

REPORT TO: Planning and Strategic Initiatives Committee

DATE OF MEETING: June 3, 2024

SUBMITTED BY: Barry Cronkite, Director, Transportation Services, 519-741-2200 ext. 7738

PREPARED BY: Darren Kropf, Manager, Active Transportation and Development, 519-741-2200 ext. 7314

WARD(S) INVOLVED: All Wards

DATE OF REPORT: May 23, 2024

REPORT NO.: DSD-2024-154

SUBJECT: Cycling and Trails Master Plan spot fixes in 2024

RECOMMENDATION:

That staff be directed to implement the proposed 2024 Cycling and Trails Master Plan spot fixes as described in DSD-2024-154; and,

That pedestrian crossovers (PXOs) be installed on the Laurentian Trail at Laurentian Drive, Williamsburg Road, Strasburg Road, and Lucerne Drive; and,

That stopping be prohibited at any time 15 metres from the crossing at each approach, and ten (10) metres immediately following each crossing; and,

That a raised crossing be constructed at the Laurentian Trail at Lucerne Drive; and further,

That the Uniform Traffic Bylaw be amended accordingly.

REPORT HIGHLIGHTS:

- The purpose of this report is to share with City Council the identified spot fixes that are recommended for installation in 2024 to improve cycling and trail safety and connectivity.
- The key finding of this report is staff is proposing trail access upgrades (curb cuts), trail signing and marking upgrades, trail crossing upgrades, bike parking, trail counters, and wayfinding and navigational sign installations in an effort to improve safety for all modes of travel.
- The financial implications are that \$200,000 will be dedicated to spot fixes for safety and route connectivity, with an additional \$50,000 dedicated for wayfinding installations and additional spot fix improvements in 2025.

- Community engagement included consulting with over 3,200 residents during the development of the Cycling and Trails Master Plan (CTMP). People identified locations that are uncomfortable and/or unsafe for people walking, rolling and cycling. Staff also received individual spot fix suggestions since Council's approval of the CTMP and has had on-going engagement with the Active Transportation and Trails Advisory Committee (ATTAC).
- This report supports the delivery of the Strategic Plan action item "Building a Connected City Together" through implementing "Localized Transportation Safety Improvement Program".

BACKGROUND:

In October 2020, Kitchener Council adopted the City of Kitchener's Cycling and Trails Master Plan through report INS-20-015. The CTMP includes 35 strategic actions in three areas of focus: Connections, Experience and Culture. **Action 1A-4** calls for the City of Kitchener to develop a spot improvement program and make safety and network connectivity improvements throughout the City of Kitchener. Information gathered during the engagement phase of the Cycling and Trails Master Plan, public and stakeholder input was used to identify trail deficiencies, intersections and crossing locations that are uncomfortable and/or unsafe for people walking, cycling, and rolling. The CTMP also identified a timeline for these spot fix improvements; defined by short, medium and long term; as can be seen in figure ES-2 – "Cycling and Trail Network Priorities" of the plan.

In the 2024 budget process, and in support of the CTMP and Vision Zero, Kitchener City Council allocated additional funding for seasonal council-directed traffic calming measures and improvements in the safety and connectivity of road, active transportation and trail networks. Staff prioritized potential projects based on Vision Zero risk factors, public feedback, and route connectivity priorities identified during public engagement for the Cycling and Trails Master Plan (2020).

REPORT:

To support safety and connectivity improvements, several site-specific "spot fixes" have been identified that focus on improved trail crossings and trail connectivity. In addition to the spot fixes recommended in the CTMP, locations were also identified by the Active Transportation & Trails Advisory Committee (ATTAC), as well as by City Councillors during bike rides in their respective wards in 2023.

Transportation Services staff also worked with ATTAC to develop a "Request a Bike Rack" program where community members can identify short-term bike parking locations on City property to help people make their everyday journeys by bike. The online form can be found at bikekitchener.ca and the recommended install locations are included within the 2024 spot fix program.

