

Supplemental Report: Cycling Network Plan: 2023 Cycling Infrastructure Installation - Second Quarter Updates and Missing Sidewalk Program - 2023 Local Road Sidewalk Installations

Date: May 10, 2023

To: City Council

From: General Manager, Transportation Services

Wards: 14 and 15

SUMMARY

Starting in 2023, the City of Toronto has planned road resurfacing work on Pape Avenue and Donlands Avenue just south of the Leaside Bridge. Separately, Metrolinx is planning changes to the Millwood Road and Overlea Boulevard intersection for the Ontario Line project. In keeping with the Council-directed complete streets approach to state-of-good-repair projects, this project proposes to make changes to the design of the intersections and roadway space on the bridge to improve operations and safety for all road users.

On April 26, 2023, Infrastructure and Environment Committee directed the General Manager, Transportation Services to submit a supplementary report to the May 10 and 11, 2023 meeting of City Council with alternatives to the proposed additional northbound one-way cycle track on the east side of Millwood Road that prioritize space for pedestrians and public realm, as well as safely and efficiently integrate the proposed two-way north and southbound cycle tracks on the west side of Millwood Road.

This supplemental report describes the staff recommended Option 1 and two alternative options. All options include road safety improvements, pedestrian-focused public realm improvements, as well as cycling connectivity. All options involve the same motor vehicle lane configuration that aims to optimize traffic flow. In all options:

- The intersection improvements at either ends of the bridge would include widened sidewalks, new or enhanced pedestrian crossings, enhanced bus stops and accessibility improvements, including longer traffic signal timing for pedestrians to cross the intersections.
- At the south end of bridge at the Pape Avenue, Donlands Avenue and Millwood Road intersection, additional public realm improvements to be implemented include

planting new trees, and other greening in the median islands and in Kiwanis Parkette.

Based on recent feedback from the local Councillor, at the north end of the bridge, Transportation Services recommends that further enhancements to the public realm be explored along Leaside Park and Millwood Road in coordination with Parks, Forestry and Recreation Division, and the local Councillor.

Given the connections this bridge makes to both Pape Avenue and Donlands Avenue in the south, and to Overlea Boulevard and Leaside Park in the north, the design proposed in Option 1 includes converting the existing unprotected bike lanes to a one-way cycle track on the east side and a two-way cycle track on the west side of the bridge in order to provide for safe and direct cycling connections by minimizing the number of roadway crossings and exposure to motor vehicle conflicts. While uncommon, a similar approach has been used elsewhere in the city to improve safety, where feasible (see page 6).

Given there is both City and Metrolinx-led construction taking place in the area, it is important to note that all of the options presented in this report would be delivered in two phases:

- starting in 2023, the existing bike lanes would be upgraded to one-way cycle tracks on both sides of the Leaside Bridge; and
- in 2025, an additional northbound cycle track would be added, making a two-way cycle track on the west side of the bridge, which is only possible once Metrolinx completes their first phase of work at Overlea Boulevard and Millwood Road.

Option 2 would modify the proposed design in Option 1 to narrow the east side cycle track with a widened (painted) sidewalk to functionally widen the space for pedestrians, including those using assistive devices like motorized scooters. This would provide more walking space on the side of the bridge that has consistent sidewalk connections to and from Thorncliffe Park Drive through Leaside Park. The project could proceed as planned to start in 2023, and the painted sidewalk would serve to identify space to widen the concrete sidewalk when state-of-good-repair bridge work is programmed in the future.

Option 3 would involve proceeding with the project as planned to start in 2023 including upgrading the existing bike lanes to one-way cycle tracks on either side of the Leaside Bridge, implementing the intersection safety improvements, as well as the state-of-good-repair project on Pape Avenue, but would hold-off on implementing the additional northbound cycle track on the west side for approximately three (3) years until such time as the Overlea Boulevard cycle tracks are constructed by Metrolinx between Millwood Road and Thorncliffe Park Drive (planned for completion in approximately 2028).

FINANCIAL IMPACT

There is no financial impact arising from this report. The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial implications as contained in the Financial Impact Section.

