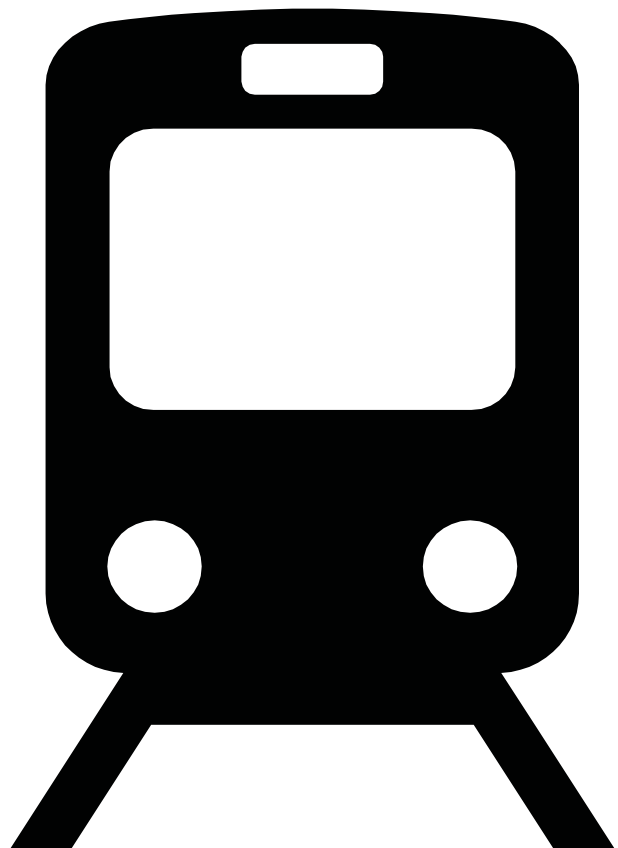

YONGE NORTH SUBWAY EXTENSION

ENVIRONMENTAL PROJECT REPORT ADDENDUM

Final Socio-Economic and Land Use
Existing Conditions & Impact Assessment
Report

April 14, 2022



	Name, Title	Signature/Date
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Yonge North Subway Extension (YNSE) Environmental Project Report Addendum

Socio-Economic and Land Use Existing Conditions & Impact Assessment Report

FOR

CONTRACTING AUTHORITY METROLINX IO

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Appendix B – YNSE Corridor Land Use Field Photographs

Appendix C – Reclassification of Land Use Designations in Official Plans

REFERENCES AND SUPPORTING DOCUMENTS

Reference	Title
City of Markham 2014	Official Plan Office Consolidation.
City of Markham 2010	Langstaff Land Use and Built Form Master Plan and Official Plan Amendment.
City of Markham 2010	City of Markham Cycling Master Plan.
City of Markham 2009	City of Markham Pedestrian and Trails Master Plan.
City of Markham 2008	Yonge and Steeles Corridor Study. Final Report.
City of Markham 2005	Markham-Thornhill Heritage Conservation District Plan. Prepared by Philip H Carter Architect and Planner.
City of Richmond Hill 2018	Official Plan 2020 Office Consolidation.
City of Richmond Hill 2018	Yonge and Carrville/ 16 th Key Development Area Draft Secondary Plan.
City of Richmond Hill 2006	Transportation Master Plan.
City of Richmond Hill 2014	Transportation Master Plan- Technical Update.
City of Richmond Hill 2016	Ward 6 Demographics
City of Toronto 2020	Circulation of Relevant Active Development Applications to OneT+ and Metrolinx.
City of Toronto 2016	Neighbourhood Census
City of Toronto 2006	Official Plan. 2019 Office Consolidation.
City of Toronto 2013	Yonge Street North Planning Study- Final Consultant's Reports and Next Steps on Implementing Official Plan Amendments.
City of Toronto 2020	Yonge Street North Transportation Master Plan – Virtual Community Consultation Materials (Meeting #6 and #7)
City of Vaughan 2010	Official Plan 2019 Office Consolidation.
City of Vaughan 2012	Vaughan Transportation Plan.
City of Vaughan 2010	Yonge Steeles Corridor Secondary Plan.
City of Vaughan 2007	Thornhill Vaughan Heritage Conservation District Plan. Prepared by Phillip H Carter Architect and Planner.
Metrolinx 2020	Transit Oriented Communities
Metrolinx 2018	2041 Regional Transportation Plan
Ministry of Municipal Affairs and Housing 2020	Size and Location of Urban Growth Centres in the Greater Golden Horseshoe.
Ministry of Municipal Affairs and Housing 2017	Greenbelt Plan
Ministry of Municipal Affairs and Housing 2017	Growth Plan for the Greater Golden Horseshoe
Ministry of Municipal Affairs and Housing 2020	Provincial Policy Statement

Reference	Title
Ministry of Transportation 2020	Transit Oriented Communities
Statistics Canada 2016	Census Profile, 2016 Census.
York Region 2010	Regional Official Plan 2019 Office Consolidation
York Region 2016	York Region Transportation Master Plan
York Region Rapid Transit Corporation 2021	Next Phase of Bus Rapid Transit
York Region Rapid Transit Corporation 2020	VivaNext Rapidway on Yonge Street in Richmond Hill

ACRONYMS, ABBREVIATIONS & MEASUREMENT UNITS

Term	Definition
BRT	Bus Rapid Transit
EEB	Emergency Exit Building
EPR	Environmental Project Report
ETR	Express Toll Route
FRTN	Frequent Rapid Transit Network
GGH	Greater Golden Horseshoe
GTA	Greater Toronto Area
GTHA	Greater Toronto and Hamilton Area
HCD	Heritage Conservation District
IBC	Initial Business Case
LPAT	Local Planning Appeal Tribunal
LRT	Light Rail Transit
MTSA	Major Transit Station Area
MMAH	Ministry of Municipal Affairs and Housing
MTO	Ontario Ministry of Transportation
MUT	Multi-use trail
OMB	Ontario Municipal Board
PBWP	Parkway Belt West Plan
PPS	Provincial Policy Statement
PPUDO	Passenger Pick-up and Drop-off
RCD	Reference Concept Design
RER	Regional Express Rail
RHCT	Richmond Hill Centre Terminal
RTP	Regional Transportation Plan
SEM	Sequential Excavation Method
TBM	Tunnel Boring Machine
TDM	Transportation Demand Management
TMP	Transportation Master Plan
TPAP	Transit Project Assessment Process
TPSS	Traction Power Substation

Term	Definition
TRCA	Toronto and Region Conservation Authority
TSF	Train Storage Facility
TTC	Toronto Transit Commission
UGC	Urban Growth Centre
VPR	Voluntary Project Review
YNSE	Yonge North Subway Extension
YRT	York Region Transit

GLOSSARY OF TERMS

Term	Definition
Frequent Rapid Transit Network	The full range of transit projects needed to meet growth as identified in the Metrolinx 2041 Regional Transportation Plan. <i>[Source: 2041 Regional Transportation Plan, Metrolinx, 2018.]</i>
Greater Golden Horseshoe	The geographic area identified as the Greater Golden Horseshoe growth plan area in Ontario Regulation 416/05 under the Places to Grow Act, 2005. <i>[Source: Growth Plan for the Greater Golden Horseshoe, 2019.]</i>
Heritage Conservation District	As per Part V of the Ontario Heritage Act, a defined geographical area within a municipality that is protected under a local bylaw to ensure conservation of its existing heritage character. The focus of this type of designation is on the prevailing character of an area, particularly its contextual attributes- such as the variety of buildings and how they interrelate, the physical attributes including trees, landscapes, building setbacks, roads, street furniture and lighting. A district designation allows a municipal council to manage and guide future change in the district by adopting a district plan with policies and guidelines tailored to the area's conservation, protection and enhancement requirements. <i>[Source: Ontario Heritage Trust, 2021.]</i>
Local Planning Appeal Tribunal	An adjudicative tribunal that hears cases in relation to a range of land use matters, heritage conservation and municipal governance. Appeals that come before LPAT are identified through policies found in the Planning Act, Aggregate Act, Heritage Act, Municipal Act, Development Charges Act and Expropriations Act. These include matters such as official plans, zoning by-laws, subdivision plans, consents and minor variances, land compensations, development charges, electoral ward boundaries, municipal finances, aggregate resources and other issues assigned by numerous Ontario statutes. <i>[Source: Ontario Land Tribunals, 2021.]</i>
Major Transit Station Area	The area including and around any existing or planned higher-order transit station within a settlement area, or the area including and around a major bus depot in an urban core. Major transit station areas generally are defined as the area within an approximate 500 metre radius of a transit station, representing about a 10-minute walk. <i>[Source: Growth Plan for the Greater Golden Horseshoe, 2019.]</i>
Ontario Municipal Board	The Ontario Municipal Board, now replaced by the Local Planning Appeal Tribunal, was an independent adjudicative tribunal that conducted hearings and made decisions on land use planning issues and other matters. <i>[Source: Ontario Land Tribunals, 2021.]</i>
Provincial Policy Statement	A consolidated statement of the government's policies on land use planning, issued under section 3 of the Planning Act. According to the act, all decisions affecting planning matters shall be consistent with the Provincial Policy Statement. <i>[Source: Ministry of Municipal Affairs and Housing, 2020.]</i>
Urban Growth Centre	Existing or emerging downtown areas shown in Schedule 4 of the Growth Plan for the Greater Golden Horseshoe and as further identified by the Minister of Municipal Affairs and Housing on April 2, 2008. <i>[Source: Growth Plan for the Greater Golden Horseshoe, 2019.]</i>

E.1 Executive Summary

Metrolinx and Infrastructure Ontario are undertaking an Addendum to the Environmental Project Report (EPR) for the Yonge North Subway Extension (YNSE). This study is following the requirements of the Transit Project Assessment Process (TPAP) under *O. Reg. 231/08* and will address a change to the subway extension alignment, stations, and associated facilities.

Previous studies followed the TPAP for the YNSE. An EPR was completed by the Regional Municipality of York (York Region), York Region Rapid Transit Corporation, the City of Toronto and the Toronto Transit Commission in 2009 for the new subway extension. A further addendum to the EPR was prepared in 2014 to assess the potential environmental impacts associated with the identified Train Storage Facility (TSF) location that would accommodate up to 14 trains within the vicinity of the Richmond Hill Centre.

E.1.1 Study Purpose

As part of the YNSE EPR Addendum process, this Existing Conditions and Impact Assessment Report has been prepared to document the current existing conditions within the Study Area, to undertake an assessment of the potential impacts associated with the currently proposed YNSE Project, and to identify mitigation and monitoring measures, as appropriate.

E.1.2 Summary of Potential Impacts, Mitigation Measures & Monitoring Activities

Based on the socio-economic and land use existing conditions information and a set of discipline-specific criteria, the potential impacts of constructing, operating, and maintaining the Project, as per the YNSE Reference Concept Design (RCD), were evaluated. Potential impacts on socio-economic and land use conditions were classified as operations and maintenance or construction impacts and are listed below.

Potential Effects

Construction Phase:

- Permanent and temporary property acquisition (property requirements will be confirmed as planning and design progress)
- Nuisance effects (e.g., dust, noise and vibration) from construction activities
- Potential for temporary disruption of access to adjacent lands
- Visual effects from construction areas/activities
- Potential for light trespass, glare and light pollution effects

Operational Phase:

- Visual effects from permanent public-facing structures
- Nuisance effects (e.g., dust, noise and vibration) from operational activities
- Potential light pollution associated with overnight maintenance and storage activities at the Train Storage Facility location

Mitigation Measures

Construction Phase:

- Confirm specific property requirements during design, and engage in ongoing consultation with affected landowners to identify appropriate site-specific mitigation measures

- Develop a communications protocol to provide notifications to the community, and address complaints in a timely manner.
- Develop an air quality management plan to mitigate potential impacts of dust during construction (see Air Quality for further detail and more mitigation measures).
- Develop a plan to manage noise and vibration during construction (see Noise & Vibration for further detail and more mitigation measures).
- Maintain access to businesses during working hours, where feasible. Where regular access cannot be maintained, provide alternative access and signage.
- Provide clearly marked pedestrian and cyclist detours where required.
- Provide screened enclosures along construction site boundaries where necessary.
- Develop a plan and apply appropriate mitigation measures to reduce the effects of light pollution.

Operational Phase:

- Reduce visual effects of project structures by considering their location, building materials, architectural design, and surrounding landscape treatments.
- Develop a plan to reduce the effects of light pollution and comply with all local applicable municipal by-laws and Ministry of Transportation practices for lighting in areas near or adjacent to highways and roadways regarding outdoor lighting for both permanent and temporary construction activities, and incorporate industry best practices provided in *ANSI/IES RP-8-18 – Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting*.

Table B 3-13 further outlines the potential socio-economic and land use effects, mitigation measures and monitoring activities.

A 1.0 Introduction

In 2009, the Regional Municipality of York, York Region Rapid Transit Corporation, the City of Toronto and the Toronto Transit Commission completed an Environmental Project Report (EPR) in accordance with the Transit Project Assessment Process (TPAP), to assess the potential environmental impacts of the proposed Yonge North Subway Extension (YNSE) Project. The Study Area was defined as Finch Avenue in the City of Toronto to Richmond Hill Centre Terminal at Highway 7 in the City of Richmond Hill, York Region. Notice to Proceed was given by the then Minister of Environment and Climate Change (now the Minister of Environment, Conservation & Parks [MECP]) and Statement of Completion was issued in April 2009.

In 2014, an EPR Addendum was carried out by the York Region Rapid Transit Corporation, in partnership with the Regional Municipality of York, Toronto Transit Commission (TTC), and the City of Toronto to assess the potential environmental impacts associated with the identified Train Storage Facility (TSF) location that would accommodate up to 14 trains within the vicinity of the Richmond Hill Centre. Statement of Completion was issued in November 2014.

Subsequently in April 2019, the Government of Ontario announced a \$28.5 billion expansion to Ontario's transit network. This rapid transit project plan includes four key initiatives including: the Ontario Line (OL), the Scarborough Subway Extension (SSE), the Eglinton West Extension (EWE), as part of the Eglinton Crosstown Light Rail Transit (ECLRT) Project, and the YNSE (**Figure A 1-1**). The YNSE is an extension of TTC's Line 1 north from Finch Station to Richmond Hill.

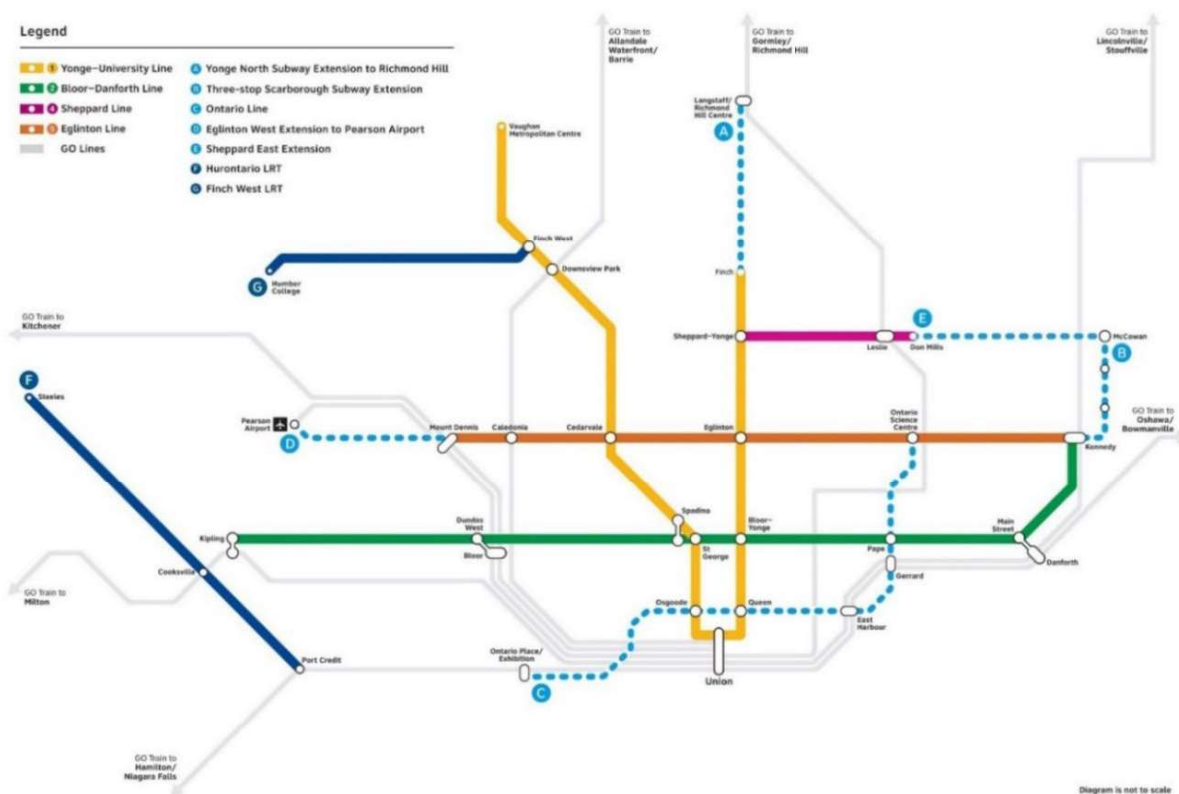


Figure A 1-1 Ontario's Rapid Transit Expansion Plan (Source: Infrastructure Ontario- 2019)

A 1.1 Initial Business Case

Metrolinx published the Yonge North Subway Extension Initial Business Case (IBC) and accompanying supplementary analysis on March 18, 2021. The IBC demonstrates how the Yonge North Subway Extension will significantly reduce travel times, grow the number of people who use public transit and serve the heart of major growth centres in Toronto and York Region. The scope and key objectives of the IBC were as follows:

- Document the details of the project, as contemplated at the time it was brought under the management of Metrolinx;
- Compare alternative alignments of the extension with a Business-As-Usual scenario;
- Investigate and evaluate options that might have additional transit benefits and/or reduced capital or operating costs; and
- Evaluate the performance of stations.

The Yonge North Subway Extension will bring higher-order rapid transit closer to a large number of residents and jobs in the intensification areas along the corridor, while providing a seamless connection between those areas. The business case introduces innovative design options in order deliver the most benefits possible within the funding envelope of \$5.6 billion.

The IBC generally provides recommendations for next steps in the Metrolinx Business Case process. The following additional recommendations of the IBC are noteworthy:

- The Yonge North Subway Extension is one of four priority transit projects announced by the Government of Ontario, along with the Scarborough Subway Extension, the Ontario Line and the Eglinton Crosstown West Extension. The Ontario Line will provide relief to Line 1 by helping to spread demand across the transit network as it grows. The Yonge North Subway Extension won't come online until the Ontario Line goes into service.
- The extension will bring rapid transit closer to residents' destinations in the northern portions of Toronto and across York Region. The IBC highlights the need to prioritize access for bus passengers while focusing on walk-in access at each of the contemplated subway stations.
- Next steps will include refining the design of the selected alternative engineering to maximize benefits and address risks, developing a Preliminary Design Business Case, seeking required *Environmental Assessment Act* approvals and proceeding toward delivery.

A 1.2 Background

A 1.2.1 2009 EPR

The *Yonge Subway Extension - Finch Station to Richmond Hill Centre Transit Project Assessment-Environmental Project Report* (2009) included the assessment of approximately 6.8km of subway alignment via twin-bored tunnel, six (6) subway stations, associated track work, one (1) major bus terminal, one (1) bus loop, four (4) traction power substations, six (6) emergency exit buildings (EEBs) and one (1) bridge structure. **Figure A 1-2** provides a key map depicting the 2009 EPR scope (the red section of the proposed alignment is located in the City of the Toronto; the blue section is located in York Region).

In April 2009, MECP issued a Notice to Proceed in accordance with the proposed Project as documented in the 2009 EPR.



Figure A 1-2 Finch Station to Richmond Hill Centre – 2009 YNSE EPR Scope

A 1.2.2 2014 EPR Addendum

Subsequent to the 2009 EPR, an EPR Addendum was undertaken in 2014 to assess the potential environmental impacts associated with the following design changes:

- Extension of the subway alignment to approximately 1 km north of the previously approved Richmond Hill Centre Station;
- Underground Train Storage Facility (TSF) for 14 trains (**Figure A 1-3**), north of the previously approved Richmond Hill Centre Station; and
- Two (2) Emergency Exit Buildings associated with the TSF.

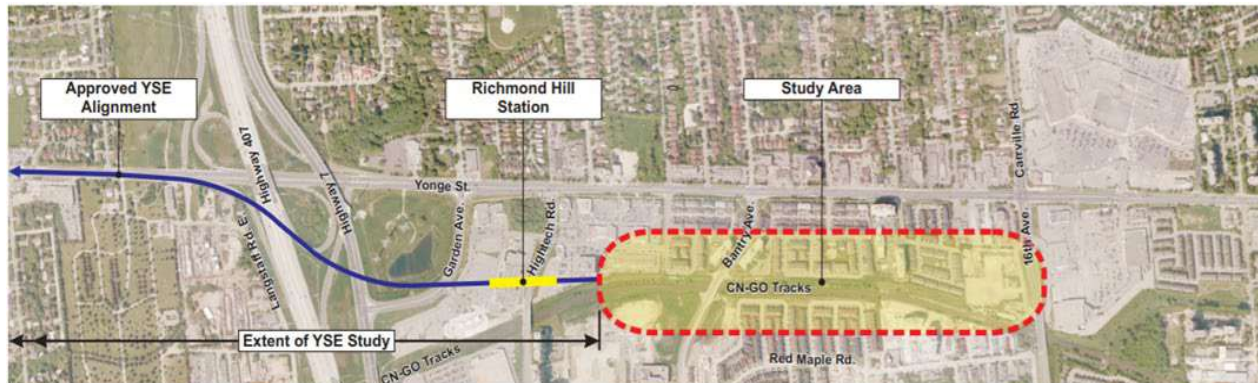


Figure A 1-3 Proposed Train Storage Facility Location - 2014 EPR Addendum

A 1.3 Study Purpose – Current EPR Addendum

Since the completion of the 2009 EPR and 2014 EPR Addendum, further changes to the proposed YNSE Project have been identified that will result in modifications to the plans presented in the previously approved 2009 EPR and 2014 EPR Addendum.

In accordance with *Section 15, O. Reg. 231/08*, Metrolinx has determined that the changes to the Project (as described in Section 2 of the YNSE EPR Addendum document and within **Section A 2.0** below) are Significant and therefore necessitate completion of an EPR Addendum to: evaluate and document the updates to the Project description, update existing conditions, carry out associated environmental impact assessment studies, identify mitigation and monitoring requirements, and undertake public, stakeholder and Indigenous Nations consultation.

Furthermore, as per *Section 16, O. Reg. 231/08*, since the construction of the Project has not commenced within 10 years of the issuance of the Statement of Completion (originally issued in 2009), Metrolinx is required to re-examine existing conditions as well as potential environmental impacts and mitigation measures documented in the previously approved EPR to ensure they are still valid and subsequently carry out additional environmental studies as appropriate.

A 1.4 Report Purpose

This report entails a review and update to existing conditions within the current EPR Addendum Study Area (contained within **Part A**) as well as an assessment of potential impacts and proposed mitigation measures and monitoring activities (contained within **Part B**) based on the currently proposed YNSE project components.

With this in mind, the purpose of this Socio-economic and Land Use Existing Conditions and Impact Assessment Report is two-fold:

- **Part A** – provides a detailed description and summary of socio-economic and land use existing conditions within the EPR Addendum Study Area;
- **Part B** – provides a description of the potential impacts associated with the proposed YNSE project and associated mitigation and monitoring measures.

A 2.0 Update to the Project Description

A 2.1 Summary of Design Changes

This section provides a detailed description of the changes to the YNSE Project since completion of the 2009 EPR and 2014 EPR Addendum. **Table A 2-1** provides a high-level schematic depicting the 2009 EPR project components, 2014 EPR Addendum project components, and currently proposed YNSE project components for comparison purposes. In addition, detailed mapping of the project design elements is contained in **Appendix A**.

Table A 2-1 Summary of YNSE Project Components, Changes & Rationale

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
1. Proposed Subway Horizontal Alignment	Approximately 6.8 km underground subway alignment from the existing Finch Station to the proposed Richmond Hill Centre Station (in the vicinity of Highway 7 and Yonge St. in the City of Richmond Hill). From Finch Station to just south of the Holy Cross Catholic Cemetery, the alignment follows Yonge St. underground. North of the Holy Cross Catholic Cemetery, the subway alignment swings slightly eastward, crossing the northwest corner of the Langstaff development lands. The alignment then turns northward under Highway 407/Highway 7. North of the Richmond Hill Centre Station, the alignment terminates at the end of subway tail tracks in the transit corridor on the west side of the CN Bala Richmond Hill GO Line.	Extension of the subway alignment by approximately 1 km from previous terminus at Richmond Hill Centre Station to 16th Ave. in the City of Richmond Hill.	The proposed YNSE subway alignment is approximately 9.5 km in total commencing at the existing Finch Station in the City of Toronto northerly to just beyond the limit of the proposed TSF (at Moonlight Lane) in the City of Richmond Hill. The proposed revenue portion of the alignment is approximately 8 km in length, while the remaining trackwork services the TSF. The proposed below grade portion of the subway alignment is approximately 6.5 km, beginning at Finch Station and extending to the proposed tunnel portal structure just south of Langstaff Road. Between Finch Station and Royal Orchard Blvd, the underground alignment is proposed to run under Yonge Street. It then curves to reach Bay Thorn Drive and continue to the east, before turning northwards where the alignment generally follows the existing CN Rail ROW until the proposed portal structure (just south of Langstaff Road) where the subway alignment emerges to at grade. The proposed at grade portion of the subway alignment is approximately 3 km in length beginning just south of Langstaff Road (from the proposed portal structure), with tracks located within and adjacent to the CN rail corridor ROW and terminating just beyond the limit of the proposed TSF (at Moonlight Lane) in the City of Richmond Hill. The at grade subway alignment generally follows the existing CN rail corridor ROW; however, the westernmost subway track is situated immediately outside the CN Rail ROW boundary for the majority of the at grade segment.	While the YNSE was previously envisioned to terminate just north of Highway 7, the area to the north was identified by Metrolinx as an area where refinement could enhance Project benefits and reduce capital costs. The proposed alignment that forms the basis for this EPR Addendum specifically addresses the challenges and opportunities of serving these areas and their future residents and employees.
2. Proposed Subway Vertical Profile	Below grade vertical profile design with a crossing above grade (bridge) over the East Don River. Proposed station and alignment depths were not presented within the 2009 EPR.	N/A	The subway alignment vertical profile was designed to reduce the depth of the stations along the route, except at the potential Royal Orchard Station, which is located approximately 500 m north of the deep East Don River Valley. The depth of the station platform at this location ranges from approximately 40 to 50 m below the existing ground surface, to account for tunnelling south of the station below the East Don River.	The current YNSE vertical profile changes from below grade to at grade south of Langstaff Road, thereby eliminating the above grade (bridge) crossing over the Don River. The currently proposed profile reduces the depth of the stations along the route (except at Royal Orchard Station), while meeting applicable tunnel grade requirements (e.g., TTC Design Manual DM-0204-04).
3. Tunnels	Approximately 6.8 km underground tunneled alignment from the existing Finch Station to the proposed Richmond Hill Centre Station in the vicinity of Highway 7 and Yonge St. in the City of Richmond Hill. <ul style="list-style-type: none"> For the purposes of determining the potential environmental effects of the Transit Project, the following approach was assumed within the 2009 EPR: <ul style="list-style-type: none"> Richmond Hill Centre Station and surrounding area would provide sufficient space for the southbound launch of the TBM and as well as storage of tunnel liners and other tunnelling materials and equipment; and 	The underground Train Storage Facility assessed in the 2014 EPR Addendum would be located adjacent to the CN Rail corridor, beginning approximately 100m north of the Richmond Hill Centre Station. Cut and cover construction methodology was assumed for this work, during which the ground surface is opened (cut) a sufficient depth to construct the subway tunnel structure.	The proposed conceptual design involves the construction of tunnels for the underground alignment portion of the current YNSE alignment with the following key parameters: <ul style="list-style-type: none"> Approximately 6 kms of twin 5.6 m internal diameter TBM tunnels Twin tunnels run from Finch Transition Box Structure to proposed portal location Reference YNSE Alignment assumes all tunnelling undertaken using two (2) TBMs Launched at the North Portal Launch Shaft, located immediately west of CN/GO rail tracks and south of Langstaff Road Both TBM's are to be removed at the Finch Transition Box Structure where the extraction shaft is to be located 	There is no change to the need for tunneling as part of the project. The currently proposed YNSE alignment still entails the construction of approximately 6 kms of tunnels; whereas the approximate length of tunnelling in the 2009 EPR was 6.8 km.

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
	<ul style="list-style-type: none"> Existing surface parking in the southwest quadrant of the Yonge Street / Steeles Avenue intersection could also provide sufficient space for the southbound launch of the TBM and storage of tunnel liners, and other tunnelling materials and equipment. <p>The 2009 EPR identified the East Don River crossing as the TBM extracting shaft location (one at each end of the crossing). Cummer / Drewry Station was also identified as a potential location to remove the TBM in the 2009 EPR.</p> <p>The 2009 EPR assumed a twin-bored tunnelling method for the entire running structure from Finch Station to the Richmond Hill Centre Station, with the exception of the section between the existing Finch Station tail tracks and Cummer/Drewry Station and the approaches to the proposed East Don River bridge.</p>			
4. Finch Station Modifications	N/A	N/A	<p>Modifications to existing Finch Station as follows:</p> <ul style="list-style-type: none"> Upgrading existing tail track to support future revenue service; Construction of the Finch Transition Box Structure, which is an underground structure that provides the transition between the existing Finch Station tail track structure and the new YNSE twin tunnels; Upgrading operational and support systems (e.g., signal upgrades) within the existing tail track area; Upgrade to the existing electrical and communication back-of-house room at the station; Upgrade to the existing Hendon Avenue Traction Power Substation located approximately 130 m west of the station; and An approximately 130 m long underground duct bank extending westerly along Hendon Avenue from the existing Finch Station. 	<p>Modifications to the existing Finch Station and nearby/associated facilities such as the existing Hendon Avenue Traction Power Substation are required to enable YNSE project implementation and future revenue service beyond Finch Station.</p>
5. Stations	Total of six (6) below grade stations proposed.	No new or modified stations were proposed.	<p>Total of four (4) below grade stations and two (2) at grade stations are proposed, as follows:</p> <ul style="list-style-type: none"> Cummer Station (below grade) Steeles Station (below grade) and bus terminal Clark Station (below grade) and bus terminal Royal Orchard Station (below grade) Bridge Station and bus terminal (at grade) High Tech Station (at grade) <p>Specific infrastructure associated with each proposed station is further detailed within the rows below.</p>	<p>Two stations, Bridge and High Tech Stations, are proposed at grade due to change in proposed subway alignment (i.e., at grade). The current station alignment maximizes the benefits of the subway extension while achieving the lowest cost for the acceptable Project scope. Of all considered alignments, the currently proposed route is the only one that provides the opportunity for one Neighbourhood Station to be included in the Project scope while maintaining costs within the funding envelope.</p>

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
	Cummer / Drewry Station: <ul style="list-style-type: none"> Location: Yonge St. & Cummer / Drewry Ave., approximately 800 m north of Finch Station. Station components: below grade station box, concourse, bicycle facilities, ventilation shaft, Bus loop located at Drewry Ave. <ul style="list-style-type: none"> Four (4) pedestrian entrances: <ul style="list-style-type: none"> Main entrances located at the Northeast and southwest quadrants of the intersection of Cummer Ave. and Yonge St. Southeast corner of Cummer Ave. / Drewry Ave. and Yonge St. East side of Yonge St at the north end of the station box. 		Potential Cummer Station (below grade) Location: Slight shift to the southwest. The proposed station is an in-line underground station located at the intersection of Cummer/Drewry Avenue and Yonge Street and includes a bus loop on Drewry Ave. west of Yonge St. with associated bus operators' facilities. Station components include: <ul style="list-style-type: none"> A below grade, two-level station box with one central platform at track level and a public concourse level above Up to two (2) at-grade pedestrian entrances (locations to be determined as part of further design development) Up to two (2) Fire Fighter's Access Shafts (FFA) Secured bicycle storage 	The proposed location shift is primarily to avoid utility conflicts. The reduced number of station entrances minimizes potential property impacts while maintaining access and circulation in a way that accommodates future ridership requirements.
	Steeles Ave. Station and bus terminal <ul style="list-style-type: none"> Location: Yonge St and Steeles Ave, approx. 1.2 km north of Cummer/ Drewry Ave. Station components: below grade station box, concourse, bicycle facilities, ventilation shaft. five (5) pedestrian entrances: <ul style="list-style-type: none"> Two (2) street entrances located north of the station box on each side of Yonge St. Two (2) street entrances located south of the station box on each side of Yonge St. One (1) entrance from median located on Steeles Ave. Underground bus terminal below Steeles Ave West. Passenger Pick-up and Drop-Off (PPUDO) Below grade bus terminal with three (3) bus access ramps and a bus platform for 25 buses. 		Steeles Station (below grade) and bus terminal Location: Yonge St. at the intersection with Steeles Ave. shifted south from 2009 EPR. Station components changes include: <ul style="list-style-type: none"> Three (3) pedestrian entrances (locations to be determined as part of further design development): <ul style="list-style-type: none"> One (1) FFA Secured bicycle storage At grade bus terminal at the southwest quadrant of Yonge St and Steeles Ave Potential road modifications to accommodate curbside bus platforms located at the Yonge St. and Steeles Ave. intersection 	The bus terminal at Steeles Station is proposed to be an at grade terminal to avoid conflicts with the existing York Durham Sanitary Sewer. The reduced number of station entrances minimizes potential property impacts while maintaining access and circulation in a way that accommodates future ridership requirements.
	Clark Ave. Station <ul style="list-style-type: none"> Location: Yonge St. and Clark Ave approximately 1 km north of Steeles Ave. 	No new stations were proposed.	Clark Station (below grade) and bus terminal Location: No change, slight lateral expansion and shift southerly. Station components changes include:	The reduced number of station entrances minimizes potential property impacts while maintaining access and circulation in a way that accommodates future ridership requirements. The addition of a bus terminal

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
	<ul style="list-style-type: none"> Station components: below grade station box, concourse, bicycle facilities, ventilation shaft. Five (5) Pedestrian entrances: <ul style="list-style-type: none"> One (1) main entrance southwest corner of Clark Ave. and Yonge St. One (1) main entrance northeast corner of Clark Ave. and Yonge St. One (1) north end of the station and on the west side of Yonge St. One (1) entrance at the east side of Yonge St. 		<ul style="list-style-type: none"> Up to two (2) pedestrian entrances (locations to be determined as part of further design development) Addition of bus facility with associated bus operator facilities 	further enhances transit system integration and improves transfers between transit modes.
	<p>Royal Orchard Station</p> <ul style="list-style-type: none"> Location: intersection of Yonge St. and Royal Orchard Blvd., approximately 800 m north of Centre St. Station components: below grade station box, concourse, bicycle facilities, ventilation shaft. two (2) pedestrian entrances: <ul style="list-style-type: none"> one (1) main entrance northeast corner of Royal Orchard Blvd. and Yonge St. one (1) entrance located southwest corner of Yonge St. and Thornhill Ave. 		<p>Potential Royal Orchard Station (below grade) Location: Yonge Street, south of Royal Orchard Blvd.</p> <p>Station components changes include:</p> <ul style="list-style-type: none"> Up to two (2) pedestrian entrances (locations to be determined as part of further design development) A deeper station box due to proximity to the East Don River Valley topographic depression. This change eliminates the need for the Don River above grade crossing. Secured bicycle storage 	Change to station location and depth as a result of changes in subway horizontal alignment and vertical profile. See rationale for alignment and profile change above.
	<p>Langstaff / Longbridge Station</p> <ul style="list-style-type: none"> Location: between Longbridge Road and Langstaff Road, approximately 1km north of Royal Orchard Boulevard. Station components: below grade station box, concourse, bicycle facilities, ventilation shaft. PPUDO Commuter parking Two (2) pedestrian entrances: <ul style="list-style-type: none"> One (1) on Hydro One property currently hosting a 230/500 kV transmission line south of Highway 407 and west of Yonge Street. One (1) located at the southeast corner of Yonge St. and Langstaff Road East 		<p>Bridge Station and bus terminal (at grade) Location: west of the CN Rail Corridor and north of Highway 407 and Highway 7.</p> <p>Station components changes include:</p> <ul style="list-style-type: none"> Three (3) pedestrian entrances (locations to be determined as part of further design development) Bus terminal Passenger and service emergency exit Secured bicycle storage 	The change in station location is in response to changes in the subway horizontal alignment and vertical profile discussed above. The reduction in number of station entrances minimizes potential property impacts while maintaining access and circulation in a way that accommodates future ridership requirements.

