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# Appendix A:

## Planning context

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# Section A.1: Planning Context

Note: This appendix refers to Area A as Segment 1 and to Area B as Segment 2, a reflection of previous project nomenclature.

A.1 Detailed planning context

The Project exists within a rich planning context. Plans and policies with implications for the Project have been published by a variety of jurisdictions and for a range of geographic scales (Exhibit A.1), including:

- The Province of Ontario
- The Greater Toronto and Hamilton Area
- The Metrolinx Service Area
- The TTC Service Area
- The City of Toronto
- Toronto’s Waterfront Area
- Precincts within Toronto’s Waterfront Area

This section reviews approved and proposed plans, policies, and projects which impact the Project and is divided into the following sub-sections:

- Provincial plans, projects, and policies;
- Regional plans, projects, and policies;
- Municipal plans, projects, and policies;
- Waterfront plans, projects, and policies;
- Other plans, projects, and policies; and
- Preliminary planning activities.

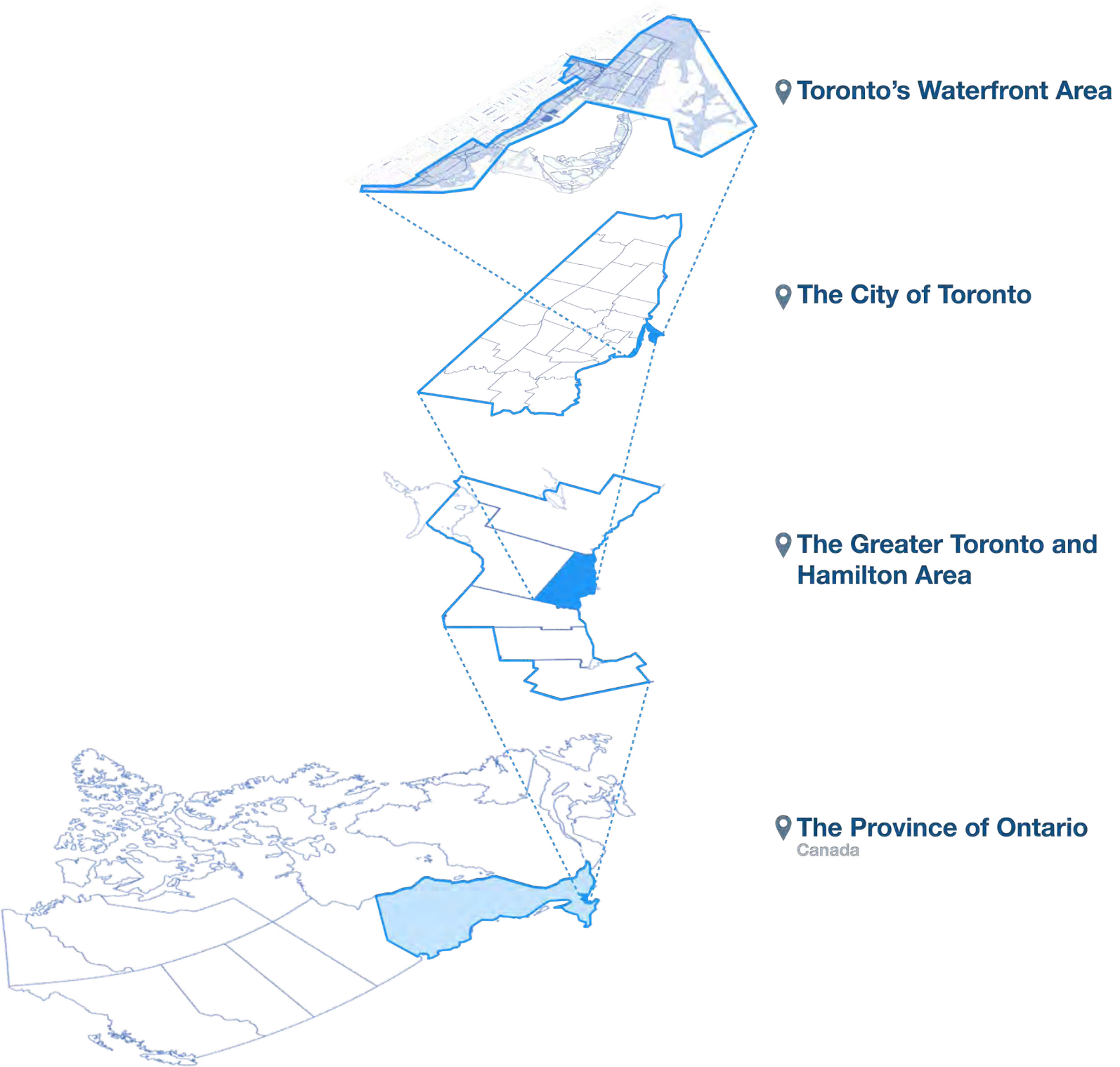
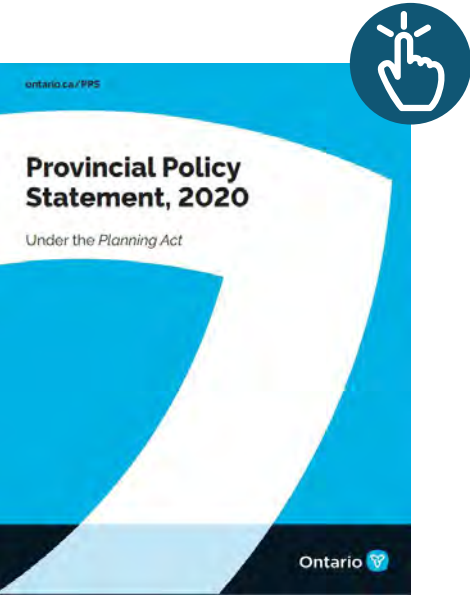


Exhibit A.1 WELRT planning context



A.1.1 Provincial plans, projects, and policies

The Project embodies the Province of Ontario’s planning principles, including sustainable transportation, mixed-use development, and land use optimization.



Provincial Policy Statement

The Provincial Policy Statement establishes the foundation of land-use planning in Ontario, promoting the optimized use of land and natural resources and encouraging mixed-use developments supported by sustainable transportation options.

The Project provides sustainable transportation modes through an electrified streetcar service and segregated bike lane that will serve existing and future mixed-use developments.



Exhibit A.2 Queens Quay West © Harold Clark Photography



A.1.2 Regional plans, projects, and policies

The Project is aligned with planning policies and transportation projects for the region, providing transit and active transportation infrastructure in a high-density, mixed-use area.



**Towards a Greater Golden Horseshoe Transportation Plan (2021)**

This plan details the proposed 2051 vision for mobility in the Greater Golden Horseshoe, which is based on three pillars: (1) getting people moving on a connected transit system; (2) enhancing capacity and performance on congested roads; and (3) efficiently moving goods across the region.

Several of the plan’s goals focus on improving transit connectivity and giving users more choice, and the plan notes that building new transit routes and stations in highly urban areas and supporting community transportation will help achieve these goals.

The Project responds to both of these goals as the new streetcar service is expected to serve high levels of local demand.



**2041 Regional Transportation Plan**

The Regional Transportation Plan serves as the blueprint for an integrated multimodal regional transportation system in the Greater Toronto and Hamilton Area. The plan supports the creation of complete travel experiences, strong connections, and sustainable and healthy communities.

Despite shifting provincial and municipal priorities over the past two decades, the Project remains a transportation priority. The plan includes the Waterfront East LRT, categorizing the Project as “in development”, and defines its extent as Union Station to Coxwell Avenue.



**A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Office Consolidation 2020)**

The Growth Plan provides a framework for regional growth in residential and employment areas, and strengthening the economy while protecting natural and heritage resources. Transit and active transportation are key mobility elements that will support land-use intensification.

The revitalization of Toronto’s waterfront is providing high-density, mixed-use communities, including affordable housing in previously-underutilized lands. The Project therefore supports the growth advocated by this regional policy.



**Union Station Rail Corridor (USRC) East Enhancements and Union Station Enhancements**

As part of the expansion of the GO service network, Metrolinx is implementing a series of projects to increase service frequency and facility capacity. The Union Station Enhancement project is improving passenger experience at Union Station, expanding platforms and circulation areas, and revitalizing the historic building. The USRC East Enhancements project improves tracks east of Yonge Street, including the expansion of Wilson Yard. The USRC East Enhancements TPAP committed to funding a Pedestrian and Cycling Connectivity Study to evaluate active connectivity options in the Project study area and committed to coordination with the City of Toronto and Waterfront Toronto.

A.1.3 Municipal plans, projects, and policies

The Project is a priority transit project for the City of Toronto. It is well aligned with current municipal plans and policies, advancing many of the City’s key goals and objectives.

Toronto Official Plan (as of April 2021)

The 2019 Official Plan establishes strategic elements to accommodate sustainable growth in jobs and housing while protecting natural and historic features and building climate resilience. The Official Plan informs the City of Toronto Zoning By-law (By-law No. 569-2013, version March 1, 2021) and other specific planning policies, including secondary plans.



Higher order transit

The plan proposes the expansion of transit services (blue dashed lines) to support densification of housing and jobs. Amongst the corridors identified in this policy is the connection from Union Station through Queens Quay East, going south to the Lower Don Lands and Port Lands.

Relation to the Project

- The Project provides connectivity between Downtown, Lower Yonge, and East Bayfront and enables onward connections to the Lower Don Lands, and the Port Lands.
- Studies for the Waterfront Transit Network confirmed the need for transit implementation in the area.



Downtown and Central Waterfront boundaries

The plan promotes high-density, transit-oriented developments in the Central Waterfront area. Detailed plans are established by the Central Waterfront Secondary Plan.

Relation to the Project

- Developments approved and built in the East Bayfront precinct are awaiting transit service implementation.
- Application processes and construction are underway for new developments along Queens Quay East.
- The Project is essential to provide transit connectivity within the Central Waterfront area and to the broader transit network system in Toronto.



Land use designation

The official plan establishes that major land uses in the study area include mixed-use areas, regeneration areas, core employment areas, and parks.

Relation to the Project

- The Project proposes the addition of parks and open spaces adjacent to Lake Ontario.
- The Project connects areas in which residential and employment activity are to be concentrated.



Natural heritage system

The plan delineates areas for protection of natural heritage, recognizing the need to minimize impacts to and restore the natural ecosystem.

Relation to the Project

- The Project includes new parks and open spaces adjacent to Lake Ontario.

Martin Goodman Trail

Part of the Great Lakes Waterfront Trail, the Martin Goodman Trail (MGT) runs adjacent to the Waterfront on Queens Quay, Lake Shore Boulevard, and Cherry Street. The trail is the main bicycle facility connecting the Port Lands with the broader Toronto bicycle network.

In addition to extending the Queens Quay streetcar and pedestrian promenade to the east, the Project will maintain the MGT connection to Cherry Street. The facility will run along Queens Quay East and into the Lower Don Lands. This proposed configuration will make cycling a convenient choice for future users, better accommodate cycling demand, and provide more direct access to the Port Lands and the new open spaces adjacent to Lake Ontario.

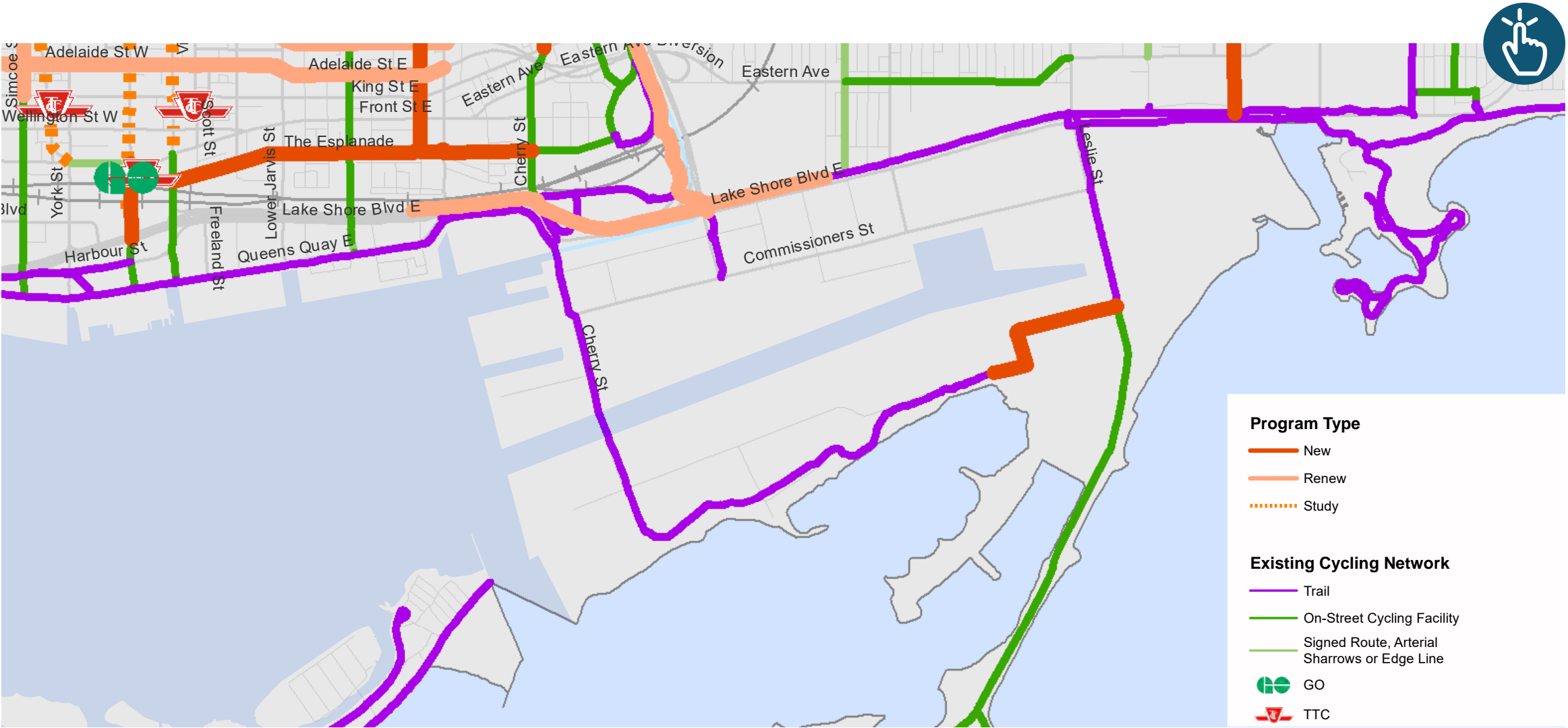


Exhibit A.3 City of Toronto Cycling Network Plan (as of June 2021)



TTC plans, projects, and policies

The TTC has several plans and projects that impact the Project. Ongoing projects include the enhancement programs on Line 1 (Yonge-University) and Line 2 (Bloor-Danforth), as well as expansion projects to accommodate future demand (Bloor-Yonge station capacity improvements, Western Yard train storage and maintenance facility, and the WELRT). The TTC’s relevant plans are summarized below.



