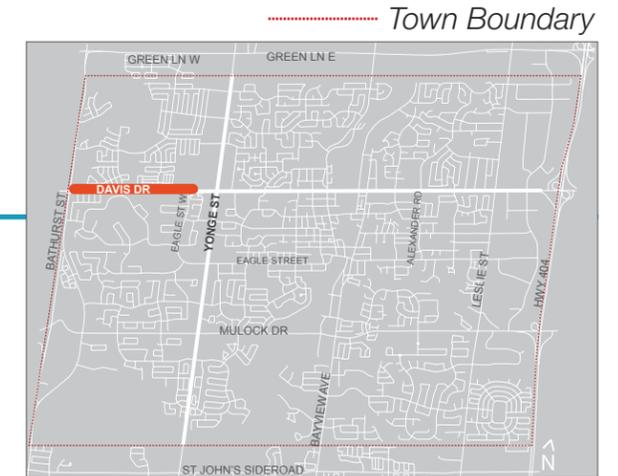




4.4 Davis Drive West Corridor

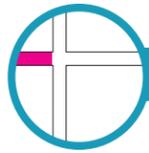


4.4.1 INTRODUCTION

The Davis Drive West corridor is marked by differing land uses, with low to mid density residential as well as commercial mixed use land uses. As a result, the Davis Drive West corridor employs both the Green Streetscape Typology as well as the Davis Urban Streetscape Typology dependent on the context of the segment.

4.4.2 OVERVIEW MATRIX

Davis Drive West Corridor Overview						
	Streetscape Element	Width (minimum)	Typical Boulevard Material	Intersection Condition	Additional Notes	Further Information
Davis Urban Streetscape Typology	Pedestrian Zone- Intersection	2.0 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Unit Pavers to extend 50 linear metres from key intersections to establish a strong sense of place; AODA compliant tactile plates, curbs and crosswalks to be utilized. 	<ul style="list-style-type: none"> Boulevard paving to visually tie into the private realm paving for a visually cohesive look. 	Sections 3.4, 4.4.6-7 and 5
	Pedestrian Zone- Midblock	2.0 metres	Permeable Concrete	<ul style="list-style-type: none"> N/A 		Sections 3.4, 4.4.3-5 and 5
	Cycle Track	1.5 metres	Poly Bound Porous Pavement	<ul style="list-style-type: none"> Cycle Track transitions to roadway at intersections; Crossride is marked with green paving, elephant feet and pavements markings (as per OTM Book 18). 	<ul style="list-style-type: none"> Cycle track must have a minimum 0.25 metre buffer from fixed objects (i.e. planters, benches, etc.). 1 metre by 2 metre pavement markings spaced 1.5 metres apart (as per OTM Book 18). 	Sections 3.7, 4.4.3-7 and 5
	Furnishing/ Planting Zone	2.35 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Street trees and other visual obstacles set back from the intersection in order to maintain a clear sight triangle. 	<ul style="list-style-type: none"> Street trees in grates used throughout Davis Urban corridor. 	Sections 3.5-6, 4.4.3-5 and 5
Green Streetscape Typology	Multi-Use Path- Intersection	3.0 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Unit Pavers to extend 18 linear metres from key intersections to establish a strong sense of place; AODA compliant tactile plates, curbs and crosswalks to be utilized. 	<ul style="list-style-type: none"> Cross Ride and Crosswalk separates cyclists and pedestrians at intersections. 	Sections 3.8, 4.4.11-12 and 5
	Multi-Use Path- Midblock	3.0 metres	Poly Bound Porous Pavement	<ul style="list-style-type: none"> N/A 		Sections 3.8, 4.4.8-10 and 5
	Landscape Zone	2.35 metres	Landscaping	<ul style="list-style-type: none"> Street trees and other visual obstacles set back from the intersection in order to maintain a clear sight triangle; Ornamental grasses planted for the first 16 metres from signalized intersections. 	<ul style="list-style-type: none"> Plant species must be hardy, salt and drought tolerant; Use native species; Landscape screening along back lotted residential adjacent lands. 	Sections 3.6, 4.4.8-10 and 5
Universal	Continuity Strip	0.6 metres	Permeable Unit Pavers on Granular Base	<ul style="list-style-type: none"> Materiality of the continuity strip to be complimentary to the boulevard pavement treatment. 		Sections 4.4.8-10 and 5
	Median	Varies	Permeable Unit Pavers and Concrete Planter with Planting	<ul style="list-style-type: none"> Median can serve as the basis for two-stage crossing at major intersections. 	<ul style="list-style-type: none"> Plant species selection is dependent on median width and available soil volumes 	Sections 4.4.13 and 5



Davis Drive West- Davis Urban Streetscape Typology

4.4.3 DAVIS URBAN STREETSCAPE TYPOLOGY GEOMETRY: TYPICAL MIDBLOCK CONDITIONS



Private Realm Sidewalk Planting/Furnishing Zone Cycle Track 0.6m Through Lane Through Lane

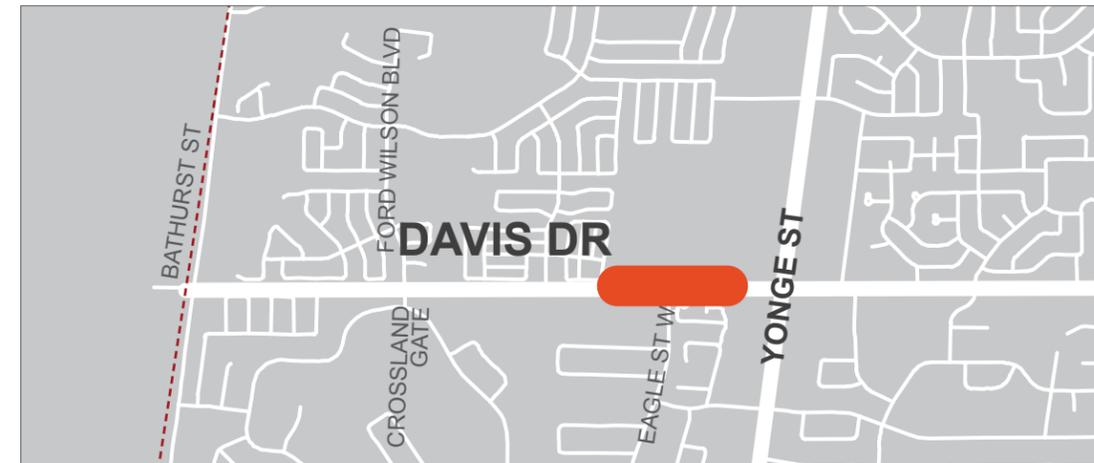


Precedent Images



ROW Boundary

Renderings display typical midblock condition



Town Boundary

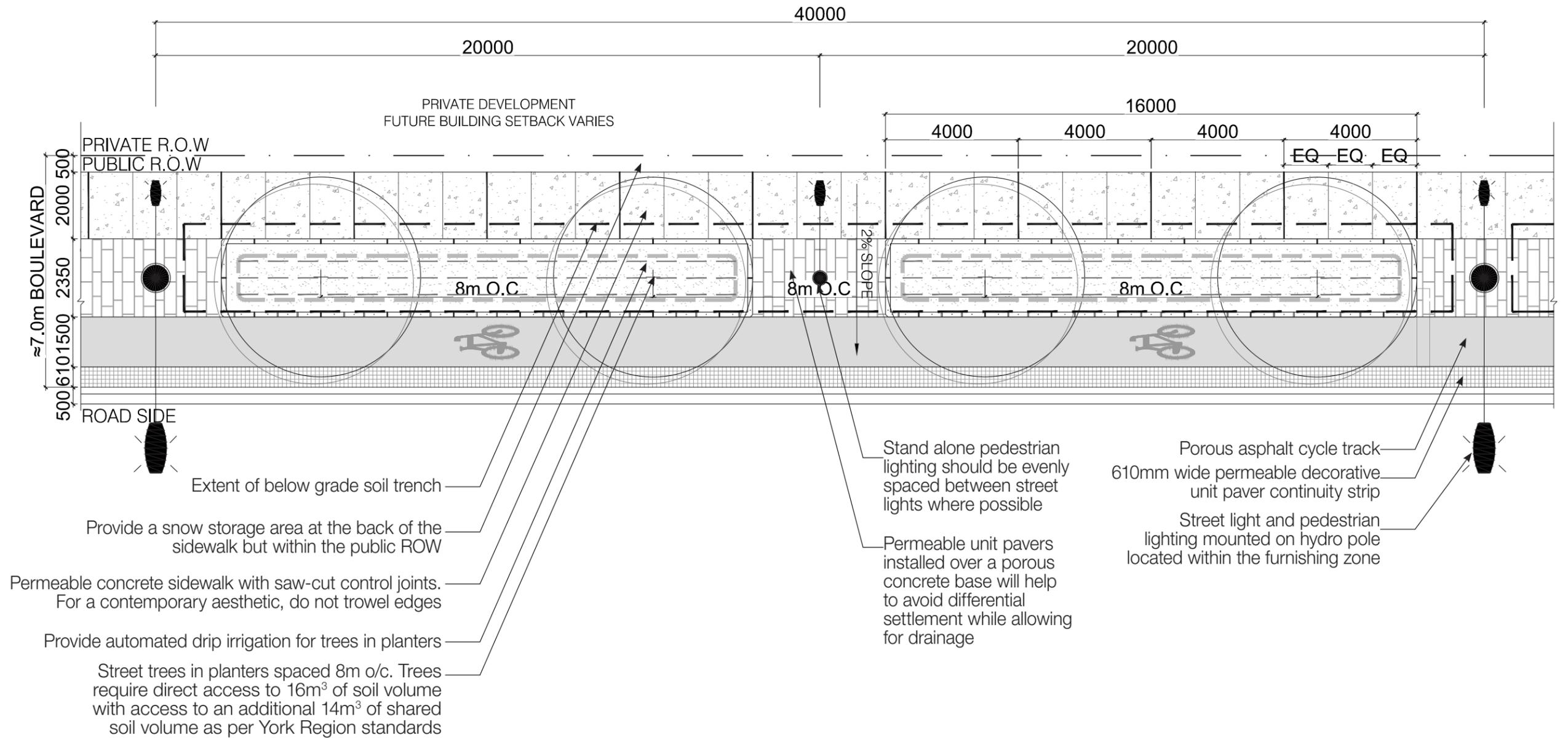
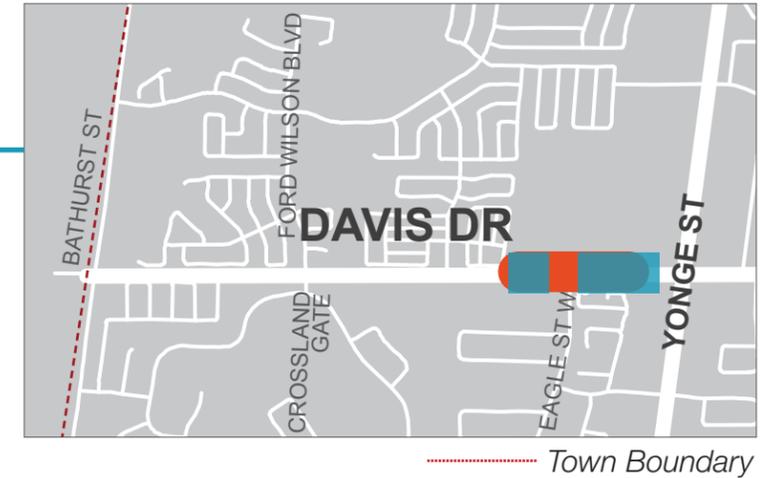
Key Map

Cross Section Centre Line



Davis Drive West- Davis Urban Streetscape Typology

4.4.4 MIDBLOCK TECHNICAL PLAN





Davis Drive West- Davis Urban Streetscape Typology

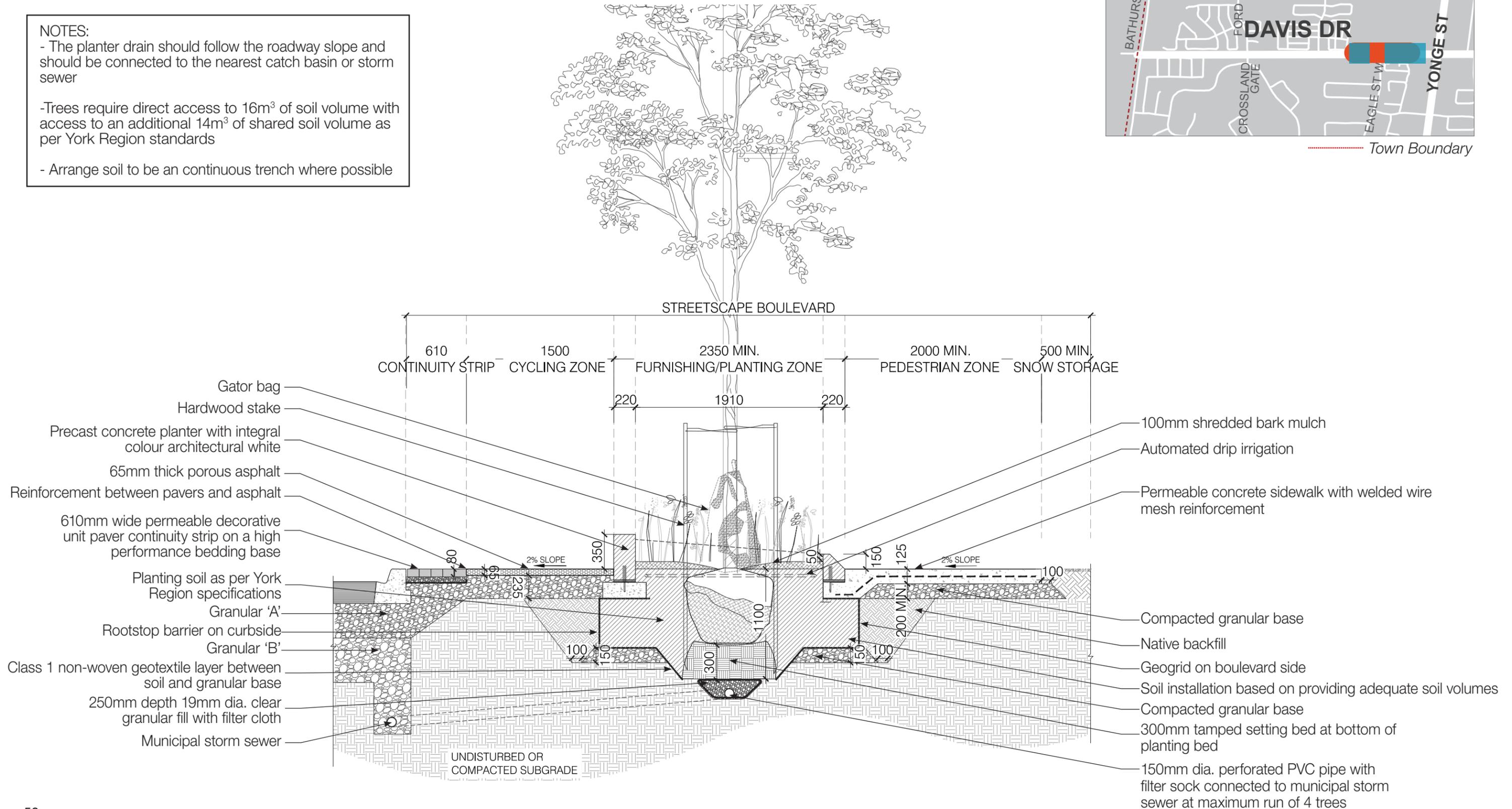
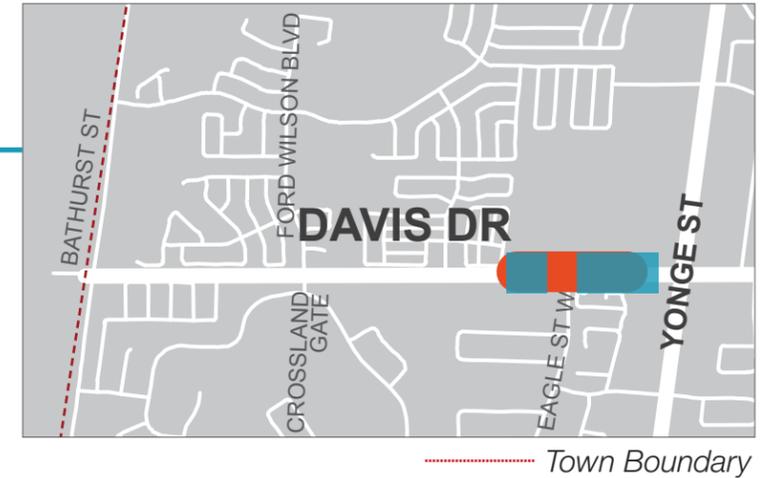
4.4.5 MIDBLOCK TECHNICAL DETAIL (CROSS SECTION)

NOTES:

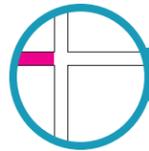
- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer

-Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards

- Arrange soil to be a continuous trench where possible

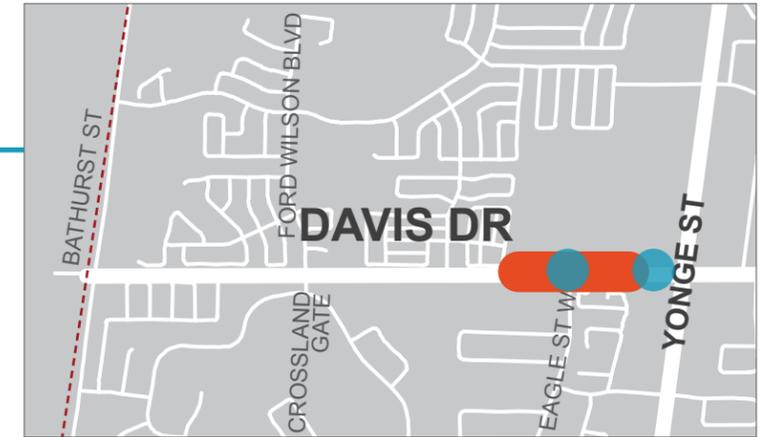


FINAL



Davis Drive West- Davis Urban Streetscape Typology

4.4.6 TYPICAL INTERSECTION TECHNICAL PLAN



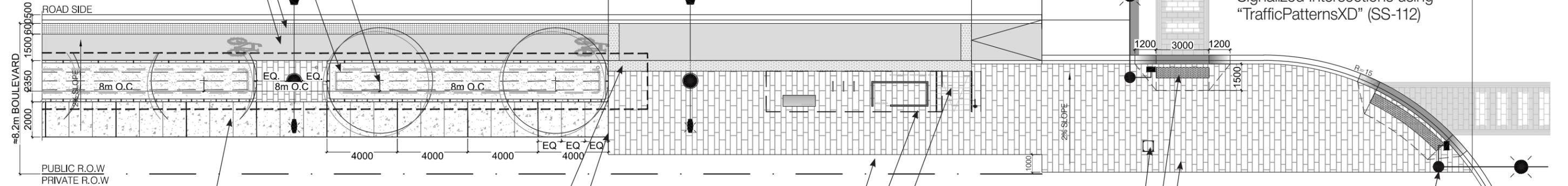
..... Town Boundary

Street trees in planters spaced 8m o/c.
Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards

Provide automated drip irrigation for trees in tree planters

Street light and pedestrian lighting mounted on hydro pole located within the furnishing zone

610mm wide permeable decorative unit paver continuity strip
Porous asphalt cycle track



Permeable concrete sidewalk with saw-cut control joints. For a contemporary aesthetic, do not trowel edges

Provide 610mm tactile warning strip along the length of the bus pad as shown for both transit users and cyclists using the cycle track

Continue permeable unit paving treatment to the end of the first planter to accentuate the importance of the intersection

Provide a snow storage area at the back of the sidewalk but within the public ROW
York Region transit shelter, seating, trash receptacle and bike rings on reinforced porous concrete pad. Unit paving to visually conceal the concrete pad
2.0m wide bus ramp deployment area must be kept clear

Conceal unsightly utility access covers in the unit paved zone with a removable paver tray
York Region standard ADA curb ramp with tactile warning strip
Permeable unit pavers installed over a porous concrete base creates an urban plaza at intersection while accommodating LID principles

Traffic pole with pedestrian crossing push button

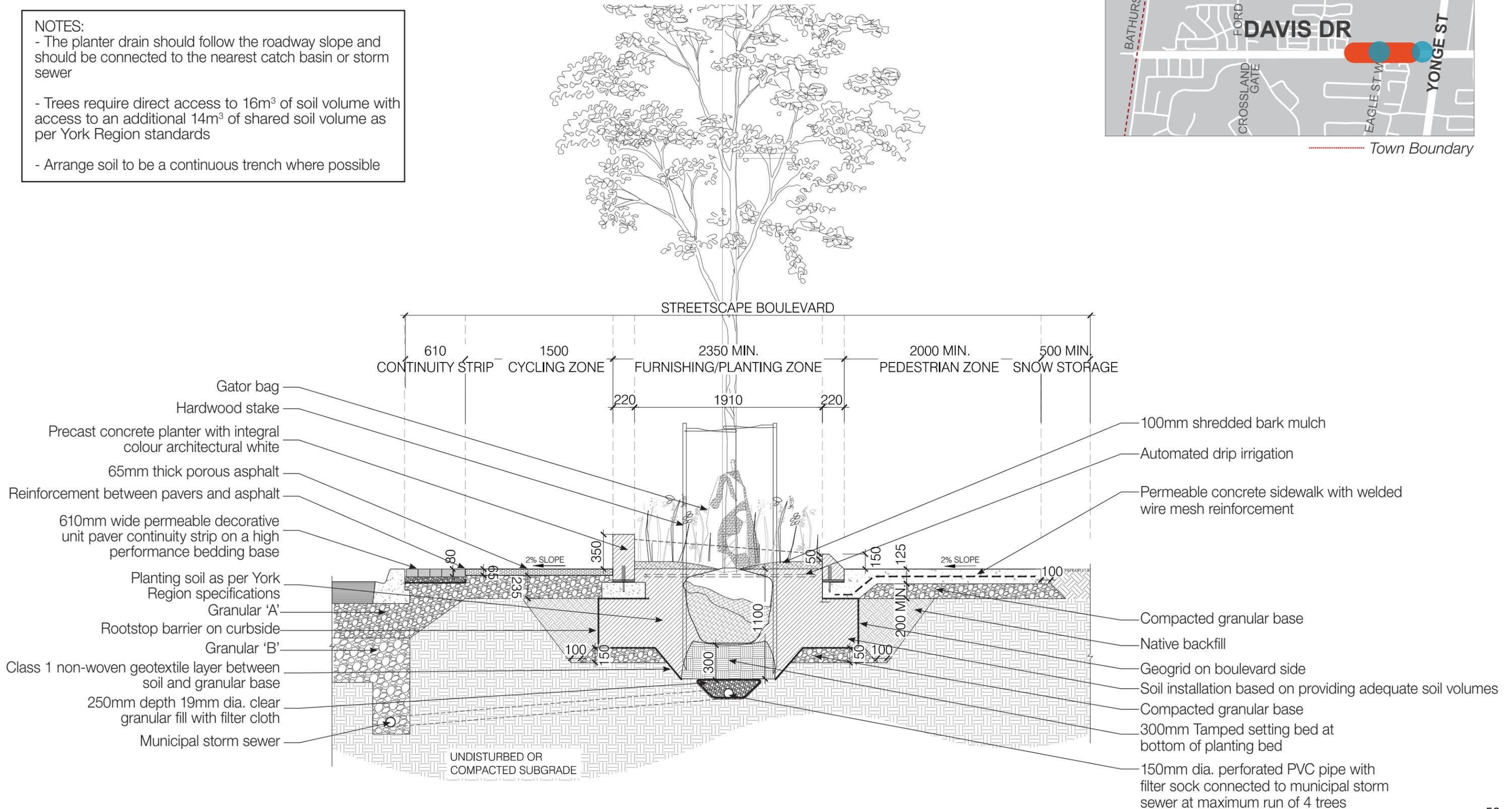
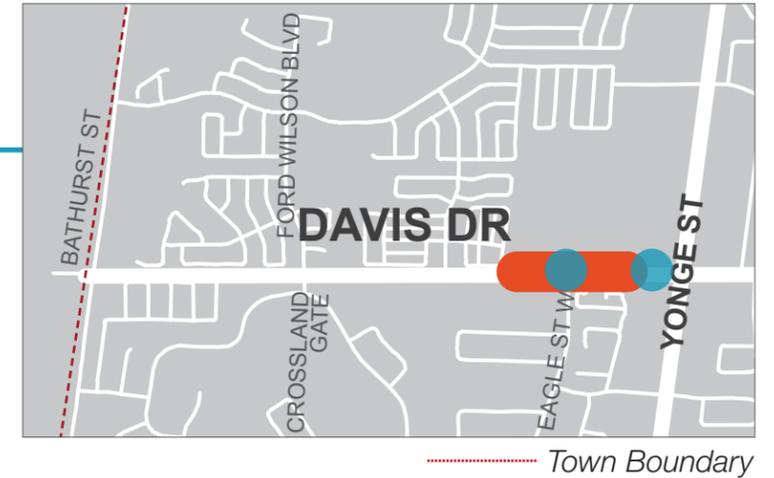


