



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No.12.1.2
Transportation Standing Committee
June 23, 2022

TO: Chair and Members of Transportation Standing Committee

SUBMITTED BY:


Jacques Dubé, Chief Administrative Officer

DATE: June 3, 2022

SUBJECT: Crosswalk Flag Program AO – Testing Products and Governance

ORIGIN

September 17, 2020 Transportation Standing Committee (Item 15.1):

MOVED by Councillor Nicoll, seconded by Councillor Mason

THAT the Transportation Standing Committee request a staff recommendation report that follows up from Council's direction of December 12, 2017 and provides:

- a. An update regarding the pilot testing of various products to enhance the visibility of crosswalks in HRM; and
- b. Recommended next steps for the placement and administrative governance of crosswalk flags in HRM.

MOTION PUT AND PASSED

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, (HRM Charter), Part III, subsection 59(3), "In addition to matters specified in this Act or another Act of Legislature, the Council may adopt policies on any matter that the Council considers conducive to the effective management of the Municipality."

HRM Charter Part VII, subsection 188(1), "The Council may make by-laws, for municipal purposes, respecting (a) the health, well-being, safety and protection of persons; ... (c) persons, activities and things in, on or near a public place or place that is open to the public."

HRM Charter, Part XII, subsection 318(2), "In so far as is consistent with their use by the public, the Council has full control over the streets in the Municipality."

RECOMMENDATION ON PAGE 2

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Halifax Regional Council:

1. Adopt Administrative Order 2022-006-OP, the *Placement of Crosswalk Flags Administrative Order*, as set out in Attachment 1 of this report; and
2. Adopt By-law S-313, amending By-law S-300, the *Streets By-law*, as set out in Attachment 3 of this report.

BACKGROUND

In 2014, Regional Council directed staff to begin working with community groups wishing to carry out a crosswalk flag program at their cost at municipal crosswalks. After receiving this direction, staff met with the citizen leading the crosswalk flag campaign to discuss and come up with an approach to be used when requests for the installation of crosswalk flags were received. These discussions led to an understanding of the general approach and guidelines to help facilitate the program.

At that time, it was agreed that flags would only be allowed at uncontrolled, marked crosswalks (crosswalks not associated with another traffic control device such as stop signs or traffic signals). Crosswalk flags would not be permitted at controlled crosswalks (those with stop signs, yield signs or traffic signals) because these locations already represent the highest levels of vehicle/pedestrian control. Where controlled crossings exist, vehicles are already required to stop, regardless of whether a pedestrian is present or not. Placement of crosswalk flags could lead to misinterpretation of the “authority” associated with the use of the flag and result in uncertainty about driver or pedestrian behaviour.

During the ongoing implementation of the crosswalk flag program, several questions arose as to the intent behind the original direction provided by Regional Council and the guidelines put in place to support the installation of crosswalk flags. As a result, a report¹ was submitted at the June 23, 2016, session of the Transportation Standing Committee outlining the current approach being used and recommended the drafting of an administrative order to provide a formalized policy for moving forward with the crosswalk flag program. The staff recommendation was approved and the requested administrative order, along with a staff report², was submitted to Regional Council on May 9, 2017. At that time, Council chose not to approve the proposed administrative order and instead chose to approve an alternative included in the report to direct staff to suspend further installations of crosswalk flags and to further investigate, or pilot, other options to increase the visibility and safety of crosswalks.

Staff returned to Regional Council on December 12, 2017, with a report³ providing additional information regarding measures that were being considered or tested to improve visibility and safety at marked crosswalks. The report recommended that Council direct staff to continue with identification and pilot testing of various products to enhance the visibility of crosswalks as part of their ongoing practice and to continue with not allowing further crosswalk flag installations until a decision was made regarding a policy governing installation. At that time, Regional Council chose to support the recommendation for staff to continue identifying and pilot testing products, but also chose to reinstate the crosswalk flag program and allow flags to be placed at basic marked crosswalks (those with pavement markings and signs only) until pilot testing could be undertaken on various products used to enhance the visibility of crosswalks.

