

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.

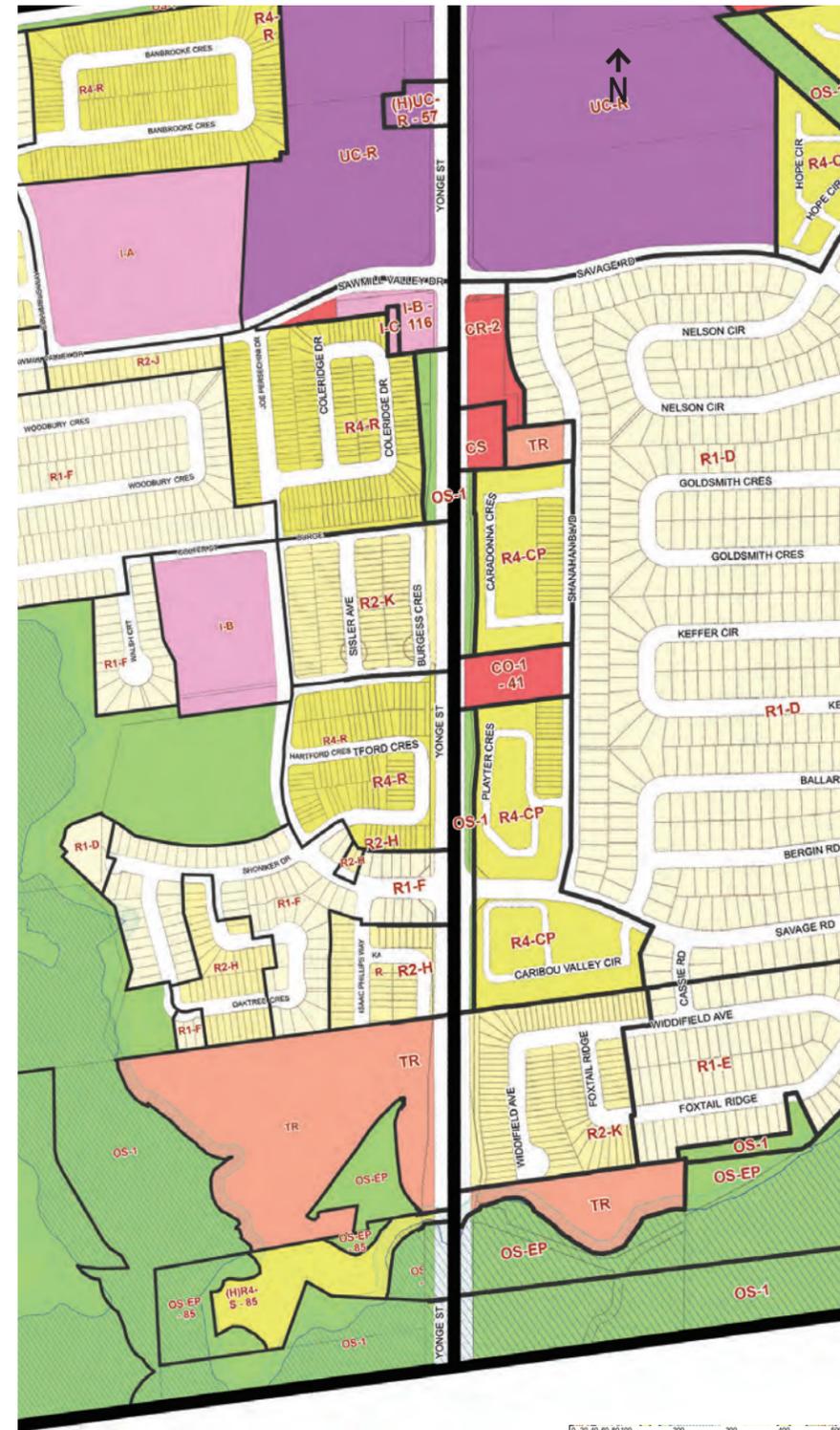
Yonge Street South section of this study is suburban in character and is predominantly low density residential. The street carries significant amounts of traffic, but mostly as a thoroughfare in the area. At present, this stretch of roadway does not have any existing bike lanes and little to no pedestrian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



3.2.1 Land Use

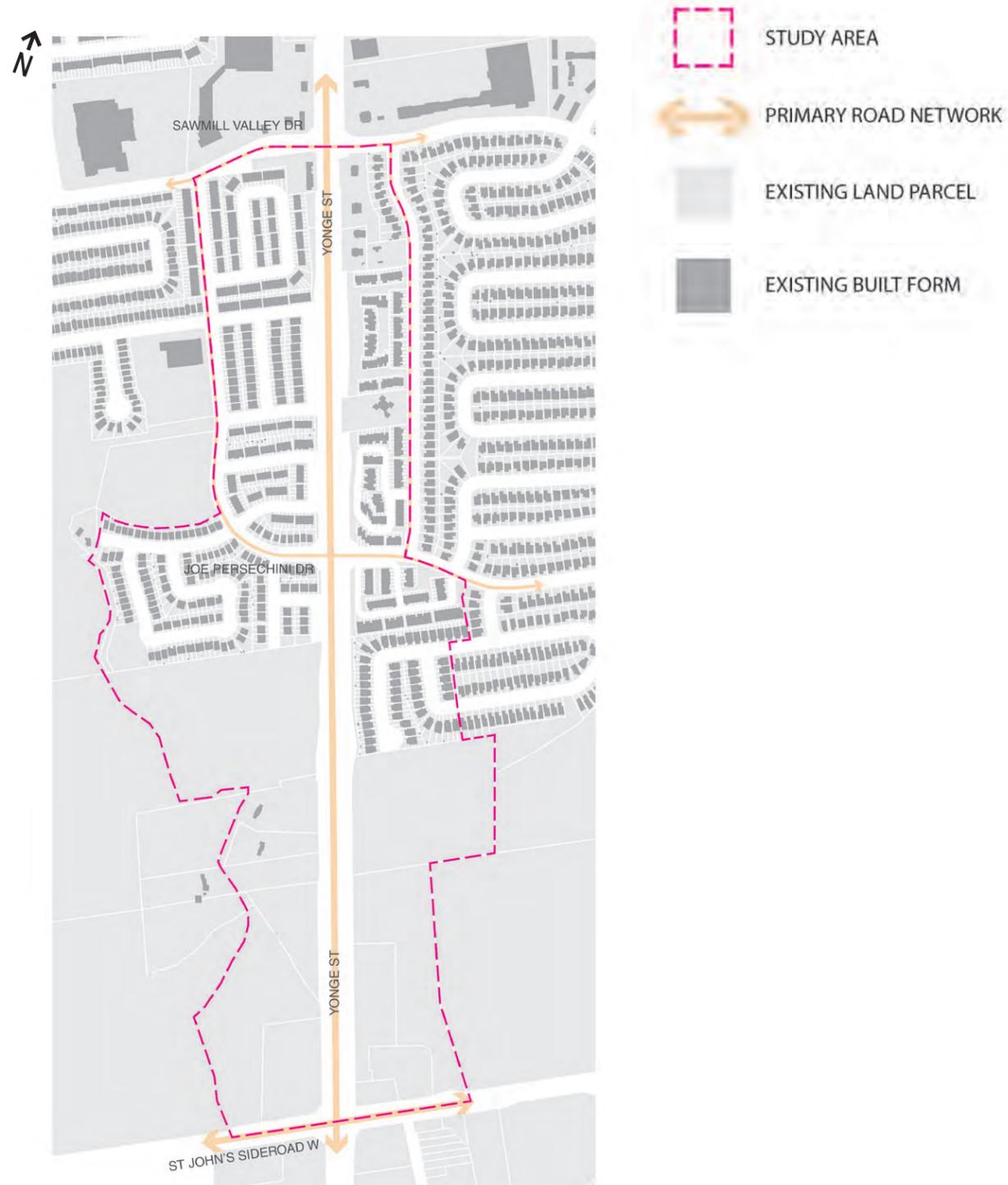


SCHEDULE "A" TO BY-LAW NO. 2010-40 TOWN OF NEWMARKET

	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
	LANDS EXCLUDED FROM THIS BYLAW
	MAP BOUNDARY
	PROPERTY PARCEL/ ROAD ALLOWANCE