DECISION HISTORY

On April 26, 2023, Infrastructure and Environment Committee directed the General Manager, Transportation Services to submit a supplementary report to the May 10 and 11, 2023 meeting of City Council with alternative options to the proposed additional northbound one-way cycle track on the east side of Millwood Road that prioritize space for pedestrians and public realm, as well as safely and efficiently integrate the proposed two-way north and southbound cycle tracks on the west side of Millwood Road, in consultation with the Ward Councillors.

<https://secure.toronto.ca/council/agenda-item.do?item=2023.IE3.8>

COMMENTS

As part of the road resurfacing project scheduled to start in 2023, Transportation Services is proposing a number of changes including the road configuration on Millwood Road including the Leaside Bridge.

On Millwood Road, the following is proposed:

- Reduce vehicle lanes from six (6) to five (5); the fifth lane transitions along the bridge so a right-turn lane is provided at each intersection;
- Reduce vehicle lane widths to support lower operating speeds and match the proposed reduction in speed limit to 40km/h; and
- Convert existing bike lanes to a two-way cycle track on the west side and a one-way northbound cycle track on the east side, in two phases:
 - starting in 2023, the existing bike lanes would be upgraded to one-way cycle tracks on either side of the Leaside Bridge; and
 - in 2025, an additional northbound cycle track would be added, making a two-way cycle track on the west side of the bridge, when Metrolinx completes their first phase of work at Overlea Boulevard and Millwood Road.

All existing motor vehicle lanes would be retained at the intersections on either end of the bridge, with the exception of one 80 metre southbound lane on Millwood Road at Overlea Boulevard. Based on traffic analysis completed, the existing and forecasted motor vehicle volumes can be accommodated in the three (3) southbound lanes including both through and left-turn lanes. As a result of the proposed changes for turning movements at the intersections, the traffic analysis projects an improvement over the existing conditions for motor vehicles making the southbound left-turn onto Overlea Boulevard during peak periods.

As directed, Transportation Services has reviewed alternative options to the proposed additional northbound one-way cycle track on the east side of Millwood Road that prioritize space for pedestrians and public realm.

It is important to note that the Leaside Bridge has no programmed state-of-good-repair work planned in the next ten years, so there is no ability to make major changes such as widening sidewalks on the bridge. During the consultation process, many residents requested that safety barriers be added to the Leaside Bridge. Based on this public

feedback, Transportation Services is working with Engineering and Construction Services on a feasibility analysis for accelerating the addition of safety barriers on the bridge.

Regardless of the option selected, Transportation Services will continue to provide input on Metrolinx's designs for Overlea Boulevard. Transportation Services is requesting the highest level of pedestrian and public realm amenities for all Ontario Line works in the Thorncliffe Park area, including the addition of sidewalks where they are missing, widen existing sidewalks to at least the City standard of 2.1m, tree-planted boulevards, safe and comfortable intersections, and public plaza space near stations.

Option 1: Retain current design and identify pedestrian and public realm opportunities along Leaside Park (recommended in the staff report)

Today, the Millwood Road is an important route for people cycling. It is one of the only crossings of the Don Valley that connects the East York, Thorncliffe Park and Leaside neighbourhoods and is flat compared to other routes. Over the coming years, as the cycling network expands access to destinations on either end of the bridge, the importance of a safe and direct connection on Millwood Road from downtown will grow. The proposed design includes converting the existing unprotected bike lanes to a one-way cycle track on the east side and a two-way cycle track on the west side. This arrangement would reduce the number of required signalized crossings, thus reducing delay, and supporting safe and convenient cycling connections.

The current proposed design maintains capacity for all users, and improves safety for people cycling and pedestrians. Today, sidewalk users are separated from vehicles by a 1.6 metres wide unprotected (painted) bike lane. Traffic data shows that vehicles commonly travel over the 50km/h speed limit. This makes some pedestrians and people cycling on the bridge feel unsafe and choose not to walk or cycle.

The current proposed design reconfigures the roadway space on the bridge to add a buffer and concrete walls. This will provide protection for pedestrians and people cycling from motor vehicle traffic on both sides of the bridge, including more than a 3.0 metre offset between pedestrians and moving motor vehicles.

The existing northbound bike lane (on the east side of the bridge) is used today by people cycling north on Pape Avenue or Donlands Avenue who want to cross the bridge toward Overlea Boulevard, Laird Drive or other points north. The additional northbound bikeway on the west side of the bridge is proposed because it is the safest and most convenient route from downtown for those using Broadview Avenue, Logan Avenue, and Hopedale Avenue, etc.

