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October 31, 2016

**DEVELOPMENT & INFRASTRUCTURE SERVICES
PLANNING & BUILDING SERVICES
REPORT 2016-40**

TO: Committee of the Whole
SUBJECT: Yonge Street and Davis Drive Streetscape Master Plan Study
ORIGIN: Development & Infrastructure Services

RECOMMENDATIONS

THAT Development & Infrastructure Services/Planning & Building Services Report 2016-40 dated October 31, 2016 regarding the Yonge Street and Davis Drive Streetscape Master Plan Study be received and the following recommendation(s) be adopted:

- 1. THAT the Yonge Street & Davis Drive Streetscape Master Plan Study be adopted.**
- 2. AND THAT subject to future budget approvals, any future improvements to Yonge Street and Davis Drive outside of the vivaNext rapidway be carried out in accordance with the Streetscape Master Plan vision.**

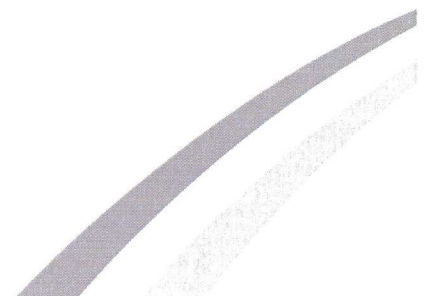
COMMENTS

The Town and Region of York have partnered to create a Streetscape Master Plan for those portions of Yonge Street and Davis Drive that are outside of the vivaNext rapidway.

In 2015 the Town and Region contracted IBI Group to prepare a Streetscape Master Plan (SMP) that would ensure a coordinated streetscape vision is achieved for those portions of Yonge Street and Davis Drive that are outside of the vivaNext rapidway (i.e. Davis Drive west of Yonge Street and east of Patterson Street, and Yonge Street north of Davis Drive and south of Savage Road).

The SMP includes a vision, master plan, implementation strategy, and estimated capital, operational, and maintenance costs.

The SMP is a complete document that starts with a vision of vibrant, green, and active corridors. Key design objectives, varied streetscape typologies, proposed hard and soft-scape materials, Low Impact Design and other context-sensitive considerations result in an overall master plan for the corridors. Finally, the plan includes an implementation strategy as well as estimated capital, operational, and maintenance costs associated with implementing the plan.



Further details are provided in the Executive Summary attached to this report as Appendix 1. The SMP is also being recommended for adoption by Regional Council on their November 3rd Committee of the Whole agenda.

The SMP design will be implemented as improvements to these portions of Yonge Street and Davis Drive are carried out by the Region of York, beginning with Yonge Street North.

The Region is currently in the design phase for improvements to Yonge Street North between Davis Drive and Green Lane, which is expected to be reconstructed in 2020/2021. The SMP project team has been working closely with the Region to ensure that the design drawings for this portion of Yonge Street are consistent with the draft document so that when the physical work begins it is done in accordance with the SMP's vision.

Similarly, the Region is currently working on improvements to the intersection of Bathurst Street and Davis Drive West, and the SMP project team has been working to ensure that the ultimate design takes into consideration the vision established in the SMP.

The Town's Development Coordination Committee and Region staff have met with developers regarding active developments along Davis Drive West to ensure that their designs will, to the extent possible, either implement the vision or accommodate the future vision at such time as Davis Drive West is urbanized.

The SMP builds on the vivaNext design and addresses the interface with the rapidway.

A key aspect of the SMP design was to recognize and build on the vivaNext rapidway design and address the interface and transition points to create a seamless public realm. Further, the Yonge Street North segment of the SMP protects for a potential future bus rapidway as identified in both Metrolinx's 25-year plan and the Region's 2016 Transportation Master Plan. The interim design will include a landscaped median which can be converted into a bus rapidway in the future.

BUSINESS PLAN AND STRATEGIC PLAN LINKAGES

The SMP supports the following branches of the Town's Strategic Plan:

Well-planned and connected: long-term strategy matched with a short-term action plan; walking and biking trails, paths and lanes

Well-equipped and managed: clear vision of the future aligned with corporate/business plans such as the Secondary Plan and the vivaNext rapidway

CONSULTATION

A core project team was established early in the process consisting of Regional and Town staff from the areas of traffic safety, road operations, capital planning, community planning, transportation planning, forestry, York Region Rapid Transit Corporation, policy and long-range planning, public works, and engineering services. Newmarket Hydro and the Lake Simcoe Region Conservation Authority were also consulted to ensure consistency with their plans and policies.

A visioning session, Public Information Centre, and a Council Workshop were also included at various points throughout the project.

HUMAN RESOURCE CONSIDERATIONS

Not applicable to this report.

BUDGET IMPACT

The following table outlines the estimated capital and annual maintenance costs (in 2016 dollars) to implement the plan, which is expected to occur over an approximate 20 year timeframe as the various segments of Yonge Street and Davis Drive are urbanized and/or improved. Regional staff advises that the estimated costs for this plan are comparable to the South Yonge Street Corridor Streetscape Master Plan in the southern part of the Region.

The Town will seek funding opportunities with the Region to cost-share the streetscape improvements.

Under the Region's Municipal Streetscape Partnership Program, the Town would seek to split the streetscape improvement costs 50/50 with the Region. As an example, the streetscaping component of the Yonge Street North project was originally budgeted for \$4.9M in accordance with the Region's "Toward Great Regional Streets" document. As shown in the table below, the streetscape improvements contemplated in the SMP amount to \$13.1M. The Town will seek to cost-share the difference (\$8.2M) with the Region, resulting in the Town's portion being approximately \$4.1M in 2016 dollars, which may be further reduced through the use of tools such as Development Charges and Section 37 Bonusing.

As per the Region's recently-adopted Transportation Master Plan update, in time (i.e. post 2019) the maintenance responsibility of boulevard elements on Regional roads will transfer to the Region.

Estimated Capital and Maintenance Cost of Streetscape Improvements

Streetscape Master Plan Segment	Capital Cost	Annual Maintenance Cost
Yonge Street North	\$13.1M	\$344K
Yonge Street South	\$ 7.5M	\$151K
Davis Drive East	\$ 9.1M	\$200K
Davis Drive West	\$ 6.8M	\$225K
Total Cost	\$36.5M	\$920K

CONTACT

For more information on this report, contact R. Nethery, Director, Planning & Building Services, ext. 2451, (rnethery@newmarket.ca).

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Assistant Director of Planning

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Director of Planning & Building Services

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Commissioner of Development & Infrastructure Services

Attachment: SMP Executive Summary

FINAL DRAFT 2016.10.17



YONGE STREET & DAVIS DRIVE STREETSCAPE MASTER PLAN

EXECUTIVE SUMMARY

INTRODUCTION

Yonge Street and Davis Drive have been identified as key locations for intensification, growth and development in the Town of Newmarket. A major transformation of these corridors is imminent, with public and private sector projects already in the works. The Streetscape Master Plan focuses on the segments of Yonge Street and Davis Drive outside of the vivaNext corridors. The Master Plan will transform the primarily car-oriented corridors into a walking, cycling and transit-oriented public realm. The Master Plan will guide streetscape development and provide recommendations to strengthen a sense of place in the Town of Newmarket centre. The plan will contribute to an atmosphere which is livable and that promotes social interaction and community engagement.