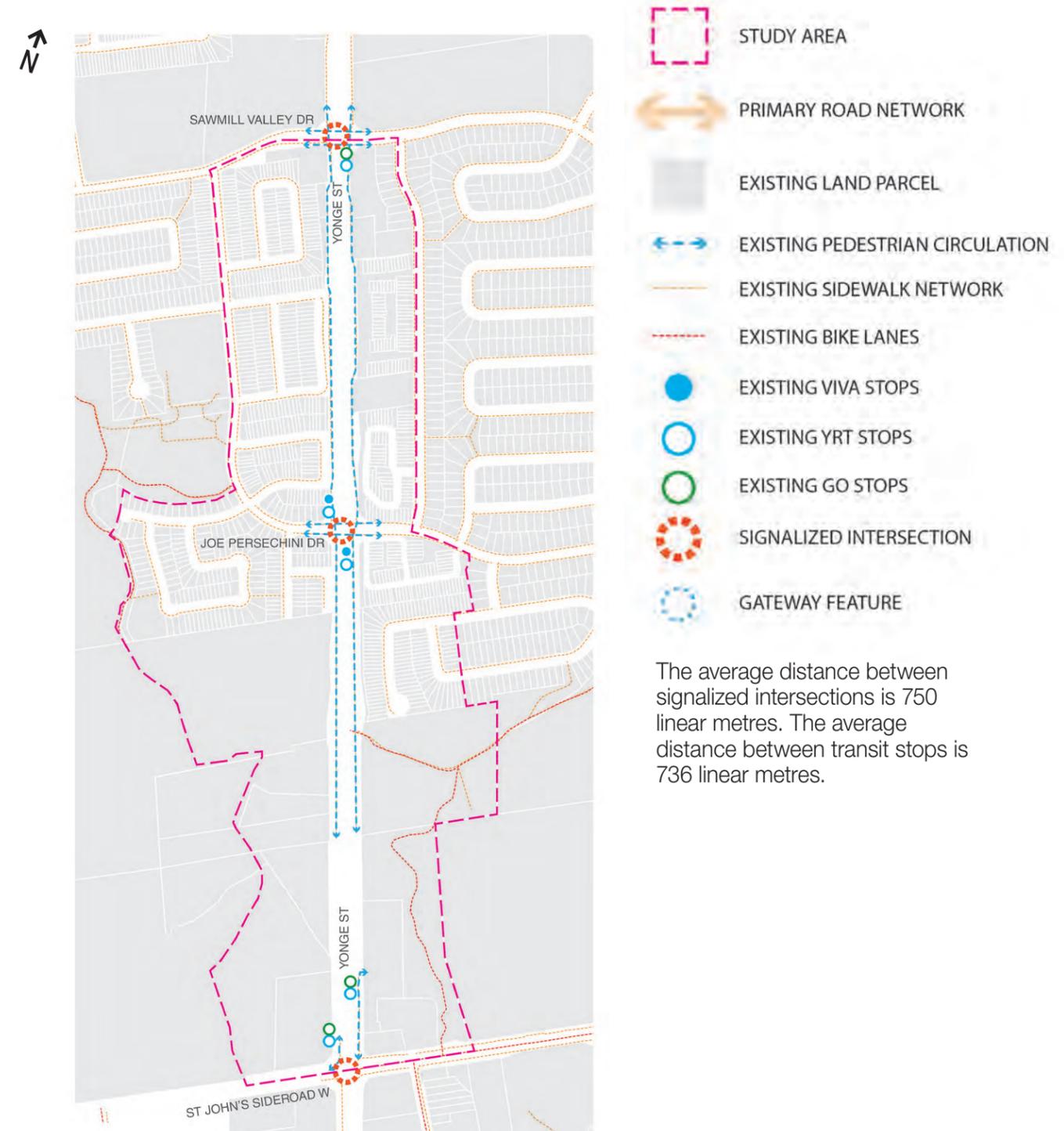
Yonge Street South

3.2.2 Built Form



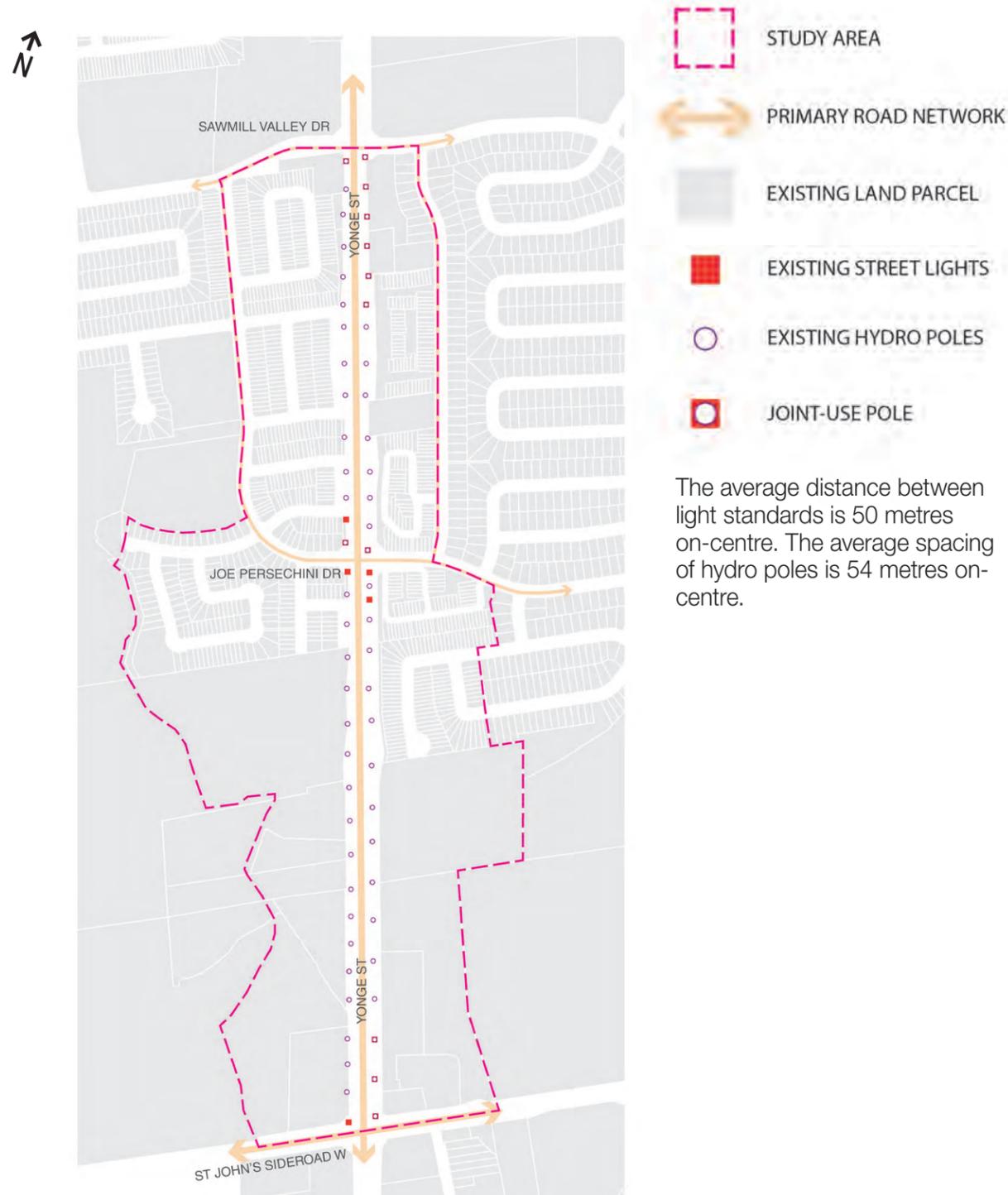
Yonge Street South

3.2.3 Active Transportation Links



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



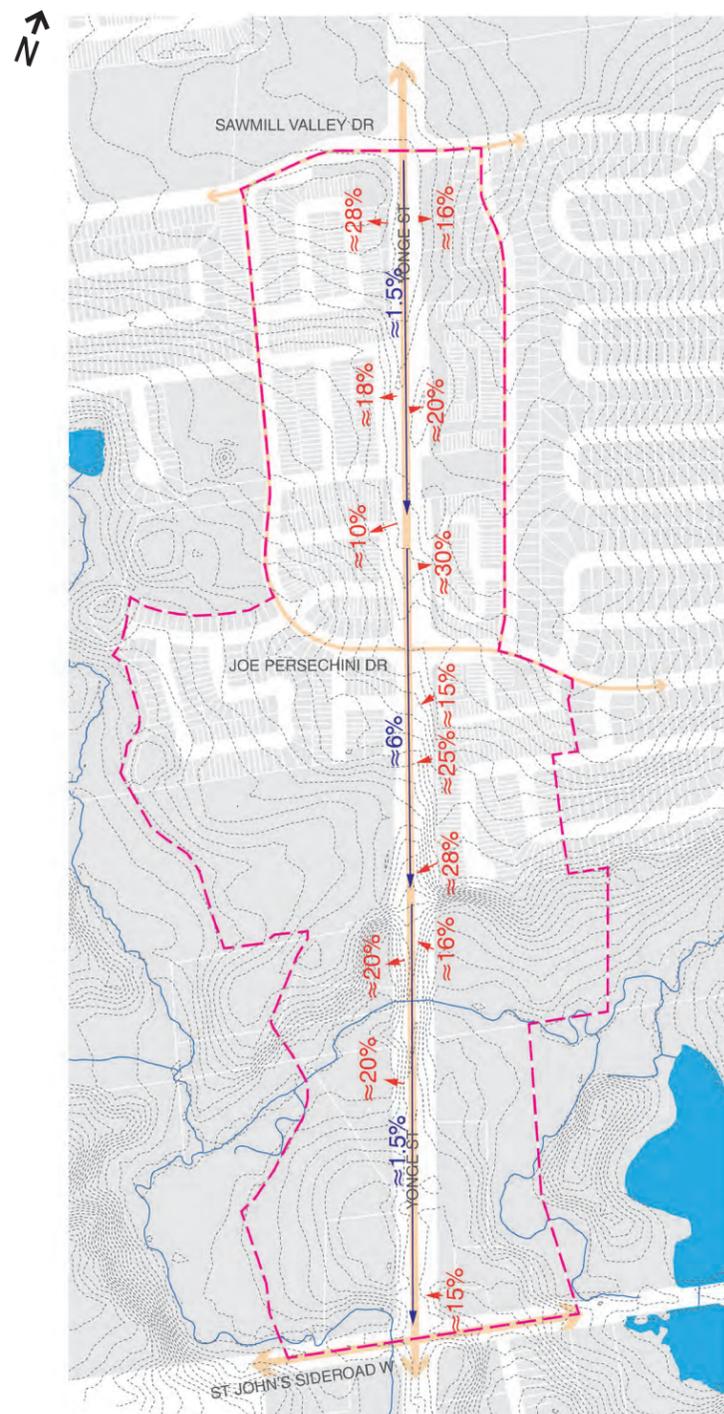
Yonge Street South
3.2.5 Green Infrastructure – Street Trees, Parks & Open Space





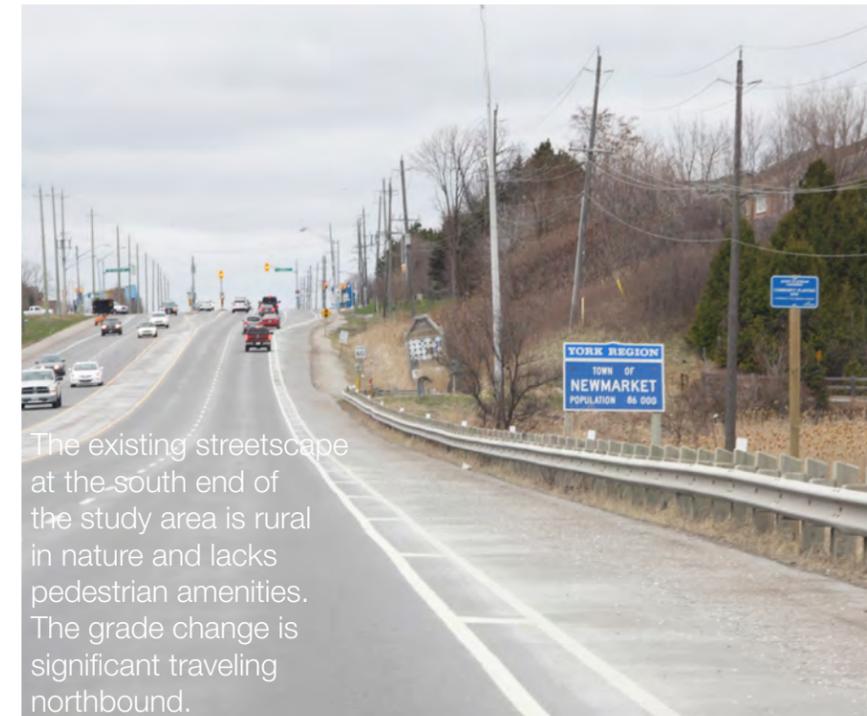
Yonge Street South

3.2.6 Topographic Features

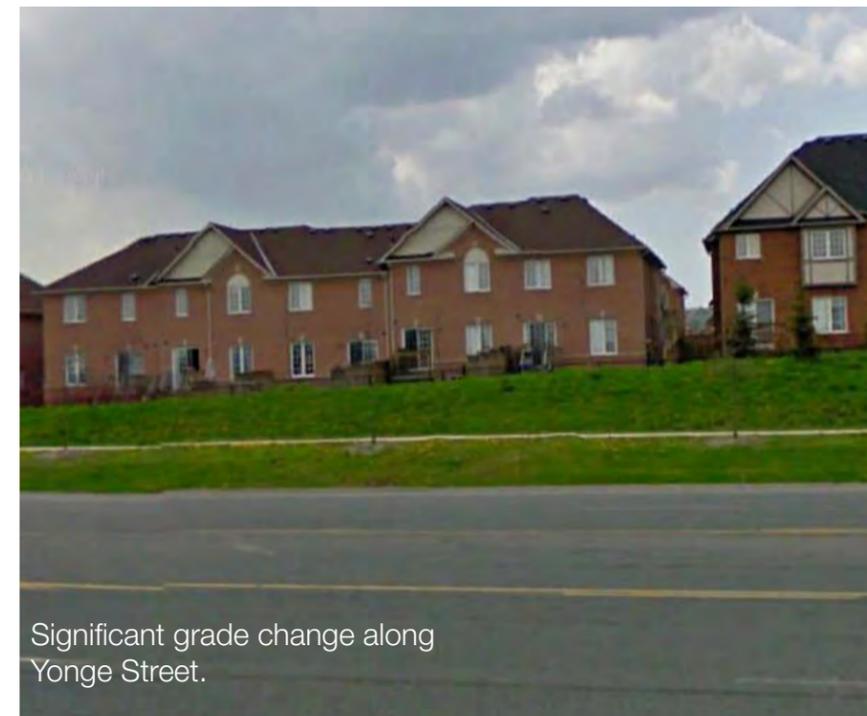


- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- WATER BODY
- WATER COURSE
- EXISTING CONTOUR LINE
- $\approx X\%$ SLOPE FROM BACK OF CURB TO PROPERTY LINE
- $\approx X\%$ LONGITUDINAL SLOPE (FOLLOW ROADWAY)

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.

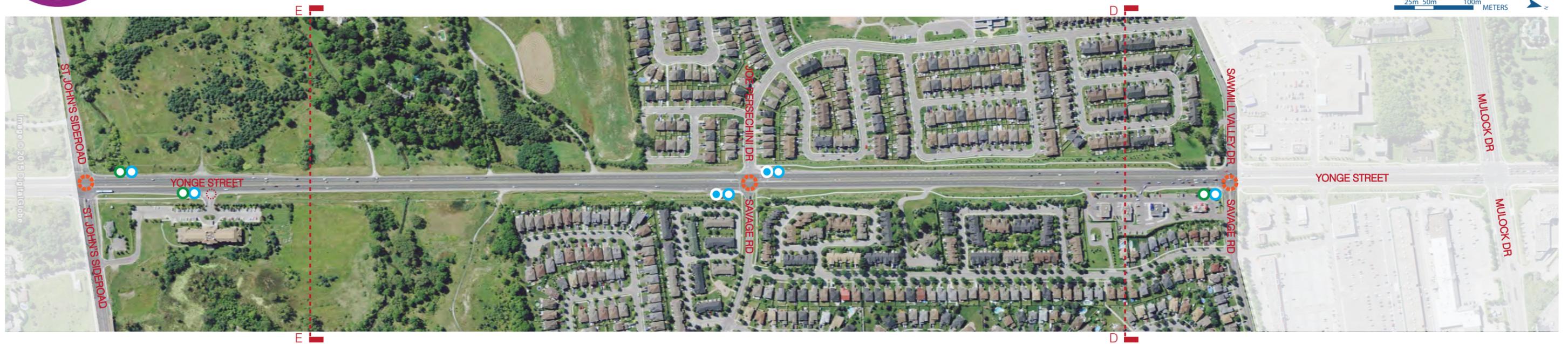


Significant grade change along Yonge Street.



Yonge Street South

3.2.7 Public ROW Existing Geometry



NORTH BOUND DISTANCE BETWEEN



TRANSIT STOPS



SIGNALIZED INTERSECTIONS

SOUTH BOUND DISTANCE BETWEEN



TRANSIT STOPS

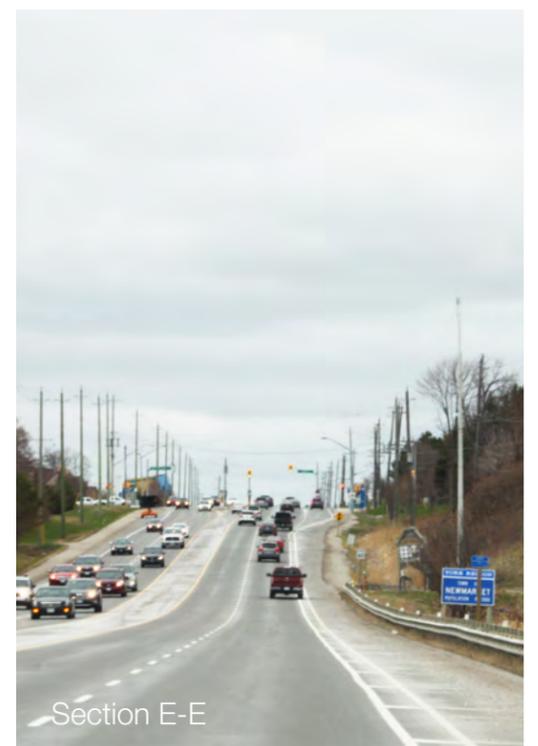
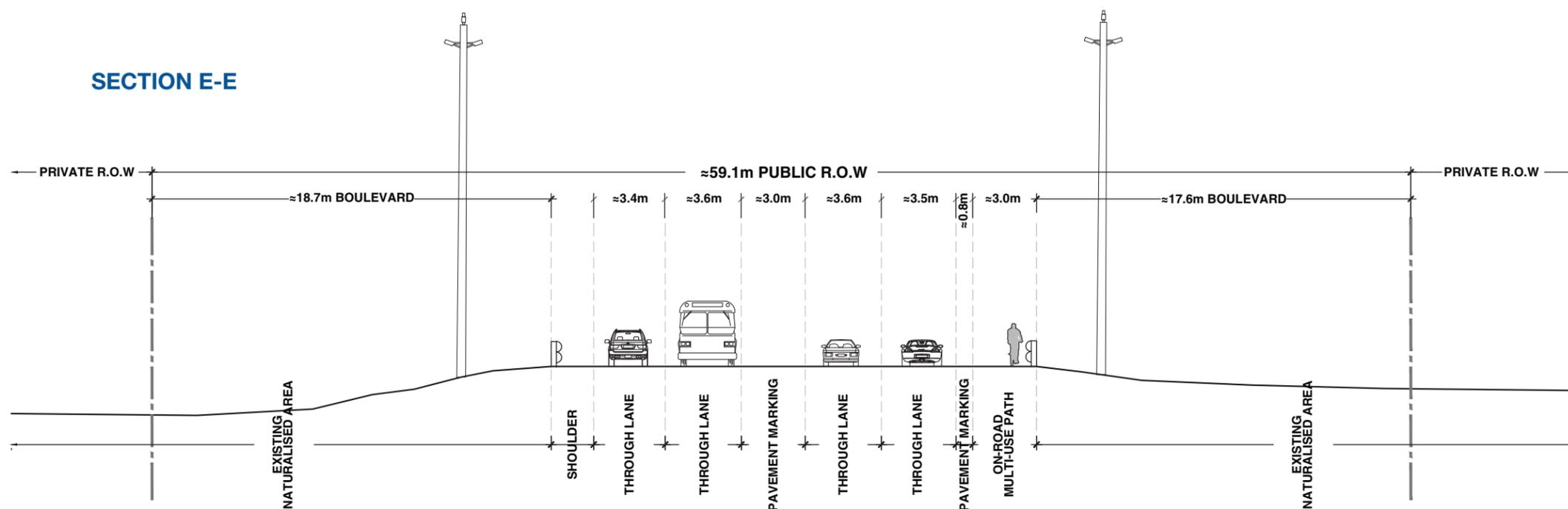
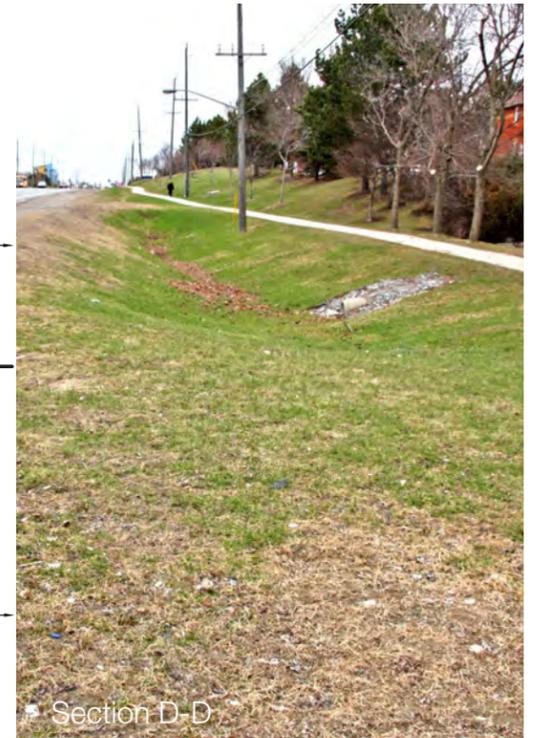
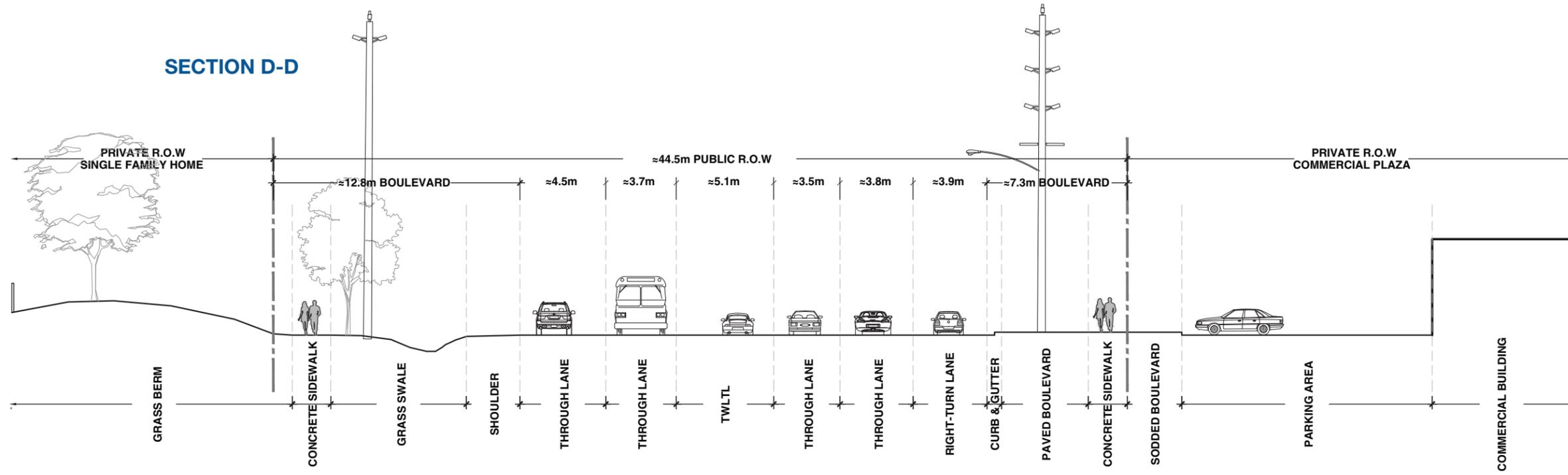
- VIVA STOP
- YRT STOP
- GO STOP
- ★ SIGNALIZED INTERSECTION
- ★ GATEWAY FEATURE
- ⊖ RIGHT IN/RIGHT OUT DRIVEWAY
- ⊘ CHANNELIZED DRIVEWAY

