



# DECORATIVE CROSSWALK GUIDELINE 2023 08 22.DOCX

Municipality of Chatham-Kent

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## 1.0 Introduction

Crosswalks are an integral component of the transportation network that distinctly indicates safe roadway crossing locations for pedestrians by means of lines or other markings on the surface of the roadway. Vehicle traffic is controlled at crosswalks with stop signs, pedestrian crossovers (PXO's), and partial or full traffic signals. Crosswalks exist at intersections, between intersections (mid-block) and on all road classification types throughout the Municipality of Chatham-Kent.

The size and colour of crosswalk pavement markings is governed by the Ontario Traffic Manual (OTM). The transverse lines, which are lines that run perpendicular to the roadway and establish the boundaries of the crosswalk, must be white and extend the entire length of the crosswalk. Ladder (also referred to as zebra) markings are suggested for crosswalks where higher visibility is desired. The longitudinal lines (rungs of the ladder) are also normally white; however, the OTM does not specify that they must be white.

The Highway Traffic Act (HTA), specifically Ontario Regulation 402/15: Pedestrian Crossover Signs, requires that PXO's include ladder pavement markings and that the longitudinal lines (rungs) are to the width and spacing as specified. Like OTM, the colour of the rungs are not mandated to be white.

The OTM does state that textured or coloured crosswalks should be "applied to increase the conspicuity of a pedestrian crossing and increase driver's awareness of potential conflicts". It goes on to state that the "materials should be designed to maintain visibility at night".

Decorative crosswalks are typically understood to be crosswalks that include elements (colour, design, imagery, texture and/or material) that are considered aesthetic enhancements above and beyond standard crosswalk treatments. In Chatham-Kent, an example of a decorative crosswalk is the rainbow crosswalk located on Forsyth Street in Chatham.

Crosswalks must always include two white transverse lines, and except for PXO's, the pavement marking treatment in between the transverse lines is not restricted. Therefore, decorative elements (artwork) can be legally applied to the road surface if they are 'framed' by the white transverse lines and the edge of the roadway (normally being curbs). However, it is implied that the design of the treatment would not negatively impact the safety of road users, visually or otherwise.

The Decorative Sidewalk Guideline is constructed to support and facilitate the installation of decorative crosswalks in the Municipality of Chatham-Kent.

## 2.0 Process

The desire to install decorative crosswalks can be driven by external and internal interests. Individuals, communities, organizations or agencies may express interest to install a decorative crosswalk on a Municipal roadway. Additionally, decorative crosswalks may be incorporated into Municipal projects, such as roadway reconstruction or other similar initiatives.

Parties with an expressed interest to install a decorative crosswalk shall consult with the Transportation section within the Infrastructure & Engineering Services Department. An agreement between the applicant and the Municipality may be necessary to formalize installation and maintenance cost terms and responsibilities.

For requested locations in Business Improvement Areas (BIAs), if the BIA is not the requestor, the BIA will be consulted for feedback on the location and design of the decorative crosswalk prior to approval.,

### 3.0 Permitted Locations

Selecting a location for the installation of decorative crosswalks is important to ensure that they are appropriate, sustainable and safe. The primary consideration in approving a decorative crosswalk location is the safety of pedestrians, cyclists and motorists. Where safety may be negatively impacted, a decorative crosswalk will not be permitted to be installed.

Decorative crosswalks are permitted only at controlled crossing locations where vehicles are required to yield to pedestrians (e.g. traffic signals, pedestrian crossovers, and stop-controlled crosswalks at intersections). Decorative crosswalks must not be installed at uncontrolled crossings (e.g. midblock uncontrolled crossings, or the free-flow legs of a two-way stop-controlled intersection), as this may create a false impression for pedestrians that they have right of way, resulting in safety risks.

Decorative crosswalks should be avoided, without special consideration and permission, across roadways that have high volumes of traffic and/or a high percentage of truck traffic, specifically, major and minor arterial roadways.

