

Edinton Crosstown West Extension **Underground Station Construction** Update and Landscape Restoration Plan Final Design

April 2, 2025



We come Thank you for attending the Eglinton Crosstown West Extension Open House.



- A Q&A period



Construction update for underground stations, • The purpose, key components and evolution of the landscape restoration plan,





LAND ACKNOWLEDGEMENT

Metrolinx acknowledges that we connect communities by building and operating transit within the traditional lands of the Anishinaabe, the Haudenosaunee and the Huron-Wendat peoples, for whom these lands continue to have great importance.

Treaties between First Nations and governments cover these lands, and the promises contained in these Treaties remain relevant to this day.

Metrolinx and its employees are committed to understanding the history of these lands and the continued impacts of colonization and take responsibility for actions to advance reconciliation.

Metrolinx will continue to seek the knowledge, expertise and experience of Indigenous partners and commits to doing business in a manner that is built on a foundation of trust, respect, and collaboration.







Engagement Guidelines

Joining as a participant?



Use Slido to submit your questions. Visit www.metrolinx.com/ecwe_ events and click on today's event







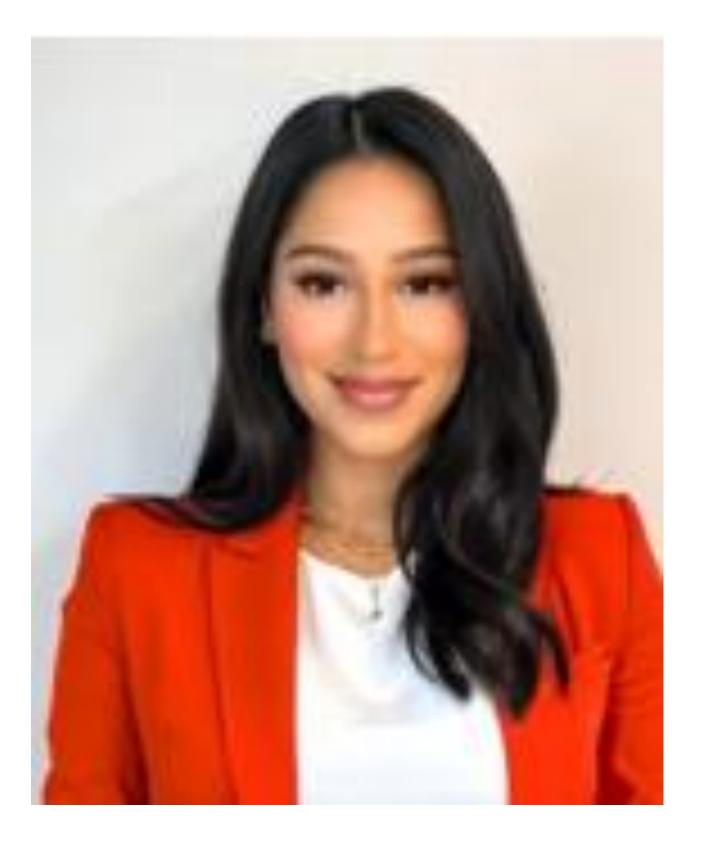
Closed Captions







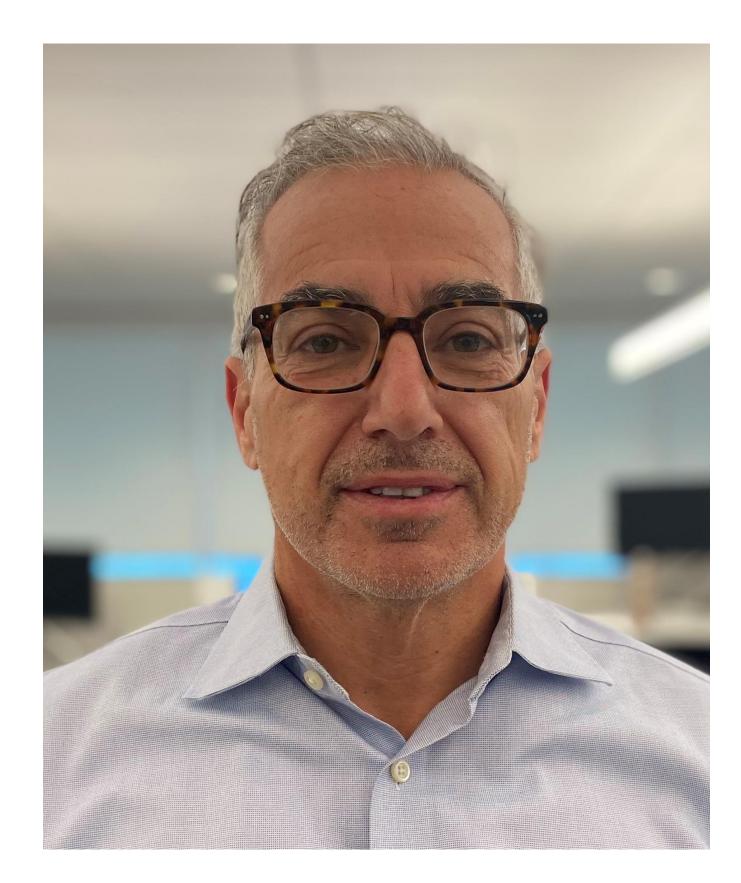
Introducing the Project Team





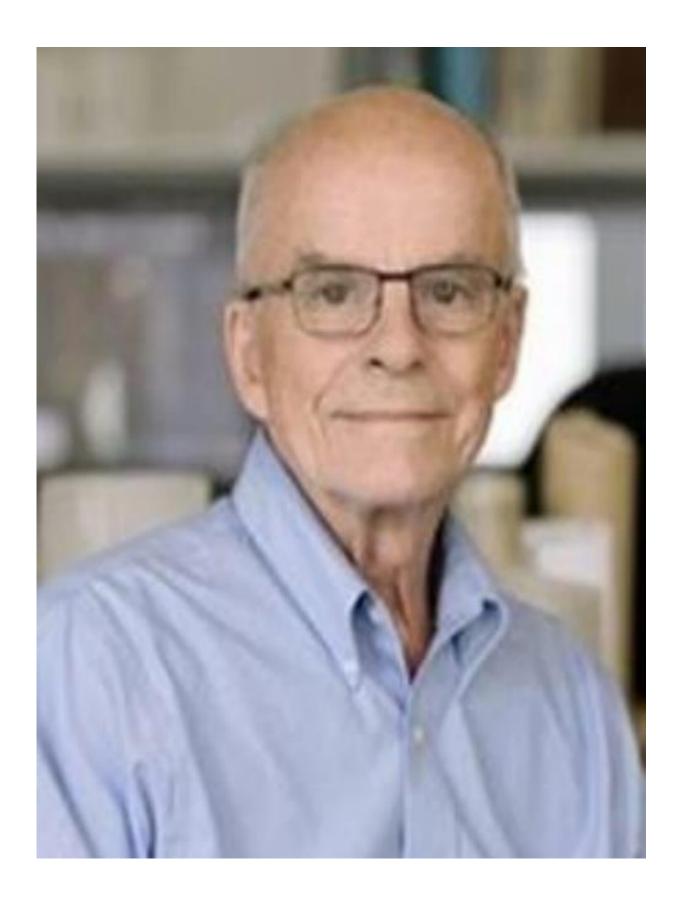
Aman Gill Community Engagement Manager, Metrolinx

Deanne Mighton Project Sponsor, Metrolinx



Mario Nalli, Senior Project Manager -Stations, Metrolinx





Kaylin Barnes Restoration Manager, Metrolinx

Peter Smith, Landscape Architect, DTAH





Christen Dschankilic Arborist, Dillon Consulting

The Eglinton Crosstown West Extension











9.2 km of new rapid transit line

Seven (7) new stations

Five (5) connections to other transit options, including: UP Express, Kitchener GO Train, GO Transit, TTC and MiWay buses

37,500 more people within walking distance to transit

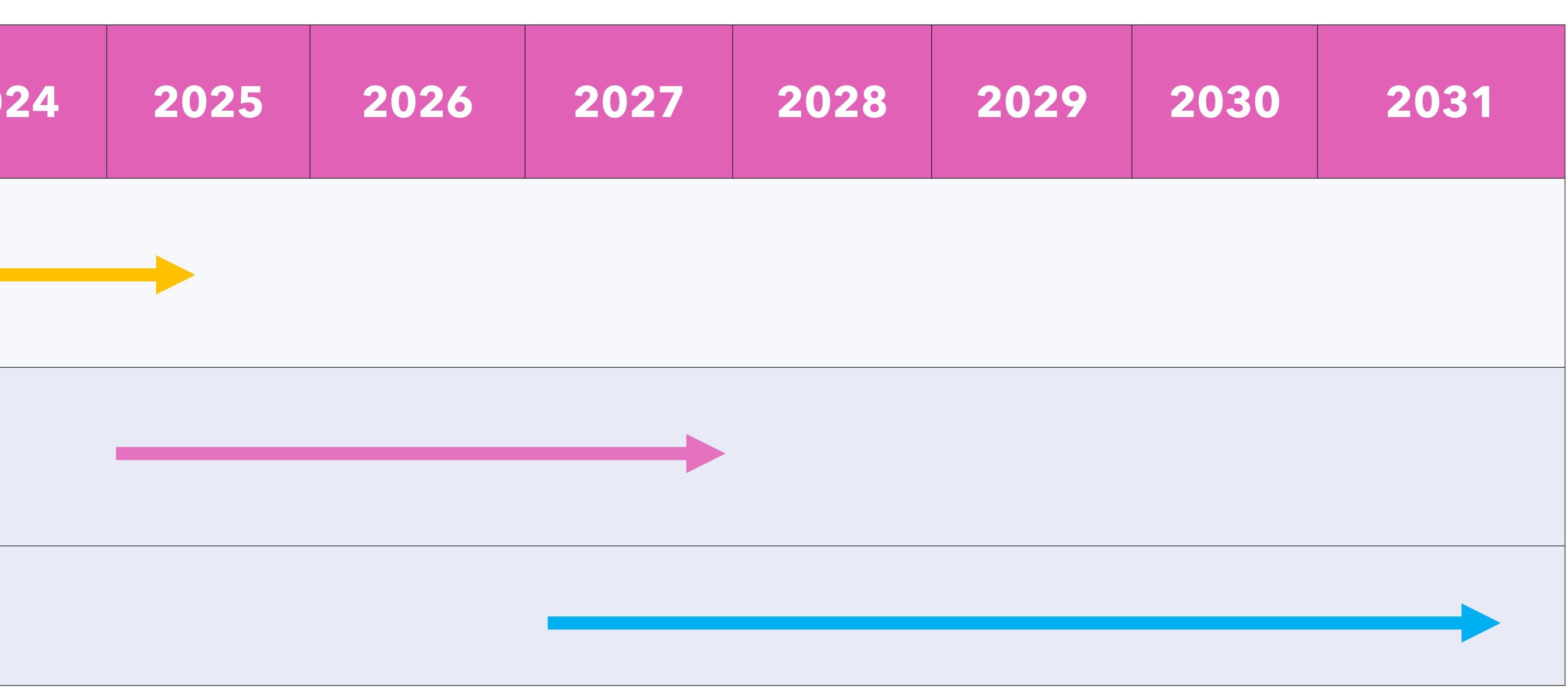
23,600 more jobs within walking distance to transit







	206
Contract Procurement - currently in process	
Early Works & Initial Project Development - currently in process	
Implementation Phase	









Construction Update - Stations Specific

Station preparation works, including tree removals, are currently underway at four of the western tunnel stations: Martin Grove, Kipling, Islington and Royal York.

Key facts about the station construction include:

- Timing is crucial, tree removals are happening now to avoid bird breeding and nesting periods (April - October)
- Significant efforts have been made to reduce station footprints, and therefore the resulting number of trees needed for removal
- These stations require a working footprint to allow for construction activities and do not represent the final above ground station size







Royal York shares a site with the important heritage building, the Mary Reid House. Station design and restoration efforts will ensure the heritage property is protected by:

- street tree plantings and clear signage.





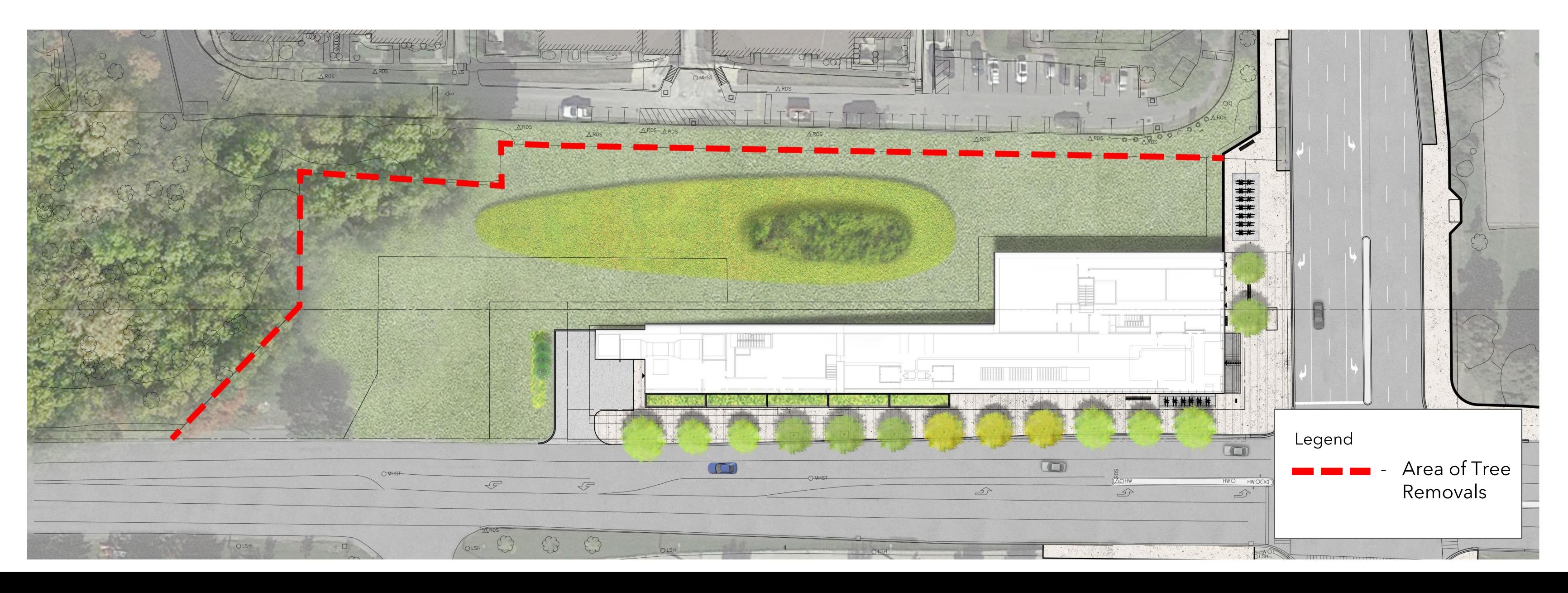
 Maintaining key aspects of the Mary Reid House landscape such as the curving driveway and mature deciduous trees; • Public plazas with distinctive paving, seating, bike racks,





Islington Station will be designed as a single standalone building on the northwest corner. Other key design features for this station include:

- south portion of the station;
- street tree plantings and clear signage.





• A free standing bike parking shelter at the north of the station building to accommodate the steep gradients at the

• Public plazas with distinctive paving, seating, bike racks,





Kipling Station will be located at the edge of the northwest corner. Other key design features for this station include:

- Kipling woodlot;
- restore as much vegetation as possible;
- tree plantings and clear signage.