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
	<p>Richmond Hill Centre Station – Transit Hub</p> <ul style="list-style-type: none"> Location: east of Yonge St. traversing High Tech Road, west of the CN rail corridor and north of Highway 7, approximately 1 km north of Royal Orchard Boulevard. Station components: below grade station box, concourse, bicycle facilities, ventilation shaft. Two (2) pedestrian entrances: <ul style="list-style-type: none"> One (1) located at northeast corner of the station box One (1) located at the southeast corner of the station box Bus terminal PPUDO Transit Hub 		<p>High Tech Station (at grade)</p> <p>Location: east of Yonge St. traversing High Tech Road, west of the CN rail corridor, and north of Highway 407 and Highway 7 and adjacent to Richmond Hill Centre Terminal.</p> <p>Station components changes include:</p> <ul style="list-style-type: none"> Two (2) pedestrian entrances (locations to be determined as part of further design development) Secured bicycle storage A revised PPUDO design to accommodate the revised station configuration 	<p>The change in station location is in response to changes in the subway horizontal alignment and vertical profile discussed above. Similar to the previously envisioned Richmond Hill Centre Station, the currently proposed High Tech Station will accommodate transfers to GO train and GO bus services, as well as local transit, and will improve subway access to the Richmond Hill Centre and Langstaff Gateway development areas.</p>
6. Proposed Emergency Exit Buildings (EEBs)	<p>Six (6) Emergency Exit Buildings (EEBs):</p> <ol style="list-style-type: none"> EEB 1: Private property on the east side of Yonge St. between Centre Ave. and Newton Drive; EEB 2: Private property on the west side of Yonge St. between Doncaster Ave. and the CN rail corridor; EEB 3: Within municipal right-of-way on the west side of Yonge St. opposite Arnold Ave.; EEB 4: Within municipal right-of-way on the east side of Yonge St. between Centre St. and the proposed East Don River Bridge; EEB 5: Private property on the east side of Yonge St. between Uplands Ave. and Kirk Drive; and EEB 6: Within municipal right-of-way on the north side of Highway 7 west of Garden Ave. 	<p>Two (2) additional EEBs:</p> <ol style="list-style-type: none"> EEB 7: Located at the proposed TSF parking lot, east of Coburg Crescent. EEB 8: Located west of the proposed alignment, south of Coburg Crescent. 	<p>Seven (7) EEBs (precise locations to be determined as part of further design development):</p> <ol style="list-style-type: none"> EEB-1: located approximately between the existing Finch Station and the potential Cummer Station EEB-2: located approximately between the potential Cummer Station and the confirmed Steeles Station EEB-3: located approximately between the confirmed Steeles Station and the confirmed Clark Station EEB-4: located approximately between the confirmed Clark Station and the potential Royal Orchard Station EEB-5: located approximately in the vicinity of the potential Royal Orchard Station EEB-6: located approximately north of Royal Orchard Station in the vicinity of Bay Thorn Drive EEB-7: located approximately north of the potential Royal Orchard Station and south of the portal structure 	<p>The TTC Design Manual requires EEBs to be located such that the distance from any underground location to an EEB is not greater than 381 m – i.e., the spacing between EEBs or between EEBs and the closest station platform or portal entrance must be 762 m or less. Applying this standard to the currently proposed design has identified the need for a total of seven (7) EEBs.</p>
7. Traction Power Substations (TPSSs)	<p>Traction Power is provided by a live third rail conductor placed alongside the rail. In order to give the voltage a boost at regular intervals along the subway alignment, electrical substations (i.e., Traction Power Substations [TPSSs]) are required. Traction power requirements dictate that TPSSs are not spaced more than 2.5 km from one another; however, a 2 km separation between TPSS is more typical.</p>	N/A	<p>Seven (7) TPSSs at the following locations:</p> <ul style="list-style-type: none"> Three (3) TPSS in the approximate vicinity of Cummer, Steeles, and Clark Stations. One (1) TPSS in the approximate vicinity of the potential Royal Orchard Station One (1) TPSS in the approximate vicinity of Bridge Station. One (1) TPSS standalone building integrated with EEB-4 between the confirmed Clark Station and the potential Royal Orchard Station One (1) TPSS at the Train Storage Facility (TSF), immediately south of 16th Ave. 	<p>The currently proposed subway alignment requires additional power compared to the alignment as presented in 2009 EPR due to its extended length (an approximate 6.8 km subway extension was assessed in 2009 compared to the approximate 9.5 km extension currently proposed). This has resulted in the need for additional TPSS facilities. The current EPR Addendum assess a total of seven (7) TPSSs locations.</p>

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
	Four (4) TPSSs locations were included within the 2009 EPR in the vicinity of Steeles Station, Clark Station, Royal Orchard Station and Richmond Hill Centre Station.			
8. Proposed Portal Structure	N/A	N/A	The tunnel portal structure will be located south of Langstaff Road, west of the CN corridor ROW. This concrete structure serves as entrance/exit to and from the subway tunnel, where the alignment transitions between below and at grade.	This structure is required to allow for the below-grade to at-grade transition of the subway alignment.
9. Proposed Launch Shaft	<ul style="list-style-type: none"> For the purposes of determining the potential environmental effects of the Transit Project, the following approach was assumed within the 2009 EPR: <ul style="list-style-type: none"> Richmond Hill Centre Station and surrounding area would provide sufficient space for the southbound launch of the TBM and as well as storage of tunnel liners and other tunnelling materials and equipment <ul style="list-style-type: none"> Existing surface parking in the southwest quadrant of the Yonge Street/Steeles Avenue intersection were also identified as providing sufficient space for the southbound launch of the TBM and storage of tunnel liners. 	N/A	The current launch shaft location corresponds to a parcel of land west of the existing CN tracks and proposed portal structure, between Holy Cross Cemetery and Langstaff Road. A construction staging area/worksites will also be prepared for the assembly of the TBM at this location. The launch shaft structure is expected to be approximately 130 m in length.	The currently proposed location of the launch shaft reduces potential property impacts by using vacant industrial properties near the CN Rail ROW, south of Langstaff Rd. and has sufficient space to meet the functional needs of TBM operations.
10. Proposed Extraction Shaft	The 2009 EPR identified the East Don River crossing as the TBM extraction shaft location (one at each end of the crossing). Cummer/Drewry Station was also identified as a potential location to remove the TBM in the 2009 EPR.	N/A	The proposed extraction shaft for the TBM operations will be located within the boundaries of the Finch Transition Box Structure that will connect the existing Finch rail track with the new YNSE alignment running north.	A new extraction shaft location is required since an at grade crossing of the East Don River is no longer proposed. There is sufficient space at the Finch Transition Box Structure to permit the removal of the TBM.
11. Proposed Modifications to Bridges/ Structures/ Culverts	<ul style="list-style-type: none"> East Don River crossing above-grade for both Subway and Roadway. Includes replacement of an existing culvert. Proposed modifications to twin-box culvert located north of Highway 7 near Richmond Hill Centre Station. 	N/A	<ul style="list-style-type: none"> Design, construction, maintenance and removal of a temporary pedestrian bridge across the subway and CN rail corridors to replace the existing pedestrian bridge connecting Richmond Hill Centre (bus) Terminal and Langstaff GO Station. Demolition of the pedestrian overpass bridge at Richmond Hill Centre will occur once bus operations are shifted to Bridge Station. Crossing of East Down River is now below-grade, meaning a new structure at this location is no longer required. Langstaff Road East grade separation Replacement of the existing culvert conveying German Mills Creek north of 16th Avenue. A number of drainage culverts along the at grade portions of the alignment may be impacted (modified or replaced) to enable implementation of the Project. Any such culverts will be identified and addressed during future phases of design. 	<p>To provide for continuous access across the rail corridor and subway alignment, the existing pedestrian bridge at Richmond Hill Centre Terminal is proposed to be replaced with a temporary pedestrian bridge. Temporary pedestrian bridge will be in place until Bridge Station is complete, with the Bridge Station providing access across the corridor.</p> <p>A new structure to carry the subway over the East Don River is no longer required now that the subway is below grade at this location.</p> <p>The existing culverts conveying German Mills Creek needs to be replaced to accommodate the rail tracks for the proposed TSF.</p>

Project Component	2009 EPR	2014 EPR Addendum	Current EPR Addendum	Rationale for Change
12. Proposed Train Storage Facility (TSF)	N/A	<p>Underground Train Storage Facility (TSF):</p> <ul style="list-style-type: none"> Capacity: 14 trains; two (2) trains stored at Richmond Hill Centre Station and the remaining 12 trains stored at the TSF Location: north of the Richmond Hill Centre Station Maintenance building for staff access to the proposed TSF east of Coburg Crescent, and associated 25-30 space employee parking lot A combined maintenance operators' facility and Electrical Service Building A ventilation shaft A drop shaft (a type of maintenance shaft) 	<p>At grade Train Storage Facility (TSF):</p> <ul style="list-style-type: none"> Capacity: 15 trains for overnight storage. Location: in the vicinity of the CN corridor and 16th Ave., north of High Tech Station. Transportation facility near Bantry Ave Rail Cars & Shops Facility (RC&S) south of 16 Ave., including parking spaces for staff and visitors. 	<p>The current configuration for the proposed TSF was selected because it avoids reconstruction of overhead bridges (High Tech, Bantry, and 16th Avenue), promotes the consolidation of buildings to minimize impacts to City of Richmond Hill property, accommodates a future multi-use trail to be completed by the municipality, and because it meets functional TTC requirements. A drop shaft is no longer necessary now that the TSF is at grade.</p>

A 2.2 EPR Addendum Study Area

The YNSE EPR Addendum Study Area generally encompasses the proposed project components (i.e., subway alignment, Stations, Train Storage Facility, launch and extraction shafts, and related ancillary components) and extends approximately 9 kms in length, commencing at the existing Finch Station along the existing Line 1 Yonge–University in the City of Toronto, and extends northerly through the City of Vaughan (to the west) and City of Markham (to the east), to Moonlight Lane (just north of the proposed TSF) in the City of Richmond Hill, York Region.

With reference to the more detailed project mapping found in **Appendix A**, the defined Study Area reflects the proposed location of the YNSE infrastructure components as well as a buffer zone that accounts for the area that may be potentially impacted by future project design refinements and/or modifications. Such design changes (if applicable) will be further defined and confirmed as part of the subsequent detailed design stage of the Project.

A 2.3 Study Area Segments

For reporting purposes and to better characterize the findings of the various environmental and technical studies, the EPR Addendum Study Area was further sub-divided into three (3) geographic segments (**Figure A 2-1**).

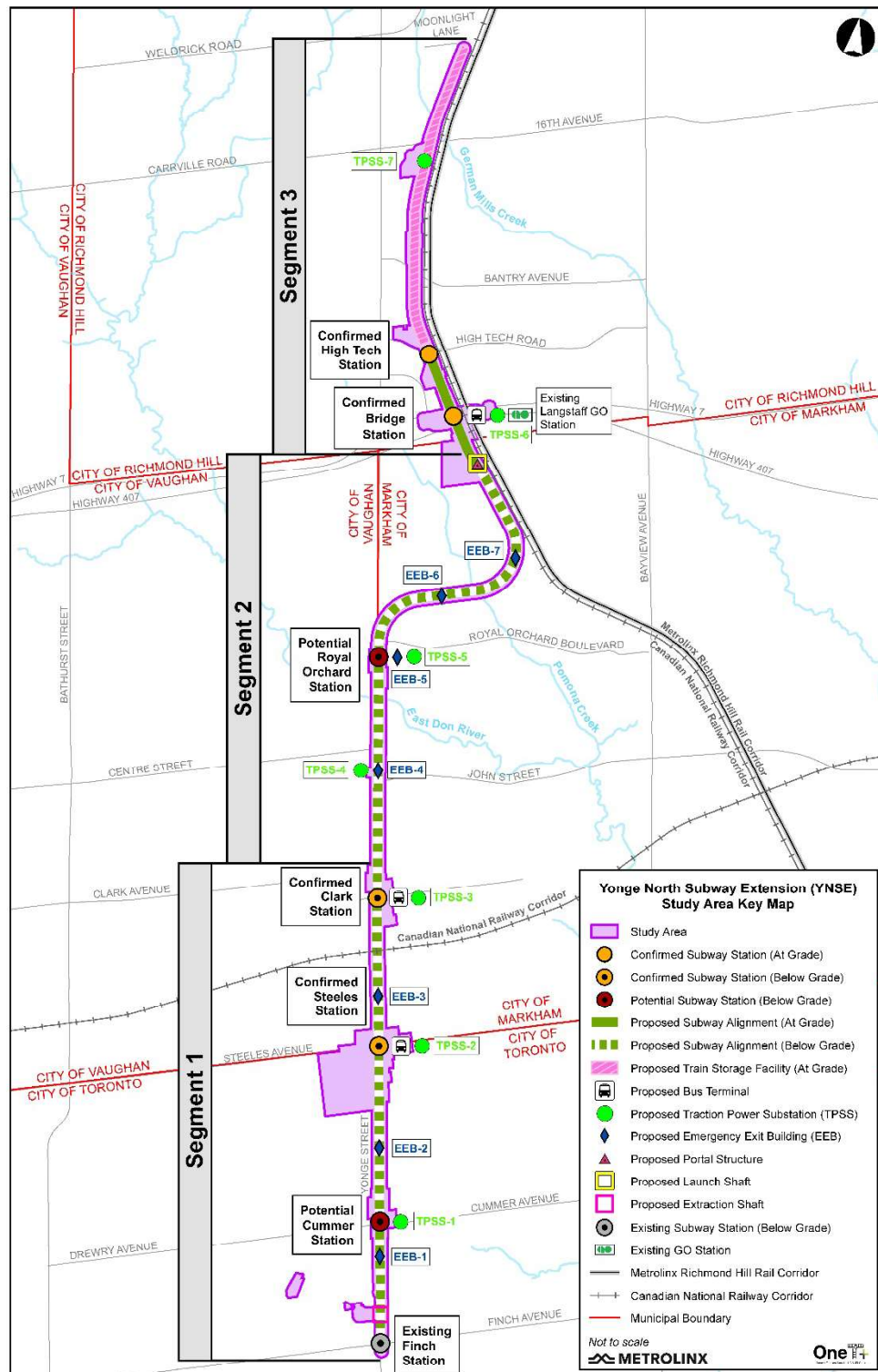


Figure A 2-1 YNSE EPR Addendum Study Area Key Plan Map Segments

A 2.3.1 Segment 1 – Finch Station to Clark Station (Below Grade)

Segment 1 starts at the existing Finch Station and extends northward to the proposed Clark Station. It should be noted that this segment is inclusive of the proposed Clark Station and the proposed Cummer Station, Cummer Station Bus Loop, Steeles Station, and Steeles Station Bus Terminal. The entirety of this segment will be below grade. At Steeles Avenue, the Project Study Area crosses the boundary between the City of Toronto and York Region, for which Yonge Street serves as a boundary between the City of Vaughan to the west and the City of Markham to the east.

A 2.3.2 Segment 2 – Clark Station to Portal/Launch Shaft (Below Grade)

Segment 2 starts immediately beyond the limits of the proposed Clark Station and extends northward to the proposed portal structure and launch shaft location, located south of Langstaff Road East within the City of Markham. This segment is inclusive of the entirety of the proposed portal and launch shaft footprint area, extending north to the proposed Bridge Station and west from the CN rail corridor towards Ruggles Avenue. It also includes the proposed Royal Orchard Station. This segment runs below grade until it reaches the tunnel portal, where it emerges to the surface. Segment 2 ends immediately north of Langstaff Road East, south of Highway 407 in the City of Richmond Hill within York Region.

A 2.3.3 Segment 3 – Portal/Launch Shaft to Moonlight Lane (At Grade)

Segment 3 starts immediately beyond the limits of the proposed portal and launch shaft location, near the proposed Bridge Station, and extends northward to Moonlight Lane which marks the northernmost Study Area limit. This segment, located within the City of Richmond Hill, includes the proposed High Tech Station and proposed TSF. The entirety of Segment 3 is planned to be at grade.

A 3.0 Existing Conditions

The Study Area includes the existing Finch Subway Station and continues north along the proposed alignment for the YNSE to its terminus near 16th Avenue in Richmond Hill. This Study Area begins in the City of Toronto and crosses into York Region within three of the Region's lower tier municipalities: The City of Vaughan, the City of Markham and the City of Richmond Hill.

The proposed Subway Extension would effectively connect two Urban Growth Centres that have been identified by the Province of Ontario for transit, and transit-supportive development, in an effort to establish "complete communities" where you can live, work and play. The Provincial Policy Statement, Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, and Parkway Belt West Plan establish the provincial policy framework for land use planning and decision making. The East Don River bisects the Study Area and is designated as part of the Greenbelt Plan "Urban River Valley", supporting the conservation of important river corridors between the great lakes and the Greenbelt Plan system of natural heritage features. The Parkway Belt West Plan, first established in 1978, protects a corridor of land along Highway 7 and 407 ETR for a variety of uses, including for large infrastructure corridors. Metrolinx's 2041 Regional Transportation Plan identifies a strategy for the planning and implementation of a regional transit system in the Greater Toronto and Hamilton Area (GTHA). Together, the provincial policies and transit plans integrate land use and transportation planning. The Project conforms to these policies and plans.

Municipal Official Plans and Transportation Master Plans identify the planned land uses and transportation systems within the Study Area. These policies and plans were reviewed to identify the planned land uses within the Study Area segments. A summary of Policy documents and their application to the Study Area can be found in **Table A 3-2**.

In addition, active development applications within the Study Area have been inventoried based on information received from the City of Toronto, City of Markham, City of Vaughan and City of Richmond Hill to identify the changing built form within the Study Area. At the time of this report preparation, 42 development applications were identified in the Study Area.

Land use designations within the Study Area segments are shown in **Appendix A**. Main land use designations include residential, mixed-use areas, employment/industrial, intensification (increase in development and population), utilities/transportation, parks/open space/recreation areas, natural heritage system, and Parkway Belt West Plan.

Existing uses were inventoried using aerial photography, open-source community facility databases, and field investigations. Segment 1 is comprised of high-density mixed residential uses (within approximately 100 m of Yonge Street), as well as several parks, parkettes, recreation areas and open spaces. Segment 2 consists of low and mid-rise apartments and condominiums as well as single-detached homes. Beyond the Yonge Street corridor and north of Royal Orchard Boulevard, this segment of the Study Area consists of low-density residential neighbourhoods. Commercial uses within this segment consist mainly of low-density commercial plazas. There is also a high concentration of parks, recreation areas and open spaces. Segment 3 contains primarily low-density residential neighbourhoods, as well as a series of commercial plazas.

A number of sensitive facilities, including childcare centres, schools, long term care centres, community centres, places of worship, and hospitals are present in the Study Area (e.g., North York Seniors Centre, Thornhill Baptist Church, St. Anthony Catholic School, Romfield Park). The sensitive facilities have been mapped on the figures in **Appendix A**.

The Study Area segments include the neighbourhoods of Newtonbrook West and Newtonbrook East in Toronto, Thornhill in Vaughan and Markham, and South Richvale, Langstaff and Observatory Neighbourhoods in Richmond Hill.

A 3.1 Purpose

The purpose of Part A of this report is to provide a detailed description of the existing conditions within the YSNE EPR Addendum Study Area. The findings and existing conditions data have been organized into the three (3) Study Area segments accordingly for reporting purposes.

A 3.2 Methodology

The socio-economic and land use existing conditions information was collected using the following information: secondary source data collection and review, data gap analysis, request for supplementary data from Study Area stakeholders, a field investigation, and preparation of land use mapping. Demographic data was reviewed and analyzed to identify key socio-economic characteristics of the existing communities within the Study Area. The inventory of existing uses, supplemented by a field investigation, was reviewed to determine the presence of sensitive facilities (i.e., schools, places of worship). The results of the data collection and analysis are summarized and documented below.

In order to document potential socio-economic and land use effects, a buffer was applied to the proposed alignment to delineate a sufficient Study Area to comprehensively document existing environmental conditions and assess potential impacts, which was used to create the Socio-Economic and Land Use Study Area mapping (see **Appendix A**). This buffer extends 150 m along the proposed alignment, 250 m around each proposed station location, and 150 m around the proposed Train Storage Facility (TSF). At the Cummer Station bus loop, the Study Area was extended approximately 50 m further west to incorporate the entire footprint of the proposed infrastructure and nearby sensitive facilities, defined in **Section A 3.7**. The resulting socio-economic and land use Study Area is shown in **Figure A 3-1**.

In the description of existing uses, the Study Area is divided into two areas: the medium-high density land uses along the Yonge Street corridor are defined as the area approximately 100 m of the alignment, and the lands beyond 100 m, which generally consist of low-density residential uses. These two areas differentiate between the different land use densities within the Study Area, and further describe the location of the sensitive facilities in relation to proximity to the YNSE alignment.

A 3.3 Review of Background Information

Previous environmental assessment work completed following the Transit Project Assessment Process (TPAP) for the YNSE was reviewed, including:

- Yonge Subway Extension – Finch Station to Richmond Hill Centre, Transit Project Assessment: Environmental Project Report (EPR) (York Region et al. 2009); and,
- Yonge Subway Extension – Finch Station to Richmond Hill Centre, Transit Project Assessment: Train Storage Facility EPR Addendum (York Region et al. 2014).

The land use and socio-economic information and data were reviewed to identify previous information that was collected.

A 3.4 Data Gap Analysis

The purpose of the gap analysis is to review the previous socio-economic and land use assessments to identify information that is outdated, non-existent, or needs to be updated.

The land use and socio-economic information contained in the 2009 YNSE EPR and the 2014 YNSE EPR Addendum was reviewed. It was determined that a number of Provincial Plans and policies were updated since 2014. As well, several municipalities have updated their Official Plans or are conducting updates to the Official Plans and/or related policies.

In addition to the changes to current policies, the YNSE alignment has been modified since the 2009 EPR and 2014 EPR Addendum. This report documents socio-economic and land use existing conditions for the updated proposed subway extension alignment.

A 3.5 Desktop Data Collection

The purpose of data collection is to characterize the existing and planned land use designations that apply to the Study Area, as well as the socio-economic characteristics of the Study Area neighbourhoods. The proposed YNSE alignment extends from Finch Station in the City of Toronto, and continues north into York Region, which is comprised of three lower tier municipalities: the City of Vaughan, the City of Markham, and the City of Richmond Hill. Data sources were reviewed from these municipalities to identify planned land uses within the Study Area.

Data was collected from the following sources to characterize socio-economic and land use within the Study Area:

- **Aerial imagery** to document and inventory existing land uses;
- **Provincial Plans and Policy Documents**, including the Growth Plan, Greenbelt Plan, Parkway Belt West Plan, and the Provincial Policy Statement;
- **Regional and Municipal Policies and Plans** prepared by the Cities of Toronto, Markham, Vaughan, Richmond Hill, and York Region (i.e., Official Plans, Secondary Plans, Master Plans, Pedestrian and Cycling Plans, Trail/Active Transportation Master Plans, Recreational Plans, etc.);
- **Statistics Canada 2016 Profile Census**;
- **Land Information Ontario (LIO)**;
- **Municipal open data**, where available (i.e., publicly available online GIS data created by municipalities pertaining to the location of sensitive facilities, such as childcare centres, schools, long term care centres, community centres, places of worship, and hospitals); and,
- **The YNSE Initial Business Case (IBC), and Supplementary Analysis**, prepared by Metrolinx, to obtain key facts regarding projected transit ridership and demographics.

Socio economic/land use data was collected within a Geographic Information Systems (GIS) database and detailed mapping was prepared for inclusion in this Socio Economic/Land Use Existing Conditions Report. Data requests for GIS files of municipal Official Plan schedules were used to generate the figures in

Appendix A.

A 3.6 Field Investigations

Field investigations were undertaken within the socio-economic and land use Study Area described in **Section A 2.2** to collect primary source data as part of the existing conditions analysis. The following site visits were

conducted to verify existing land uses, confirm the location of sensitive facilities, and take representative photographs of the Study Area:

- December 22, 2020 – Finch Avenue to John Street and High Tech Road to 16th Avenue
- June 21, 2021 – John Street to High Tech Road and 16th Avenue to Moonlight Lane

Appendix B presents photographs of the Study Area segments in the vicinity of proposed station locations.

A 3.7 Existing Conditions Characterization

The analysis of existing socio-economic characteristics of the Study Area neighbourhoods was performed by reviewing Statistics Canada data and Neighbourhood data available from municipal sources. Information such as population, housing types, and travel patterns are presented for each neighbourhood to characterize the area.

Land use designations were mapped and described, based on a review of applicable policies and plans from provincial and municipal sources. A description of the zoning that applies to the Study Area is also described based on the Zoning By-laws in effect at the time of writing this report.

The land use inventory identified “sensitive facilities”, which are defined as childcare centres, schools, long term care centres, community centres, places of worship, and hospitals within the Study Area (150 m around the proposed alignment and 250 m around the proposed stations, extending a further 50 m at the Cummer Station bus loop to accommodate the proposed infrastructure and nearby sensitive facilities). Due to the urbanized nature of the Study Area, schools were only included where a playground or outdoor amenity area was present. A number of private schools are located in urbanized areas, such as plazas along the study corridor, and have a similar operation as other commercial uses. As such, they were not identified as sensitive facilities. “Sensitive facilities” more generally are also defined in the Existing Conditions Reports for the other disciplines assessing socio-economic effects, which may include Air Quality, Noise and Vibration, Natural Environment, etc.

A list of active development applications that have been submitted for review by the municipalities within the Study Area has been prepared based on information received from the municipalities. The list of development applications is based on the information available at the time of writing this report.

A 3.8 Land Use Mapping

The land use mapping presents the following information:

- Study Area boundary, proposed YNSE alignment and infrastructure;
- Official Plan land use designations;
- Greenbelt Plan – Urban River Valley; and
- Sensitive facilities.

To provide more consistency among the land use designations presented in **Appendix A** (Land Use Maps), land use designations were standardized across the various municipalities into eight categories, based on land use type. For example, assigning a land use type of ‘Employment/Industrial’ instead of Prestige Industrial. A description of the land uses in **Appendix A** is summarized in **Table A 3-1** below. A more detailed description of how the Official Plan designations were categorized is presented in **Appendix C**.

Table A 3-1 Definitions of Generic Land Uses

Land Use Designation	Definition
Residential	Characterized by low density residential buildings that consist of single detached, semi-detached, duplexes, triplexes, townhouses, row houses, and walk-up apartments that are three storeys or less, as well medium and higher densities that include apartment and condominium buildings that are greater than three storeys in height.
Mixed-use Area	Characterized by a mix of residential, commercial, institutional, and/or office uses. While density may vary from one location to another, there is a general presumption that these areas seek to encourage density relative to low density residential neighborhoods.
Employment/Industrial	Primarily characterized by office and light-to-heavy industrial uses and other facilities or structures necessary for their operation.
Intensification	Provides a development framework, land use policies, and design guidelines that encourage transit-oriented and mixed-use development.
Utilities/Transportation	Currently or planned to be used for the provision of utility or transportation infrastructure, or any ancillary use to the aforementioned.
Parks/Open Space/Recreation Area	Public or private lands where generally little development occurs aside from recreational or cultural facilities. Related land uses may include parks, sports fields, golf courses, cemeteries, open space corridors, and other recreational spaces.
Parkway Belt West Plan	Lands that are subject to the policies of the Parkway Belt West Plan (PBWP), which is a provincial plan that applies to large areas of land throughout the Greater Toronto Area. The objectives of the plan are to: separate and define the boundaries of urban areas; integrate the system of urban areas through the creation of corridors and the placement of utilities; reserve land for future flexibility for future linear facilities and unanticipated activities; and provide a linked open space framework.
Greenbelt Plan – Urban River Valley	Lands located within the Greenbelt Plan Area (Urban River Valley designation). The East Don River crosses the Study Area and is designated in the Greenbelt Plan as ‘Urban River Valley’.

A 3.9 Planning Policy Framework

The planning policy framework includes plans and policy documents at the provincial, regional and local levels. The *Planning Act* establishes the land use planning framework for the Province of Ontario, and municipalities are required to prepare Official Plans to implement provincial policies, including the Provincial Policy Statement (PPS), Growth Plan, and Greenbelt Plan. With recent changes to the provincial plans in 2017 as part of the Provincial Coordinated Land Use Planning Review, and the recent update to the PPS in 2020, policy changes have been implemented since the YNSE 2009 EPR and 2014 EPR Addendum.

There are three key policy areas within the Study Area: Urban Growth Centres, the Greenbelt Plan Urban River Valley, and the Parkway Belt West Plan area. **Figure A 3-1** presents these key planning areas within the YNSE Study Area.

The proposed YNSE would connect two Urban Growth Centres (UGCs) that are designated in the Provincial Growth Plan and identified in local Official Plans with accompanying land use policies. The Urban Growth Centre at the south limit of the Study Area is located around Yonge Street near Finch Station, and the north Urban Growth Centre is near Highway 407 ETR in Richmond Hill. Lands designated by the Greenbelt Plan, as Urban River Valley, are located within the Study Area along the valley of the East Don River, at the crossing of Yonge Street north of John Street. In addition, the lands along the Highway 407 ETR corridor are located within the provincial Parkway Belt West Plan. These Provincial Plans and policies are summarized in **Table A 3-2** and further described in the following sections.

Municipalities are responsible for local planning decisions and advice, including the development of Official Plans and applicable zoning by-laws to ensure that future planning and development will meet the needs of the community. Area specific Secondary Plans provide additional direction to manage and guide growth in these areas. Municipalities also prepare transportation master plans to direct where and how the transportation system should be designed to meet the needs of the travelling public and residents. Municipal policy documents and plans are summarized in **Table A 3-2** and further described in the following sections.

Table A 3-2 Summary of Policy Documents

Provincial/ Regional/ Local	Document	Application to the YNSE Study Area
Provincial	Provincial Policy Statement	<ul style="list-style-type: none"> A comprehensive set of provincial policies that relate to matters of provincial interests and apply province wide.
	Growth Plan for the Greater Golden Horseshoe	<ul style="list-style-type: none"> The Study Area is located within the Growth Plan area and includes two Urban Growth Centres. Major Transit Station Areas are to be identified by local municipalities, in accordance with the Growth Plan. Growth projections were updated in the recent Growth Plan update (2017), and municipalities are required to update their Official Plans.
	Greenbelt Plan	<ul style="list-style-type: none"> The Don River is designated as “Urban River Valley” in the Greenbelt Plan.
	Parkway Belt West Plan (PBWP)	<ul style="list-style-type: none"> The Plan area protects lands for large-scale infrastructure corridors. Areas along the Highway 407 ETR corridor are located within the PBWP area.
	2041 Regional Transportation Plan	<ul style="list-style-type: none"> The Plan notes that the YNSE is being planned as part of the next rapid transit projects to be delivered in the GTHA.
City of Toronto	Official Plan	<ul style="list-style-type: none"> Land use designations consist of a mix of residential, mixed-use, commercial and employment (Appendix A). Yonge Street is noted as a Centre, connected by Corridors along major streets.

Provincial/ Regional/ Local	Document	Application to the YNSE Study Area
	North York Centre Secondary Plan	<ul style="list-style-type: none"> Identifies land use designations and policies for the Study Area.
	Yonge Street North Planning Study	<ul style="list-style-type: none"> A Secondary Plan is in progress for the Yonge Street North area.
	Yonge Street North Transportation Master Plan	<ul style="list-style-type: none"> A Transportation Master Plan is in progress for the Yonge Street North area.
Region of York	Official Plan	<ul style="list-style-type: none"> Study Area is located within the 'Urban' land use designation. The Regional Structure Plan identifies the YNSE.
	York Region Transportation Master Plan	<ul style="list-style-type: none"> Identifies a transportation framework and policies for the Study Area.
	York Region Pedestrian and Cycling Master Plan	<ul style="list-style-type: none"> Outlines a pedestrian and cycling network for the Region of York.
	Thornhill Heritage Conservation Plan	<ul style="list-style-type: none"> Documents the policies and guidelines to ensure the conservation of heritage resources and guide future development.
City of Vaughan	Official Plan	<ul style="list-style-type: none"> Land use designations consist of a mix of residential, mixed-use, commercial and employment (Appendix A). Yonge Street is designated as Local Centre near Centre Street, Regional Intensification Corridor near Highway 407 ETR, and north of the Yonge street Primary Centre and South of Centre Street Local Centre.
	Yonge Steeles Corridor Secondary Plan	<ul style="list-style-type: none"> Identifies land use designations and policies for the Study Area.
	Vaughan Transportation Master Plan	<ul style="list-style-type: none"> Identifies a transportation framework and policies for the Study Area.
City of Markham	Official Plan	<ul style="list-style-type: none"> Land use designations consist of a mix of residential, mixed-use, commercial and employment (Appendix A). Yonge Street is noted as a Regional Corridor/Key Development Area at Doncaster Avenue, and at Royal Orchard Boulevard. A Heritage Centre is located at John Street and Yonge Street. The City of Markham Official Plan identified the Langstaff Gateway area is identified as a Regional Centre and an Anchor Hub.
	Langstaff Gateway Secondary Plan	<ul style="list-style-type: none"> Identifies land use designations and policies for the Study Area.

Provincial/ Regional/ Local	Document	Application to the YNSE Study Area
	Yonge Steeles Corridor Study – Secondary Plan Amendment	<ul style="list-style-type: none"> Identifies land use designations and policies for the Study Area.
	City of Markham Cycling Master Plan	<ul style="list-style-type: none"> Outlines a cycling network for the City of Markham.
	City of Markham Pedestrian and Trails Master Plan	<ul style="list-style-type: none"> Outlines a pedestrian and trails network for the City of Markham.
City of Richmond Hill	Official Plan	<ul style="list-style-type: none"> Land use designations consist of a mix of residential, mixed-use, commercial and employment (Appendix A). Yonge Street is noted as a Centre, connected by Corridors along major streets.
	Richmond Hill Centre Secondary Plan (in progress)	<ul style="list-style-type: none"> A Secondary Plan is in progress for the Richmond Hill Centre area.
	Yonge and Carrville/16 th Key Development Area Secondary Plan (in progress)	<ul style="list-style-type: none"> A Secondary Plan is in progress for the Yonge and Carrville/16th Key Development Area.
	Richmond Hill Transportation Master Plan	<ul style="list-style-type: none"> Identifies a transportation framework and policies for the Study Area.

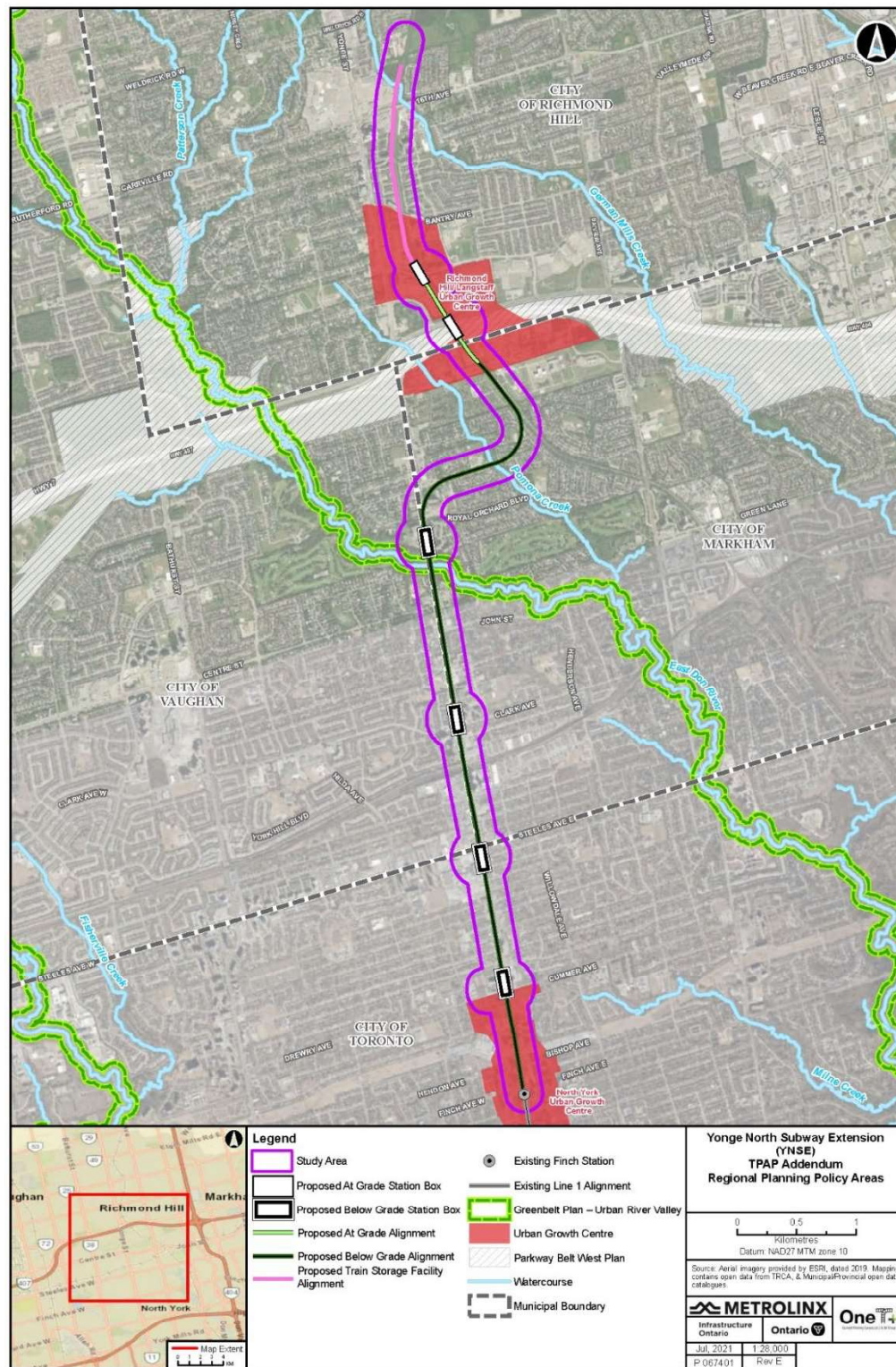


Figure A 3-1 Provincial and Regional Policy Areas

A 3.9.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) is issued under Section 3 of the *Planning Act*. The PPS contains a comprehensive set of policies that address matters of provincial interest and applies province wide. Some of the policy themes include transportation, transit and infrastructure facilities to be planned to meet current and projected needs, providing for an efficient, cost effective and reliable multi-modal transportation system that is integrated with adjacent systems and those of other jurisdictions, and is appropriate to address projected needs to support the movement of goods and people. The PPS also promotes the construction of transit in and between residential, employment (including commercial and industrial), and institutional uses and other areas to improve energy efficiency and air quality.

A 3.9.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The Growth Plan for the Greater Golden Horseshoe (GGH) was established in 2006 under the *Place to Grow Act, 2005* and was most recently updated in 2019, with a further amendment made in 2020. It is a long-term plan which builds upon the PPS 2020, and establishes the land use planning framework to support the achievement of complete communities, a thriving economy, a clean and healthy environment and social equity. The Greenbelt Plan is to be read in conjunction with the Growth Plan, as it identifies a planning framework for the Greenbelt Area.

The Growth Plan identifies an approach to accommodating the forecasted growth for the GGH in complete communities, which are designed to provide a mix of jobs, services, transit, opportunities for active transportation and a full range of housing to support the needs of the community. To support the establishment of complete communities, the Plan identifies a system of strategic growth areas, including Urban Growth Centres, Priority Transit Corridors, and Major Transit Station Areas (MTSAs), that identify minimum intensification and density targets. These terms are defined as follows:

- **Urban Growth Centres:** is a type of strategic growth area within settlement areas, for accommodating intensification and higher density mixed uses in a compact built form.
- **Priority Transit Corridors:** those areas identified on Schedule 5 of the Growth Plan.
- **Major Transit Station Areas:** a type of strategic growth area that is approximately 500 to 800 m radius of an existing or planned high order transit station or stop within a settlement area, (i.e. 10-minute walk).

The Growth Plan for the GGH (2019) identifies two Urban Growth Centres (UGC) within the Study Area, the North York Centre UGC located along Yonge Street and Finch Avenue, as well as the Richmond Hill Centre/Langstaff Gateway UGC located in proximity to Highway 407 ETR and Yonge Street. The boundaries of these UGCs are presented on **Figure A 3-1**. The policies of the Growth Plan require minimum density targets of 400 residents and jobs combined per hectare for the North York Centre UGC, and 200 residents and jobs combined per hectare for the Richmond Hill/Langstaff Gateway UGC (MMAH 2020).

The Yonge Street corridor north of the existing Finch subway station is identified as a Priority Transit Corridor. The Growth Plan requires municipalities to complete detailed planning for MTSAs along Priority Transit Corridors, and to identify MTSAs in Official Plans and Zoning By-laws. In addition to the UGC density targets, the Plan also identifies a minimum density target of 200 residents and jobs combined per ha for MTSAs on Priority Transit Corridors that are served by subways. The City of Toronto and Region of York are currently undergoing a review of potential MTSAs within their municipalities. Lower tier municipalities will be required to implement the Region of York's MTSAs in their Official Plans.

A 3.9.3 Greenbelt Plan

The Greenbelt Plan was established in 2005 under the *Greenbelt Act*, and most recently updated in 2017. The Greenbelt Plan includes the Greenbelt Protected Countryside and Urban River Valley, and also includes the Niagara Escarpment Plan, Oak Ridges Moraine Conservation Plan, and Parkway Belt West Plan areas. Together with these plans, the Greenbelt Plan builds upon the PPS (2020) to provide a land use planning framework for the environmental and agricultural systems within the GGH.

Within the Study Area, the Greenbelt Plan “Urban River Valley” is designated along the East Don River, north of Mill Street and south of the proposed Royal Orchard Station. The “Urban River Valleys” are key river valleys in urban areas that are opportunities for expansion and integration of the Greenbelt and its system into urban areas. They are generally found along main corridors of river valleys connecting the Greenbelt Area with the Great Lakes and inland lakes. The Plan identifies a set of Urban River Valley policies, however, it is noted that all existing, expanded or new infrastructure which is subject to and approved under the Environmental Assessment Act is permitted provided that it *“supports the needs of adjacent settlement areas or serves the significant growth and economic development expected in southern Ontario and supports the goals and objectives of the Greenbelt Plan”* (Policy 6.2.3 of the Greenbelt Plan).

Lands designated as Urban River Valley are subject to certain Greenbelt Plan policies that address stewardship, minimizing potential impacts to natural heritage systems, watershed-based planning, and the application of planning, design and construction practices that enhance the size, diversity, connectivity, and functions of key natural heritage features, key natural hydrologic features, and key hydrologic areas.

The following Greenbelt Plan policies are applicable to the Project across the Don River:

- “The lands are governed by the applicable Official Plan policies provided they have regard to the objectives of the Greenbelt Plan” (Section 5.2.2); and
- “All existing, expanded or new infrastructure which is subject to and approved under the Environmental Assessment Act, or which receives a similar approval, is permitted provided it supports the needs of adjacent settlement areas or serves the significant growth and economic development expected in southern Ontario and supports the goals and objectives of the Greenbelt Plan” (Section 6.2.3).

A 3.9.4 Parkway Belt West Plan

The Parkway Belt West Plan was first established under the *Ontario Planning and Development Act* in 1978. First established to protect lands for infrastructure, open spaces and separate urban areas, many amendments have taken place since that time, and the Plan area now protects lands for large scale infrastructure corridors.

The lands within the Study Area designated as part of the Parkway Belt West Plan are located along the Highway 407 ETR corridor within the City of Vaughan, City of Markham and City of Richmond Hill, as shown in **Figure A 3-1**. Changes to the lands within the Parkway Belt West Plan area, or the related Minister’s Zoning Orders, may require approval from the Ministry of Municipal Affairs and Housing (MMAH).

A 3.9.5 Greater Golden Horseshoe Transportation Plan (Ongoing)

The Ontario Ministry of Transportation (MTO) is currently developing a long-term transportation plan for the GGH to ensure that the future transportation system in the area supports continued prosperity and quality of life until 2051. The GGH Transportation Plan will align with, and build upon, other provincial initiatives including the PPS, the Growth Plan, and the Greenbelt Plan.

The foundation for the study identified existing conditions, trends and outlooks that will influence the transportation needs of the GGH over the long term. Goals and objectives were developed and refined through feedback received from stakeholders and the public. Potential future transportation gaps and strategic opportunities for improvements were then identified using modelling and technical analysis. The Province is now using input from the public survey, feedback from additional engagement efforts, and analysis results to develop the transportation plan and associated policies.

A 3.9.6 Metrolinx 2041 Regional Transportation Plan

Metrolinx's 2041 Regional Transportation Plan (RTP) forms the policy basis for improving the transportation system within the GTHA to 2041. The 2041 RTP outlines the planned transit system including GO Expansion, subways, and Frequent Rapid Transit Network (FRTN) consisting of Priority Bus, Frequent Regional Express Bus, light rail transit and bus rapid transit projects. Key objectives of the plan are to complete the delivery of current regional transit projects, provide frequent rapid transit to enhance regional connections, optimize the transportation system, integrate transportation and land use, and prepare for an uncertain future.

The 2041 RTP includes the YNSE Project as a key rapid transit project that is under development to meet the needs of the region in the near term. An extension of the Line 1 Subway into York Region has been recognized as a priority "In Development" Project under the 2041 Regional Transportation Plan. It has been a priority by Metrolinx, York Region, and City of Toronto as a local and regional transit authority. Given the significance of the Project, the Province, City of Toronto, Region of York, and the TTC have dedicated resources to YNSE planning work.

