



# Quayside Infrastructure and Public Realm (QIPR)

Schematic Design

May 24<sup>th</sup>, 2023

# Project Background

## Project Description

- The Quayside Infrastructure and Public Realm project consists of all the infrastructure, internal streets, Parliament Street, Parliament Plaza and Water's Edge Promenade components of the larger Quayside project. (Map to follow)
- Waterfront Toronto will lead the design and construction of this project as master developer and delivery agent to the City of Toronto and in coordination with the preferred development partner for Quayside (QILP).
- Waterfront Toronto has undertaken a public procurement and retained WSP (with West 8+DTAH) to lead the design of this work.
- Other consultants have been retained (or will be retained in the future) for Queens Quay, Silo Park, Parliament Slip Lakefill and Parliament Slip Activation.
- The Quayside Impact team will deliver the design and construction of the Privately owned Publicly accessible open spaces within the interior of Blocks 1-3 at Quayside.



# Project Timeline

## QIPR Milestone Schedule

- June 2022 – Stage 1 Issues ID
- May 2023 - 30% Design
- September 2023 - 60% Design

## QIPR Milestone Schedule (Parliament Plaza Only)

- June 2022 – Stage 1 Issues ID
- Later 2023- 30% Design
- TBD - 60% Design

## QILP Milestone Schedule (For Reference)

- January 2023 - QILP Stage 1 Issues ID DRP
- July 2023 - Master Plan + Urban Design Guidelines Stage 2 Draft Plan DRP
- Date TBD - Rezoning + SPA Application
- Date TBD - Buildings Stage 2 Schematic Design DRP3

# Project Timeline

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

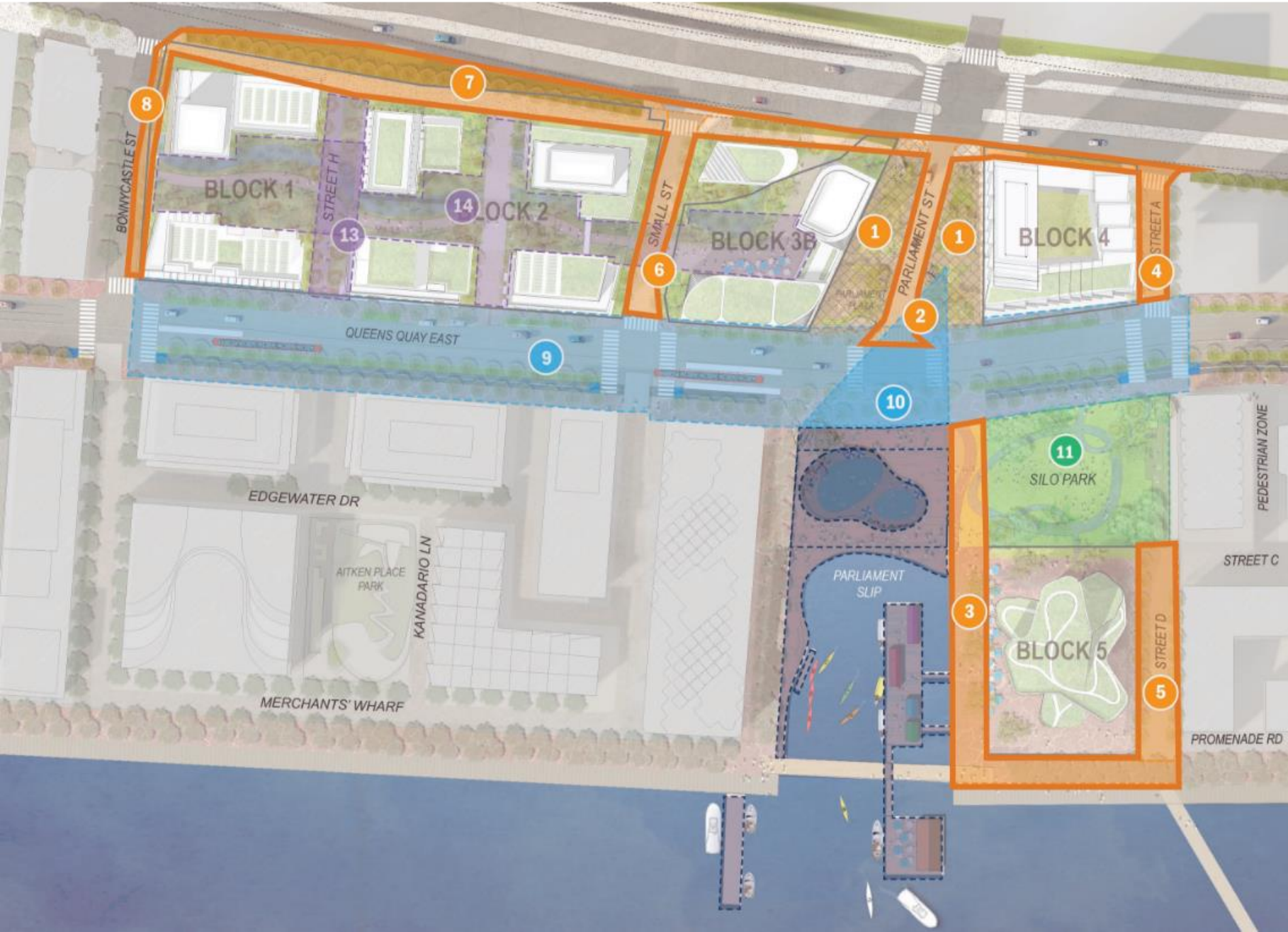
Review Stage: Schematic Design

## QIPR + QILP Ongoing Coordination Items

- Program + Design Integration
- Building Floorplan Coordination
- Coordination of Underground Structures with Public Realm



# Quayside Coordinated Public Realm Program

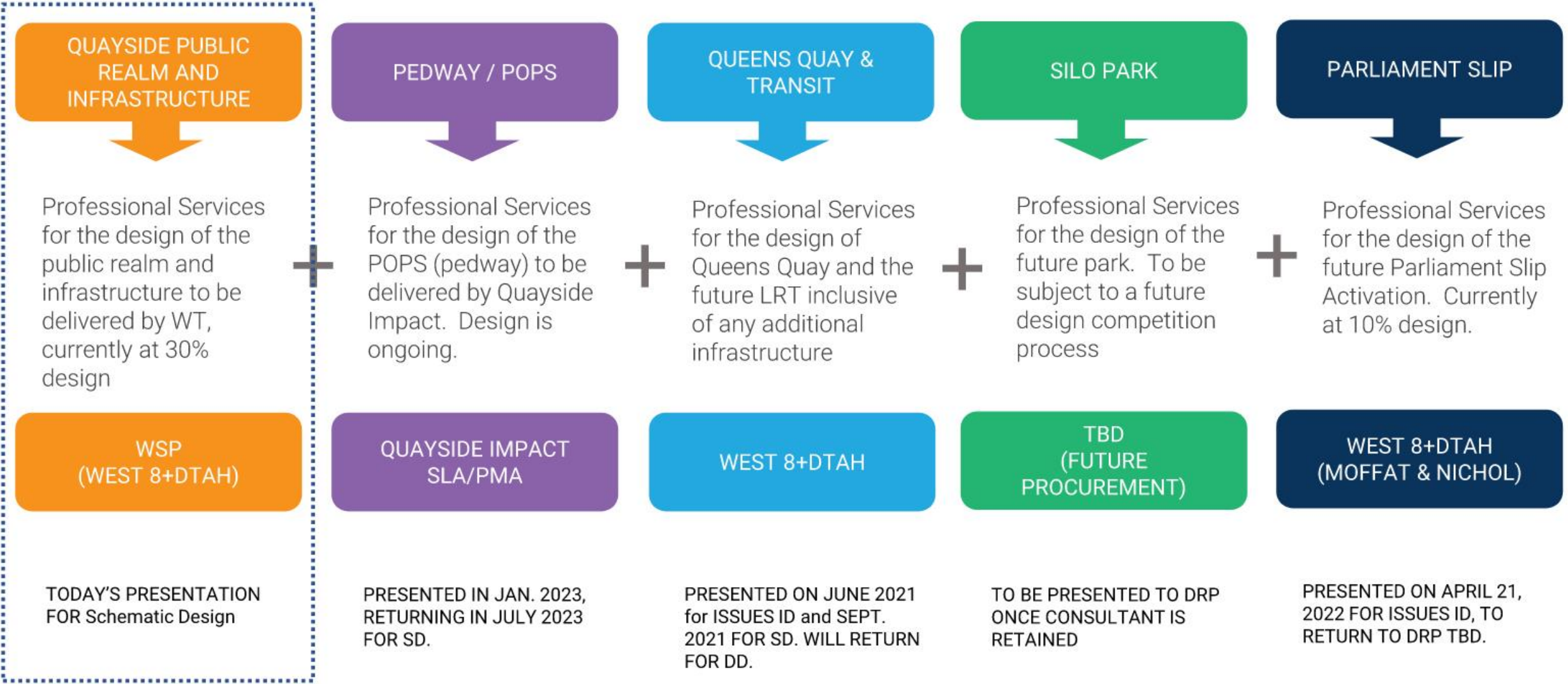


- 1 Parliament Plaza
  - 2 Parliament Street
  - 3 Water's Edge Promenade
  - 4 Street A
  - 5 Street D
  - 6 Small Street
  - 7 Lakeshore Blvd East - South Side
  - 8 Bonnycastle Street - East Side
- TODAY'S PRESENTATION
- 9 Queens Quay East - Bonnycastle to Street A
  - 10 Queens Quay East Lakefill/Dockwall
  - 11 Silo Park
  - 13 Street H
  - 14 Pedway

## Projects

- Quayside Public Realm and Infrastructure
- Proposed POPS
- Queens Quay
- Silo Park
- Parliament Slip

# Team Structure & Project Status





# Design Site Context



# Design Context

## Quayside Impact Design Proposal

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design





# Design Context

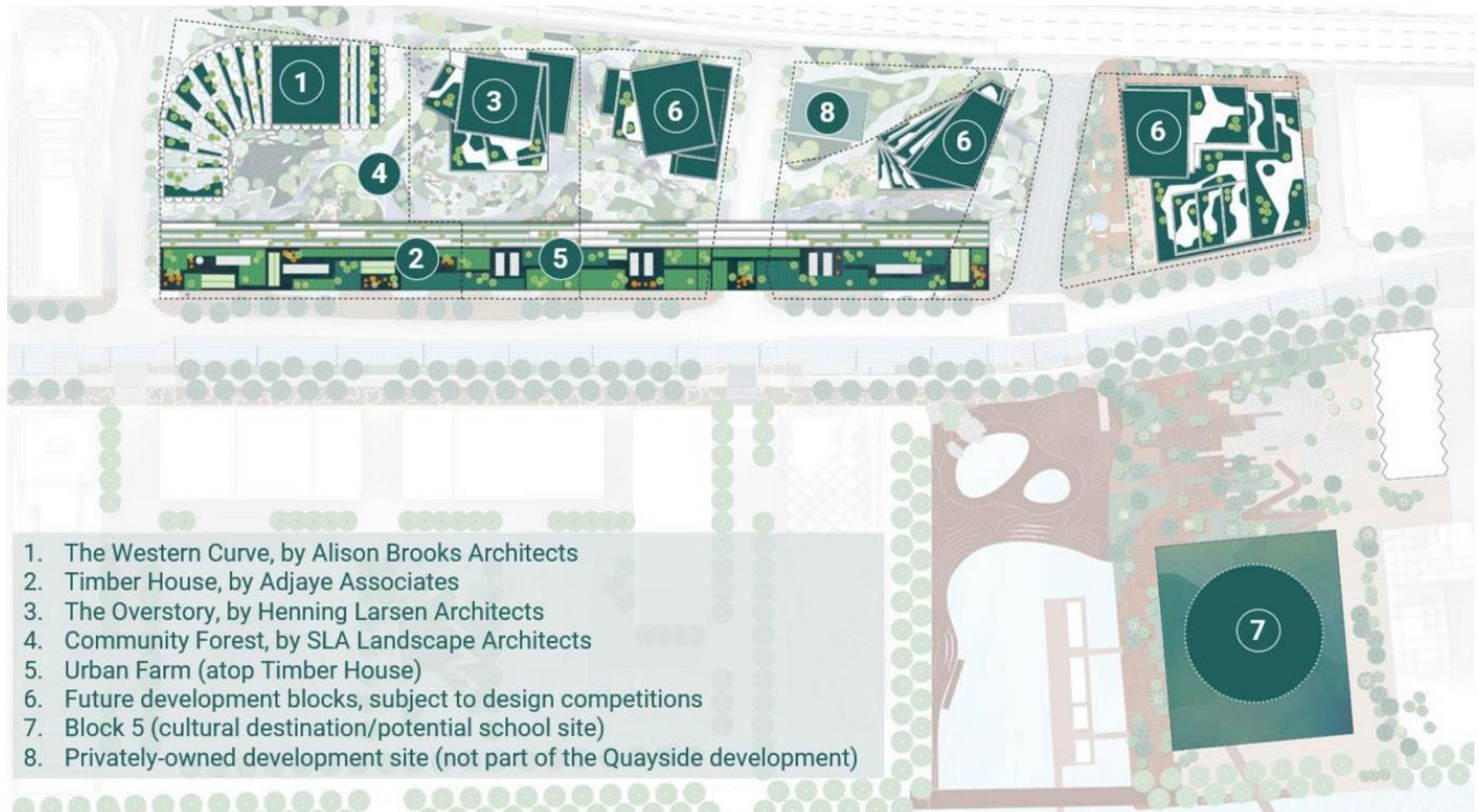
## Quayside Impact Proposed Site Plan

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design



1. The Western Curve, by Alison Brooks Architects
2. Timber House, by Adjaye Associates
3. The Overstory, by Henning Larsen Architects
4. Community Forest, by SLA Landscape Architects
5. Urban Farm (atop Timber House)
6. Future development blocks, subject to design competitions
7. Block 5 (cultural destination/potential school site)
8. Privately-owned development site (not part of the Quayside development)