• Positioning the station buildings to minimize the impact on the

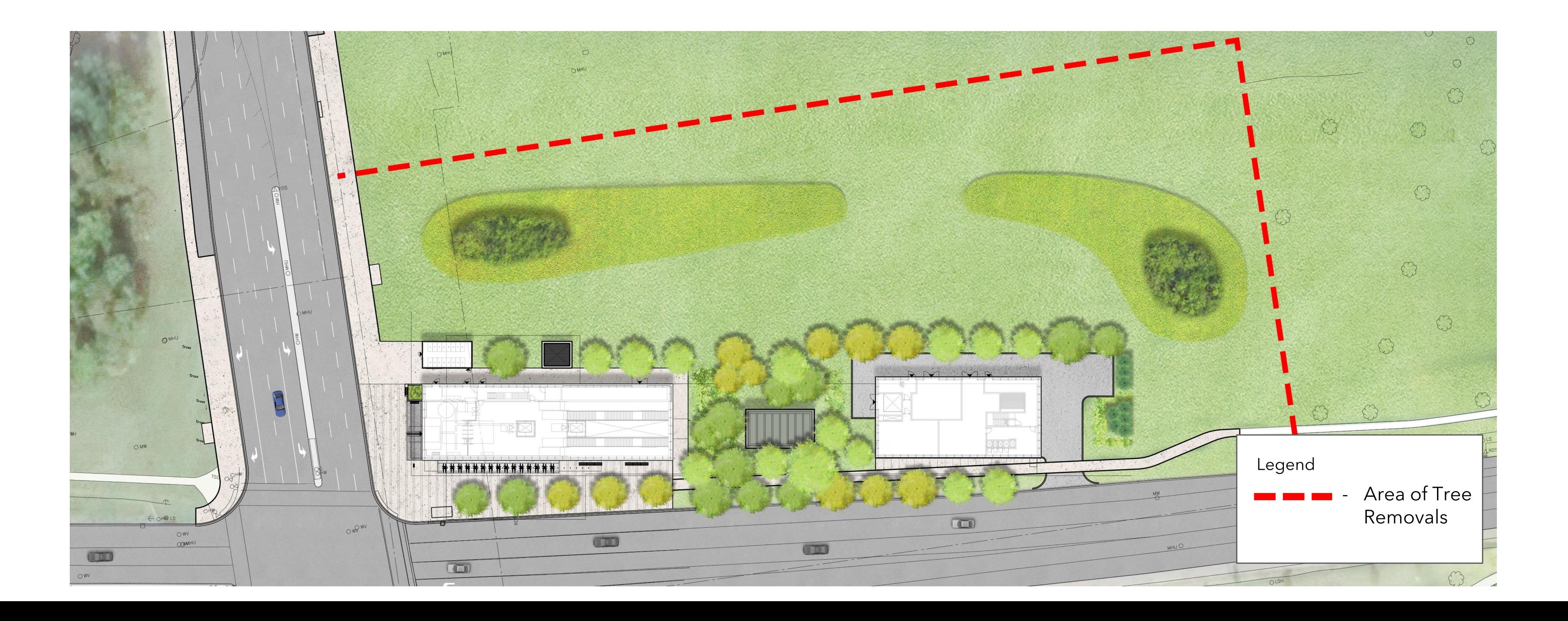
• Full restoration of the space between the main entrance and service building to maintain the strong woodlot presence and • Public plazas with distinctive paving, seating, bike racks, street





Martin Grove will include two buildings, both located on the northeast corner. Other key design features for this station include:

- A well-planted, public courtyard between the main entrance and service buildings;
- street tree plantings and clear signage.





• Public plazas with distinctive paving, seating, bike racks,







Restoration Plan - Purpose and Scope

• The Restoration Plan advances a line-wide approach to landscape development and enhancement.

M.S. S.P.J. S.A.

• The Restoration Plan includes over 100 detailed planting plans to guide implementation through four independent contracts extending over 10 years.

RENFORTH-EGLINTON STATION

Restoration Focus:

Priority #1 - Restore lands impacted by construction; Priority #2 - Improve properties adjacent to the project; Priority #3 - Enhance parkland in the community.

MARTIN GROVE-EGLINTON STATION

> **KIPLING-EGLINTON STATION**

SCARLETT-EGLINTON STATION

ISLINGTON-EGLINTON STATION

ROYAL YORK-EGLINTON STATION

LEGEND **UNDERGROUND STATION ELEVATED STATION** O OPEN CUT STATION **ECLRT STATION** A EMERGENCY EXIT BUILDING (EEB) TRACTION POWER SUBSTATION (TPSS)



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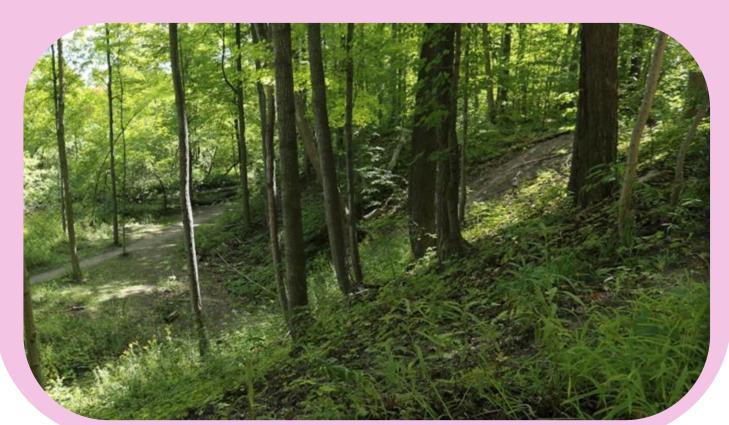
ANE-EGLINTON **STATION**

JOUNT DENNIS STATION IECTION (ECLRT





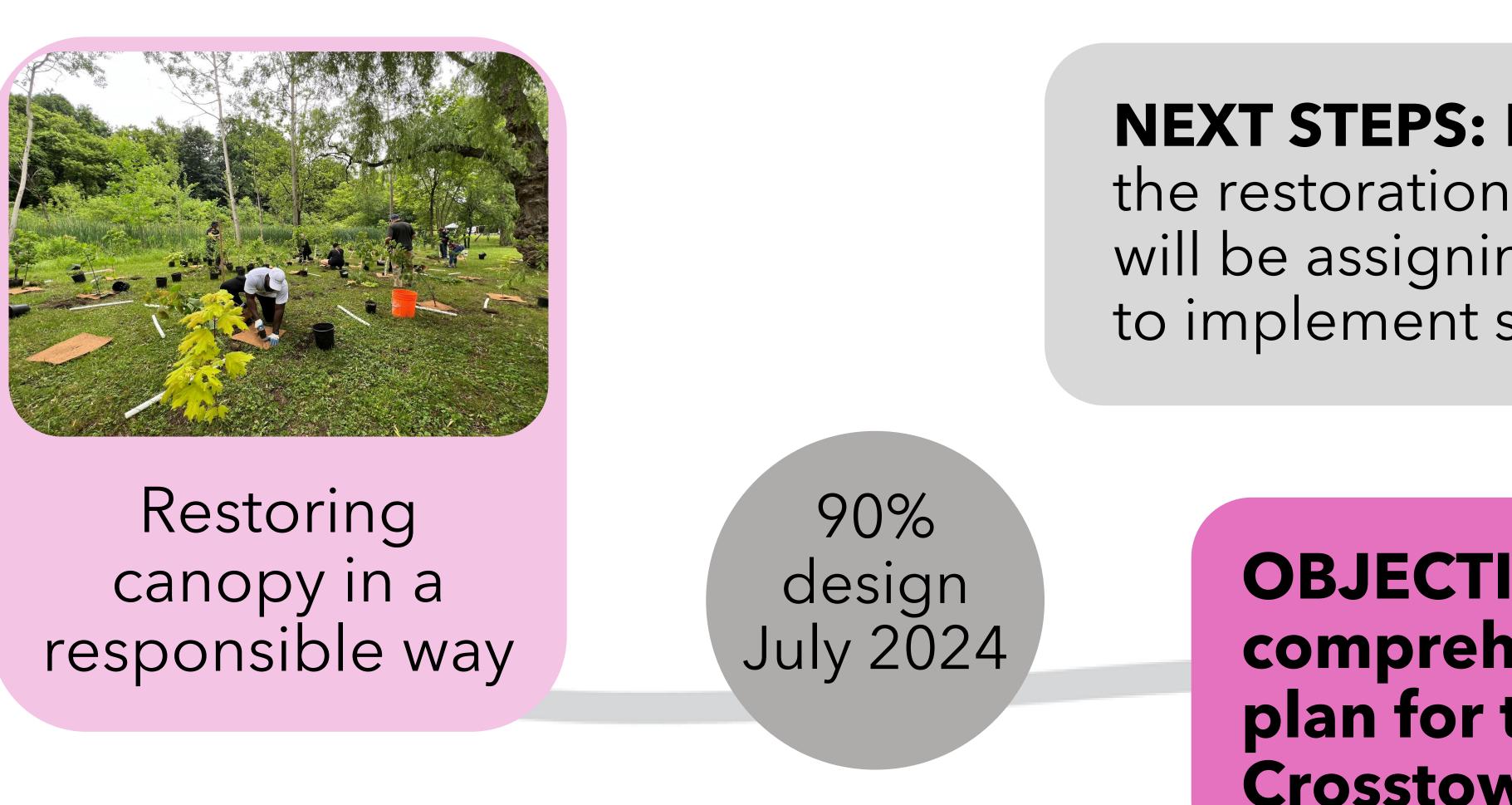
Seed collection (vegetation rescue and reuse) - replicating local ecosystem





The Road to a Landscape Restoration

Researching and reaching agreement on soil remediation



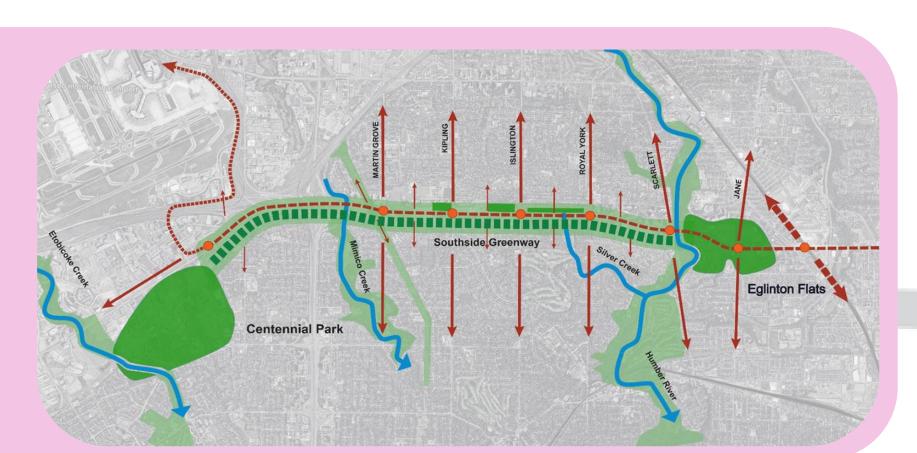


Remnant forest monitoring (Kipling, Denfield, and Wincott woodlots)

Bringing together multidisciplines

Developing a line-wide approach

Negotiations with the City to plant on City of Toronto lands







NEXT STEPS: Now that we have the restoration plan in place, we will be assigning our contractors to implement segments over time

> **OBJECTIVE:** develop a **comprehensive restoration** plan for the Eglinton **Crosstown West Extension**

> > 30% design Nov 2023



Stakeholder Engagement on the Restoration Plan

In total, we have held the following engagement sessions focused on restoration:



16 meetings with Indigenous Nations



9 restoration working group meetings



4 joint workshops with the City of Toronto and TRCA



3 Landscape Restoration Open Houses,







Toronto and Region Conservation Authority

ECWE **Restoration Plan**

Working Group







Indigenous Nations

Restoration Goals

Short-term

- Establish priority areas for restoration
- Invasive species removal and control
- Planting, monitoring, and maintenance
- habitat enhancement

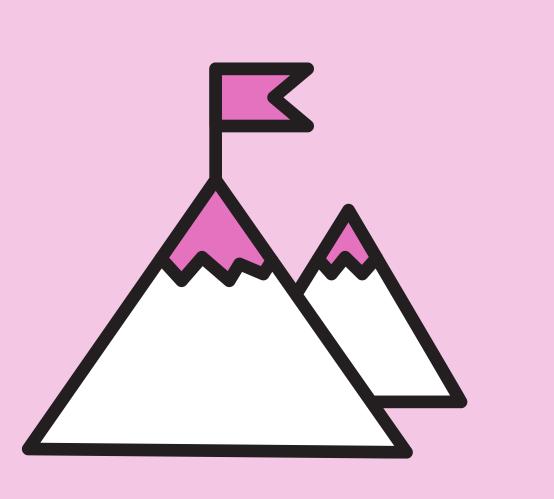


Establishing areas for wildlife

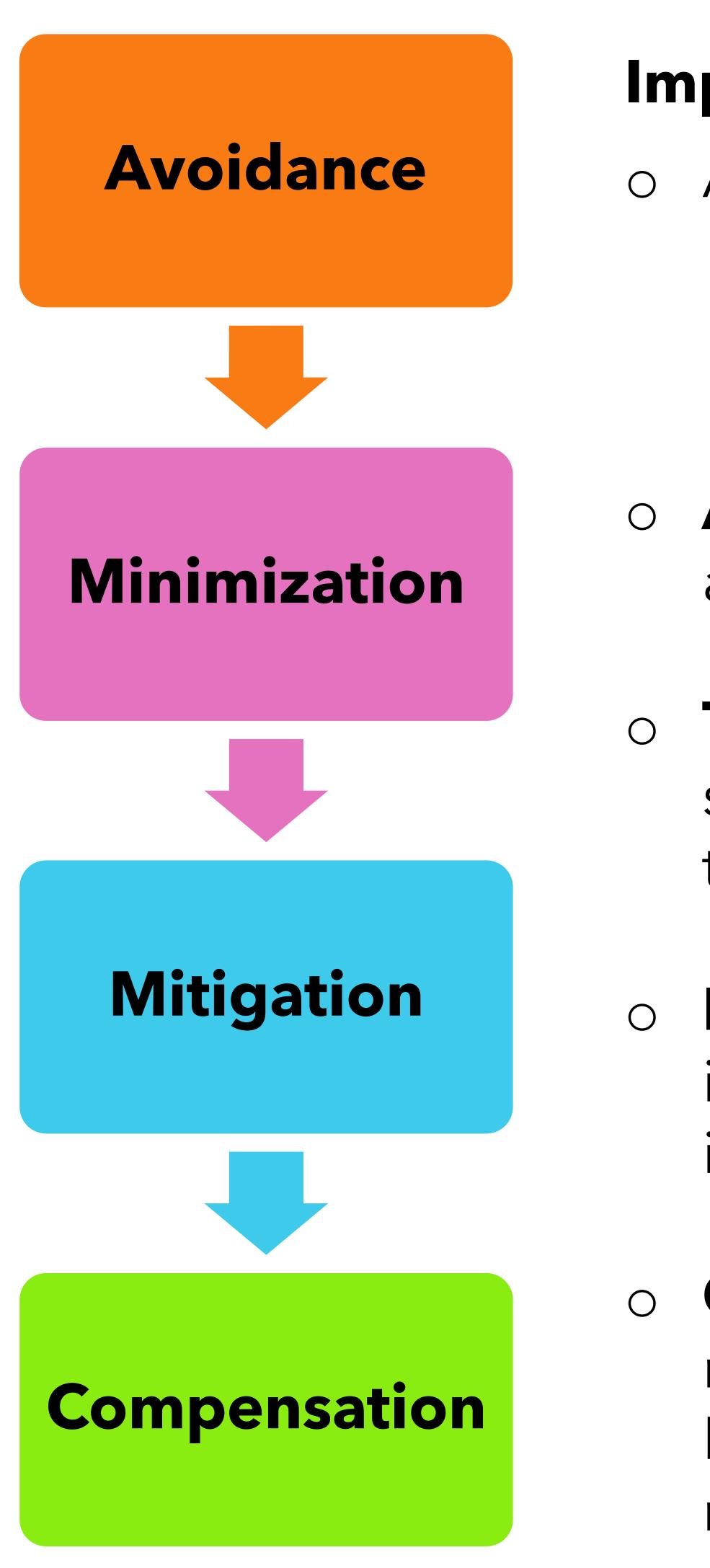
Long-term

- Naturalization
- Self-sustaining native vegetation communities
- Increase bio-diversity (flora and fauna)
- Improve ecological connectivity





Evaluation of Vegetation and Removals



Implementing the Mitigation Hierarchy

o Assessing alternatives to Avoid and Minimize Impacts is the first consideration o If in Initial Business Case - Can Project be moved to different location? o If in Detailed Design - Can design be modified to reduce/ eliminate removals?

o Areas to Avoid/ Minimize Impacts - Designated Natural Areas (DNAs), Parks, and other natural/ sensitive features

o Trees to Avoid/ Minimize Impacts - Species at Risk, Bio-culturally significant species, locally rare/ significant species, heritage/ memorial trees, large mature trees etc.

• Mitigation Measures - Measures and Best Management Practices (BMPs) to reduce impacts to trees and features being protected and promote recovery for trees injured

o **Compensation** – Where impacts could not be avoided, determine number of trees required to compensate for removals following municipal requirements and the Metrolinx Vegetation Guideline and identify on and off - site restoration for replacement values.





Metrolinx Vegetation Guideline

Our goal is to keep the number of trees we remove to a minimum and we strive to replace them in areas where they are being removed as early as we can. The restoration plan is guided by the Metrolinx Vegetation Guideline.

- and keeping the region green.
- managing vegetation, including the on their size and location.

