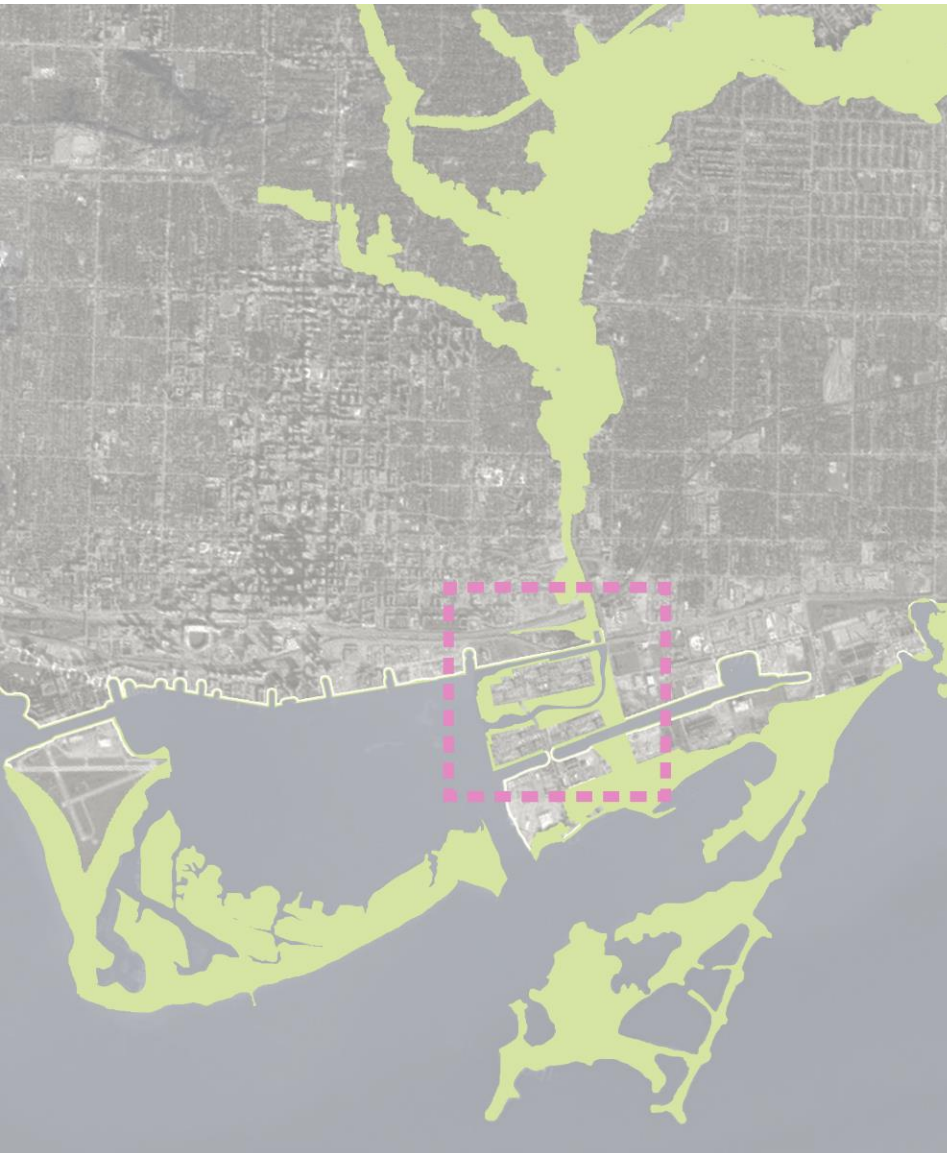


# Port Lands Acceleration Initiative 2013

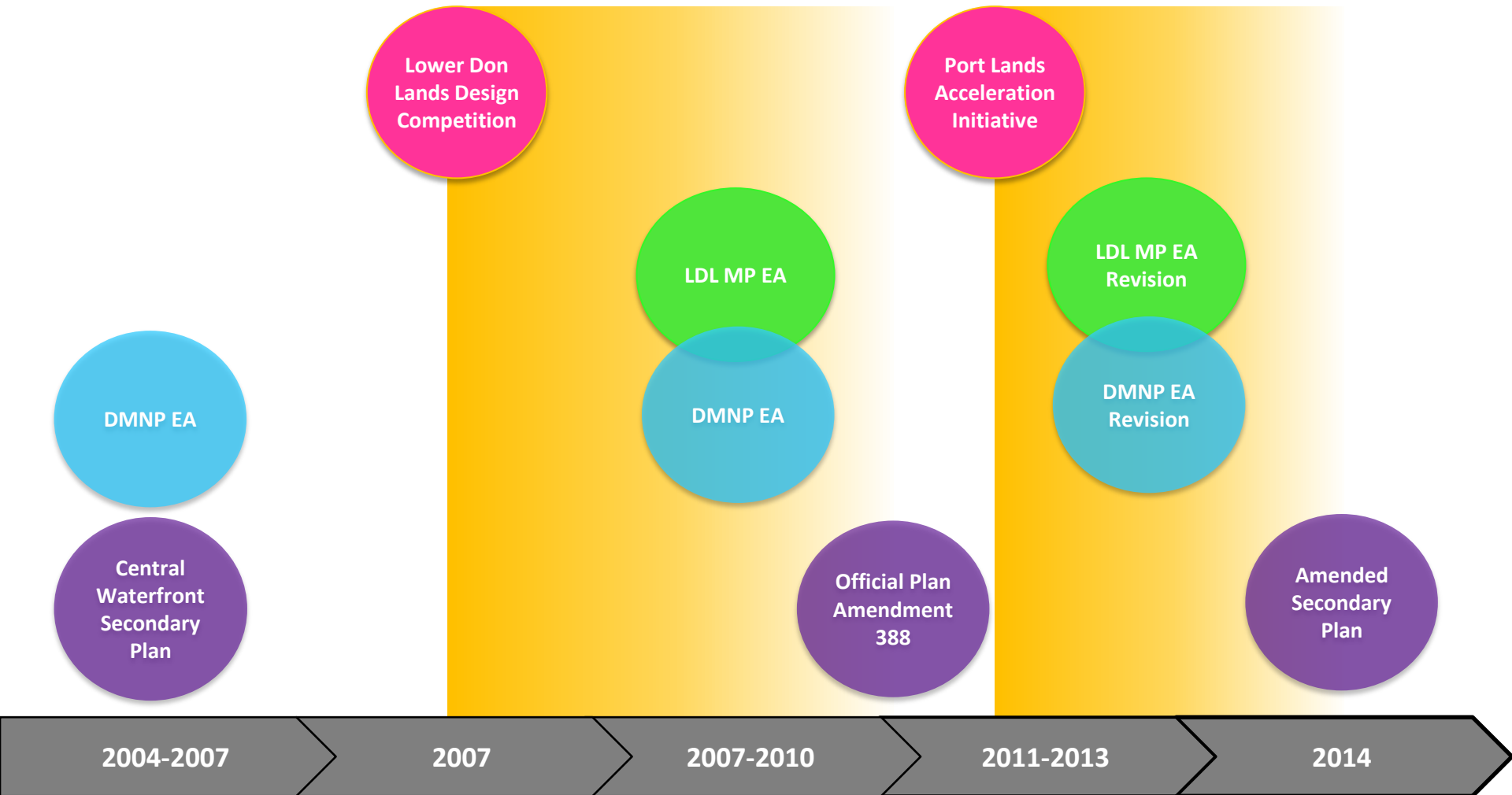


## Don Mouth Naturalization and Port Lands Flood Protection Project Environmental Assessment

## & Lower Don Lands Master Plan Environmental Assessment Study

Public Meeting

# Port Lands Planning Context



# October 2012 City Council Direction



- Amend the DMNP EA based on the 2012 “4WS Re-aligned” option and submit to the Ministry of the Environment (MOE) for approval;
- Revise the Lower Don Lands (LDL) Master Plan and Keating Channel Precinct Class EA to align with the PLAI direction;
- Protect the proposed valley and stream corridors from encroachment by development;
- Complete a high-level framework plan for the entire Port Lands;
- Confirm precinct boundaries and initiate precinct planning, inclusive of business and implementation planning, for the Cousins Quay, Polson Quay and Film Studio Precincts

# The Need for Flood Protection



- Permanent removal of flood risk from 240 ha of land

# DMNP EA Amendment – Purpose



**DMNP EA Study Area**

DMNP EA establishes:

- River channel and Greenway configurations for flood conveyance
- Naturalization and city building
- Adaptive management strategy
- Proposed phasing strategy for removing regulatory flood zone
- Minimum elevations for surrounding lands
- Flood protection requirements

# LDL MP EA Study – Purpose

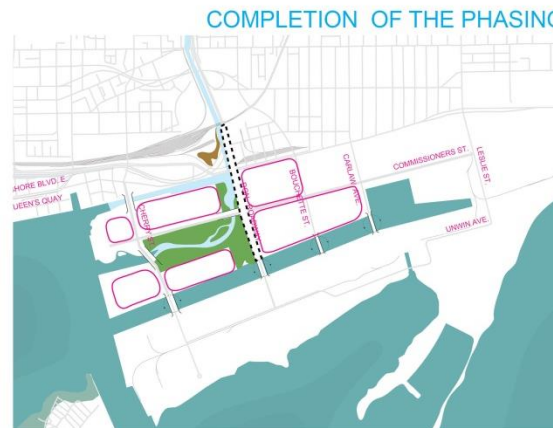


**LDL MP EA Study Area**

The LDL MP EA Study:

- Servicing infrastructure necessary to support revitalization and refines it to coincide with the optimized river valley.
- Phases 3 and 4 are being completed for Schedule C projects including streets and coordinated stormwater management infrastructure.
- Minimum elevations of bridges and roads to match DMNP EA

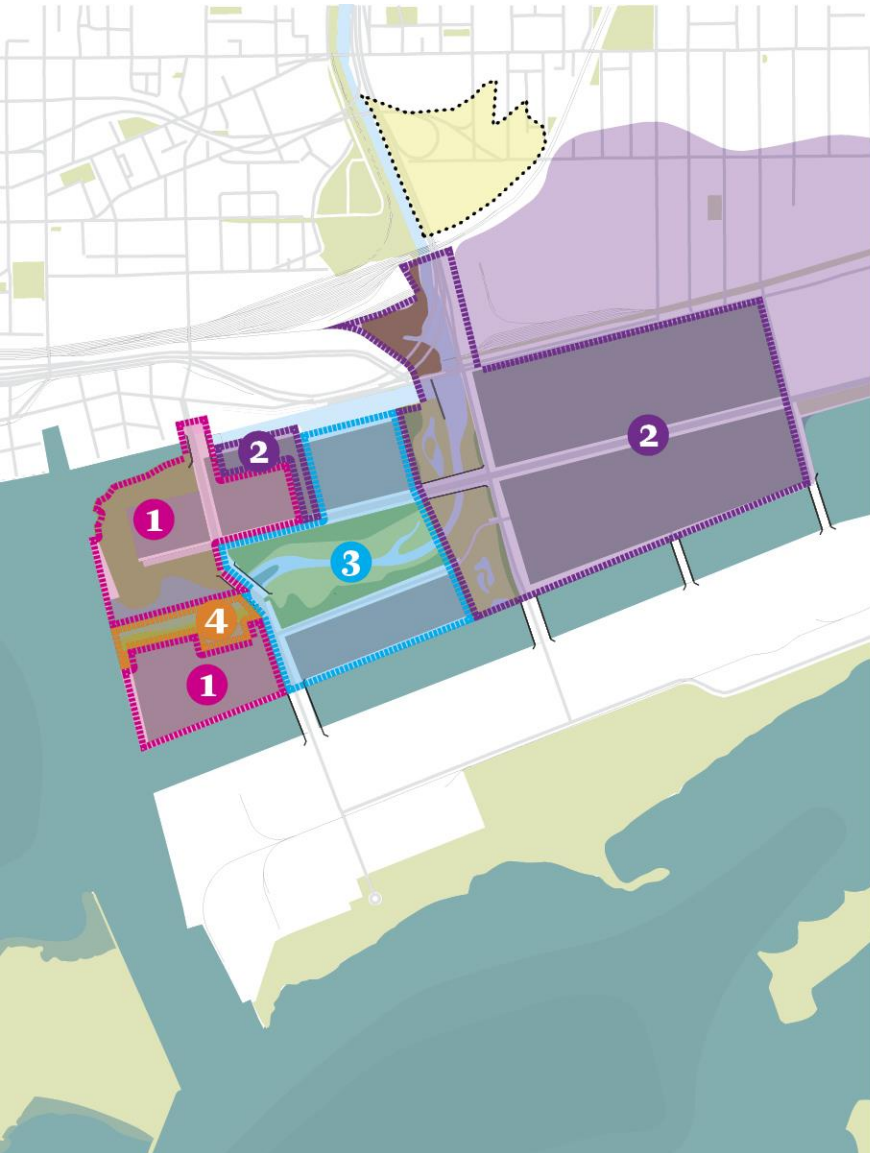
# 2012 PLAI Phasing



-  flood area
-  raised Don Roadway
-  developable area
-  spillway
-  sediment basin



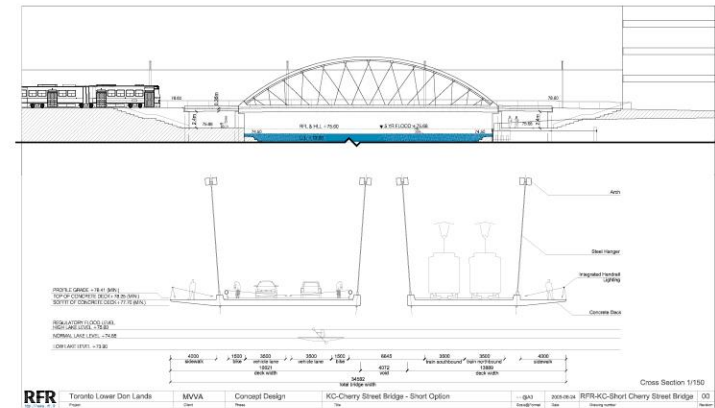
# 2013 PLAI Optimized Phasing – Overview



- 1** Phase 1
- 2** Phase 2
- 3** Phase 3
- 4** Phase 4



# 2013 PLA – Phase 1 – Flood Protection



- Phase 1 Greenway no longer necessary
- Construct new Keating Channel bridge
- Remove old Keating Channel bridge and abutments