Davis Drive West- Davis Urban Streetscape Typology

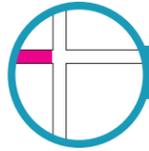
4.4.7 TYPICAL INTERSECTION TECHNICAL DETAIL (CROSS SECTION)

NOTES:

- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer
- Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards
- Arrange soil to be a continuous trench where possible

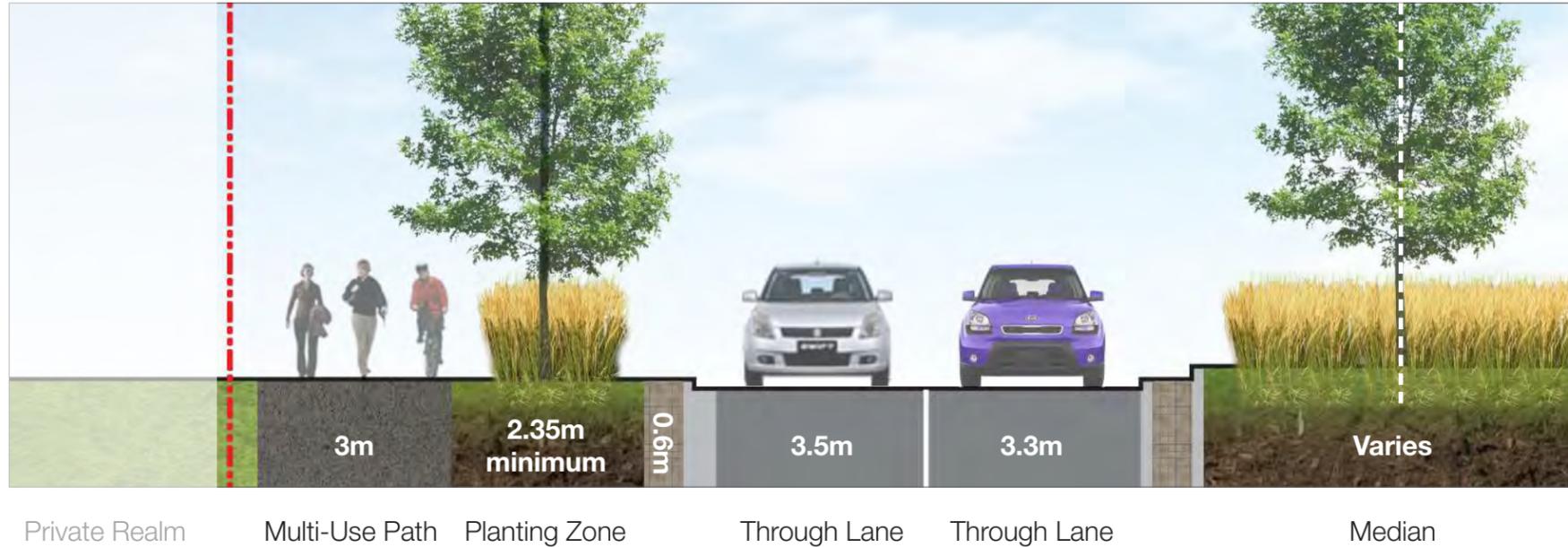


FINAL

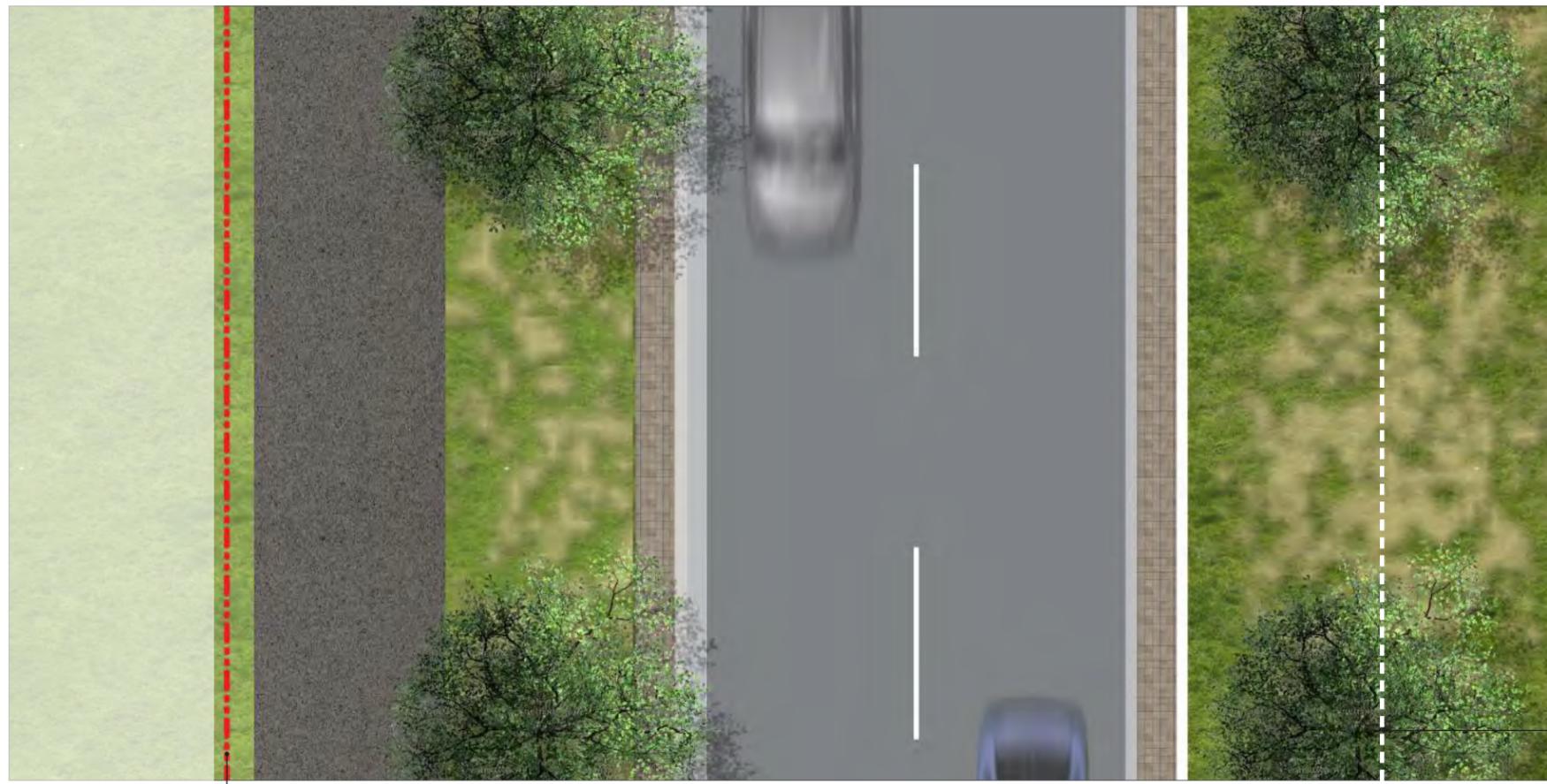


Davis Drive West- Green Streetscape Typology

4.4.8 GREEN STREETSCAPE TYPOLOGY GEOMETRY: TYPICAL MIDBLOCK CONDITIONS

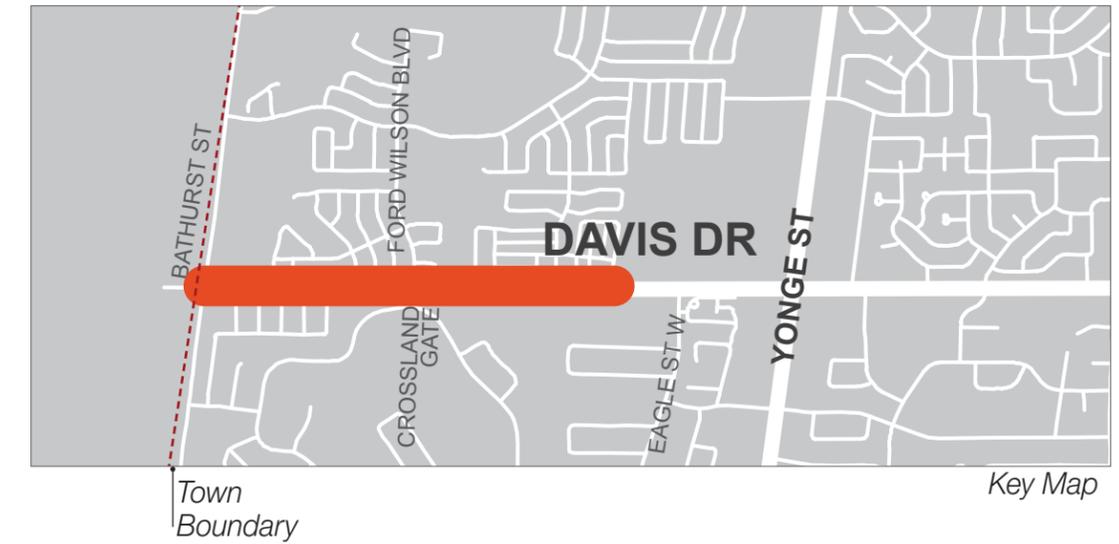


Precedent Images



Cross Section Centre Line

Renderings display typical midblock condition



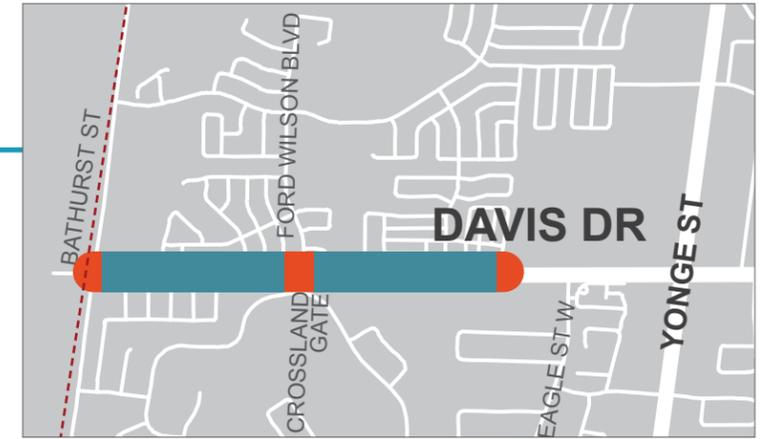
Key Map

ROW Boundary

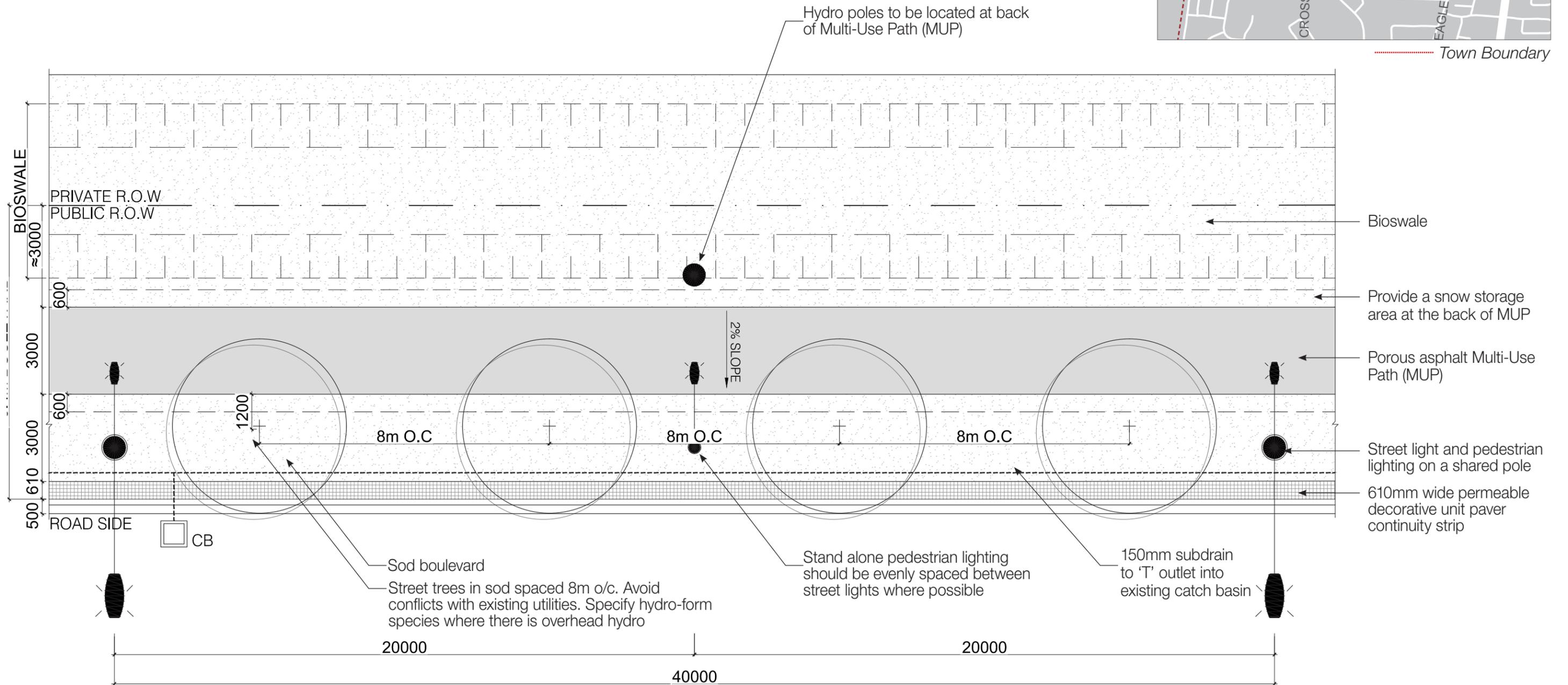


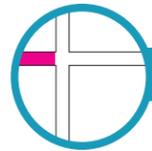
Davis Drive West- Green Streetscape Typology

4.4.9 MIDBLOCK TECHNICAL PLAN



..... Town Boundary



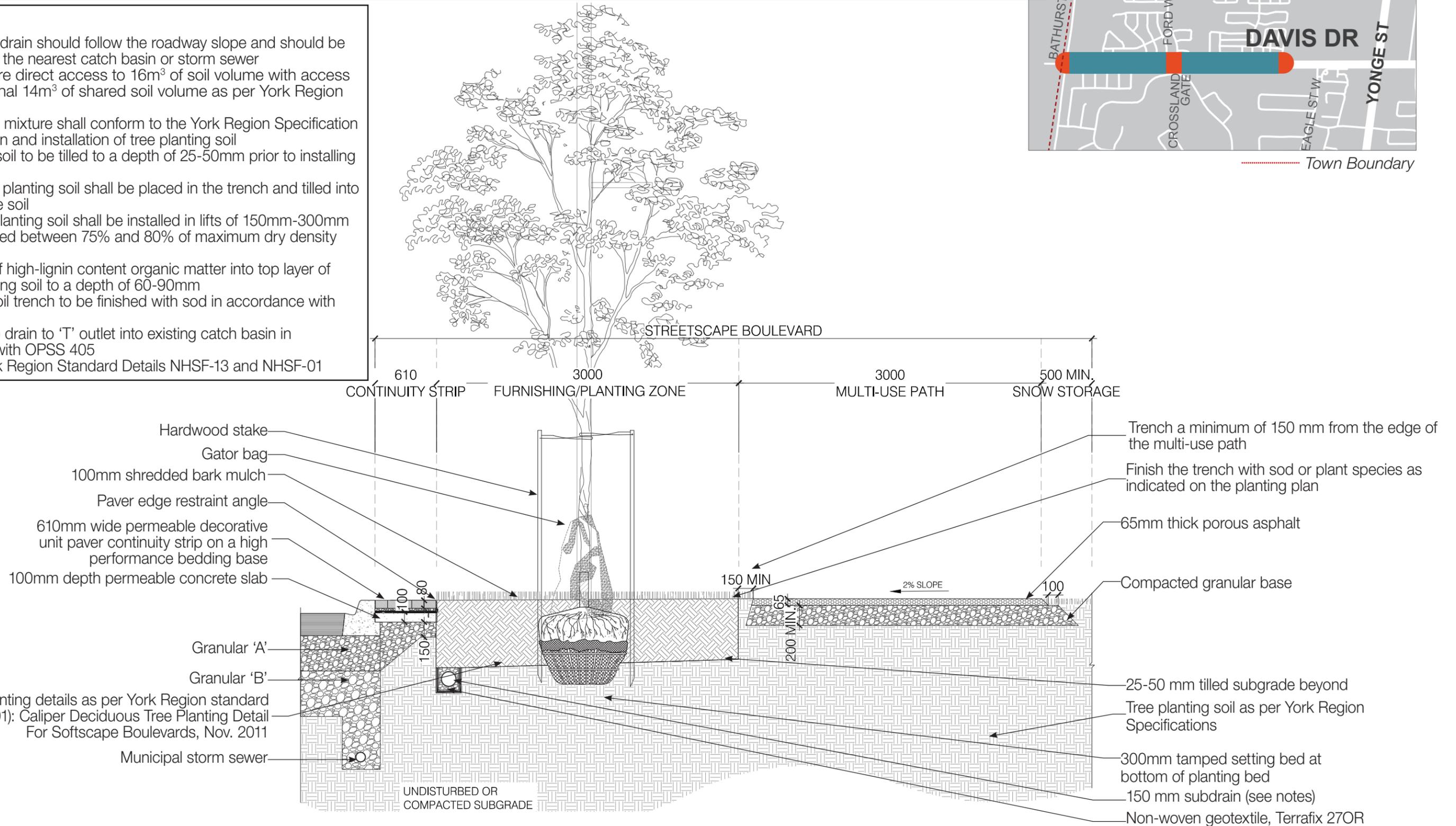
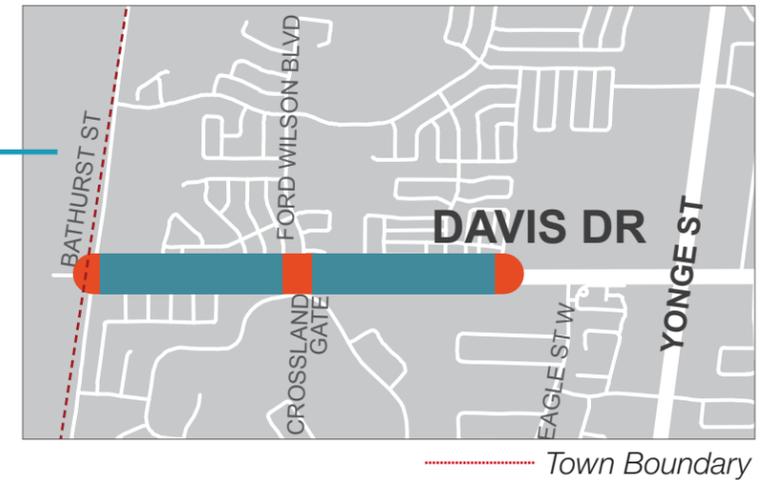


Davis Drive West- Green Streetscape Typology

4.4.10 MIDBLOCK TECHNICAL DETAIL (CROSS SECTION)

NOTES:

