



# **North York Centre South Service Road Environmental Study Report Addendum**

**North York Class EA Addendum**

City of Toronto

18 July, 2022

# Executive Summary

This Environmental Study Report Addendum (ESR Addendum) provides an updated alternative design for the completion of the south-eastern portion of the North York Centre Service Road ("South Service Road") south of Sheppard Avenue East and east of Yonge Street, first studied in detail in a 1996 Environmental Study Report (ESR), modified in a 1998 ESR Addendum and reviewed in 2013 as part of a further ESR Addendum.

This report is subject to, and must be read in conjunction with, the limitations set out in **Section 1.2** and the assumptions and qualifications contained throughout the Report.

This current Addendum recommends a two phased approach for the South Service Road, including an interim design and ultimate design. The interim design, referred to as "Interim Option C", is an offset intersection with a reduced lane arrangement that includes the extension of Tradewind Avenue north from Anndale Drive to Sheppard Avenue East, maintains the existing Doris Avenue alignment, and restricting the Bonnington Place intersection with Sheppard Avenue East to a northbound 'right-out' to maintain basic access to municipal services (waste management, snow removal, emergency services, etc.). These two intersections will be operated as a single coordinated intersection through traffic signal phasing. The ultimate design, referred to as "Ultimate Option B", is a single continuous intersection at Sheppard Avenue East achieved by realigning the approach of Doris Avenue to meet the northern extension of Tradewind Avenue at Sheppard Avenue East. This would result in a single four-lane intersection on a skew.

The recommended two-phased approach based on Interim Option C and Ultimate Option B achieves the objectives of the South Service Road and avoids near-term impacts to the existing parking garage at 45 - 47 Sheppard Avenue East and the privately-owned publicly accessible space (POPS) at the northeast corner of Doris Avenue and Sheppard Avenue East. The properties along the west side of Bonnington Place that were required for the alignment of this facility identified in the 1998 ESR Addendum are also required for the implementation of the recommended interim and ultimate designs. This property has now been acquired by the City. In addition, the entrance to surface parking at 45 - 47 Sheppard Avenue East will be restricted to 'right-in' access only, while a new full movement access to the site and access to the existing parking garage will be constructed on Tradewind Avenue or Anndale Avenue. The alignment south of Anndale to Avondale will remain largely unchanged with single lane in both directions and controlled stops.

Under the Municipal Class Environmental Assessment (MCEA) process, an addendum is required when a significant modification is proposed or a change in the environmental setting occurs after the ESR has been filed. The environmental setting within the Study Area has changed since the original 1996 ESR and 1998 ESR Addendum were filed, and therefore requires that an addendum be completed. It should be noted that an updated ESR Addendum was prepared in draft after public and agency consultation on revised alternatives were presented in 2013. This current ESR Addendum builds off the consultation that has occurred since the draft 2014 ESR Addendum.

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# 1. Introduction

## 1.1 Purpose of this addendum

The purpose of this Environmental Study Report Addendum (ESR Addendum) is to document the changes to the 1996 Downtown Plan South of Sheppard Avenue – Transportation Infrastructure Requirements Environmental Study Report<sup>1</sup> (1996 ESR) and 1998 Environmental Study Report Addendum<sup>2</sup> (1998 ESR Addendum). It should be noted that a further draft Addendum was prepared in 2014 after revised alternatives were presented to the public, agencies and Council. This Addendum was never finalized and this current Addendum builds off the consultation that occurred on the 2014 draft Addendum.

With this in mind, the City of Toronto has undertaken a review of the 1998 ESR Addendum and subsequent analysis and consultation completed in 2014 and 2015, and more recently in 2020, to determine the environmental changes to the Study Area and consider if the impacts should result in any significant modifications to the Preferred Solution endorsed by City Council in December 2020. In accordance with the Municipal Class Environmental Assessment (MCEA), this ESR Addendum contains a description, rationale, and implications of the proposed changes, including proposed mitigation measures.

The Study Area for this Addendum extends southerly from the intersections of Greenfield Avenue and Doris Avenue to Avondale Avenue and Tradewind Avenue, including approximately 75 metres east and west of Tradewind Avenue, Bonnington Place and Doris Avenue

Figure 1.1.

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<sup>1</sup> City of North York (1996). *Downtown Plan South of Sheppard Avenue – Transportation Infrastructure Requirements Environmental Study Report*. Retrieved from <https://www.toronto.ca/wp-content/uploads/2017/11/98c1-pcu-Downtown-Plan-South-of-Sheppard-ESR-TIR-Sep1996.pdf>

<sup>2</sup> City of Toronto (1998). *Downtown Plan South of Sheppard Avenue – Transportation Infrastructure Requirements Environmental Study Report Addendum*. Retrieved from [https://www.toronto.ca/wp-content/uploads/2017/11/98ce-pcu-Downtown-Plan\\_South-of-Sheppard-ESR-Addendum-TIR-Apr1998.pdf](https://www.toronto.ca/wp-content/uploads/2017/11/98ce-pcu-Downtown-Plan_South-of-Sheppard-ESR-Addendum-TIR-Apr1998.pdf)

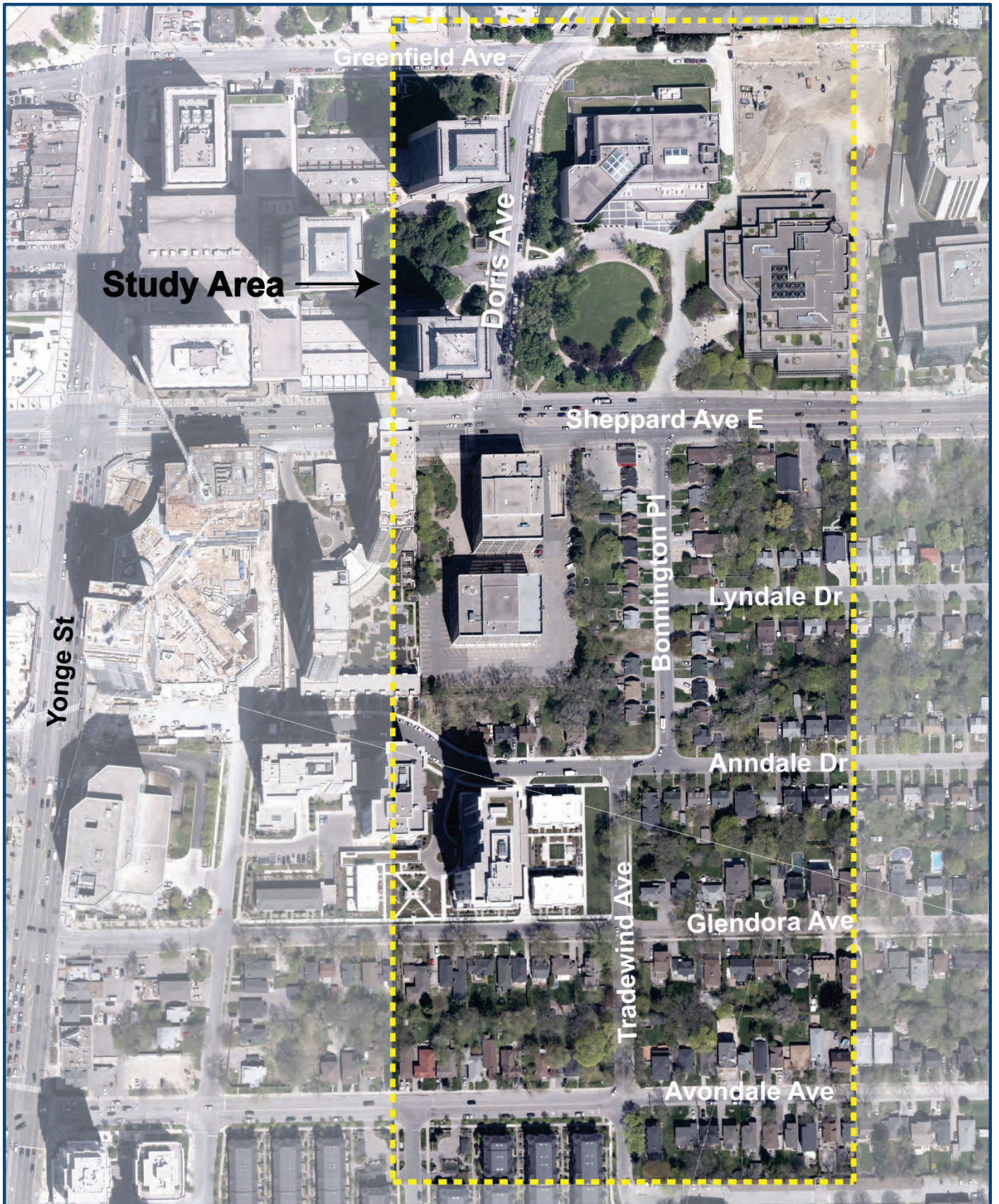


Figure 1.1 Study Area

## 1.2 Scope and limitations

*This report: has been prepared by GHD for City of Toronto and may only be used and relied on by City of Toronto for the purpose agreed between GHD and City of Toronto as set out in **Section 1.1** of this report.*

*GHD otherwise disclaims responsibility to any person other than City of Toronto arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.*

*The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.*

*The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.*

*The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.*

## 1.3 Project history

In 1996, the former City of North York developed a vision to improve the transportation network in the North York Centre to support employment and residential growth of the area. To support growth, a street network was created which includes keeping Yonge Street a central civic street and promenade supported by two parallel streets - Doris Avenue and Beecroft Road – referred to as the North York Centre Service Roads. The North York Centre Service Roads form a ring road around the North York Centre, east and west of Yonge Street.

This study focusses on the Doris Avenue Extension (also referred to in this report as the South Service Road). The completion of the South Service Road would link Doris Avenue and Tradewind Avenue across Sheppard Avenue East, east of Yonge Street in order to alleviate traffic on the Yonge Street corridor and key intersections within the overall study area.

The South Service Road was first studied in detail in a 1996 Municipal Class Environmental Assessment (MCEA) (**Section 1.3.1.1**), followed by an Addendum to the Environmental Study Report (ESR Addendum) in 1998 (**Section 1.3.1.2**). Following the filing of the 1998 ESR Addendum, various alternatives for connecting Doris Avenue and Tradewind Avenue across Sheppard Avenue East continued to be studied and reassessed with the objective of improving traffic flow to better accommodate growth in North York Centre and mitigating impacts to private property. In 2013, Council reopened the study to address changes in the Study Area, including extensive high-rise development in North York Centre, and objectives of the 2006 North York Secondary Plan. In April 2014, a new ESR Addendum was completed and then presented to Council (June 2014) for approval to file the ESR Addendum. Council deferred approval and directed staff to revise the alternative options and reassess with a stronger focus on traffic capacity, traffic operations and overall safety.

Throughout 2014 and 2015, the project team revised the alternative options and conducted further consultation with key stakeholders. In 2014, the City reported on the findings of the preliminary evaluation of the alternative options. At this point, Council decided to reserve their decision to confirm the preferred alternative until the City completed the development of a comprehensive transportation network plan to support traffic capacity and growth in the North York Centre. The transportation network plan includes the scheduled corridor improvements and modifications of Yonge Street (REimagining Yonge Street) (**Section 1.3.1.3**) and the North York Centre Service Roads.

Upon completion of the REimagining Yonge Street MCEA staff report, in December 2020, Council endorsed a preferred solution for the South Service Road (**Section 5.6**) and authorized the General Manager, Transportation Services to issue a Notice of Completion and to file the ESR Addendum. Since the endorsement, the project team finalized the preliminary design as documented in this ESR Addendum.



## 1.3.1 Related studies

### 1.3.1.1 1996 ESR

The 1996 Downtown Plan South of Sheppard Avenue – Transportation Infrastructure Requirements Environmental Study Report (1996 ESR) established the need for the Doris Avenue and Beecroft Road South Service Roads. The purpose of the ESR was to identify the transportation infrastructure needed to support the land use and development levels associated with Official Plan Amendment No. 393 (OPA 393) of the Downtown Plan, south of Sheppard Avenue and within the context of the North York Centre. OPA 393 envisioned higher density development along the frontages of Highway 401, Yonge Street and Sheppard Avenue. With the understanding that this land use intensification would result in more vehicle traffic as development continued in the North York Centre, Council undertook the 1996 ESR.

The 1996 ESR developed four alternative solutions, as identified in Section 5.3 of this report, to improve existing roadways, including: Bales Avenue, Poyntz Avenue, Midblock Avenue, and Tradewind Avenue. Only the Midblock Avenue and Tradewind Avenue alternatives adequately addressed the problems and opportunities identified. Ultimately, the Midblock Avenue alternative was recommended as the preferred road alignment. In September 1996, the ESR was completed and filed with the City Clerk of the former City of North York for the mandatory 30 calendar day review period. During the 30-day review period, the Minister of the Environment<sup>3</sup> advised the City Clerk in a letter dated November 29, 1996, that several bump-up requests of the ESR had been received and he would not make a decision until OPA 393 was resolved by the Ontario Municipal Board (OMB).

### 1.3.1.2 1998 ESR Addendum

The 1998 Environmental Study Report Addendum (1998 ESR Addendum) was undertaken following the release of OMB decision (Decision No. 1249) on OPA 393 on September 29, 1997. The OMB decision established a new boundary for the southeast quadrant of North York's Downtown as well as a location of the South Service Road. The OMB decision made specific recommendations regarding the boundary of the Secondary Plan Area for North York Centre, the location of transportation infrastructure for the South Service Road including the need to create a 'hard edge' between the stable low-density residential community and Downtown high-density blocks.

In accordance with the MCEA process for a Schedule "C" project, an addendum to the 1996 ESR was required due to the changes in the planning context. The 1998 ESR Addendum reflects the impact of the OMB decision on the project.

The 1998 ESR Addendum preferred alternative (See Figure 5.1) included a realignment of Doris Avenue just north of Sheppard Avenue East and an extension of the South Service Road south of Sheppard Avenue East, aligning with the existing Tradewind Avenue alignment at Anndale Drive.

### 1.3.1.3 REimagining Yonge MCEA

In 2016 the REimagining Yonge MCEA Study (REimagining Yonge) commenced. The purpose of REimagining Yonge is to provide a plan for the transformation of Yonge Street, south of Sheppard Avenue to north of Finch Avenue, into a "Complete Street" that provides a range of transportation options and safe passage to key destinations including the North York Centre. This will include a full reconstruction of Yonge Street within the City's existing right-of-way to create a multi-modal four-lane street and enhanced streetscape, including wider sidewalks for pedestrian, and cycling facilities. In order for the vision of Reimagining Yonge to proceed, at least the initial phase of both the South Service Road (Doris Avenue) and Beecroft Road extensions (north-south road located immediately west of Yonge Street) will need to be in place as the extensions are integral pieces of transportation network infrastructure required to support growth and development propertities in the North York Centre. In December 2020, Council endorsed the recommended design within REimagining Yonge and authorized the General Manager, Transportation Services to issue a Notice of Study Completion and file REimagining Yonge in the public record for a minimum of 30 days, in accordance with the requirements of the MCEA.

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<sup>3</sup> Now known as the Minister of the Environment, Conservation and Parks

The potential for a two-phase implementation of the South Service Road was explored to facilitate concurrent construction of the North York Centre transportation network, inclusive of REimagining Yonge and the North York Centre Service Roads comprised of the South Service Road (Doris Avenue) and the Beecroft Road extension. **Figure 1.2** outlines the implementation schedule of the North York Centre transportation network plan.

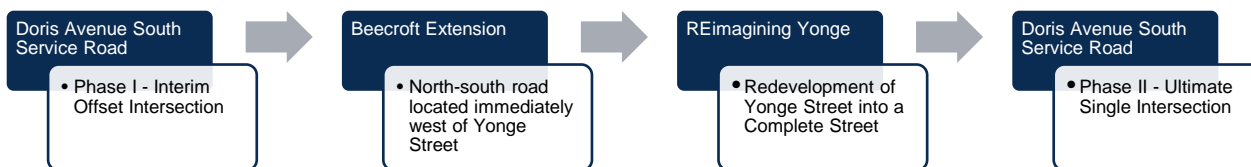


Figure 1.2 Implementation of the North York Centre transportation network plan

## 2. Municipal Class Environmental Assessment Addendum Process

The Municipal Class Environmental Assessment (MCEA) process was developed by the Municipal Engineers Association (MEA 2000, amended 2007, 2011 and 2015) to streamline the EA process for reoccurring municipal projects that are similar in nature, usually limited in scale, and with a predictable range of environmental effects that are responsive to mitigating measures.