Goals of the 2041 RTP that are applicable to the Project include, but are not limited to:

- Strong Connections: Connecting people to the places that make their lives better, such as homes, jobs, community services, parks and open spaces, recreation, and cultural activities;
- Complete Travel Experiences: Designing an easy, safe, accessible, affordable and comfortable door-to-door travel experience that meets the diverse needs of travelers; and
- Sustainable and Healthy Communities: Investing in transportation for today and for future generations by supporting land use intensification, climate resiliency and a low-carbon footprint, while leveraging innovation.

A 3.9.7 Ministry of Transportation Southern Highways Program

The MTO Southern Highways Program is an annually published, five-year investment plan for highway construction in southern Ontario. It provides an overview of the Ontario government's plan to repair and expand provincial highways and bridges, and planning studies to address long-term transportation and infrastructure needs in the area. There are currently no major planned transportation infrastructure projects underway by the MTO within the Study Area, according to the MTO Southern Highways Program for 2017 to 2021.

A 3.9.8 407 Transitway from East of Highway 400 to Kennedy Road - EPR

In December 2010, MTO issued a Notice of Completion for the 407 Transitway TPAP from east of Highway 400 to Kennedy Road. This involved a planning and preliminary design study for the 23 km central segment of a transitway facility located along the Highway 407 corridor, which encompasses the City of Vaughan, the City of Markham, the City of Richmond Hill, and the Regional Municipality of York. The 407 Transitway corridor crosses the YNSE Study Area along the area adjacent to the 407 ETR alignment. The project components proposed as part of the study include stations and an operations, maintenance and storage facility.

As currently planned, the project will be implemented initially as bus rapid transit (BRT) and may be converted to light rail transit (LRT) in the future. The study notes that segments that provide improved access to the planned YNSE should be given priority, and sequencing should be responsive to the zones with highest ridership potential to maximize benefits and exposure of dedicated transitway service.

The proposed 407 transitway aligns with municipal and provincial objectives, as identified in the official plans of the stakeholder municipalities, the Growth Plan for the GGH, and the Metrolinx RTP. Many of the key project objectives complement the goals of the YNSE Project and the overall planning of high-order rapid transit in the Study Area, including the following:

Transportation

- Offer a safe, high speed, more efficient way of moving people between GTA population and employment zones, north or south of the corridor;
- Improve connectivity and integration with the regional transportation network by promoting gateway opportunities with modal interchange facilities; and
- Enhance the ability to increase capacity to meet additional travel demand.

Land Use

- Improve accessibility to existing/planned major mixed-use urban centres/nodes in the corridor.

Natural and Social Environments

- Minimize adverse effects on the natural environment;
- Minimize adverse effects on the social environment; and,
- Reduce reliance on energy resources and reduce automobile dependence and gas emissions.

A 3.9.9 Regional/Local Planned Transit Connections

Within the Project Study Area, various regional and local transit projects are planned with the objective of creating a well-integrated transportation network that encompasses the future proposed YNSE.

Two (2) of these projects, identified in the 2041 RTP, provide direct connections to the existing Finch Station and proposed southern boundary of the YNSE in the City of Toronto (Metrolinx, 2018). These include the Finch West LRT extension, which will connect Finch West Station with Finch Station, and the Finch East Priority Bus, which will provide service between Finch Station and McCowan Road. Additionally, the RTP proposes Two-Way, All-Day Go Service between Union Station and Richmond Hill GO, and sets a 'beyond 2041' objective of 15-minute GO Service along the rail corridor at which the YNSE comes to grade. These planned transit improvements will provide more frequent service to the existing Langstaff GO station, which will connect directly to the proposed Bridge Station as part of the YNSE Project.

In addition to regional transit connections, the ongoing VivaNext BRT expansion program aims to transform Yonge Street and Highway 7 into urban corridors that support high-density mixed-use development through the construction of rapidways (York Region Rapid Transit Corporation, 2021). These rapidways involve the use of central bus-only lanes in order to expedite transit services. In the YNSE Study Area, the Steeles Avenue Rapidway, which is planned to connect Jane Street in Vaughan to Kennedy Road in Markham, is currently under analysis – with future BRT service along this corridor to be determined. The 6.5 km Yonge Street Rapidway, completed in December 2020, now provides service along Yonge Street from Highway 7 to 19th Avenue/ Gamble Road, and was planned with the objective of providing a rapid transit connection between the YNSE future terminus and other destinations within York Region (York Region Rapid Transit Corporation, 2020).

As per the YNSE IBC published in March 2020, the Project is estimated to provide subway service to 94,100 riders daily. This will allow 26,000 more people to live within a ten-minute commute of a subway station, make 1,650 jobs accessible within a 45-minute transit commute between York Region and Toronto, and allow 22,900 employees to work within walking distance of the subway. Integration with planned transit connections will further complement these key benefits and provide for a well connected inter-regional transit system.

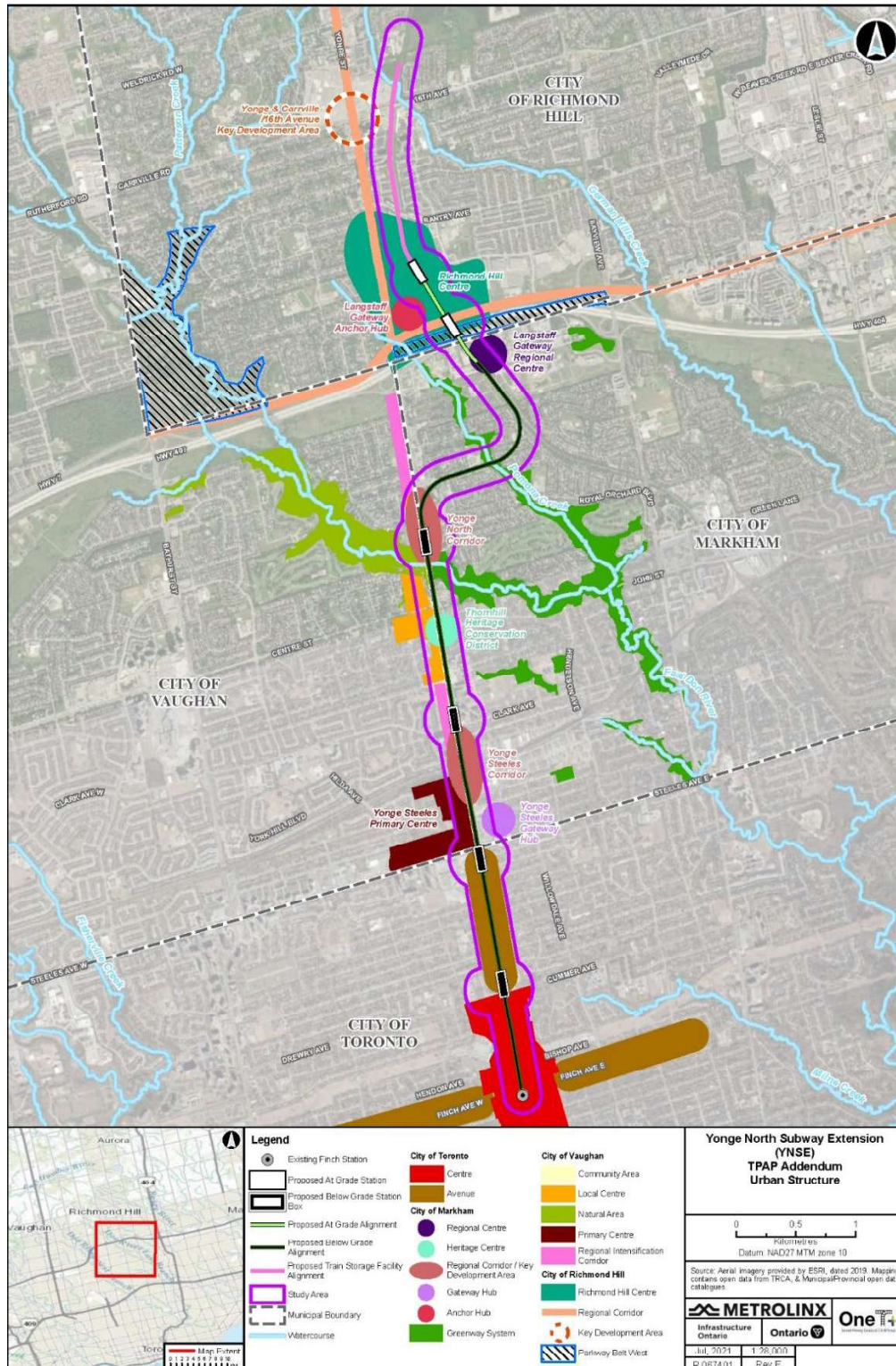


Figure A 3-2 Municipal Urban Structure

A 3.9.10 City of Toronto

A 3.9.10.1 City of Toronto Official Plan

The City of Toronto Official Plan was approved by the Ontario Municipal Board in 2006, and subsequently amended through Official Plan Amendments, and compiled in the 2019 Office Consolidation. The Official Plan identifies a vision for an attractive and safe City, based on principles of diversity and opportunity, beauty, connectivity, leadership, and stewardship. The Official Plan notes that the Greater Toronto Area is projected to grow by 2.7 million residents and 1.8 million jobs by the year 2031. The Official Plan identifies the need for the City to be a competitive employment area, integrate regional transportation and transit systems, plan for a range of housing types, deliver services to residents, and protect natural environment and cultural resources.

The Urban Structure of the City identifies a system of Centres, Avenues, Employment Areas, and Green Space System. The following provides a summary of the Urban Structure within the Study Area:

- **North York Centre:** located along Yonge Street between Highway 401 and Drewry Avenue / Cummer Avenue. Centres are areas that have high transit accessibility, and will be places where jobs, housing and services will be concentrated. The Official Plan notes the presence of important commercial office space, and a vibrant residential and cultural centre.
- **Avenues:** the area along Yonge Street between Drewry Avenue / Cummer Avenue, continuing north to Steeles Avenue at the Toronto/Vaughan/Markham Municipal Boundaries is identified as an Avenue. Avenues are important corridors along major roads where reurbanization is anticipated for new housing and job opportunities. Not all areas identified as Avenues are identified for growth, and development must meet the neighbourhood protection policies to address compatibility.
- **Employment Areas:** No Employment Areas are located within the Study Area in the City's Urban Structure.
- **Greenspace System:** No lands within the Green Space System are located within the Study Area.

The Official Plan includes transportation policies that encourage transit supportive densities and support place making. Yonge Street north of Finch Avenue is identified as a Higher Order Transit Corridor (Map 4). The Official Plan notes that Yonge Street north of Finch Station should be established as a dedicated transit corridor to facilitate development of Yonge Street as an Avenue and to improve transit service to residents of York Region (Section 2.2.2, Official Plan).

An Official Plan Review is underway to bring the City of Toronto Official Plan into conformity with the Growth Plan by the province's deadline of July 1, 2022. As part of this work, the City of Toronto is identifying the locations of Major Transit Station Areas, including within the YNSE Study Area.

It is also noted that the City of Toronto is evaluating opportunities to improve the streetscape and public realm for all users (pedestrians, cyclists, transit and vehicles) along Yonge Street from Sheppard Avenue to the Finch Hydro Corridor as part of the REimagining Yonge Street Environmental Assessment. The recommended final design for the reconstruction of Yonge Street from Florence Avenue/Avondale Avenue to Hendon Avenue/Bishop Avenue includes:

- a cross-section reduction from six to four lanes;
- wider sidewalks and boulevards;
- new and enhanced pedestrian crossings – traffic signals and turn restrictions at some intersections;
- a centre landscaped median;
- protected bicycle lanes (cycle tracks);

- on-street lay-bys for parking, loading and deliveries, where right-of way width permits;
- the removal of both northbound and southbound left-turn lanes at the intersection of Yonge Street and Sheppard Avenue
- modifications in the section of Finch Avenue and Hendon Avenue/Bishop Avenue to improve TTC bus travel

In the event that the recommendations from the REimagining Yonge Street Environmental Assessment are adopted by the City's Infrastructure and Environment Committee, then Detailed Design could begin as early as 2023, with construction commencing potentially as early as 2026.

A 3.9.10.2 North York Centre Secondary Plan

The North York Centre Secondary Plan contains area specific development policies for North York Centre, an important focus of transit-based employment and residential growth. The Secondary Plan area is divided into two parts.

- **North York Centre North:** The Study Area is located within the "North" sub-area, which is intended to be predominantly residential with commercial uses focused at Finch Station.
- **North York Centre South:** This sub-area is located south of the Study Area and will be a commercial hub, with office and commercial uses, as well as a preferred location for civic and governmental uses.

The Secondary Plan outlines a set of development policies for this area, addressing density, streetscaping, transportation, environment, among others.

A 3.9.10.3 Yonge Street North Planning Study and Transportation Master Plan (Ongoing)

A new Secondary Plan is in development for the Yonge Street North area, between Finch Avenue and Steeles Avenue. The study will be undertaken in the context of existing provincial policies and plans, including the Growth Plan for the GGH and Metrolinx's Big Move. It will determine the level of development that can be supported by the existing and improved transportation network and planned higher order transit system. Community consultation on this study has been conducted since 2011 and informed the development of policies regarding built form, massing, streetscaping, parks and transportation. A presentation was made to the City's Urban Design Review Panel, and draft Secondary Plan policies are under development. The boundary of the Secondary Plan is bounded by Finch Avenue to the south, Talbot Road/ Hilda Avenue to the west, Steeles Avenue to the north, and Willowdale Avenue to the east, as shown in **Figure A 3-3**.

A related Transportation Master Plan is also in progress and will identify transportation solutions to support the vision for complete communities within the Yonge Street North area. Potential transportation network changes may include establishing development block sizes that are transit-oriented and walkable, increase connectivity for walking and cycling, provide access and manage traffic from existing and future developments, and access to and from neighbourhood amenities. The Plan will also address parking requirements, transportation demand management (TDM) measures, road safety and traffic calming, and potential expansion of pedestrian and cycling networks.

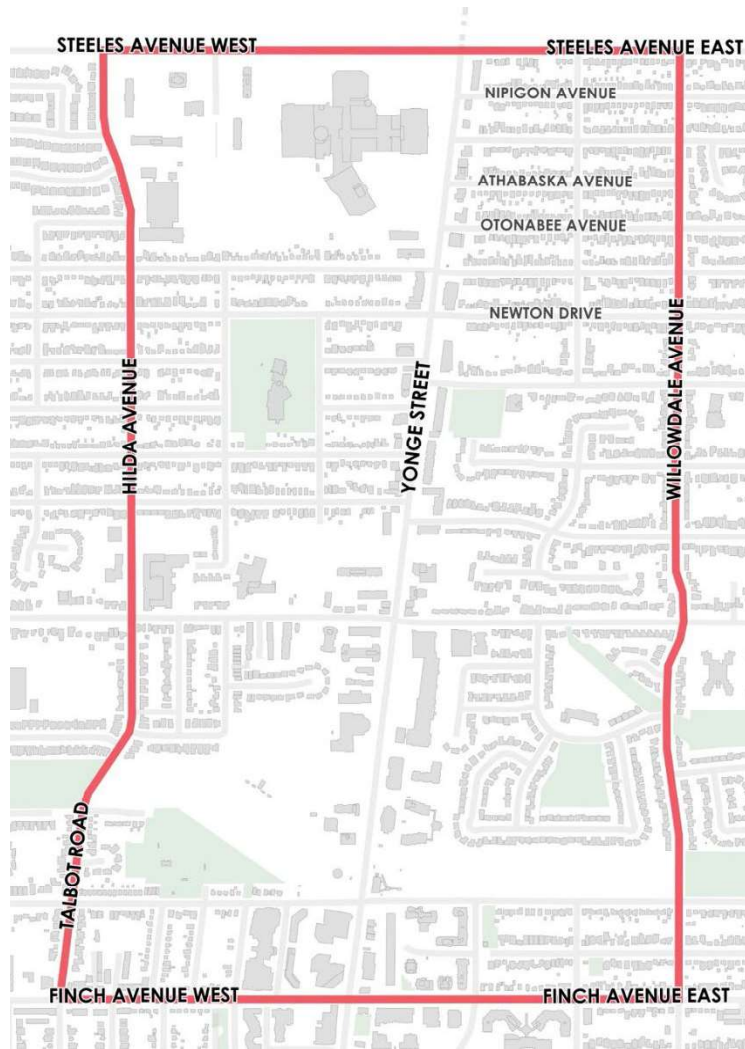


Figure A 3-3 Yonge Street North Planning Study and Transportation Plan Draft Study Area

A related Transportation Master Plan is also in progress and will identify transportation solutions to support the vision for complete communities within the Yonge Street North area. Potential transportation network changes may include establishing development block sizes that are transit-oriented and walkable, increase connectivity for walking and cycling, provide access and manage traffic from existing and future developments, and access to and from neighbourhood amenities. The Plan will also address parking requirements, transportation demand management (TDM) measures, road safety and traffic calming, and potential expansion of pedestrian and cycling networks.

A 3.9.11 York Region

A 3.9.11.1 York Region Official Plan

York Region's Official Plan was approved in 2010 and amendments to the Plan since that time have been compiled in the 2019 Office Consolidation. The Region is currently updating its Official Plan and a draft Official Plan is to be prepared in 2021. The current Official Plan describes how York Region plans to

accommodate future growth and development while meeting the needs of existing residents and businesses. It provides directions and policies that guide economic, environmental and community planning decisions.

In terms of transportation goals, York Region's vision is an expanded, comprehensive, and well-integrated public transit system that is convenient and accessible to all residents and workers and links all major communities within York Region. The Region's objectives include, but are not limited to:

- Recognizing transit as a Regional strategic investment priority;
- Working with partners to complete the transit network (including subway line extensions);
- Achieving higher transit usage by supporting improvements in service, access and design;
- Achieving an overall transit modal split of 30 percent during peak periods in the Urban Area and 50 per cent in the Regional Centres and Corridors by 2031;
- Securing lands for facilities such as transit stations and related infrastructure (including vent shafts, transit; operation and maintenance facilities, passenger pick-up and drop-off areas, electrical and electronic infrastructure and passenger safety facilities);
- Providing accessible and integrated public transit to people with disabilities; and
- Coordinating the planning, integration and operation of existing and new transit services with local municipalities, the Toronto Transit Commission, the Province, Metrolinx and adjacent municipalities.

As noted above, York Region is undergoing a Municipal Comprehensive Review (also known as Official Plan Review) and is addressing conformity of its Regional Official Plan to the 2019 Growth Plan. As part of this scope of work, Major Transit Station Areas (MTSAs) are being delineated. Currently, up to five of the Region's proposed MTSAs are located along the YNSE alignment (Steeles, Clark Royal Orchard, Langstaff/Longbridge, and Richmond Hill Centre). The Growth Plan required MTSAs to be mapped in Official Plans, and that density targets of 200 residents and jobs combined per hectare are met for areas served by subways.

A 3.9.11.2 York Region Transportation Master Plan

The York Region Transportation Master Plan (2016) updates the 2009 Transportation Master Plan and 2008 Pedestrian and Cycling Master Plan. The Plan addresses the transportation objectives of the Region's Official Plan, Vision 2051 and Strategic Plan. To accommodate population and employment growth, the transportation networks need to be optimized and expanded, and expanding opportunities for active transportation. The proposed 2041 Transit Network identifies:

- Subway Extension along Yonge Street from Toronto to Yonge Street and Highway 407 ETR; and
- Potential for this subway to be extended further north in the future.

The 2041 Transit Network also includes:

- A Rapid Transit Corridor along Yonge Street north of Highway 407 ETR;
- Frequent Transit Network (bus transit) along collector roads;
- GO Train Rush Hour Service along the railway east of the Study Area;
- Proposed East-West Transitway along the 407 ETR Corridor; and,
- Proposed Separated Cycling Facilities along Yonge Street.

Transit coordination on a regional scale, is a key component of the plan, and the YNSE is identified as a key project that would increase connectivity between York Region and the rest of the Greater Toronto and Hamilton Area (GTHA).

A 3.9.11.3 York Region South Yonge Streetscape Master Plan Study Update

The York Region South Yonge Streetscape Master Plan was completed in 2012 and was updated in 2021. Since the 2012 plan, the Region has implemented several on-street cycling facilities, however public feedback indicated that on-boulevard facilities were preferred as they are perceived to be safer. Additional studies undertaken by the Region (Pedestrian and Cycling Planning and Design Guidelines and Designing Great Streets Guidelines) also did not recommend on-street cycling facilities. This resulted in the evolution of support of on-boulevard cycling facilities by York Region's active transportation standards.

In response to the changing direction on implementing future cycling facilities, York Region issued an RFP to update the 2012 South Yonge Streetscape Master Plan to integrate cycling facilities with other pedestrian and streetscape facilities within the boulevard. The key objectives of the Master Plan update set out to transform the corridor into a "main street" for York Region that is bold, sustainable and achievable.

A 3.9.12 City of Vaughan

A 3.9.12.1 City of Vaughan Official Plan

The City of Vaughan Official Plan was approved in 2010, and the amendments to date are compiled in the 2019 Office Consolidation. The City of Vaughan is currently undertaking an Official Plan Review (OPR). The Official Plan is part of an overall Growth Management Strategy initiated by Vaughan City Council that will shape the future of the City and guide its continued transformation into a vibrant, beautiful and sustainable City. Also known as "A Plan for Transformation", it addresses all elements of effective, sustainable, and successful city-building while managing projected growth to the year 2031.

The west side of Yonge Street north of Steeles and south of Langstaff Road is located within the City of Vaughan. The Urban Structure is organized into different Intensification Areas and Stable Areas, as follows:

- **Primary Centre:** Centred at the northwest quadrant of Yonge Street and Steeles Avenue, this area is identified as a Primary Centre, which is intended for intensification around planned subway stations and existing regional shopping destinations. These areas are envisioned to become mixed-use areas with residential development and a range of other uses that will serve residents.
- **Local Centre:** Located north and south of Centre Street, this Local Centre will function as mixed-use cores of their communities. These areas will be primarily residential supported by a mix of uses to serve the daily needs of the surrounding community.
- **Regional Intensification Corridor:** The lands along Yonge Street are identified as a Regional Intensification Corridor, which connect the Primary Centre and Local Centre. These areas are located along roads identified for higher-order transit and can accommodate mixed-use or employment intensification.
- **Natural Areas and Countryside:** The East Don River is identified as part of the Natural Areas, and the Natural Heritage Network policies of the Official Plan apply and restrict development within these areas.
- **Parkway Belt West Lands:** The lands directly south of the 407 ETR are part of the Parkway Belt West Plan.

The above Urban Structure sets the planning framework for land use decisions along the Yonge Street corridor. These intensification areas also support transit supportive densities with the planned subway extension into York Region. The Official Plan contains policies that coordinate land use and transit planning in the City of Vaughan and implement the provincial Growth Plan.

A 3.9.12.2 Yonge Steeles Corridor Secondary Plan

The Yonge Steeles Corridor Secondary Plan was adopted by Vaughan City Council on September 7, 2010 and is currently under appeal before the Ontario Land Tribunal (OLT). The Secondary Plan contains land use policies and urban design guidelines for future development in the area. The Secondary Plan includes policies to integrate transit and land uses, assuming that either the extension of the Yonge Subway or the introduction of a Bus Rapid Transit service would be implemented along Yonge Street. The Secondary Plan provides opportunities for intensification through the redevelopment of lands fronting Yonge Street and Steeles Avenue while simultaneously protecting stable residential neighbourhoods, providing a range of housing choices and a mix of uses, conserving land, and minimizing the ecological footprint of the residential and working population.

A 3.9.12.3 City of Vaughan Transportation Master Plan

The Vaughan Transportation Master Plan (2012) is currently undergoing an update and was prepared to address the auto-oriented urban structure of the City of Vaughan, and to evaluate transportation needs and identify policies, infrastructure and services needed to accommodate growth to 2031. The TMP highlights that the City of Vaughan has integrated transit and land use planning in the Official Plan, and that the urban structure of intensification areas will support transit supportive densities and encourage alternative modes of transportation. The Plan builds upon the 2007 Pedestrian and Bicycle Master Plan pedestrian and bicycle network of trails and pathways. The TMP identifies targets for transit modes, identifies a 'Transit First' approach, and programs to change travel behaviours. The YNSE is noted as one of the planned transit network improvements.

The City of Vaughan initiated a new Transportation Plan in 2019 that will update and re-evaluate transit and transportation policies and infrastructure needs for the next 20 years.

A 3.9.12.4 Vaughan Thornhill Heritage Conservation District

The community of Thornhill contains two Heritage Conservation Districts (HCDs), one within the City of Vaughan, and the other within the City of Markham. Figures 8-11 in **Appendix A** presents the boundaries of each of these HCDs. A heritage permit is required from the City of Vaughan and Markham for certain development activities within the HCDs.

The Vaughan Thornhill Heritage Conservation District is located on the west side of Yonge Street, generally from south of Arnold Avenue to Helen Avenue. The HCD was approved by the City of Vaughan in 1988, and the Thornhill Vaughan Heritage Conservation District Plan (2007) sets out design guidelines for development within this area. The guidelines provide for direction on the design of buildings to fit into the surrounding heritage character. The intent for the Yonge Street corridor to become a vibrant mixed-use area is acknowledged in the plan, and policies are outlined to protect, and enhance heritage resources, and ensure that developments are complementary to the surrounding heritage character (City of Vaughan 2007).

The Markham Thornhill HCD is further described in **Section A 3.9.13**.

A 3.9.12.5 Vaughan Pedestrian and Bicycle Master Plan

In 2017, the City of Vaughan undertook an update to the 2007 Pedestrian and Bicycle Master Plan to set the City on a path to becoming a more walkable and bikeable community. The updates built on the 2010 Vaughan Official Plan and the 2012 Transportation Master Plan and focused on building a community and internal understanding and support, as well as understanding community priorities while updating technical content to reflect current standards.

The key themes outlined in the updated Pedestrian and Bicycle Master Plan are outlined below:

- **Safety:** will be prioritized through physically separated pedestrian and cycling infrastructure (sidewalks and cycle tracks) for all ages and abilities, as well as ongoing seasonal maintenance.
- **Infrastructure:** will be advanced in a cost-effective yet timely manner by leveraging larger capital projects and developments and annual active transportation planning and implementation program budgets to fill the gaps.
- **Connectivity:** will occur by prioritizing bold initiatives such as the Vaughan Super Trail, Vaughan Metropolitan Centre Separated Cycling Network, localized neighbourhood mini-networks and intensification areas, as well as access across physical barriers.
- **Awareness and Culture:** within the organization and broader community will be fostered through ongoing education and outreach as well as expanding active transportation policies and guidelines in applicable City plans.

A 3.9.12.6 City of Vaughan Yonge-Steeles Urban Design and Streetscape Study (Ongoing)

The Yonge-Steele Urban Design Study and Streetscape Plan is currently underway for completion in 2022 and sets out to develop an urban design framework through design guidelines and a streetscape plan to guide private development and publicly accessible space design for the secondary plan area. The study will build on the existing City policy frameworks and guidelines to support the evolution of the Yonge-Steeles Corridor as an attractive, transit-oriented, vibrant and sustainable urban environment and an inviting destination for people and businesses.

A 3.9.13 City of Markham

A 3.9.13.1 City of Markham Official Plan

The City of Markham Official Plan was approved in 2014 in part, and the Office Consolidation is based on the Partial Approval Orders from the Ontario Municipal Board (OMB) and Local Planning Appeal Tribunal (LPAT). The Official Plan provides a vision for growth in Markham to 2031, based on the principles of protecting the natural environment and agricultural lands, building healthy communities, increasing travel options and maintaining a strong economy. The land use framework set out in this plan is informed by the principles of sustainable community development.

The Urban Structure of the City of Markham consists of a system of Centres and Corridors. Along Yonge Street, the Urban Structure identifies the following areas:

- **Gateway Hub:** The intersection of Steeles Avenue and Yonge Street is identified as a Gateway Hub, a key entrance location to and from the City of Markham which supports a sense of place and community.
- **Regional Corridor / Key Development Area:** As part of the City's intensification strategy, priority areas for intensification include Regional Corridor / Key Development Areas, as well as Local Centres and Corridors. Growth will be directed to these areas. Two areas along Yonge Street are identified with this designation, the Yonge Steeles Corridor, located north of Steeles Avenue, and the Yonge North Corridor, located at Royal Orchard Boulevard.
- **Heritage Centre:** The area at Yonge Street and John Street is identified as a Heritage Centre and is one of Markham's heritage conservation districts which recognize the distinct character of heritage

buildings, historic sites and landscapes. Any redevelopment within this area must be compatible and enhance the heritage character of Thornhill.

Langstaff Gateway is located east of Yonge Street, south of the 407 ETR and is part of the Provincial Urban Growth Centre. The Official Plan recognizes its status as a Regional Centre, as defined in the York Region Official Plan. It is also identified as an Anchor Hub, which are intended to be a central place with significant levels of transit services that support development (Markham 2014). Multiple transit systems interface at the Langstaff Gateway including the GO Rail system, a Regional Rapid Transit Corridor along Highway 7 and the planned Highway 407 Transitway. The Langstaff Gateway is adjacent to the Richmond Hill Regional Centre north of Highway 407 ETR.

The City's Urban Structure also identifies a Greenway System which includes natural heritage and hydrological features and their associated buffers. The Official Plan contains a set of development policies around the permitted uses within and adjacent to this area.

A 3.9.13.2 Langstaff Gateway Secondary Plan

In May 2008, the City of Markham initiated a Master Plan for the Langstaff area, bounded to the north by Langstaff Road, to the south by the Holy Cross Cemetery, to the east by Bayview Avenue and to the west by Yonge Street. A large proportion of the Langstaff area is located within the YNSE Study Area and the approved plan is based on the Gateway Community being serviced by a subway entrance located at Yonge Street, as shown in Schedule BB – Community Structure found in official Plan Amendment No. 183.

Through consultation with area landowners and the public, a Land Use and Built Form Master Plan and mixed-use design concept was created. The Langstaff Gateway Secondary Plan and an Official Plan amendment were approved by York Regional Council in 2011 and are now in effect. The Langstaff Gateway Secondary Plan implements the vision of the Master Plan, and provides for a compact, complete, integrated, sustainable, high-density urban centre that will serve as a portion of the Regional Centre and the Richmond Hill Centre / Langstaff Gateway Urban Growth Centre.

A 3.9.13.3 Yonge Steeles Corridor Study – Secondary Plan Amendment

The Yonge Steeles Corridor Study was undertaken based on the direction that growth in the region will occur through Regional Centres and locally identified Key Development Areas within Regional Corridors. The Thornhill Secondary Plan covers the entire community of Thornhill in Markham. This Secondary Plan Amendment establishes new policies for the Yonge Steeles Redevelopment Area, which includes the lands at the north-east quadrant of Yonge Street and Steeles Avenue. The area extends north to south of Elgin Street, and extends easterly to Dudley Avenue, except for the block directly abutting Steeles Avenue, which extends further east to Willowdale Boulevard. The Secondary Plan Amendment identifies a policy framework that will guide development to achieve the built form objectives, while providing appropriate transitions to surrounding land uses. The plan encourages mixed-use, compact forms, and vibrant frontages and requires appropriate urban design and servicing studies.

A 3.9.13.4 City of Markham Cycling Master Plan

The City of Markham's Cycling Master Plan (2010) recommends a strategy for addressing cycling in Markham until the year 2025. It identifies a plan to create a more integrated cycling network, which is a key component of the local transportation and recreational system. A guiding principle of the plan is that the cycling network should be integrated with other nodes of transportation, particularly public transit, and routes should be selected to provide access to transit nodes.

A 3.9.13.5 Markham Pedestrian and Trails Master Plan

The City of Markham's Pedestrian and Trails Master Plan (2009) sets out a plan for improving and expanding Markham's trail system. The vision of the plan is an interconnected system of pathways and trails with improved connections to existing and planned sidewalks and connect neighbourhoods to key destinations in Markham.

A 3.9.13.6 Markham Thornhill Heritage Conservation District

The community of Thornhill contains two Heritage Conservation Districts (HCDs), one within the City of Vaughan, and the other within the City of Markham. Figures 8-11 in **Appendix A** presents the boundaries of each of these HCDs. A heritage permit is required from the City of Vaughan and Markham for certain development activities within the HCDs.

The City of Markham approved the Thornhill Heritage Conservation District in 1986. The boundary of the HCD is located on the east side of Yonge Street, generally from south of Arnold Avenue to Bay Thorn Drive. A large area along John Street is located within this HCD. The Thornhill-Markham Heritage Conservation District Plan establishes a set of policies and design guidelines for this area. The YNSE alignment is located in proximity to the Yonge Street Special Policy Area, which is located between John Street and south of the East Don River. The HCD Plan includes Yonge Street streetscape policies that recognize the intent for this corridor to become a vibrant mixed-use area, that promotes a high-quality pedestrian environment and transit supportive streetscape. The policies identify a framework for how the Yonge Street corridor should be developed, in a way that is complementary the historic character of the area (City of Markham 2005).

The Vaughan Thornhill HCD is further described in **Section A 3.9.12.4**.

A 3.9.14 City of Richmond Hill

A 3.9.14.1 City of Richmond Hill Official Plan

The City of Richmond Hill Official Plan was partially approved by the OMB in 2018 and amendments since that time have been included in the 2020 Office Consolidation. The City is currently reviewing its Official Plan and will be completing a Municipal Comprehensive Review. The existing Official Plan vision identifies guiding principles including creating complete communities, environmental protection and sustainability, economic vitality, place making, and planning for connectivity and mobility.

With the City's settlement areas nearly built out, future development in the Town will be through intensification. The Urban Structure for the City of Richmond Hill identifies the following components within the Study Area:

- **Richmond Hill Centre:** The lands surrounding Yonge Street and Highway 7 are designated as a Centre. This Centre will be the primary intensification area for the greatest height and density and is planned to achieve a 1:1 ratio of residents-to-jobs.
- **Regional Corridor:** Regional Corridors are key connections between Centres in York Region and across the GTA, which accommodate transit. There are two Regional Corridors within the Study Area along Yonge Street and Highway 7. Not all areas along these corridors will be suitable for intensification.
- **Parkway Belt West Plan:** Includes the lands along the Highway 407 ETR corridor along the municipal border with the City of Markham that are within the Parkway Belt West Plan area.

- **Greenway System:** The Greenway System contains natural features and functions as well as urban open spaces. The Study Area includes portions of the Greenway System along Pomona Creek and German Mills Creek.
- **Key Development Area:** These areas are generally located along Regional Corridors and are well served by transit and major nodes of retail and commercial development, and where there are opportunities for redevelopment. A Key Development Area is located at Yonge Street and Carrville Road / 16th Avenue.

Official Plan policies address the policies that support the urban structure and implement the guiding principles of the plan. The Transportation System policies identify the importance of having a well-connected transportation system, a range of mobility options, coordination with regional and provincial transportation initiatives, and local transportation and transit needs.

A 3.9.14.2 Richmond Hill Centre Secondary Plan (Ongoing)

The Richmond Hill Centre Secondary Plan is under development and has been presented at two Public Open Houses. The Secondary Plan will outline a vision for the urban centre and provide development policies. The Centre is envisioned as a hub of residential and employment uses, well serviced by transit, and will be the place where new public spaces and walkable streets are established.

A 3.9.14.3 Yonge and Carrville/16th Key Development Area Secondary Plan (Ongoing)

The Yonge and Carrville / 16th Key Development Area Secondary Plan is under development. It was presented to Council in 2017 but based on public input, the Secondary Plan and Official Plan Amendment have been revised. The Secondary Plan is undergoing further review and is also being revisited as part of the Official Plan Review process. This area contains Hillcrest Mall, a large commercial plaza and residential uses. The Key Development Area Policy Directions and Recommendation Report presents a preferred land use scenario that identifies a range of low (4 storey), mid-rise (8 storeys), tall building zone (16 storeys) and tall buildings: Yonge and 16th Intersection (20 storeys). The built form and development policies for this area will be finalized and are subject to change.

The Secondary Plan will provide direction for intensification of the area as a retail, commercial, and medium to high-density development node. It proposes policy direction on matters such as character, parks and open space, transportation and servicing and provides for the development of a multi-use trail, which is planned to be located generally in an area extending from Langstaff Road to 16th Avenue, west of the CN rail corridor.

A workshop and stakeholder engagement has taken place with respect to the Secondary Plan, and per Richmond Hill's Key Directions report it is anticipated that elements of this Secondary Plan will be carried forward including the possibility of a future TTC/GO station serving this area. The City's Yonge – 16th Key Development Area (KDA) Secondary Plan shown in **Figure A 3-4**, identifies the conceptual location for the future subway station at the Yonge Street and 16th Avenue area.

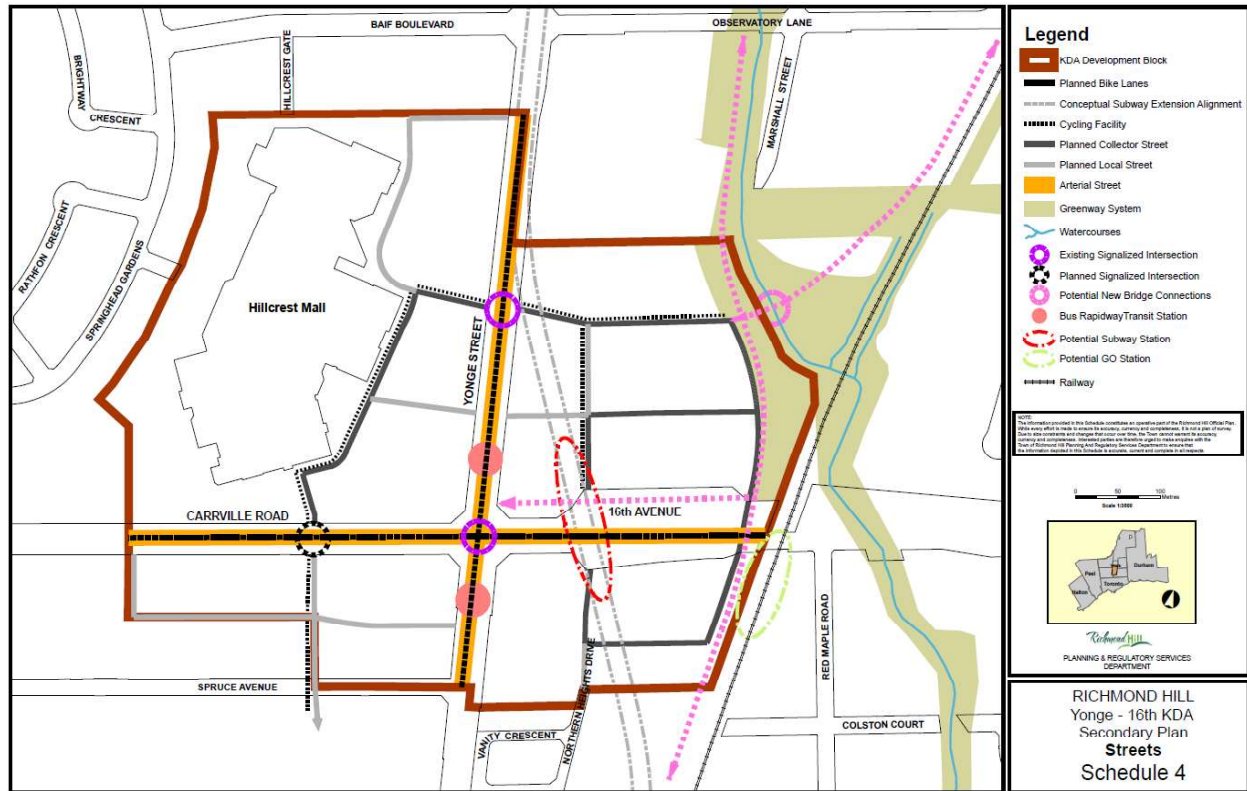


Figure A 3-4 Excerpt from Richmond Hill Official Plan Schedule 4: Yonge – 16th KDA Secondary Plan

A 3.9.14.4 City of Richmond Hill Transportation Master Plan

The City of Richmond Hill's Transportation Master Plan aims to address key transportation challenges including the need to manage growth and minimize environmental impacts while ensuring that Richmond Hill has a strong competitive position to attract business and maintain economic vitality. The 2006 TMP was further updated in 2014 to reflect new population and employment forecasts, support the implementation of the Official Plan, and accommodate provincial and regional planning goals and objectives.

The 2014 TMP addressed Richmond Hill Centre, and noted that Yonge Street is intended to be a pedestrian-oriented urban street with accessible transit, with a grid of secondary streets to support the transportation needs of the area. The TMP identified street network upgrades including a mid block crossing at Highway 7 to connect Richmond Hill Centre to Markham's Langstaff Gateway, a pedestrian and cyclist bridge over the CN Rail tracks at Richmond Hill Centre, and an extension of Garden Avenue between Yonge Street and Bayview Avenue including a grade separation at the railway tracks.

The City of Richmond Hill initiated a study in 2019 to update the Transportation Master Plan to establish a future vision for all travel modes within the City to the year 2041.

A 3.10 Segment 1 – Finch Station to Clark Station

Appendix A, Figures 1 to 7 provide an overview of the infrastructure proposed within this segment of the Study Area.