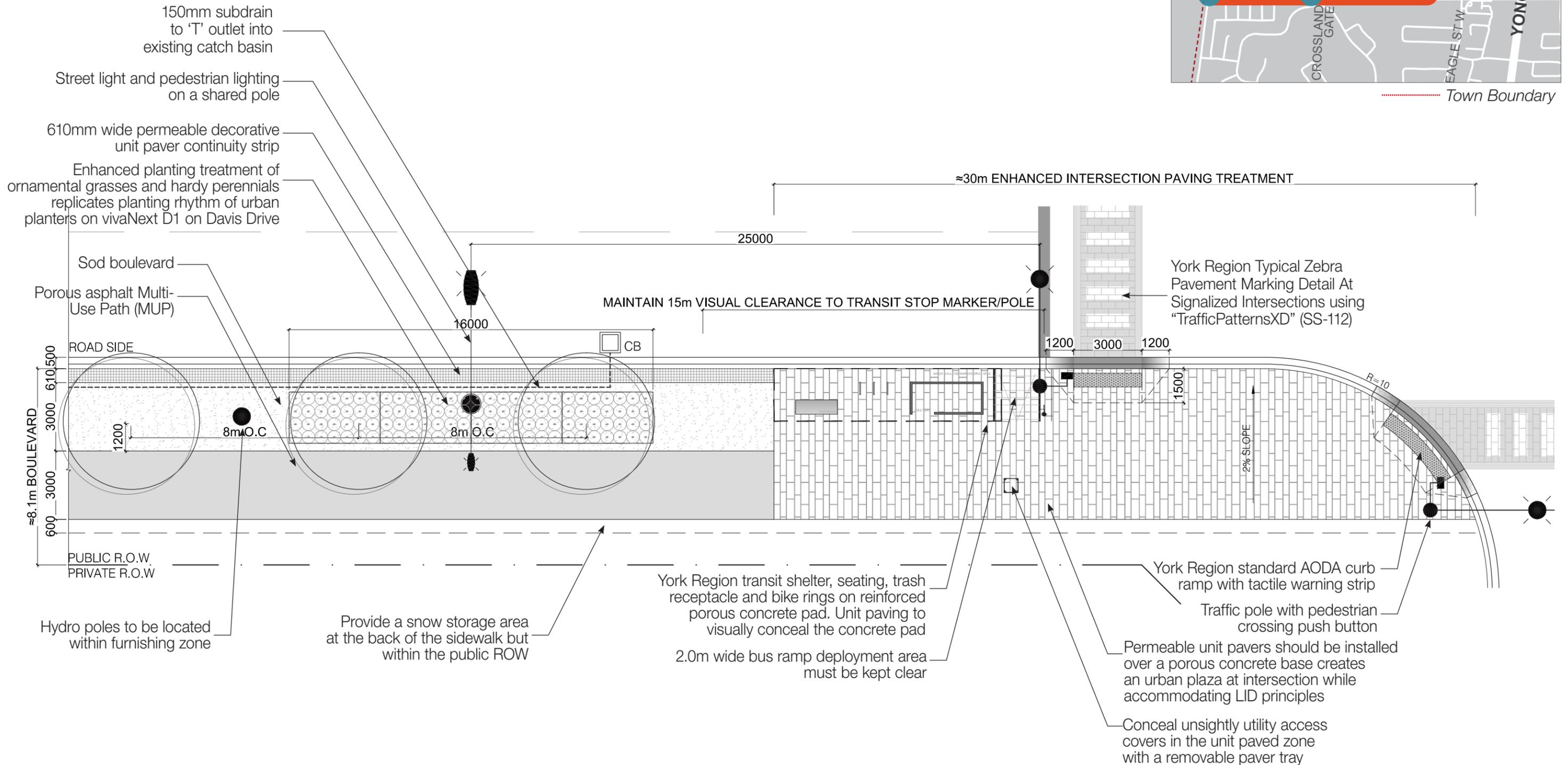
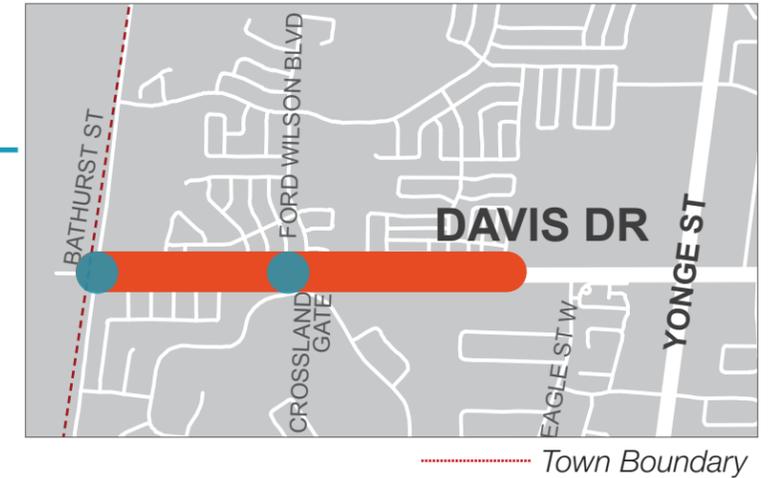
- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer
- Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards
- Planting soil mixture shall conform to the York Region Specification for preparation and installation of tree planting soil
- Sub grade soil to be tilled to a depth of 25-50mm prior to installing planting soil
- 25-50mm of planting soil shall be placed in the trench and tilled into the sub grade soil
- Remaining planting soil shall be installed in lifts of 150mm-300mm and compacted between 75% and 80% of maximum dry density (proctor)
- Till 40mm of high-lignin content organic matter into top layer of installed planting soil to a depth of 60-90mm
- Boulevard soil trench to be finished with sod in accordance with OPSS 803
- 150mm sub drain to 'T' outlet into existing catch basin in accordance with OPSS 405
- Refer to York Region Standard Details NHSF-13 and NHSF-01

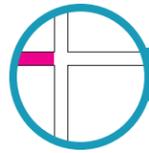




Davis Drive West- Green Streetscape Typology

4.4.11 TYPICAL INTERSECTION TECHNICAL PLAN

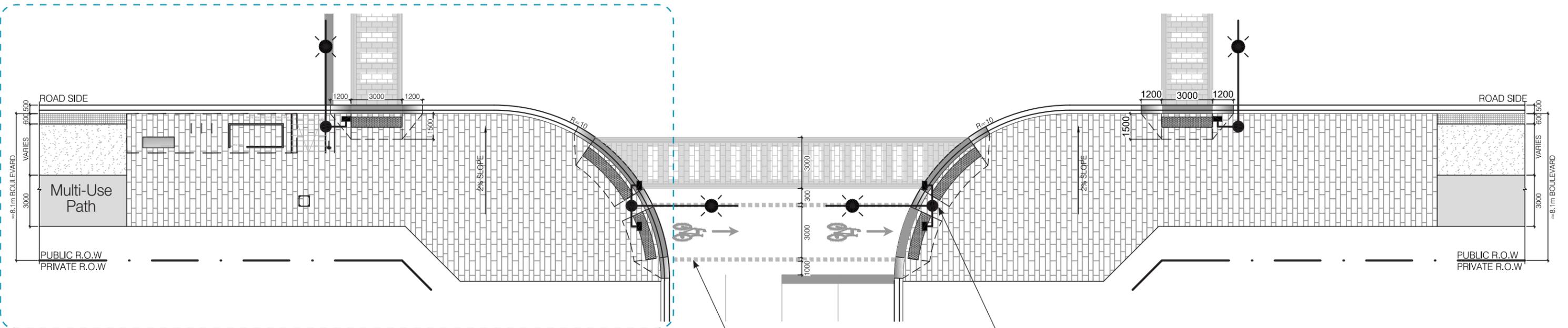
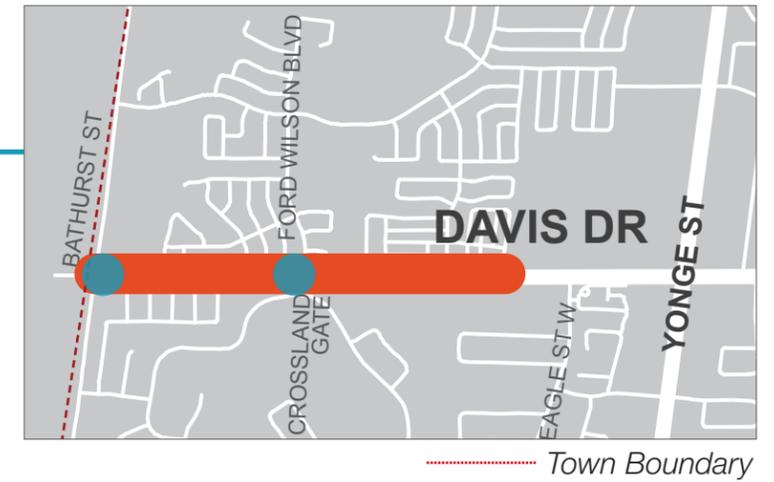




Davis Drive West- Green Streetscape Typology

4.4.11.1. TYPICAL INTERSECTION TECHNICAL PLAN - CYCLING INFRASTRUCTURE & PAVEMENT MARKINGS

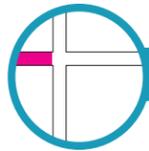
NOTES:
 - Separate bicycle signal heads should be provided at signalized intersections that will operate on the same loop and timing plan as the pedestrian signals



For boulevard details, refer to section 4.4.11

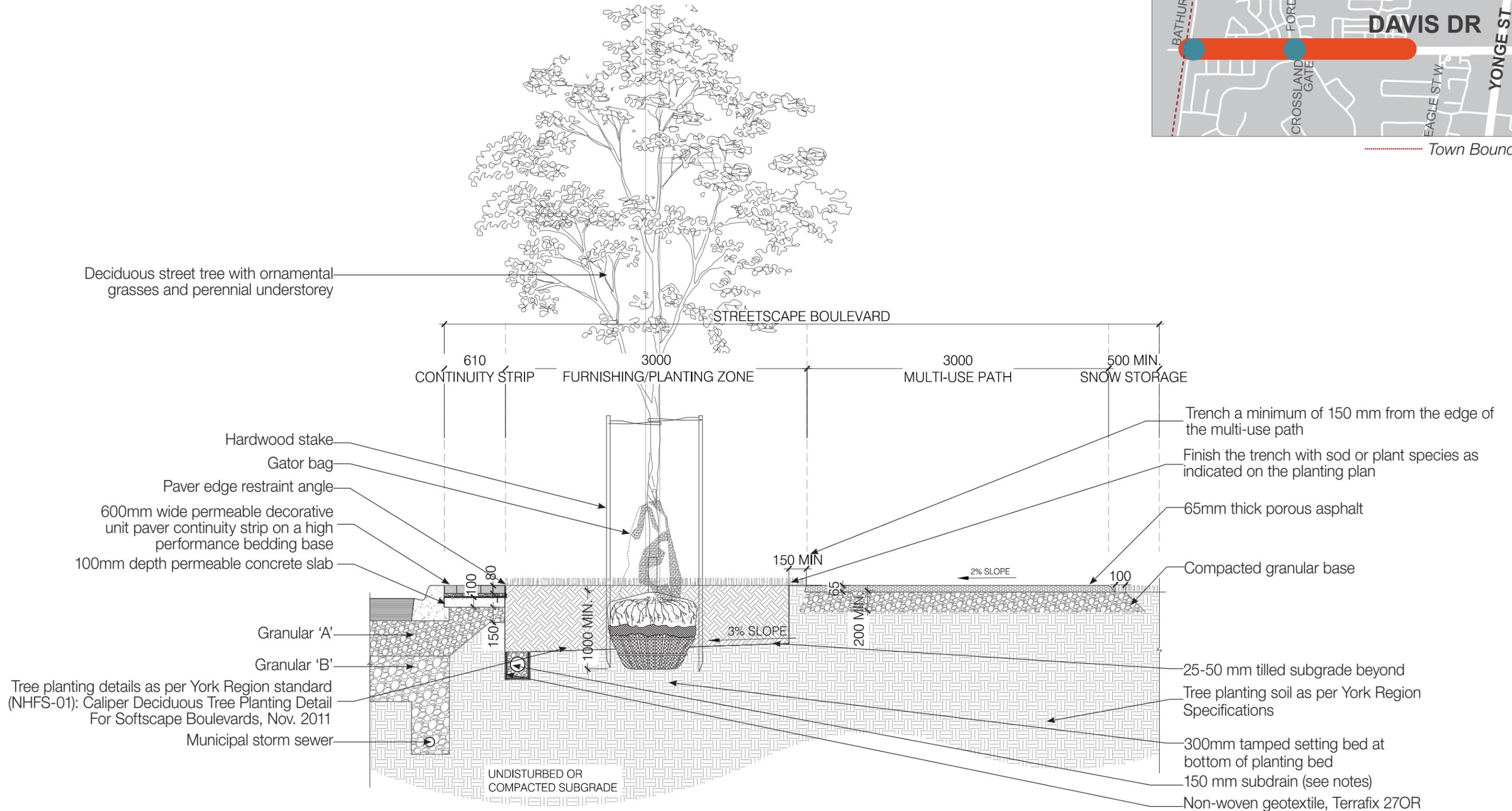
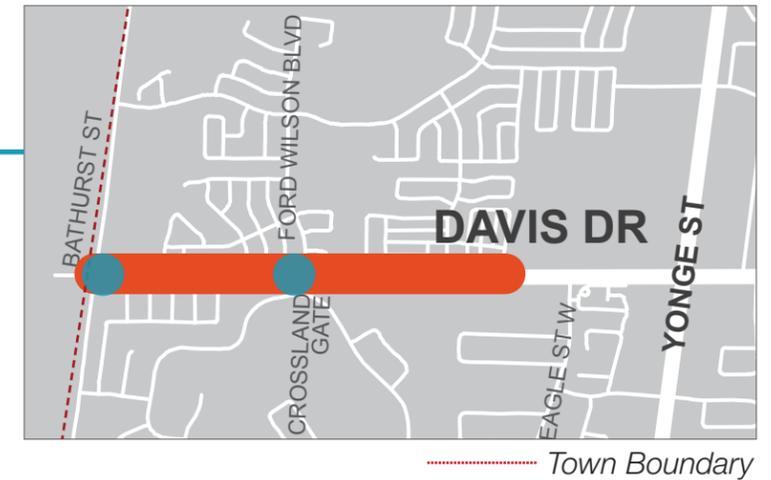
Typical elephant's feet pavement marking for crossrides

Separate signal heads for both pedestrians and cyclists mounted on traffic signal pole



Davis Drive West- Green Streetscape Typology

4.4.12 TYPICAL INTERSECTION TECHNICAL DETAIL (CROSS SECTION)



FINAL



Davis Drive West

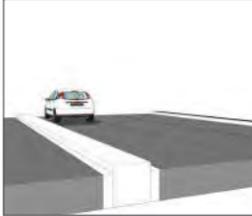
4.4.13 MEDIAN CONDITIONS

BACKGROUND

The Streetscape Master Plan presents a centre median within the Davis Drive West corridor where there is room in the ROW. Within some segments, the median is wide enough to accommodate deciduous canopy trees with an understory planting of hardy ornamental grasses and shrubs. This will contribute to the greening and beautification of the corridor. Other segments of the corridor contain a narrower median with unit pavers.

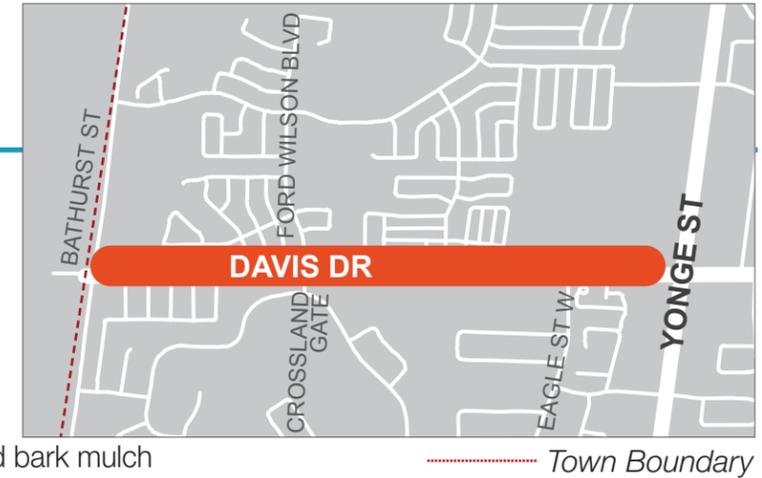


Centre Median Sizing Matrix

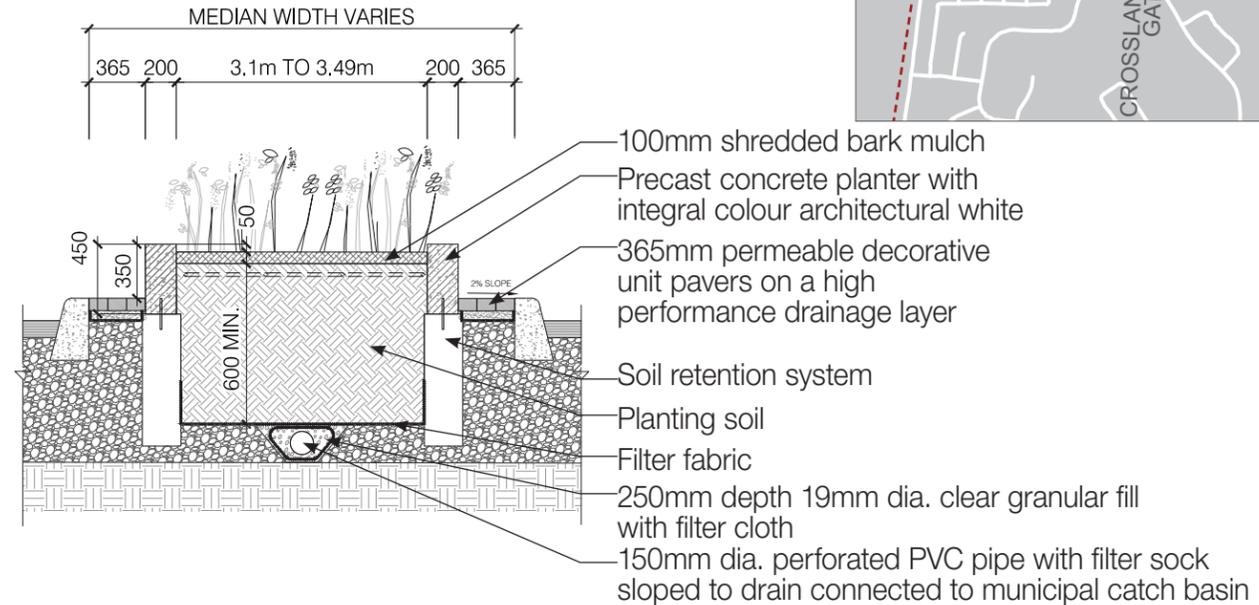
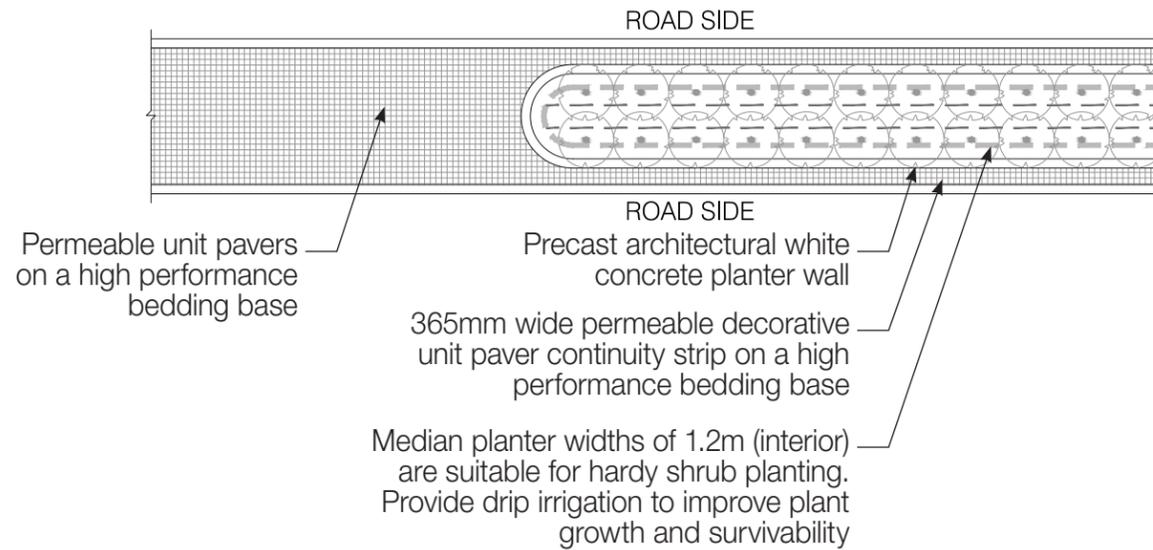
Visualization	Width (From Edge of Pavement)	Median Type	Additional Notes	Further Information
	1.0 metre minimum	Concrete	<ul style="list-style-type: none"> CIP concrete median with a light broom finish. 	Sections 3.5 and 3.8
	1.0 metre - 1.9 metres	Unit Pavers on a Granular Base	<ul style="list-style-type: none"> Contemporary pavers that match the streetscape aesthetic should be used ; Median provides space for place-making banners. 	Sections 3.5 and 3.8
	2.0 metres - 4.4 metres	Concrete Planter with Shrubs and Small Ornamental Trees	<ul style="list-style-type: none"> Planted with hardy shrubs species (see plant palette); Inside planter width should be a minimum of 1500 mm; 350 mm high precast concrete planter; Planters offset 0.5 metres from median edges for safety and to mitigate the impacts of salt spray on plant material; Median provides space for place-making banners. 	Sections 3.5 and 3.8
	4.5 metres +	Concrete Planter with Trees	<ul style="list-style-type: none"> Planted with deciduous canopy trees spaced 6 metres on centre; Inside planter width should be a minimum of 2500 mm; Planted with deciduous street trees 8 metres on centre in midblock conditions; Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards; 350 mm high precast concrete planter; Planters offset 0.5 metres from median edges for safety and to mitigate the impacts of salt spray on plant material; Median provides space for place-making banners and public art where space permits. 	Sections 3.5 and 3.8