The MCEA document outlines the addendum process for a modification or change in the environmental setting (including changes in environmental regulations) that occurs after the ESR has been filed or if the time between the filing of the ESR in the public record to the proposed commencement of construction exceeds 10 years. In these instances, a proponent will document the changes in environmental setting, review the planning and design process, describe the environmental implications of the changes, and ensure the project and the mitigating measures are still valid. These reviews are to be included in the ESR Addendum and the proponent will issue a “Notice of Filing of Addendum” to all potentially affected members of the public and review agencies. A 30-day Addendum review period will follow this notice in which the public and agencies can review and respond.

During this time if there are outstanding concerns that the project may adversely impact constitutionally protected Aboriginal and treaty rights, which cannot be resolved in discussion with the City, then a person or party may request that the Minister of the Environment, Conservation and Parks make an order for the project to comply with Part II of the *Environmental Assessment Act*. This is referred to as a Part II Order, which addresses Individual Environmental Assessments. If no Part II Order requests are received the proponent may proceed to implementation and construction.

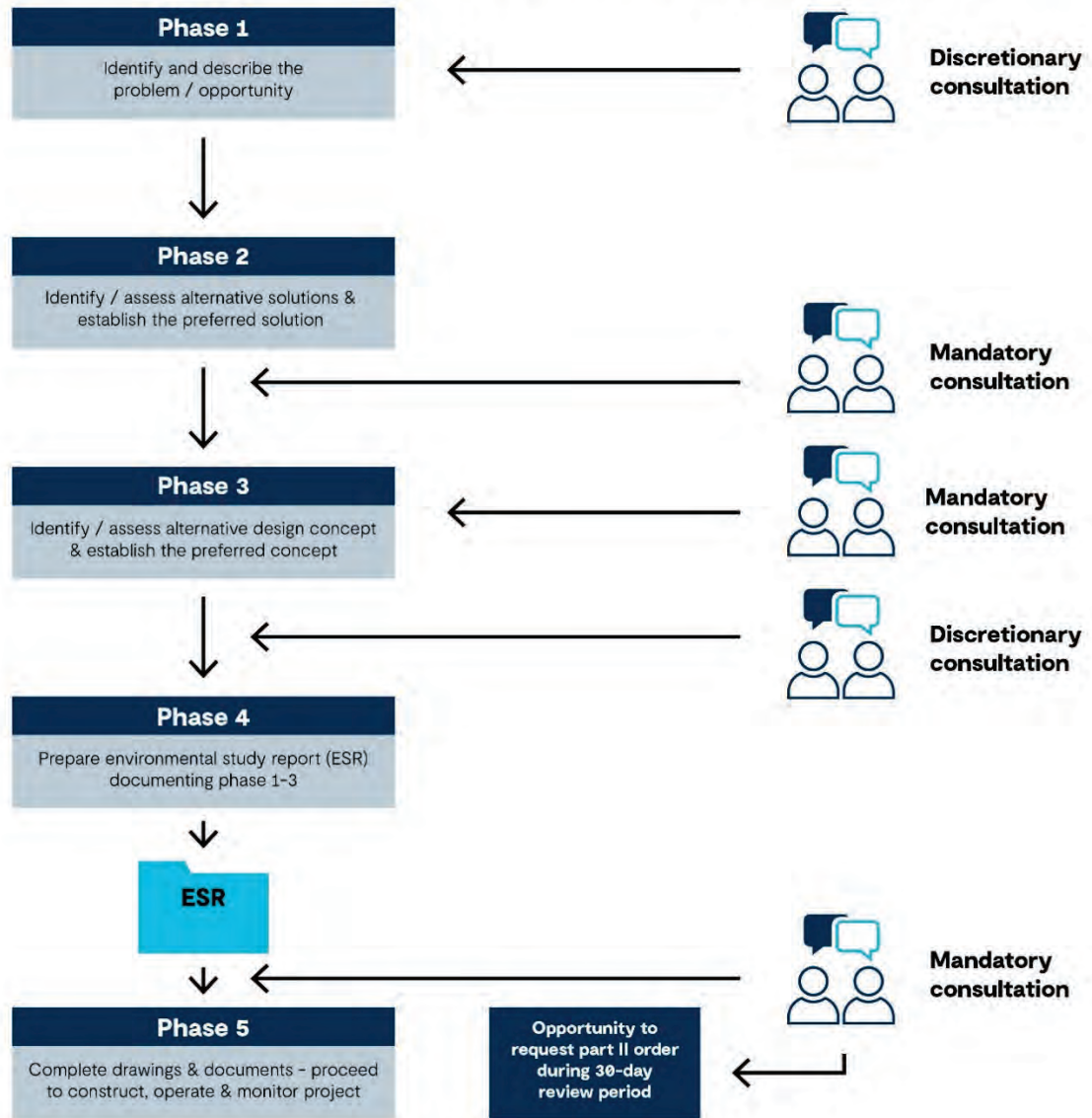
**As stated in the MCEA document, only the matters in this ESR Addendum that represent changes from the 1998 ESR Addendum are open for review and not the entire project.**

### 2.1 Rationale for this Addendum

The 1996 ESR and subsequent 1998 Addendum was completed as a Schedule ‘C’ project. These projects have potential for significant environmental effect and are subject to the full planning and documentation procedures specified in the MCEA document. An ESR must be prepared and submitted for review by the public and relevant review agencies. If all public and agency comments and issues are resolved during the public review period, the project may proceed. These projects generally include construction of new facilities or major expansions to existing facilities. The MCEA process for Schedule “C” projects is outlined on **Figure 2.1**, which was followed in 1996.



# Overview of the → **Schedule C municipal class environmental assessment process**



Note: Consultation includes review agencies, Indigenous communities, and the public.

Figure 2.1 Schedule "C" MCEA process

In 1998 an ESR Addendum to the 1996 ESR was completed to reflect changes to the environment arising from the September 29, 1997 OMB decision handed down addressing the North York Centre Downtown boundary, development levels and specific recommendations to the transportation infrastructure location and requirements. The OMB decision changed the Downtown boundary, set new development levels, and directed the location of specific road infrastructure. The decision necessitated the re-design of transportation infrastructure, specifically along Tradewind and Doris Avenues.

This ESR Addendum has been prepared because there have been changes in the environmental setting and over ten (10) years has passed since the ESR was filed in the public record. As per the MCEA process, this ESR Addendum reviews any environmental implications of the proposed change, updates the mitigation measures (as required) to address the passage of time, and proposed a two-phased approach to the undertaking. In addition to reviewing any changes to the environmental setting, this ESR Addendum has expanded upon previously reviewed intersection options associated with the South Service Road. A review of the reassessed alignment options is included in this ESR Addendum (**Section 5**).

## 3. Problems and Opportunities

### 3.1 Revised Problem/Opportunity Statement

In 1996, the City identified the need to modify the transportation network within North York Centre in order to support planned development within the North York Centre Secondary Plan. Traffic growth was expected to be significant given higher density developments planned along Highway 401, Yonge Street and Sheppard Avenue, and there is already congestion within the existing road network. Although the Line 4 (Sheppard) subway will continue to increase transit use, there is still a need for more road network capacity within North York Centre.

Completing the North York South Service Road will assist with traffic circulation and provide capacity in support of planned development, as well as address issues with the existing transportation network. It will also facilitate the flow of traffic between existing and future development south of Sheppard Avenue, allowing arterial roads to carry through traffic and help protect stable residential areas from traffic infiltration. Further, more clarity would be provided in terms of how the development plans would be accommodated by delineating a formal boundary for high-rise development along Yonge Street. The current configuration of key roads on the east side of Yonge Street (Doris Avenue, Bonnington Place, Tradewind Avenue and Sheppard Avenue East) does not achieve these goals.

As mentioned in **Section 1**, the need for this project was first established in 1996, through an ESR, and reiterated in the 1998 ESR Addendum, the North York Centre Secondary Plan, and the REimagining Yonge study. A large portion of the South Service Road has been implemented and is in operation. The implementation of the balance of the South Service Road, south of Sheppard Avenue East, required additional property and coordination with other projects.

An opportunity exists to complete the South Service Road on the east side of Yonge Street, by linking Doris Avenue and Tradewind Avenue, in order to improve traffic flow to better accommodate growth in North York Centre both in the nearer- and longer-terms. The South Service Road achieves several objectives, including:

- Connecting North York Centre with a finer grained transportation network in order to better manage traffic flow along Yonge Street and other alternate routes
- Providing convenient rear access to residential, retail, and office buildings on Yonge Street
- Forming a boundary for the high-rise development within North York Centre in relation to the adjacent stable residential neighbourhoods

This would allow for the project to achieve the goals of the Official Plan and the North York Centre Secondary Plan.

The project will achieve the goals of the City's Official Plan (2019) and the North York Centre Secondary Plan as well as increase public safety outcomes by implementing the City's Vision Zero Road Safety Plan<sup>4</sup>.

<sup>4</sup> City of Toronto (2019). *Vision Zero Road Safety Plan*. Retrieved from: <https://www.toronto.ca/services-payments/streets-parking-transportation/road-safety/vision-zero/vision-zero-plan-overview/>

## 3.2 Relationship to the 1996 ESR and 1998 ESR Addendum

This ESR Addendum is not a new study, but complementary work required to complete the Environmental Assessment process as outlined in the MCEA for Municipal Road projects. Therefore, this ESR Addendum is to be considered in conjunction with the 1996 ESR and 1998 ESR Addendum, as well as a significant volume of work completed during the previously prepared (but not released) draft ESR Addendum in 2014 and subsequent consultation and design refinements in the recent past. The City may proceed with implementation of the project subject to review and response by affected parties.

This ESR Addendum only addresses the alignment and cross-section, and associated environmental impacts, for the Doris Avenue Extension between Greenfield Avenue and Avondale Avenue. Only the items in this ESR Addendum that represent changes to the recommended undertaking from the 1996 ESR and 1998 ESR Addendum are open for review.

In addition, while the City's Official Plan sets City policies and planning objectives, the pace of development is reliant on the private sector. While key factors of the undertaking have been addressed in the 1996 ESR, 1998 ESR Addendum, and this ESR Addendum, there are other factors such as timing of the project, budgetary considerations, construction phasing and scheduling, and property acquisition that must be addressed prior to implementation of the project.

## 4. Study Team

This ESR Addendum was prepared by GHD Ltd. on behalf of the City of Toronto. The study team consists of a technical advisory committee made up of City staff from Transportation Services, City Planning, and Public Consultation departments, and consulting staff from GHD who provided expertise in the areas of transportation planning and engineering, planning and public consultation.

The following sub-consultants were retained during the previously prepared (but not released) draft ESR Addendum in 2014, to assist in updating current environmental constraints:

- Landscape Architecture – Schollen & Company
- Archaeology – Archeoworks

## 5. Development of Alternative Design Options

### 5.1 Identification of Alternative Design Options and Considerations

Several alternative options for the South Service Road were developed through this study in order to address the Revised Problem/Opportunity Statement (**Section 3**), as well as complex project history (**Section 1.3**). The subsequent sections outline the key alternative options developed throughout the study, including:

- 1998 ESR Addendum Preferred Alternative (**Section 5.2**)
- 2013/14 Alternative Options (**Section 5.3**)
- 2015 Preliminary Evaluation Alternative Options (**Section 5.4**)
- 2020 Council Approved Recommended Options (**Section 5.5**)
- 2021 Recommended Options (**Section 5.6**).

Common to all the options is the need to construct an ultimate four-lane cross section with 3.3 metre (m) curb lanes, 3.0 metre though and auxiliary lanes, and 2.1 m pedestrian clearway. Lane widths may be reduced to 3.0 m if deemed

to be required during detailed design to avoid conflicts. However, 3.3 m lane widths were used for the conceptual design to provide for this future flexibility and refinement in detailed design while appropriately capturing impacts associated with complex geometric conditions not previously explored.

Safety is a key design consideration for all alternatives proposed and on this basis, a single intersection design is generally less likely to cause driver and pedestrian confusion and reduces the number of vehicular and pedestrian conflict points. An offset intersection design requires more signage and pavement markings to direct road users through the intersection increasing driver workload, as well as introducing more conflict points. In all instances and as part of detailed design, a safety audit should be undertaken to optimize safety – for instance, wider sidewalks, designated crossing areas, signage, and lane markings to improve the overall safety of the intersection for all road users. Two options for a continuous intersection (Option A and B) and two options for an offset intersection (Options C and D) were advanced as part of this study and are described in detail in Section 5.3.

Options for accessing the underground parking garage from within the 45 - 47 Sheppard Avenue East development were also investigated by reviewing the turning movements of a crew cab pick-up truck entering/exiting the facility. A new full moves entrance to the surface parking area, which may facilitate access to the existing underground parking access, will be constructed on Tradewind Avenue or Anndale Avenue. The location and detailed design will be completed in consultation with the property owner. Directional signage will be a consideration during the future detailed design for the new entrance.

All options under consideration have associated property impacts, with all options requiring properties south of Sheppard Avenue East, which have been acquired by the City. The single intersection design would impact one or both of the south-west and north-east quadrants of Doris Avenue and Sheppard Avenue East.

The north-east quadrant of the Study Area includes a Privately Owned Publicly Accessible Space (POPS) at 90 Sheppard Avenue East with a feature in the form of a round landscaped berm, consisting of mature trees and sod. The berm is an important feature to the local community and business patrons. In consultation with City Planning, impacts to the berm and landscape features will be minimized, and/or avoided, when finalizing the design of the road skew north of Sheppard Avenue East during detailed design.

In all scenarios, existing sanitary and water distribution systems will remain in place, and new minor storm sewer systems constructed where required to drain the new roadways, connecting to the existing systems where feasible.

## 5.2 Description of the 1998 ESR Addendum Option Preferred Alternative

This option, as shown on **Figure 5.1**, includes a realignment of Doris Avenue just north of Sheppard Avenue East and an extension of the South Service Road south of Sheppard Avenue East, aligning with the existing Tradewind Avenue alignment at Anndale Drive, creating a 70-degree angle at the Sheppard Avenue East/Doris Avenue intersection. The new road alignment cuts through the POPS at 90 Sheppard Avenue East at the northeast corner of Sheppard Avenue East and Doris Avenue.

The alignment of the new South Service Road cuts through the properties on the west side of Bonnington Place, and the existing parking garage and entrance for 45 - 47 Sheppard Avenue East, requiring a new entrance to the surface and underground parking at the south of the property off Anndale Drive. The existing intersection at Bonnington Place and Sheppard Avenue East will be closed and a cul-de-sac constructed at the north limit of Bonnington Place.