On arterial roadways, maintenance is cost prohibitive given the amount of tire wear and marks from large trucks. Decorative crosswalks can be installed on collector and local classified roadways. This includes collector and local roadways that intersect with, or are immediately parallel to, major/minor arterial roadways permitting that the crosswalk is located on the secondary leg(s) of the intersection.

It is important that the roadways are in acceptable condition. The installation location surface must be free of potholes, fatigue cracking, loose debris or other similar degraded conditions which would inhibit the installation of surface treatments or perceivably shorten the operational life. Asphalt roadways are preferred, however concrete roads can be considered. Roadways that are constructed using unit pavers, stamped textures or comprised of mixed materials (such as adjoining asphalt and concrete surfaces) should be avoided.

Normally, roadways that are scheduled for reconstruction or re-surfacing within five (5) years or less from the time of decorative crosswalk installation should be avoided so that the treatments are not inadvertently removed earlier than intended or before their operational end-of-life. In exceptional cases where a decorative crosswalk is deemed appropriate despite having an expected lifespan of less than 5 years, the requestor will be responsible for 100% of the installation cost.

## 4.0 Installation & Maintenance

Proper installation and maintenance of a decorative crosswalk treatment protects their overall integrity and longevity. Therefore, they must be installed in a professional manner, by forces that are sufficiently trained and skilled, using appropriate materials and methods. They must be routinely monitored and repaired and maintained as necessary.

### 4.1 Decorative Crosswalk Specifications

i. Artwork must be contained within the two white standard transverse lines of the crosswalk and the edge of the roadway. Treatment must be configured so that a pedestrian's first step is onto asphalt (the bare road surface), achieved by starting the artwork approximately 1.0 metre away from the curb/edge of road. It must not continue or extend onto median islands, curb gutters, curbs, sidewalks or other roadway features;

ii. Artwork must not be applied to utility manhole covers, chamber lids, frames or other similar infrastructure;

iii. Artwork should provide visual contrast and be reflective as per the requirements of the Ontario Traffic Manual;

iv. Artwork that would be considered ladder (or zebra) markings, must dimensionally conform to the requirements of the HTA and Ontario Traffic Manual;

v. Artwork shall respect community standards concerning appropriate subjects and imagery for display in public places. Further, commercial interests such as advertising and copyright protected content is not permitted without special consideration and explicit permission;

vi. Artwork must not be comprised of any elements that road users, particularly pedestrians, would interact with such as hopscotch as an example;

vii. Artwork must not directly or inadvertently mislead the general use or guidance of the crosswalk, especially users whom are visually impaired; and

viii. Artwork shall comply with the Municipality of Chatham-Kent Public Art Policy.

### 4.2 Material & Installation

i. Durable skid resistant pavement markings, such as thermoplastic or cold plastic, must be used for artwork and as specified by the Public Works Department. The in-service operational life of durable pavement markings is approximately five (5) years, and dependent upon roadway surface conditions and traffic volumes.

ii. Pavement marking materials must provide a suitable walking surface in all weather conditions across the entire crosswalk and be either inherently non-slip or incorporate non-slip additives or elements. In the case of products or methods not used previously in Chatham-Kent, a material sample or test installation may be required for evaluation.

- iii. Artwork must be reflective as per the requirements of the Ontario Traffic Manual;
- iv. Decorative crosswalks must be installed by the Municipality of Chatham-Kent, Engineering Division (Transportation Section) or by contractors as directed by the same;
- v. Artwork designs shall be reasonable, easily reproduced and installed using the noted marking materials and their associated installation methods. Artwork must be acceptable and appropriate based upon the Public Art Policy process and requirements; and
- vi. Installation shall be scheduled to occur seasonally in the late spring to early fall or as weather and conditions permit to ensure optimal adherence of materials to roadway surfaces.