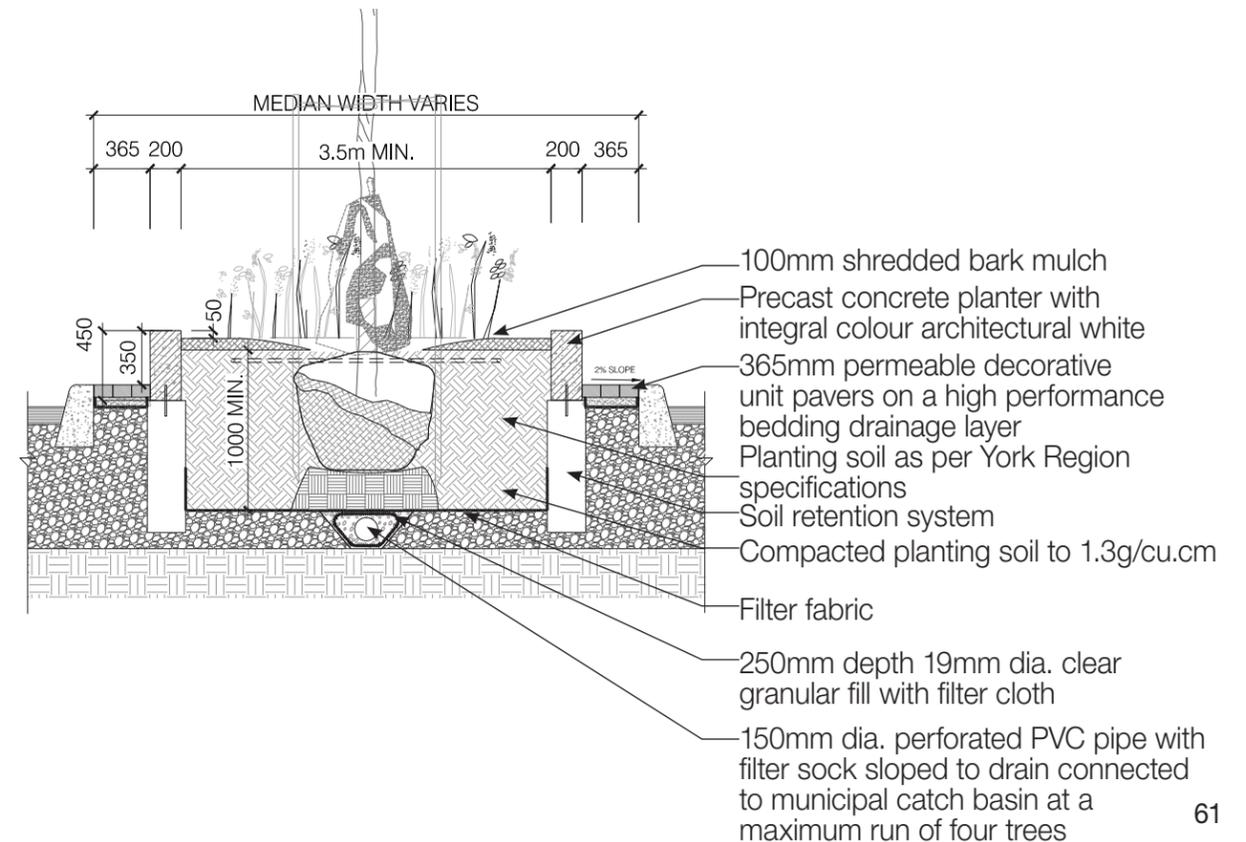
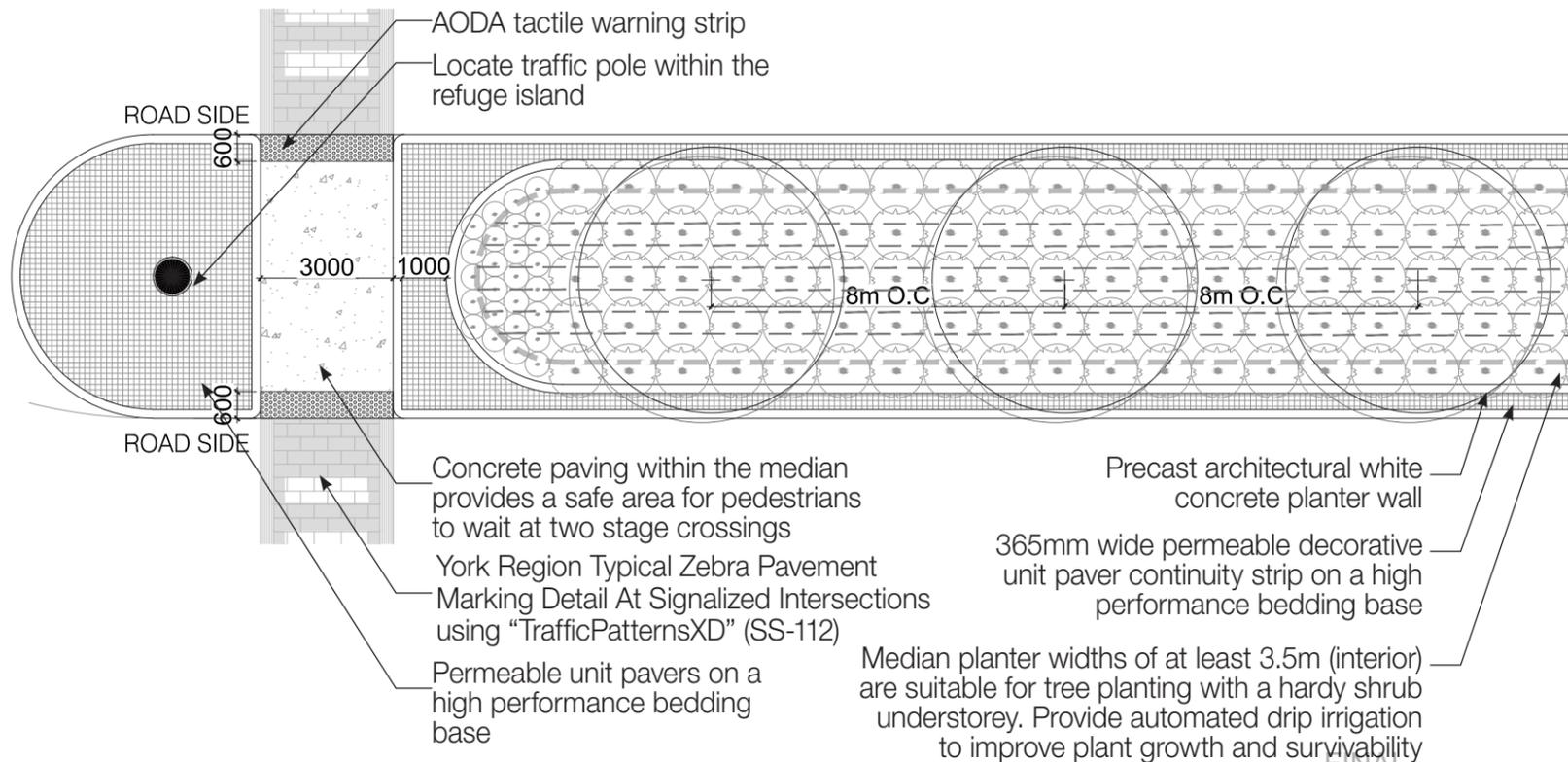
MEDIAN TECHNICAL PLAN AND DETAIL



MEDIAN TECHNICAL PLAN AND DETAIL: WIDTH 2.0 METRES- 4.4 METRES



MEDIAN TECHNICAL PLAN AND DETAIL: WIDTH 4.5 METRES MINIMUM

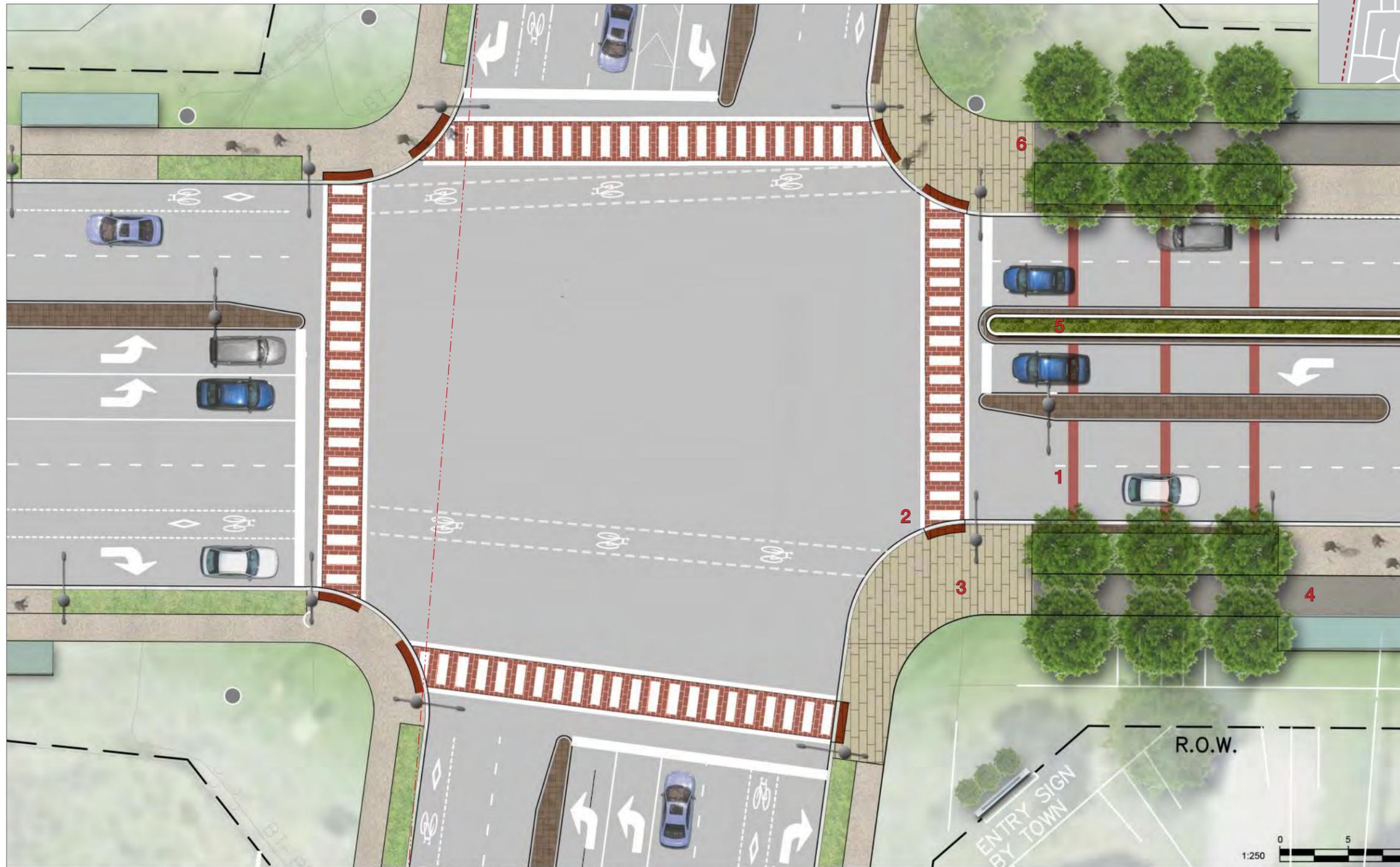




Davis Drive West- Green Streetscape Typology

4.4.14 GATEWAY CONDITION

----- Town Boundary



This plan depicts the Town of Newmarket gateway at Davis Drive and Bathurst Street. The streetscape design provides visual cues that commuters, pedestrians and cyclists are entering the Town of Newmarket.

KEY FEATURES LEGEND

- 1. Unit paver gateway banding 8 metres on centre ties into tree spacing
- 2. Decorative crosswalk: refer to Regional Municipality of York – Typical Zebra Pavement Markings Detail at Signalized Intersections using 'TrafficPatternsXD' SS-112
- 3. Unit paving creates an intersection plaza: refer to sections 4.4.11-12
- 4. MUP flanked by deciduous trees: refer to section 4.4.8-10
- 5. Planted median: refer to section 4.4.13
- 6. Refer to section 5 for more information on materiality

*Crossrides to be added to the Bathurst Street at Davis Drive Capital Project at a future date.

Township of King | Town of Newmarket Boundary



4.5 Davis Drive East Corridor

----- Town Boundary

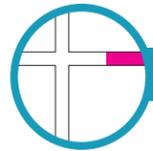


4.5.1 INTRODUCTION

The Davis Drive East corridor is marked by differing land uses, with low to mid density residential as well as medical and commercial adjacent land uses. As a result, the Davis Drive East corridor employs both the Green Streetscape Typology as well as the Davis Urban Streetscape Typology dependent of the context of the segment.

4.5.2 OVERVIEW MATRIX

Davis Drive West Corridor Overview						
	Streetscape Element	Width (minimum)	Typical Boulevard Material	Intersection Condition	Additional Notes	Further Information
Davis Urban Streetscape Typology	Pedestrian Zone-Intersection	2.0 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Unit Pavers to extend 50 linear metres from key intersections to establish a strong sense of place; AODA compliant tactile plates, curbs and crosswalks to be utilized. 	<ul style="list-style-type: none"> Boulevard paving to visually tie into the private realm paving for a visually cohesive look. 	Sections 3.4, 4.5.6-7 and 5
	Pedestrian Zone-Midblock	2.0 metres	Permeable Concrete	<ul style="list-style-type: none"> N/A 		Sections 3.4, 4.5.3-5 and 5
	Cycle Track	1.5 metres	Poly Bound Porous Pavement	<ul style="list-style-type: none"> Cycle Track transitions to roadway at intersections; Crossride is marked with green paving, elephant feet and pavements markings (as per OTM Book 18). 	<ul style="list-style-type: none"> Cycle track must have a minimum 0.25 metre buffer from fixed objects (i.e. planters, benches, etc.). 1 metre by 2 metre pavement markings spaced 1.5 metres apart (as per OTM Book 18). 	Sections 3.7, 4.5.3-7 and 5
	Furnishing/Planting Zone	2.35 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Street trees and other visual obstacles set back from the intersection in order to maintain a clear sight triangle. 	<ul style="list-style-type: none"> Street trees in grates used throughout Davis Urban corridor. 	Sections 3.5-6, 4.5.3-5 and 5
Green Streetscape Typology	Multi-Use Path-Intersection	3.0 metres	Permeable Unit Pavers on Permeable Concrete Base	<ul style="list-style-type: none"> Unit Pavers to extend 18 linear metres from key intersections to establish a strong sense of place; AODA compliant tactile plates, curbs and crosswalks to be utilized. 	<ul style="list-style-type: none"> Cross Ride and Crosswalk separates cyclists and pedestrians at intersections. 	Sections 3.8, 4.5.11-12 and 5
	Multi-Use Path- Midblock	3.0 metres	Poly Bound Porous Pavement	<ul style="list-style-type: none"> N/A 		Sections 3.8, 4.5.8-10 and 5
	Landscape Zone	2.35 metres	Landscaping	<ul style="list-style-type: none"> Street trees and other visual obstacles set back from the intersection in order to maintain a clear sight triangle; Ornamental grasses planted for the first 16 metres from signalized intersections. 	<ul style="list-style-type: none"> Plant species must be hardy, salt and drought tolerant; Use native species; Landscape screening along back lotted residential adjacent lands. 	Sections 3.6, 4.5.8-10 and 5
Universal	Continuity Strip	0.6 metres	Permeable Unit Pavers on Granular Base	<ul style="list-style-type: none"> Materiality of the continuity strip to be complimentary to the boulevard pavement treatment. 		Sections 4.5.8-10 and 5
	Median	Varies	Permeable Unit Pavers and Concrete Planter with Planting	<ul style="list-style-type: none"> Median can serve as the basis for two-stage crossing at major intersections. 	<ul style="list-style-type: none"> Plant species selection is dependent on median width and available soil volumes 	Sections 4.5.13 and 5



Davis Drive East- Davis Urban Streetscape Typology

4.5.3 DAVIS URBAN STREETSCAPE TYPOLOGY GEOMETRY: TYPICAL MIDBLOCK CONDITIONS



Private Realm Sidewalk Planting/Furnishing Zone Cycle Track Through Lane Through Lane

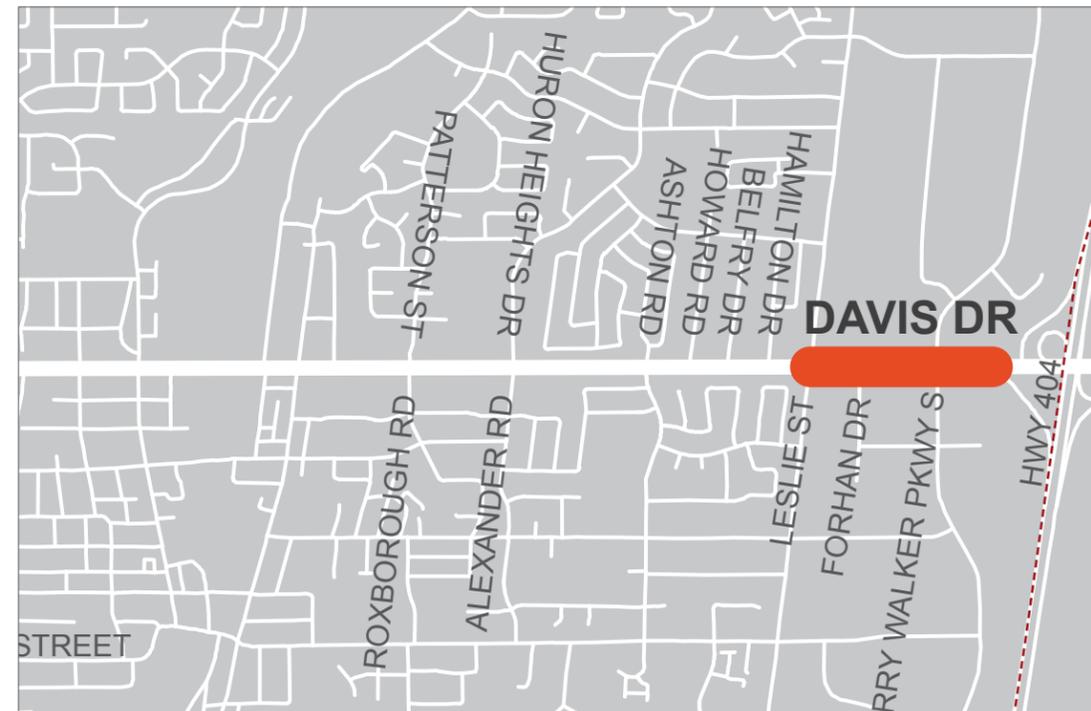


Precedent Images



ROW Boundary

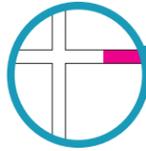
Renderings display typical midblock condition



Key Map

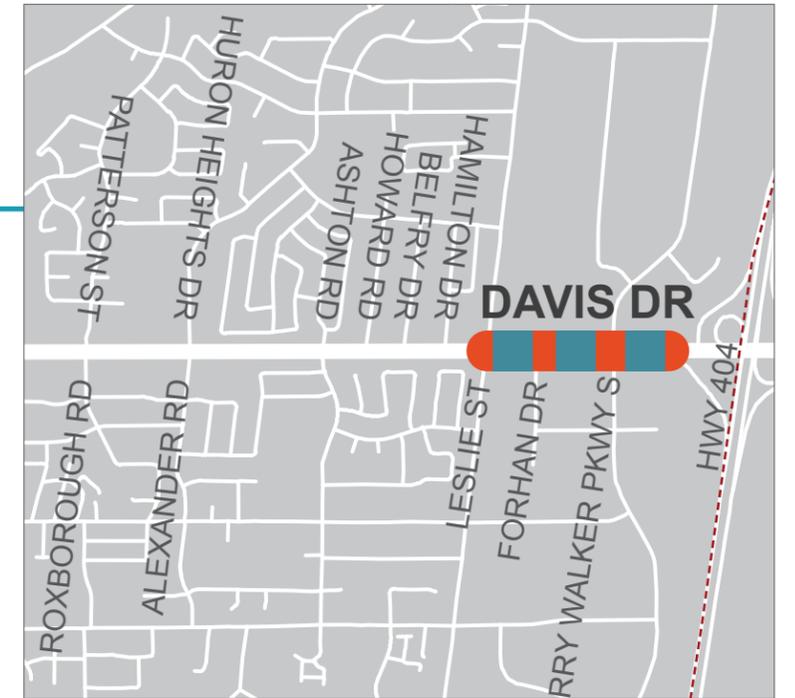
Town Boundary

Cross Section Centre Line

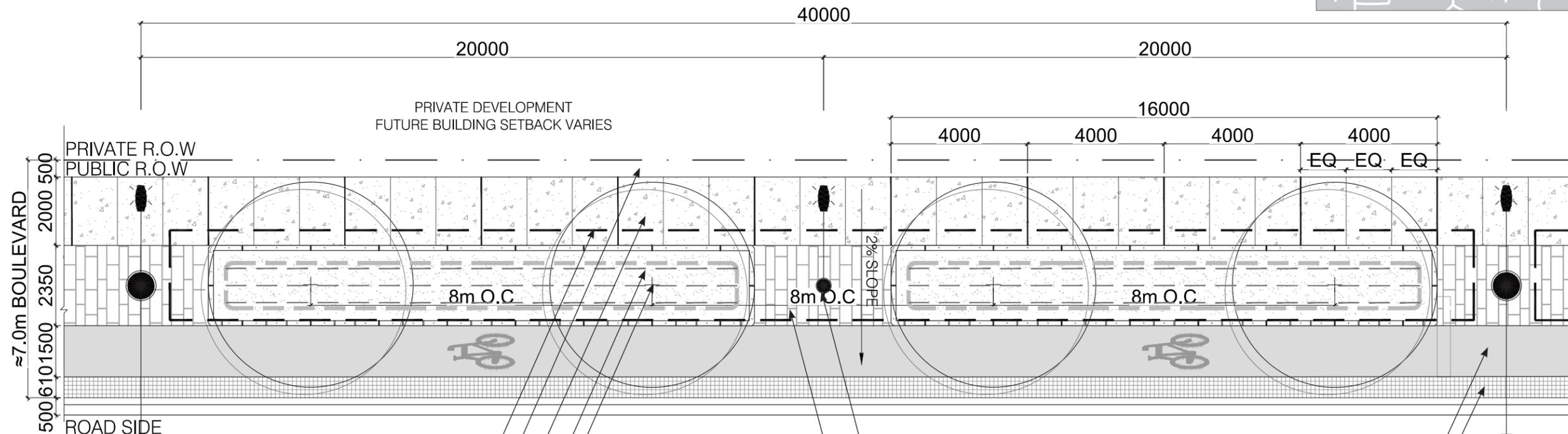


Davis Drive East- Davis Urban Streetscape Typology

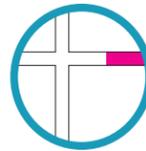
4.5.4 MIDBLOCK TECHNICAL PLAN



Town Boundary



- Stand alone pedestrian lighting should be evenly spaced between street lights where possible
- Permeable unit pavers installed over a porous concrete base to help mitigate differential settlement while allowing for drainage
- Porous asphalt raised cycle track
- 610mm wide permeable decorative unit paver continuity strip
- Street light and pedestrian lighting mounted on hydro pole located within the furnishing zone
- Extent of below grade soil trench
- Provide a snow storage area at the back of the sidewalk but within the public ROW
- Permeable concrete sidewalk with saw-cut control joints. For a contemporary aesthetic, do not trowel edges
- Provide automated drip irrigation for trees in tree planters
- Street trees in planters spaced 8m o/c. Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards

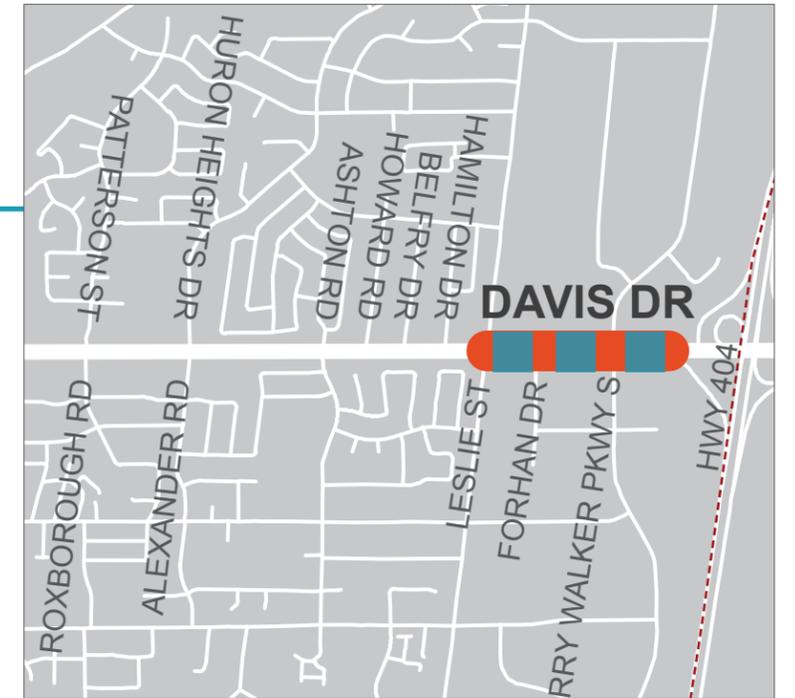


Davis Drive East- Davis Urban Streetscape Typology

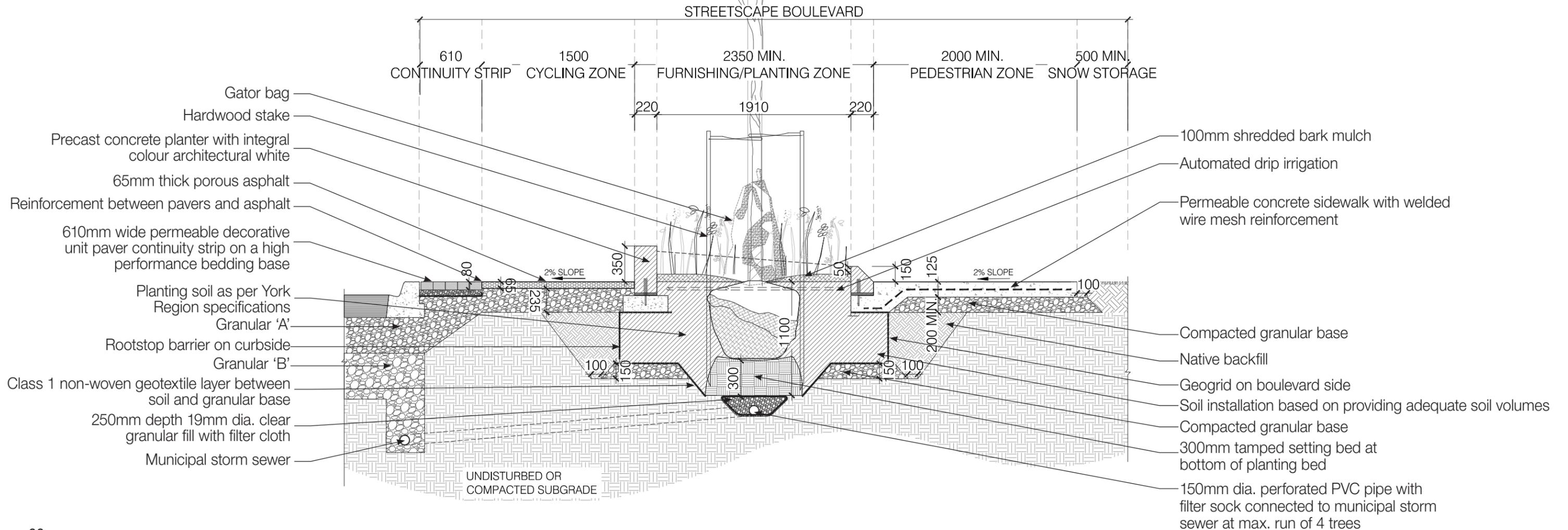
4.5.5 MIDBLOCK TECHNICAL DETAIL (CROSS SECTION)