STREETSCAPE MASTER PLAN OBJECTIVES

1. Establish a vision incorporating urban design principles;
2. Develop a bold and unified streetscape vision for the Town of Newmarket that responds to the local context;
3. Create a hierarchy of spaces/streetscape typologies;
4. Provide pedestrian accessibility;
5. Develop placemaking opportunities;
6. Visually tie into vivaNext streetscape and Town of Newmarket Gateways;
7. Establish a strong wayfinding strategy.



Streetscape Gateways
Project Limits

THE VISION

The Vision for the Yonge Street & Davis Drive Streetscape Master Plan is to create Vibrant, Green & Active Streetscape.

As the Town of Newmarket transforms from its suburban past to its urbanized future, an attractive public realm will encourage people to live, work and play in these newly developed communities and public spaces. Wide sidewalks, safe bike lanes and convenient public transit will provide options for the community transportation. The new streetscape will act as a catalyst for development and will subsequently enhance the activities in the adjacent private realm.

The focus at the visioning stage was to develop a streetscape vision for Yonge Street and Davis Drive that builds upon the transformation of the public realm through a placemaking approach incorporating urban design principles that:

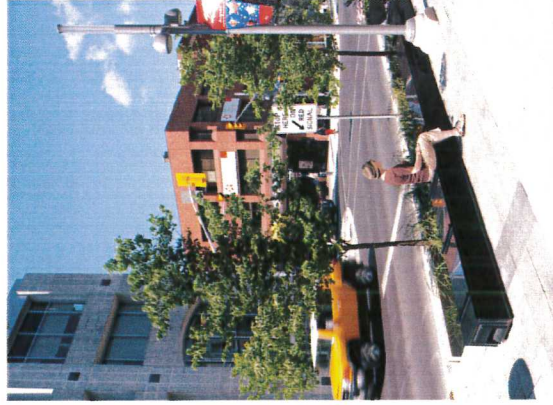
- Foster a lively and livable street;
- Inspire high quality design;
- Embrace art and culture;
- Create a climate of economic success;
- Cultivate a sustainable environment.

YONGE STREET & DAVIS DRIVE STREETScape MASTER PLAN VISION



STREETScAPE DESIGN PRINCIPLES

ARCHITECTURAL BUILT FORM, PLACEMAKING, PUBLIC ART



Architectural & Streetscape Design Interface

Built form should encourage an animated street front and contain visual interest.

Theming & Corridor Identity

Each corridor should possess a unique context sensitive identity that caters to its specific conditions.

Streetscape Transition

The streetscape should transition into adjacent streetscapes gracefully.

Screening

Landscape screening should be used to provide a visual buffer where appropriate.

Transit Stops & Coordinated Street Furniture

A cohesive design and material should be used throughout the corridors.

Outdoor Space & Public Art

High quality open spaces should aid in creating a strong sense of place.



GREEN STREETS AND ENVIRONMENTALLY PROGRESSIVE DESIGN



Environmentally Progressive Design

Strategies that reduce the urban heat island effect, reduce stormwater runoff and enhance natural features should be employed.

Street Trees

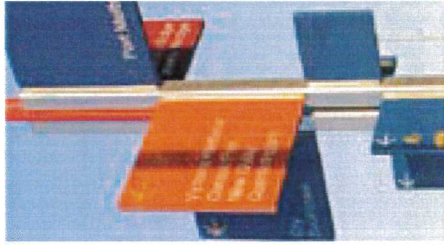
Context-appropriate street trees should be implemented to optimize the urban canopy.

Paving

Paving should be environmentally sustainable and enhance placemaking.



ACCESS AND WAYFINDING



Barrier-Free Access

Paths should be continuous, safe, unobstructed and AODA compliant.

Wayfinding

Unique and accessible wayfinding strategies should be utilized.

Pedestrian Linkages

Unobstructed pedestrian paths should connect local destinations.

Cycling Infrastructure

Context-appropriate cycling infrastructure should encourage safe transit.

Crosswalks

Crosswalks should cater to all users.

FUNDAMENTALS OF PUBLIC REALM DESIGN



Multi-Modal

Balance the needs of all users: pedestrians, cyclists, transit users and motorists.

Safety

Active transportation infrastructure should maximize safety and security.

Utilities

Minimize the visual impact of utilities through burial and screening techniques

Lighting

Coordinated unique lighting should enhance placemaking.

IMPLEMENTATION AND MAINTENANCE*



Policy Updates

Development Review

Public Utilities Coordination Committee

Town of Newmarket Public Art Policy and Plan

Collaboration between York Region and Town of Newmarket

Capital Construction

Funding Strategies

* Refer to page 20 for further detail

STREETScAPE MASTER PLAN

The plan provides a context-sensitive approach that supports mixed-use environments with attractive streets, high quality urban design and a distinct sense of place. The Yonge Street & Davis Drive Streetscape Master Plan design achieves the following design objectives:

- Create a Complete Street that caters to all users, not just motorists
- Improve community identity and pride
- Provide safe accessible pedestrian sidewalks
- Design safe and continuous cycling infrastructure
- Expand the urban forest
- Implement Low Impact Development (LID) sustainable strategies within the public realm