#### 4.3 Maintenance & Operations

- i. Cleaning of decorative crosswalks shall be carried out by the Municipality of Chatham-Kent, Public Works Division. Any repairs will be carried out by the Municipality of Chatham-Kent, Engineering Division or an approved contractor;
- ii. It is recognized that decorative crosswalks do not have an attributed level of service as defined by Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways. However, decorative crosswalks shall generally be inspected by the Municipality of Chatham-Kent, Public Works Division, once per calendar year, typically in the late spring;
- iii. Maintenance of decorative crosswalks shall be safety focused, but also to maintain the integrity and longevity of the artwork. The vibrancy of the colours will fade over time, particularly with heavy traffic. This is normal and to be expected; fading colours will not warrant replacement. Maintenance shall be generally conducted on an as-needed basis;
- iv. Decorative crosswalks do not have an infinite life and would need to be removed (and replaced if appropriate) when deemed necessary or as required by any terms and/or agreements of their installation;
- v. Requestors of decorative crosswalks shall be responsible for installation costs and share maintenance costs with the Municipality of Chatham-Kent as described in Section 5.0 of this guideline.

#### 5.0 Attributed Costs

The cost of installing and maintaining decorative crosswalks will have an impact on capital and existing operational budgets. Because of this, the person or agency requesting decorative crosswalks shall share in all or part of the costs.

Table 1 outlines installation cost sharing.

Table 1: Cost-Sharing for Decorative Crosswalks

| Scenario  | Municipal Share                               | Requestor's Share  |
|---|---|--|
| Locations where resurfacing is planned within 5 years | None  | 100%   |
| Existing non-ladder crosswalk                         | 40% (Cost of white durable pavement markings) | 60% (Cost difference between standard ladder markings and artwork) |
| Existing ladder crosswalk (< = 3 years old)           | None  | 100%   |
| Existing ladder crosswalk (> = 3 years old)           | 40% (Cost of white durable pavement markings) | 60% (Cost difference between standard ladder markings and artwork) |
| All other locations                                   | None  | 100%   |

The cost of installing a decorative crosswalk is dependent upon the intricacy, width of the roadway, coverage of the artwork and location. It is estimated that installation costs would be between \$5,000 and \$15,000 depending on the length of the crossing.

The ongoing maintenance of the decorative crosswalks shall be shared between the Municipality of Chatham-Kent and the requestor based upon the cost difference between standard crosswalks and decorative crosswalks. Costs would also be dependent upon the same primary cost drivers noted as part of installation (above).

Maintenance costs shall be determined at the time of approval and based upon the design of the decorative crosswalks and perceived attributed maintenance cost pressures.

Installation and maintenance costs which are shared with the Municipality of Chatham-Kent by requestors should be formalized by establishment of a written agreement.

In cases where crosswalks are damaged by a third party that is responsible for restoration costs (e.g. a roadway cut to install services to a property), the restoration costs charged to the third party shall include the cost to restore the decorative crosswalk.

Decorative crosswalks that are not requested by external people or agencies, but rather internal to the Municipality of Chatham-Kent, installation costs shall be funded from an appropriate capital budget. Maintenance and operation costs shall be funded from an appropriate operating budget and annual budgets shall be reasonably adjusted as decorative crosswalks are added or removed.

**6.0 Roles & Responsibilities**

- i. The General Manager of Infrastructure & Engineering Services, or their delegate, shall be responsible for administering and recommending updates to this guideline;
- ii. Decorative crosswalk artwork approval shall be the responsibility of the Infrastructure & Engineering Services Department, Engineering Division and in collaboration with the Public Works Division and Economic Development and Tourism Division.

iii. The Infrastructure & Engineering Services Department, Engineering and Public Works Divisions shall be responsible for coordinating, planning, implementing and maintaining decorative crosswalks in the Municipality of Chatham-Kent; and

iv. Requestors shall share in the ownership and responsibility of decorative crosswalks as governed by any formal agreements or terms as they apply.