FINAL: 2016.11.27



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YONGE STREET & DAVIS DRIVE STREETSCAPE MASTER PLAN

PHASE 1 REPORT: RESEARCH, SITE INVENTORY, AND SWOT ANALYSIS

FINAL

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1.0 Executive Summary

The Yonge Street & Davis Drive Streetscape Master Plan will guide streetscape development and provide recommendations to strengthen and reinforce Newmarket Centre and its surrounding community, contributing to a unique atmosphere with a strong sense of place that is livable and promotes social interaction and community engagement.

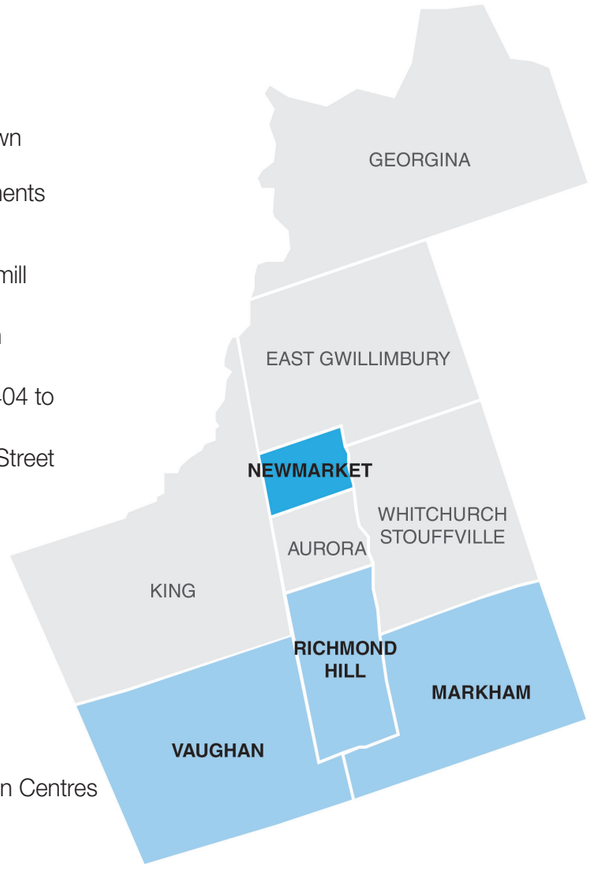
1.1 Project Introduction

Within the Town of Newmarket, the Yonge Street and Davis Drive corridors have been identified as key locations for intensification, growth and development. With public and private sector projects already in the works, a major transformation of these corridors is imminent. In response, the development of the Yonge Street & Davis Drive Streetscape Master Plan study will define the key design principles and establish modifications to the streetscape image from a primarily car-oriented community to a walking, cycling and transit-oriented public realm, with enhanced public amenities and contextually informed public-private interface. The Yonge Street & Davis Drive Streetscape Master Plan will guide streetscape development and provide recommendations to strengthen and reinforce Newmarket Centre and its surrounding community, contributing to a unique atmosphere with a strong sense of place that is livable and promotes social interaction and community engagement.

1.2 Physical Context

Located entirely within the boundaries of the Town of Newmarket, the Yonge Street & Davis Drive Streetscape Master Plan includes four key segments of Yonge Street and Davis Drive.

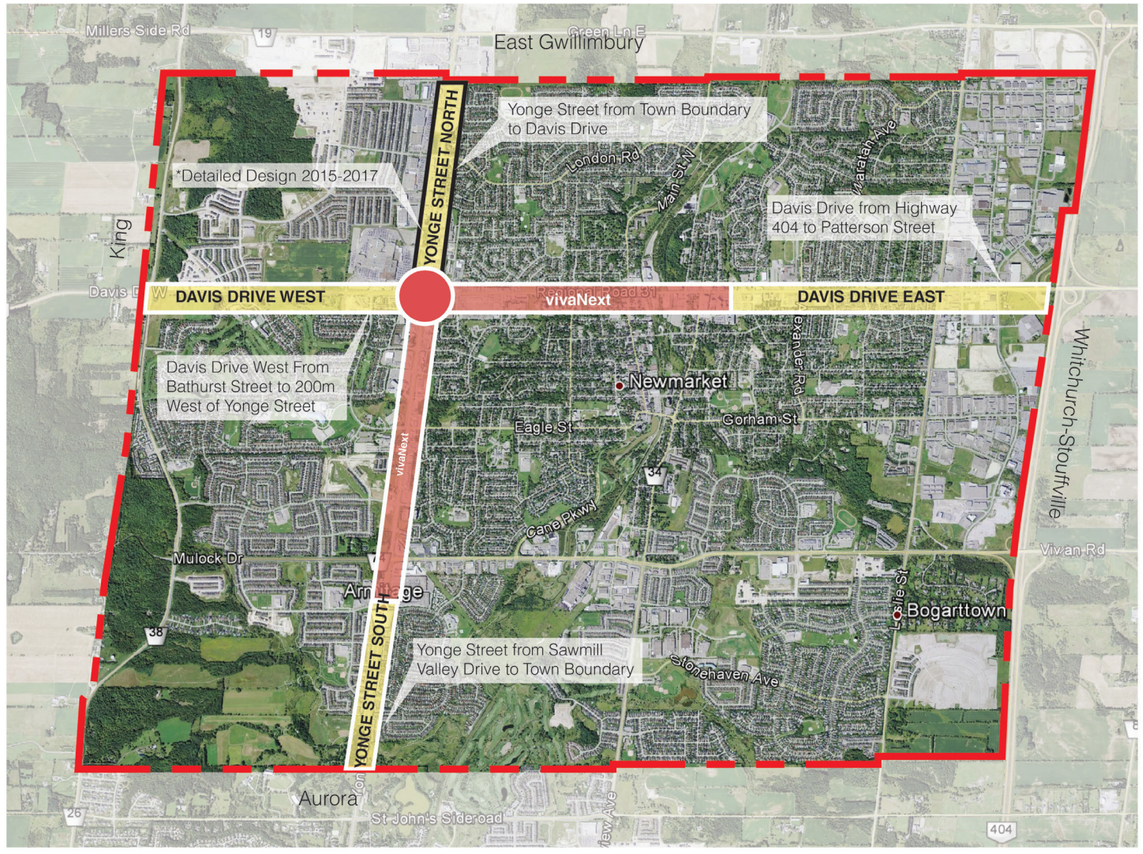
- **Yonge Street South** – Yonge Street from Sawmill Valley Drive to Town boundary
- **Yonge Street North** – Yonge Street from Town boundary to Davis Drive
- **Davis Drive East** – Davis Drive from Highway 404 to Patterson Street
- **Davis Drive West** – Davis Drive from Bathurst Street to 200m West of Yonge Street



York Region's Four Urban Centres

1.3 Project Scope

The Yonge Street and Davis Drive corridors have been identified within both the Provincial Places to Grow Act and York Region's Official Plan as locations that will see continued growth, urbanization and intensified development within the next five to 10 years. The Yonge Street & Davis Drive Streetscape Master Plan provides a vision and recommendations to four key segments outside of the vivaNext rapidway that will help to determine the look and feel of York Region for decades to come. The scope of work includes establishing a project vision, layout, interface with the vivaNext BRT streetscape design, and detailed specifications for the implementation of a coordinated and high quality public and private streetscape. The Master Plan will include a clearly defined understanding of the maintenance responsibilities and costs for the streetscape as well as strategies to secure funds for future years of maintenance.



Streetscape Master Plan Project Segments

1.4 Site Inventory Summary

Yonge Street North



Yonge Street North, bounded by the Town boundary to the north and 200 metres north of Davis Drive on the south, is a high volume arterial located within the commercial core of the Town of Newmarket. The street carries a significant amount of traffic at a design speed of 100km/h. This stretch of roadway has no bike lanes and the existing pedestrian realm lacks pedestrian amenities and character.

Key existing characteristics of Yonge Street North include:

- Wide ROW and paved area (ranging from 39.5 metres – 49.1 metres);
- Streetscape character is predominantly large big-box stores with significant setback from Yonge Street;
- Numerous large asphalt parking lots front Yonge Street;
- Frequent consolidated driveways due to large lots;
- Open ditches adjacent to roadway and sidewalks;
- Significant grade changes at some properties;
- Presence of utilities poles and above grade utilities.

Yonge Street South



Bounded by Sawmill Valley Drive on the north and the Town boundary to the south, the Yonge Street South section of this study is more suburban in character and is predominantly low density residential. The street carries significant amounts of traffic, but mostly as a thoroughfare through the area. This stretch of roadway does not have any existing bike lanes and minimal pedestrian amenities.

Key existing characteristics of Yonge Street South include:

- Wide ROW (ranging from 44.5 metres – 59.1 metres);
- Streetscape character is predominantly low density residential;
- Above grade utility poles and utility boxes;
- Rural cross section south of Joe Persechini Drive;
- Non-continuous sidewalk on west side of street.

Davis Drive West

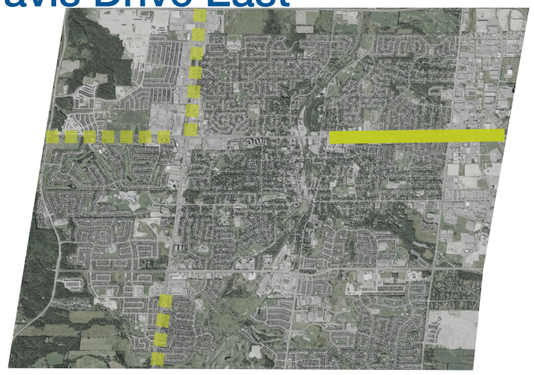


Davis Drive West, bound by Bathurst Street on the west and 200 metres west of Yonge Street on the east, has a varied streetscape character with predominantly commercial developments from Yonge Street to Eagle Street and a more rural cross section from Eagle Street to Bathurst Street. Davis Drive West carries a significant amount of passing traffic, with the intersection of Yonge Street and Davis Drive noted as a key intersection and urban centre of the Town of Newmarket. There is a continuous sidewalk on the south of the street for the majority of the length and no existing bike lanes. Most of the commercial development is focused towards Yonge Street, with a GO Transit hub at Eagle Street. Low to medium density residential is slated on both sides of Davis Drive with the proposed Sundial and Glenway subdivisions. In addition, this portion of Davis Drive coincides with the future Town of Newmarket Gateway at Bathurst Street, as well as the vivaNext rapidway.

Key existing characteristics of Davis Drive West include:

- Wide ROW (ranging from 33.5 metres – 51 metres);
- Varied street character with higher commercial density to the east and more rural, low density residential to the west;
- Non-continuous sidewalk along the north side of the street;
- The average distance between existing signalized intersections is approximately 720 linear metres;
- The average distance between transit stops is approximately 1150 linear metres.

Davis Drive East



Davis Drive East, bound by Patterson Street on the west and Highway 404 on the east, has a varied and inconsistent street character with one section heavily dominated by a commercial strip plaza development and medical facilities in the east. A majority of the streetscape is dominated by residential rear lots. The section of Davis Drive has continuous sidewalks provided along both sides for the entire length as well as an existing bicycle facilities (on-road shared) for a majority of length. Although sidewalks and cycling facilities currently exist, there is a lack of amenities resulting in a poor pedestrian environment and a cluttered public realm. In addition, there are frequent driveways, particularly along the north side of Davis Drive, interrupting both traffic and pedestrian flow. This section of Davis Drive transitions into to the vivaNext rapidway near Patterson Street.

Key existing characteristics of Davis Drive East include:

- Varied street character with a mix of commercial as well as low density residential;
- Above ground utilities visible;
- Utility poles are dominant in the streetscape;
- Significant grade changes near Leslie Street and Davis Drive on southeast quadrant.

1.5 Project Objectives

Great streets are far more than the individual roadways, sidewalks or public spaces they encompass. The most successful streetscapes are created when a creative and context sensitive design and scale is thoughtfully applied to the relationships between buildings, streets, sidewalks, trails, gateways, parks and open space which make up the public realm. Successful street design is intrinsically intertwined with the needs, wants, and movement of daily community life and plays a key role in determining how a Region or Town looks, feels and functions. By offering pedestrian friendly environments, safe bike lanes, wide boulevards, attractive paving, good lighting, shade trees, amenities such as comfortable site furnishings and generously planted landscaped areas, pedestrians, transit users, cyclists and drivers will know that they are truly welcome in the public realm within York Region and the Town of Newmarket. That look and feel must be one that provides a memorable and spacious place for pedestrians, cyclists and transit riders, while also providing reasonable mobility for passenger cars and commercial vehicles. To that end, the Yonge Street & Davis Drive Streetscape Master Plan design objectives are as follows:

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

1.6 Study Tasks and Phases

The work plan developed for the Yonge Street & Davis Drive Streetscape Master Plan breaks down the scope of work into five distinct phases:

Phase 1 – Research, Site Inventory and Analysis
Phase 2 – Vision Statement, Key Design Principles and Objectives
Phase 3 – Streetscape Master Plan
Phase 4 – Detailed Design Guidelines and Standards
Phase 5 – Implementation Strategy and Maintenance Capital Costs

The Phase 1 Report is the first step in developing the Yonge Street & Davis Drive Streetscape Master Plan.

1.7 Objectives of Phase 1 Report

The purpose of the Phase 1 Report is to undertake an extensive review and analysis of all study area background materials to ensure that the planning process is informed by a comprehensive understanding of York Region's and the Town of Newmarket's issues and opportunities. A significant amount of policy, planning, public realm development and infrastructure works has already been completed or is in the process of being implemented at the Provincial, Regional and municipal level. By reviewing and assessing relevant policy and planning documents, the planning effort will be consistent with community, Town and Regional policy and framework directives. This report will outline the key aspects of each report which will inform the Yonge Street & Davis Drive Streetscape Master Plan.

The report will outline the approach to pedestrian and active transportation oriented development in York Region and Town of Newmarket by identifying key policy and planning documents which have a direct impact on the Yonge Street & Davis Drive Streetscape Master Plan and how the identified recommendations are both relevant and support the overall objectives of this project. This review leads to a comprehensive analysis of Strengths, Weakness, Opportunities and Threats (SWOT) which addresses the four key sections within the scope of work: Yonge Street North, Yonge Street South, Davis Drive East and Davis Drive West.

1.8 Summary of Key Research Issues

The information and initiatives outlined in the reports studied will inform the Yonge Street & Davis Drive Streetscape Master Plan. The key issues discussed in these reports are as follows:

- Context Sensitive Growth Management: Development should be informed by the current context and future development of the area. The Streetscape Master Plan should be driven by neighbourhood demographics, land use, current and future developments, intensification and street typologies.
- Effective and Sustainable Transportation: Safe and effective mobility within the Town of Newmarket and with adjacent areas is a high priority. Multiple modes of transportation should be accommodated, with a focus on transit and active forms of transportation.
- Placemaking: The Town of Newmaket should be an identifiable, easy to navigate town with a strong sense of place. Neighbourhoods should have a clear identity reflective in the streetscape. A reduction of visible utilities would aid this initiative.
- Accessibility: Streetscapes must be Accessibility for Ontarians with Disability Act (AODA) compliant in order to be accessible for the entire population, including a growing senior population.

2.0 REVIEW OF RELEVANT PLANS AND STUDIES

Many policy documents, guidelines, and infrastructure initiatives will assist in the development of the Yonge Street & Davis Drive Streetscape Master Plan and inform the final design guidelines and standards.

York Region and Town of Newmarket plans and studies that have been reviewed as part of Phase 1 of this project include the following:

PROVINCE OF ONTARIO

- The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (2008)
- Growth Plan for the Greater Golden Horseshoe (2006)
- Provincial Places to Grow Act (2005)

YORK REGION

- Best Practices for Planning Centres and Corridors (2013)
- Vision 2051
- York Region Official Plan (Office Consolidation: 2013)
- South Yonge Street Corridor Streetscape Master Plan (2012)
- North Yonge Street Corridor Public Transit and Associated Road Improvements Environmental Study Report (2008)
- Bus Rapid Transit Design Standards (2007)
- Transit-Oriented Development Guidelines (2006)
- York Region Transit Coordinated Street Furniture Urban Design Guidelines (2009)
- Pedestrian and Cycling Master Plan (2008)
- York Region Street Tree Preservation and Planting Design Guidelines (2009)
- York Region Transportation Master Plan (2009)
- Designing Great Streets – A Context Sensitive Approach for York Region (For Reference: DRAFT-2014)
- vivaNext D1 IFC (Construction Drawings for Davis Drive vivaNext)
- vivaNext Design Development Yonge Street

TOWN OF NEWMARKET

- York Region Transportation Master Plan (2002)
- 2006 Official Plan
- Visualization, Massing and Height Study (2010)
- Urban Centres Transportation Study (2014)
- Undergrounding Hydro Feasibility Study (2013)
- Urban Centres Secondary Plan (DRAFT-2014)
- Active Transportation Study (DRAFT-2014)
- Public Art Plan and Policy (DRAFT-2014)
- Intersection Design Study (DRAFT-2014)
- Parks Policy Development Manual (2014)
- Cultural Master Plan (2014)
- Estates of Glenway Draft Subdivision Plan
- Sundial Homes Draft Subdivision Plan
- Newmarket Streetscape and Gateway Feature Design

Since numerous studies have previously summarized many of these reports, a more useful exercise is to highlight the key recommendations that are relevant to the Yonge Street & Davis Drive Streetscape Master Plan. These key recommendations are found in the following sections.



Current entry into the Town of Newmarket lacks a significant sense of place.

2.1 Planning Policy and Infrastructure Framework

2.1.1 Vision 2051

Vision 2051 was developed as a response to York Region's new and changing context and provides the Region with a bold and innovative strategy to guide the creation of thriving communities, with a specific emphasis on sustainability. Consistent with successful initiatives identified in Vision 2021 and Vision 2025, Vision 2051 uses eight goal areas that steer the vision for the Region and provide direction for key actionable items.

Vision 2051 Goals

1. A Place Where Everyone Can Thrive
2. Livable Cities and Complete Communities
3. A Resilient Natural Environment and Agricultural System
4. Appropriate Housing for All Ages and Stages
5. An Innovative Economy
6. Interconnected Systems for Mobility
7. Living Sustainably
8. Open and Responsive Governance

Of particular relevance to consider in the development of the Yonge Street & Davis Drive Streetscape Master Plan is Vision 2051's goal of providing an interconnected system for mobility. The document outlines a future scenario in which "a seamless network for mobility provides accessibility to all destinations using diverse transportation options for people in all communities (24)." The document promotes active, safe and efficient modes of transportation. Vision 2051 specifically calls for the following actions:

Vision 2051 Mandate

1. Prioritize People and Reduce the Need for Travel
2. Prioritize Alternative Modes of Travel for Active Transportation
3. Provide a Variety of Transit Choices
4. Create a Network of Complete Streets
5. Moving Our Economy

2.1.2 York Region Official Plan (January 14, 2013)

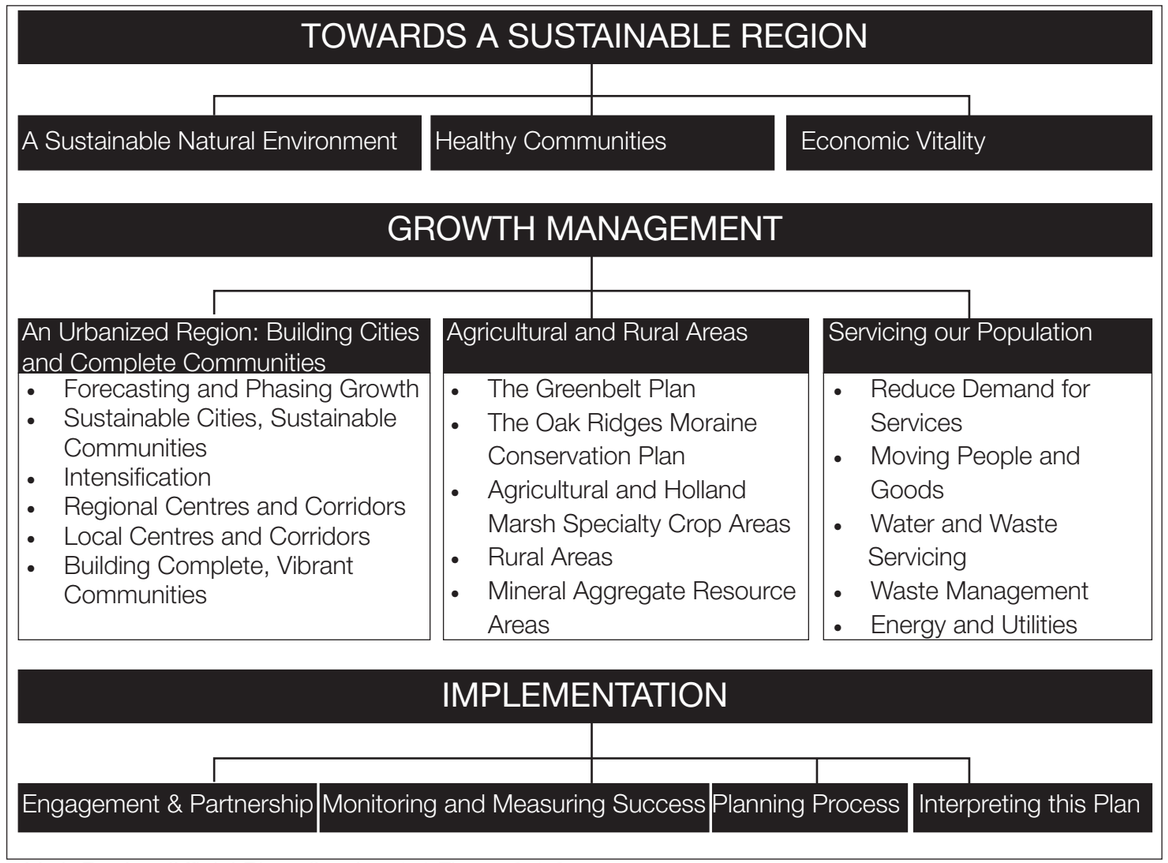
The York Region Official Plan provides a set of policies to guide future development decisions with a focus on three key components: a sustainable environment, healthy communities and economic vitality. (see figure 2.1.2a)

KEY EXCERPTS:

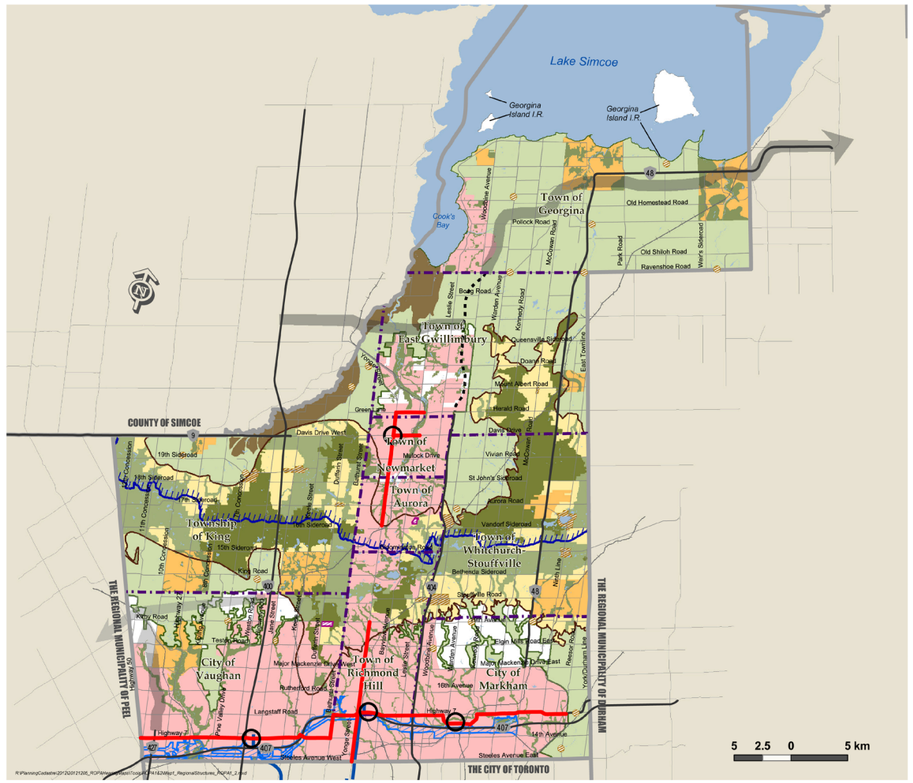
Outlining street network objectives:

1. "To ensure streets support all modes of transportation including walking, cycling, transit, automobile use, and the efficient movement of goods (Section 7.2)."
2. "To plan and protect future urban and rural streets to accommodate transportation demands (Section 7.2)."

YORK REGION OFFICIAL PLAN SUSTAINABILITY FRAMEWORK



York Region Official Plan- Section 1.4 Figure 2.1.2a



York Regional Structure Map
Figure 2.1.2b

2.1.3 Town of Newmarket 2006 Official Plan

The Town of Newmarket Official Plan, approved in 2008 with subsequent amendments in 2014, was developed in response to the continued growth and increased development within the Town of Newmarket and designates four central areas, or "Centres" within the Town that will be the primary focus for future employment and population growth. Included in the "Urban Growth Centres" are the Yonge Street Regional Centre and the Yonge-Davis Urban Growth Centre with recommendations for both that focus on compact, transit-oriented, pedestrian friendly, mixed-use development.

Specifically relevant to the Yonge Street & Davis Drive Streetscape Master Plan, the Yonge-Davis Provincial Urban Growth Centre "is envisioned as a meeting place, location for cultural facilities, public institutions, major services, and transit hubs (Section 4.3.1)." Both the Yonge-Davis Provincial Urban Growth Centre and the Yonge Street Regional Centre are identified as key locations for intensification. The Yonge-Davis Urban Growth Centre boundary is defined on Schedule A Land Use- Town of Newmarket.

(Section 1.2)

KEY EXCERPTS:

The character of Yonge Street shall further be defined on a segment by segment basis as part of the Yonge Street Regional Centre Secondary Plan, including the identification of Key Development Areas to focus compact and mixed-use development (Section 4.3.2.2).

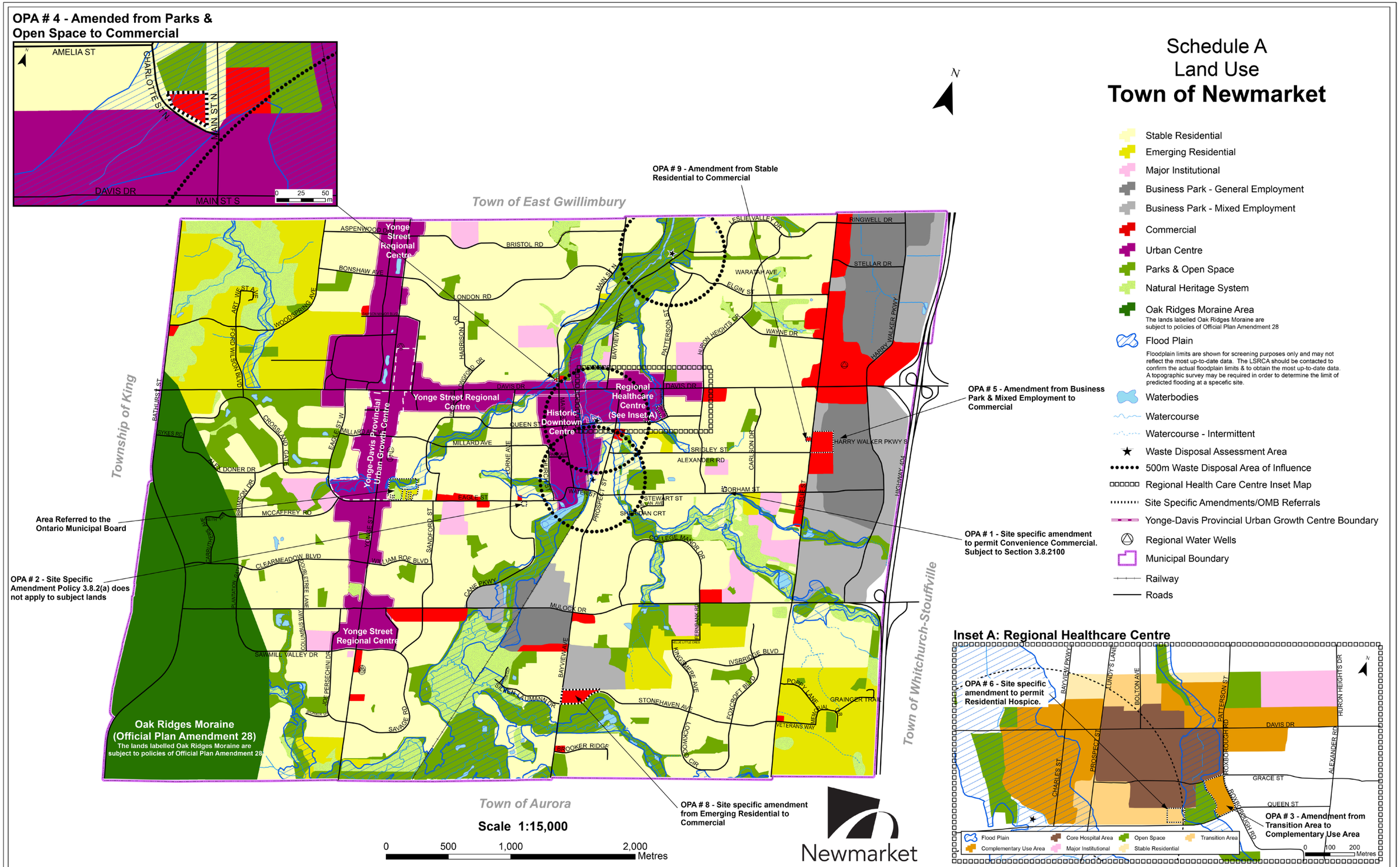
A community
well. . . beyond the ordinary
Shaping our future and realizing our vision of a Town that is '*well* beyond the ordinary' means pursuing five key strategic directions to ensure that Newmarket is:

- Living *Well*
and is
- *Well* Equipped and Managed
- *Well* Planned and Connected
- *Well* Balanced
- *Well* Respected

2.1.4 Summary of Key Issues, Opportunities and Constraints

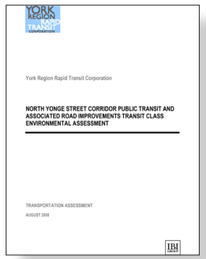
Newmarket Centre is a dynamic, centrally located collection of communities that is currently experiencing significant growth and development. The review of all relevant plans, background studies and reports pertaining to planning policy and infrastructure provides key guidelines for growth management and outlines a comprehensive approach which will guide the development of the Yonge Street & Davis Drive Streetscape Master Plan. The following key issues, opportunities and constraints were determined and are relevant to all sections of the Master Plan:

- Growth management and planning appropriately for the increased development is a significant concern as the Region continues to grow. A comprehensive strategy is required in order to provide residents with quality public spaces, increased mobility and enhanced services.
- Mobility is a high priority for the Region: providing easily accessible, connected mobility options that offer opportunities for active, healthy living as well as providing for multiple modes of transportation.
- Identification of Urban Centres and how to plan accordingly based on the continued growth and increased development are relevant to the Master Plan. The Yonge-Davis Provincial Urban Growth Centre in particular presents numerous public realm and streetscape opportunities as it is envisioned to be a key focal point within the community.