¹ [160623TSC-mins.pdf \(halifax.ca\)](#)

² [May 9, 2017 Halifax Regional Council Minutes / Halifax.ca](#)

³ [Halifax Regional Council Minutes - December 12, 2017 | Halifax.ca](#)

DISCUSSION

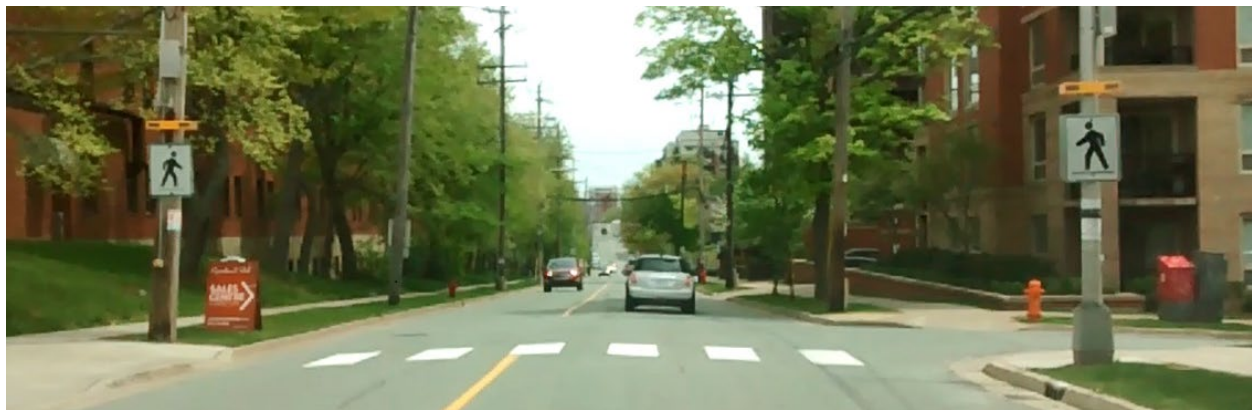
Crosswalk Enhancements – Pilot Testing

As part of an ongoing commitment to identify alternative measures to effectively improve visibility and safety at crosswalks, staff has implemented various treatments to date at both uncontrolled and controlled marked crosswalks. Controlled crosswalks include marked crosswalks at locations where there are other traffic controls in place for vehicle traffic, such as stop signs, yield signs and traffic signals. Uncontrolled marked crosswalks are those where no other vehicle control exists and include basic marked crosswalks with line markings and crosswalk signs only as well as those with pedestrian activated beacons (overhead RA-5 and RRFB). The following information provides a summary of measures implemented and experience with each so far.

Rectangular Rapid Flashing Beacons (RRFB)

Rectangular rapid flashing beacons are pedestrian activated beacons that are installed just above the standard crosswalk signs at marked crosswalks. When activated, the bright LED beacons flash in a rapid, alternating strobe pattern to indicate to drivers that a pedestrian is present at the crossing. Initial installation of these devices occurred in 2017 and staff assessment showed them to be very effective in improving driver yielding. In addition, public feedback indicated that the RRFBs were very bright and easy to see, even on a sunny day, and were much more visible than the overhead beacons (RA-5's) because of their position and flash pattern. As a result, RRFBs have been adopted as one of the measures staff will regularly consider for use on HRM crosswalks.

Staff has undertaken a review of all basic marked crosswalks (those with pavement markings and side mounted signs only) and identified locations where an upgrade to RRFB would be appropriate. The assessment resulted in 79 locations identified for upgrade with a further 36 locations where additional data would be required to make a final decision on whether the location would be appropriate for upgrade.



RRFB Enhanced Crosswalk

An initial assessment undertaken after the reviews were completed identified that with the resources (staff and budget) available at that time, approximately 20 locations could be upgraded per year with all identified locations completed within 5 years.

Beginning with fiscal 2020/2021, staff began incorporating locations identified for upgrade into the capital program. At end of the 2021/2022 fiscal year, 25 of the initial 79 locations have been completed, leaving 54 locations remaining to be upgraded from the original list. Assuming all 36 locations requiring additional data / further review are also warranted for upgrade to RRFB, there could be a total of up to 90 locations remaining to be upgraded.