Between existing Finch Station and the proposed Steeles Station, this segment traverses the Newtonbrook West and Newtonbrook East neighbourhoods of the City of Toronto. Newtonbrook West comprises land west of Yonge Street up through Drewry Avenue (which becomes Cummer Avenue east of Yonge Street), while Newtonbrook East comprises lands east of Yonge Street to Cummer Avenue.

North of the proposed Steeles Station, this segment traverses the community of Thornhill, which is divided between the City of Markham and the City of Vaughan. Steeles Avenue represents the municipal boundary between the City of Toronto and York Region. Within York Region, Yonge Street is the boundary between the lower-tier municipalities of Vaughan to the west and Markham to the east. Within both Vaughan and Markham, this segment of the Study Area represents a primary municipal gateway. The area is suburban and automobile-centric in nature, both from a land use and built form perspective. While the area is suburban in nature, it is an evolving Regional intensification corridor with multiple high-density mixed-use developments constructed in the area.

A 3.10.1 Socio-Economic Conditions

In 2016, the population of Newtonbrook West was 23,831 – a 3% increase since 2011, while the population of Newtonbrook East was 16,097, a 2% decrease since 2011. The median age of residents was approximately 42 years in both neighbourhoods. Twenty eight percent (28%) of residents in Newtonbrook West and 45% in Newtonbrook East lived in private single-detached housing, while 49% of residents in Newtonbrook West and 43% in Newtonbrook East resided in units in high-density buildings greater than five storeys. Forty five percent (45%) of residents in Newtonbrook West and 49% in Newtonbrook East commuted to work by driving their own vehicles while 43% in Newtonbrook West and 41% in Newtonbrook East took public transit (City of Toronto, 2016). Available bus services in this area include the VIVA Blue line (which connects to the existing Finch Station), VIVA Orange line, GO regional bus services (including routes 19, 27, 32, 34, 67, and 96) and TTC and York Region Transit (YRT) local bus services.

The streetscape along Yonge Street reflects the cultural diversity of the community and contains a number of local commercial establishments and strip mall-type shopping centres containing a variety of offices, restaurants and retail.

Thornhill is a community within the Cities of Markham and Vaughan. In 2016, Thornhill had a population of 112,719, a 2% increase since 2011. The median age of residents was just under 43 years. Private single-detached housing comprised 53% of Thornhill's dwelling units, while 26% of residents occupied units in high-density buildings greater than five storeys. Seventy percent (70%) of Thornhill residents commuted to work in personal vehicles, while nearly 20% took public transit (Statistics Canada, 2016). Available bus services in this area include VIVA Blue line, VIVA Orange line, GO regional bus service (route 32), and TTC and YRT local bus services.

A 3.10.2 Existing Land Use

The land uses described in **Table A 3-3** are located within this segment and are mapped in **Appendix A**. The following sections characterize the existing uses by land use type within the Study Area.

Table A 3-3 Existing Land Uses – Segment 1: Finch Station to Clark Station

Land Use Type	Facility Name	Figure #
Institutional – School	Anderson College	2
Institutional – School	Unionville Academy	3
Institutional – School	Drewry Secondary School	3
Commercial	Centrepont Mall	5
Recreation Area	North York Seniors Centre	1
Park	Olive Square	1
Park	Finch Parkette	1
Park	Centre Park	4
Park	Benjamin Thorne Park	6
Park	Sir Robert Watson-Watt Park	6

A 3.10.2.1 Residential Uses

This segment of the Study Area comprises high density mixed residential uses along the Yonge Street corridor (within approximately 100 m of Yonge Street). A number of large apartment buildings and mixed-use condominium towers are located along Yonge Street, including the World on Yonge just north of Meadowview Avenue on the east side of Yonge Street (see **Figure A 3-5**) and the Skyrise on Yonge just south of Clark Avenue on the west side of Yonge Street (**Figure A 3-6**). A large site at the south-east quadrant of Yonge Street and Cummer Avenue is under development for a large residential development. A number of large apartment and condominium towers are located at the intersection of Yonge Street and Clark Avenue.

Beyond the mixed uses along the Yonge Street corridor are established low density residential neighbourhoods. These areas are designated as ‘Neighbourhoods’ in the City of Toronto Official Plan, ‘Residential Low Rise’ in the City of Markham Official Plan, and ‘Low-Rise Residential’ in the City of Vaughan Official Plan.



Figure A 3-5 View Facing North on Yonge Street North of Steeles Avenue -
World on Yonge Mixed-use Development



Figure A 3-6 View Facing South-West on Yonge Street at Clark Avenue -
Skyrise on Yonge Mixed-Use Development

A 3.10.2.2 Commercial and Industrial Uses

Two (2) large high-rise office buildings are located at the south-west quadrant of Yonge Street and Finch Avenue, the North American Centre buildings (see **Figure A 3-7**). These offices offer employment opportunities and associated retail uses in close proximity to the existing TTC Finch subway station and Finch GO Bus Terminal.



**Figure A 3-7 View Facing South-West on Yonge Street at Bishop Avenue -
North American Centre Office Buildings**

Centerpoint Mall, located at the southwest intersection of Yonge Street and Steeles Avenue West, is a large indoor shopping centre with over 95 commercial tenants. Across the street from the mall, north of Steeles Avenue West is a large commercial plaza containing various retail uses and services. Further north along Yonge Street, a series of auto dealerships are clustered on the west side of Yonge Street, south of the railway corridor. Doncaster Avenue, east of Yonge Street contains a number of established commercial businesses, on the south side of the rail corridor.

Further north, mixed-use developments are located on the west side of Yonge Street, north and south of Clark Avenue. The south-west quadrant contains a high density mixed-use development with at grade retail and office uses. Strip plaza commercial uses are located on the east side of Yonge Street, south of Clark Avenue.

Several commercial plazas and multi-unit buildings line both sides of Yonge Street within this segment. These commercial uses include restaurants, retail stores, offices, grocery stores, and other convenience services.

There are no industrial uses within this segment.

A 3.10.2.3 Institutional Uses

A total of three (3) schools are located within this segment, as outlined in **Table A 3-3**. The schools are generally located beyond the Yonge Street corridor, with the exception of Anderson College, which is located on Yonge Street just north of the Finch Station Pick up and Drop off area.

It should be noted that there are a number of specialized schools that are located within the commercial plazas along Yonge Street. In general, these uses are contained within a commercial unit and do not have outdoor amenities (i.e. playgrounds, sports fields).

A 3.10.2.4 Recreational Uses

This segment comprises a number of parks, parkettes, recreation areas and open spaces, as shown in **Table A 3-3**. North York Seniors Centre is a recreational facility that provides classes, events, and social supports for seniors (see **Figure A 3-8**). Two parks, Olive Square and Benjamin Thorne Park are located within approximately 100 m of Yonge Street.

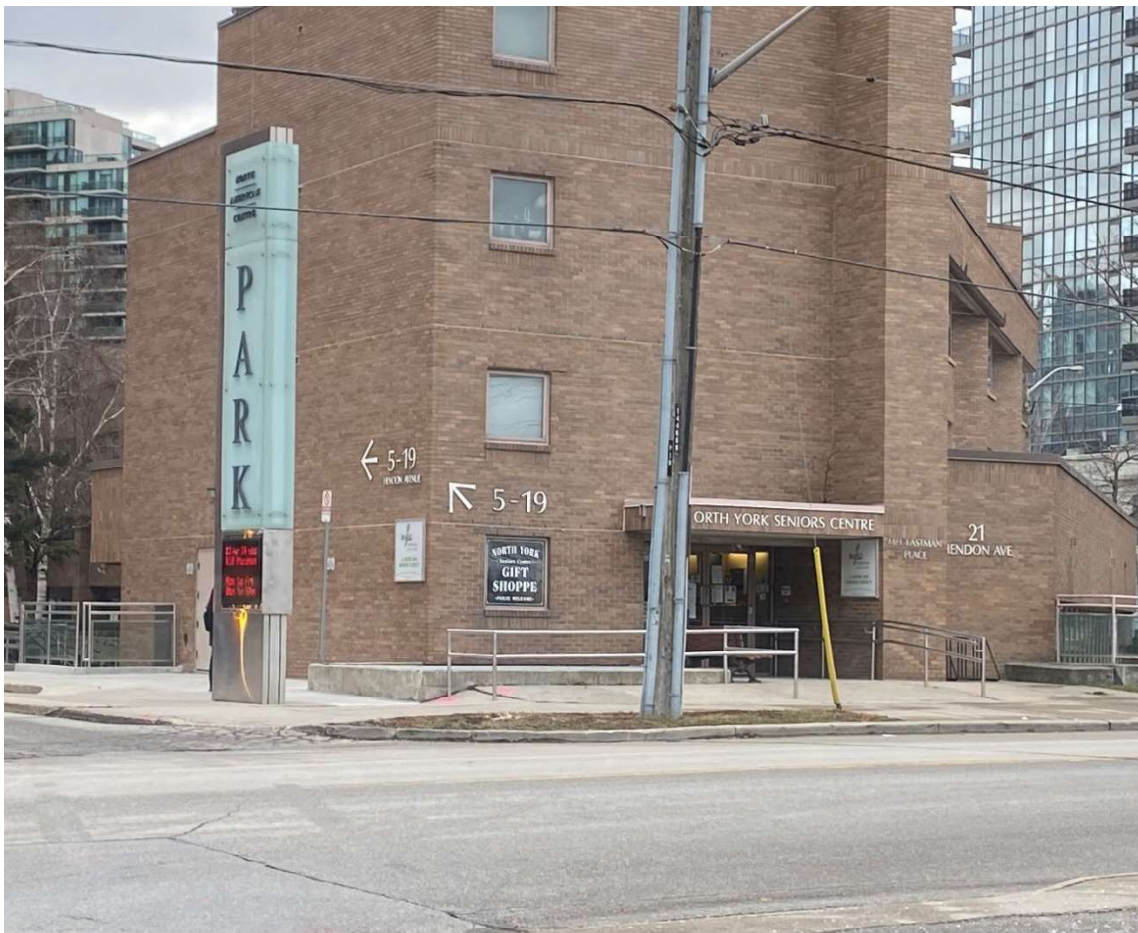


Figure A 3-8 View Facing South on Hendon Avenue, West of Yonge Street - *North York Seniors Centre*

A 3.10.2.5 Sensitive Facilities

A total of three (3) sensitive facilities are located within the segment, all of which are schools. There are no places of worship, childcare facilities, hospitals or long-term care facilities located in this segment.

A 3.10.3 Planned Land Use

A 3.10.3.1 Official Plan

According to the City of Toronto Official Plan, the section of Segment 1 between Finch Avenue and Steeles Avenue is designated 'Mixed-use Areas' along the Yonge Street corridor and 'Neighbourhoods' with some 'Parks' beyond Yonge Street. There is also a 'Utility Corridor', a Hydro One transmission line, running east-west just north of Finch Avenue. In order to provide consistency between the multiple municipalities mapped in **Appendix A**, land use designations are generalized (see **Table A 3-1** for an overview of generic land use designations). These designations are classified under the generic 'Mixed-use', 'Residential', 'Parks/Open Space', and 'Utilities/ Transportation' categories.

Under the York Region Official Plan, the section of this segment between Steeles Avenue and Clark Avenue is designated as an 'Urban Area' and Yonge Street is defined as a 'Regional Corridor'.

The City of Markham Official Plan designates the section of Segment 1 east of Yonge Street between Steeles Avenue and Clark Avenue 'mixed-use high rise'. The CN Railway Corridor, classified as 'transportation and utilities', crosses the segment south of Clark Avenue. These land uses are generically classified as 'Mixed-use' and 'Utilities/Transportation' in **Appendix A**. Under Section 9.18.8.3 of the Markham Official Plan (Chapter 9: Area and Site-Specific Policies), and the land use designations for the Yonge Steeles Corridor in the Amendment to the Thornhill Secondary Plan.

In the City of Vaughan Official Plan, the section of Segment 1 west of Yonge Street between Steeles Avenue and Clark Avenue is designated 'lands subject to secondary plans', in reference to the Yonge Steeles Corridor Secondary Plan shown in Schedule 14-A. The lands are generically classified as 'Mixed-use' in **Appendix A**, reflecting the land use policies and designations that are contained in the Secondary Plan.

A 3.10.3.2 Zoning

Under the City of Toronto Zoning By-law 569-2013, the portion of this segment between Finch Avenue West and Steeles Avenue West is zoned primarily 'Commercial Residential'. One notable exception is the Hydro One Transmission Line, zoned as a 'Utility and Transportation' corridor and extending to just north of Finch GO Station. Another exception is 'Residential Apartment' areas north of Drewry Avenue/ south of Connaught Avenue and north of Moore Park Avenue/ south of Centerpoint Mall on the west side of Yonge Street.

North of Steeles Avenue the Study Area is within York Region, with the City of Vaughan on the west side of Yonge Street, and the City of Markham on the east side of Yonge Street.

It should be noted that, at the time of writing this Existing Conditions Report, the City of Vaughan and the City of Markham were undertaking Comprehensive Zoning By-law reviews to produce new zoning by-laws that conform to Official Plan policies and guide land use and development. This section should be interpreted in the context of the in-effect zoning by-law at the time of study.

According to the City of Vaughan Zoning By-law 1-88, the land between Steeles Avenue and Clark Avenue west of Yonge Street is predominantly zoned 'Commercial', with the exception of the CN rail corridor zoned 'Transportation Industrial' and the land north of the CN tracks/ south of Clark Avenue West zoned 'Commercial Residential'.

According to the City of Markham Zoning By-law 2551, most of the land between Steeles Avenue and Clark Avenue are zoned 'Highway Commercial'. There are two areas zoned 'Community Amenity', one north of Woodward Avenue/ south of Grandview Avenue and another north of Meadowview Avenue/ south of the CN rail corridor. Additionally, the land north of Glen Cameron Road/ south of Morgan Avenue is zoned

‘Neighbourhood Commercial’ and north of Morgan Avenue/ south of Clark Avenue is zoned ‘Community Commercial’.

A 3.10.3.3 Secondary Plans and Future Developments

Nearby development applications in this segment of the Study Area as of April 2021 are as follows:

City of Toronto

- 127 Finch Avenue- proposal for three townhouse blocks containing a total of 17 common element condominium street townhouse units with internal private road and an underground garage.
- 100 Finch Avenue- proposal for a four-storey residential building with ground floor commercial uses and a one-level underground garage. Concurrent Official Plan Amendment, Rezoning and Site Plan Control applications.
- 50 Finch Avenue- proposal to construct a nine-storey mixed-use building with ground floor commercial uses and two levels of below grade parking.
- 57 Finch Avenue- Draft Plan of Condominium Application to establish stacked townhouses. A Rezoning Application, and Site Plan Approval Application have been approved for the proposed development.
- 40 Hendon Avenue- Official Plan Amendment proposing a four-storey multi-unit residential building consisting of two-storey townhouse units and apartment units. The Official Plan Amendment proposes to amend mapping of the North York Centre Secondary Plan that shows Hendon Avenue terminating into a cul-de-sac.
- 5799-5915 Yonge Street- Site plan approval application for the first phase of the Newtonbrook Plaza re-development, which includes two mixed-use towers of 34 and 32 storeys as well as a new community centres (Newtonbrook Community Recreation Centre). Construction is planned for 2022-2026.
- 5800 Yonge Street- Plan of Subdivision Approval application for four new residential and mixed-use buildings with heights ranging from 34- to 44-storeys and a new public park organized around a network of public streets and a system of pedestrian connections.
- 5995 to 5997 Yonge Street- Zoning By-law Amendment application for a 40-storey mixed-use building with non-residential.
- 51 Drewry Avenue- proposal for two towers of nine and 29-storeys and a five-storey podium containing townhouses and apartment units.
- 5959 Yonge Street- Site Plan application to permit a 40-storey high-rise mixed-use building.
- 6080 Yonge Street- Zoning by-law and Official Plan amendment for a 20-storey mixed-use building.
- 6150 Yonge Street- Site Plan Application for a mid-rise mixed-use building that comprises an entire block along Yonge Street between Pleasant Avenue and Goulding Avenue.

City of Vaughan

- 7028 Yonge Street and 2 Steeles Avenue West- proposed mixed-use development consisting of three towers of residential, hotel, and at grade retail.
- 100 Steeles Avenue West- proposed mixed-use development consisting of four mixed-use blocks and a north-south public street.

- 180 Steeles Avenue West- proposed mixed-use development consisting of six buildings with residential and ground floor retail uses, including two 16-storey buildings and four towers ranging from 25 to 45 storeys.
- 72 Steeles Avenue West- proposed mixed-use development consisting of three buildings with residential and ground floor retail uses. 7040 and 7054 Yonge Street are also included within this proposed development.
- 7080 Yonge Street- proposed mixed-use development consisting of two high-rise buildings, linked by a shared two-storey podium.
- 88 Steeles Avenue West- proposed redevelopment containing two mixed-use towers with heights of 40 and 52 storeys atop a shared seven-storey podium.

City of Markham

- 36 Steeles Avenue- Official Plan Amendment and Zoning by-law amendment applications for the development of two 13-storey mixed-use buildings and two eight-storey residential buildings.
- 7015 Yonge Street- proposed redevelopment of a current gas station into two mixed-use residential towers with heights of 65 and 52 storeys connected by a one-storey

The southern portion of this segment, between Finch Avenue and Drewry Avenue (west of Yonge Street)/ Cummer Avenue (east of Yonge Street) is located within the City of Toronto's North York Centre Secondary Plan Area, which contains site specific development and urban design policies to provide for the redevelopment of North York Centre and the protection and enhancement of adjacent neighbourhoods.

Section A 3.9.10.2 provides more information about the North York Centre Secondary Plan.

From Steeles Avenue to Clark Avenue, this segment is located within the Yonge Steeles Corridor Secondary Plan area (within the City of Vaughan) and the Yonge Steeles Corridor Study Area (within the City of Markham). Both Secondary Plans provide a development framework, land use policies, and design guidelines that promote intensification and encourage transit-oriented, mixed-use development. **Sections A 3.9.12.2** and **A 3.9.13.3** contain further details regarding the Yonge Steeles Corridor Secondary Plan.

A 3.11 Segment 2 – Clark Station to Portal/Launch Shaft

Appendix A, Figures 7 to 14 provide an overview of the infrastructure proposed within this segment of the Study Area.

This segment is entirely located within the community of Thornhill, which is separated between the City of Markham to the east of Yonge Street and the City of Vaughan to the west.

A 3.11.1 Socio-Economic Conditions

Refer to **Section A 3.10.1** for a description of Socio-Economic Conditions of the Thornhill community.

A 3.11.2 Existing Land Use

The land uses described in **Table A 3-4** are located within this segment and are mapped in **Appendix A**. The following sections characterize the existing uses by land use type within the Study Area.

Table A 3-4 Existing Land Uses – Segment 2: Clark Station to Portal/Launch Shaft

Land Use Type	Facility Name	Figure #
Institutional- School	Thornhill Public School	8
Institutional- School	Baythorn Public School	11
Institutional- School	St. Anthony Catholic School	12
Institutional- Place of Worship	Thornhill Baptist Church	10
Institutional- Cemetery	Thornhill Baptist Church Cemetery	10
Institutional- Cemetery	Holy Cross Catholic Cemetery & Funeral	13
Institutional- ChildCare Facility	Inventive Minds Kidz Academy	9
Institutional- Library	Thornhill Village Library	9
Recreation Area	The Thornhill Club	10
Recreation Area	Ladies' Golf Club of Toronto	10
Recreation Area	Thornhill Park Tennis Club	9
Park	Thornhill Park & Sports Fields	9
Park	Cricklewood Park	10
Park	Riverside Park	10
Park	Royal Orchard Park	12
Park	Romfield Park	13

A 3.11.2.1 Residential Uses

Between Clark Avenue and Royal Orchard Boulevard, along the Yonge Street corridor, this segment of the Study Area consists of low and mid-rise apartments and condominiums as well as single-detached homes, classified mainly as 'Residential Mid-Rise' in the City of Markham Official Plan and 'Low-Rise Mixed-use' in the City of Vaughan Official Plan. A concentration of mid-to-high density 'tower in the park' style apartments and condominiums are located near Royal Orchard Boulevard, surrounding the proposed Royal Orchard Station, including the Gazebo of Thornhill condominiums located north of Royal Orchard Boulevard and south of Bay Thorn Drive (see **Figure A 3-9**).



Figure A 3-9 View Facing East on Yonge Street, North of Royal Orchard Boulevard - *The Gazebo of Thornhill* Condominiums

Beyond the Yonge Street corridor and north of Royal Orchard Boulevard, this segment of the Study Area consists of low-density residential neighbourhoods. This includes the Langstaff Community located east of the proposed Royal Orchard Station, which is comprised of predominantly single-family homes.

A 3.11.2.2 Commercial and Industrial Uses

Commercial uses within this segment of the Study Area consist mainly of low-density commercial plazas, offering retail and grocery stores, restaurants, banks, and medical offices. Between John Street and Crickelwood Park/ the Thornhill Club, the Yonge Street corridor is lined with retail shops, restaurants and offices that make up the commercial core of the Markham/Vaughan Thornhill Heritage Conservation District (see **Figure A 3-10** and **Figure A 3-11**). The Royal Orchard Shopping Centre, located on the east side of Yonge Street at Royal Orchard Boulevard, provides retail and office space for over 15 commercial tenants. There are no industrial uses within this segment.



Figure A 3-10 View Facing West on Yonge Street, North of Old Jane Street - Commercial Uses Within the Markham/ Vaughan Thornhill Heritage Conservation District



Figure A 3-11 View Facing North-East on Yonge Street, North of Thornhill Summit Drive - Commercial Uses
Within the Markham/Vaughan Thornhill Heritage Conservation District

A 3.11.2.4 Institutional Uses

This segment contains a significant number of institutional uses, including three (3) schools, one (1) place of worship, two (2) cemeteries, one (1) childcare facility, and one (1) library, as shown in **Table A 3-4**. Thornhill Public School is located on the west side of Yonge Street and Arnold Avenue adjacent to the proposed alignment, while St. Anthony Catholic School, is located north of Banquo Road and south of Kirk Drive, directly above the proposed alignment.

Holy Cross Catholic Cemetery, which provides burial services, a funeral home, and related facilities, is located just southwest of the proposed portal footprint where the subway alignment comes to grade, extending east to the existing CN corridor. Both the Thornhill Baptist Church and its accompanying cemetery are located along the corridor, at Yonge Street and Royal Orchard Boulevard, slightly south of the proposed Royal Orchard Station (see **Figure A 3-12**). Inventive Minds Kidz Academy, an early childhood development and daycare centre, and the Thornhill Village Branch of the Markham Public Library System are located on the east side of Yonge Street, north of Colborne Street and south of Thornhill Summit Drive near where the proposed alignment traverses off Yonge Street and completely into the City of Markham. All other institutional uses in this segment are located beyond the proposed alignment.



Figure A 3-12 View Facing West on Yonge Street, Just North of Royal Orchard Boulevard -
Thornhill Baptist Church

A 3.11.2.5 Recreational Uses

There is a high concentration of parks, recreation areas, and open space along both sides of the proposed alignment within this segment. As outlined in **Table A 3-4**, this amounts to a total of three (4) parks and two (2) recreation areas within the Study Area. Cricklewood Park is located on the east side of Yonge Street, south of Royal Orchard Boulevard, while Romfield Park, is also located adjacent to the proposed alignment, slightly east of where the alignment begins running parallel to the existing CN corridor. A section of Royal Orchard Park is also contained within the Study Area, between Bay Thorn Drive and Thorny Brae Drive. Pedestrian trails meander along Pomona Creek and the East Don River valley.

The Thornhill Park Tennis Club, a privately owned tennis facility offering court bookings, programs and lessons, is located on the east end of Thornhill Park in close proximity to Yonge Street. The Thornhill Club, a

private golf course, is located on the west side Yonge Street, north of Mill Street and the East Don River. Finally, the Ladies' Golf Club of Toronto is located south of Crickwood Park on the east side of Yonge Street.

A 3.11.2.6 Sensitive Facilities

In summary, 8 (eight) sensitive facilities are located within the segment, including three (3) schools, one (1) place of worship, two (2) cemeteries, one (1) childcare facility, and one (1) library. There are no hospitals or long-term care facilities located in this segment.

A 3.11.3 Planned Land Use

A 3.11.3.1 Official Plan

The York Region Official Plan designates all land north of proposed Clark Station to the proposed portal/launch shaft as 'Urban Area' and defines Yonge Street as a 'Regional Corridor'.

According to the City of Markham Official Plan, various land use designations apply along this segment of Yonge Street. This includes 'Residential Mid Rise' areas immediately north of proposed Clark Station, transitioning into a 'Mixed-use Heritage Main Street' and a small 'Residential High Rise' strip north of John Street. These land uses are generically classified as 'Mixed-use' and 'Residential' in **Appendix A**. The Study Area then traverses east into the City of Markham at Royal Orchard Boulevard, passing through a 'Greenway', 'Private Open Space', and 'Residential Low Rise' areas. Towards the north end of the segment, the Study Area meets the CN Railway corridor designated 'Transportation and Utilities'. In **Appendix A**, these land uses are generalized as 'Parks/Open Space', 'Residential', and 'Utilities/Transportation'.

The City of Vaughan Official Plan also applies multiple designations to this segment along Yonge Street. North of proposed Clark Station and south of Centre Street, the land is primarily designated 'Low-Rise Mixed-use', interspersed with a 'Mid-Rise Mixed-use' section and two small 'Parks' areas. North of Centre Street, this segment of the Study Area includes 'Parks', 'Natural Areas', and 'Private Open Spaces' designations before it traverses east and outside the City of Vaughan. These uses are classified as 'Mixed-use' and 'Parks/Open Space' in **Appendix A**.

Segment 2 is also located within two Heritage Conservation Districts (HCDs), the Vaughan-Thornhill HCD and the Markham-Thornhill HCD. The boundaries of the HCDs are presented on Figures 8 -11 in **Appendix A**, and described in **Sections A 3.9.12.4 and A 3.9.13.6**.

A 3.11.3.2 Zoning

The section of this segment that runs along Yonge Street is split between the City of Markham to the east and the City of Vaughan to the west. North of Centre Street, this segment is located entirely in the City of Vaughan. It then crosses Yonge Street at Royal Orchard Boulevard and moves completely into the City of Markham, extending further east until it reaches the CN Railway corridor, where it moves north and slightly west.

It should be noted that, at the time of writing this Existing Conditions Report, the City of Vaughan and the City of Markham were undertaking Comprehensive Zoning By-law reviews to produce new zoning by-laws that conform to Official Plan policies and guide land use and development. This section should be interpreted in the context of the in-effect zoning by-law at the time of study.

The City of Markham Zoning By-law 2551 applies various zoning designations to the lands east of Yonge Street between the northern end of proposed Clark Station and Thornhill Summit Drive. These include 'Multiple Family Residential', 'Highway Commercial', 'Neighbourhood Commercial', and 'Community Commercial'. Extending northeast of Royal Orchard Boulevard, where this segment is situated fully within the

City of Markham, lands are designated 'Community Commercial', 'Multiple Family Residential', 'Single Family Residential', 'Open Space' (within the vicinity of Pomona Creek and Royal Orchard Park), and 'Special Uses' (at Holy Cross Catholic Cemetery).

West of Yonge Street, lands are zoned for various uses under the City of Vaughan Zoning By-law 1-88. Residential uses include 'Residential', 'Apartment Residential', and 'Old Village Residential'. Commercial uses include 'Highway Commercial' and 'Restricted Commercial'. North of Centre Street, lands are zoned 'Open Space Park' at Thornhill Park and 'Parkway Belt Open Space Zone' which encompasses the East Don River Valley and extends west to include the Thornhill Club.

A 3.11.3.3 Secondary Plans and Future Developments

Nearby development applications in this segment of the Study Area as of April 2021 are as follows:

City of Vaughan

- 7608 Yonge Street- condominium application for a residential apartment building.
- 46 Centre Street- proposal for a mixed-use development consisting of two low-rise buildings.
- 8136-8188 Yonge Street- zoning by-law amendment to permit a ten-storey mixed-use building.
- 8248 Yonge Street- proposed redevelopment for a three-storey retail/office commercial building.

City of Markham

- 14 John Street- proposal for a four-storey apartment building to the rear of the existing heritage dwelling.
- 7859 Yonge Street- Official Plan Amendment and Zoning by-law amendment to facilitate the development of a 12-storey residential building and a public park.
- 10 Royal Orchard Boulevard- Official Plan Amendment and Zoning by-law amendment for a redevelopment consisting of four residential buildings with heights ranging from 25-29 stories.
- 25, 11, 9, and 5 Langstaff Road East- Zoning by-law amendment and Draft Plan of Subdivision for two residential towers of 50 and 45 storeys connected by a ten-storey podium and four levels of underground parking.
- 14 Cedar Avenue- new recycling/ processing facility with an existing building in the southern half to be used for accessory space.

This segment of the Study Area is situated within the Langstaff Gateway Secondary Plan Area, which extends from the Holy Cross Catholic Cemetery north to Langstaff Road East (just beyond the northern limit of this segment) and from Yonge Street east to Bayview Avenue. This Secondary Plan aims to provide for integrated, compact development within the Langstaff Gateway Urban Growth Centre (also identified as a Regional Centre). **Section A 3.9.13.2** provides further detail regarding this Secondary Plan.

A 3.12 Segment 3 – Portal/Launch Shaft to Moonlight Lane

Appendix A, Figures 14 to 19 provide an overview of the infrastructure proposed within this segment of the Study Area.

This segment of the Study Area traverses three different neighbourhoods within Ward 6 of the City of Richmond Hill South Richvale, Langstaff, and Observatory (at the most northern point of the proposed alignment). The majority of this segment is located in the Langstaff neighbourhood. Ward 6 is bounded by Weldrick Road East and 16th Avenue to the north, Highway 404 to the east, Highway 7 to the south, and Yonge Street to the west.

A 3.12.1 Socio-Economic Conditions

In 2016, Ward 6 of the City of Richmond Hill had a population of 35,140, comprising 18% of the city's total population. The median age of residents was 43. Thirty-two (32%) of the residents lived in private single-detached homes, while 44% resided in units in high-density buildings greater than five storeys. Twenty-one (21%) of Ward 6 residents commuted to work within Richmond Hill, 29% commuted outside of Richmond Hill and within York Region, and 50% of residents commuted outside of York Region (Richmond Hill Demographics, 2016). Area residents use both personal vehicles and public transit services including GO train, VIVA BRT lines, GO bus routes, and local YRT bus routes, many of which converge at the Richmond Hill Centre Terminal.

A 3.12.2 Existing Land Use

The land uses described in **Table A 3-5** are located within this segment and are mapped in **Appendix A**. The following sections characterize the existing uses by land use type within the Study Area.

Table A 3-5 Existing Land Uses – Segment 3: Portal/Launch Shaft to Moonlight Lane

Land Use Type	Facility Name	Figure #
Park	Railway Parkette	17
Park	Grace Lawrence Parkette	17
Park	Junction Parkette	17
Park	Red Maple Parkette	17

A 3.12.2.1 Residential Uses

This segment contains primarily low-density residential neighbourhoods. West of the Study Area, along the Yonge Street corridor, are higher-density, mixed-use residential developments such as the Beverly Hills Condos within the Yonge and Carrville/ 16th Avenue Key Development Area (see **Figure A 3-13**). A number of new residential developments are under construction in this area, demonstrating evolving land uses in conjunction with the Key Development Area policy direction.

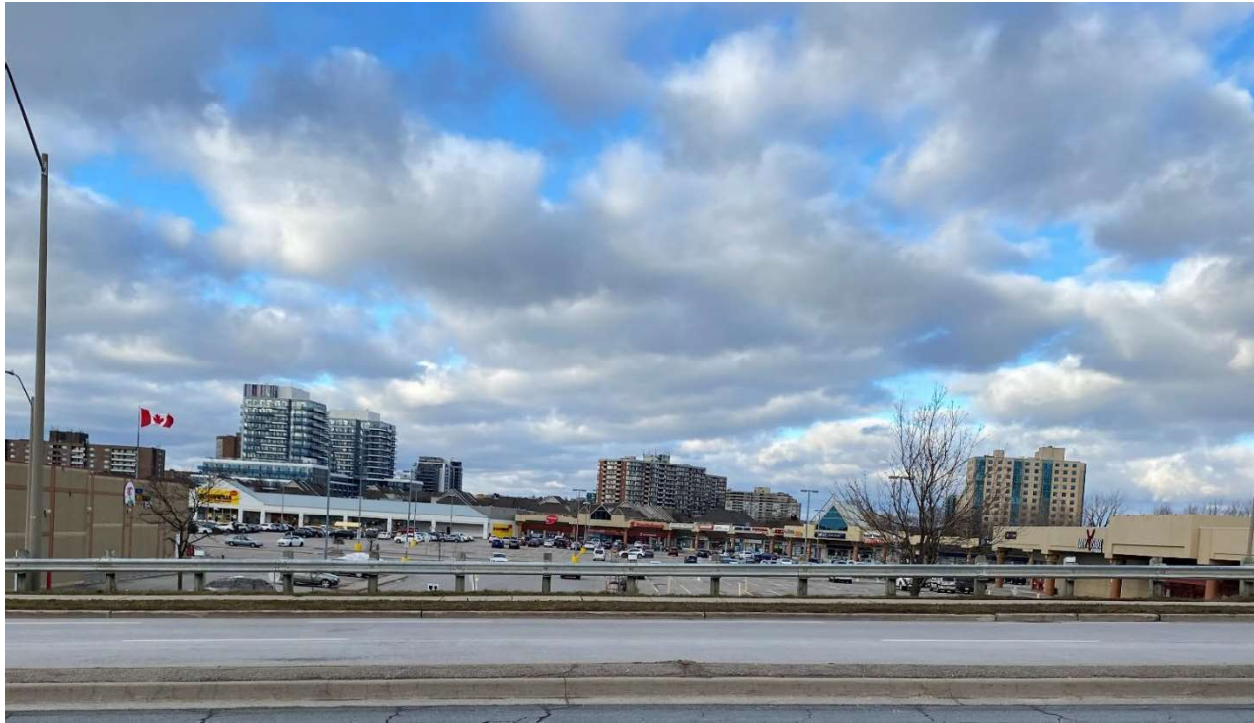


Figure A 3-13 View Facing North on Yonge Street at Carrville Road -
The Beverly Hills Condos Mixed-Use Development

A 3.12.2.2 Commercial and Industrial Uses

A series of commercial plazas are clustered between the Langstaff GO Station and Bantry Avenue on the east side of Yonge Street, near the proposed High Tech Station. These plazas contain retail stores, restaurants, medical and veterinary offices, and other employment uses, including the York Region Transit Office.

Hillcrest Mall, an enclosed shopping centre offering 135 retail stores, services, and restaurants, is located on the west side of Yonge Street at Carrville Road. South Hill Shopping Centre, another commercial plaza, is located on the east side of Yonge Street, adjacent to Hillcrest Mall and in closer proximity to the Study Area (see **Figure A 3-14**). This plaza consists of over 20 commercial tenants including retail stores, pharmacies, restaurants, a fitness centre, and other services.



**Figure A 3-14 View Facing East on Yonge Street North of Carrville Road -
*South Hill Shopping Centre Commercial Plaza***

North of the proposed Bridge Station and Highway 7, within the vicinity of the existing Langstaff GO Station and parking lot, this segment traverses a Hydro One transmission line (see **Figure A 3-15**).



Figure A 3-15 View Facing East from Langstaff GO Parking Lot - Hydro One Transmission Line

A 3.12.2.3 Institutional Uses

There are no institutional uses located within this segment of the Study Area.

A 3.12.2.4 Recreational Uses

A total of four (4) parks are located within this segment, as shown on **Table A 3-5**, all of which are small parkettes: Railway Parkette, Grace Lawrence Parkette, Junction Parkette, and Red Maple Parkette. The parkettes are located relatively close to one another and serve residential areas on either side of the CN railway corridor north of Bantry Avenue and south of 16th Avenue. A small woodlot, Heritage Woodlot, is also located at the southeast corner of Yonge Street and High Tech Road. German Mills Creek crosses the

proposed TSF alignment just north of 16th Avenue and south of Observatory Lane, surrounded by a municipally designated Natural Heritage System and pedestrian trails (see **Figure A 3-16**).



Figure A 3-16 View Facing South on Observatory Lane, East of Yonge Street and West of Nighstar Drive/ Marshall Street - German Mills Creek Natural Heritage System

A 3.12.2.5 Sensitive Facilities

No sensitive facilities are located within the segment.

A 3.12.3 Planned Land Use

A 3.12.3.1 Official Plan

Within the York Region Official Plan, this segment of the Study Area is designated as an 'Urban Area' and Yonge Street is defined as a Regional Corridor. Additionally, the Parkway Belt West Plan area surrounds the

Highway 7/Highway 407 ETR and a Regional Centre is located at the east corner of Yonge Street and Langstaff Road. **Section A 3.9.4** provides an overview of the provincial Parkway Belt West Plan, which provides protection for large-scale infrastructure corridors, among other uses.

The City of Richmond Hill Official Plan designates the land north of the proposed portal/launch shaft and surrounding Highway 7 as 'Parkway Belt West' and 'Utility Corridor', which are classified as 'Parkway Belt' and 'Utilities/Transportation' in **Appendix A**.

North of this, the 'Neighbourhood' designation primarily applies, with a few key exceptions. The Richmond Hill Centre Secondary Plan Area is designated 'Downtown Local Centre', extending into a 'Regional Mixed-use Corridor' along Yonge Street. Additionally, a 'Key Development Area' is designated at Yonge Street and Carrville Road/ 16th Avenue, located just west of the Study Area northern limit. These classifications are generalized as 'Residential', 'Mixed-use', and 'Intensification Area' in **Appendix A**.

A 3.12.3.2 Zoning

It should be noted that, at the time of writing this Existing Conditions Report, the City of Richmond Hill was undertaking a Comprehensive Zoning By-law review to produce a new zoning by-law that conforms to Official Plan policies and guides land use and development. This section should be interpreted in the context of the in-effect zoning by-law at the time of study.

According to the City of Richmond Hill Zoning By-law 111-17, the land extending from the northern end of the portal/launch shaft to Langstaff Road East is zoned as 'Rural Industrial'. North of this is a 'Utility Corridor', comprising Highway 7 and the Hydro One Transmission Line. Lands beyond this are zoned 'Special Commercial', extending north along the Study Area to Beresford Drive to the west/ Bantry Avenue to the east. Moving north towards 16th Avenue, lands are zoned 'Residential Multiple' and 'Rear Land Townhouse Dwelling', interspersed with lands zoned for 'Park' uses.

A 3.12.3.3 Secondary Plans and Future Developments

Nearby development applications in this segment of the Study Area as of April, 2021 are as follows:

City of Richmond Hill

- 8888 Yonge Street- Site Plan submission for a 15-storey mixed-use building.
- 10 Oneida Crescent- Official Plan Amendment and Zoning by-law amendment to facilitate the development of a high-density residential development comprised of four residential towers ranging from 18 to 30 storeys with an interconnected three-storey podium.
- 8700 and 8710 Yonge Street- re-application of Official Plan and Zoning By-law amendment applications to facilitate the construction of a 54-storey high rise, mixed-use development.
- 65 Oneida Crescent- Site Plan Approval and Draft Plan of Condominium to permit a 19-storey residential apartment building.
- 0 Oneida Crescent- Site Plan Approval, Official Plan Amendment and Zoning by-law amendment applications for nine street townhouse blocks and four residential towers ranging from 25-37 storeys, with a three-storey podium on each tower. The proposal also includes a free-standing, two-storey shared amenity building.
- 8868 Yonge Street- Site Plan Application, Official Plan Amendment, and Zoning by-law amendment applications and related Site Plan application to permit two 15-storey buildings with five- and seven-storey podiums, an 18-storey tower on a six-storey podium, a 13-storey tower on a four-storey podium, and a ten-storey retirement residence.

- 9201, 9205 & 9185 Yonge Street and 55 16th Avenue- Site Plan application to permit mixed-use, high density development consisting of four condominium towers between one and 24 storeys.
- 9251 Yonge Street- revised Official Plan Amendment and Zoning by-law amendment applications for high density, mixed-use developments of 38 and 43 storey towers.
- 9350 Yonge Street- Official Plan Amendment and Zoning by-law amendment applications for two apartment buildings 26 and 29 storeys in height on a shared seven-storey podium
- 243 16th Avenue- Zoning by-law amendment, Draft Plan of Subdivision, Draft Plan of Condominium and Site Plan applications for 13 common element condominium townhouse units.
- 265, 305 16th Avenue and 86, 92, 94, 98, 102 & 106 Duncan Road- Zoning by-law amendment and Draft Plan of Subdivision applications to facilitate the creation of 14 single detached dwellings and 20 semi-detached dwelling units.
- 9301, 9325, 9335 Yonge Street- Official Plan Amendment and Zoning by-law amendment applications to facilitate Phase 1 of a multi-phased site redevelopment, consisting of two high density mixed-use buildings of 42 and 45 storeys that are to be connected by a five-storey podium.
- 159, 169, 177, 181, and 189 Carrville Road- Zoning by-law amendment and Draft Plan of Subdivision Re-Applications for a medium density residential development comprised of 36 townhouse dwelling units.