# Design Context

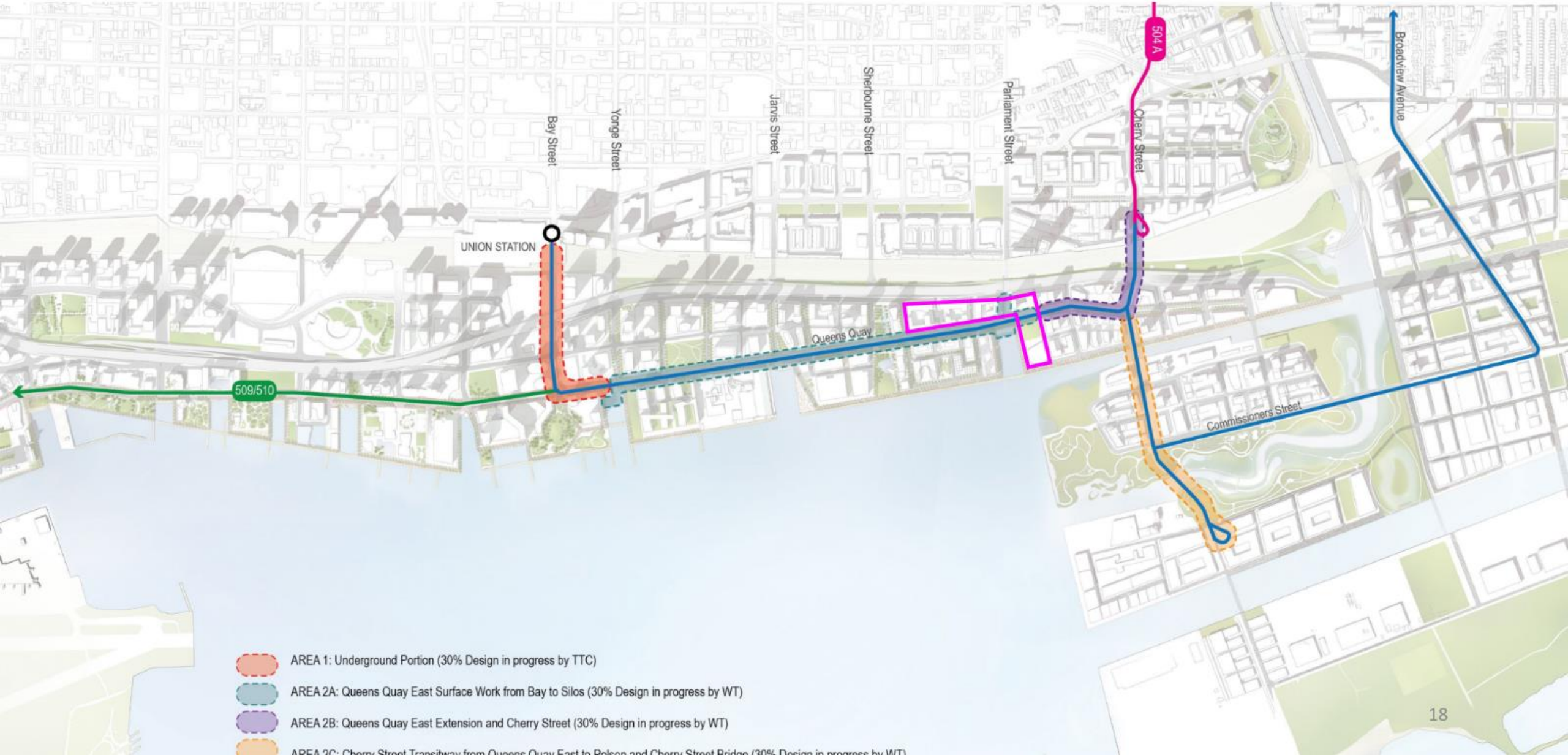
## Queens Quay Public Realm

### Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design



- AREA 1: Underground Portion (30% Design in progress by TTC)
- AREA 2A: Queens Quay East Surface Work from Bay to Silos (30% Design in progress by WT)
- AREA 2B: Queens Quay East Extension and Cherry Street (30% Design in progress by WT)
- AREA 2C: Cherry Street Transitway from Queens Quay East to Borsari and Cherry Street Bridge (30% Design in progress by WT)



# Design Context

## Queens Quay Public Realm

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design





# Design Context

## Waterfront Internal Streets – Bonnycastle Street

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design





# Design Context

## Lake Shore Public Realm Implementation

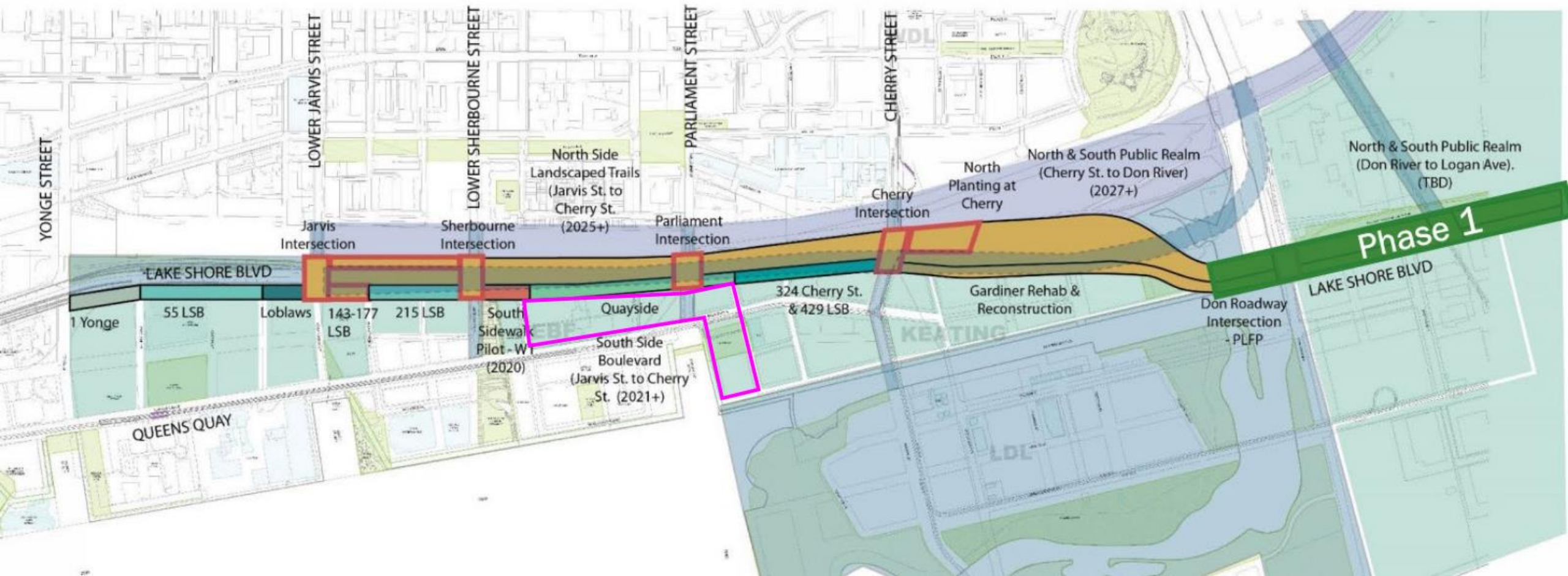
### Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

Review Stage: Schematic Design

- Lake Shore Public Realm
- Quick Start Projects
- Pilot Project
- Development Frontages
- Metrolinx Projects
- City / WT Infrastructure Projects
- Private Development





# Design Context

## Lake Shore Public Realm Implementation

### 3.1.5/ GARDINER PUBLIC REALM STREETScape\*

\* More details to be provided at a later date

The Gardiner Public Realm project will provide a coherent design vision and identity for the Gardiner East corridor from Jarvis to Logan St. and complete 100% construction drawings for the south side boulevard between Jarvis and Cherry St. The design includes public realm improvements to the Lake Shore Boulevard streetscape and residual spaces between the Gardiner Expressway and Rail Corridor, improved cycling and pedestrian connections, as well as a coherent identity for the public realm frontages of new developments to the south.

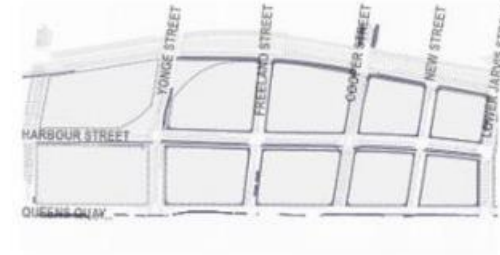


Figure 3.17 Illustration of the south side Lower Jarvis-Sherbourne Street



Figure 3.18 Illustration south side of Lake Shore Boulevard



Figure 3.19 Illustration of the vision for Lakeshore Boulevard



# Design Context

## Parliament Slip Activation

Quayside Infrastructure + Public Realm

Proponent: Waterfront Toronto

Design Team: West 8 + DTAH

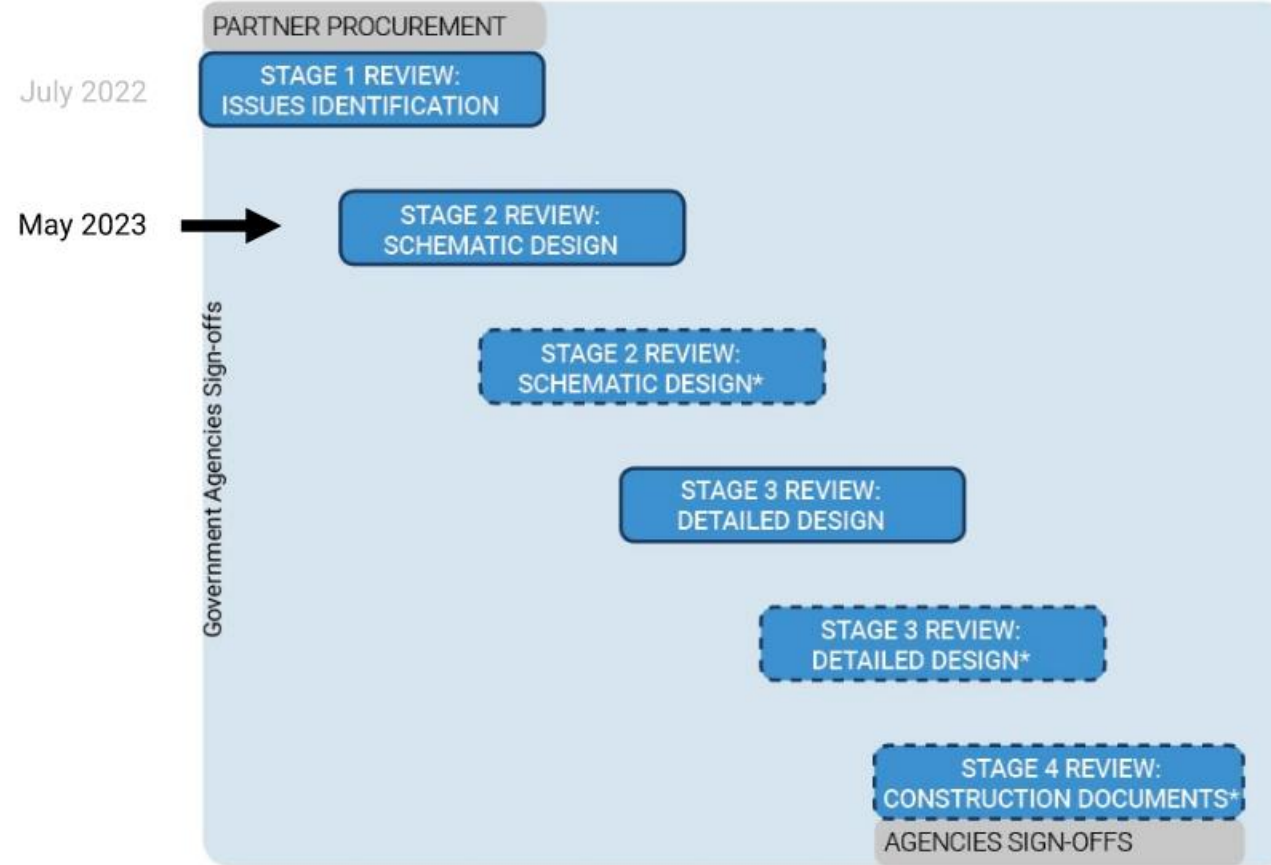
Review Stage: Schematic Design





# Project Approval Stage

DRP Stream : Public land – Agency Approval



\*This review will only be required if the project has changed significantly since the previous review, or the Panel, Waterfront Toronto, or City staff have significant outstanding concerns.



# Previous Consensus Comments

## June 2022 Issues Identification

### General

- Appreciated the concept and that the Canadian analogy is embodied in the presentation, ensure the design can inspire and innovate on all levels.
- Ensure the various public realm components are well integrated to create a continuous experience, specifically the urban forest must be implemented seamlessly.
- Consider the pedestrian connection to Villiers Island as part of the site context.
- Strong support for the concept of the “urban forest” throughout the project, consider the landscape design carefully to ensure successful implementation.

### Public Realm

- The public realm, specifically the five streets, are the connective tissue of Quayside, ensure the streets and public realm are well designed:
  - Maintain important view corridors to the water.
  - Consider the human scale and pedestrian friendly design.
  - The intersection of Parliament and Lake Shore is a gateway to the waterfront, ensure the public realm design supports this experience.

### Parliament Plaza

- A pilot project is recommended to prototype the urban forest and identify specifications that work best for the site.
- Avoid creating a suburban landscape experience, consider accommodating large trees, a variety of species and scale to reduce uniformity, and a robust understorey.
- Consider the species and design of the trees carefully as the urban forest is set in an urban plaza and not a park.



# Areas for Panel Consideration – Waterfront Toronto

## Design Excellence

- Does the Panel support the overall design concept and the level of ambition around the public realm principles?
- Does the Panel support the design of the streetscapes at Lake Shore, Parliament, and Water's Edge?

## Relationship with Context/Integration

- Do the streetscapes integrate well with the adjacent context of Quayside and major design projects?

## Sustainability and Resilience Design

- Does the design support the objectives of reducing embodied carbon emissions in public realm work?
- Are there opportunities to further support WT Green Building Requirements including resilience planning, landscaping and biodiversity, rainwater harvesting, and the specification of sustainable and non-toxic material?



# Quayside Infrastructure and Public Realm

Design Review Panel - Schematic Design - DRAFT

May 24, 2023

DRAFT



WATERFRONTToronto



WEST 8 + dtah



MULVEY & BANANI



SHOREPLAN



# Contents

- 1. Recap: Design Vision and Opportunities**
- 2. Design Concept: Regenerative Urban Pocket Forest**
- 3. Schematic Design Walk Through**
  - The Immersive Waterfront Arrival Experience
    - Parliament Grove and Parliament Street
    - Lake Shore Boulevard
    - Water's Edge Promenade
  - **Continuous Urban Grain: Streetscapes**





DRAFT

**Quayside:**  
The Heart of Toronto's Urban Transformation



# Quayside: From Grey to Green



DRAMA

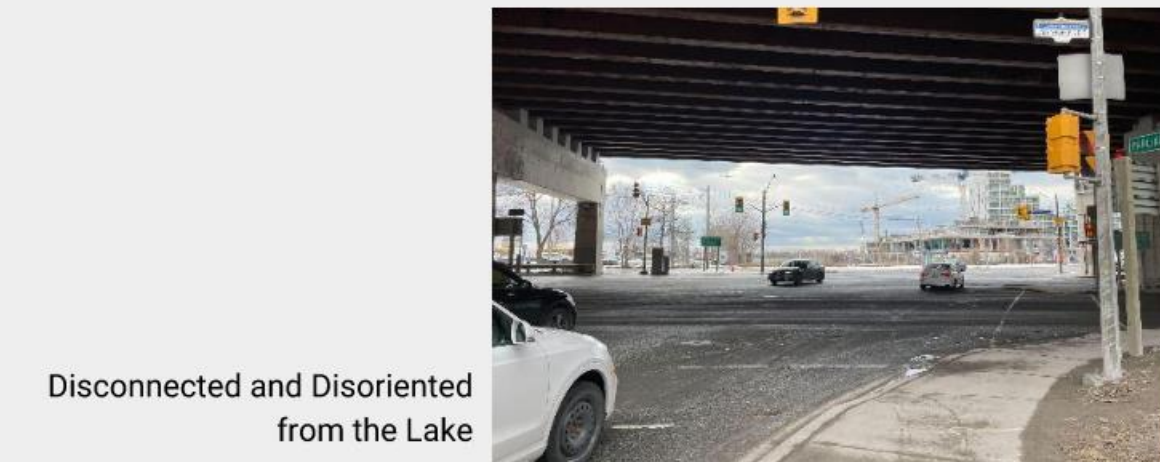
Forgotten Post-Industrial Land:  
Zero Density,  
Prime Real Estate Opportunity