Designed & Produced by Information Technology – GIS Printed: September 2014 Consolidation. Source: Roads, Municipal Boundary, Railway, Waterbodies- Geomatics Division, Planning and Development Services Department © The Regional Municipality of York, 2013; Flood Plain - Lake Simcoe Region Conservation Authority; All other map layers - Town of Newmarket. **DISCLAIMER: This document is provided by the Town of Newmarket for your personal, non-commercial use. The information depicted on this map has been compiled from various sources. While every effort has been made to accurately depict the information, data/mapping errors may exist. This map has been produced for illustrative purposes only. It is not a substitute for a legal survey.**

2.2 Urban Design and Special Studies



2.2.1 North Yonge Street Corridor Public Transit and Associated Road Improvements Environmental Study (2008)

Completed in August 2008, the North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA was developed to complement the South Yonge Street Corridor Public Transit Improvements Reports (2007) and to be consistent with the processes utilized for various other York Region Rapid Transit transportation assessments. For the purposes of this study, the North Yonge Street Corridor study area is bounded by Green Lane in the Town of East Gwillimbury on the north and 19th Avenue/Gamble Road in Richmond Hill to the south. The study outlines existing transportation conditions, an assessment of the future Base Case transportation operations (the future conditions without intervention), land assumptions, an analysis of rapid transit alternatives, and results of the transportation assessment for the preferred design.

As this report directly encompasses the proposed study area for the Yonge Street & Davis Drive Streetscape Master Plan, implications and design interface will be discussed in further detail in Section 3.1.9.

2.2.2 Designing Great Streets – A Context Sensitive Approach for York Region (DRAFT – 2014)

The Designing Great Streets- A Context Sensitive Approach for York Region draft report recommends the designation of six street typologies and addresses each typology through context sensitive solutions, defined as “a collaborative and interdisciplinary approach to planning, designing and building Regional streets (Section 2).” Working within the various contexts found within the different communities in York Region, the guidelines provide a “toolbox of design solutions” which outlines the proposed responses to various streetscape components including on-street parking, minimum intersection spacing, utilities, stormwater management approach and street lighting.

A key outcome from this report that will significantly impact the development the Yonge Street & Davis Drive Streetscape Master Plan was the classification of roads into typologies and the associated Context Sensitive Solutions for Regional Streets – York Region. The four road sections that fall within the Yonge Street & Davis Drive Streetscape Master Plan are classified as follows:

- Yonge Street North – Urban Centre
- Yonge Street South – Connector / Rural
- Davis Drive West – Connector/ Rural
- Davis Drive East – Connector

A streetscape typology matrix (in draft form) from the Context Sensitive Solutions for Regional Streets- York Region is included on the following four pages.

KEY EXCERPTS:

Vision: “To create vibrant streets for York Region that provide a range of safe and reliable transportation options while being sensitive to the adjacent land uses and the needs of the community (Section 4).”



Streetscape currently dominated by vehicular traffic.

DRAFT TYPOLOGY MATRIX - REVISION #10

CONTEXT SENSITIVE SOLUTIONS FOR REGIONAL STREETS - YORK REGION

	Road Typology	Urban Centre	Urban Avenue	Main Street	Connector	Rural Road	Rural Hamlet
	Thumbnail						
	Example	*e.g. Davis Drive between Yonge & Southlake Hospital*	*e.g. Highway 7 between Valleymede and East Beaver Creek*	*e.g. King Road at King City*	*e.g.Dufferin btwn Steeles & Rutherford*	*e.g. Davis Drive btwn York-Durham Line and Hwy 404*	*e.g. Kleinburg, Holt*
	Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement	Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
OPERATIONAL CRITERIA	**ROW Width Range**	36m - 45m	36m - 45m	30m	36m - 45m	Up to 36m	36m
	Flow Characteristics	Interrupted flow by passive traffic calming (narrow lanes, on-street parking, mid-block crossings) and signals.	Uninterrupted flow except at signals and roundabouts.	Interrupted flow by passive traffic calming (narrow lanes, on-street parking, mid-block crossings) and signals.	Uninterrupted flow except at signals, roundabouts and controlled cross walks.	Uninterrupted flow except at signals, stop signs, roundabouts and controlled cross walks.	Uninterrupted flow except at signals, stop signs, roundabouts and controlled cross walks.
	Travel Speed (km/h)	40 - 50	40 - 60	40 - 50	60 - 70	70 - 80	40 - 50
	Maximum Number of Lanes	6 lanes	6 lanes	4 lanes	6 lanes	4 lanes	4 lanes
	Median	No	Access Control, Turn Lane Protection, Pedestrian Refuge, Special Character, Bioswale	No	Access Control, Turn Lane Protection, Pedestrian Refuge, Bioswale	Turn Lane Protection	Turn Lane Protection
	Local Street Connectivity	Highly porous	Highly porous	Highly Porous	Moderately Porous	Not Porous	Within hamlet, highly porous
	Access Management	Highest degree of private access control desirable.	High degree of private access control desirable.	Highest degree of private access control desirable.	Moderate degree of private access control desirable.	Access control not necessary.	Moderate degree of private access control desirable.
	Transit	Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit.	Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit.	Can accommodate transit priority lanes and mixed traffic transit.	Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit.	Can accommodate transit priority lanes and mixed traffic transit.	Can accommodate mixed traffic transit.
	Goods Movement Corridor	Limited goods movement corridor. Ideally restricted to off-peak and/or weekends.	Supports goods movement.	Limited goods movement corridor. Ideally restricted to off-peak and/or weekends.	Primary goods movement corridor.	Primary goods movement corridor.	Supports goods movement.
	Cycling Provisions	Cycle Track (conventional or separated)	Cycle Track	Bike lane	Cycle track or multi-use trail	Paved shoulder or multi-use trail	Bike lane
	Crosswalks	Pedestrian crossings formalized only as controlled crosswalks. Dedicated cycle crossing facilities on routes with bike lane.	Pedestrian crossings formalized only as controlled crosswalks. Dedicated cycle crossing facilities on routes with cycle track.	Pedestrian crossings formalized as controlled crosswalks & uncontrolled mid-block crossings. Dedicated cycle crossing facilities on routes with bike lane.	Pedestrian crossings formalized only as controlled crosswalks. Dedicated cycle crossing facilities on routes with cycle track/multi-use trail.	Pedestrian crossings at signalized intersections.	Pedestrian crossings formalized only as controlled crosswalks.

(Draft Typology Matrix - Council Attachment 1 5/24/2013)

Not relevant to study.

Not relevant to study.

DRAFT

DRAFT TYPOLOGY MATRIX - REVISION #10

CONTEXT SENSITIVE SOLUTIONS FOR REGIONAL STREETS - YORK REGION

	Road Typology	Urban Centre	Urban Avenue	Main Street	Connector	Rural Road	Rural Hamlet
	Thumbnail						
	Example	*e.g. Davis Drive between Yonge & Southlake Hospital*	*e.g. Highway 7 between Valleymede and East Beaver Creek*	*e.g. King Road at King City*	*e.g.Dufferin btwn Steeles & Rutherford*	*e.g. Davis Drive btwn York-Durham Line and Hwy 404*	*e.g. Kleinburg, Holt*
	Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement	Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
OPERATIONAL CRITERIA	**On-Street Parking**	Dedicated	Off-peak	Dedicated	No	No	Dedicated
	Minimum Intersection Spacing (m)	200-350m	300-400m (415m - 625 TAC)	200-350m	300-400m (500-750m TAC)	existing ranges	existing ranges
	Utilities	Underground & JUT preferred. Spacing must still be reserved for Bell Pedestals and Hydro/Rogers above ground boxes. Utility tunnels under sidewalk as a means to address space constraints.	Underground & JUT preferred, however Hydro, Rogers if above ground will need to have adequate set-back and clear-zone.	Underground & JUT preferred. Spacing must still be reserved for Bell Pedestals and Hydro/Rogers above ground boxes. Utility tunnels under sidewalk as a means to address space constraints.	Utility corridor provided for above ground Hydro and below grade Rogers, Bell, Enbridge, storm, sanitary, to be placed at standard ROW offset locations.	Utility corridor provided for above ground Hydro and below grade Rogers, Bell, Enbridge, storm, sanitary, to be placed at standard ROW offset locations.	Utility corridor provided for above ground Hydro and below grade Rogers, Bell, Enbridge, storm, sanitary, to be placed at standard ROW offset locations.
	Stormwater Management Approach	Limited space for SWM facilities, Adequate end of pipe treatments should be met.	Landscaped medians could consider bio-swales etc. Spacing should be provided for end of pipe swales and sediment control measures. Option to consider local SWM Ponds as outfall locations	Limited space for SWM facilities, Adequate end of pipe treatments should be met. Integrate LID measures with streetscape elements.	If using landscaped medians could consider bio-swales etc. However if using a continuous left median then Spacing should be provided for end of pipe swales and sediment control measures. Option to consider local SWM ponds as outfall locations	Rural ditching and effective sediment control measures i.e. rock check dams etc. to be used	Rural ditching and effective sediment control measures i.e. rock check dams etc. to be used
	Street lighting	Type of lighting and standards typically set by local municipality. Can be placed within clear-zone to meet street lighting levels	Type of lighting and standards typically set by local municipality. Can be placed within clear-zone to meet street lighting levels	Type of lighting and standards typically set by local municipality. Can be placed within clear-zone to meet street lighting levels	Type of lighting and standards typically set by local municipality. Can be placed within clear-zone to meet street lighting levels	Provided at intersections locations as required	Provided at intersections locations as required

(Draft Typology Matrix - Council Attachment 1 5/24/2013)

Not relevant to study.

Not relevant to study.

DRAFT

DRAFT TYPOLOGY MATRIX - REVISION #10

CONTEXT SENSITIVE SOLUTIONS FOR REGIONAL STREETS - YORK REGION

	Road Typology	Urban Centre	Urban Avenue	Main Street	Connector	Rural Road	Rural Hamlet
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	Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement	Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
URBAN DESIGN CRITERIA	**Land Use Designations**	Residential, Commercial, Mixed-Use, Institutional, Open Space	Commercial, Mixed-Use, Residential, Institutional, Industrial	Mixed-Use, Residential, Commercial, Institutional, Open Space, Historic Districts	Mixed-Use, Residential Commercial, Industrial	Agriculture, Institutional, Industrial, Open Space, Commercial, Residential	Commercial, Residential, Open Space
	Land Use Context	Transitioning from medium density to high density, mixed-use city centre.	Existing medium and large format retail transitioning to medium density street-oriented development.	Existing heritage building fabric not transitioning but with infill development and limited intensification.	Predominantly suburban residential not transitioning.	Predominantly agriculture with clusters of low density residential, industrial clusters, institutional and commercial uses.	Clusters of low density residential and/or commercial plots, typically at a junction.
	Planned Building Scale & Orientation	Mixture of street-oriented built form of varied size. Increase in density and height in growth centres (Markham, Vaughan, Richmond Hill).	Mixture of street-oriented built form of varied size. Increase of density and height adjacent to transit nodes and when approaching growth centres.	Mixture of small scale street-oriented built form.	Mixture of small to medium scale built form set back from street or back-lotted.	Typical agricultural rural fabric. Variety of built form sizes, oriented to but set back from the street.	Variety of built form sizes, oriented to but set back from the street in rural areas, mixture of small scale street-oriented built form in villages and hamlets.
	Boulevard Treatment	The boulevard should have an urban cross section including wide sidewalks, street trees, landscaping, land-use transition zone, transit amenities and public art.	Boulevard treatment should reflect the street's active transportation priority but also have an urban cross section including a cycle track, sidewalks, street trees and appropriate pedestrian and transit amenities.	The boulevard should have an urban cross section including wide sidewalks, street trees, land-use transition zone, transit amenities and public art.	Boulevard treatment should reflect the street's primary function of moving vehicles. The boulevard should have a semi-urban cross section including sidewalks or multi-use trail, street trees, buffer planting, landscaping, pedestrian and transit amenities.	Paved shoulder to support cycling. Multi-use trail separated from street when supported by a cycling master plan (Regional or Municipal).	Sidewalks to support retail activity. Street trees and decorative lighting as upgrades.
	Minimum Boulevard Width (excluding RT options)	6.45m	9.50m	7.15m	8.45m	n/a	3.0m

(Draft Typology Matrix - Council Attachment 1 5/24/2013)

Not relevant to study.

Not relevant to study.

DRAFT

DRAFT TYPOLOGY MATRIX - REVISION #10

CONTEXT SENSITIVE SOLUTIONS FOR REGIONAL STREETS - YORK REGION

	Road Typology	Urban Centre	Urban Avenue	Main Street	Connector	Rural Road	Rural Hamlet
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	Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement	Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
	ELEMENTS						
ROAD ELEMENTS	**Travel Lane**	3.25m	3.35m	3.35m	3.5m	3.5m	3.5m
	Outside Travel Lane	3.5m	3.5m (off-peak parking optional)	3.35m	3.5m	3.75m	3.5m
	Dedicated On-Street Parking	2.4m	no	2.4m	no	no	3.0m
	Continuous Centre-Turn Lane	no	no	no	3.0m	no	no
	Painted Centre Median	no	no	no	no	2.0m	no
	Median	no	3.5m	no	5.0m	no	no
	Shoulder	no	no	no	no	2.5m	no
	Rapid Transit (excl. platforms)	7.0m	7.0m	no	7.0m	no	no
	On-Street Bike Lane	1.8m	no	1.8m	no	no	no
BOULEVARD ELEMENTS	**Cycle Track (requires edge zone/buffer)**	1.5m	1.5m	no	1.5m	no	no
	Edge Zone	1.0m	1.0m	1.0m	1.0m	no	1.0m
	Planting & Furnishing Zone	1.7m min.	2.2m min.	3.0m min.	2.1m min.	no	2.5m min.
	Pedestrian Clearway	3.45m min.	2.0m min.	3.45m min.	2.0m min.	no	2.0m min.
	Frontage & Marketing Zone	1.0m -3.0m, depending on setback	1.0m -3.0m, depending on setback	1.0m -3.0m, depending on setback	no	no	no
	Multi-Use Trail	no	no	no	3.5m	4.0m	no
	Drainage Swale	no	no	no	no	4.75m	no
		(Draft Typology Matrix - Council Attachment 1 5/24/2013)		Not relevant to study.			Not relevant to study.

LEGEND

MINIMUM REQUIREMENT
PREFERRED
OPTIONAL
not applicable or no

DRAFT



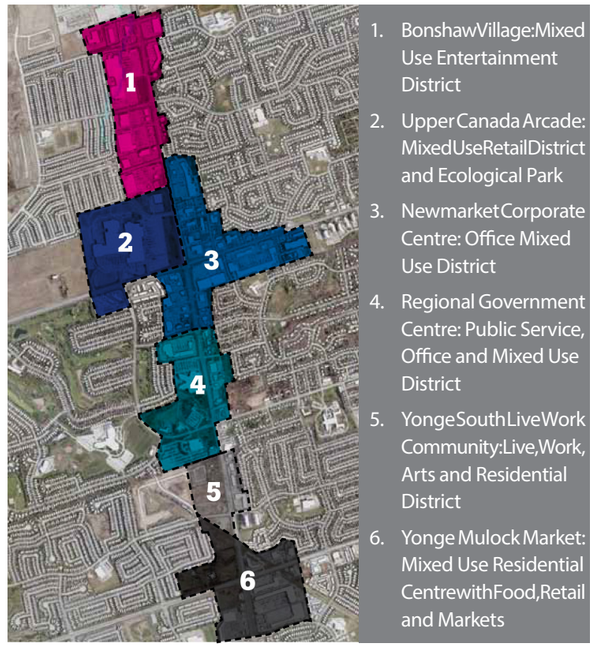
2.2.3 Visualization, Massing and Height Study (2010)

The Visualization, Massing and Height Study builds upon the vision statement and policies found in the Town of Newmarket Official Plan and specifically provides recommendations for the identified Urban Growth Centres in terms of how they should "look and feel" and how they relate to the adjacent neighbourhoods and public spaces. Following public and stakeholder consultation, key areas within the Yonge Street Urban Growth Centres were recognized as being crucial for development. Incorporating key themes and elements identified within the York Region Official Plan, urban design guidelines were developed as part of this study as well as the tools to implement the vision. One recommendation which specifically relates to the Yonge Street & Davis Drive Streetscape Master Plan was the recommendation to remove above ground hydro and other above ground services to improve the overall visual character and public realm. The Urban Centres Secondary Plan (see section 2.2.6) outlines policies that set the stage for undergrounding hydro in the future.

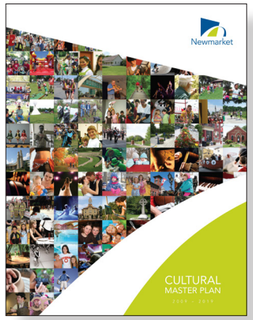
In addition, numerous character areas and defining community precincts were identified within the report. The provided recommendations and attributes of Bonshaw Village, Upper Canada Arcade, Newmarket Corporate Centre and Yonge Mulock Market may directly influence the Yonge Street & Davis Drive Streetscape Master Plan.

KEY EXCERPTS:

1. Bonshaw Village: "The Bonshaw Village has potential to become an entertainment focused community by encouraging and diversifying its existing uses (Section 3.2.1)."
2. Upper Canada Arcade: "The Upper Canada Arcade is the retail centre of the region. The stormwater management ponds have the potential to be transformed into landscape amenities. Synergies between these land uses could create a unique hybrid retail area (Section 3.2.2)."
3. Newmarket Corporate Centre: "Building on the existing land uses of the Newmarket Corporate Centre, a desirable commercial area can be established by promoting more density and active land uses (Section 3.2.3)."
4. Yonge Mulock Food Village: "At Yonge and Mulock there is an opportunity to create a food-based retail centre because of its central location. By promoting unique, high density building types with an emphasis on ground level on food-based retail, this precinct can be developed (Section 3.2.6)."



Area Map
Source: Visualization, Massing and Height Study

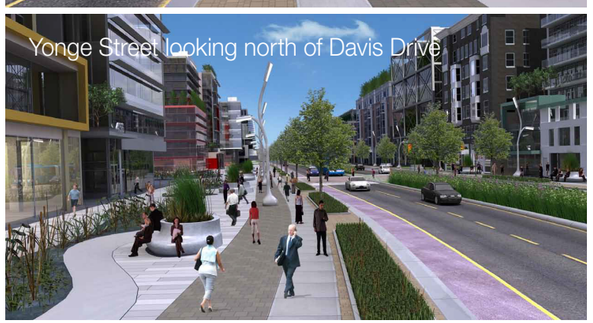


2.2.4 Cultural Master Plan (2014)

The Cultural Master Plan presents a vision for the Town of Newmarket 10 years into the future when the Town will have a notable and active cultural scene that is well integrated with and supported by the community. The document provides key themes and messages, goals and a clear cultural development action plan in order to successfully achieve the proposed vision. The plan identifies opportunities for an integrated approach to culture and includes the prospect of public art and enhanced streetscape elements.

Visualization images taken from Visualization, Massing and Height Study (2010)





Source: Visualization, Massing and Height Study

2.2.5 Undergrounding Hydro Feasibility Study (2013)

As a result of recommendations provided by the Visualization, Massing and Height Study as well as the continued growth of the Town of Newmarket and identification of Yonge Street and Davis Drive as key corridors within the Town, a study was completed to determine the feasibility of burying overhead hydro infrastructure and associated services. The Undergrounding Hydro Feasibility Study was undertaken in two phases which outlined the general issues, advantages, best practices and comparable precedents as well as provided analysis of potential cost recovery mechanisms and implementation. Five options were reviewed for undergrounding existing overhead wires, with the preferred and most feasible approach being to convert Yonge Street to a 13.8kV system, maintain 44kV express feeders and bury all circuits. Benefits specified in the report include:

- Improved aesthetic character;
- Enhanced pedestrian environment;
- Reduction of streetscape clutter;
- Hydro infrastructure protection;
- Reduction of tree trimming costs;
- Increased ability for intensification and development.

The Town of Newmarket and York Region are currently not implementing the undergrounding of hydro. The Urban Centres Secondary Plan (see Section 2.2.6) contains policies that may result in future implementation.

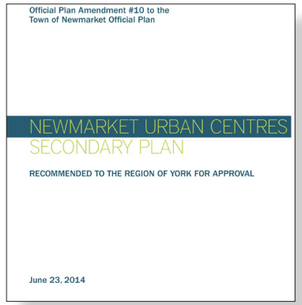
KEY EXCERPTS:

The preliminary review of right-of-way requirements indicated that an additional 5.0m of land on average may be required from some or all of the property owners fronting on Yonge Street [Section 7.1 quote from Undergrounding Hydro and Feasibility Study (2013)].

	Option	Context	Comment
1	Re-route the existing lines at 44kV.	Yonge Street from Mulock to Newmarket's northerly limit; relocation onto wooden poles to the rear of the properties along Yonge Street or other corridors, at the existing 44kV.	Not Feasible. This option would be tied to development proposals and could not be practically implemented until the majority of developments moved forward.
2	Convert Yonge Street to a 27.6 kV system.	Construction of a 230/27.6 kV transformer station and maintain 44 kV express feeders and bury all circuits.	Not Feasible. There is no capacity on the Hydro One transmission grid. Nor is there value in introducing a fourth operating voltage in NTP.
3	Convert Yonge Street to a 13.8 kV system, maintain 44 kV express feeders and bury all circuits	Yonge Street from Mulock to Green Lane with duct banks on both sides; includes 2 distribution transformer stations.	**Potentially Feasible**- Will require property acquisition, construction of 2 substations to step down the 44 kV lines to 13.8 kV lines and replacement of the 20 existing private connections.
4	Bury all Overhead Wires along the Davis Drive and Yonge Street Corridors at the existing voltage	Yonge Street from Mulock to Green Lane with duct banks on both sides.	Not Feasible. The cost of this option is prohibitively expensive due to the use of the 44kV as a distribution voltage.
5	Bury the 13.8 kV and 44 kV lines only in select priority districts within the Davis Drive and Yonge Street corridors.	Costing would be dependent on the extent and location of the undergrounding.	Not Feasible. This option is both complicated and potentially costly as it would mean transforming the power voltage on a staged basis. It will also create operational issues for NTP and is not a preferred approach.

(Information extracted from Table 1 - Section 5.5 Comparison of Options Considered from Undergrounding Hydro and Feasibility Study (2013))

NTP: Network Time Protocol



2.2.6 Urban Centres Secondary Plan (2015)

The Urban Centres Secondary Plan provides detailed land use plans and policy guidelines to guide development within the "Urban Centres", as identified within the Town of Newmarket Official Plan as the Yonge-Davis Provincial Urban Growth Centre, the Yonge Street Regional Centre and the Regional Healthcare Centre.

As identified by the Urban Centres Secondary Plan, the predominant land use designation for the study areas within the Yonge Street & Davis Drive Streetscape Master Plan is mixed-use and provides for a "mix of uses including commercial, office, residential, employment, recreational and institutional and will contribute to the establishment of the Urban Centres as a complete community (Section 5.3.1)." The corridors are further categorized into Areas with Priority Commercial Areas and associated recommendations and policies. Key attributes that specifically relate to the Yonge Street & Davis Drive Streetscape Master Plan are as follows (also refer to Area Map on page 18):

YONGE STREET: NORTH OF DAVIS DRIVE

Yonge Street North – Entrance of Canada Mall, north

- Area is predominantly residential with a land use of approximately 80% total Gross Floor Area (GFA) as residential and 20% GFA as commercial and employment uses.
- Predominantly medium density, mid-rise development (3-8 storeys), with a small portion on the east side of Yonge Street between Dawson Manor Boulevard and Bonshaw Avenue designated for low density (2 storeys).
- A Priority Commercial Area was identified at the planned rapidway transit stop at Yonge Street and Bonshaw Avenue.
- Preferred location for up to two elementary school sites with a neighbourhood park located adjacent.

Yonge Street and Davis Drive Node

- Highest concentration of both people and jobs and highest density with an ultimate build-out of approximately 13,500 people and 10,100 jobs with a land use mix of approximately 65% total GFA as residential and 35% of total GFA as commercial and employment.
- The Yonge and Davis corner will function as the primary retail node for both the Urban Centres and Town of Newmarket.
- Priority Commercial Areas have been identified along the majority of Yonge Street with two parks and open space.
- As outlined by the Urban Centres Secondary Plan, the Upper Canada Mall, which sits as an anchor on the corner of Yonge Street and Davis Drive, is anticipated to "redevelop over the long term into a mixed use area while maintaining its key function as a significant retail centre (28)."
- Higher standards of urban design are to be applied to the northwest corner and on the southern periphery of this key area.

YONGE STREET: SOUTH OF MULOCK DRIVE

- South of Mulock Drive is predominantly high-density (6-17 storeys) mixed-use with two proposed neighbourhood parks.
- The most southern portion will be mid-rise (2-6 storeys).
- The northwest corner of Mulock Drive and Yonge Street is a significant neighbourhood park and natural heritage system.
- Priority Commercial Areas have been identified along the main intersection of Yonge Street and Mulock Drive.

DAVIS DRIVE: WEST OF YONGE STREET

- The Yonge and Davis corner will function as the primary retail node for both the Urban Centres and Town of Newmarket.
- Priority Commercial Areas have been identified along the majority of the north side of Davis Drive as well as

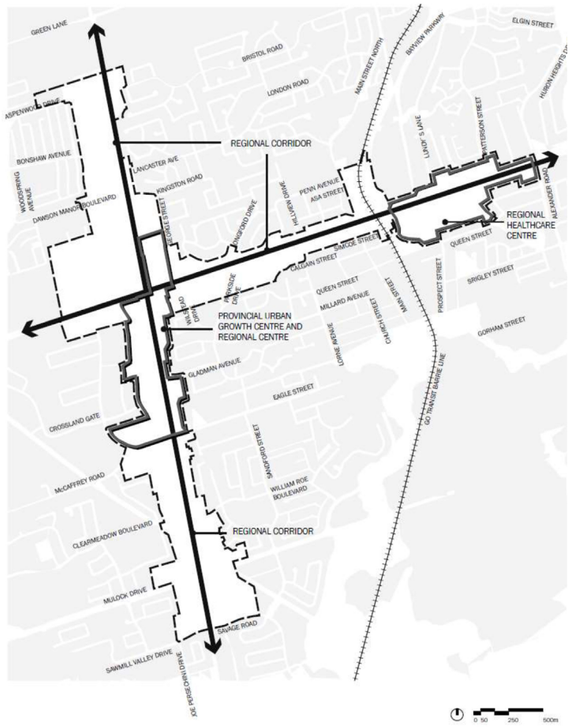
the south side of Davis Drive.

- The Upper Canada Mall, which sits as an anchor on the corner of Yonge Street and Davis Drive, is slated for redevelopment.

DAVIS DRIVE: EAST OF PATTERSON STREET/ ROXBOROUGH ROAD

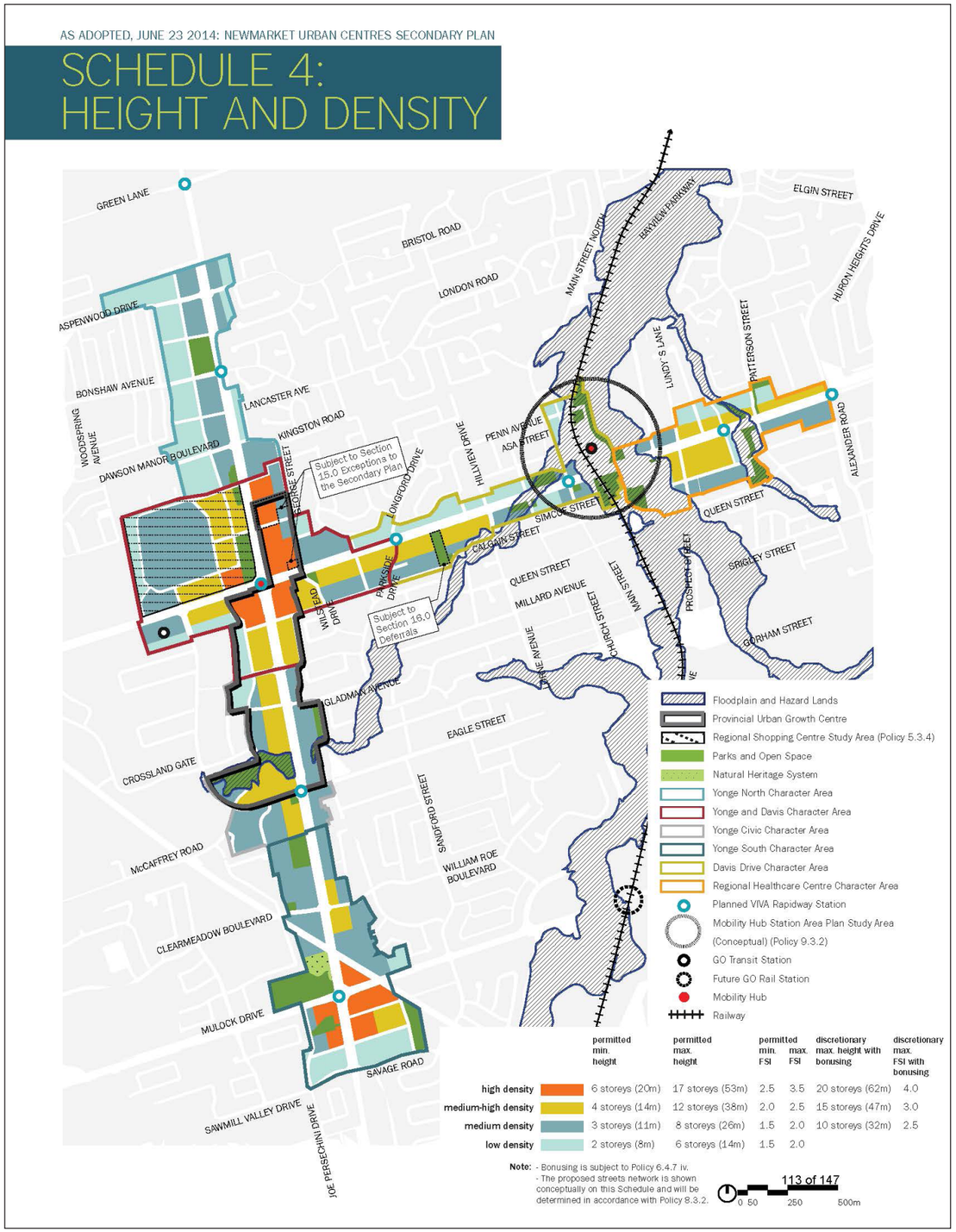
- This area will be the catalyst for medical related uses and will focus specifically on medically related offices and services.
- East of Patterson Street to Alexander Road (the only portion of the Urban Centres Secondary Plan that overlaps with the Yonge Street & Davis Drive Streetscape Master Plan), is prescribed to be medium-high density (4-12 storeys) along the north side of Davis Drive and medium density (3-8 storeys) along the south side of Davis Drive.
- The highest densities will be located on Davis Drive in proximity to the planned rapidway stations, one of which is at the intersection of Alexander Road and Davis Drive.