There are two (2) Secondary Plans located within the vicinity of this segment, both currently under development. The Richmond Hill Centre Secondary Plan will outline a vision for the urban centre including policies to guide development of a residential and employment hub that is well-served by transit. The built form and draft policies for the Yonge and Carrville/16th Key Development Area Secondary Plan have been developed, but the Secondary Plan is still in progress. The Key Development Area contains Hillcrest Mall, a large commercial plaza, and residential uses. **Sections A 3.9.14.3** and **A 3.9.14.4** provide more information about these plans, respectively.

PART B - YNSE EPR ADDENDUM IMPACT ASSESSMENT REPORT

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APPENDICES

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B 1.0 Purpose

The purpose of this section is to document the socio-economic and land use impact assessment that was carried out as part of the Yonge North Subway Extension (YNSE) EPR Addendum, including identification of potential effects, and a description of proposed mitigation measures, and monitoring activities.

B 2.0 Methodology

The impact assessment process was based on the key steps described in the following subsections.

B 2.1 Impact Assessment Criteria

The following socio-economic and land use criteria was established for purposes of evaluating potential effects associated with the Project:

Socio-Economic Criteria

- Potential effects on sensitive facilities (i.e. hospitals, schools, community landmarks, child-care centres, cemeteries, and long-term care centres);
- Potential effects on pedestrian trails;
- Potential effects on parks/open spaces; and
- Potential nuisance effects (outlined in the Noise and Vibration Assessment and Air Quality Impact Assessment Reports)

Land Use Criteria

- Potential effects on existing land uses; and
- Potential effects on approved future/planned land uses.

Where infrastructure is proposed within City of Toronto's existing Higher Order Transit Corridor, no land use impacts have been identified as the use of the corridor is for public transportation (refer to **Section A 3.9.6** for further detail).

B 2.2 Methodology

The socio-economic and land use existing conditions information was used as the basis from which the potential effects (positive and negative) of constructing, operating and maintaining the Project were identified.

A four-step process was followed to assess potential impacts associated with the Project and to identify mitigation measures and monitoring activities (as required):

- Step 1 – Identify potential impacts resulting from the construction and operation of the Project;
- Step 2 – Establish mitigation measures to eliminate or reduce potential adverse effects, as well as monitoring activities to verify and validate that mitigation measures are functioning effectively;
- Step 3 – Carry out consultation with stakeholders/regulatory authorities; update impact assessment results and/or proposed mitigation and monitoring measures as appropriate; and

- Step 4 – Document impact assessment results.

For the purposes of differentiating the various types of potential environmental impacts associated with the Project, impacts were characterized and grouped as follows:

Table B 2-1 Characterization of Potential Impacts

Construction Impacts	<ul style="list-style-type: none"> • Potential temporary effects (e.g., disruption/disturbance) on existing Study Area features or receptors due to construction activities associated with the Project (e.g., construction of new tracks, tunnelling, storage facility, bridge modifications, etc.).
Operations and Maintenance Impacts	<ul style="list-style-type: none"> • Potential permanent effects on existing Study Area features (i.e., displacement or removal) or receptors due to operations and/or maintenance activities associated with the Project (e.g., operation of the new subway system/trains, operation of train storage facility, etc.).

B 3.0 Impact Assessment

The following section provides a detailed description of project components/activities, potential socio-economic and land use effects, and commitments to mitigation measures, monitoring and future work. This section of the report has been organized by project component for reporting purposes.

B 3.1 Overview of Provincial and Municipal Planning Documents

With its location in the Province of Ontario, the proposed YNSE Project should be screened for consistency with provincial, regional, and local plans and policy documents. As detailed in **Section A 3.9**, the *Planning Act* (1990) sets out the provincial land use planning framework and directs municipalities to prepare Official Plans to implement provincial policies.

Table B 3-1 provides a summary of the Project's potential impacts as they relate to applicable policy documents, which was determined through the Impact Assessment process. A description of the land use review for each segment of the Project is further detailed in Sections **B 3.2** to **B 3.4**.

Table B 3-1 Summary of Policy Documents

Provincial/ Regional/ Local	Document	Description of Project Impacts
Provincial	Provincial Policy Statement	<ul style="list-style-type: none"> • The Project will develop transit infrastructure facilities to help meet current and projected needs • The Project will provide for a cost-effective transportation system (updates to proposed alignment and number of stations since 2009 EPR and 2014 EPR Addendum allow for cost-savings) • The Project will integrate adjacent transportation systems including TTC, YRT/VIVA, local bus service, and GO bus and train service

Provincial/ Regional/ Local	Document	Description of Project Impacts
	Growth Plan for the Greater Golden Horseshoe	<ul style="list-style-type: none"> Enhancement of transit service in North York UGC and Richmond Hill Centre/ Langstaff Gateway UGC will support the achievement of minimum density targets Higher order transit development along a Priority Transit Corridor/ MTSA (Yonge Street north of Finch Station) will support the achievement of minimum density targets
	Greenbelt Plan	<ul style="list-style-type: none"> No at grade infrastructure is proposed within the Greenbelt Plan Urban River Valley area As proposed infrastructure in the vicinity of the East Don River is below grade, the potential for impacts is negligible. Proposed below grade infrastructure is subject to approval under the <i>Environmental Assessment Act</i> and will support goals and objectives of the Plan
	Parkway Belt West Plan (PBWP)	<ul style="list-style-type: none"> Proposed project components are consistent with designation of lands along Highway 407 ETR as an infrastructure corridor
	2041 Regional Transportation Plan	<ul style="list-style-type: none"> The Project is consistent with the identification of the YNSE as a key rapid transit project to meet the needs of the region in the near term
City of Toronto	Official Plan	<ul style="list-style-type: none"> The Project will result in the creation of a dedicated transit corridor along Yonge Street north of Finch Station to facilitate development of Yonge Street as an 'Avenue', and is therefore consistent with the urban structure and policies of the Official Plan
	North York Centre Secondary Plan	<ul style="list-style-type: none"> The Project will enhance transit services to support transit-based employment and residential growth, both of which are key objectives of the Secondary Plan as per Section 1.1
	Yonge Street North Planning Study	<ul style="list-style-type: none"> The planned YNSE will inform the study findings and Secondary Plan
	Yonge Street North Transportation Master Plan	<ul style="list-style-type: none"> The planned YNSE will support complete communities within the area and inform the Transportation Master Plan
Region of York	Official Plan	<ul style="list-style-type: none"> The Project will integrate existing and new transit services across the Region through coordination and planning with local municipalities, TTC, the Province, Metrolinx and adjacent municipalities- as per Section 7.2.36 of the Official Plan The Project will allow for the completion of the transit network, as per Map 11 in the Official Plan, which includes the YNSE

Provincial/ Regional/ Local	Document	Description of Project Impacts
	York Region Transportation Master Plan	<ul style="list-style-type: none"> Execution of the subway extension is a key project within the proposed 2041 Transit Network that will increase connectivity between York Region and the rest of the GTHA
City of Vaughan	Official Plan	<ul style="list-style-type: none"> The Project will promote intensification around the Primary Centre at Yonge Street and Steeles Avenue and along the Yonge Street Regional Intensification Corridor, as identified in Schedule 1 (Urban Structure) of the Official Plan The Project will provide for public transit that supports higher development densities within Local Centres north and south of Centre Street, as per Section 2.2.5.7 of the Official Plan Proposed development within the Parks/Open Space designation will be well-integrated, protect existing natural heritage features and open space linkages, and incorporate public amenities, as per Section 7.3 of the Official Plan
	Yonge Steeles Corridor Secondary Plan	<ul style="list-style-type: none"> The Project supports policies which classify the extension of the Yonge Subway or another higher order transit service along Yonge Street as a key transportation infrastructure investment required to permit the full buildout of the Secondary Plan area (including Sections 1.0, 5.1, and 8.6)
	Vaughan Transportation Master Plan	<ul style="list-style-type: none"> The Project is consistent with the Plan's 'Transit First' approach which identifies YNSE as a planned transit network improvement
	Vaughan Thornhill Heritage Conservation District	<ul style="list-style-type: none"> The Project will promote the development of the area into a vibrant mixed-use area that complements the surrounding heritage character Proposed at grade infrastructure in the Heritage Conservation District (HCD) will be minimal, consisting of at grade ancillary features associated with TPSS-4 and EEB-4, and will be designed to be well-integrated with existing land uses to maintain neighbourhood character
City of Markham	Official Plan	<ul style="list-style-type: none"> The following Official Plan (OP) policies are met through the implementation of the Project: Section 7.1.7.6 - extension of the Yonge Subway line to serve the development of Langstaff Gateway Regional Centre Section 9.18.8.1 - integrates mixed-use development with transit-supportive densities within the Yonge Steeles Corridor Intensification within the Yonge Steeles and Yonge North Regional Corridors/ Key Development Areas as per Map 1 (Markham Structure)

Provincial/ Regional/ Local	Document	Description of Project Impacts
		<ul style="list-style-type: none"> Section 8.6.1.2- Any infrastructure proposed within the Greenway will receive approval under the <i>Environmental Assessment Act</i>
	Langstaff Gateway Secondary Plan	<ul style="list-style-type: none"> Proposed at grade infrastructure in this area, including the portal structure and Bridge Station, will be integrated with existing and planned land use As per Section 3.16.2, development phasing will be coordinated with the provision and availability of infrastructure and transit, which includes development of infrastructure proposed as part of the YNSE The Project will support a concentration of density and mix of uses within a reasonable walk to higher order transit – Section 3.16.3 of the Secondary Plan
	Yonge Steeles Corridor Study – Secondary Plan Amendment	<ul style="list-style-type: none"> Consistent with policies established for the Yonge Steeles Redevelopment Area and Secondary Plan Amendment, including accommodating growth through well-served, mixed use compact forms
	City of Markham Cycling Master Plan	<ul style="list-style-type: none"> The Project will provide for the integration of the existing cycling network with the proposed infrastructure to ensure connection with transit nodes
	City of Markham Pedestrian and Trails Master Plan	<ul style="list-style-type: none"> The Project will provide for the integration of the existing trail system with proposed infrastructure, and will provide increased transit connectivity among neighbourhoods and destinations in Markham
	Markham Thornhill Heritage Conservation District	<ul style="list-style-type: none"> The Project will promote the development of the area into a mixed-use area and transit-supportive streetscape that complements the historic character of the area Proposed at grade infrastructure in the HCD will be minimal, and will be designed to be well-integrated with existing land uses in order to maintain neighbourhood character
City of Richmond Hill	Official Plan	<ul style="list-style-type: none"> Intensification within Richmond Hill Centre will help achieve target ratios for population and employment growth Transit development in Regional Corridors will support key connections between York Region across the GTA The Project will support redevelopment and enhancement of transit services within Key Development Areas Any infrastructure proposed within the Greenway System will be within the existing CN corridor

Provincial/ Regional/ Local	Document	Description of Project Impacts
	Richmond Hill Centre Secondary Plan (in progress)	<ul style="list-style-type: none">The planned YNSE will be incorporated into the Secondary Plan and help inform the vision of Richmond Hill Centre as a transportation, residential and employment hub
	Yonge and Carrville/16 th Key Development Area Secondary Plan (in progress)	<ul style="list-style-type: none">The planned YNSE will inform the Secondary Plan and preferred land use scenario for future development
	Richmond Hill Transportation Master Plan	<ul style="list-style-type: none">The Project is consistent with policies to provide accessible transit along Yonge Street and support transit upgrades within the Richmond Hill Centre and Langstaff Gateway areasThe planned YNSE will inform the current study to update the Plan and future vision to the year 2041

B 3.2 Segment 1 – Finch Station to Clark Station

Figures 1 to 7 in **Appendix A** provide an overview of the infrastructure proposed in this segment.

B 3.2.1 Finch Station, Transition Box, Extraction Shaft and EEB-1

The existing Finch Station is a below grade station located at the intersection of Finch Avenue and Yonge Street in the City of Toronto. This station represents the current terminus of the TTC subway Line 1, and infrastructure at this site will be modified to prepare for extension of the alignment- including electrical and mechanical modifications, upgrades to trackwork, and construction of a below grade duct bank (extending west along Hendon Avenue) by others. The following subsections provide a description of impacts related to the proposed transition box structure and temporary extraction shaft at the north end of the Finch Station tail tracks.

Figures 1-2 in **Appendix A** provide an overview of the infrastructure proposed in the vicinity of this station.

B 3.2.1.1 Operations & Maintenance Impacts

B 3.2.1.1.1 Socio-Economic

There are two (2) parks located in the vicinity of the existing Finch Station. Olive Square is immediately adjacent to the southeast end of the station, while Finch Parkette is located further north and east. West of the station are two (2) sensitive facilities: North York Seniors Centre, which provides social and recreational opportunities for seniors, and Anderson College, a private educational institution. The proposed infrastructure will operate primarily below grade will not be located on parkland or interface with sensitive facilities.

Maintenance of the proposed transition box structure may occur when necessary; however, these activities are short-term in nature and pose no long-term visual, noise/vibration, or traffic disturbances to sensitive facilities or recreational amenities. It should also be noted that any related operations and maintenance will occur below grade within the tail track.

The proposed extraction shaft is a temporary Project component and will be removed once tunnelling is complete; therefore, there will be no impacts related to operations & maintenance of the extraction shaft.

EEB-1 is located between the existing Finch Station and the potential Cummer Station in the vicinity of the proposed transition box structure and extraction shaft.

B 3.2.1.1.2 Land Use

The site of the existing Finch Station and proposed infrastructure is located in the City of Toronto's Higher Order Transit Corridor (as per Map 4 of the City of Toronto's Official Plan) in an area designated as mixed-use, with the exception of the Finch Hydro Corridor, which runs through the existing station area and is designated as a utility corridor. The area is surrounded by office employment, multi-unit residential buildings, and two bus terminals on the east side of Yonge Street, including the TTC Finch Terminal on the south side of Bishop Avenue and the YRT/VIVA and GO Bus Terminal on the north side of Bishop Avenue. The mixed-use designation is intended to provide residents with access to a broad range of uses and amenities that promote the use of nearby transit services, while the utility corridor designation provides for the transmission of energy, communication and the movement of people and goods and is intended to provide protection for public transit routes, as per Chapter 5, Sections 4.4 and 4.5 of the City of Toronto's Official Plan. Furthermore, a large residential project is currently under development on the east side of Yonge Street and anticipated to be completed in 2023, adjacent to the northeast end of the proposed transition box and extraction shaft and just southeast of the proposed Cummer Station.

The existing and proposed infrastructure are located within the provincially designated North York Centre Urban Growth Centre, as per the Growth Plan (2019). Urban Growth Centres are planned focal areas for regional service facilities, intended to serve as high density employment areas that are supported by an inter-regional transit network. Within the City of Toronto, Urban Growth Centres are planned to achieve a minimum density target of 400 residents and jobs combined per hectare by 2031. This area is also within the City of Toronto's North York Centre Secondary Plan Area, which contains area specific development policies to promote transit-based employment and residential growth. Since the site of Finch Station is currently an operating subway station within the Higher Order Transit Corridor, and is located within an Urban Growth Centre, the operations of the proposed infrastructure are anticipated to have no adverse impacts on current land uses.

It is recognized that land use over time changes as communities evolve; however, all land use is regulated through the Municipal Official Plans. As such, the operation and maintenance of Finch Station and Transition Box is anticipated to be compatible with future development of surrounding land uses.

B 3.2.1.2 Construction Impacts

B 3.2.1.2.1 Socio-Economic

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects along Yonge Street and Hendon Avenue (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and that staging options will be developed to minimize potential effects on local access and travel patterns to the extent possible. These effects are anticipated to cease once construction has finished.

B 3.2.1.2.2 Land Use

Please refer to **Section B 3.2.1.1.2** above for a discussion of potential land use impacts.

B 3.2.2 Cummer Station, Bus Loop, TPSS-1, and EEB-2

The proposed Cummer Station is a below grade station located at the intersection of Cummer Avenue/Drewry Avenue and Yonge Street in the City of Toronto. A TPSS building (TPSS-1) is proposed in this area and an off-street bus loop west of the station, serving only buses and bus operators. The proposed EEB-2 is located beyond Cummer Station and along the proposed alignment between Cummer and Steeles Station.

Figures 3-4 in **Appendix A** provide an overview of the proposed infrastructure.

B 3.2.2.1 Operations & Maintenance Impacts

B 3.2.2.1.1 Socio-Economic

There is one (1) park (Centre Park) located north of the proposed station and southeast of EEB-2. Additionally, there are two (2) sensitive facilities: Unionville Academy, a private secondary school located between the proposed station and the proposed off-street bus loop, and Drewry Secondary School, a specialized vocational public secondary school located west of the bus loop.

Area residents may experience visual impacts associated with the Cummer Station, bus loop, TPSS-1 and EEB-2. A Design Excellence process will be followed during detailed design to integrate new infrastructure into the existing environment and reduce the extent of visual impacts, where possible. This may be accomplished through visual screening measures such as fencing, selection of appropriate design, vegetative buffers/landscaping or the use of locally sourced building materials which are compatible with the characteristics of the surrounding environment.

In residential areas in the vicinity of the proposed infrastructure, there is the potential for nuisance effects. Maintenance of the road network surrounding Cummer Station and bus loop, as well as the stairwells, elevators, and structures associated with the station, bus loop, TPSS-1, and EEB-2 may occur when necessary. These activities are short-term in nature and pose no long-term disturbances to sensitive facilities or recreational amenities. It should also be noted that the majority of station operations and maintenance will occur below grade and have minimal impacts at grade. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.2.2.1.2 Land Use

Land Use Designation

Cummer Station, TPSS-1, and EEB-2 are currently located in an area designated as mixed-use, while the proposed bus loop is located on a site designated as Neighbourhoods in the City of Toronto's Official Plan. The area is surrounded by multi-unit residential buildings and commercial plazas, with single and semi-detached homes beyond Yonge Street near the bus loop.

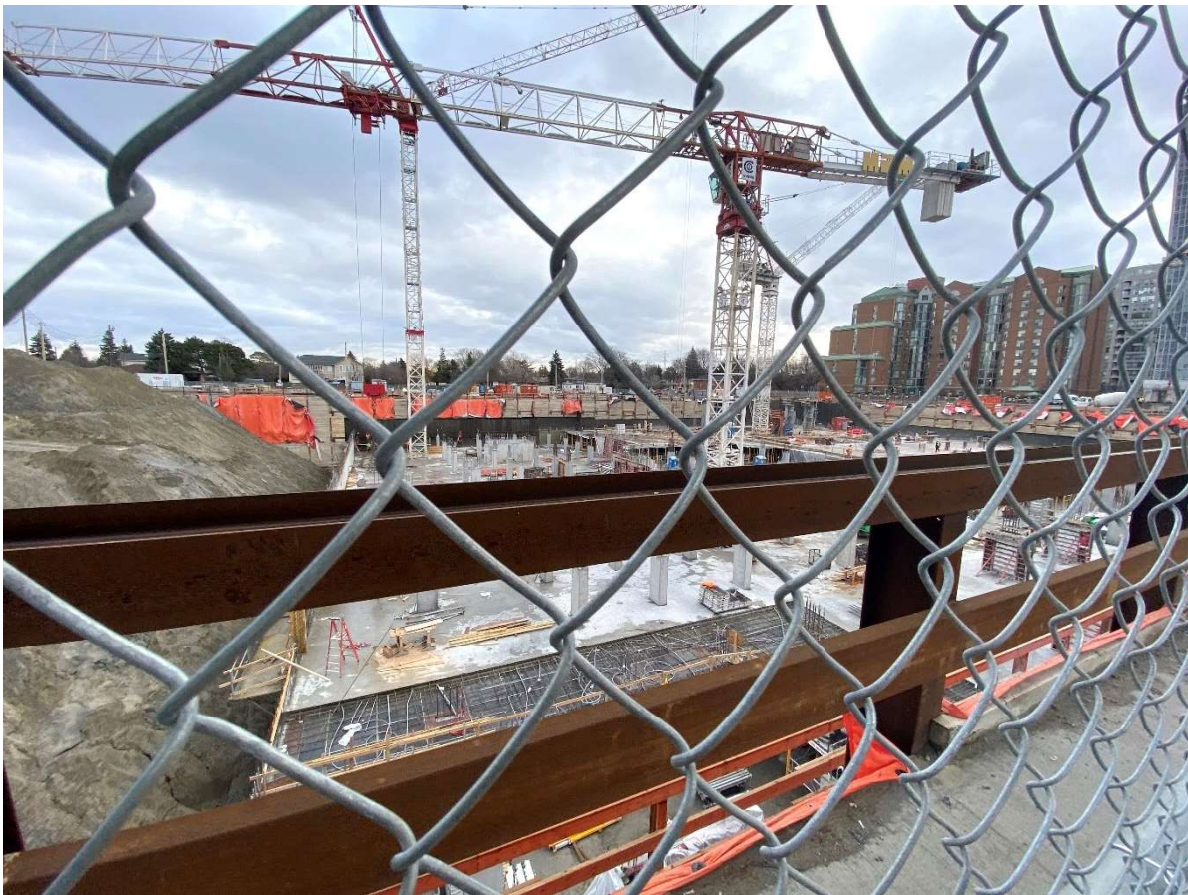
According to Chapter 5, Section 4.5 of the City of Toronto's Official Plan, the mixed-use designation is intended to provide residents with access to a broad range of uses including commercial, residential, institutional, open space and utilities, and promotes the development of nearby transit services. Additionally, this section of Yonge Street is designated as a Higher Order Transit Corridor (as per Map 4 of the City of Toronto's Official Plan). Chapter 5, Section 4.1 of the City of Toronto's Official Plan notes that uses such as public transit facilities, utility and telecommunications installations, and public services and facilities are permitted in Neighbourhoods.

Policy Area

The southern end of the proposed station (designated as mixed-use, as outlined above) is situated within the provincially designated North York Centre Urban Growth Centre, as per the Growth Plan (2019). Urban Growth Centres are planned local areas for regional service facilities, intended to serve as a high-density employment area that is supported by an inter-regional transit network. Within the City of Toronto, Urban Growth Centres are planned to achieve a minimum density target of 400 residents and jobs combined per hectare by 2031. The proposed Cummer Station, TPSS-1 and EEB-2 are expected to support the achievement of the minimum density target by enhancing the inter-regional transit network. It also falls within the City of Toronto's North York Centre Secondary Plan Area, which extends north to Cummer/Drewry Avenue and contains area specific development policies to promote transit-based employment and residential growth.

At the southeast quadrant of Yonge Street and Cummer Avenue, a large residential project is currently under development, located directly adjacent to the southern end of the station and south of TPSS-1 (see **Figure B 3-1**).

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of Cummer Station and bus loop, TPSS-1 and EEB-2 is anticipated to be compatible with future development of surrounding land uses.



**Figure B 3-1 View Facing East on Yonge Street, South of Cummer Avenue -
Mixed-Use Development Under Construction**

B 3.2.2.2 Construction Impacts**B 3.2.2.2.1 Socio-Economic**

Access to businesses and existing uses along Yonge Street and Cummer Avenue/ Drewry Avenue (including Drewry Secondary School and Unionville Academy, located on either side of the proposed bus loop) may be impacted during construction. Metrolinx will provide well-connected walkways, clearly marked detours, and alternative access and signage where required.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that the local community is aware of construction scheduling and staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.2.2.2.2 Land Use

Please refer to Section **B 3.2.2.1.2** above for a discussion of potential land use impacts.

B 3.2.3 Steeles Station, Bus Terminal, TPSS-2, and EEB-3

The proposed Steeles Station is a below grade station located at the intersection of Steeles Avenue and Yonge Street. This intersection represents the northern boundary of the City of Toronto and the southern boundary of the City of Vaughan (west of Yonge Street) and the City of Markham (east of Yonge Street). An at grade bus terminal is proposed at the southwest quadrant of Yonge St and Steeles Ave. EEB-3 is generally located beyond the station and along the proposed alignment between Steeles Station and Clark Station.

Figures 5-6 in **Appendix A** provide an overview of the proposed infrastructure.

B 3.2.3.1 Operations & Maintenance Impacts

B 3.2.3.1.1 Socio-Economic

There are no sensitive facilities located in the vicinity of the proposed infrastructure, however there is a park located northeast of the proposed station and north of EEB-3 (Sir Robert Watson-Watt Park) and Benjamin Thorne Park Parkette.

The bus terminal will be designed to provide a functional layout that supports existing uses while minimizing overall dimensions. All modified intersections and platform designs will meet current municipal and provincial accessibility standards including, but not limited to, implementation of standard details for drop curbs with tactile walking surfaces.



**Figure B 3-2 View Facing Southwest from the Intersection of Yonge Street
and Steeles Avenue - Centerpoint Mall**

Maintenance of the road network surrounding Steeles Station and bus terminal, the stairwells, elevators, and structures associated with the station, bus terminal, TPSS-2, and EEB-3 may occur when necessary; however, these activities are short-term in nature and pose no long-term visual disturbances to sensitive facilities or recreational amenities. It should also be noted that the majority of station operations and maintenance will occur below grade and have minimal impacts at grade. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.2.3.1.2 Land Use

Land Use Designation

The proposed infrastructure (including Steeles Station and bus terminal, TPSS-2, and EEB-3) is located at the intersection of Yonge Street and Steeles Avenue in an area designated as mixed-use and encompasses the City of Toronto (south of and including Steeles Avenue), the City of Vaughan (north of Steeles Avenue and west of Yonge Street), and the City of Markham (north of Steeles Avenue and east of Yonge Street). Transit facilities are permitted under mixed-use land designations according to all three municipal Official Plans. The bus terminal and TPSS-2 are located in the City of Toronto, while EEB-3 is in the City of Markham. The

proposed station, bus terminal, TPSS-2 and EEB-3 are surrounded by commercial plazas and medium to high density residential buildings.

Policy Area

This area is guided by two separate secondary plans. The City of Vaughan's Yonge Steeles Corridor Secondary Plan, shown in **Figure B 3-3** below, contains policies and design guidelines to integrate transit and land uses in anticipation of the extension of the Yonge subway or another rapid transit service in this municipally designated Primary Centre.

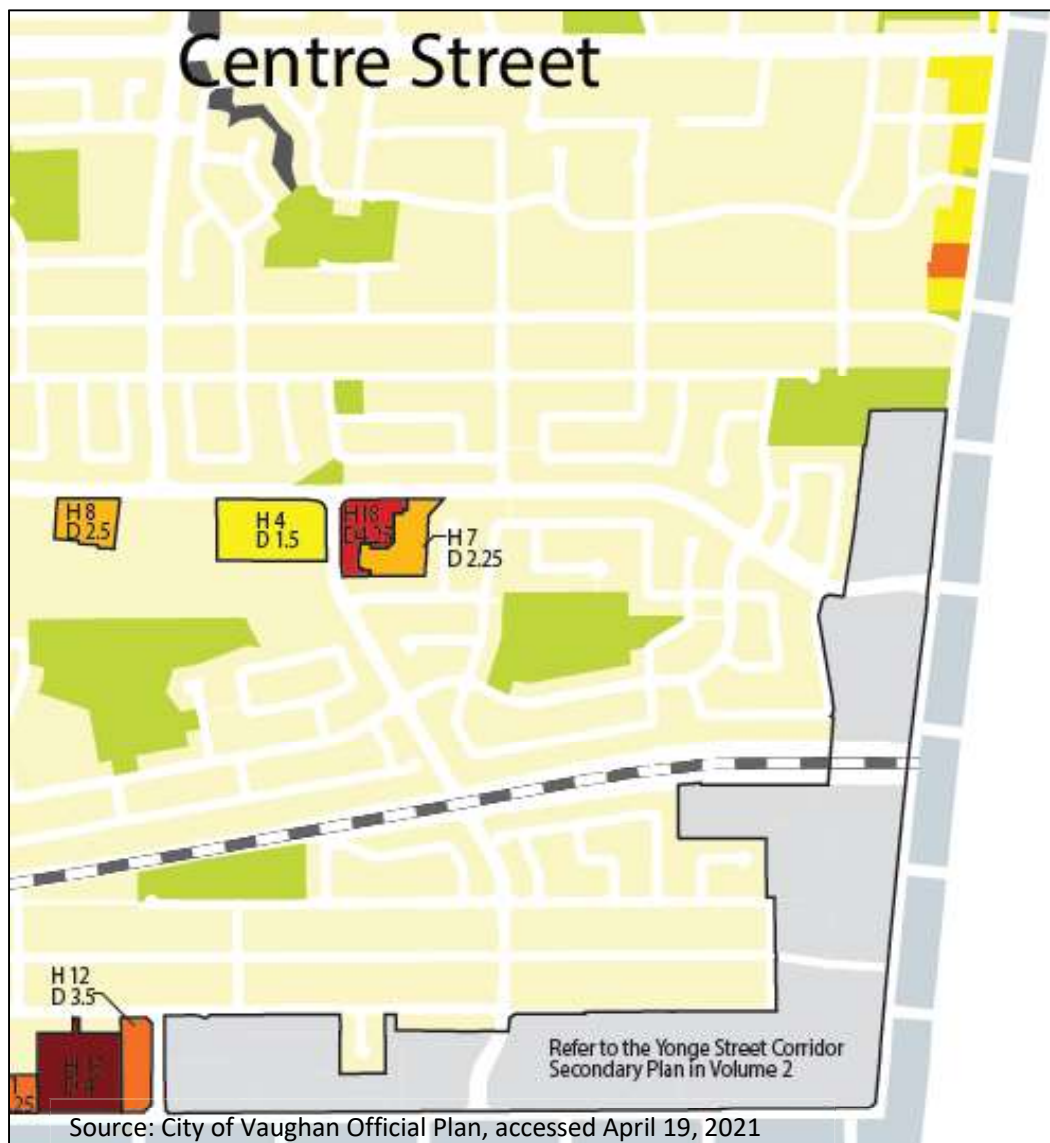


Figure B 3-3 Excerpt from the City of Vaughan's Official Plan Schedule 13

The City of Markham's Yonge Steeles Corridor Study and resulting Secondary Plan Amendment, as shown in **Figure B 3-4**, establishes policies for the Yonge Steeles Redevelopment Area, which includes the lands at the north-east quadrant of Yonge Street and Steeles Avenue. It encourages mixed-use, compact development to

support growth in this municipally designated Regional Corridor and Gateway Hub (see **Figure A 3-2** Municipal Urban Structure Map).



Figure B 3-4 Excerpt from the City of Markham's Official Plan Map 3

Significant mixed-use development activity is anticipated at the northwest quadrant of this intersection, as described in **Section A 3.10.3.3**, which, in conjunction with enhanced transit service through the YNSE, will further support the objectives of the Yonge Steeles Corridor secondary plans. The proposed infrastructure will promote intensification within a Regional Corridor, Key Development Area, and Primary Centre, as recognized in the City of Vaughan and City of Markham's Official Plans (see **Figure A 3-2** Municipal Urban Structure Map) and is consistent with municipal land use policies. Therefore, activities associated with operations of the proposed infrastructure are compatible with existing land uses.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of Steeles Station and bus terminal, TPSS-2 and EEB-3 is anticipated to be compatible with future development of surrounding land uses.

B 3.2.3.2 Construction Impacts

B 3.2.3.2.1 Socio-Economic

Access to a section of the Centerpoint Mall parking lot and pedestrian access to the northeast quadrant of the Yonge Street and Steeles Avenue intersection is likely to be impacted during construction, however signage and clearly marked detours will be provided where required.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that the local community and businesses are aware of construction scheduling and staging options that will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.2.3.2.2 Land Use

Please refer to **Section B 3.2.3.1.2** above for a discussion of potential land use impacts.

B 3.2.4 Clark Station, Bus Terminal, and TPSS-3

The proposed Clark Station is a below grade station located at the intersection of Clark Avenue and Yonge Street, with a TPSS (TPSS-3) and a bus terminal in the same area.

Figure 7 in **Appendix A** provides an overview of the proposed infrastructure.

B 3.2.4.1 Operations & Maintenance Impacts

B 3.2.4.1.1 Socio-Economic

There are no parks or sensitive facilities located within 250 m of the proposed station, bus terminal and TPSS.

Maintenance of the road network surrounding Clark Station, stairwells, elevators, and structures associated with the station and TPSS-3 may occur when necessary; however, these activities are short-term in nature and pose no long-term visual disturbances to sensitive facilities or recreational amenities. It should also be noted that the majority of station operations and maintenance will occur below grade and have minimal impacts at grade. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.2.4.1.2 Land Use

Land Use Designation

The proposed Clark Station, bus terminal and TPSS-3 will be operating within the City of Vaughan to the west of Yonge Street and the City of Markham to the east. Both the City of Vaughan and the City of Markham designate this area as mixed-use, a designation which encourages a variety of land uses and the permitted land uses include transit facilities in the Official Plans of both municipalities. It is surrounded by low-rise commercial plazas and medium to high density residential buildings.

Policy Area

The subject site is situated within the northern portion of the Yonge Steeles Corridor secondary plan jurisdiction. **Section B 3.2.3.1.2** above provides an overview of the policy objectives of the City of Vaughan and the City of Markham's Yonge Steeles Corridor secondary plans and corresponding studies.

The proposed infrastructure is anticipated to have no adverse impacts on current land uses, and will contribute to municipal policy objectives by integrating transit and surrounding land uses and promoting intensification within a Regional Corridor, Key Development Area, and Primary Centre, as recognized in the City of Vaughan and City of Markham's Official Plans (see **Figure A 3-2** Municipal Urban Structure Map).

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of Clark Station and TPSS-3 is anticipated to be compatible with surrounding land uses.

B 3.2.4.2 Construction Impacts

B 3.2.4.2.1 Socio-Economic

Pedestrian access in close proximity to the Clark Avenue/ Yonge Street intersection and future project construction activities in this area may be impacted during construction due to the proposed construction activities here, however signage and clearly marked detours will be provided where required.

A cycling route traverses Clark Avenue and passes through the proposed station area, which may result in impacts to cycling route connectivity, particularly in relation to the above-grade station components construction. To address this, Metrolinx will provide well connected, clearly delineated, and appropriately

signed walkways and cycling route options, with clearly marked detours where required. Additionally, at locations where construction vehicles are present, flagging will be implemented to ensure construction vehicle operators are aware of crossing cyclists and pedestrians.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.2.4.2.2 **Land Use**

Please refer to **Section B 3.2.4.1.2** above for a discussion of potential land use impacts.

B 3.3 Segment 2 – Clark Station to Portal/Launch Shaft

Figures 7-14 in **Appendix A** provide an overview of the infrastructure proposed in this segment.

B 3.3.1 TPSS-4 and EEB-4

Clark Station was described within Segment 2; however, ancillary facilities related to Clark Station are also located within Segment 2, north of Clark Station. The proposed EEB-4 will be integrated with TPSS-4, located on the southwest corner of Yonge Street and Old Jane Street in the City of Vaughan. These ancillary facilities are proposed north of the proposed Clark Station and south of Royal Orchard Station.

Figure 9 in **Appendix A** provides an overview of the proposed infrastructure.

B 3.3.1.1 Operations & Maintenance Impacts

B 3.3.1.1.1 Socio-Economic

There are no parks/open spaces/ recreation areas or sensitive facilities located within 250m of the proposed EEB-4 and TPSS-4. Thornhill Park and Tennis Club, the Thornhill Club (private golf club), and Riverside Park on the west side of Yonge Street and the Ladies' Golf Club of Toronto and Cricklewood Park to the east are all located further north, towards Royal Orchard Station. Three (3) sensitive facilities are located in the general area between Clark Station and Royal Orchard Station, including Thornhill Public School (south of EEB-4 and TPSS-4), Thornhill Village Library, and Inventive Minds Kidz Academy childcare centre (northeast of EEB-4 and TPSS-4).

Maintenance of the stairwells, elevators, and structures associated with TPSS-4, and EEB-4 may occur when necessary; however, these activities are short-term in nature and pose no long-term disturbances to sensitive facilities or recreational amenities. It should also be noted that the majority of EEB operations and maintenance will occur below grade and have minimal impacts at grade. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.3.1.1.2 Land Use

Land Use Designation

The proposed EEB-4 and TPSS-4 are located in the City of Vaughan in an area designated as mixed-use ('low-rise mixed-use' in the City of Vaughan's Official Plan). According to General Land Use Policy 9.2.1.11 of the City of Vaughan's Official Plan, public utilities that are authorized under the *Environmental Assessment Act*, including transit facilities, are permitted in all land use designations with the exception of the Core Features of the Natural Heritage Network and any hazard areas where public utilities may not necessarily be appropriate. Therefore, the proposed infrastructure is permitted to operate under the current land use designation.

Policy Area

EEB-4 and TPSS-4 are within the Vaughan Thornhill Heritage Conservation District, which contains a mix of commercial, residential, and recreational uses. The intent of the Vaughan Heritage Conservation District Plans is for the Yonge Street corridor to become a vibrant, mixed-use area that is pedestrian-friendly, transit supportive, and developed in a way that is complementary to the historic character of the area. As part of detailed design, efforts will be made to minimize visual impacts where possible. A Design Excellence process will be followed to integrate the new infrastructure design into the existing environment to reduce the extent

of visual impacts. For further details regarding known or potential built heritage resources and cultural heritage landscapes in this area, potential impacts, and related mitigation measures, refer to the Cultural Heritage Existing Conditions and Impact Assessment Report contained in the current EPR Addendum.

The proposed EEB-4 and TPSS-4 are also located within the TRCA Regulated Limit. Refer to the Natural Environment Impact Assessment Report contained in the current EPR Addendum for further details and proposed mitigation measures.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of TPSS-4 and EEB-4 is anticipated to be compatible with future development of surrounding land uses.

B 3.3.1.2 Construction Impacts

B 3.3.1.2.1 Socio-Economic

Cycling routes connect with Yonge Street from Arnold Avenue on the west and John Street on the east, located south of the proposed ancillary facilities. To address potential impacts to cyclists, Metrolinx will provide well connected, clearly delineated, and appropriately signed walkways and cycling route options, with clearly marked detours where required. Additionally, at locations where construction vehicles are present, flagging can be implemented to ensure construction vehicle operators are aware of crossing cyclists.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.3.1.2.2 Land Use

Please refer to **Section B 3.3.1.1.2** above for a discussion of potential land use impacts.

B 3.3.2 Royal Orchard Station, TPSS-5, EEB-5, EEB-6 and EEB-7

The proposed Royal Orchard Station is a below grade station located just south of Royal Orchard Boulevard and Yonge Street intersection, split between the City of Vaughan to the west of Yonge Street and the City of Markham to the east. A TPSS (TPSS-5) and an EEB (EEB-5) are also proposed in this area. Further along the alignment, EEB-6 is planned to be located in the vicinity of Bay Thorn Drive.

Finally, the proposed EEB-7 is proposed north of Banquo Road where the below grade alignment curves east and begins to travel along the existing CN/GO rail corridor, between Royal Orchard Station and the portal/launch shaft.

Figures 10-12 in **Appendix A** provide an overview of the proposed infrastructure in the vicinity of Normark Drive and Bay Thorn Drive.

B 3.3.2.1 Operations & Maintenance Impacts

B 3.3.2.1.1 Socio-Economic

There is one (1) park located northwest of the proposed EEB-7, Riverside Park. Additionally, there are four (4) sensitive uses located within the vicinity of the proposed infrastructure – Baythorn Public School, located northeast of the proposed Royal Orchard Station, St. Anthony Catholic School, located just southwest of EEB-7, and Thornhill Baptist Church and Cemetery, located northwest of Royal Orchard Station. A Design Excellence process will be followed during detailed design to integrate new infrastructure into the existing environment and reduce the extent of visual impacts. This may be accomplished through visual screening measures such as the use of building materials which are compatible with the characteristics of the surrounding environment.

Maintenance of the road network surrounding Royal Orchard Station, stairwells, elevators, and structures associated with the station, TPSS-5, EEB-5, EEB-6, and EEB-7 may occur when necessary; however, these activities are short-term in nature and pose no long-term disturbances to sensitive facilities or recreational amenities. It should also be noted that the majority of station operations and maintenance will occur below grade and have minimal impacts at grade. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.3.2.1.2 Land Use

Land Use Designation

The proposed Royal Orchard Station, TPSS-5 and EEB-5 will be operating in the City of Markham's Yonge North Regional Corridor Intensification Area in an area designated both as mixed-use heritage main street and residential high rise. According to Chapter 8, Section 8.3 of the City of Markham's Official Plan, intensification areas are intended to provide for mixed-use higher density development served by rapid transit, while lands designated as 'mixed-use' are primarily located along Markham's best-served transit routes and are intended to be transformed into complete communities where people are encouraged to use non-automobile modes of transportation. Section 8.2.5 of the Official Plan notes that the intent for development in residential high-rise areas is to support existing or planned transit services, and to "ensure development responds to the provision of transportation infrastructure" (Policy 8.2.5.1 d). Transit uses are supported under these designations, and the proposed Royal Orchard Station and TPSS-5 are anticipated to complement existing land use objectives by supporting intensification and rapid transit service in a designated intensification area.

The City of Markham designates the land on which the proposed EEB-6 and EEB-7 are situated as residential low-rise. According to Section 8.2.3.6 of the City of Markham Official Plan, on lands designated low-rise

residential, development should be designed to be transit-oriented and reflect transit-oriented development principles. Furthermore, Section 8.1.1 provides for municipal transportation facilities as a land use in all designations (except in greenways unless specifically stipulated). Finally, given that the EEBs are required for passenger safety and only to be used in the event of an emergency, the at grade structures associated with EEB-6 and EEB-7 are anticipated to have no adverse impacts on the current land use designation.