In a built-up and growing region, tree removal is necessary. To offset these removals, Metrolinx follows a detailed, best practices plan for planting new trees

Metrolinx has developed a Vegetation Guideline that provides direction for removal and replacement of trees based











Where We're At – New Plantings

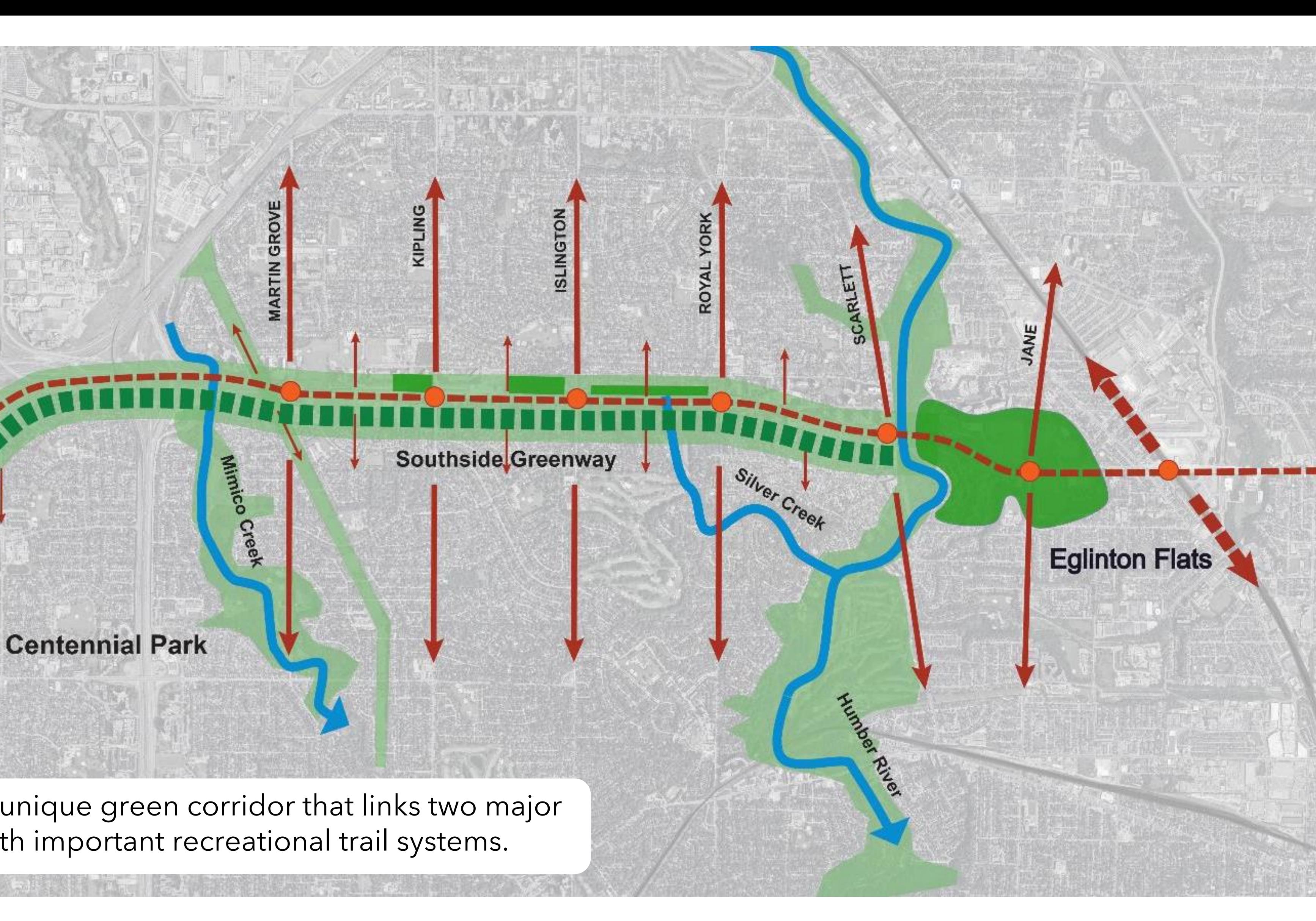


A Line-wide Perspective

Eglinton Avenue West is a unique green corridor that links two major City parks and connects with important recreational trail systems.

NUMBER DE

Etopicote Creet



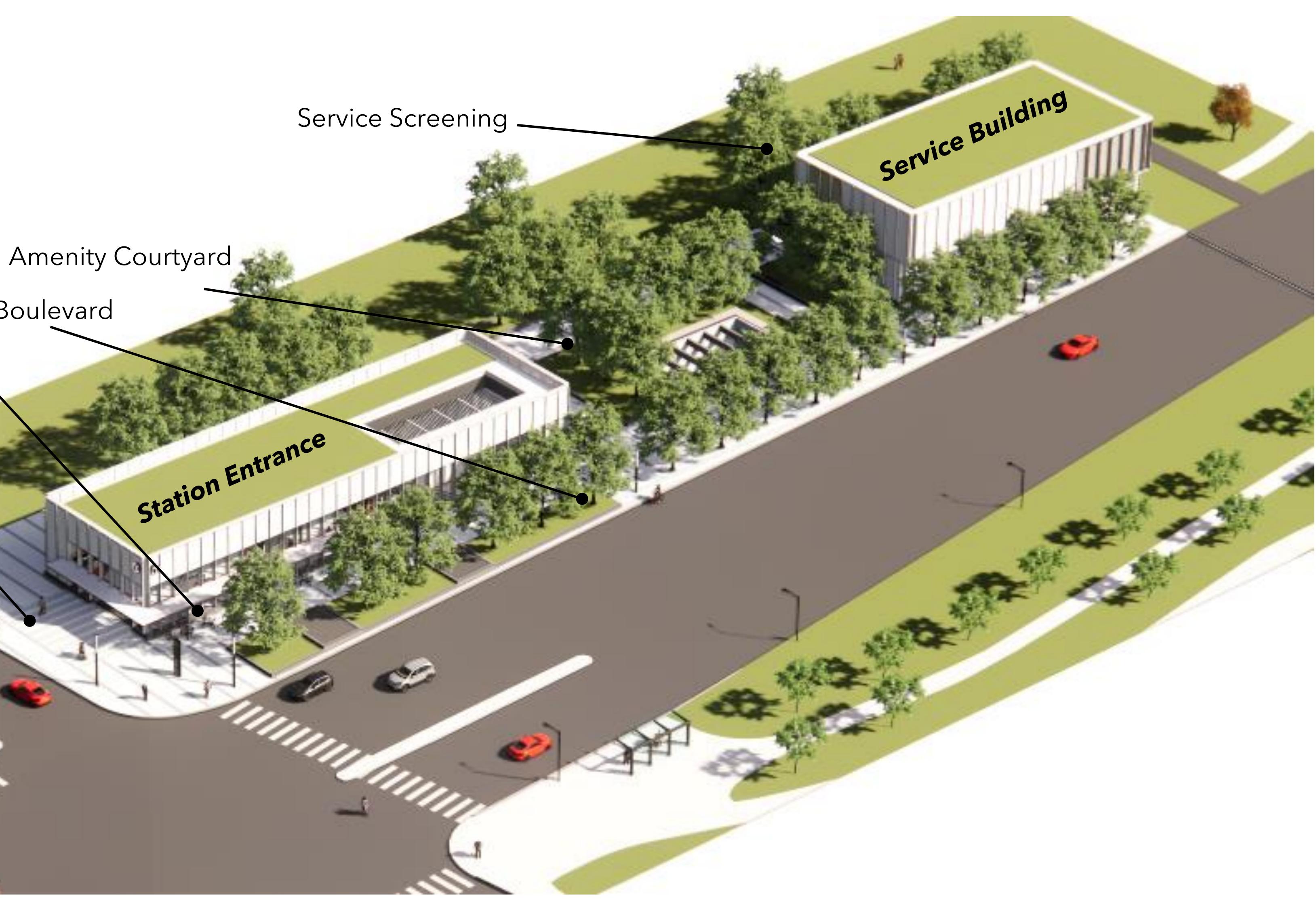






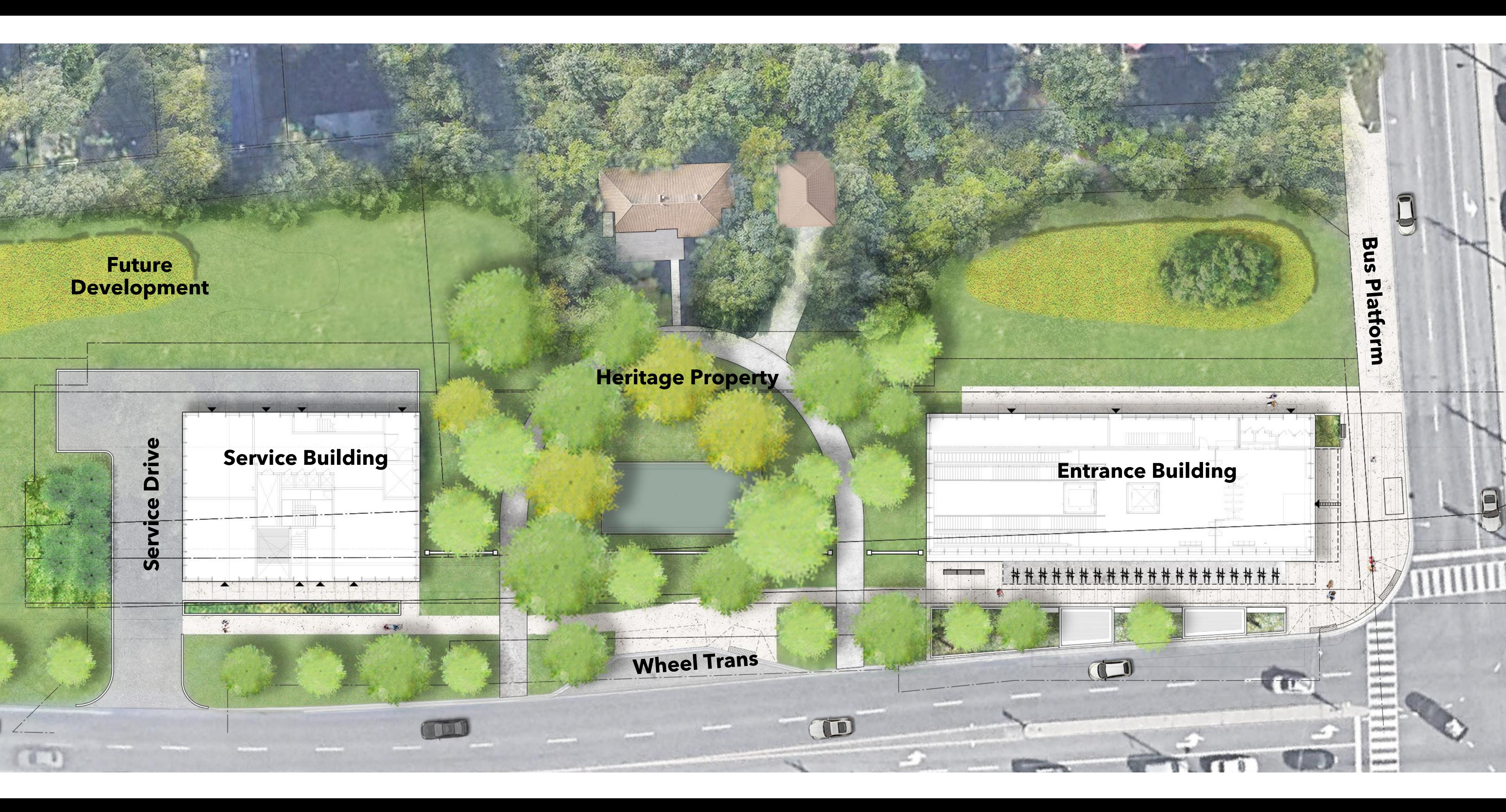
Station Features

Planted Boulevard Bike Parking Station Plaza





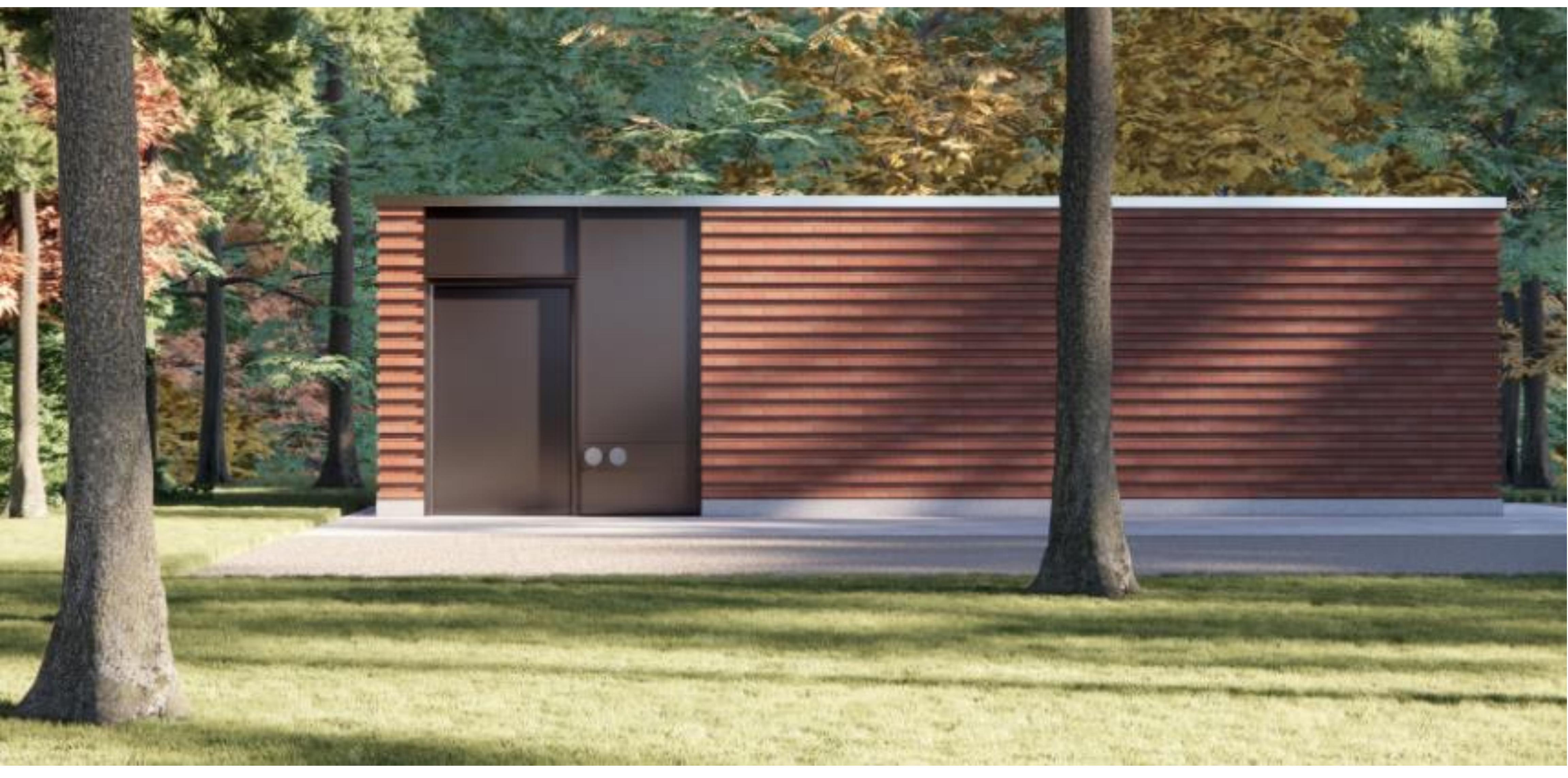








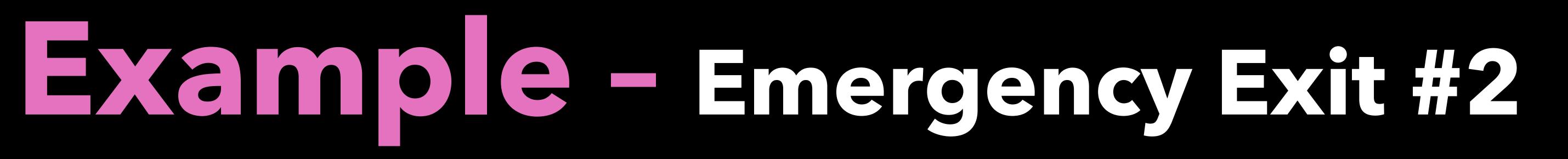
ECWE Facilities – Stations and Ancillary Building