The current 2022/2023 Road Safety Improvements capital program includes an additional 40 locations to be upgraded to RRFB. Given that not all 36 locations still undergoing assessment will likely require an upgrade, proceeding with 40 locations per year should result in all locations identified for upgrade to RRFB to be completed within the next two years (by end of fiscal 2023/2024), cutting the initial time anticipated to complete in half.

Fluorescent Yellow-Green Crosswalk Signs

HRM took part in a national pilot study conducted by the Transportation Association of Canada (TAC) to determine if the use of fluorescent yellow-green signs, as opposed to the standard white signs, would have an impact on driver yielding behaviour. The study included several jurisdictions across Canada and assessed driver yielding behaviour with the standard white signs in place and then conducted assessments with the signs replaced by the fluorescent yellow-green signs. Unfortunately, the study showed no statistical change in driver yielding behaviour as a result of the change in sign colour. As a result, the fluorescent sign colour was not approved to be used for crosswalk signs and so they were not adopted as an allowable sign under Provincial signage regulations. At the conclusion of the pilot, the signs were removed. In 2019, the Provincial Minister of Transportation and Infrastructure Renewal did not approve a request by HRM to use fluorescent yellow-green colour for crosswalk signs (Attachment 4).

Reflective Crosswalk Signpost Treatments

With the goal of improving the visibility of basic marked crosswalks (those with pavement markings and side mounted signs only) and make them more noticeable to drivers, staff undertook a project to apply reflective strips to the posts at these crosswalks. In total, fluorescent yellow/green reflective strips were applied to the posts at 353 crosswalks, beginning in 2018 and completed in 2019. Based on feedback received, the reflective strips have been very well received and provide a significant improvement to highlighting these crosswalk locations. Staff will continue with this treatment as part of typical installation for basic marked crosswalk installations.

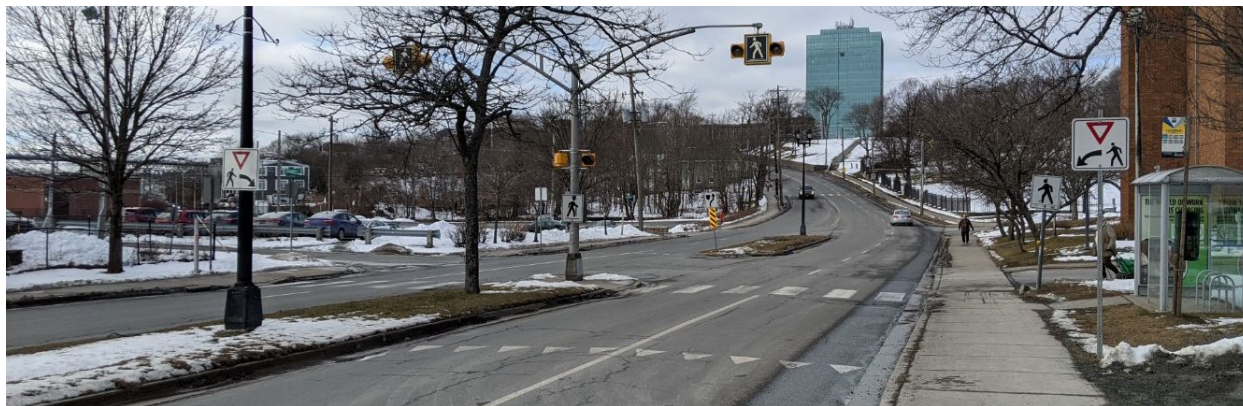


Reflective Signpost Treatment at Basic Marked Crosswalk

Advanced Yield to Pedestrian Lines

Advance yield to pedestrian lines are a treatment consisting of pavement markings and signs to reinforce proper yielding location for vehicles when approaching a crosswalk to improve visibility to pedestrians, particularly on wide crossings on 4-lane roadways where vehicles approaching the crosswalk in multiple lanes may obscure visibility to a crossing pedestrian if yielding takes place too close to the crosswalk.

Staff identified 7 initial marked crosswalk locations with pedestrian activated overhead flashing beacons on multi-lane roads to install the advanced yield lines to assess their effectiveness in influencing driver yielding position. Before and after assessments were conducted, it was found that, in general, both driver yielding compliance and yielding position improved after the pavement markings and signs were installed for the lanes nearest where the pedestrian began to cross. For the far lanes, driver yielding compliance improved, but the yielding position (i.e., vehicles yielding too close to the crosswalk) showed no improvement.