Policy Area

The proposed Royal Orchard Station is located partially within the TRCA Regulated Limit, outside of the floodline, in an urban river valley that surrounds the East Don River, as shown in **Figure B 3-5** below. Refer to the Natural Environment Impact Assessment Report contained in the current EPR Addendum for further details.

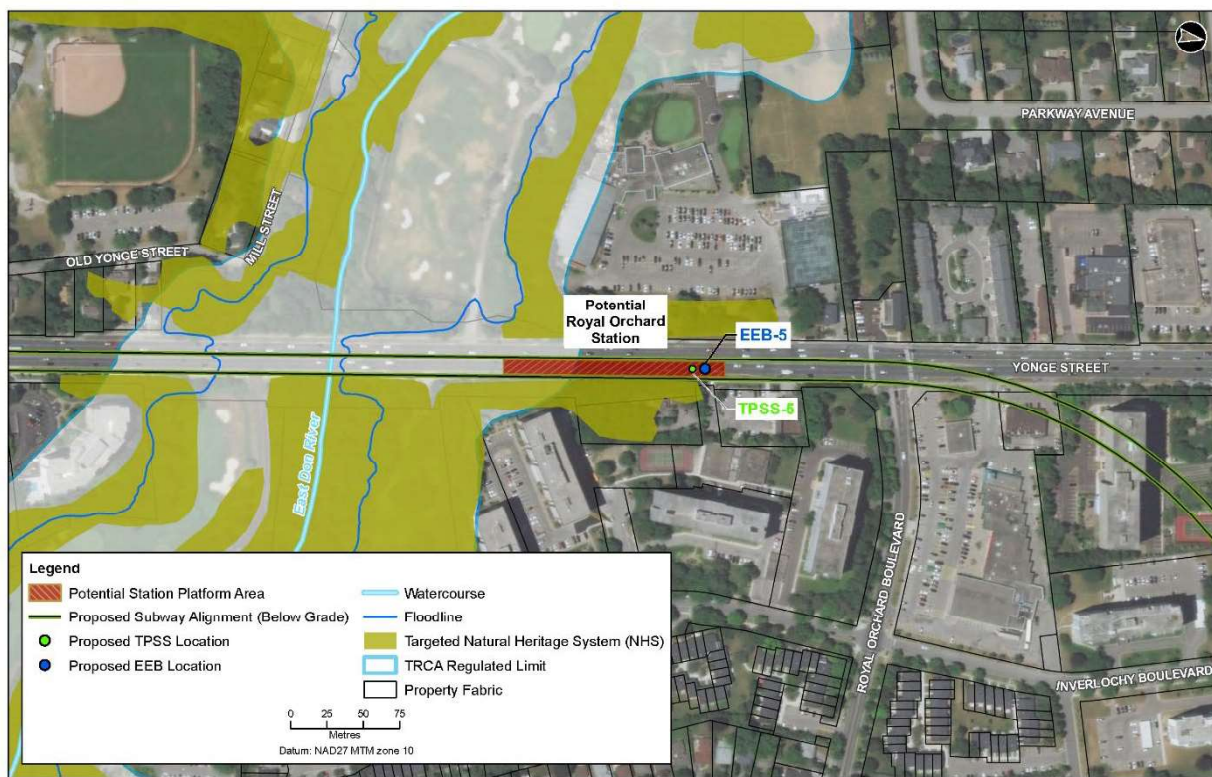


Figure B 3-5 Proposed Royal Orchard Station and Ancillary Features and TRCA Regulated Area

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of Royal Orchard Station, TPSS-5, EEB-5, EEB-6 and EEB-7 is anticipated to be compatible with future development of surrounding land uses.

B 3.3.2.2 Construction Impacts

B 3.3.2.2.1 Socio-Economic

To mitigate potential construction impacts, access to nearby land uses will be maintained to the extent possible, and potentially affected residents and business owners will be notified of construction activities, and a communications plan will be in place to facilitate inquiries and ensure timely resolution of complaints.

Signage and clearly marked detours will be provided where required. Regarding visual impacts, a screened enclosure for the development site will be provided, with particular attention to the waste disposal and material storage areas and consideration will be given to providing temporary landscaping along the borders of the construction site between site fencing/enclosure and walkways, where space allows, and where necessary.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and that staging options will be developed to minimize potential effects on local access and travel patterns to the extent possible. These effects are anticipated to cease once construction has finished.

B 3.3.2.2.2 Land Use

Please refer to **Section B 3.3.2.1.2** above for a discussion of potential land use impacts.

B 3.3.3 Portal and Launch Shaft

The proposed portal and launch shaft will be located immediately west of the existing CN/GO rail corridor, north of Holy Cross Catholic Cemetery, and south of Langstaff Road. The launch shaft is a temporary structure and will serve the purpose of launching the TBM, which will be removed from the extraction shaft at the north end of the Finch Station tail track. The tunnel portal is where the subway will emerge to the surface and run at grade for the remainder of the proposed alignment.

Figure 14 in **Appendix A** provides an overview of the proposed infrastructure.

B 3.3.3.1 Operations & Maintenance Impacts

B 3.3.3.1.1 Socio-Economic

There are no parks/recreation areas located within 150m of the proposed infrastructure, however one (1) sensitive use, the Holy Cross Catholic Cemetery, is located just southwest of the portal/launch shaft, extending east to the CN Corridor. The location of the portal/ launch shaft has purposely been situated north of the cemetery lands to avoid encroachment.

Maintenance of the tunnel portal may occur when necessary; however, these activities are short-term in nature and pose no long-term visual, noise/vibration, or traffic disturbances to sensitive facilities or recreational amenities. These effects are anticipated to cease once maintenance activities have finished.

The proposed launch shaft is a temporary project component and will be removed once tunnelling is complete; therefore, no impacts during the operations and maintenance phase are anticipated for the launch shaft.

B 3.3.3.1.2 Land Use

Land Use Designation

The proposed portal and launch shaft are located in the City of Markham on a site with three separate land use designations, as shown in **Figure B 3-6**: mixed-use to the north, utilities/ transportation to the east, and medium to high density residential to the south (more specifically- mixed-use high rise, residential high rise, and transportation and utilities in the City of Markham's Official Plan). According to Chapter 8 of the City of Markham's Official Plan, lands designated as mixed-use are primarily located along Markham's best-served transit routes and are intended to be transformed into complete communities encouraging the use of non-automobile modes of transportation (Official Plan Section 8.3). The residential high-rise designation applies to lands near mixed-use areas with the intent of supporting existing or planned transit services (Official Plan Section 8.2.5), and lands designated as transportation and utilities provide corridors for transportation facilities (Official Plan Section 8.10). Transit uses are permitted to operate under all three of these designations.

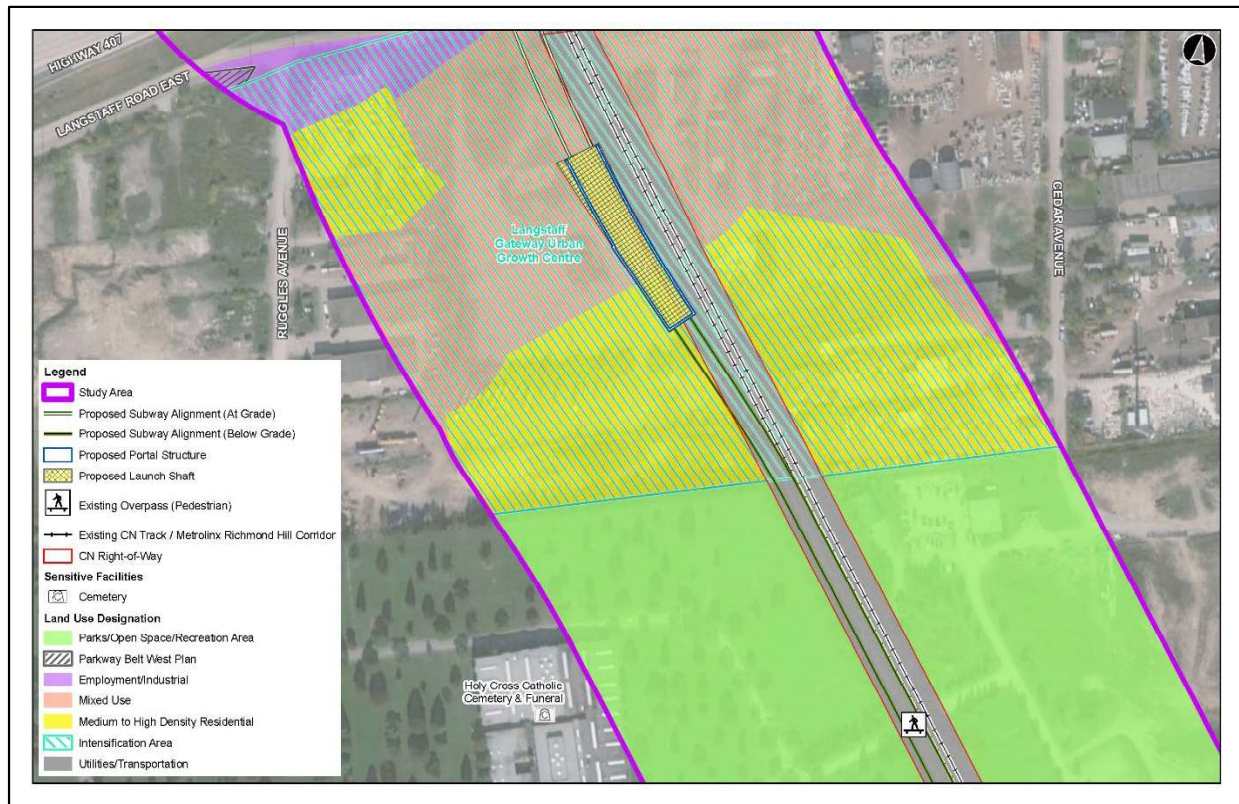


Figure B 3-6 Proposed Portal/ Launch Shaft with Land Use Designations Overlaid

Policy Area

The subject site is located within the provincially designated Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre as per the Growth Plan (2019). Urban Growth Centres are planned focal areas for regional service facilities, intended to serve as high density employment areas that are supported by an inter-regional transit network. The Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre is planned to achieve a minimum density target of 400 residents and jobs combined per hectare by 2031. This area is also within the City of Markham's Langstaff Gateway Secondary Plan Area, which provides for a compact, complete, and high-density regional centre that will serve as a portion of the Urban Growth Centre. Operations and maintenance of the proposed portal and launch shaft are anticipated to have no adverse impacts on current land uses, as they are intended to enhance the existing transit network and support intensification to help meet density targets and policies under the Langstaff Gateway Urban Growth Centre and Secondary Plan.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of the portal is anticipated to be compatible with future development of surrounding land uses.

B 3.3.3.2 Construction Impacts

B 3.3.3.2.1 Socio-Economic

Through the design process, it was determined that in order to avoid encroachment onto the lands of the Holy Cross Cemetery, the existing CN tracks would require temporary diversion to the east to prepare the land within the existing CN corridor for tunnelling to take place. Once these preparatory works are complete, the CN tracks will be reinstated to their permanent location and tunnelling will proceed. This work is not

anticipated to impact sensitive facilities, parks, or recreational amenities. There may be temporary disruptions to CN/GO rail service along the existing CN Bala corridor, and consultation is underway to establish a suitable mitigation strategy and ensure that the public is notified in advance of any potential service disruptions. Additionally, a temporary barrier structure is proposed during construction to separate the boundaries of the project work site from the temporarily diverted CN track.

To mitigate construction impacts, a screened enclosure for the development site will be provided, with particular attention to the waste disposal and material storage areas. Additionally, consideration will be given to providing temporary landscaping along the borders of the construction site between site fencing/enclosure and walkways, where space allows, and where necessary. Mitigation measures related to potential nuisance effects are outlined in the Air Quality and Noise and Vibration Impact Assessment reports contained in the current EPR Addendum.

These impacts are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), temporary disruptions to CN/GO rail service (as noted above), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.3.3.2.2 Land Use

Please refer to **Section B 3.3.3.1.2** above for a discussion of potential land use impacts.

B 3.4 Segment 3 – Portal/Launch Shaft to Moonlight Lane

B 3.4.1 Bridge Station, Bus Terminal, and TPSS-6

The proposed Bridge Station is an at grade station located west of the CN rail corridor, between Highway 7 and Highway 407 ETR in the City of Richmond Hill and will serve as a major transit hub. A TPSS (TPSS-6) is also proposed in this area.

Figure 14 in **Appendix A** provides an overview of the proposed infrastructure.

B 3.4.1.1 Operations & Maintenance Impacts

B 3.4.1.1.1 Socio-Economic

There are no parks or sensitive features located within 250 m of the proposed infrastructure or 150 m of this section of the proposed alignment.

A multi use trail (MUT) is planned by the City of Richmond Hill to extend from just south of Langstaff Road to 16th Avenue along the west side of the existing CN right-of-way and proposed at grade alignment, as shown in **Figure B 3-7**. The MUT overlaps with the proposed Bridge Station and bus terminal and the location and Metrolinx will work with the City of Richmond Hill to accommodate for the proposed infrastructure.

Metrolinx will engage in ongoing consultation with the City of Richmond Hill to confirm the location of the MUT, find integrated solutions to accommodate the proposed development and planned uses of the site, and identify appropriate site-specific mitigation measures as required.

Maintenance of the proposed at grade and below grade components of Bridge Station, bus terminal, and TPSS-6 as well as the stairwells, elevators, and structures associated with these project components may occur when necessary; however, these activities are short-term in nature and pose no long-term visual, noise/vibration, or traffic disturbances. Additionally, there are no sensitive facilities or recreational amenities within 250 m of the proposed infrastructure. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

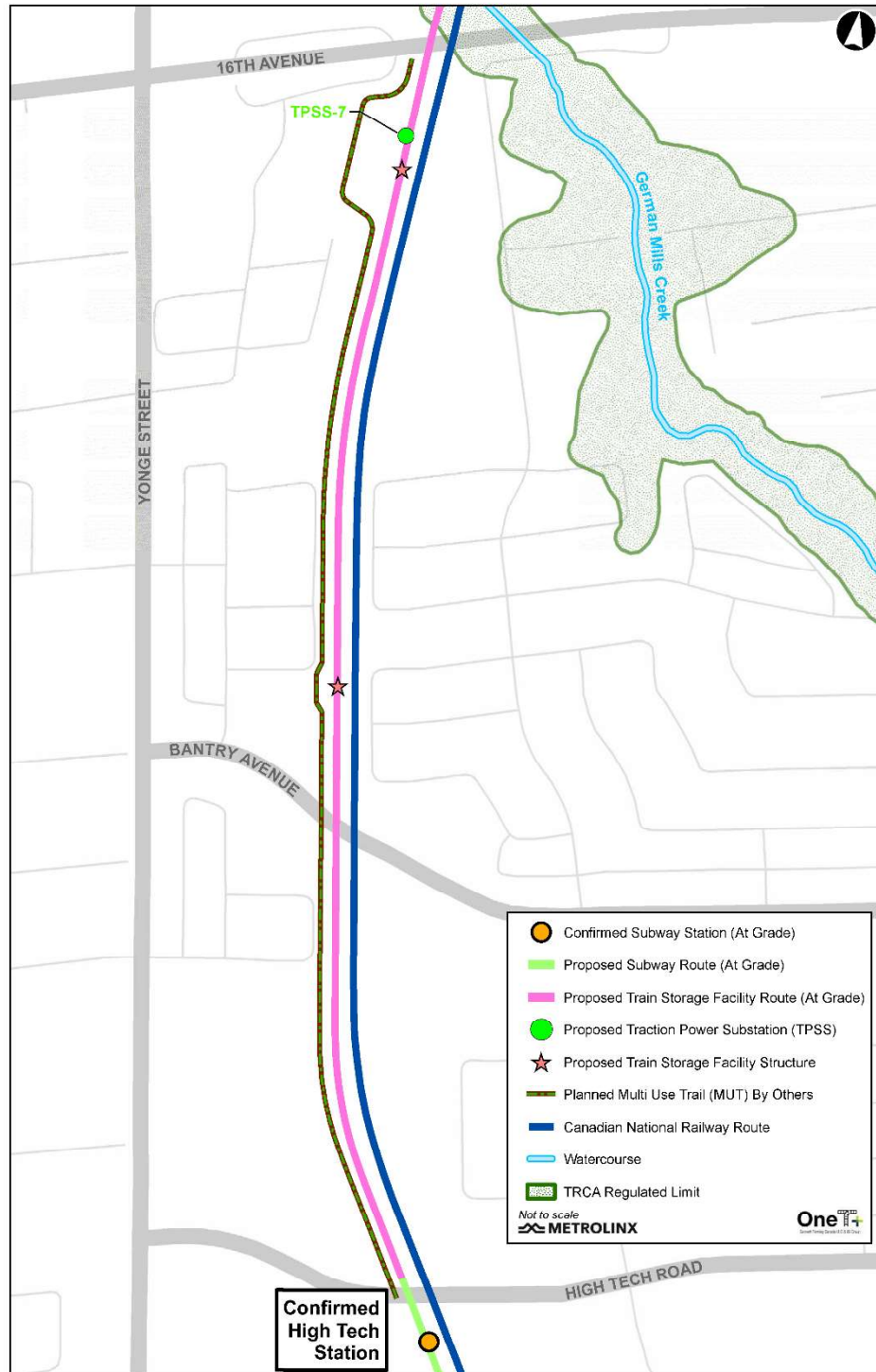


Figure B 3-7 City of Richmond Hill Planned Multi-Use Trail

B 3.4.1.1.2 Land Use

Land Use Designation

The site of the proposed Bridge Station, bus terminal, and TPSS-6, located in the City of Richmond Hill, is designated as Parkway Belt West Plan (on the southern half of the site) and utility corridor (on the northern half) in the Official Plan. According to Chapter 4, Sections 4.10.8 and 4.11.1 of the City of Richmond's Official Plan, the Parkway Belt West designation includes lands that are subject to and governed by the provincial Parkway Belt West Plan, which protects land along Highway 7 and 407 ETR for a variety of uses including large infrastructure corridors. The Official Plan utility corridor designation permits electrical transformer and distribution systems, transportation utilities, parking and related facilities.

Policy Area

The subject site is located within the provincially designated Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre as per the Growth Plan (2019). Urban Growth Centres are planned focal areas for regional service facilities, intended to serve as high density employment areas that are supported by an inter-regional transit network. The Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre is planned to achieve a minimum density target of 400 residents and jobs combined per hectare by 2031. The proposed Bridge Station, bus terminal, and TPSS-6 are anticipated to have no adverse impacts on current land uses and are aligned with provincial policy objectives. These facilities provide for linkages between urban areas and promote inter-regional transit.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of Bridge Station, Bus Terminal, and TPSS-6 is anticipated to be compatible with future development of surrounding land uses.

B 3.4.1.2 Construction Impacts

B 3.4.1.2.1 Socio-Economic

The existing GO Langstaff Station is located on the east side of the CN corridor on the north end of the proposed Bridge Station, spanning underneath both Highway 7 and Highway 407 ETR and connecting with the Richmond Hill Centre Terminal (RHCT) VIVA/YRT/GO Bus Station by way of a pedestrian bridge. There is an existing passenger pick-up and drop-off (PPUDO) area at the southeast corner of the platform connecting to Langstaff Road East and two GO parking lots to service the station, one on each side of the highways. There are also two existing overhead road overpasses located within the proposed station footprint. Impacts including transit access disruptions and road modifications are anticipated during construction of the proposed Bridge bus terminal, which will be centred above Bridge Station between Highway 7 and Highway 407 ETR.

Metrolinx will develop Traffic Control and Management Plan(s) to maintain access through work zones, to the extent possible, install appropriate signage and clearly marked detours where required, ensure the public is notified in advance of any potential service disruptions, and consult with York Region Transit to establish a mitigation strategy. The existing overhead road overpasses, Langstaff GO Station platform, Langstaff Road, and Highway 7 will remain operational during construction.

A shared roadway bike lane along Langstaff Road terminates at the CN right-of-way, near the south end of the proposed station footprint, while a paved shoulder cycling route crosses the north end of the proposed station along Highway 7 via an existing overhead road overpass and adjoins with shared roadway cycling routes along Red Maple Road and High Tech Road. To address potential impacts to cyclists, Metrolinx will provide well connected, clearly delineated, and appropriately signed walkways and cycling route options,

with clearly marked detours where required. Additionally, at locations where construction vehicles are present, flagging can be implemented to ensure construction vehicle operators are aware of crossing cyclists.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling and staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.4.1.2.2 Land Use

Please refer to Section **B 3.4.1.1.2** above for a discussion of potential land use impacts.

B 3.4.2 High Tech Station

The proposed High Tech Station is an at grade station located where High Tech Road meets the CN right-of-way in the City of Richmond Hill. North of the High Tech Station footprint, the proposed subway alignment terminates and transitions into the TSF tracks, which service the proposed TSF facilities located further north.

Figure 15 in **Appendix A** provides an overview of the proposed infrastructure.

B 3.4.2.1 Operations & Maintenance Impacts

B 3.4.2.1.1 Socio-Economic

The City of Richmond Hill is currently planning for a MUT, as shown in **Figure B 3-7**, which will extend along the west side of the proposed alignment and station. This area currently consists of greenspace separating the CN corridor from Richmond Hill Centre Terminal (RHCT), commercial plazas, government offices, and low-density residential areas further north. Additionally, the proposed MUT overlaps with the south end of the proposed at grade station. Metrolinx will engage in ongoing consultation with the City of Richmond Hill to confirm the location of the proposed MUT, find integrated solutions to accommodate the proposed development and planned uses of the site, and identify appropriate site-specific mitigation measures as required.

Maintenance of the proposed at grade High Tech Station as well as the stairwells, elevators, and structures associated with the station may occur when necessary; however, these activities are short-term in nature and pose no long-term visual, noise/vibration, or traffic disturbances. Additionally, there are no sensitive facilities within 250 m of the proposed infrastructure, and no impacts on the nearby parkettes are anticipated. Lane closures and temporary detours may be required to ensure the safety of workers. These effects are anticipated to cease once maintenance activities have finished.

B 3.4.2.1.2 Land Use

Land Use Designation

The proposed High Tech Station will be operating in the City of Richmond Hill in an area designated as Richmond Hill Centre and is surrounded by RHCT (a VIVA, YRT, and GO bus terminal), commercial plazas, and government offices. The Richmond Hill Centre designation is intended to support the development of a mixed-use, compact urban centre supported by a high-quality public realm, walkable streets and transit-oriented development, as per Chapter 4, Section 4.2 of the City of Richmond Hill's Official Plan. Additionally, according to policy 4.2.1.10, "development in the Richmond Hill Centre shall support the integration of public rapid transit including the planned extension of the Yonge Street subway" (City of Richmond Hill, 2018).

Policy Area

The subject site is also located within the provincially designated Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre, which extends to just north of Bantry Avenue, as per the Growth Plan (2019). Urban Growth Centres are planned focal areas for regional service facilities, intended to serve as high density employment areas that are supported by an inter-regional transit network. The Richmond Hill Centre/ Langstaff Gateway Urban Growth Centre is planned to achieve a minimum density target of 400 residents and jobs combined per hectare by 2031.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of High Tech Station and the related infrastructure is anticipated to be compatible with future development of surrounding land uses.

B 3.4.2.2 Construction Impacts

B 3.4.2.2.1 Socio-Economic

A potential demolition is planned for an existing pedestrian bridge (shown in **Figure B 3-8**), located just south end of the High Tech Station footprint and connecting Langstaff GO Station with RHCT. This demolition will occur as late as possible during the construction phase to minimize impacts to pedestrians and transit-users, and a new pedestrian bridge will be integrated with the southern end of the proposed station to replace the existing bridge. The new pedestrian bridge will be constructed prior to demolition of the existing bridge. Furthermore, Metrolinx will install appropriate signage and clearly marked detours where required, ensure the public is notified in advance of any potential service disruptions, and consult with York Region Transit to establish a mitigation strategy.



Source: Google Street View, accessed April 19, 2021

Figure B 3-8 Richmond Hill Centre Station and Pedestrian Bridge Connecting with Langstaff GO Station

During construction of the proposed High Tech Station, local road closures may be required on either side of High Tech Road. To mitigate related impacts, access to nearby land uses will be maintained to the extent possible, and potentially affected residents, tenants and business owners will be notified of initial construction schedules, as well as modifications to these schedules as they occur. Additionally, signage and clearly marked detours will be provided where required.

A shared roadway bike lane traverses High Tech Road and passes through the proposed station footprint via an existing overhead road overpass, connecting with another shared roadway cycling route approximately 125 m east of the station at Red Maple Road. Additionally, a bike lane crosses the proposed alignment along an existing overhead road overpass at Bantry Avenue. To address potential impacts to cyclists, Metrolinx will provide well connected, clearly delineated, and appropriately signed walkways and cycling route options, with clearly marked detours where required. Additionally, at locations where construction vehicles are present, flagging can be implemented to ensure construction vehicle operators are aware of crossing cyclists.

Finally, there may be nuisance and/or visual impacts experienced by residents north of Bantry Avenue during construction of the at grade alignment. A screened enclosure for the development site will be provided, with particular attention to the waste disposal and material storage areas, and Metrolinx will keep property owners and tenants informed of construction works.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling. Staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.4.2.2.2 Land Use

Please refer to section **B 3.4.2.1.2** above for a discussion of potential land use impacts.

B 3.4.3 Train Storage Facility and TPSS-7

The proposed Train Storage Facility (TSF) will be a storage, cleaning and light maintenance facility located at grade on the west side of the CN corridor. The rail alignment associated with the TSF will stretch to approximately Moonlight Lane. The TSF will accommodate up to 15 trains and will include a transportation facility, a rail cars and shops facility, and TPSS-7, located south of 16th Avenue.

Figures 16-18 in **Appendix A** provide an overview of the proposed infrastructure.

B 3.4.3.1 Operations & Maintenance Impacts

B 3.4.3.1.1 Socio-Economic

Railway Parkette, Junction Parkette, and Red Maple Parkette are located east of the proposed TSF tracks, while Grace Lawrence Parkette is to the west. No sensitive facilities are located within 150 m of the proposed infrastructure. Given that the TSF and TPSS-7 are not proposed within proximity to any of these parkettes, there are no anticipated impacts on park space.

The City of Richmond Hill is currently planning for a MUT, as shown in **Figure B 3-7**, which would extend directly through the proposed TSY and TPSS-7. This area currently consists of greenspace separating the CN corridor from an auto dealership and parts store, as well as an auto collision centre. Metrolinx will engage in ongoing consultation with the City of Richmond Hill to confirm the location of the proposed MUT, find integrated solutions to accommodate the proposed infrastructure and planned uses of the site, and identify appropriate site-specific mitigation measures as required.



Figure B 3-9 View Facing West from CN Corridor, South of 16th Avenue - Existing Car Dealership and Auto Body & Collision Centre

There is potential for the proposed at grade TSF tracks to interface with the TRCA regulated limit near 16th Avenue, which surrounds German Mills Creek and pedestrian trails that meander along sections of the watercourse. Refer to the Natural Environment Impact Assessment Report contained in the current EPR Addendum for further details.

Light maintenance of train cars including cleaning is proposed at this site. Additionally, maintenance of the stairwells, elevators, and structures associated with the TSF structures and TPSS-7 may occur when necessary. To address this, Metrolinx will mitigate noise and vibration impacts, as outlined in the Noise and Vibration Impact Assessment Reports contained in the current EPR Addendum. Additionally, Metrolinx will address potential light pollution by adhering to all applicable local municipal by-laws and Ministry of Transportation practices for lighting in areas near or adjacent to highways and roadways.

B 3.4.3.1.2 Land Use

Land Use Designation

The proposed TSF parking and access area and TPSS-7 are located in a designated Key Development Area (KDA). According to Chapter 4, Section 4.4 of the City of Richmond Hill's Official Plan, KDAs are intensification

areas where public rapid transit services intersect with major nodes of retail and commercial development activity. Transit uses are permitted within this land use designation.

North of the proposed TSF parking & access area, a commercial plaza is located on the northside of 16th Avenue, while a car dealership and automotive uses are located on the south side of 16th Avenue. Low-density residential neighbourhoods and the greenway system surround the proposed TSF tracks.

Policy Area

The Yonge and Carrville/16th Avenue KDA is envisioned as a sub-centre for mixed-use high density development due to its proximity to public rapid transit on Yonge Street and the opportunity to intensify underutilized lands in the area. A Secondary Plan is also currently under development for this area. Metrolinx will consult with the City of Richmond Hill to remain informed of the Secondary Plan as it is developed.

It is recognized that land use changes over time as communities evolve; however, all land use is regulated through the Municipal Official Plans. The operation and maintenance of the TSF and TPSS-7 and the related infrastructure is anticipated to be compatible with future development of surrounding land uses.

B 3.4.3.2 Construction Impacts

B 3.4.3.2.1 Socio-Economic

Construction-related nuisance and/or visual impacts may be experienced on either side of the existing CN corridor during construction of the at grade TSF track. A screened enclosure for the construction site will be provided, with particular attention to the waste disposal and material storage areas, and Metrolinx will develop Communications and Complaints protocols to keep property owners and tenants informed of upcoming construction works.

Potential socio-economic effects associated with construction are anticipated to be temporary and related to noise/vibration, air quality, temporary traffic effects (including traffic diversions and control), construction staging areas and visual disturbances. Metrolinx will ensure that local business and property owners are aware of construction scheduling. Staging options will be developed to minimize potential effects on local access and travel patterns as much as possible. These effects are anticipated to cease once construction has finished.

B 3.4.3.2.2 Land Use

Please refer to **Section B 3.4.3.1.2** above for a discussion of potential land use impacts.

B 4.0 Summary of Potential Impacts, Mitigation Measures and Monitoring Activities

The assessment of impacts contained in **Section B 3.0** provides an overview of how the YNSE RCD as documented in this report may affect socio-economic and land use conditions within the identified Study Area.

Table B 3-2 provides a summary of the potential socio-economic and land use impacts, and commitments to mitigation measures, monitoring and future work.

Table B 3-2 Summary of Socio-Economic & Land Use Mitigation and Monitoring Commitments

Project Phase	Environmental Components	Potential Impacts	Mitigation Measures	Monitoring Activities
CONSTRUCTION	Property Acquisition	Property acquisition – permanent and temporary	<ul style="list-style-type: none"> Specific permanent property requirements associated with the Project infrastructure components, and temporary property requirements, such as those associated with construction staging and access, will be minimized to the extent feasible as planning progresses. 	<ul style="list-style-type: none"> None identified
	Land Use and Access Disruption	Nuisance effects from construction activities	<ul style="list-style-type: none"> Mitigation measures related to potential nuisance effects are outlined in the Air Quality and Noise and Vibration potential impacts, mitigation measures, and monitoring activities tables. An Erosion and Sediment Control Plan will be developed in accordance with the Greater Golden Horseshoe Area Conservation Authorities' <i>Erosion and Sediment Control Guideline for Urban Construction</i> (2019), as amended from time to time, that addresses sediment release to adjacent properties and roadways. 	<ul style="list-style-type: none"> Monitoring activities related to potential nuisance effects are outlined in the Air Quality and Noise and Vibration potential impacts, mitigation measures, and monitoring activities tables. Erosion and sediment control monitoring to be conducted (e.g., on-site inspection of erosion and sediment control measures).
		Land use and access disruption	<ul style="list-style-type: none"> Provide well connected, clearly delineated, and appropriately signed walkways and cycling route options, with clearly marked detours where required. Provide temporary walkways with a pedestrian clearance of 2.1 m, where possible. Temporary walkways required during construction will also meet Accessibility for Ontarians with Disabilities Act requirements for universal accessibility. Provide temporary lighting, as required, and wayfinding signs and cues for navigation around the construction site. Regular (existing) access to businesses during working hours will be maintained, where feasible. Where regular access cannot be maintained, alternative access and signage will be provided. 	<ul style="list-style-type: none"> Regular monitoring (e.g., on-site inspection) of temporary access paths, walkways, cycling routes and fencing to ensure effectiveness.
	Visual Characteristics	Visual effects from construction areas/activities	<ul style="list-style-type: none"> A screened enclosure for the construction site(s) will be provided, as required, with particular attention to the waste disposal and material storage areas. Consideration will be given to providing temporary landscaping along the borders of the construction site between site fencing/enclosure and walkways, where space allows, and where necessary. 	<ul style="list-style-type: none"> Regular monitoring (e.g., on-site inspection) of construction visual effects mitigation measures to ensure effectiveness.
	Light Pollution	Light trespass, glare and light pollution effects	<ul style="list-style-type: none"> The Constructor will perform the Works in such a way that any adverse effects of construction lighting are controlled or mitigated in such a way as to avoid unnecessary and obtrusive light with respect to adjoining residents, communities and/or businesses. Comply with all local applicable municipal by-laws and Ministry of Transportation practices for lighting in areas near or adjacent to highways and roadways regarding outdoor lighting for both permanent and temporary construction activities, and incorporate industry best practices provided in ANS/IES RP-8-18 – Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting. Obtrusive light with respect to adjoining residents, communities, and/or businesses will be limited. 	<ul style="list-style-type: none"> Regular monitoring (e.g., on-site inspection) of light pollution mitigation measures to ensure effectiveness.
	Transportation	Construction may result in the need for temporary road or lane closures and potential impacts to cycling and pedestrian, transit and rail networks	<ul style="list-style-type: none"> Mitigation measures related to transportation effects are outlined in the Transportation Existing Conditions & Impact Assessment report. 	<ul style="list-style-type: none"> Monitoring activities related to transportation effects are outlined in the Transportation Existing Conditions & Impact Assessment report.

Project Phase	Environmental Components	Potential Impacts	Mitigation Measures	Monitoring Activities
OPERATION	Property Acquisition	Property acquisition during the operation phase of the Project is not required.	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Land Use and Access Disruption	Nuisance effects from operational activities	<ul style="list-style-type: none"> Mitigation measures related to potential nuisance effects from Operations are outlined in the Noise and Vibration potential impacts, mitigation measures, and monitoring activities tables. 	<ul style="list-style-type: none"> Monitoring related to potential nuisance effects are outlined in the Noise and Vibration Assessment Impact Assessment Reports contained in the current EPR Addendum.
		The operational activities of the subway will not generate land use and access disruption	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
	Visual Characteristics	Visual effects from construction areas/activities	<ul style="list-style-type: none"> Reduce visual effects of project structures by considering their location, building materials, architectural design, and surrounding landscape treatments. 	<ul style="list-style-type: none"> None identified
	Light Pollution	Light trespass, glare and light pollution effects	<ul style="list-style-type: none"> Comply with all local applicable municipal by-laws and Ministry of Transportation practices for lighting in areas near or adjacent to highways and roadways regarding outdoor lighting for both permanent and temporary construction activities, and incorporate industry best practices provided in ANSI/IES RP-8-18 – Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting. Obtrusive light with respect to adjoining residents, communities, and/or businesses will be limited. 	<ul style="list-style-type: none"> Regular monitoring (e.g., on-site inspection) of light pollution mitigation measures to ensure effectiveness
	Transportation	Minimal short-term impacts associated with maintenance activities (e.g., temporary lane/sidewalk closures) may occur.	<ul style="list-style-type: none"> Provide signage and detours in advance of temporary lane/sidewalk closures during maintenance activities, as required. 	<ul style="list-style-type: none"> N/A

Notes:
Regulations, standards and guidance documents referenced herein are current as of the time of writing and may be amended from time to time. If clarification is required regarding regulatory requirements, the Constructor is encouraged to consult with the appropriate regulatory agencies.

B 5.0 Permits/Approvals

Permits and approvals that may be required during subsequent design and implementation phases of the Project are outlined below. Permits and approvals will be confirmed during detailed design.

Federal

- Permits relating to CN right-of-way

Provincial

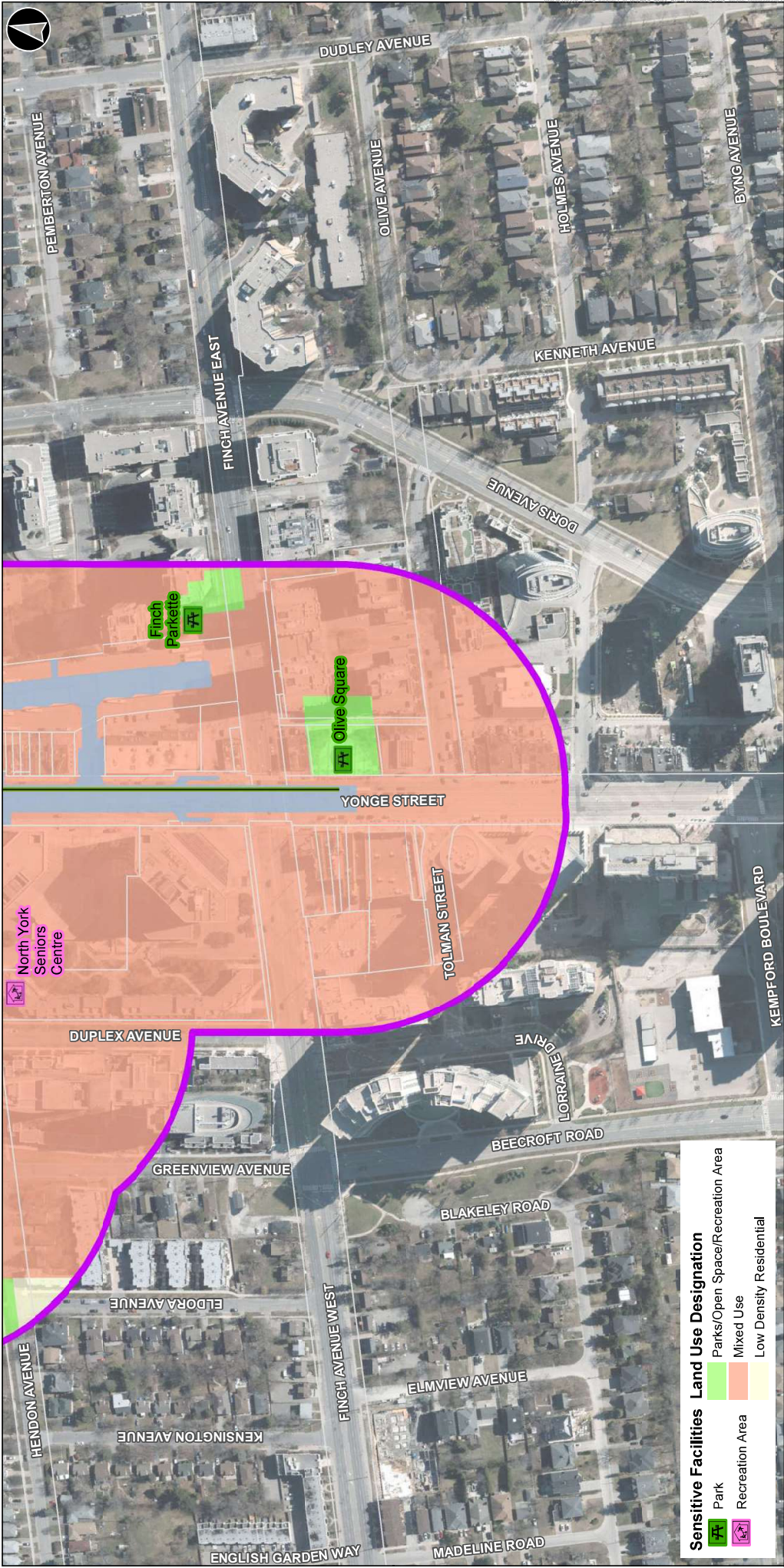
- Building and Land Use Permits from the Ministry of Transportation (MTO) as per the 2009 EPR, Section 6.1;
- Encroachment Permit for any required work within the MTO right-of-way.
- Permits relating to hydro right-of-way

Municipal


- Planning approvals (including Site Plan Approval) for above-grade structures and facilities (through York Region, City of Toronto, City of Vaughan, City of Markham, and City of Richmond Hill) as per the 2009 EPR, Section 6.1 and the 2014 EPR Addendum, Section 6.1 in the spirit of cooperation and to provide the municipality with an opportunity to comment;
- Building permits for the stations, Emergency Exit Buildings and other ancillary features (through York Region, City of Toronto, City of Vaughan, City of Markham, and City of Richmond Hill) as per the 2009 EPR, Section 6.1, and the 2014 EPR Addendum, Section 6.1 in the spirit of cooperation and to provide the municipality with an opportunity to comment;
- Demolition permits in the spirit of cooperation and to provide the municipality with an opportunity to comment;
- Permits relating to work that directly affects Municipal and/or Regional infrastructure (e.g., bridge or water/sewer line modifications)





A range of municipal permits and approvals may be required for the Project, particularly as pertaining to municipally owned lands and infrastructure. Metrolinx will obtain all required permits and approvals. However, Metrolinx as a Crown Agency of the Province of Ontario is exempt from certain municipal processes and requirements. In these instances, Metrolinx will engage with the City of Toronto, York Region, City of Vaughan, City of Markham, and City of Richmond Hill to incorporate municipal and regional requirements as a best practice, where practical, and may obtain associated permits and approvals.