# 2013 PLAI – Phase 1 – Development



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

# 2013 PLAI – Phase 2 – Flood Protection



Don Valley Trail bike path over sediment management area

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

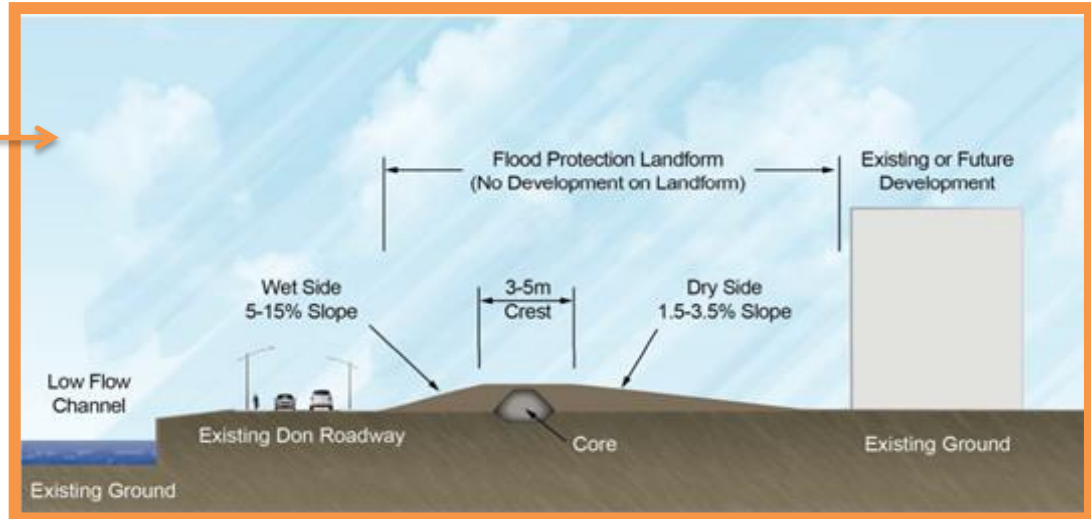


Key Plan

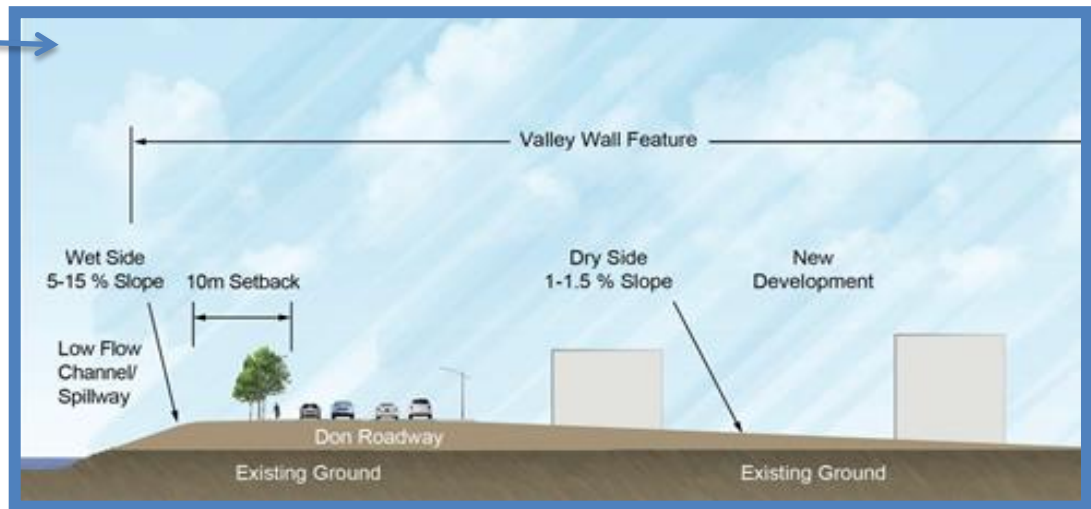


Eastern Avenue Protection Works Inset

# 2013 PLAI – Phase 2 – Flood Protection - Detail

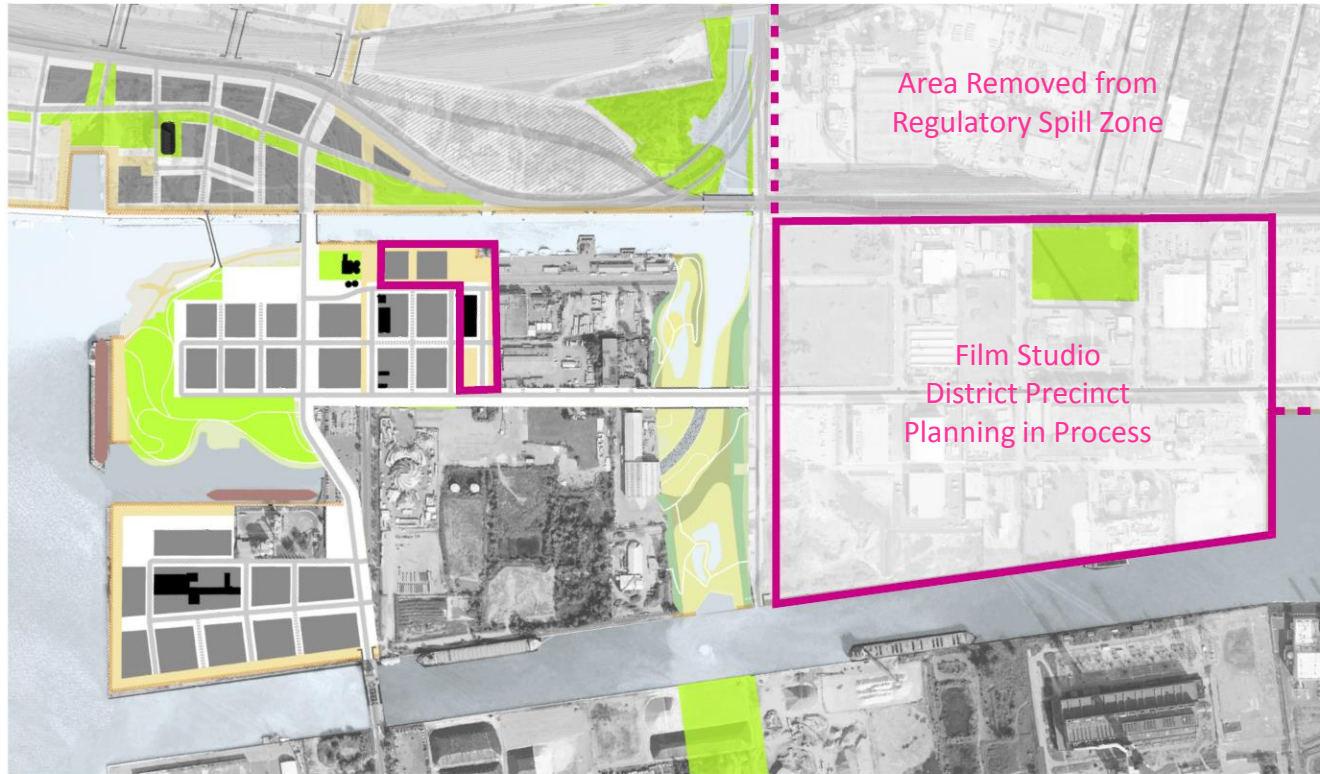


FLOOD PROTECTION LANDFORM



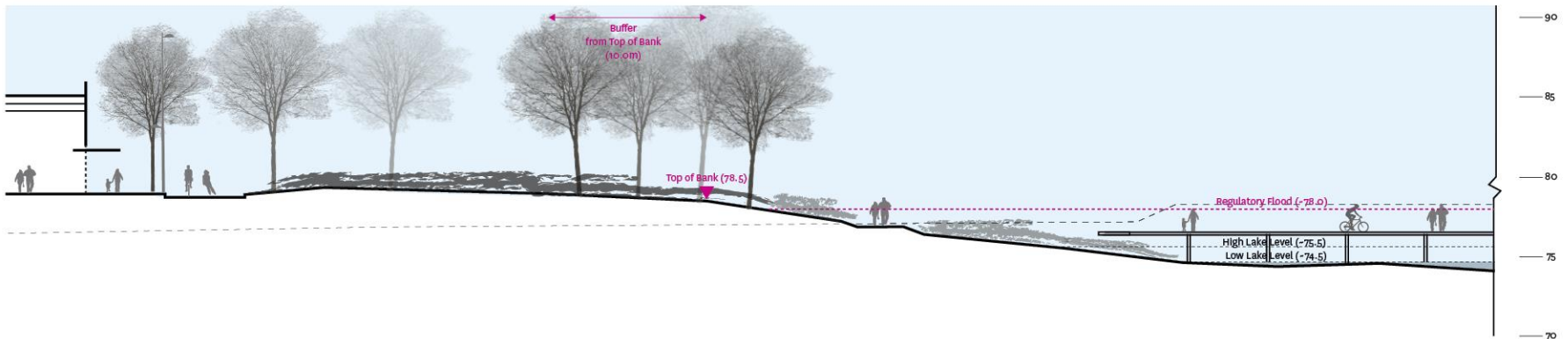
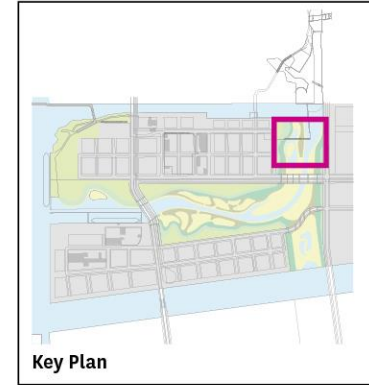
VALLEY WALL FEATURE

# 2013 PLAI – Phase 2 – Development

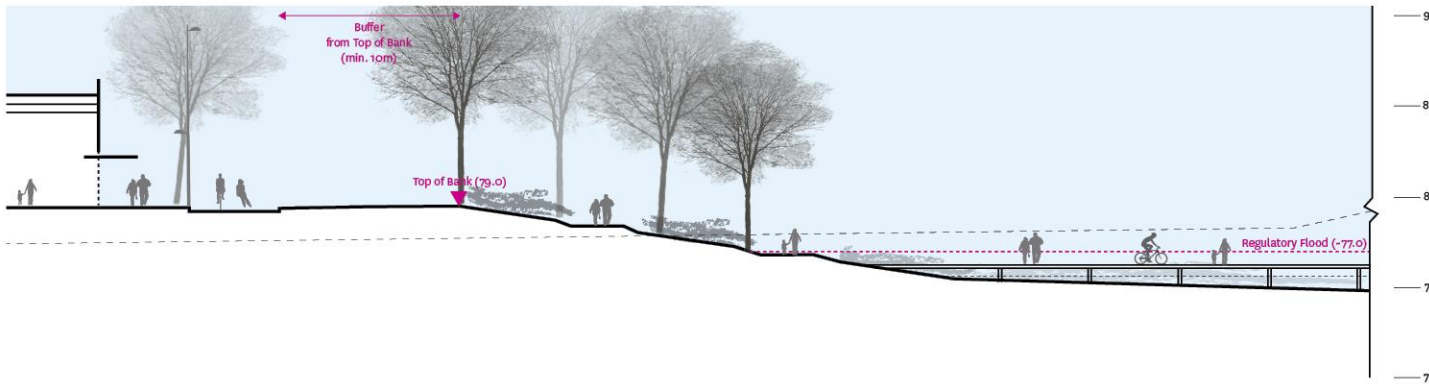
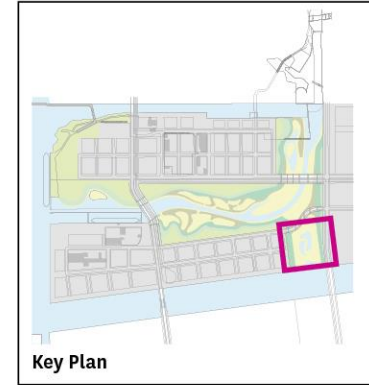
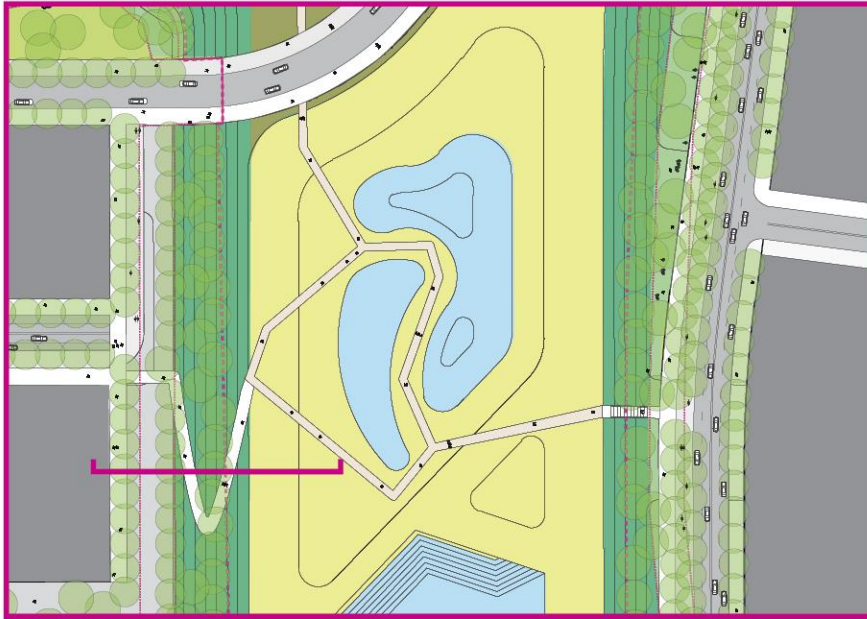