Boulevard Cycle Tracks in Urban Areas



Street Trees Define the Boulevard Edge



Multi-Use Path in Low Density Areas



Corridors Accessible for All Users



Landscape Buffers the Multi-Use Path



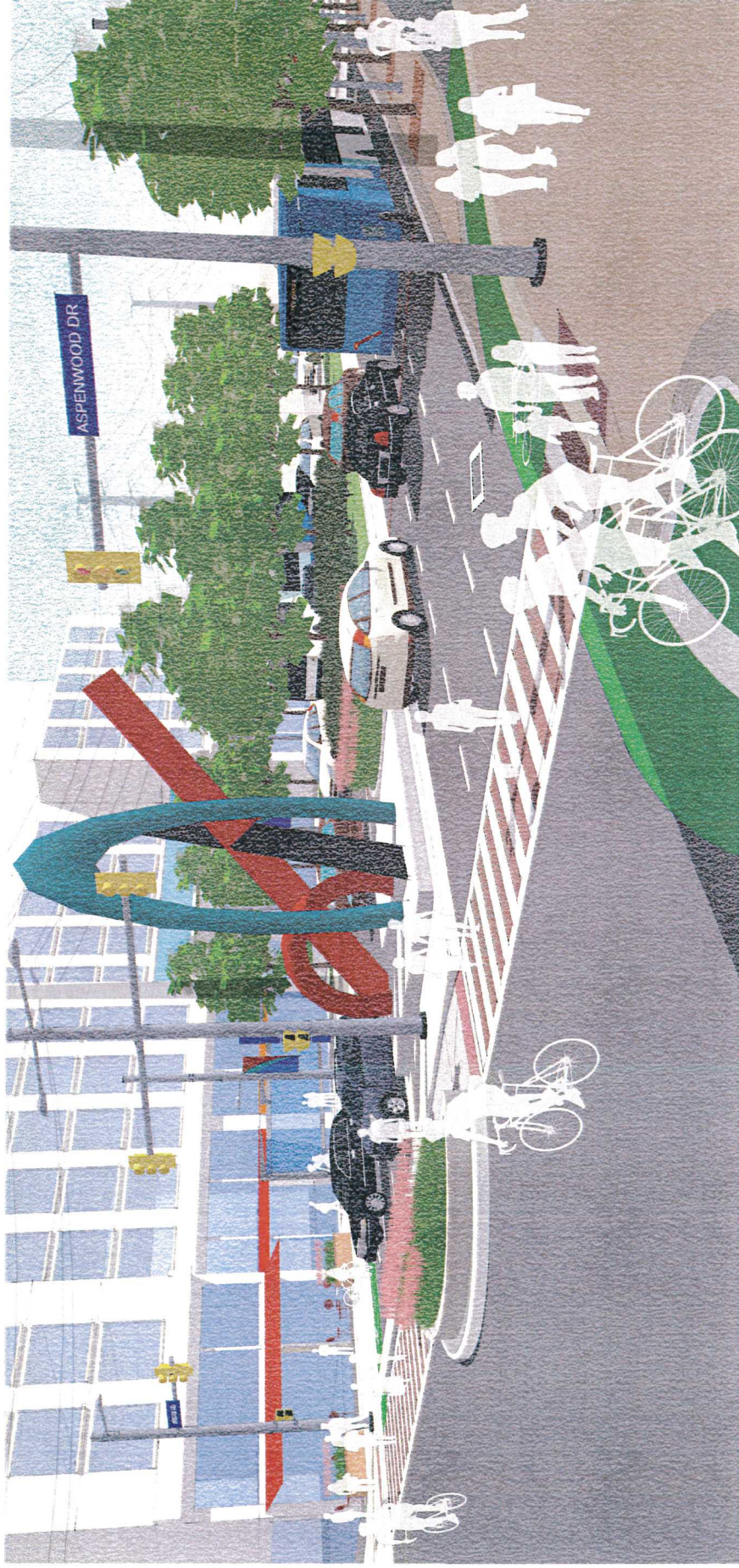
Animated Public Realm





Yonge Street North STREETSCAPE

The **Yonge Urban Streetscape Typology** is applicable for the length of the Yonge Street North corridor. Characterized by distinctive urban placemaking elements such as cycle tracks, street trees in grates and public art, this design responds to the urbanized future of the Town of Newmarket.

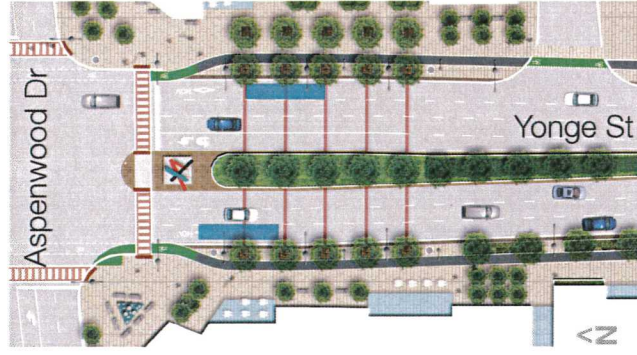


Perspective rendering of the Yonge Street North Gateway at Aspenwood Drive

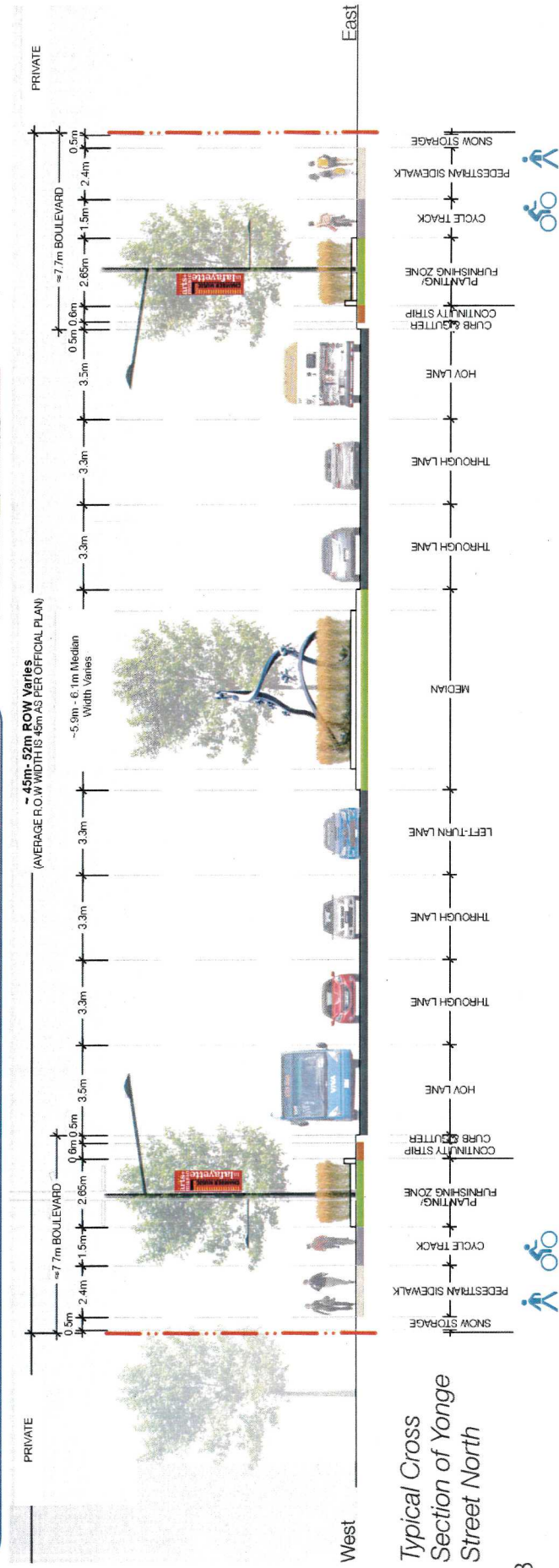
URBAN STREETSCAPE TYPOLOGY

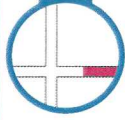
KEY FEATURES

- Interim condition which protects the median for the future vivaNext BRT
- Planted median with public art aids in establishing a strong sense of place
- Street trees with understorey planting
- Pedestrian amenities including benches, trash receptacles and lighting
- Raised cycle track promotes active transportation
- Clear pedestrian routes
- Right Size geometry:
 - 3.3 metre through lane
 - 3.5 metre curbside lane
 - 3.3 metre turn lane
 - 2.4 metre sidewalk
 - 1.5 metre bike lane