Next Stop, Even Better

The TTC establishes priorities for improvements and expansion of transit through the **5-Year Service Plan & 10-Year Outlook**. The plan presents a vision to support Toronto’s employment and population growth, identifies focus areas, and outlines a 20-point action plan. The plan recognizes that expansion of the Union LRT Station loop and extension of the Queens Quay streetcar service to the east are required to support demand in East Bayfront, the Lower Don Lands, and the Port Lands.



Ridership Growth Strategy

The **2003 Ridership Growth Strategy** proposes actions and projects to increase ridership and support the City of Toronto Official Plan. Recognizing the benefits of streetcar service in a dedicated transitway along Queens Quay West, the TTC proposes the expansion of this service to support developments along Toronto’s waterfront. The Ridership Growth Strategy was reviewed in 2018 and includes short- and medium-term actions.



A.1.4 Waterfront plans, projects, and policies

Much of Toronto’s waterfront region was originally built as infill lands to accommodate industrial uses and port activities. With increased growth in Toronto and higher land value prices in surrounding areas, planning efforts started to explore the revitalization of the waterfront.

Planning efforts in Toronto’s waterfront region have been led by Waterfront Toronto. Formally created in 2001 by the Government of Canada, the Province of Ontario, and the City of Toronto, Waterfront Toronto was founded to oversee, collaborate with, and lead a variety of initiatives to connect people with the waterfront, develop parks and public spaces, foster private developments, provide affordable housing, plan and implement transportation, and protect natural and cultural heritage.

Toronto’s waterfront region is divided into several precincts, as shown in Exhibit A.4. Those which will primarily be impacted by the Project proposed in this TPAP include:

- Central Waterfront
- Lower Yonge
- East Bayfront

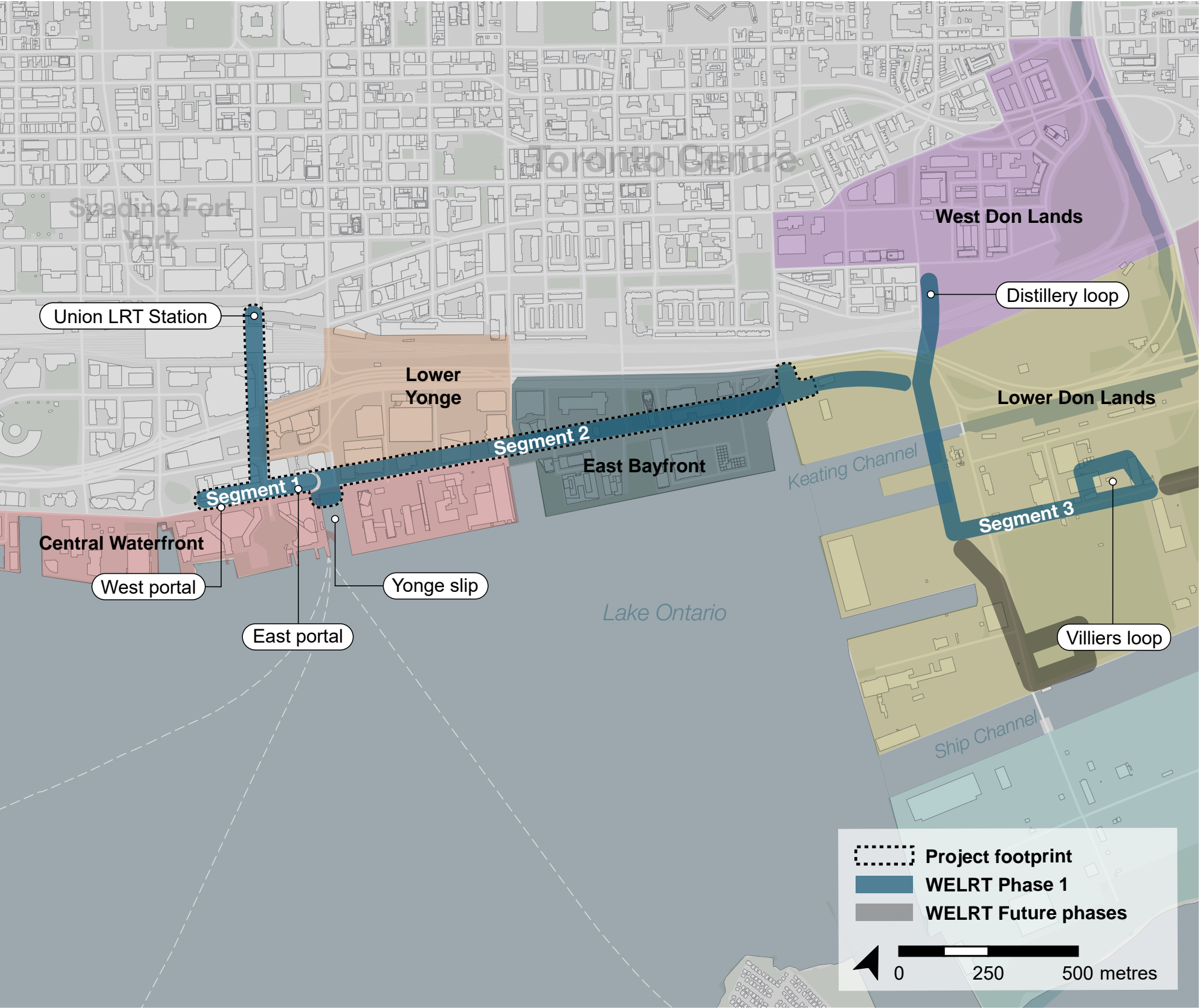


Exhibit A.4 WELRT project and adjacent precinct areas

Central Waterfront Secondary Plan

City Council adopted the Central Waterfront Secondary Plan in 2003, which solidifies the following principles:

- **Removing barriers/making connections:** reconnect the City and new developments with Lake Ontario through the new Martin Goodman Trail, new transit connections, a promenade along the waterfront, and the redesign of the Gardiner Expressway corridor;
- **Building a network of spectacular waterfront parks and public spaces:** incorporate heritage elements and create new amenities to increase the number of public and open spaces along the waterfront;
- **Promoting a clean and green environment:** prioritize sustainable transportation, renaturalization of water bodies, protection of wildlife habitats, and flood protection infrastructure; and
- **Creating dynamic and diverse new communities:** allow for new mixed-use developments to attract businesses and provide affordable housing.

The land-use plan (Exhibit A.5) designated most of the East Bayfront, Lower Don Lands, and Port Lands as follows:

- **Regeneration areas, which** are subject to precinct planning for implementation of new developments and densification. Precinct Plans have been developed for the East Bayfront, Lower Yonge, Keating Channel, and Villiers Island.
- **Parks and open spaces,** which support the renaturalization of the Don River mouth, provide flood protection, and protect the areas immediately adjacent to Lake Ontario for public use.
- **The foot of Yonge special study area,** which is envisioned as a new tourist destination with public amenities;
- **Inner Harbour Special Places,** which are defined as arrival places with high-quality landscape and urban design at areas such as the Yonge, Jarvis, and Parliament Slips.

The Central Waterfront Secondary Plan defines key initiatives and mandates to advance revitalization efforts and promote its principles, including:

- The **redesign of the Gardiner corridor**, culminating in the 2017 Gardiner Expressway and Lake Shore Boulevard East Reconfiguration EA;
- A **new streetcar connection** between Exhibition Place and the Port Lands, with Queens Quay envisioned as the spine for the waterfront. This connection was implemented along Queens Quay West and this TPAP is seeking approval for an extension to the east;
- The **connection of the waterfront trail**, including Martin Goodman Trail, Garrison Creek, Humber Valley, and Don Valley;
- The connection of **cultural and heritage corridors**; and
- A framework for the **revitalization** of the East Bayfront and Keating Channel West precincts, resulting in precinct plans.



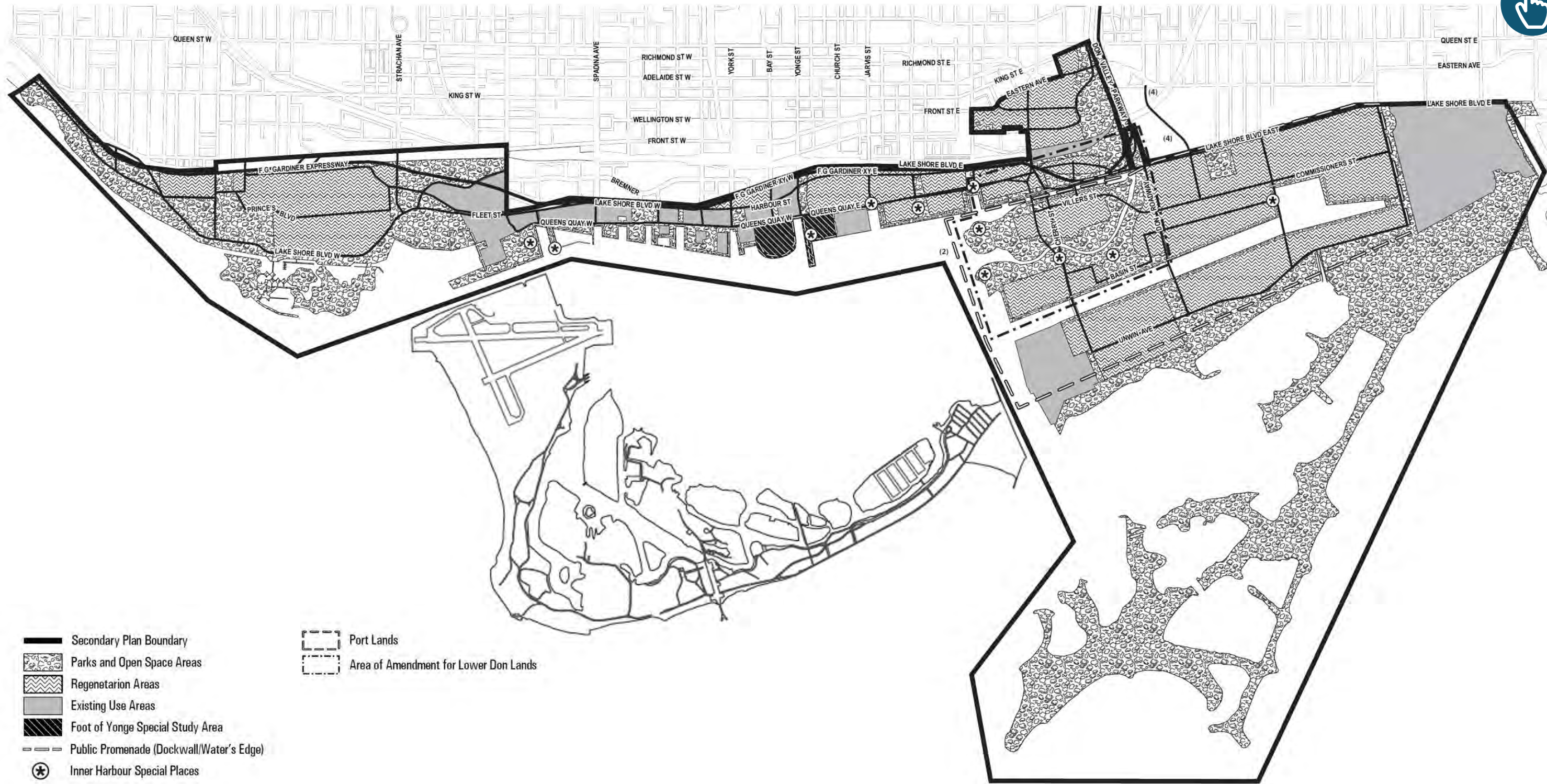


Exhibit A.5 Central Waterfront Secondary Plan - land use plan



East Bayfront

The vision for East Bayfront started to take shape in parallel with the Central Waterfront Secondary Plan, ultimately evolving into environmental assessment studies for a master plan and transit services. Exhibit A.6 illustrates the boundaries of the East Bayfront plans summarized in this section.

2005 East Bayfront Precinct Plan

Following the planning process and approval of the Central Waterfront Secondary Plan, East Bayfront was one of the first precincts for which a precinct plan was developed. The 2005 study largely focused on the area within the precinct boundaries, including an extended area to the east (up to Cherry Street) - lands that overlap with the Lower Don Lands/Keating Channel precinct. The vision for the area assumes a future where the Gardiner Expressway is realigned, making space for a revitalized Lake Shore Boulevard.

2006 East Bayfront Municipal Class Environmental Assessment Master Plan

The planning process for East Bayfront advanced into a Municipal Class EA Master Plan, amending the zoning by-law (By-law No. 1049-2006). To incorporate the analysis for the streetcar network extension along Queens Quay East, the study area of the Class EA Master Plan included the right-of-way around Queens Quay East up to Bay Street.

This plan required support for future developments in the form of water supply, sanitary servicing, stormwater systems, and an initial assessment of transportation needs. A key analysis from this phase of the project studied right-of-way options that could minimize roadway space.

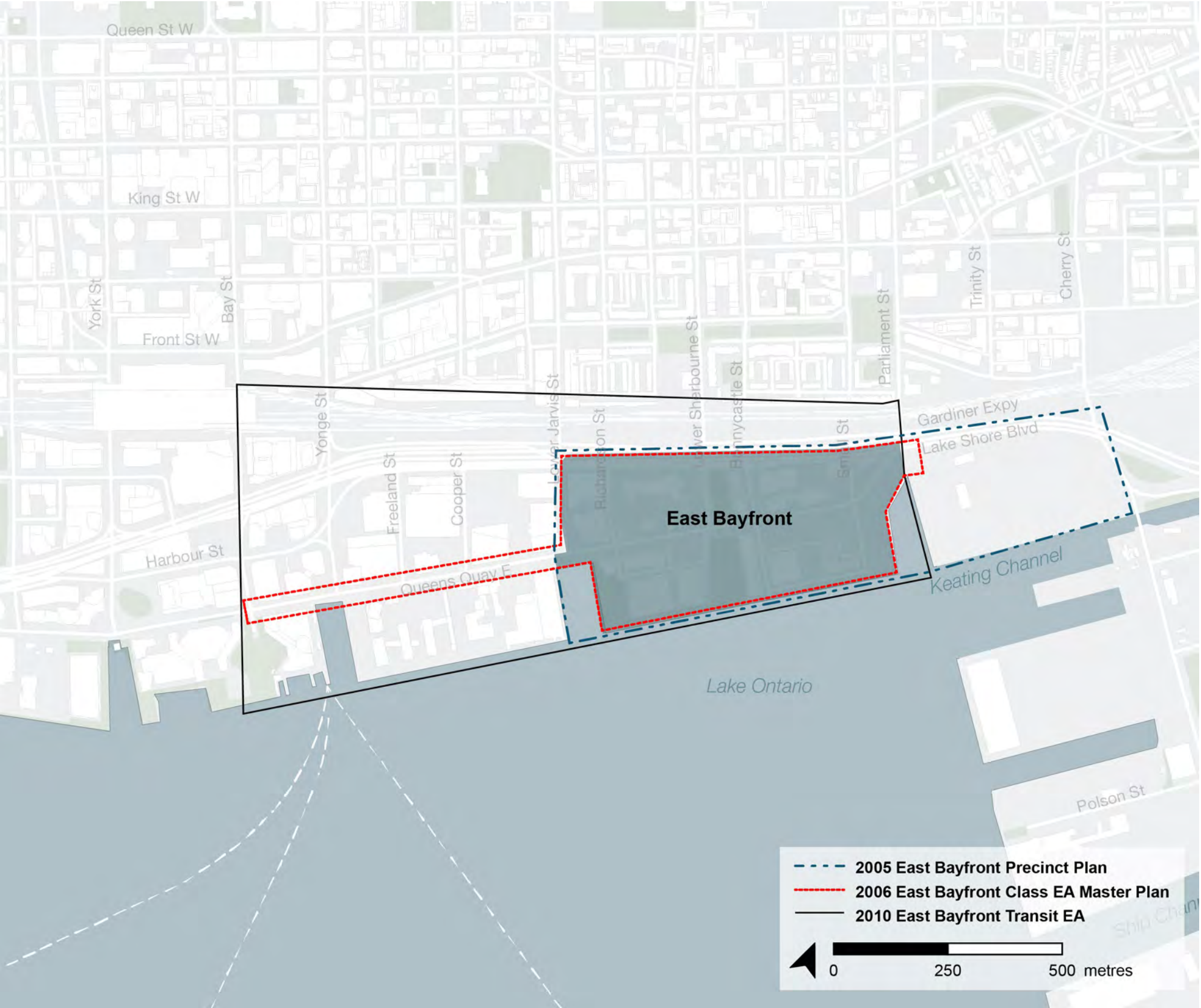


Exhibit A.6 East Bayfront study areas



2010 East Bayfront Transit Class Environmental Assessment

The previous East Bayfront studies recommended that East Bayfront’s transit needs and Queens Quay East’s right-of-way width undergo additional investigation. The boundaries of the East Bayfront Transit Class Environmental Assessment (EBF Transit Class EA) extend beyond the precinct boundaries in order to incorporate parallel planning efforts in areas adjacent to East Bayfront. The recommended streetcar alignment is shown in Exhibit A.7.