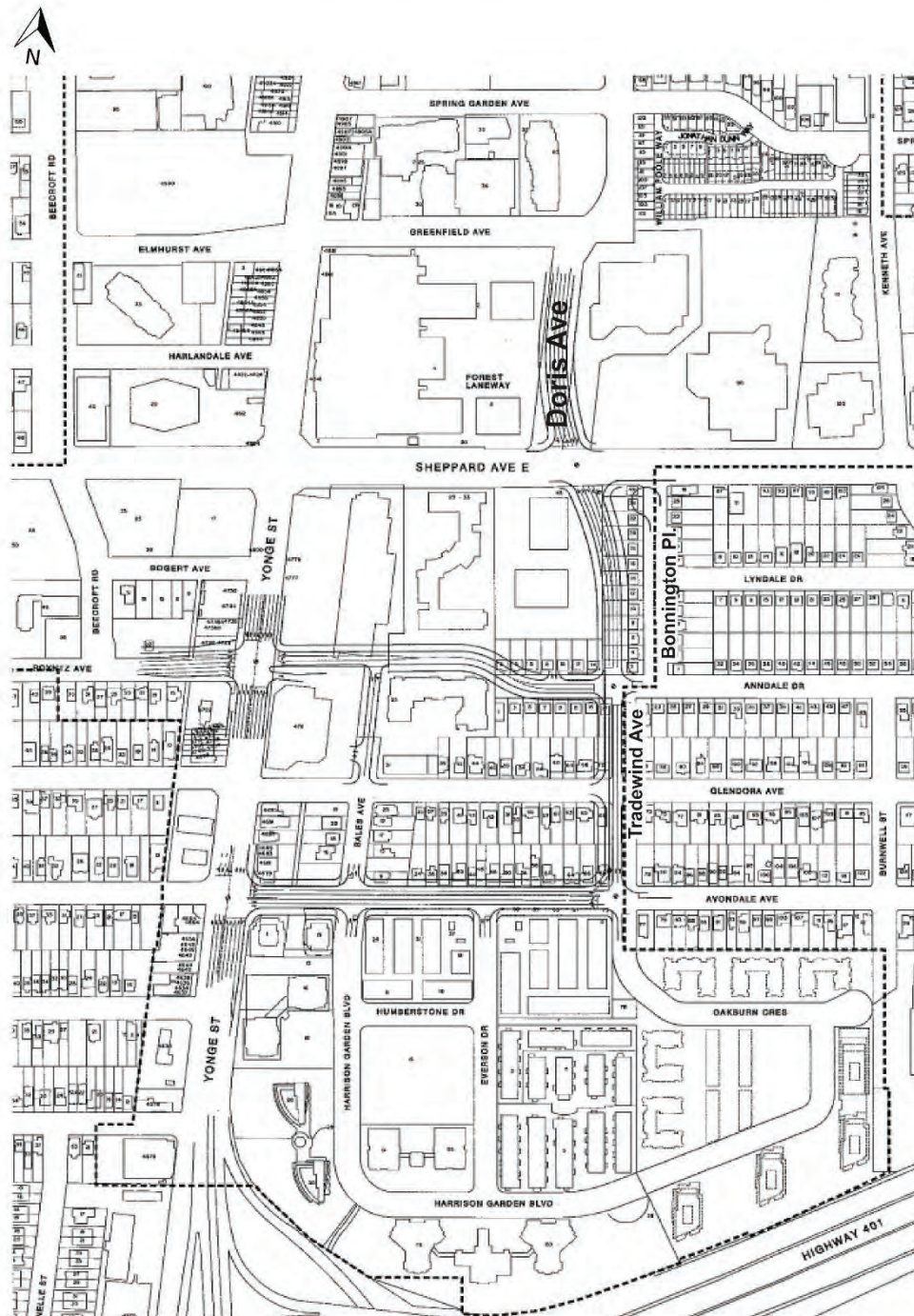


Figure 5.1 1998 ESR Addendum Option preferred alternative

## 5.3 2014 ESR Addendum and Alternative Options

As outlined in **Section 1.3**, in 2014 a draft “ESR Addendum and Alternative Options” was prepared at Council’s request in order to address the changes in the Study Area and fulfil the objectives outlined in the North York Secondary Plan (2006). Four alternative options were developed in order to address the decision of the OMB, Secondary Plan Policies and increased vehicle/pedestrian/cyclist traffic in the Study Area (**Sections 5.3.1 to 5.3.4**).

In April 2014, City staff presented the draft ESR Addendum to Council which identified Option D (**Section 5.3.4**), the offset intersection, as the preferred alternative option. Ultimately, Council deferred their decision to file the 2014 ESR Addendum and directed staff to revise the alternative options and re-assess with a strong focus on traffic capacity and operations/safety (**Section 5.4**).

### 5.3.1 Option A – Single Intersection, Right-Angle

Option A, as shown on **Figure 5.2**, includes a realignment of the Doris Avenue/Sheppard Avenue East intersection approximately 90 m to the east, creating a 90-degree (right-angle) intersection. The resulting reverse curves on Doris Avenue cut through the POPS at 90 Sheppard Avenue East and connect to the existing road alignment immediately south of the existing Doris Avenue/Greenfield Avenue intersection. The posted speed limit through the reverse curves will be 40 km/h.

The extension of the South Service Road south of Sheppard Avenue East curves west near Lyndale Drive to align with the existing Tradewind Avenue alignment at Anndale Drive. This alignment cuts through the acquired properties on the west side of Bonnington Place and uses the existing ROW of Bonnington Place between Lyndale Drive and Sheppard Avenue East. This requires rework of the Lyndale Drive/Bonnington Place intersection, and the connection of driveways between Lyndale Drive and Sheppard Avenue East to the new service road.



# Option A - Single Intersection - Right Angle

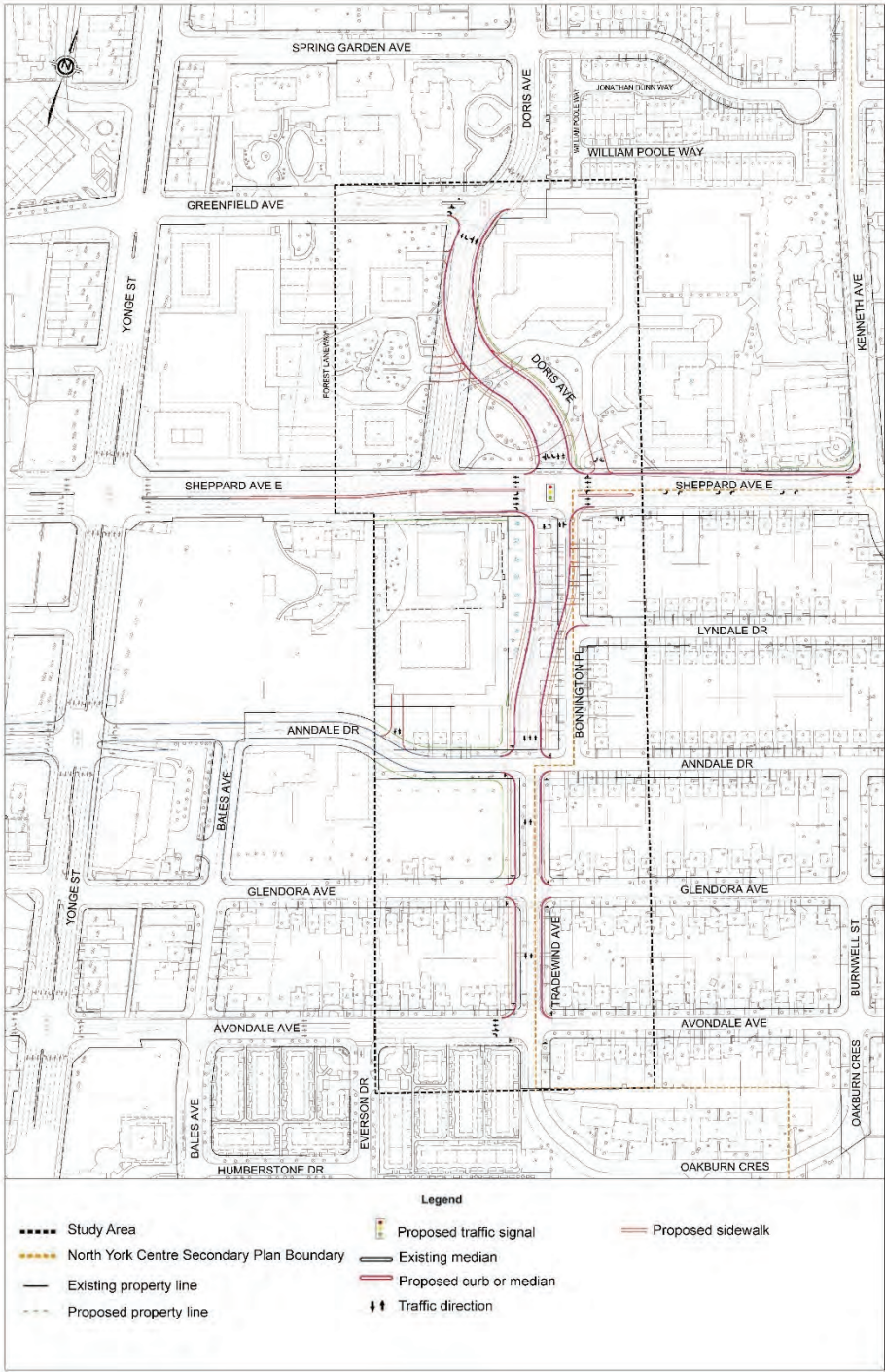


Figure 5.2 Option A - Single Intersection, Right-Angle

## 5.3.2 Option B – Single Intersection, Skewed

Option B, as shown on

Figure 5.3, includes a realignment of the Doris Avenue/Sheppard Avenue East intersection approximately 70 metres to the east, creating a 60-degree skewed intersection. The alignment of Doris Avenue results in an impact to the southwest portion of the POPS at 90 Sheppard Avenue East and connects to the existing road alignment immediately south of the existing Doris Avenue/Greenfield Avenue intersection. The final design of Option B was modified following the February 2020 public consultation in order to minimize the impact on the POPS and avoid impact to the underground parking structure at 45 - 47 Sheppard Avenue East.

The extension of the South Service Road south of Sheppard Avenue East curves west to align with the existing Tradewind Avenue alignment at Anndale Drive. This alignment cuts through the acquired properties on the west side of Bonnington Place. The existing intersection at Bonnington Place and Sheppard Avenue East will be closed and a cul-de-sac constructed at the north limit of Bonnington Place.

# Option B - Single Intersection - Skewed

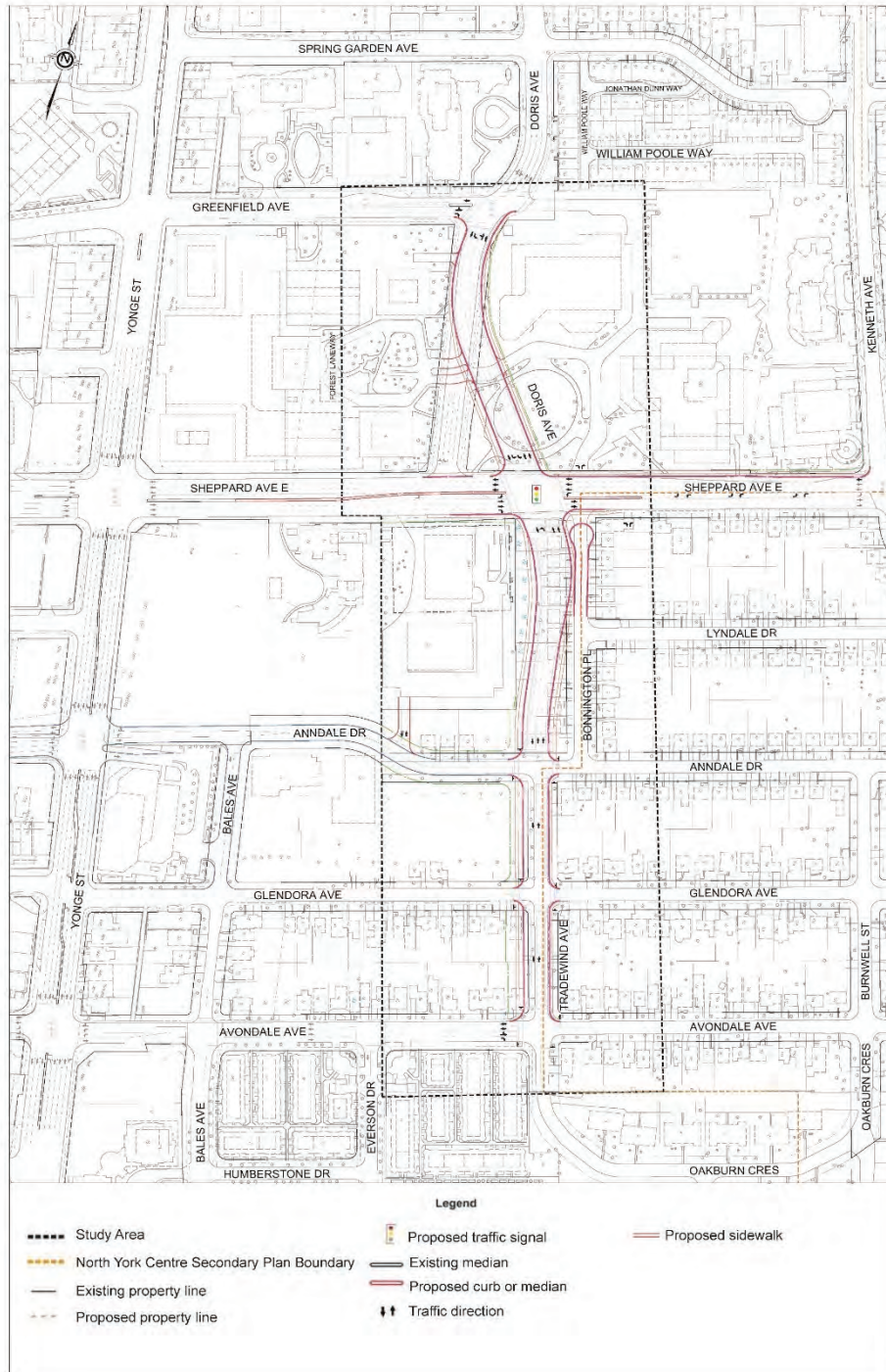


Figure 5.3 Option B - Single Intersection, Skewed

### 5.3.3 Option C – Offset Intersection Maintaining Doris Avenue Alignment

Option C, as shown on

Figure 5.4, maintains Doris Avenue and the existing location of the Doris Avenue/Sheppard Avenue East intersection, with a minor impact to the POPS at 90 Sheppard Avenue East for the construction of an additional lane and sidewalk within the east boulevard.

The extension of the South Service Road south of Sheppard Avenue East aligns with the existing Tradewind Avenue alignment at Anndale Drive, with a slight curve to the west to avoid conflicts at the north-east corner of 45 - 47 Sheppard Avenue East. The resulting intersection is offset by approximately 60 m and would have coordinated traffic signals installed at Doris Avenue/Tradewind Avenue, enabling the design to function as a single signalized intersection to optimize traffic flow.

This alignment cuts through the acquired properties on the west side of Bonnington Place. The existing intersection at Bonnington Place and Sheppard Avenue East will be closed and a cul-de-sac constructed at the north limit of Bonnington Place, as proposed in the 1998 ESR Addendum.

