



**SUBJECT: Downtown Streetscape Guidelines**

**TO: Planning and Development Committee**

**FROM: Department of City Building - Planning Building and Culture**

Report Number: PB-62-19

Wards Affected: 2

File Numbers: 560-01

Date to Committee: September 10, 2019

Date to Council: September 23, 2019

---

**Recommendation:**

Approve the Downtown Streetscape Guidelines, included as Appendix A to department of city building report PB-62-19 dated July 2019; and

Direct the Director of City Building to proceed with the next steps outlined in department of city building report PB-50-19 including updating the engineering / urban design detail standards to implement the Downtown Streetscape Guidelines.

**Purpose:**

In a report presented to the Planning and Development Committee meeting on July 9, 2019, staff recommended a boulevard (building-to-curb) pavement material treatment and a family of street furnishings for four (4) character areas within the downtown. At this meeting, Council passed the following two motions:

- *Direct the Director of City Building to report back with more recommended options for the Lakeshore Road streetscape, including the currently proposed design; and*
- *Direct the Director of City Building to report back with life-cycle cost estimates for concrete/permeable unit pavers throughout the streetscape.*

The purpose of this report is to address to the above motions directing staff to further explore and report back with respect to streetscape furnishing options for Lakeshore Road and to undertake a life-cycle cost assessment for replacing concrete sidewalks with unit pavers.

This report is supplementary to department of city building report PB-50-19 presented to the Planning and Development Committee on July 9, 2019 and therefore it should be read in conjunction with the previous report, which presents the Downtown Streetscape Guidelines for approval and outlines next steps.

The Guidelines support all four pillars of the Strategic Plan: A City that Grows; A City that Moves; A Healthy and Greener City; and, An Engaging City.

---

## **Background and Discussion:**

### **Background:**

The current downtown streetscape guidelines, known as the Streetscape Design Study for Downtown Burlington, were adopted in 1982.

In 2015, Council approved a capital project to study and update the downtown streetscaping guidelines due to changes to standards for accessibility, lighting and safety, and to consider advancements in technologies related to streetscape elements such as paving materials and lighting technologies. The timing of this approval also aligned with the emergence of the downtown as an area of interest for private growth and investment and in consideration of other public infrastructure investments such as those made to Spencer Smith Park and segments of Lakeshore Road in the early 2000s, which strayed from the original theme of the Streetscape Design Study for Downtown Burlington.

Between 2015 and 2019, stakeholders and members of the public were engaged to develop new Downtown Streetscape Guidelines. This process took place over three phases, with the first two led by staff with support from a consulting team. The final phase was completed in-house lead by an interdepartmental staff team with representatives from Capital Works (Accessibility, Asset Management, Design and Build, Site Engineering); City Building (Planning and Urban Design); Roads, Parks and Forestry; Transportation Services; and, Transit.

The review and update process has included public open houses, a workshop and presentations to Heritage Burlington, the Burlington Accessibility Advisory Committee, the Halton Developers' Liaison Committee (HDLIC), and the Burlington Downtown Business Association (BDBA), on-line surveys and questionnaires. In May 2018, draft Downtown Streetscape Guidelines were shared with the public and stakeholders for additional input and feedback.

Upon adoption, the new Downtown Streetscape Guidelines would replace the current downtown streetscape guidelines.

Report PB-50-19 contains additional background and project information including details regarding the project scope, overview of the downtown streetscape guidelines, consultation, implementation, financial matters, and next steps.

## **Discussion:**

### **Lakeshore Road Streetscape – Furnishing Options / Recommendations:**

In response to the Council direction, staff has developed two furnishing options in addition to the option presented to the Standing Committee of Council on July 9<sup>th</sup>, 2019 and shown in the draft Downtown Streetscape Guidelines attached hereto as Appendix A dated July 2019, for the Lakeshore Road streetscape.

#### **Option 1 – Waterfront Furnishings**

This option is included as part of the Downtown Streetscape Guidelines as the current design recommendation. It provides for a family of furnishings that would be painted grey as a unique place-making element intended to unify Lakeshore Road as a character street. The choice of colour and style has been considered based on the character and scale of the street, surrounding waterfront, and consistency with the outcomes from the Council-approved City of Burlington Downtown Waterfront Implementation Plan (2003). This option is intended to align and unify with recent public investments for stretches of Lakeshore Road and Spencer Smith Park.

