



OAKVILLE

REPORT

PLANNING AND DEVELOPMENT COUNCIL MEETING

MEETING DATE: FEBRUARY 13, 2017

FROM: Engineering and Construction Department

DATE: January 19, 2017

SUBJECT: Lakeshore Road Reconstruction and Streetscape Project,
Streetscape Furniture Selections

LOCATION: Downtown Oakville

WARD: Multiple Wards: 2 & 3

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RECOMMENDATION:

1. That the preferred streetscape material selections for the Downtown Oakville Streetscape Master Plan, as detailed in the report from the Engineering and Construction department, dated January 19, 2017, be approved;
2. That *3000 Kelvin* colour temperature LED fixtures be utilized for all decorative streetlights within the Downtown Oakville commercial district; and
3. That *3000 Kelvin* colour temperature LED fixtures also be utilized for decorative streetlights along the historic main streets of the other town commercial districts; namely:
 - a. Kerr Street within the Kerr Village commercial district;
 - b. Lakeshore Road West and Bronte Road within the Bronte Village Commercial District.

KEY FACTS:

The following are key points for consideration with respect to this report:

- Council previously approved the Downtown Transportation and Streetscape (DTS) study which included a streetscape masterplan for all downtown streets and also approved moving forward with the Lakeshore Road Reconstruction and Streetscape Project, based on the DTS study recommendations
- The engineering design phase of the Lakeshore Road Reconstruction and Streetscape Project generated significant public feedback and a request to reconsider the contemporary theme recommendation of the DTS study.
- Council directed staff to recommence public engagement process to gather additional input on furnishing theme choices (either traditional, contemporary or classic)

- Staff relaunched the public engagement process in the fall of 2016 and the traditional furnishing theme was clearly preferred. The traditional theme was approved by Council in October 2016.
- Staff continued with the second phase of the public engagement process in December of 2016 in order to select specific furnishing choices under the approved traditional theme
- The public engagement process also included options for a bridge railing style for the Lakeshore Road Bridge
- Staff also undertook a pilot project in order for the public to provide feedback on LED fixture colour choices (*3000 Kelvin vs 4000 Kelvin*) for downtown streetlights.
- Staff reported to the Heritage Oakville Advisory Committee and requested a permit for the selected furnishings - the minutes to the meeting are included in Council's agenda package.
- Staff will be reporting back separately on flexible street options for Lakeshore Road later in 2017.

BACKGROUND:

The Downtown Plan, launched in late 2013, was comprised of two studies: the Downtown Cultural Hub (DCH) study and the Downtown Transportation and Streetscape (DTS) study. Both studies were undertaken concurrently to coordinate public engagement and collaboration opportunities.

The DTS study component of the Downtown Plan reviewed traffic and roadway conditions within downtown Oakville and it presented options to enhance the roadways, beautify streets, improve pedestrian/cycle mobility and to revitalize Towne Square.

As a result of feedback received during earlier public engagement sessions, Council, at its meeting of July 25, 2016, passed a motion directing staff to:

- Relaunch a public engagement process in the autumn of 2016 with traditional, classical and contemporary furniture options — streetlights, benches, bike rings and bollards
- Move forward with granite pavers/curbs and waste receptacles.
- Develop options for Lakeshore Road that would provide, in whole or in part, a flexible (curbless) street.
- Report back in early 2017

As per Council's direction, staff relaunched the public engagement process. The first phase of the process commenced in September 2016, to seek feedback on a preferred style (traditional, contemporary or classic) for the streetlights, benches, bike rings and bollards in downtown Oakville.

In October 2016, staff reported the results of the first phase of the engagement process and recommended a traditional theme for downtown furnishings. The report is attached as Appendix B to this report. Council approved the recommendation and directed staff to move forward with the second phase of the public consultation to select the individual furniture pieces to suit the traditional theme (streetlights, benches, bike rings and bollards).