Yonge Street South - Existing Boulevard Width

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

Yonge Street South
ROW
 3.2.7. Public ROW Existing Geometry
 Existing Cross Sections





Yonge Street South

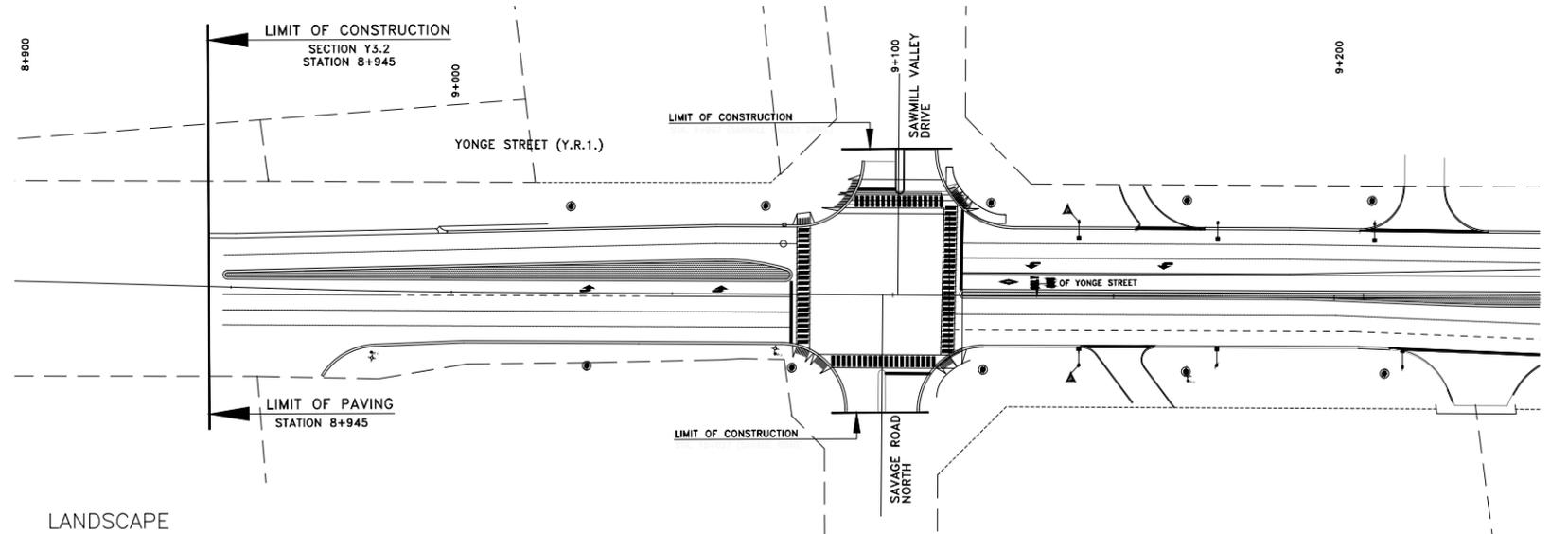
3.2.8 Relevant Studies and Design Interface

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.

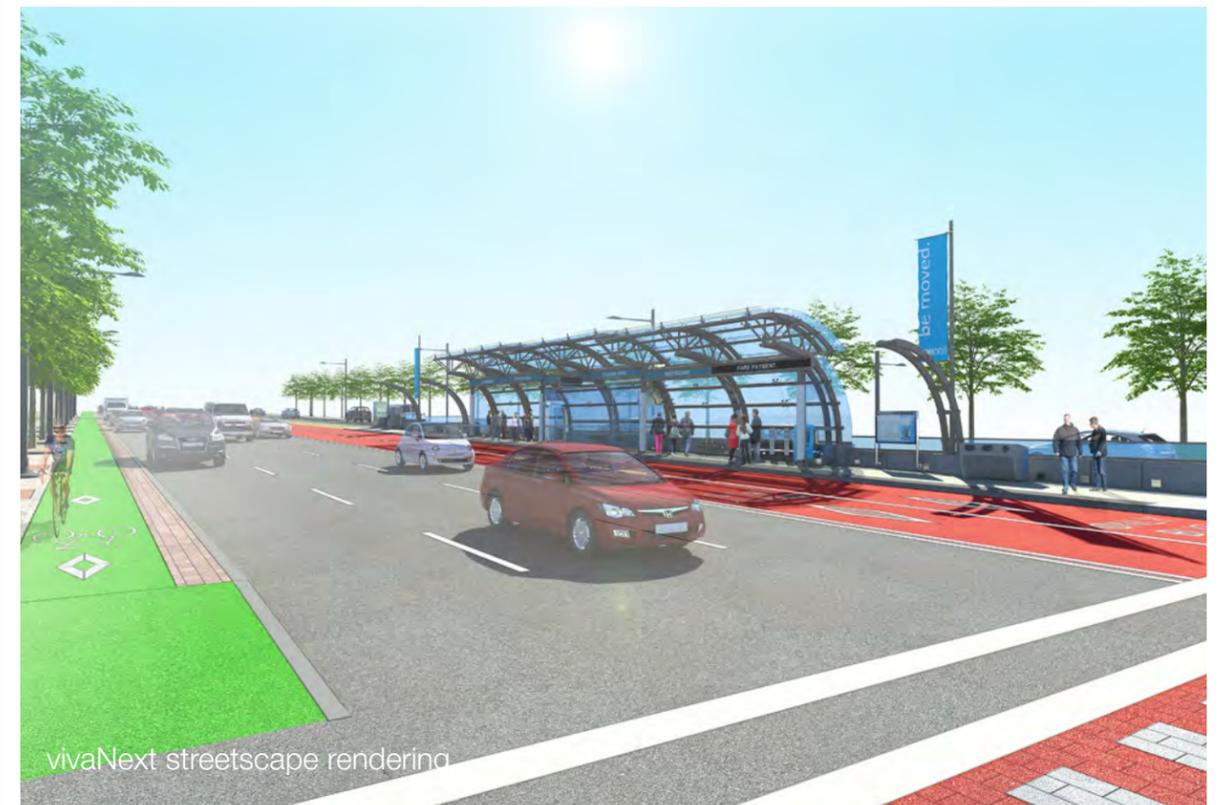
The Streetscape Master Plan as part of this study will transition into the vivaNext streetscape design as well as the bike lane geometry.

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**





	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • All public transit options available including VIVA, YRT and GO Transit • Predominantly residential with potential for high transit ridership 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Efficient movement of traffic • Minimal commercial driveway interruptions • Average boulevard width is wide (average 15.8 metres west and 13 metres east)
WEAKNESSES	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Insufficient cycling facilities 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • TWLTL present between Sawmill Drive and Savage Road
OPPORTUNITIES	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Eliminate TWLTL • Introduce traffic calming measures • Promote public education on the benefits of active transportation
THREATS	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Currently, transit less convenient than driving 	<ul style="list-style-type: none"> • Primarily a thoroughfare with few destinations in the area 	<ul style="list-style-type: none"> • 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.

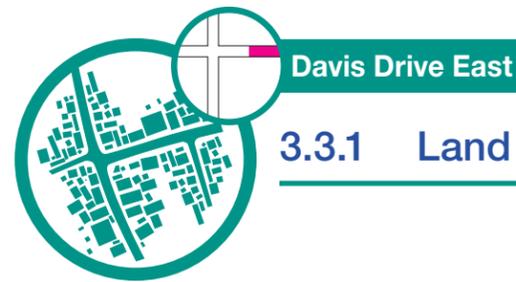
3.3 Davis Drive East – Existing Conditions

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.

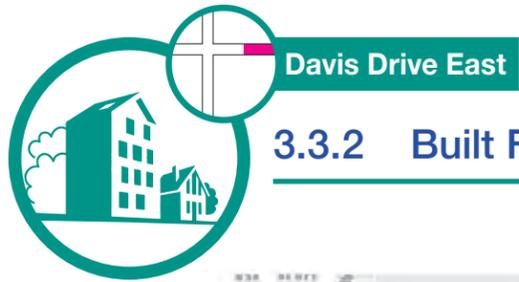


3.3.1 Land Use



**SCHEDULE “A” TO BY-LAW NO. 2010-40
TOWN OF NEWMARKET**

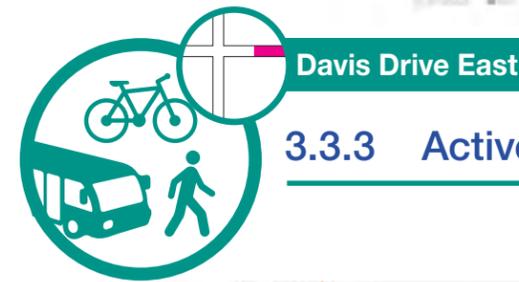
	RESIDENTIAL DETACHED DWELLINGS		INSTITUTIONAL ZONES
	RESIDENTIAL SEMI-DETACHED DWELLINGS		OPEN SPACE ZONES
	RESIDENTIAL MULTIPLE DWELLINGS (DUPLEX)		TR: TRANSITIONAL ZONES
	RESIDENTIAL MULTIPLE DWELLINGS (TOWNHOME)		FP: FLOOD PLAIN
	RESIDENTIAL MULTIPLE DWELLINGS (APARTMENT)		NH: REGULATORY AREA AND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



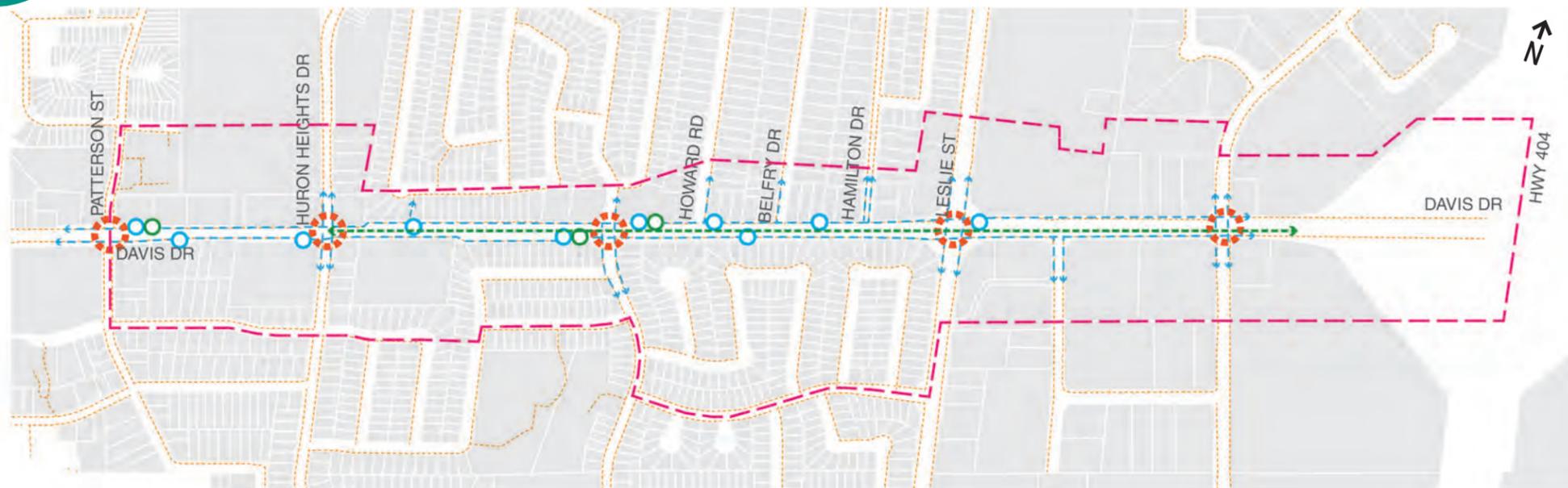
3.3.2 Built Form



- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- EXISTING BUILT FORM



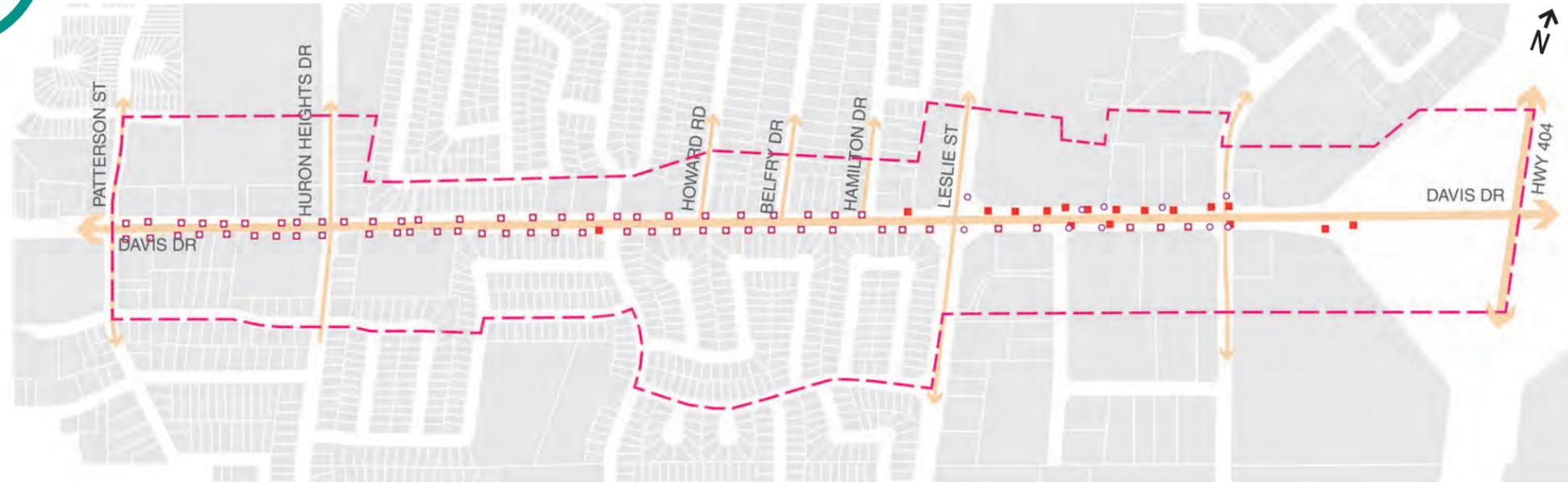
3.3.3 Active Transportation Links



- 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 320 linear metres.