The table below summarizes the recommended spot fix program for installation in 2024:

Recommended Spot Fix Improvements - 2024

Ward	Location	Description	Cost
1	Trail access at Rothsay Avenue and Matthew Street	Install curb cut for accessible access to trail	\$7,000

2	Trail access at Idle Creek Drive	Install curb cut for accessible access to trail	\$7,000
2	Dom Cardillo Trail at River Road	Install an eco-counter to gather year-round pedestrian and cyclist data	\$2,000
2	Dom Cardillo Trail accesses	Install streetname blades for better orientation within the neighbourhood trail network	\$3,000
3	Homer Watson Boulevard multi-use trail	Install additional signs and markings to bring greater awareness to trail and driveway conflicts with poor visibility	\$2,000
3	Franklin Road at Kingsway Drive	Pavement marking adjustments to improve traffic operations following bike lane installation	\$10,000
4	Streetname blades in Willowlake Park and Homer Watson Park	Install streetname blades for better orientation within the neighbourhood trail network	\$2,000
5	Streetname blades in Parkvale Park	Install streetname blades for better orientation within the neighbourhood trail network	\$2,000
5	Trail connection between Watercress Court and Ottawa Street	Install curb cut for accessible access to trail	\$7,000
6	Laurentian Trail crossings	Install pedestrian crossovers at all city-owned crossings, upgrade refuge island to meet accessibility requirements at Strasburg Road, install a raised crossing at Lucerne Drive and install streetname blades	\$100,000
6	Trail access at Country Hill Drive	Install curb cut for accessible access to trail	\$7,000
8	Trail access at Cloverdale Crescent	Install curb cut for accessible access to trail	\$7,000
8	Henry Sturm Trail at Lawrence Avenue	Install an eco-counter to gather year-round pedestrian and cyclist data	\$2,000
8	Belmont Village	Install five bike racks on north-end of business district	\$5,000
9	Iron Horse Trail at Cherry Street	Repair broken counter and upgrade to model that can count e-scooters in addition to pedestrians and cyclists	\$3,000
9/10	King Street boulevard multi-use trail between Wellington Street and Victoria Street	Install signage and markings to better delineate the trail from the transit stations and reduce conflicts between pedestrians and cyclists	\$11,000
10	Weber Street boulevard multi-use trail between Victoria Street and Wilhelm Street	Install signage, markings and crossrides to bring greater awareness to conflicts at driveways and minor street crossings	\$22,000

10	Wellington Street at Ahrens Street	Install a bike rack to serve transit and local businesses	\$1,000
	TOTAL		\$200,000

A map of all proposed locations can be found in Appendix A.

In addition to the recommended spot fix program, staff are recommending that approximately \$50,000 of the dedicated funding be used for wayfinding projects that would contribute to the Strategic Plan action item for city-wide active transportation routes. This work is underway and draft routes will be shared for public input and with City Council this fall. The initial route for wayfinding sign deployment is planned for Wards 7, 8 and 9, between the Boardwalk and Downtown. Spot fix projects along this route would also be identified and prioritized in 2025, to ensure the route is safe and comfortable for all ages and abilities.

Laurentian Trail Crossing Upgrades

Laurentian Trail is an open space trail providing recreational opportunities and transportation options, serving several high pedestrian and cyclist destinations, including schools, McLennan Park, and retail. Improving the trail crossings was identified by the community as an important “spot fix” during the engagement phase of the Cycling and Trails Master Plan and is supported by the Vision Zero network screening analysis. More specifically pedestrian crossovers (PXOs) were requested.

Ontario Traffic Manual (OTM) Book 15: Pedestrian Crossing Treatments provides guidance for the selection and design of PXOs. Pedestrian Crossovers (PXOs) provide pedestrians with crossing opportunities by requiring motorists to yield to pedestrians within the crosswalk. The presence of a pedestrian in the crosswalk requires the driver of a vehicle approaching the crossover to stop before entering the crossover. See Appendix C for PXO types proposed in this report.

The following four Laurentian Trail crossing locations were studied in 2023/2024 and staff are the installation of a PXO at minimum in each location (warrant information included in Attachment B – Laurentian Trail PXO Warrants):

Street crossing	Current conditions	Proposed improvements
Williamsburg Rd	Raised, uncontrolled crossing	Install PXO Level 2 Type D
Laurentian Dr	Raised, uncontrolled crossing	Install PXO Level 2 Type D
Strasburg Rd	Substandard refuge island, Crossing Guard location	Retrofit refuge island to meet AODA requirements, and install PXO Level 2 Type B (Crossing Guard location to remain)
Lucerne Dr	Uncontrolled crossing	Install raised crossing, improve trail alignment and install PXO Level 2 Type D

This addresses the Laurentian Trail crossings that fall within municipal jurisdiction. It is worth noting that the Laurentian Trail crossing of Westmount Road East is under the jurisdiction of the Region of Waterloo. Staff will continue to discuss this location with Regional staff for potential improvements in the future.