While identifying transportation facilities to serve East Bayfront and reviewing the right-of-way required to achieve the vision defined in the secondary plan and the Precinct Plan, the EBF Transit Class EA considered benefits to public realm and accessibility to transit and non-motorized transportation modes to reduce automobile dependency. The final configuration resulted in a 38-metre right-of-way (Exhibit A.8) featuring the following components:

- Segregated streetcar guideways south of traffic lanes, terminating in an interim loop at Parliament Street;
- Roadway accommodating one through-lane per direction with auxiliary left-turn/right-turn lanes; and
- The Martin Goodman Trail (MGT) as a dedicated 4 metre-wide, off-street bicycle facility located south of the streetcar guideway, connecting with the north-south bicycle facility along Parliament Street.



Exhibit A.7 Recommended streetcar alignment (2010 EBF Transit Class EA)

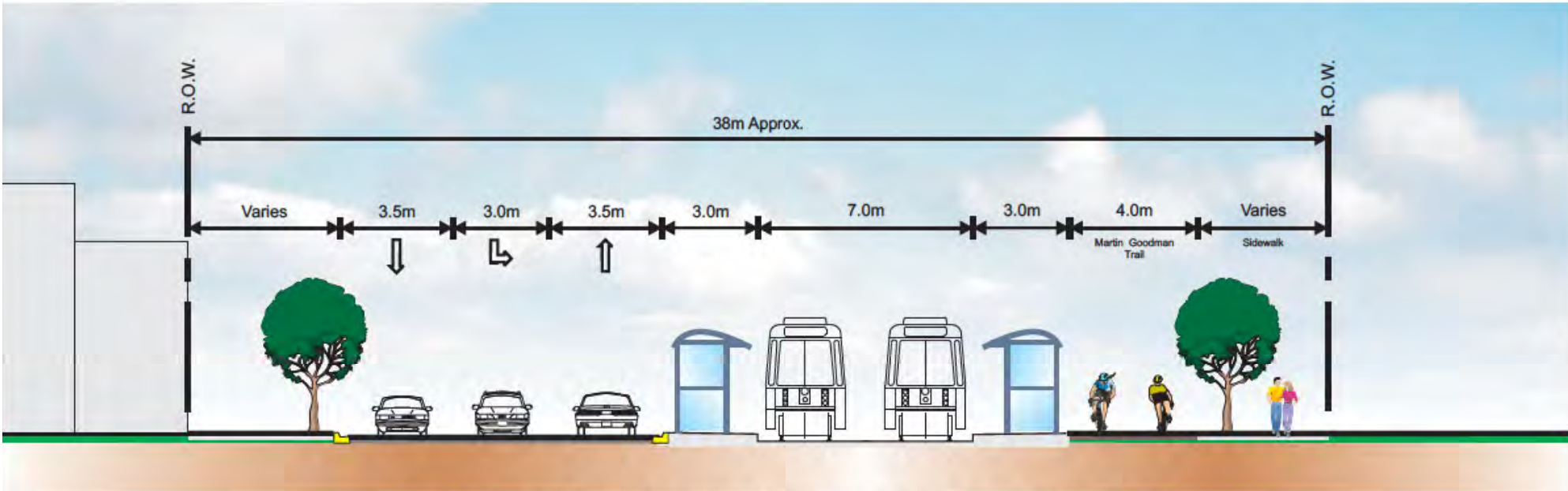


Exhibit A.8 Typical cross section (2010 EBF Transit Class EA)



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To accommodate future streetcar demand, the study identified a need to expand the Union LRT Station Loop. Exhibit A.9 shows a conceptual design indicating preliminary spatial needs.

Both the roadway and streetcar alignments were envisioned to terminate at Parliament Street for the short-term, until areas within Lower Don Lands advanced in planning and design.

Given the plans to use the Parliament Slip for stormwater management purposes, a site east of Parliament Street was identified to accommodate an interim loop for streetcars (Exhibit A.10).

On the west side, the connection between the streetcar and Union LRT Station used the same tunnel that connects the station with Queens Quay West. The tunnel would emerge into a portal located between Yonge Street and Freeland Street (Exhibit A.11), requiring the relocation of a storm sewer culvert.

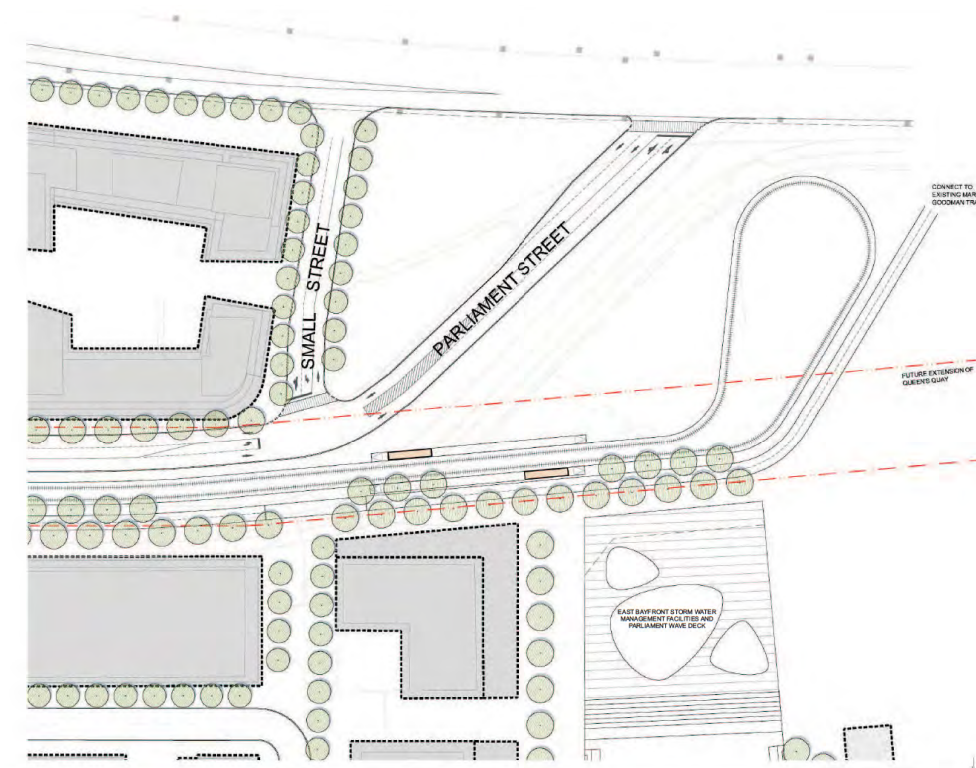


Exhibit A.10 Interim loop at Parliament Street (2010 EBF Transit Class EA)

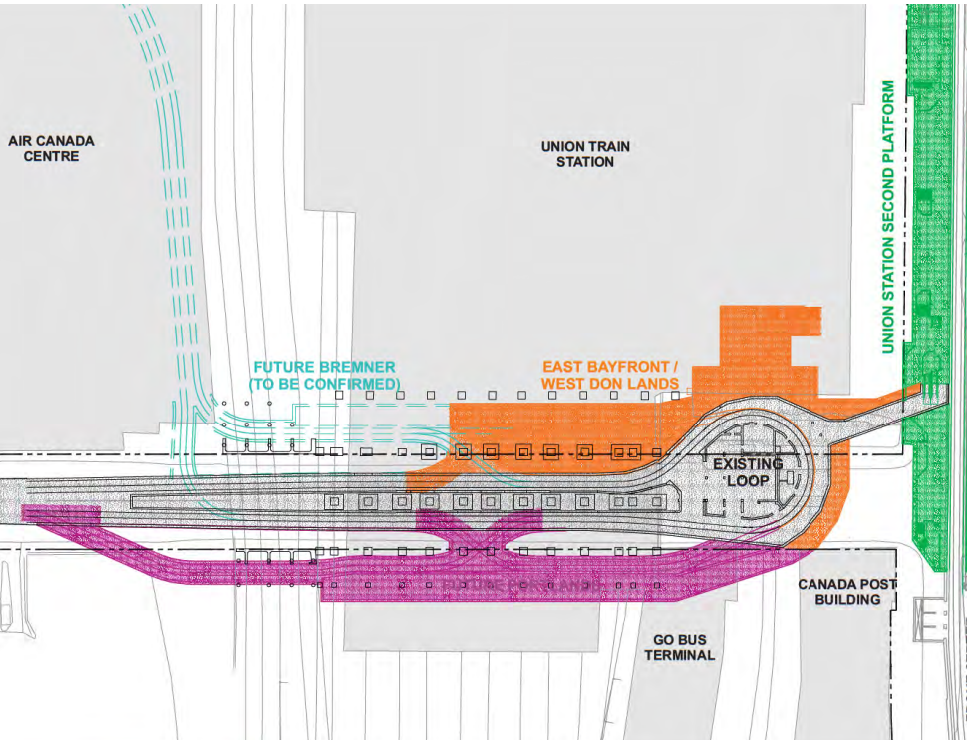


Exhibit A.9 Union Loop expansion (2010 EBF Transit Class EA)



Exhibit A.11 Queens Quay East portal (2010 EBF Transit Class EA)

East Bayfront and the Project

The proposed alternatives from the 2010 EBF Transit Class EA were valid for ten years from the Notice of Completion. Detailed design work and construction have not started since the submission of the study, necessitating a review of the Project to ensure that the proposed plan, design, and mitigation measures are still valid.

Since 2010, a series of studies, planning, and design efforts advanced in the area (e.g. Lower Don Lands EA Master Plan, Ontario Line, specific studies for Queens Quay East). These studies refined some design aspects for the implementation of the Project.



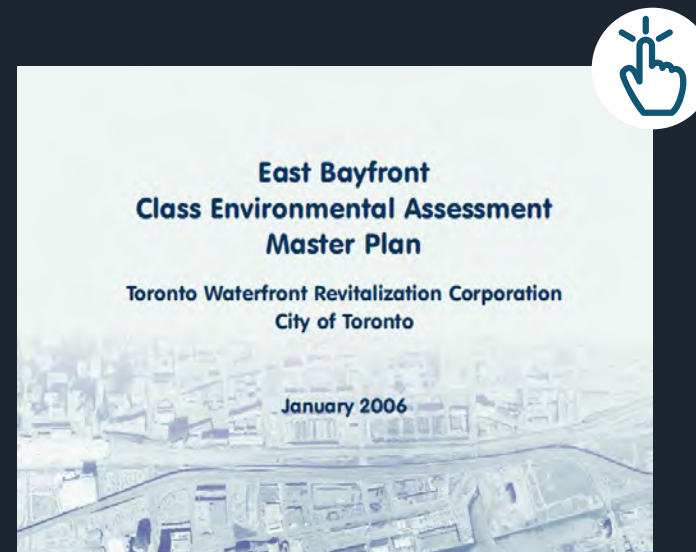
# Key plans & main outcomes



## 2005 East Bayfront Precinct Plan

The plan provides design concepts, guidelines, and targets to:

- Implement public infrastructure (public spaces, community facilities, street network, and parks);
- Expand the streetcar network within East Bayfront;
- Develop 25% of total gross floor area (GFA) for employment use (equivalent to 8,000 jobs);
- Develop 6,300 residential units (equivalent to 23,000 residents), designating 20% as affordable rentals and 5% as low-end-of-market housing;
- Strengthen north-south connections with Lower Jarvis Street, Lower Sherbourne Street, and Parliament Street terminating in revitalized public spaces;
- Incorporate Parliament Street as a cultural corridor that terminates at a waterfront public space (Parliament Slip) that includes a school and a community recreation centre; and
- Preserve historical buildings, including the Victory Soya Mills Silos for its industrial heritage significance.



## 2006 East Bayfront Class EA Master Plan

Recommendations from this plan include:

- Two through-lanes on Queens Quay East;
- Further investigation of the preferred cross section for Queens Quay East in a separate study (later denominated the 2010 East Bayfront Transit EA); and
- Further investigation and additional stakeholder and community consultation to inform a reduction of the Queens Quay East right-of-way width to less than 40m.



## 2010 East Bayfront Transit Class EA

This EA investigates planning and design alternatives, resulting in the following recommended configuration:

- Transit corridor: one transit facility running along Queens Quay serving East Bayfront and Port Lands area, as opposed to two parallel services
- Technology: streetcar in dedicated right-of-way to meet the expected demand
- Portal location: east of Yonge Street, with streetcar fully at-grade at the intersection of Queens Quay East and Freeland Street
- Alignment: streetcar guideways south of traffic lanes; roadway to accommodate one through-lane per direction, with auxiliary left-turn/right-turn lanes
- Right-of-way width: 38m

### Lower Don Lands

The Lower Don Lands redevelopment efforts were initiated in 2007 with a design competition to build a vision for the area. The goals were:

- Develop an iconic identity for the Don River that accommodates crucial flood protection and habitat restoration requirements; and
- Create a bold and comprehensive concept design that integrates development, transportation infrastructure, and the river mouth into a harmonious whole.

To achieve these goals, the project proceeded with a series of studies, planning, and design efforts addressing issues such as flood protection, renaturalization of the Don River mouth (as part of the Port Lands Acceleration Initiative), expansion of infrastructure to support future developments, and connectivity with the rest of the city. This section summarizes outcomes of the studies. Exhibit A.12 shows the boundaries of the Lower Don Lands and of the relevant plans in this area.