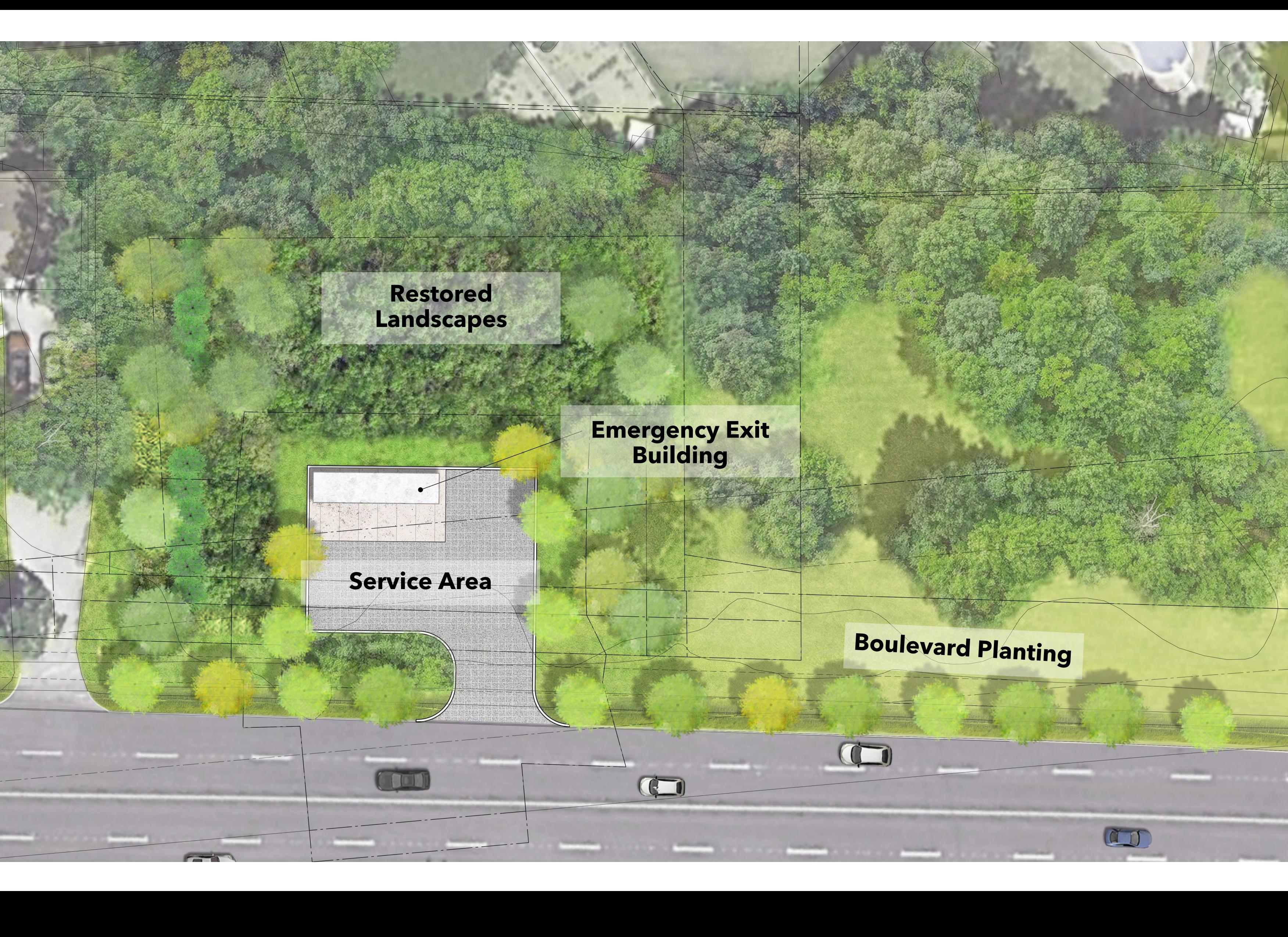
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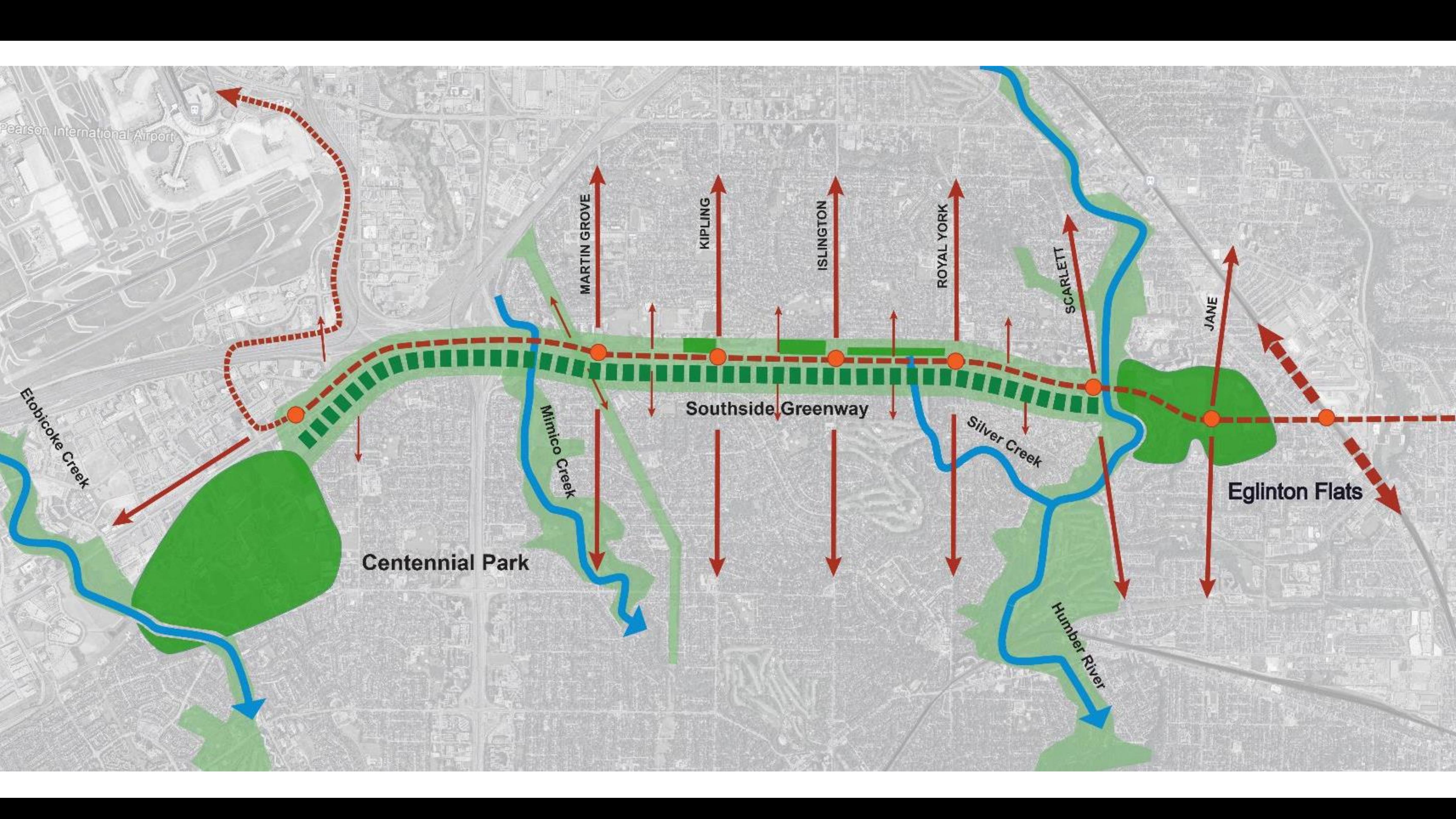
Adjacent Property







