

PRE-SUBWAY PLAN

4.0 PRE-SUBWAY PLAN

4.1 INTRODUCTION

As proposed, the Yonge Subway Extension would extend the TTC's Line 1 subway service 7.4 kilometres from Finch Station into Richmond Hill. Metrolinx and Infrastructure Ontario are working together to deliver the project, which will strengthen the regional transit system by once again extending subway service outside of Toronto into York Region. The target completion date is 2029-30.

Most recent plans propose up to six stations, including transit hubs at Richmond Hill Preliminary engineering and design work for the YNSE is proceeding under Metrolinx's leadership. Metrolinx expects to develop the Initial Business Case for the YNSE by summer 2020, Federal funding is expected to be secured through the Investing in Canada Infrastructure Plan With this background, this section of the report deals with the Pre-Subway Plan – a plan that identifies areas where the Streetscape Master Plan design could potentially be built prior to construction of the subway and retained as part of the ultimate plan. However, as detailed implementation plans are not available at this time when the Master Plan Update is being prepared, this Pre-Subway Plan could only be prepared at a high level conceptual basis. In the absence of a decision on timing of construction and accompanying funding for the subway, Yonge Street must continue to function as a major commuter

route accommodating increasing traffic flow and functions for the foreseeable future. The prime assumption upon which a Pre-Subway Plan could be built is that it will continue to use existing roadway infrastructure including pavement width and curb lines. When further implementation schedule is available, a Plan of this nature will need to identify areas of boulevard where implementation of the Streetscape Master Plan could potentially take place without compromising the roadway and traffic functions or that would require re-construction when the subway is built.

4.1.1 GENERAL CRITERIA

The criteria used to determine eligibility for certain blocks or sections of Yonge Street to undergo streetscape development in the Pre-Subway period includes the following:

- 1. Maximize use of capital investment. York Region desires to show commitment to the transformation of Yonge Street; however, it does not want to undertake work that will be disturbed during subway construction or when the ultimate road configurations are implemented.
- 2. Maintain roadway capacity while improving conditions for bicycles and transit. See Section 4.1.2 below for a discussion of Transportation System Management strategies to be pursued.

3. Construction feasibility and efficiency. If a section exceeding one block in length can be developed on both sides, development should be considered. Work could continue into the next block even if the new streetscape cannot be implemented all the way to the next intersection because of existing additional turn lanes. However, given that the Pre-Subway Plan calls for the elimination of right turn lanes, the curbs may in fact be moved (to ultimate placement) in the Pre-Subway period to allow for completion of entire block.

Bus lay-bys are also rendered unnecessary by the designated High Occupancy Vehicle (HOV) lane in Pre-Subway Plan, so those curbs could also be "straightened" out and the 'pork chops' at the proposed gateway to Old Thornhill Village may be eliminated in the Pre-Subway period.

In all cases where development is possible, either the existing curbs will remain in the ultimate scenario or the ultimate curbs can be constructed now. No rebuilding or piece-meal construction will be necessary.

4. Minimize deviations from the Master Plan design. While some adaptations will need to be made in the areas to be developed using existing curb widths, the general philosophy, design intent and principles of the Master Plan guided the development of the Pre-Subway Plan and therefore, the Master Plan design guidelines shall apply.

4.1.2 ROAD CAPACITY AND FUNCTION

During Pre-Subway conditions, minimizing the cost of changes to the streetscape is a key goal. To this end, elements of Transportation System Management (TSM) have been recommended to maintain existing corridor operating conditions while improving the streetscape of the corridor. This includes:

- Narrowing basic lane widths;
- Reallocating existing pavement dimensions and improving conditions for bicycles;
- Maintaining key functional elements of existing lane configurations (centre left turn lane) to maximize corridor accessibility and minimize impact upon through capacity;
- Adopting access management strategies to improve private driveway design, location, and operation relative to corridor operating conditions (from general vehicular, transit, bicycle, pedestrian, and urban design perspectives) (such strategies include back lanes, side street and off-street parking and servicing);
- Addressing intersection capacity through signal timing / phasing efficiencies and progression considerations.

4.1.3 GENERAL PRINCIPLES FOR LANE DEPLOYMENT LANE WIDTHS

Adjustments to lane widths will require a context sensitive design approach. Where elements of the Master Plan can be implemented in advance of subway construction, lane adjustments should be made to increase the boulevard space when necessary. Right sizing the on-street travel lanes provides an opportunity to adjust the existing curb line to its ultimate location. The right sizing of Regional lane widths will be undertaken by York Region as part of a separate process outside of this Master Plan Update.

Where lane widths (through lanes as well as turning lanes) exceed those specified in the Master Plan (typically greater than 3.5m for through lanes) lanes should be narrowed to match the Master Plan. It is important to ensure that sufficient transition space is available to facilitate any resulting lane shifts or lane alignment changes between road segments. These changes will typically occur at intersections, but should sufficient space be available, they could occur at midblock locations.