  In addition, within the scope of study for the Urban Centres Secondary Plan, all of Yonge Street and Davis Drive has been identified as a Green Street. As defined within the document, Green Streets "shall be designed to function as part of the Parks and Open Space system by: a) providing green connections between elements of the parks and open space system through street trees; b) providing shade and resting areas for pedestrians; c) integrating the open spaces associated with public facilities; and d) incorporating street trees at approximately 6 to 8 meter intervals in order to contribute to the Town's target of a minimum of 12% tree canopy coverage by 2026 with a variety of tree species (Section 10.3.3.vi)."



The Amendment provides a vision, objectives and policies to guide development within the Urban Centres and addresses the long term intensification of the Secondary Plan area through to *build-out*.

Source: Newmarket Urban Centres Secondary Plan - Schedule 1: Study Area



Map from Newmarket Urban Centres Secondary Plan Schedule 4: Height and Density

KEY EXCERPTS:

STREETSCAPE RECOMMENDATIONS:

1. "Street furnishings, which include benches, bike racks, bollards, bus shelters/kiosks, trash/recycling bins, banners, way-finding signage and pedestrian lighting, should be used as unifying landscape elements (Section 7.3.6.i)."

2. "All public streets, and generally all private streets in the Urban Centres shall have sidewalks and street trees on both sides and lighting scaled appropriately for pedestrians, cyclists and drivers to increase the overall comfort, aesthetic and safety of the street (Section 7.3.6.ii)."

3. "A boulevard width of approximate 10 metres will be established along both sides of Yonge Street and Davis Drive. This boulevard will accommodate wide pedestrian sidewalks, cycling facilities and landscaping as well as the planned burying of hydro lines...(Section 7.3.6.iv)."

4. "New gateway features will be created at the eastern boundary of the Urban Centres on Davis Drive, on the northern and southern boundaries of the Urban Centres on Yonge Street, at the intersection of Yonge Street and Davis Drive and at the entrance to Main Street on Davis Drive, in order to create a sense of arrival in the Urban Centres, distinguish it as the urban core and commercial centre of the Town, and create a unique and memorable identity (Section 12.3.2.i)."

2.2.7 Integrated Accessibility Standards Regulation Guidelines (2014)

The Integrated Accessibility Standards and Regulation Guidelines was developed as a response to the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), which requires that accessibility standards be developed, implemented and enforced in order to achieve accessibility for all Ontarians. This document became law in Ontario as of January 1, 2015. Accessibility within the built environment is of the utmost importance and spaces should be designed to be barrier-free and adapted to fulfill the needs of all users equally. These guidelines provide the standard for designing public spaces, specifically in relation to new construction and redevelopment.

This study will play an integral role in the development of the Yonge Street and Davis Drive streetscape and all requirements will be met as part of the process. Key standards that are specifically relevant to the Yonge Street & Davis Drive Streetscape Master Plan include the following:

KEY EXCERPTS:
ACCESSIBILITY STANDARDS:

1. Exterior paths must have sufficient widths, manageable slopes and stable surfaces to allow for transportation of people with differing levels of ability;

2. Curb ramps must have an accessible slope and be clearly visible;

3. Depressed curbs must align with the path of travel and be clearly visible.

2.2.8 Summary of Key Issues, Opportunities and Constraints

As the Yonge Street and Davis Drive corridors have been identified as key locations for intensification and growth, a significant amount of policy, planning and public realm development has already been completed or is in the process of being implemented at a Provincial, Regional and municipal level. The review of relevant plans, background studies and reports pertaining to urban design and special studies provided key guidelines on a more detailed level with pertinent information pertaining to areas, corridor specific design recommendations and overall proposed design standards. The following key issues, opportunities and constraints were determined and are relevant to all sections of the Yonge Street & Davis Drive Streetscape Master Plan:

- Streetscape typologies have already been classified in accordance with existing policy documents – the Yonge Street & Davis Drive Streetscape Master Plan will follow the approach of Context Sensitive Solutions for Regional Streets and provide design solutions accordingly;
- Public art is an important addition to the public realm. It adds meaning and value to spaces, creating a strong, unique sense of place. Opportunities for public art and historically significant components must be incorporated into the final streetscape Master Plan;
- Any reduction of visible utilities, such as transformer boxes, hydro poles or communication boxes, would significantly reduce clutter and improve the overall aesthetic and functionality of the public realm;
- Areas and proposed land uses have been established in the Secondary Plan;
- The current streetscapes are not designed to meet the most updated AODA standards – as part of the master planning process, these mandatory standards will be incorporated in order to ensure universal accessibility.

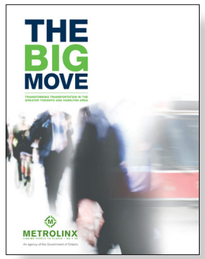


Lack of sufficient pedestrian circulation.



Sidewalk not AODA compliant.

2.3 Transportation Framework



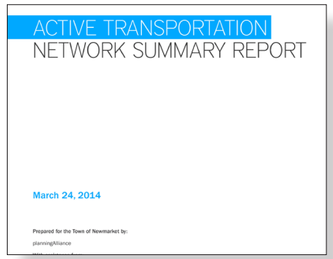
2.3.1 The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (2008)

The Metrolinx Regional Transportation Plan outlines the visions, goals, objectives and policy directions for the design and operation of the Regional transportation system. The Plan is organized around strategic directions:

- Reduce demands on the transportation system
- Increase choices for travel
- Meet the needs of the traveler first
- Build communities that make traveling easier
- Commit to continuous improvement

In addition, eight "Big Moves" are identified as recommended priority actions that are critical to the transformation of the Greater Toronto and Hamilton Area (GTHA) transportation system:

1. A fast, frequent and expanded regional transit network.
2. A complete walking and cycling network with bike-sharing programs.
3. An information system for travelers, where and when they need it.
4. A region-wide integrated transit fare system.
5. A system of connected mobility hubs.
6. High-order transit connectivity to the Pearson Airport district from all directions.
7. A comprehensive strategy for goods movement.
8. An Investment Strategy to provide stable and predictable funding.



2.3.2 Active Transportation Network Plan (2014)

Four key planning and policy documents, the Provincial Growth Plan for the Greater Golden Horseshoe, the York Regional Official Plan, the Newmarket Official and the Urban Centres Secondary Plan, all promote the importance of an integrated active transportation network. This study specifically addresses the areas within the Urban Centres Secondary Plan and provides recommendations as well as refines the On-Street Bike Lane and Off-Street Trails Plan in Schedules D and E of the Newmarket Official Plan. The study includes an existing conditions analysis, opportunities and constraints analysis, active transportation concept development and key recommendations.

As indicated in the study, the Primary Active Transportation Network will be the highest priority for completion and will incorporate "dedicated bike facilities that are separated from mixed traffic, preferably by grade separation or physical barriers, for the majority of their length (Section 3)." Yonge Street North and Davis Drive West are recommended as part of the Primary Active Transportation Network and designated for Future Regional Road Biking. In addition, Davis Drive (between Bathurst Street and the GO Bus Station) has been identified as an undeveloped priority, as part of the Town's (15) priorities for cycling facilities within the Town's road ROW.

Although the study only covers a portion of the Yonge Street & Davis Drive Streetscape Master Plan study area, all recommendations provided for the Active Transportation Network as a whole should be considered for the four segments of the Yonge Street & Davis Drive Streetscape Master Plan to ensure seamless connectivity.



2.3.3 Pedestrian and Cycling Master Plan (2008)

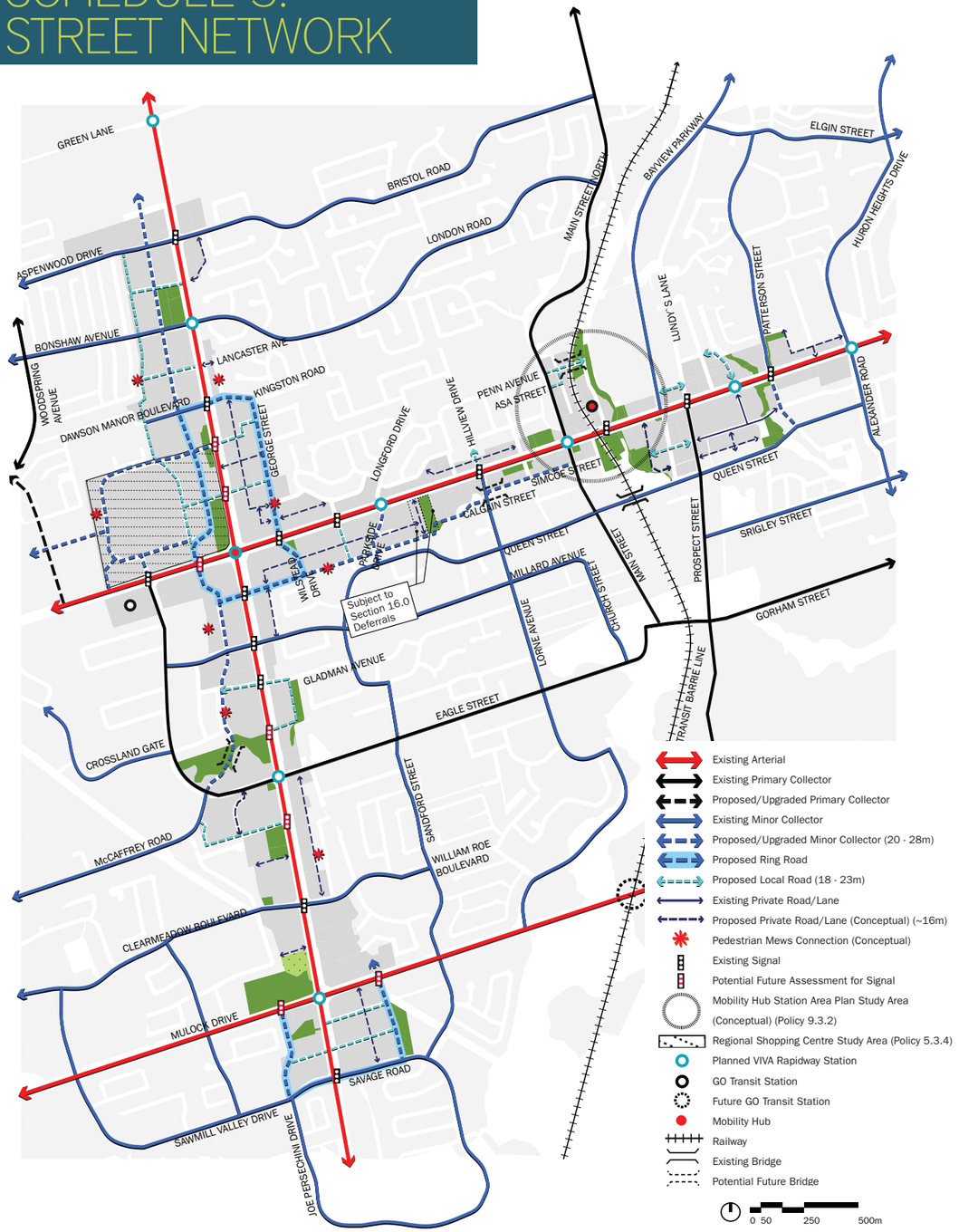
York Region's Pedestrian and Cycling Master Plan guides the Region in implementing a comprehensive pedestrian system and on and off-road Region-wide cycling network over the next 25 years – a goal consistent with Vision 2026. Following extensive public consultation with key Region partners and stakeholders, the Master Plan provides recommendations, planning and design guidelines, policy and program suggestions, a proposed organization structure to administer the Master Plan and a detailed implementation strategy. Within this study, Yonge Street has been identified as a candidate cycling route within the road right-of-way.

KEY EXCERPTS:

1. "The Vision is based on the principle of assigning more priority to walking, cycling, public transit, carpooling and transportation demand management initiatives. This will provide a more balanced and sustainable transportation system that places less emphasis on single occupant motor vehicle trips and assist in reducing each individual's carbon footprint (Section EX-1)."
2. Phase 1 Cycling Network Implementation Schedule, Year 0-5 "Provide a route along segments of Yonge Street in Newmarket/ Aurora where practical according to the Region's 10-Year Roads and Transit Construction Program, with a short-term alternative to Yonge Street via adjacent local streets where required (Figure 6-2, Section 6-5)."

AS ADOPTED, JUNE 23 2014: NEWMARKET URBAN CENTRES SECONDARY PLAN

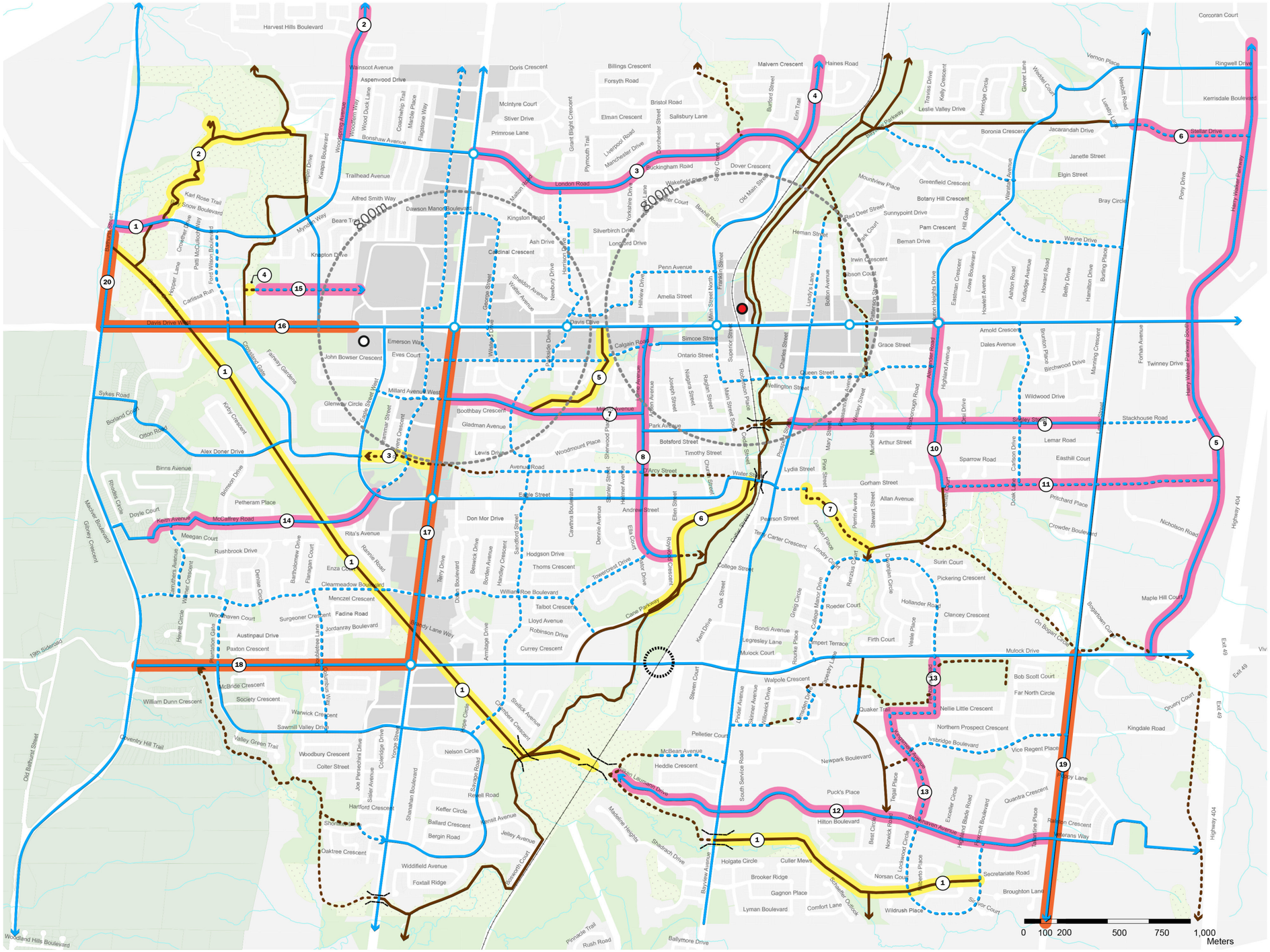
SCHEDULE 5: STREET NETWORK



The 2021 Planned Road Network in the Newmarket Urban Centres Secondary Plan proposes change to the Yonge Street & Davis Drive Streetscape Master Plan study area, including new and relocated signals along Yonge Street North and new proposed roads intersecting Yonge Street South. In addition, new signals and a new intersection are proposed for Davis Drive East. Refer to Schedule 5: Street Network.

APPENDIX B:

Priorities for Within the Road ROW and Off-Road Active Transportation Network (0 - 5 Years)



- Primary Active Transportation Network (Within the Road ROW)
- Secondary Active Transportation Network (Within the Road ROW)
- Primary Active Transportation Network (Off-Road)
- Secondary Active Transportation Network (Off-Road)
- Region of York Priorities within the Road ROW (0 - 5 Years)
- Town of Newmarket Priorities within the Road ROW (0 - 5 Years)
- Town of Newmarket Off-Road Priorities (0 - 5 Years)
- Planned VIVA Rapidway Station
- Mobility Hub
- Future GO Transit Station
- Railway
- Potential Future Pedestrian Bridge/Underpass
- Waterbodies/Watercourses

Active Transportation Network Plan

2.3.4 Urban Centres Transportation Study (2014)

The Urban Centres Transportation Study – Phase 2: Traffic Operation Review is the latter portion of a two phase study that was conducted as a result of and to support the Urban Centres Secondary Plan. The study as a whole aimed to characterize an appropriate multi-modal transportation plan for the Town of Newmarket and provide policy recommendations that will accommodate the levels and land uses proposed in the Urban Centres Secondary Plan. Phase 1 of the study undertook an extensive analysis of population and employment levels and land use patterns proposed in the Secondary Plan against York Region transportation demand forecasting model. Phase 2, which was primarily reviewed for the purpose of the Yonge Street & Davis Drive Streetscape Master Plan, developed key strategies for addressing congestion and increasing mobility and transit share.

2.3.5 Summary of Key Issues, Opportunities and Constraints

Yonge Street and Davis Drive are vital “people-movers” within York Region and Town of Newmarket, carrying a significant amount of people on a daily basis via various modes of transportation. The current car dominance of the area and lack of pedestrian focus is a major issue and challenge. Current policy dictates a movement towards more transit and active modes of transportation. The review of relevant plans, background studies and reports pertaining to the transportation framework provided guidelines and directives which supported this shift.

The following key issues, opportunities and constraints were determined and are relevant to all sections of the master plan:

- There is a strong move towards less car dependence and more focus on transit-oriented initiatives and directives to connect mobility hubs, Regional transit and multi-modal opportunities with increased efficiency and functionality;
- Active transportation and integrating connected networks are key components of numerous plans and policy documents.

3.0 EXISTING SITE INVENTORY & ANALYSIS



As part of Phase 1, a thorough site inventory and analysis for each of the four segments was conducted from both digital sources and an extensive review of documents enhanced by a site walk by the project team. The information gathered from the site analysis is crucial to the development of a consolidated Streetscape Master Plan and will greatly impact the final recommendations.



Streetscape dominated by commercial signage and lacks a clear sense of place.



Car dominated streetscape lacks pedestrian and cyclist amenities.

3.0 EXISTING SITE INVENTORY & ANALYSIS

The Yonge Street and Davis Drive corridors in the Town of Newmarket are currently experiencing rapid transformation with planned development and intensification solidifying their placement as the key arterials within the Town of Newmarket. The four segments to be analyzed are:

- Yonge Street North
- Yonge Street South
- Davis Drive East
- Davis Drive West

While Yonge Street North is currently characterized by big-box warehouse stores, Yonge Street South is primarily a residential area with natural heritage features. Davis Drive West is primarily a low density residential area while Davis Drive East is predominantly a well established area containing a mix of residential, commercial and employment uses. Existing street character and land uses vary throughout the four segments, but there is a consistent need to balance the objectives for pedestrians, cyclists, transit users and cars.

The following is an overview of the physical, social and economic components which define both character and opportunities. Understanding these layers and the urban structure that they create is the starting point for analysis of the physical form of the area and for preparing responsive design recommendations for how the streetscape should develop and ultimately look and feel.

Existing conditions for all four segments will be inventoried, assessed and analyzed as they relate to:

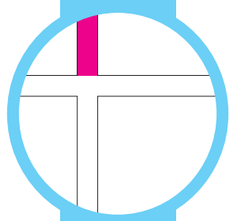
- Land Use
- Built Form
- Active Transportation Links
- Civil Infrastructure – Utilities and Lighting
- Green Infrastructure – Street Trees, Parks & Open Space
- Cultural Landmarks
- Topographic Features
- Public ROW Existing Geometry
- Relevant Studies and Design Interface



The interface between the public and private realm is challenging due to significant grade change.



Visually uncoordinated street furniture and lighting illustrates lost opportunity to develop a cohesive sense of place.



3.1 Yonge Street North – Existing Conditions

The Project Team has evaluated the existing conditions along Yonge Street North. The key findings, defining features and analysis is summarized within this section.

Yonge Street North is a high volume arterial located within the commercial core of the Town of Newmarket. The street carries a significant amount of passing traffic at a design speed of 100km/h. A high design speed is vehicular centric and works against pedestrians, cyclists and businesses fronting Yonge Street. Greater vehicular speeds increase risks for pedestrians and cyclists, and reduce the number of customers for businesses. This stretch of roadway has no bike lanes present and the existing pedestrian realm leaves much to be desired.

Key existing characteristics of Yonge Street North include:

- Wide ROW and paved area (ranging from 39.5 metres – 49.1 metres);
- Streetscape character is predominantly large big-box stores with significant setback from Yonge Street;
- Numerous large asphalt parking lots front Yonge Street and contribute to the heat island effect;
- Frequent consolidated driveways due to large lots;
- Open ditches adjacent to roadway and sidewalks;
- Significant grade changes at some properties;
- Visual dominance of hydro poles and above ground utilities.



Yonge Street North

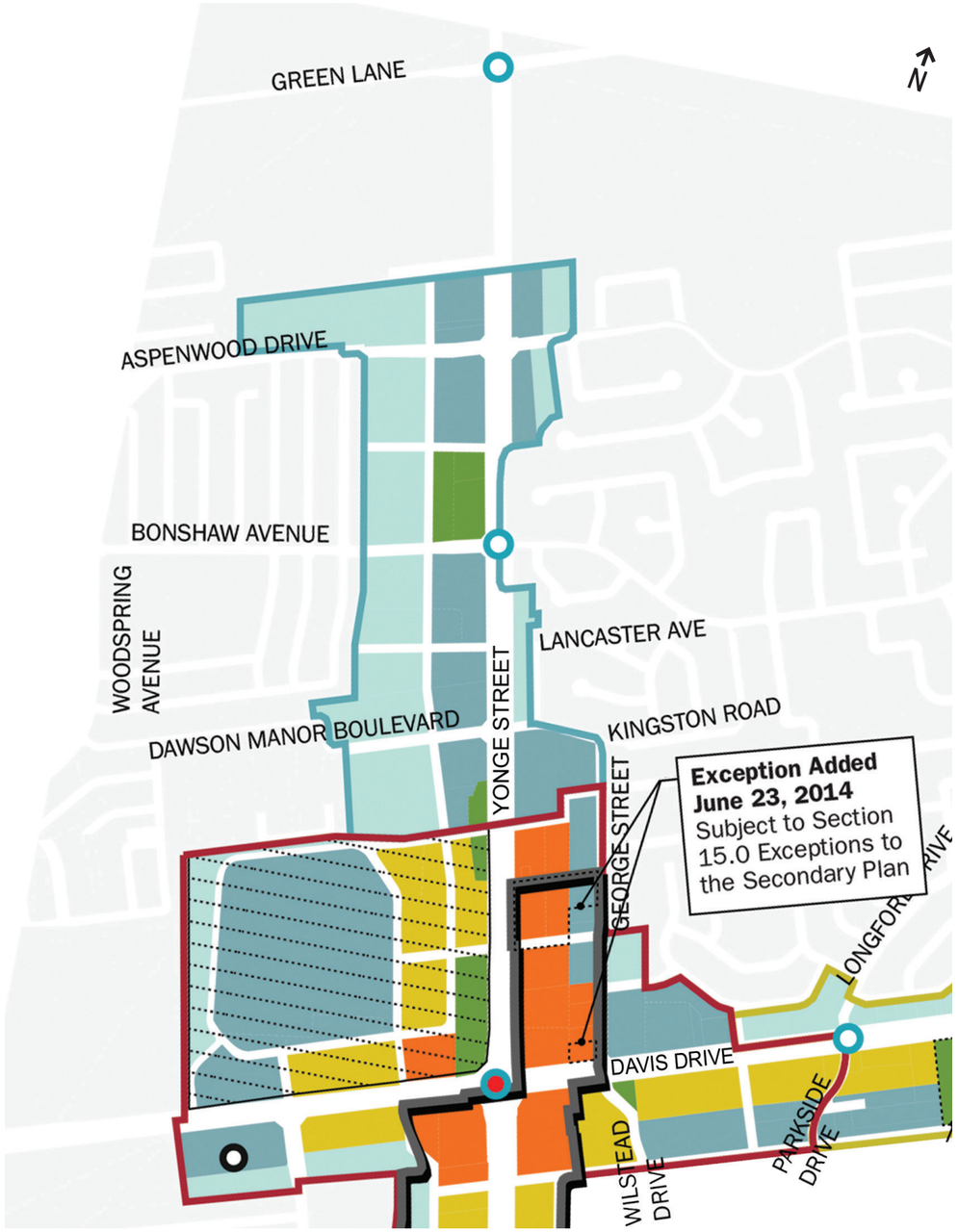
3.1.1 Land Use



Source: Newmarket Urban Centres Secondary Plan- Schedule 3: Land Use

Yonge Street North

3.1.2 Built Form



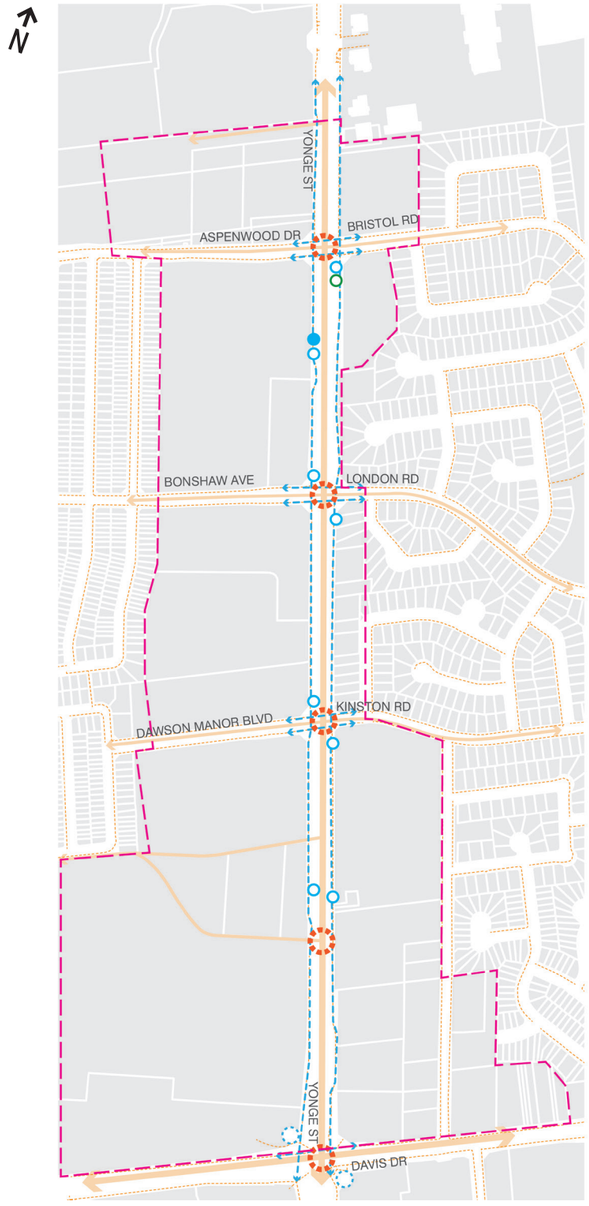
- Floodplain and Hazard Lands
- Provincial Urban Growth Centre
- Regional Shopping Centre Study Area (Policy 5.3.4)
- Parks and Open Space
- Natural Heritage System
- Yonge North Character Area
- Yonge and Davis Character Area
- Yonge Civic Character Area
- Yonge South Character Area
- Davis Drive Character Area
- Regional Healthcare Centre Character Area
- Planned VIVA Rapidway Station
- Mobility Hub Station Area Plan Study Area (Conceptual) (Policy 9.3.2)
- GO Transit Station
- Future GO Rail Station
- Mobility Hub
- Railway

	permitted min. height	permitted max. height	permitted min. FSI	permitted max. FSI	discretionary max. height with bonusing	discretionary max. FSI with bonusing
high density	6 storeys (20m)	17 storeys (53m)	2.5	3.5	20 storeys (62m)	4.0
medium-high density	4 storeys (14m)	12 storeys (38m)	2.0	2.5	15 storeys (47m)	3.0
medium density	3 storeys (11m)	8 storeys (26m)	1.5	2.0	10 storeys (32m)	2.5
low density	2 storeys (8m)	6 storeys (14m)	1.5	2.0		

Source: Newmarket Urban Centres Secondary Plan- Schedule 4 : Height and Density

Yonge Street North

3.1.3 Active Transportation Links



STUDY AREA
PRIMARY ROAD NETWORK
EXISTING LAND PARCEL
EXISTING PEDESTRIAN CIRCULATION
EXISTING SIDEWALK NETWORK
EXISTING BIKE LANES
EXISTING VIVA STOPS
EXISTING YRT STOPS
EXISTING GO STOPS
SIGNALIZED INTERSECTION
GATEWAY FEATURE

The average distance between existing signalized intersections is approximately 375 linear metres. The average distance between transit stops is approximately 330 linear metres.