*Plan of the Yonge
Street North Gateway
at Aspenwood Drive*

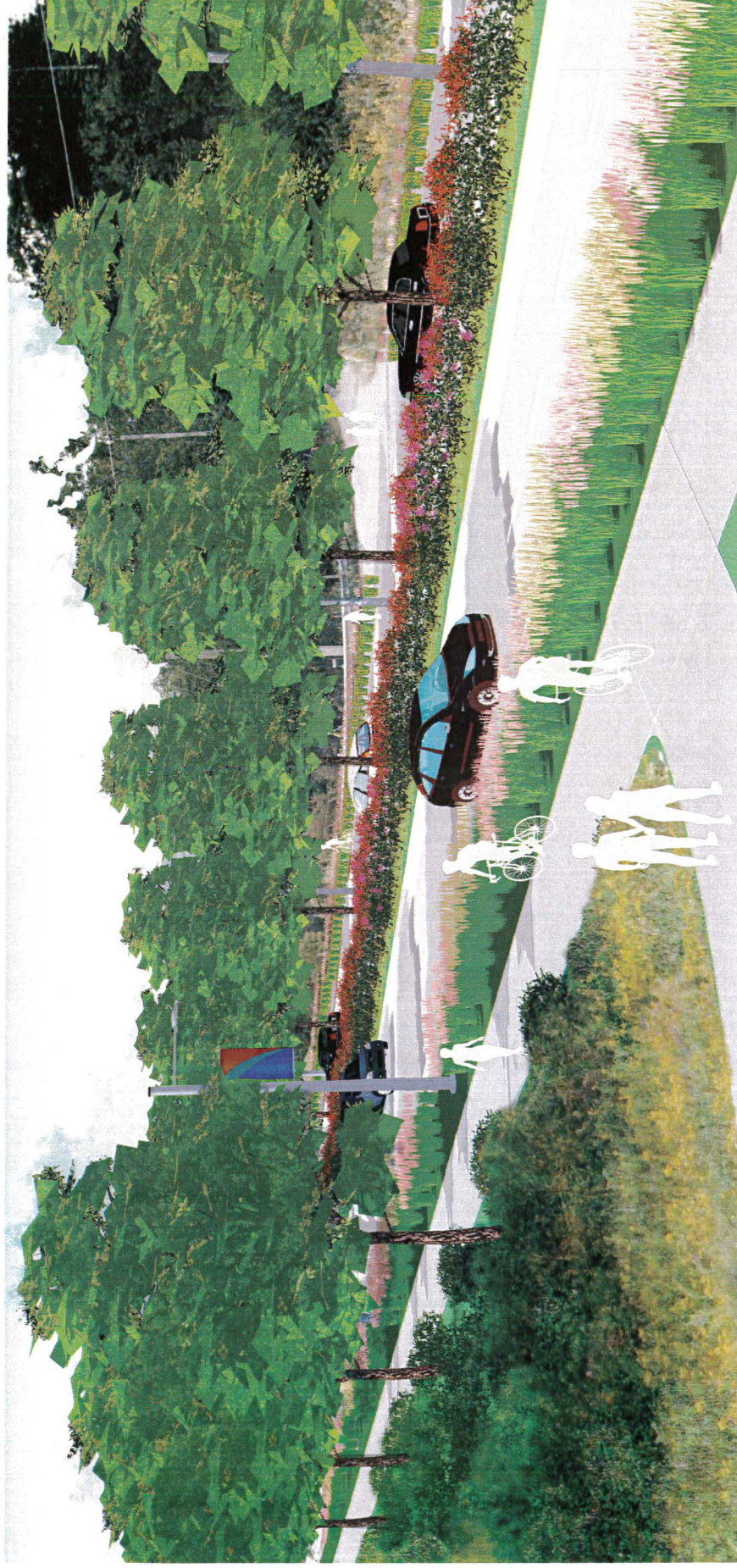




Yonge Street South

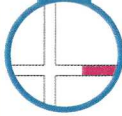
STREETSCAPE

The **Green Streetscape Typology** is applicable for the length of the Yonge Street South corridor. The corridor is characterized by enhanced green infrastructure such as street trees with understorey planting flanking a multi-use path that connects into the local trail system.



Perspective rendering of the Yonge Street South at the Nokiidaa Trail

GREEN STREETScape TYPOLOGY

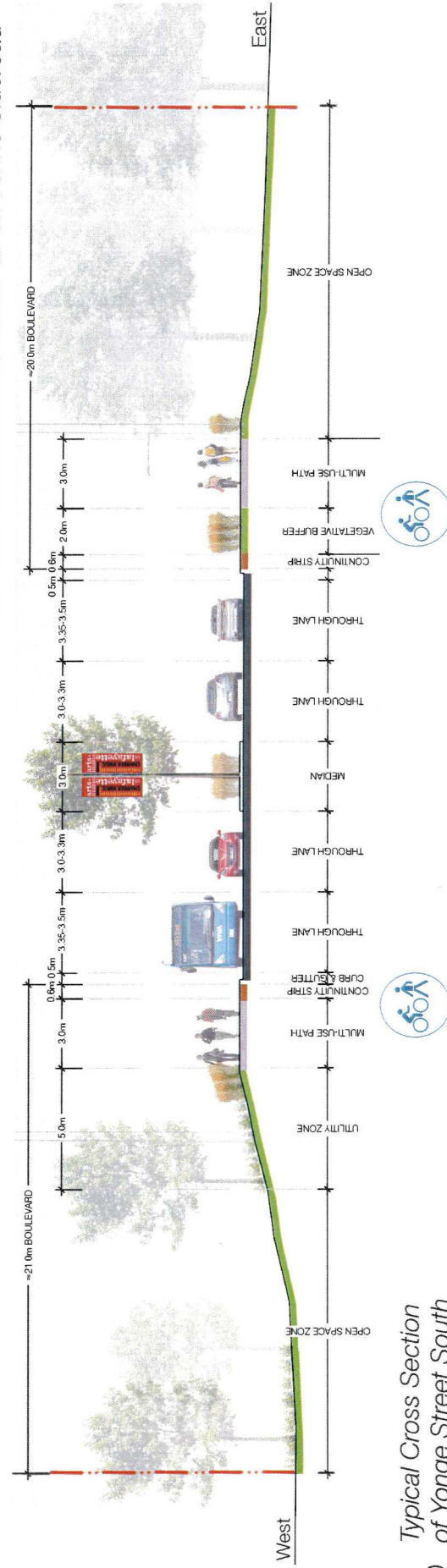


KEY FEATURES

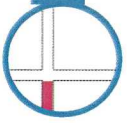
- Street trees in softscape with understorey planting
- Pedestrian amenities including benches, trash receptacles and transit shelters
- Planted median with shrubs and trees
- Two through lanes in either direction
- Multi-use path
- Landscape buffer segregates cyclists and pedestrians using the multi-use path from vehicular traffic
- Banners provide visual interest and a space for conveying information about Town events
- Signature lighting provides illumination for pedestrians, cyclists and vehicles
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP



Plan of the Yonge
Street South Gateway
at St. Johns Sideroad



Typical Cross Section
10 of Yonge Street South



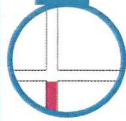
Davis Drive West STREETSCAPE

Davis Drive West utilizes two streetscape typologies in order to respond to the surrounding context: Green and Davis Urban Streetscape Typology.