- Development to Munitions Block
- Film Studio District Precinct and lands east of Don Roadway are flood protected

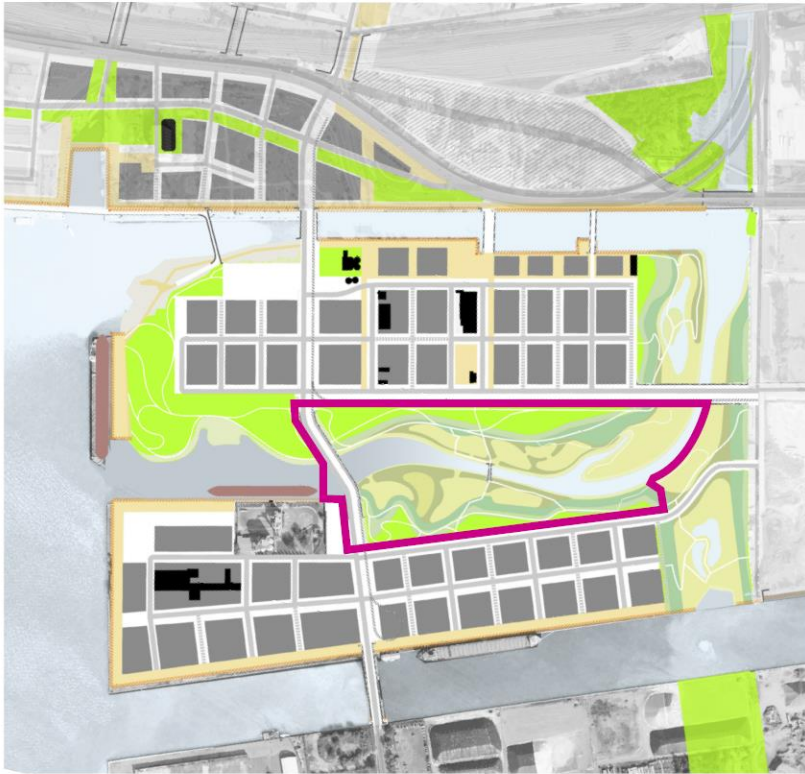
# 2013 PLA – Greenway



# 2013 PLAI – Greenway



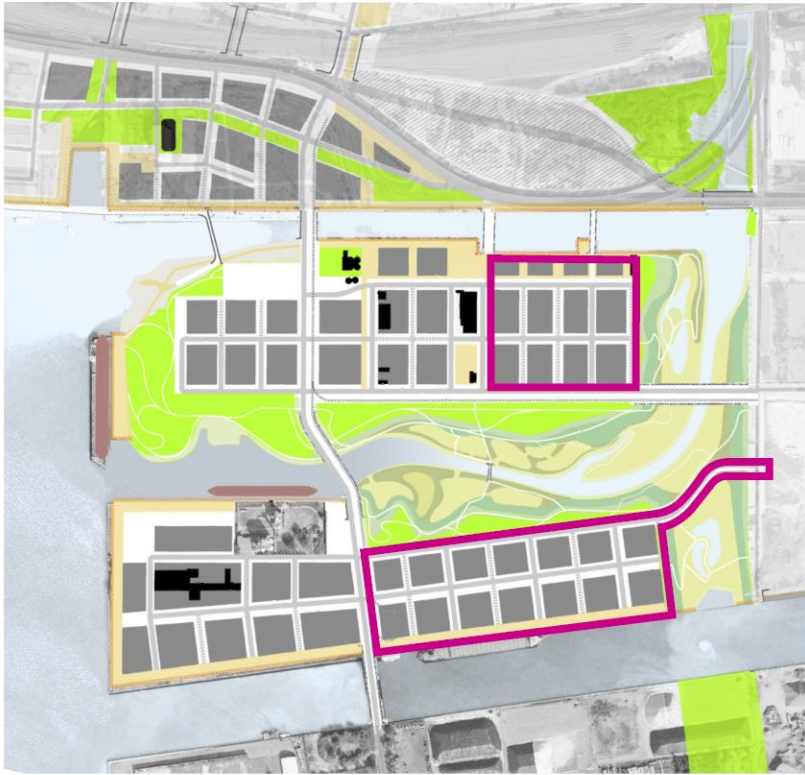
# 2013 PLAI – Phase 3 – Flood Protection



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



# 2013 PLAI – Phase 3 – Development



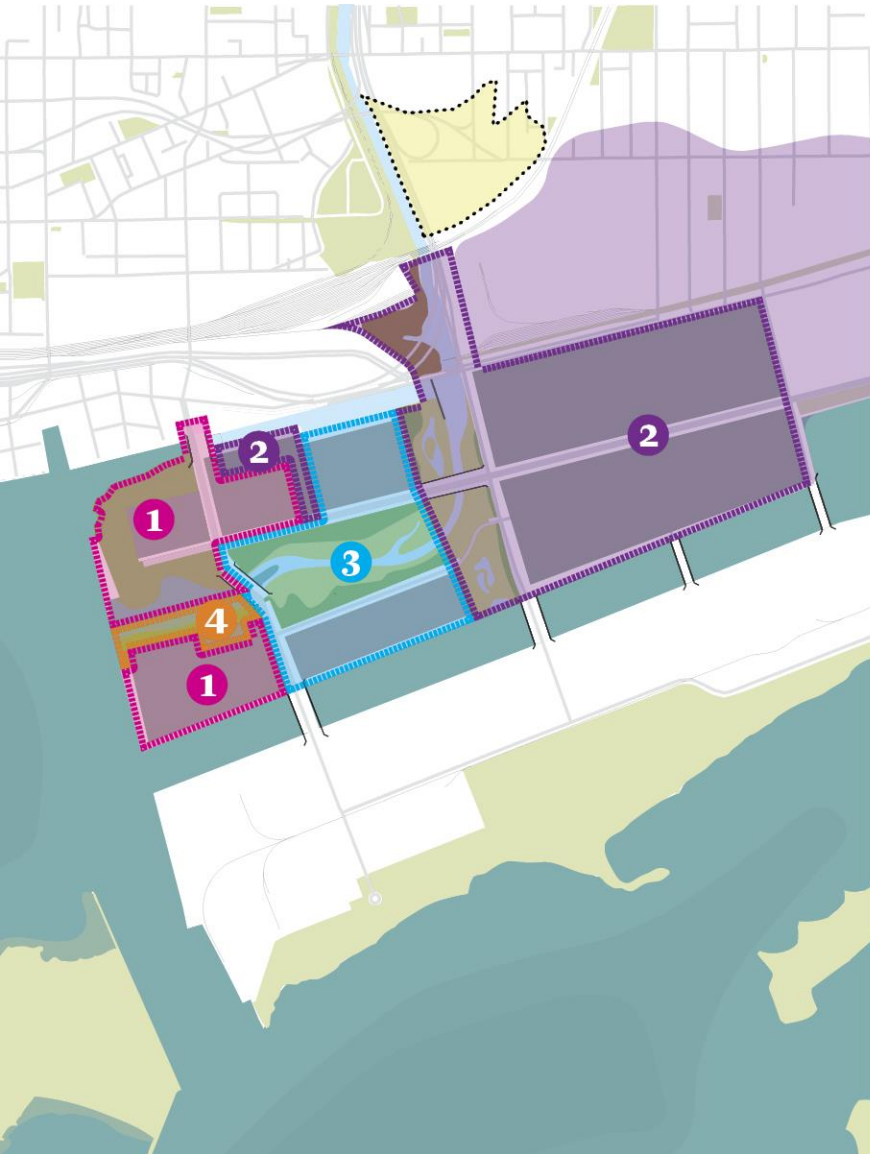
- River Valley Precincts
- Construct Basin Street bridge
- Raise and fill north and south of river valley

# 2013 PLAI – Phase 4 – Naturalization



- Naturalize Polson Quay south dockwall

# 2013 PLAI Optimized Phasing – Conclusion

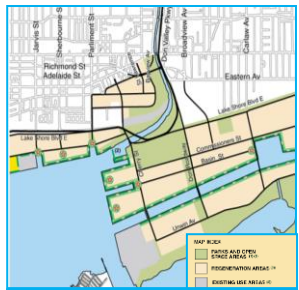


- Building the permanent condition in a phased approach both:
  - minimizes/eliminates throwaway costs of interim construction and
  - meets accelerated urban development goals