NOTES:

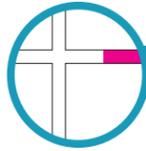
- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer
- Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards
- Arrange soil to be a continuous trench where possible



----- Town Boundary



FINAL

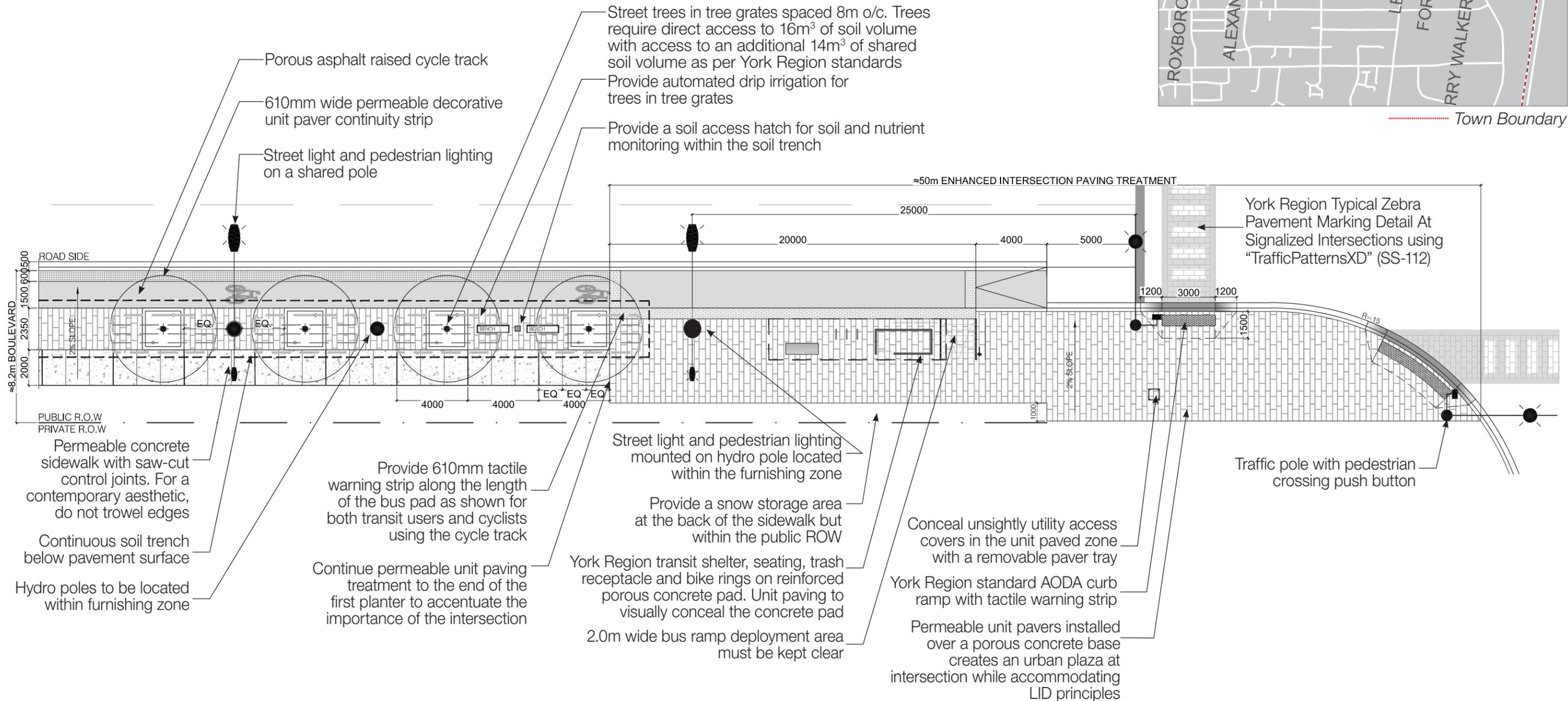


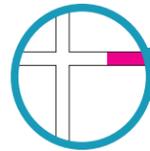
Davis Drive East- Davis Urban Streetscape Typology

4.5.6 TYPICAL INTERSECTION TECHNICAL PLAN



Town Boundary





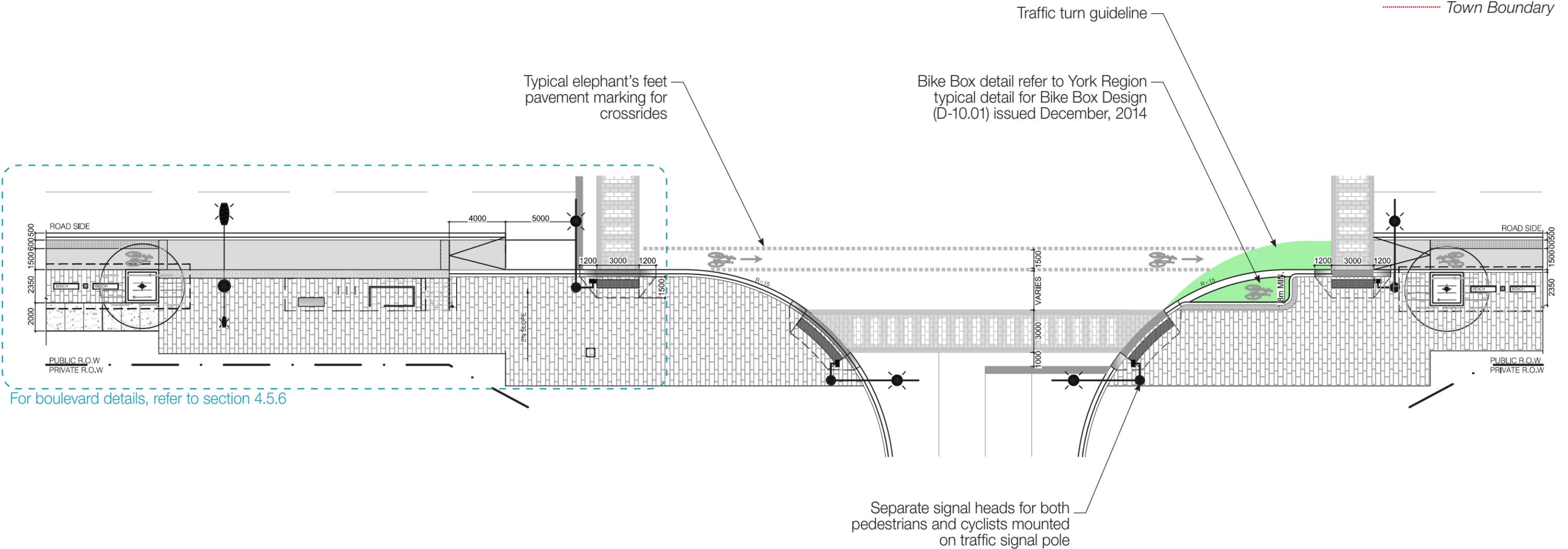
Davis Drive East- Davis Urban Streetscape Typology

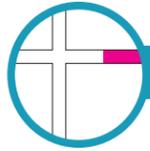
4.5.6.1. TYPICAL INTERSECTION TECHNICAL PLAN - CYCLING INFRASTRUCTURE & PAVEMENT MARKINGS

NOTES:
 - Separate bicycle signal heads should be provided at signalized intersections that will operate on the same loop and timing plan as the pedestrian signals



..... Town Boundary

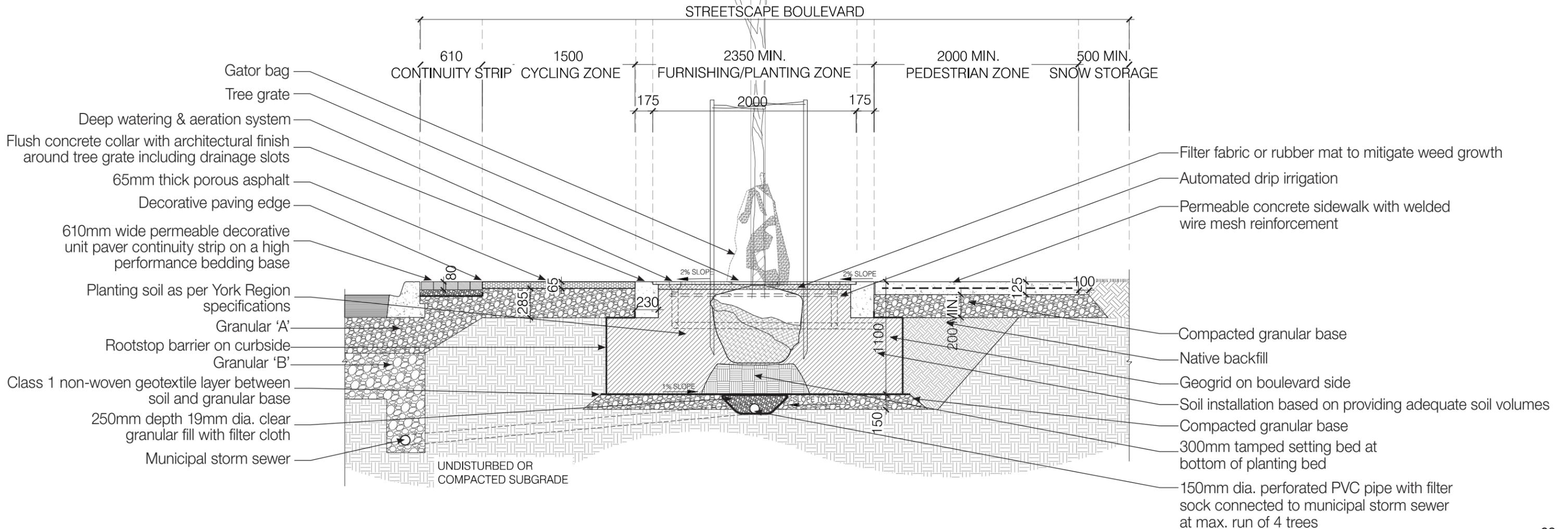
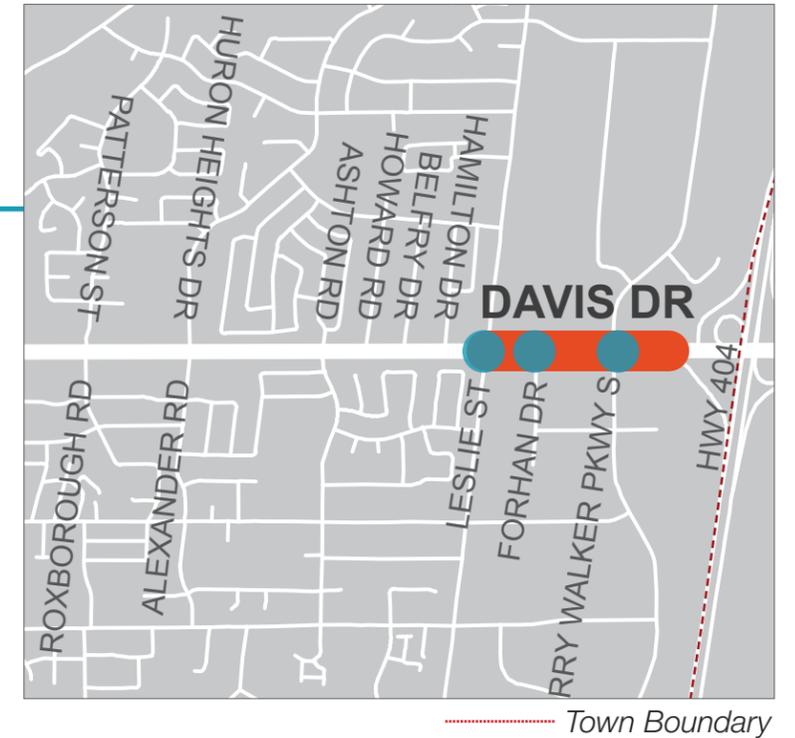


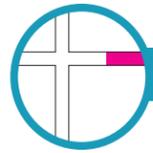


Davis Drive East- Davis Urban Streetscape Typology

4.5.7 TYPICAL INTERSECTION TECHNICAL DETAIL (CROSS SECTION)

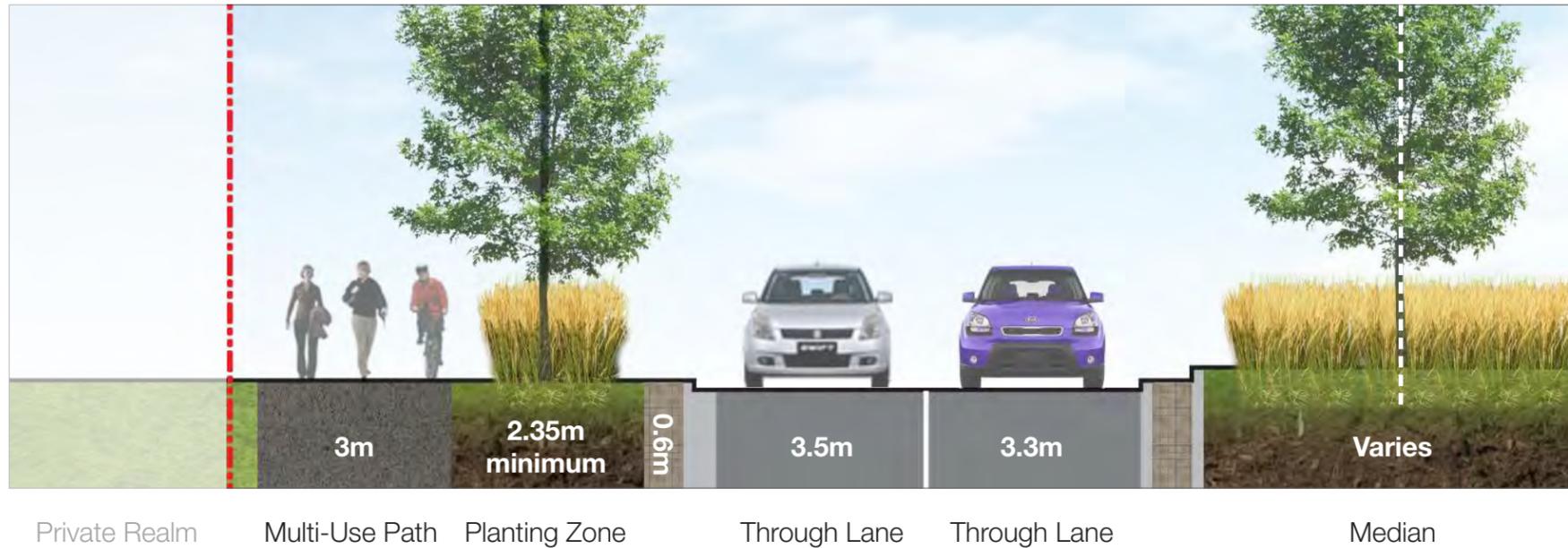
- NOTES:
- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer
 - Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards
 - Arrange soil to be a continuous trench where possible



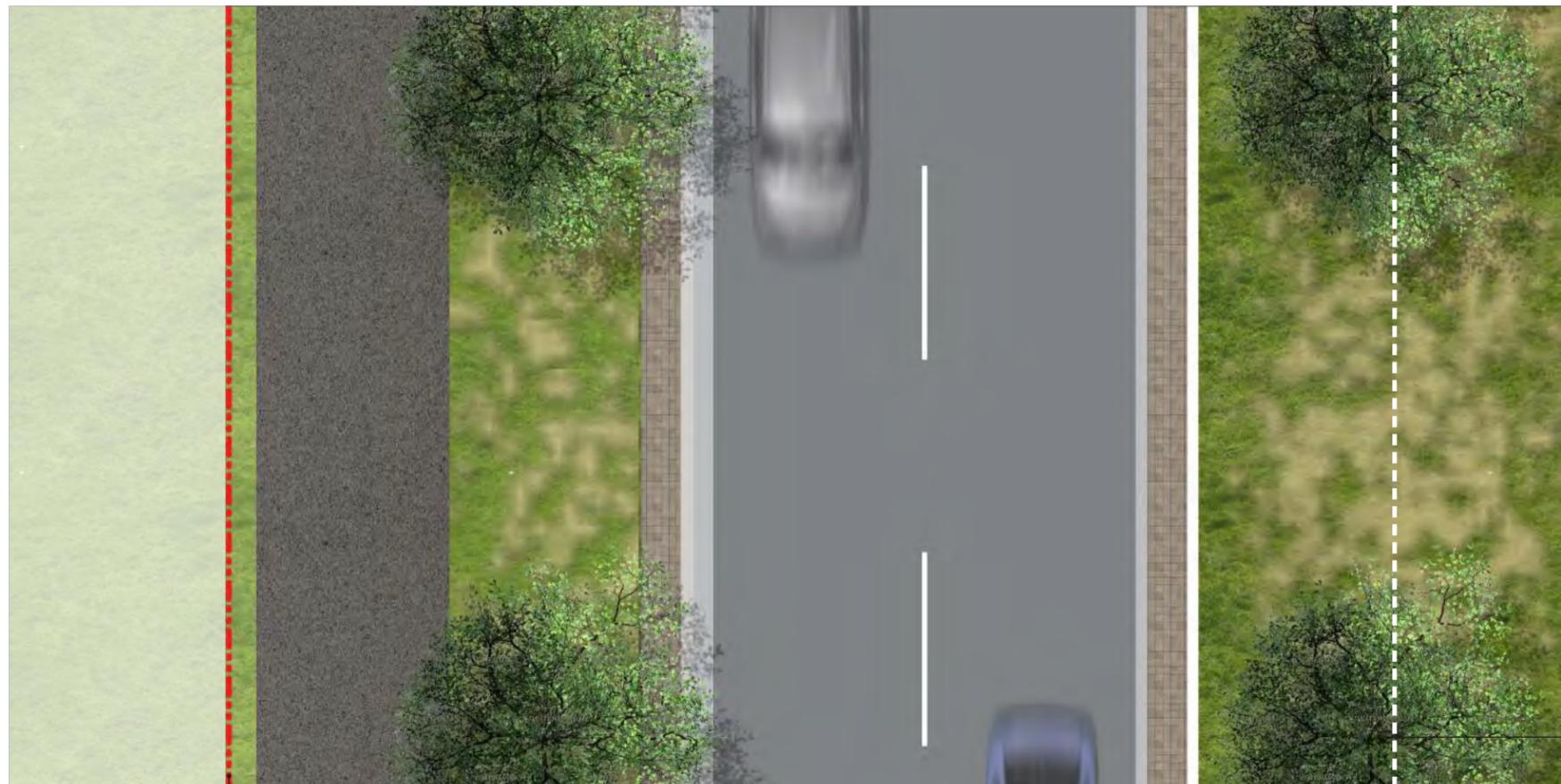


Davis Drive East- Green Streetscape Typology

4.5.8 DAVIS URBAN STREETSCAPE TYPOLOGY GEOMETRY: TYPICAL MIDBLOCK CONDITIONS



Precedent Images



Renderings display typical midblock condition

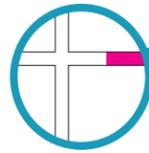
FINAL



Key Map

Town Boundary

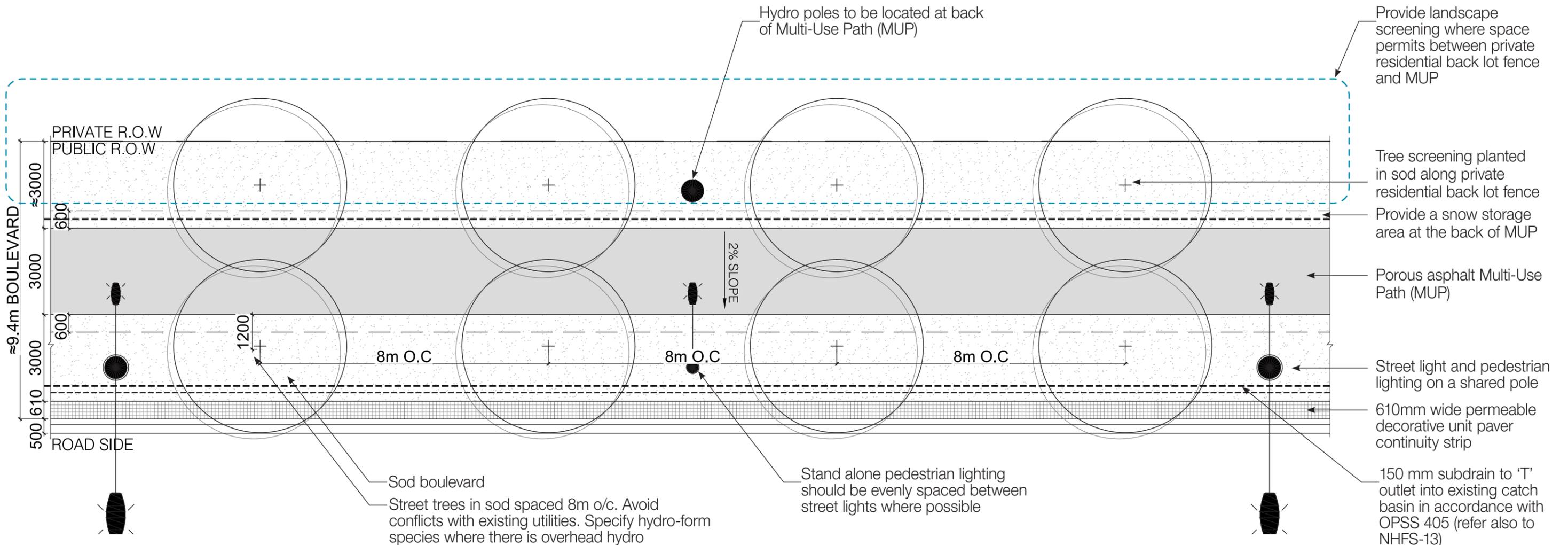
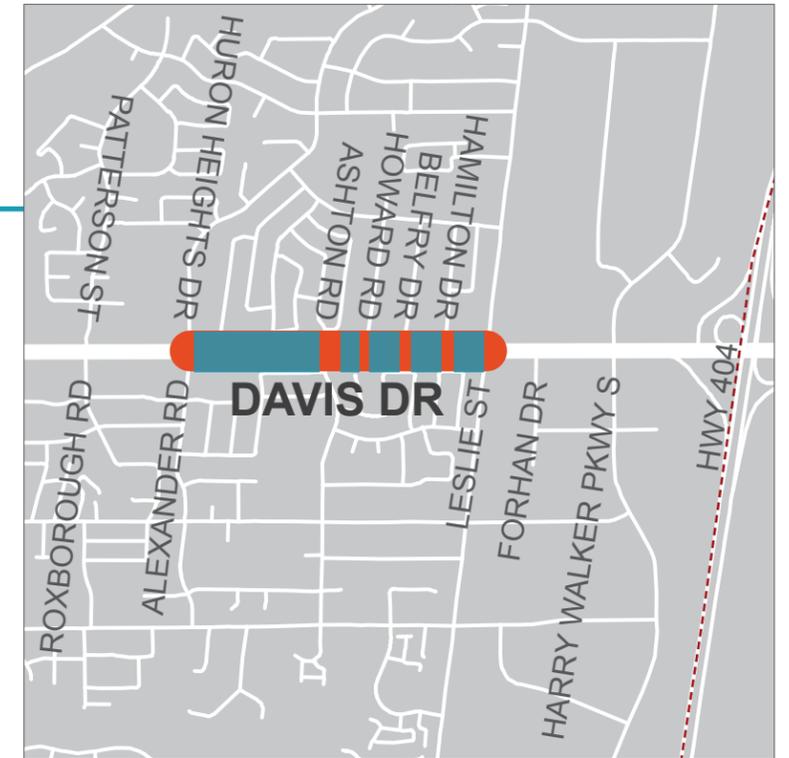
Cross Section Centre Line