# Option C Offset Intersection Maintaining Doris Avenue Alignment

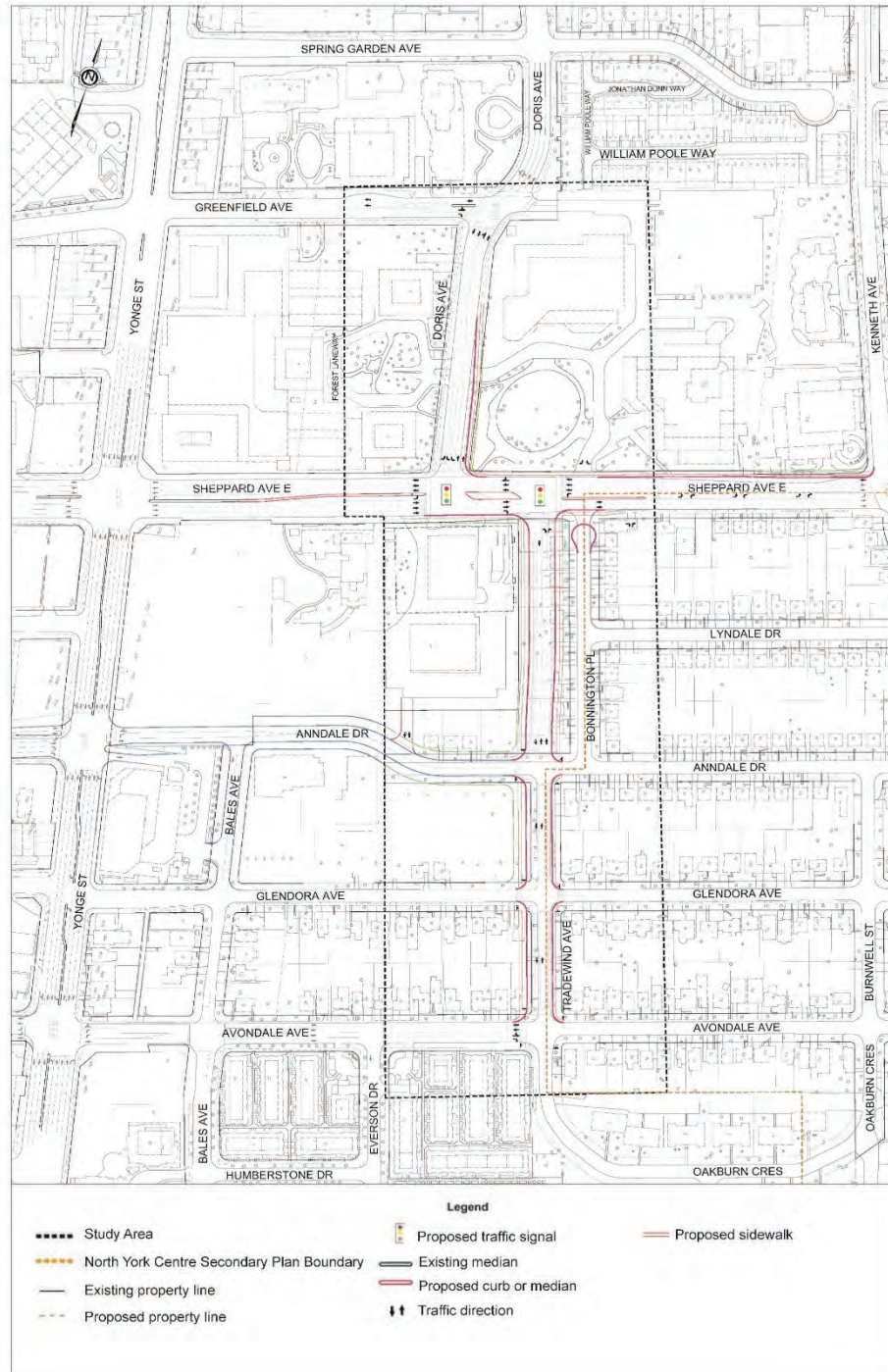


Figure 5.4 Option C - Offset Intersection Maintaining Doris Avenue Alignment

### 5.3.4 Option D – Offset Intersection Realigning Doris Avenue

Option D, as shown on

Figure 5.5, is similar to Option C, with the main difference of Doris Avenue aligned to the east to intersect with Sheppard Avenue East at 90 degrees. There is a minor impact, greater than Option C, to the POPS at 90 Sheppard Avenue East. The resulting intersection is offset by approximately 58 m and would be designed to function as a single signalized intersection.

The extension of the South Service Road south of Sheppard Avenue East aligns with the existing Tradewind Avenue alignment at Anndale Drive, with a slight curve to the west to avoid conflicts at the north-east corner of 45 - 47 Sheppard Avenue E. This alignment cuts through the properties on the west side of Bonnington Place. The existing intersection at Bonnington Place and Sheppard Avenue East will be closed and a cul-de-sac constructed at the north limit of Bonnington Place.

This option was previously recommended to Council as part of the draft ESR Addendum in 2014. Council deferred approval and directed staff to revise the alternative options and reassess with a strong focus on traffic capacity, traffic operations, and overall safety.

# Offset Intersection Realigning Doris Avenue

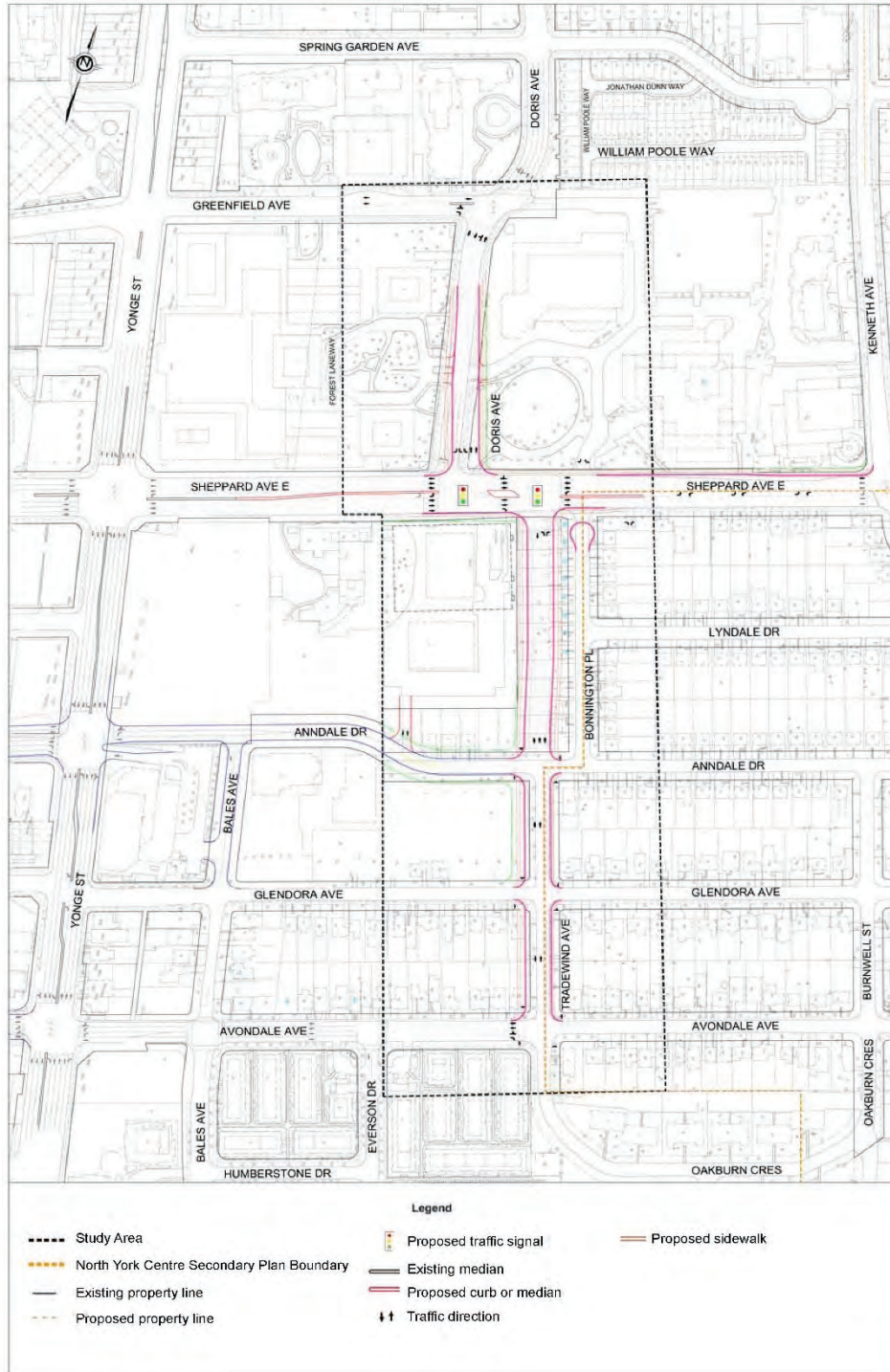


Figure 5.5 Option D - Offset Intersection Realigning Doris Avenue

## 5.4 2015 Preliminary Evaluation of Alternative Options

After receiving Council direction (June 2014) to review the alternative options, in 2015 Options A to D outlined in **Section 5.3** were revised, evaluated, and presented to the public in Spring 2015 (see **section 8** for detail on consultation and Appendix E for Evaluation Matrix).

Option B (**Section 5.4.2**), the single intersection skewed at Sheppard Avenue East, was identified as the preliminary recommended option as part of the public consultation. Option B was recommended for the following reasons:

- Improves north-south travel for motorists and cyclists on Doris/Tradewind
- Improves east-west travel for motorists and cyclists on Sheppard Avenue
- Improves safety for pedestrians traveling north-south through intersection
- Moderate impacts to POPS

As discussed in **Section 1.3**, Council deferred their decision to confirm the preferred alternative until such a time as the City completed the development of a comprehensive transportation network plan to support traffic capacity, safety, and growth in the North York Centre.

### 5.4.1 Option A – Single Intersection, Right Angle

Option A, as shown on

Figure 5.6, creates a single intersection - Realign Doris Avenue to pass through the POPS at 90 Sheppard Avenue, meeting Bonnington Place at a right angle at Sheppard Avenue East. South of Sheppard Avenue East, the South Service Road would connect to the existing Tradewind Avenue. Several houses on Bonnington Place would have driveways that connect to the Service Road, which is generally contrary to Secondary Plan policy.





Figure 5.6 North York-Service-Road - Option-A – tech drawing

## 5.4.2 Option B – Single Intersection, Skewed \*Recommended\*

Option B, as shown on

Figure 5.7, creates a single intersection - Realign Doris Avenue to meet the northern extension of Tradewind Avenue, resulting in a skewed intersection at Sheppard Avenue East. Bonnington Place would be closed off in a cul-de-sac, as proposed in the 1998 ESR.

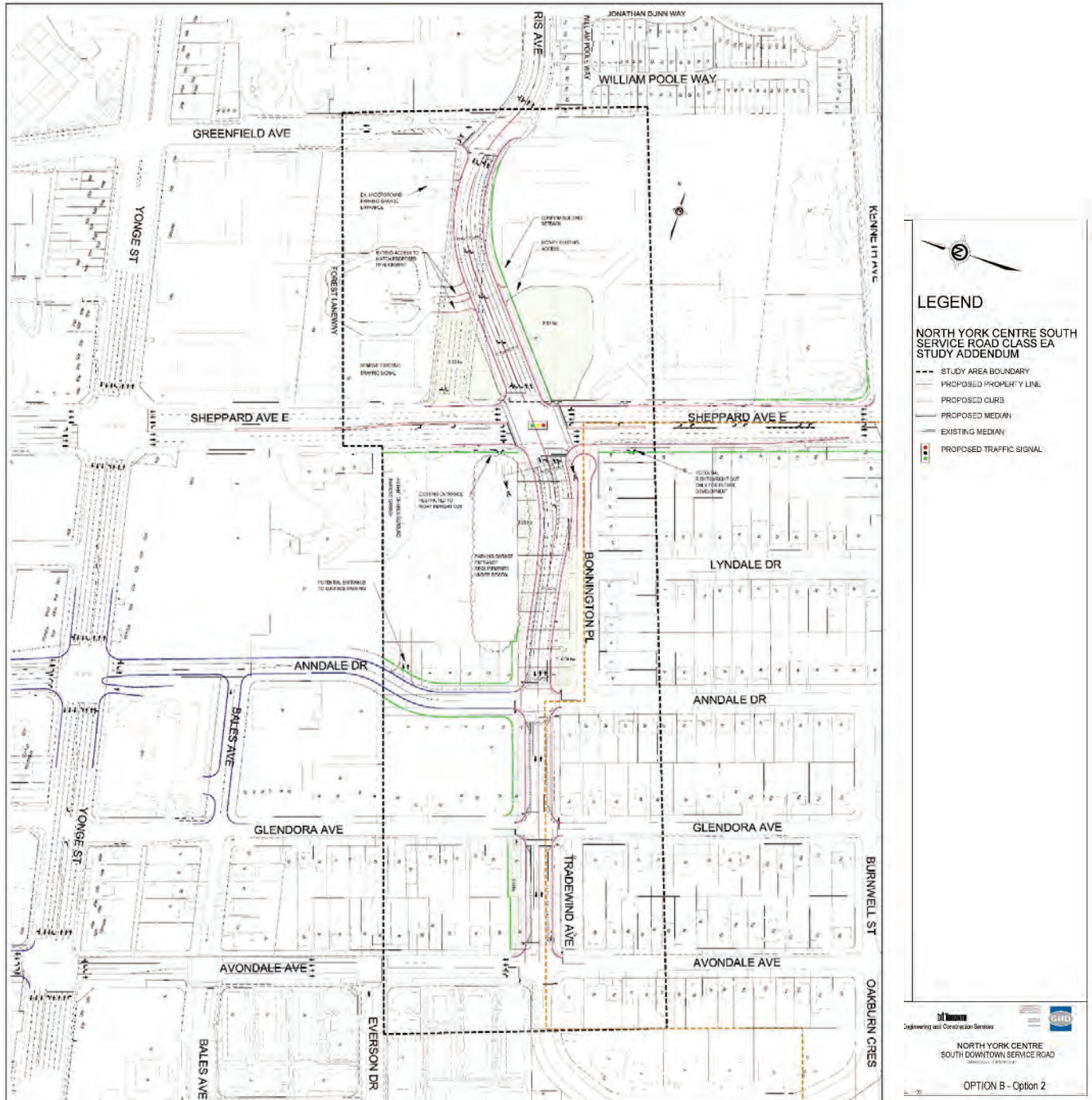


Figure 5.7 North York-Service-Road - Option-B – tech drawing

### 5.4.3 Option C – Offset Intersection Maintaining Doris Avenue Alignment

Option C, as shown on

Figure 5.8, creates an offset intersection by extending Tradewind Avenue up to Sheppard Avenue East, and installing coordinated traffic signals at Doris Avenue and Tradewind Avenue. Bonnington Place would be closed off in a cul-de-sac.

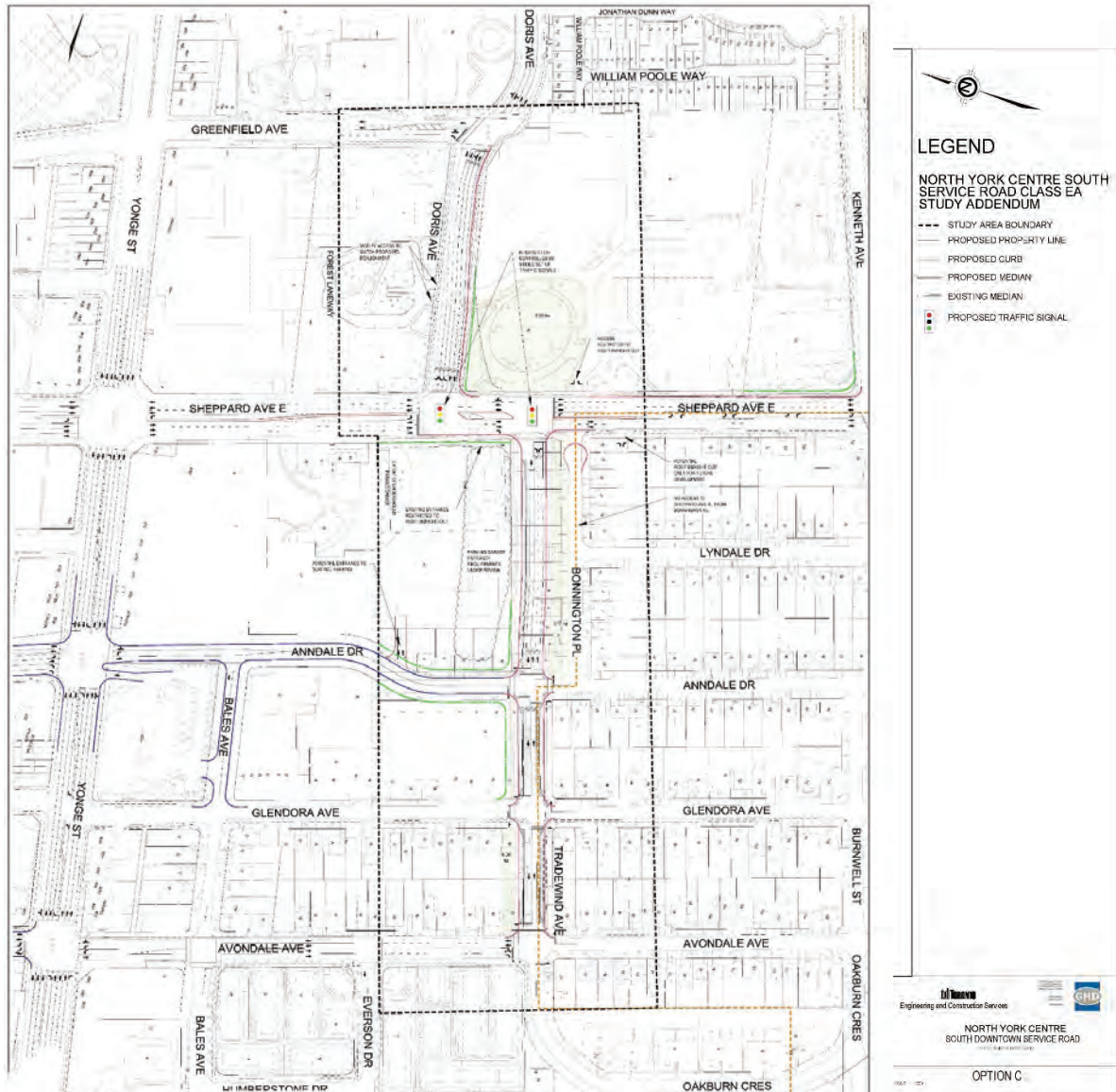


Figure 5.8 North York-Service-Road - Option-C – tech drawing

### 5.4.4 Option D – Offset Intersection Realigning Doris Avenue

Option D, as shown on

Figure 5.9, creates an offset intersection by realigning Doris Avenue to meet Sheppard Avenue East at a right angle, and extend Tradewind Avenue to Sheppard Avenue East, creating an offset intersection. Traffic signals would be

synchronized, and a reduced offset compared to Option C (Section 5.4.3). Bonnington Place would be closed off in a cul-de-sac



Figure 5.9 North York-Service-Road - Option-D – tech drawing

## 5.5 2020 Council Endorsed Options

A traffic model was completed as part of the REimagining Yonge EA which forecasted traffic volumes to 2031. The horizon year from the REimagining Yonge model was updated to 2022 to reflect the implementation period for the

South Service Road. The traffic analysis results identified a single intersection (Options A/B from the 2015 options) as performing better than the offset intersection options. The results of preliminary evaluation of the 2015 options (**Section 5.4** and **Appendix E**) and the traffic analysis was presented to City Council at its June 2014 meeting.