# DMNP EA

# Progression of the DMNP EA



**Central Waterfront Secondary Plan, 2003**



**Approved EA Terms of Reference, 2006**



**Lower Don Lands Design Competition, 2007**



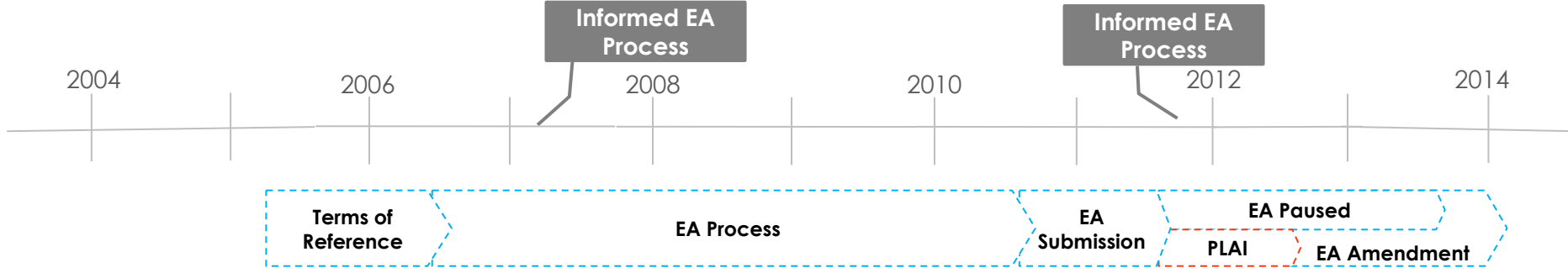
**DMNP EA Conceptual Design, 2010**



**Port Lands Acceleration Initiative (PLAI), 2012**



**DMNP EA Amendment, 2013**



1

## **Develop Long List of Alternatives Based on:**

1. Discharge Points
2. River Characteristics
3. Channel Shape (Cross-Section)
4. Habitat Types (What Grows in the Channel)

2

## **Evaluate Alternatives and Identify a Short List of Alternatives Based on Technical Feasibility, Including:**

- Recreational Opportunities within the River Valley System
- Integration with Infrastructure
- Management of Sediment, Debris, and Ice; Navigation

3

## **Comparative Evaluation of Short List of Alternatives**

4

## **Select Preferred Alternative for Further Evaluation**

5

## **Confirm and Describe Preferred Alternative**

# Amended Preferred Alternative

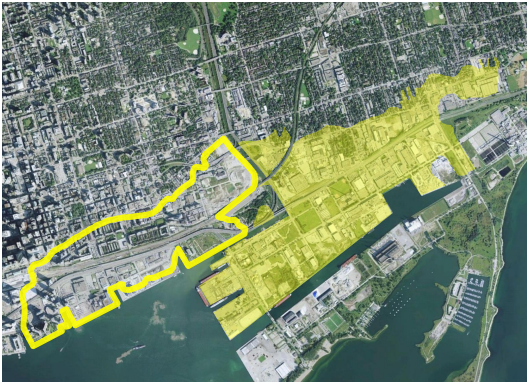
## Preferred Alternative, 2013



- Realignment of the Greenway
- Phased Implementation of Flood Protection
- Accommodation of Lafarge During Phasing
- Rationalizing Developable Land and Naturalization
- Removal of Inner Harbour Promontories

# How does the Amended Alternative Fulfill the Project Goals?

## Flood Protection



**Permanent removal of flood risk from 240 ha of land**

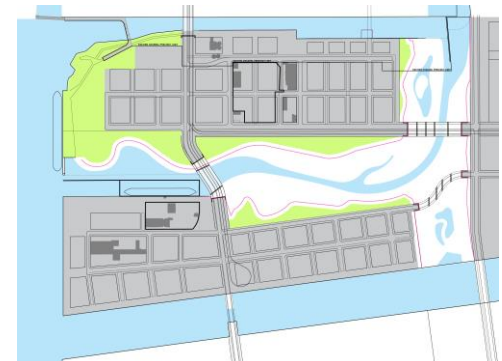
## Naturalization



**Aquatic Habitat:**  
14 Hectares

**Naturalization (Terrestrial / Wetland):**  
16 Hectares

## Revitalized City Environment



**Phased flood protection allows development to proceed in step with completion of the new river valley**



# Overview of the Effects and Mitigation

## Flood Protection

- Phased construction of river will progressively remove lands from flood risk without increasing flood risk elsewhere
- Permanent removal of 240 ha of land from flooding

## Naturalization

- Creation of 14 ha of high quality aquatic habitat
- Creation of 16 ha of naturalized habitat (wetland/terrestrial) which is expected to attract locally significant species

## Recreational and Cultural Opportunities

- New river mouth provides greater recreational opportunities than the existing river (e.g., boating, trails, enjoyment of naturalized landscapes)
- Heritage resources within the footprint of the river valley system will be conserved, relocated, raised, or commemorated

# Overview of the Effects and Mitigation

## Operational Management and Constructability

- Flood protection minimizes throwaway costs between phases
- Sediment management uses existing infrastructure where possible and allows for the use of dredgate during lakefilling
- Design and phasing limits impacts to existing operations and shipping

## Planned Land Use

- Nuisance effects on existing/future residents and businesses (e.g., noise, dust, and traffic) due to construction will be mitigated

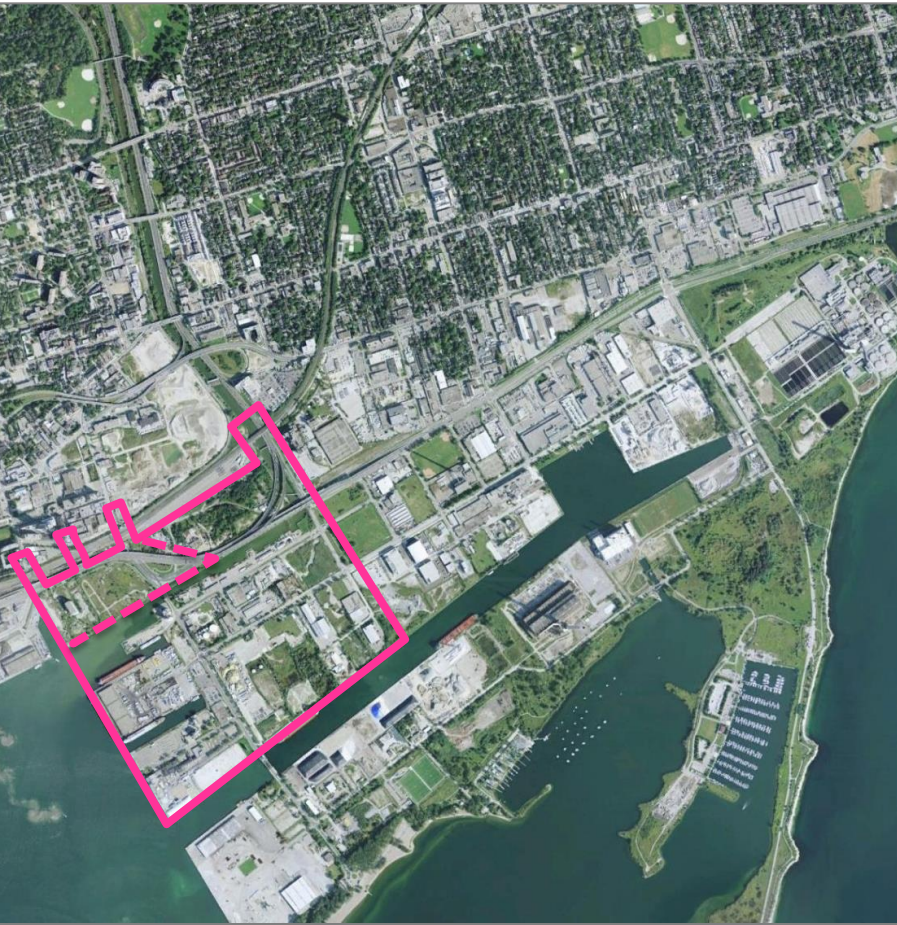
## Sustainability Framework

- Excavated soil will be treated and reused on-site where appropriate
- Remaining soils that must be transported off-site will have minimal effects on traffic, air quality, and noise.