Private, Inaccessible, Unoccupied



Barren, Concrete Jungle



Disconnected and Disoriented  
from the Lake



Vibrant, Ped-First  
Public Realm

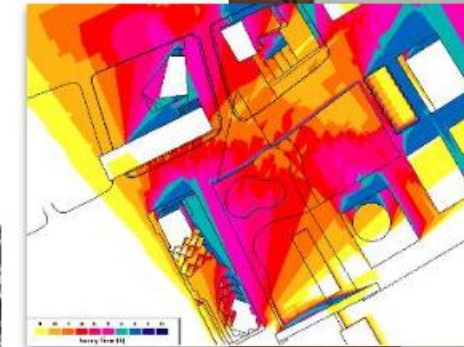


# What Are We Solving For?

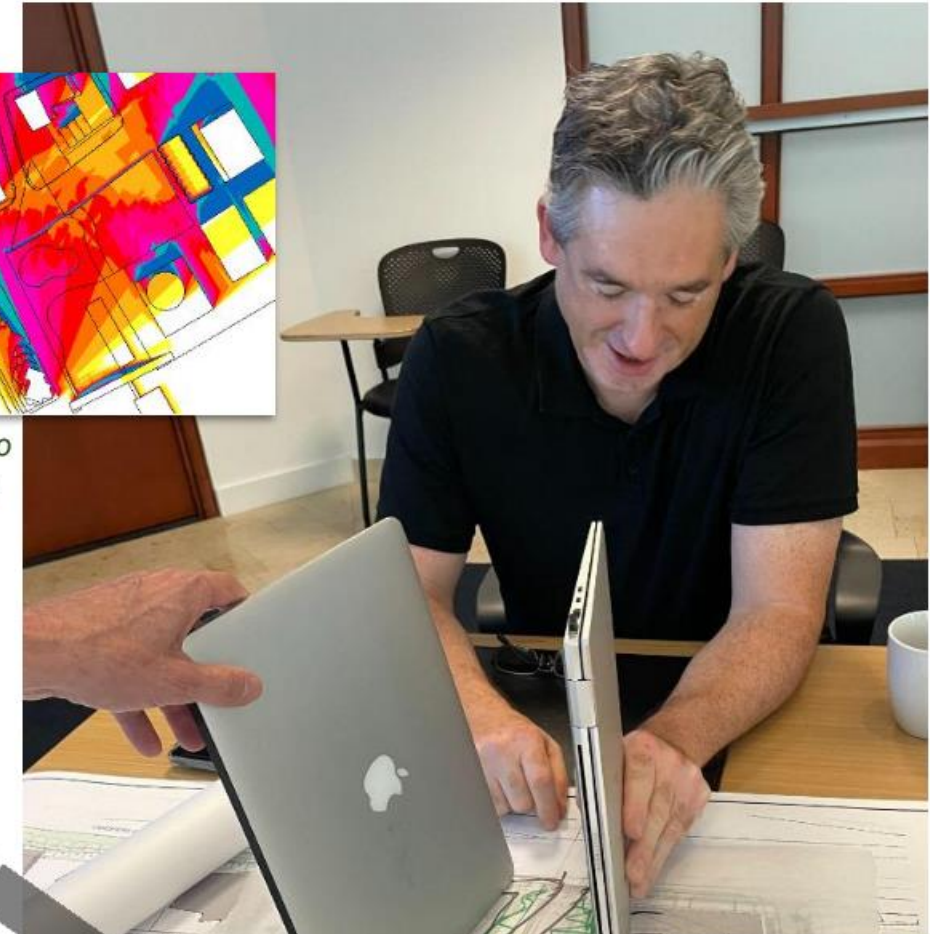
*Uninviting pedestrian arrival*



*Fluctuating groundwater in a changing and unpredictable climate*



*Responding to microclimate*



*Complementing high density surroundings*



*Traffic & construction corridor:  
noise, smog, pollution*



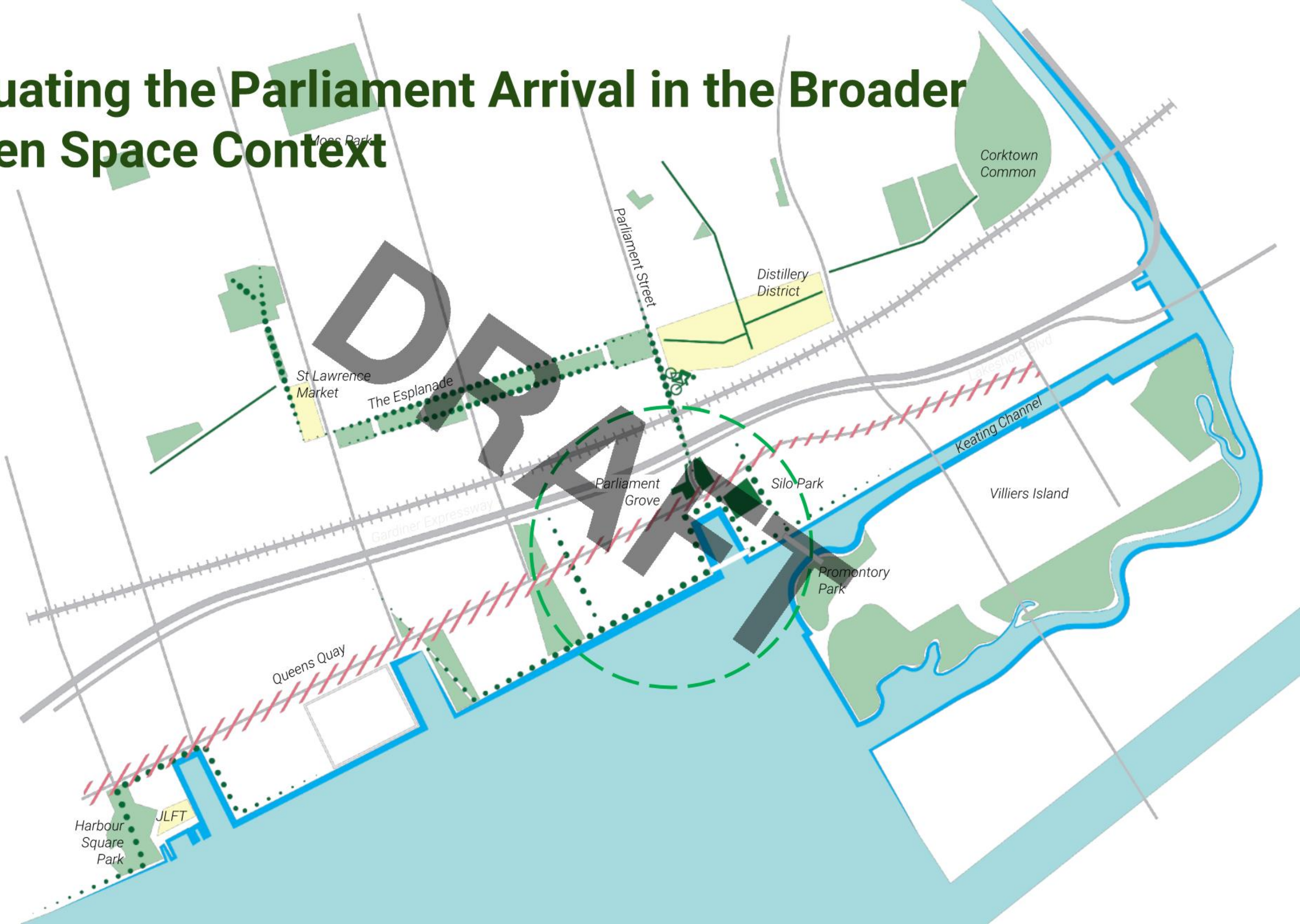
*Need to create a durable and easy to maintain a four-season landscape*



*Lakefront microclimate*



# Situating the Parliament Arrival in the Broader Open Space Context







**Regenerative Urban Pocket Forest  
Rooted in Place**





# **The Immersive Waterfront Arrival Experience**

*Lake Shore Intersection*

*Parliament Street and Parliament Grove*

*Water's Edge Promenade*





Gardiner Expressway

Parliament Street

Community Forest

Parliament Grove

Silo Park

Parliament Slip

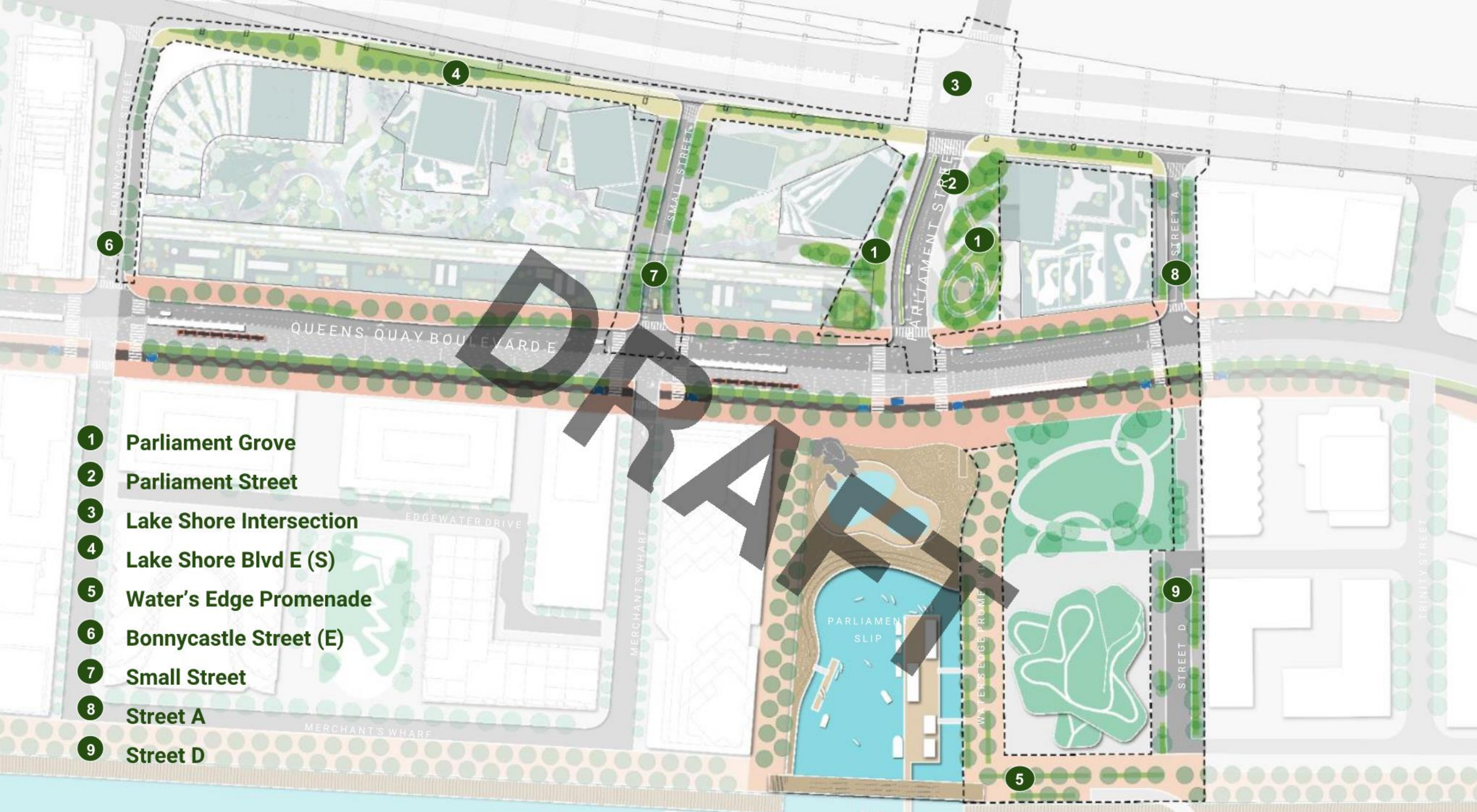
Keating Channel

Lake Ontario

Villiers Island

# Extending the Urban Landscape: A Continuous Green Edge





**DRAFT**

- 1 Parliament Grove
- 2 Parliament Street
- 3 Lake Shore Intersection
- 4 Lake Shore Blvd E (S)
- 5 Water's Edge Promenade
- 6 Bonnycastle Street (E)
- 7 Small Street
- 8 Street A
- 9 Street D