Appendix A – YNSE Existing and Planned Land Use Mapping



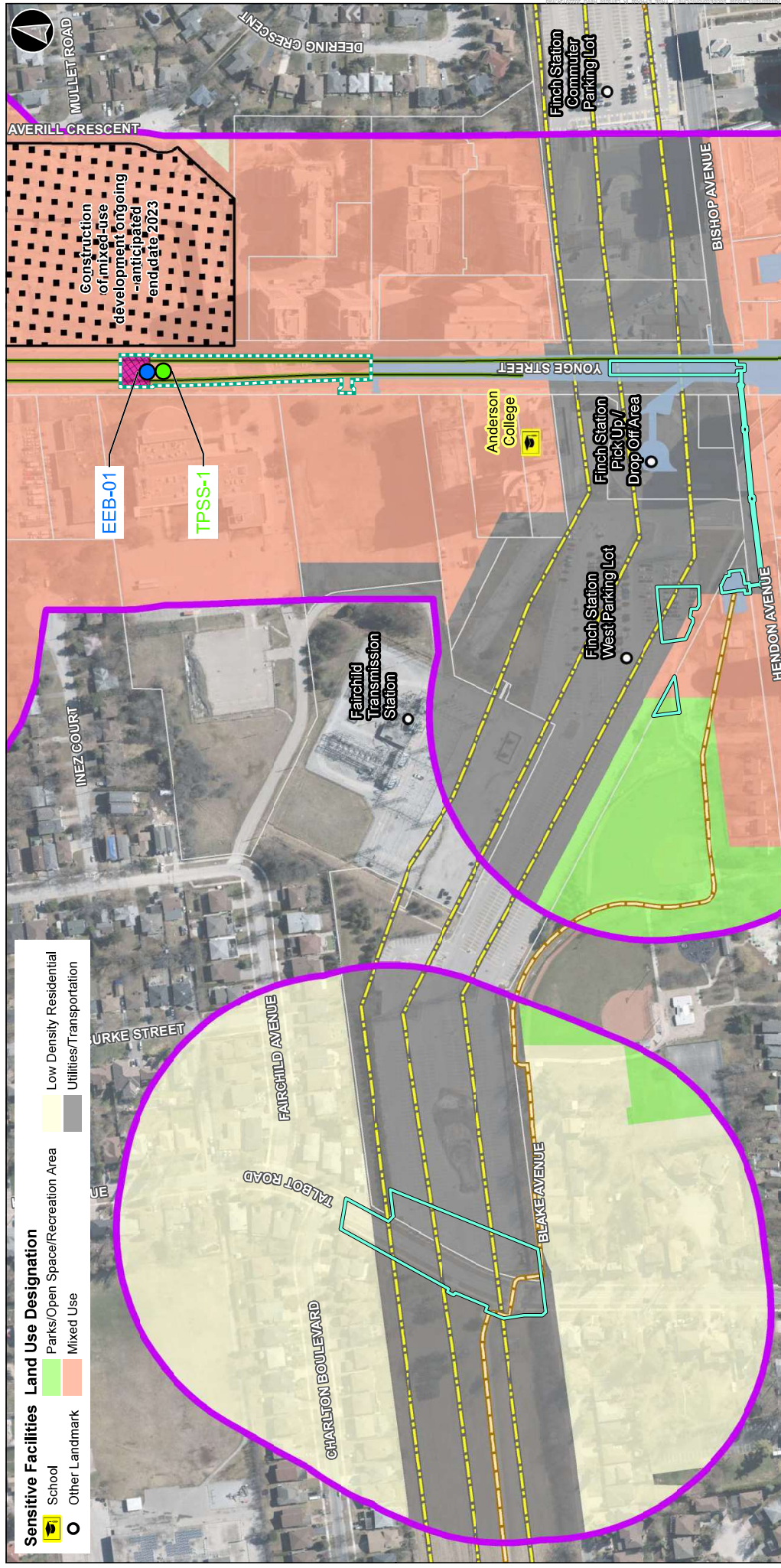
**Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping**

 METROLINX Infrastructure Ontario	Segment 1 - Figure 1	
	Jan. 2022	1:2,500
Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.		Rev 0

- Legend**
-  Study Area
 -  Existing Finch Station
 -  Proposed Subway Alignment (Below Grade)
 -  Property Fabric



Designs are conceptual and subject to change.



Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

	Segment 1 - Figure 2	1:2,500	Jan. 2022
	Figure 2	P 067400	Rev 0

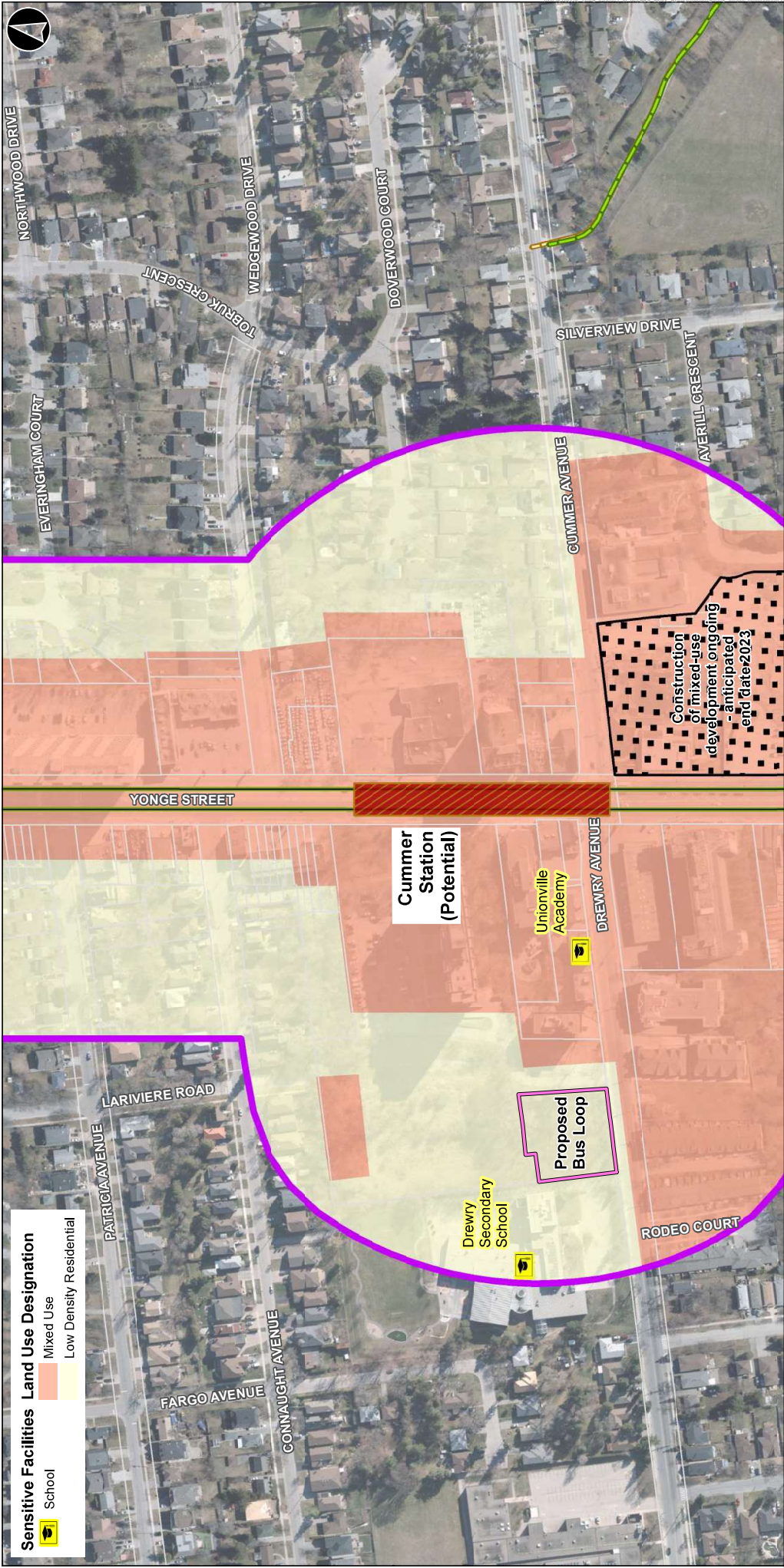
Data Sources:
 Aerial imagery provided by ESRI dated 2019.
 Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Map Extent
0 0.5 1 Kilometres

Legend

- Study Area
- Proposed Finch Station Modifications
- Existing Finch Station
- Proposed Transition Box Structure (Below Grade)
- Proposed Subway Alignment (Below Grade)
- Proposed Extraction Shaft
- Proposed EEB Location
- Area Under Development/Construction (By Others)
- Bike Network
- Existing Hydro One Transmission
- Property Fabric

Designs are conceptual and subject to change



Sensitive Facilities

- School

Land Use Designation

- Mixed Use
- Low Density Residential



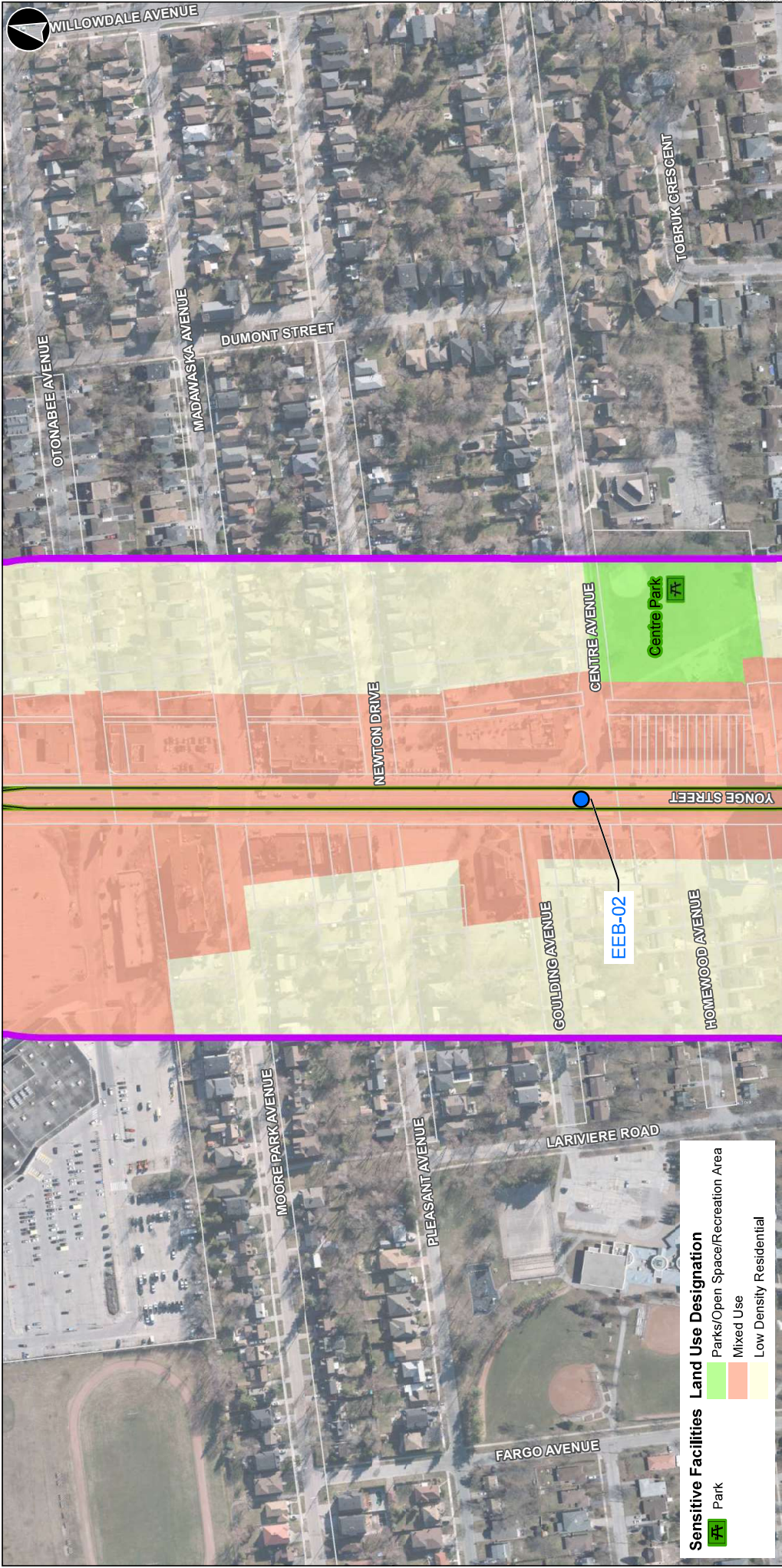
- Legend**
- Study Area
 - Proposed Subway Alignment (Below Grade)
 - Potential Station Platform Area
 - Proposed Bus Loop
 - Area Under Development/Construction (By Others)
 - Trail Network
 - Bike Network
 - Property Fabric

Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

Segment 1 - Figure 3	METROLINX Infrastructure Ontario
	One +
Jan. 2022	1:2,500
P 067400	Rev. 0

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA &
Municipal/Provincial Data Catalogues.

Designs are conceptual and subject to change.



Map Extent
0 0.5 1
Kilometres

Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Proposed EEB Location
- Property Fabric

Sensitive Facilities

- Park

Land Use Designation

- Parks/Open Space/Recreation Area
- Mixed Use
- Low Density Residential

Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping

Segment 1 - Figure 4

0 25 50 75 100
Metres

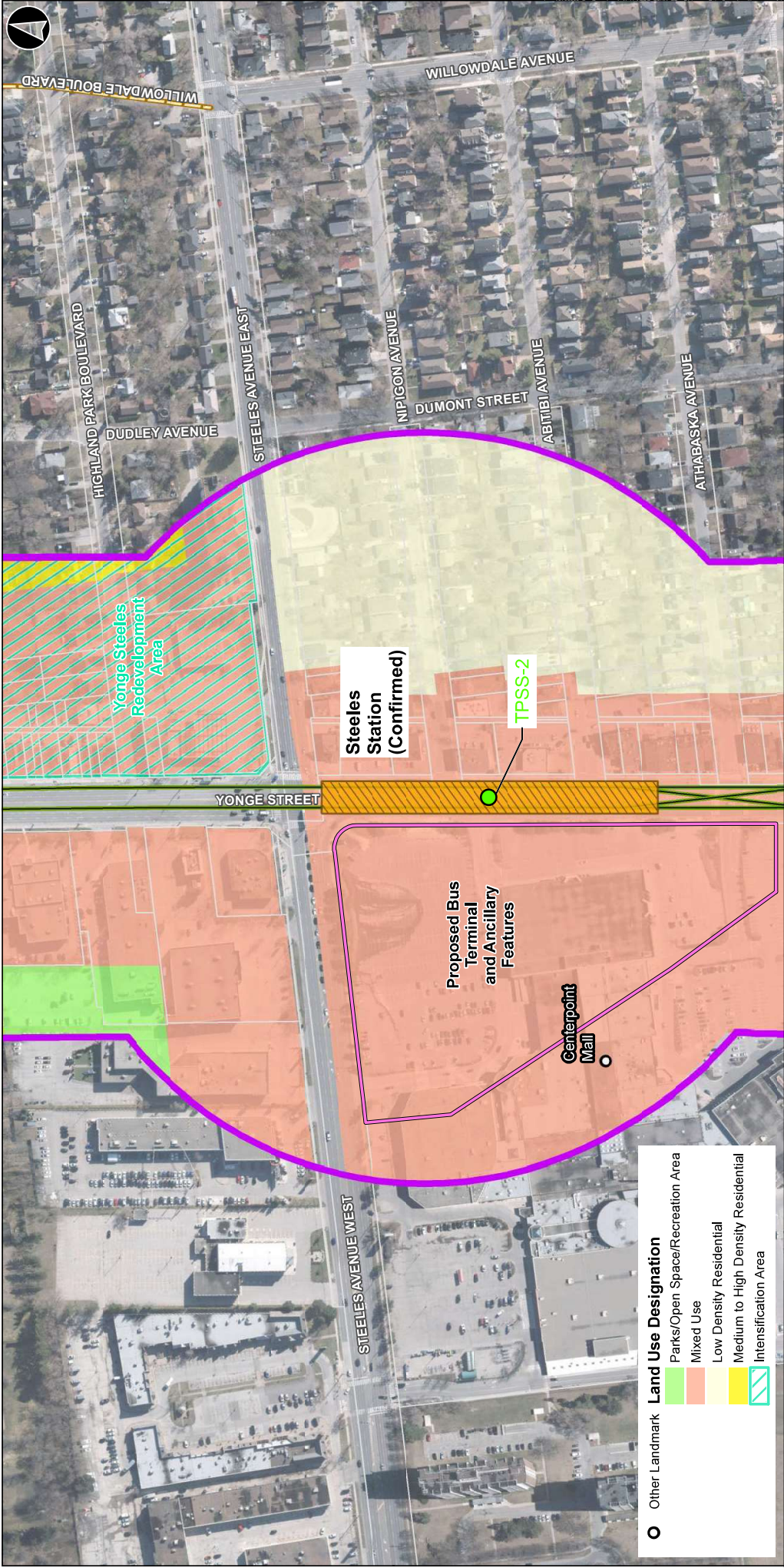
Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Jan. 2022 1:2,500
P 067400 Rev 0

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Infrastructure Ontario

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Ontario

Designs are conceptual and subject to change.



Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Confirmed Station Platform Area
- Proposed Bus Terminal and Ancillary Features
- Bike Network
- Property Fabric

Land Use Designation

- Parks/Open Space/Recreation Area
- Mixed Use
- Low Density Residential
- Medium to High Density Residential
- Intensification Area

Map Extent

0 0.5 1
Kilometres

**Segment 1 -
Figure 5**

Jan. 2022 1:2,500
P 067400 Rev 0

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Infrastructure
Ontario

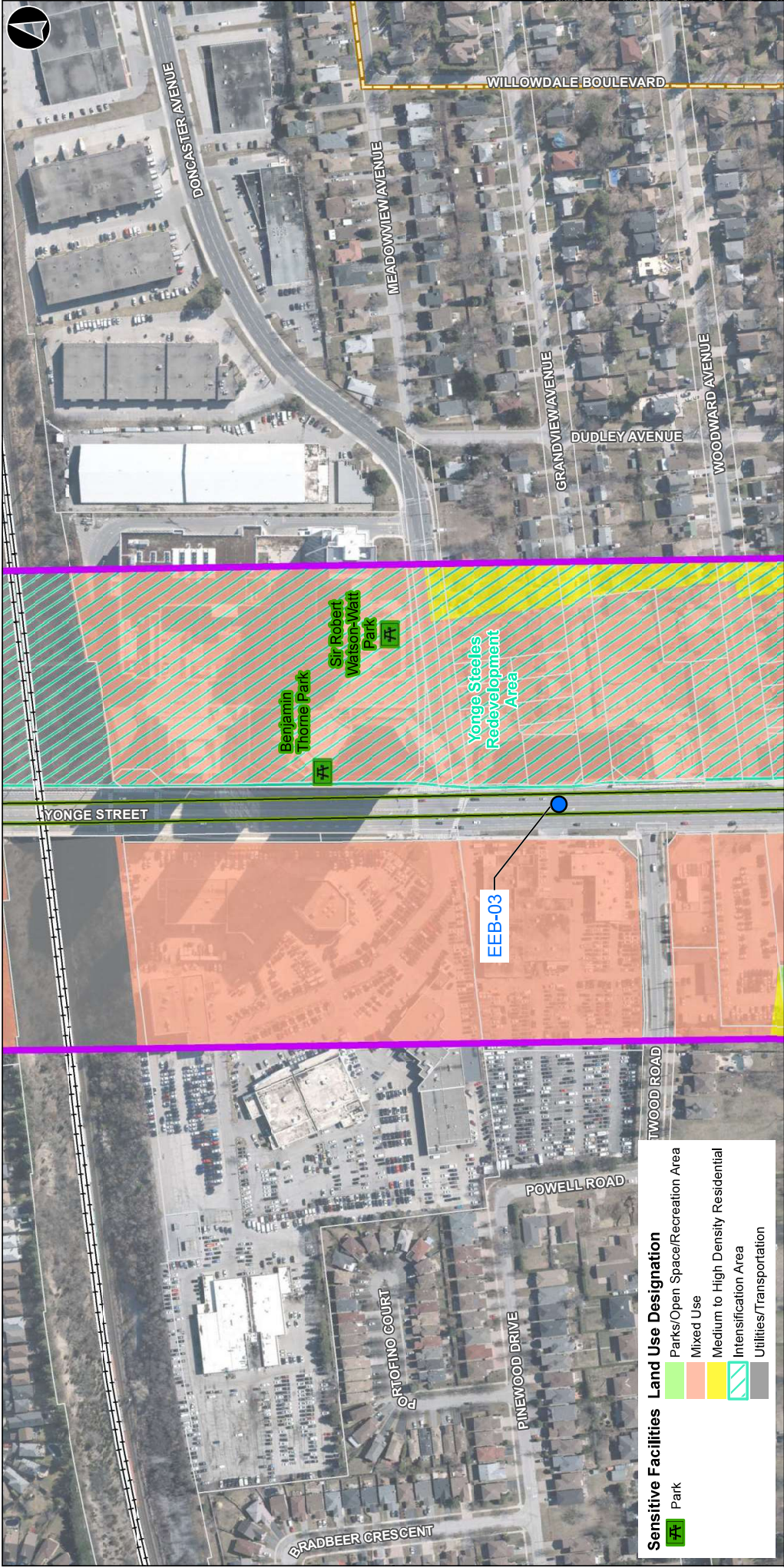
One
Map

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Datum: NAD27 MTM zone 10

0 25 50 75 100
Metres

Designs are conceptual and subject to change



Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

**Segment 1 -
Figure 6**

Scale: 0 25 50 75 100 Metres

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Metrolinx
Infrastructure Ontario
One

Jan. 2022 1:2,500
P 067400 Rev 0

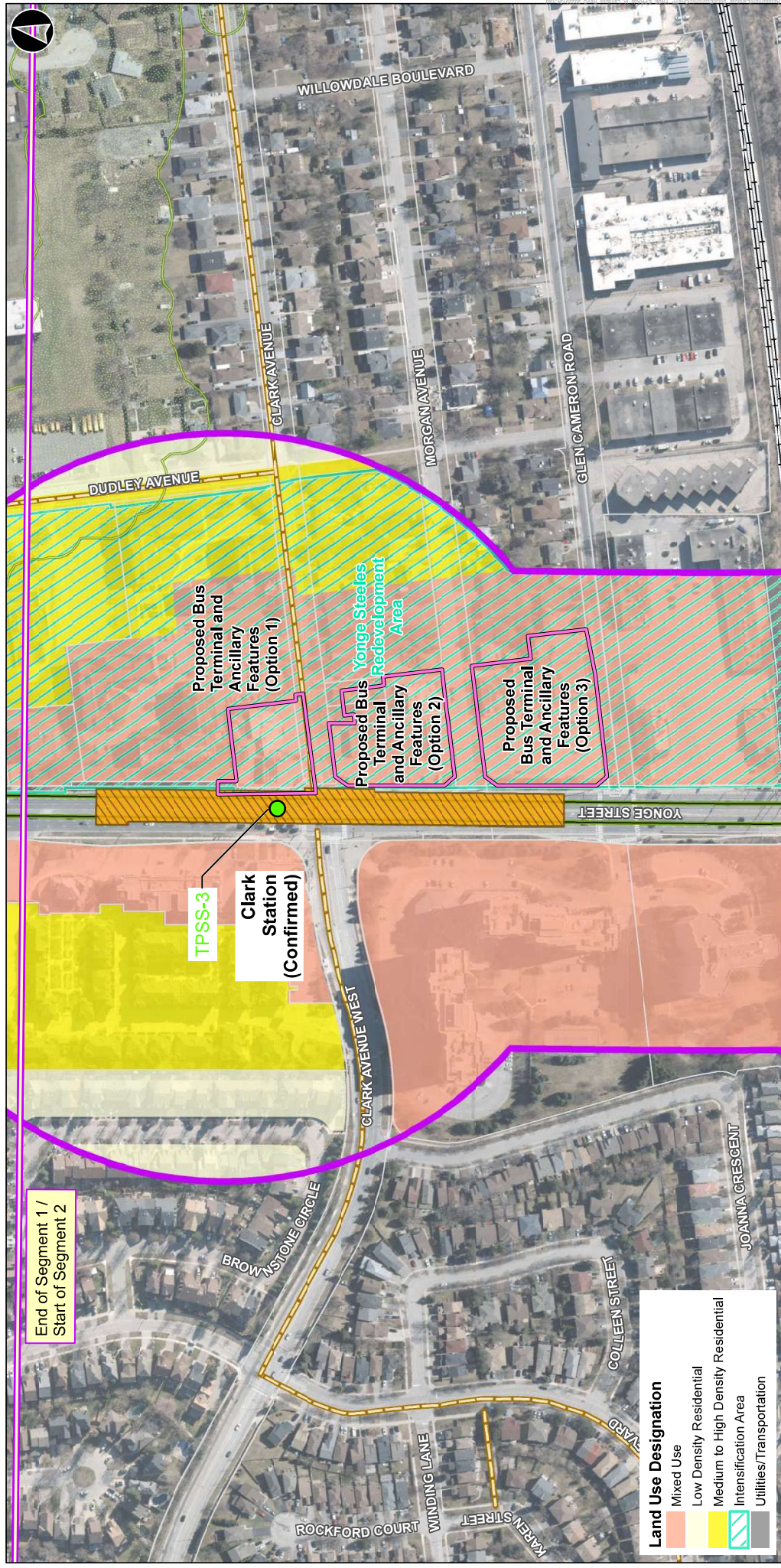
Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Proposed EEB Location
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- Property Fabric

Map Extent

0 0.5 1 Kilometres

Designs are conceptual and subject to change



End of Segment 1 /
Start of Segment 2

TPSS-3

Clark
Station
(Confirmed)

Proposed Bus
Terminal and
Ancillary
Features
(Option 1)

Proposed Bus
Terminal
and Ancillary
Features
(Option 2)

Proposed
Bus Terminal
and Ancillary
Features
(Option 3)

Yonge Steeles
Redevelopment
Area

Land Use Designation

- Mixed Use
- Low Density Residential
- Medium to High Density Residential
- Intensification Area
- Utilities/Transportation

Legend

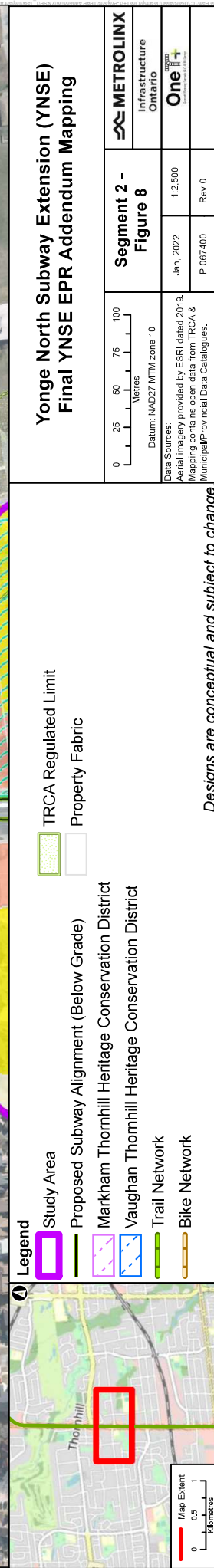
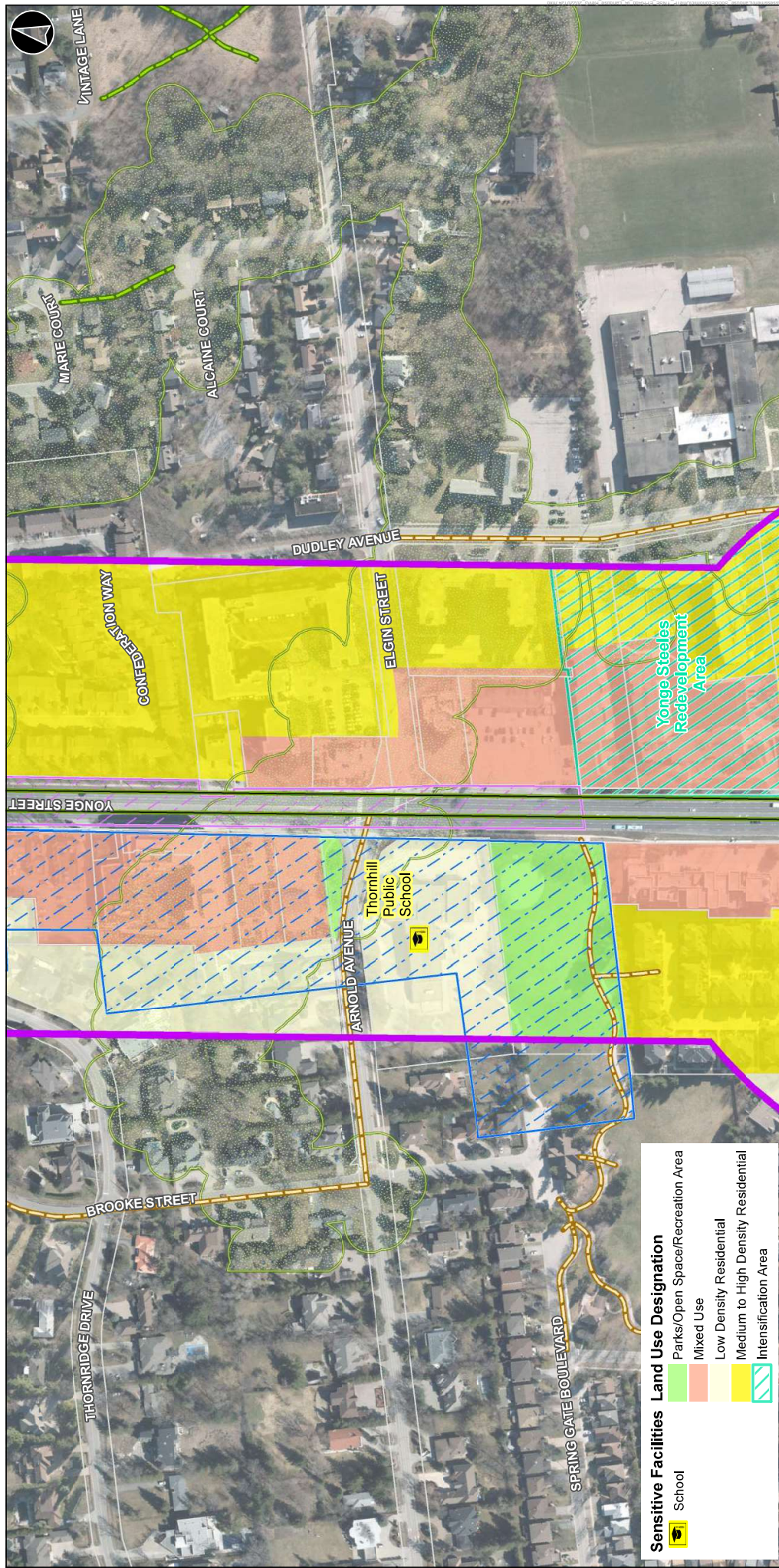
- Study Area
- Study Area Segment Breakline
- Proposed Subway Alignment (Below Grade)
- Confirmed Station Platform Area
- Proposed Bus Terminal and Ancillary Features
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- TRCA Regulated Limit
- Property Fabric



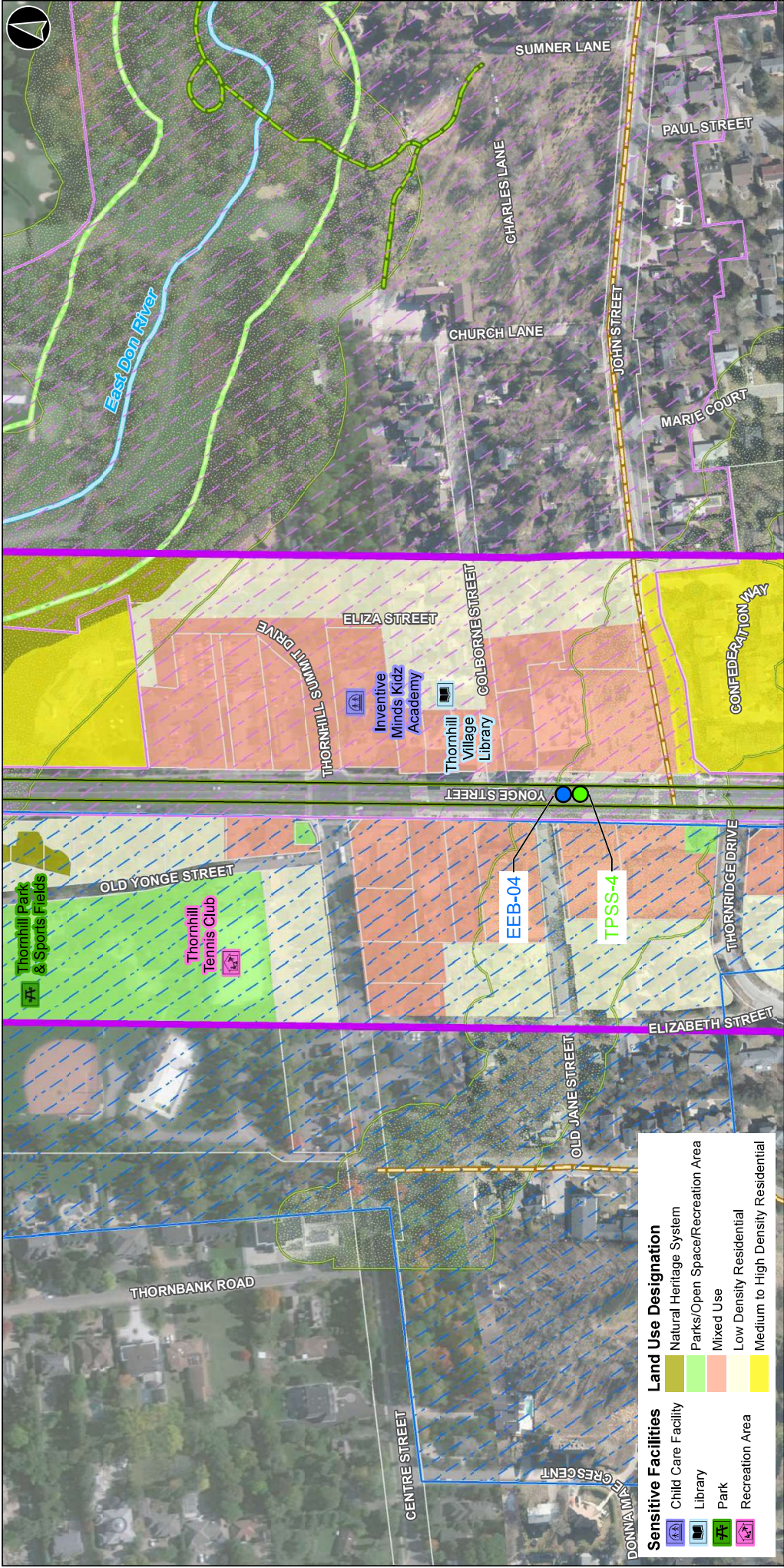
**Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping**

METROLINX Infrastructure Ontario	Segment 1/2 - Figure 7	
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Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.		Rev 0

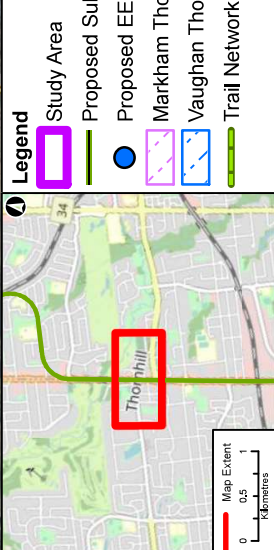
Designs are conceptual and subject to change



Designs are conceptual and subject to change.