A Line-wide Perspective













Southside Greenway







Southside Greenway





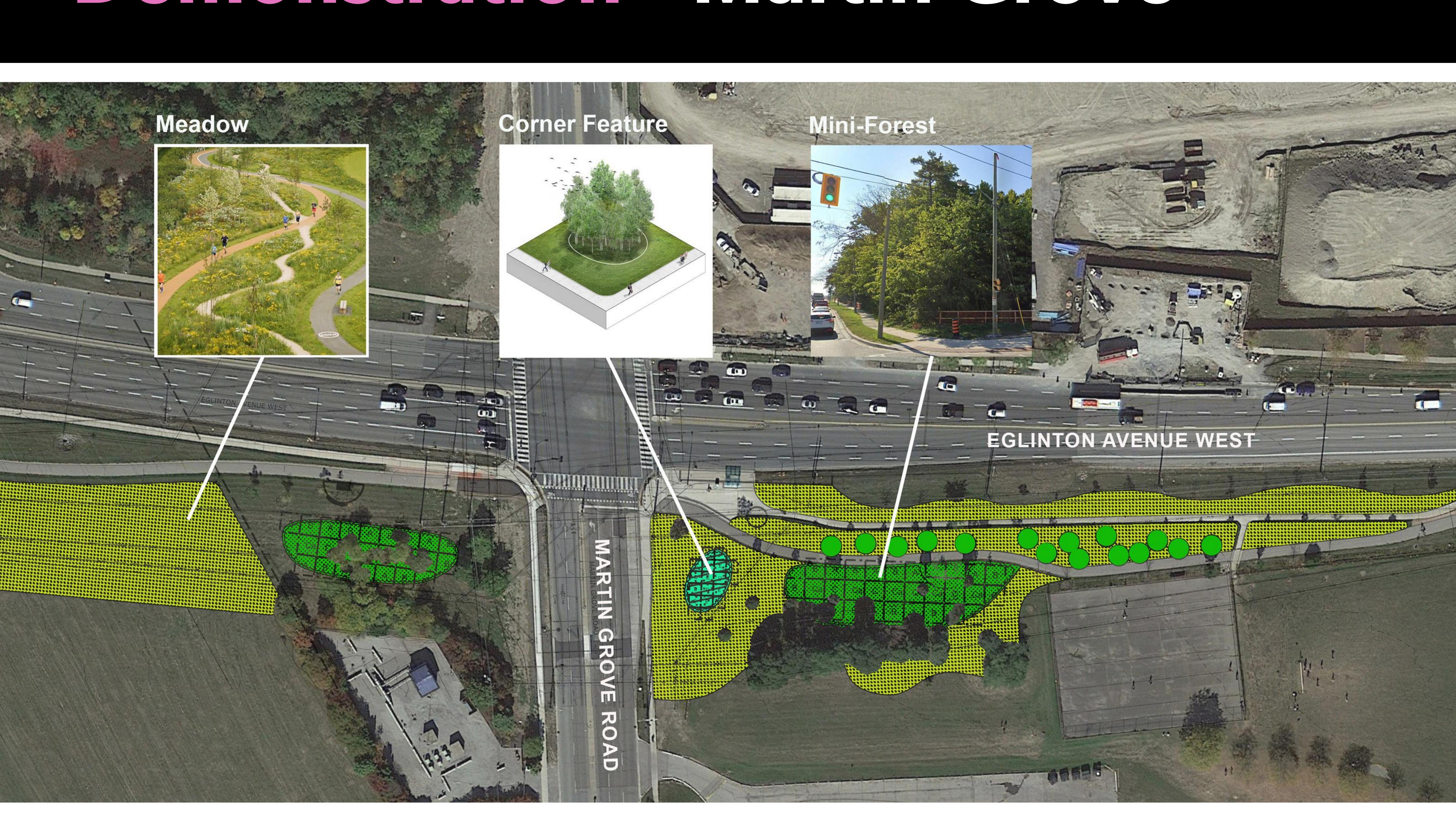




...with room for improvement



Demonstration - Martin Grove





Demonstration - Silver Creek







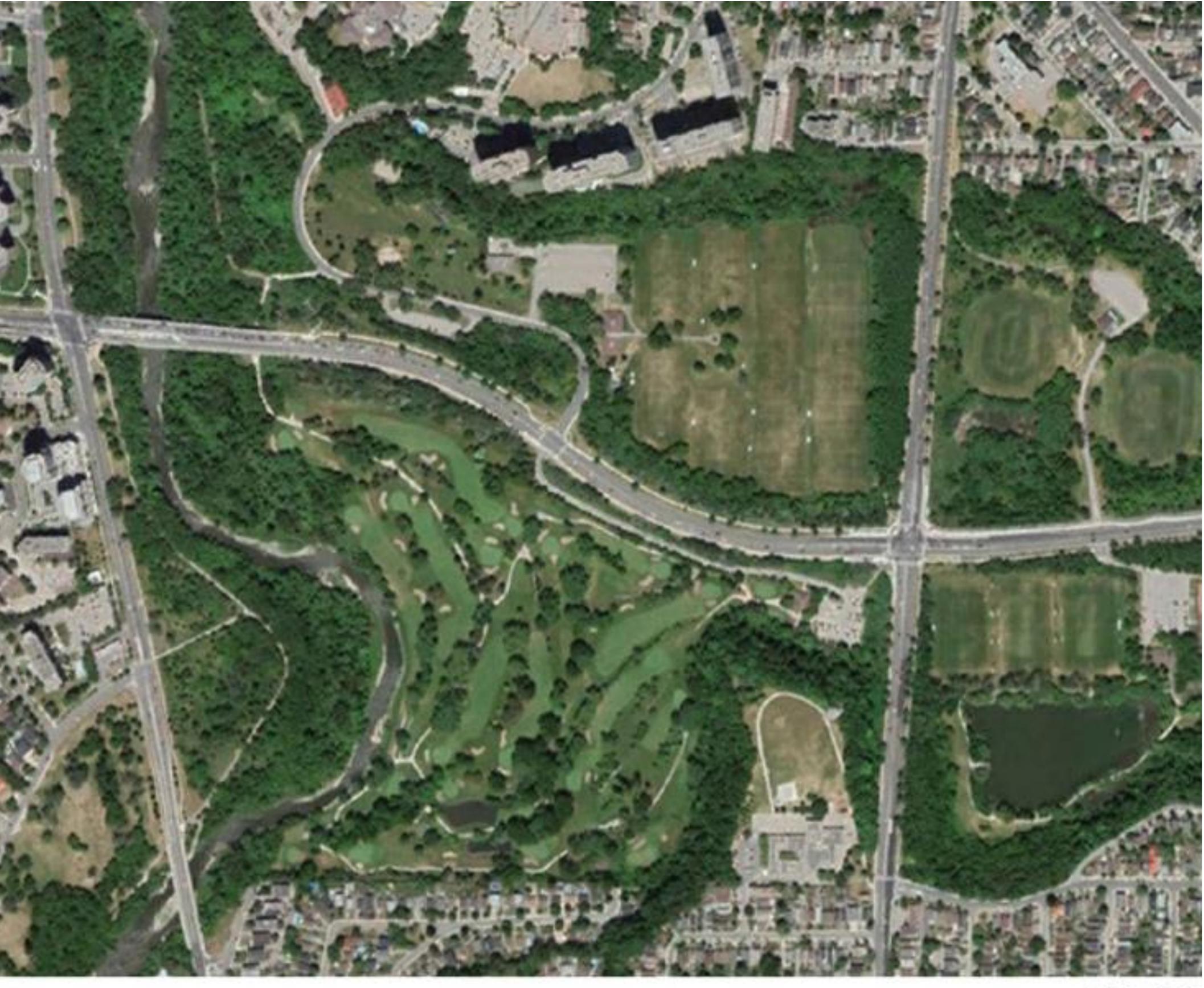
Impacted Lands -Under the Guideway















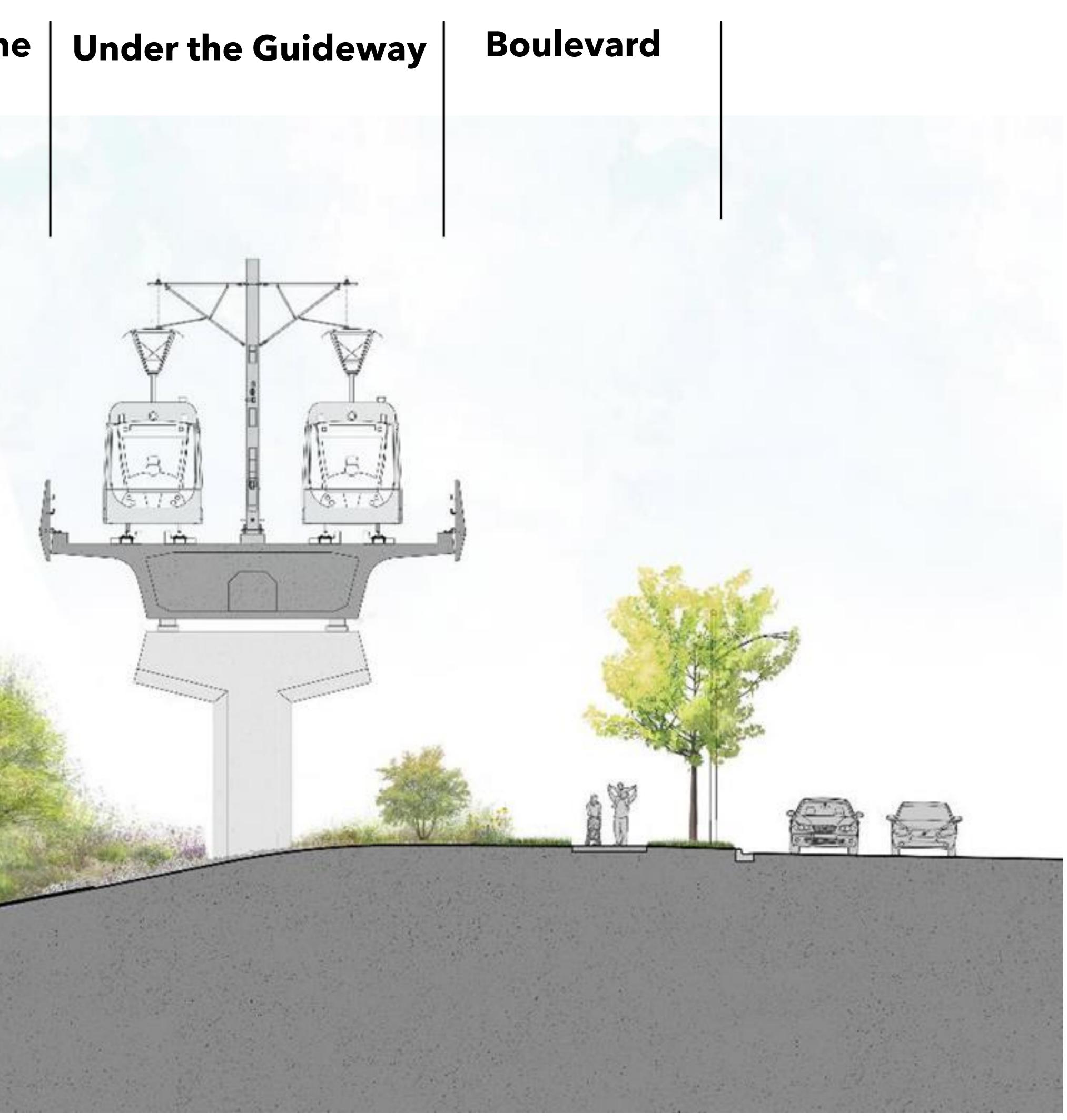


Existing Vegetation



Comprehensive Restoration

Restoration North of the Guideway

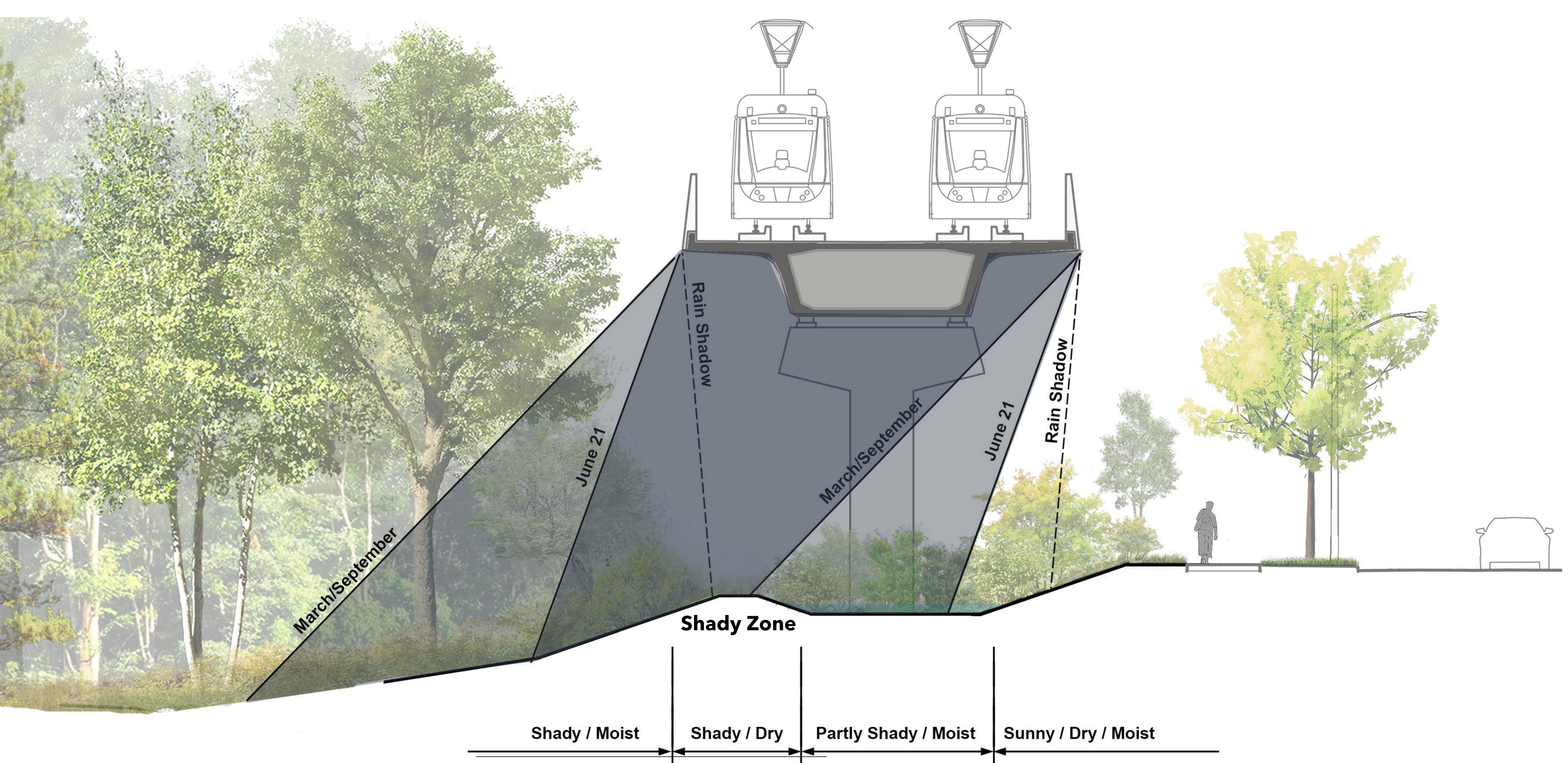








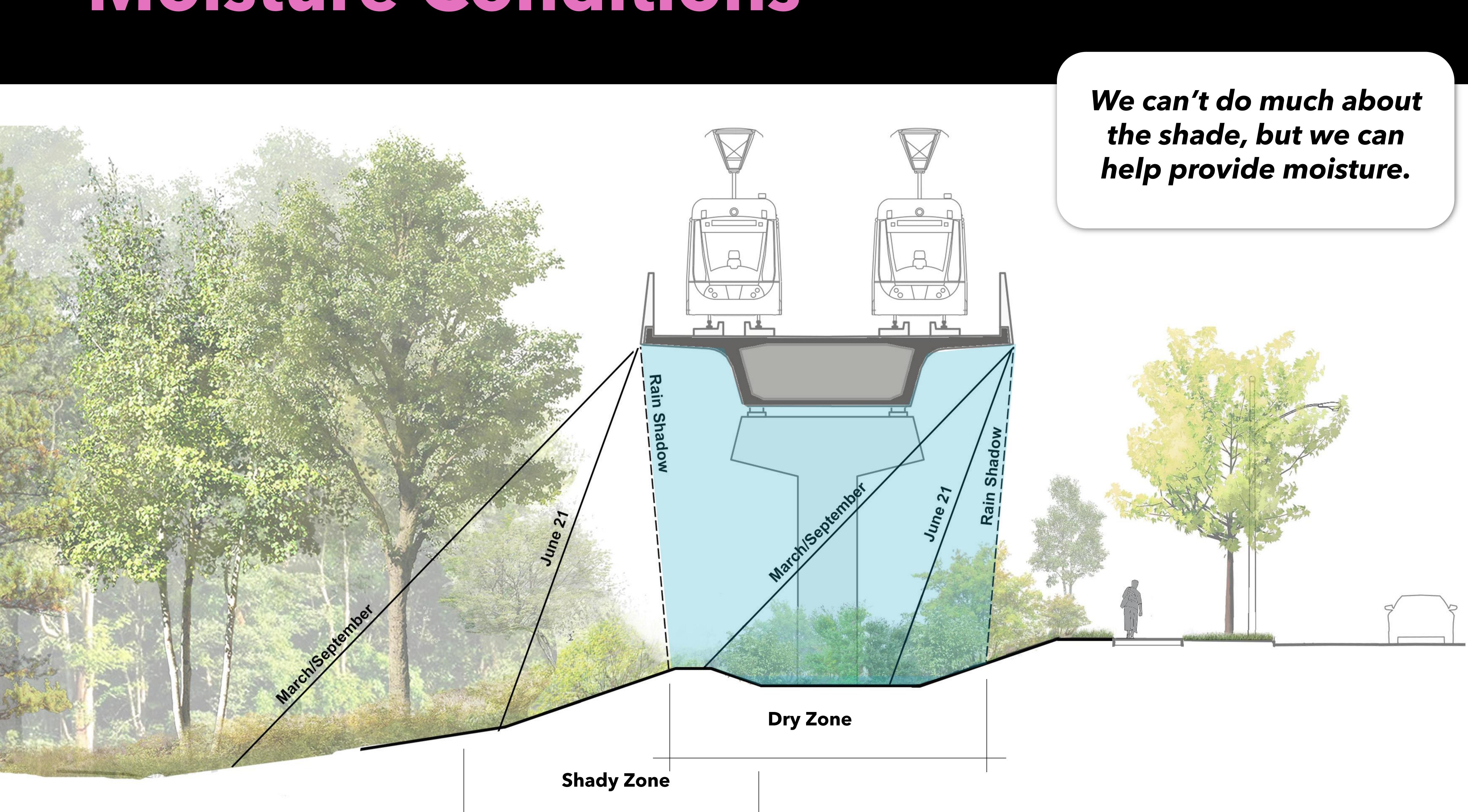
Solar Conditions







Moisture Conditions



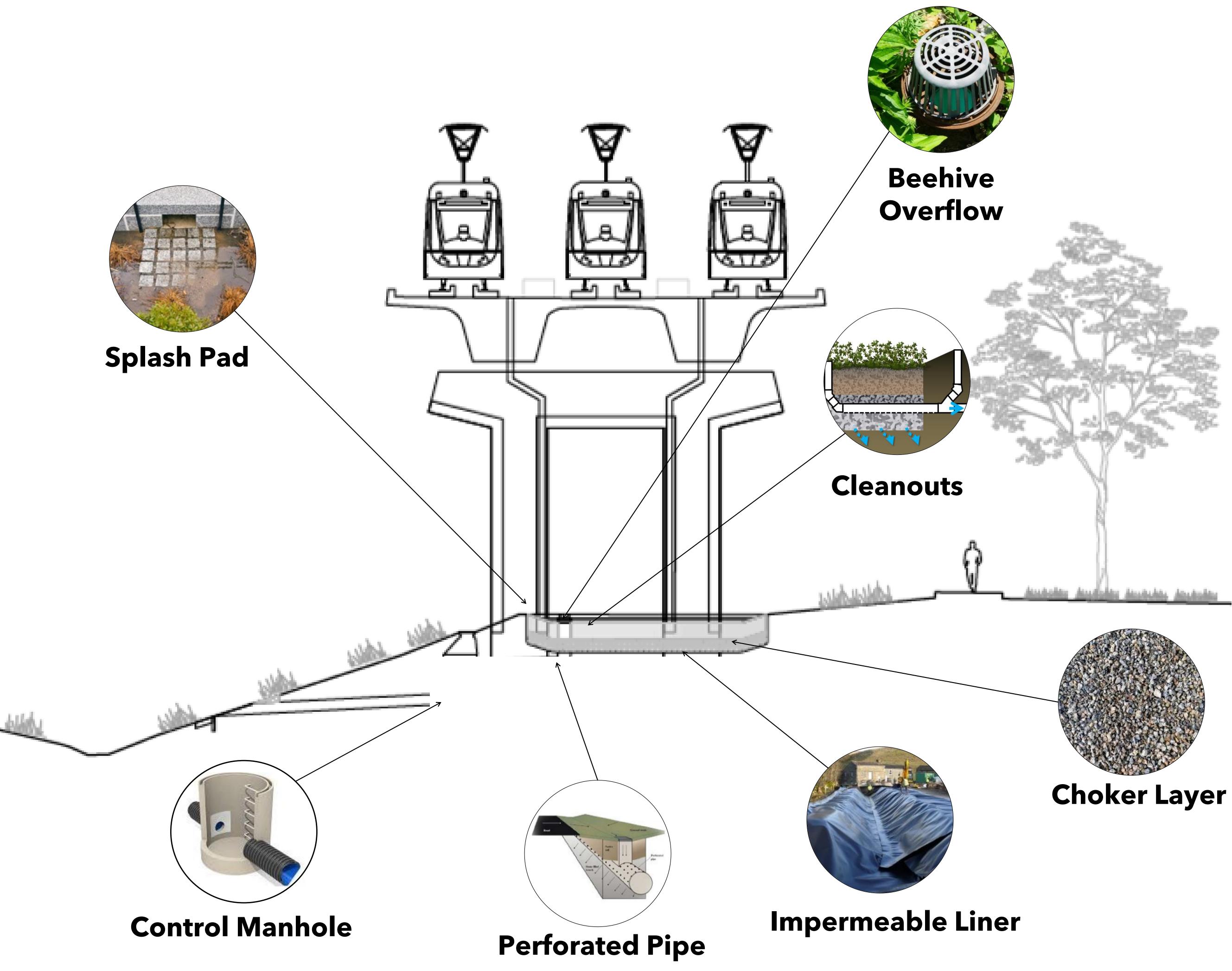




Rain Gardens

The rain gardens capture rainfall from the elevated guideway above and use the water to irrigate shrubs and other vegetation under the guideway.





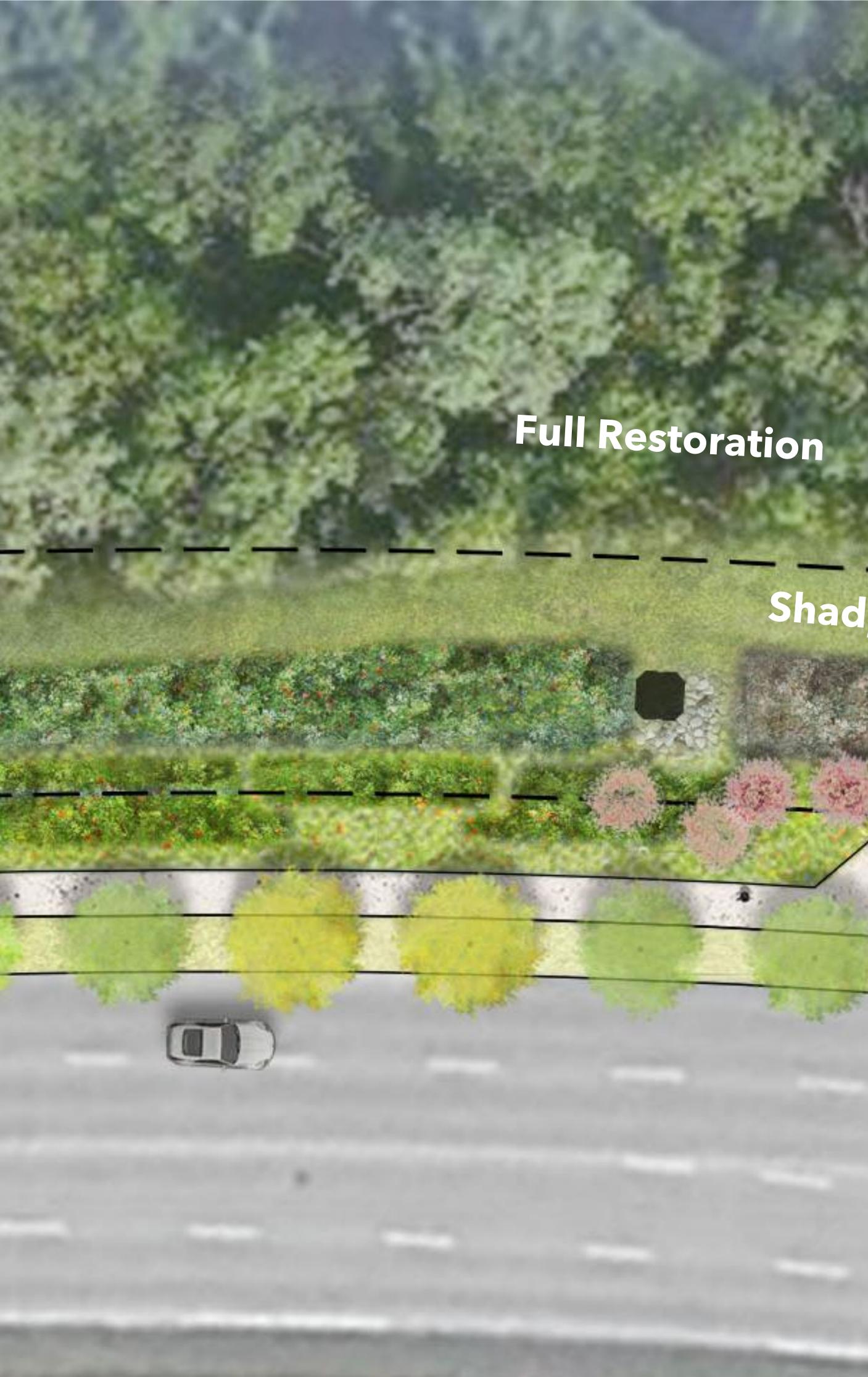






Typical Rain Garden







Shady Meadow









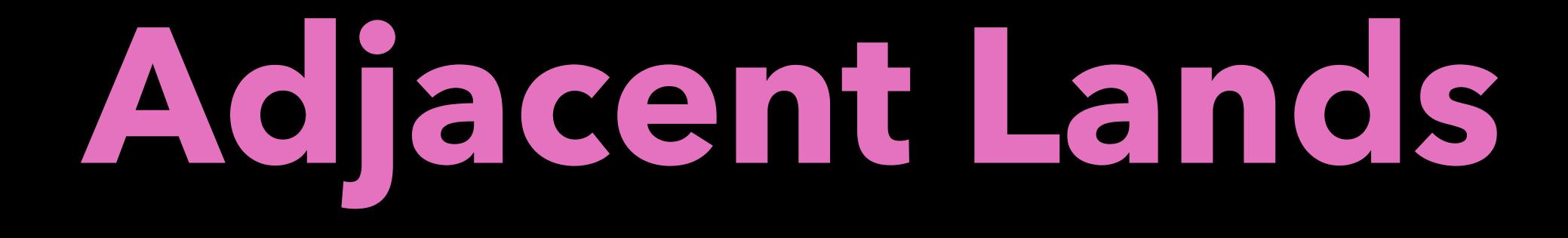
The Complete Picture



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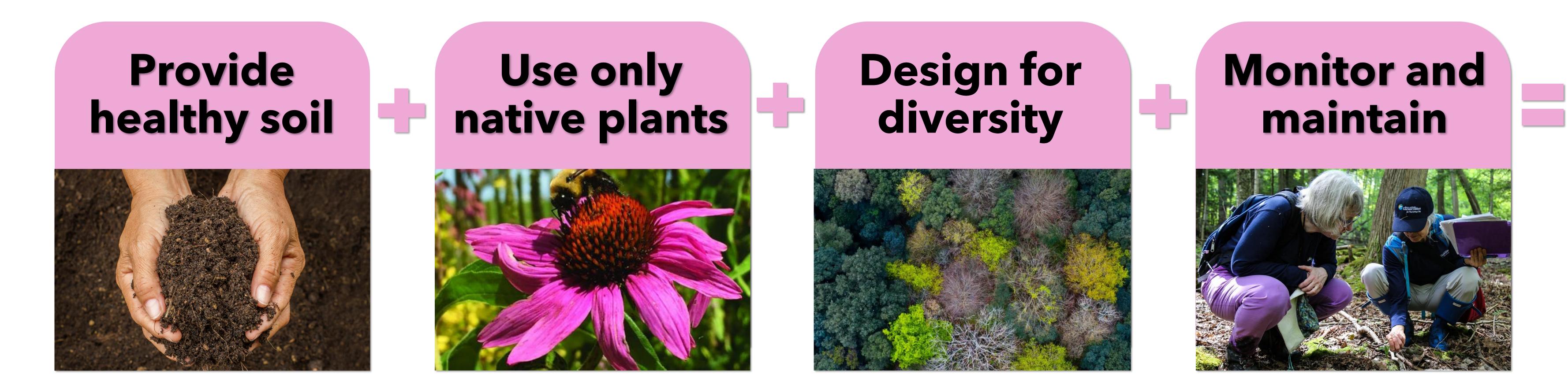