# Consistent Inner Streets, Green Lungs, and a Continuous Primary Waterfront



# Public Realm Character Aspirations



**WEP**

**Inner Streets**

**Parliament Street & Lake Shore Blvd**

**Parliament Grove**

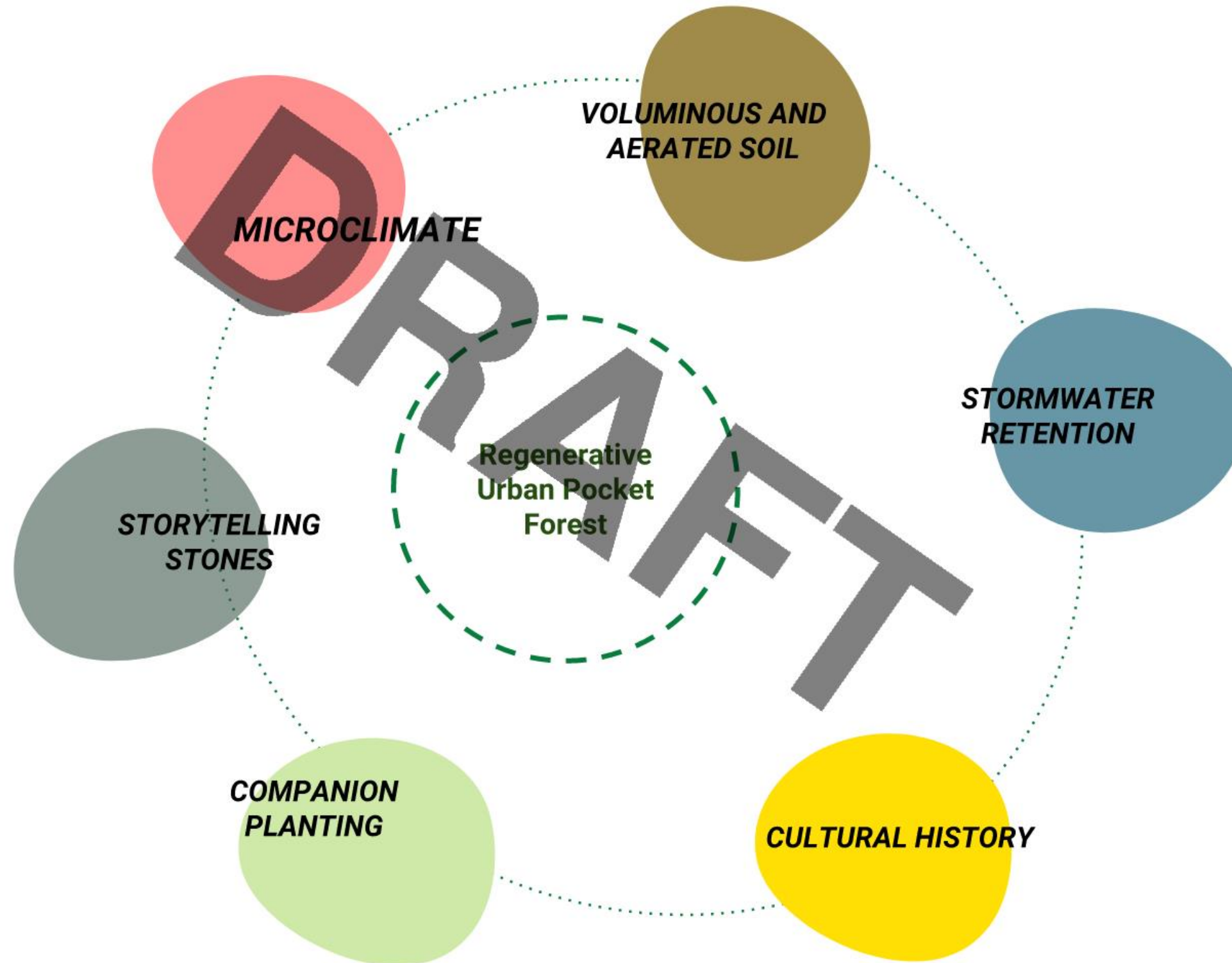


# Concept: Quayside Regenerative Urban Pocket Forest



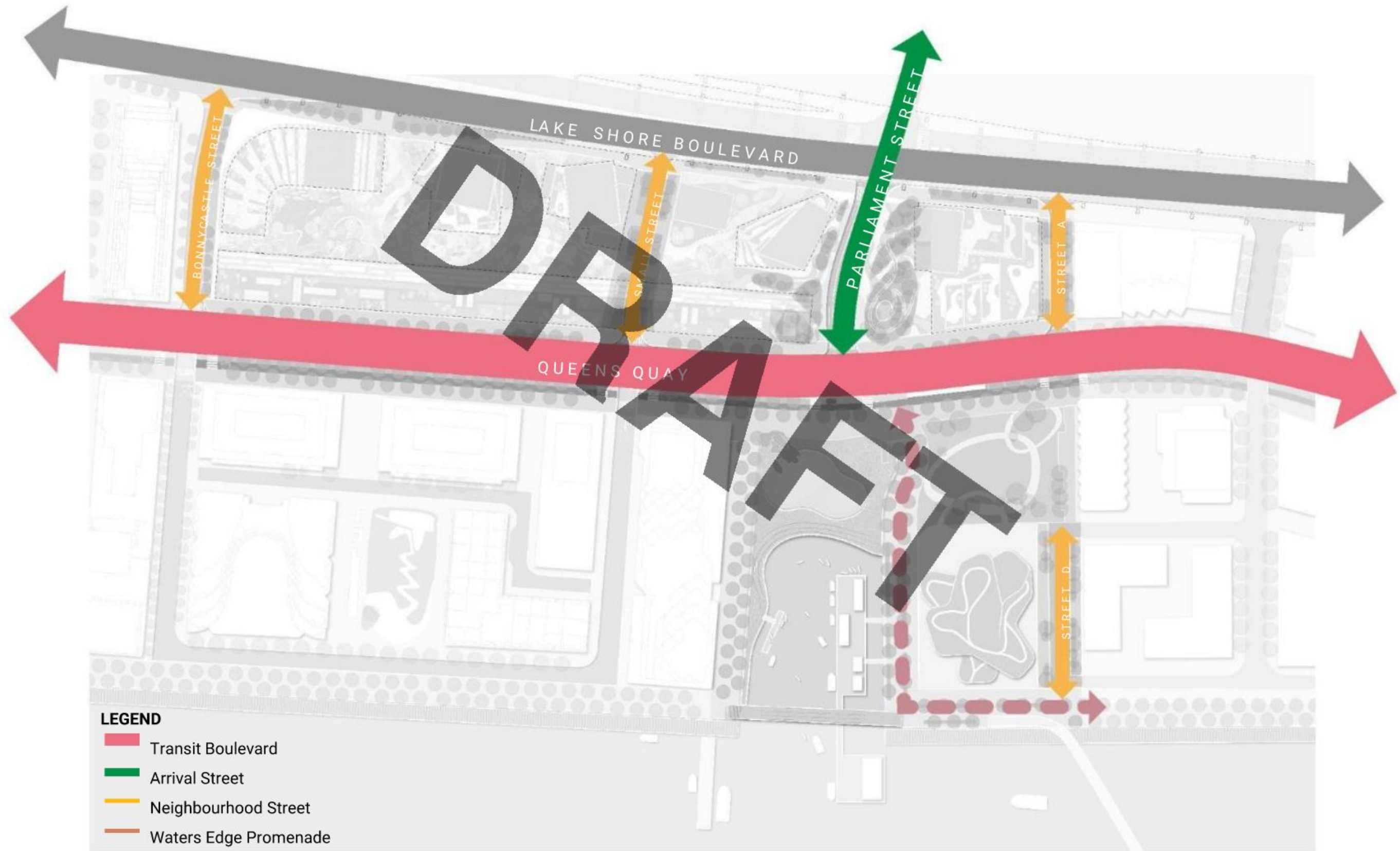


# Regenerative Pocket Forest Components





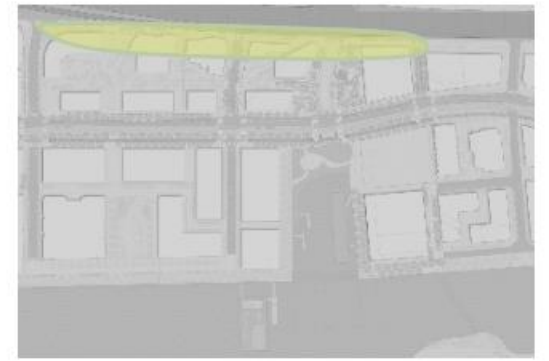
# Public Realm & Street Hierarchy





# Lake Shore Boulevard East

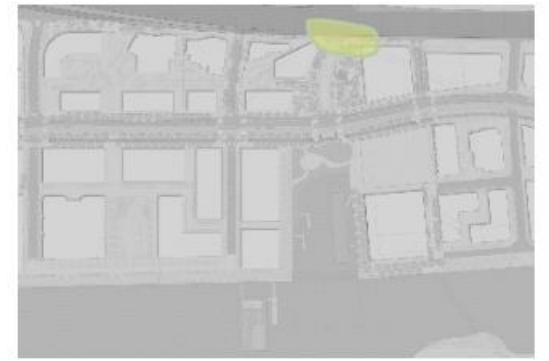
Implementing approved public realm plan on south side





# Lake Shore Boulevard Intersection

Safe and legible pedestrian and cyclist scale





# Material and planting palette - Lake Shore Public Realm

## MATERIALS

### HARDSCAPE & EDGES



**Exposed Aggregate Concrete with granite aggregate and special saw cuts**  
Intersection corners



**Permeable Unit Pavers**  
Pedestrian Walkway



**CIP Concrete Curbs**  
Vehicular barrier curb and paving edge

### FURNISHINGS



**Pedestrian Lighting (consistent with JLFT and LSB)**  
Aluminium with Olivio Candelabra

## PLANTING

*\*Final plant selection will be informed by outcomes of engagements with Local Indigenous Environmental and Plant Culture Subject Matter Experts*

### TREES & LARGE SHRUBS



**American Elm**  
*Ulmus americana 'Valley Forge'*  
*Ulmus americana 'Princeton'*



**Homestead Elm**  
*Ulmus 'Homestead'*



**Accolade Elm**  
*Ulmus japonica x Wilsoniana 'Morton'*

### SHRUBS AND UNDERSTORY



**Switchgrass**  
*Panicum virgatum*



**Little Bluestem**  
*Schizachyrium scoparium*



**Lanceleaf Coreopsis**  
*Coreopsis lanceolata*



**October Skies Aster**  
*Aster oblongifolius 'October skies'*



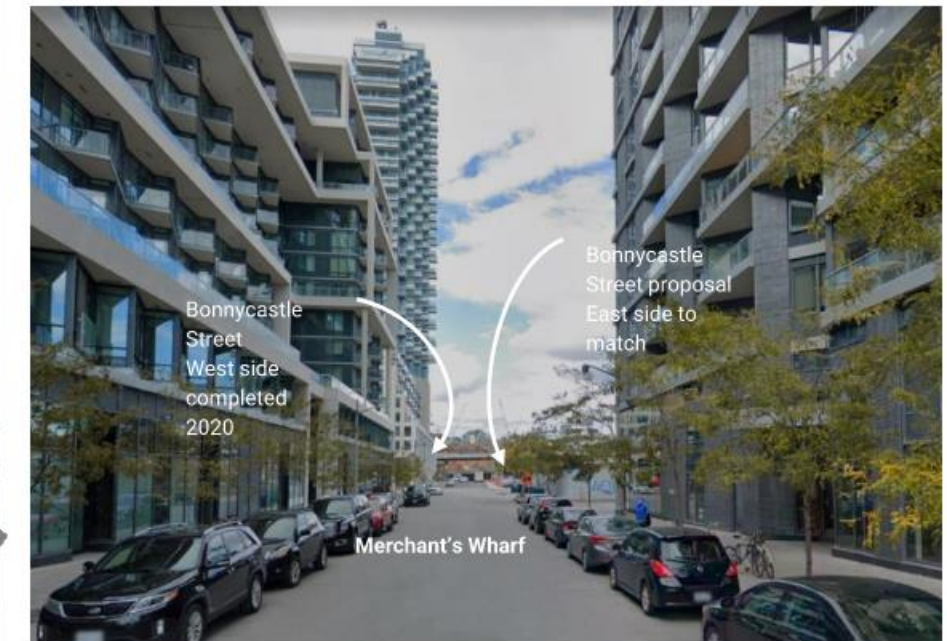
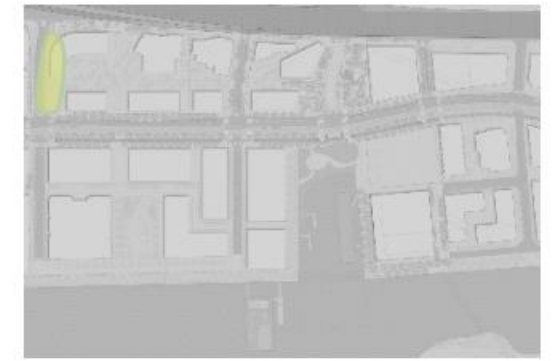
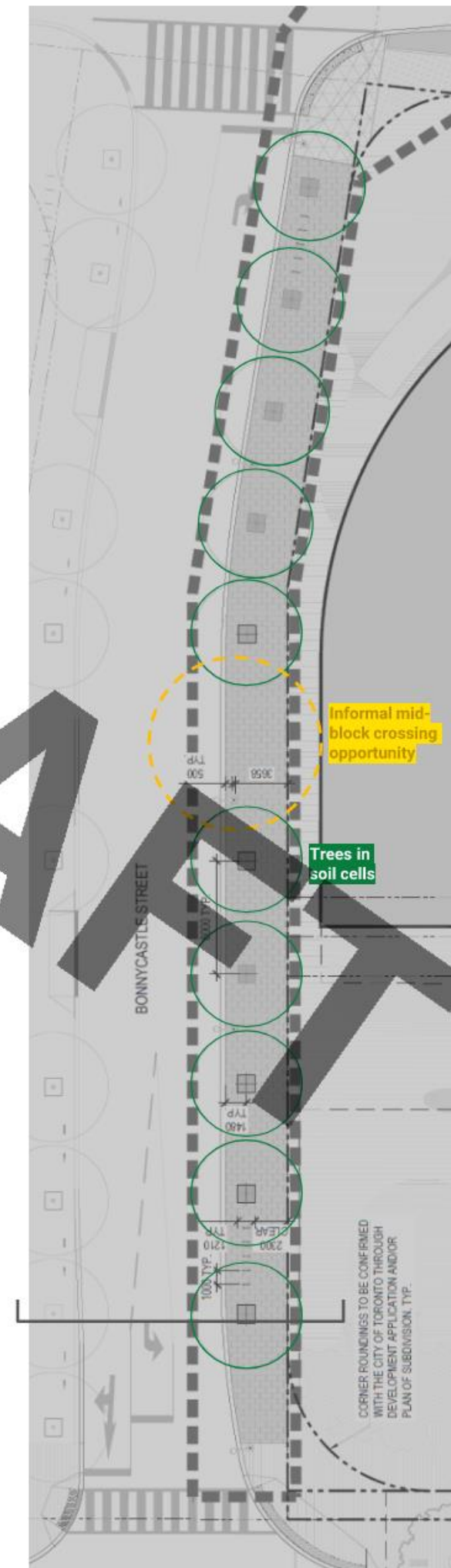
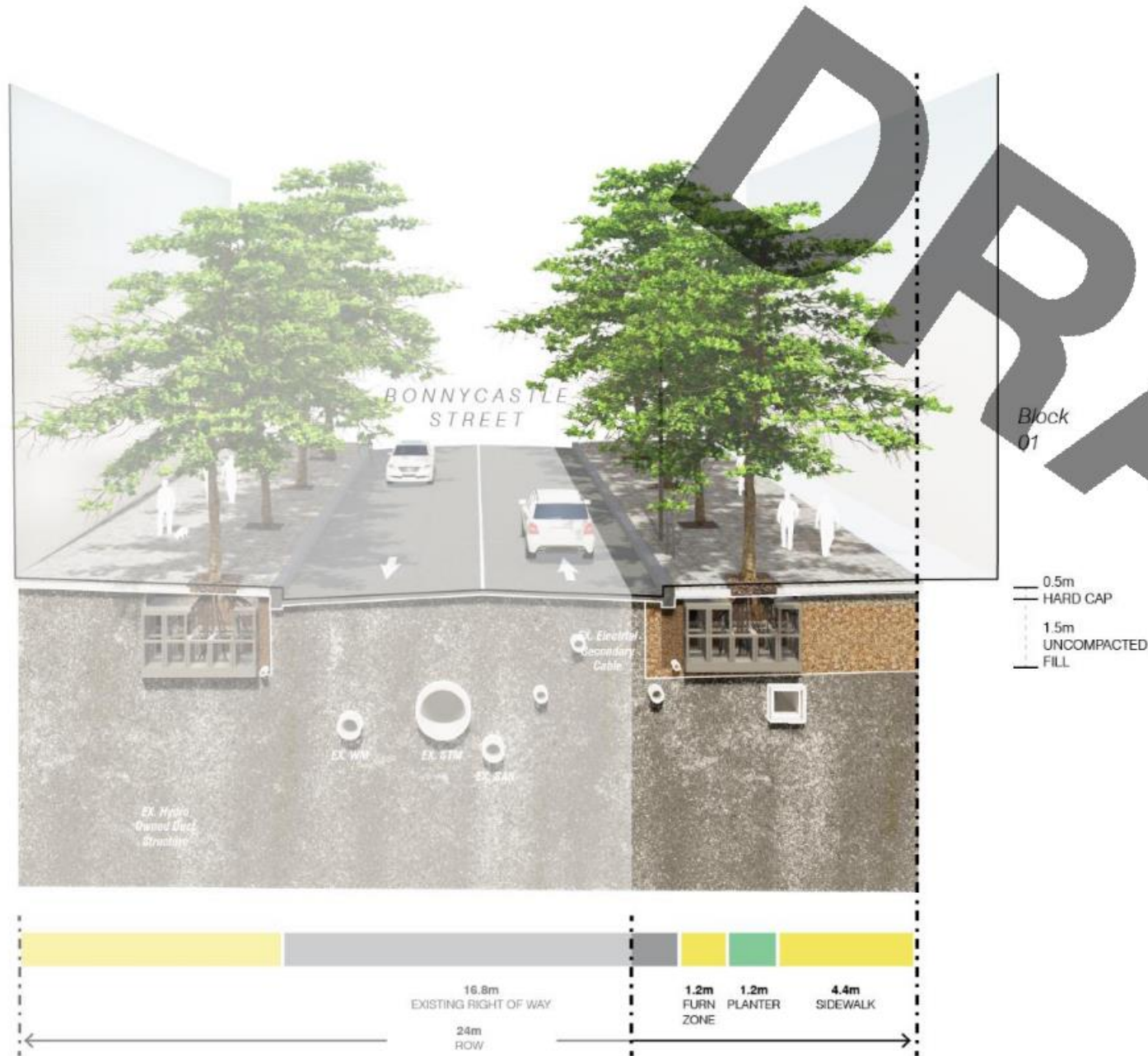
*Lakeshore Boulevard East, Green Infrastructure Pilot, 2022*