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

This plan outlines servicing (water, sanitary, stormwater, and transportation) and open space requirements to enable and support future development in the Lower Don Lands. This environmental study also forms the basis for the implementation of the Keating Channel Precinct.

The recommended transportation master plan was built on the following principles:

- Shift towards non-auto modes;
- Prioritize transit;
- Increase and improve the pedestrian network;
- Increase and improve the bicycle network;
- Rationalize parking; and
- Improve the public realm.

This study recommends the extension of the Queens Quay East streetcar service from Parliament Street to Cherry Street, connecting it with a north-south transit service on Cherry Street that would also serve the Port Lands. A preferred Parliament Street alignment was developed to intersect with Queens Quay East at as close to a 90 degree angle as possible to allow maximal land development; this

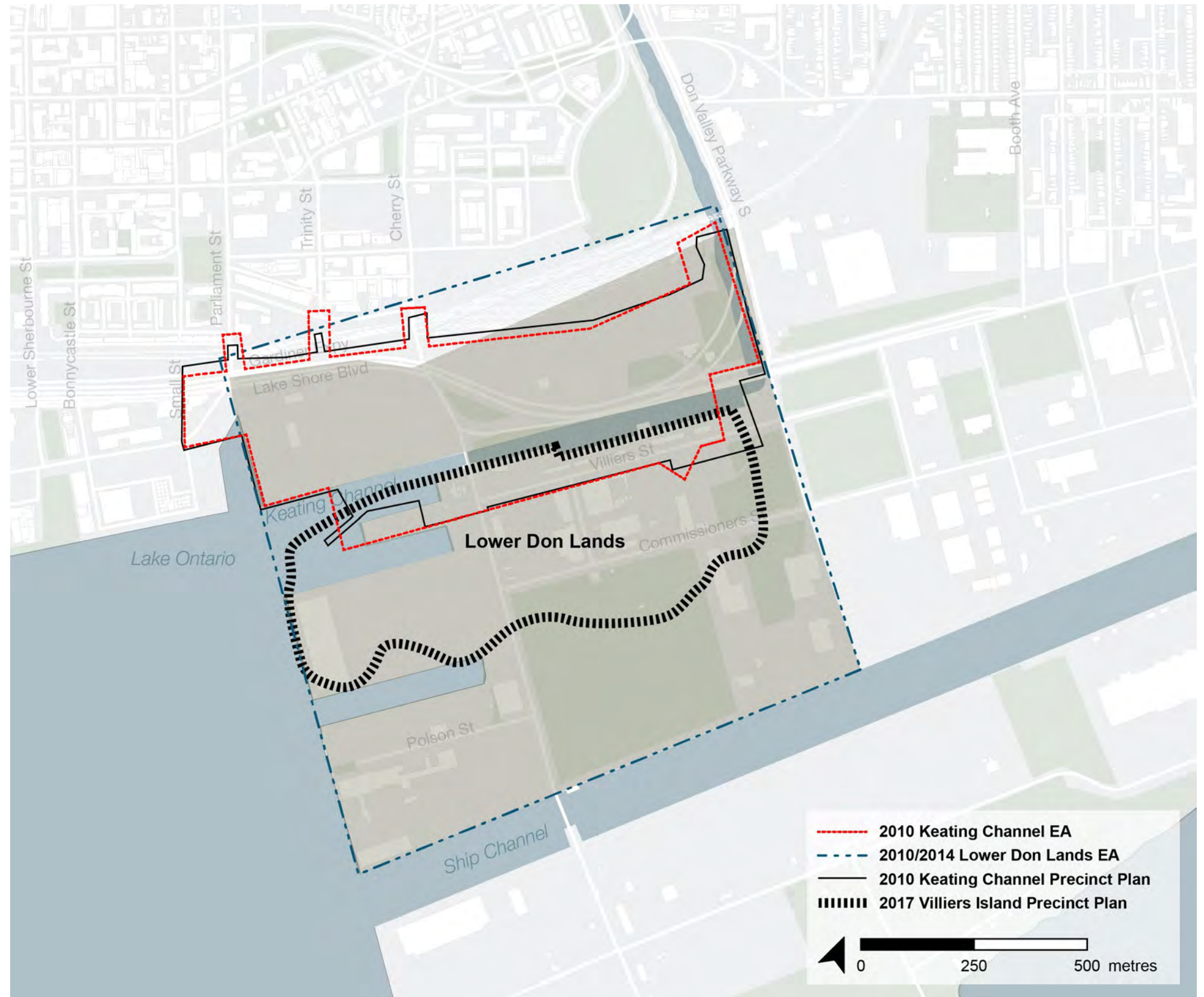


Exhibit A.12 Lower Don Lands study areas



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road was envisioned as a four-lane street, with potential to designate one lane as temporary on-street parking during off-peak periods.

This EA was refined in 2014 to incorporate plans and projects adjacent to the area. Final configuration and recommendations are presented in the 2014 Lower Don Lands Environmental Assessment Master Plan Addendum section.

2014 Lower Don Lands Environmental Assessment Master Plan Addendum

The 2014 Lower Don Lands Environmental Assessment Master Plan Addendum was developed to incorporate project updates in the area, aligning it with the Don Mouth Naturalization and Port Lands Flood Protection project and the overall Port Lands Acceleration Initiative. Both projects resulted in a refined location for the new Don River mouth and a review of potential gross floor area. These refinements resulted in a review of some transportation aspects. Below is a description of the final configuration approved under this environmental assessment, with specific elements highlighted in Exhibit A.13:

- 1. **Queens Quay East:** The streetcar and Martin Goodman Trail are extended east to Cherry Street. The roadway is extended east of Cherry Street. Additional refinements are to be incorporated in a revision of the Keating Channel Precinct Plan.
- 2. **Parliament Street and head of slip:** As a result of the streetcar extension, the interim loop at Parliament is not required. To enable the extension of Queens Quay East, the Parliament head of slip requires infill and dockwall reconfiguration. A proposed realignment of Parliament Street enables a more perpendicular intersection with Queens Quay East.
- 3. **New roads in 3C area:** The plan incorporates new roads proposed in the Keating Channel Precinct Plan, including Silo St., and Trinity St.
- 4. **Cherry Street:** Cherry Street features a side-running streetcar on the east side and requires roadway reconstruction (including a portal underneath the Union Station Rail Corridor bridge) and realignment in the south portion to accommodate the new mouth of Don River.
- 5. **Distillery Loop:** The Cherry Street streetcar is connected with the Distillery Loop.

APPROVED EA MASTER PLAN- TRANSIT



2013 LDL MP EA STUDY- TRANSIT



Exhibit A.13 Transit plan - Lower Don Lands EA Master Plan (2014)

- 6. **Polson Loop:** A new loop is constructed to accommodate proposed streetcar services (including Queens Quay East).
- 7. **Commissioners Street:** Streetcar service is extended from Cherry Street to the east. Commissioners Street also features separated cycling lanes as part of a linear park located between the transitway and vehicle lanes.



## 2010 Keating Channel Precinct Plan

The 2010 Keating Channel Precinct Plan provided a pathway for the re-zoning of industrial lands to commercial and residential lands and open space in the Keating Channel Precinct through an amendment to the zoning by-law (By-law No. 1174-2010) (Exhibit A.14). By-law No. 2010-1174 was later amended in 2017 following a decision by the Ontario Municipal Board to adjust allowable densities, tower areas, and building heights. At the time of the Keating Channel Precinct Plan approval, the Gardiner Expressway East EA was at early stages of study, and the Precinct Plan provided an initial concept for the configuration of the expressway and Lake Shore Boulevard. This conceptual design was taken into consideration for the Gardiner Expressway EA, finalized in 2017. The final recommendation includes a requirement to review the lands east of Cherry Street in the Keating Channel Precinct Plan and carry on the changes into an amendment to the zoning by-law as necessary. This amendment has not been completed yet.

**Quayside:** Quayside includes the area west of Victory Soya Mills extending up to Bonnycastle Street. This area was part of an Innovation Development Opportunity Request for Proposals (RFP) in 2017 that envisioned a smart-city development that would provide opportunities for innovative, technology-driven solutions for the urban environment. Sidewalk Labs was the development partner for the lands until summer 2020. With Sidewalk Labs' withdrawal from the waterfront, Waterfront Toronto released a Request for Qualifications (RFQ) for the Quayside Development Opportunity. Through a competitive procurement process, Waterfront Toronto selected local developers Dream Unlimited and Great Gulf Group, together known as Quayside Impact, to develop the mixed-use community.

**3C Waterfront:** The area east of Trinity Street (known as 3C Waterfront) is undergoing detailed design for the realignment of Cherry Street. The infrastructure works, in combination with future development plans, indicate that the implementation of Queens Quay East is important for expanding transit services to the east side of the waterfront area.

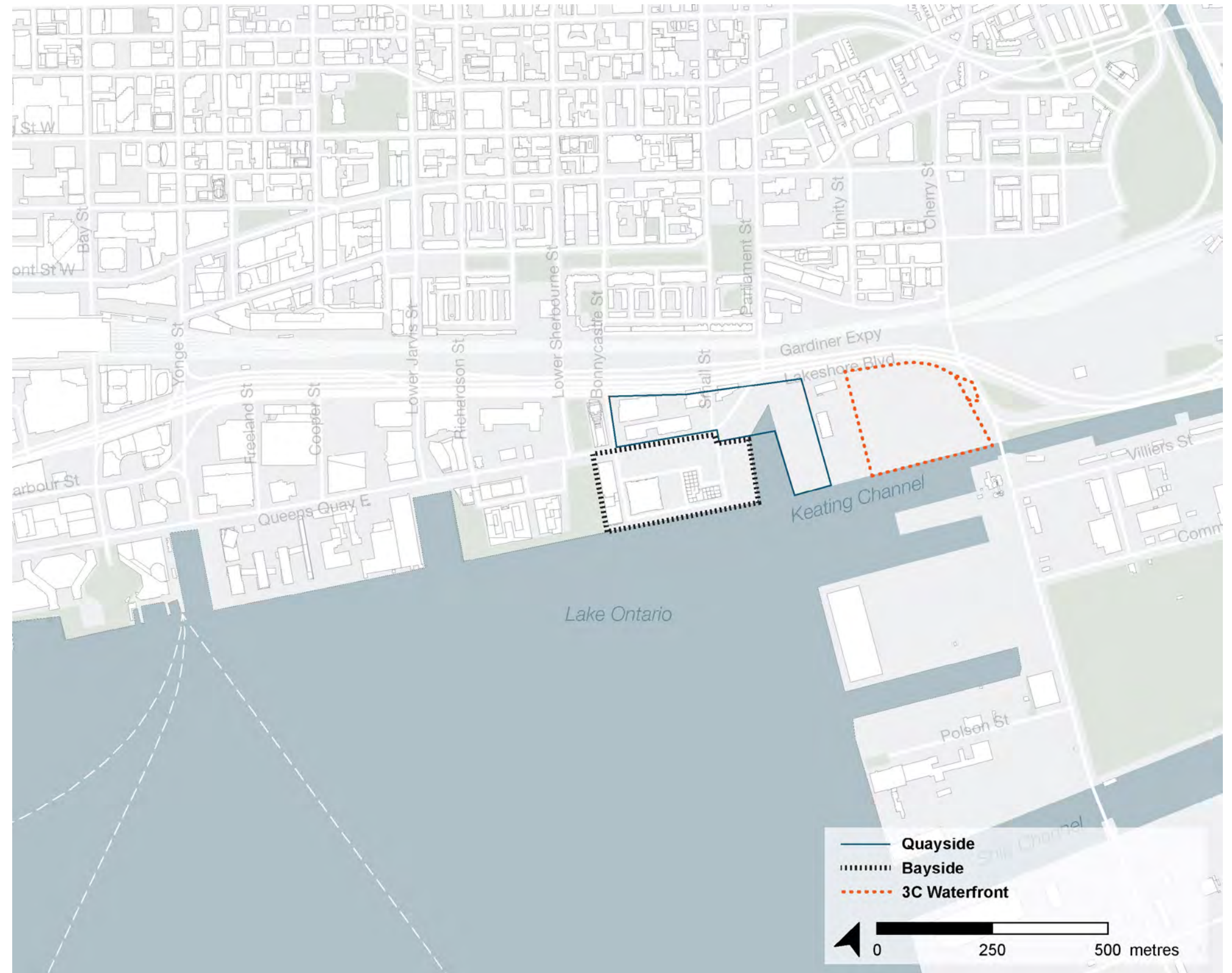


Exhibit A.14 Planned developments around Keating Channel Precinct





Exhibit A.15 Cherry Street north bridge (November 2020) © Waterfront Toronto

**Villiers Island**

Villiers Island planning efforts include the Villiers Island Precinct Plan and the Port Lands Planning Framework, both published in 2017. These documents provided a pathway for amendments to the zoning by-law that have not happened to date. Current work in the area includes the Don Mouth Naturalization and Flood Protection, both of which are essential to prepare the land for future development.

**Lower Don Lands and the Project**

The 2014 LDL EA addendum will no longer lapse as implementation of the approved project has started. Since the approval, some aspects have been implemented as part of the Port Lands Flood Protection project, such as the realignment of Cherry Street roadway and the new bridge over the Keating Channel (Exhibit A.15).

While the Project only extends to Street A, the infrastructure to be constructed in the Lower Don Lands is crucial to enable operations of the streetcar outside of the Project footprint.



Lower Yonge

Lower Yonge is located between Lake Shore Boulevard, Lower Jarvis Street, Queens Quay East, and Yonge Street (Exhibit A.16). As part of the Waterfront Toronto Central Waterfront Secondary Plan, this area was subject to the precinct planning process.

2014 Lower Yonge Transportation Master Plan Environmental Assessment

Prepared as phases 1 and 2 of the 2018 Lower Yonge Municipal Class EA, this study identifies needs and proposes a preferred roadway network to accommodate future development, alleviate traffic (especially for Queens Quay East), and expand bicycle facilities in the area. The study proposes new roads, including the extension of Harbour Street to Lower Jarvis Street and a new north-south street between Cooper Street and Lower Jarvis Street.

2016 Lower Yonge Precinct Plan

The Precinct Plan incorporates the recommendations from the Transportation Master Plan, refining the vision for the area and establishing guidance for density, land use program, public realm, and mobility. Queens Quay East is envisioned as the primary street, since this road connects Lower Yonge with other Waterfront neighbourhoods and the rest of the City via transit and the Martin Goodman Trail (Exhibit A.17) .