Council endorsed a recommendation for the South Service Road to move forward based on a two-phased approach. A two-phased implementation would allow for an immediate interim solution (Option C), while the ultimate condition (a revised version of Option B from the 2015 preliminary evaluation) undergoes detailed design and additional property acquisition.

From a geometric and functional design perspective, the Doris Avenue Realignment alternative is technically recommended for the 2031 Horizon Year. With this Horizon Year in mind, traffic growth and travel pattern shifts will take some time period to be fully realized, and therefore the interim traffic needs may be different than the ultimate scenario. As a result, the use of a reduced cross section and offset scenario (Reduced 'Option 'C') as an interim improvement is appropriate to permit the City to implement improvements while consultation and mitigation measures for the ultimate solution (Option B) are determined with major stakeholders.

The primary benefits of this interim strategy are to avoid disruption to the POPS and allow for access out of the 45 - 47 Sheppard Avenue garage without property transfer until ultimate traffic volumes are realized.

Further discussion on the interim and the ultimate solutions are provided in subsequent sections below.

### 5.5.1 Phase 1 – Interim Condition, Offset Intersection (Option C)

Phase 1 would consist of the construction of Option C developed as part of the 2015 preliminary evaluation (**Section 5.4.3**). The road alignment south of Sheppard Avenue East would become the south leg of the future condition (**Section 5.5.2**).

### 5.5.2 Phase 2 – Ultimate Condition, Single Intersection (revised Option B)

Phase 2, as shown in

Figure 5.10, consists of the realignment of Doris Avenue to meet the northern extension of Tradewind Avenue implemented in Phase 1 (**Section 5.5.1**). This would result in a single four-legged intersection, with a skew on the north-east quadrant.

Phase 2 is based on a revised version of Option B. (**Section 5.4.2**). It was developed considering geometric design configurations and intersection skew outside of standard TAC guidance, considering the unique and competing physical constraints with the parking garage at 45 - 47 Sheppard Ave East in the south-west quadrant, and the POPS in the north-east quadrant.



## 5.6 2021 recommended options

Revised Options B (**Section 5.5.2**) and Option C (**Section 5.4.3**) have been carried forward and refined as the most viable options based on Council's endorsement in December 2020.

The 2031 Horizon Year traffic growth and travel pattern shifts will take some time to fully realize, and that the interim traffic needs may be different than the ultimate scenario. As a result of the review of traffic data and the confirmation of the REimagining Yonge preferred alternative, this ESR Addendum recommends a two-phased approach for the South Service Road, described in **Section 5.6.1** and **Section 5.6.2**.

Detailed analysis of the 2021 recommended options is provided in **Appendix A**.

### 5.6.1 Phase 1 - Interim Condition, Offset Intersection (Interim Option C)

Phase 1, referred to as Interim Option C, is shown on

Figure 5.11. Interim Option C is a revised version of Option C developed as part of the 2015 preliminary evaluation (**Section 5.4.3**) that was endorsed by Council in December 2020. The use of a reduced cross section and offset scenario as an interim improvement is appropriate to permit the City to implement improvements while consultation and mitigation measures are determined with major stakeholders.

The primary benefits of this interim strategy are to avoid disruption to the POPS and allow for access out of the 45 - 47 Sheppard Avenue East garage.

With a lower complement of Northbound (NB) and Southbound (SB) through traffic and a higher complement of Southbound Left turning vehicles in the near term, Doris Avenue would comprise of 1 NB lane, 1 SB right turn lane and dual SB left turn lanes. To avoid widening and disturbances to the POPS, on-street parking would be removed in this area.

The Tradewind Avenue extension would comprise of 2 NB lanes terminating with a dedicated NB left turn lane and a NB right turn lane, with 1 SB lane. The west curb could be constructed to ultimate position of the ultimate realignment to provide interim on-street parking compensation from impacts on Doris Avenue, where repurposing the existing roadway only requires the removal of on-street parking.

The Interim Option C 'offset' intersection does not introduce any new impacts or approvals that would otherwise be required for the ultimate scenario. We do not recommend that the full four-lane ultimate cross section and/or the skew of the south leg be implemented without the complementary north leg as a means of mitigating these impacts. The position of the south leg and the number of lanes can be positioned in a way to use part of the ultimate realignment and maximize intersection spacing from Doris Avenue, and may permit temporary "right-in right-out" access for 45 - 47 Sheppard Avenue East as a basic interim measure, while the final location and land acquisition for the permanent full moves access on Tradewind Avenue or Anndale Avenue are being finalized.

The primary caveat to this alternative is that the south leg and associated traffic signals would require additional and 'throw-away' cost and area disruption as well as introducing several more pedestrian conflict points with vehicles and operational challenges associated with closely spaced signals and the associated degradation of traffic operations on Sheppard Avenue East.

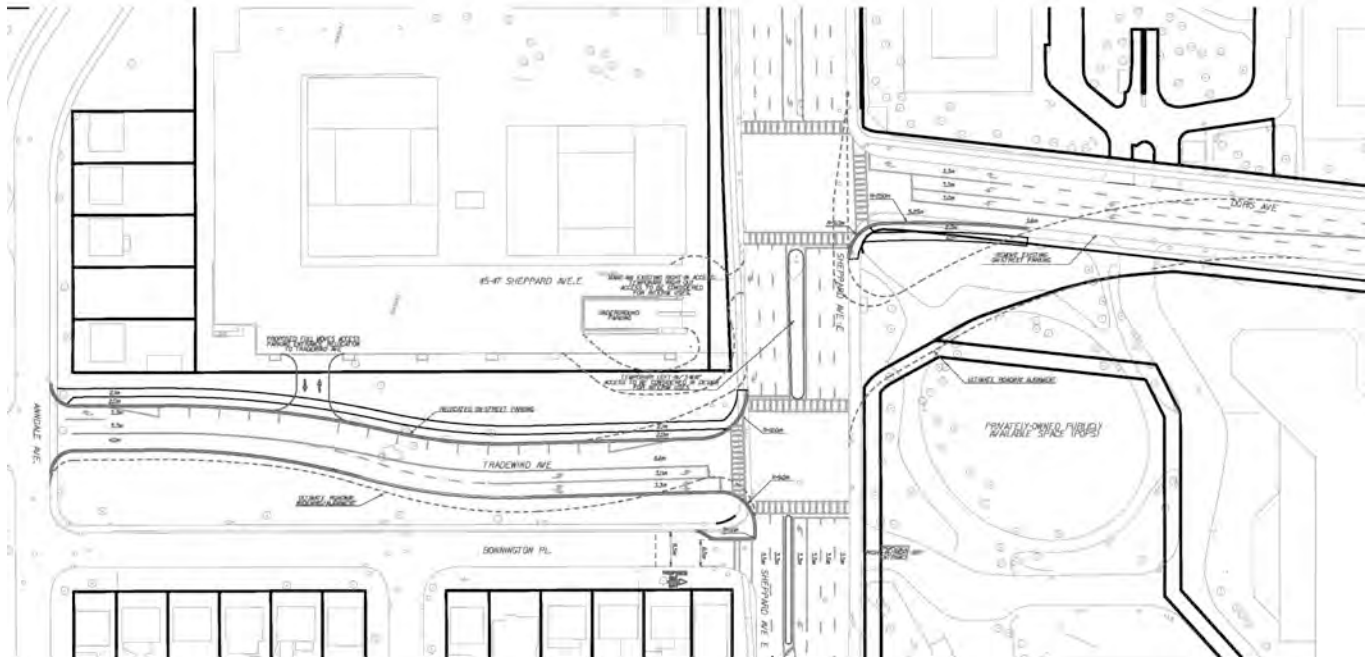


Figure 5.11 Interim Option C, Offset Intersection

## 5.6.2 Phase 2 – Ultimate Condition, Realigned Intersection (Ultimate Option B)

Phase 2, referred to as Ultimate Option B, is shown in

Figure 5.12. Ultimate Option B is a slightly revised version of Revised Option B that was approved by Council in December 2020 (**Section 5.5.2**). Three key geometric modifications were included to balance basic geometric needs and achieve the objectives of the alternative which include:

- Increase the offset between the Tradewind Avenue Extension from the 45 - 47 Sheppard Ave East parking garage to provide vehicles exiting the garage the ability to exit via new Tradewind Avenue or Anndale Avenue access, and remove conflict with pedestrian standing area/crosswalk area;
- Fix the maximum allowable skew of the Sheppard Avenue E intersection to 60 degrees, and eliminate back-to-back curve movements within the intersection; and
- Allow for the flexibility of 5 lane Doris Avenue realignment to 2 SB Left Turn Lanes OR 1 SB Left Turn Lane in the ultimate scenario to address long term travel pattern changes in the study area.

Phase 2 would result in a single continuous intersection at Sheppard Avenue East. Doris Avenue and Tradewind Avenue will be realigned approaching Sheppard Avenue East to meet at a single intersection, with a maximum skew of 60-degrees. To minimize 'throw-away' costs, much of the Tradewind Avenue footprint from the interim condition will be re-used for the ultimate condition. Bonnington Place will continue to operate as a northbound 'right-out' connection to Sheppard Avenue East.

Doris Avenue would comprise of 2 NB lanes, 1 SB through-right lane, and dual SB left turn lanes. Tradewind Avenue Extension would comprise of 1 NB through-right lane, 1 NB through lane, 1 NB left turn lane and 2 SB lanes. The configuration of the five-lane section on Doris Avenue allows for various left turn lane assignment configurations to accommodate changing travel patterns.

The appropriate timing of implementation of Phase 2 will be subject to property acquisition, confirmation of approach for maintaining access to 45 - 47 Sheppard Avenue East facilities, and completion of detailed design to minimize the subsequent impacts to the POPS as a result of those constraints.



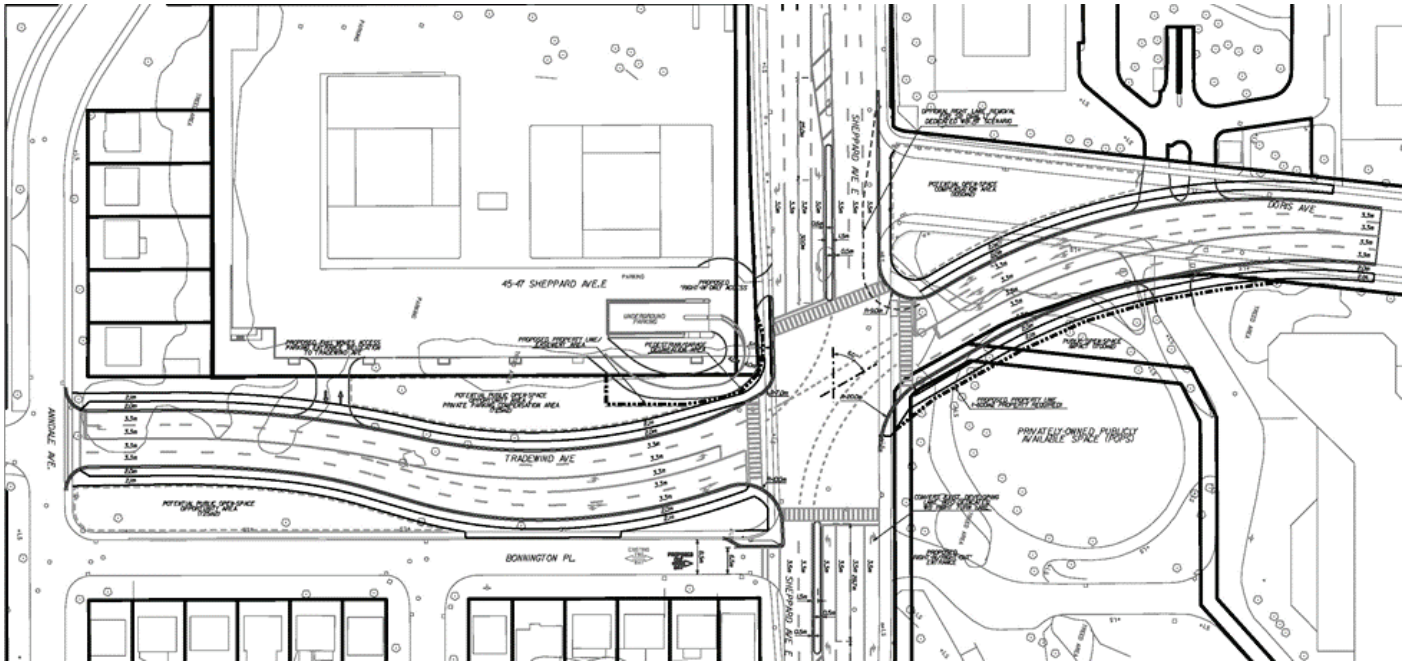


Figure 5.12 Ultimate Option B, Realigned Intersection

## 6. Changes in the environmental setting

### 6.1 Overview

As mentioned previously, with City Council’s direction to staff in June 2014 to refine Option B to address any deficiencies and reassess all Options, with priority given to the traffic capacity and operations at the Service Road/Sheppard Avenue East intersection, along with MCEA proponent requirements to review the planning and design process and the current environmental setting to ensure that the project and the mitigation measures are still valid given the current planning context when over 10 years has passed since the ESR was filed in the public record. With this in mind, the purpose of this section is to document the changes in the current planning and environmental setting from the previously prepared 1998 ESR Addendum.

### 6.2 Natural Environment

As the Study Area is urbanized with little remaining natural environment, no significant wildlife habitat or vegetation is found within the Study Area with the exception of mature trees and shrubs along the roadside, in residential lots, and within the POPS at 90 Sheppard Avenue East.

A Tree Inventory and Assessment Report (**Appendix B**) was carried out within the Study Area during the preparation of the 2014 draft ESR Addendum to document existing conditions and characterize the vegetation communities that could be impacted by the implementation of the alternative options A-D (**Section 5.3**). The project team consulted the Tree Inventory and Assessment Report during the development of subsequent alternative options.

Trees were assessed to determine their merit for retention based on:

- Species Quality
- Condition
- Age/Size

A total of 108 trees and tree groups were inventoried, most were found to be in good to fair health and condition. Based on the Tree Inventory it is recommended that a Future Assessment be undertaken during the detailed design phase to confirm the relative ‘merit for retention’ and ‘potential for preservation’.

A number of tree preservation recommendations were made with the objective of mitigating potential impacts on trees from construction related activities, including:

- Site clearing and Tree Protection Guidelines
- Establishing Tree Protection Zones (TPZs)
- Establishing Construction Access Areas
- Root pruning
- Post construction care
- Tree transplantation procedures and post care

## **6.3 Social/ Built Environment**

The environmental setting of the Study Area as described in the 1996 ESR has significantly changed with respect to the Social/Built Environment. Extensive high-rise development has taken place in the North York Centre as a result in changes to the planning and policy framework for the area. The intensive development has resulted in higher traffic congestion and pedestrian movements during peak hours, as well as expanded use of high-order transit within the North York Centre.