The rendering illustrates the gateway at Bathurst Street and Davis Drive, which employs the Green Streetscape typology with canopy trees planted in a bed of ornamental grasses.



Perspective rendering of the Davis Drive West Gateway at Bathurst Street



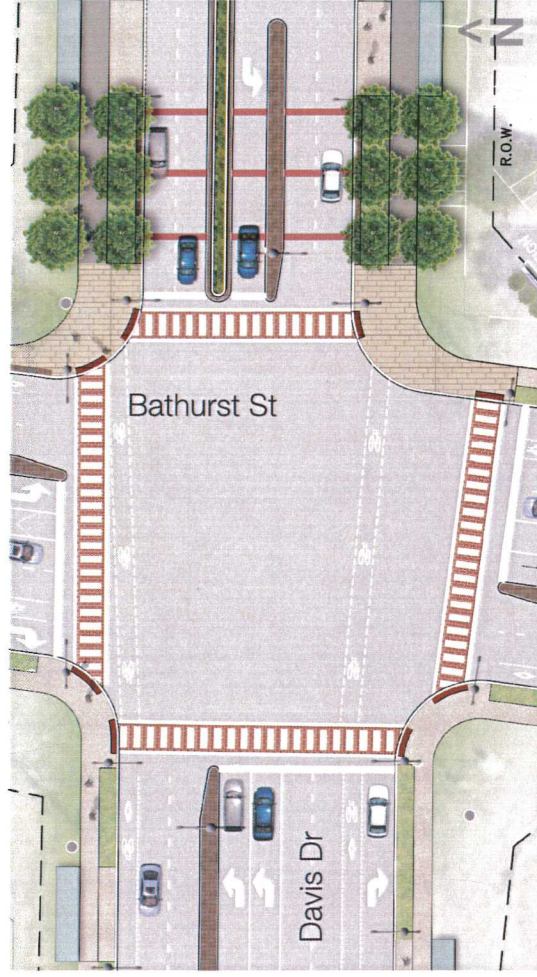
Davis Drive West

GREEN STREETScape TYPOLOGY (BATHURST STREET TO WEST OF EAGLE STREET)

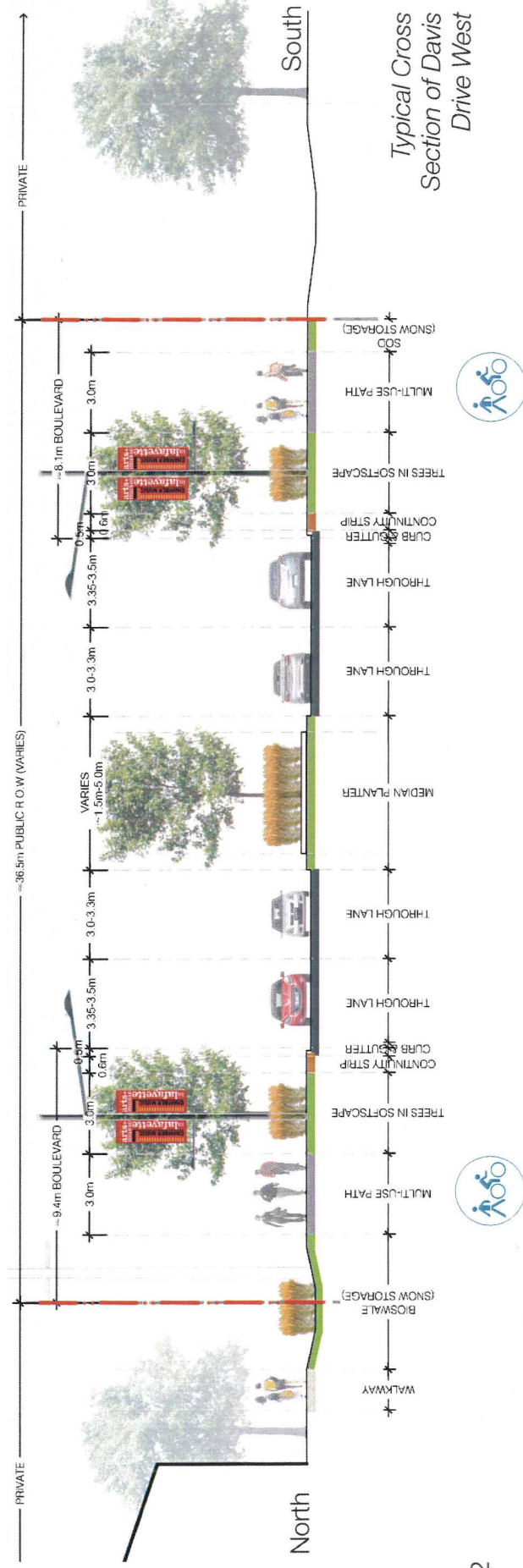
The **Green Streetscape Typology** includes a multi-use path with a landscape buffer to serve the surrounding low-density residential neighbourhoods.

KEY FEATURES

- Multi-use path with landscaped buffer encourages active transportation
- Street trees in softscape with understorey planting
- Pedestrian amenities including benches, trash receptacles and transit shelters
- Planted median minimizes the scale of the expansive ROW
- Two through lanes in either direction
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP



Plan of the Davis Drive West Gateway at Bathurst Street and Davis Drive



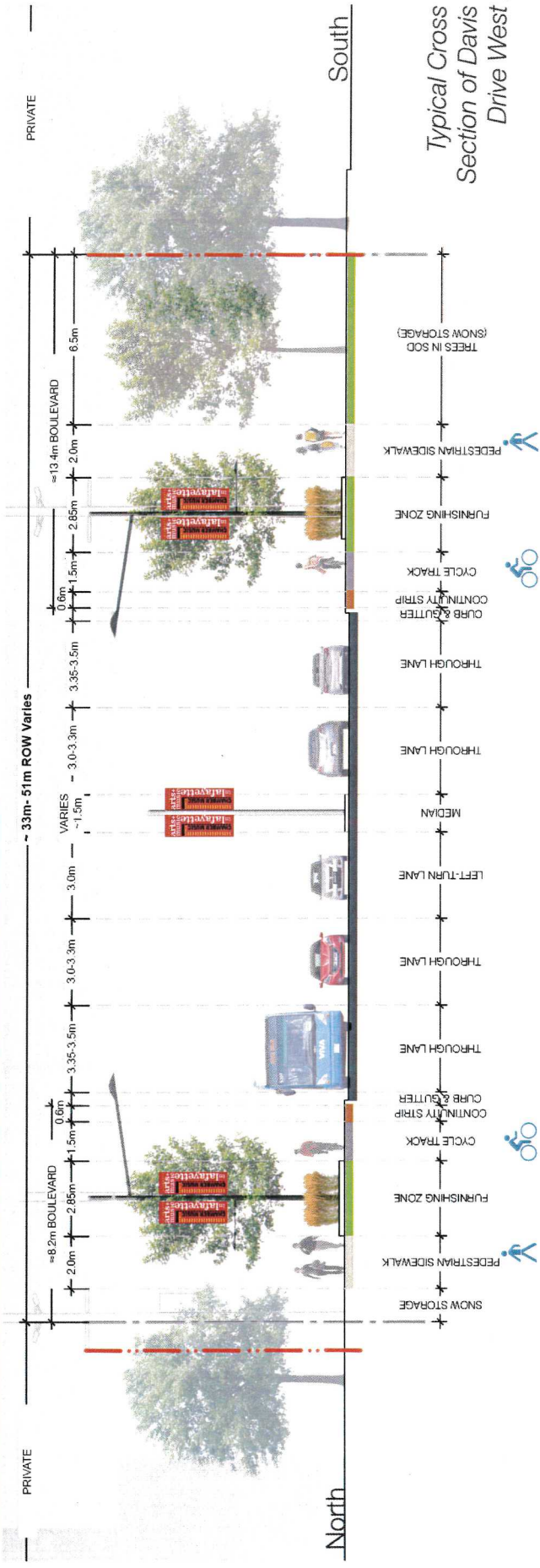
DAVIS URBAN STREETSCAPE TYPOLOGY (WEST OF EAGLE STREET TO YONGE STREET)