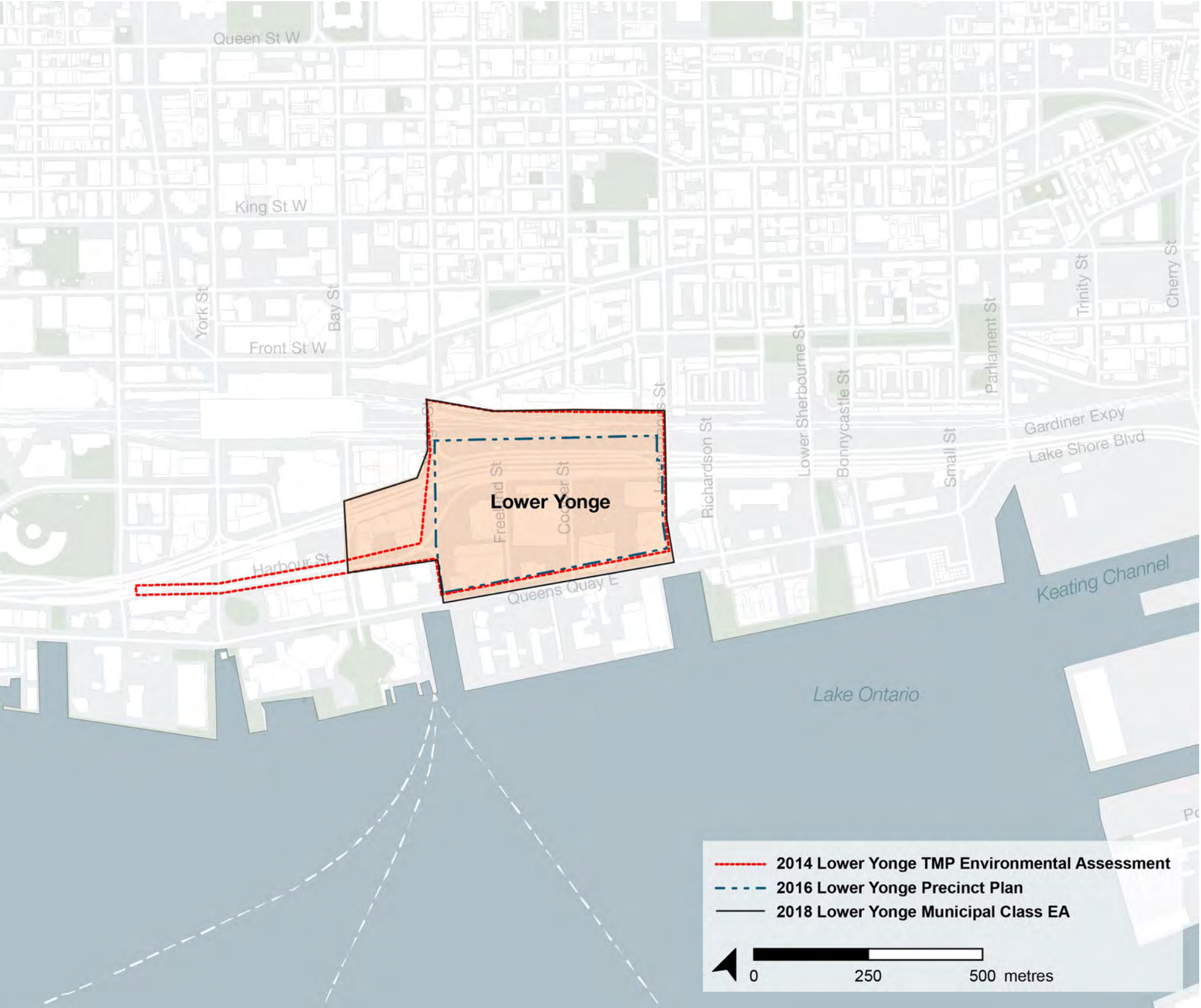


Exhibit A.16 Lower Yonge study areas





Exhibit A.17 Illustrative rendering - Lower Yonge Precinct Plan (2016)

### 2018 Lower Yonge Municipal Class EA

This environmental assessment consolidates and refines the proposed configuration for the Lower Yonge Precinct, resulting in changes to the roadway geometry of Queens Quay East. The following proposed roadway modifications (Exhibit A.18) have been incorporated in the Project:

- Conversion of Harbour Street to two-way operations east of York Street and extension to Lower Jarvis Street;
- Elimination of the eastbound Bay Street on-ramp to the Gardiner Expressway;
- Reduction in length of the eastbound Lower Jarvis Street off-ramp from the Gardiner Expressway;
- Elimination of Harbour Street S-curve at Yonge Street, normalizing intersections;
- Addition of eastbound lane on Lake Shore Boulevard East from Yonge Street to Lower Jarvis Street;
- Extension of Cooper Street to Church Street; and
- Addition of north-south street between Cooper Street and Lower Jarvis Street.

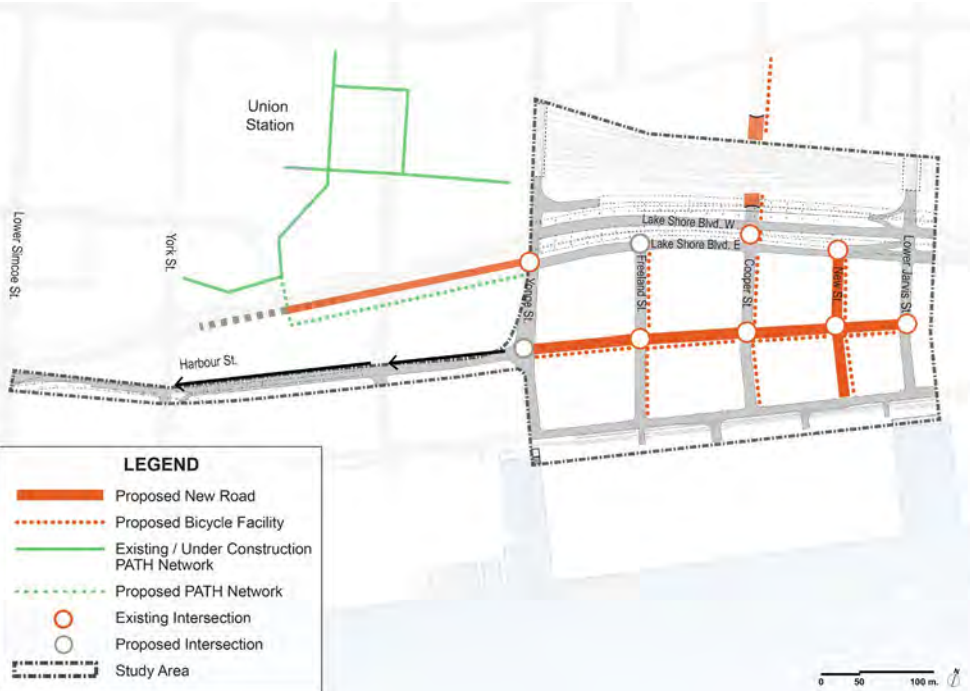


Exhibit A.18 Proposed roadway modifications in Lower Yonge

Below is a description of the proposed lane configuration for the side streets between Queens Quay East and Harbour Street:

- Yonge Street: 3 lanes with off-street bike lanes
- Freeland Street: 3 lanes with a bus lay-by on the east side
- Cooper Street: 3 lanes with on-street bike lanes
- New Street: 2 lanes with lay-bys
- Lower Jarvis: 4 lanes

### 2020 Lower Yonge Preliminary Engineering Design (30%)

Preliminary design (30%) and associated cost estimates for each of the recommendations from the Lower Yonge Precinct Environmental Assessment and the Lower Yonge Precinct Transportation Master Plan are underway. A constructability assessment and traffic management plan for the delivery of the infrastructure improvements are also being developed. This scope of work will result in strategies for coordination with other construction projects in the Lower Yonge Precinct.

## Lower Yonge and the Project

The Project incorporates the proposed Lower Yonge lane configurations, reducing traffic volumes on Queens Quay East by distributing traffic on new side streets. Additionally, the streetcar service and bike lane improve Lower Yonge's connectivity to other waterfront neighbourhoods and the rest of the City.



West Don Lands

In 2010, By-law No. 4-2011 was approved by City Council to amend the land use regulations within the West Don Lands. Since this amendment, several new developments and supporting services have been constructed within the precinct.

In 2015, new developments in the Canary District were completed for use as the Athlete’s Village during the 2015 Toronto Pan/Parapan American Games. In 2019, 761 affordable rental units near Cherry Street and Mill Street were awarded funding. In 2020, a new development located immediately adjacent to the Distillery street car loop (Exhibit A.19) was approved by Council. The planned development includes two mixed-use towers featuring 661 residential units and almost 25,000 square metres of employment and retail space.

In 2016, a streetcar line along Cherry Street began operation. This streetcar provides essential service to the current and future residents of the West Don Lands. Following the completion of the Ontario Line, the Cherry Street connection will become even more important, providing a critical north-south link for people at the Waterfront to access the planned Ontario Line Station at King/Parliament.

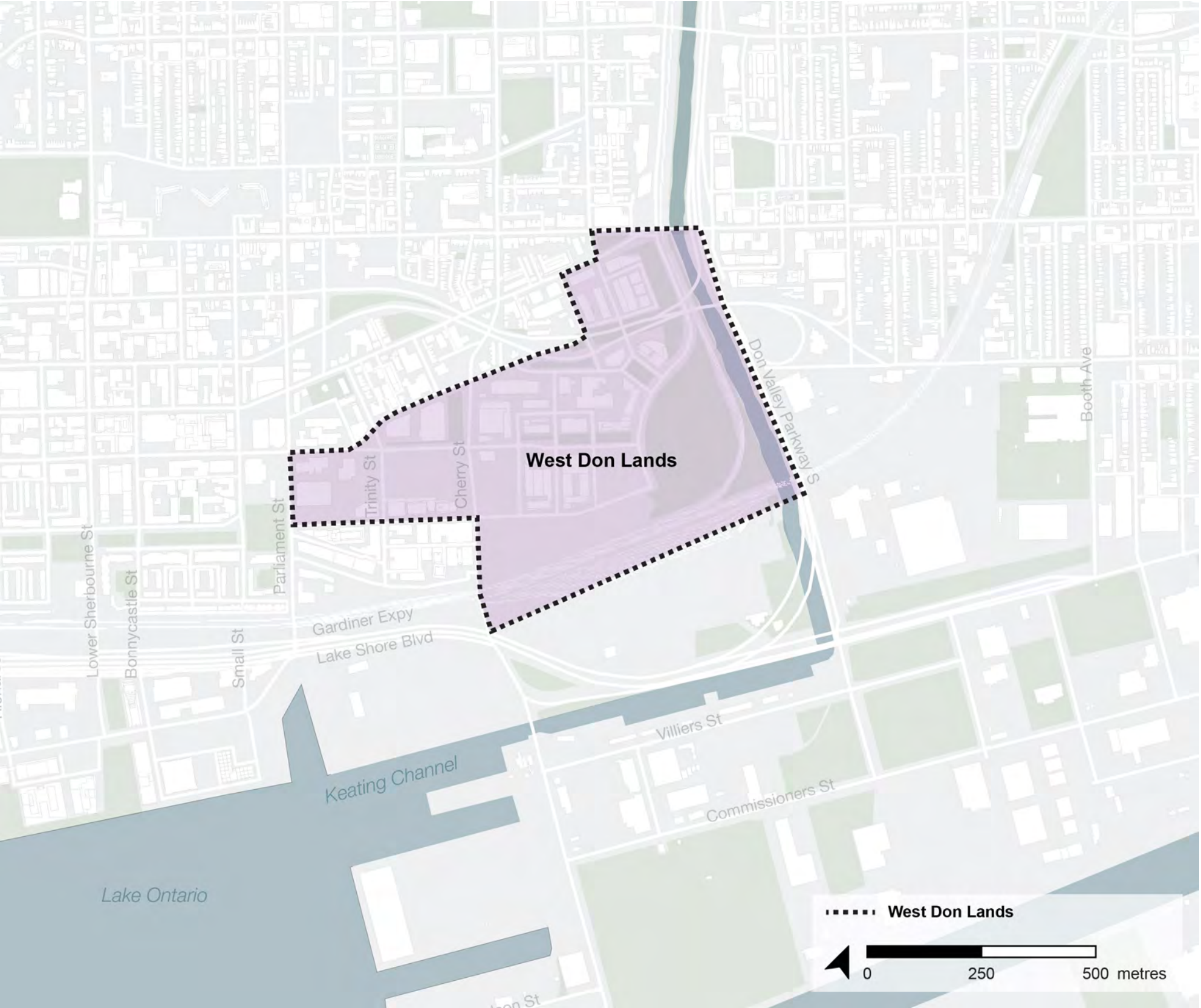


Exhibit A.19 West Don Lands study area



East Harbour

In 2021, the Province of Ontario announced a Transit Oriented Communities (TOC) partnership with Cadillac Fairview to design and construct a new Transit Hub in East Harbour (Exhibit A.20). Building on the 2020 Transit-Oriented Communities Act passed by Ontario to enable the development of new communities centered on stations along the province’s four priority subway projects, East Harbour will provide a connection between the Ontario Line subway and the proposed East Harbour SmartTrack station. The 38-acre community is expected to house over 50,000 employees and 10 million square feet of commercial development.



Exhibit A.20 East Harbour study area



Appendix A Planning context

A.1.5 Other plans, projects, and policies

This section includes a description of ongoing or proposed projects around the Project footprint. As many of these projects will be implemented concurrently with this Project, coordination is required to organize construction and minimize impacts on surrounding communities.

2017 Gardiner Expressway East Environmental Assessment

Finalized in 2017, the Gardiner Expressway Environmental Assessment reviews alternative configurations for the Gardiner Expressway and Lake Shore Boulevard corridor. The EA recommends a solution (Exhibit A.21) that maintains the freeway connection between the Gardiner and the Don Valley Parkway, removes the elevated expressway east of the Don Roadway (Logan Ramps), creates new access ramps east of Cherry Street, realigns Lake Shore Boulevard East between Cherry Street and the Don River (Exhibit A.22), and enables public realm improvements from Jarvis Street to Leslie Street (Exhibit A.23).

The proposed design extends Queens Quay East to a new north-south road that connects the east portion of the Keating Channel precinct and Villiers Island.

The conclusion of this environmental study report requires an update to the Keating Channel Precinct Plan and amendment to the zoning by-law for the lands east of Cherry Street. This has not been approved yet.