*\*Species to be informed by outcomes of LSB planting pilot*



# Bonnycastle Street, E side

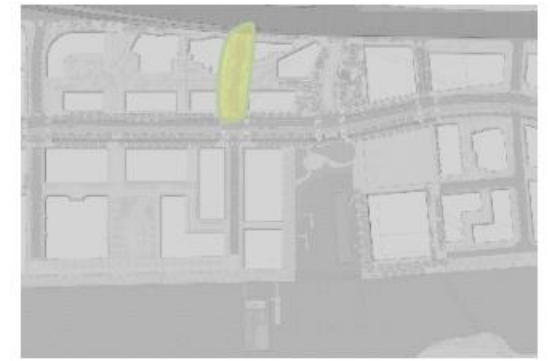
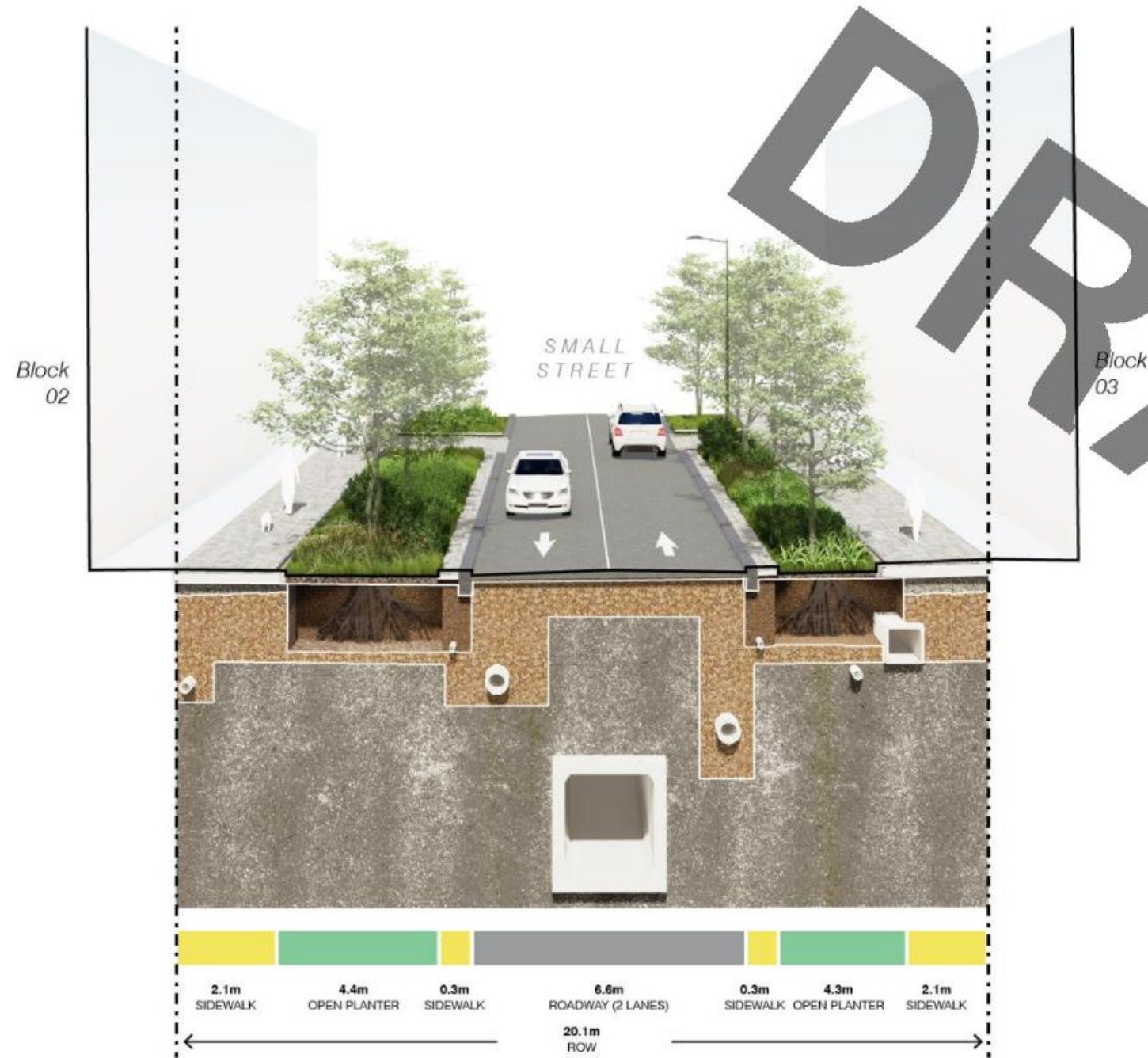
## Consistent Inner Streets





# Small Street - pedway connector

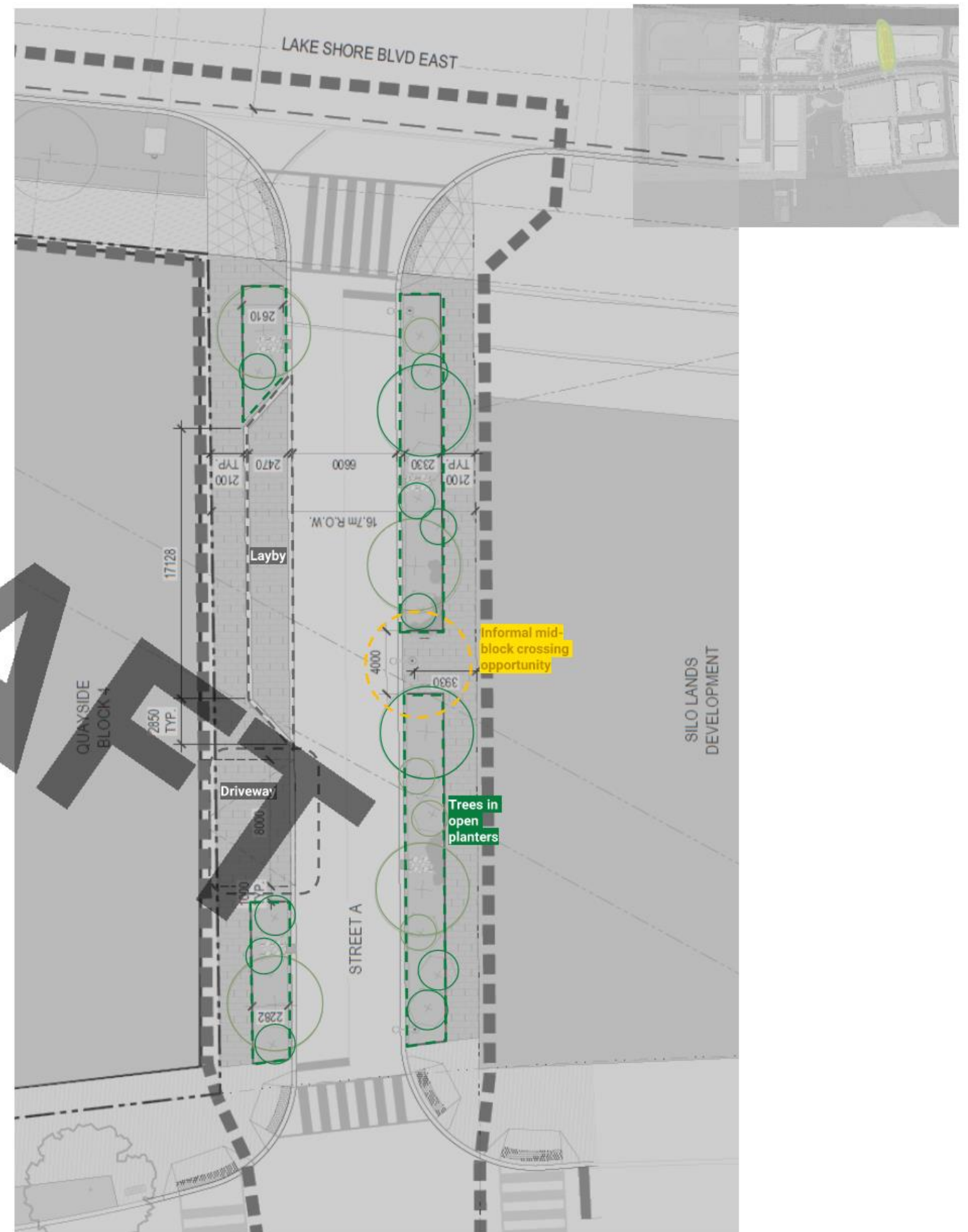
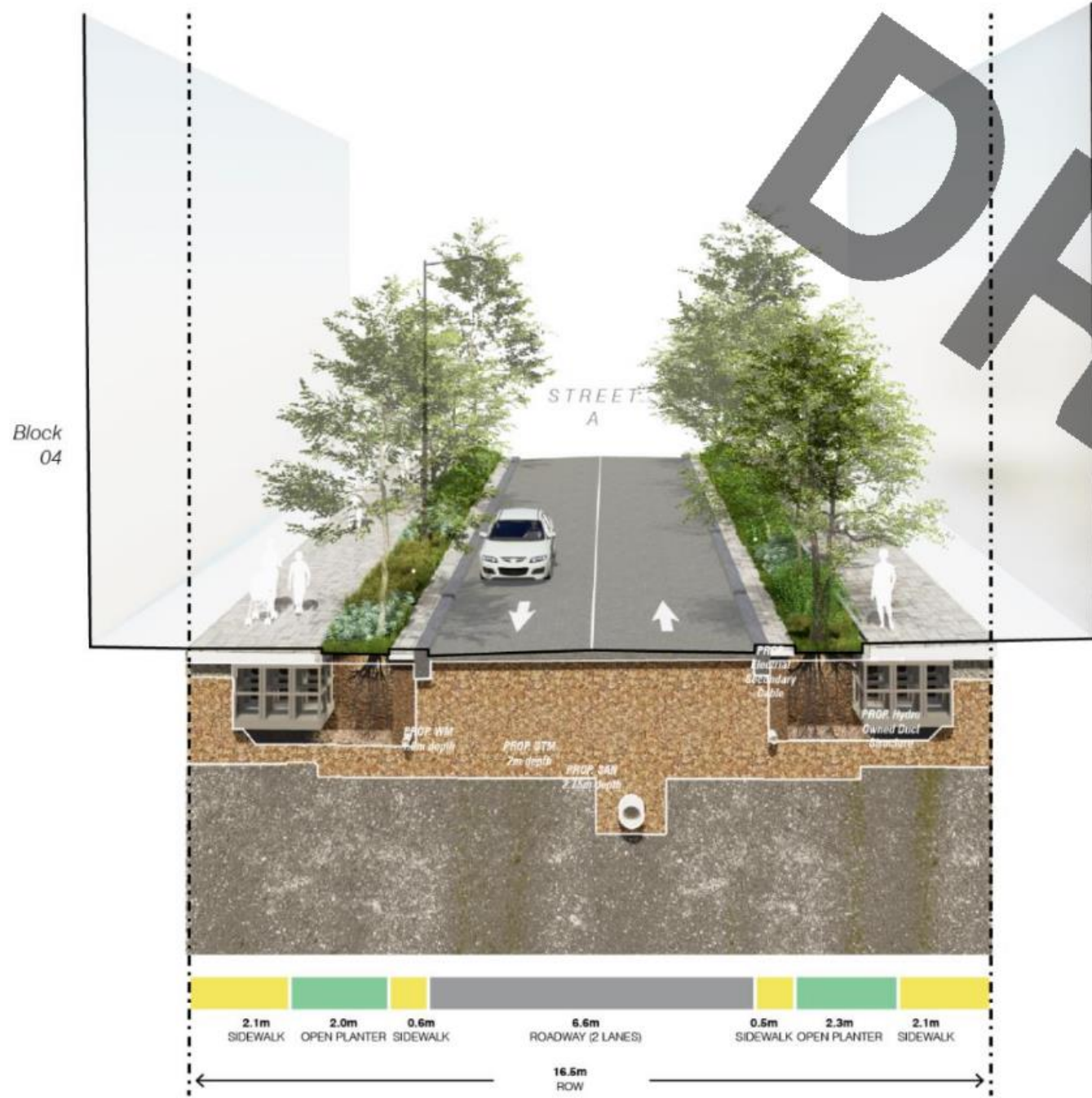
Consistent Inner Streets





# Street "A"

## Consistent Inner Streets

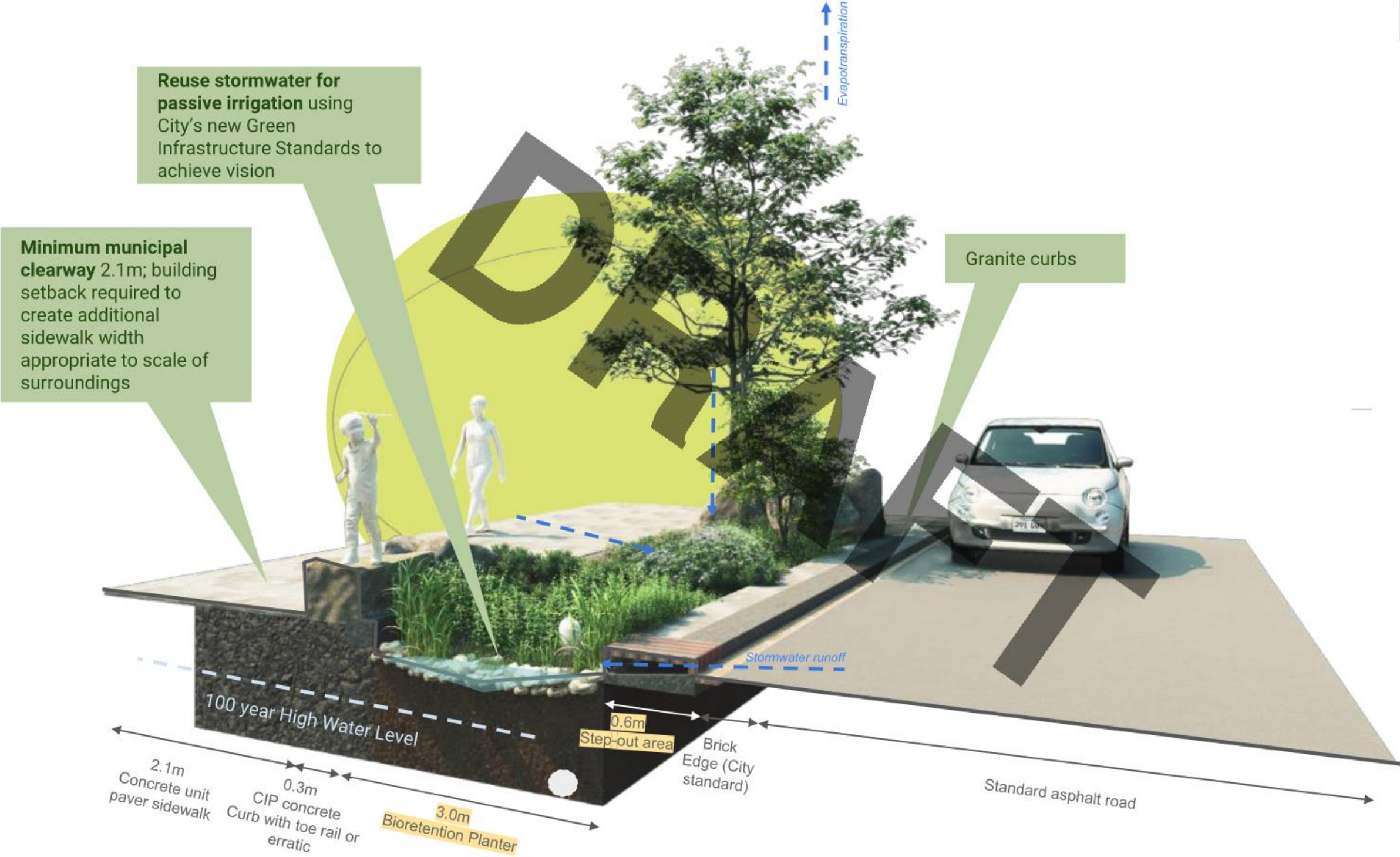
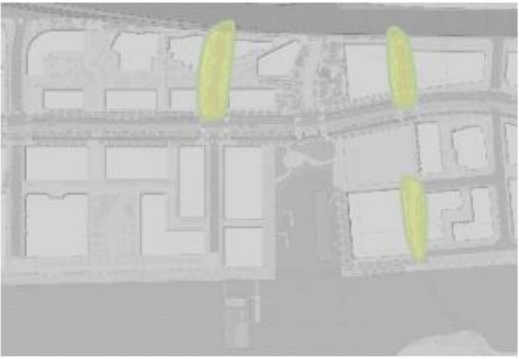