STRATEGIC PLAN ALIGNMENT:

This report supports the delivery of the Strategic Plan action item “Building a Connected City Together” through implementing a “Localized Transportation Safety Improvement Program”.

FINANCIAL IMPLICATIONS:

Capital Budget –In the 2024 budget process, Kitchener City Council allocated an additional \$400,000, funded from the tax capital reserve, for additional seasonal council-directed traffic calming measures and improvements in the safety and connectivity of road, active transportation and trail networks. In DSD-2024-073 Vision Zero Project Update, staff reported that \$150,000 of that funding was allocated to solar powered radar signs and seasonal roadway narrowings, leaving \$250,000 for trail safety and connectivity improvements, as described within this report.

Operating Budget – The proposed improvements will have on-going operating costs related to the life cycle maintenance for signs, pavement markings, asphalt repair, etc. These costs will be referred to the 2025 budget process.

COMMUNITY ENGAGEMENT:

INFORM – This report has been posted to the City’s website with the agenda in advance of the council / committee meeting.

CONSULT – Over 3,200 residents were engaged during the development of the Cycling and Trails Master Plan. This included in-person and online engagement where residents were asked to identify specific spot fix locations that reduce barriers to their cycling and trail use. Individual suggestions since the adoption of the CTMP have also been logged and investigated, and are reflected in the proposed project list.

COLLABORATE - The Active Transportation & Trails Advisory Committee shared a list of desired trail curb cuts for spot fix implementation in 2022. Also in 2022, ATTAC submitted a memo to staff proposing a “Request a Rack” program to satisfy action 2B in the CTMP to deploy more bike parking.

A draft of DSD-2024-154 was shared with the Active Transportation and Trails Advisory Committee on Tuesday May 14, and they unanimously passed the following motion: “That the Active Transportation and Trails Advisory Committee is appreciative of City Council’s additional investment in trail safety and connectivity through the 2024 Budget process and ATTAC is in full support of the list of spot fix projects presented in DSD-2024-154.”

PREVIOUS REPORTS/AUTHORITIES:

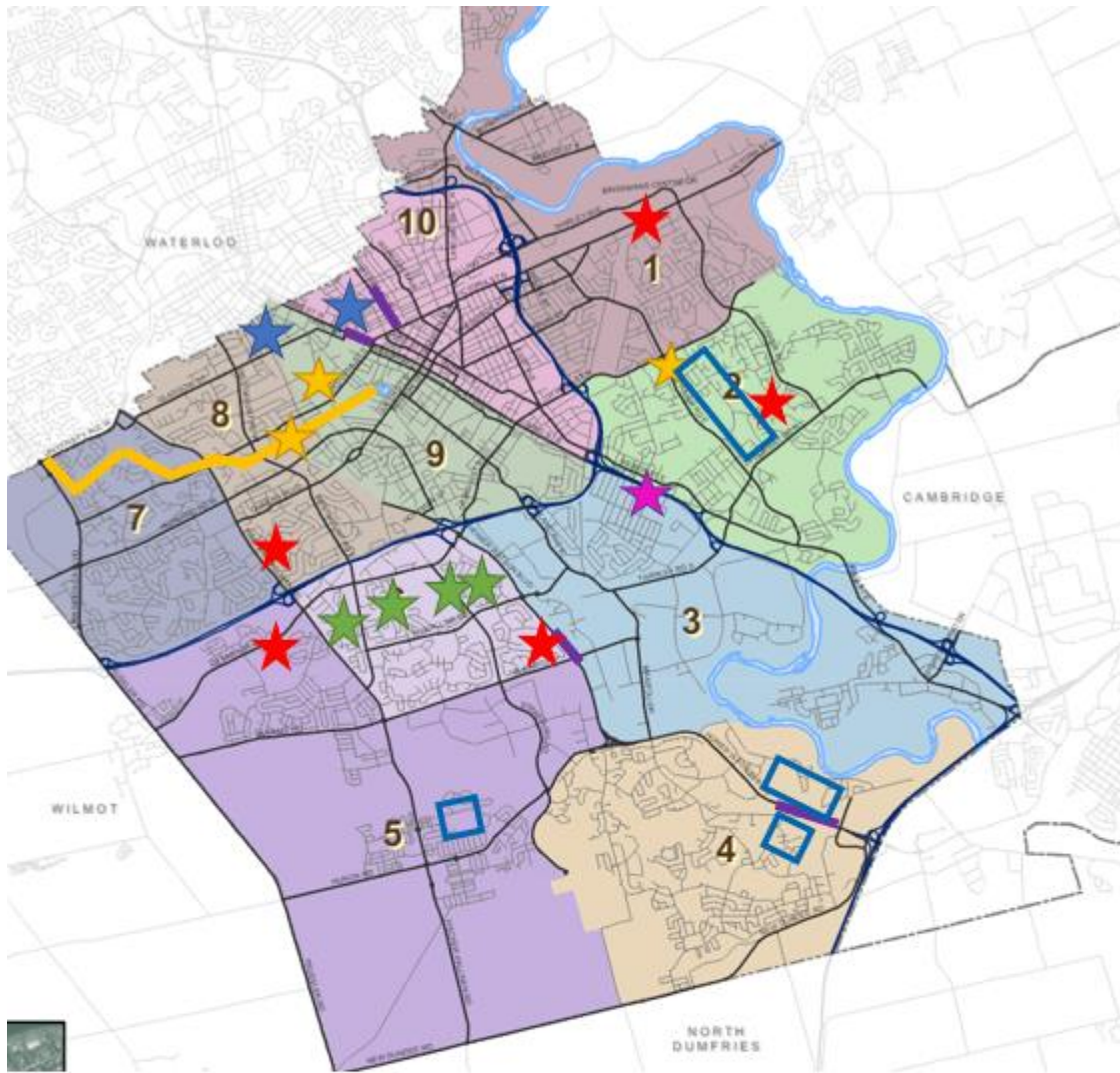
- DSD-2024-073 Vision Zero Project Update
- INS-20-015 2020 Cycling and Trails Master Plan