### **6.3.1 Planning and policy framework**

#### **6.3.1.1 Provincial Policy Statement (2020)**

The 1998 ESR Addendum references the Provincial Policy Statement (1997) that addressed matters associated with the EA. Since 1997, the Provincial Policy Statement has been updated in 2005, 2014 and most recently in May 2020. In accordance with Section 3 of the *Planning Act*, all decisions affecting planning matters shall be consistent with the Provincial Policy Statement.

#### **6.3.1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)**

In 2005 the Ontario government adopted the *A Place to Grow Act* which enables the development of regional growth plans that guide government investments and land use planning policies.

The Growth Plan for the Greater Golden Horseshoe, 2006 (Growth Plan) was first the first growth plan under the *A Place to Grow Act* to provide a framework for implementing Ontario’s vision for building stronger, prosperous communities by better managing growth in this region. Since the introduction of the Growth Plan in 2006, the region has seen a shift to more compact development patterns, a greater variety of housing options, more mixed-use development in ‘Urban Growth Centre’ and other ‘Strategic Growth Areas’, and greater integration of transit and land use planning.

In 2020 the Growth Plan was updated to responds to the key challenges that the region continues to face over the coming decades with enhanced policy directions.

North York Centre is identified in the Growth Plan 2005 and 2020 as an ‘Urban Growth Centre’. Policies of the Growth Plan and in particular in Section 3 Infrastructure to Support Growth, were reviewed and considered throughout the development and consideration of alternative solutions for this project.

#### **6.3.1.3 Official Plan (2019)**

The current City of Toronto Official Plan is in effect as of February 2019. Section 2.2.2 of the Official Plan designated the North York Centre as a vibrant transit-supportive mixed-use “Centre”. As a Centre, the Official Plan states that the area will have a Secondary Plan. Further, OPA 479 (Public Realm Policies) which was approved in September 2020,

speaks to the public and private spaces to which the public has access to. In the case of the ultimate configuration, minimizing the disturbance to the existing POPS and the potential for the creation of other public open space (compensation area) are particularly relevant to policies associated with this OPA.

#### **6.3.1.4 North York Centre Secondary Plan (2015)**

The North York Centre Secondary Plan (2006, updated in 2015) was adopted by Council subsequent to the 1998 ESR Addendum. This current review of the preferred Tradewind Option and development of alternative solutions occurred within the context of the current policy framework. Policies within the Secondary Plan support the development of North York Centre as a focus of transit-based employment and residential growth. While strategic growth is focused on the North York Centre, it is also the objective of the plan to protect, preserve and enhance the existing adjacent neighbourhoods.

In reviewing the recommended solution from the 1998 ESR Addendum beginning in 2013 and in developing alternative designs for the South Service Road, policies of the North York Secondary Plan were considered during the preparation of this study, including:

- 5. Environment and Urban Design
  - 5.3 Built Form Policies
    - 5.3.6 Interface Between North York Centre and Adjoining Neighbourhoods
  - 5.6 Pedestrian Environment
    - 5.6.2 Streets and Pedestrian Routes
    - 5.6.7 Pedestrian and Cycling Links
- 6. Parks and Open Space
  - 6.4 Linear, Parks, Streetscaping and Landscaping
- 8. Roads and Services
  - 8.3 Service Roads
    - 8.6 North York Centre South Service Road
      - 8.11 Driveway Access
      - 8.13 Boulevard Widths and Utilities

#### **6.3.1.5 Vision Zero Road Safety Plan (2019)**

The City developed the Vision Zero Road Safety Plan in 2016 to eliminate fatalities and serious injuries on Toronto roads by improving road safety between 2017 and 2021. In July 2019, Council endorsed Vision Zero 2.0, which recommended a set of more extensive, more proactive, and more targeted initiatives, informed by data, and aimed at eliminating serious injury and fatalities on Toronto's roads. The current configuration of the roads within the Study Area do not achieve the goals in Vision Zero 2.0. The Plan was considered during evaluation of alternative solutions (**Section 7**) and during detailed design.

#### **6.3.1.6 Complete Streets – Official Plan and Guidelines (2014/2017)**

The Vision for complete streets comes from the City's OP, which recognizes that City streets are important public open spaces which connect people and places and support the development of complete communities. Building off of the OP, the City developed Complete Streets Guidelines (2017) which provided a new approach for how to design streets within Toronto. The Complete Streets Guidelines provide a toolbox of ways to ensure Toronto's streets are safer for all users, including pedestrians, cyclists, transit users, drivers, and people of all ages and levels of ability.

The current configuration of roads within the Study Area do not achieve the goals in the Complete Streets Guidelines. The Guidelines will be considered during evaluation of alternative solutions (**Section 7**) and during detailed design.

### 6.3.1.7 Cycling Network Considerations

The Cycling Network Plan Update approved by Council in July 2019 included the adoption of Sheppard Avenue as a Major City-Wide Corridor, the first phase of which is tentatively planned in 2022 between Bonnington Place and Bayview Avenue. While not included in the EA Addendum, the incorporation of planned cycling infrastructure (i.e., cycle track) on Sheppard Avenue East should be considered within the limits during detailed design and construction of Option B to extend the planned cycling infrastructure westerly towards Yonge Street, subject to Council and/or EA approvals.

## 6.3.2 Existing Conditions

The predominant existing land uses within the Study Area is a mixed-use area and stable neighbourhood. The mixed-use area contains a variety of office, retail, services, entertainment, residential and open space uses. The description of the existing land uses has been subdivided by road sections starting from the northern Study Area limit and finishing with the southern Study Area limit.

### 6.3.2.1 Doris Avenue from Greenfield Avenue to Sheppard Avenue East

Doris Avenue, a minor arterial, has four lanes, allows on-street parking during off-peak periods, and has narrow sidewalks. The east side of Doris Avenue includes the Toronto Catholic District School Board and Catholic Education Foundation of Ontario building and a POPS. The POPS includes a round landscaped berm with mature trees around its perimeter. The berm is an important feature to the local community and business patrons. The west side of Doris Avenue includes three residential towers with generous landscaping, accessible from Forest Laneway that connects to Doris Avenue.

### 6.3.2.2 Sheppard Avenue East from Doris Avenue to Bonnington Place

Sheppard Avenue East, a major arterial road, has six traffic lanes, plus a centre left-turn lane, between Beecroft Road and Bonnington Place, transit stops, pedestrian crossings, and narrow sidewalks. The north side of Sheppard Avenue East includes a residential tower and the landscaped POPS mentioned above, while the south side of Sheppard Avenue East includes mixed use retail, office, and residential towers and an underground parking garage and entrance for 45 - 47 Sheppard Avenue East.

### 6.3.2.3 Bonnington Place from Sheppard Avenue East to Anndale Drive

Bonnington Place is a local two-lane road with a narrow sidewalk on the west side of the street. This side of Bonnington Place is zoned as a mixed-use area, while the east side is zoned as “low-density residential” and is a neighbourhood with one and two-storey detached dwellings. The east side of the street contains a linear open green space.

### 6.3.2.4 Tradewind Avenue from Avondale Avenue to Anndale Drive

Tradewind Avenue, a local two-lane road, is zoned as a mixed-use area on the west side of the street with two condominiums, while the east side is zoned as “low-density residential” and is a neighbourhood with one and two storey detached dwellings. Both sides of the street have sidewalks and planting zones with mature trees.

## 6.3.3 Development Applications

In addition to these existing land uses, there are presently four potential or planned developments within the Study Area. These developments including their location and status under the *Planning Act* are presented in **Table 6.1**. Given the areas designation as an Urban Growth Centre, it can be concluded that the existing land use fabric is undergoing change and has significant development pressures.

Table 6.1 Potential and planned development in the Study Area

Potential/ Planned Development	Location	Planning Act Status
The proposed development for a 39 storey and 374 until infill apartment on the Greenfield Avenue frontage of Sheppard Centre, with additional retail/commercial space on the Yonge Street and Sheppard Avenue and Greenfield Avenue frontages and the replacement of 25 existing rental units.	2 Sheppard Avenue E, North York, ON, M2N 7E7	Approved (March 31, 2015)
To obtain consent to sever the property into two undersized lots.	65 Glendora Avenue, North York, ON, M2N 2V8	Approved with Conditions (March 2, 2017)
To obtain consent to sever the property into two lots and to create various easements/rights-of-ways for pedestrian and vehicle access and maintenance and support purposes.	4841-4881 Yonge Street, North York, ON, M2N 5X2	Conditional Consent (July 9, 2019)
To construct a new two- storey dwelling. The existing dwelling would be demolished.	91 Avondale Avenue, North York, ON, M2N 2V1	Approved (September 28, 2016)

## 6.3.4 Transportation

### 6.3.4.1 Transportation network

The transportation network within the Study Area has changed significantly since the 1998 ESR Addendum.

Some of the planned transportation network improvements outlined in the 2006 North York Centre Secondary Plan associated with the South Service Road have been implemented, including the Anndale Drive extension and the reconfiguration of Avondale Avenue. Specifically, Anndale Drive extension was completed in 2013, as per the 1998 ESR Addendum, in order to connect Anndale Drive to Yonge Street. The extension included the installation of an all-way stop control at the intersection of Anndale Drive and Bales Avenue; the installation of no stopping at any time restrictions on Anndale Drive between Yonge Street and Bales Avenue, and the removal of the existing eastbound and westbound through restrictions on Yonge Street at Poyntz Avenue/the driveway to 4711 Yonge Street. Further, Avondale Drive has undergone reconfiguration to improve traffic flow at the intersection at Avondale Avenue/Florence Avenue and Yong Street by constructing an additional (fifth) lane to allow for a separate westbound right turn lane.

The Line 4 (Sheppard) subway, which was under construction during the 1996 ESR and 1998 ESR Addendum studies, opened in 2002. Line 4 is a five-station subway line that travels 5.5 kilometres underground between Yonge Street and Don Mills Road. Since the opening of the line, Sheppard-Yonge station is the seventh busiest subway station, serving approximately 76,800 passenger trips to and from the station per day<sup>5</sup>. The opening of the Sheppard Subway Line was a catalyst for extensive high-rise tower development in the North York Centre.

Lastly, several traffic studies have been conducted that confirm traffic congestion during peak hours has increased since 1998. **Section 6.3.4.2** describes traffic studies completed to date.

### 6.3.4.2 Background traffic studies

#### 6.3.4.2.1 Mixed-Use Development Traffic Impact Study – 49 Sheppard Avenue East (2013)

A traffic impact study (prepared by LEA Consulting, 2013) for a mixed-use development on the 49 Sheppard East lot was performed, including an operational assessment of key intersections within the Study Area. The study highlighted the projected capacity constraints in the future at surrounding intersections, including Sheppard Avenue East and Doris Avenue.

<sup>5</sup> Toronto Transit Commission (2014). *Operating Statistics*. Retrieved from: [https://www.ttc.ca/Coupler/Short\\_Turns/Operating%20Statistics/index.jsp](https://www.ttc.ca/Coupler/Short_Turns/Operating%20Statistics/index.jsp)

#### **6.3.4.2.2 Doris Avenue and Sheppard Avenue Design Alternatives - Options B and C AIMSUN Model Results (2019)**

The memorandum (prepared by LEA Consulting, 2019), discusses the existing and future traffic conditions for the horizon year 2022 under a number of scenarios regarding the alternative design options for Doris Avenue and Sheppard Avenue East intersection. The main objective of this analysis is to compare the offset intersection shown in Option C with the alternative realigned design in Option B, and to assess the impacts of maintaining a 6-lane cross-section at Yonge Street versus reducing it to a four-lane cross-section. The study concludes that Option B has a lower overall delay compared to Option C, and that maintaining a six-lane cross section along Yonge Street results in better traffic operation than reducing to a four-lane cross-section.

#### **6.3.4.2.3 REimagining Yonge Traffic Modelling Report (2020)**

The Traffic Modelling Report (prepared by the City of Toronto, 2020) was used to develop a traffic simulation model, using Aimsun, for the Study Area within the “REimagining Yonge Street” Class Environmental Assessment. Two scenarios were modelled for the future year 2031, including a “do-nothing + Doris connection” scenario, which maintains a six-lane cross section along Yonge Street and assumes the Doris/Tradewind Avenue realigned connection, and the “transform Yonge” scenario, which reduces Yonge Street from six-lanes to four-lanes. The modelling report provided operational assessment results from Aimsun for the key intersections within the Study Area, including intersections along the Doris Avenue corridor.

#### **6.3.4.3 Traffic volumes**

The 2031 REimagining Yonge Street Modelling Report was used as a basis for obtaining volumes for 2023 and 2031. The 2031 volumes, as outlined in the REimagining Yonge staff report, were adjusted to 2023 using a reduction factor of 0.5% annually for the AM peak and 1% annually for PM peak volumes. These reduction factors were the annual growth rates used in the Doris Avenue Extension Traffic Analysis Report, which was previously conducted for the Doris Avenue corridor. (available in Attachment 1 of Staff's report to City Council: <https://www.toronto.ca/legdocs/mmis/2020/ie/bgrd/backgroundfile-158590.pdf>). Traffic volumes generated by the parking garage were added to base traffic volumes to obtain total traffic volume for 2023 and 2031.

## **6.4 Economic Environment**

A change to the Economic Environment as described in the 1998 Addendum Study Area relates to reviewing potential costs in present day values (2021). Further analysis on present day value will be completed during detailed design.

### **6.4.1 Properties Acquired by the City**

Subsequent to the 1996 ESR and 1998 ESR Addendum, the City initiated the acquisition process for some of the lands identified as required to implement the construction of the Tradewind alternative through a combination of purchases and through conditions of development approval for the subject properties. The properties currently owned by the City are:

- 2, 4, and 12 Anndale Drive
- 49 Sheppard Avenue East
- 4, 6, 8, 12, 14, 16, 18, 20, 22, and 24 Bonnington Place
- 68 Avondale Avenue

The City is waiting on the outcome of this study to confirm additional property requirements. Once this Addendum is filed and the 30-day review period is complete, the City will confirm additional property needs, and initiate the process of acquiring the land required to implement the project.

## 6.5 Cultural Environment

### 6.5.1 Stage 1 Archaeological Assessment

A Stage 1 Archaeological Assessment (AA) (**Appendix D**) was carried out within the Study Area to determine whether there is potential for recovery of archaeologically significant material. The Stage 1 AA indicated that while much of the Study Area has undergone extensive disturbance or has been previously assessed, there exists undisturbed land that has not been subjected to an AA that carries the potential for the recovery of archaeologically significant material. Therefore, it is recommended that lands within the preferred option that have not been paved or disturbed through other development activities be subject to a Stage 2 AA during detailed design, prior to implementation of the project.

### 6.5.2 Heritage features

The Elihu Pease House at 34 Avondale Avenue continues to be the only property designated as a heritage feature within the Study Area. No other properties are under review or appeal for heritage designation within the Toronto Heritage Register.

## 7. Evaluation of Alternative Designs

The “do nothing” option in this study is the implementation of the preferred alignment from the April 1998 ESR Addendum, and therefore the two alternatives considered in this ESR Addendum are evaluated against that option and their ability to address any significant changes to the natural, social/built, economic, or cultural environment that have occurred since the 1998 ESR Addendum.

For consistency, the evaluation criteria used to compare the alternatives against the 1998 ESR Option are similar to the evaluation criteria used in the 1998 ESR Addendum. The evaluation has been split into three (3) parts, namely:

- Part 1: Ability to meet the identified problems/opportunity statement
- Part 2: Impacts to Socio-Economic Environment
- Part 3: Indirect Impacts

The evaluation matrix is included in **Appendix E**. A number of the evaluation criteria included in the matrix do not provide a significant variation between the alternatives, therefore the following discussion is based on the evaluation criteria which have the greatest differences between the options.