Adjacent Lands – Eglinton Flats & Fergy Brown Park





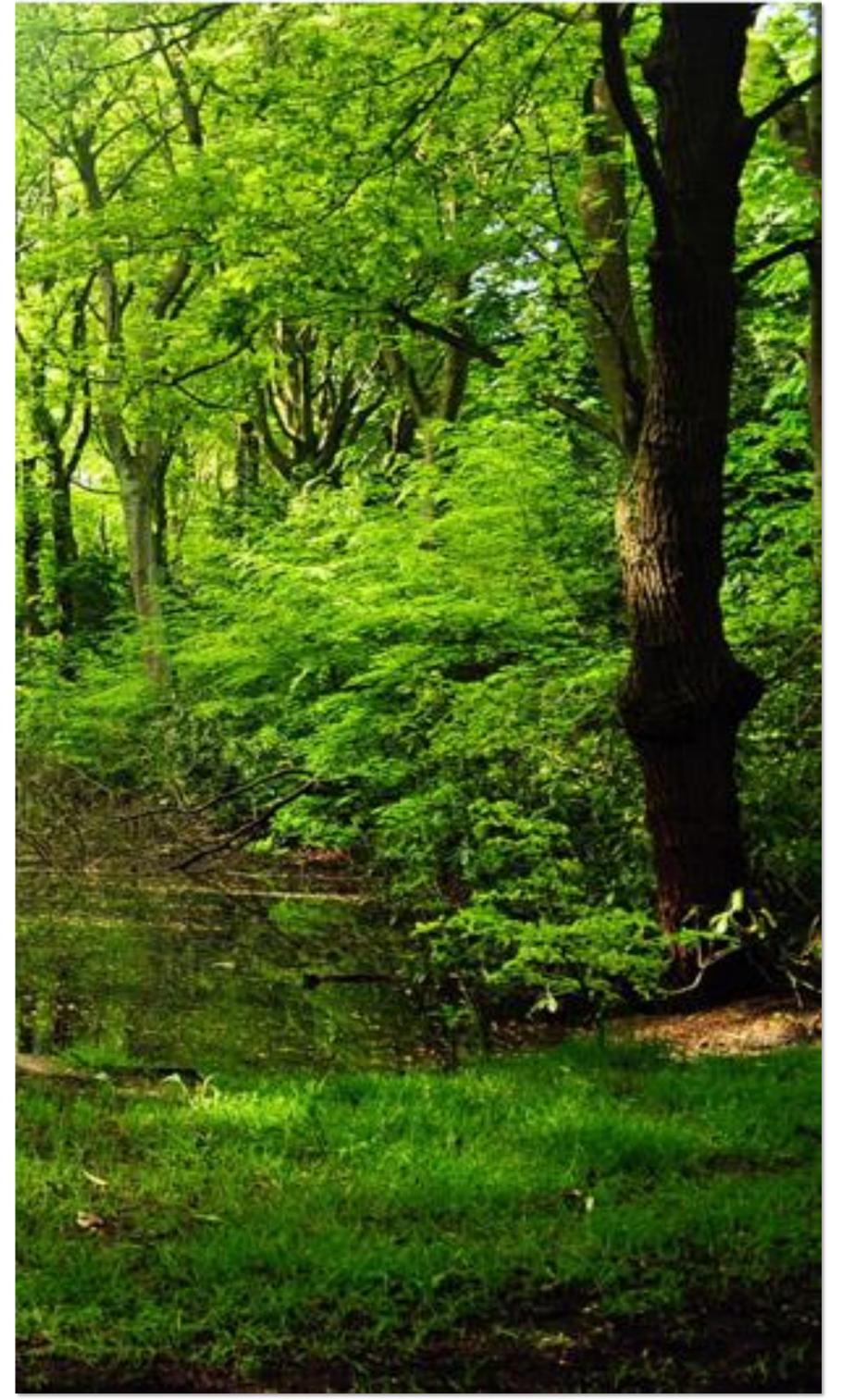
What's Required for Successful Landscape Restoration?



Landscape restoration requires an understanding of ecological systems including soil types, moisture regimes and local weather conditions as well as a thorough knowledge of native plants and plant communities.

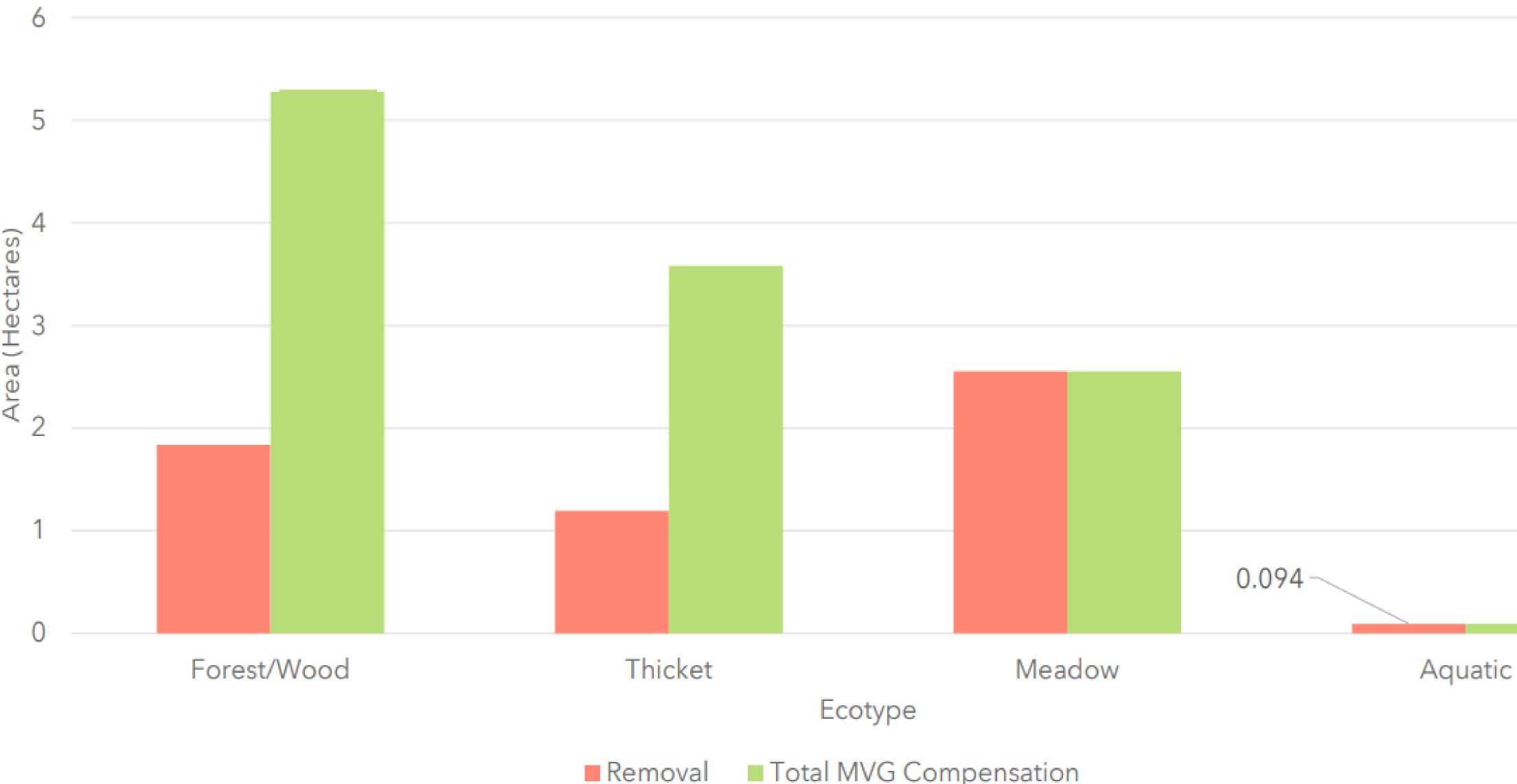
It's more than just one single act; successful landscape restoration is a carefully managed process that extends over many years and involves a series of planned, sequential stages intended to replicate natural processes.





Maintaining Canopy in the Corridor

IMPACTS VS. TOTAL RESTORATION



• Tree removals will be compensated at a minimum 3:1 ratio (e.g. for every 10 trees removed, 30 trees would be planted).

40% of trees will be planted on Metrolinx lands, while 60% will be on the City of Toronto and TRCA lands - all within the corridor.

Impacts are based on Reference Concept Design

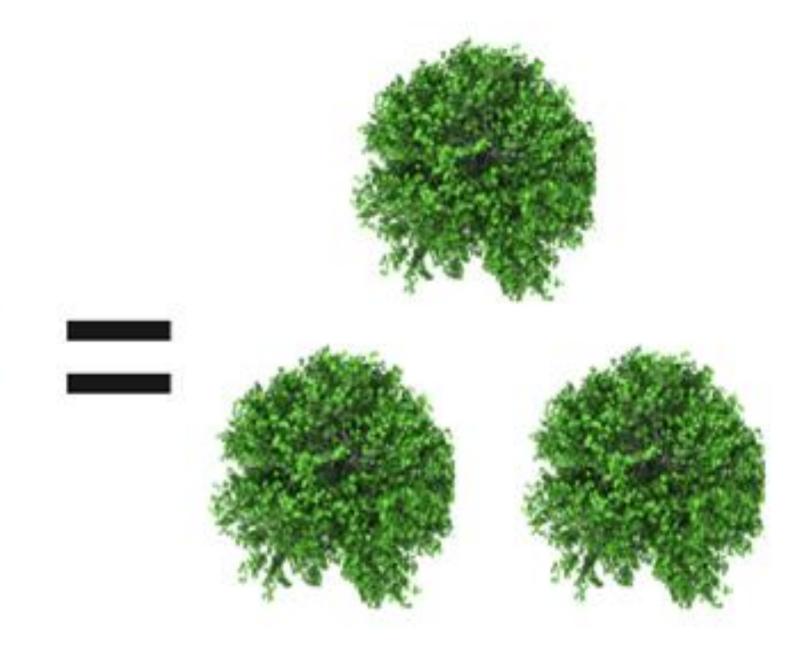
• Replacing the canopy is not just about compensation, but also repair and improvement by making sure replanting results in the local ecosystem in a better state that its current condition.

0.094

The approximately 5.59 hectares of trees removed will be compensated and replaced by approximately 11.42 hectares of new trees



REMOVE



REPLACE

1 hectare = 2.47 acres = about 2 and half football fields

Natura ization

Naturalization involves planting native vegetation to establish habitat and improve ecological value. The ultimate design goal is both form and function as well as enabling natural ecological succession.

The Process:

- Amend soils
- Plant, apply mulch and water
- of invasive, plants, weeding, etc.

 Understand existing conditions – light, soil, plants, wildlife, habitat, etc. Remove / control invasive plant species

Monitor and adaptively manage over time

• Maintenance – mowing, mulching, watering, tree guards, continued removal





Ingredient #1: Soil Matters





The three-step process outlined below will guarantee a healthy soil and planting environment where all new plantings will thrive.



Step 1: Decompact

Loosening the soil and puncturing holes in the ground will ensure air, water and nutrients can get into the soil more easily.

Step 2: Amend

Adding certain ingredients (e.g., fungi and mulch) will ensure there is the perfect balance of nutrients and organisms needed for healthy soil. We try to treat the existing soil to make it better.





Step 3: Import Adding new, high-quality soil to maintain the best possible conditions.





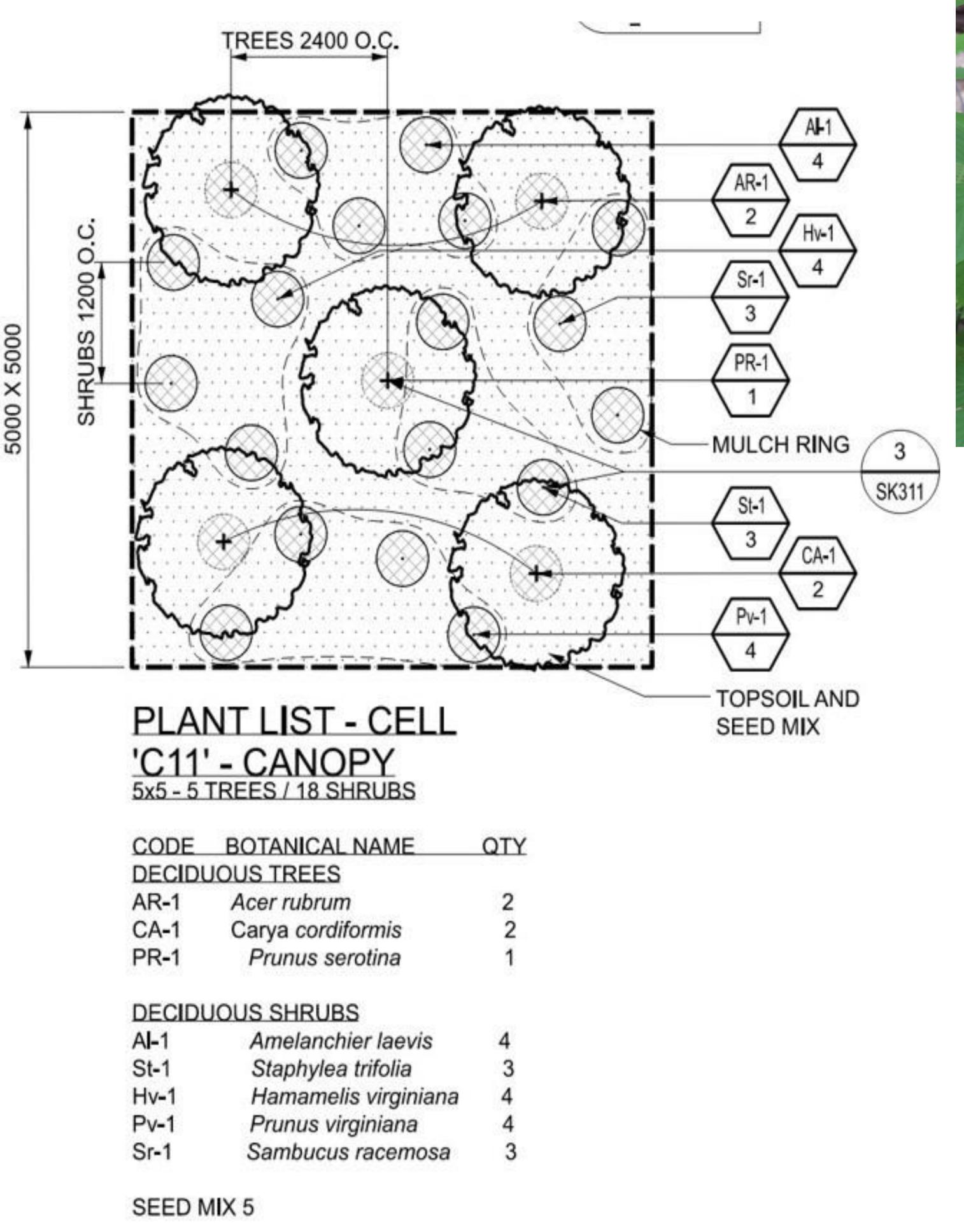
Ingredient #2: Diversity of Plants







planted in the area.



Planting designs aim to strike a balance between existing and future conditions.