APPROVED BY: Justin Readman, General Manager, Development Services

ATTACHMENTS:

- Attachment A – Spot fix locations map
- Attachment B - Laurentian Trail PXO Warrants
- Attachment C – PXO Types

Attachment A – Spot fix locations map



- ★ Bike Parking
- ★ Trail Curb Cut Accessibility Improvement
- ★ Pedestrian Crossover (PXO)
- ★ Trail Counter
- ★ Traffic Operations Improvements
- Boulevard Multi-Use Trail Safety Improvements
- Streetname Blades
- Active Transportation Wayfinding Route (2025)

Attachment B – Laurentian Trail PXO Warrants

Ontario Traffic Manual (OTM) Book 15: Pedestrian Crossing Treatments provides guidance for the selection and design of PXOs.

PXOs are recommended when the following conditions are met:

- 100 or more pedestrians observed crossing over an 8-hour period;
- 750 vehicles per 8-hour period;
- No other controlled crossing within 200 m;
- Adherence to Ontario Traffic Manual Book 15 lane configuration and traffic volume conditions; and
- Posted speed limit ≤ 60 km/h.

There are four types of PXOs, as directed by OTM Book 15. See Attachment C for the two types recommended in this report. The distinguishing feature is Type B includes flashing beacons – activated by pedestrians with a push button – while Type D does not include the beacons. Both types grant legal right of way to pedestrians, but the flashing beacons are used on higher volume streets for greater visibility and awareness to drivers.

WILLIAMSBURG ROAD

Justification	Required Value	Actual Value	Conditions Satisfied?	Staff recommendation
8-hour Pedestrian Volume at proposed crossover location	> 100 pedestrians	102	YES	PXO Level 2 Type D
8-hour Two-way Vehicle Volume	> 750 vehicles	979	YES	
Distance from Nearest Controlled Crossing	> 200 metres	350 m	YES	

LAURENTIAN DRIVE

Justification	Required Value	Actual Value	Conditions Satisfied?	Staff recommendation
8-hour Pedestrian Volume at proposed crossover location	> 100 pedestrians	229	YES	PXO Level 2 Type D
8-hour Two-way Vehicle Volume	> 750 vehicles	1446	YES	
Distance from Nearest Controlled Crossing	> 200 metres	750 m	YES	

STRASBURG ROAD

Justification	Required Value	Actual Value	Conditions Satisfied?	Staff recommendation
8-hour Pedestrian Volume at proposed crossover location	> 100 pedestrians	178	YES	PXO Level 2 Type B
8-hour Two-way Vehicle Volume	> 750 vehicles	5238	YES	
Distance from Nearest Controlled Crossing	> 200 metres	420 m	YES	