- Sensitive Facilities**
 - Child Care Facility
 - Library
 - Park
 - Recreation Area
- Land Use Designation**
 - Natural Heritage System
 - Parks/Open Space/Recreation Area
 - Mixed Use
 - Low Density Residential
 - Medium to High Density Residential

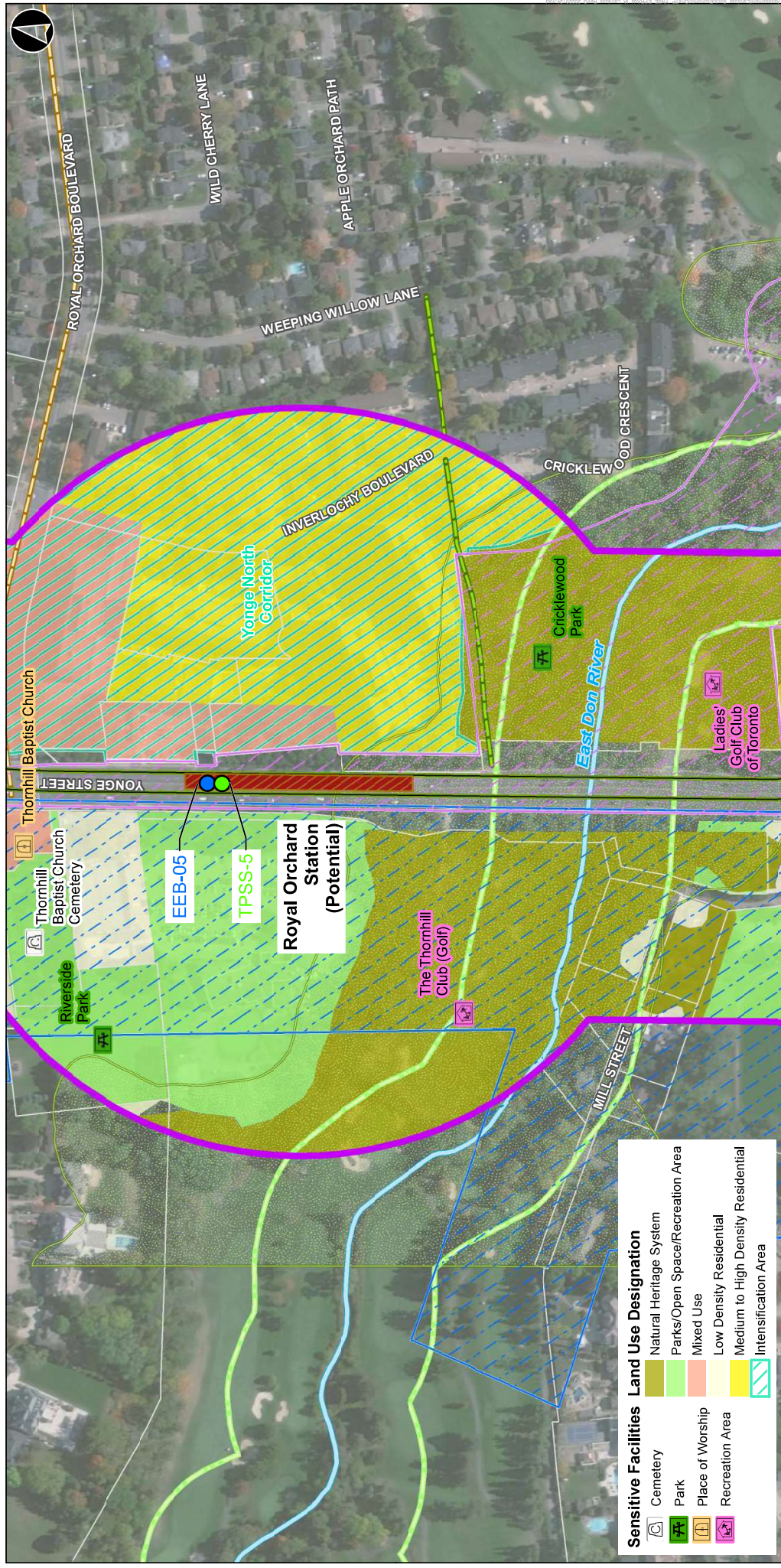


- Legend**
 - Study Area
 - Proposed Subway Alignment (Below Grade)
 - Proposed EEB Location
 - Markham Thornhill Heritage Conservation District
 - Vaughan Thornhill Heritage Conservation District
 - Trail Network
- Bike Network
 - Watercourse
 - Greenbelt Plan - Urban River Valley
 - TRCA Regulated Limit
 - Property Fabric

**Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping**

	Segment 2 - Figure 9	
	Jan. 2022	1:2,500
Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.		Rev 0

Designs are conceptual and subject to change



Map Extent
0 0.5 1
Kilometres

Sensitive Facilities

- Cemetery
- Park
- Place of Worship
- Recreation Area

Land Use Designation

- Natural Heritage System
- Parks/Open Space/Recreation Area
- Mixed Use
- Low Density Residential
- Medium to High Density Residential
- Intensification Area

Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Potential Station Platform Area
- Proposed EEB Location
- Markham Thornhill Heritage Conservation District
- Vaughan Thornhill Heritage Conservation District
- Trail Network
- Bike Network
- Watercourse
- Greenbelt Plan - Urban River Valley
- TRCA Regulated Limit
- Property Fabric

Yonge North Subway Extension (YNSE)

Final YNSE EPR Addendum Mapping

Segment 2 - Figure 10

Jan. 2022
P 067400

Infrastructure Ontario

One

Scale: 1:2,500

0 25 50 75 100 Metres

Datum: NAD27 MTM zone 10

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Rev 0

Designs are conceptual and subject to change



Sensitive Facilities

- School

Land Use Designation

- Parks/Open Space/Recreation Area
- Mixed Use
- Low Density Residential
- Medium to High Density Residential
- Intensification Area

Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Proposed EEB Location
- Markham Thornhill Heritage Conservation District
- Vaughan Thornhill Heritage Conservation District
- Bike Network
- Property Fabric

Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping

Segment 2 - Figure 11

Jan. 2022 1:2,500

P 067400 Rev 0

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Infrastructure Ontario
One

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Datum: NAD27 MTM zone 10

0 25 50 75 100 Metres

Map Extent

0 0.5 1 Kilometres

Designs are conceptual and subject to change



Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

Legend

- Study Area
- Proposed Subway Alignment (Below Grade)
- Proposed EEB Location
- Trail Network
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor

Sensitive Facilities Land Use Designation

- Natural Heritage System
- Low Density Residential
- Utilities/Transportation
- ⛶ Park
- 🏫 School

Watercourse

- CN Right-of-Way
- TRCA Regulated Limit
- Property Fabric

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Datum: NAD27 MTM zone 10

0 25 50 75 100
Metres

**Segment 2 -
Figure 12**

METROLINX
Infrastructure
Ontario

One
+
800-387-0707

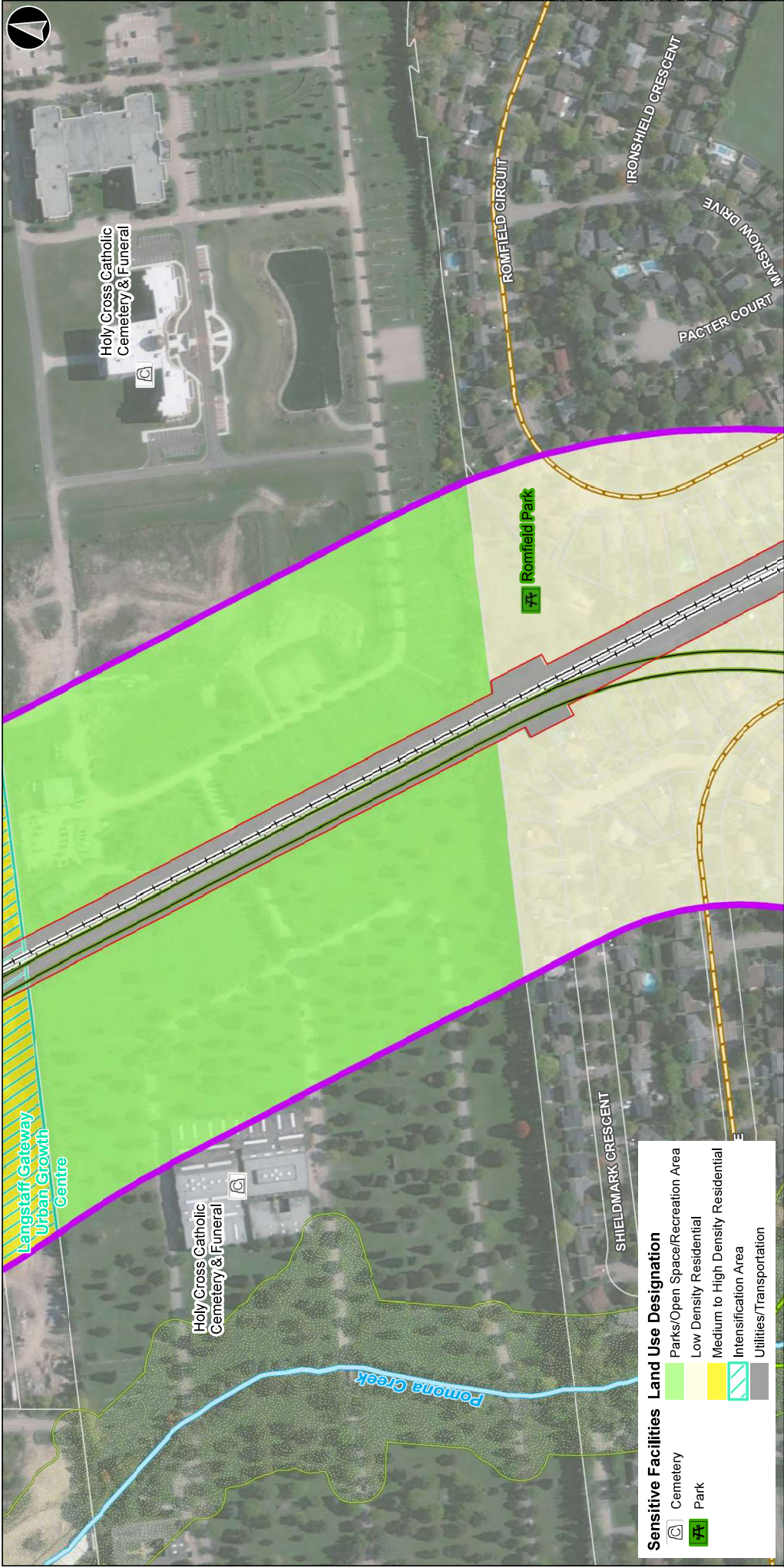
Mar. 2022

P 087400

1:2,500

Rev 0

Designs are conceptual and subject to change



Sensitive Facilities Land Use Designation

- Cemetery
- Park
- Parks/Open Space/Recreation Area
- Low Density Residential
- Medium to High Density Residential
- Intensification Area
- Utilities/Transportation

Legend

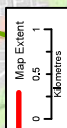
- Study Area
- Proposed Subway Alignment (Below Grade)
- Trail Network
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- Watercourse

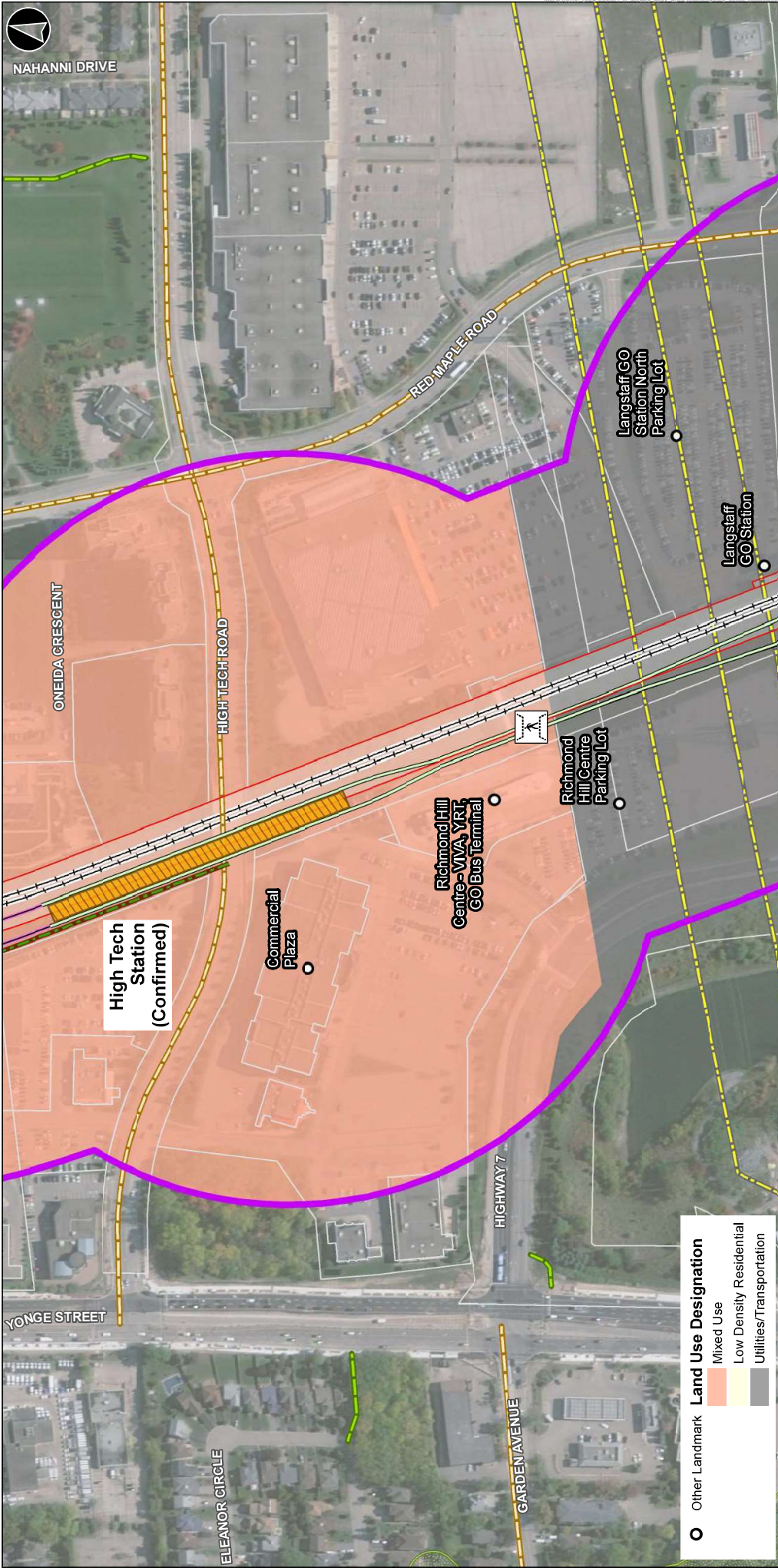
- CN Right-of-Way
- TRCA Regulated Limit
- Property Fabric

Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

METROLINX Infrastructure Ontario	Segment 2 - Figure 13	0 25 50 75 100 Metres
	Jan. 2022 1:2,500 P 067400 Rev 0	Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Designs are conceptual and subject to change





Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

Legend

- Study Area
- Proposed Temporary Pedestrian Bridge
- Proposed Subway Alignment (At Grade)
- Proposed Train Storage Facility Alignment
- Confirmed Station Platform Area

Planned Multi Use Trail (By Others)

- Trail Network
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- Existing Hydro One Transmission
- CN Right-of-Way

Land Use Designation

- Other Landmark
- Mixed Use
- Low Density Residential
- Utilities/Transportation

Scale

0 25 50 75 100 Metres

Map Extent

0 0.5 1 Kilometres

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Datum: NAD27 MTM zone 10

**Segment 3 -
Figure 15**

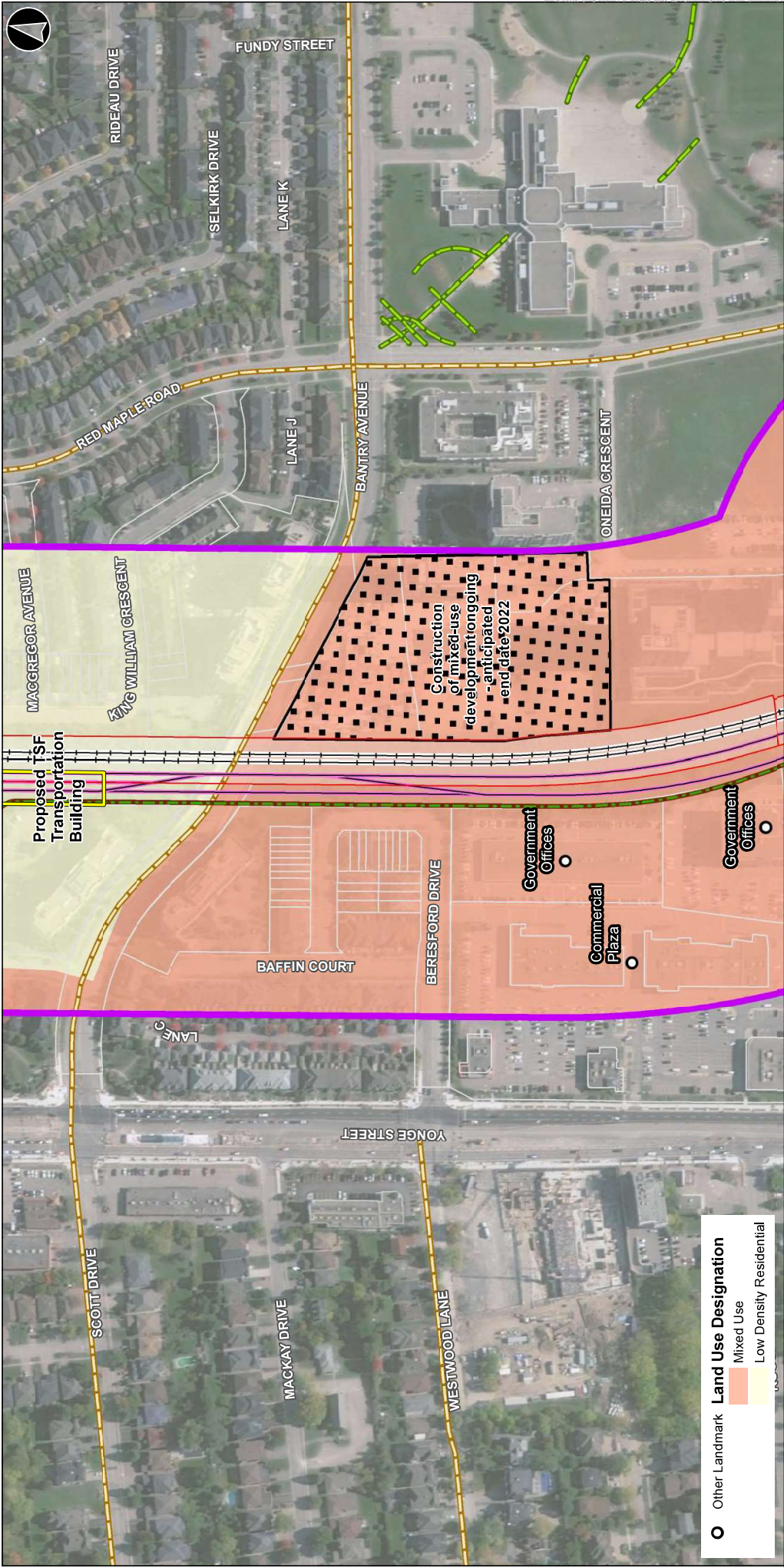
Jan. 2022 1:2,500

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Infrastructure
Ontario

One

Designs are conceptual and subject to change



Land Use Designation

- Other Landmark
- Mixed Use
- Low Density Residential



Legend


- Study Area
- Proposed TSF Transportation Building
- Proposed Train Storage Facility Alignment
- Area Under Development/Construction (By Others)
- Planned Multi Use Trail (By Others)

- Trail Network
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- CN Right-of-Way
- Property Fabric

Government Offices

Commercial Plaza


Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

 Metrolinx Infrastructure Ontario	Segment 3 - Figure 16	1:2,500	Jan. 2022	P 067400	Rev 0	<p>Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.</p> <p>Datum: NAD27 MTM zone 10</p> <p>0 25 50 75 100 Metres</p>
	<p>One</p> <p>100% open data</p>					

Designs are conceptual and subject to change



Yonge North Subway Extension (YNSE) Final YNSE EPR Addendum Mapping

 Infrastructure Ontario	Segment 3 - Figure 17	
	Jan. 2022	1:2,500
Data Sources: Aerial imagery provided by ESRI dated 2019. Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.		Rev 0

-  Study Area

 Proposed TSF Transportation Building

 Proposed Train Storage Facility Alignment

 Planned Multi Use Trail (By Others)

 Trail Network

 Bike Network
-  Existing CN Track / Metrolinx Richmond Hill Corridor

 Watercourse

 CN Right-of-Way

 TRCA Regulated Limit

 Property Fabric

Designs are conceptual and subject to change

 Park

 Mixed Use

 Low Density Residential

 Intensification Area

Sensitive Facilities Land Use Designation





Land Use Designation

- Natural Heritage System
- Low Density Residential



Legend

- Study Area
- Proposed Train Storage Facility Alignment
- Trail Network
- Bike Network
- Existing CN Track / Metrolinx Richmond Hill Corridor
- Watercourse

- CN Right-of-Way
- TRCA Regulated Limit
- Property Fabric

**Yonge North Subway Extension (YNSE)
Final YNSE EPR Addendum Mapping**

**Segment 3 -
Figure 19**

0 25 50 75 100
Metres

Data Sources:
Aerial imagery provided by ESRI dated 2019.
Mapping contains open data from TRCA & Municipal/Provincial Data Catalogues.

Jan. 2022
1:2,500

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Rev 0

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Infrastructure
Ontario

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Infrastructure
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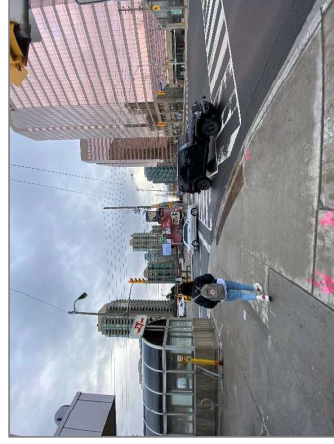
Designs are conceptual and subject to change

Appendix B – YNSE Corridor Land Use Field Photographs

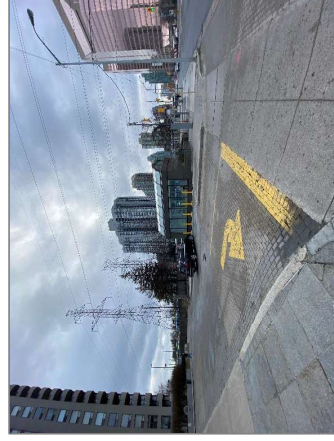
Appendix B: YNSE Corridor Land Use Field Photographs Existing Finch Subway Station



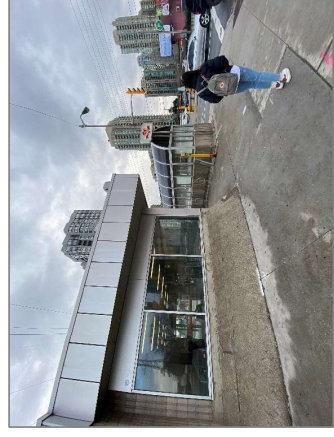
Context / Location Plan



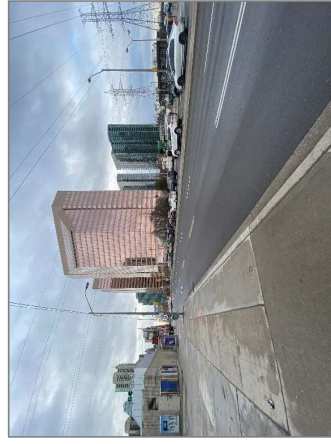
View south at intersection of Yonge Street and Bishop Avenue



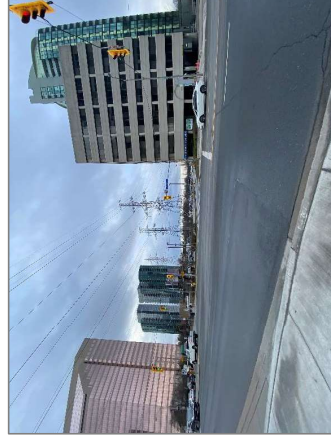
View south-east towards Yonge Street and Bishop Avenue. Bus Terminal for TTC/GO Transit/VIVA.



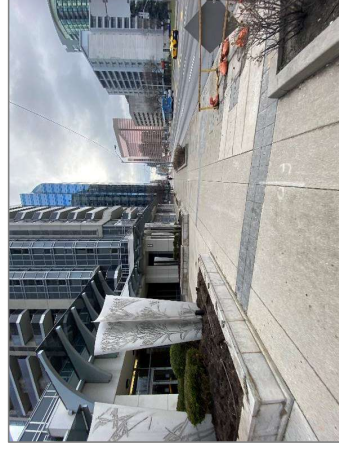
View south-east towards TTC Station/Bus Terminal.



View south-west towards Yonge Street and Bishop Avenue. Shows office buildings in background and hydro corridor where the Finch Station Pick up and Drop off area is located.



View west north of Bishop Avenue on Yonge Street. Shows the hydro corridor and pick up and drop off area, as well as the Anderson College building.

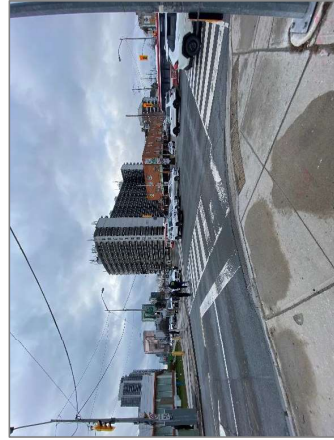


Example of residential apartment/condominium buildings along Yonge Street north of Finch Station.

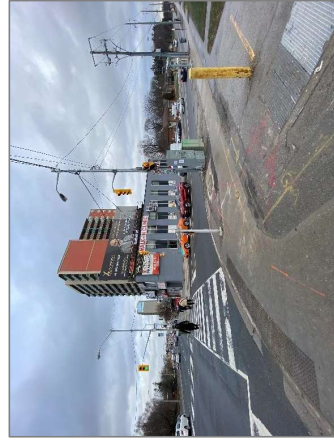
Appendix B: YNSE Corridor Land Use Field Photographs Proposed Cummer Station



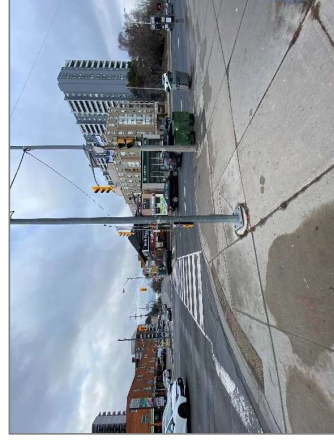
Context / Location Plan



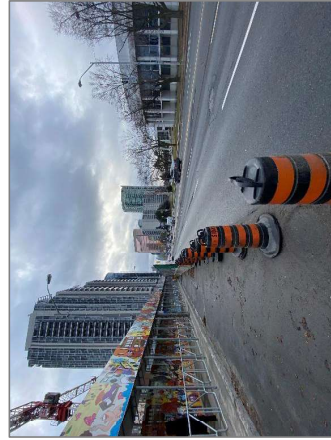
View south-west at the Cummer Avenue-Drewry Avenue/Yonge Street intersection.



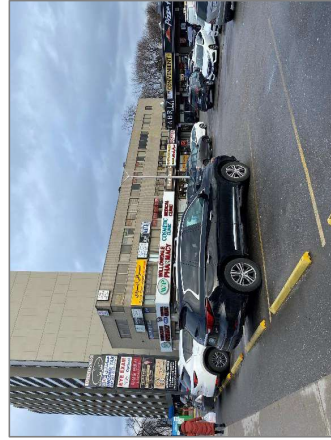
View north on Yonge Street looking towards the east portion of the Cummer Avenue/Yonge Street intersection. Note the commercial and residential uses.



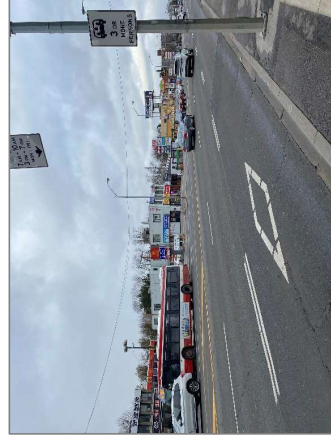
View east at the Cummer Avenue-Drewry Avenue/Yonge Street intersection. Note commercial uses at the intersection.



View south of the Cummer Avenue-Drewry Avenue/Yonge Street intersection. Note the large residential development site on the east side of Yonge Street.



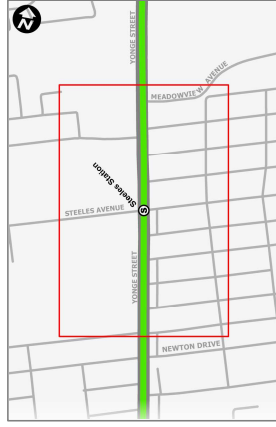
View north on the east side of Yonge Street (Wedgewood Drive) north of the Cummer Avenue-Drewry Avenue/Yonge Street intersection. This is an example of the typical plaza retail found north of the intersection.



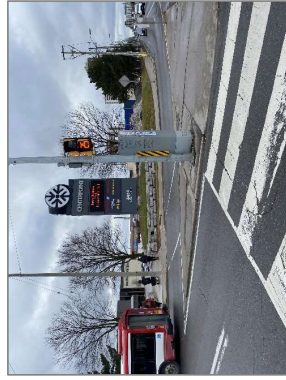
View north-west on Yonge Street (Homeward Dr), north of the Cummer Avenue-Drewry Avenue/Yonge Street intersection. This photo shows the typical retail found along Yonge Street.

Appendix B: YNSE Corridor Land Use Field Photographs

Proposed Steeles Station



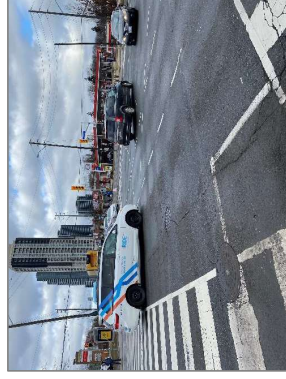
Context / Location Plan



View west at the intersection of Yonge Street and Steeles Avenue. Centerpoint Mall is located at the south-west quadrant of the intersection.



View west at the intersection of Yonge Street and Steeles Avenue. Retail plazas are located along the north side of Steeles Avenue.



Steeles Avenue / Yonge Street intersection. View looking north-east. Note gas station at the north-east quadrant.



View looking south on Yonge Street from the intersection. Retail plazas located along the east (left) side, and Centerpoint Mall on the west (right) side.



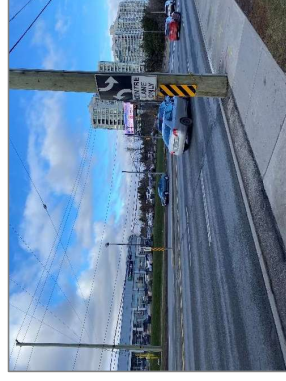
View north on Yonge Street north of Steeles Avenue. Photo taken beside the Golden Star restaurant, looking towards the new mixed use development (World on Yonge).



View east from Yonge Street into the at grade retail and above residential development (World on Yonge).

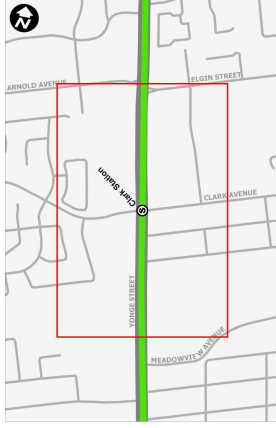


View of west side of Yonge Street. Note the multiple auto sales retailers.

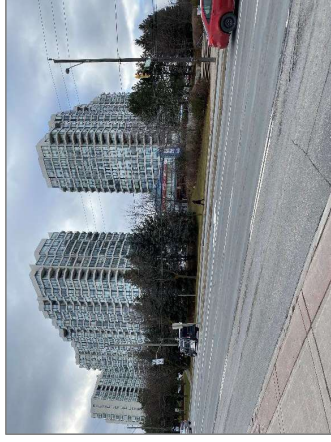


View on Yonge Street towards north-west. Note auto retail on left side of image, and multi-unit residential further north.

Appendix B: YNSE Corridor Land Use Field Photographs Proposed Clark Station



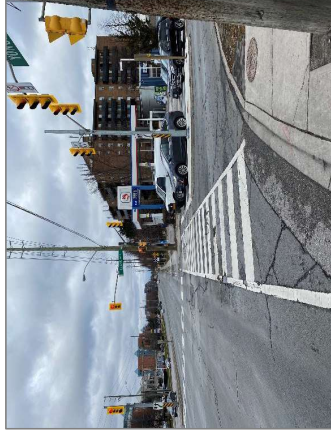
Context / Location Plan



View of residential development located at the south-west quadrant of Clark Avenue and Yonge Street. This development contains at-grade retail and office space.



View of the north-west quadrant of Clark Avenue / Yonge Street. The large building is Central Park on Yonge, an office building with a number of medical offices.



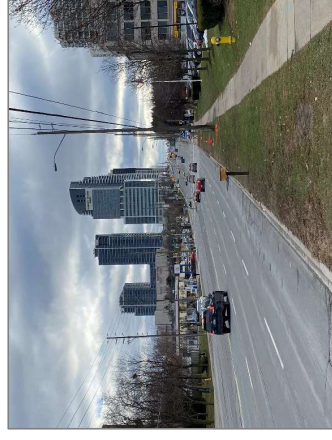
View of the north-east quadrant of Clark Avenue / Yonge Street. Note the gas station at the intersection, and apartment buildings further north.



Mixed use development located north of Clark Avenue / Yonge Street.

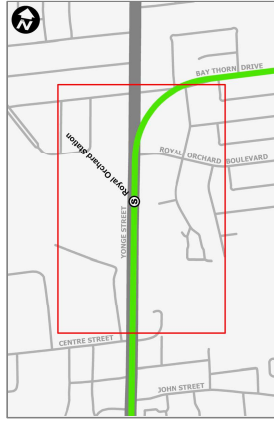


Commercial plaza at the south-east quadrant of Clark Avenue and Yonge Street.



View looking south on Yonge Street towards the Clark Avenue and Yonge Street intersection.

Appendix B: YNSE Corridor Land Use Field Photographs Proposed Royal Orchard Station



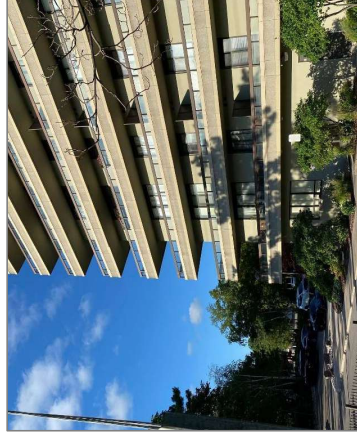
Context / Location Plan



View of commercial plaza located on the east side of Yonge Street, north of Thornhill Summit Drive.



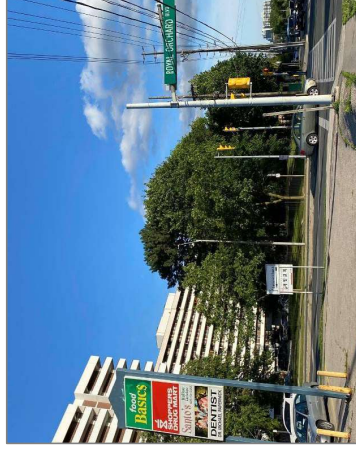
View looking west on Yonge Street, south of Royal Orchard Boulevard- Thornhill Golf & Country Club.



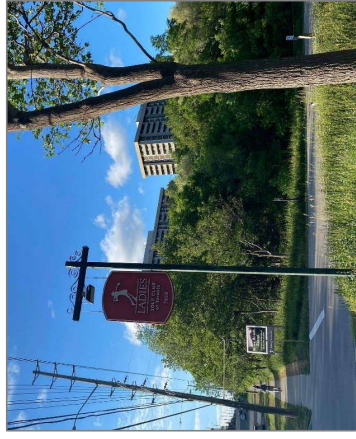
View of residential building looking east on Yonge Street south of Bay Thorn Drive.



View of business on the west side of Yonge Street at Centre Street.



View of commercial plaza at the north-east quadrant of the Yonge Street and Royal Orchard Boulevard intersection.



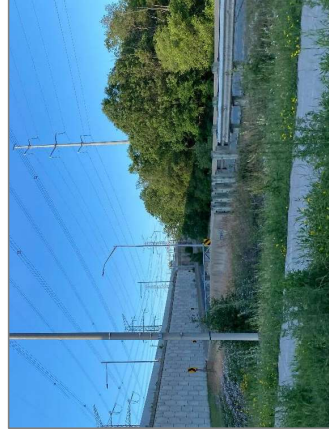
View looking northeast on Yonge Street south of Royal Orchard Boulevard- Ladies' Golf Club of Toronto.

Appendix B: YNSE Corridor Land Use Field Photographs

Proposed Bridge Station



Context / Location Plan



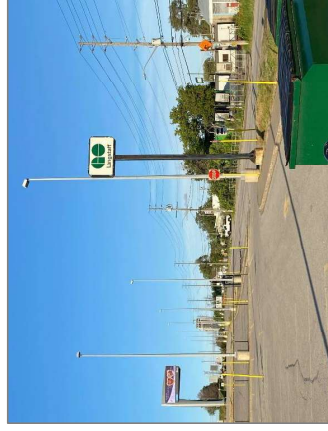
View of highway 407 ramp east of Yonge Street and north of Langstaff Road.



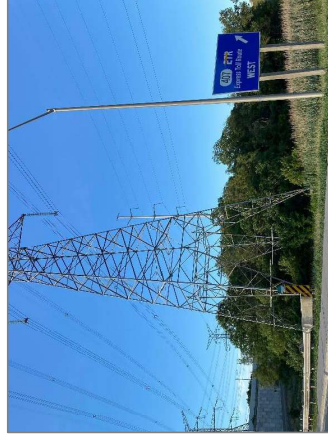
View looking west from Langstaff GO Station south parking lot, south of Highway 407 - CN Rail crossing.



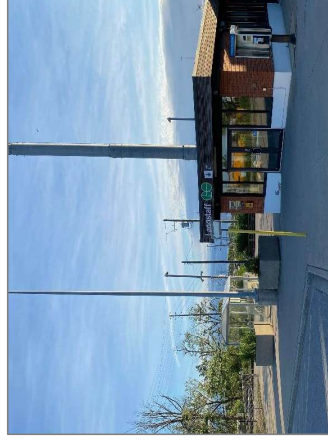
View looking west from Langstaff GO Station north parking lot, north of Highway 7.



View looking east from Langstaff GO Station south parking lot, south of Highway 407.



View of highway 407 ramp east of Yonge Street and north of Langstaff Road.



View looking west at Langstaff GO Station facilities, located north of Highway 7.

Appendix B: YNSE Corridor Land Use Field Photographs

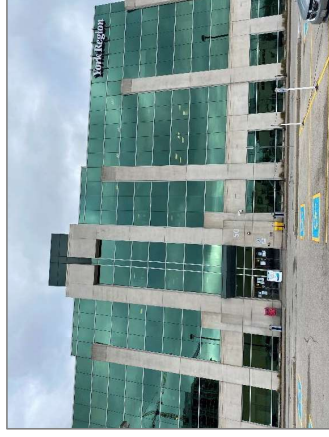
Proposed High Tech Station



Context / Location Plan



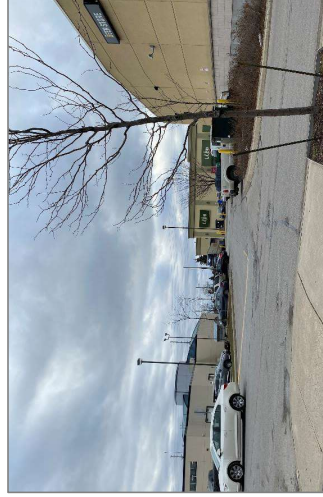
View looking north towards High Tech Road, east of Yonge Street- cinema within commercial plaza.



View looking east towards CN corridor, east of Yonge Street- York Region Transit Head Office.



View looking east towards CN corridor, east of Yonge Street- Viva bus terminal.



Commercial plaza located east of Yonge Street and north of High Tech Road.



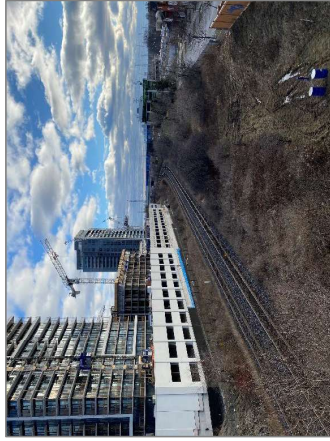
View looking west towards CN corridor, south of Bantry Avenue.



View looking north towards Bantry Avenue, east of CN corridor.

Appendix B: YNSE Corridor Land Use Field Photographs

Proposed Train Storage Yard



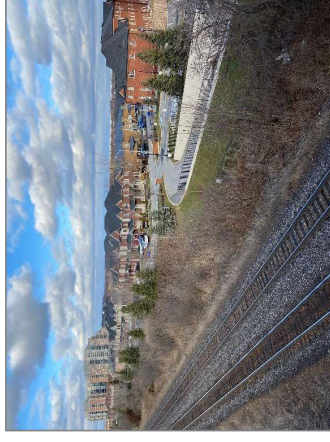
View south from Bantry Avenue along the existing rail corridor. New development under construction east of the rail ROW.



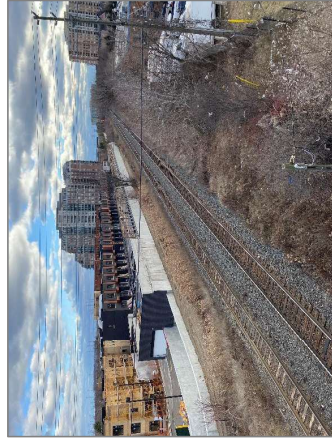
View south from Bantry Avenue along existing rail corridor. Residential uses along the west side of the ROW.



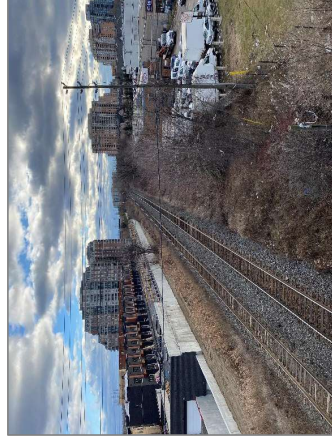
View north from Bantry Avenue along existing rail corridor.



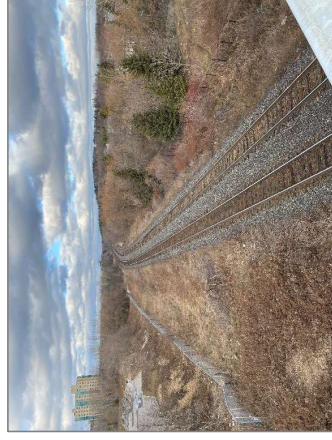
View north from Bantry Avenue along existing rail corridor.



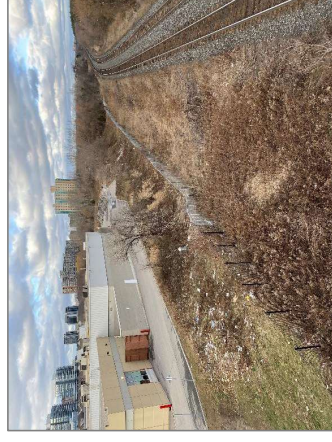
View south from 16th Avenue along existing rail corridor. New residential development under construction at the time of site visit on east (left) side.



View south from 16th Avenue along existing rail corridor. Auto/car dealership uses on the west side (right) side.



View north from 16th Avenue along existing rail corridor.



View north from 16th Avenue along existing rail corridor. Big box retail centre located to the west (left).

Appendix C – Reclassification of Land Use Designations in Official Plan

CITY OF MARKHAM

City of Markham Land Use Designation	YNSE Land Use Redesignation
Greenway	Natural Heritage System
Transportation and Utilities	Utilities/Transportation
Parkway Belt West	Parkway Belt West
Private Open Space	Parks/Open Space/Recreation Area
Residential Low Rise	Low Density Residential
Residential Mid Rise	Medium to High Density Residential
Residential High Rise	Medium to High Density Residential
Mixed-use Low Rise	Mixed-use
Mixed-use Mid Rise	Mixed-use
Mixed-use High Rise	Mixed-use
Mixed-use Office Priority	Mixed-use
Mixed-use Heritage Main Street	Mixed-use
Business Park Employment	Employment/Industrial
Business Park Office Priority Employment	Employment/Industrial
Service Employment	Employment/Industrial
General Employment	Employment/Industrial
Intensification Area	Intensification Area

CITY OF RICHMOND HILL

City of Richmond Hill Land Use Designation	YNSE Land Use Redesignation
Natural Core	Natural Heritage System
Natural Linkage	Natural Heritage System
Parkway Belt West	Parkway Belt West
Richmond Hill Centre	Mixed-use
Key Development Area	Intensification Area
Regional Mixed-use Corridor	Mixed-use
Neighbourhood	Low Density Residential
Utility Corridor	Utilities/Transportation

CITY OF TORONTO

City of Toronto Land Use Designation	YNSE Land Use Redesignation
Neighbourhoods	Low Density Residential
Apartment Neighbourhoods	Medium to High Density Residential
Mixed-use Areas	Mixed-use
Natural Areas	Natural Heritage System
Parks	Parks/Open Space/Recreation Area
Other Open Spaces Areas (Including Golf Courses, Cemeteries, Public Utilities)	Parks/Open Space/Recreation Area
Institutional Areas	Institutional
Regeneration Areas	Regeneration Area
General Employment Areas	Employment/Industrial
Core Employment Areas	Employment/Industrial
Utility Corridors	Utilities/Transportation

CITY OF VAUGHAN

City of Vaughan Land Use Designation	YNSE Land Use Redesignation
Natural Areas	Natural Heritage System
Parks	Parks/Open Space/Recreation Area
Private Open Spaces	Parks/Open Space/Recreation Area
Low-Rise Residential	Low Density Residential
Low-Rise Mixed-use	Mixed-use
Mid-Rise Residential	Medium to High Density Residential
Mid-Rise Mixed-use	Mixed-use
High-Rise Residential	Medium to High Density Residential
High-Rise Mixed-use	Mixed-use
Parkway Belt West Lands	Parkway Belt West
Infrastructure & Utilities	Utilities/Transportation