Advanced Yield to Pedestrian Line at Multi-Lane RA-5 Crosswalk

At this point, staff recognize a potential benefit to the use of advanced yield to pedestrian lines, but will be expanding the current pilot to include additional locations in order to continue further study and determine what factors may be involved in the poor driver yielding position for the far side lanes prior to making a decision regarding adopting this treatment as a permanent measure. This will enable staff to identify any changes to the installations that may help achieve the overall effectiveness of these treatments to influence driver yielding behaviour (compliance and position)

In-Road School Crosswalk Signs (RA-8)

The in-road school crosswalk sign is placed on the centreline of a roadway at a marked school crosswalk where crossing guards are present. The signs are intended to help improve the visibility of the crosswalk to approaching drivers. Staff installed the in-road signs in August of 2020 at 5 locations in advance of school returning in September.

Given the locations where the signs are installed have crossing guards present when students are crossing, which would control the crossing, the primary intent of this pilot was meant to assess the durability of the signs. The signs are constructed of an impact resistant plastic and incorporate a “knock-down” spring-loaded base that is bolted to the road surface so they would remain in place. Shortly after installation, staff began to receive complaints that the signs were creating obstructions in the roadway and that they needed to be removed. The placement of the signs accommodated appropriate road space to allow vehicles to be able to easily pass them without difficulty, so they were left in place in order to continue with the trial.

Within approximately two to three months, 4 of the 5 signs had been irreparably damaged, in at least one instance intentionally, and were no longer in place. The last remaining sign was damaged and had to be removed in the spring of 2021. It appears that the current application of these signs is not appropriate and will not be considered further.

Leading Pedestrian Intervals

A leading pedestrian interval is an approach used at crosswalks at signalized intersections where the pedestrian signal is activated in advance of the green vehicle signal being activated. This provides the pedestrian with a head-start when crossing which allows them to be more visible as they establish their

presence within the crosswalk. Studies throughout North America have shown that leading pedestrian intervals can be effective in improving pedestrian safety at signalized intersections.

Staff began implementing leading pedestrian intervals in 2018, receiving positive feedback on the approach. It became evident that this measure could prove beneficial as a measure to improve crosswalk safety and staff has adopted its use as a potential measure to be implemented at locations with a demonstrated need based on conditions at the particular intersection.

Crosswalk Flags – Placement and Administrative Governance

Since the implementation of the crosswalk flag program, several assessments were undertaken in 2015, 2016 & 2017, to gauge usage and potential effectiveness of the devices at basic marked crosswalks (those with pavement markings and signs only) as well as those with pedestrian activated flashing beacons (overhead beacons and RRFB). The general findings from past assessments indicated the following:

- Flag usage ranged between 2% and 8% and use is highest amongst vulnerable road users (children and the elderly);
- Flags did appear to provide marginal improvement to driver yielding at basic marked crosswalks where there were pavement markings and signs only;
- Flags did not appear to provide improvement to driver yielding at marked crosswalks where pedestrian activated flashing beacons (overhead beacons or RRFB) were present;
- Crosswalk locations with pedestrian activated flashing beacons (overhead beacons or RRFB), without crosswalk flags, had driver yielding rates between 95% - 100% for the locations where assessments were completed.

Given the low usage observed, the overall benefit associated with flag placement at marked crosswalks, regardless of crosswalk treatment type, is difficult to quantify.

As indicated in the background section of this report, staff continued facilitation of the crosswalk flag program based on Regional Council direction; however, several questions began to arise as to the intent behind the original direction provided by Council and the guidelines originally put in place to support the installation of crosswalk flags. Based on experience and assessments of HRM locations with crosswalk flags to date, and to provide clarity and consistency in facilitating their placement, staff has prepared a proposed administrative order to assist in the continued facilitation of the crosswalk flag program. The following general questions are addressed by the proposed Administrative Order:

Where would crosswalk flags be permitted to be installed?