CYCLING FACILITIES

Cycling facilities should be deployed as segments of the boulevard permit. Interim measures may be required to safely transitions cyclists between the cycling facility and mixed traffic. Typically, this would occur at a controlled intersection. Midblock transitions should only be permitted if they are for cyclists 'entering' the cycling facility.

In exceptional circumstances, temporary cycling facilities can be installed within the boulevard, allowing for the cycling facility to be extended to a safe transition point. Temporary facilities may also be required where the Master Plan cannot be realized due to the location of existing bus stops (and shelters) that cannot be relocated or adjusted to accommodate the ultimate cycling facility. In this case temporary facilities are acceptable until such bus stops are decommissioned or relocated and the ultimate facility can be constructed.

If the cycling facility cannot be safely transitioned, the main portion of the facility could be constructed, with the entry and exit ends closed through appropriate measures, for future connections to be completed.

MEDIANS

Under Pre-Subway conditions, the centre left turn lane medians are maintained throughout the corridor for traffic operations and land access reasons. However, it is envisioned that future development, through a corridor access management approach, would minimize direct access to Yonge Street and optimize access from side streets and consolidated private driveways along Yonge Street. This would permit the implementation of raised planters where centre left turn lane provisions are not functionally required in the long term.

4. Pre-Subway Plan

4.2 OPPORTUNITIES FOR CONSTRUCTION

This section identifies the various conditions that may allow for opportunities for construction of the streetscape along Yonge Street to occur during the Pre-Subway period.

Areas where open-cut construction will be required during the subway tunnel construction (Condition A) will only undergo necessary repairs and maintenance – no extensive upgrades shall occur until after the subway is implemented. Areas where either the ultimate Master Plan or the Pre-Subway Plan can be built during the Pre-Subway period (Condition B and C) will be upgraded when possible – considering the need for extensive road or boulevard repairs, scheduled utility work, new development, financial partnership agreements, etc.

For the purpose of this study, the study area is classified into four categories:

Condition A: Open-cut areas that cannot be developed until subway construction is complete (Ultimate Plan);

Condition B: Areas where the Master Plan can be slightly modified using existing curbs (Pre-Subway Plan);

Condition C: Areas where roadway widths are narrower than the proposed design and can be expanded with no loss of

transportation function (Pre-Subway Plan);

Condition D; Areas where the current roadway is wider than the proposed allocation and it would be preferable to wait until the road is narrowed to achieve a more spacious pedestrian zone (Ultimate Plan).

During the detail design and construction drawing phases of the South Yonge Street Corridor streetscape development projects, different conditions may apply; trees will need to be assessed and alternative design solutions may be discovered.

4.3 LAND ACQUISITION

Considerable attention and efforts have been paid by the Master Planning team to confine the scope of work of the proposed Streetscape Master Plan within the 36 metre R.O.W. to minimize needs for additional land acquisition for future implementation. While some minor areas within the corridor may require land requisition, this requirement may be eliminated through detailed site investigation and design process.

REFERENCE IMAGES

Greater Manchester's 'Bee Network', Manchester, UK https://airqualitynews.com/wp-content/uploads/2018/06/ manchester-beelines-705x470.jpg Accessed 4 December 2020

Greater Manchester: Cycling and Walking Infrastructure Manchester, UK http://2.bp.blogspot.com/-wmdLM0MeuD0/Utv1HD6aA_I/ AAAAAAAEus/Q8Wvk4p31ao/s320/img_0512.jpg Accessed 4 December 2020

Greater Manchester: Cycling and Walking Infrastructure, Manchester, UK http://madcyclelanesofmanchester.blogspot.com/2014/01/ design-options-for-oxford-road-2.html Accessed 4 December 2020

Greater Manchester: Cycling and Walking Infrastructure, Manchester, UK https://i2-prod.manchestereveningnews.co.uk/incoming/ article17640268.ece/ALTERNATES/s810/1 How-School-Roadin-Sale-could-look.jpg Accessed 4 December 2020

Aycock, Alice. Toronto Twister, Toronto https://www.aaycock.com/pier-27-2017 Accessed 4 December 2020

Bieler, Ted. Triad, Toronto. https://www.pbase.com/bmcmorrow/image/121419460 Accessed 4 December 2020

Blue Republic (Anna Passakas and Radoslaw Kudlinsk). Stargate, Toronto https://www.livabl.com/2020/05/intergalactic-art-unveiled-150-155-redpath-condos.html Accessed 4 December 2020

Covit, Linda. Tracings, Toronto. https://www.enoac.ca/fr/user/474/public Accessed 4 December 2020

Morin, Jean-Pierre. Sentinelles, Toronto. https://www.pinterest.ca/pin/656892295618301461/ Accessed 4 December 2020