Yonge Street North

3.1.4 Civil Infrastructure - Utilities and Lighting



STUDY AREA
PRIMARY ROAD NETWORK
EXISTING LAND PARCEL
EXISTING STREET LIGHTS
EXISTING HYDRO POLES
JOINT-USE POLE

The average distance between light standards is 43 metres on-centre. The average spacing of hydro poles is 43 metres on-centre.

Yonge Street North

3.1.5 Green Infrastructure – Street Trees, Parks and Open Space



STUDY AREA

PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

WATER BODY / POND

PARKS & OPEN SPACE

SIGNIFICANT FOREST

EXISTING STREET TREES

WATER COURSE

There are minimal street trees along the Yonge Street North segment. The existing stormwater management ponds on the western side of Yonge Street provide green space and amenity to the local community.



Streetscape lacks connection with green space.

Yonge Street North

3.1.6 Cultural Landmarks

YONGE STREET NORTH

YONGE STREET NORTH ENTRANCE OF CANADA MALL, NORTH

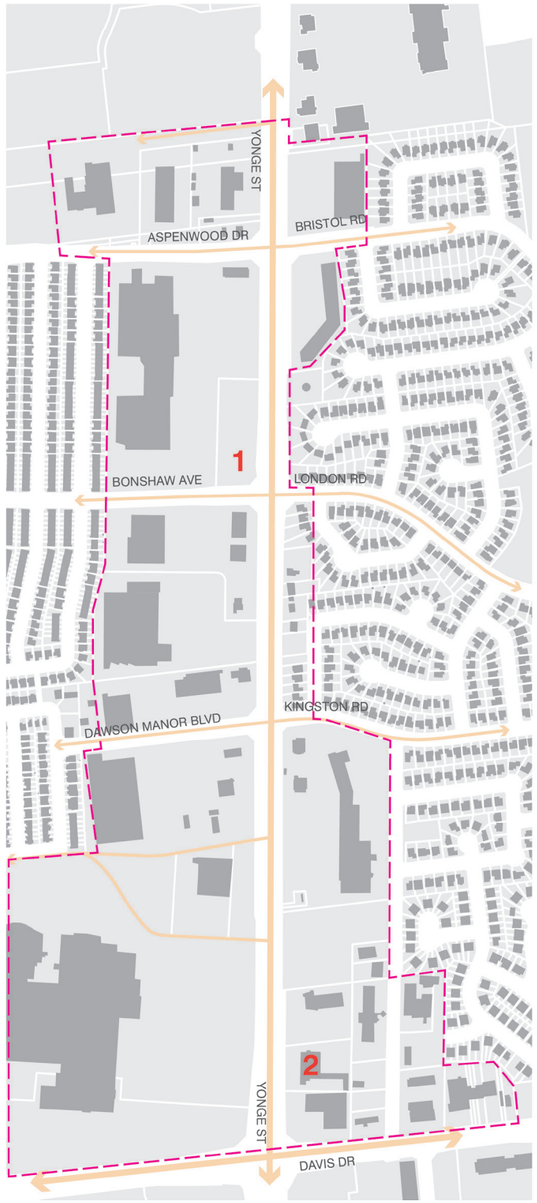
This section of Yonge Street housed the original Poplar Bank School site, located on the southwest side of Yonge Street and Poplar Bank Side Road. The site's current location is in the Yonge Street and Green Lane area and is shared between Newmarket and East Gwillimbury. The historical site dates back to 1802 with the last known use of the school in 1862. Although the old school was demolished in 1998, there are items that still remain along Yonge Street that have cultural significance. These items include an old electric bell, a silver pitcher that was displayed on the school's float during the annual Newmarket parade as well as several photographs. On Yonge Street, north of Bonshaw Avenue on the west side, a cultural landmark exists in the form of a cairn monument made of bricks that were salvaged from the old school. There are plans to relocate the monument closer to the new Poplar Bank School.

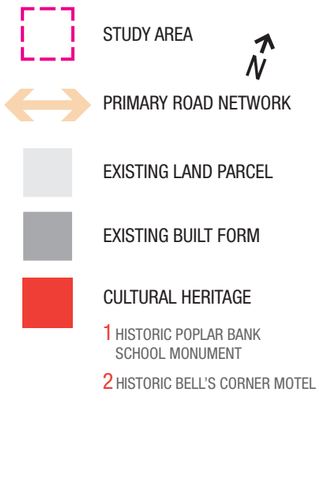
YONGE STREET AND DAVIS DRIVE

The Town of Newmarket's first motel (and only for many years) Bell's Corner was originally constructed in the 1950s at the prominent corner of Yonge Street and Davis Drive. The site is currently still used as a hotel and is now known as the Best Western Voyageur Place Hotel. Some of Bell's Corner's original motel units remain at the north end of the building.



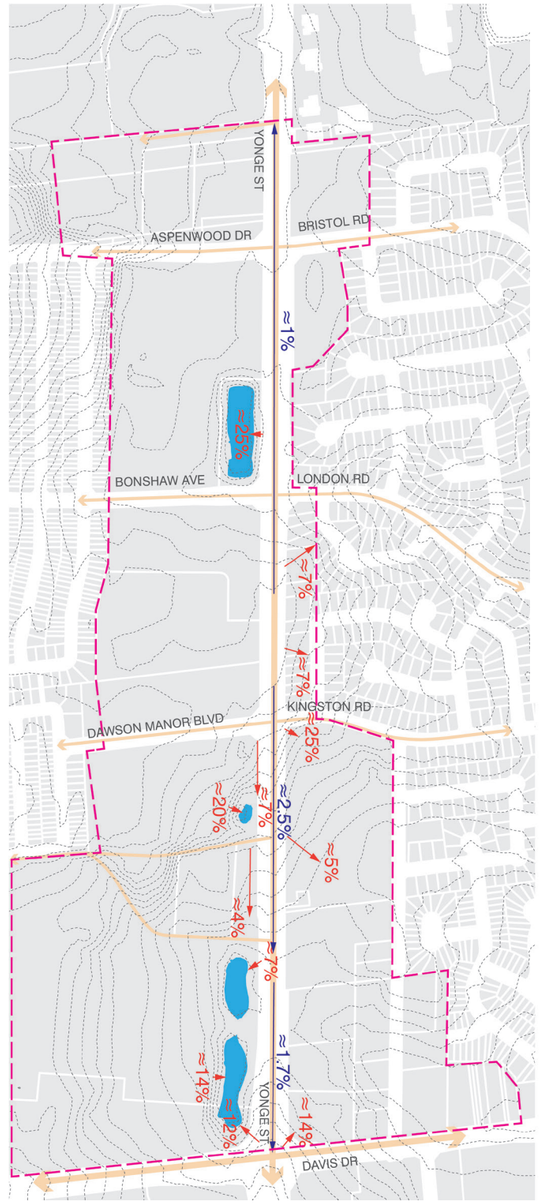
(Photo from newmarkethistoricalsociety.ca)

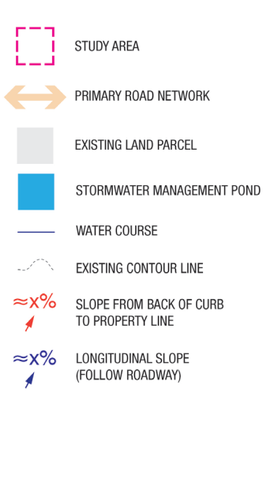




Yonge Street North

3.1.7 Topographic Features

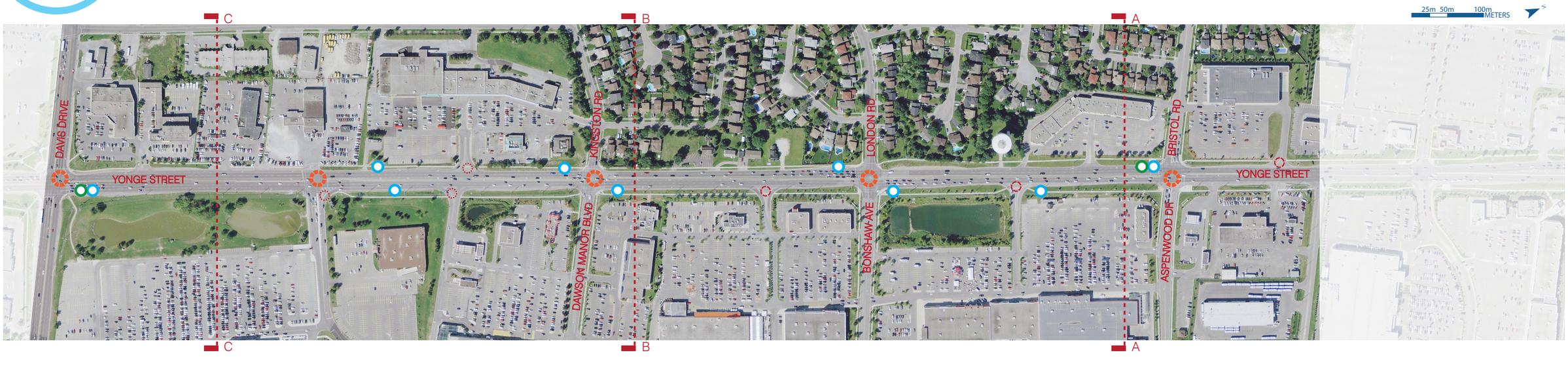




There are 7% slopes from the back of sidewalk to the property line from Bonshaw Avenue south to Kingston Road on the east side of Yonge Street. There are significant grade changes on the southeast corner of Yonge Street and Kingston Road as well as the northeast corner of Yonge Street and Davis Drive as the public ROW transitions into private property.

Yonge Street North

3.1.8 Public ROW Existing Geometry



SOUTH BOUND DISTANCE BETWEEN

249m | 364m | 457m — TRANSIT STOPS

395m | 374m | 375m | 345m — SIGNALIZED INTERSECTIONS

NORTH BOUND DISTANCE BETWEEN

420m | 292m | 397m | 219m — TRANSIT STOPS

- VIVA STOP
- YRT STOP
- GO STOP
- SIGNALIZED INTERSECTION
- GATEWAY FEATURE
- RIGHT IN/RIGHT OUT DRIVEWAY
- CHANNELIZED DRIVEWAY

Yonge Street North - Existing Boulevard Width

Town Boundary (Bristol Rd) to 200m North of Davis Drive

Segments		Cross Section	Traffic Lane Configuration	Bike Lane	Transit Facilities			Public R.O.W Width	Boulevard Width		Pedestrian Sidewalk	Walking Trails	Driveways	
					YRT Stops	VIVA Stops	GO Station		West	East			West	East
Bristol Rd to London Rd	A-A	150m south of Bristol Rd	4 Through Lanes + TWLTL + 1 R Turn Lanes	N/A	3	N/A	1	49.1m	9.7m	18.3m	West & East	N/A	1	3
London Rd to Kingston Rd	B-B	65m north of Kingston Rd	4 Through Lanes + TWLTL + 1 R Turn Lane	N/A	2	N/A	N/A	39.5m	8.9m	6.3m	West & East	N/A	1	5
Kingston Rd to Davis Dr	C-C	200m north of Davis Dr	4 Through Lanes + TWLTL + 2 R Turn Lanes	N/A	4	N/A	1	45.8m	6.9m	10.5m	East	N/A	2	5

TWLTL = Two-Way Left Turn Lane

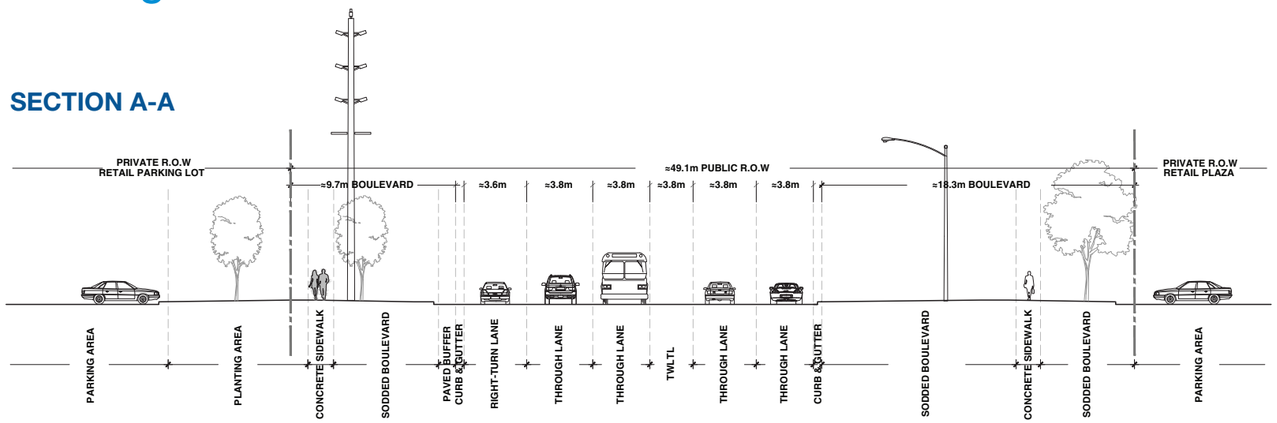
ROW

Yonge Street North

3.1.8. Public ROW Existing Geometry

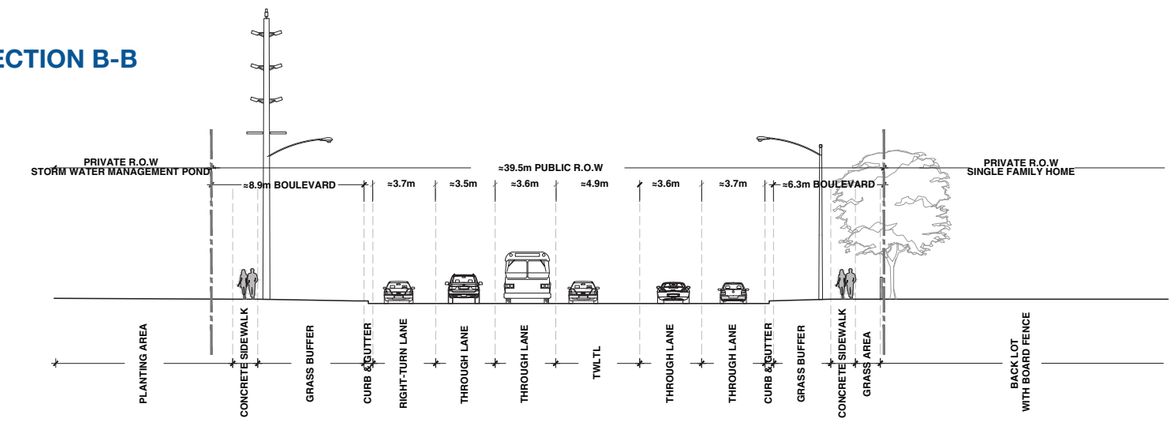
Existing Cross Sections

SECTION A-A

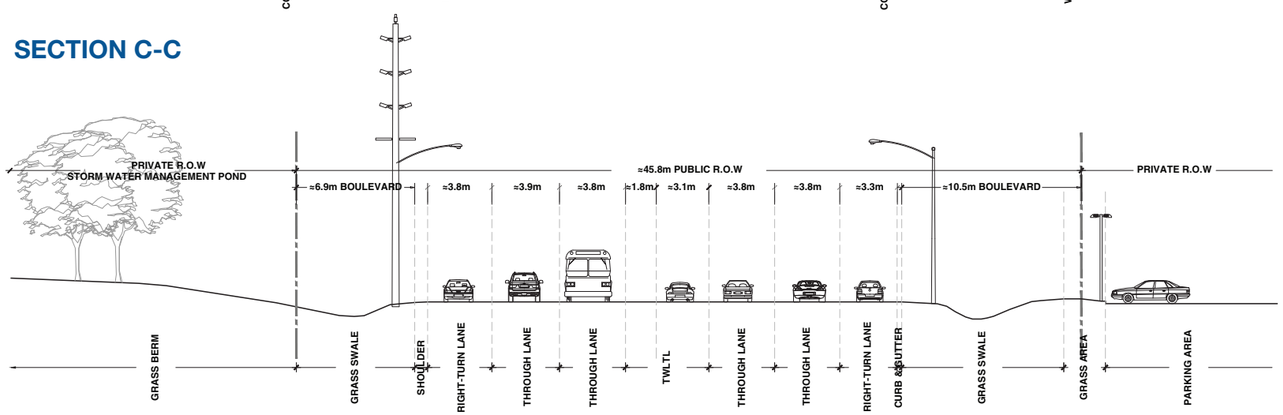



SWM culvert and ditch along Yonge Street North.

SECTION B-B



SECTION C-C




SWM pond has the potential to be an amenity.



Yonge Street North

3.1.9 Relevant Studies and Design Interface

THE NORTH YONGE STREET CORRIDOR PUBLIC TRANSIT AND ASSOCIATED ROAD IMPROVEMENTS ENVIRONMENTAL STUDY REPORT (2008)

Completed in August 2008, the North Yonge Street Corridor Public Transit and Associated Road Improvements Transit Class EA was developed to complement the South Yonge Street Corridor Public Transit Improvements Reports (2007). The study outlines existing transportation conditions, an assessment of the future Base Case transportation operations, land assumptions, an analysis of rapid transit alternatives, and a recommended preferred design as a result of the transportation assessment. Based on the heavy concentration of development and intensification along Yonge Street near the Davis Drive intersection, the preferred alternative needed to account for increased demand and growth throughout the study area.

As part of the study, existing traffic volumes and travel patterns were analyzed. The following data, as it relates to the Yonge Street & Davis Drive Streetscape Master Plan includes:

- Yonge Street operates at capacity, and in some cases, beyond capacity primarily during the PM peak hours, northbound, between Dawson Manor Boulevard and Green Lane;
- Yonge Street, south of Green Lane, operates at below capacity during the AM peak hour, southbound;
- The Davis Drive/Yonge Street intersection operates at capacity during all the peak hour conditions as a result of heavy volume from all directions – the left turn movements operate as protected and permitted;
- During the AM peak hour at the Yonge/ Davis intersection, the westbound turn lane operates at capacity, with the eastbound left turn operating close to capacity;
- During the PM peak hour at the Davis Drive/Yonge Street intersection, the northbound through, the southbound left turn, the eastbound left turn and the westbound left turn operates at capacity, with the northbound through and westbound through operating at close to capacity.

Evaluated separately along key segments along Yonge Street, the five design alternatives were:

1. Existing road configuration with rapid transit operating in mixed traffic;
2. Existing road configuration with some intersection improvements and rapid transit operating in mixed traffic;
3. Widening of Yonge Street to 6-lanes with rapid transit operating in mixed traffic curb HOV lanes;
4. Widening of Yonge Street to accommodate rapid transit operating in a dedicated median rapidway;
5. Widening of Yonge Street to 6-lanes with rapid transit operating in a dedicated median rapidway.

Based on the extensive assessment of the transportation impacts of design and routing alternatives, a preferred design for rapid transit was selected. Alternative 3 was heavily considered as a contribution to the final preferred design as it provided the necessary improvements for both modes. Key features that specifically relate to the Yonge Street & Davis Drive Streetscape Master Plan are as follows:

- The transit system will eventually run down the centre of Yonge Street and the western portion of Davis Drive;
- Through a phased approach, the ultimate end goal for Yonge Street would be a median BRT lane, with intermediate HOV lanes as a temporary solution;
- In general, the opposing transit lanes would be delineated or protected with concrete barriers or landscaped areas;
- Transit right-of-way lanes would consist of a different pavement colour and would be separated from the general traffic lanes by a rumble strip.

Exhibit 5.1: Preferred Rapid Transit Alternative

Locations on Yonge Street	Northbound	Southbound
Green LN & Davis Dr.	2 Lanes + HOV Lane (Stage 1) 2 Lanes + BRT Lane (Stage 2)	2 Lanes + HOV Lane (Stage1) 2 Lanes + BRT Lane (Stage 2)
Davis Dr. & Millard Ave.	2 Lanes + BRT Lane	2 Lanes + BRT Lane
Millard Ave. & Mulock Dr.	2 Lanes + BRT Lane	2 Lanes + BRT Lane
Mulock Dr. & Orchard Height Blvd.	2 Lanes + BRT Lane	2 Lanes + BRT Lane
Orchard Height Blvd. & Golf Links Dr.	Mix Traffic (2 Lanes)	Mix Traffic (2 Lanes)
Golf Links Dr. & Gamble Rd.	2 Lanes + BRT Lane	2 Lanes + BRT Lane
Locations on Davis Drive	**Eastbound**	**Westbound**
Yonge St. & Roxborough Rd.	2 Lanes + BRT Lane	2 Lanes + BRT Lane
Roxborough Rd. & Harry Walker Parkway	Mixed Traffic (2 Lanes)	Mixed Traffic (2 Lanes)
Locations on Green Lane	**Eastbound**	**Westbound**
Yonge St. & GO Station.	2 Lanes + BRT Lane	2 Lanes + BRT Lane

Preferred Rapid Transit Alternative as it pertains to the scope of this study (Exhibit 5.1)

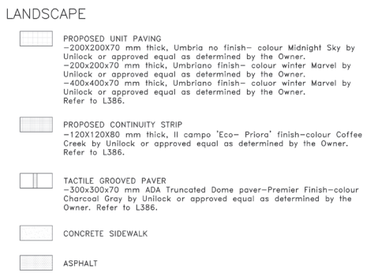
VIVANEXT DESIGN DEVELOPMENT YONGE STREET

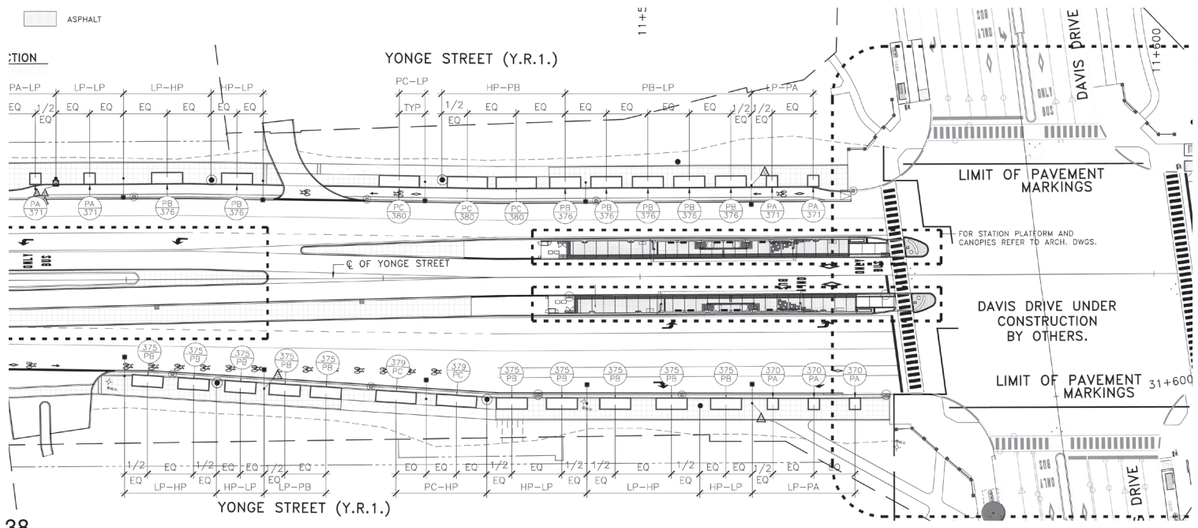
The vivaNext Yonge Street rapidway extends from Davis Drive to Mulock Drive as part of the comprehensive rapid transit network that connects the Region's urban centres. The project is currently in the detailed design phase with preliminary construction underway. This segment of the rapidway is scheduled to open in December 2018. An additional vivaNext rapidway within the context of this study is dependent on future funding commitments, spanning along Yonge Street from south of Mulock Drive to Green Lane..





vivaNext Yonge Street Y3.2 Streetscape Design Boulevard Planter Layout - 90% Detailed Design





NEWMARKET GATEWAY FEATURE AT YONGE AND DAVIS

Along with the newly developed vivaNext rapidway, the Newmarket Placemaking Features are the first in the Town of Newmarket's placemaking initiatives. One of the critical intersections that the project focuses on is Yonge Street and Davis Drive, the other is at Davis Drive and Main Street. The initiative developed a unique gateway feature that reinforces the branding and image of the Town of Newmarket.

The Yonge Street and Davis Drive feature creates a gateway to a future park at the northwest corner and an urban plaza on the southeast corner. Unique custom beacons will be illuminated at night for an additional element of animation. The N Arch (below) was created and serves as a public art piece. The "N" stands for Newmarket and is etched with the Town's street network. In late afternoon, the shadow creates a shape reminiscent of the letter "D" for Davis Drive. The gateway design at this intersection is currently pending approval by Town of Newmarket Council.

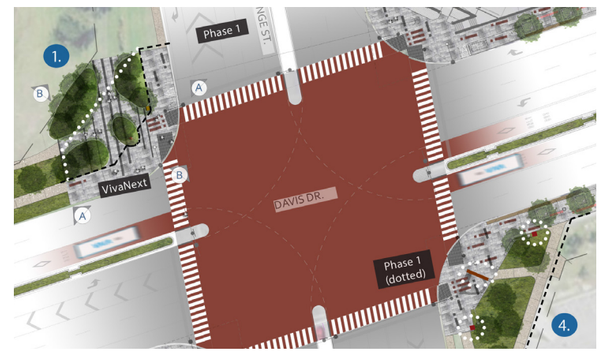
The N arch is proposed for the southwest corner of Yonge Street and Davis Drive.



Rendering of gateway at the northwest corner of Yonge Street and Davis Drive.







Intersection treatment at Yonge Street and Davis Drive.

Source: IBI Group

Yonge Street North

SWOT

3.1.10 SWOT

	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	· Continuous sidewalks provided on both sides for majority of length · Central hub for the Town and planned for highest concentration of mixed-use development · Continuous buffer zone between roadway and sidewalks · Wide ROW width (average 44.8 metres)	· Large public ROW (average 44.8 metres) can accommodate cycling facilities · Region and Town planning policy focus on future active transportation · Key destinations are close and can be easily reached via cycling	· Numerous transit options: eight YRT stops and one GO Transit stop · Transit stops within average 350 metres distance of each other · Growing ridership with increased intensification and development	· Signalized intersections at each major intersection encourages safe pedestrian crossing	· Efficient high volume traffic corridor with relatively little congestion · Central corridor for the Town and planned highest concentration of mixed-use development and density · Average boulevard width is wide (8.5 metres west and 10.6 metres east)
WEAKNESSES	· Poor pedestrian environment · Lack of pedestrian amenities including lighting, coordinated street furnishings, street trees, public art and upgraded paving · Frequent commercial driveways interrupt pedestrian sidewalks · Pedestrians do not have priority over the automobile · Corridor is not frequented by pedestrians · Lack of pedestrians and interactive street wall means the corridor is not animated, lacks "eyes on the street" · Narrow sidewalk width (approximately 1.5 metres) · Cluttered pedestrian space with above ground utilities · Hydro guy wires interfere with pedestrian circulation and are unsightly · Large asphalt parking lots flank the ROW · Street wall is not present; buildings are setback significantly · Large turning radii at intersections increase crossing distances for pedestrians and discourage drivers from slowing down	· No dedicated cycling facilities present	· Lack of attractive transit amenities including benches, shelters, etc. · Lack of commuter-oriented perspective · All existing stops located at or near an intersection. Lack of midblock transit stops	· Safe pedestrian crossings only occur at signalized intersections at each major intersection with an average spacing of 370 metres · Spacing promotes jaywalking · Issues with intersection design, including lack of defined crosswalks and worn-out pavement markings, increases pedestrian risk when crossing · Crosswalks are not current with AODA standards, specifically curb ramps · Large turning radii promotes faster turning speeds, increasing risk to pedestrians and cyclists	· TWLTL* throughout which lose effectiveness given high traffic volume and driveway densities · TWLTL lanes take up valuable road "real estate" · Right-turn lanes take up valuable boulevard space particularly at intersections · Car-oriented corridor
OPPORTUNITIES	· Establish pedestrian priority · Provide high quality street furnishings and design features to promote pedestrian use and lingering · Incorporate closely spaced, pedestrian scaled lighting along sidewalks · Introduce street trees and plantings to enhance the overall pedestrian experience, have a positive environmental impact, and create shade and microclimates · Incorporate high quality sidewalk materials including paving to strengthen pedestrian realm · Introduce public art components to add meaning and value to key spaces and increase sense of place · Define pedestrian crosswalks with pavement markings, such as Traffic Patterns XD, to enhance placemaking, accessibility and safety · Increase pedestrian connections, access and linkages · Increase in minimum sidewalk width to 1.8 metres or greater · Reduce turning radii at intersections to reduce pedestrian crossing distances and force drivers to slow down	· Provide space for separate bike facilities, at minimum utilizing bicycles harrow lane markings · Eliminate TWLTL and reconfigure vehicular lanes to accommodate bike facilities · Implement signage/wayfinding systems to help cyclists identify the safest and most desirable routes · Increase connections, access and linkages to key destinations and transit facilities	· Capitalize on existing transit and incorporate additional transit options (i.e. viva) · Provide additional transit amenities to provide a convenient waiting area that is not disruptive to pedestrian circulation flow · Promote transit-oriented development along Yonge Street · Reconfigure transit stops to midblock placements, reducing conflicts with other traffic	· Introduce midblock crossings where appropriate · Define pedestrian crosswalks with pavement markings such as Traffic Patterns XD, and/or other treatments to increase accessibility and visibility · Redesign curb ramps to current AODA standards · Urbanize intersections with tight turning radii to promote slower turning speeds and reduce crossing distance for pedestrians · Provide a protected median at intersections and/or midblock where appropriate	· Eliminate TWLTL · Introduce traffic calming · Incorporate on-street parking, which is more efficient than parking lots, allows redevelopment of existing parking lots to street level retail and provides economic benefits to businesses along street · Provide on-street parking in order to establish a buffer for pedestrians · Re-evaluate the need and efficiency of right-turn lanes. Use this space in boulevard
THREATS	· Car-oriented community where vehicles are the predominant transport and drivers often overlook pedestrian safety as a priority · High volume traffic corridor with a design speed of 100 km/h · Pedestrian safety issues at crosswalks · Developments fail to present active frontage and contribute to street life/pedestrian activity	· Car-oriented community where vehicles are the predominant transport and drivers often overlook \cyclist safety as a priority · High volume traffic corridor with frequent breaks (intersections and driveways) · Current low-level of cycling use with lack of cycling culture	· Car-oriented community with less focus on taking public transit · Currently, transit less convenient than driving	· High volume traffic corridor with a design speed of 100 km/h · High traffic volumes results in car overflow of stacking lane	· Car-oriented community where vehicles are the predominant transport

* Two-Way Left Turn Lanes

Yonge Street North

3.1.11 Summary

Yonge Street North, bounded by the Town boundary to the north and 200m north of Davis Drive to the south, is a high volume arterial located within the commercial core of the Town of Newmarket. The street carries a significant amount of traffic at a design speed of 100km/h. A high design speed is vehicular centric and works against pedestrians, cyclists and businesses fronting Yonge Street. Greater vehicular speeds increase risks for pedestrians and cyclists, and reduce the number of customers for businesses. This stretch of roadway has no bike lanes present and the existing pedestrian realm leaves much to be desired.