When the crosswalk flag program first began, consideration was given to allowing the placement of crosswalk flags at marked crosswalks that had pedestrian activated flashing beacons as well as unmarked crosswalk locations. However, the most recent Regional Council direction received in 2017, stated that only basic marked crosswalks, those identified by pavement markings and side mounted signs, would be considered for placement of crosswalk flags. Although staff has followed this direction to date, requests continue to be received to also allow crosswalk flags to be placed at marked crosswalks where pedestrian activated flashing beacons and RRFBs are in place. As a result, the proposed administrative order allows for crosswalk flags to be placed at any uncontrolled, marked crosswalk, including those with pedestrian activated flashing beacons and RRFBs.

Unmarked crosswalk locations do not have appropriately located infrastructure to support the placement of the flags. Without poles/posts located within, or very near to, the legal crossing location it may encourage pedestrians to cross outside of the crosswalk where they do not have the legal right of way.

What is the process for requesting a location to be assessed for the placement of crosswalk flags?

Requests to allow flags to be placed at a crosswalk can be made by any individual. HRM's current practice regarding the installation of other infrastructure, such as marked crosswalks, can be made by a single individual and if the proper criteria are met, the infrastructure is installed. Since other infrastructure that would involve a cost to the Municipality can be requested by a single individual, it would seem reasonable that the placement of crosswalk flags, which represents no cost to the Municipality, could also be requested in this manner. As part of the request process, a "sponsor" must be identified to take on the responsibility to monitor and maintain the crosswalk flags once installed.

What are the requirements that would allow for crosswalk flags to be placed at a particular location?

For crosswalk flags to be placed at a location, the following criteria must be met:

- The location must be an existing marked crosswalk;
- Aside from line markings, crosswalk signs and pedestrian-activated beacons, the crosswalk must not otherwise be controlled by traffic signs or traffic signals;
- The location must have existing sign posts or utility poles in place to support placement of the flag containers. HRM will not install posts for the sole purpose of placing crosswalk flags, nor will installation of posts by others be allowed within the right of way;
- Posts or poles must be located within approximately 2 metres of the crosswalk. This is to ensure the flags are accessible and do not encourage pedestrians to cross outside the crosswalk area. This condition would be consistent with our current guidelines used for placement of push-buttons;
- Posts or poles already supporting regulatory signage controlling right of way (stop, yield, etc.) or access (turn restrictions, one-way, etc.) cannot be used to support placement of crosswalk flags. This ensures the visibility and recognition of these controls;
- Flags shall be no larger than 40 x 40 centimetres (16 x 16 inches) attached to a dowel or rod no longer than 75 centimetres (30 inches); and
- Placement of the containers and flags will not, in the opinion of the Traffic Authority, create any obstruction to access or visibility or contribute to any other safety issue.

What roles and responsibilities are associated with a location where crosswalk flags are placed?

The crosswalk flag program is a community led initiative and as such, the "sponsor" for each installation would be responsible for:

- Supply and installation of the containers and flags. This would include the cost for all materials and labour required;
- On-going monitoring and upkeep of the location after installation;
- Providing regular updates to HRM outlining monitoring and upkeep activities;
- Obtaining any permissions necessary to attach equipment to utility poles and supply of proof of permission to HRM upon request; and
- Modification or removal of the installation, if requested by HRM.

In addition to the creation of the proposed Administrative Order, amendments to the Streets By-Law (S-300) have been prepared to ensure alignment between the Administrative Order and By-Law. The amendments are outlined in Attachments 2 and 3.

Because this is a community initiative, HRM is responsible for providing an initial review of requests as a facilitator for the installation of crosswalk flags and would not be responsible for any costs associated with installation, loss or damage of the flags, containers or any other materials associated with the installation.

There have been instances at locations with pedestrian activated flashing beacons where the flags or containers have been interfering with the push-buttons due to flags covering the button, containers having shifted or been intentionally moved/tampered with or flags being “jammed” into equipment instead of being placed in the containers. This situation can make it difficult for pedestrians to effectively notice and access the buttons, which are required to be pressed when crossing. The proposed administrative order provides the Engineer with the ability to request the removal of crosswalk flags at any time which would address any complaints related to the ongoing maintenance of a particular crosswalk flag installation,

FINANCIAL IMPLICATIONS

No financial implications at this time.

RISK CONSIDERATION

No risk considerations were identified.

COMMUNITY ENGAGEMENT

No community engagement was required.