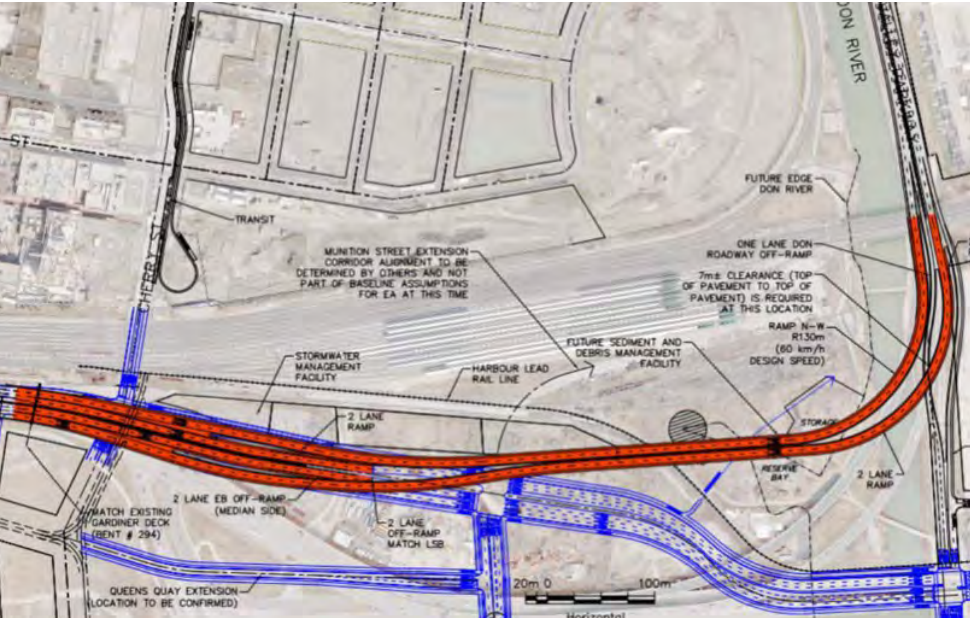


Exhibit A.21 Preferred configuration



Exhibit A.22 Rendering of preferred undertaking



Exhibit A.23 Urban design plan

The Gardiner Expressway and the Project

The preferred alternative is expected to increase opportunities for transit service in the waterfront area. The realignment of Gardiner Expressway and Lake Shore Boulevard changes the traffic patterns in the area and provides a better configuration from an urban design standpoint as more lands will be available for development, landscape design, and public realm improvements.



**Inner Harbour West tunnel**

Toronto’s waterfront has been designated by the International Joint Commission as one of 43 Areas of Concern (AoC) in the Great Lakes Basin since 1987, due to severely degraded water quality and environmental health. The Canada- Ontario-Agreement – Respecting the Great Lakes Basin sets out the formwork and requirements for delisting Toronto’s Inner Harbour as an AoC. In response, the City has initiated the Don River and Central Waterfront (DR&CW) Project - the largest stormwater management program in the history of the City. This will significantly reduce the volume of released stormwater runoff and combined sewer overflows into the Lower Don River, Taylor-Massey Creek and Inner Harbour by:

- Diverting 27 CSOs that currently flow to Lake Ontario to a new system of storage tunnels
- Transporting the overflows to the Ashbridges Bay Wastewater Treatment Plant (ABWTP) where it will be pumped from the Coxwell By-pass Tunnel (CBT) by the Integrated Pumping Station (IPS)
- Storing the overflow during extreme rainstorms until it can be treated

The DR&CW program is being carried out in five stages: 1) CBT, 2) Inner Harbour West Tunnel (IHWT), 3) Offline Tanks, 4) Taylor Massey Creek Tunnel and 5) IHLD Connections. The IHWT forms part of the integrated tunnel system, linking into the existing Western Beaches Tunnel (WBT) upstream and the CBT downstream. The IHWT is a 5.64 km long, 6.3m ID tunnel that will largely run under Queens Quay from the 30m ID Western Beaches Shaft (WBS-1) to the 20m ID LDS-3(A) shaft, via an intermediate 15m ID shaft (IHWS-2), through Georgian Bay Shale.

Ontario Line

Announced in 2019, the Ontario Line is a planned rail service connecting the Exhibition/Ontario Place, downtown Toronto (running underneath Queen Street), Corktown, East Harbour, Line 2 (Bloor-Danforth) (at Pape Station), and Eglinton Crosstown LRT (at Science Centre station) (Exhibit A.24). The 15.6-kilometre line will include 15 stops, providing relief from overcrowding to some of Toronto’s busiest transit lines.

One of the Ontario Line stations will be located at East Harbour, to the northeast of the Project. By 2041, Metrolinx estimates that 5,800 people will be within walking distance of the station and 14,900 people will use the station during the busiest travel hour.

Although the Ontario Line absorbs part of the projected WELRT demand, the future developments in East Bayfront, Lower Don Lands, and Port Lands still require streetcar service to meet the demand. Moreover, the 2020 Transit Phasing Study concluded that the streetcar service proposed by the Project increases the resiliency and capacity of the broader transit network, providing more choices to connect the Port Lands and downtown Toronto.

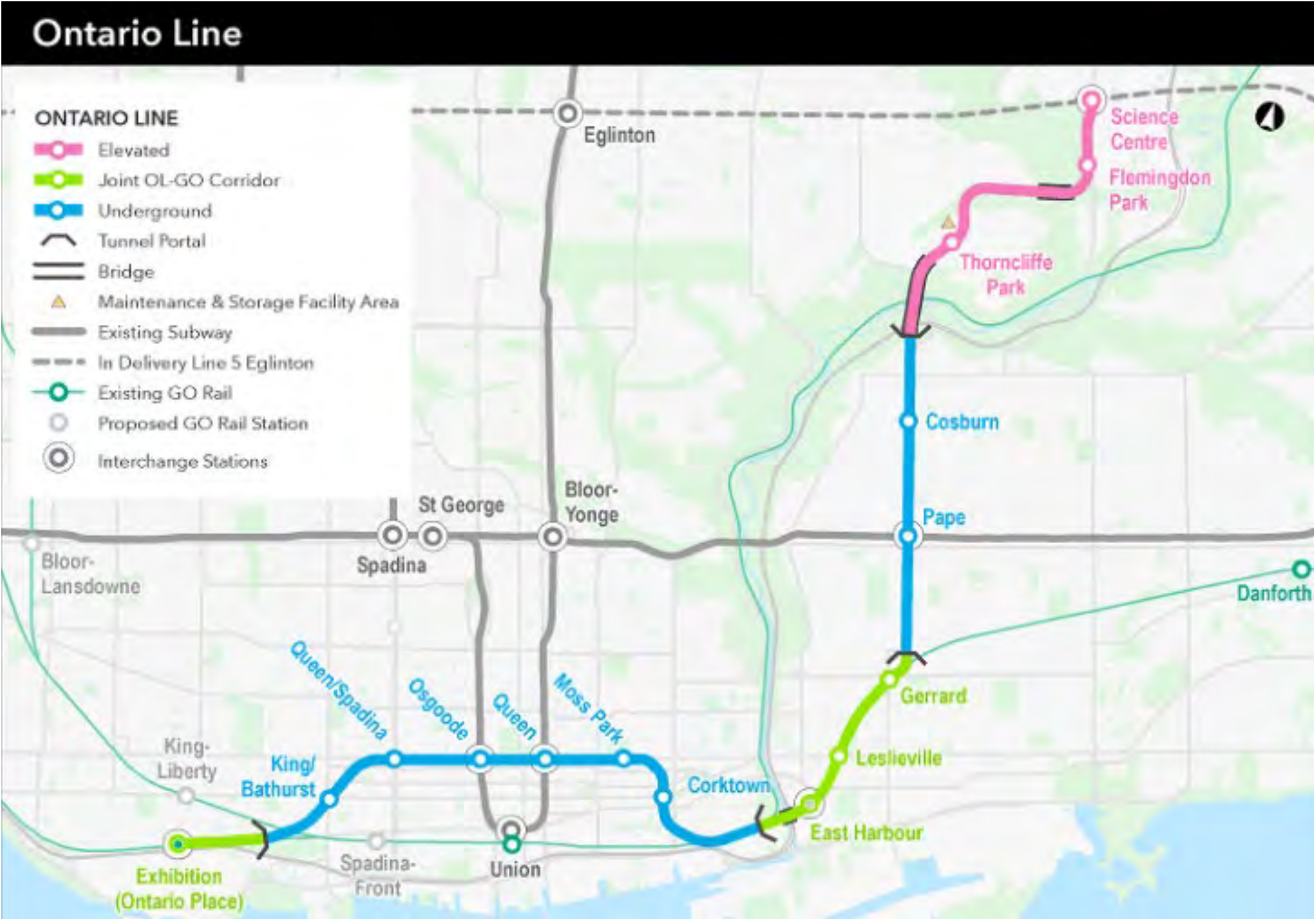


Exhibit A.24 Ontario Line



A.1.6 Preliminary planning activities

This section summarizes preliminary planning activities for the Project. Several of these studies have resulted in recommendations for minor design modifications to the Project.

Waterfront Transit Reset

The Waterfront Transit Reset incorporated several parallel planning and development efforts to establish a transit network plan for Toronto’s waterfront area. The study considered projected growth in population and employment for 2041 and new transportation projects. The following key findings impact East Bayfront and Queens Quay East (Exhibit A.25):

- **Queens Quay, from Bay Street to Parliament Street:**
  - o The streetcar should run in an exclusive right-of-way, integrated with the Union Station-Queens Quay Link solution.
  - o There is a need to serve the community in developments that are under construction in the area while the streetcar service is not built/operating.
- **Parliament to Leslie:**
  - o The LRT network should include a realigned Queens Quay East between Parliament Street and Cherry Street.
  - o The Cherry Street LRT should extend south of Commissioners Street to the Ship Channel.
  - o The main east-west LRT should continue along Commissioners Street and connect to Leslie Street.
  - o The Broadview Avenue streetcar should initially be extended south to Commissioners Street, and eventually to south of the Ship Channel.
- **Union Station-Queens Quay Link:**
  - o The link between Union Station and Queens Quay East is a critical component of the Waterfront Transit Network.
  - o Further analysis is needed to identify the most appropriate technology to link Union Station to Queens Quay East. (This was further studied during the Union Station -- Queens Quay Transit Link Study.)

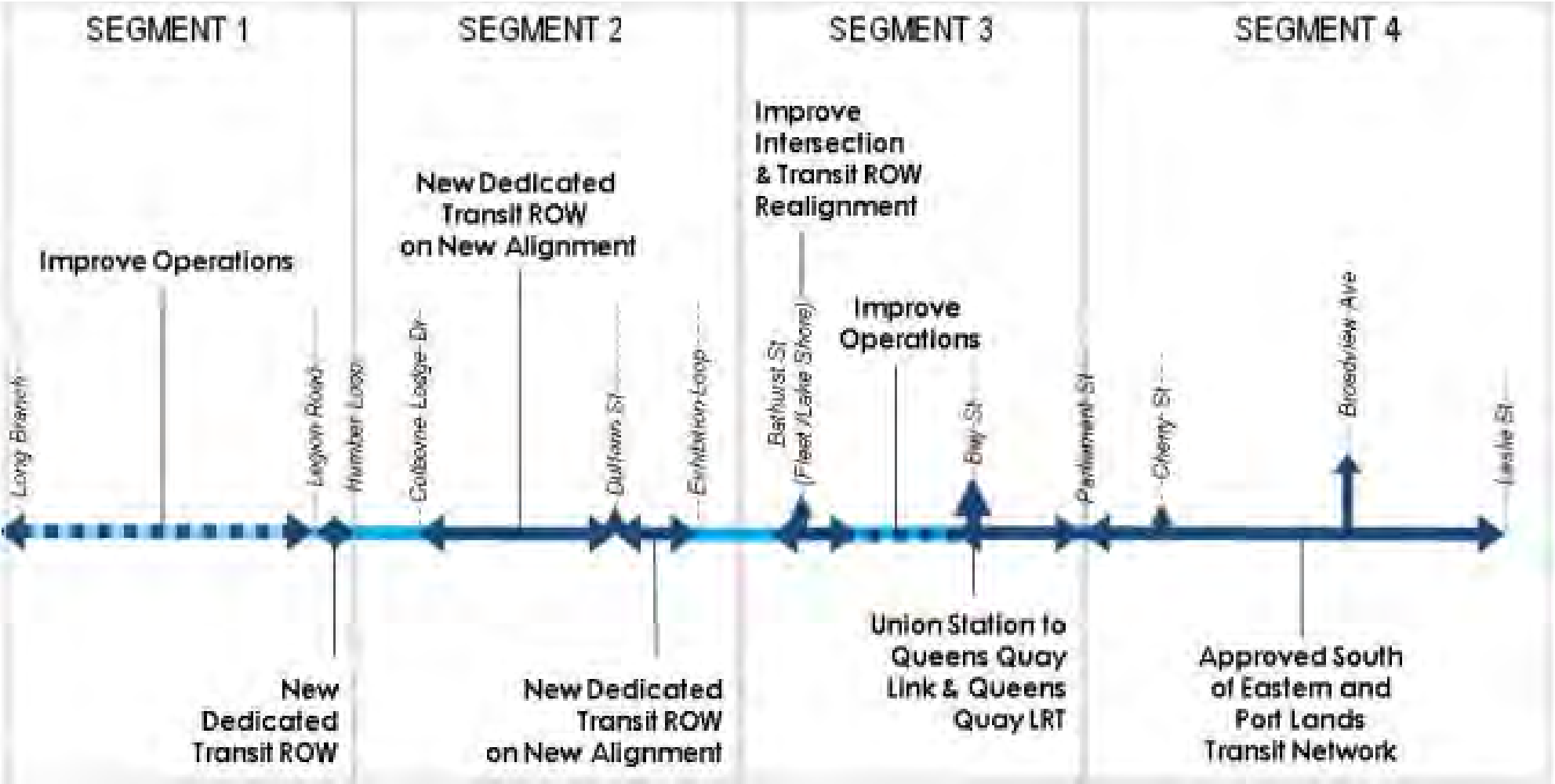


Exhibit A.25 Waterfront Transit Network outcomes

Union Station - Queens Quay Transit Link Study

Following the Waterfront Transit Reset, City Council directed staff to find an appropriate and implementable solution for the Union Station - Queens Quay Transit Link. The Union Station - Queens Quay Transit Link Study considered two technologies for enhancing the connection between Union Station and Queens Quay: an expanded streetcar loop at Union Station (Exhibit A.26) and an Automated People Mover (APM). While the expanded streetcar loop already had EA approval, the APM was proposed as a potentially cost-effective alternative.

Stations were designed to the latest standards and integrated with the Union Station retail concourse, with the opportunity for integration with existing and future developments at the north and south ends of the Link. Both designs had very similar capital and operating costs. Notably, the streetcar better serves the East Bayfront and wider waterfront while the APM serves a smaller geographic area with more concentrated ridership. Following a comparative evaluation of the two options, streetcar was identified as the preferred option because it:

- Increased accessibility from a user experience perspective due to a lack of transfer to the East Bayfront and Central Waterfront;
- Offered the strongest amount of flexibility for the future Waterfront Transit Network implementation and TTC service planning; and
- Had no substantial cost disadvantages.