Leaside Bridge | Option 1 | Recommended

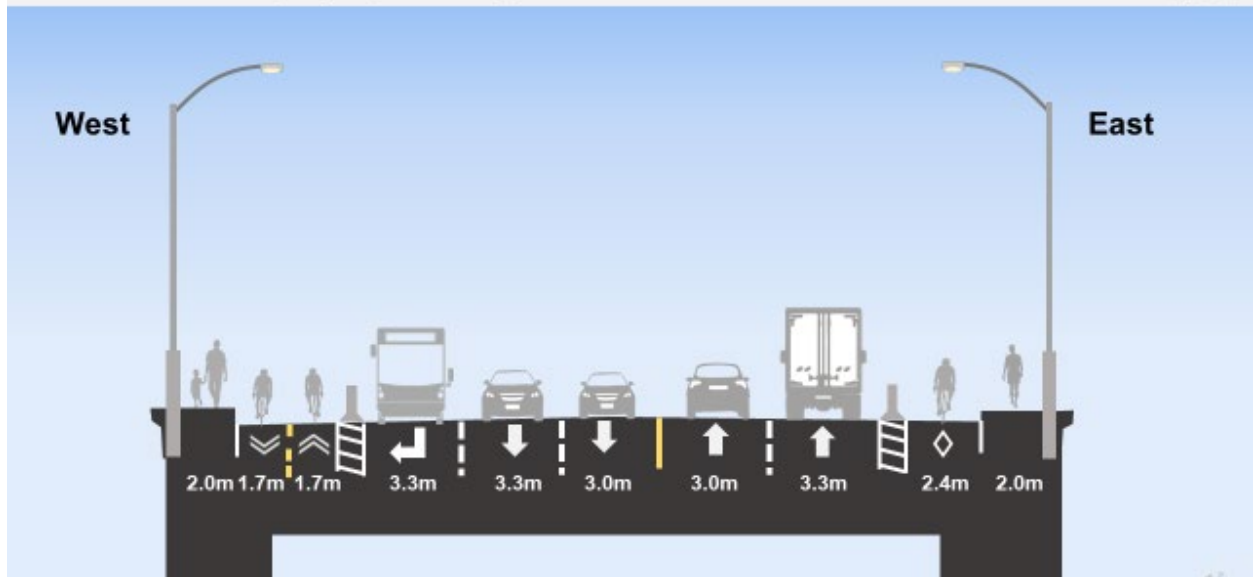


Figure 1: A cross section of Option 1, which retains the current proposed design.

At the ends of the bridge, both intersections would include sidewalks widened to 2.1m, new or enhanced pedestrian crossings, enhanced bus stops and added accessibility features.

Installation of the missing sidewalk on the west side Millwood Road near Overlea Boulevard is currently being reviewed for potential delivery by Metrolinx, along with longer traffic signal timing for pedestrians to cross the intersections, which is especially important for vulnerable road users like seniors and children.

At the Pape Avenue, Donlands Avenue and Millwood Road intersection, additional public realm improvements include planting new trees, and other greening in the median islands and in Kiwanis Parkette.

Transportation Services is committed to creating a beautiful and safe public realm for pedestrians and recommends that further enhancements to the public realm be explored along the frontage of Leaside Park on the east side of Millwood Road in coordination with the local Councillor and Parks, Forestry and Recreation Division. Improvements could include new seating, shade trees, and improvements to the existing ramp to the park.

If only one-way cycle tracks were provided on the Leaside Bridge and through the connecting intersections, people cycling northbound from downtown would have to cross both Pape Avenue and Donlands Avenue before cycling on Millwood Road. This would create additional exposure to motor vehicle movements and the delay at intersections resulting from additional crossings could lead to lack of cycling compliance and associated safety and operational concerns.