ENVIRONMENTAL IMPLICATIONS

No environmental implications were identified.

ALTERNATIVES

The Transportation Standing Committee could choose to recommend one of the following alternatives to Halifax Regional Council:

1. Adopt Administrative Order 2022-006-OP, the Placement of Crosswalk Flags Administrative Order with amendments to only allow crosswalk flags to be placed at basic marked crosswalks (ie. those with pavement markings and signs only, but not those with pedestrian activated flashing beacons or RRFBs)
2. Not recommend approval of the proposed administrative order and by-law amendments and direct the Chief Administrative Officer to continue facilitating the installation of crosswalk flags according to the current process. This is not recommended as it does not provide clarity to staff and residents of program expectations;
3. Direct the Chief Administrative Officer to not allow any further installations of crosswalk flags but allow existing crosswalk flag installations to remain; or

4. Direct the Chief Administrative Officer to not allow any further installations of crosswalk flags and order the removal of flags from all locations where they are currently installed.

ATTACHMENTS

Attachment 1 - Proposed Administrative Order 2022-006-OP, Respecting the Placement of Crosswalk
Flags

Attachment 2 - Showing Proposed Changes (By-Law S-300)

Attachment 3 - Amending By-law (By-Law S-313)

Attachment 4 - July 23, 2019 letter from Provincial Minister of Transportation and Infrastructure Renewal

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Lucas Pitts, P.Eng., Director, Traffic Management, Deputy Traffic Authority 782-641-5670

**ADMINISTRATIVE ORDER NUMBER 2022-006-OP
RESPECTING THE PLACEMENT OF CROSSWALK FLAGS**

BE IT RESOLVED AS AN ADMINISTRATIVE ORDER of the Council of the Halifax Regional Municipality under the authority of the *Halifax Regional Municipality Charter*, as follows:

WHEREAS the Crosswalk Safety Advisory Committee was formed in March of 2013 in response to concerns from residents within the Municipality for the safety of pedestrians in crosswalks;

AND WHEREAS the Committee put forward recommendations related to goals and actions to be taken to improve pedestrian safety at crosswalks, including “Approve the use of crosswalk flags in HRM at crosswalks where the community takes on the responsibility of installing and maintaining them”;

Short Title

1. This Administrative Order may be cited as the “*Placement of Crosswalk Flags Administrative Order*.”

Purposes

2. The purposes of this Administrative Order are to:

- (a) identify crosswalk types that would be considered for the installation of crosswalk flags;
- (b) establish a process for requests to be considered for the installation of crosswalk flags; and
- (c) establish the roles and responsibilities with regard to installation, monitoring, maintenance and removal of crosswalk flags.

Interpretation

3. In this Administrative Order,

- (a) “crosswalk” means that portion of a roadway ordinarily included within the prolongation or connection of curb lines and property lines at intersections or any other portion of a roadway clearly indicated for pedestrian crossing by lines or other markings on the surface;
- (b) “Engineer” means the Engineer of the Municipality and includes a person acting under the supervision and direction of the Engineer;
- (c) “Municipality” means the Halifax Regional Municipality;
- (d) “pedestrian-activated beacon” means a flashing amber light activated by a pedestrian to indicate to drivers of vehicles on a roadway that the pedestrian is crossing, or waiting or about to cross, the roadway; and

(e) “roadway” means that portion of a street or highway between the regularly established curb lines or that part improved and intended to be used for vehicular travel.

Request

4. (1) A person may request permission to install crosswalk flags at or near a crosswalk.
- (2) A request to install crosswalk flags shall include:
- (a) the location that is the subject of the request; and
 - (b) the name and contact information of the individual who will assume responsibility for monitoring and maintaining the crosswalk flags once installed.