# Neighborhood Grove planting detail innovations



Reuse stormwater for passive irrigation using City's new Green Infrastructure Standards to achieve vision

Minimum municipal clearway 2.1m; building setback required to create additional sidewalk width appropriate to scale of surroundings

Granite curbs

100 year High Water Level

2.1m Concrete unit paver sidewalk

0.3m CIP concrete Curb with toe rail or erratic

3.0m Bioretention Planter

0.6m Step-out area

Brick Edge (City standard)

Standard asphalt road

Evapotranspiration

Stormwater runoff







# Material and planting palette - inner streets

## MATERIALS

### HARDSCAPE & EDGES



**Concrete Unit Pavers**  
Pedestrian Walkway



**Granite Curbs**  
Barrier curb for vehicles



**Metal Toe Rail**  
Edge protection for planters

### FURNISHINGS



**Erratic boulders and River Rock**  
Informal seating edges and stormwater erosion protection



**City Standard Bike Racks**  
Classic and robust



**New Waterfront Signature Lighting**  
Aluminium pole with approved new fixture

## PLANTING

\*Final plant selection will be informed by outcomes of engagements with Local Indigenous Environmental and Plant Culture Subject Matter Experts

### TREES & LARGE SHRUBS



**Honey Locust** (Bonnycastle & Small St)  
*Gleditsia triacanthos*



**Pin Oak**  
*Quercus palustris*



**Red Oak**  
*Quercus rubra*



**Cucumber Tree**  
*Magnolia acuminata*



**Bur Oak**  
*Quercus macrocarpa*



**Swamp White Oak**  
*Quercus bicolor*

### SHRUBS AND UNDERSTORY



**Little Bluestem**  
*Schizachyrium scoparium*



**Tufted Hair Grass**  
*Deschampsia cespitosa*



**Abbotswood Potentilla**  
*Potentilla fruticosa* 'Abbotswood'



**Gro-Low Fragrant Sumac**  
*Rhus aromatica* 'Gro Low'



**Dwarf Ninebark**  
*Physocarpus opulifolius* 'Nanus'



**Downy Phlox**  
*Phlox pilosa*



**Bee Balm**  
*Monarda didyma*



**Wild Lupine**  
*Lupinus perennis*



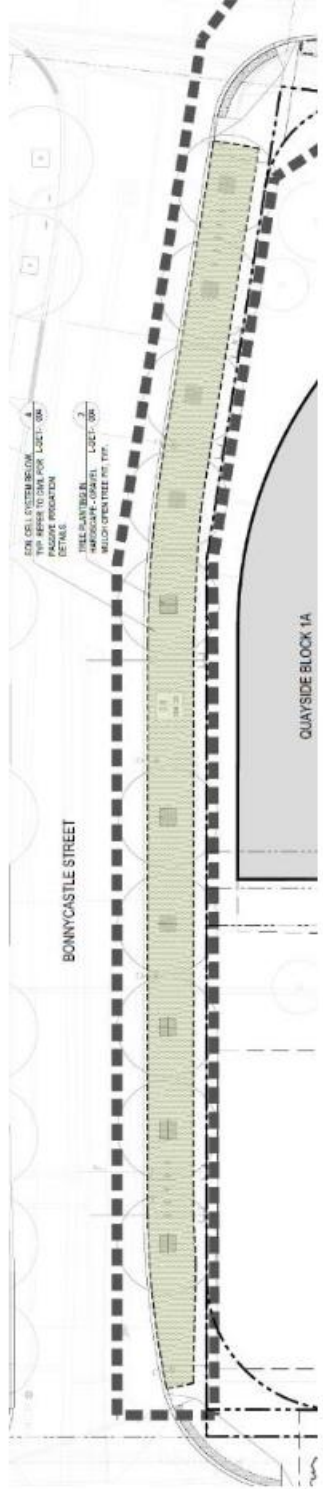
**New Jersey Tea**  
*Ceanothus americanus*



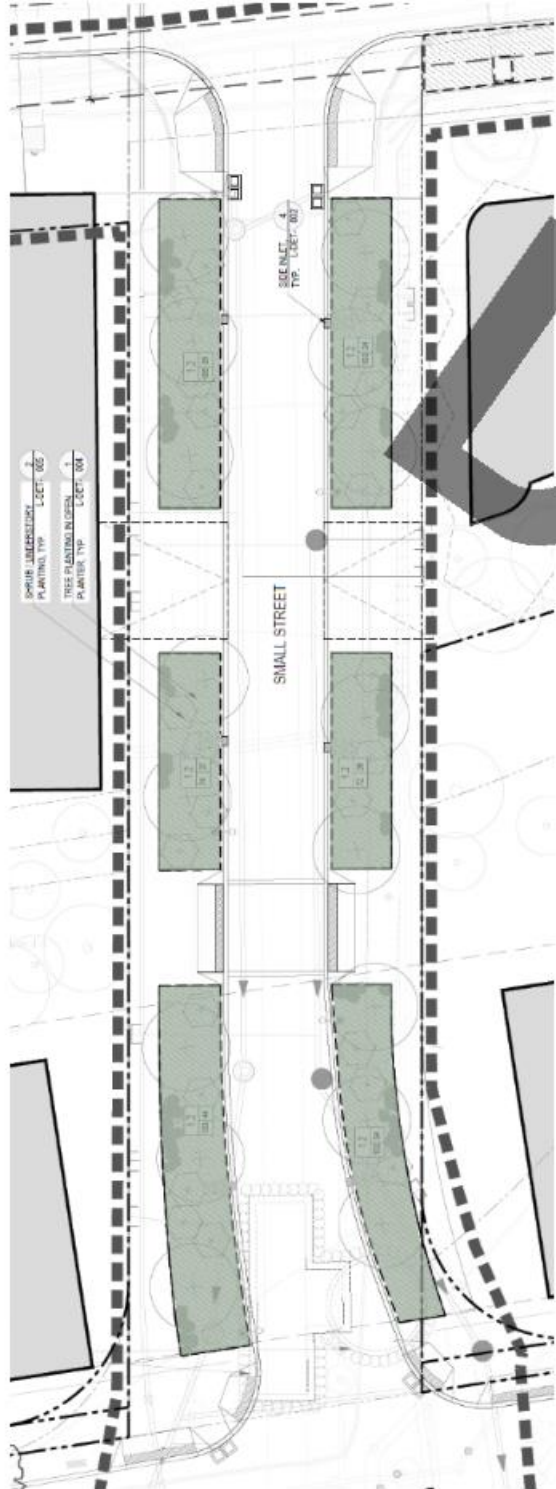
**Canada Wild Rye**  
*Elymus canadensis*



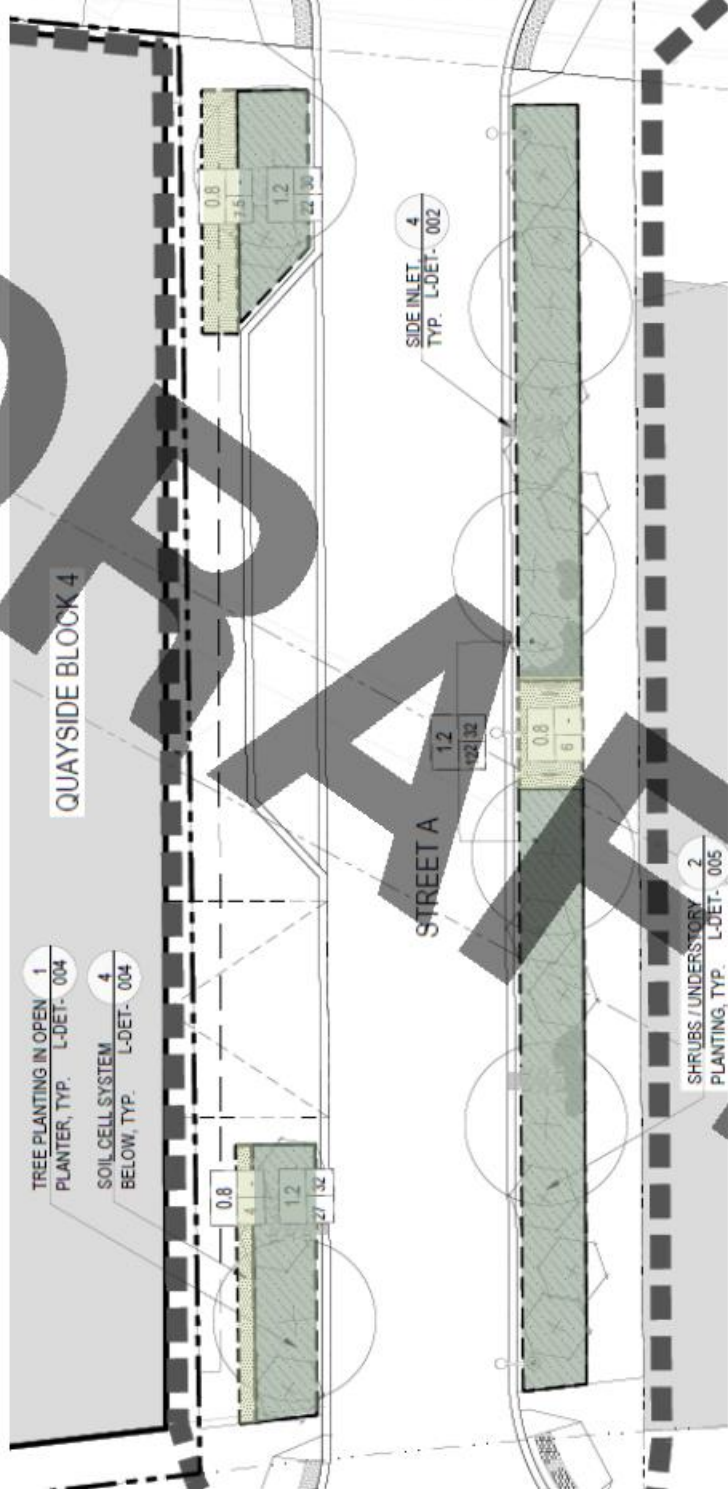
# Soil Volume



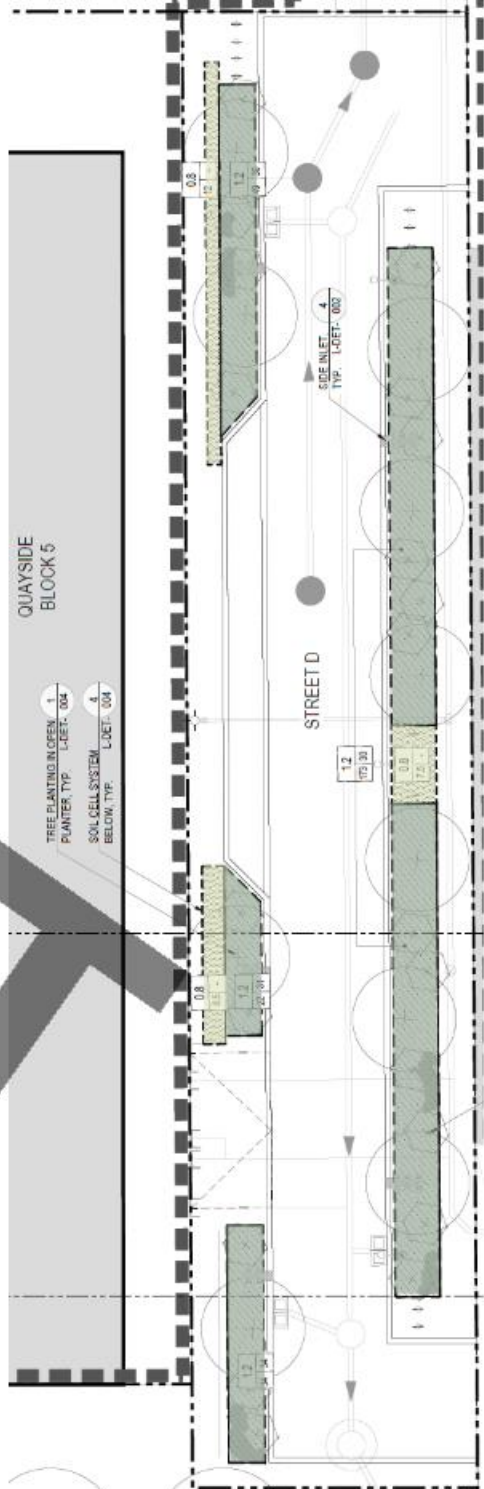
**Bonnycastle Street**  
20m<sup>3</sup> / tree, shared soil cells



