July 25, 2025

Sentinel Road Safety Improvements

Contract: 24ECS-RD-06LR

Project Details

The City of Toronto has nearly completed the reconstruction of and watermain replacement on Sentinel Road from Lamberton Boulevard to Sheppard Avenue West. As part of the reconstruction, the existing bicycle lanes on both sides of the road are being upgraded to cycle tracks, in addition to widened sidewalks, raised crosswalks, curb extensions and integrated TTC bike/bus stops.

This project is part of the Council-approved 2024 Capital Works Program to review aging City roads, bikeways and sidewalks for current and future needs.

Decision Background

Sentinel Road from Lamberton Boulevard to Sheppard Avenue West is undergoing construction due to the poor condition of the road. In Toronto, a road is reconstructed every 50-100 years. This project provides a once in a generation opportunity and cost effective method to bundle changes to improve operations and safety for the corridor.

The changes on Sentinel Road as part of the road reconstruction also fulfill the City's commitment the Vision Zero Road Safety Plan. The Plan's goal is to eliminate traffic-related fatalities and serious injuries by making our roads safer for everyone, especially for seniors, school children, and people walking and cycling. From 2016 to 2020, there were 114 vehicle collisions on Sentinel Road between Lamberton Boulevard and Sheppard Avenue West. All planned changes are focused on reducing future collisions.

Installation of the Sentinel Road Safety Improvements project was authorized by City Council on April 7, 2022 (Item IE28.7).

Design & Material Choice

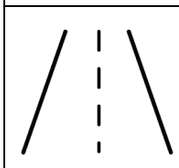
The choice of materials is typically influenced by the nature of the roadway work and the opportunity to provide permanent cycling infrastructure. The goal is to establish a clear separation between motor vehicle lanes and bike lanes to enhance safety. The various separation methods all share the common goal of preventing motor vehicles from entering the bike lane when prohibited, to ensure the safety of people cycling, whether due to passing turning vehicles or other reasons. Striking a balance between traffic flow and the safety of people cycling is crucial, and the chosen design aims to address both concerns.

On Sentinel Road, raised cycle tracks will be constructed using asphalt. Raised crosswalks will be installed at most intersections to allow for seamless transitions between sidewalks.

Need for Enhanced Bikeways

Toronto builds and upgrades bikeways to improve road safety for all users, including those who do not cycle. New and enhanced bikeways help to reduce speeding and provide a buffer between pedestrians and motor vehicle traffic. Expanding the cycling network also aligns with other city policy objectives, such as TransformTO, which aims for 75% of all school and work trips under 5 km by walking, cycling and transit by 2030, and the Vision Zero Road Safety Plan, which strives to reduce traffic-related deaths and injuries to zero by prioritizing the safety of our most vulnerable road users.

Cycling on sidewalks is prohibited in Toronto for individuals aged 14 and older, as sidewalks are designated for pedestrians and those using mobility aids. The implementation of on-street cycle tracks is aimed at establishing safe cycling spaces while keeping sidewalks unobstructed for pedestrians.



Impacts to Motor Vehicle Travel Lanes

Prior to construction, Sentinel Road consisted of one 3.8m wide motor vehicle travel lane in each direction, which exceeds the City's minimum Lane Widths guidelines of 3.3m for a curb lane along a TTC bus route. Following reconstruction, the motor vehicle travel lanes were reduced to 3.3 - 3.5m throughout the corridor.

The benefits of reducing lane widths includes encouraging drivers to travel slower and not exceed the speed limit, which results in reduced impact speed in the event of a collision and

	provides drivers with more reaction time. Reducing lane widths also allows for space within the roadway to better accommodate dedicated cycling facilities and widened sidewalks. Narrowing lane widths also shortens the pedestrian crossing distance, which reduces the time a pedestrian is exposed to vehicular traffic while crossing the road. Where curbs radii were reduced at intersections, staff performed an analysis using turning movement software to ensure vehicles of all sizes could safely manoeuvre along the route. This project did not involve any lane removals or changes to the direction of travel on Sentinel Road.
	**TTC Bus Stops and Integrated Bike/Bus Platforms** There are currently 11 bus stops along Sentinel Road between Lamberton Boulevard and Sheppard Avenue West. In coordination with TTC, four stops are being relocated between Stilecroft Drive and Frederick Mowat Lane. The changes will improve bus travel times and reliability, and to create optimal bus stop distances and waiting areas. Notable changes include the relocation of bus stops on the west side of Stilecroft Drive, the east and west sides of Dovehouse Avenue, and the east side of Frederick Mowat Lane. During construction, TTC Route 106 Sentinel will be diverted until November 2025. All bus stops within the corridor will be upgraded to either integrated bike/bus platforms or floating bus platforms to safely manage the crossing of people cycling and people waiting for the bus and provide delineated space for all users. Integrated bike/bus platforms keep the bikeway clear for people cycling, while providing sidewalk-level access for people boarding and exiting TTC buses. People waiting for the bus should stand on the sidewalk or in the shelter until the bus arrives. When passengers are crossing the integrated platforms, people cycling must yield outside the yellow designated waiting area until the path is clear. Integrated bike/bus platforms have been installed along several other suburban cycling routes within the city, including on Steeles Avenue East, Sheppard Avenue East and Lawrence Avenue East. Floating bus platforms require people waiting for the bus to cross the cycle track to reach a dedicated waiting space or shelter. When passengers are crossing the cycle track, people cycling must yield before the painted crosswalks. Floating bus platforms have also been installed on other suburban cycling routes including Kipling Avenue and Steeles Avenue East.
	**City Services Impacts** During the project's design phase, consultation was conducted with the City of Toronto’s Operations and Maintenance, Solid Waste, and Emergency Services to ensure the new road configuration supports vehicle maneuverability and continued operations of city services, while balancing road safety. The plans received approval from EMS and Fire Services before they were submitted to City Council for approval. Safe access for emergency vehicles is a fundamental part of the design process. The City will service the cycle tracks on Sentinel Road in winter using smaller snow plow equipment. Visit toronto.ca/snow to learn more about winter maintenance of bikeways.
	**Safety Considerations** Cycle tracks have been implemented in various locations across the city and have shown to improve safety for all road users. The Sentinel Road design has been employed successfully on similar streets, and is expected to improve safety of all road users.

Need More Information?

If you have questions about this project, please contact us:

Cycling and Pedestrian Projects	cycling@toronto.ca
General inquiries	311
Website	toronto.ca/sentinel

Thank you for your patience. Building a great city takes time. Better infrastructure for all of us is worth the wait.

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