Davis Drive East- Green Streetscape Typology

4.5.9 MIDBLOCK TECHNICAL PLAN

NOTES:
 - Refer also to York Region Transportation Services Boulevard Tree Planting Soil Trench for Softscape Boulevards NHFS-13

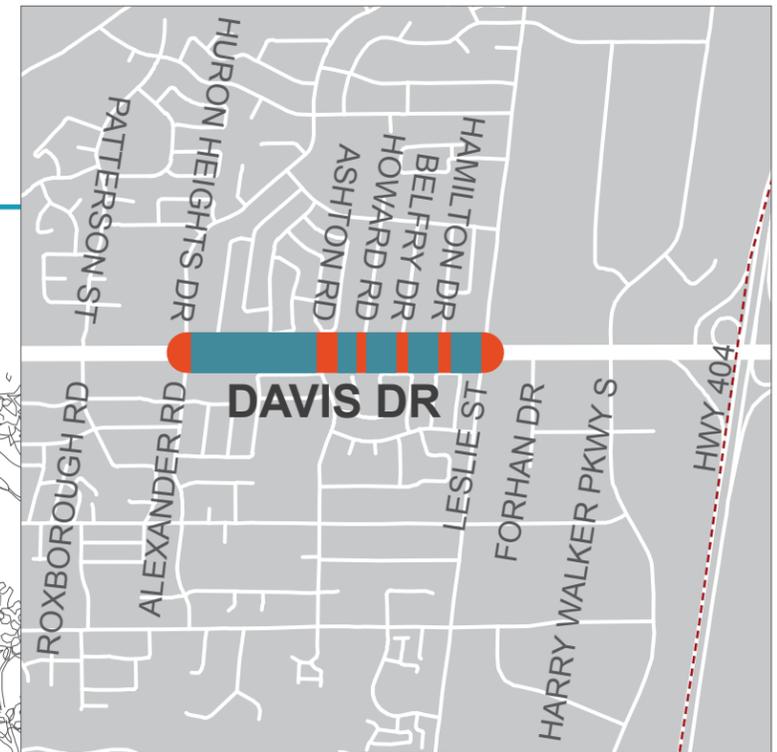
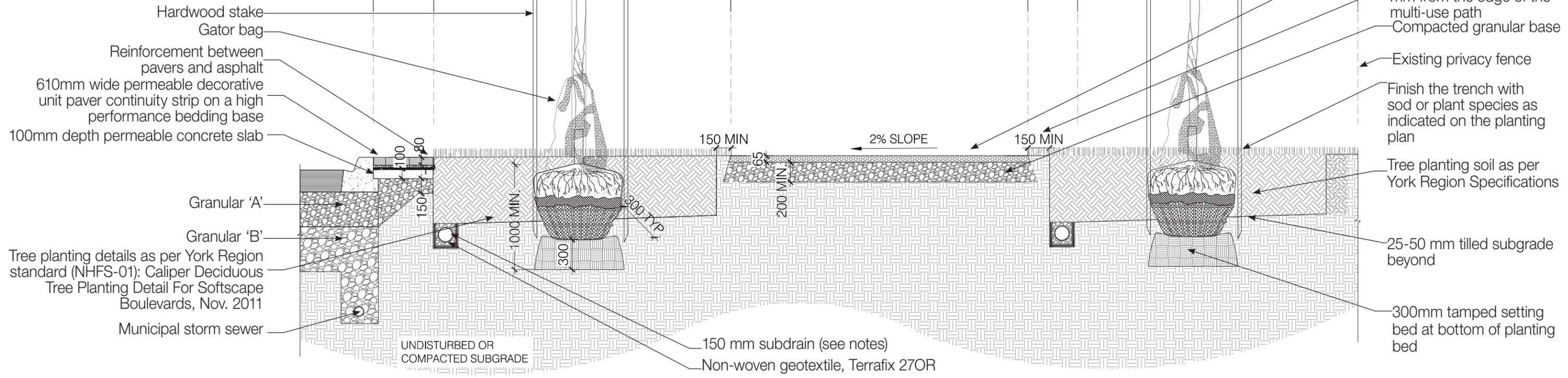


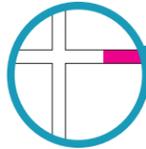


Davis Drive East- Green Streetscape Typology

4.5.10 MIDBLOCK TECHNICAL DETAIL (CROSS SECTION)

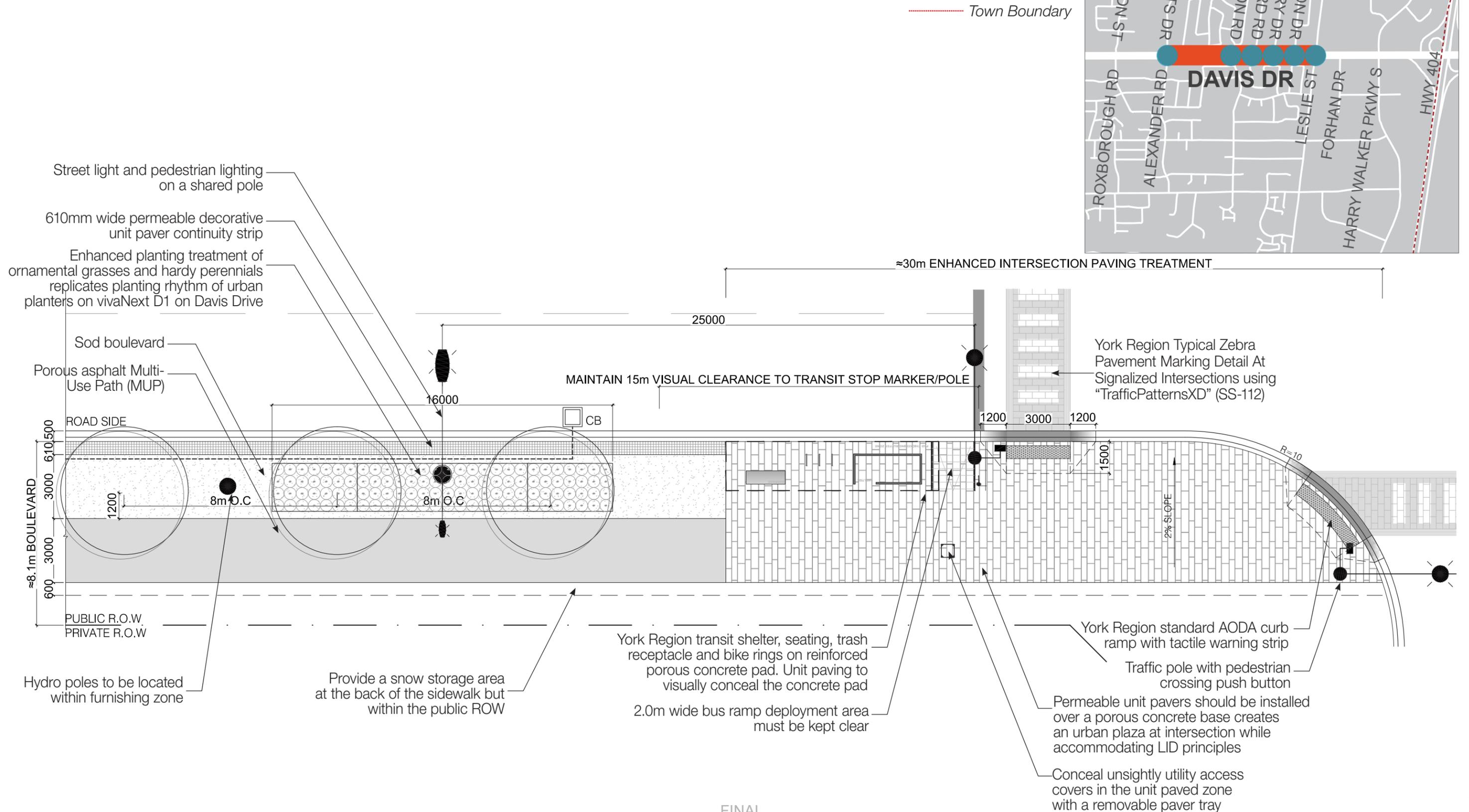
- NOTES:**
- The planter drain should follow the roadway slope and should be connected to the nearest catch basin or storm sewer
 - Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards
 - Planting soil mixture shall conform to the York Region Specification for preparation and installation of tree planting soil
 - Sub grade soil to be tilled to a depth of 25-50mm prior to installing planting soil
 - 25-50mm of planting soil shall be placed in the trench and tilled into the sub grade soil
 - Remaining planting soil shall be installed in lifts of 150mm-300mm and compacted between 75% and 80% of maximum dry density (proctor)
 - Till 40mm of high-lignin content organic matter into top layer of installed planting soil to a depth of 60-90mm
 - Boulevard soil trench to be finished with sod in accordance with OPSS 803
 - 150mm sub drain to 'T' outlet into existing catch basin in accordance with OPSS 405.

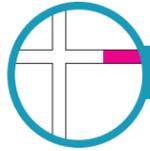




Davis Drive East- Green Streetscape Typology

4.5.11 TYPICAL INTERSECTION TECHNICAL PLAN



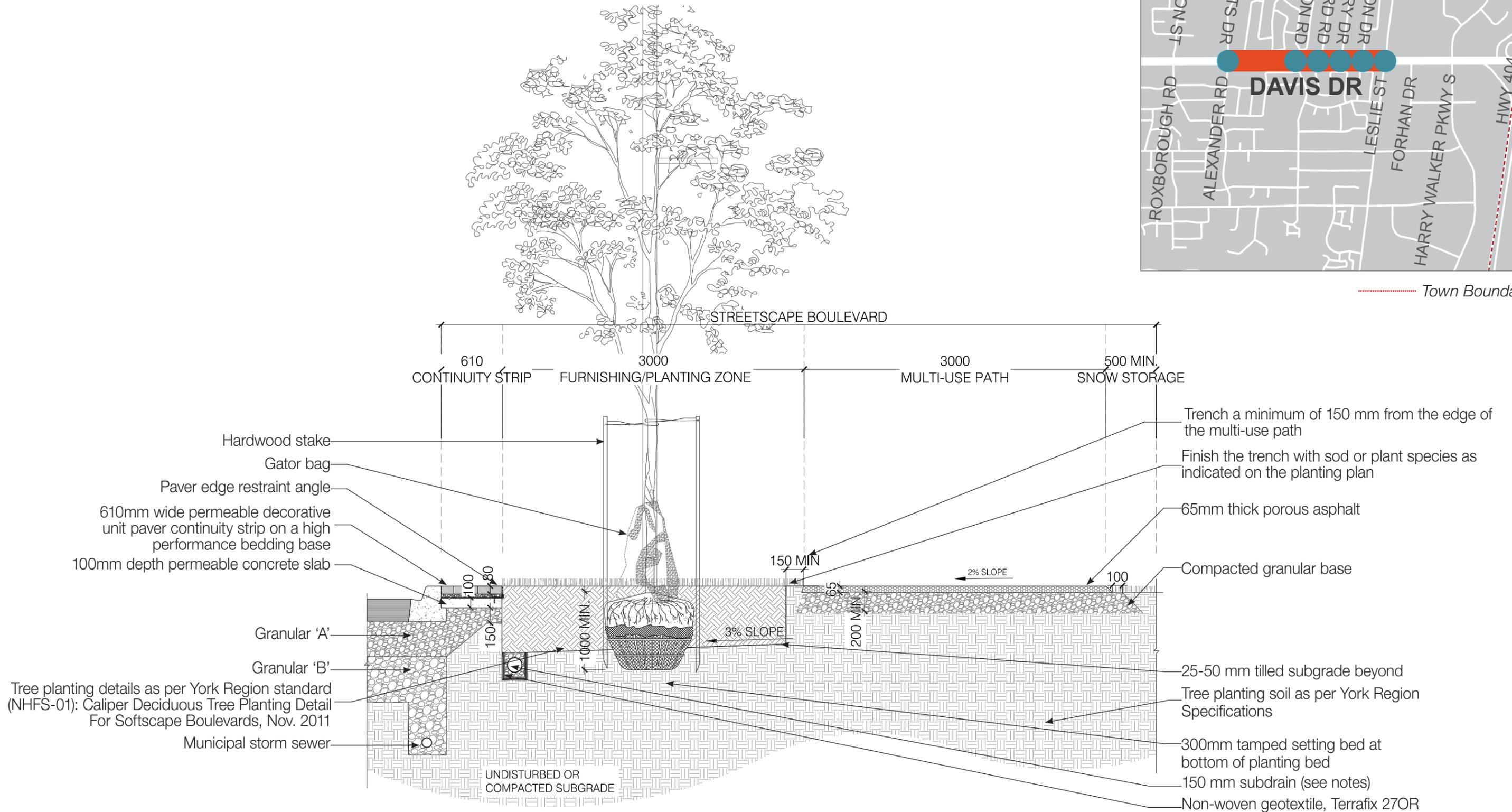


Davis Drive East- Green Streetscape Typology

4.5.12 TYPICAL INTERSECTION TECHNICAL DETAIL (CROSS SECTION)



..... Town Boundary



FINAL

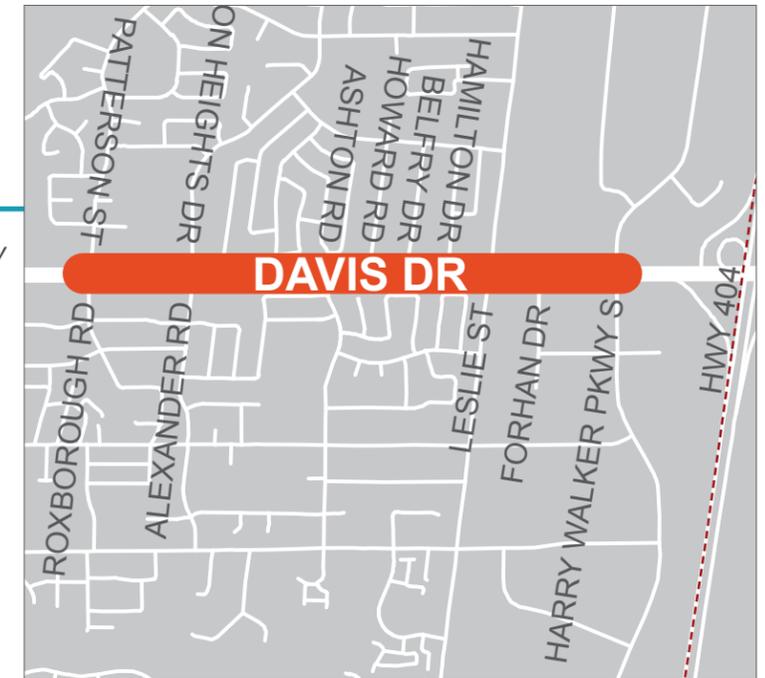


4.5.13 MEDIAN CONDITIONS

BACKGROUND

The Streetscape Master Plan presents a centre median within the Davis Drive East corridor where there is room in the ROW. Due to the size of the ROW, the median condition within this corridor contains unit pavers.

..... Town Boundary

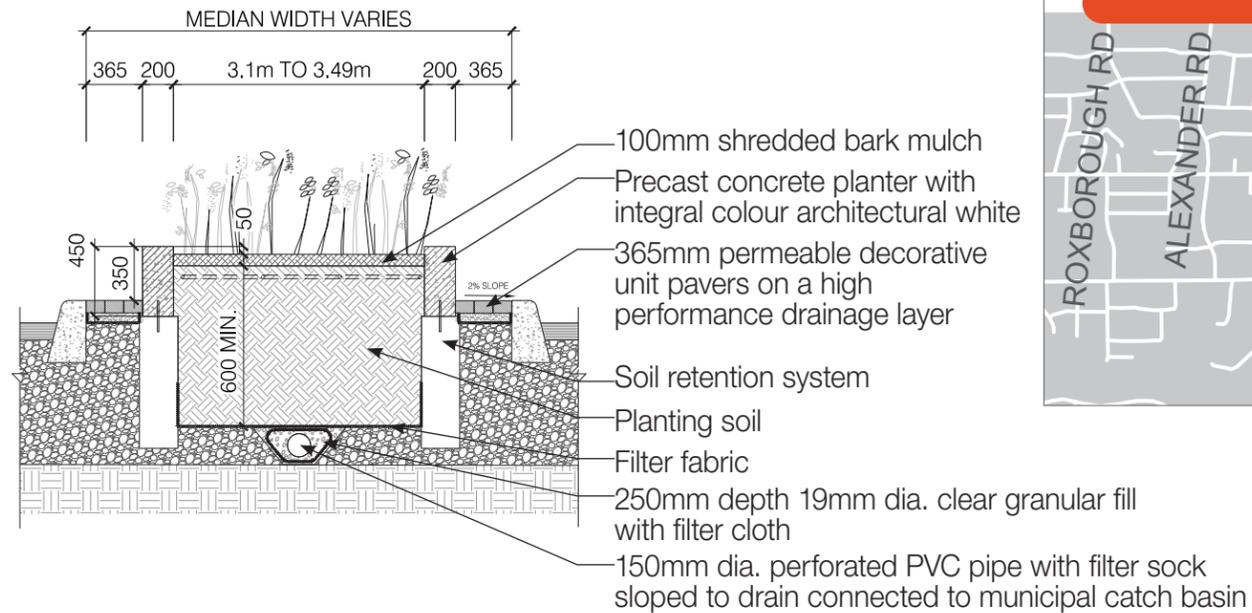
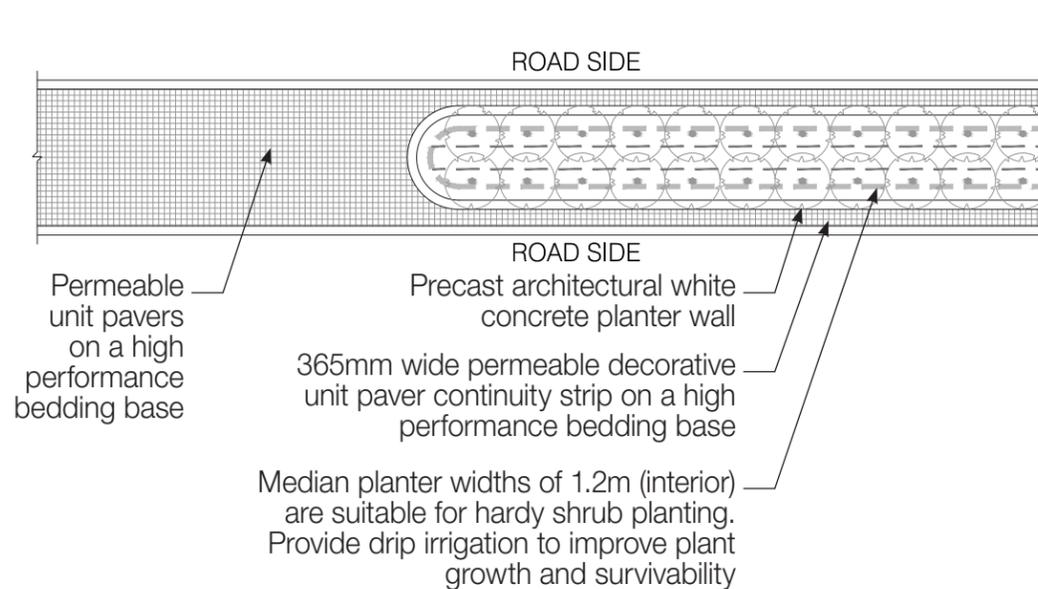


Centre Median Sizing Matrix				
Visualization	Width (From Edge of Pavement)	Median Type	Additional Notes	Further Information
	1.0 m minimum	Concrete	<ul style="list-style-type: none"> CIP concrete median with a light broom finish. 	Sections 3.5 and 3.8
	1.0 m - 1.9 m	Unit Pavers on a Granular Base	<ul style="list-style-type: none"> Contemporary plank that match the streetscape aesthetic should be used; Median provides space for place-making banners. 	Sections 3.5 and 3.8
	2.0 m - 4.4 m	Concrete Planter with Shrubs	<ul style="list-style-type: none"> Planted with hardy shrubs species (see plant palette); Inside planter width should be a minimum of 1500 mm; 350 mm high precast concrete planter; Planters offset 500 mm from median edges for safety and to mitigate the impacts of salt spray on plant material; Median provides space for place-making banners. 	Sections 3.5 and 3.8
	4.5 m +	Concrete Planter with Trees	<ul style="list-style-type: none"> Planted with deciduous canopy trees spaced 8 metres on centre; Inside planter width should be a minimum of 2500 mm; Trees require direct access to 16m³ of soil volume with access to an additional 14m³ of shared soil volume as per York Region standards; 350 mm high precast concrete planter; Planters offset 500 mm from median edges for safety and to mitigate the impacts of salt spray on plant material; Median provides space for place-making banners and public art where space permits. 	Sections 3.5 and 3.8