In addition, Council directed staff to review LED fixture colour temperature for downtown streetlights, specifically *3000 Kelvin (K) vs 4000 Kelvin (K)*. The light colour produced by both fixture types are different; *4000K* LED fixtures produce light that is closer to the daylight spectrum (white) whereas *3000K* fixtures produce light that can be described as more 'yellow' in colour. In response, staff followed up with Council (via an information memo dated October 25, 2016) on a plan to conduct a pilot project along a block of Lakeshore Road in the downtown core (Navy Street to Thomas Street) where *3000K* fixtures were retrofitted onto the existing streetlight poles on the south side, and *4000K* on the north side. The intent was to solicit feedback by providing the public an opportunity to see the differences between the two colour temperatures.

The purpose of this report is to present the results of the second phase of the re-launched public engagement process for the street furnishings (streetlights, benches, bollards and bike rings), bridge railing and LED fixture colour temperature.

COMMENT/OPTIONS:

Public Engagement Process:

As per Council's direction, staff undertook the second phase of the public engagement process in December 2016, to seek feedback on the selection of the traditional furniture selections (streetlights, benches, bike rings and bollards) and also on a preference between *3000K* and *4000K* LED streetlight fixtures.

In addition, the second phase of the public engagement process was also used to solicit feedback on two other items:

1. A preferred colour for streetscape furnishings.
2. A railing style for the Lakeshore Road bridge

The purpose of the engagement process was to obtain feedback on specific pieces of traditional-style furniture. Two options of each bike ring, bollard, bench, and street light style, were presented to the public. An online survey that included a photo gallery of materials options was launched on December 5, 2016.

The online site provided interested stakeholders an opportunity to select their preferred furniture pieces as well as select their preference for furniture colour, LED light colour temperature, and railing to be used on the Lakeshore Road Bridge. The public was also given the opportunity to provide comments on the presented furniture pieces until December 23, 2016.

A Public Information Centre was also held at town hall on Thursday, December 8, 2016. Staff provided display boards featuring sample furniture photos representing each furniture piece as well as actual samples of each material – bench, bike ring and bollard, at the meeting which gave the public an opportunity to sit on the benches and see the materials in person. Staff then asked visitors/residents to select the pieces they preferred.

In addition to the online photo gallery and survey, a sample of each bench, bike ring and bollard was also installed within Towne Square. Signage was also included which explained the project and gave the public an opportunity to sit on the benches and review the materials in downtown Oakville. Materials were installed on December 5, 2016 and were left in Towne Square until December 23, 2016.

The public were also provided two choices for furnishing colour that staff believed was most appropriate to suit a traditional theme; graphite black and moss green.

Three railing options for the Lakeshore Road Bridge were also provided to the public. Two of the options have been used on existing bridges in Oakville (Smith Triller Viaduct over Sixteen Mile Creek, Rebecca Radial Bridge over Bronte Creek and Dundas Bridge over Sixteen Mile Creek). The third option was taken from a recent project in Toronto (Strachan Ave).

Communications promoting the engagement opportunities began as soon as the online photo gallery was launched. This included communication to the downtown BIA and the resident associations, newspaper advertisements, eNewsletter articles, digital screens, media release, web updates, and social media posts.

In order to specifically promote the LED pilot, signage was installed at both ends of the test block explaining the LED pilot as well as directing the public to the website to provide feedback. The LED fixtures were installed during and available for the public to review between December 5 and December 23, 2016.

A photo gallery for each of the options presented to the public is included in Appendix A of this report.

Public Engagement Results (PIC, Online, Emails and BIA):

The public meeting resulted in 29 responses for preferred furnishings (including colour), LED colour temperature and bridge railing. The online survey resulted in 541 responses for preferred furnishings, theme colour and LED colour temperature type. Several emails were also received on LED colour temperature preference. There were 242 separate online responses relating to the bridge railing options.

The Downtown BIA also carried out their own survey of their members and their results (29) have also been included in the responses below. The BIA has been advised of this report and the meeting date and they have indicated they would be delegating to Council.

It should be noted that some responses did not include a preference for all of the items.