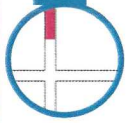
The **Davis Urban Streetscape Typology** contains a pedestrian sidewalk and a raised cycle track, separated by a planting/ furnishing zone.

KEY FEATURES

- Street trees in grates and planters with understorey planting
- Cycle track with a landscape buffer from pedestrian sidewalk minimizes conflict
- Cycle track extends from Yonge Street to west of Eagle Street, to the GO Bus Terminal driveway
- Public realm transitions seamlessly with private realm
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 2.0 metre sidewalk
 - 1.5 metre bike lane with a 0.6 metre buffer

*Plan of a signalized intersection along the Davis
Urban segment of Davis Drive West*

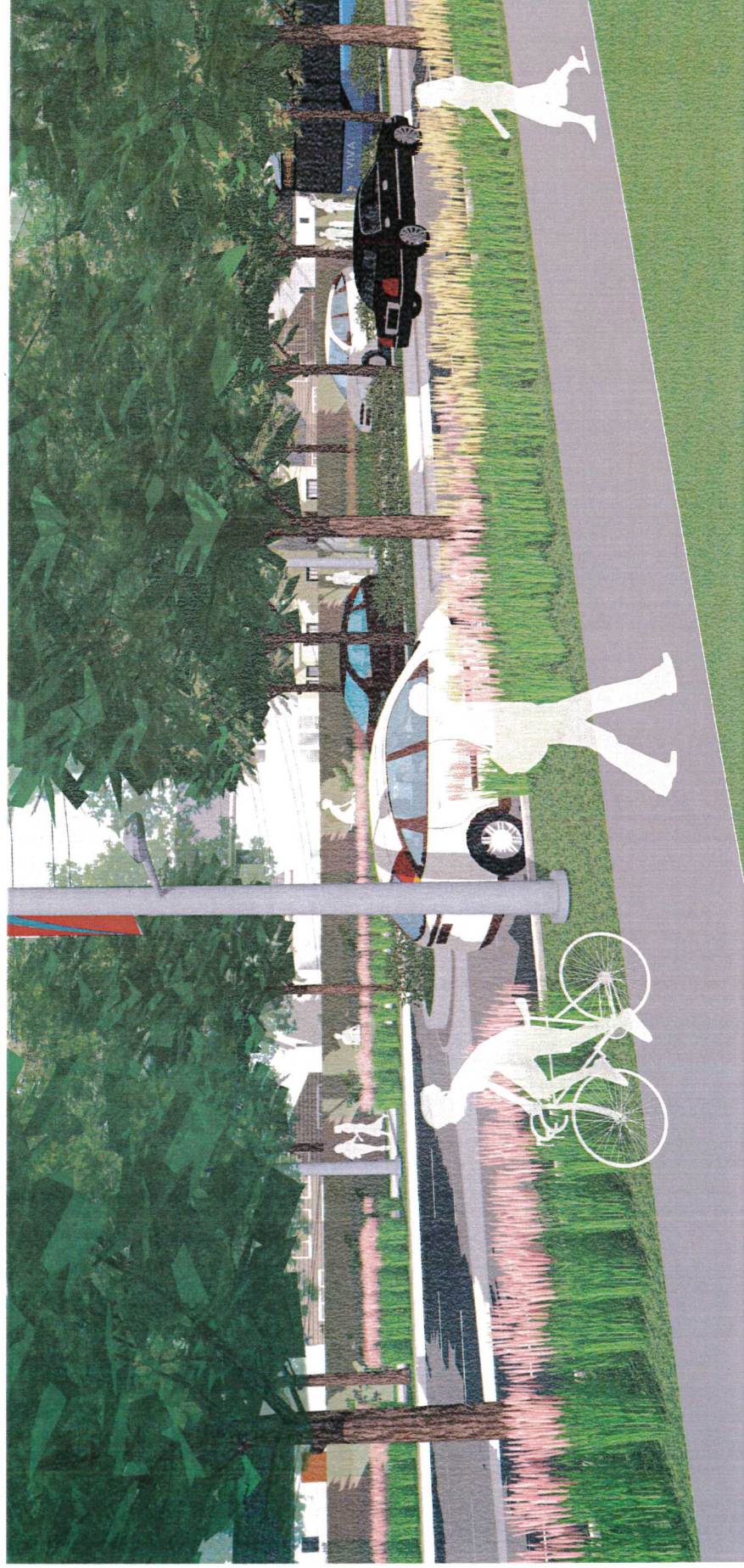




Davis Drive East STREETScape

Davis Drive East utilizes two streetscape typologies in order to respond to the surrounding context: Green and Davis Urban Streetscape Typology.