There are several existing locations in the city where one-way cycle tracks are paired with two-way cycle tracks on the opposite side of the street between two intersections, as is proposed on Millwood Road. Examples include:

- On Bloor Street West, between Bartlett Avenue and Havelock Street, a two-way bikeway is provided on the north side and a one-way bikeway on the south side, to help connect bikeways north and south of Bloor Street West;
- On Davenport Road, between Bracondale Hill Road and Shaw Street, a two-way bikeway is provided on the north side, to help connect bikeways on the north and south of Davenport Road;
- On Queens Park Crescent West, south of Hoskin Avenue, a two-way bikeway is provided on the east side and a one-way bikeway is provided on the west side, to ensure people can connect to Hoskin Avenue and Wellesley Street without crossing at multiple signalized intersections; and
- On Bayview Avenue between Rosedale Valley Road and a River Street, a two-way bikeway is provided on both the east and west sides to connect people to River Street and Bayview Avenue without interacting with the unsignalized slip lane at the River Street and Bayview Avenue ramp intersection.

Option 2: Modify the proposed design to narrow the east side cycle track with a widened (painted) sidewalk and plan for future pedestrian enhancements

Option 2 proposes to retain the east side cycle track, but reduce it to the minimum width (1.5 metres). Next to the east side sidewalk, a painted sidewalk extension of approximately 1.0 metre would be added to functionally widen the space for pedestrians, including those using assistive devices like motorized scooters. This would provide more walking space on the side of the bridge that has consistent sidewalk connections to and from Thorncliffe Park Drive through Leaside Park. The painted sidewalk would serve to identify space to widen the concrete sidewalk when state-of-good-repair bridge work is programmed in the future.

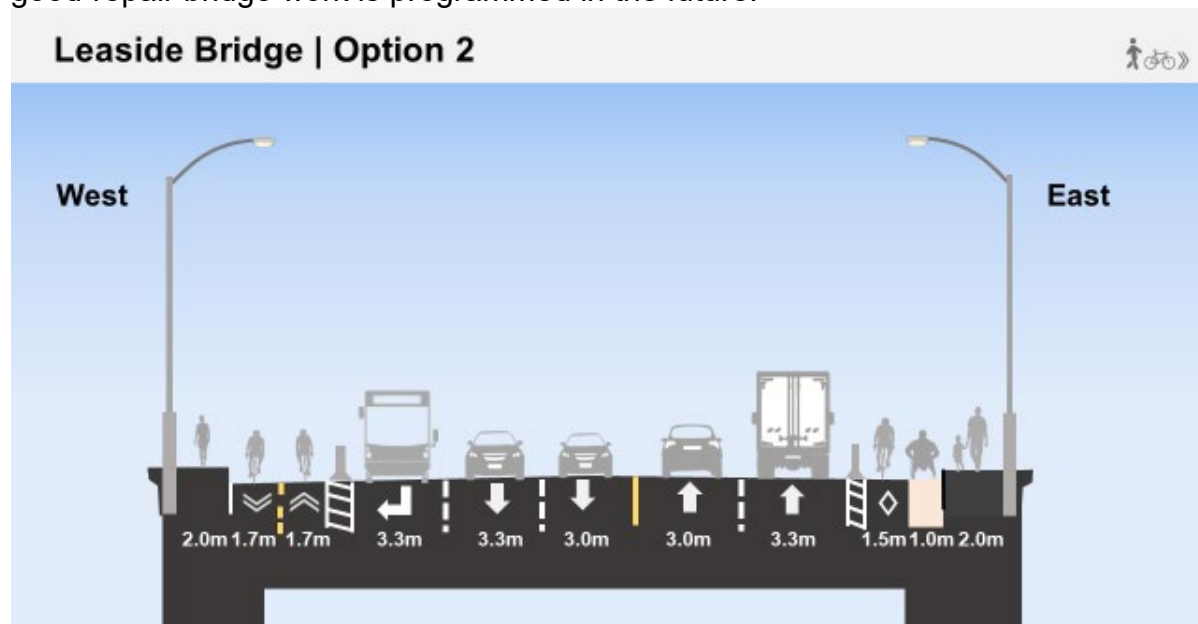


Figure 2: A cross section of Option 2, which includes a new 1.0m space for pedestrians on the east side.

The east side northbound bikeway is retained in this option because it is used today by approximately 300-500¹, people cycling, a portion of which are headed north on Pape Avenue or Donlands Avenue who want to cross the bridge toward Overlea Boulevard, Laird Drive or other points north. This is particularly important during Metrolinx's construction at the Overlea Boulevard and Millwood Road intersection between 2023 and 2025, when the east side northbound bikeway would be the only way for people cycling to cross the Don Valley in this part of the City. Without it, during that construction, people cycling would be forced use the high-volume curb lane, sharing with frequent buses, trucks and motor vehicles.