The results are as follows (overall preferred choice in **bold**)

Benches (597 responses):

- Landscape Forms Plainwell Bench 218 (36.5%)
- **Maglin MLB310 Bench** 379 (63.5%)

Bike Ring (589 responses):

- **Maglin MRB200** 453 (77.0%)
- Maglin MRB500 136 (23.0%)

Bollard (594 responses):

- HCI B602 290 (48.8%)
- **Maglin MTB100** 304 (51.2%)

Light Standard Style (595 responses):

- **Acorn Style pole to match existing** 432 (72.6%)
- Pendant style roadway and pedestrian light 163 (27.4%)

Furniture Colour (596 responses):

- **Graphite Black** 426 (71.5%)
- Moss Green 135 (22.7%)
- No Preference 35 (5.8%)

LED Light colour temperature Type (615 responses):

- **3000K** 302 (49.1%)
- **4000K** 93 (15.1%)
- **No Preference** 220 (35.8%)

Bridge Railing (268 responses):

- Bridge Railing Option 1 4 (1.5%)
- Bridge Railing Option 2 95 (35.4%)
- **Bridge Railing Option 3** 169 (63.1%)

Lakeshore Road Bridge Railing:

The public clearly preferred railing option #3 (the railing used on the Strachan Ave Bridge in Toronto). Staff were only seeking input on the railing style.

The engineering consultants have recommended an outer parapet/railing height of 1.37m (measured from finished sidewalk elevation to the top of the railing). The proposed railing is higher than the existing parapet railing height of approximately 1.1 m.

There were some concerns expressed in a very limited number of responses (4) regarding the proposed bridge railing height. The Canadian Highway Bridge Design Code specifies the minimum parapet/railing heights for facilities that have both pedestrians and cyclists to be a minimum of 1.37m in height.

While dedicated bike lanes are provided on the bridge within the road platform (outside of the sidewalk facility), young cyclists, under bylaw, are permitted to use the sidewalk and would likely be accompanied by their parent(s)/adults. Further, it is our experience that some adult cyclists will use the sidewalk (contrary to our bylaw).

Based on this reality, the consultant has taken a conservative approach for the proposed bridge railing height in order to protect for the possibility of cyclists on the sidewalk and is recommending the Canadian Highway Bridge Design Code requirement of a 1.37 m high parapet/railing to protect for both pedestrians and cyclists. Staff support the consultant's recommendations as it reduces liability for the town and provides a higher level of protection/safety. The trend in bridge design is to provide for a higher railing height. For example, the MTO's recent rehabilitation of the Trafalgar Road QEW Overpass included the retrofit to a 1.37 m high outer parapet wall on the structure.

Streetlight Pole/Fixture Selection:

There was a clear preference for the existing streetlight pole and acorn fixture styles. The town can address this preference in two ways:

1. Refurbish existing poles and retrofit new acorn LED fixtures
2. Supply and install new poles and acorn LED fixtures to match existing styles.

As the engineering design phase continues for the Lakeshore Road Reconstruction and Streetscape project, the project team will undertake a feasibility study to determine the costs of refurbishing the existing poles compared to new poles. The feasibility study will be looking at life cycle analysis, pole attachments and the logistics of storing and refinishing of the existing poles - this will be used to establish a cost comparison to new poles/fixtures. This analysis will be provided at the time of the final engineering drawing presentation and a recommendation will be provided on which option to proceed with.

It should be noted that there are not enough existing streetlight poles in the downtown to meet the current lighting design criteria – so if the recommendation is to recycle and re-use the existing poles, there will still be a need to acquire some new poles to match existing.

LED Fixture Colour Temperature

In 2015, Council approved a program to convert all Oakville streetlights to LED technology. LED fixtures provide more efficient lighting and can provide savings of over 40% compared to existing high pressure sodium light fixtures.

The town's standard for LED fixture colour temperature is *4000K*. This standard provides optimal luminance for safety and security. Most municipalities have adopted a *4000K* standard for streetlights.

The Roads and Works Operations Department has been converting streetlight fixtures throughout the town based on the standard and to date all “cobra” and ‘square’ style light fixtures throughout town have already been converted to LEDs. The conversion of decorative fixtures throughout the town is planned for 2017.