### 7.1 Intersection Geometry

From a geometric and functional design perspective, Ultimate Option B (**Section 5.6.2**) – the 2020 single realignment alternative - is technically recommended for the 2031 Horizon Year, with an offset intersection (Interim Option C from **Section 5.6.1**) which can be more easily implemented in the interim. Below is a brief narrative of key geometric design considerations as part of the recommendation and overall alternative development.

Ultimate Option B is significantly preferred over Interim Option C with respect to industry guidance for intersection spacing and overall functional performance. Interim Option C presents intersection spacing of <50m on a high-volume and higher speed vehicular corridors can become problematic from a vehicular operations perspective. Queuing, large vehicle turning, and storage needs between the intersections presents significant long term functional performance issues with high potential of blocking adjacent intersections and crosswalks that are unable to be appropriately mitigated through signal timing and coordinated signals. This is of particular concern for westbound (WB) Right turning traffic at Doris Avenue and eastbound (EB) Through traffic at Tradewind Avenue. The presence of sequential offset T-intersections has the effect of ‘metering’ or ‘restricting’ capacity improvements on existing alignments.

From an active transportation perspective, closely spaced intersections tend to minimize out of way travel and generally support active transportation mobility. However, for this environment, the desired N/S pedestrian routes are naturally offset and closely spaced crossings do not reduce out of way travel. Offset intersections in this project environment introduces additional conflict points of pedestrians with vehicles in a challenging vehicular operational environment which would not promote pedestrian increase mobility or anticipated pedestrian safety in this case.

Ultimate Option B achieves the core design philosophy to address poor operations associated with offset configurations, and the least number of conflict points. The realignment geometrics in Ultimate Option B are not ideal and Interim Option C allows for flatter geometric approaches to Sheppard Avenue East. However, Ultimate Option B geometric intersection skew (approximately 60 degrees) is not uncommon for high-density urban environments, and also exist on Doris Avenue immediately north (in the vicinity of Greenview Avenue). The skew and operational concerns can be mitigated through signage, traffic control devices, and detailed design choices where mitigation of operational concerns associated with Interim Option C are less beneficial.

Ultimate Option B and Interim Option C are considered equal with respect to access to/from 45 - 47 Sheppard Ave East. While Interim Option C may have a limited ability to support temporary 'right-out' access, it is not desirable long term. The planned inclusion of higher order cycling infrastructure on Sheppard Ave, the growing east-west pedestrian demands, the proximity to pedestrian standing area and stop bars at Tradewind Avenue intersection, stopping/decision sight distance to Doris Avenue intersection, and limited availability to re-enter traffic with queuing traffic at the Tradewinds Avenue Intersection, all contribute to significant safety concerns associated with permitting 'right-out' existing traffic to Sheppard Avenue. As well, neither Ultimate Option B or Interim Option C are able to safely permit 'left-in' or 'left out' movement to the site to/from Sheppard Avenue East, triggering the need for a new access point from either Tradewind Avenue Extension of Anndale Avenue.

Interim Option C is preferred with respect to the POPS, and property impact perspective. However, the cross section and turning lane needs required with traffic demand growth and pedestrian needs still require disturbances to existing vegetation.

Ultimate Option B and Interim Option C are considered equal in their ability to support on-street parking. Both require the removal and/or relocation of on-street parking on Doris Avenue north of Sheppard Avenue East.

Ultimate Option B is preferred over Interim Option C which has more pedestrian conflict points and/or higher potential for pedestrian crossing. The realignment allows for preferred signal operations and timing to prioritize and protect appropriate vehicular and pedestrian crossing locations at a convenient and centralized locations.

## 7.2 Traffic Operations

A traffic analysis was conducted for the intersections along the Doris Avenue/Tradewind Avenue corridor. A signalized offset intersection was evaluated as an interim measure for 2023 at the Doris and Sheppard Avenue intersection. A realigned Doris Avenue at Sheppard Avenue East intersection was evaluated with future 2031 traffic volumes.

The measures of effectiveness used to assess the operations at the intersections in this study are the Level of Service (LOS), the volume to capacity (v/c) ratio, and 95<sup>th</sup> percentile queues. LOS is defined in terms of average control delay per vehicle according to the criteria of the Highway Capacity Manual, sixth edition (HCM 6) and is used to describe the quality of service of a transportation facility. There are six levels defined, ranging from LOS 'A' to LOS 'F'. LOS 'A' represents the best operating conditions from the traveller's perspective and LOS 'F' represents the worst. The LOS and the corresponding delay, as defined by HCM 6 for signalized and unsignalized intersections are shown in Table 7.1.

Table 7.1 Level of Service Criteria for Intersections

Level of Service	Control Delay – Signalized (s)	Control Delay – Unsignalized (s)	Description
A	≤ 10	≤ 10	Free flow
B	> 10 - 20	> 10 – 15	Stable flow (slight delays)
C	> 20 - 35	> 15 – 25	Stable flow (acceptable delays)



Level of Service	Control Delay – Signalized (s)	Control Delay – Unsignalized (s)	Description
D	> 35 – 55	> 25 – 35	Approaching unstable flow (tolerable delays)
E	> 55 – 80	> 35 – 50	Unstable flow (intolerable delays)
F	> 80 or v/c >1.0	> 50 or v/c >1.0	Forced flow (jammed)

Traffic assessment results for the 2023 interim year scenario shows that the implementation of an offset intersection provides a sufficient overall Level of Service (LOS) with an LOS of ‘D’ during the AM peak and LOS of ‘E’ for the PM peak hour. However, some movements at the intersection, including the westbound through and southbound left movement may experience heavier delays and capacity concerns. This is due to timing constraints based on maintaining the existing signal cycle length at the intersection, as well as meeting pedestrian walk interval times during the other signal phases. However, generally the intersection provides adequate LOS and can work as an interim measure until the 2031 ultimate year scenario. The remaining intersections along the Doris Avenue/Tradewind Avenue corridor operate at an acceptable LOS with no capacity or queuing concerns.

Two lane configurations were assessed for the north approach at the Doris Avenue and Sheppard Avenue East intersection in the ultimate scenario. On this approach, double left-turn lanes were considered and a through-right lane as the lane configuration 1 and a single left-turn lane, a shared through-left lane and shared through-right lane as the lane configuration 2. Results of the 2031 ultimate conditions analysis suggest that the intersections along the Doris Avenue corridor will operate with an overall acceptable LOS of between LOS ‘A’ or LOS ‘C’, with no capacity or queuing concerns if lane configuration 1 is implemented at the Doris/Sheppard intersection. However, using lane configuration 2 results in an overall LOS of ‘D’ in the AM and LOS of ‘E’ in the PM peak, and results in capacity concerns for the westbound movements in the PM peak as the westbound through operates at an LOS of ‘F’ and with a volume to capacity ratio (V/C) of 1.08. This is because under lane configuration 2, the intersection requires split phasing to operate. By using split phasing, as well as ensuring minimum pedestrian walk intervals during minor approach movement phases, longer delays are experienced for the major approaches including the westbound through movement. The lane configuration 2 is not a viable alternative from both a traffic signal phasing perspective, due to the split phasing, and due to the poor traffic operations. The remaining intersections along the Doris Avenue/Tradewind Avenue corridor operate at an acceptable LOS of either LOS ‘A’ or LOS ‘B’ in the ultimate year scenario. Detailed analysis is provided in **Appendix C**.

### 7.3 North York Centre Secondary Plan

The North York Centre Secondary Plan included these requirements:

- The nearest curb of the service road is to be a minimum 12 m from the property lines of the adjacent stable residential area to the east.
- Intervening property between the service road and stable residential area to be available to form a linear park and/or public open space.
- Potential to support development of land within the secondary plan area by maintaining access and creation of reasonable development blocks.

These requirements are met by the 1998 ESR Addendum Option as well as Interim Option C and Ultimate Option B.

### 7.4 Disruption to Privately-Owned Publicly Accessible Space (POPS) Features

The POPS at 90 Sheppard Avenue East at the north-east corner of Sheppard Avenue East/Doris Avenue is impacted by Ultimate Option B. The design of Ultimate Option B, has been significantly refined from the 2015 version to minimize the impact to the POPS, requiring minimal redevelopment or loss of this feature. Interim Option C is not

expected to impact the POPS. Additional design refinements and options are available to further mitigate impacts can be found in **Appendix A**.

## 7.5 Disruption to 45 - 47 Sheppard Avenue East Underground Parking Garage and Access

The 45 - 47 Sheppard Avenue East property contains a direct frontage access to surface parking and underground garage from Sheppard Avenue. The access is permissive of all movements and is the only access point to either the surface or underground parking.

While maintaining full moves access directly to/from Sheppard Avenue East is not viable, replicating existing movements to the site and facilitating access to/from the existing garage entrance is critical to the intersection feasibility and viability perspective. As a result, intersection designs and geometry are configured in a manner which maintain egress from the existing garage entrance to the access Sheppard Avenue East via Tradewind Avenue or Anndale Avenue. Design impacts, detailed design considerations and mitigation analysis can be found in **Appendix A**.

## 7.6 Estimated Construction Costs

Per the December 2020 staff report adopted by Council, staff estimate the interim condition, which includes detailed design and construction, is approximately \$7 million. The total estimated capital costs will be further refined during the detailed design phase.

## 7.7 Design Accommodations & Cross Section

### 7.7.1 Accommodation of Pedestrians

For geometric and spatial planning purposes, alternatives assume the use of 2.1 metre wide sidewalks consistent with the City of Toronto Standards (T-310.010). Consideration for 1.8 metre wide sidewalks on Tradewind Avenue may be considered during design due to the local road nature of the corridor.

The conceptual designs also include a 2.0 metre wide boulevard (not including curb and gutter) to support City's Complete Street objectives. In the context of Doris Avenue and Tradewind Avenue, this area is allocated for illumination, utilities, snow storage and street greening opportunities. Modifications or reductions to the boulevard widths, in combination with lane width refinements, may be appropriate in consultation with the City during subsequent design phases.

Interim Option C provides pedestrians with crosswalks which are generally perpendicular to the lanes of traffic, minimizing crossing time, while the skewed nature of Ultimate Option B results in longer pedestrian crossing times in the north-south direction. Interim Option C has more conflict points between pedestrians and vehicles. Both options provide additional pedestrian crossing opportunities on the east leg of Sheppard Avenue East which do not exist today. The realignment allows for preferred signal operations and timing to prioritize and protect appropriate vehicular and pedestrian crossing locations at a convenient and centralized locations. Level of service for various options as discussed in **Section 6.3.4.3** reflects the accommodation of pedestrians via adequate pedestrian walk intervals.

### 7.7.2 Accommodation of Cyclists

Bike lanes that were proposed along Doris Avenue in earlier studies have been removed from the proposed design. The REimagining Yonge MCEA has identified Yonge Street as the central transit spine and active transportation route for the North York Centre's transportation network. As a result, Doris Avenue and Tradewind Avenue are no longer envisioned to have a higher-order cycling function.

The Cycling Network Plan Update approved by Council in July 2019 included the adoption of Sheppard Avenue as a Major City-Wide Corridor. The first phase of which is tentatively planned in 2022 between Bonnington Place and

Bayview Avenue. While not included in the EA Addendum, the incorporation of planned cycling infrastructure (i.e., cycle track) on Sheppard Avenue East should be considered within the limits during detailed design and construction of Ultimate Option B to extend the planned cycling infrastructure westerly towards Yonge Street, subject to Council and/or EA approvals.

### 7.7.3 Accommodation of Vehicular Traffic

For geometric planning purposes, conceptual cross section designs maintain a 3.30 metre lane width for all through lanes and auxiliary lanes consistent with the maximum widths identified in the City of Toronto Lane Width Guideline. While these widths are wider than the target, the horizontal geometry and skew of the intersection warrants protection for the maximum width of lane at this stage of design. Modifications or reductions towards the target 3.0 metre for through lane and auxiliary lane widths may be appropriate in consultation with the City during subsequent design phases. Transportation Association of Canada (TAC) Geometric Design Guide are used in combination with City of Toronto Standards and industry practices for geometric design purposes.

## 7.8 Impact on Mature Trees

Ultimate Option B will have a greater impact on existing mature trees than Interim Option C, including impacts within the POPS at 90 Sheppard Avenue East. A tree replacement plan will be determined in consultation with Urban Forestry during detailed design.

## 7.9 Parking Impacts

Interim Option C requires the removal of on-street parking north of Sheppard to avoid significant disturbance to the POPS and existing vegetation. Compensation for on-street parking can be provided on the new Tradewind Avenue Extension south of Sheppard Avenue East. Ultimate Option B can provide the same on-street parking as the existing conditions north of Sheppard Avenue East as well as south of Sheppard Avenue East through the protection of a four-lanes section south of Sheppard Avenue East.

## 7.10 Noise and Air Quality

Interim Option C would have a higher impact on noise and air quality due to longer idling time caused by the lower level of service expectations. Ultimate Option B would result in the lowest overall impact on noise and air quality.

## 7.11 Future Open Space

Interim Options C provides the best opportunity for linear park and/or public open space adjacent to the South Service Road and thereby provide good connectivity from Avondale Avenue to the POPS at 90 Sheppard Avenue East. Ultimate Options B are less preferred due to the resulting broken connectivity adjacent to Bonnington Place and the impacts to the POPS at 90 Sheppard Avenue East.

# 8. Conclusion and Recommendation

To achieve the goals outlined in the Revised Problem and Opportunity Statement (**Section 3.1**), originally identified in the 1996 ESR, this ESR Addendum recommends the City implement a single intersection consistent with Ultimate Option B (**Section 5.6.1**), with an interim offset intersection consistent with Interim Option C (**Section 5.6.2**). When completed, the South Service Road will support the growth and development planned in North York Centre. It will also facilitate the flow of traffic between existing and future development south of Sheppard Avenue, allowing arterial roads to carry through traffic and help protect stable residential areas from traffic infiltration.

A two-phase implementation of the South Service Road will facilitate concurrent construction of the North York Centre transportation network, inclusive of REimagining Yonge and the North York Centre Service Roads comprised of the South Service Road and the Beecroft Road extension. The Service Roads will form a ring road around the North York Centre, east and west of Yonge Street, in order to alleviate traffic on Yonge Street which is undergoing redevelopment into a Complete Street that provides multimodal transportation options. Together, the North York Centre transportation network will support multi-modal transportation demand and growth in the North York Centre.

The implementation of the two-phased South Service Road approach recommended in this ESR Addendum will achieve the goals of the City's Official Plan (2019) and the North York Centre Secondary Plan, as well as increase public safety outcomes by implementing Vision Zero objectives including improved pedestrian facilities at existing intersections.

## 8.1 Implementation of Interim Solution(s)

The ultimate Option B alignment continues to be preferred over the interim Option C, and remains the final objective for the South Service Road. However, in the event that an interim design is identified during the detailed design process that aligns with Ultimate Option B, no additional Addenda are required as no new impacts would be introduced. Interim configurations are inherently part of minimizing implementation impacts while consulting with affected stakeholders, and as such the City may proceed with implementation an alternative interim configuration.

## 8.2 Proposed Construction Schedule

The construction schedule for the South Service Road is dependent upon finalization of this ESR Addendum, subject to the statutory review period and the advancement of preliminary and detailed design.

A preliminary estimate of the implementation schedule is as follows:

- Complete ESR Addendum and 30-day addendum review period: Q4 2021
- Preliminary and Detailed Design of Phase 1: 2022 – 2023
- Phase 1 Construction: 2023 – 2024

## 8.3 Potential Environmental Impacts and Mitigation Measures

The anticipated implications of the proposed changes are summarized according to the four aspects of the environment as defined by the *EA Act* (Natural, Social/ Built, Economic and Cultural).

### 8.3.1 Natural Environment

#### 8.3.1.1 Trees

A Future Assessment will be required during the detail design process to confirm opportunities for tree preservation and develop a plan for establishing methodologies pre and post construction with the objective of minimizing loss of healthy trees. The Future Assessment should be carried out in accordance with the recommendations contained within the Tree Inventory and Assessment (**Appendix B**).

#### 8.3.1.2 Privately-Owned Publicly Accessible Space (POPS) at 90 Sheppard Avenue E

Ultimate Option B requires approximately 600m<sup>2</sup> of POPS property acquisition, and approximately 1,700 m<sup>2</sup> of total open-space impact available for public uses. An aggregate compensatory area of 1,050 m<sup>2</sup> west of the Doris Avenue realignment and 1,450 m<sup>2</sup> of potential area south of Sheppard Avenue East along Tradewind Avenue are potentially available.