Opportunities for Yonge Street North include:

- Wide ROW (ranging from 39.5 metres – 49.1 metres) provides opportunities for effective and protected pedestrian, cyclist, vehicular and public transportation.
- Wide ROW also allows for the presence of placemaking initiatives to encourage pedestrian presence and potentially reducing traffic.
- The introduction of street parking opens up street front land previously used as parking lots.
- Elimination of current right-turn lanes can add to valuable boulevard space.



View from private property up to Yonge Street at southeast corner of Yonge and Kingston Road.



Right-in right-out driveways are car-oriented and take away valuable space that could be utilized in a boulevard streetscape.

3.2 Yonge Street South – Existing Conditions

The Project Team has evaluated the existing conditions along Yonge Street between Sawmill Valley Drive and the Town boundary of Newmarket. The key findings, defining features and analysis is summarized within this section.

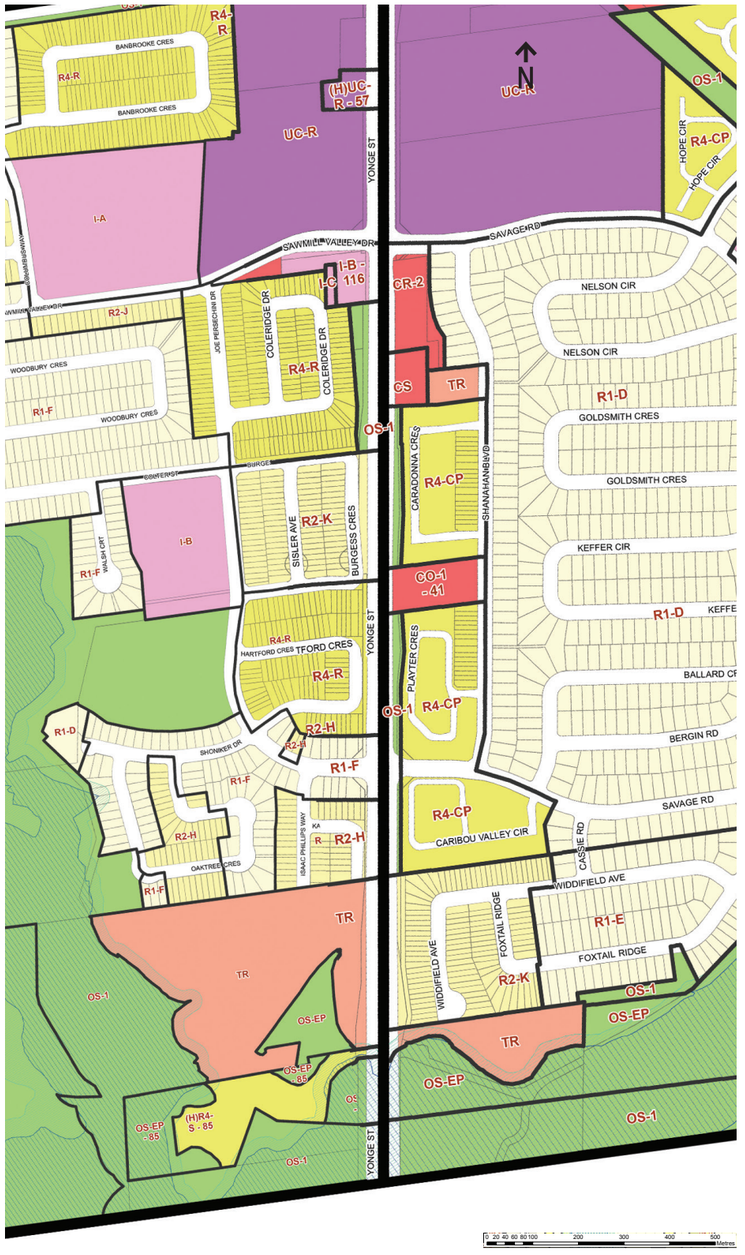
Yonge Street South section of this study is suburban in character and is predominantly low density residential. The street carries significant amounts of traffic, but mostly as a thoroughfare in the area. At present, this stretch of roadway does not have any existing bike lanes and little to no pedestrian amenities.

Key existing characteristics of Yonge Street South include:

- Wide ROW (ranging from 44.5 metres – 59.1 metres);
- Land use is predominantly low density residential;
- Above ground utilities and hydro poles dominate the streetscape and contribute to visual clutter;
- Rural cross section south of Joe Persechini Drive;
- The sidewalk is not continuous in some locations;
- Streetscape components such as paving materials, lighting, signage and furniture are utilitarian.

Yonge Street South

3.2.1 Land Use



SCHEDULE "A" TO BY-LAW NO. 2010-40
TOWN OF NEWMARKET

- RESIDENTIAL DETACHED DWELLINGS
- RESIDENTIAL SEMI-DETACHED DWELLINGS
- RESIDENTIAL MULTIPLE DWELLINGS (DUPLEX)
- RESIDENTIAL MULTIPLE DWELLINGS (TOWNHOME)
- RESIDENTIAL MULTIPLE DWELLINGS (APARTMENT)
- COMMERCIAL ZONES
- URBAN CENTRE ZONES
- EMPLOYMENT ZONES
- INSTITUTIONAL ZONES
- OPEN SPACE ZONES
- TR: TRANSITIONAL ZONES
- FP: FLOOD PLAIN
- NH: REGULATORY AREA AND OTHER NATURAL HAZARDS ZONE
- OAK RIDGES MORAINE
- Sec. 1.9 LANDS EXCULDED FROM THIS BYLAW
- MAP BOUNDARY
- PROPERTY PARCEL/ ROAD ALLOWANCE

Yonge Street South

3.2.2 Built Form



STUDY AREA

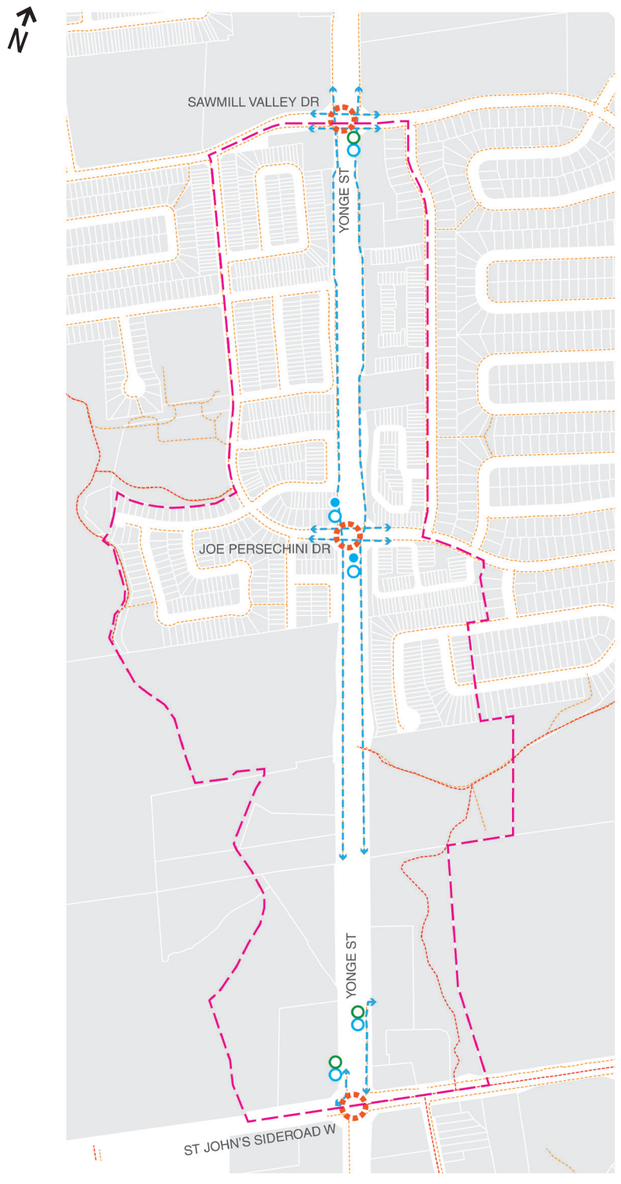
PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

EXISTING BUILT FORM

Yonge Street South

3.2.3 Active Transportation Links



STUDY AREA

PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

EXISTING PEDESTRIAN CIRCULATION

EXISTING SIDEWALK NETWORK

EXISTING BIKE LANES

EXISTING VIVA STOPS

EXISTING YRT STOPS

EXISTING GO STOPS

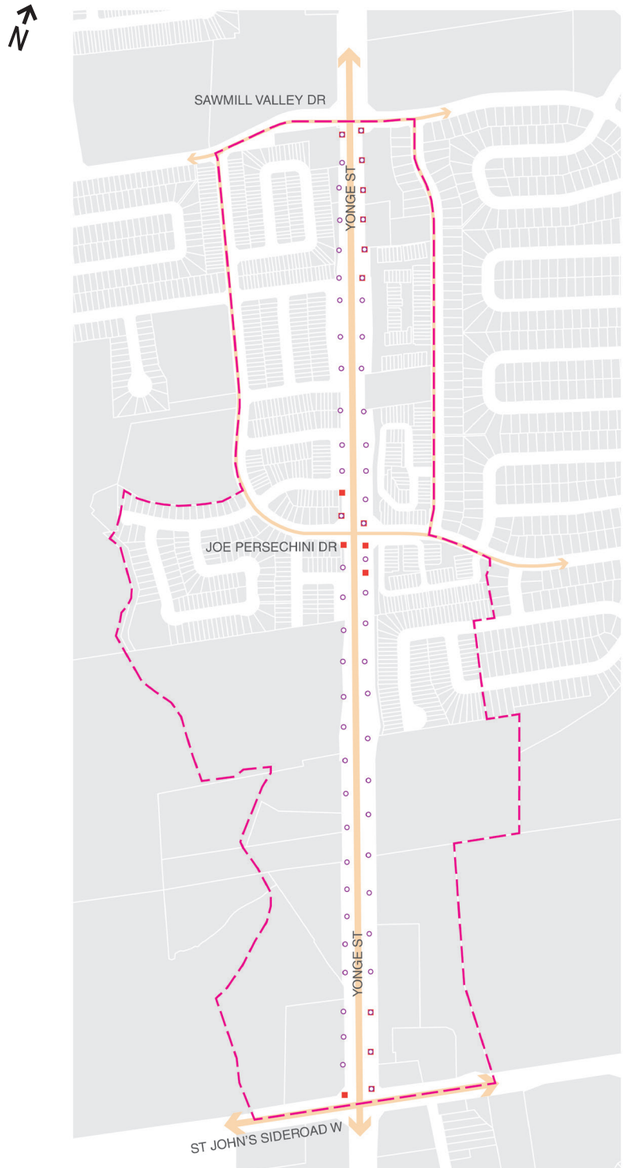
SIGNALIZED INTERSECTION

GATEWAY FEATURE

The average distance between signalized intersections is 750 linear metres. The average distance between transit stops is 736 linear metres.

Yonge Street South

3.2.4 Civil Infrastructure - Utilities and Lighting



STUDY AREA

PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

EXISTING STREET LIGHTS

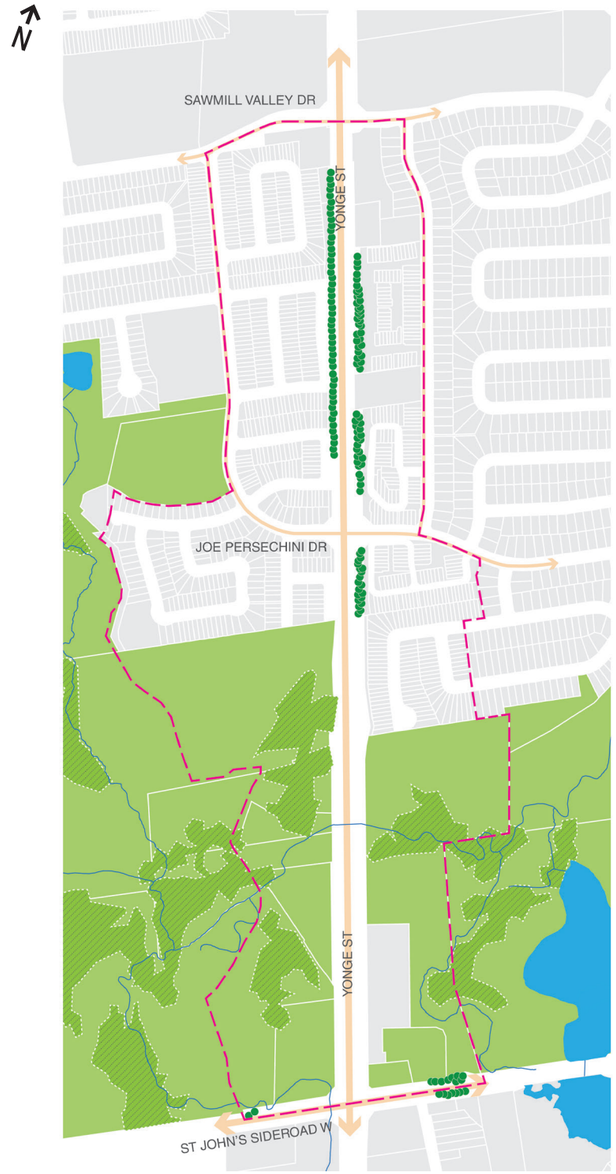
EXISTING HYDRO POLES

JOINT-USE POLE

The average distance between light standards is 50 metres on-centre. The average spacing of hydro poles is 54 metres on-centre.

Yonge Street South

3.2.5 Green Infrastructure – Street Trees, Parks & Open Space



STUDY AREA

PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

WATER BODY / POND

PARKS & OPEN SPACE

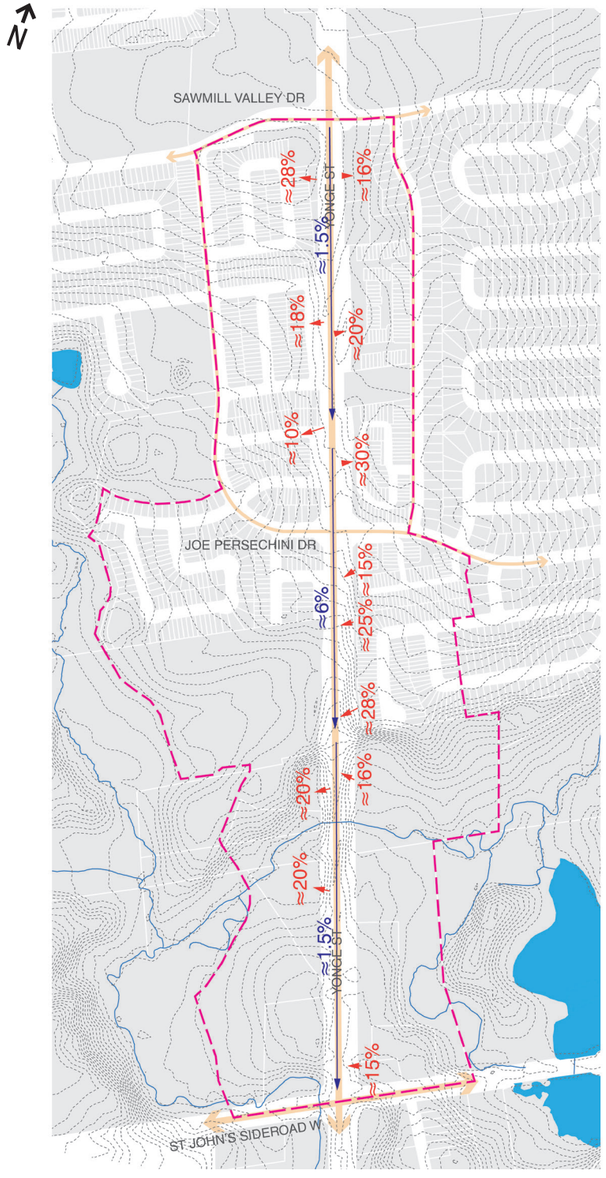
SIGNIFICANT FOREST

EXISTING STREET TREES

WATER COURSE

Yonge Street South

3.2.6 Topographic Features



STUDY AREA

PRIMARY ROAD NETWORK

EXISTING LAND PARCEL

WATER BODY

WATER COURSE

EXISTING CONTOUR LINE

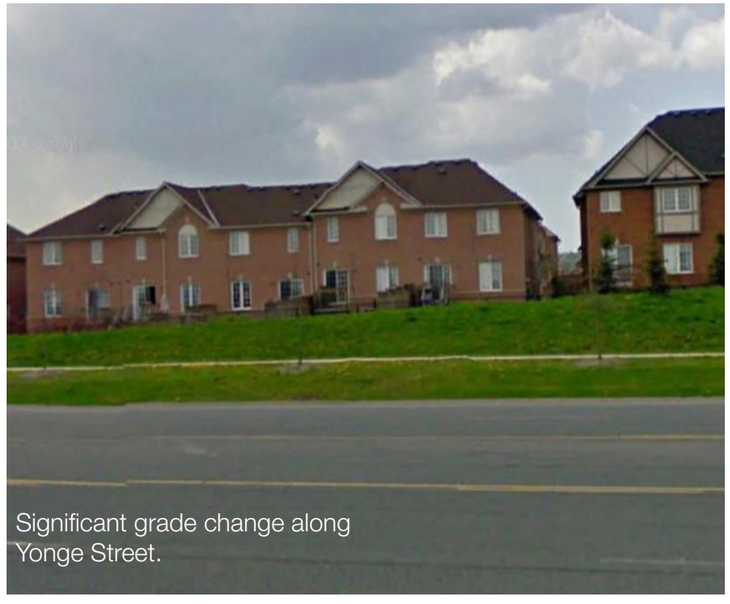
≈x% SLOPE FROM BACK OF CURB TO PROPERTY LINE

≈x% LONGITUDINAL SLOPE (FOLLOW ROADWAY)

There is an average grade of 20% (ranging from 6% to 30%) from the sidewalk to the property line on Yonge Street from Sawmill Valley Drive to Joe Persechini Drive. The grade changes become more significant on the east side of Yonge Street approaching Joe Persechini Drive.



The existing streetscape at the south end of the study area is rural in nature and lacks pedestrian amenities. The grade change is significant traveling northbound.



Significant grade change along Yonge Street.



Dominant presence of hydro poles and guy wires clutters streetscape.

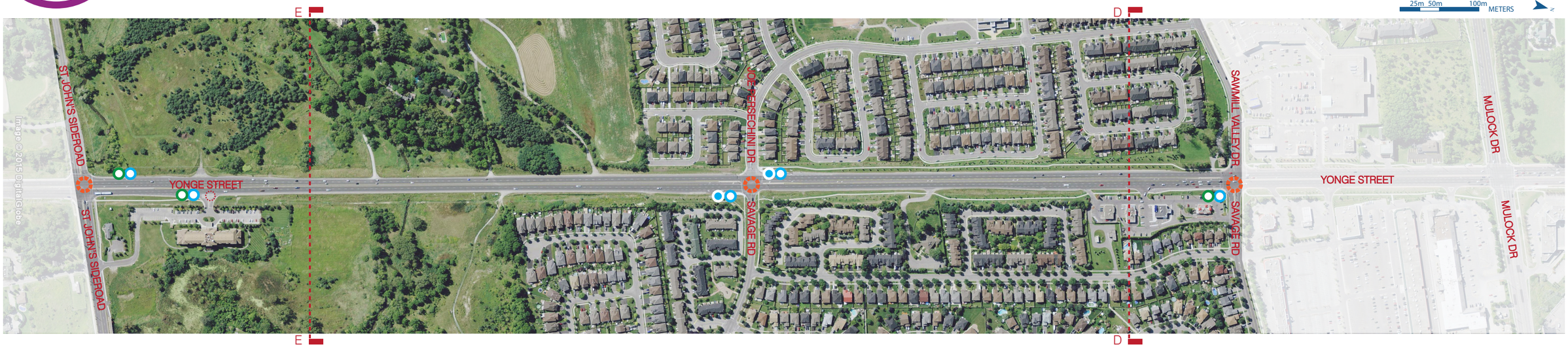


VivaNext stop not integrated with the streetscape and adjacent pedestrian sidewalk.

Yonge Street South

ROW

3.2.7 Public ROW Existing Geometry



NORTH BOUND DISTANCE BETWEEN

940m — TRANSIT STOPS

936m — 705m — SIGNALIZED INTERSECTIONS

SOUTH BOUND DISTANCE BETWEEN

712m — TRANSIT STOPS

- VIVA STOP
- YRT STOP
- GO STOP
- SIGNALIZED INTERSECTION
- GATEWAY FEATURE
- RIGHT IN/RIGHT OUT DRIVEWAY
- CHANNELIZED DRIVEWAY

Yonge Street South - Existing Boulevard Width

Sawmill Valley Dr to Town Boundary

Segments	Cross Section		Traffic Lane Configuration	Bike Lane	Transit Facilities			Public R.O.W Width	Boulevard Width		Pedestrian Sidewalk	Walking Trails	Driveways	
					YRT Stops	VIVA Stops	GO Station		West	East			West	East
Sawmill Valley Dr to Joe Persechini Dr	D-D	155m south of Sawmill Valley Dr	4 Through Lanes + TWLTL + 1 R Turn Lane	N/A	2	1	1	44.5m	12.8m	7.3m	West & East	N/A	0	3
Joe Persechini Dr to St John's Sideroad	E-E	340m north of St John's Sideroad	4 Through Lanes + Multi-use Path	N/A	3	2	2	59.1m	18.7m	18.6m	N/A	East	3	2

TWLTL = Two-Way Left Turn Lane

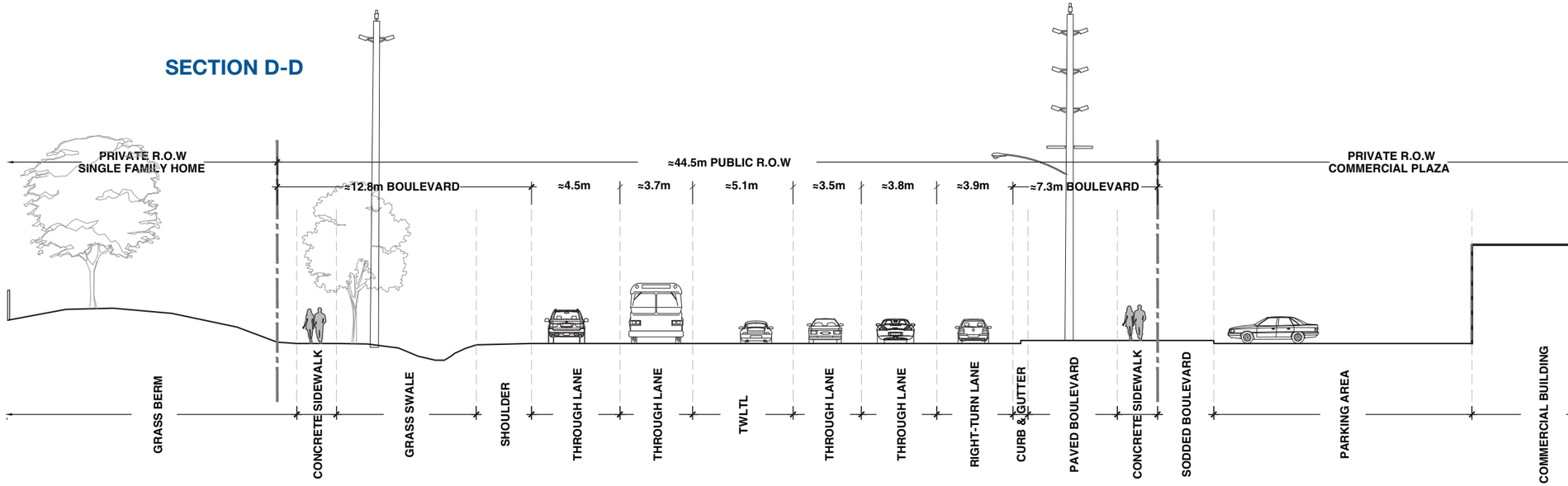
ROW

Yonge Street South

3.2.7. Public ROW Existing Geometry

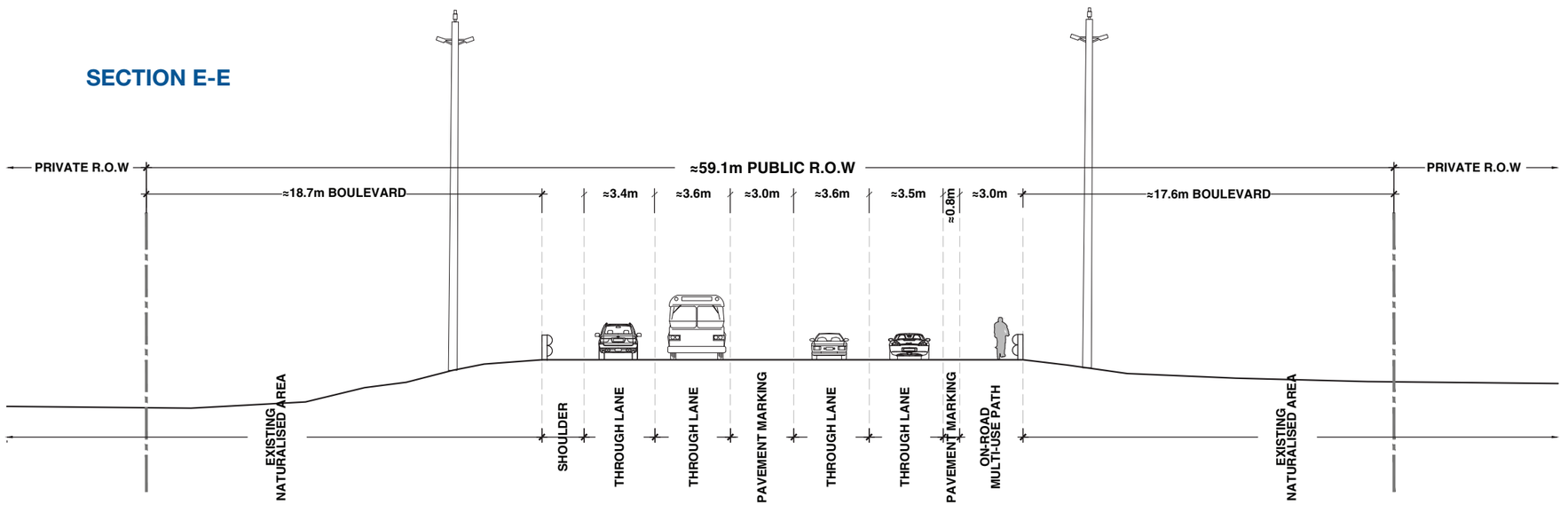
Existing Cross Sections

SECTION D-D




Section D-D

SECTION E-E




Section E-E

Yonge Street South

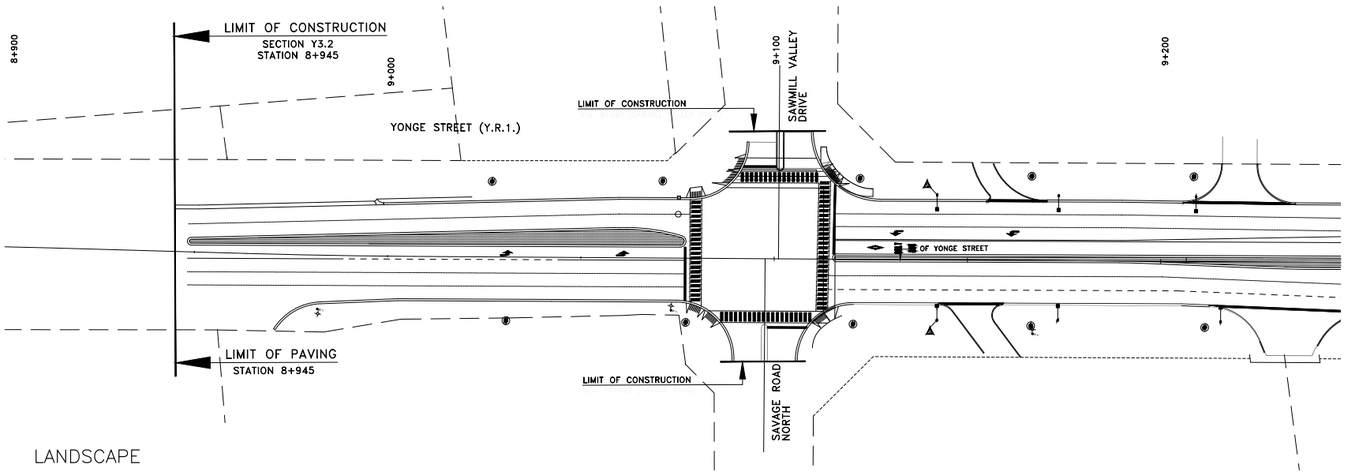
3.2.8 Relevant Studies and Design Interface

VIVANEXT DESIGN DEVELOPMENT ON YONGE STREET SOUTH

The vivaNext Yonge Street rapidway extends from Davis Drive to Mulock Drive as part of the comprehensive rapid transit network that connects the Region's urban centres. The project is currently in the detailed design phase with preliminary construction underway. This segment of the rapidway is scheduled to open in December 2018.