The pilot project resulted in a clear preference for *3000K* colour temperature LED fixtures for streetlights within the historic downtown commercial district. Comments received indicated they provide a “warmer” and more pleasing ambient colour for pedestrians. *3000K* fixtures can be used to provide the appropriate illumination levels along the roadway; however, they are less efficient and will use approximately 10% more energy than *4000k* fixtures. There are no health effect differences for using either colour temperature for street light purposes.

Staff note that pedestrians within our commercial districts typically walk on boulevards with zero frontage clearances to store fronts. Pedestrian levels are generally high in our commercial districts and light spillover from store fronts onto the boulevards is a common occurrence. For these reasons, the difference in optical performance is negligible when comparing the two colour ranges. Therefore, staff are not opposed to the use of 3000K LED fixtures on decorative streetlight poles within the historic Downtown Oakville commercial district. The fixture style would be the acorn type.

Further, in order to provide some consistency between commercial districts in the town, staff believe 3000K LED fixtures would also be acceptable where similar conditions exist as in the downtown such as the historic “main” streets in both the Kerr Village and Bronte Village commercial districts where decorative streetlight poles exist. Specifically, the roads affected would be:

- Kerr Village Commercial District: Kerr Street. Note, Lakeshore Road West through Kerr Village does not have decorative poles. The existing “cobra” head fixtures have already been replaced with 4000K LED fixtures.
- Bronte Village Commercial District: Lakeshore Road West and Bronte Road

Roads and Works Operations will be undertaking the conversion of existing decorative high pressure sodium fixtures to LED in 2017, including those fixtures in the commercial districts. However, staff will be reviewing the merit of deferring the conversion of the Lakeshore Road fixtures in Downtown Oakville with the impending road construction project starting in 2019/2020.

Flexible Street Options for Lakeshore Road, In Whole or in Part:

The commitment to undertake and complete the public engagement process for streetscape furnishing selections in time to meet the Lakeshore Road Bridge Project schedule was significant. Staff will be undertaking a separate engagement process on the flexible street options and will be reporting back to Council prior to finalizing the road design.

Heritage Oakville Advisory Committee:

A report and presentation was provided to the Heritage Oakville Advisory Committee at its meeting of January 31, 2017, regarding the results of the furnishing selections, and a request for a heritage permit was made. The minutes of the Heritage Oakville Advisory Committee are included in Council’s agenda package.

Next Steps:

Upon Council's approval of this report, staff will begin incorporating the recommended selections into the Lakeshore Road Reconstruction and Streetscape Project as the engineering design phase continues. These selections will also be included and incorporated into the Lakeshore Road Bridge Reconstruction which is underway. In addition, these selections will be incorporated into the DTS Masterplan and used as other roads in the downtown are reconstructed.

Staff will be working to further develop flexible street options for Lakeshore Road in the spring of 2017 and will launch a separate public engagement process. Staff will be reporting back to Council later in 2017.

CONSIDERATIONS:**(A) PUBLIC**

The public and BIA have been made aware of this report and the Council meeting date.

(B) FINANCIAL

The construction budget for the Lakeshore Road Reconstruction and Streetscape Project has been included in the town's capital forecast (2019-2020). The engineering budget for the project was previously approved in a prior year's budget. The construction budget for the Lakeshore Road Bridge is approved as part of the 2017 capital budget.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

Roads and Works Operations, Parks and Open Space and Planning have been involved in the furnishing selection process and have reviewed this report.

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- enhance our economic environment
- continuously improve our programs and services
- provide outstanding service to our residents and businesses
- be accountable in everything we do
- enhance our cultural environment
- enhance our social environment

From: Engineering and Construction Department

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(E) COMMUNITY SUSTAINABILITY

The Lakeshore Road Reconstruction and Streetscape project addresses all the pillars of sustainability; linkages between streets, business, promotes social, improving active transportation promotes environmental, the vibrancy of the downtown promotes economic and the link to the DCH promotes the cultural pillar of community sustainability.

APPENDICES:

Appendix A - Photo Gallery of Options

Appendix B - Staff Report to PD Council Meeting of October 3, 2016.

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