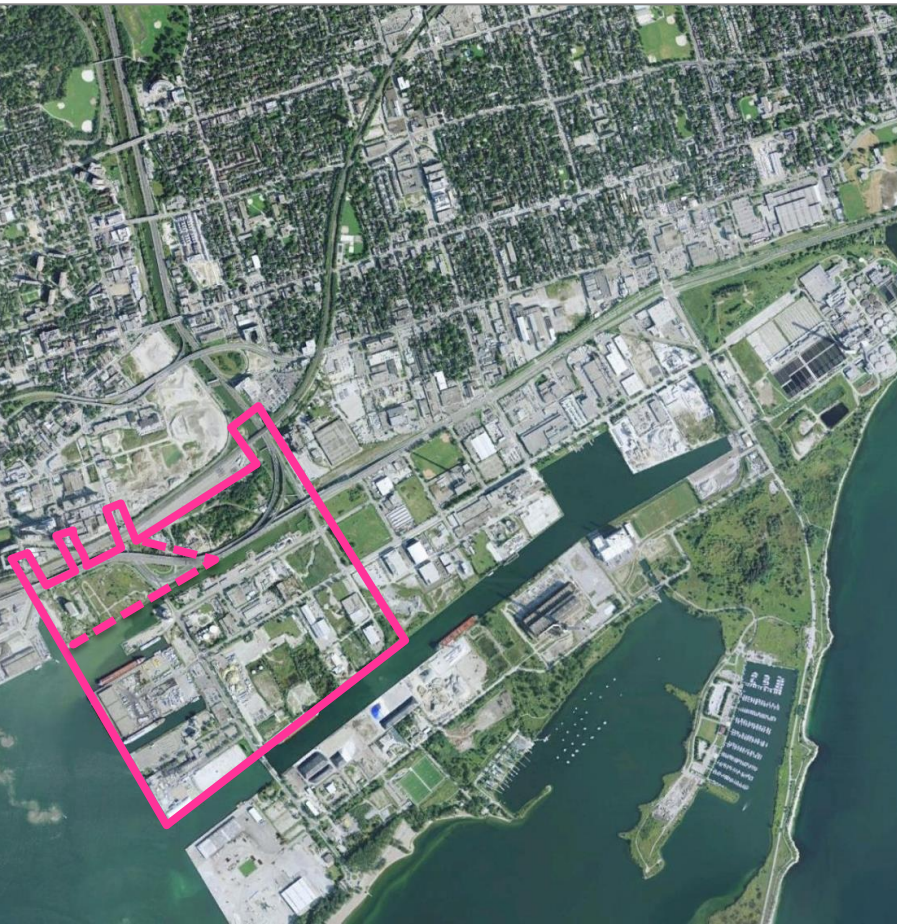
# LDL EA MP Study

# LDL EA MP Study - Overview



- In 2010 City Council approved a Transportation and Infrastructure Master Plan (Phases 1 and 2) for the entire LDL and completed the EA process (Phases 3 and 4) for the Keating Precinct.
- The completed EA was approved for the lands west of Cherry Street. The remainder was put on hold pending the completion of the Gardiner Expressway EA.
- 2012 PLAI Plan requires revisions to the approved Master Plan.
- Phases 3 and 4 of the Class EA are being completed for all lands south of the Keating Channel.

# LDL EA MP Study - Content



## Scope for LDL EA MP:

- Water
- Sanitary
- Roads
- Bridges
- Transit
- Stormwater

# Water

## Approved EA Master Plan



**Proposed  
or  
Relocated  
in this  
Addendum**

## 2013 LDL MP EA Study



# Sanitary

## Approved EA Master Plan



**Proposed  
or  
Relocated  
in this  
Addendum**

## 2013 LDL MP EA Study



# Roads

Approved EA Master Plan

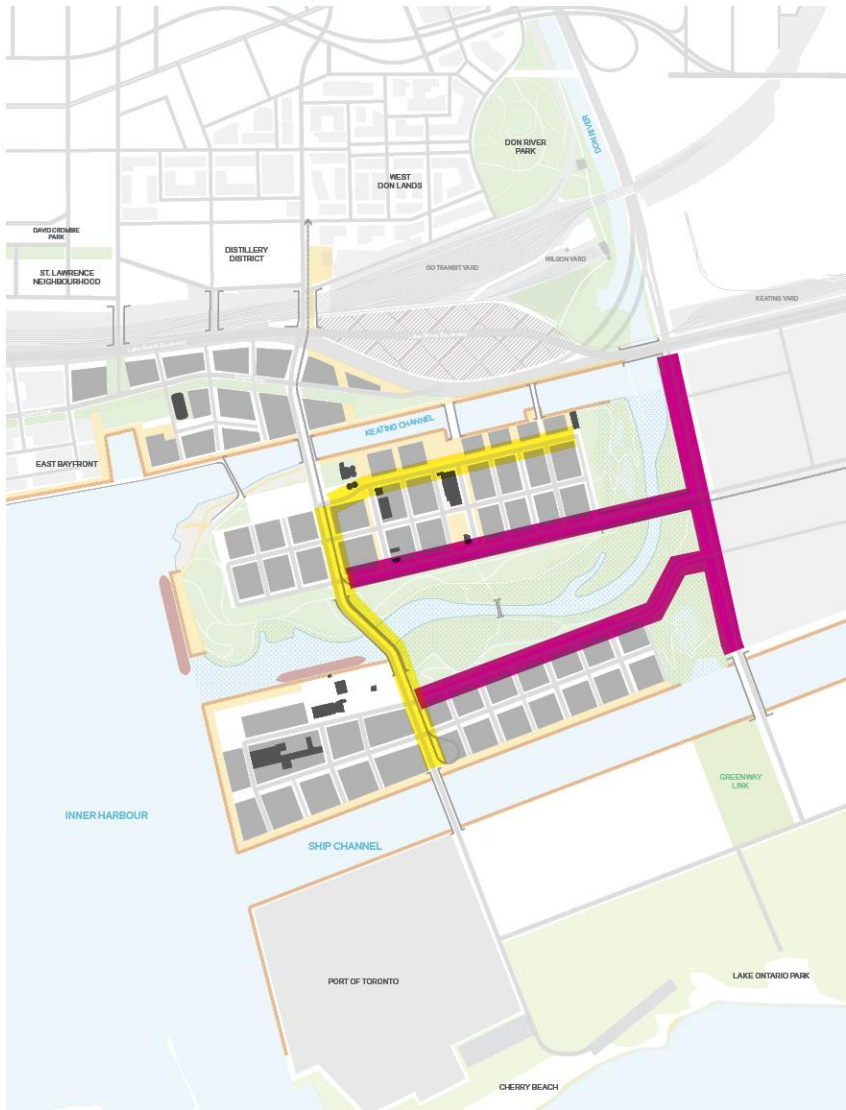


Complete Phases 3 and 4 of Class EA: Location not Changed from 2010



Proposed or Relocated in this Addendum

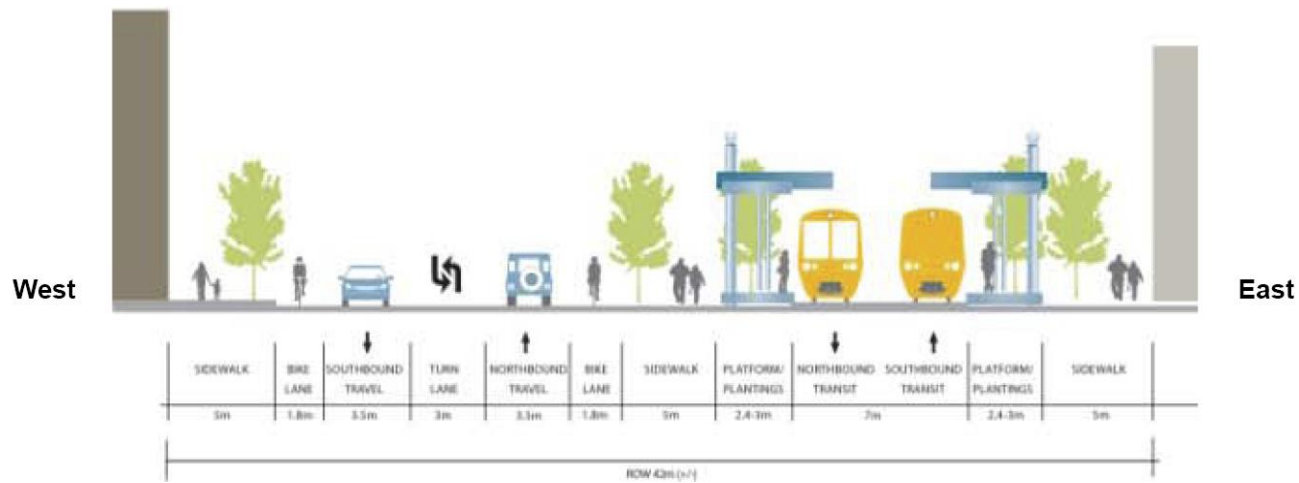
2013 LDL MP EA Study



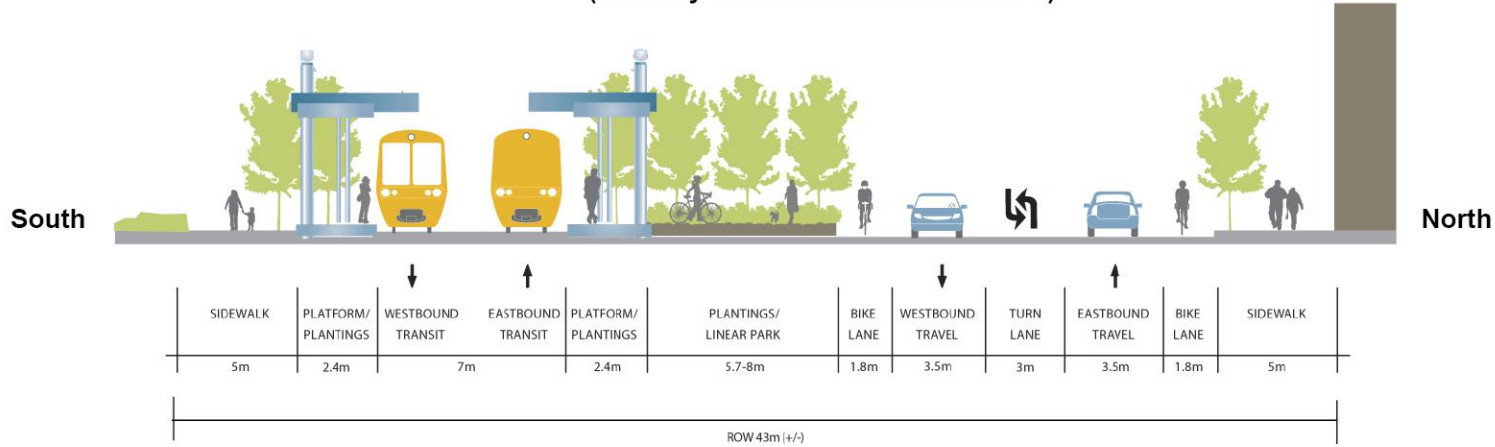


# Roads – Cross Sections

**Figure 11-2 Cross-section for Cherry Street between Lake Shore Boulevard and Villiers Street**



**Figure 11-20 Cross-section for Commissioners Street (formerly Villiers Street Alternative 1)**



# Roads – Basin Street Alternatives

**Alternative 1 – Bridge** – structure comprised of a deck on piers

**Alternative 2 – Causeway and Bridge** – combination of filled embankment and smaller bridges where the water has to pass through – underneath the bridge deck could be completely open or box culverts.