The Streetscape Master Plan as part of this study will transition into the vivaNext streetscape design as well as the bike lane geometry.

VivaNext Yonge Street Y3.2 Streetscape Design Boulevard Planter Layout - 90% Detailed Design



LANDSCAPE

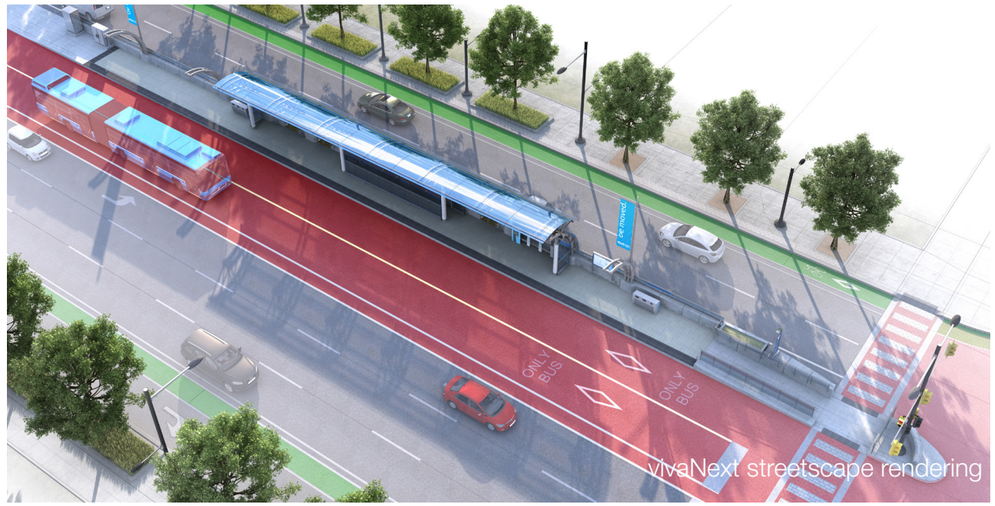
PROPOSED UNIT PAVING
–200X200X70 mm thick, Umbria no finish– colour Midnight Sky by Unilock or approved equal as determined by the Owner.
–200x200x70 mm thick, Umbriano finish– colour winter Marvel by Unilock or approved equal as determined by the Owner.
–400x400x70 mm thick, Umbriano finish– colour winter Marvel by Unilock or approved equal as determined by the Owner.
Refer to L386.

PROPOSED CONTINUITY STRIP
–120X120X80 mm thick, Il campo 'Eco– Priora' finish–colour Coffee Creek by Unilock or approved equal as determined by the Owner. Refer to L386.

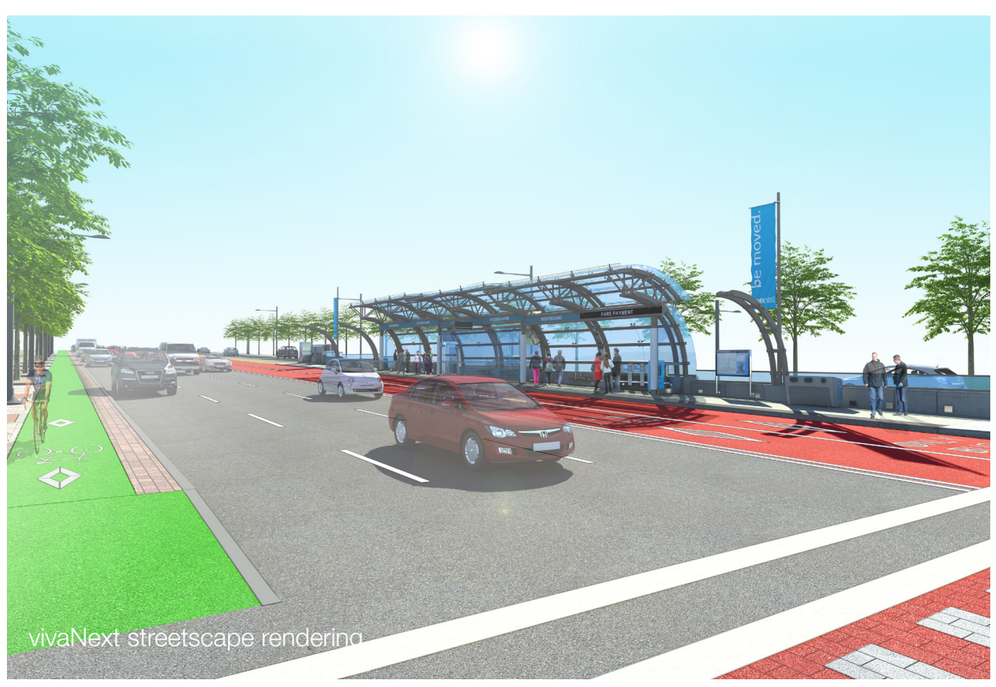
TACTILE GROOVED PAVER
–300x300x70 mm ADA Truncated Dome paver–Premier Finish–colour Charcoal Gray by Unilock or approved equal as determined by the Owner. Refer to L386.

CONCRETE SIDEWALK

ASPHALT



vivaNext streetscape rendering



vivaNext streetscape rendering

Yonge Street South

SWOT 3.2.9 SWOT

	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	· Pedestrian sidewalk along both sides of Yonge Street between Sawmill Valley Drive and Savage Road · Where sidewalks are present, there is a continuous buffer zone between the roadway and sidewalk · Average boulevard width is 14.35 metres · Existing walking trails and connections (Nokiidaa Trail, Tom Taylor Trail, and connection to Mackenzie Marsh)	· Existing on-road multi-use path with pavement marking from Savage Road to Town boundary · Region and Town planning policy focus on future active transportation	· All public transit options available including VIVA, YRT and GO Transit · Predominantly residential with potential for high transit ridership	· Signalized crossing at each major intersection, spaced an average of 705 metres · Access provided to all major residential and commercial developments · Minimal traffic interruption due to rural character and limited commercial driveway interruptions	· Efficient movement of traffic · Minimal commercial driveway interruptions · Average boulevard width is wide (average 15.8 metres west and 13 metres east)
WEAKNESSES	· Non-continuous sidewalk along west side of street south of Joe Persechini Drive (multi-use path set to be built on east side) · Inconsistent street character · Poor pedestrian environment · Lack of pedestrian amenities including lighting, coordinated street furnishings, street trees, public art and paving · Frequent commercial driveways break pedestrian sidewalk · Pedestrians do not have priority · Narrow sidewalk width (approximately 1.5 metres) · Cluttered pedestrian space with above ground utilities and signage · Hydro guy wires interfere with pedestrian circulation and are unsightly	· Insufficient cycling facilities	· Transit stops are infrequent with 736 metres spacing · Challenge of serving a more rural area · Lack of commuter-oriented perspective · Lack of attractive transit amenities including benches, shelters, etc. · Car-oriented community with less focus on taking public transit, especially in a more rural setting	· Signalized intersections spaced too far apart · Insufficient intersections leads to jaywalking at uncontrolled locations · Large turning radii promotes faster turning speeds and greater crossing distances for pedestrians increasing their risks	· TWLTL present between Sawmill Drive and Savage Road
OPPORTUNITIES	· Establish pedestrian priority through continuous AODA compliant sidewalks · Provide high quality street furnishings and design features to promote pedestrian use and lingering · Incorporate closely spaced, pedestrian scaled lighting along sidewalks · Introduce street trees and plantings to enhance the overall pedestrian experience, have a positive environmental impact, and create shade and microclimates. · Incorporate high quality sidewalk materials including paving to strengthen pedestrian realm · Introduce public art components to add meaning and value to key spaces and increase sense of place · Define pedestrian crosswalks with pavement markings, such as Traffic Patterns XD, to enhance placemaking, accessibility and safety · Increase pedestrian connections, access and linkages · Increase in minimum sidewalk width to 1.8 metres · Define vistas through lookout points	· Provide space for dedicated bike lanes, at minimum utilizing bicycle sharrow lane markings · Eliminate TWLTL and reconfigure vehicular lanes to accommodate bike lanes · Implement signage/wayfinding systems to help cyclists identify the safest and most desirable routes · Increase connections, access and linkages to key destinations, transit facilities and trails · Promote public education on the benefits of active transportation	· Capitalize on existing transit and incorporate additional transit options · Provide additional transit amenities to provide a convenient waiting area that is not disruptive to pedestrian flow · Add additional transit stops at midblock placements to reduce pedestrian walking distances	· Introduce midblock crossings if possible · Implement enhanced pavement markings at intersections and crossings, such as Traffic Patterns XD, to increase accessibility and safety · Urbanize intersections with tighter turning radii to promote slower turning speeds and reduce crossing distance for pedestrians	· Eliminate TWLTL · Introduce traffic calming measures · Promote public education on the benefits of active transportation
THREATS	· Car-oriented community where vehicles are the predominant transport and drivers often overlook pedestrian and cyclist safety as a priority · High volume traffic corridor with a design speed of 80 km/h · Pedestrian safety issues at crosswalks · Developments fail to present active frontage and contribute to street life/pedestrian activity	· Car-oriented community where vehicles are the predominant transport and drivers often overlook cyclist safety as a priority · High volume traffic corridor with a design speed of 80 km/h · Current lack of cycling culture	· Currently, transit less convenient than driving	· Primarily a thoroughfare with few destinations in the area	· Car-oriented community · Primarily rural character with more convenience provided by vehicle use versus other modes

Yonge Street South

3.2.10 Summary

Bounded by Sawmill Valley Drive on the north and the Town boundary on the south, the Yonge Street South section of this study is more rural in character and is predominantly low density residential. The street carries significant amounts of traffic, and currently functions as a thoroughfare. This stretch of roadway does not have any existing bike facilities and little to no pedestrian amenities.

Key opportunities for Yonge Street South include:

- Wide ROW (ranging from 44.5 metres – 59.1 metres) provides opportunities to strengthen pedestrian, cyclist, vehicular and public transit movement;
- Enhance pedestrian usage and experience through providing ample continuous sidewalks with plantings to provide shade, appealing microclimates and a stronger sense of place;
- Encourage cycling through the implementation of protected bike facilities and multi-use trails supported by clear wayfinding for the safest routes.


Expansive intersection privileges vehicular transportation over pedestrian.


Right-turn lane oriented to vehicular transportation.



Unsightly culvert for SWM.



Pedestrian experience lacks appealing sense of place.

3.3 Davis Drive East – Existing Conditions

The Project Team has evaluated the existing conditions along Davis Drive between Highway 404 to Patterson Street. The key findings, defining features and analysis is summarized within this section.

Davis Drive East has a varied and inconsistent street character with one section heavily dominated by commercial strip plaza development and medical facilities in the east and a majority of the streetscape dominated by residential rear lots. This section of Davis Drive has continuous sidewalks along both sides for the entire length, as well as an existing bicycle facilities (on-road shared) for the majority of length (from Alexander Road to Harry Walker Parkway). Although sidewalks and cycling facilities currently exist, there is a lack of amenities resulting in a poor pedestrian environment and a cluttered public realm. In addition, there are frequent driveways, particularly along the north side of Davis Drive, interrupting both traffic and pedestrian flow. This section of Davis Drive interfaces with the vivaNext rapidway near Patterson Street.

Key existing characteristics of Davis Drive East include:

- Varied street character with a mix of commercial and low density residential;
- Above grade utilities visible and contribute to clutter in the public realm;
- Hydro poles along north side of street dominate the streetscape;
- Significant grade changes near Leslie Street and Davis Drive on the southeast quadrant;
- Residential rear lots create an unanimated streetscape;
- Lack of bike facilities;
- Car-oriented streetscape.

Davis Drive East

3.3.1 Land Use



SCHEDULE "A" TO BY-LAW NO. 2010-40
TOWN OF NEWMARKET

- RESIDENTIAL DETACHED DWELLINGS
- RESIDENTIAL SEMI-DETACHED DWELLINGS
- RESIDENTIAL MULTIPLE DWELLINGS (DUPLEX)
- RESIDENTIAL MULTIPLE DWELLINGS (TOWNHOME)
- RESIDENTIAL MULTIPLE DWELLINGS (APARTMENT)
- COMMERCIAL ZONES
- URBAN CENTRE ZONES
- EMPLOYMENT ZONES
- INSTITUTIONAL ZONES
- OPEN SPACE ZONES
- TR: TRANSITIONAL ZONES
- FP: FLOOD PLAIN
- NH: REGULATORY AREA AND OTHER NATURAL HAZARDS ZONE
- OAK RIDGES MORAINE
- Sec. 1.9 — LANDS EXCULDED FROM THIS BYLAW
- MAP BOUNDARY
- PROPERTY PARCEL/ ROAD ALLOWANCE

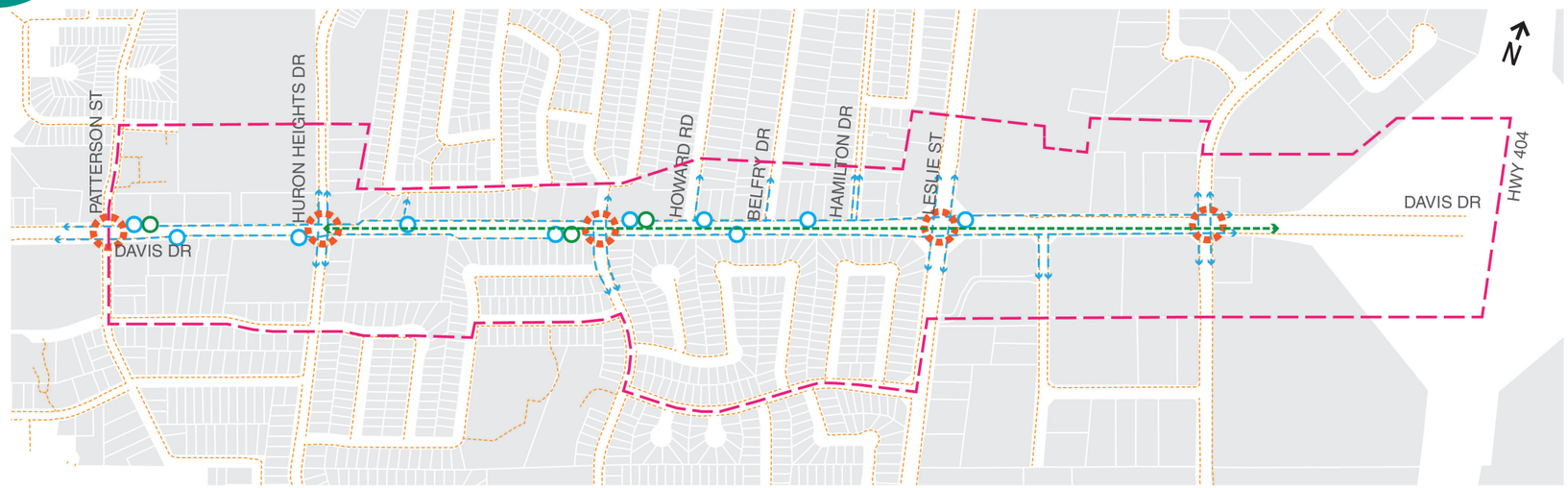
Davis Drive East

3.3.2 Built Form



Davis Drive East

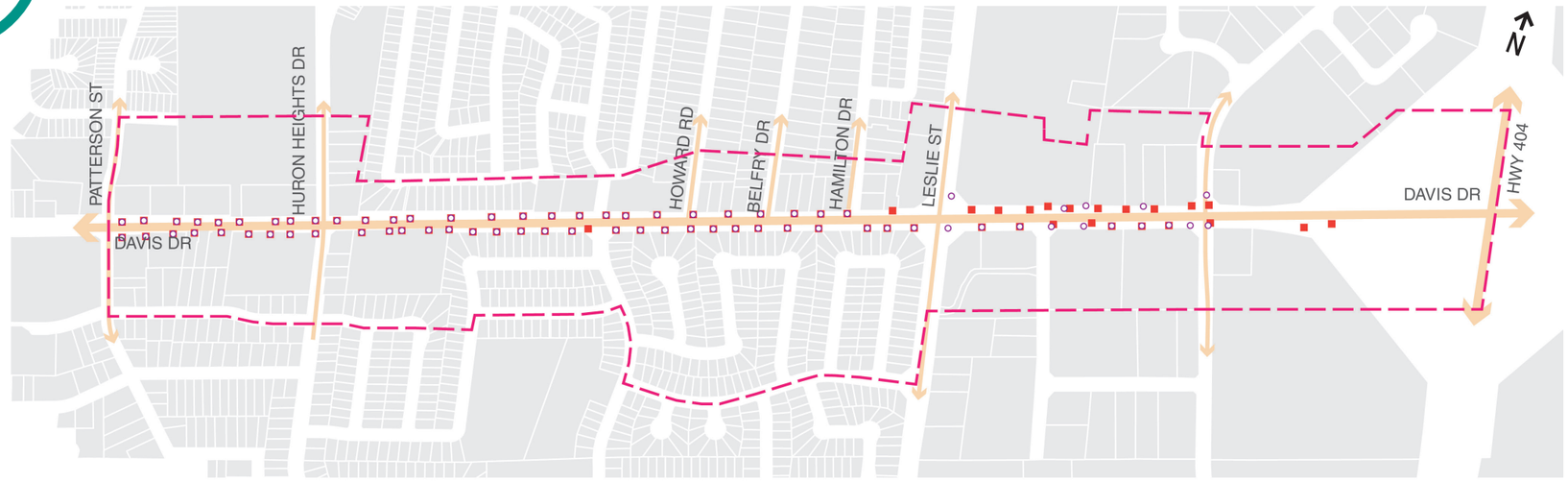
3.3.3 Active Transportation Links



The average distance between existing signalized intersections is approximately 375 linear metres. The average distance between transit stops is approximately 320 linear metres.

Davis Drive East

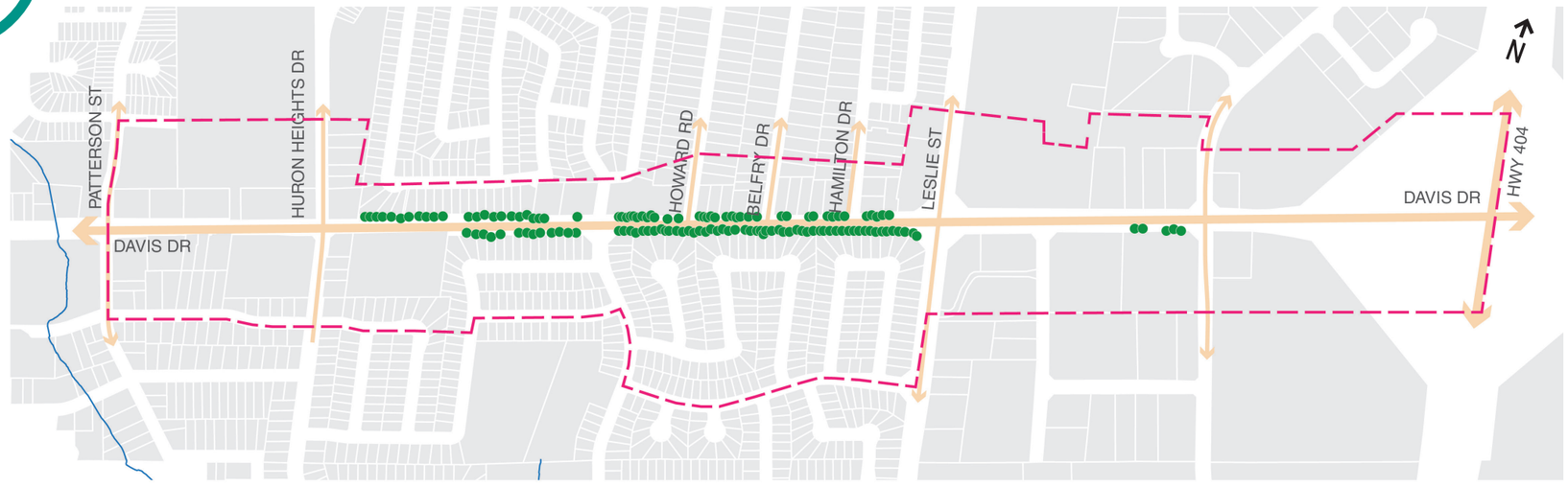
3.3.4 Civil Infrastructure - Utilities and Lighting



The average distance between light standards is 45 metres on-centre. The average spacing of hydro poles is 45 metres on-centre.

Davis Drive East

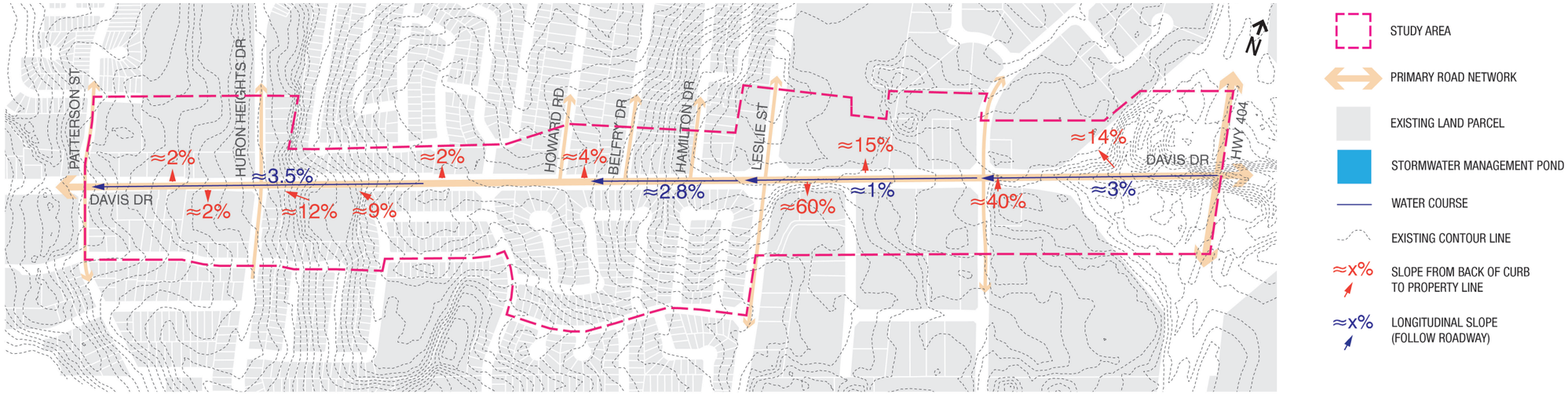
3.3.5 Green Infrastructure – Street Trees, Parks & Open Space



This segment of the corridor lacks street trees adjacent to the large commercial-industrial lots. Street trees are present at the centre of the segment where there are single family rear lots.

Davis Drive East

3.3.6 Topographic Features




There are significant grade changes adjacent to the public sidewalk, leading to private parking lots and commercial establishments.

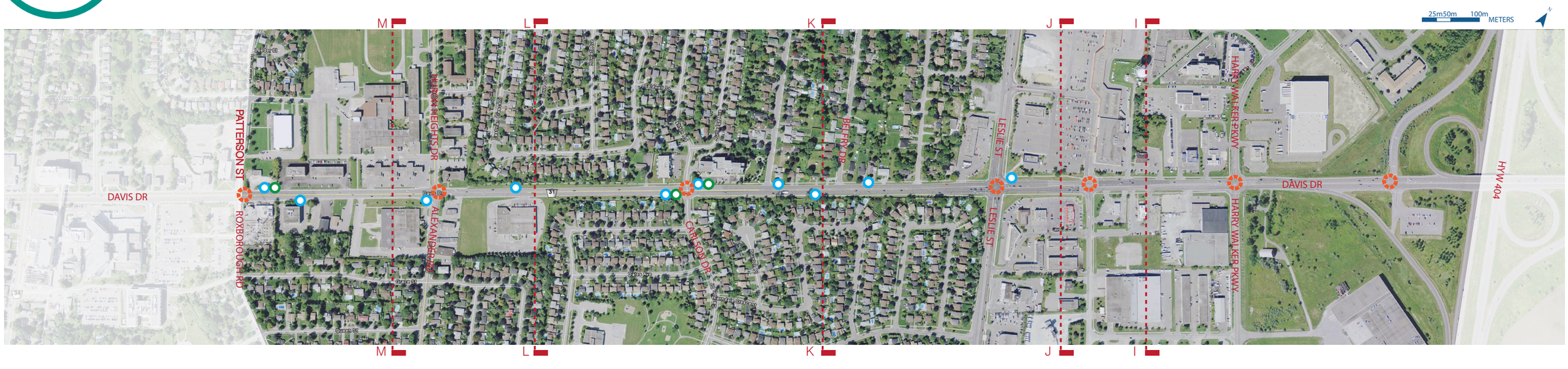

There are notable grade changes adjacent to the public sidewalk as the public realm transitions to the private property line.

There are a few locations that have considerably steep slopes of up to 60%, such as the southeast corner of Leslie Street and Davis Drive.

ROW

Davis Drive East

3.3.7 Public ROW Existing Geometry



Davis Drive East - Existing Boulevard Width

Patterson St to Hwy 404

Segments	Cross Section		Traffic Lane Configuration	Bike Lane	Transit Facilities			Public R.O.W Width	Boulevard Width		Pedestrian Sidewalk	Walking Trails	Driveways	
					YRT Stops	VIVA Stops	GO Station		North	South			North	South
Hwy 404 to Leslie St	J-J	100m east of Forhan Ave	4 Through Lanes + TWLTL + 1 R Turn Lane	On-road shared	1	N/A	N/A	39.7m	8.2m	9.2m	North & South	South	4	4
	I-I	40m west of Forhan Ave	additional section to illustrate grade change											
Leslie St to Carlson Dr	K-K	27m west of Belfry Dr	4 Through Lanes + TWLTL	On-road shared	4	N/A	1	31.7m	5.7m	8.2m	North & South	South	8	0
Carlson Dr to Alexander Rd	L-L	190m east of Alexander Rd	4 Through Lanes	On-road shared	2	N/A	1	29.5m	11.4m	3.5m	North & South	South	2	2
Alexander Rd to Patterson St	M-M	75m west of Alexander Rd	4 Through Lanes	N/A	3	N/A	1	28.2m	5.5m	7.8m	North & South	South	5	4