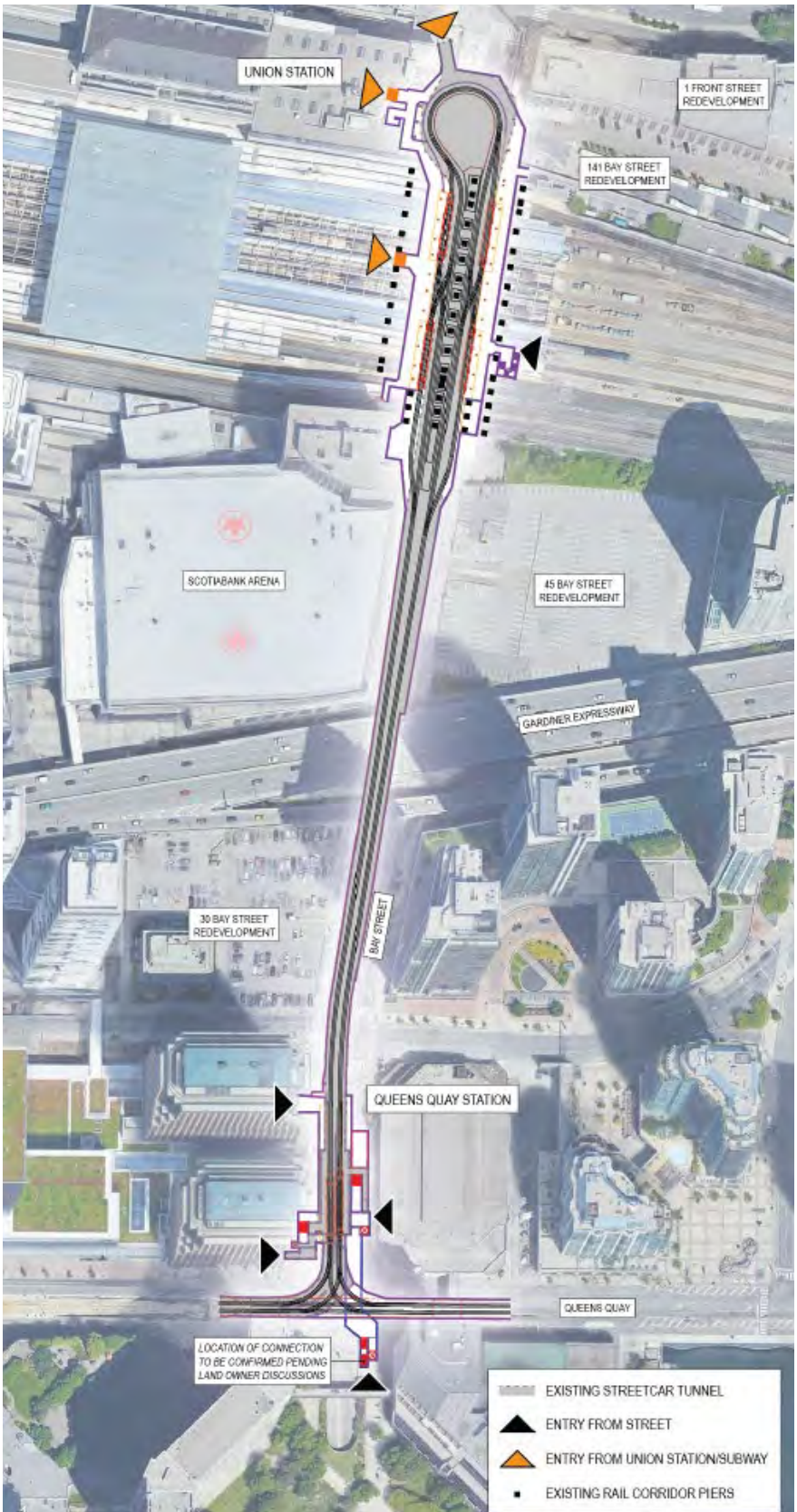


Exhibit A.26 Streetcar option



### Portal Selection Study

The Portal Selection Study analyzed the feasibility of and developed a high-level cost estimate for a streetcar portal located to the west of Yonge Street. The 2010 East Bayfront Transit Class Environmental Assessment evaluated five portal options for where the streetcar guideway would emerge and identified the preferred portal location as east of Yonge Street. However, updated design and cost estimates determined that the costs to construct this portal were greater than originally estimated due to major civil infrastructure beneath Yonge Street. The Waterfront Transit Reset considered strategies to reduce the cost of bringing transit to Queens Quay East, including relocating the portal location to the west of Yonge Street.

As part of the Portal Selection Study, an updated portal design west of Yonge Street was developed and re-evaluated (Exhibit A.27). The updated design maintains two-way traffic north of the tracks, requiring the closure of existing driveways at the Westin Harbour Castle Hotel. As the Westin still requires access, slip infill at the Yonge Slip was proposed, enabling access to the Westin and Jack Layton Ferry Terminal and creating opportunities for expanded public space. The design provides for access to the slip from a new driveway aligned with Yonge Street and an at-grade streetcar guideway through the Yonge Street intersection,

The cost estimate of the updated portal design indicated that the overall project capital cost could be reduced by approximately \$50 million. As the new slip head creates new operating and maintenance costs of approximately \$10 million over 30 years, the refreshed portal configuration is approximately \$40 million cheaper than the portal east of Yonge Street. Following a multi-criteria evaluation update consistent with the 2010 EBF Transit Class EA, the Portal Selection Study concluded that the preferred portal location is west of Yonge Street.

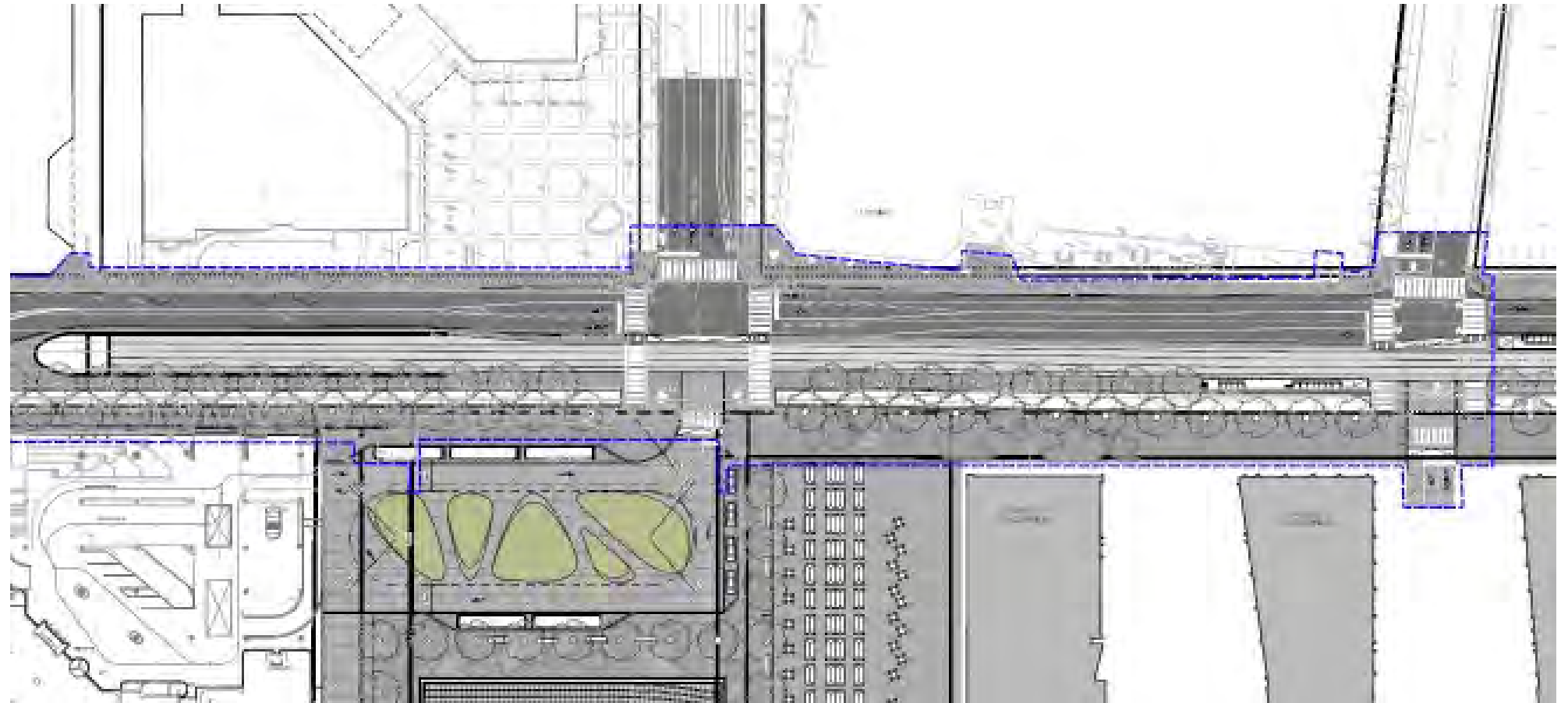


Exhibit A.27 Updated portal design

Transit phasing study

The transit phasing study evaluates options for the phased funding and implementation of the Waterfront Transit Network. The study identifies the transit infrastructure that should be prioritized for Phase 1 for two areas: Segment 1 - Union LRT Station Loop and Queens Quay-Ferry Docks LRT Station and Segment 2 - Waterfront East Surface Network.

Segment 1 - Union LRT Station Loop Phasing Analysis

This analysis examines which transit infrastructure should be prioritized for Phase 1 of the Waterfront Transit Network for the Union LRT Station Loop given the expected diversion of demand following the announcement of the Ontario Line. A total of five Union LRT Station (Exhibit A.28) and three Queens Quay-Ferry Docks LRT Station (Exhibit A.29) Phase 1 alternatives are evaluated against operational and passenger criteria using modelled demand that includes the Ontario Line.

At Union LRT Station, the study concludes that the expansion of the station to two platforms on the west side of the loop is a viable Phase 1 alternative that would provide sufficient capacity for both streetcar operations and passenger capacity from the assumed beginning of operations (2029) to at least the forecasting horizon year (2041).<sup>1</sup> Pedestrian flow simulation of the two-platform option confirms that the use of platforms for simultaneous boarding and alighting operations can function appropriately under both baseline and higher demand sensitivities.

Additionally, the study finds that the existing condition is a viable Phase 1 alternative for Queens Quay-Ferry Docks LRT Station. While noting that a separate connection between two platforms may be considered to support improved passenger safety, the study concludes that no platform extensions are required for the station from a streetcar and platform capacity perspective.

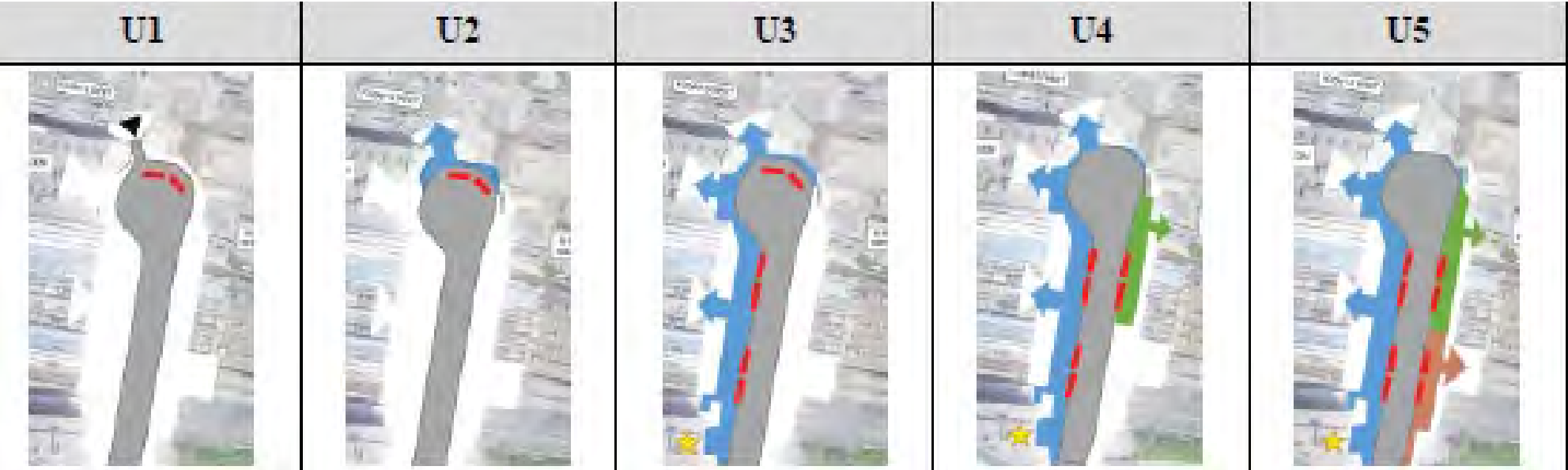


Exhibit A.28 Union LRT Station alternatives

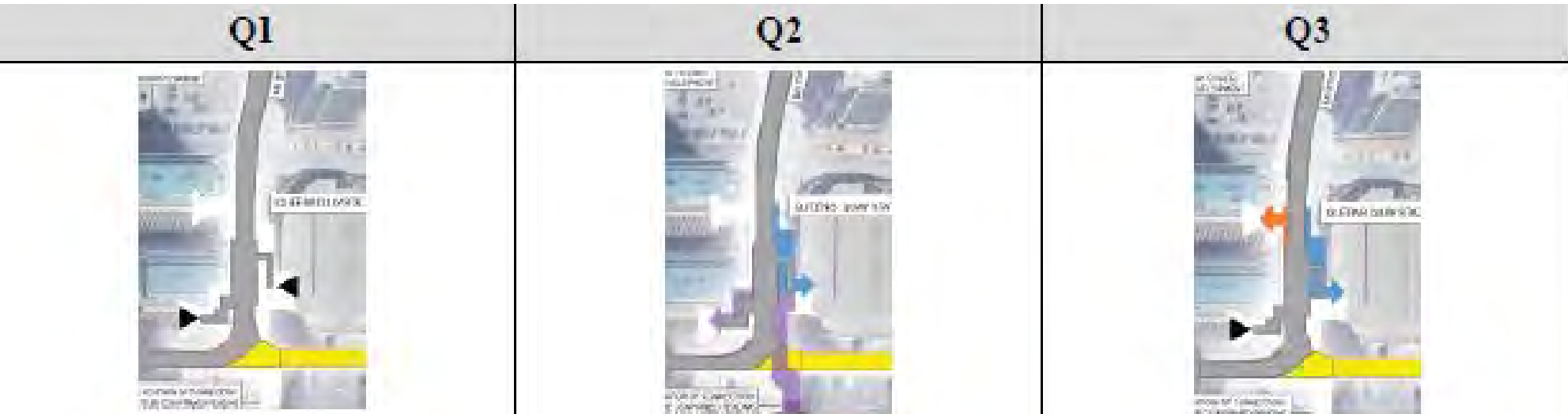


Exhibit A.29 Queens Quay-Ferry Docks LRT Station alternatives

<sup>1</sup> The year 2029 for Day 1 opening is now outdated. Although the study indicated that three platforms would be sufficient at Union Station on Day 1 of operation, since two additional platforms will be required by 2041 it would require construction to commence shortly after Day 1 opening by mid-2030s. As the cost saving of two-platform configuration vs four-platform is not significant and to avoid significant disruption to traffic, four platforms are to be implemented on Day 1.



Area 2 - Waterfront East Surface Network

The phasing analysis of the surface network on Queens Quay East examined to which destination the streetcar should extend (Exhibit A.30):

- **Alternative 1: Parliament Loop** – This alternative is the previously EA-approved option, and provides surface infrastructure along Queens Quay East to a temporary loop in the vicinity of Parliament Street.
- **Alternative 1A: Corktown Connection** – A variation on the Parliament Loop provides surface infrastructure along Queens Quay East and Parliament Street to the Corktown Station on the Ontario Line.
- **Alternative 2: Distillery Loop** – This alternative provides surface infrastructure to the existing Distillery Loop via a new portal or on-street connection under the rail corridor on Cherry Street.
- **Alternative 3: Villiers Island Loop** – This alternative provides surface infrastructure along Queens Quay East and Cherry Street to a temporary loop on Villiers Island near Polson Street.
- **Alternative 4: Full Network** – This alternative provides surface infrastructure along Queens Quay East and Cherry Street to Distillery and Bouchette, with connections to the Broadview streetcar extension.