**Small Street**  
34 - 44m<sup>3</sup> / tree, open planters

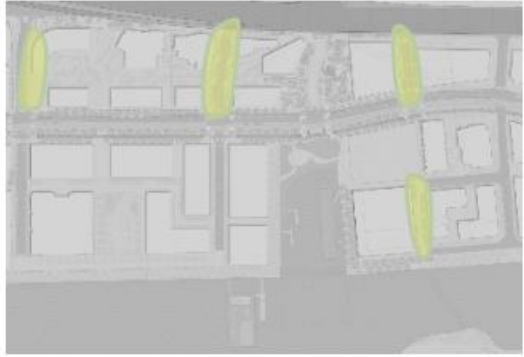


**Street A**  
30 - 32 m<sup>3</sup> / tree, combination of open planters with soil cells



**Street D**  
30 - 34 m<sup>3</sup> / tree, combination of open planters with soil cells

1.0	PLANTING SOIL DEPTH (m)
183	TOTAL SOIL VOLUME / TREE (m <sup>3</sup> )
15	TOTAL SOIL VOLUME (m <sup>3</sup> )

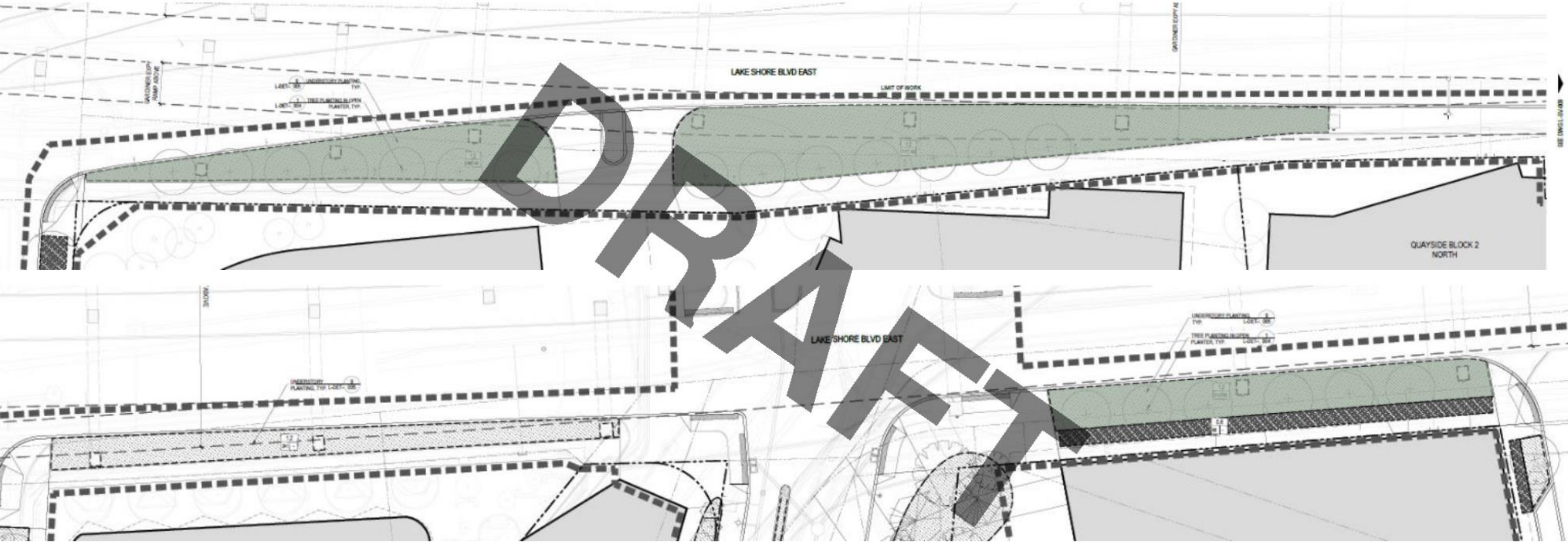
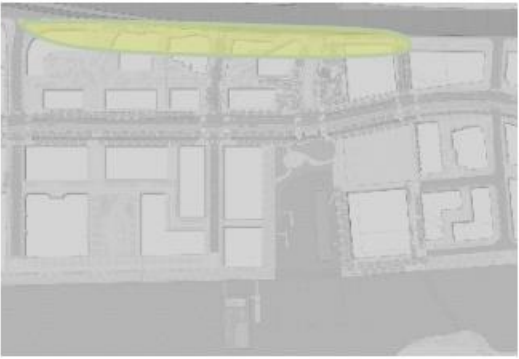


- Shared Soil Cells
- Open Planters



# Soil Volume

- 1.0 — PLANTING SOIL DEPTH (m)
- 183 15 — TOTAL SOIL VOLUME / TREE (m<sup>3</sup>)
- TOTAL SOIL VOLUME (m<sup>3</sup>)

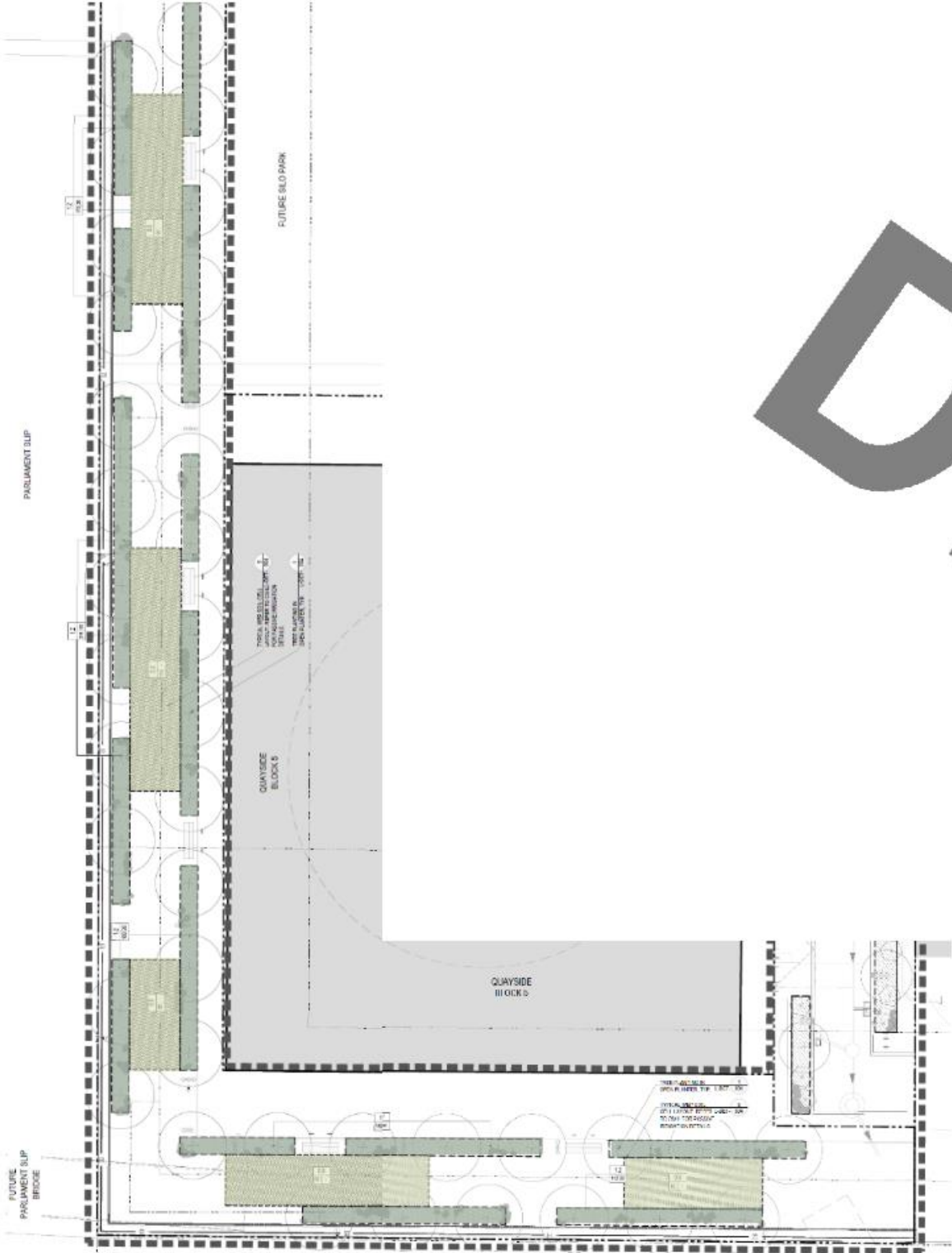


Open Planters

Lake Shore Boulevard  
63 - 49 m<sup>3</sup> / mature tree spacing, open planters



# Soil Volume



1.0	PLANTING SOIL DEPTH (m)
183	TOTAL SOIL VOLUME / TREE (m <sup>3</sup> )
15	TOTAL SOIL VOLUME (m <sup>3</sup> )



- Shared Soil Cells
- Open Planters

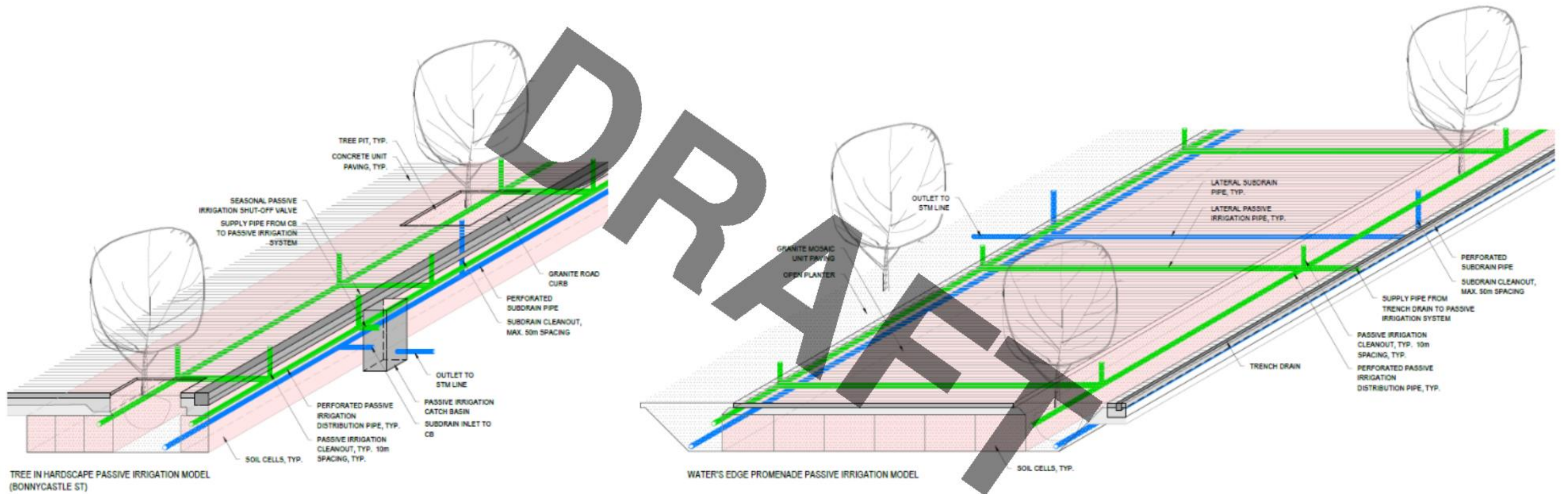
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**Water's Edge Promenade**  
 30m<sup>3</sup> / tree spacing, combined open planters and soil cells



# Passive Irrigation Strategy

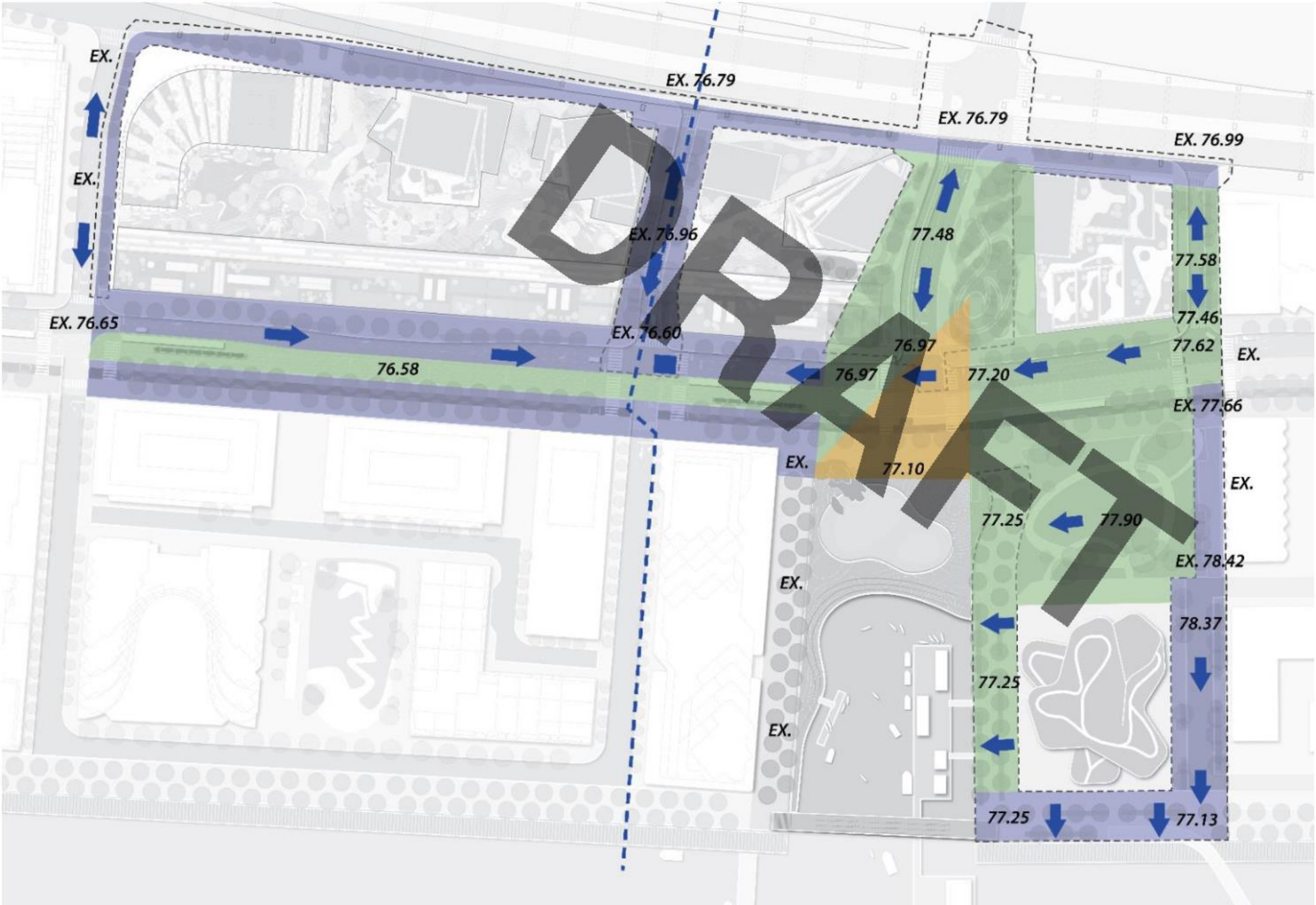
## Water's Edge Promenade and Bonnycastle Street









1 TYPICAL PASSIVE IRRIGATION CONCEPT - REFER TO CIVIL FOR DETAILS  
N.T.S.



# Grading Strategy

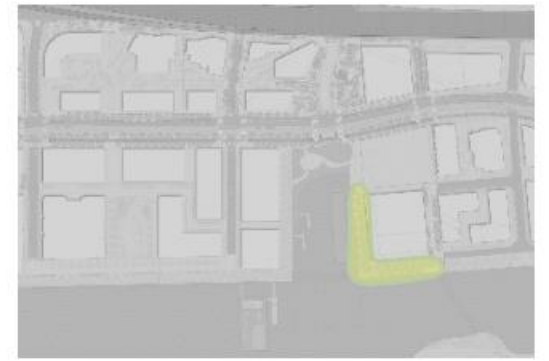


-  Overland flow route
-  Grade raised
-  Existing grade maintained
-  New land fill
- EX.** Existing elevation
- XX.X** Proposed elevation
-  Existing Combined Sewer Overflow (CSO)
-  Proposed super catch basin



# Water's Edge Promenade

Evolution of existing language

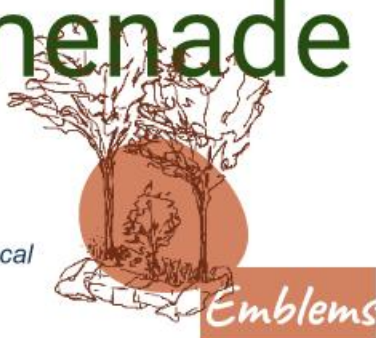








# Material and planting palette - Water's Edge Promenade



## MATERIALS

### HARDSCAPE & EDGES



**Granite Setts with Maple Leaf Pattern**  
Pedestrian Promenade (Waterside)



**Concrete Unit Pavers**  
Pedestrian Walkway (Building Edges)



**Metal Toe Rail**  
Edge protection

## PLANTING

\*Final plant selection will be informed by outcomes of engagements with Local Indigenous Environmental and Plant Culture Subject Matter Experts