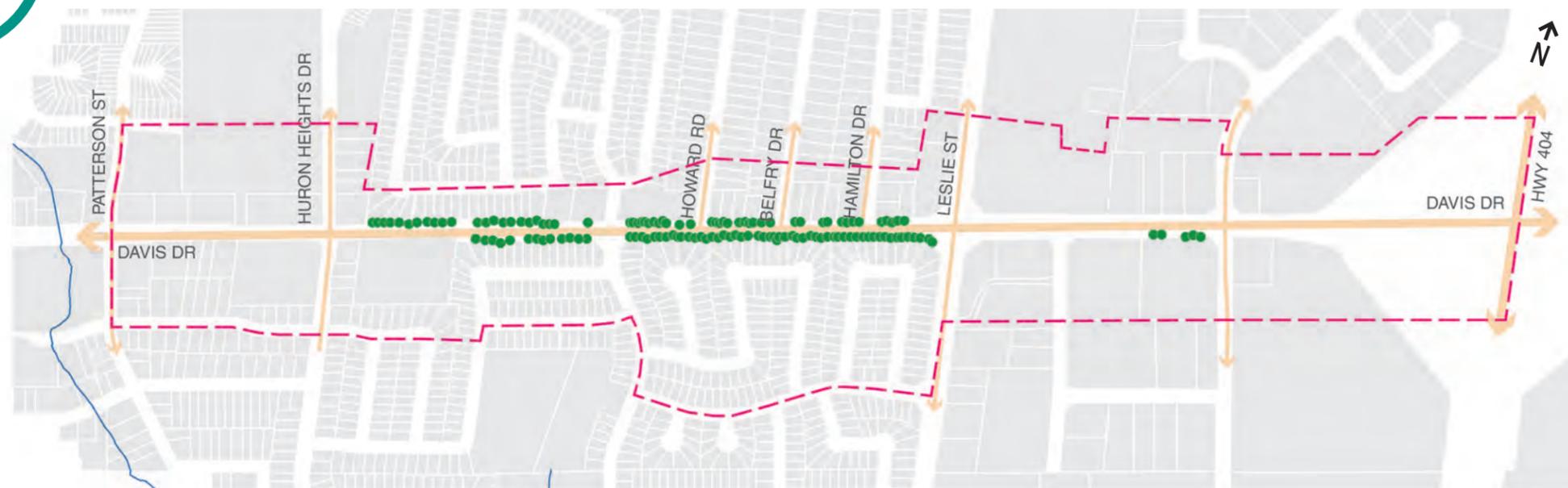
Davis Drive East
3.3.4 Civil Infrastructure - Utilities and Lighting



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

The average distance between light standards is 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



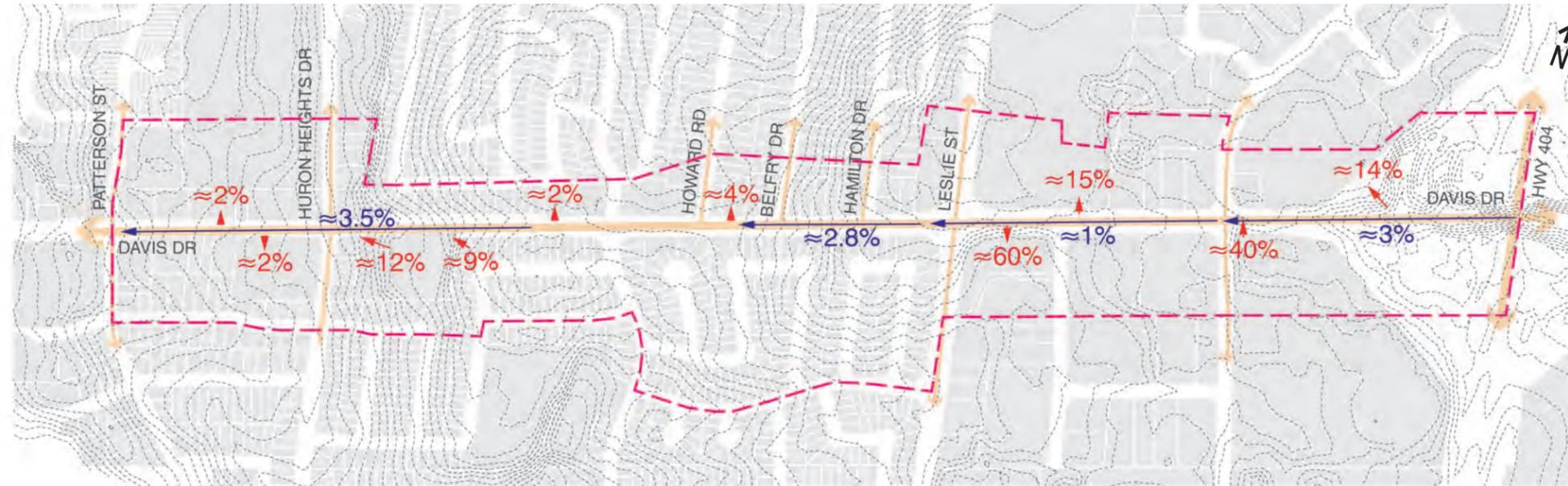
- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- WATER BODY / POND
- PARKS & OPEN SPACE
- SIGNIFICANT FOREST
- EXISTING STREET TREES
- WATER COURSE

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.

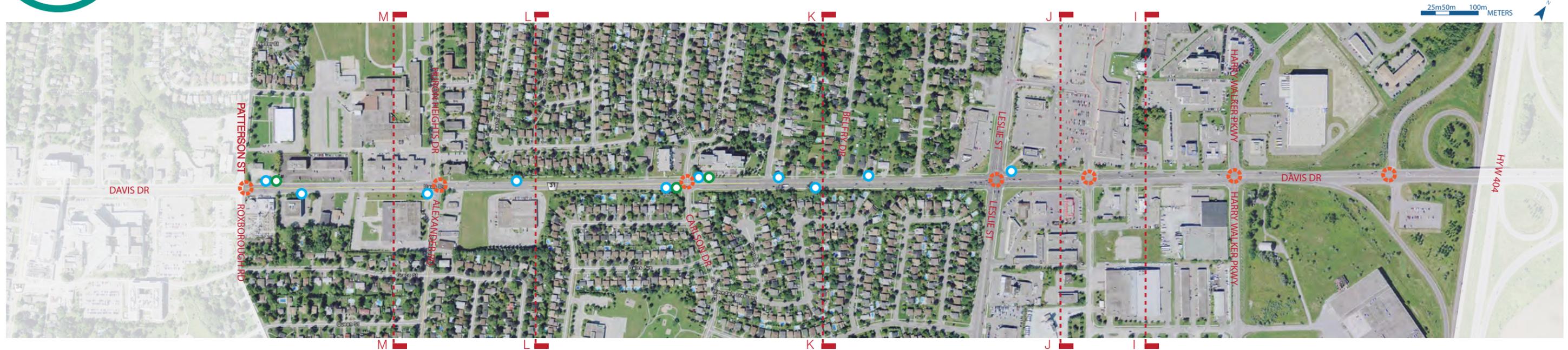


There are notable grade changes adjacent to the public sidewalk as the public realm transitions to the private property line.

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



WEST BOUND DISTANCE BETWEEN TRANSIT STOPS



SIGNALIZED INTERSECTIONS



EAST BOUND DISTANCE BETWEEN TRANSIT STOPS

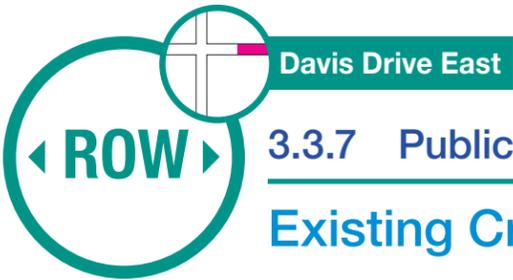


- VIVA STOP
- YRT STOP
- GO STOP
- SIGNALIZED INTERSECTION
- GATEWAY FEATURE
- RIGHT IN/RIGHT OUT DRIVEWAY
- CHANNELIZED DRIVEWAY

Davis Drive East - Existing Boulevard Width

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	
Patterson St to Hwy 404														
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

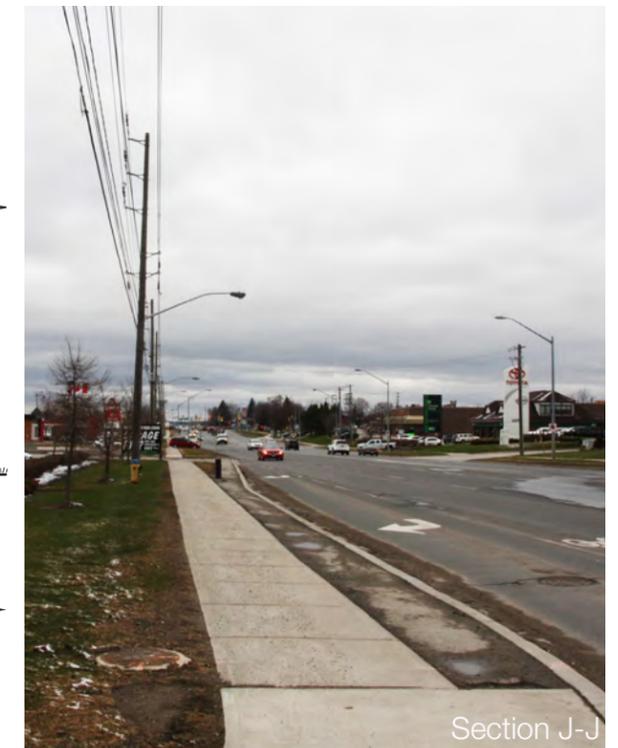
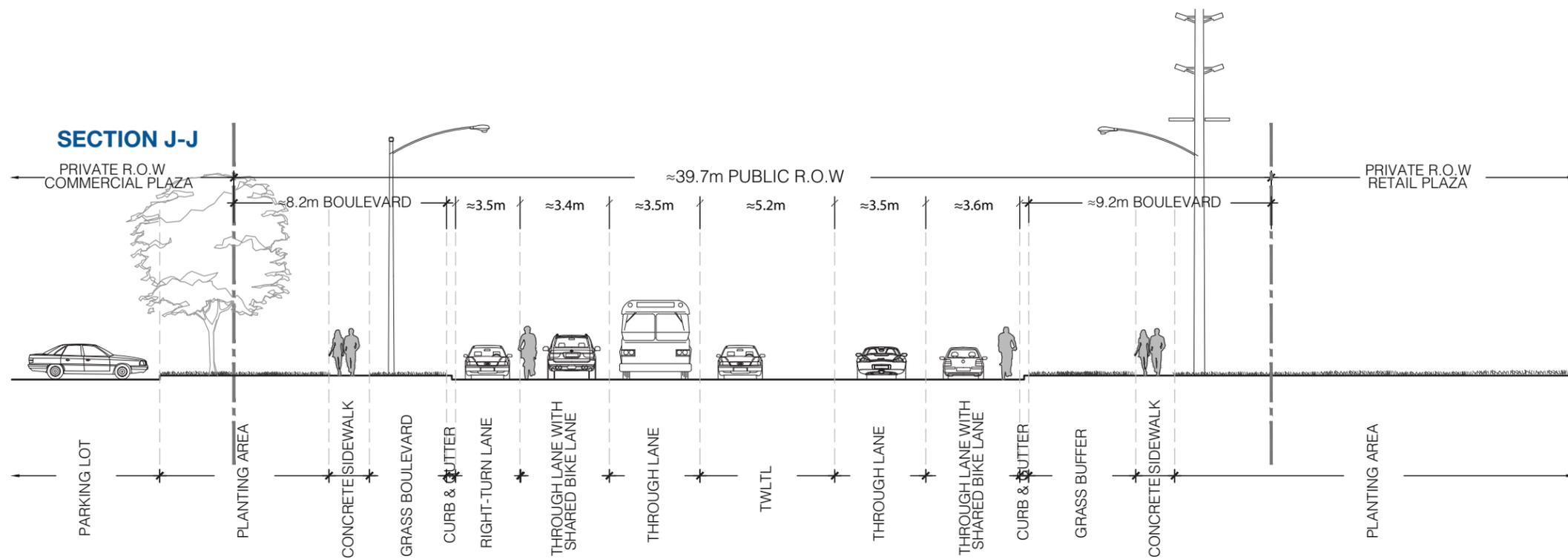
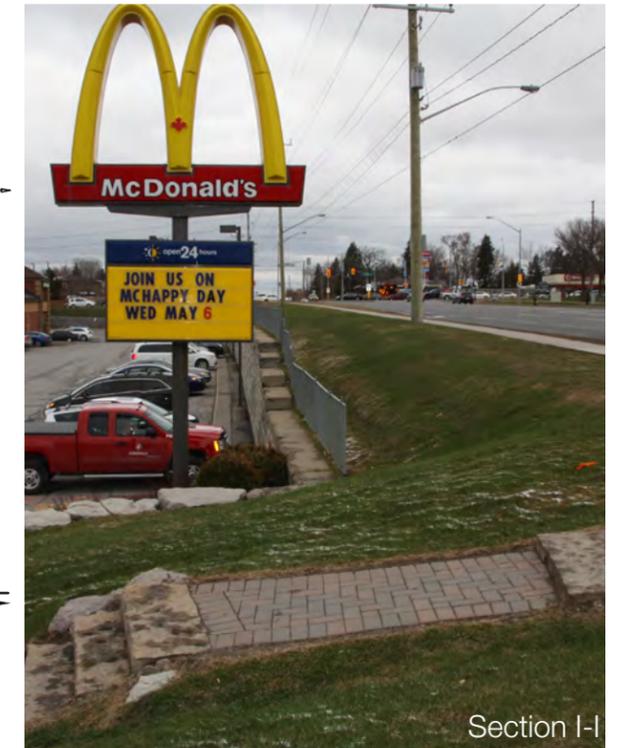
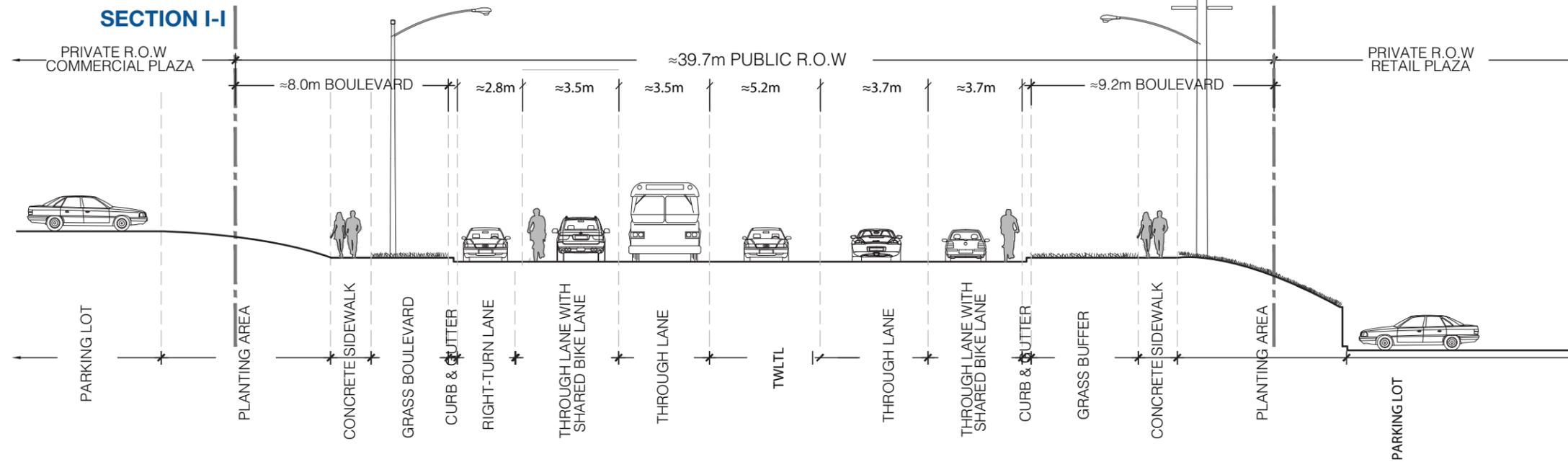
TWLTL = Two-Way Left Turn Lane