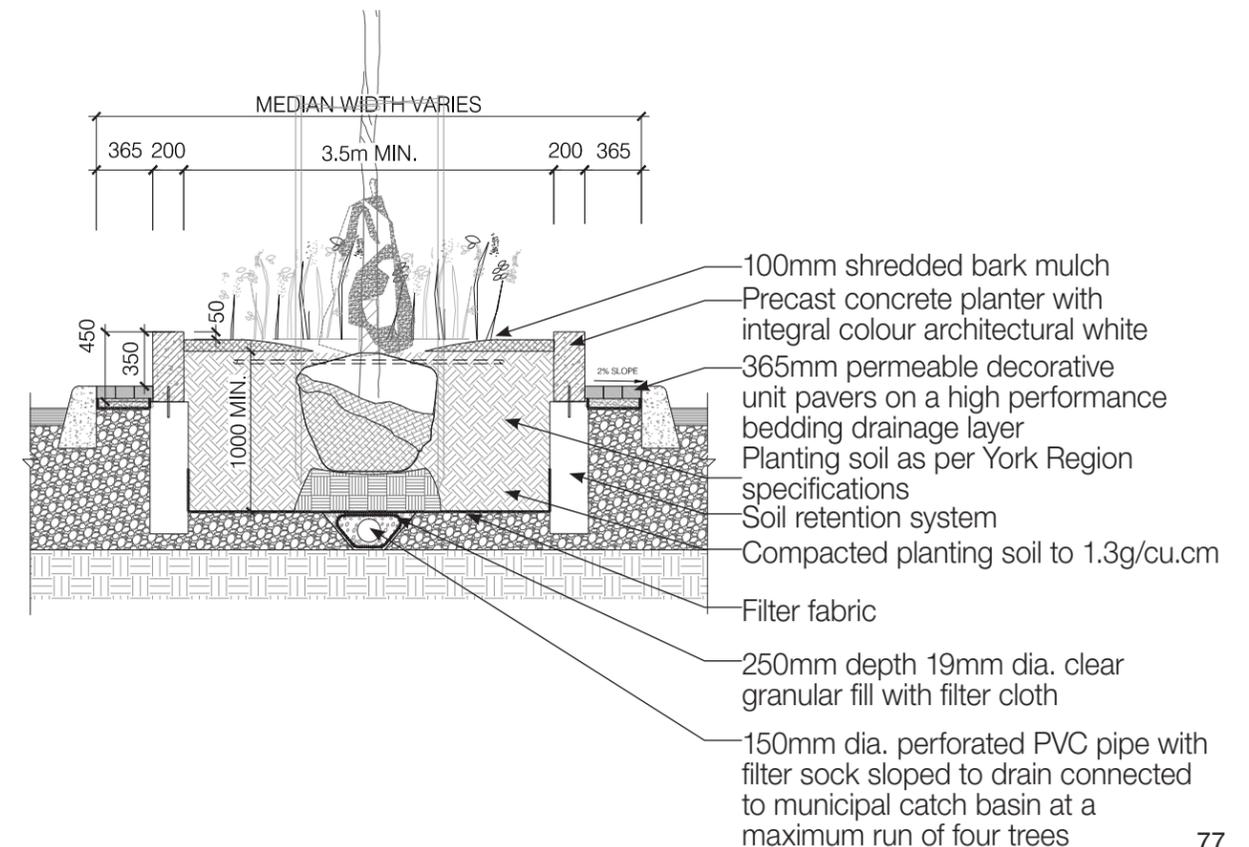
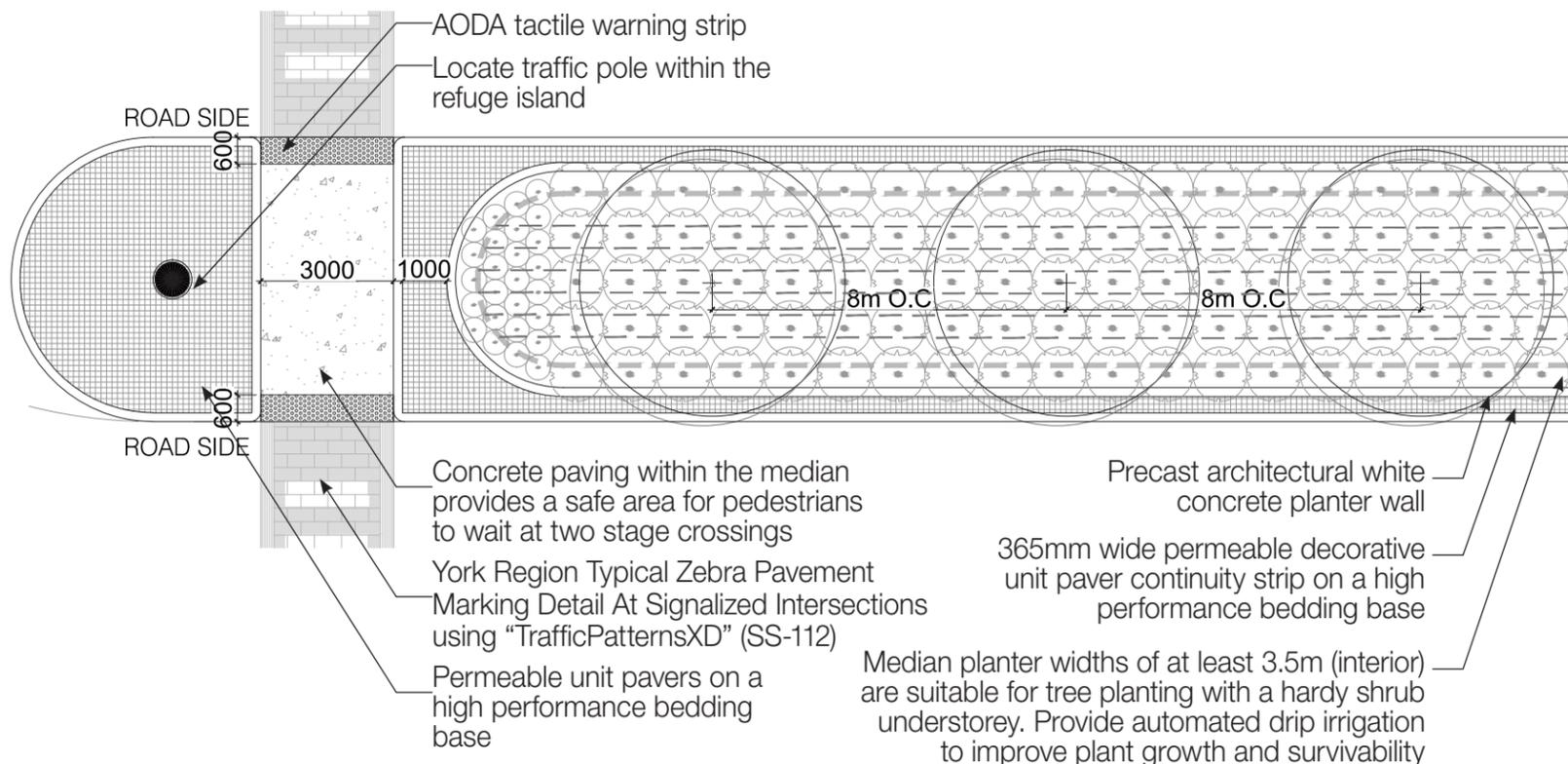
MEDIAN TECHNICAL PLAN AND DETAIL

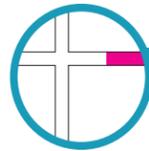
MEDIAN TECHNICAL PLAN AND DETAIL: WIDTH 2.0 METRES- 4.4 METRES



..... Town Boundary

MEDIAN TECHNICAL PLAN AND DETAIL: WIDTH 4.5 METRES MINIMUM

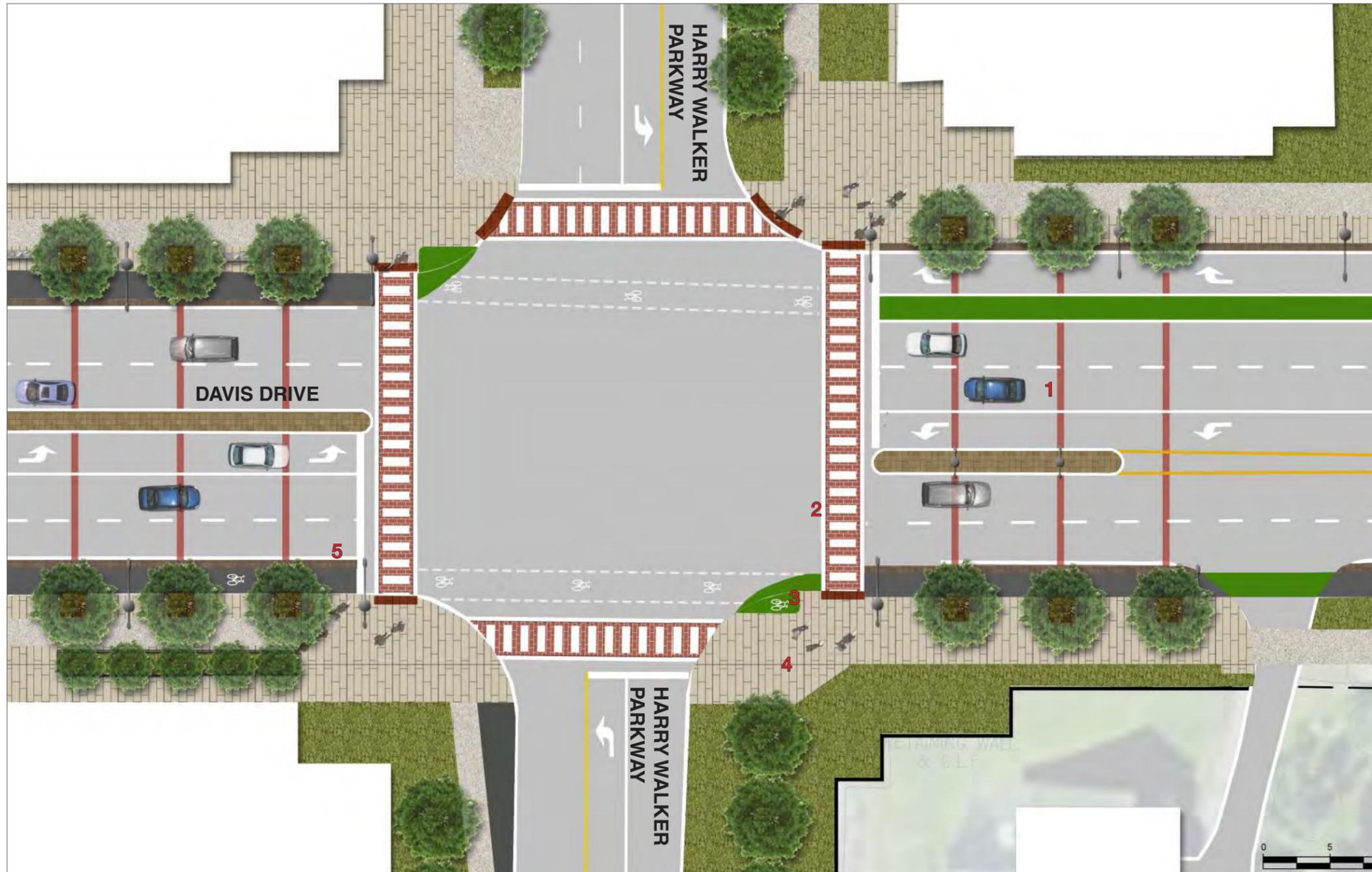




Davis Drive East- Davis Urban Streetscape Typology

4.5.14 GATEWAY CONDITION

..... Town Boundary



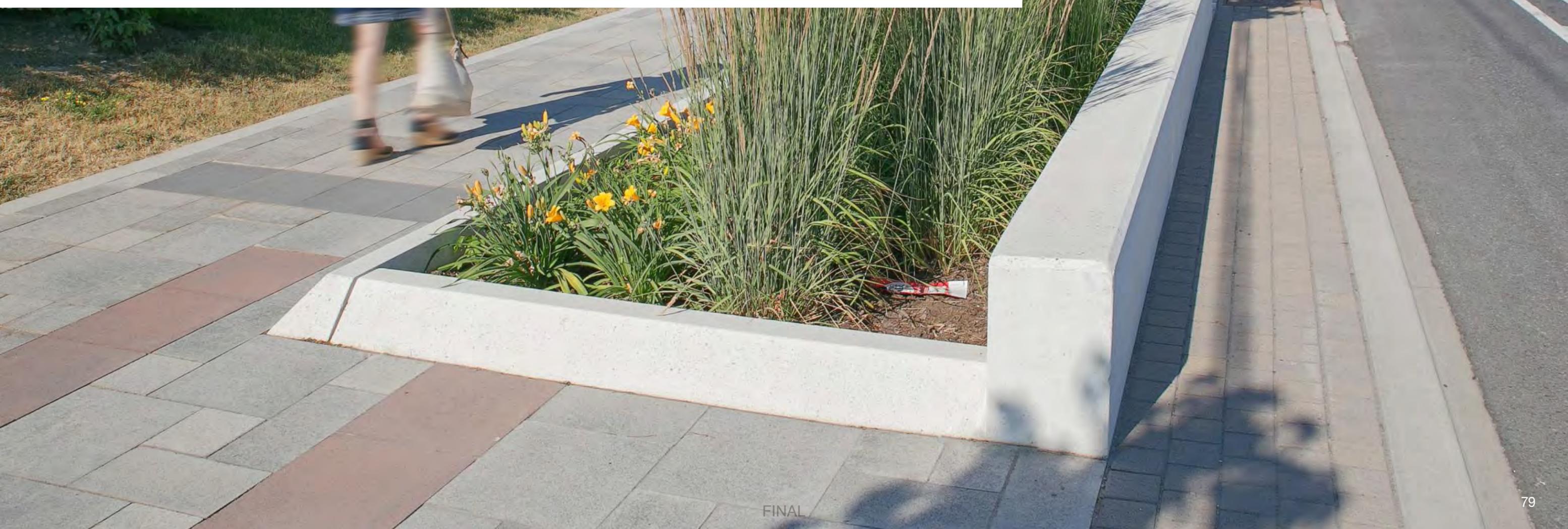
Harry Walker Parkway marks the eastern gateway condition along Davis Drive east. The streetscape design provides visual cues that motorists, pedestrians and cyclists are entering the Town of Newmarket.

KEY FEATURES LEGEND

- 1. Unit paver gateway banding 8 metres on centre
- 2. Refer to Regional Municipality of York – Typical Zebra Pavement Markings Detail at Signalized Intersections using ‘TrafficPatternsXD’ SS-112
- 3. Refer to Regional Municipality of York – Typical Detail for Bike Box and Side Road Pedestrian Curb Ramp Interface D-10.02
- 4. Refer to sections 4.5.6-7
- 5. Refer to sections 4.5.8-9
- 6. Refer to section 5.0 for more information on materiality.



5.0 MATERIALITY



5.1 HARDSCAPE MATERIALITY

The hardscape material palette aids in creating a contemporary and cohesive streetscape.

The material palette complements the vivaNext materials, creating a sense of visual cohesion while also differentiating the streetscape.

LID and sustainability initiatives are employed wherever possible within the hardscape. For instance:

- Materials with light albedo are used in order to mitigate the Urban Heat Island effect.
- Permeable materials are used where feasible in order to mitigate flooding and recharge ground water.
- Recycled materials are used where possible such as within the cycle track and MUP, as well as within the roadway sub-base.
- Engineered green walls provide an opportunity to optimize planting within the streetscape.

This section outlines the hardscape material palette that is recommended for Yonge Street and Davis Drive.

** Proprietary materials provided for design intent and performance standard for the purposes of the Streetscape Master Plan. Approved equal can be substituted at Detailed Design stage.*

5.1.1 PAVING MATERIAL PALETTE MATRIX

UPDATED May 30, 2022

Location	Material Type	Suggested Brand	Recommended Product	Colour(s)	Finish	Unit Size	
Sidewalk	Concrete	N/A	N/A	Light Grey	Textured	N/A	
Multi-Use Path	Asphalt	N/A	N/A	Black	N/A	N/A	
Pedestrian Zone at Intersections Field	Unit Pavers	Unilock	Artline	Alpine Fusion	Artline	Various (7cm depth)	
Pedestrian Zone at Intersections Banding	Unit Pavers	Unilock	IL Campo	Heritage Brown	IL Campo	4 x 8" (20cm x 10cm x 7cm)	
	Unit Pavers	Unilock	Series 3000	Black Granite	Series 3000	4 x 8" (20cm x 10cm x 7cm)	
Planting Zone Furnishings Field	Unit Pavers	Unilock	Artline	Alpine Fusion	Artline	Various (7cm depth)	
Planting Zone Furnishings Banding	Unit Pavers	Unilock	IL Campo	Heritage Brown	IL Campo	4x12" (20cm x 10cm x 7cm)	
Cycle Track Tactile Banding	Unit Pavers	Unilock	IL Campo	Heritage Brown	IL Campo	4x12" (20cm x 10cm x 7cm)	
Continuity Strip	Unit Pavers	Unilock	IL Campo	Heritage Brown	IL Campo	4x12" (20cm x 10cm x 7cm)	
VivaNext Field	Unit Pavers	Unilock	Umbriano	Winter Marvel	Umbriano	Small Square (20cm x 20cm x 7cm) Rectangle (40cm x 20cm x 7cm) Square (40cm x 40cm x 7cm)	
VivaNext Tactile Banding	Unit Pavers	Unilock	Umbriano	Summer Rose & Midnight Sky	Umbriano	16x16" (40cm x 40cm x 7cm)	

HARDSCAPE MATERIAL PALETTE MATRIX (CONTINUED)

UPDATED May 30, 2022

Location	Material Type	Suggested Brand	Recommended Product	Colour(s)	Finish	Unit Size	
Curb Ramp Tactile Plates	Cast Iron Tactile Plates	Neenah	AODA Compliant Detectable Warning Plates	Unpainted	Unpainted	Width varies pending site condition (610mm depth)	
Crosswalk	Thermoplastic Pavement Markings	Flint	TrafficPatternsXD	Colonial Brick and White	N/A	3000mm wide	
Median Field	Unit Pavers	Unilock	Artline	Alpine Fusion	Artline	Various (7cm depth)	
Median Banding	Unit Pavers	Unilock	IL Campo	Heritage Brown	IL Campo	4x12" (20cm x 10cm x 7cm)	

5.1.3 TREE GRATES

Contemporary tree grates with clean lines should be used within urban corridors.

Accenturba's Aztec square powder coated steel grates (below) are recommended.



* Proprietary materials provided for design intent and performance standard for the purposes of the Streetscape Master Plan. Approved equal can be substituted at Detailed Design stage.

5.1.2 RETAINING WALLS

Retaining walls should be used where necessary throughout the corridors. Green walls should be implemented wherever possible. Retaining wall should be aesthetically cohesive with the contemporary style of the streetscape and hardscape materials.



Pedestrian Retaining Wall Option: 200mm-1200mm



Engineered Retaining Wall Option: 1200mm +



Engineered Green Wall

5.2 SOFTSCAPE MATERIALITY

5.2.1 TREE SPECIES PLANTING LOCATION MATRIX

Visualization	Species	In Tree Grates/ Planters	Hydro Form	In Sod	Screening	Medians
	Hackberry <i>Celtis occidentalis</i> **	●		●	●	
	Honeylocust <i>Gleditsia triacanthos var. inermis</i>	●		●	●	●
	Horsechestnut <i>Aesculus hippocastanum</i>	●		●	●	
	Kentucky Coffeetree <i>Gymnocladus dioicus</i>	●		●	●	●
	Ohio Buckeye <i>Aesculus glabra</i>	●		●	●	
	Silver Maple <i>Acer saccharinum</i>	●		●	●	
	Swamp White Oak <i>Quercus bicolor</i> **	●		●	●	
	Ivory Silk Tree Lilac <i>Syringa reticulata 'Ivory Silk'</i>	●	●	●	●	
	Shubert Cherry <i>Prunus virginiana 'Shubert'</i>	●	●	●	●	
	Bradford Pear <i>Pyrus calleryana</i>	●	●	●	●	

* This matrix provides a sample of suitable species. Planting should be cross-referenced with the most current version of The Regional Municipality of York Acceptable Street Tree Species for Regional Roads.

** Pending approval by York Region

*** Rain Garden planting palette to follow in Section 5.2.4

5.2.2 SHRUB SPECIES MATRIX

Visualization	Species	Landscape/ Planters	Screening	Medians
	Salt spray Rose <i>Rosa rugosa</i>		●	●
	Staghorn Sumac <i>Rhus typhina</i>		●	
	False Spirea <i>Sorbaria sorbifolia</i>		●	●
	Red Osier Dogwood <i>Cornus sericea</i>	●	●	●
	Gro low Sumac <i>Rhus aromatic</i> 'Gro-Low'	●	●	●
	Fragrant Sumac <i>Rhus aromatic</i>	●	●	●
	Northern Bayberry <i>Myrica pensylvanica</i>	●	●	
	White snowberry <i>Symphoricarpos</i> <i>albus</i>	●	●	
	Goldstar Potentilla <i>Potentilla Fruticosa</i> 'Gold Star'	●	●	●
	Abbotswood Potentilla <i>Potentilla Fruticosa</i> 'Abbotswood'	●	●	●

* This matrix provides a sample of suitable species. Planting should be cross-referenced with the most current The Regional Municipality of York acceptable streetscape planting list.

* Rain Garden planting palette to follow in Section 5.2.4
FINAL

5.2.3 PERENNIALS AND ORNAMENTAL GRASSES MATRIX

Visualization	Species	Landscape/ Planters	Screening	Medians
	Daylily <i>Hemerocallis sp.</i>	●		●
	Black Eye Susan/ Orange Coneflower <i>Rudebeckia fulgida</i>	●		●
	Purple Coneflower <i>Echinacea purpurea</i>	●		●
	Sedum 'Autumn Joy' 'Autumn Fire' Munstead Dark red' <i>Sedum sp.</i>	●		●
	Snow'n summer <i>Cerastium tomentosum</i>	●		
	Carnations/ Pinks <i>Dianthus sp.</i>	●		
	Threadleaf Coreopsis <i>Coreopsis verticillata</i> 'Zagreg'	●		
	Sea thrift <i>America maritime 'splendens'</i>	●		
	Feather Reed Grass <i>Calamagrostis x acutifolia</i> 'Karl Foerster'	●	●	●
	Eldorado Feather Reed Grass <i>Calamagrostis x El dorado</i>	●	●	●
	Red Switch Grass <i>Panicum virgatum</i> 'Shenandoah'	●	●	●
	Blue Switchgrass <i>Panicum virgatum 'Heavy metal'</i>	●	●	●

* This matrix provides a sample of suitable species. Planting should be cross-referenced with the most current The Regional Municipality of York acceptable streetscape planting list.