### TREES & LARGE SHRUBS



**Freeman Maple**  
*Acer x freemanii*



**Striped Maple**  
*Acer pensylvanicum*



**Dogwood**  
*Cornus alternifolia*

## FURNISHINGS



**Waterfront Signature Benches**  
Wood and aluminium



**City Standard Bike Racks**  
Classic and robust



**Waterfront Signature Lighting**  
Wood and aluminium with Olivio

## SHRUBS AND UNDERSTORY



**Spicebush**  
*Lindera benzoin*



**Carrionflower**  
*Smilax herbacea*



**Canada mayflower**  
*Maianthemum canadense*



**Solomon's Seal**  
*Polygonatum pubescens*



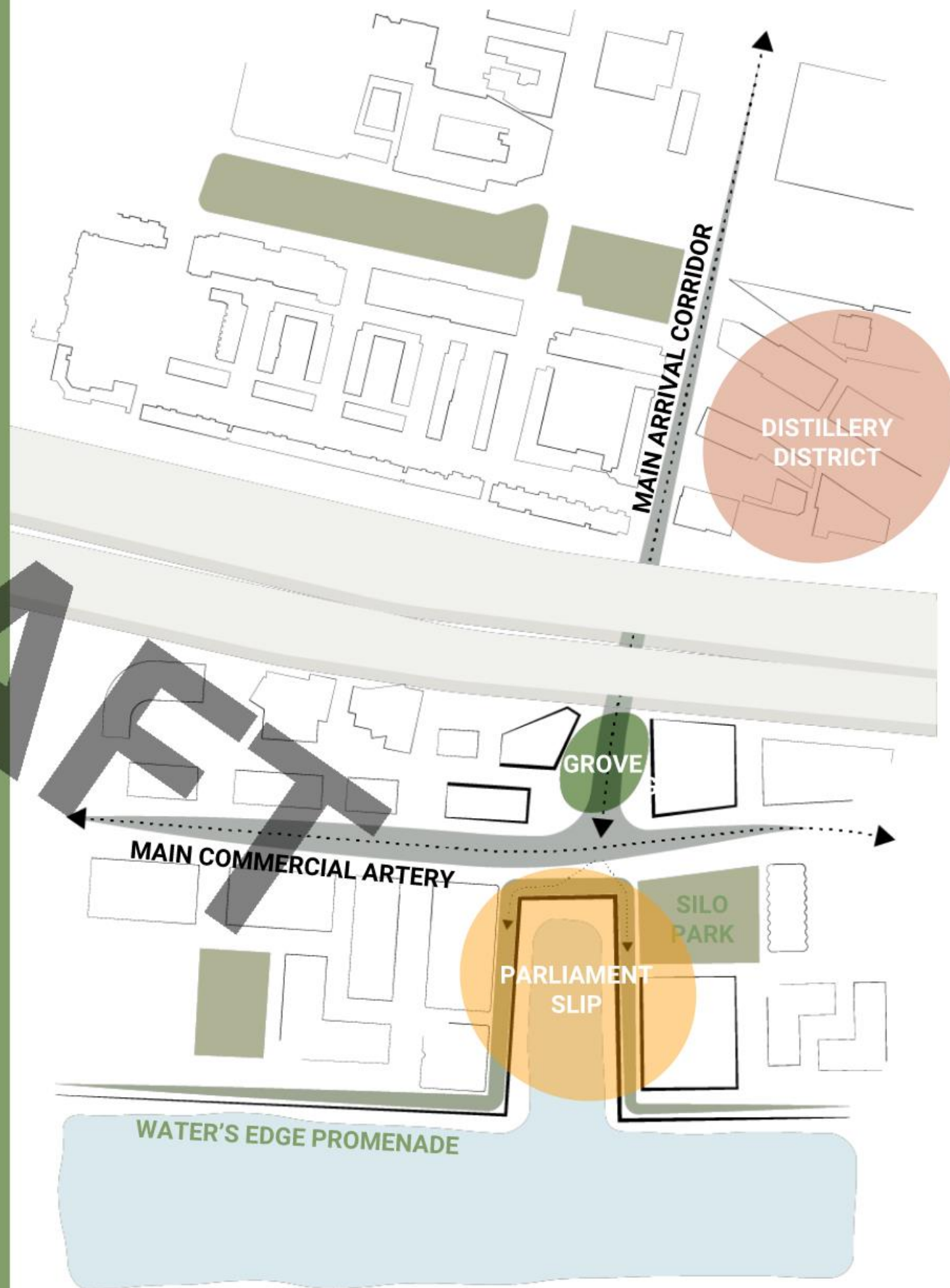
**Wild Sarsaparilla**  
*Aralia nudicaulis*



**Foamflower**  
*Tiarella cordifolia*

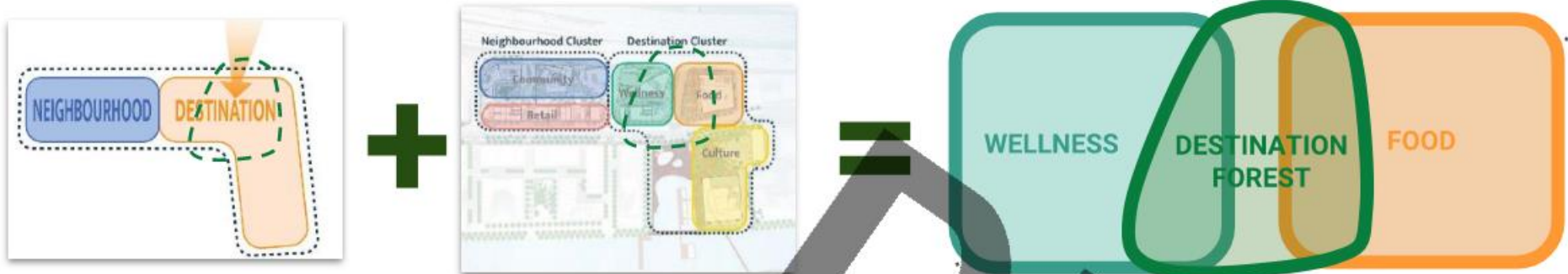


**Parliament Grove: a place of respite along an axis of activity**

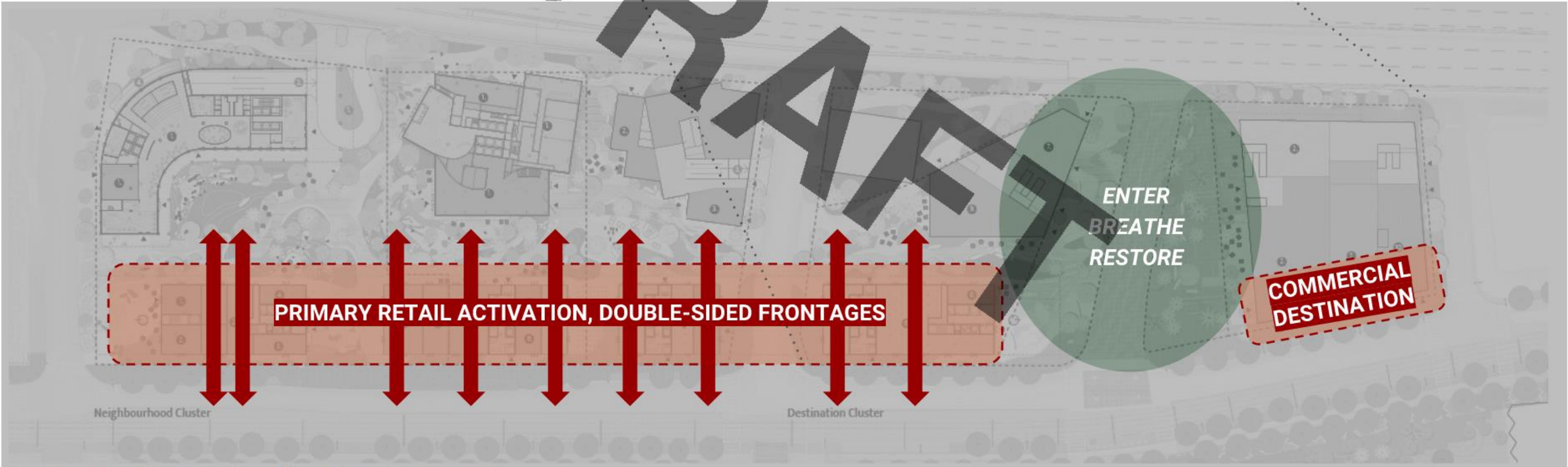




# Green Destination Uniting Wellness + Food Clusters



**DRAFT**

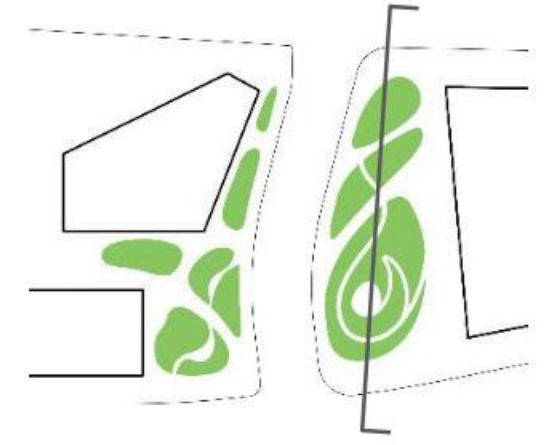


Analysis of Quayside Impact Ground Floor (Competition Proposal)

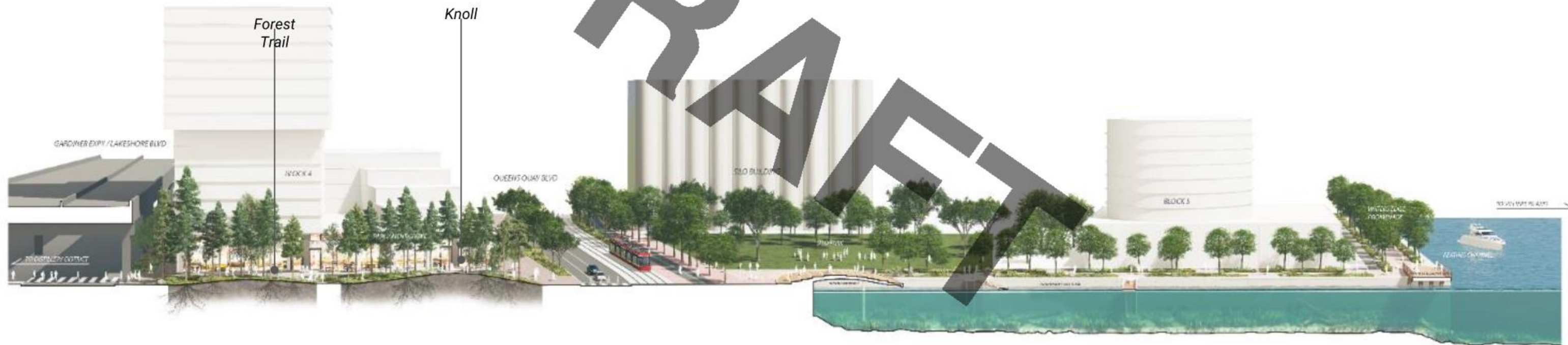


# Waterfront Arrival Experience

Undulating forest humanizing the scale down from Gardiner to Waterfront



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Lakeshore Blvd

Parliament Grove

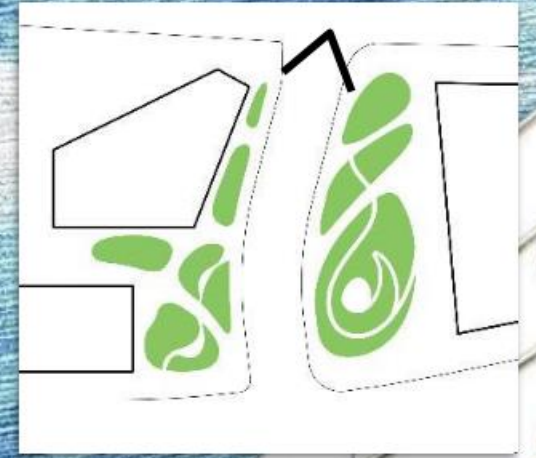
Queens Quay

Head of Slip

Waters Edge Promenade



# Parliament Street Arrival



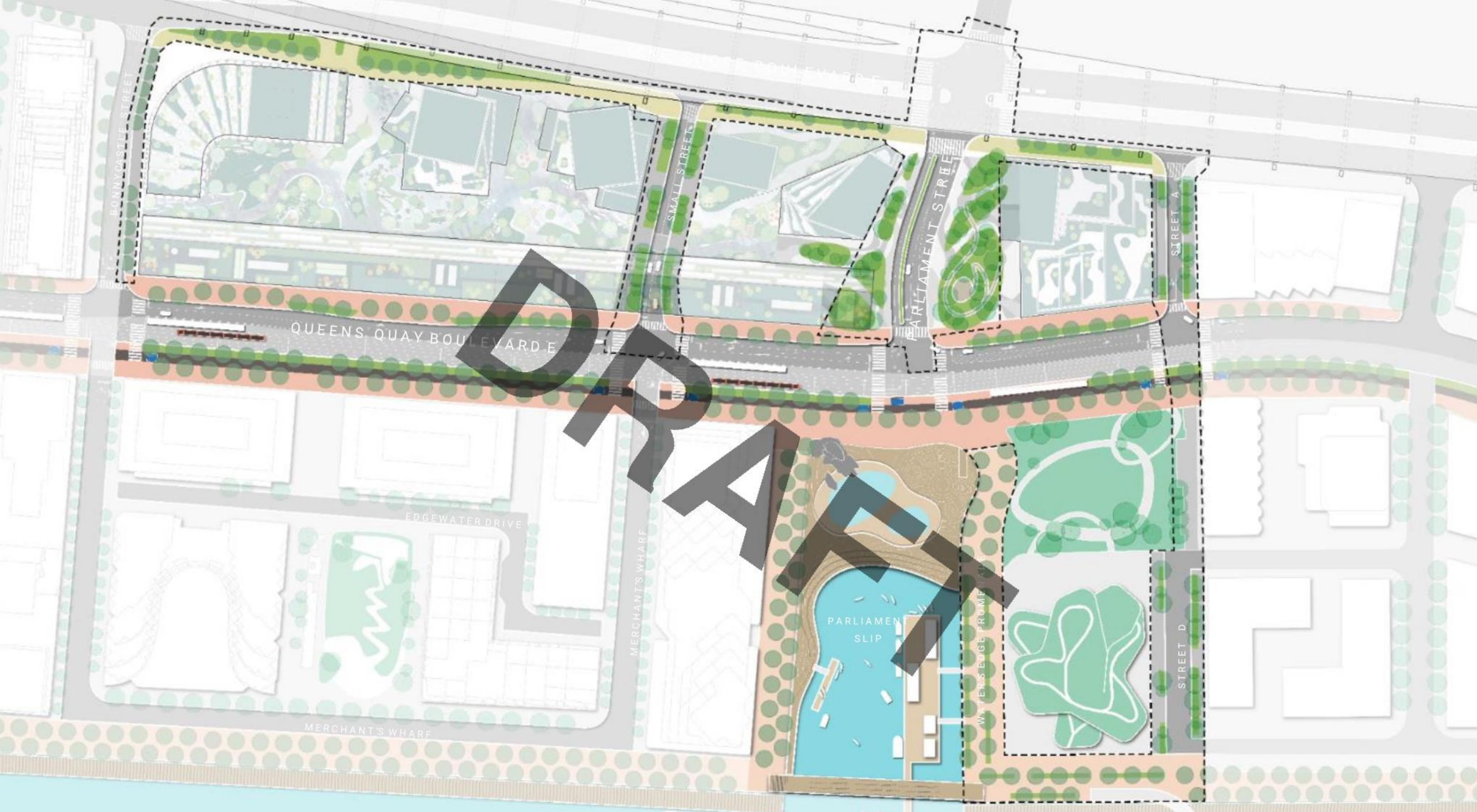
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# A Complete Piece of Waterfront