ROW

3.3.7 Public ROW Existing Geometry

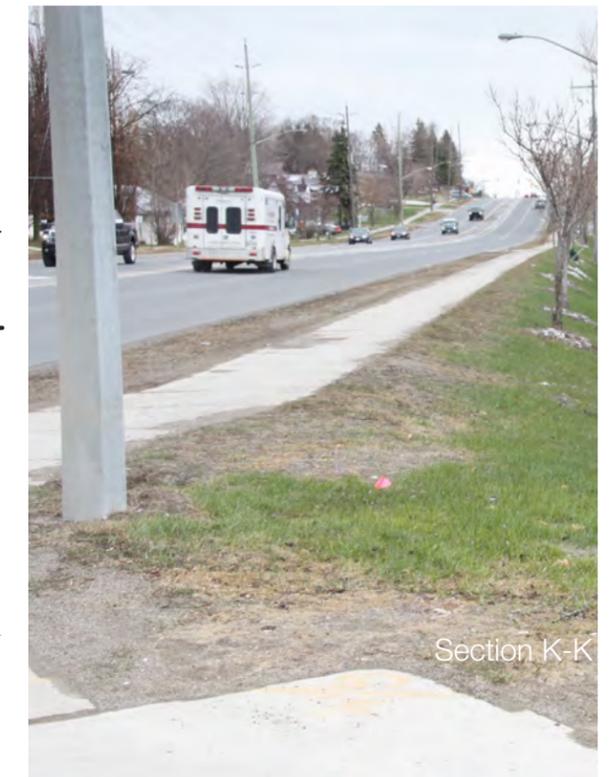
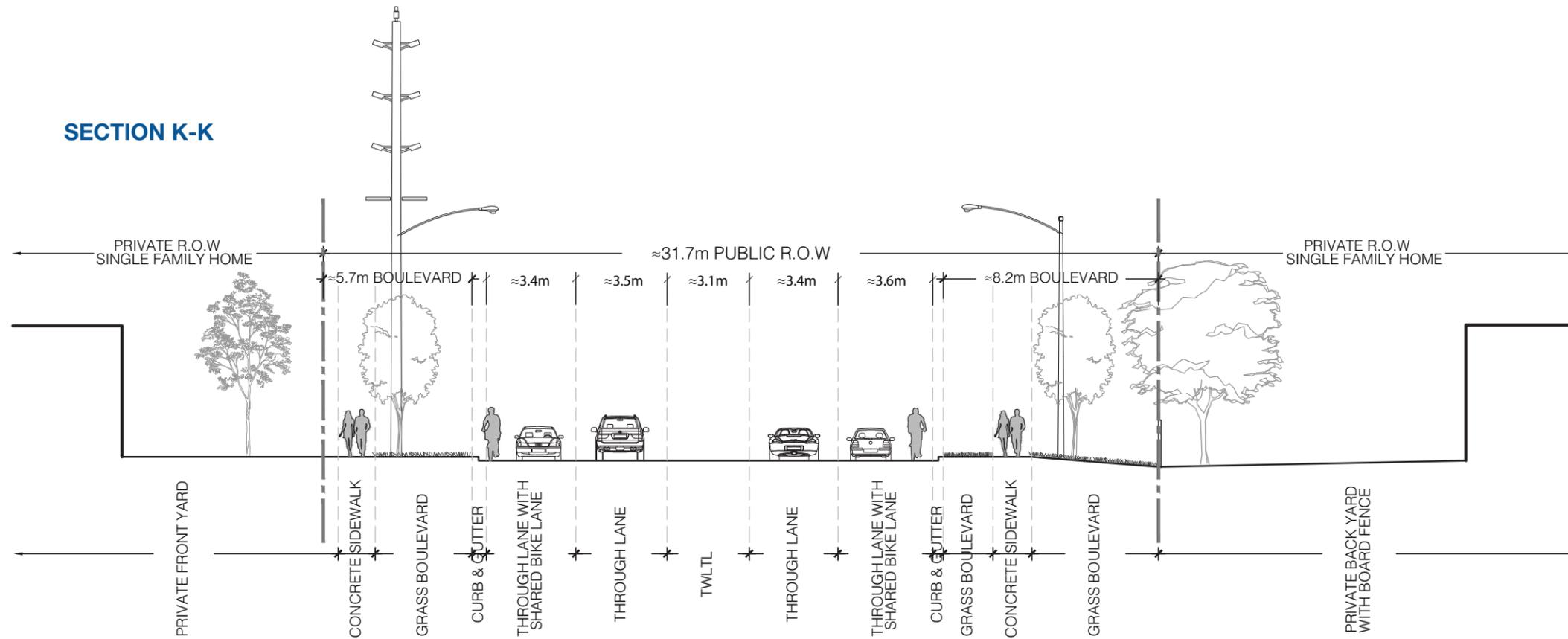
Existing Cross Sections

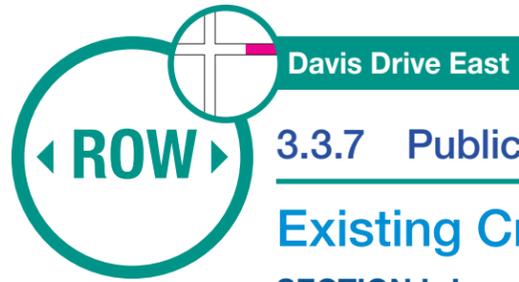


ROW Davis Drive East

3.3.7 Public ROW Existing Geometry

Existing Cross Sections

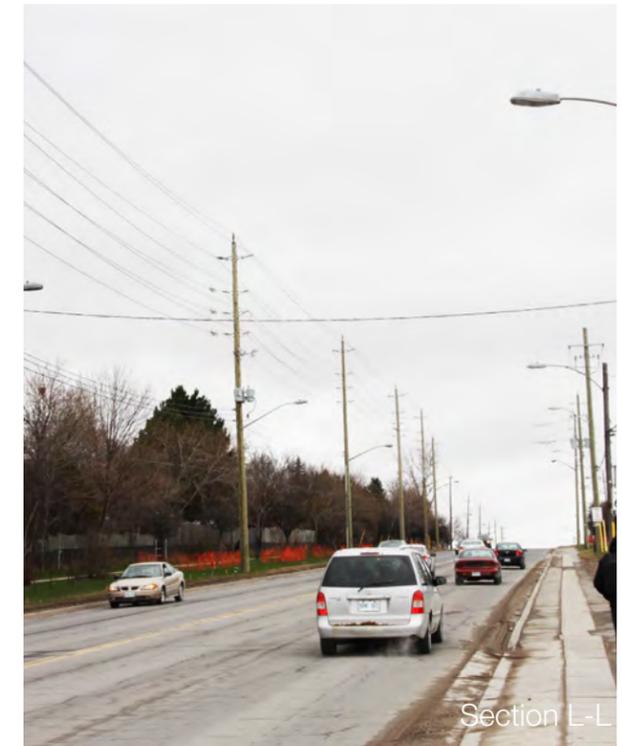
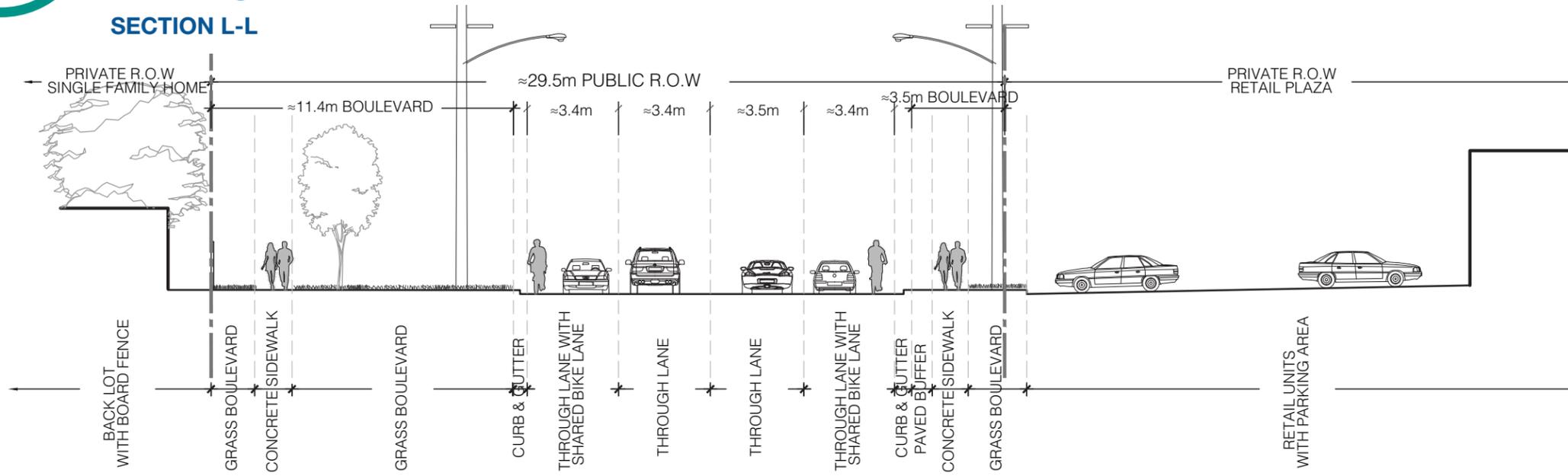




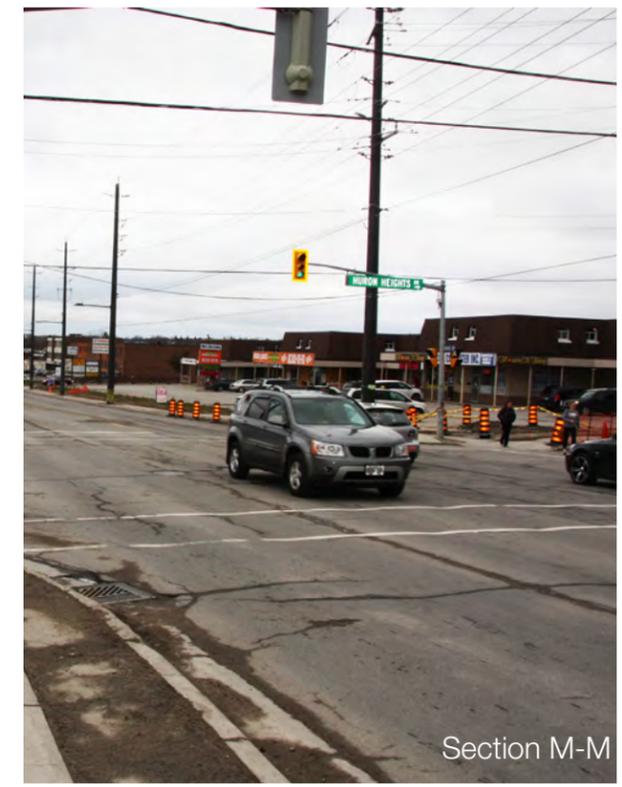
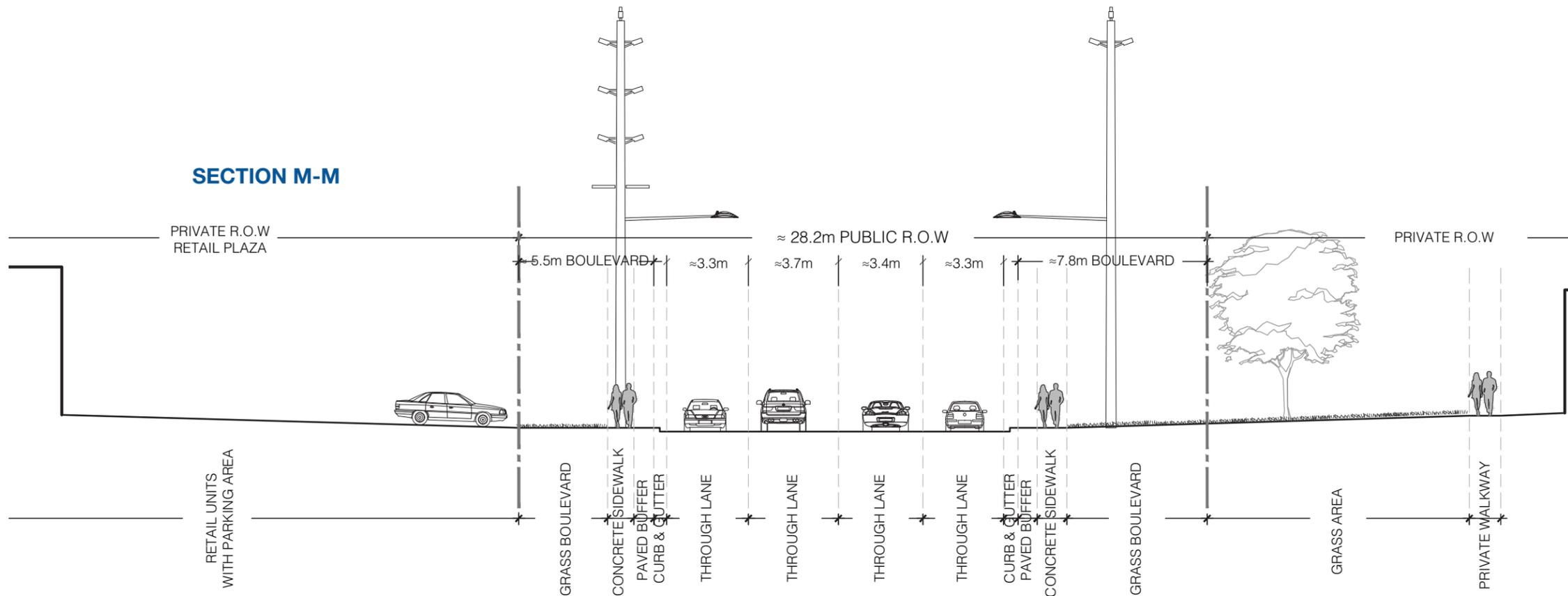
3.3.7 Public ROW Existing Geometry