Option 2 retains cycling connections and includes new pedestrian space on the Leaside Bridge, but the new space would not be sufficient for people cycling and pedestrians to walk or cycle side by side at road level.

Option 3: Same as Option 1, build one-way cycle tracks on either side of the Leaside Bridge starting in 2023, but delay the west side northbound cycle track until 2028

Option 3 is the same as Option 1, but would hold-off on implementing the additional northbound cycle track on the west side for approximately three (3) years until such time as the Overlea Boulevard cycle tracks are constructed by Metrolinx between Millwood Road and Thorncliffe Park Drive (planned for completion in approximately 2028). Until 2028, people cycling from routes northbound from downtown would have to cross twice at Pape Avenue and Donlands Avenue before cycling north.

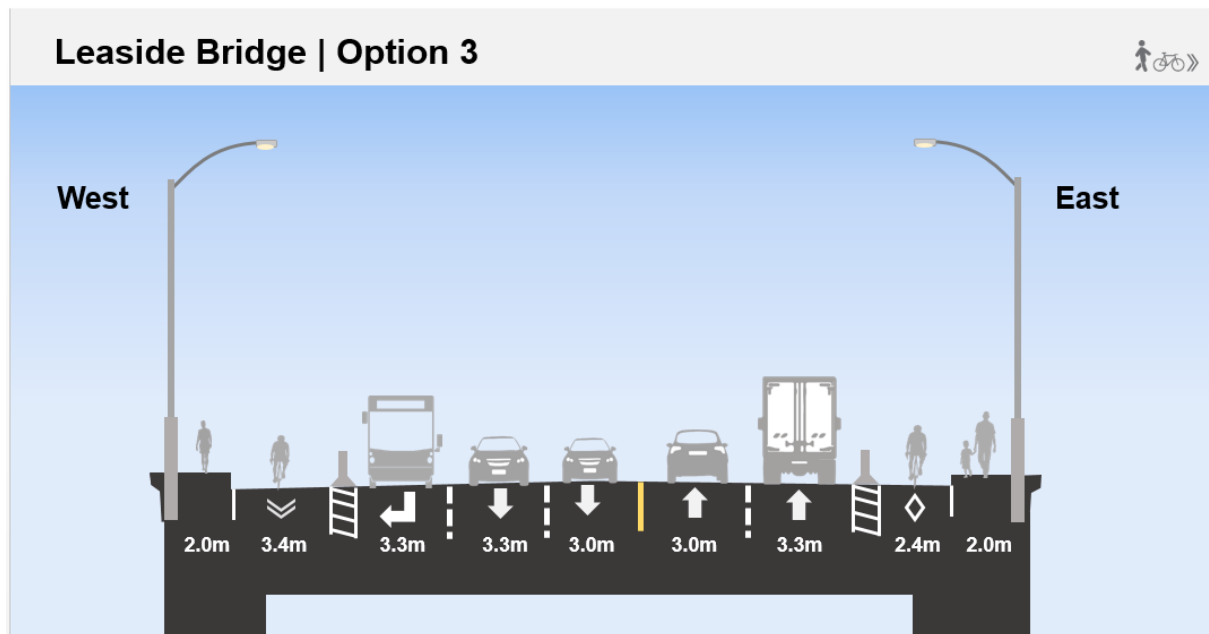


Figure 3: A cross section of Option 3, which would delay the implementation of the two-way cycle track on the west side.

¹ Based on two counts undertaken in June 2022 at the intersections adjacent to the bridge, there are approximately 300-500 people cycling on the bridge daily.