The analysis concluded that the Preliminary Design Business Case for the Waterfront East network should consider the inclusion of transit infrastructure to Villiers Island or the Full Network as part of the funding envelope for delivery before 2030. The incremental investment to serve Villiers Island (in addition to the Distillery Loop option) is approximately \$100m and provides strategic value to advance the vision and redevelopment of the Waterfront.



Exhibit A.30 Recommended surface networks

### 2020 Design Refresh (10%):

The 2020 Design Refresh includes the 10% concept design of roadway and streetcar track elements on Queens Quay East from Bay Street to Street A. The concept design is generally consistent with the approved 2010 East Bayfront Transit Class Environmental Assessment but includes some modifications in response to changes in context since 2010. Key design changes include:

- **Queens Quay alignment:** A new alignment between Small Street and the Victory Soya Mills increases available space between Queens Quay East and Lake Shore Boulevard. The alignment extends the existing Queens Quay alignment east to Parliament Street and then transitions to the north of the silo.
- **Parliament Street alignment update:** The realignment of Queens Quay East also necessitates a realignment of the Queens Quay East and Parliament Street intersection. The 10% design discusses two proposed designs to realign Parliament Street based on existing utilities and other considerations.
- **East portal location:** The 2010 design identified a portal east of Yonge Street as the preferred option due to its reduced impacts to the Westin Harbour Castle property and less complex transportation operations at the intersection of Yonge Street and Queens Quay. In the 10% design, the portal has been moved west of Yonge Street due to urban design benefits and significant cost savings. Additional benefits of locating the portal west of Yonge include:
  - o The new Yonge Slip provides an opportunity to improve safety by resolving conflicts along the frontage of the Westin Harbour Castle property;
  - o Vehicular movements can be consolidated at a single signalized intersection which provides benefits for pedestrian and cyclist safety, as well as transit reliability;
  - o New passenger pick-up and drop-off facilities can serve the wider waterfront;
  - o No modifications are required to access any residential properties; and
  - o There is an opportunity to integrate the new slip head with the MT27 park.



Cherry Street Portal Feasibility Study

The Cherry Street Portal Feasibility Study examines the Cherry Street USRC Bridge of the Union Station Rail Corridor (USRC) and evaluates potential configurations for an LRT portal (Exhibit A.31). The design brief for the project includes consideration of two-way flow of pedestrians, bicycles, cars, and LRT transit across the USRC.

The Feasibility Study approach for planning, design and construction of the Cherry Street portal started with consideration of the evaluation criteria used for selection of the portal configuration at the Environmental Assessment (EA) stage, updating and revising the evaluation criteria in light of current planning and visions for the waterfront area, and then selecting a configuration to carry forward. In addition to updated evaluation criteria, the feasibility level

evaluation for determining the new portal configuration also considered all known constraints including, but not necessarily limited to:

- Existing Site Conditions,
- Existing Buildings and Structures,
- Existing Infrastructure and Utilities,
- Operational Requirements of adjacent TTC and Metrolinx assets,
- Technical Design Requirements,
- Adjacent Projects,
- Constructability Issues, and
- Cost.

The three primary configurations for the Cherry Street portal which were evaluated as part of this Feasibility Study are summarized below:

- Bridge Rebuild (EA Preferred Configuration), which involves rebuilding the existing Cherry Street USRC Bridge structure to match the new Lower Cherry Street alignment.
- Mixed Traffic in Existing Portal, in which LRT traffic would be added to the transitway mix in the existing Cherry Street USRC Bridge by sharing the same structural space in the existing portal.
- New LRT Portal, which supplements the existing Cherry Street USRC Bridge with a new portal located to the east.

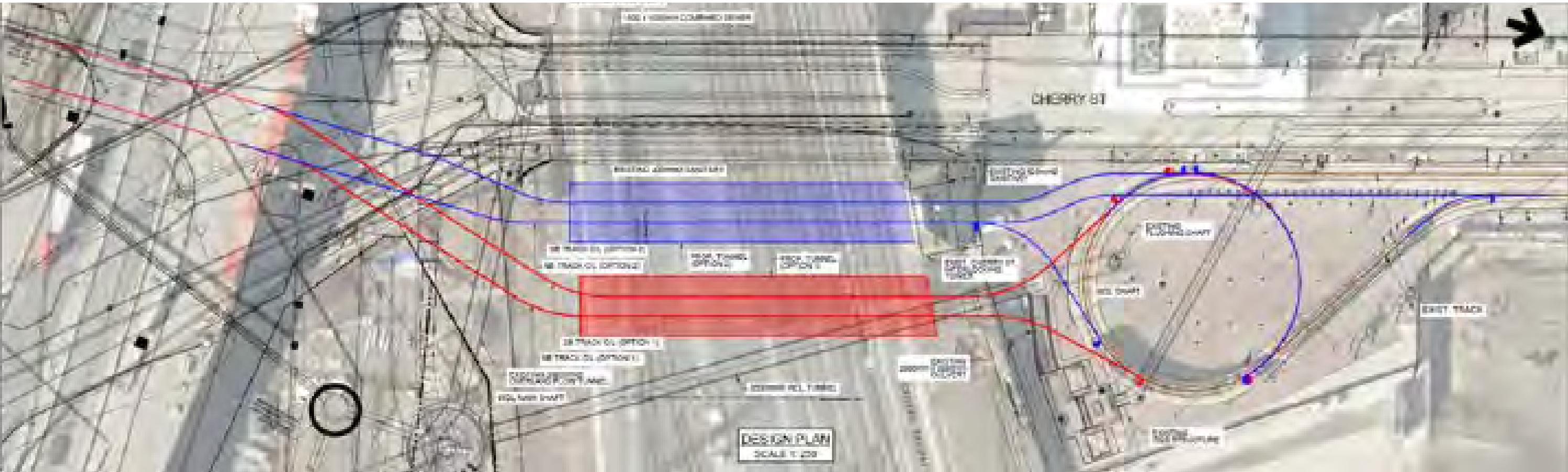


Exhibit A.31 Preliminary preferred portal horizontal alignments

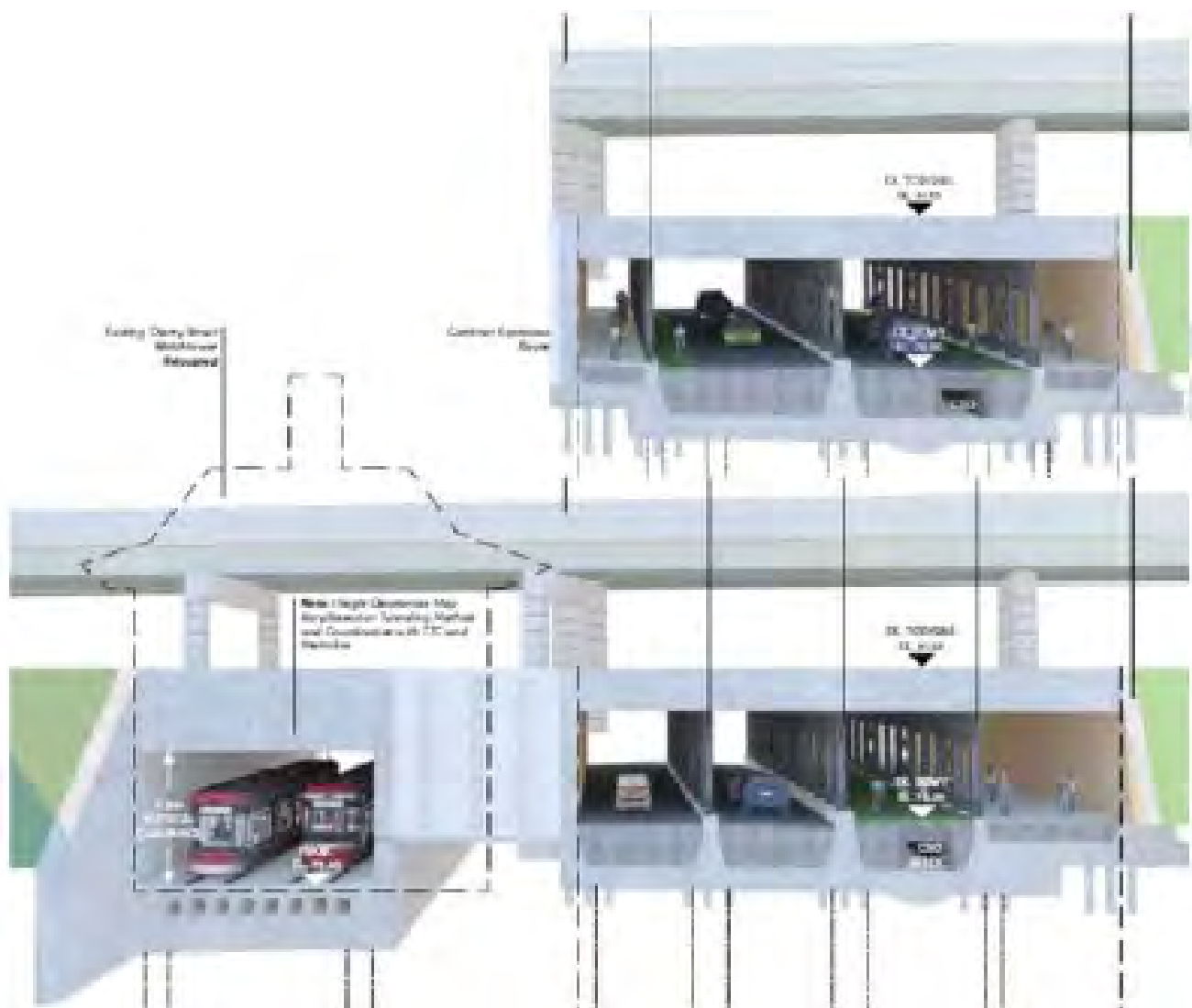


Exhibit A.32 New portal alternative alignment at Interlocking Tower Location

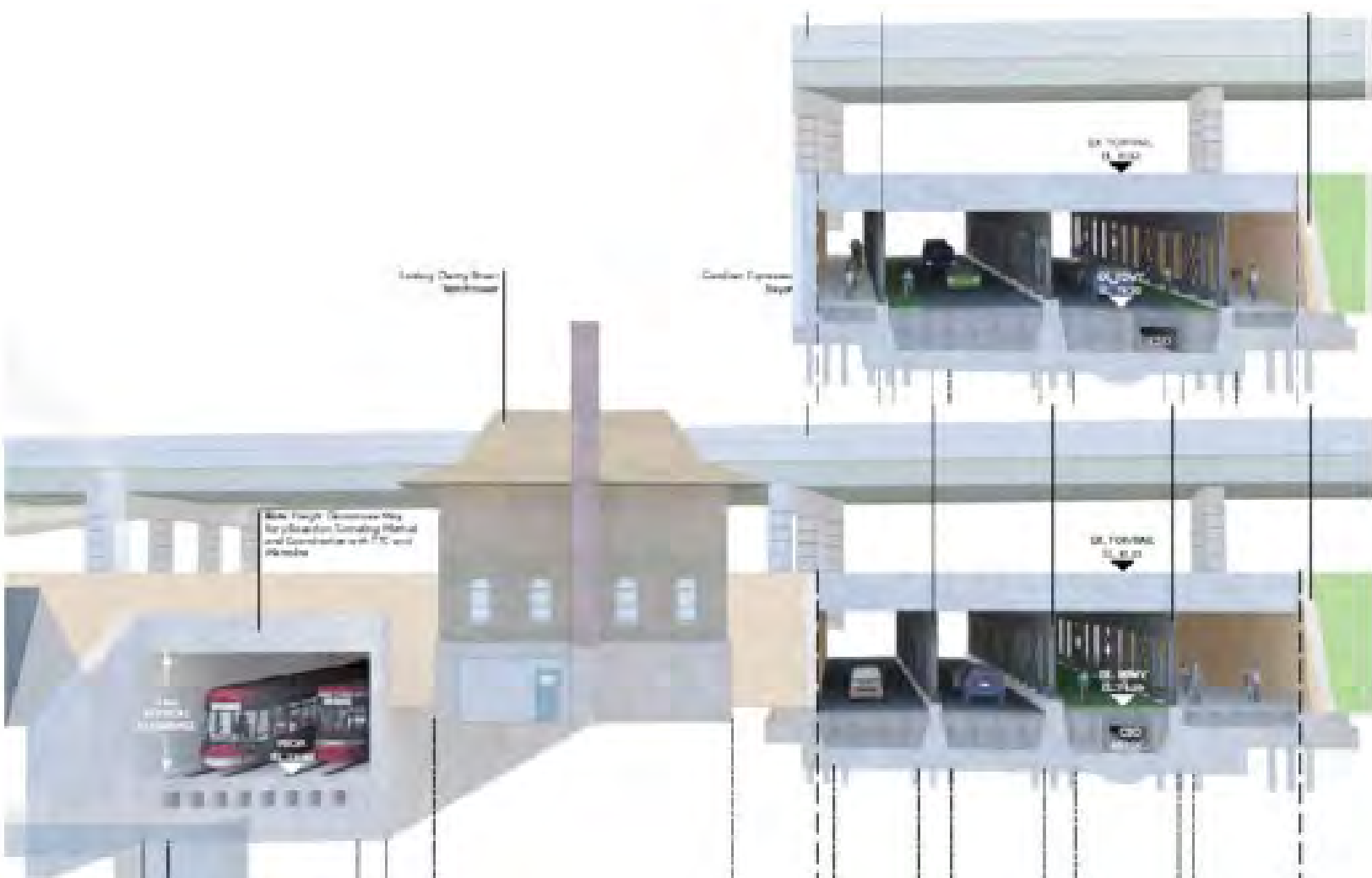


Exhibit A.33 New portal alternative alignment east of Interlocking Tower Location

The Feasibility Study identifies Configuration No. 3 - New LRT Portal to carry forward in the design process. This configuration maintains vehicle, pedestrian, and bicycle traffic in the transitway defined by the existing Cherry Street USRC Bridge and provides a new portal for dedicated LRT service at a location to the east of the existing bridge. The selected LRT portal configuration includes two primary alternatives – one that would locate the new portal through the Cherry Street Interlocking Tower east of the existing Bridge (Exhibit A.32) and a second that would locate the new portal to the east of the Tower building (Exhibit A.33).

This project is now considering moving the Tower structure to allow the new LRT portal to be constructed at that location, but that

remains under consideration and no recommendation regarding alignment for the new LRT portal is made in this Feasibility Study. Rapid lateral box jacking was selected as the preferred method for constructing the new LRT portal. Because this is a modified cut-and-cover method, there will be direct, but limited-duration impacts to the rail corridor. Discussions with Metrolinx are required to determine acceptability.