**Alternative 3 – River Ford** – where the road is built at-grade down into the spillway and floods during 1 in 25 year events and is impassable at that time.

Criteria	Alternative 1: Bridge	Alternative 2: Causeway	Alternative 3: At-grade river ford
Natural Environment	The bridge would provide both movement of peak flood flows and the potential for some natural elements beneath the bridge depending on final bridge design.	The causeway would provide for movement of peak flood flows, but since the structure would have more structural impediments, it would require more land for the spillway north of the roadway. Since the water would move through culverts beneath the road, there is no opportunity to naturalize that area.	The at-grade river ford would provide both movement of peak flood flows and the potential for some natural elements adjacent to the road.
Social Environment	Since all three routes occupy the same general area, and there are no nearby residences, the three alternatives would have the same social impact.		
Economic Environment	Likely to add the most economic benefit, as it would provide full access to all planned development lands.	Less economic benefit, as the causeway would require a larger spillway to the north to accommodate flood waters, reducing the future development area.	Likely to add the most economic benefit, as it would provide full access to all planned development lands.
Cultural Environment	No significant cultural resources are likely to be affected by any of the alternatives		
Sustainability	Both the bridge and causeway would provide numerous opportunities for the accomplishment of sustainable construction practices for the roadway.		The roadway would probably require more maintenance and rebuilding after every major flood event.
Land Use and Property	Requires land currently owned and leased by TPLC. The road would be constructed in the future at the time of redevelopment, so any leased land holdings could be addressed by then.	Also requires lands owned and leased by TPLC, but the causeway would cause the need for a larger area north of the roadway to be set aside as open space to accommodate flood water backup created by the causeway, so less property is available for development.	Requires land currently owned and leased by TPLC. The road would be constructed in the future at the time of redevelopment, so any leased land holdings could be addressed by then.
Transportation	The bridge and the causeway would provide adequate transportation access to allow future development and network traffic distribution.		The river ford would also provide adequate transportation access and traffic distribution most of the time, but in the event of a major flood, access would be cut off in this route, so there would not be a secondary egress route, so this option is inferior.
Municipal Services	All three alternatives would be built in an area where the municipal services are being completely reconstructed for the flood protection spillway, so there is no difference.		
Preferred Alternative	X	Y	

# Bridges

## Approved EA Master Plan



**Complete Phases 3 and 4 of Class EA: Location not Changed from 2010**



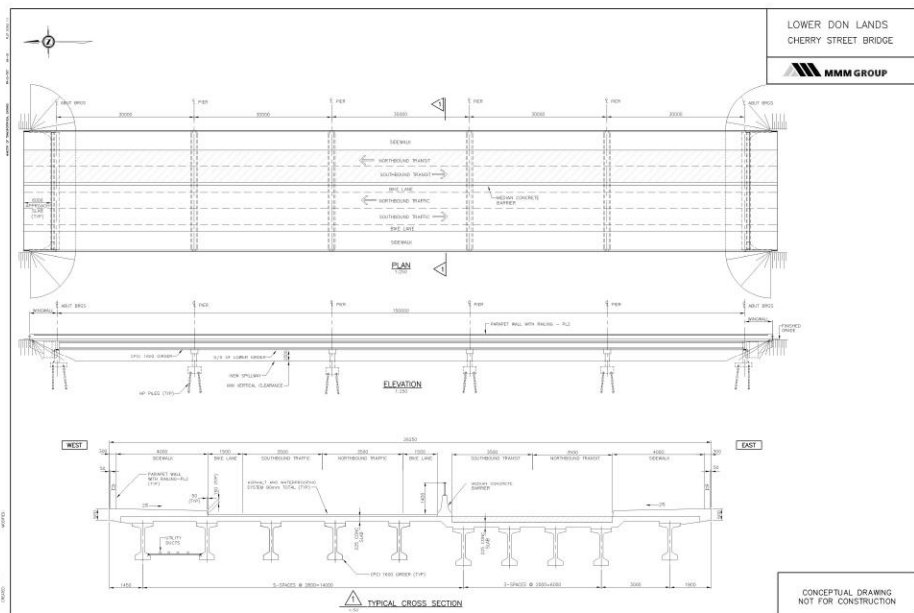
**Proposed or Relocated in this Addendum**

## 2013 LDL MP EA Study

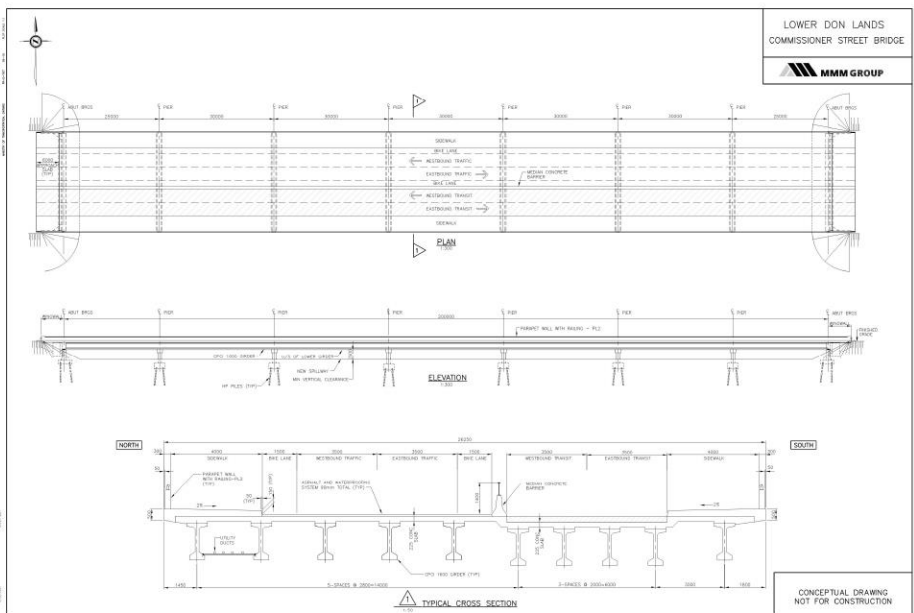


# Bridges – Conceptual Drawings

## Polson Slip Bridge



## Commissioner Street Bridge



# Transit

## Approved EA Master Plan



Complete  
Phases 3  
and 4 of  
Class EA:  
Location  
not  
Changed  
from 2010