Existing Cross Sections

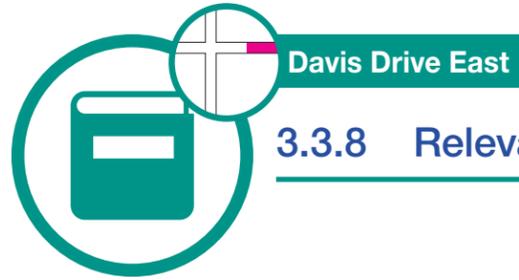
SECTION L-L



SECTION M-M



FINAL



Davis Drive East

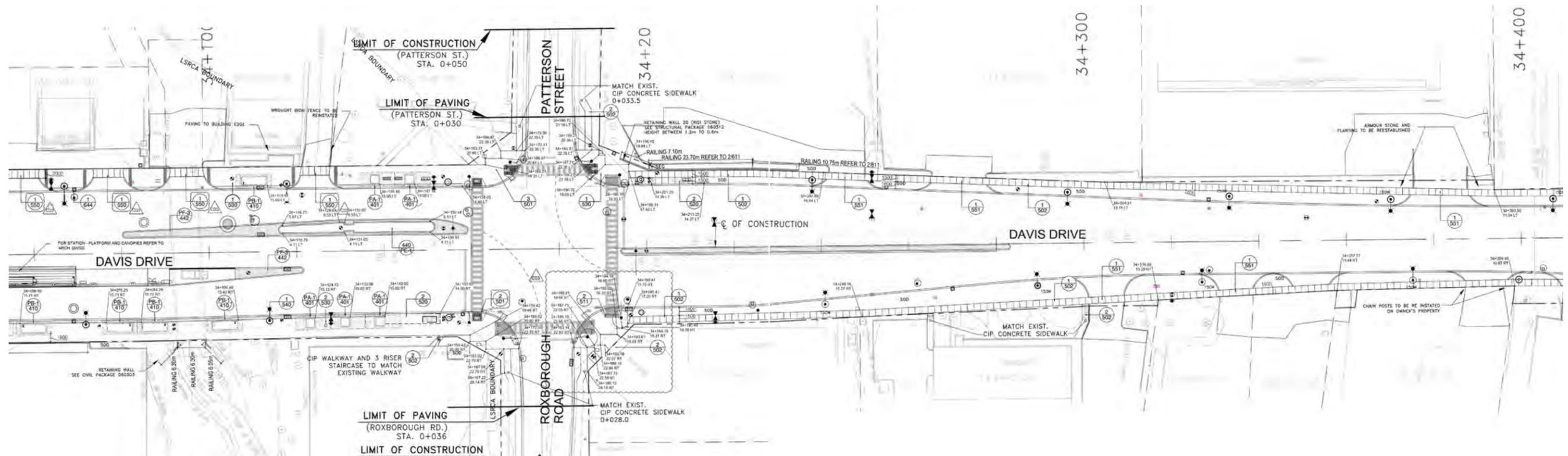
3.3.8 Relevant Studies and Design Interface

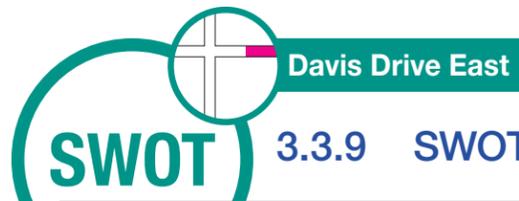
VIVANEXT DAVIS DRIVE - D1

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





	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Signalized intersection at each major crossing spaced an average of 375 metres 	<ul style="list-style-type: none"> Efficient thoroughfare with easy access to Highway 404 Provides easy access to medical facilities along Davis Drive
WEAKNESSES	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Sharrow bike lane not protected Little space between cyclists and traffic Lack of bicycle facilities on the Viva segment of Davis Drive 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Vehicles using the street as a throughway to access Highway 404 TWLTL present between Highway 404 to Carlson Drive
OPPORTUNITIES	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Eliminate TWLTL Introduce traffic calming Provide more efficient turning options into medical facilities Create planted landscape buffers along Davis Drive
THREATS	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> High volume traffic corridor with frequent cars turning Car-oriented community 	<ul style="list-style-type: none"> Through traffic flow entering Highway 404 Car-oriented community with less focus on taking public transit 	<ul style="list-style-type: none"> High volume traffic corridor Traffic coordination to reduce stacking and congestion 	<ul style="list-style-type: none"> 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.

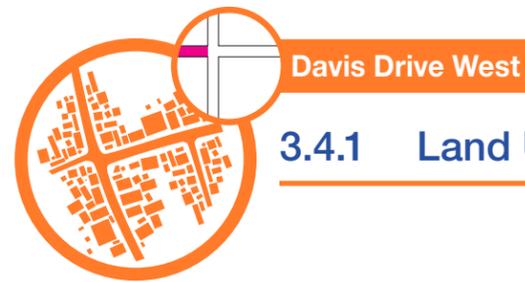
3.4 Davis Drive West – Existing Conditions

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.



3.4.1 Land Use



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

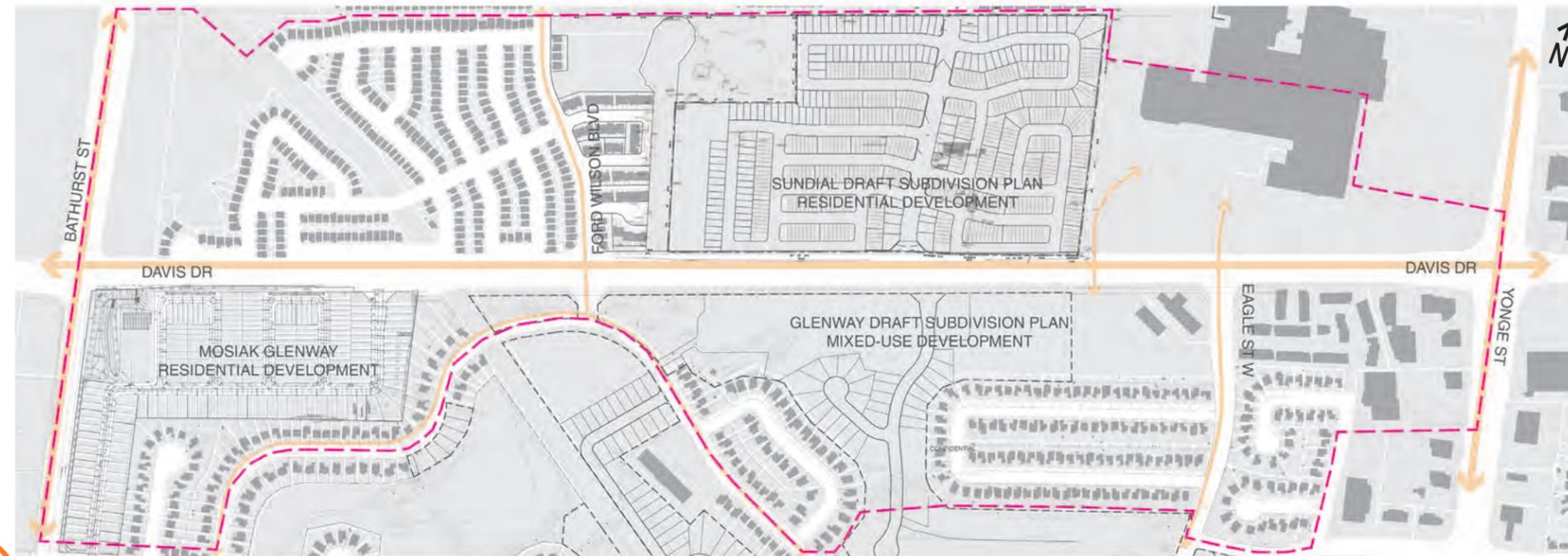
	RESIDENTIAL DETACHED DWELLINGS		INSTITUTIONAL ZONES
	RESIDENTIAL SEMI-DETACHED DWELLINGS		OPEN SPACE ZONES
	RESIDENTIAL MULTIPLE DWELLINGS (DUPLEX)		TR: TRANSITIONAL ZONES
	RESIDENTIAL MULTIPLE DWELLINGS (TOWNHOME)		FP: FLOOD PLAIN
	RESIDENTIAL MULTIPLE DWELLINGS (APARTMENT)		NH: REGULATORY AREA AND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

FINAL

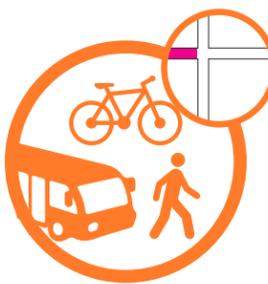


Davis Drive West

3.4.2 Built Form

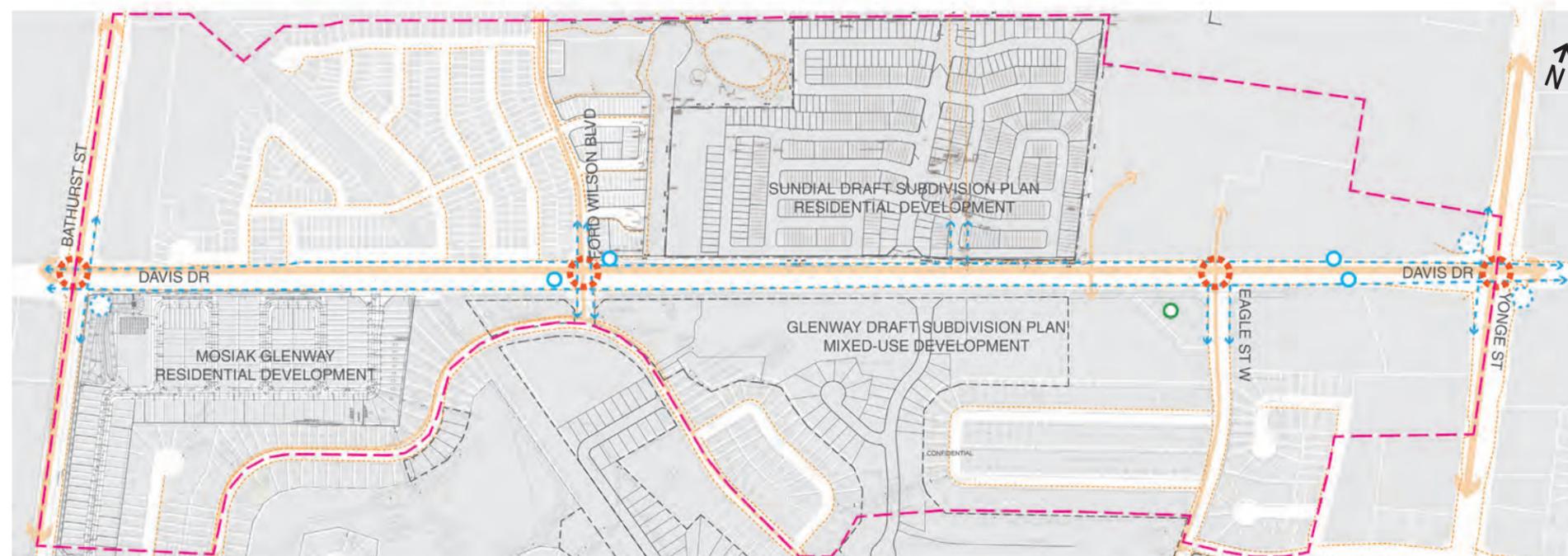


- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- EXISTING BUILT FORM

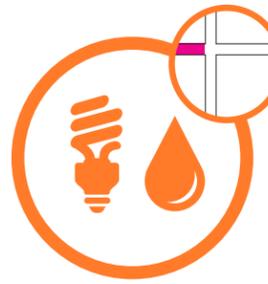


Davis Drive West

3.4.3 Active Transportation Links

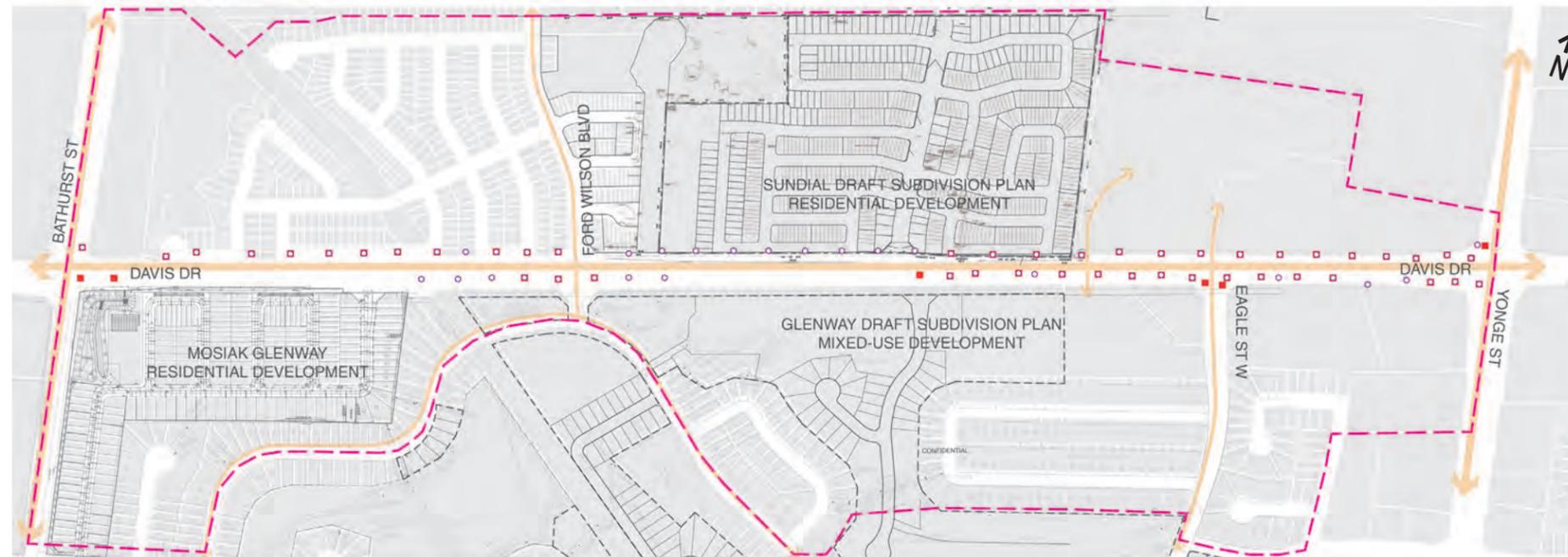


- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- EXISTING PEDESTRIAN CIRCULATION
- EXISTING SIDEWALK NETWORK
- EXISTING BIKE LANES
- EXISTING VIVA STOPS
- EXISTING YRT STOPS
- EXISTING GO STOPS
- SIGNALIZED INTERSECTION
- GATEWAY FEATURE