Native Plant Selection



The restoration plan provides a plant selection guideline to dictate the types of native plants that will be planted and used to restore the project lands. Here are some examples of the native plant species you can expect to see in



Alternate Leaved Dogwood



Purple-flowering raspberry







Red Osier Dogwood

Evening Primrose





The restoration plan provides a plant selection guideline to dictate the types of native plants that will be planted and used to restore the project lands. Here are some examples of the tree, shrubs and herbs that will be planted.

Scientific Name	Common Name	Preferred Soil Conditions	Wildlife Use	Light Requirements	Characteristics
		Trees			
Acer rubrum	Red maple	Intermediate / moist	A Man R		
Betula alleghaniensis	Yellow birch	Moist	A R		
Carpinus caroliniana	Blue beech	Moist	A Kan de		
Carya cordiformis	Bitternut hickory	Dry / moist			
		Shrubs			
Amelanchier laevis	Smooth serviceberry	Dry / moist	A 🗣 💦		
Cephalanthus occidentalis	Buttonbush	Moist / wet	Heren .		
Diervilla lonicera	Bush honeysuckle	Dry / moist	A Kan et		
		Herbaceous			
Eurybia macrophylla	Large-leaved aster	Dry / moist			
Monarda fistulosa ssp. fistulosa	Wild bergamont	Intermediate / dry	Negali.		
Rudbeckia hirta	Black-eyed susan	Intermediate / moist	And and a second se		
 Wildlife Use = Breeding and migratory birds ⇒ Pollinators ⇒ Fruit / nut bearing species ⇒ = Forage for mammals 	Light Requirements \rightarrow = Full sun \rightarrow = Part sun \frown = Full shade \frown = Part shade	Characteristics = Salt tolerant = Drought tolerant			

Native Plant Selection

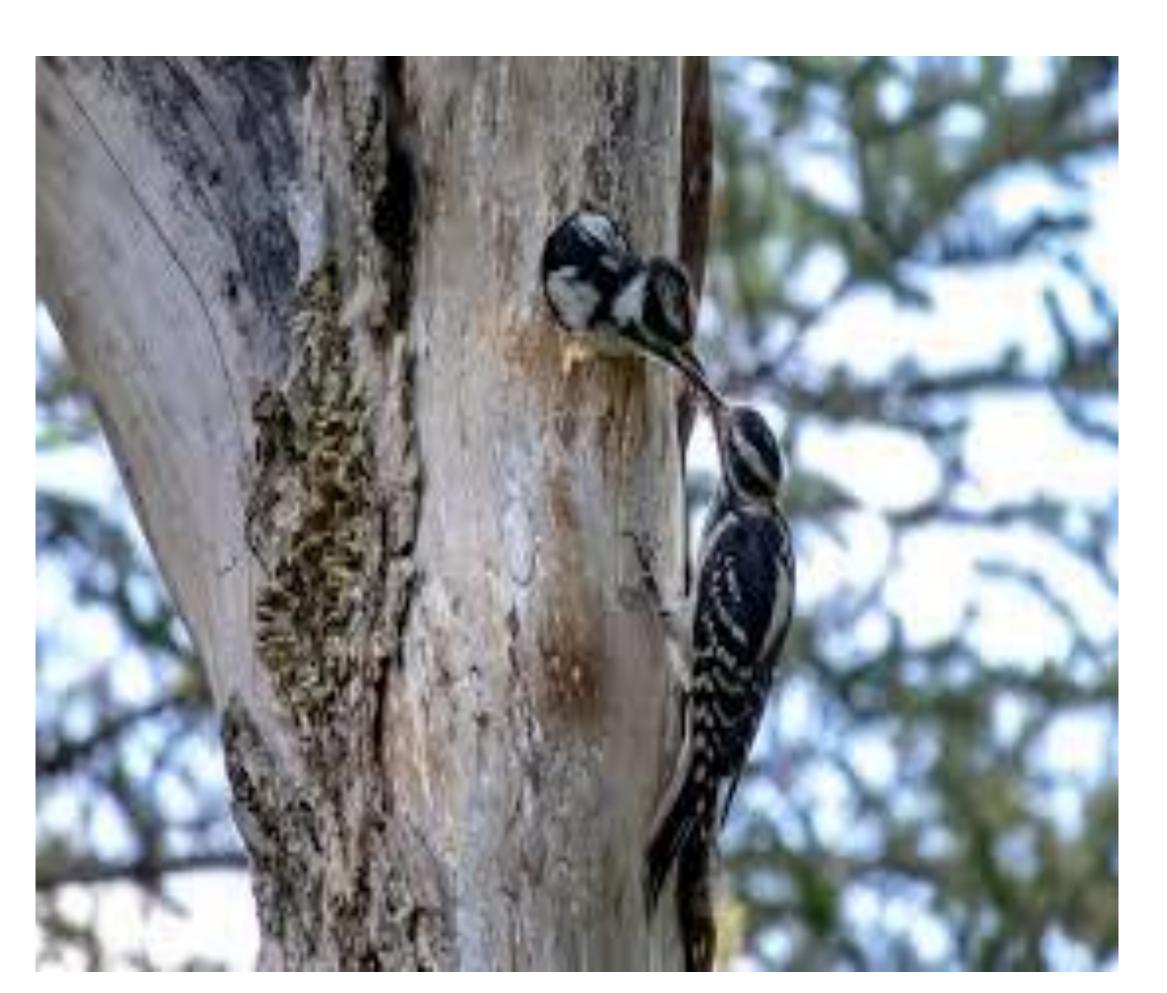






Wildlife Habitat

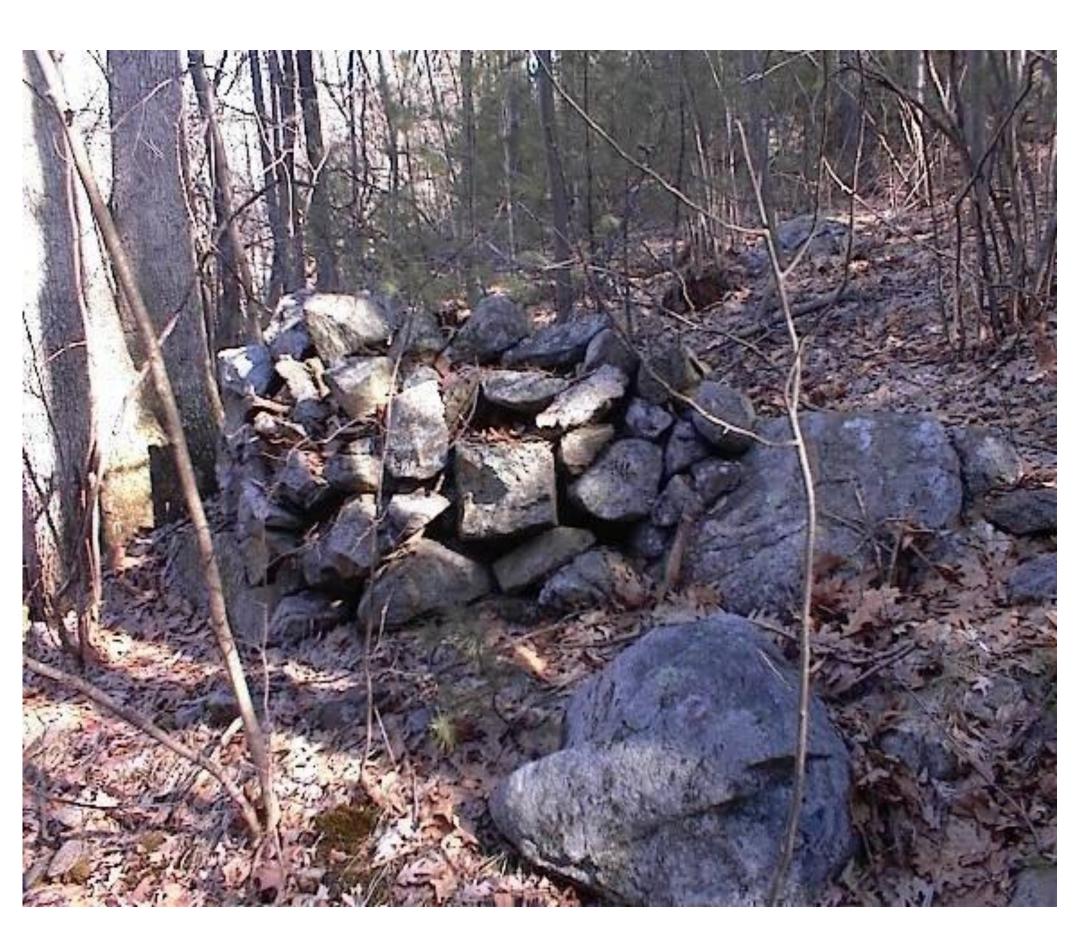
- Use existing material (e.g., coarse woody debris, snags & cavity trees, etc.)
- Girdling of invasive trees as a means of control and habitat creation
- Plant trees and shrubs that provide food for wildlife
- Install wildlife habitat structures



Hairy Woodpecker in Cavity

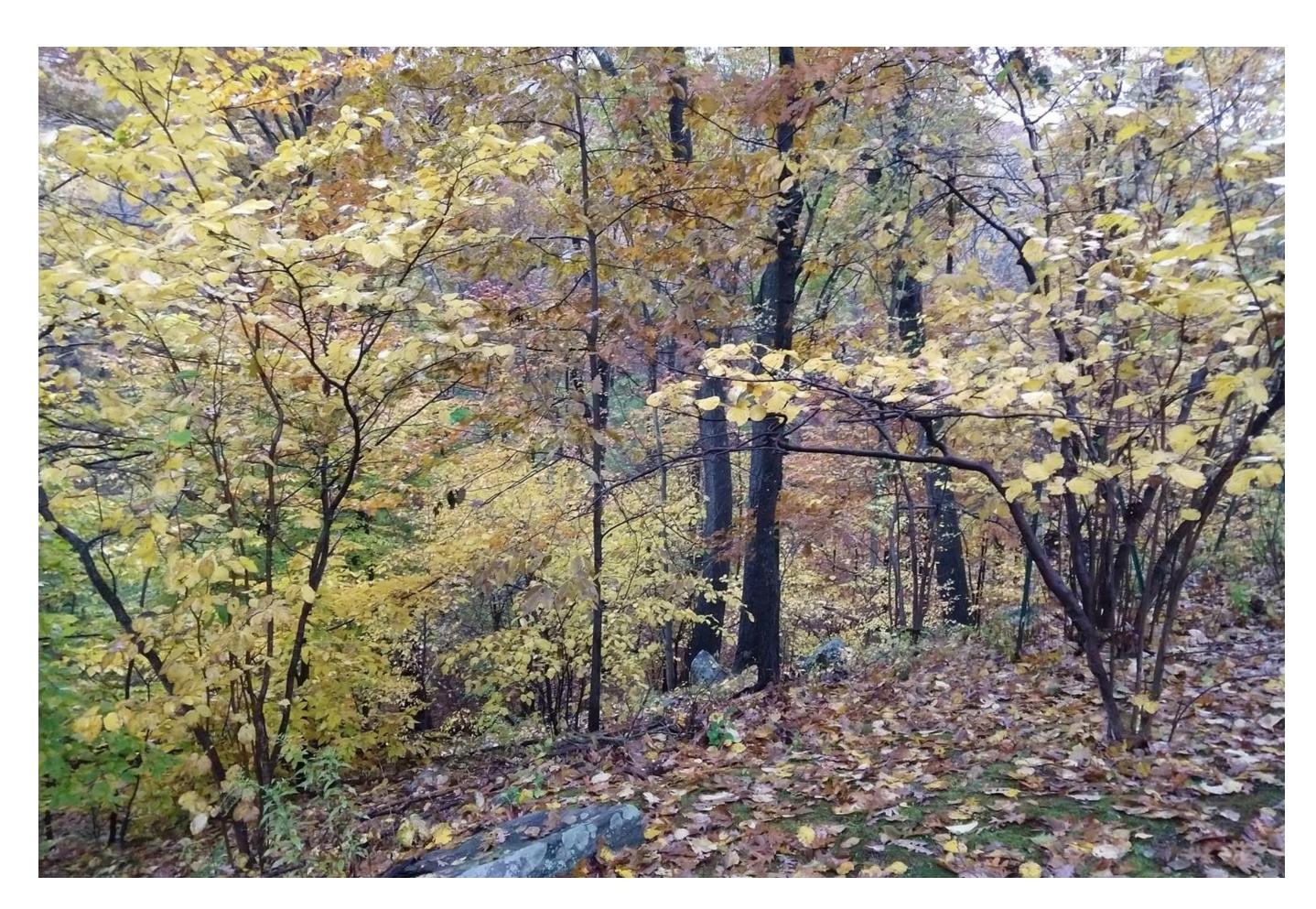


Girdling



Rock Pile





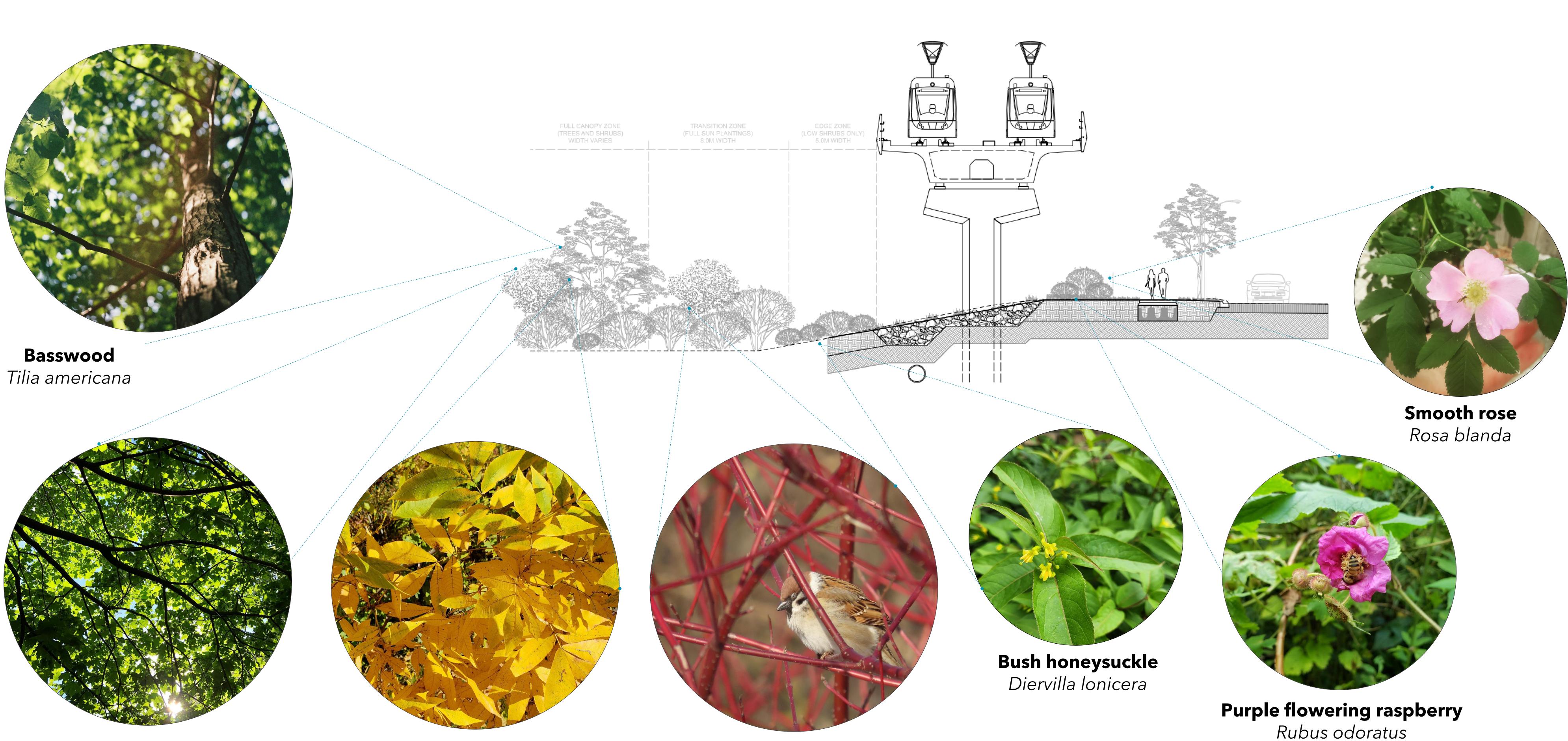


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Forest Structure

Snake in coarse wood debris

Vegetation Zones



Sugar maple Acer saccharum **Bitternut hickory** Carya cordiformis

Red osier dogwood Cornus sericea



Ingredient #3: Monitoring and Maintenance

Monitoring and Maintenance

Monitoring

- vegetative cover, etc.)
- Plant condition, presence of yellowing leaves
- etc.)

Maintenance

- Invasive Species Control multi-year process
- mulch
- planted trees and shrubs

Post-planting monitoring by a qualified professional for five years Mortality/dieback; survival rate (e.g., % surviving plants, %

Evidence of pests & diseases (e.g., fugus, insect damage, etc.) • Mechanical or physical damage (e.g., animal feeding, trampling,

• **Watering** - varies depending on species, plant size, soil type/composition, topography, ambient temperature, drought, etc.