Schedule Implication Summary of Options 1 - 3

| | Schedule | Cost |
|---|---|--------------------|
| Option 1: Retain current design, and identify pedestrian and public realm opportunities along Leaside Park (recommended in the staff report) | <p>No impact to schedule:</p> <ul style="list-style-type: none"> Existing bike lanes would be upgraded to one-way cycle tracks starting in 2023 Additional northbound cycle track would be added in future, making a two-way cycle track on the west side of the bridge, when Metrolinx completes their first phase of work at Overlea Boulevard and Millwood Road, planned for 2025 | No additional cost |
| Option 2: Modify the proposed design in Option 1 to narrow the east side cycle track with a widened (painted) sidewalk, and plan for future pedestrian enhancements | Same as Option 1 | No additional cost |
| Option 3: Same as Option 1 but delay the west side northbound cycle track until 2028 | <ul style="list-style-type: none"> As in Option 1, existing bike lanes would be upgraded to one-way cycle tracks starting in 2023 Additional northbound cycle track would be added in future, making a two-way cycle track on the west side of the bridge, when the Overlea Boulevard cycle tracks are planned to be constructed by Metrolinx, planned for 2028 | No additional cost |

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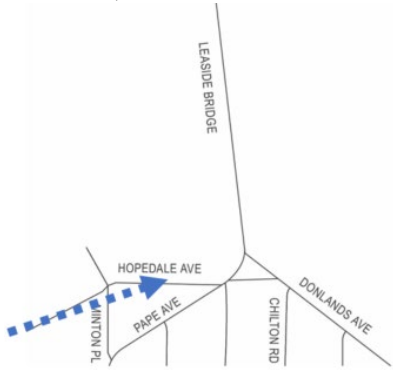
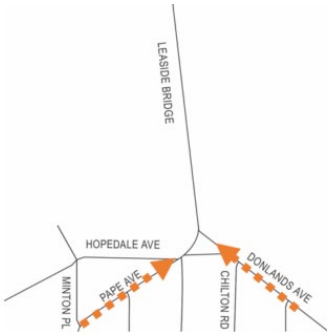
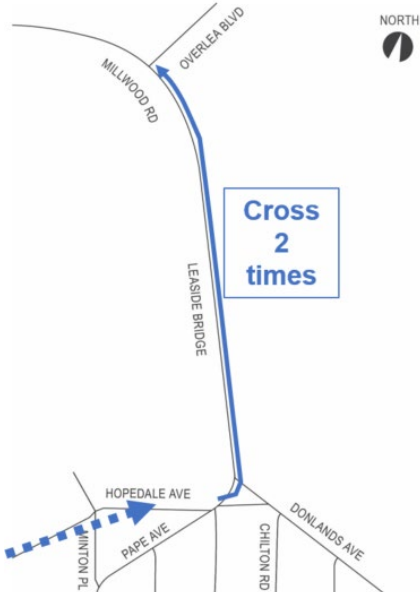
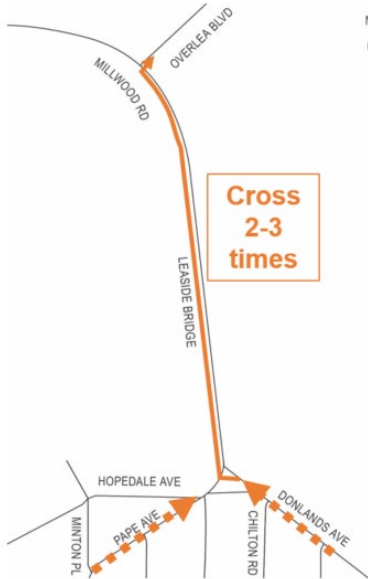
SIGNATURE

Barbara Gray
 General Manager, Transportation Services

ATTACHMENTS

Attachment 1: Why a Northbound Cycle Track on Both Sides of the Bridge?

Attachment 1: Why a Northbound Cycle Track on Both Sides of the Bridge?

| | West side northbound cycle track | East side northbound cycle track |
|------------------------------------|--|--|
| <p>Who would use it?</p> | <p>People cycling on the shortest route from downtown, including Broadview Avenue, Logan Avenue, Hopedale Avenue, etc.</p>  | <p>People cycling from Donlands Avenue or on Pape Avenue</p>  |
| <p>Implication if not provided</p> | <p>People cycling from the south west would have more exposure to conflicts with motor vehicles as a result of needing to cross both Pape Avenue and Donlands Avenue to cycle north on Millwood Road's east side</p>  | <p>People cycling from the south east along Donlands Avenue would have more exposure to conflicts with motor vehicles as a result of needing to cross Donlands Avenue and Pape Avenue to the west side, and then after cycling north on the bridge would have to cross back to the east side; people cycling from Pape Avenue would do the same but would not have to cross Donlands Avenue</p>  |