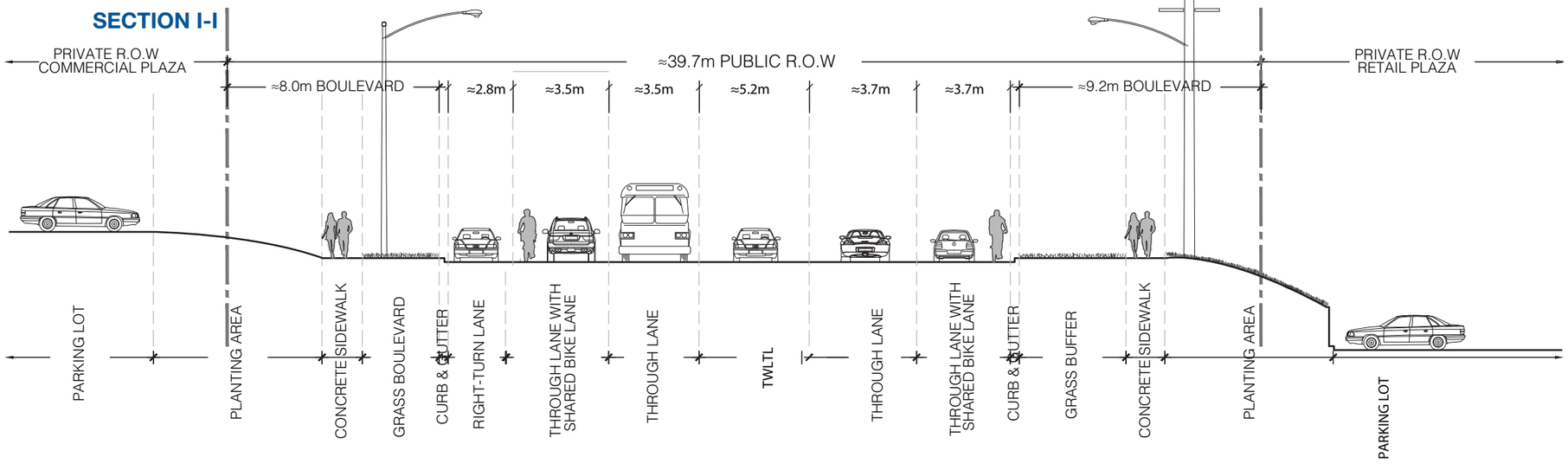
TWLTL = Two-Way Left Turn Lane

ROW

Davis Drive East

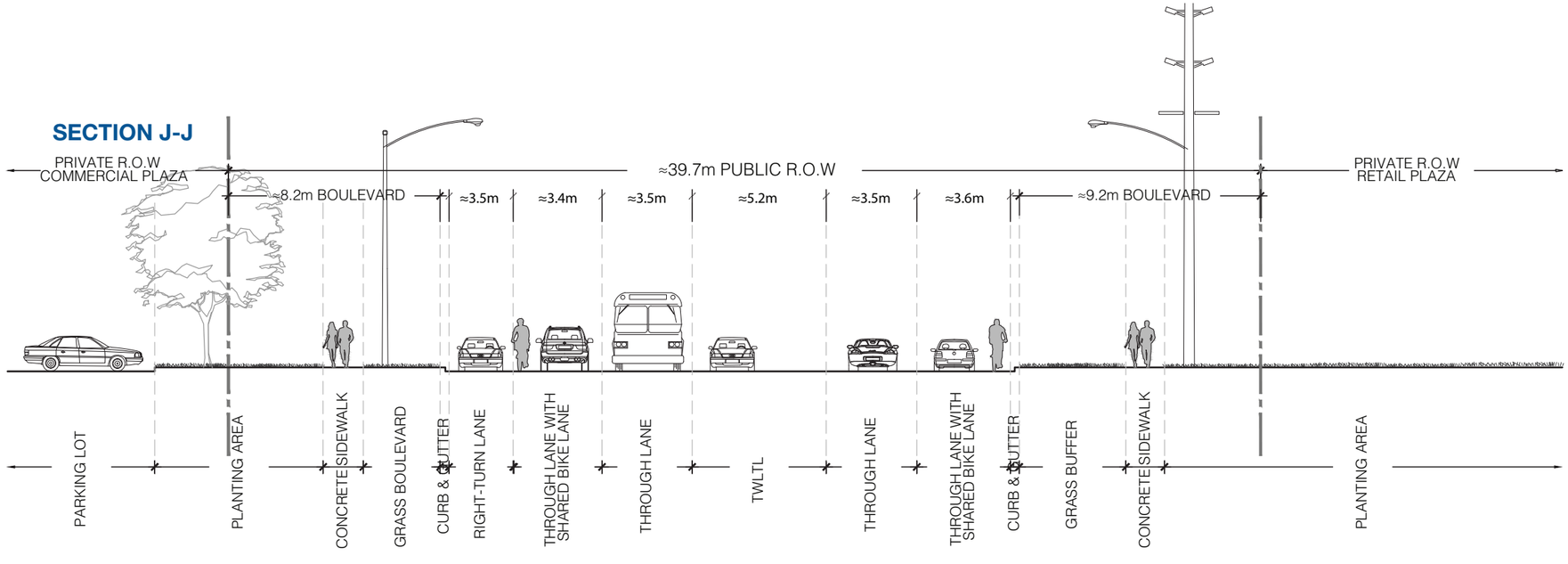
3.3.7 Public ROW Existing Geometry

Existing Cross Sections





Section I-I




Section J-J

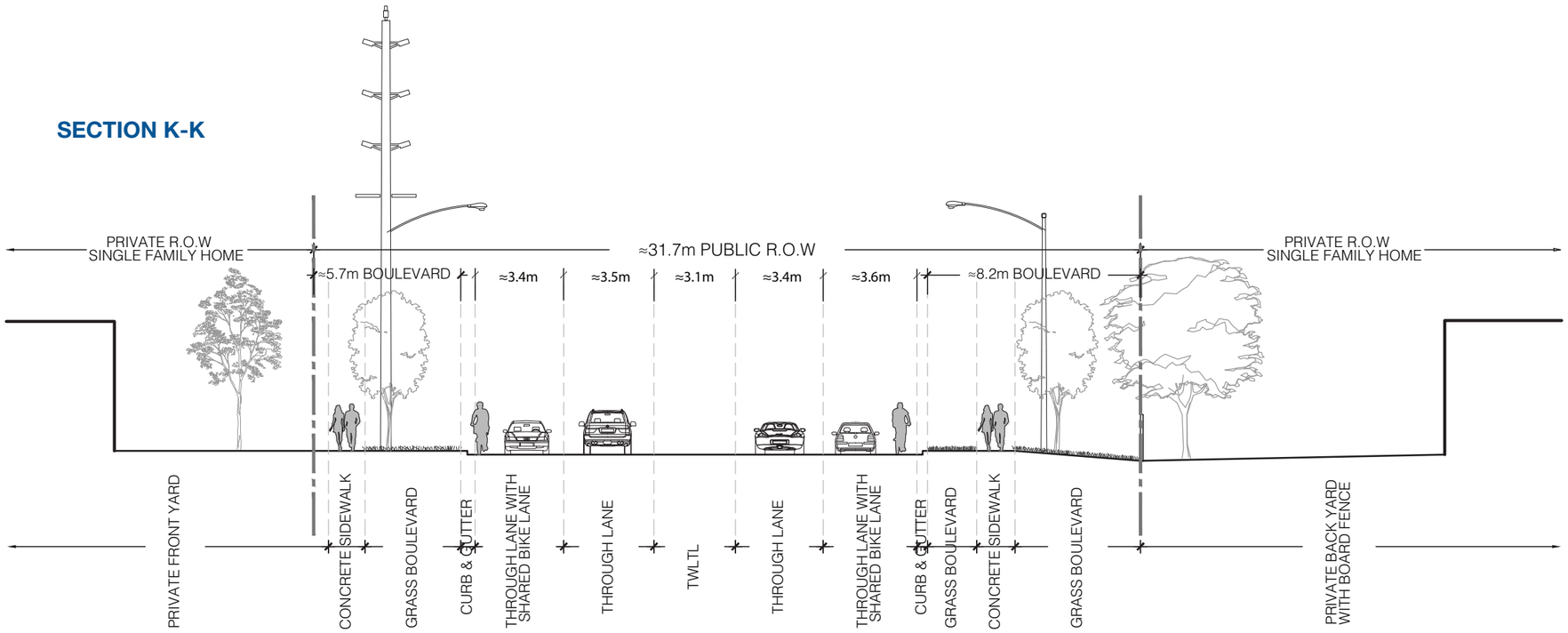
ROW

Davis Drive East

3.3.7 Public ROW Existing Geometry

Existing Cross Sections

SECTION K-K




Section K-K

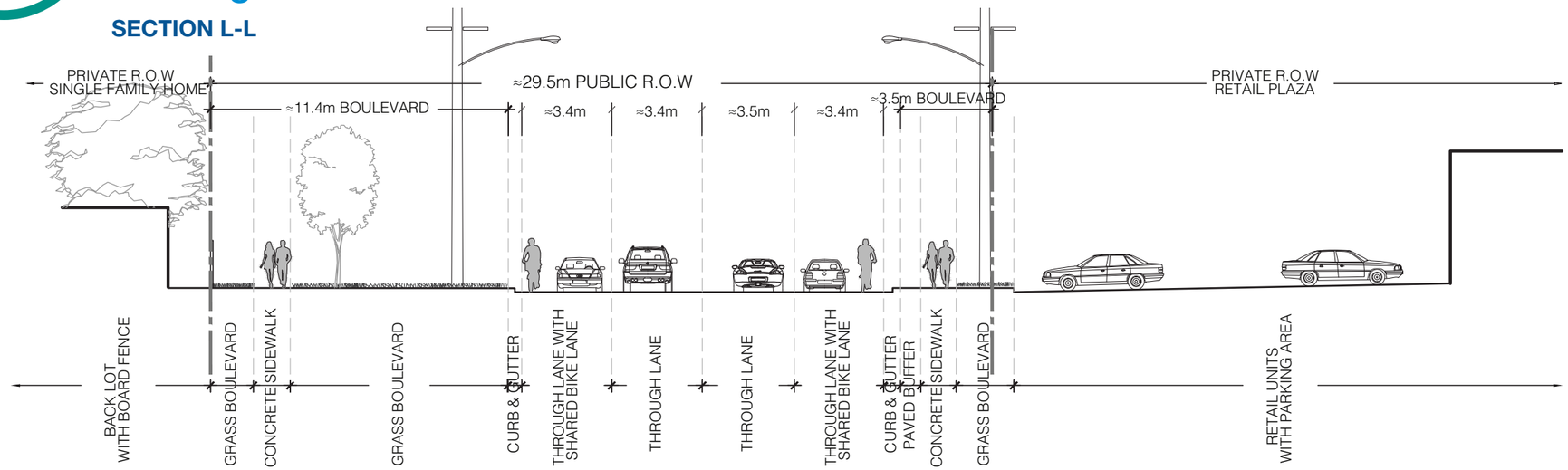
ROW

Davis Drive East

3.3.7 Public ROW Existing Geometry

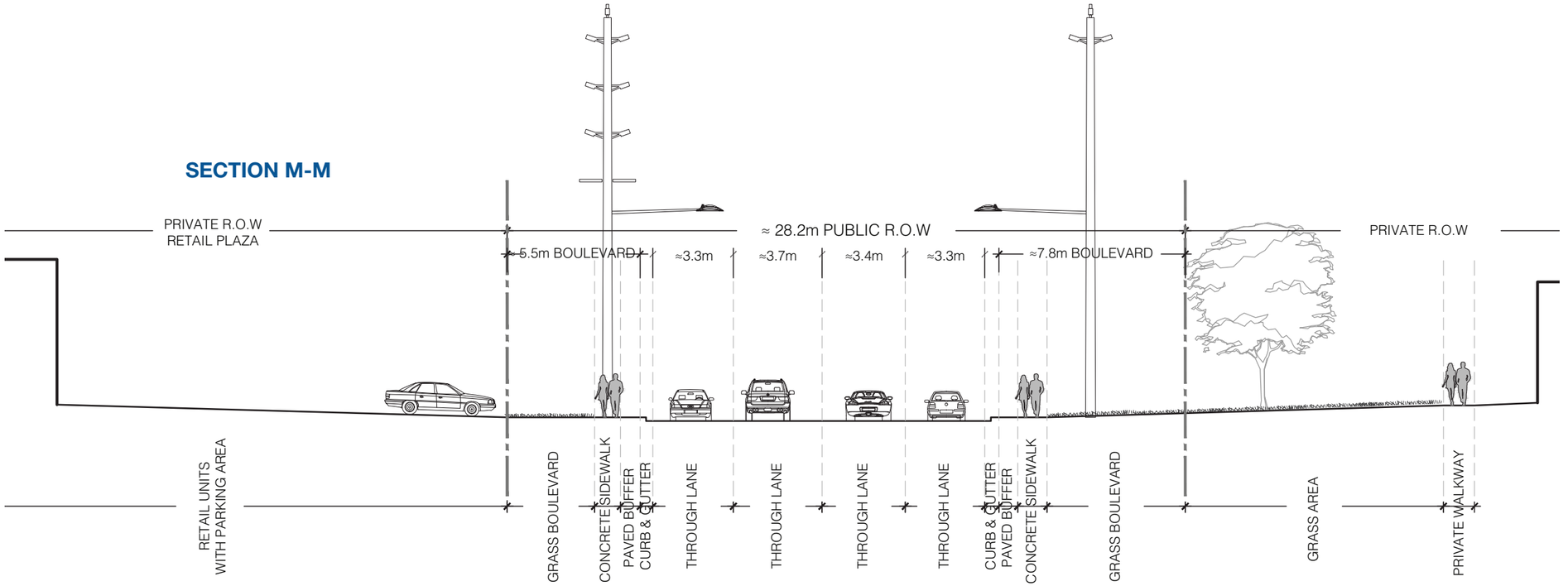
Existing Cross Sections

SECTION L-L




Section L-L

SECTION M-M





Section M-M

Davis Drive East

3.3.8 Relevant Studies and Design Interface

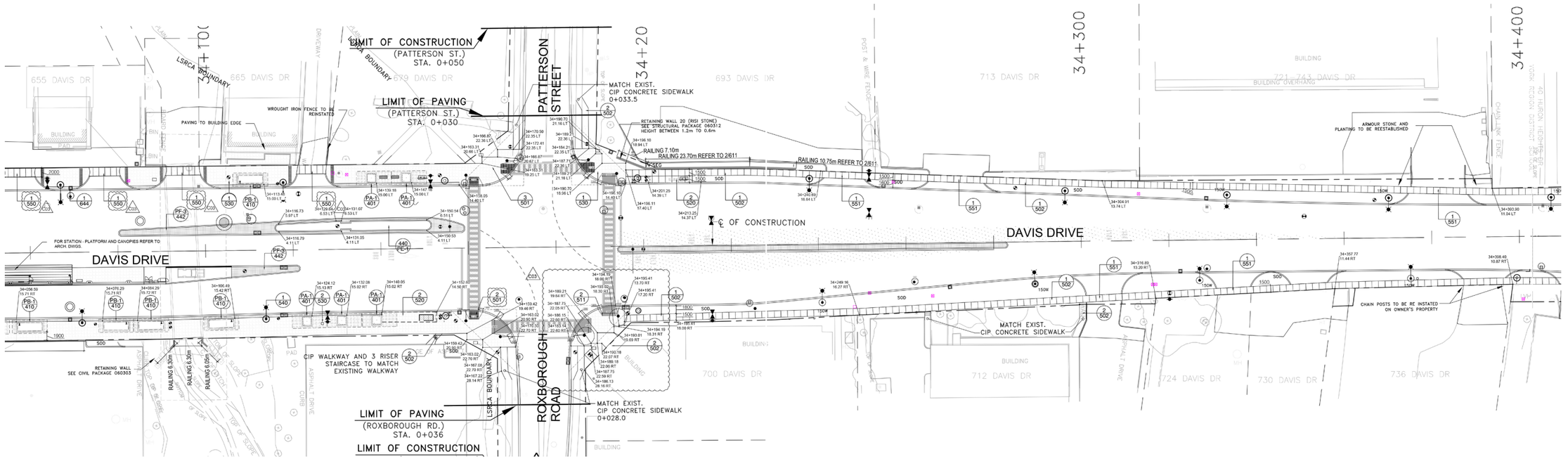
VIVANEXT DAVIS DRIVE - D1

By the end of 2015, Davis Drive's bus rapidway project will be completed, with a dedicated rapidway centre lane along Davis Drive between Yonge Street to Patterson Drive and curb side transit lanes to Highway 404. The bus rapid transit lanes will provide fast, convenient transit and assist in the transformation of the Town of Newmarket. The infrastructure project will include road widening, paving, and the installation of pedestrian friendly boulevards and sidewalks. The existing carpool lot at Davis Drive and Highway 404 will be significantly expanded to accommodate the growth, development and increased ridership. It will be the last eastbound stop for all Viva buses. The Streetscape Master Plan will transition into the D1 project at Patterson Drive.





vivaNext Davis Drive D1 Landscape Streetscape Layout Plan - IFC



Davis Drive East

SWOT 3.3.9 SWOT

	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	· Continuous sidewalks provided along both sides for entire length · Access to walking trails along south side of Davis Drive · High concentration of residential development · Continuous buffer zone between roadway and sidewalks · Wide ROW width (average 32.3 metres)	· Existing bicycling lane (on-road, shared) for majority of length · Region and Town planning policy focus on future active transportation · Key destinations are bike accessible	· Numerous transit options including 10 YRT stops and three GO Transit stops with average spacing of 317 metres · From Patterson Street to Leslie Street, stops are spaced more frequently to service residential community	· Signalized intersection at each major crossing spaced an average of 375 metres	· Efficient thoroughfare with easy access to Highway 404 · Provides easy access to medical facilities along Davis Drive
WEAKNESSES	· Frequent commercial driveways, particularly along the north side of the street, disrupt the pedestrian realm · Inconsistent street character · Poor pedestrian environment · Lack of pedestrian amenities including lighting, coordinated street furnishings, street trees, public art and paving · Pedestrians do not have priority · Narrow sidewalk width (approximately 1.5 metres) · Cluttered pedestrian space with above ground utilities and signage · Hydro guy wires interfere with pedestrian circulation and are unsightly	· Sharrow bike lane not protected · Little space between cyclists and traffic · Lack of bicycle facilities on the Viva segment of Davis Drive	· Challenges of serving a more rural, residential area · Lack of commuter-oriented perspective · Lack of transit stops near medical facilities · Lack of attractive transit amenities including benches, shelters, etc.	· Lack of signalized and/or safe crossing opportunities at midblock residential development · Issues with intersection design, including lack of defined crosswalks which increases pedestrian risk when crossing · Crosswalks are not current with AODA standards, specifically curb ramps · Large turning radii promotes faster turning speeds, increasing risks to pedestrians and cyclists	· Vehicles using the street as a throughway to access Highway 404 · TWLTL present between Highway 404 to Carlson Drive
OPPORTUNITIES	· Provide adequate connections to medical facilities on both sides of street, allowing users to access different offices without using a car · Establish pedestrian priority · Provide high quality street furnishings and design features to promote pedestrian use and lingering · Incorporate closely spaced, pedestrian scaled lighting along sidewalks · Introduce street trees and plantings to enhance the overall pedestrian experience, have a positive environmental impact, and create shade and microclimates · Incorporate high quality sidewalk materials including paving to strengthen pedestrian realm · Introduce public art components to add meaning and value to key spaces and increase sense of place · Introduce AODA compliant pedestrian crosswalks with pavement markings, such as Traffic Patterns XD, to enhance placemaking, accessibility and safety · Increase pedestrian connections, access and linkages, specifically in relation to medical facilities and transit stops · Increase in minimum sidewalk width to 1.8 metres	· Provide space for separate bike facilities, at minimum utilizing bicycle sharrow lane markings · Eliminate TWLTL and reconfigure lanes to accommodate bike facilities · Implement signage/wayfinding systems to help cyclists identify the safest and most desirable routes · Increase connections, access and linkages to key destinations, transit facilities and medical facilities · Provide bicycle parking where appropriate and in relation to medical facilities	· Focus on accessible transit facility amenities · Re-align YRT stops to service medical facilities · Increase ridership with planned intensification of medical facilities · Provide additional transit amenities to provide a convenient waiting area that is not disruptive to pedestrian flow	· Introduce midblock crossings where appropriate · Define pedestrian crosswalks with pavement markings such as Traffic Patterns XD, and/or other treatments to increase accessibility and safety · Redesign curb ramps to current AODA standards · Urbanize intersections with tight turning radii to promote slower turning speeds and reduce crossing distance for pedestrians · Provide a protected median at intersections and/or at midblock	· Eliminate TWLTL · Introduce traffic calming · Provide more efficient turning options into medical facilities · Create planted landscape buffers along Davis Drive
THREATS	· Car-oriented community where vehicles are the predominant transport and drivers often overlook pedestrian and cyclist safety as a priority · High volume traffic corridor · Pedestrian safety issues at crosswalks · Predominantly residential development (single family homes) and retail parking lots fail to present active frontage	· High volume traffic corridor with frequent cars turning · Car-oriented community	· Through traffic flow entering Highway 404 · Car-oriented community with less focus on taking public transit	· High volume traffic corridor · Traffic coordination to reduce stacking and congestion	· Car-oriented community

Davis Drive East

3.3.10 Summary

Davis Drive West, bound by Patterson Street on the west and Highway 404 on the east, has a varied and inconsistent street character. The western streetscape is heavily dominated by commercial strip plaza developments and medical facilities, with the majority of the eastern streetscape dominated by residential rear lots. The section of Davis Drive has continuous sidewalks along both sides for the entire length, as well as an existing bicycle lane (on-road shared) for the majority of its length. Although sidewalks and cycling facilities currently exist, they are utilitarian in nature. In addition, there are frequent driveways, particularly along the north side of Davis Drive, interrupting pedestrian flow. This section of Davis Drive interfaces with the vivaNext rapidway near Patterson Street.

Key opportunities for Davis Drive East include:

- Wide ROW allows for the presence of placemaking initiatives to encourage pedestrian presence and potentially reduce traffic;
- Address significant grade changes near Leslie Street;
- Create AODA compliant access to medical facilities and throughout public realm;
- Devise a system to maintain an appealing streetscape with a strong sense of place despite being dominated by residential rear lots;
- Ensure safety and a pleasant pedestrian experience, consolidating driveways where feasible;
- Create an environment for community interaction and gathering in proximity to pre-existing community facilities and commercial establishments.



Above grade utilities clutter the streetscape.


There is a lack of pedestrian amenities along the corridor.



The streetscape environment is geared towards the vehicular experience.

3.4 Davis Drive West – Existing Conditions

The Project Team has evaluated the existing conditions along Davis Drive between Bathurst Street and 200 metres West of Yonge Street. The key findings, defining features and analysis is summarized within this section.

Davis Drive West has a varied streetscape character with predominantly commercial developments from Yonge Street to Eagle Street and a more rural cross section from Eagle Street to Bathurst Street. Similar to Yonge Street North, Davis Drive West carries a significant amount of through traffic, with the intersection of Yonge Street and Davis Drive noted as a key intersection and urban centre of the Town of Newmarket. There is a continuous sidewalk on the south side of the street for the majority of the length and no existing bike lanes. Most of the commercial development is focused towards the Yonge Street and Davis Drive intersection, with a GO Transit hub at Eagle Street. The proposed Sundial and Glenway subdivisions at Bathurst Street are low to medium density residential communities.

Key existing characteristics of Davis Drive West includes:

- Wide ROW (ranging from 33.5 metres – 51 metres);
- Varied street character with commercial land use to the east and more rural, low density residential to the west;
- Non-continuous sidewalks in some locations along the corridor;
- The average distance between existing signalized intersections is approximately 720 linear metres, which is geared towards vehicular travel and encourages pedestrian jay walking;
- The average distance between transit stops is approximately 1150 linear metres.

Davis Drive West

3.4.1 Land Use



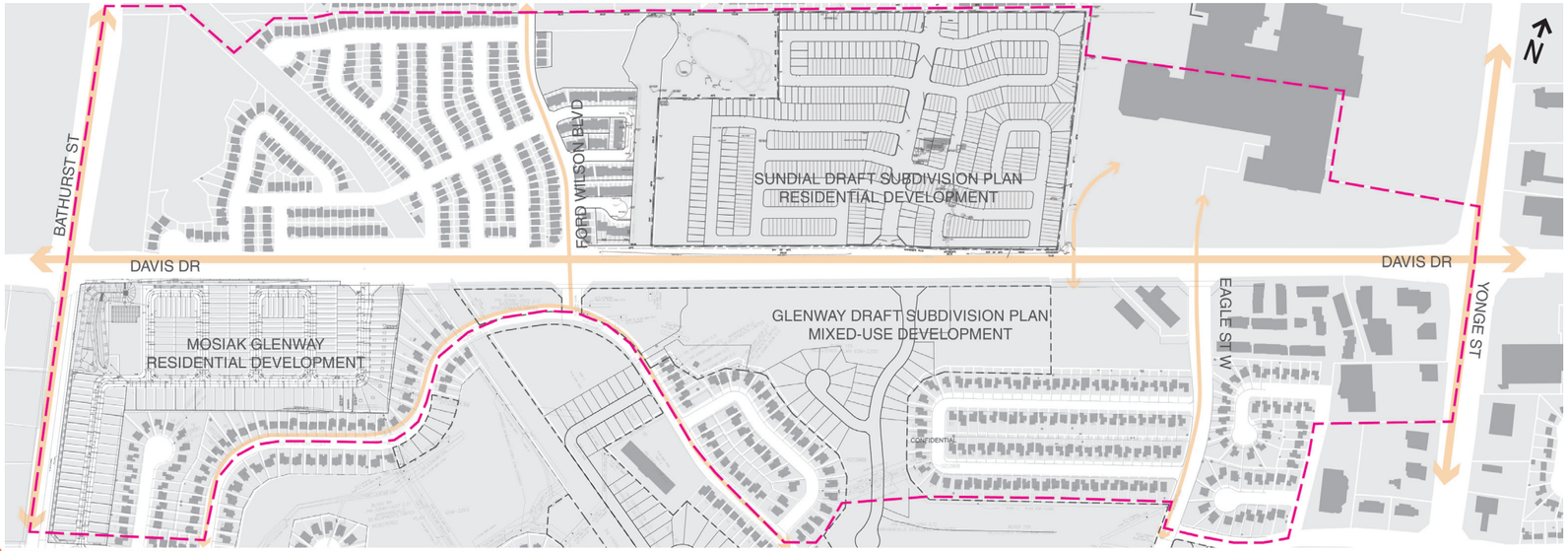
SCHEDULE "A" TO BY-LAW NO. 2010-40
TOWN OF NEWMARKET

- RESIDENTIAL DETACHED DWELLINGS
- RESIDENTIAL SEMI-DETACHED DWELLINGS
- RESIDENTIAL MULTIPLE DWELLINGS (DUPLEX)
- RESIDENTIAL MULTIPLE DWELLINGS (TOWNHOME)
- RESIDENTIAL MULTIPLE DWELLINGS (APARTMENT)
- COMMERCIAL ZONES
- URBAN CENTRE ZONES
- EMPLOYMENT ZONES
- INSTITUTIONAL ZONES
- OPEN SPACE ZONES
- TR: TRANSITIONAL ZONES
- FP: FLOOD PLAIN
- NH: REGULATORY AREA AND OTHER NATURAL HAZARDS ZONE
- OAK RIDGES MORAINE
- Sec. 1.9 LANDS EXCULDED FROM THIS BYLAW
- MAP BOUNDARY
- PROPERTY PARCEL/ ROAD ALLOWANCE

FINAL

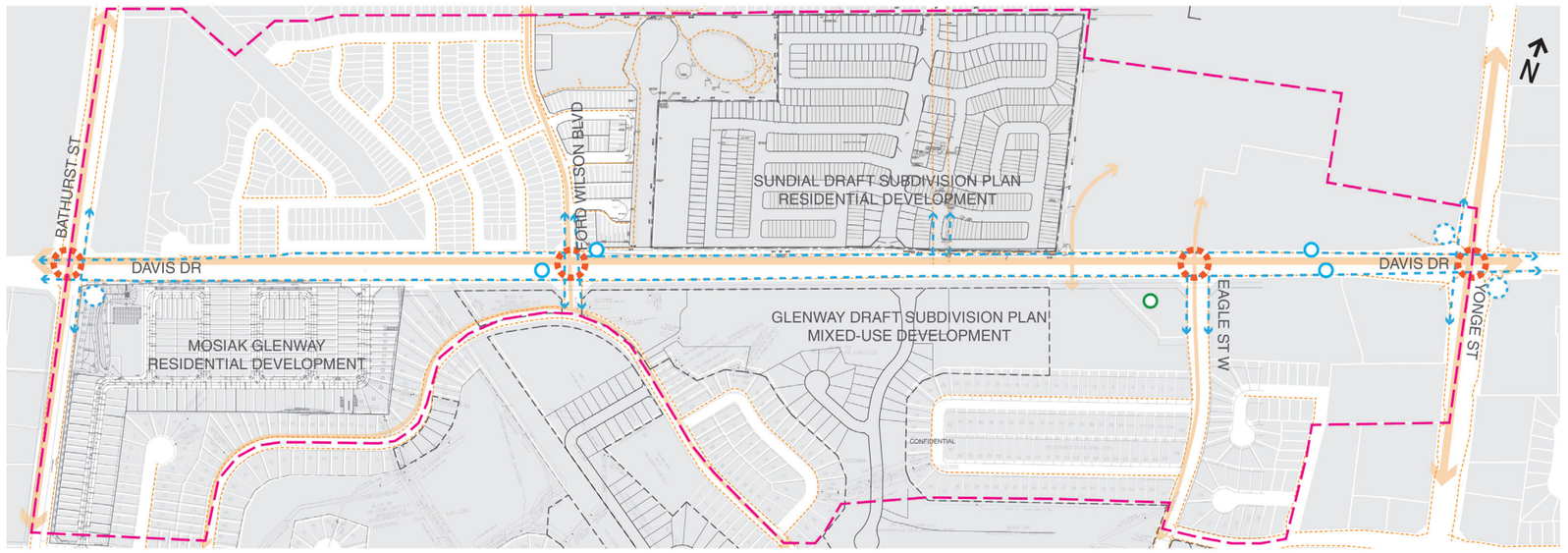
Davis Drive West

3.4.2 Built Form



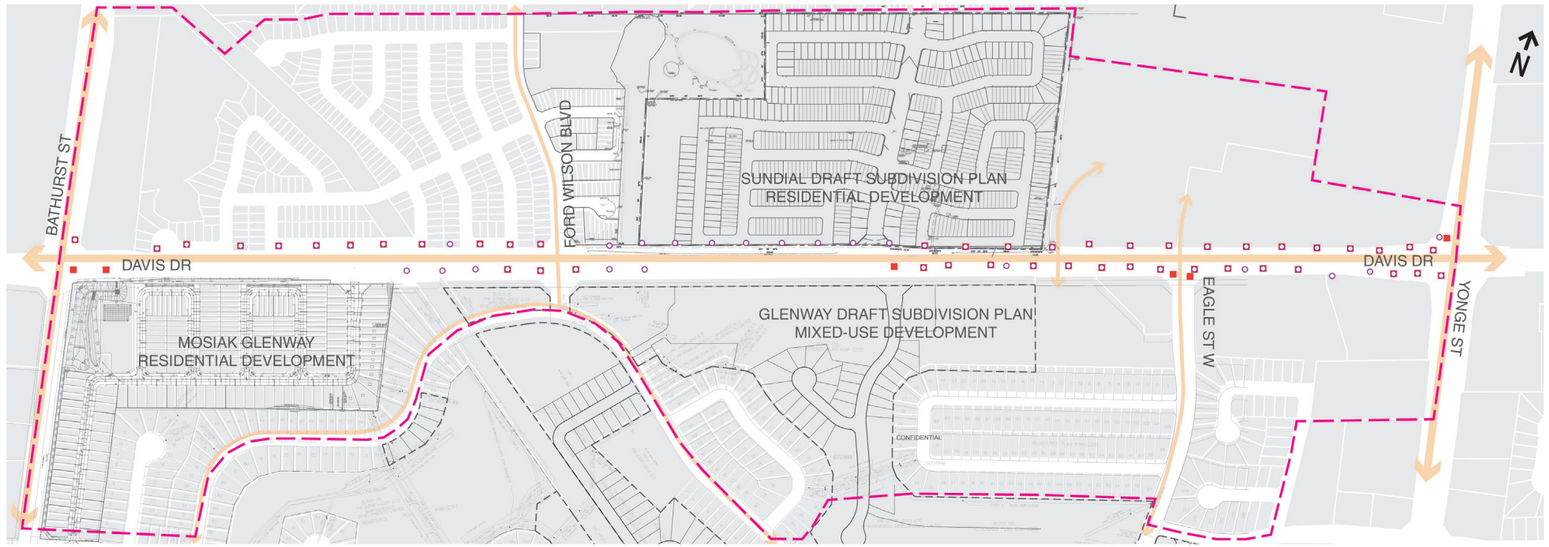
Davis Drive West

3.4.3 Active Transportation Links



Davis Drive West

3.4.4 Civil Infrastructure - Utilities and Lighting

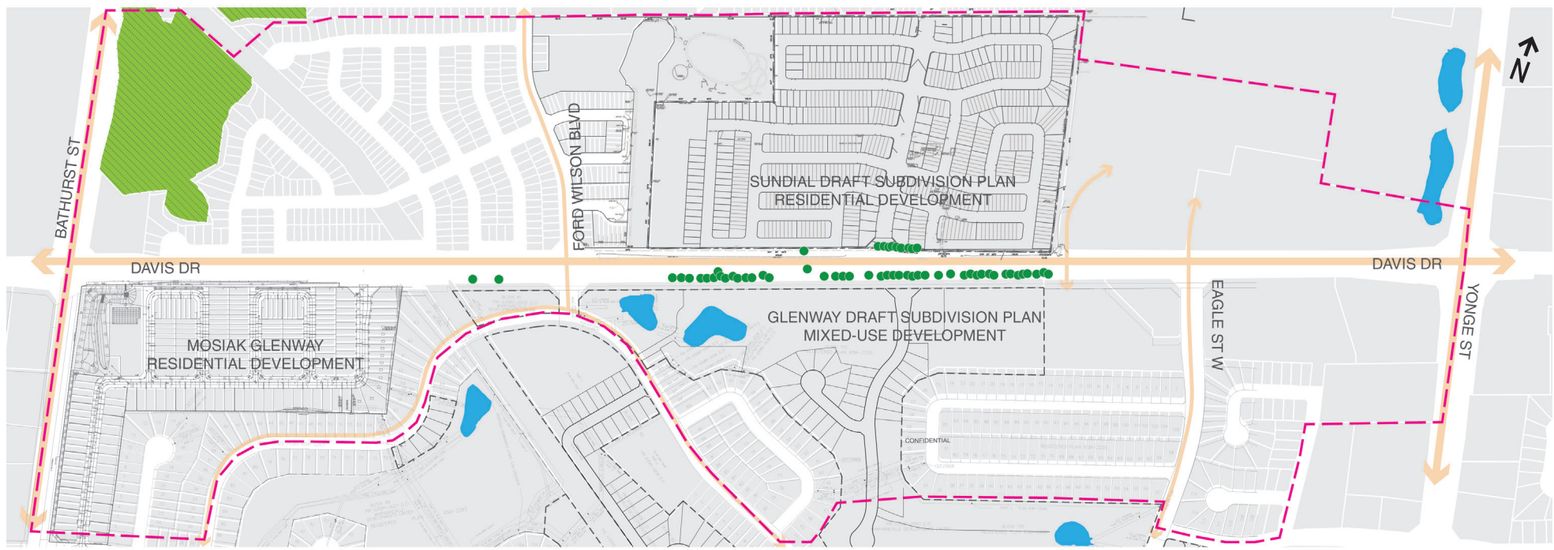


STUDY AREA
PRIMARY ROAD NETWORK
EXISTING LAND PARCEL
EXISTING STREET LIGHTS
EXISTING HYDRO POLES
JOINT-USE POLE

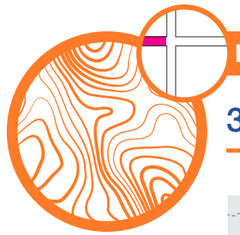
The average distance between hydro poles is approximately 55 metres on-centre. The average distance between light standards is approximately 55 metres on-centre.