Criteria for Placement of Crosswalk Flags

5. (1) The Engineer shall review any request received in accordance with this section.
- (2) The Engineer shall only grant permission to install crosswalk flags and associated containers, if the Engineer is satisfied that all of the following conditions are met:
- (a) the crosswalk that is the subject of the request:
 - (i) must be marked by lines or other markings on the surface of a roadway, and
 - (ii) must not be controlled by official traffic signs or official traffic signals, other than lines or other markings on the surface of the roadway, crosswalk signs, pedestrian-activated beacons, or a combination thereof;
 - (b) the proposed location for the installation of crosswalk flags must be a sign-post or utility pole that:
 - (i) is existing infrastructure,
 - (ii) is located within 2.0 metres of the crosswalk that is the subject of the request,
 - (iii) is not already supporting regulatory signage controlling the right of way or access to the right of way, such as a stop sign, yield sign, turn restriction, or one-way street, etc.; and
 - (iv) is otherwise suitable for the purpose;
 - (c) the crosswalk flags, if installed at the proposed location, must not endanger traffic, obstruct visibility or impair access to the crosswalk, sidewalk, or roadway; and
 - (d) the crosswalk flags, if installed at a location with pedestrian activated beacons, must not obstruct or impede the operation of the pedestrian push-button.

6. Upon completion of the review, the Engineer shall notify the requestor of the decision to grant or refuse permission.
7. If permission is granted, the Engineer may impose conditions on such permission and shall notify the requestor of such conditions.

Roles and Responsibilities

8. The requestor shall be responsible for:
 - (a) the installation of the crosswalk flags and associated containers and all costs related to such installation, including material and labour costs;
 - (b) the on-going monitoring and maintenance of the crosswalk flags and associated containers and all costs related to such monitoring and maintenance, including material and labour costs;
 - (c) obtaining all necessary permissions to install the crosswalk flags and associated containers, such as permission from Nova Scotia Power, Bell Aliant or Eastlink, and upon request, providing the Municipality with copies of the permissions obtained;
 - (d) providing the Engineer, upon request, with a written log of monitoring and maintenance activity undertaken by the requestor for the location(s) where they have assumed responsibility for the installation of crosswalk flags; and
 - (e) upon the request of the Engineer, to remove the crosswalk flags and associated containers within the timeframe specified in the request.
9. The Municipality shall not install or erect posts, or permit others to install or erect posts, for the purpose of installing crosswalk flags and associated containers.
10. The Municipality shall not be responsible for any loss, damage or theft of the crosswalk flags, containers or any other materials associated with the installation.

Done and passed this day of , 2022.

Mike Savage, Mayor

I, Iain MacLean, Municipal Clerk of the Halifax Regional Municipality, hereby certify that the above noted Administrative Order was passed at a meeting of Halifax Regional Council held on [month], [day], 2022.

Iain MacLean, Municipal Clerk

PART IV - STREETS & SERVICES PERMIT

...

Obstructions

30. (1) No person shall obstruct any street without first obtaining a Street & Services permit from the Engineer.
- (2) Where an obstruction may cause damage to the street, the Engineer may require a security deposit in the amount specified in Administrative Order 15, such deposit to be held until the Engineer is satisfied that no damage has occurred to the street after the obstruction has been removed.
- (3) The Engineer may permit any person to use any portion of a street for construction or other temporary purpose subject to any conditions that he may reasonably impose.
- (4) The Engineer may refuse to issue a Street & Services permit when it is in the public interest to do so.

PART IVA – CROSSWALK FLAGS

- 30A (1) No person shall install crosswalk flags on or near a street except in accordance with this section.
- (2) A person may request permission from the Engineer to install crosswalk flags on or near a street pursuant to the *Placement of Crosswalk Flags Administrative Order*.
- (3) If permission is granted, the crosswalk flags shall be installed in accordance with the conditions set out in the permission, and such permission shall be provided to the requestor.
- (4) If permission has been granted by the Engineer, every crosswalk flag shall
- (a) be bright orange in colour;
 - (b) not exceed forty (40) centimeters by forty (40) centimeters in width; and
 - (c) be attached to a dowel or rod that does not exceed 75 centimeters in length.

PART V - DRIVEWAY ACCESS

Permit Required

31. Every property owner is required to obtain a street and services permit from the Engineer before constructing a driveway access.

Revocation of Permits

42. (1) The Engineer may cancel, revoke or suspend any permit where there is a violation of this bylaw, any order made pursuant to this bylaw and any condition of any permit issued under the authority of this bylaw.
- (2) Any person who has been refused a permit or whose permit has been revoked pursuant to the exercise of any discretion by the Engineer may appeal to the Appeals Committee.