Proposed  
or  
Relocated  
in this  
Addendum

## 2013 LDL MP EA Study



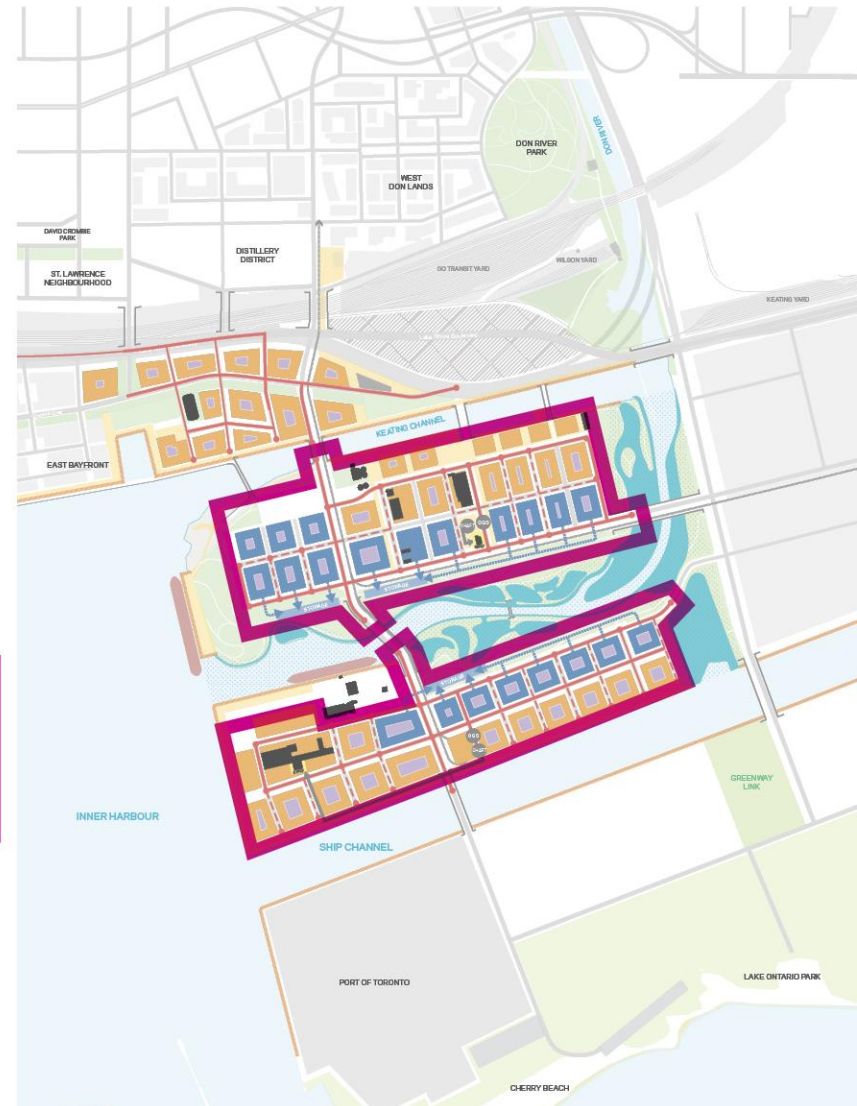
# Stormwater

## Approved EA Master Plan



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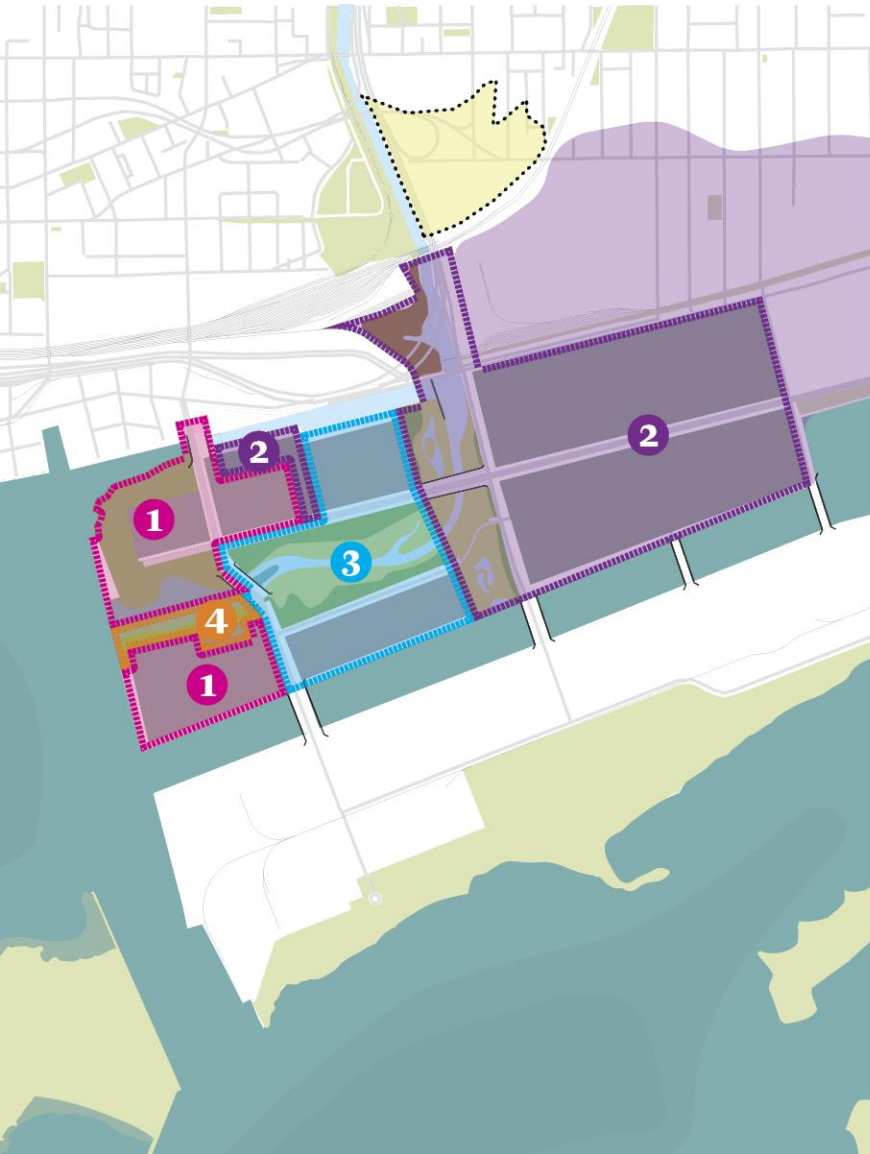
## 2013 LDL MP EA Study





# Next Steps

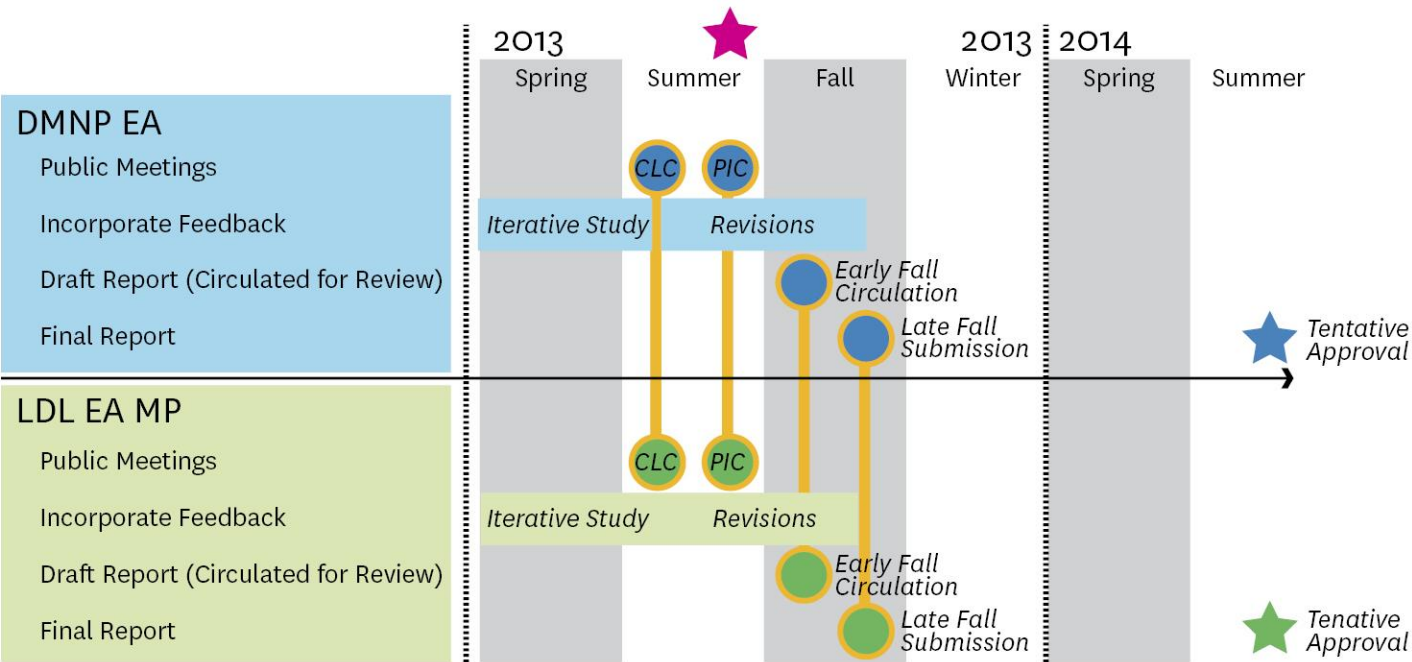
# PLAI Financing Strategy



- The City has included in its Development Charges report to City Council provision for City-wide development charges. This is now before City Council.
- City is exploring the potential for area-specific development strategies.
- The landowners have formed a group to explore funding infrastructure costs once the EA has been adopted.
- City, WT, and TRCA will continue to pursue funding from senior levels of government when and if funds are available coordinated with other City and Waterfront renewal efforts.



# Next Steps



# Continued Planning in the Port Lands

## Planning Frameworks



- Port Lands Planning Framework:
  - High-level framework to articulate the vision for the Port Lands
- South of Eastern Strategic Direction:
  - A three-pronged strategy to plan and facilitate investment and economic growth in the South of Eastern area

## Port Lands and South of Eastern Class EA



- Arterial and collector streets, including:
  - Planned function and character of Lake Shore Boulevard
  - North-south connections
  - Potential connections across the Ship Channel
  - Transit routes
  - Pedestrian and cycling facilities
- Servicing infrastructure for anticipated development (water, storm and sanitary)

# Continued Planning in the Port Lands

## Precinct Planning



- The City and Waterfront Toronto are developing precinct plans for Cousins Quay and the Film Studio Precinct
- The Precinct Plan for Polson Quay is currently on hold
- Central Waterfront Secondary Plan sets out that precinct plans be prepared prior to enacting zoning by-laws
- The establish the location, scale and character of:
  - blocks and streets
  - type and amount of development
  - Building heights
  - parks and public spaces; and
  - community facilities
- More detailed urban design guidelines are developed

# Continued Planning in the Port Lands

	Q2 2013	Q3 2013	Q4 2013	Q1 2014
Port Lands Planning Framework / Port Lands and South of Eastern Class EA	Initiation/Background	Vision/Objectives	Alternatives/Analysis SAC CCM SAC CCM	Recommendations SAC CCM
Film Studio Precinct Plan	Initiation/Background	Vision/Objectives	Options/Analysis	Recommendations SAC CCM SAC CCM
Cousins Quay Precinct Plan	Initiation/Analysis	Vision/Objectives DC SAC CCM	Alternatives/Implementation SAC	Recommendations SAC CCM



# Discussion