LUCERNE DRIVE

Justification	Required Value	Actual Value	Conditions Satisfied?	Staff recommendation
8-hour Pedestrian Volume at proposed crossover location	> 100 pedestrians	231	YES	PXO Level 2 Type D
8-hour Two-way Vehicle Volume	> 750 vehicles	172	NO	
Distance from Nearest Controlled Crossing	> 200 metres	50 m	NO	

If all conditions are not met, a PXO can still be warranted based on engineering judgement and if there is a “requirement for system connectivity” or the location is “on pedestrian desire lines.” This location fits those criteria. Further, Lucerne Drive includes many vulnerable street users given the proximity to an elementary school. Given low traffic volumes, there is little risk of traffic from the stop sign at Selkirk Dr backing up into the crosswalk. City staff support a PXO at this location.

ATTACHMENT C: PXO TYPES

Level 2 Pedestrian Crossover Treatments – Type B (OTM Book 15 – Pedestrian Crossover Treatments)

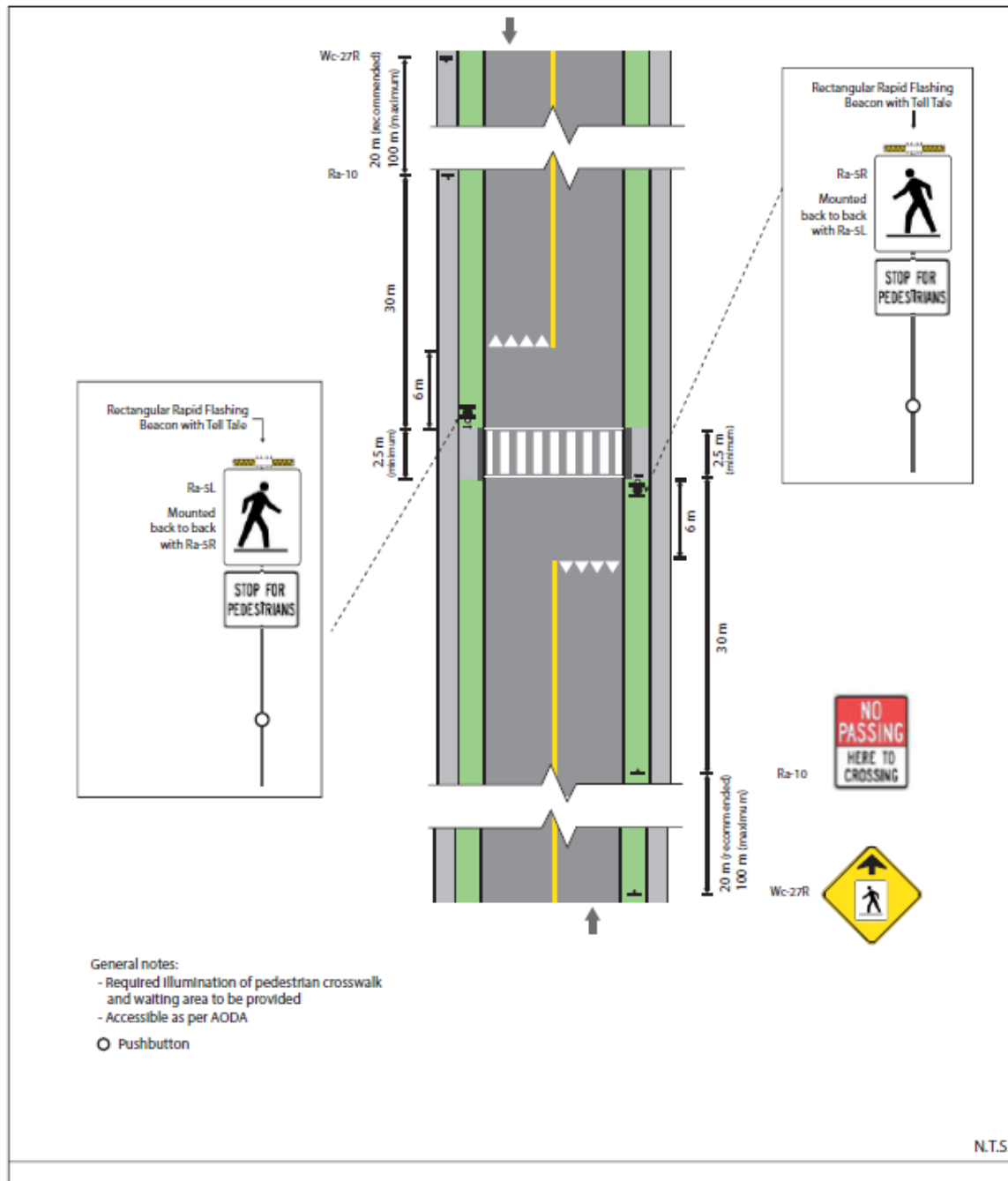


Figure 30: Pedestrian Crossover Level 2 Type C – Mid-block (2-lane, 2-way)