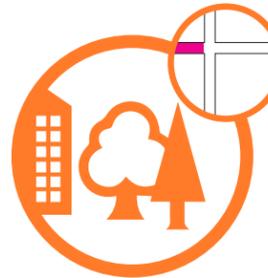
Davis Drive West

3.4.4 Civil Infrastructure - Utilities and Lighting



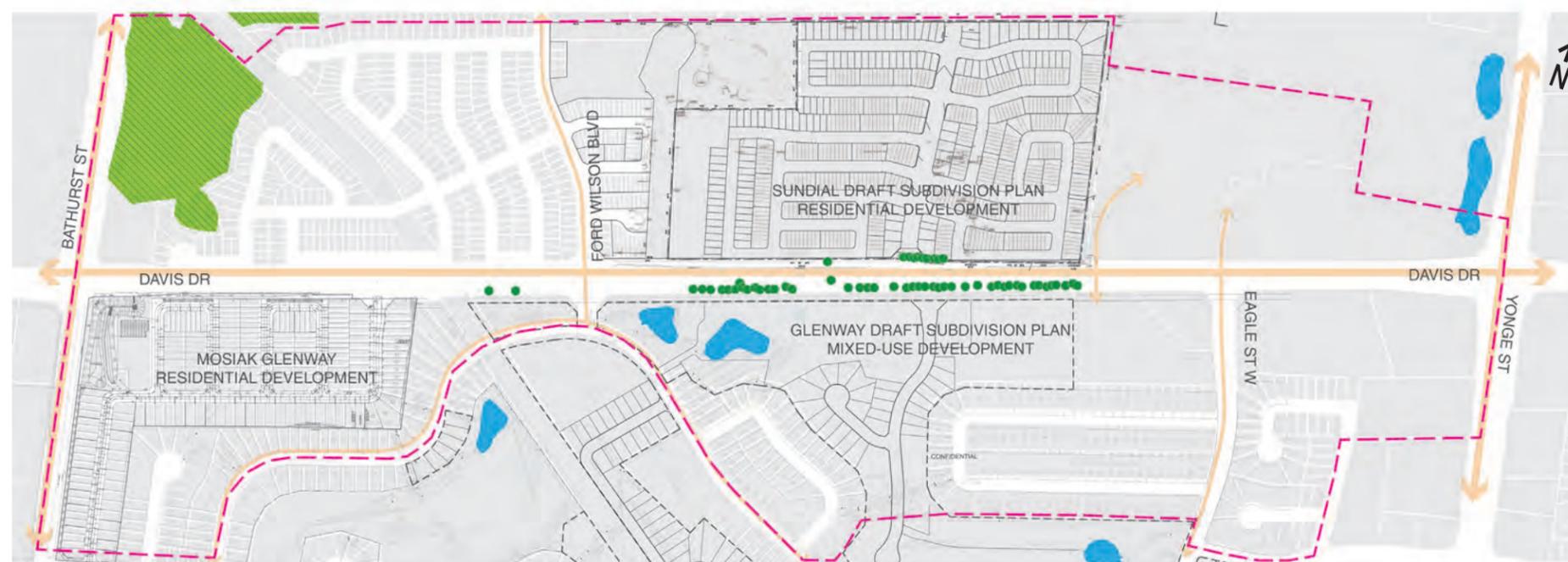
- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- EXISTING STREET LIGHTS
- EXISTING HYDRO POLES
- JOINT-USE POLE

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

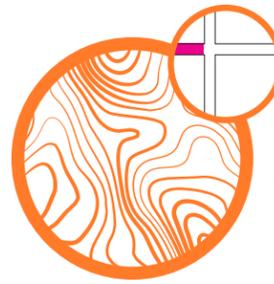


Davis Drive West

3.4.5 Green Infrastructure – Street Trees, Parks & Open Space

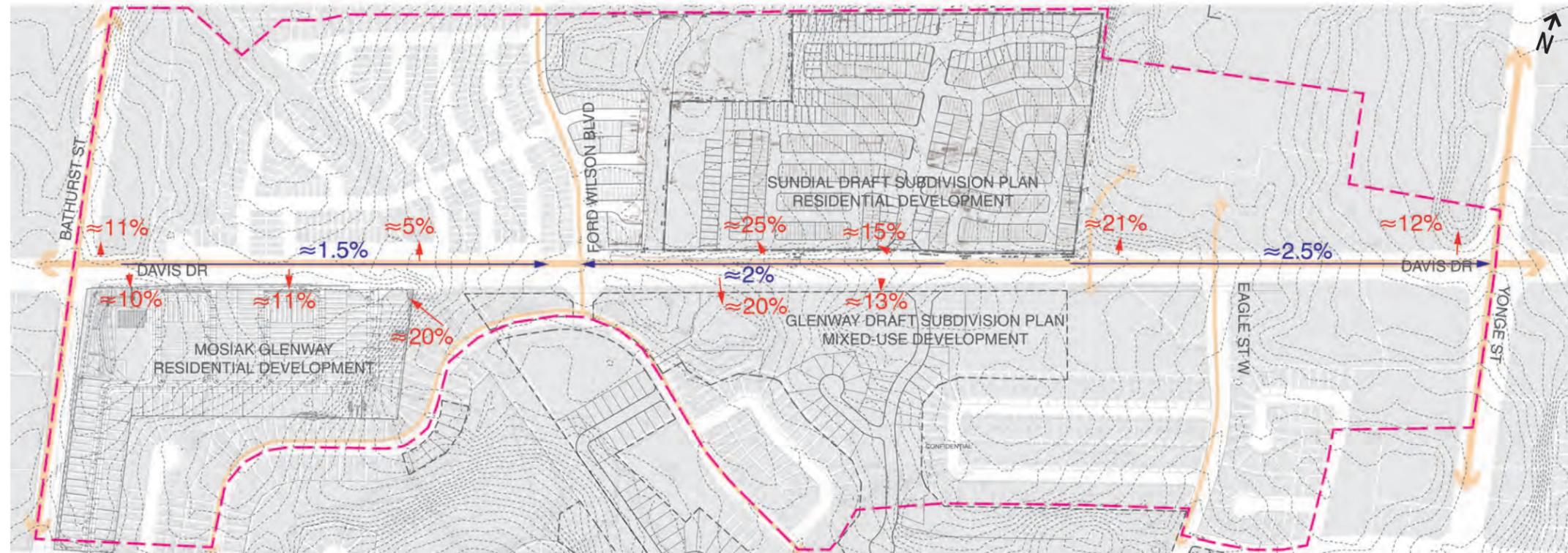


- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- WATER BODY / POND
- PARKS & OPEN SPACE
- SIGNIFICANT FOREST
- EXISTING STREET TREES
- WATER COURSE



Davis Drive West

3.4.6 Topographic Features



- STUDY AREA
- PRIMARY ROAD NETWORK
- EXISTING LAND PARCEL
- STORMWATER MANAGEMENT POND
- WATER COURSE
- EXISTING CONTOUR LINE
- $\approx X\%$ SLOPE FROM BACK OF CURB TO PROPERTY LINE
- $\approx X\%$ LONGITUDINAL SLOPE (FOLLOW ROADWAY)



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



WEST BOUND DISTANCE BETWEEN



EAST BOUND DISTANCE BETWEEN



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

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 Bathurst 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

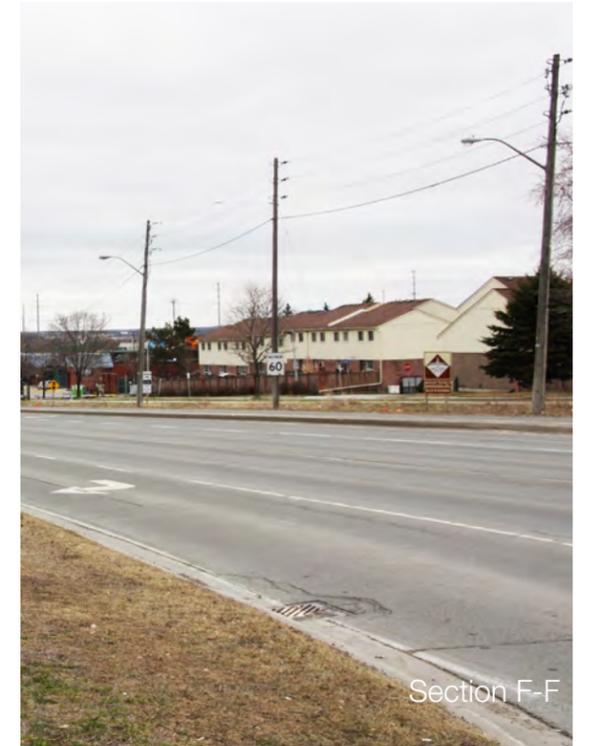
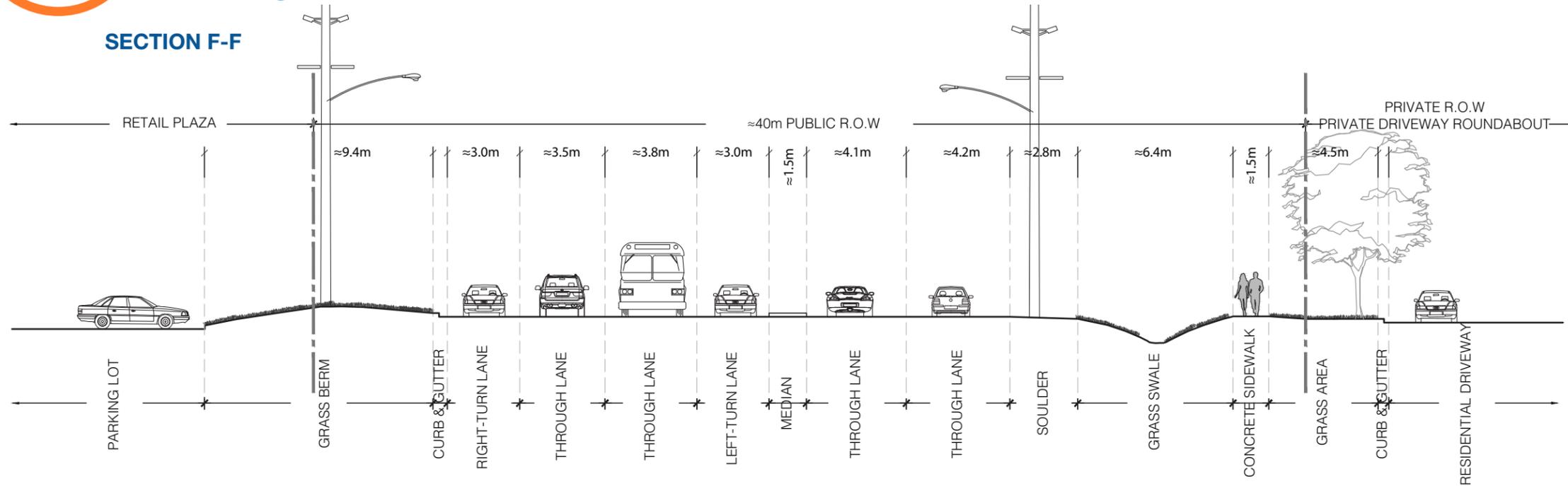
TWLTL = Two-Way Left Turn Lane

ROW Davis Drive West

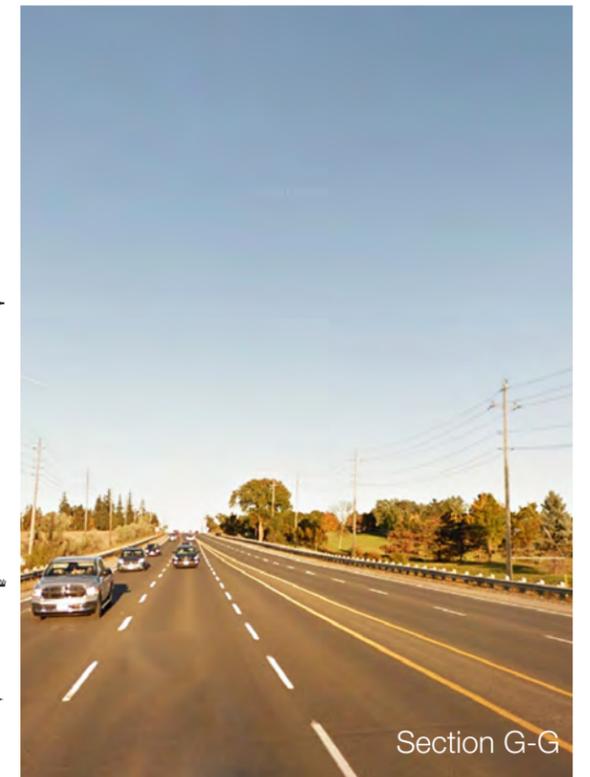
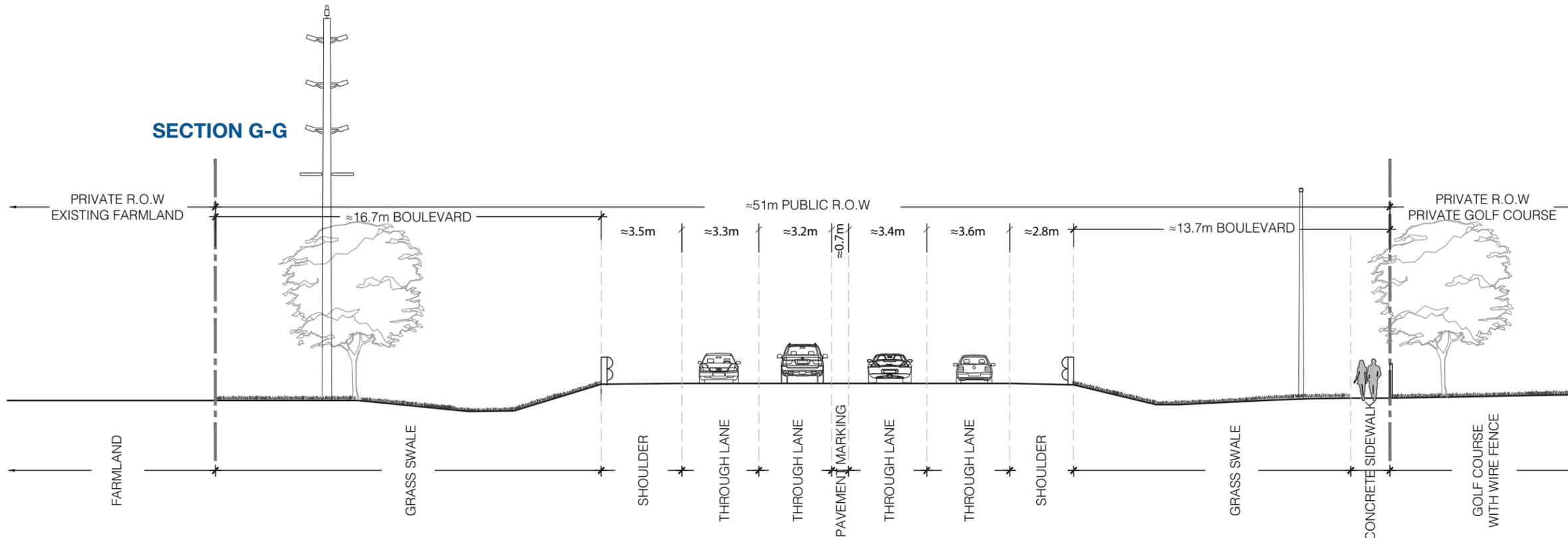
3.4.7 Public ROW Existing Geometry