#### **Option 2 – Heritage Furnishings**

The second option would see the Lakeshore Road furnishings take on a heritage theme matching the Mixed-Use Commercial District. Staff note that the heritage themed streetlights are not intended to be as tall as the proposed waterfront furnishings and would require shorter spacing between poles to meet current lighting design criteria due to the width of Lakeshore Road. This option would increase the number of streetlights required on both sides of the roadway, while limiting the number of potential street trees. This means more streetlight poles that will breakup and visually compete with views on the south side of Lakeshore Road to the waterfront, especially adjacent to the park edge. Furthermore, this option would suggest that Lakeshore Road does not warrant a special treatment to identify it as a character street.

#### **Option 3 – Hybrid**

The third option would provide a hybrid version of the above two options by continuing with the waterfront furnishings from Maple Avenue to Brant Street at which point the streetscape elements would transition to the heritage theme for the Mixed-Use Commercial District from Brant Street to Smith Avenue. This option takes an approach that acknowledges a changing context from Maple Avenue to Smith Avenue and

provides a streetscape treatment that intimates the intersection of Brant Street and Lakeshore Road as a gateway.

## Recommendation

The following matrix summarizes ratings for the three streetscape furnishing options and four criteria. These design determinates provide the framework to compare and recommend the streetscape furnishing options.

**Table 1: Options Summary Matrix**

	Option 1	Option 2	Option 3
<b>Identity / Sense of Place</b>	✓✓✓	✓	✓✓
<b>Street Scale</b>	✓✓✓	✓	✓✓
<b>Street Trees</b>	✓✓✓	✓	✓✓
<b>Views / Vistas to Lake</b>	✓✓✓	✓	✓✓
<b>Recommend Overall</b>	✓✓✓	✓	✓✓

Based on the above matrix, staff continue to recommend that Council approve Option 1 as the streetscape theme for Lakeshore Road.

Option 1 rates higher than the other because it is the only option that would provide a consistent and unique colour to reinforce the design response to distinguish Lakeshore Road as a character street. Additionally, as a wider street within downtown (with a planned right-of-way width of 30 metres) the spacing between light poles is also an important consideration and is directly related to the height of the light fixture. Spacing that might be sufficient for a narrow street such as Lower Brant Street, may not be provide adequate lighting (even coverage) of roadways and sidewalks for a wider street. Option 1 provides a style of light fixture that is better suited to taller light poles and therefore an appropriate configuration for a wider street. The heritage themed light fixture is more appropriately installed at closer intervals on a narrower street. Lastly, Option 1 would provide a style that not only conforms to the waterfront theme and helps to create a unique sense of place, it may require fewer streetlights. More widely spaced street lights would make allowance for more street trees as well as maintaining and enhancing views / vistas to the Lake Ontario.

Once finalized and approved, the new streetscape furnishings and materials will be specified through an update to the engineering / urban design standards and taken to the market through a competitive bid process (RFP) for ultimate selection and procurement. As streets are programmed for reconstruction in the future the new

streetscape furnishings and materials will be implemented. At present, the capital forecasted reconstructions for James and John Streets in 2024 will provide the first publicly funded opportunities to implement the new streetscape furnishing and hardscape selections.

### **Life-Cycle Cost Estimates for Unit Pavers:**

Staff have undertaken a simple life-cycle analysis to compare the costs of installing unit pavers where a cast-in-place poured concrete method of installation is currently recommended in the pedestrian clear zone of the street boulevard. Please refer to the Streetscape Anatomy section of the draft Downtown Streetscape Guidelines (Section 3.1 – Figure 3) for a visual illustration of the Boulevard and its respective zones, including the Clear Path Zone.

This analysis looked at a 60-year life cycle cost comparison that includes both the initial capital costs as well as maintenance costs. The following table summarizes the findings:

**Table 2: Total Life-Cycle Cost Estimates per Square Metre**

	<b>Total Cost (per square metre)</b>	<b>Total Cost / Year</b>	<b>Difference (per square metre)</b>
<b>Concrete paving</b>	\$164.80	\$2.75	-
<b>Concrete unit pavers</b>	\$401.80	\$6.70	+ \$3.95