Level 2 Pedestrian Crossover Treatments – Type D (OTM Book 15 – Pedestrian Crossover Treatments)

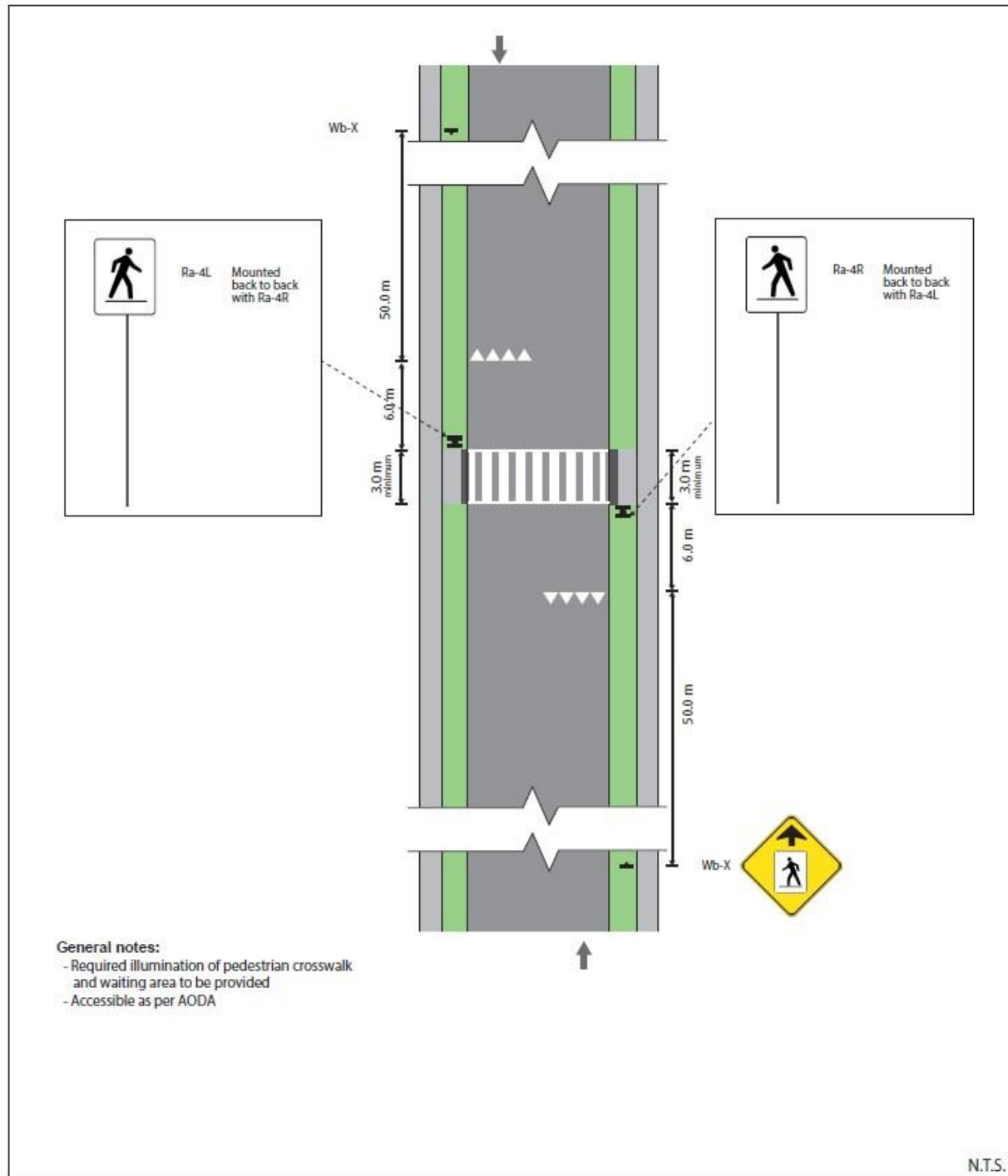


Figure 40: Pedestrian Crossover Type D – Mid-block (2-lane, 2-way)