The rendering illustrates the Green Streetscape typology with canopy trees planted in a bed of ornamental grasses. The plant material provides a green buffer for pedestrians and cyclists from roadway traffic



Perspective rendering of the Davis Drive East Green in a low density residential neighbourhood



Davis Drive East

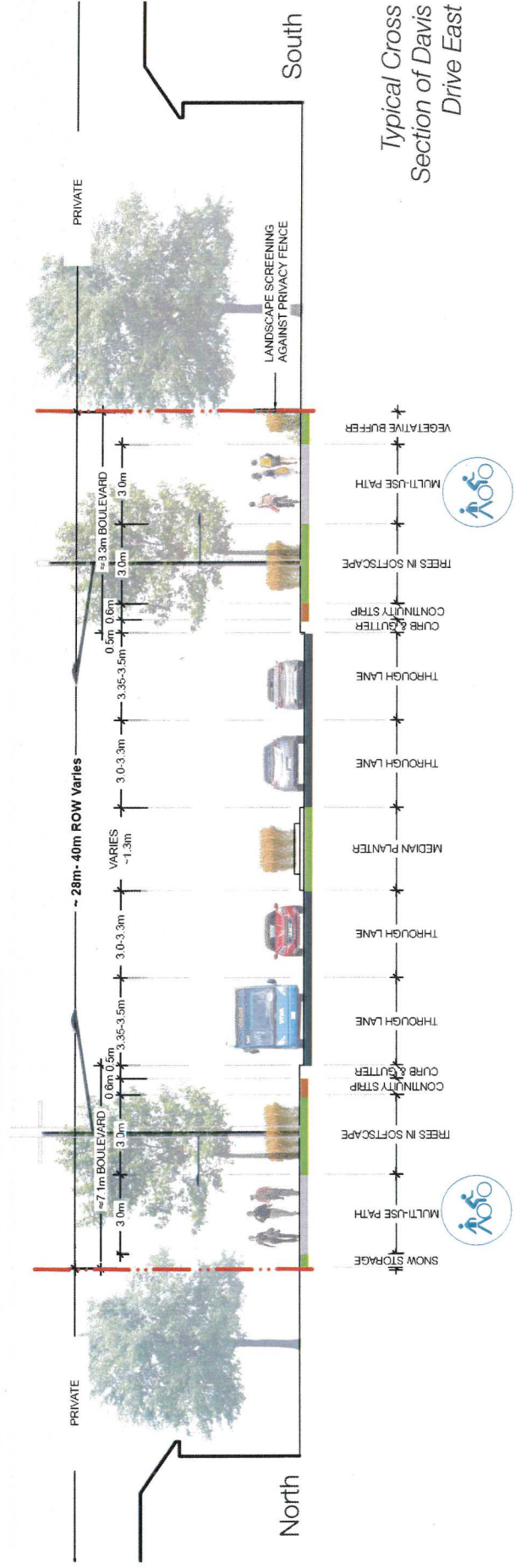
GREEN STREETSCAPE TYPOLOGY (PATTERSON STREET TO LESLIE STREET)

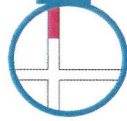
The **Green Streetscape Typology** contains a multi-use path with a landscape buffer to serve the surrounding low-density residential neighbourhoods.

KEY FEATURES

- Multi-use path for pedestrians and cyclists with vegetated buffer from vehicular traffic
- Street trees in softscape with understorey planting
- Landscape screening of varied privacy fences creates visual cohesion along rear lot residential properties
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP

Plan of a signalized intersection along the Green segment of Davis Drive East





Davis Drive East

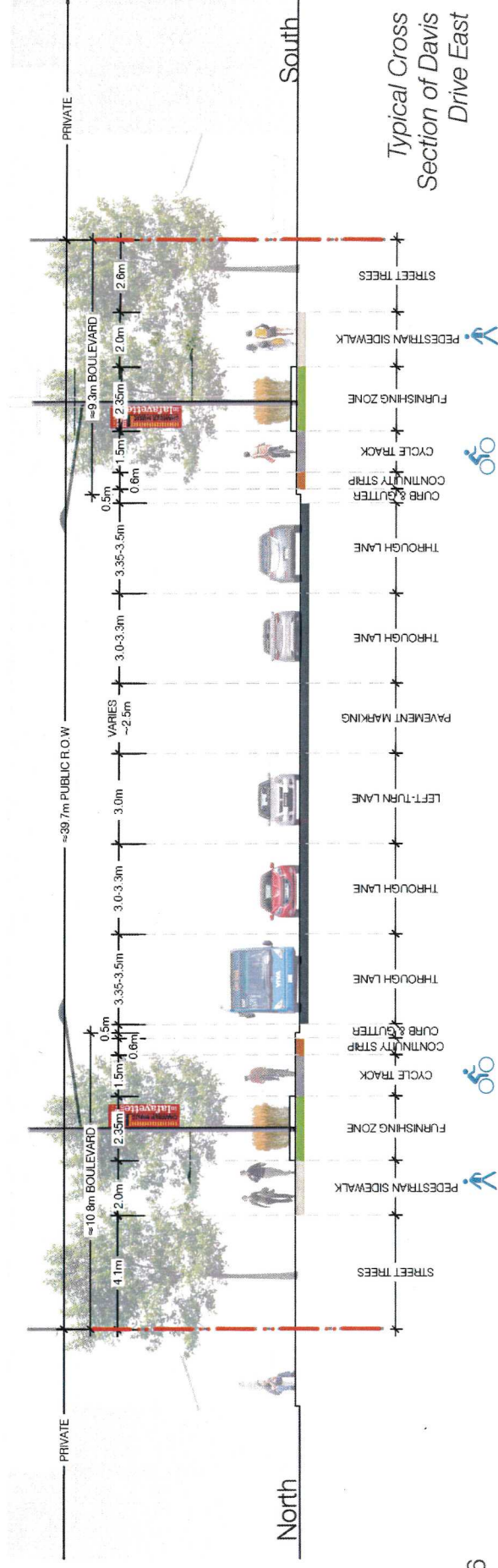
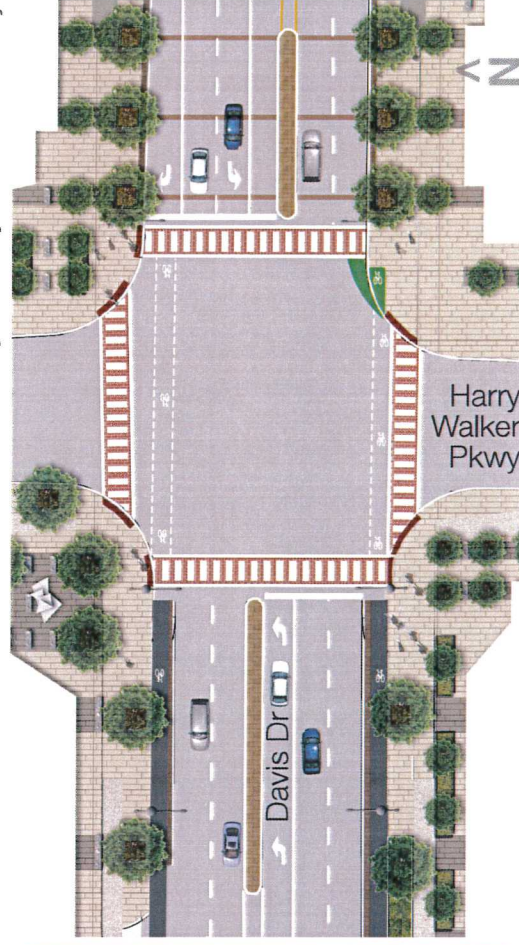
DAVIS URBAN STREETScape TYPOLOGY (LESLIE STREET TO TOWN BOUNDARY)

The **Davis Urban Streetscape Typology** contains a pedestrian sidewalk and a raised cycle track, separated by a planting/ furnishing zone.