The above highlights the significant cost difference between a poured cast-in-place concrete sidewalk and one constructed using unit pavers. A cost increase of \$3.95 per square metre equates to a hardscape treatment that is approximately 200% more costly. Staff note that this simple analysis has taken a conservative approach. A more detailed analysis prepared by the City of Vaughan prices the total life cycle costs at approximately 400% more costly. Staff note that Vaughan's assumptions are based on a comprehensive review and analysis of operations and maintenance unit costs. Unfortunately, the City of Burlington is limited in terms of data in this regard and therefore cannot provide a similar detailed analysis for each unit cost associated with all the applicable operational and maintenance activities for each element with the streetscape. This would appear to account for the discrepancy between staff's conservative estimate and the findings for the City of Vaughan. Additionally, the Guidelines identify the Clear Path Zone as the highest priority zone within the boulevard and therefore recommends it be the widest. This means more area and therefore more unit pavers, which further impacts costs as well as operational requirements, level of service expectations, and concerns related to accessibility / safety. Another factor to

consider is construction schedule impacts. In general, compared to poured concrete, the placement of unit pavers would take significantly longer. Accordingly, the use of unit pavers throughout the downtown would add significant costs to all future street-related projects. For example, when applied to Lower Brant Street the resultant costs are as follows:

**Table 3: Cost Estimates for Lower Brant Street – Concrete paving vs. unit pavers**

	<b>Total Cost</b>	<b>Difference</b>
<b>Concrete paving <i>Option 1</i></b>	\$533,819.18	-
<b>Concrete unit pavers <i>Option 2</i></b>	\$1,301,508.18	+\$767,689

**Note:** the total costs exclude costs for installation of curbs and gutters, soft landscaping and site furnishings

Given the above, staff conclude that it would not be cost effective to use unit pavers throughout the downtown.

Staff are not recommending the use of unit pavers within the clear path zone throughout the downtown.

Notwithstanding the above, staff continue to support the strategic use of decorative pavement, including unit pavers, within the downtown as a component of any redesign scheme since they can add a positive place-making element to future projects for public spaces and stretches of the downtown street network such as a flexible or shared street.

#### **A Note on Permeable Pavers**

Staff will continue to consider life cycle costs for permeable pavers. However, at present there are few reliable sources and thus information on permeable pavers is proving difficult to find. Notwithstanding, staff are confident in stating that the order of magnitude increase would be much greater than traditional unit pavers due to the difference in construction and need for increased maintenance to ensure the pavers drain properly and not create issues of flooding or icing.

Additionally, staff would highlight that the Downtown Streetscape Guidelines does make provision for permeable pavers throughout the downtown in future comprehensive road redesigns. Though it does not recommend the high-volume use of them for the reasons noted above. Furthermore, it is anticipated that the new Stormwater Design Guidelines (and subsequent standards) will present opportunities to use this and other stormwater management techniques to enhance water quantity and quality strategically throughout the downtown.

### **Additional Commentary:**

To clarify the scope of the project and the role of design guidelines this section will provide some additional commentary with respect to the general nature and purpose of design guidelines.

Design guidelines are intended to provide additional guidance that should be used to guide all future decision-making processes related to private and public investments, the preliminary and detailed engineering design phases of planned or future street-related capital improvement projects (i.e. road reconstruction, main street revitalization), and the development application review process. Design guidelines, however, should not be misinterpreted as a comprehensive planning document in and of themselves, especially in this case. They may also contain guidelines and illustrative examples that are intended to demonstrate aspirational goals or targets that may or may not ultimately be achievable due to various constraints.

---

### **Financial Matters:**

Refer to report PB-50-19

---

### **Connections:**

The Guidelines align with the key strategic directions set out in Burlington's Strategic Plan and connect to various approved documents and ongoing initiatives, particularly the scoped re-examination of the adopted Official Plan, Interim Control By-law study, and the delivery of the Integrated Mobility Plan. Moreover, it is important to note that the Guidelines are intended to be a living document that will be continually edited and updated to evolve with the downtown yet still provide predictability for short-, medium-, and long-range planning and investments.

If approved, the Guidelines will signal the City's commitment to investment in the downtown public realm that will improve the success of small business, including local tourism, and delivery of safe and pedestrian-friendly streets as well as a commitment to design excellence. Accordingly, the recommendations contained in the Guidelines will lead to renewed streetscapes throughout the Downtown that will require a sustained need for enhanced levels of service and corresponding financial resources.

### **Public Engagement Matters:**

Staff hosted several public consultation sessions over the course of 3 years, including a public workshop, 2 open house drop-in sessions, an online survey, and a dedicated web page. Print and social media were used to advertise these community engagement opportunities.

---

### **Conclusion:**

The update to the Downtown Streetscape Guidelines are needed to help plan, design, and implement future streetscape improvements throughout the downtown. This report recommends approval of the Downtown Streetscape Guidelines.

---

Respectfully submitted,

Todd Evershed, MCIP RPP

Urban Designer

905.335.7600 x 7870

### **Appendices:**

- A. City of Burlington Downtown Streetscape Guidelines (July 2019)

### **Report Approval:**

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.