• Soil Amendments – addition of ingredients such as fungi and

• Weeding – removal of weeds immediately adjacent to newly









- Common invasive plant species in the project area include garlic mustard, phragmites, buckthorn and dogstrangling vine.
- Both natural and chemical methods are viable for the treatment of some species.
- Proposed control methods are based on best management practices from the Ontario Invasive Plant Council.
- Treatment is typically completed in stages and over many years.
- Invasive tree species may be managed by girdling, whereby they remain on the landscape to decay over time, providing habitat for birds and mammals.
- We will work closely with the City of Toronto and local conservation authority to follow their guidelines and best management practices.

Invasive Species Management









Garlic mustard



Dog-strangling vine

Common buckthorn



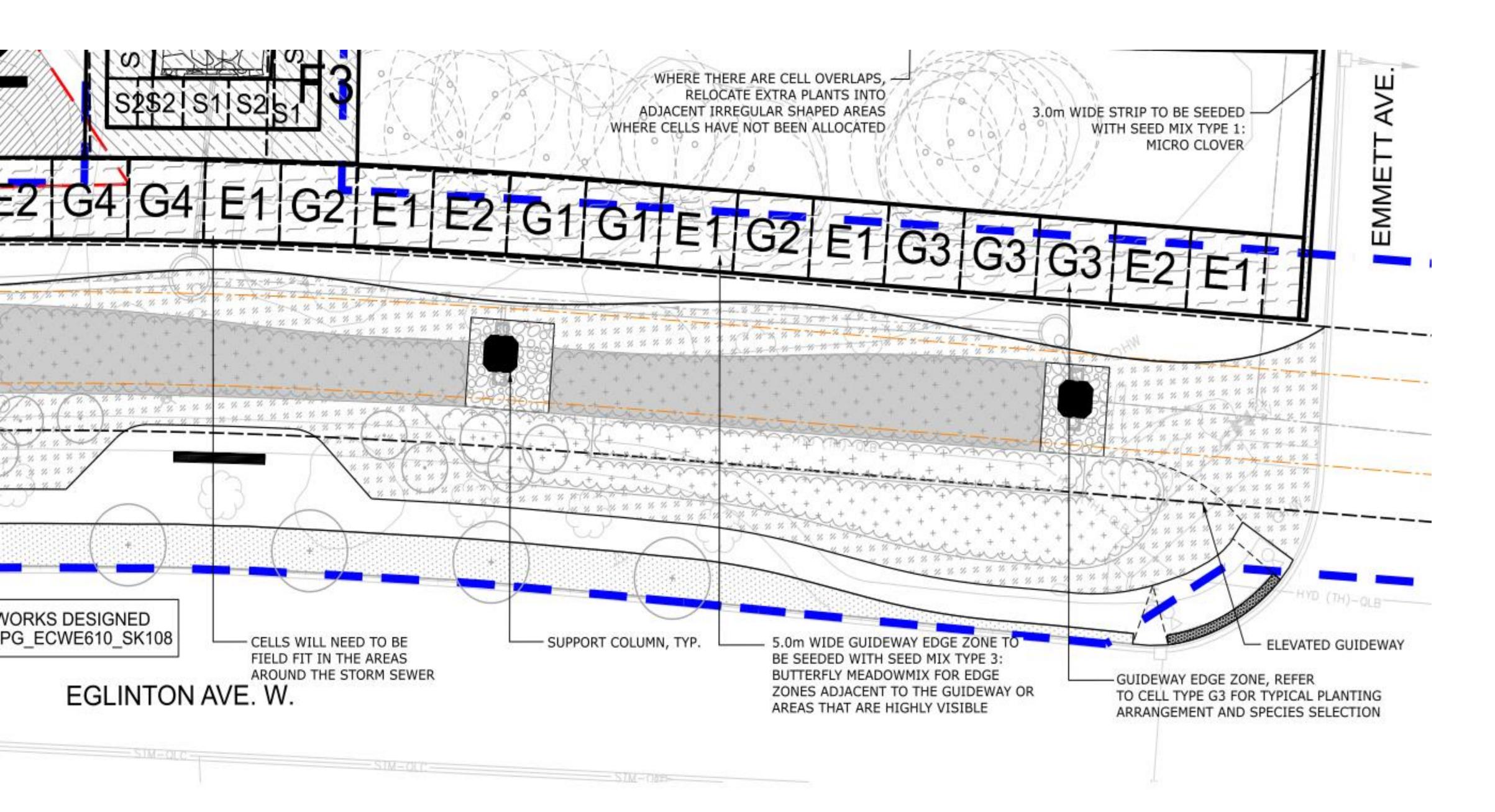




Phragmites at Fergy Brown park

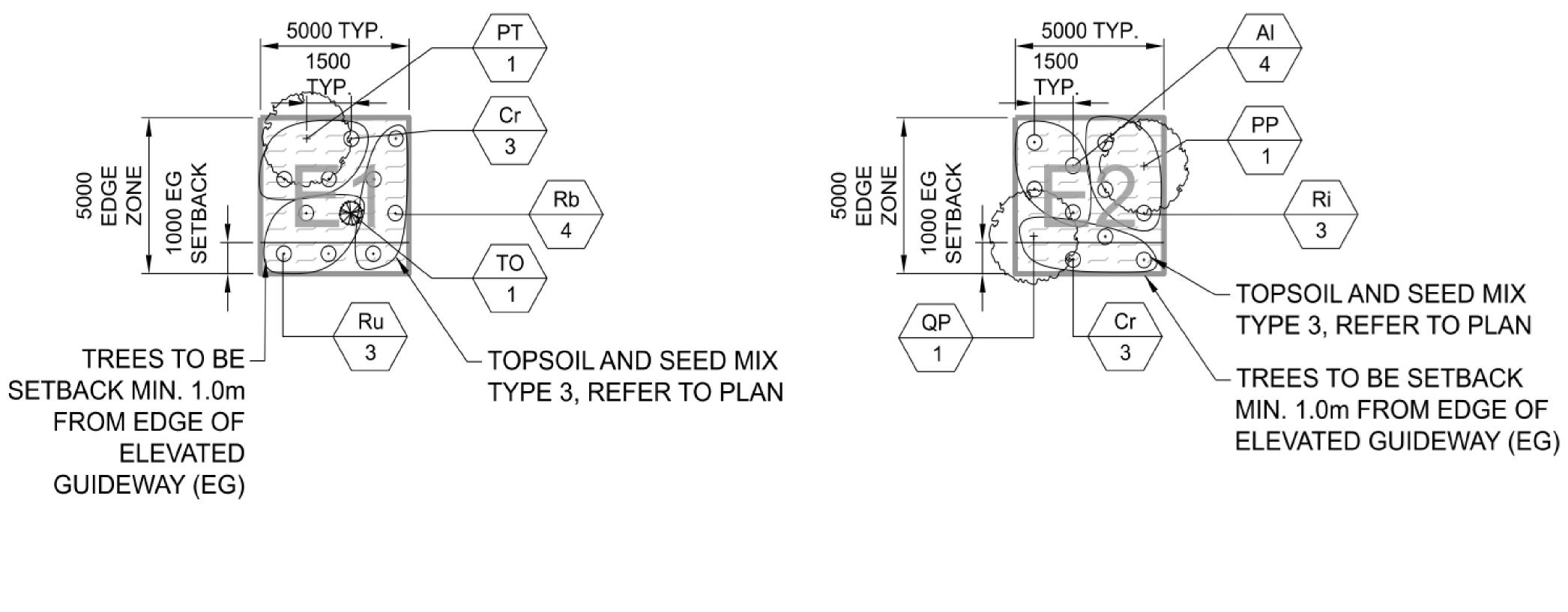
Edge Management

Edge planting cells have been designed to provide screening, mitigate edge effects & facilitate forest succession.



Edge plantings along Elevated Guideway





PLANT LIST - CELL 'E1'
(REFER TO MASTER PLANT LIST
FOR TOTAL QUANTITIES)

CODE BOTANICAL NAME QTY DECIDUOUS TREES Populus tremuloides PT

CONIFEROUS TREES TO Thuja occidentalis

DECIDL	JOUS SHRUBS
Cr	Cornus racemosa
Rb	Rosa blanda
Ru	Rubus odoratus

TYPICAL PLANTING CELL CONFIGURATION/ 6 **SK332** 'E1' EDGE ZONE

TYPICAL F 'E2' EDGE

Edge zone planting cells



PLANT LIST - CELL 'E2' (REFER TO MASTER PLANT LIST FOR TOTAL QUANTITIES)

COD	E BOTANICAL NAME	QTY
DEC	IDUOUS TREES	
PP	Prunus pennsylvanica	1
QP	Quercus palustris	1
DEC	IDUOUS SHRUBS	
AI	Amelanchier laevis	4
Cr	Cornus racemosa	3

Rubus idaeus

PLANTING CELL CONFIGURATION	$\overline{7}$	~	1
	<u> </u>		
EZONE	SK	332,	/

Woodlot Monitoring



Work with the City to monitor effects of new transit stations and ancillary buildings on the woodlots.

monitor and enhance the Kipling and Wincott woodlots.



Use the Denfield Park woodlot as a control site to protect against long-term negative changes.



Woodlots are a key landscape feature that include the last remaining original, native vegetation in the area. Here are several strategies the restoration plan will utilize to



Add edge plantings to buffer the interior forest and facilitate forest succession.





Spring 2025 Tunneling construction begins for

- ATC2 (eastern tunnel) (April 2025)
- Construction Methods and Updates
 - Open House (April 9, 2025)
 - Tree Giveaway (May 2025)

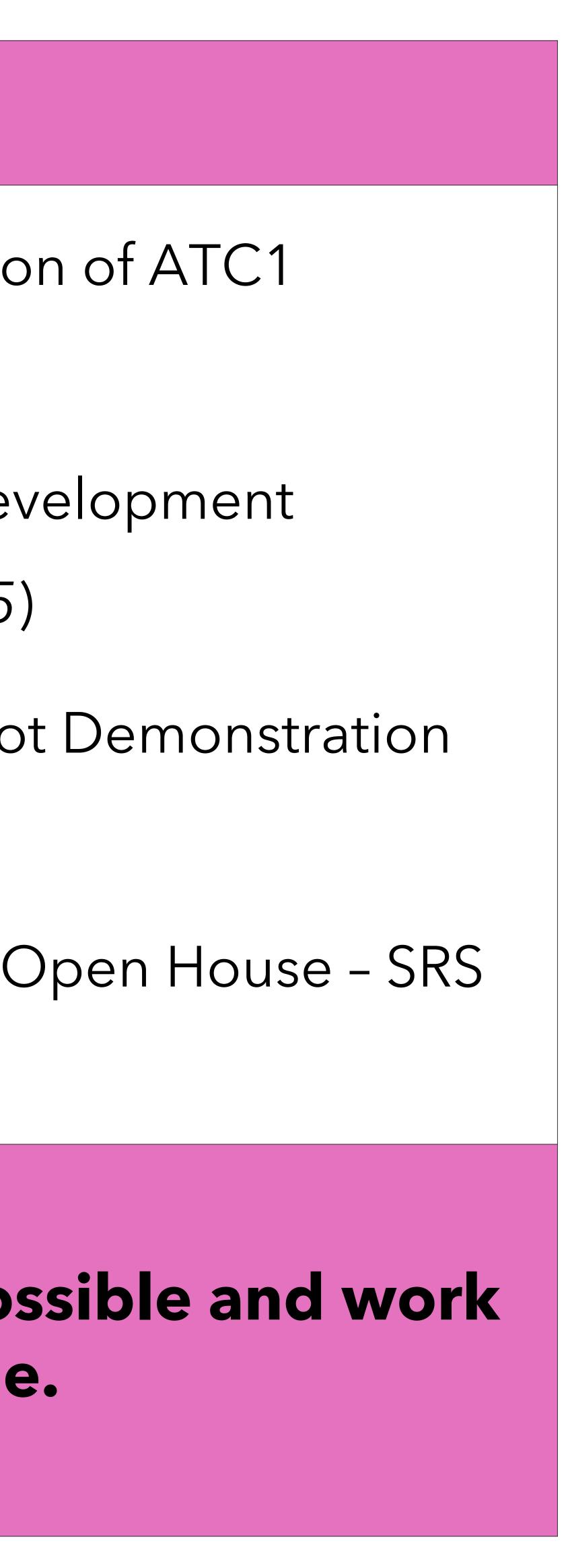
Ongoing Metrolinx plans to initiate restoration on the adjacent lands as soon as possible and work will be completed in parallel with the construction schedule.



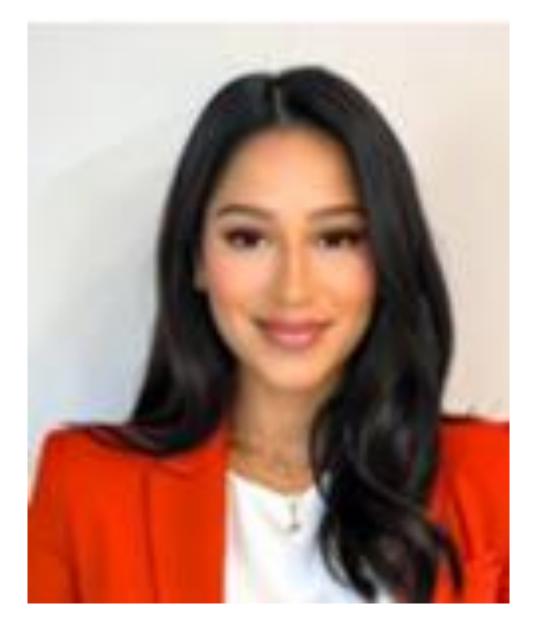
Mid-Late 2025

- Tunneling Substantial Completion of ATC1 contract (June 2025)
- Stations, Rails, Systems (SRS) Development
- Partner Awarded (Summer 2025)
- Kipling and Pearen Park Woodlot Demonstration Workshop (Fall 2025)
- Meet the Development Partner Open House SRS (Fall 2025)





Panel Discussion

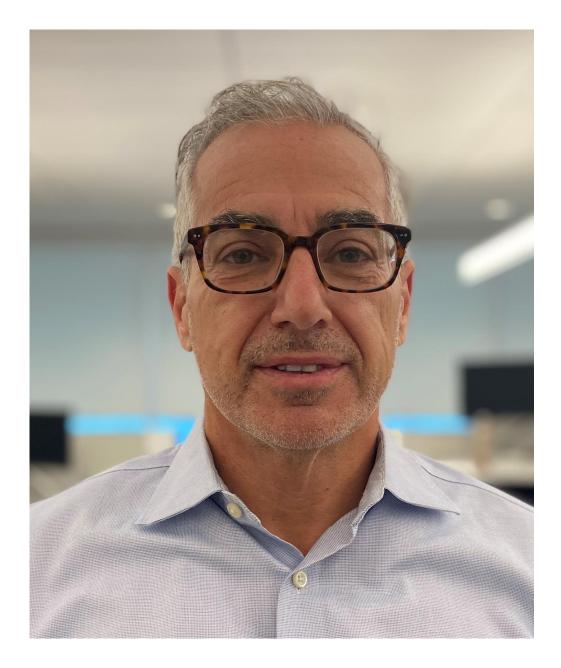




Aman Gill Community Engagement Manager, Metrolinx

Deanne Mighton Project Sponsor, Metrolinx

To submit a question, visit www.metrolinx.ca/ecwe_events and click on today's event. Use the Slido at the bottom of the page.

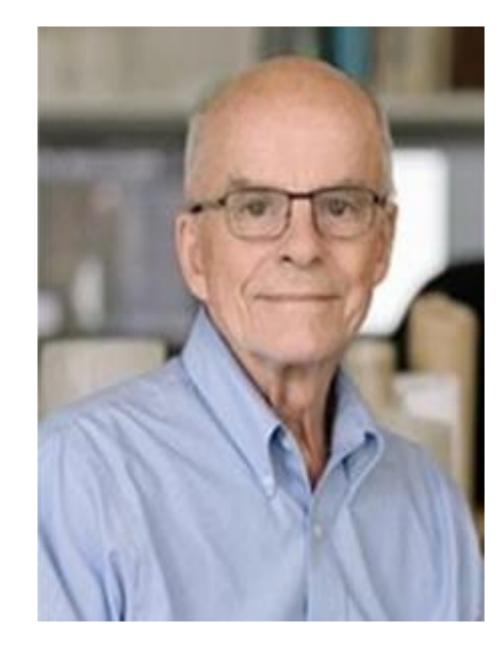




Mario Nalli, Senior Project Manager -Stations, Metrolinx

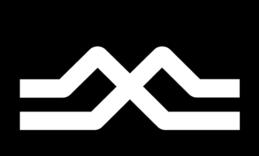
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Christen

Dschankilic

Arborist,

Dillon

Consulting











Thank you for coming to the Open House



Visit: metrolinx.com/EglintonWest Email us: EglintonWest@metrolinx.com @EglintonWestEXT **Call us:** 416-202-8001



Visit us at the Community **Office**

326 Scarlett Road

Tuesdays and Thursdays, 10 a.m. - 5 p.m. or by appointment