** Rain Garden planting palette to follow in Section 5.2.4

5.2.4 RAIN GARDEN PLANT PALETTE

	Visualization	Species
Grasses		Big Bluestem Grass <i>Andropogon gerardii</i>
		Feather Reed Grass <i>Calamagrostis x acutifolia</i> 'Karl Foerster' **
		Tufted Hairgrass <i>Deschampsia cespitosa</i>
		Canada Wild Rye <i>Elymus canadensis</i>
		Virginia Wild Rye <i>Elymus virginicus</i> var. <i>virginicus</i>
		Fountain Grass <i>Pennisetum hameln</i>
		Little Bluestem <i>Schizachyrium scoparium</i>

	Visualization	Species
Broadleaf Herbaceous (and Ferns)		Red columbine <i>Aquilegia canadensis</i>
		Swamp Milkweed <i>Asclepias incarnata</i> ssp. <i>incarnata</i>
		Butterfly Weed <i>Asclepias tuberosa</i>
		Showy Trick Trefoil <i>Desmodium canadense</i>
		Purple Cone Flower <i>Echinacea purpurea</i> **
		Joe Pye <i>Eupatorium maculatum</i> ssp. <i>maculatum</i>
		Ox Eye <i>Heliopsis helianthoides</i>
		Shasta Daisy <i>Leucanthemum x superbum</i>
		Wild Bergamot <i>Monarda fistulosa</i>
		Black Eyed Susan <i>Rudbeckia hirta</i>
		New England Aster <i>Symphotrichum novae</i> <i>angliae</i>
		Blue Vervain <i>Verbena hastata</i>
		Hoary Vervain <i>Verbena stricta</i>

* This matrix provides a sample of suitable species for Rain Gardens. The matrix provides species that are not included in the The Regional Municipality of York acceptable streetscape planting list, and should be approved by the Region before specified in detailed design.

** Connotes species on The Regional Municipality of York acceptable streetscape planting list

RAIN GARDEN PLANT PALETTE (CONTINUED)

	Visualization	Species
Shrubs		Allegheny Serviceberry <i>Amelanchier laevis</i>
		Chokeberry <i>Aronia melanocarpa</i>
		Gray dogwood <i>Cornus foemina ssp. racemosa</i>
		Red Osier Dogwood <i>Cornus sericea</i> **
		Spicebush <i>Lindera benzoin</i>
		Northern Bayberry <i>Myrica pensylvanica</i>
		Ninebark <i>Physocarpus opulifolius</i>
		Sumac <i>Rhus aromatica</i> **
		Thimbleberry <i>Rubus odoratus</i>
		Pussy Willow <i>Salix discolor</i>
		Narrowleaf Willow <i>Salix exigua</i>
		Red Elder <i>Sambucus racemosa ssp. pubens</i>
		Arrowwood Viburnum <i>Viburnum dentatum</i>
	Nannyberry <i>Viburnum lentago</i>	

	Visualization	Species
Trees		Silver Maple <i>Acer saccharinum</i> **
		Paper Birch <i>Betula papyrifera</i> **
		Common Hackberry <i>Celtis occidentalis</i> **
		Ginkgo <i>Ginkgo biloba</i>
		Honey Locust <i>Gleditsia triacanthos var. inermis</i> **
		Black Cherry <i>Prunus serotina</i>
		Swamp White Oak <i>Quercus bicolor</i> **
		Bur Oak <i>Quercus macrocarpa</i> **
		Northern Red Oak <i>Quercus rubra</i>

* This matrix provides a sample of suitable species for Rain Gardens. The matrix provides species that are not included in the The Regional Municipality of York acceptable streetscape planting list, and should be approved by the Region before specified in detailed design.

** Connotes species on The Regional Municipality of York acceptable streetscape planting list

5.3 FURNISHING

5.3.1 YORK REGION CO-ORDINATED STREETScape FURNITURE PROGRAM

Kramer Design Associates (KDA) developed a Co-Ordinated Street Furniture Program for York Region. The Streetscape Furniture has been designed to:

- Comply with AODA standards;
- Develop a cohesive aesthetic;
- Create a contemporary character;
- Minimize visual clutter;
- Address CPTED principles;
- Provide a space for advertising, maps or local events (in bus shelters);
- Be comfortable and ergonomic for users; and
- Create a modular kit-of-parts for ease of construction, maintenance and repair.

The streetscape furniture should be placed within the Furnishing Zone typically at intersection locations where pedestrian volumes are greatest as well as midblock at YRT stops. Furnishing should:

- Respond to specific contextual needs;
- Meet AODA requirements; and
- Respect sight-lines, setbacks and clearances.

5.3.2 BUSINESS IMPROVEMENT AREA (BIA) ELEMENTS

- If a future BIA becomes involved in a corridor of the streetscape, BIA assets should visually tie-in with the York Region Standard Furniture.
- Planters and other BIA furnishing elements should be placed in the Planting and Furnishing Zone.
- BIA banners and signature hanging planters could be added to the light poles to enhance placemaking.



Bike Ring



Bench (small)



Transit Shelter (with ad)



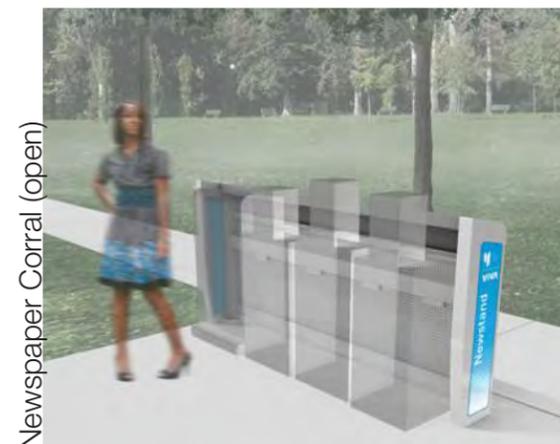
Newspaper Corral (closed)



Bench (large)



Transit Shelter (typical)



Newspaper Corral (open)



Waste Receptacle



Transit Shelter (roadside)

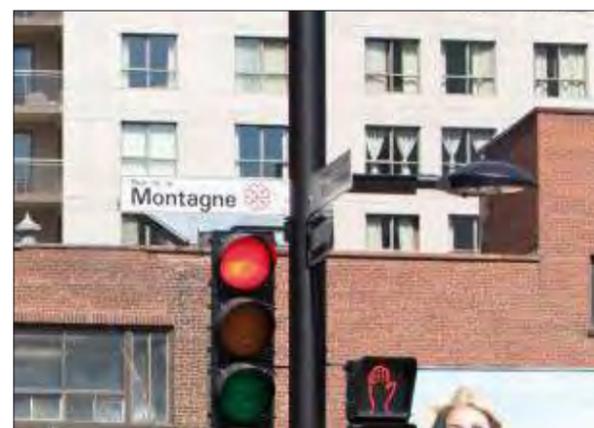
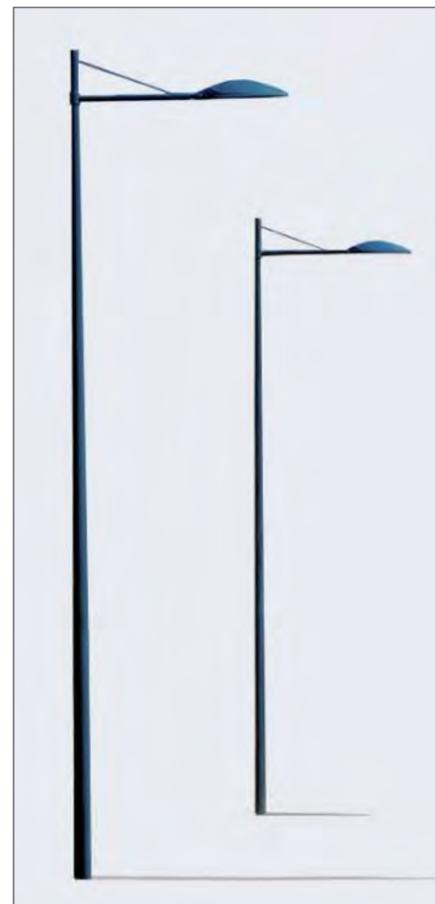
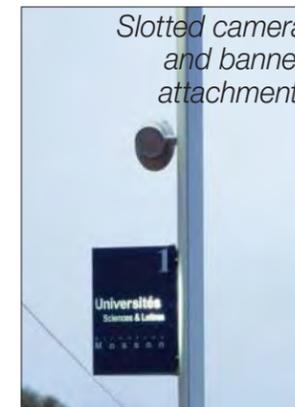
Streetscape furnishing images courtesy of KDA

5.4 LIGHTING

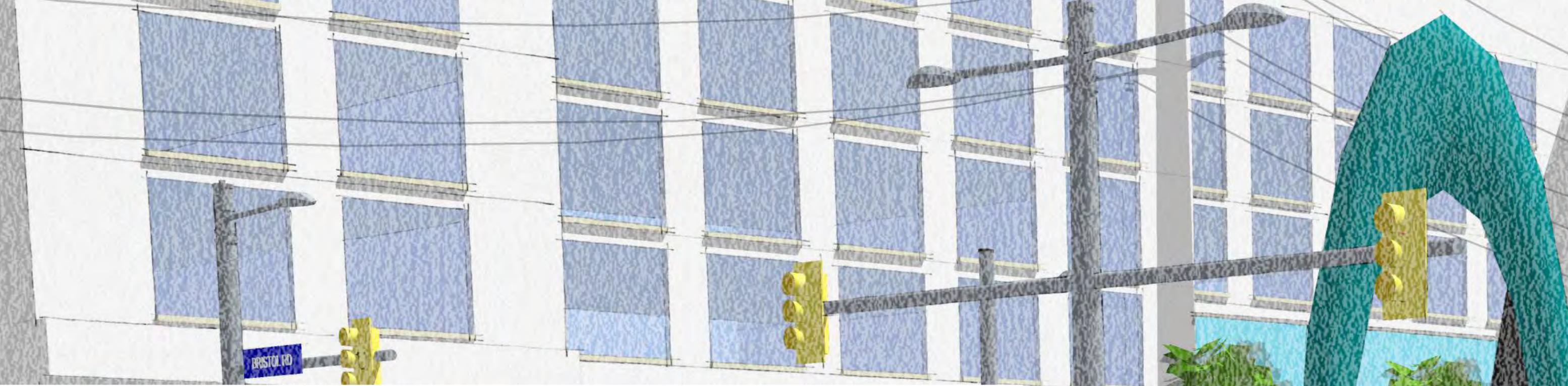
The lighting should fit within the contemporary streetscape aesthetic as well as complement the adjacent vivaNext streetscape. Technilum Technilox in charcoal is the recommended lighting (or approved alternative). In order to provide a variety of lighting levels to respond to the local context, the following fixtures should be utilized throughout the corridors:

- Street lights,
- Street lights with pedestrian luminaire,
- Pedestrian lights,
- Bollards, and
- Feature lighting.

The lighting poles contain a slot system that allow for the addition of signage, traffic lights, banners, hanging baskets and other fixtures directly onto the pole, reducing streetscape clutter.



All lighting images courtesy of Technilum



6.0 URBAN DESIGN CHECKLIST



The Urban Design Checklist is a tool to be used by development review staff at the Town of Newmarket and York Region when reviewing private development applications within the corridor limits to ensure principles of the Master Plan vision is upheld and realized.

Consolidated Urban Design Checklist		√
Built Form	Compose building height to fit within the locate context and comply with Secondary Planning initiatives and zoning by-laws.	
	Design height of building to be proportional with the ROW and within the angular plane.	
	Implement a lower rise podium facing the street in high rise buildings developments in order to retain human-scale and a visually balanced public ROW.	
	Locate buildings close to street edge as per Secondary Planning initiatives and local zoning by-laws.	
	Reinforce a continuity of built form and definition of the public realm through building placement at the street edge.	
	Orient buildings to the street with surface parking lots located at the rear.	
Building Access	Visually connect buildings and the access spaces in between to the streetscape.	
	Locate active uses such as retail stores and service oriented businesses at-grade to animate the streetscape and allow for patio space or other open space programming adjacent to the streetscape.	
	Feature building fronts prominently at the street level to animate the streetscape.	
	Clearly identify building entrances visually.	
	Create easy access to buildings from street level.	
	Locate parking lots in the rear of buildings or underground rather than fronting the streetscape.	
	Avoid segregating buildings from the street with elements such as walls, berms or fences.	
	Minimize midblock vehicle entry points where possible and locate them a sufficient distance from intersections so they do not impede on pedestrian circulation or bus stops.	
Building Setback & Forecourt	Ensure that setback encourages and active streetscape and upholds the Secondary Plan and local zoning by-laws.	
	Create an intersecting street wall through built form.	
	Use windows and high quality materials to create an attractive, human-scale environment at ground level.	
	Provide amenities such as canopies, shade structures and arcades along the street front to protect pedestrians from the elements.	
	Provide street furniture, patios and other amenities along the street front to animate the public realm.	
	Outdoor spaces should be easily accessible for all users.	
	Paving materials used in building forecourts are complementary to the building design and the streetscape materiality.	
	Review location and extent of private paving materials in front of building developments to delineate maintenance responsibilities between private property owner and municipality.	
	Review if encroachment agreements are necessary.	
AODA CPTED	Ensure that all development complies with current AODA standards for exterior spaces.	
	Ensure private development features do not impede natural surveillance to and from the public ROW.	
Plant Material	Specify plant material that is hardy, salt tolerant and complimentary to the planting within the public ROW.	
	Provide seasonal interest with plant species.	
	Ensure clear sight lines and safety setbacks are adhered to as per the York Region Site Triangle Manual and/ or TAC or engineering best practices.	
Grading	Review grading interface between private and public realm to ensure an even gradual slope transition, and/ or per Town and Region Standards.	
	Ensure all surface runoff from private development stays within private property boundary, and/ or per Town and Region Standards.	



7.0 NEXT STEPS



7.1 NEXT STEPS

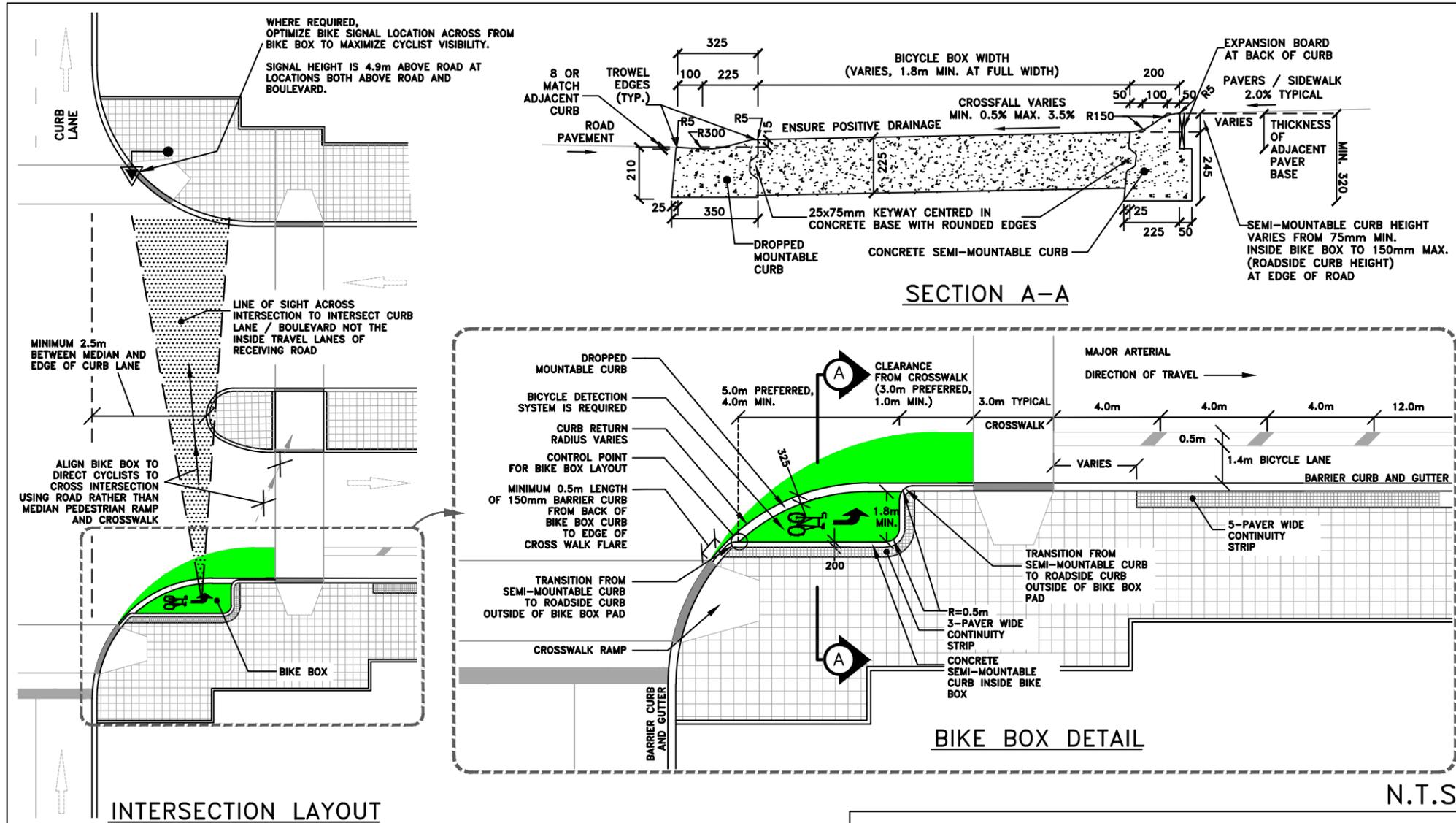
The final Yonge Street & Davis Drive Streetscape Master Plan report is Phase 5: Operations and Maintenance Considerations. This report will outline the projected costs for the construction and maintenance of the proposed Streetscape Master Plan. The report will examine unit costs of streetscape elements in order to develop an Order of Magnitude Capital Cost Estimate.



A. GLOSSARY OF ACRONYMS AND TERMS

BIA	Business Improvement Area
CIP	Cast In Place
CPTED	Crime Prevention Through Environmental Design
LID	Low Impact Development
Low albedo	A surface that absorbs the majority of incoming sun radiation and reflects a small amount of it.
MUP	Multi-Use Path
TAC	Transportation Association of Canada

B. YORK REGION BIKE BOX DETAIL



NOTES:

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CONCRETE SHALL BE 30MPa COMPRESSIVE STRENGTH AT 28 DAYS, WITH 5% TO 7% AIR ENTRAINMENT.
3. PAVER FOR CONTINUITY STRIP:
MANUFACTURER: UNILOCK, ECO-PRIORA
SIZE: 120X120X80mm
OR APPROVED EQUAL
4. BIKE DETECTION SYSTEM IS REQUIRED
5. INCLUDE TRANSVERSE CONTRACTION JOINTS ACROSS BIKE BOX PAD, IN LINE WITH CURB CUTS
6. BIKE BOX PAD TO HAVE LIGHT BROOM FINISH PERPENDICULAR TO STREET

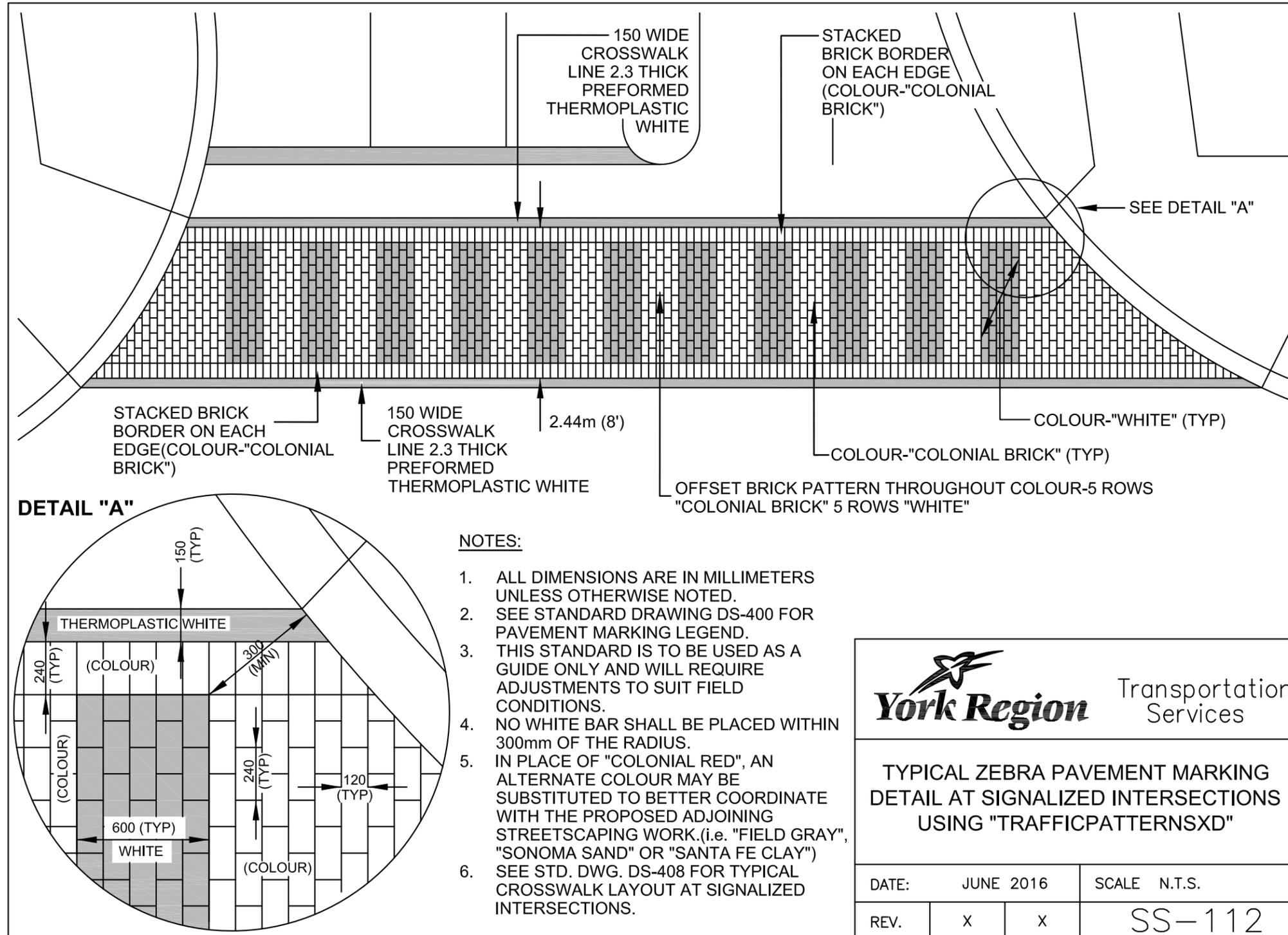


TYPICAL DETAIL FOR BIKE BOX DESIGN

DEC 2014
DATE

D-10.01

C. YORK REGION CROSSWALK DETAIL



York Region Transportation Services

TYPICAL ZEBRA PAVEMENT MARKING
DETAIL AT SIGNALIZED INTERSECTIONS
USING "TRAFFICPATTERNSXD"

DATE:	JUNE 2016	SCALE	N.T.S.
REV.	X	X	SS-112