(3) All appeals shall be in writing, in the form of a notice, and filed with the Municipal Clerk within 15 days of the refusal or revocation and shall clearly state the grounds for the appeal.

(4) The Appeals Committee shall hear the appeal at a time and place as it determines and may confirm the refusal or revocation by the Engineer or direct the immediate issuance or re-issuance of the permit by the Engineer subject to such conditions as the Appeals Committee may determine.

(5) For the purposes of this section, permit includes permission under Part IVA.

HALIFAX REGIONAL MUNICIPALITY
BY-LAW NUMBER S - 313
BY-LAW RESPECTING STREETS

BE IT ENACTED by the Council of the Halifax Regional Municipality that By-law S-300, the Streets By-law, is further amended as follows:

1. PART IVA is added after PART IV and before PART V, as follows:

PART IVA – CROSSWALK FLAGS

- 30A (1) No person shall install crosswalk flags on or near a street except in accordance with this section.
- (2) A person may request permission from the Engineer to install crosswalk flags on or near a street pursuant to the *Placement of Crosswalk Flags Administrative Order*.
- (3) If permission is granted, the crosswalk flags shall be installed in accordance with the conditions set out in the permission, and such permission shall be provided to the requestor.
- (4) If permission has been granted by the Engineer, every crosswalk flag shall
- (a) be bright orange in colour;
 - (b) not exceed forty (40) centimeters by forty (40) centimeters in width; and
 - (c) be attached to a dowel or rod that does not exceed 75 centimeters in length.

2. Section 42 is amended by adding subsection 5 after subsection 4 and before section 43 as follows:

- (5) For the purposes of this section, permit includes permission under Part IVA.

Done and passed this , day of , 2022.

MAYOR

MUNICIPAL CLERK



Transportation and Infrastructure Renewal
Office of the Minister

PO Box 186, Halifax, Nova Scotia, Canada B3J 2N2

JUL 23 2019

His Worship Mike Savage
Mayor
Halifax Regional Municipality
1841 Argyle Street
PO Box 1749
Halifax, NS B3J 3A5

Dear Mayor Savage:

Thank you for your letter of June 14, 2019, regarding amending the Nova Scotia *Traffic Signs Regulations* to permit the use of crosswalk signs with a fluorescent yellow-green (FYG) background colour.

Currently, all regulatory crosswalk signs in Nova Scotia have a black legend on a white background. This is consistent with the signage for crosswalks contained in both the *Manual of Uniform Traffic Control Devices for Canada (MUTCDC)* and the *Pedestrian Crossing Control Guide*, both published by the Transportation Association of Canada (TAC).

The Traffic Operations and Management Standing Committee of TAC recently completed a study to evaluate the merit of introducing crosswalk signs with FYG background to the MUTCDC. In this study FYG crosswalk signs were evaluated in medium and large municipalities across the country, including HRM, to determine if the colour change improved effectiveness of the signs. It was found that there was no long-term significant improvement in driver yielding as a result of the colour change. This confirmed similar results of a previous 2002 study carried out by another group of researchers; therefore, it was recommended that the colour of the signs not change in the MUTCDC.

It is very important that the signs we use to regulate traffic be uniform and consistent across the province and the country. Therefore, we will continue to use the crosswalk signs as illustrated in the MUTCDC and no changes will be made to the *Traffic Signs Regulations* at this time.

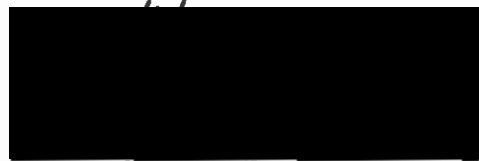
His Worship Mike Savage

Page 2

However, the study performed by TAC did point to another TAC study, where it was found that adding a retroreflective strip to a sign's post does significantly improve driver compliance with the sign, particularly at night. I see that HRM is currently doing that at a number of crosswalks and I encourage you to continue with this practice.

Thank you again for your letter and for you and your council's continued interest in improving road safety.

Sincerely,



Lloyd P. Hines

Minister

- c: Brad Anguish, Director Transportation and Public Works, Halifax Regional Municipality
- Taso Koutroulakis, Manager Traffic Management, Halifax Regional Municipality
- Michael Croft, Department of Transportation and Infrastructure Renewal