KEY FEATURES

- Curbside raised cycle track with buffer
- Street trees in grates and planters with understorey planting
- Furnishing/ planting zone buffer between cycle track and pedestrian sidewalk
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 2.0 metre sidewalk
 - 1.5 metre bike lane with a 0.6 metre buffer

Plan of the Davis Drive East Gateway at Harry Walker Parkway



MATERIAL PALETTE

The Streetscape Master Plan provides a cohesive material palette that promotes Low Impact Development through such elements as permeable hardscape surfaces and context appropriate planting.



Lighting image courtesy of Technilum

Streetscape furnishing images courtesy of KDA

ORDER OF MAGNITUDE CAPITAL COSTS (IN 2016 CANADIAN DOLLARS) BY STREETSCAPE CORRIDOR

Order of Magnitude Capital Costs by streetscape corridor:

STREETSCAPE CORRIDOR	LENGTH (KM)	AVERAGE COST/ KM	CORRIDOR COST
Yonge Street North	1.8	\$ 7,368,000	\$ 13,042,000
Yonge Street South	1.7	\$ 4,353,000	\$ 7,488,000
Davis Drive West	1.9	\$ 4,728,000	\$ 9,125,000
Davis Drive East	2.5	\$ 4,737,000	\$ 6,822,000

TOTAL COST: \$ 36,477,000

The Order of Magnitude Costs includes:

- Material and installation of boulevard and median streetscape elements
- Gateway elements
- Street lighting
- Streetscape furniture including benches, trash receptacles and bike parking

The Order of Magnitude Costs does **not** include:

- Roadway elements
- Utility relocation*
- Traffic signals
- Bus shelters

* The Order of Magnitude cost for burying hydro is approximately \$ 3,500/ linear metre or \$ 3.5 million/ kilometre (not including the relocation of other utilities).

The Order of Magnitude cost for the relocation of a hydro pole is approximately \$30,000 each.

CAPITAL COSTS COMPARISON

The Capital Costs for the Yonge Street & Davis Drive Streetscape Master Plan compared with other streetscape Capital Costs within York Region.

STREETSCAPE	AVERAGE COST (MILLION) / KM
Yonge Street & Davis Drive Streetscape Master Plan	\$ 5.3 M
South Yonge Street Corridor Streetscape Master Plan	\$ 8.2 M
vivaNext Streetscape	\$ 6.6 M

ORDER OF MAGNITUDE MAINTENANCE AND OPERATIONS COSTS (IN 2016 CANADIAN DOLLARS) BY STREETSCAPE CORRIDOR

Order of Magnitude Maintenance and Operations Capital Costs for each streetscape corridor:

STREETSCAPE CORRIDOR	LENGTH (KM)	AVERAGE COST/ KM/ YEAR	CORRIDOR COST/ YEAR
Yonge Street North	1.8	\$ 194,000	\$ 344,000
Yonge Street South	1.7	\$ 88,000	\$ 151,000
Davis Drive West	1.9	\$ 144,000	\$ 225,000
Davis Drive East	2.5	\$ 143,000	\$ 200,000

TOTAL COST: \$ 920,000

The Order of Magnitude Maintenance and Operations Costs assumes four season maintenance of the boulevard and median including:

- Cleaning and wet vacuum sweeping of boulevard hardscape surfaces
- Routine snow removal of boulevard surfaces
- Irrigation of boulevard and median planting
- Trees and shrub maintenance
- Repair of special features (planters, banners, gateway banding, etc.)
- Crosswalk pavement markings

The Order of Magnitude Maintenance and Operations Costs does **not** include:

- Snow removal in the roadway
- Maintenance of traffic signals and street lights
- Roadway maintenance and repair

IMPLEMENTATION

Success of this Master Plan requires commitment by key decision makers for its design, implementation and on-going maintenance. Public realm improvements create vibrant walkable communities to encourage people to want to live, work and play in the Town of Newmarket. The Yonge Street & Davis Drive Streetscape Master Plan Vision and initiatives need to be included within Capital project budgets that includes long-term maintenance.

This requires a coordinated approach between York Region, the Town of Newmarket and stakeholders including vivaNext, YRT, Newmarket Hydro, utilities, Ministry of Transportation of Ontario (MTO), Lake Simcoe Region Conservation Authority (LSRCA), local businesses, developers as well as private land owners.

Key points for implementation include the following:

POLICY

Strategy

- Official Plan and Zoning By-law Updates
- Development Charges By-law Updates

Initiatives

- Tax Increment Funding
- Federal Gas Tax Fund

Design/ Construction

- Special Area Development Charges By-laws

DEVELOPMENT

Strategy

- Private developers shall be required to contribute to enhancement of the public realm and streetscape.



Visioning Workshop

UTILITIES

Strategy

- Buried hydro poles allow a smaller lot line setback which ultimately increase the developable area and can create a return on investment to developers.
- A Public Utilities Coordinating Committee (PUCC) can establish long term strategic coordination of utility locations including hydro, gas, Bell, and existing utility re-locations.

Initiatives

- York Region and the Town of Newmarket may consider developing a Special Policy Area By-law outlining hydro installation standards for new areas of intensification on Yonge Street and Davis Drive through a cost-sharing plan with Newmarket Hydro and private developers.

Design/Construction

- In the preliminary engineering stage, it is important to identify and protect an ideal duct bank location along the corridor for the purposes of burying hydro. The proposed duct bank location should be situated to minimize disruption to the executed streetscape elements in the future as the corridor intensifies and funding becomes available to underground electrical services.

PUBLIC ART

Strategy

- The Town has a Public Art Policy and Plan that will guide the installation of public art along the Yonge Street and Davis Drive corridors.

Initiatives

- Section 37 of the Planning Act may be used as an implementation strategy for public art.

Design/Construction

- Detailed design of the public realm should provide public art of civic scale in highly visible locations along the Yonge Street and Davis Drive corridors.

COLLABORATION

It is imperative the various departmental decision makers work closely to ensure the design, implementation, and maintenance of capital and redevelopment projects along the Yonge and Davis corridors are being met in accordance with the Yonge Street & Davis Drive Streetscape Master Plan.

CAPITAL CONSTRUCTION

There are two Capital projects underway that currently correspond with this streetscape study:

- Yonge Street (Davis Drive to Green Lane)
- Bathurst Street and Davis Drive intersection improvements

The implementation of the Yonge Street & Davis Drive Streetscape Master Plan will be integrated with Yonge Street North and Bathurst Street Capital Projects with support from York Region Municipal Streetscape Partnership Program (MSPP) in order to optimize construction scheduling and costs.

FUNDING STRATEGIES

Funding is an integral aspect to the realization of this Master Plan. The Streetscape will likely employ a number of different funding sources including some or all of the following:

- York Region Municipal Streetscape Partnership Program (MSPP)
- Public Private Partnerships (P3)
- Development Charges (DC)
- Section 37- Ontario Planning Act Site Plan Approval
- Business Improvement Area Funding
- Ministry of Transportation of Ontario
- Private sector sponsors
- Lake Simcoe Region Conservation Authority