Mitigation to the POPS is directly related to the design details to approach geometry and intersection skew, associated with the access and egress needs of the 45 - 47 Sheppard Avenue East which will be confirmed in the detailed design phase.

## 8.3.2 Social/Built Environment

As the realignment of Tradewind Avenue is in keeping with the alignment proposed in the 1998 ESR Addendum, it is expected that the recommended solution effectively mitigates any measurable environmental concern related to noise or air quality impacts.

### 8.3.2.1 45 - 47 Sheppard Avenue parking garage access

The position of the existing garage access in relation to the intersection(s) in both the Interim Option C and Ultimate Option B, restricting left movements to/from Sheppard Avenue East is recommended. The parking garage egress 'right-out' to Sheppard Avenue East is also complicated as a result of the proximity to the stop bar and pedestrian standing areas at the intersection which are significant. Maintaining full moves access to the garage at the existing location is not viable.

Access to the surface and underground garage from Sheppard Ave EB is proposed to be permitted via a channelized 'Right-In' Only. A new full moves access from either Tradewind Avenue Extension or Anndale Avenue is proposed to replace the eliminated vehicle moves from Sheppard Avenue East. This will allow for a safer parking access by leveraging a new traffic signal to facilitate both SB traffic and WB Left movement accessing the garage and moving the pedestrian conflict point away from congested pedestrian areas to a location with improved visibility.

Approximately 200 m<sup>2</sup> of City owned property is required to facilitate this private access vehicular movement, requiring the largest area of City owned property. This property is comprised of vacant land previously acquired by the City on Bonnington Place.

An Interim Option C condition may consider temporary use of a 'Right-Out' and/or a slotted 'Left-In' as temporary measures to be considered during detailed design.

Details and options of on-site access to the underground garage to be considered during detailed design can be found in **Appendix A**.

#### 8.3.2.1.1 Structural considerations and modifications

A structural feasibility analysis was undertaken as part of this study which concluded the recommended solution are structurally viable.

Given the presence of existing vehicular use at these locations (existing parking stalls and the existing exit to Sheppard Avenue East) at the locations identified and maintaining the low-speed nature and size of vehicles traversing from earth fill to the structure surface, this does not attribute to a different set of structural loading. A potential new surface entrance from Tradewind Avenue and realigned at-grade access to the existing underground garage do not present new or significant changes to the structural design loading which is anticipated to have been required and established in the design of the original facility.

A structural field review is recommended at the detailed design stage to confirm the overall cost impact, identify any condition/deterioration related changes, which are anticipated to be minor based on the scale. For more information, please refer to **Appendix A**.

### 8.3.2.2 Bonnington Place

To maintain basic municipal service access to Bonnington Place, a northbound 'right-out' northbound access to Sheppard Avenue East is recommended. The 1998 ESR Addendum identified a cul-de-sac near Sheppard Avenue East to facilitate turning of large municipal service vehicles for waste collection and snow removal. A minimum of a 20.0 m diameter would be required to access the frontage of the three residences north of Lyndale Drive. The space that the cul-de-sac would otherwise occupy complicated maintaining access to the parking garage discussed in **Section 8.3.2.1**, which determined the position of Tradewind Avenue Extension.

To maintain the occasional access of service vehicles to Bonnington Place, a 'right-out' access is preferred over a cul-de-sac. This will permit service vehicles to continue northbound on Bonnington Place in a similar fashion to

existing service vehicle operations. The detailed designs should consider a depressed median island on Sheppard Avenue East and flexible delineator traffic control devices which would permit emergency access use.

### 8.3.3 Cultural environment

#### 8.3.3.1 Archaeology

A Stage 2 AA shall be carried out in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) Guidelines in any undisturbed areas prior to carrying out any excavation activities within the South Service Road alignment. The MHSTCI and City of Toronto Heritage Preservation Services Unit is to be satisfied that all archaeological licensing and technical review requirements have been satisfied prior to any disturbance occurring in areas that have been identified as having archaeological potential. Refer to **Appendix D** for additional details.

Stage 2 Archaeological Assessment (and further Stage 3 Archaeological Assessment and/or Stage 4 Mitigation, if recommended in the Stage 2 Archaeological Assessment) will be completed as early as possible, prior to the completion of Detailed Design and well in advance of any ground disturbing activities. In the event that archaeological resources are unexpectedly encountered during construction, MHSTCI should be contacted and all activities impacting archaeological resources will cease immediately.

#### 8.3.3.2 Heritage features

No negative environmental effects are anticipated on heritage features within the Study Area as a result of the project.

## 9. Consultation on the Proposed Changes

Consultation with the public, review agencies and Indigenous communities throughout the evaluation and review phases of the project were key components of the ESR Addendum review process. Public consultation for this study was primarily conducted over three periods:

- September 2013 to March 2014
- May 2015 to June 2015
- February 2020 to January 2021

Each period included direct engagement with stakeholders and affected property representatives, public notification, a public drop-in event, a detailed web page ([toronto.ca/nyc-south-road](http://toronto.ca/nyc-south-road)), and multiple feedback mechanisms, including online, email, phone and postal.

Throughout the consultations, trends in public opinion received were relatively consistent:

- Popular preference for a single intersection that will optimize traffic flow and pedestrian safety
- Majority acceptance that an offset intersection (interim) may be necessary and is better than do-nothing
- Interest in having the project implemented without further delay
- Appreciate the Bonnington Place cul-de-sac design that will avoid residential driveways directly on the service road
- Concerns about any changes that may increase traffic infiltration on to residential streets
- Some opposition to impacting of the existing green space (north-east of Doris Avenue)

Stakeholder consultation will continue prior to finalizing detailed design and required property acquisition.

The following sections provide the details of each consultation activity that was carried out during this review, providing the overall approach to soliciting meaningful project input.

### 9.1 Indigenous Communities Consultation

A letter sent to the City of Toronto from the Ministry of Aboriginal Affairs in 2013 identified that the Mississauga of the New Credit First Nation may have interest or rights for a project within the City boundaries.

A later letter from the Ministry provided a revised list of Aboriginal communities for projects in the City:

- Alderville First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Mississaugas of Scugog Island
- Mississaugas of the New Credit First Nation

A notification letter, including PDF copies of the Stage 1 Archaeological Report, February 2020 Public Update flyer, and links to the web page with Public Information Panels, were sent by email on March 22, 2021 to the confirmed formal representatives of each of the above five Indigenous communities. A follow-up reminder email was also sent April 13, 2021.

No First Nations representatives expressed interest in this project at this stage.

It should be noted that the Mississaugas of the New Credit First Nation requested to be reengaged once the City proceeds with a Stage 2 Archaeological Assessment on this project.

A copy of the letters and email responses are included in Appendix F.

## 9.2 Public Consultation Overview

Public consultation for this study was primarily conducted over three periods:

- September 2013 to March 2014
- May 2015 to June 2015
- February 2020 to January 2021

The public consultation was conducted online and offline. Below is a summary table of the major activities carried out. *Example copies of letters, flyers and ads are included in appendices.*

Date	Activity	Details
September 16, 2013	Study informally introduced at Planning application public meeting for: 49 Sheppard Avenue East and 14, 16, 18, 20, 22, 24 Bonnington Place	Introductory project information shared at City Planning meeting addressing developments in the corridor Web page created and Study Information handout shared with participants
November 26, 2013	An introductory letter to properties in the study area	Sent to all 138 property owners/managers in the Study Area (not including individual condominium owners) Web site was also updated with frequently asked questions
February 13, 20, 27, 2014	Notice of Public Event #1 published	Published twice in the North York Mirror (East) newspaper and also flyer delivered to study area. Issued to Standard Agencies list
March 5, 2014	Public Event #1	75 participants 25 Feedback submissions
May 7, 2014	Email Update and notice of Public Works and Infrastructure Committee meeting	May 14, 2014 Public Works and Infrastructure Committee item PW31.9
May 28 and June 6, 2015	Notice of Public Event #2 published	Published twice in the North York Mirror (East) newspaper and also flyer delivered to study area.
June 11, 2015	Public Event #2	57 participants 108 Feedback submissions

Date	Activity	Details
June 1, 2015	Letters sent to potentially impacted properties	Addressed letters sent to 66 property owners with potential impacts from the proposed new road design
February 10, 2020	Notice of Public Event #3 published	Flyers delivered to the study area. Emails sent to project list and standard agency stakeholder list.
February 27, 2020	Public Event #3	18 participants at the event. 40 feedback submissions received.
November 24, 2020	Update and notice of Infrastructure and Environment Committee meeting (Item IE18.2)	Emails sent to project list with 115 contacts on record. Included details of two-phased implementation approach and opportunity to participate in committee meeting.
December 1, 2020	Infrastructure and Environment Committee consideration	See Item IE18.2 Six communications received by the Committee. <i>See details at:</i> <a href="http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE18.2">http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE18.2</a>
TBD	Notice of 30 day review for final report	To be published via flyer and email lists.

## 9.2.1 Methods of Public Engagement

Members of the public and stakeholders were informed about the project and invited to participate using a variety of methods.



Flyer distribution area - Canada Post letter carrier map



### **9.2.1.1 Flyers**

Paper flyers with study information, event details and the project webpage were delivered by Canada Post Unaddressed AdMail throughout the study area (Yonge Street to Dudley Avenue, Highway 401 to Empress Avenue).

The number of mailboxes receiving flyers in the study increased from 10,000 in 2014 to 19,000 in 2020.

Copies of all notices are included in Appendix F.

### **9.2.1.2 Addressed Letters**

At key phases early in the Addendum study addressed letters were sent to property owners to notify them of the study and invite their participation:

- November 26, 2013: Letters sent to 138 property owners/managers in the study area (not including individual condominium owners).
- June 1, 2015: Letters sent 66 property owners with potential impacts from the proposed new road design.

Property occupants would also have received flyer notices.

### **9.2.1.3 Newspaper Ads**

For the Public Events #1 and #2, notice was published twice in the local newspaper: North York Mirror (East). For Public Event #3, an ad was not published as the City's standard practice changed to focus on flyers and electronic means of notification.

### **9.2.1.4 Email List**

Throughout the study, interested members of the public were invited to subscribe to the project email list:

- At public consultation events
- By contacting the public consultation coordinator listed on flyers, letters and the study web page
- Whenever submitting comments or otherwise contacting the public consultation staff for the study

Subscribers numbered from 80 to 115 throughout the life of the project. Subscribers were sent study consultation event invitations and project updates as noted in the above Public Consultation Overview table.

### **9.2.1.5 Web Page**

Starting in September 2013, the project web page hosted background and introductory information materials and links to related projects. At each phase of public consultation, the web page was updated with complete copies of materials presented at the public events. Input was invited through online feedback forms, and direct contact via email or phone.

The web page URL was as follows: [toronto.ca/nyc-south-road](http://toronto.ca/nyc-south-road)

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 / North York Centre: Doris Ave. Extension (South Service Road) - Bonnington Pl. & Tradewind Ave.

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## North York Centre: Doris Ave. Extension (South Service Road) – Bonnington Pl. & Tradewind Ave.

November 2020 Update: City staff will be presenting recommendations for this study to the Infrastructure & Environment Committee (IEC) at the December 1, 2020 meeting. **A copy of the staff report is available under IEC agenda item IE 18.2.** Interested members of the public can arrange to speak or submit comments to the Committee.

The North York Centre Service Roads – comprised of Doris Avenue and Beecroft Road – form a ring road around the North York Centre, east and west of Yonge Street.

The Service Roads serve several purposes, including:


- Connecting North York Centre with a finer grained transportation network in order to better manage traffic flow along Yonge Street and other alternate routes;
- Providing convenient rear access to residential, retail, and office buildings on Yonge Street; and
- Forming a boundary for the high-rise development within North York Centre in relation to the adjacent stable residential neighbourhoods.

The completion of the southeastern portion of the Service Road that would link Doris

**Two-phased Approach** | Study Area | Background


As a result of the review that has been undertaken, this EA Addendum recommends a two phased approach as follows:

**Phase 1 – Interim: Offset Intersection**



- Tradewind Avenue would be extended up to Sheppard Avenue East.
- This would result in an offset intersection at Tradewind Avenue / Sheppard Avenue East and Doris Avenue / Sheppard Avenue.
- Traffic signal phasing would be coordinated at the offset intersection to optimize traffic flow.
- Bonnington Place would be closed off in a cul-de-sac south of Sheppard Avenue East, as proposed in the 1998 EA.
- This was identified as Option C in the

**Phase 2 – Future: Single Intersection\***



- Doris Avenue would be realigned approaching Sheppard Avenue East to meet the northern extension of Tradewind Avenue.
- This would result in a single four-legged intersection, with a skew on the north-east quadrant.
- This is a revised version of Option B identified in the Environmental Assessment process

\*This final design is a modification following the February 2020 public consultation. Staff refined the Future condition to achieve the

*Samples from study web page (April 2021)*

### 9.2.1.6 One-window Contact

Throughout the study all public materials invited engagement with City of Toronto public consultation staff with listed contact including phone, email, and postal address. All significant comments and responses were tracked and addressed.

### 9.2.1.7 Public Drop-In Events

Three public consultation events were hosted by the project team at key phases in the study. Each event followed the same format of displayed information panels, opportunity to discuss with the project team, and invitation to submit comments using a paper feedback form or online feedback form. All information materials from the public events were also published as PDF files on the project web page.

Event	Date/Time	Location	Participation
Public Event #1	March 5, 2014 6 to 9 p.m	Earl Haig Secondary School, 100 Princess Avenue	75 participants 25 feedback submissions
Public Event #2	June 11, 2015 6 - 8 p.m.	Earl Haig Secondary School, 100 Princess Avenue	57 participants 108 feedback submissions
Public Event #3	February 27, 2020 6 - 8 p.m.	North York Memorial Community Hall	18 participants 40 feedback submissions.

## 9.2.2 Affected Property Owner Engagement

Property owners directly impacted by the proposed changes and new road include the following:

Address	Owner
80 Sheppard Avenue East	Toronto Catholic District School Board (TCDSB)
45 - 47 Sheppard Avenue	Crown Realty Partners
90 Sheppard Nominee Inc.	90 Sheppard Nominee Inc. (represented by Crown Realty Partners)
25 Bonnington Place and 87, 91, 93 and 95 Sheppard Avenue East	SheppBonn Ltd.
69 Glendora Avenue	Gergely Szokolay

Throughout the project, these stakeholders participated in multiple meetings, phone calls and email discussions with the members of the project team. Effort was made to address, and where possible, resolve questions and concerns raised.

A copy of key messages and meeting records from the late phase of the study (2020) are included in **Appendix F**.

## 9.3 Agency Notification

Study notice was circulated to the City's Public Consultation Unit's standard Transportation Project Agency Contact List prior to each public consultation event. See list of agencies and departments contact in **Appendix F**.

# 10. Notice of Filing of Addendum and Commenting Period

As per the MCEA, a Notice of Filing of Addendum (**Appendix F**) was issued by the City to review agencies, Indigenous communities, and the public. Specifically, this involved the following activities:

- Issuing the Notice through direct mailing to adjacent property owners in the Study Area.
- Issuing the Notice via email and/or direct mailing to review agencies, utilities, councillors, interested persons (subscribers), and Indigenous communities.
- Publishing the Notice in newspaper.
- Publishing the Notice on the City's website ([toronto.ca/nyc-south-road](http://toronto.ca/nyc-south-road)) in the "background" tab.

The City established the 30-day addendum review period, whereby any interested person can inspect the ESR Addendum, the 1998 ESR Addendum and the 1996 ESR prepared for the North York Centre South Service Road MCEA and provide comments. The comments, including any issues or concerns, should be sent first to GHD, on behalf of the City, for potential resolution.

If there are outstanding concerns that the project may adversely impact constitutionally protected Aboriginal and treaty rights, which cannot be resolved in discussion with the City, then a person or party may request that the Minister make an order for the project to comply with Part II of the *Environmental Assessment Act*. This is referred to as a Part II Order, which addresses Individual Environmental Assessments. If no Part II Order requests are received the City may proceed to implementation and construction.