Davis Drive West

3.4.5 Green Infrastructure – Street Trees, Parks & Open Space

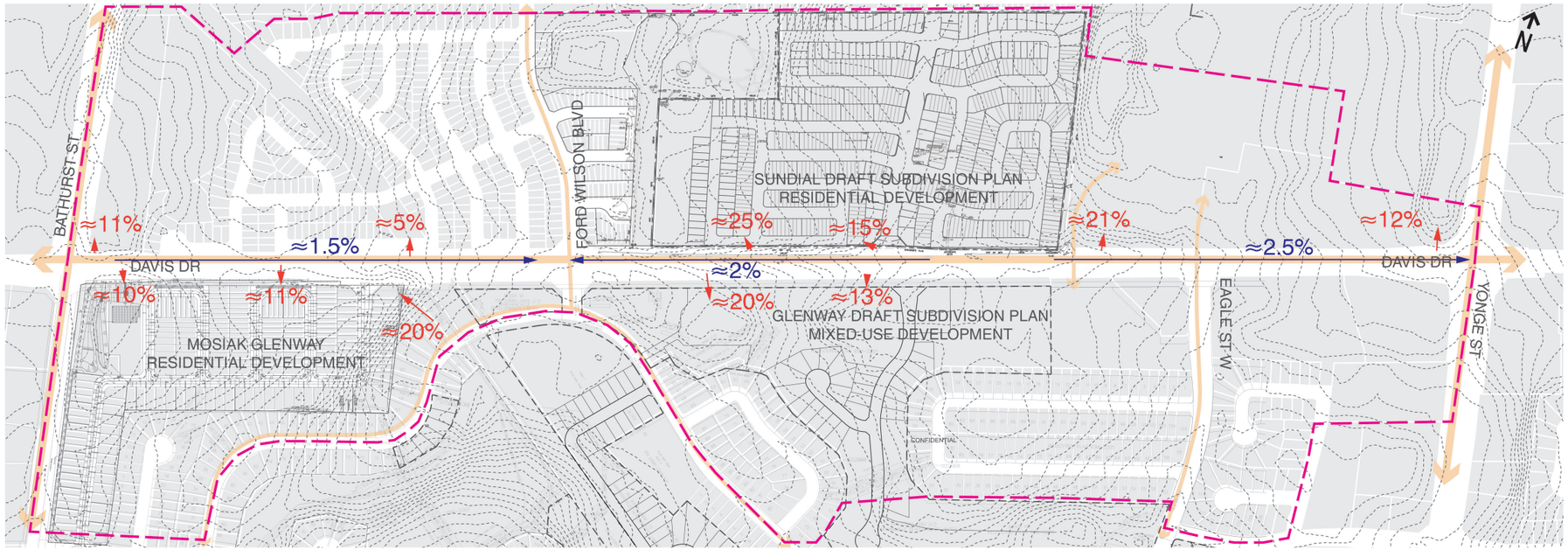


STUDY AREA
PRIMARY ROAD NETWORK
EXISTING LAND PARCEL
WATER BODY / POND
PARKS & OPEN SPACE
SIGNIFICANT FOREST
EXISTING STREET TREES
WATER COURSE



Davis Drive West

3.4.6 Topographic Features





Lack of sufficient pedestrian sidewalk.



Significant grade change between the public and the private realm.

The existing grades along this segment vary with steep grades adjacent to the proposed Sundial and Glenway subdivision plans. The Streetscape Master Plan will investigate the interface between these subdivisions and the public ROW.

ROW

Davis Drive West

3.4.7 Public ROW Existing Geometry



Davis Drive West - Existing Boulevard Width

Bathurst St to 200m West of Yonge St

Segments		Cross Section	Traffic Lane Configuration	Bike Lane	Transit Facilities			Public R.O.W Width	Boulevard Width		Pedestrian Sidewalk	Walking Trails	Driveways	
					YRT Stops	VIVA Stops	GO Station		North	South			North	South
Yonge St to Eagle St	F-F	128m east of Eagle St	4 Through Lanes + TWLTL + 1 R Turn Lane	N/A	2	N/A	N/A	41m	4.9m	8.6m	South	South	1	1
Eagle St to Ford Wilson Blvd	G-G	642m west of Eagle St	4 Through Lanes	N/A	1	N/A	1	51m	16.7m	13.7m	South	South	1	1
Ford Wilson Blvd to Bathrust St	H-H	300m east of Bathurst St	4 Through Lanes	N/A	1	N/A	N/A	33.3m	15.1m	3.8m	N/A	South	1	2

TWLTL = Two-Way Left Turn Lane

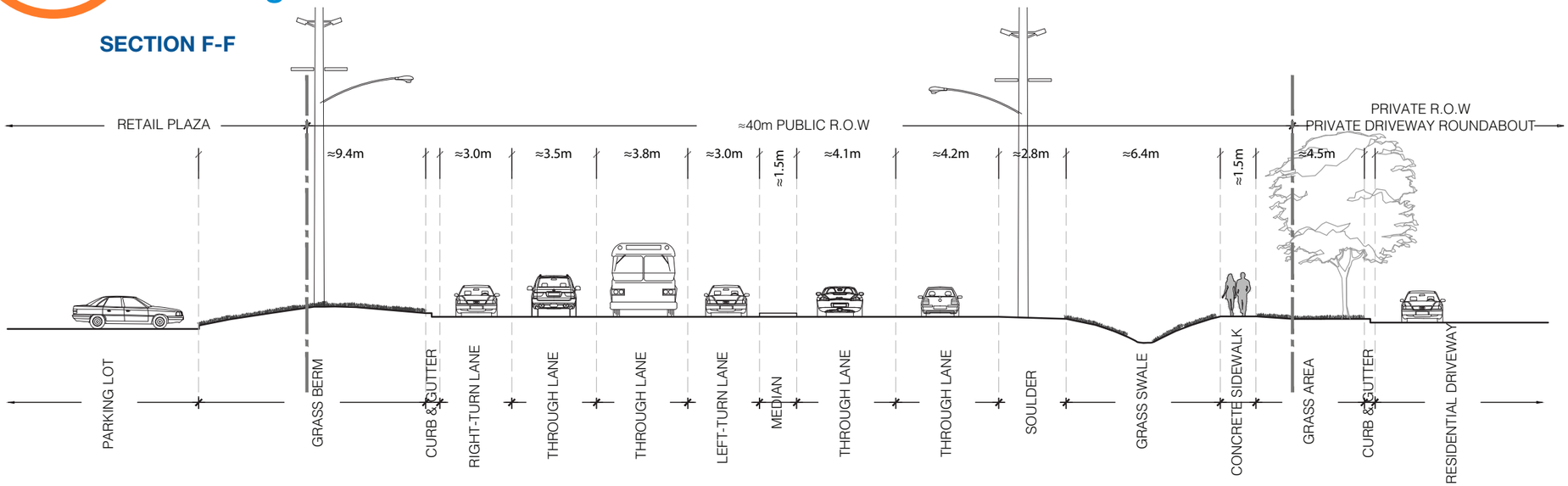
ROW

Davis Drive West

3.4.7 Public ROW Existing Geometry

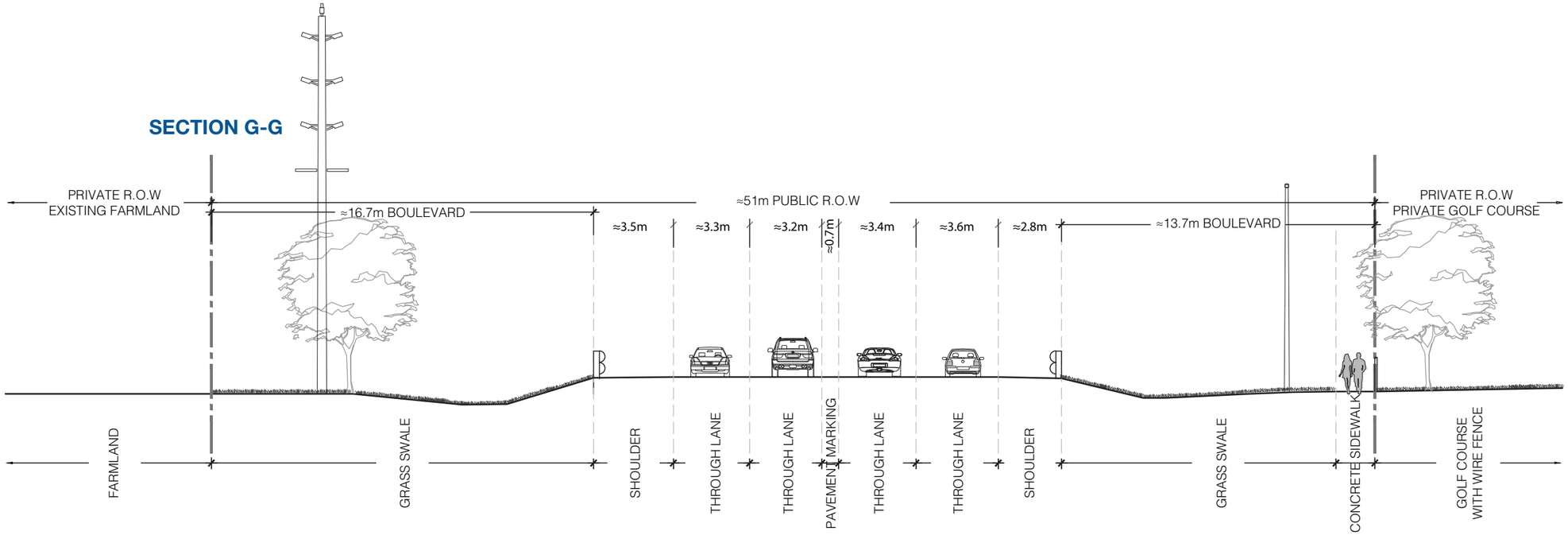
Existing Cross Sections

SECTION F-F





SECTION G-G





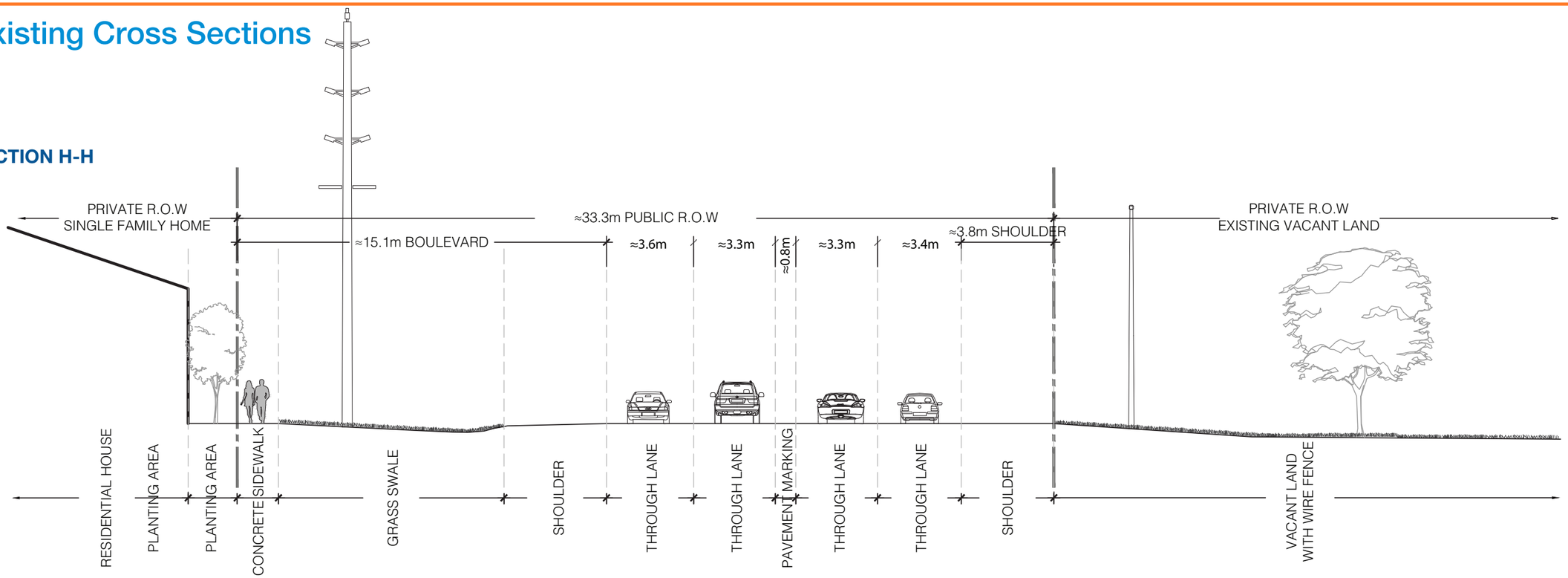
ROW

Davis Drive West

3.4.7 Public ROW Existing Geometry

Existing Cross Sections

SECTION H-H





Intersection focused on vehicular transportation and movement. This is the site for Mosaik Glenway Subdivision.

Davis Drive West

3.4.8 Relevant Studies and Design Interface

SUNDIAL SUBDIVISION

Located along the north side of Davis Drive, adjacent to the Upper Canada Mall commercial node, the proposed Sundial Subdivision is a residential development that is a mix of single detached, semi-detached and multiple attached housing for a total of 728 dwelling units. As the last undeveloped tract in northwest Newmarket, the proposed development addresses the planned intensification of the Urban Centre.

In terms of its impact on the Yonge Street & Davis Drive Streetscape Master Plan, the proposed development fronting Davis Drive is a stormwater management pond adjacent to the watercourse along the west edge and primarily residential roadways with a combination of Single Family, Back to Back, On Street Townhouses and Semi-Detached Housing. As part of the proposal, a new road that accommodates vehicular and pedestrian access will be built along the north side of Davis Drive as well as a new pedestrian walkway from the internal street system connecting to the Upper Canada Mall.

GLENWAY SUBDIVISION

The Estates of Glenway Subdivision, located along the south side of Davis Drive adjacent to the GO Transit hub, is a residential proposal which would re-zone a former golf course into a housing development. With a proposed 742 units built on the land, the subdivision would contain a mix of single detached homes, townhouse condos, apartments and live-work units that would include commercial space. In addition, approximately a quarter of the subdivision will be allocated for green space which will include parks, open space and stormwater management facilities. The proposed maximum height for the development is between 4-6 storeys.

Of particular relevance to the Yonge Street & Davis Drive Streetscape Master Plan is how the proposed development will change the look and feel of Davis Drive. In an effort to provide additional animation along Davis Drive, townhouse units and live-work commercial/condo options are proposed. At the entrance of Glenway Subdivision, Block 166 to the west will be designated as Commercial and Block 170, to the east, will be a stormwater management pond and open space parkland.



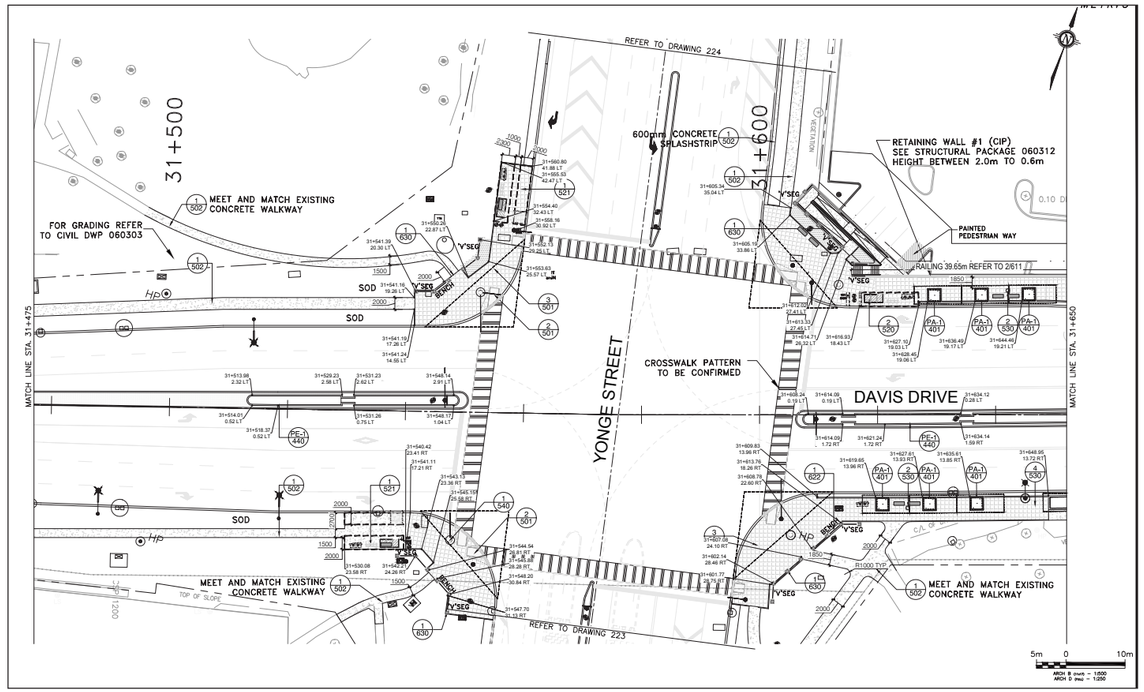
Townhouse Examples – Glenway Planning Justification Report (Appendix 4)

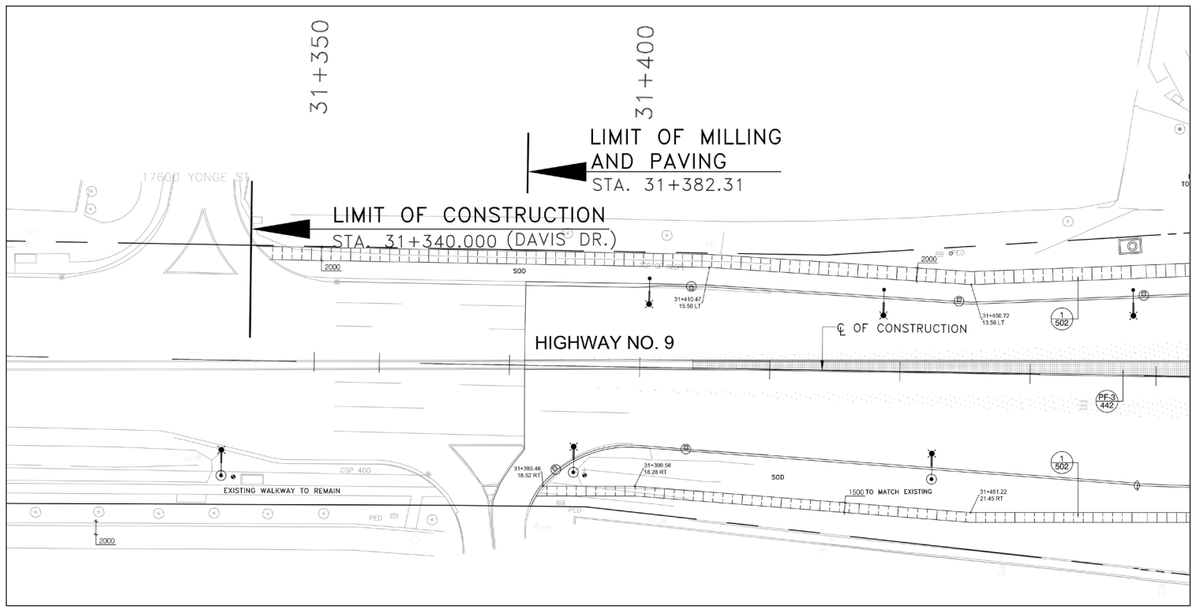


Live-Work Examples – Glenway Planning Justification Report (Appendix 5)

VIVANEXT DAVIS DRIVE D1 LANDSCAPE STREETSCAPE LAYOUT PLAN - IFC

The vivaNext D1 limit of construction extends westerly along Davis Drive west of Yonge Street including new concrete sidewalks and lighting.





NEWMARKET PLACEMAKING FEATURES – BATHURST AND DAVIS GATEWAY

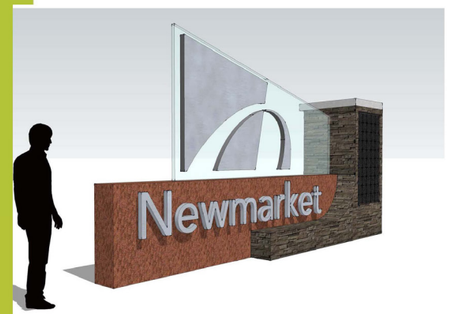
As part of the Newmarket Placemaking Features project, the Bathurst and Davis Gateway was designed to be at the southeast corner of this key intersection.

The gateway feature emphasizes a primary entrance into the Town of Newmarket's core along Davis Drive and highlights the Town's innovation and branding. Unique character signage was incorporated as well as solar panels and lighted elements.

Site Location – Bathurst and Davis Drive

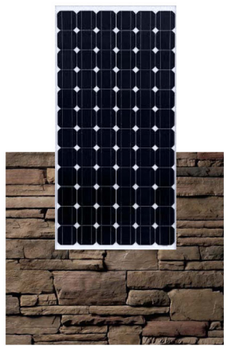


3D Concept



Backlit Tempered Glass

Solar Panels



Dry Laid Natural Stone Cladding

Davis Drive West

SWOT

3.4.9 SWOT

	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	· Continuous sidewalk along south side of street from Yonge Street to Ford Wilson Boulevard · Central hub for the Town and planned for the highest concentration of mixed-use development · Significant population increase with the proposed Sundial Homes and Glenway developments · Gateway feature at Davis Drive and Bathurst Street as well as at Davis Drive and Yonge Street · Wide ROW width (average 41.8 metres)	· Large ROW (average 41.8 metres) can accommodate cycling facilities · Region and Town planning policy focus on future active transportation · Key destinations are in close proximity and can be easily reached via cycling	· Existing transit hub with GO Transit stop · Variety of transit options supported including YRT	· Signalized intersections at each major intersection (average spacing of 720 metres) · Existing signalized crossings at key intersections connecting major amenities (i.e. transit hub and mall area)	· Efficient, high volume traffic corridor with relatively little congestion · Central corridor to the Town and planned highest concentration of mixed-use development · Average boulevard width is 12.23 metres north and 8.7 metres south
WEAKNESSES	· Non-continuous sidewalk along street creates issues with connectivity · Poor pedestrian environment · Lack of pedestrian amenities including lighting, coordinated street furnishings, street trees, public art and paving · Frequent commercial driveways break pedestrian realm · Pedestrians do not have priority · Narrow sidewalk width (approximately 1.5 metres) · Cluttered pedestrian space with above ground utilities · Hydro guy wires interfere with pedestrian circulation and are unsightly · Proposed intersection design for Bathurst Street and Davis Drive is vehicular in scale, making pedestrian movement more difficult	· No dedicated cycling facilities present	· Transit facilities located far apart from each other (average spacing of 1135 metres) · Lack of attractive transit amenities including benches, shelters, etc. · Lack of commuter-oriented perspective · All existing stops located at or near an intersection	· Spacing promotes jaywalking · Issues with intersection design, including lack of defined crosswalks, increases pedestrian risk when crossing · Crosswalks are not current AODA compliant, specifically curb ramps · Large turning radii promotes faster turning speeds, increasing risk to pedestrians and cyclists	· TWLTL present between Yonge Street and Eagle Street · Fluctuation of boulevard width
OPPORTUNITIES	· Establish pedestrian priority · Provide high quality street furnishings and design features to promote pedestrian use and lingering · Incorporate closely spaced, pedestrian scaled lighting along sidewalks · Introduce street trees and plantings to enhance the overall pedestrian experience, have a positive environmental impact, and create shade and microclimates · Incorporate high quality sidewalk materials including paving to strengthen pedestrian realm · Introduce public art components to add meaning and value to key spaces and increase sense of place · Define pedestrian crosswalks with pavement markings, such as Traffic Patterns XD, to enhance placemaking, accessibility and safety · Increase pedestrian connections, access and linkages, specifically in relation to the proposed Sundial Homes and Glenway developments · Increase in minimum sidewalk width to 1.8 metres · Incorporate Newmarket gateway sign at Bathurst Street and Davis Drive	· Provide space for separate bike facilities, at minimum utilizing bicycle sharrow lane markings · Eliminate TWLTL and reconfigure vehicle lanes to accommodate bike facilities · Implement signage/wayfinding systems to help cyclists identify the safest and most desirable routes · Increase connections, access and linkages to key destinations and transit facilities	· Increase ridership with proposed Sundial Homes and Glenway developments · Capitalize on existing transit and incorporate additional transit options · Provide additional transit amenities to create a convenient waiting area that is not disruptive to pedestrian flow · Promote transit oriented development along Yonge Street · Reconfigure transit stops to midblock placements, reducing conflicts with other traffic	· Provide adequate connections to new developments · Introduce midblock crossings where appropriate · Define pedestrian crosswalks with pavement markings such as Traffic Patterns XD, and/or other treatments to increase accessibility and safety · Redesign curb ramps to current AODA standards · Urbanize intersection with tight turning radii to promote slower turning speeds and reduce crossing distance for pedestrians · Provide a protected median at intersections and/or at midblock	· Eliminate TWLTL · Introduce traffic calming measures · Incorporate on-street parking, which is more efficient than parking lots, allows redevelopment of existing parking lots to street level retail and provides economic benefits to businesses along street · Provide adequate ingress/ egress to new residential developments
THREATS	· Car-oriented community where vehicles are the predominant transport and drivers often overlook pedestrian and cyclist safety as a priority · High volume traffic corridor with posted speed of 60 km/h · Pedestrian safety issues at crosswalks · Developments fail to present active frontage and contribute to street life/ pedestrian activity	· Car-oriented community where vehicles are the predominant transport and drivers often overlook pedestrian and cyclist safety as a priority · High volume traffic corridor with posted speed of 60km/h · Current low-level cycling use with lack of cycling culture	· Car-oriented community with less focus on taking public transit · Currently, transit less convenient than driving	· High volume traffic corridor with posted speed of 60 km/h · Traffic flow coordination to reduce stacking and congestion	· Car-oriented community where vehicles are predominant transport

Davis Drive West

3.4.10 Summary

Davis Drive West, bounded by Bathurst Street on the west and 200 metres west of Yonge Street on the east, has a varied streetscape character with predominantly commercial developments from Yonge to Eagle and a more rural cross section from Eagle to Bathurst. Similar to Yonge Street North, Davis Drive West carries significant amount of passing traffic, with the intersection of Yonge Street and Davis Drive noted as a key intersection and urban centre of the Town of Newmarket. There is a continuous sidewalk on the south of the street for the majority of the length and no existing bike lanes. Most of the commercial development is focused towards Yonge Street and Davis Drive, with a GO Transit hub at Eagle Street and residential slated on both sides of Davis Drive with the proposed Sundial and Glenway subdivisions. In addition, this portion of Davis Drive coincides with the future Town of Newmarket Gateway at Davis Drive as well as the vivaNext rapidway.

Key opportunities for Davis Drive West include:

- Wide ROW (ranging from 33.5 metres – 51 metres) can accommodate pedestrian, cyclist, vehicular and public transit options;
- Varied street character with mixed use to the east and more rural, low density residential to the west will inform the character of the streetscape so that it serves the surrounding community;
- Enhance pedestrian, cyclist and transit experience and safety originating from new residential developments including the presence of continuous sidewalks and multi-use trails in order to encourage forms of transportation other than vehicular;
- Recognize gateway into the Town of Newmarket;
- Wide ROW also allows for the presence of placemaking initiatives to encourage pedestrian presence and potentially reduce traffic.



Multi-lane intersection focuses on vehicular traffic, creating an unappealing experience for pedestrians and cyclists.

Glossary of Acronyms

AODA: Accessibility for Ontarians with Disability Act

CA: Conservation Authority

CPTED: Crime Prevention Through Environmental Design

FSI: Floor Space Index

GFA: Gross Floor Area

GTHA: Greater Toronto and Hamilton Area

LEED: Leadership in Energy and Environmental Design

LID: Low Impact Development

NTP: Network Time Protocol

OP: Official Plan

ROW: Right of Way

RTP: Regional Transportation Plan

SWM: Stormwater Management

SWOT: Strengths, Weakness, Opportunities, Threats

TDM: Transportation Demand Management

TWLTL: Two Way Left Turn Lane

UGC: Urban Growth Centre

FINAL