Existing Cross Sections

SECTION F-F



SECTION G-G

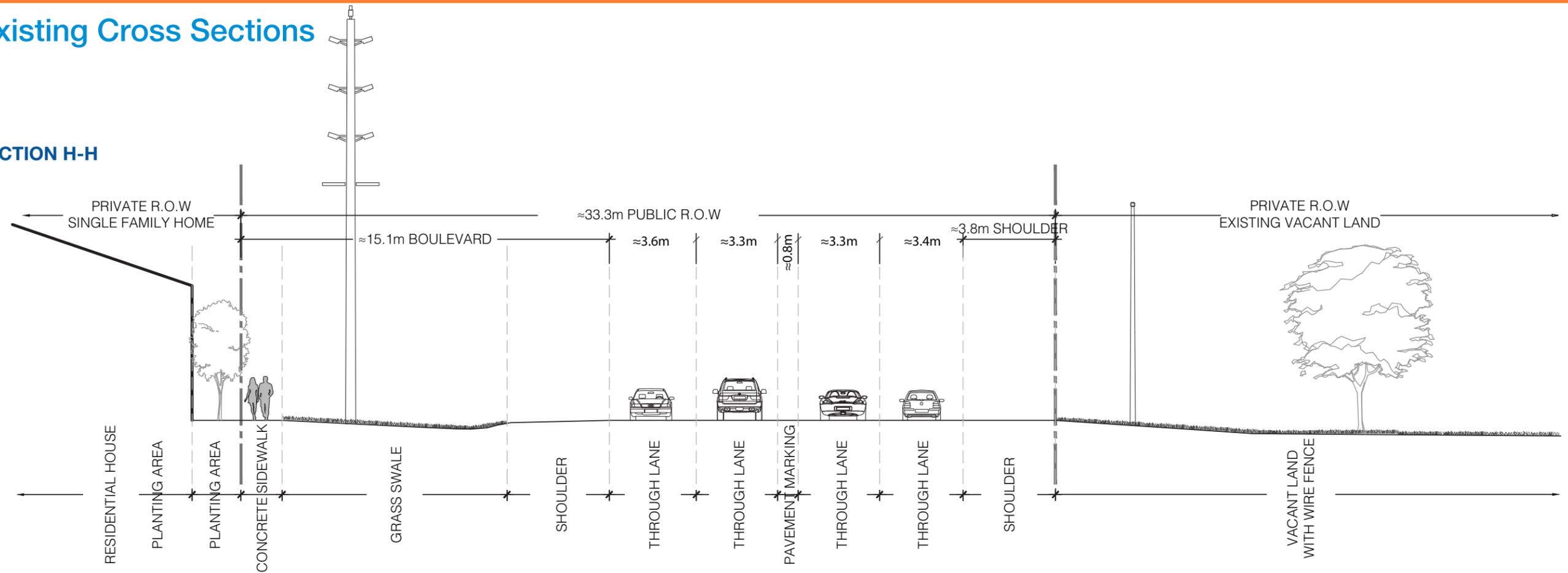


ROW Davis Drive West

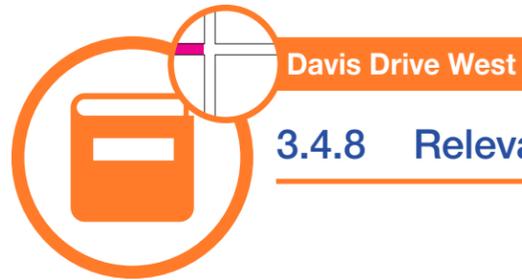
3.4.7 Public ROW Existing Geometry

Existing Cross Sections

SECTION H-H



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



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.



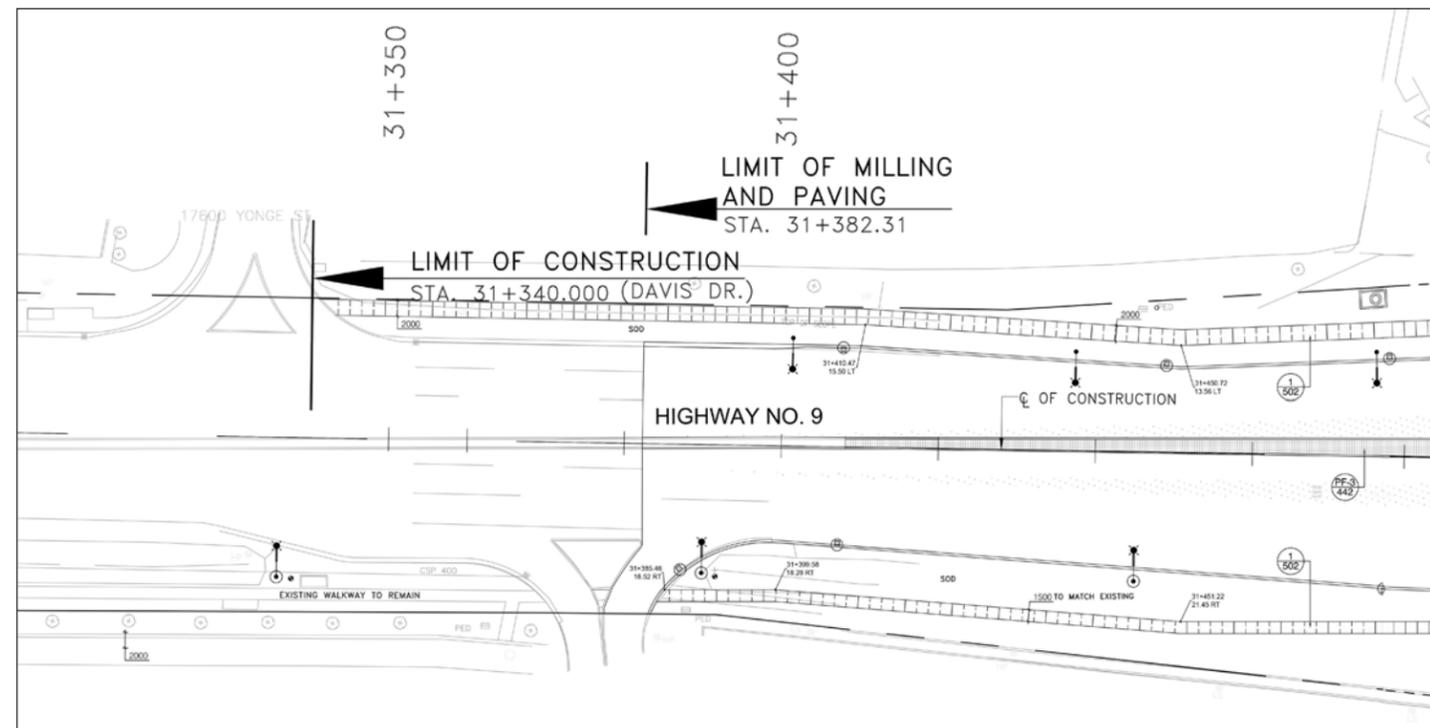
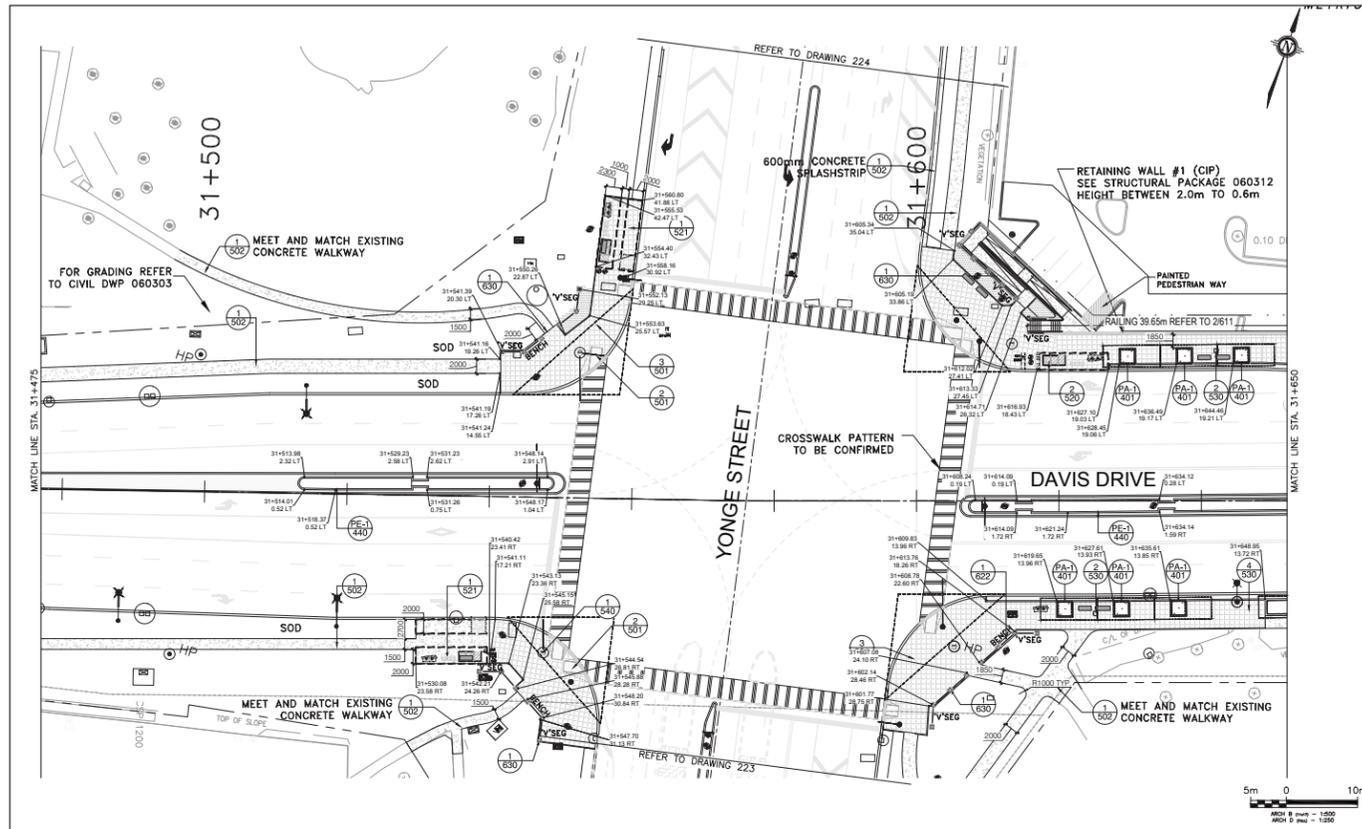
Townhouse Examples – Glenway Planning Justification Report (Appendix 4)



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

VIVANEXT DAVIS DRIVE D1 LANDSCAPE STREETScape LAYOUT PLAN - IFC

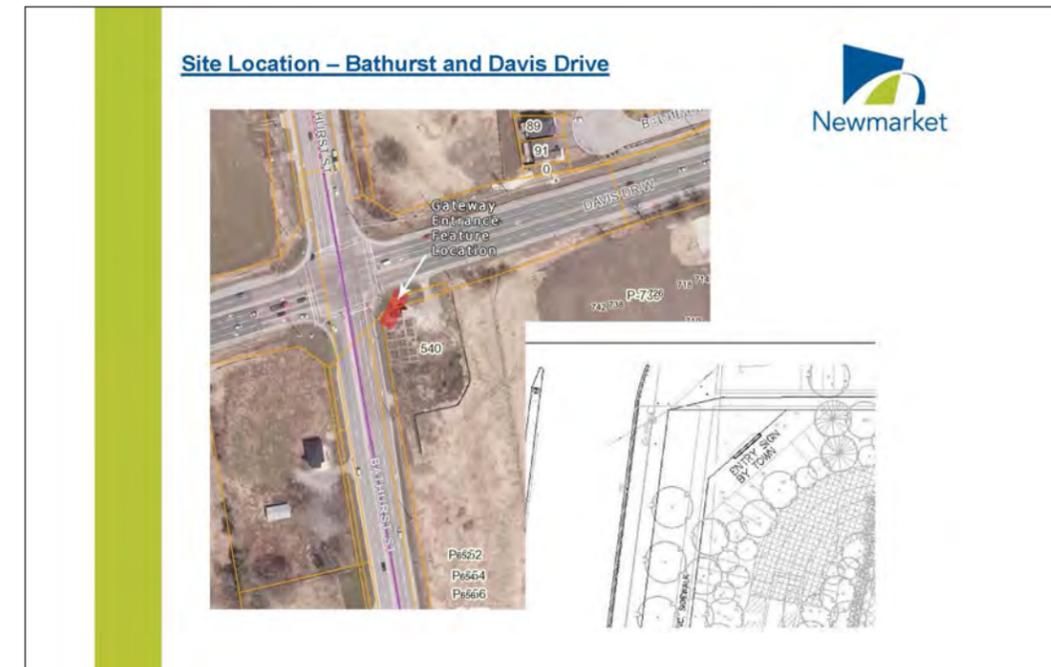
The vivaNext D1 limit of construction extends westerly along Davis Drive west of Yonge Street including new concrete sidewalks and lighting.



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.





	PEDESTRIAN MOBILITY	CYCLING FACILITIES	TRANSIT FACILITIES	SIGNALIZED INTERSECTION SPACING	VEHICULAR CHARACTERISTICS
STRENGTHS	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Existing transit hub with GO Transit stop Variety of transit options supported including YRT 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No dedicated cycling facilities present 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> TWLTL present between Yonge Street and Eagle Street Fluctuation of boulevard width
OPPORTUNITIES	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Car-oriented community with less focus on taking public transit Currently, transit less convenient than driving 	<ul style="list-style-type: none"> High volume traffic corridor with posted speed of 60 km/h Traffic flow coordination to reduce stacking and congestion 	<ul style="list-style-type: none"> 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

