



MEMORANDUM

TO: Heritage Markham Committee

FROM: Regan Hutcheson, Manager-Heritage Planning

DATE: October 11, 2023

SUBJECT: SPECIAL PROJECTS
UNIONVILLE MAIN STREET STREETSCAPE – DETAILED DESIGN STAGE-
LIGHT POLES

Project: Unionville Main Street Streetscape – Detailed Design Stage

Issue: Selection of Street Light Poles

- a) Main Street commercial area
- b) Main Street residential area (Hwy 7 – railway)
- c) East Lane

Background:

- **Master Plan:** The City of Markham undertook the **Main Street Unionville Commercial Core Streetscape Master Plan 2021 -Study** between 2018 and 2022. The study was received by Markham Council and endorsed in principle as the guiding document for streetscape improvements and treatment. On March 8, 2022, Council endorsed the Main Street Unionville Revitalization Project with an estimated Capital Cost of \$10,460,000.00, including enhanced streetscape treatment (stone pavers to be used for sidewalks, boulevards, parking bays and on the street).
- **Detailed Design Phase:** The City (Engineering) has retained consultants to undertake the detailed design stage of the Unionville Main Street Streetscape Project. Currently, the detailed design work is at the 90% stage and a number of public consultations have occurred. Two members of Heritage Markham are on the Advisory Committees Working Group
- **Project Area and Scope:**
 - New sidewalk, boulevard and road surfaces, as well as streetscape improvements on Main Street between rail track and Carlton Road.
 - Underground infrastructure improvements to watermains and storm sewers
 - Lighting, landscaping and parking arrangement on East Lane
 - New heritage-complementary streetlight system from Highway 7 to Carlton Road and on East Lane

- **Consultation with Heritage Markham Committee:**
 - The Master Plan indicated that Heritage Markham Committee would be consulted on specific design features to ensure they are compatible with the goals, objectives and policies of the Unionville Heritage Conservation District Plan. These would include surface treatments, lighting, wayfinding infrastructure and historical interpretation as they are considered alterations in a heritage conservation district.
 - Heritage Markham previously provided comment on proposed surface pavers.

Status/ Staff Comment

- Heritage Staff have been working with the Project Consultants and other City staff on the selection of appropriate light poles that will be used both in the commercial core area, East Lane, on a small portion of Fred Varley Drive and on Main Street in the residential area between Highway 7 and the railway tracks.
- Guidance was provided in the Master Plan document regarding appropriate street lighting design and the concept of public Wifi (see Appendix 'B')
- Selected Light Pole (See Appendix 'A')
 - Staff has recommended the same pole design as was used on Main Street in Markham Village for design consistency in our heritage conservation districts.
 - Simple pole (125 mm diameter) and base with a top mounted lantern (as per current pole based on historic precedent)
 - Main Street Unit
 - Height of Pole – 3.2 m
 - Lantern – top mounted on pole, lantern with polycarbonate clear lens
 - Material – Cast Aluminum Alloy Luminaire, Steel Pole
 - Colour – black
 - Light Intensity – 40 to 60 watts – 3000K Colour Temperature, Average horizontal illuminance level around 15 to 20 lux
 - Banner Arms – single side banner arm
 - Flower Planter Arms – yes
 - Upper Electrical Box – yes
 - Lower Electrical Box – yes

Note Street Lights on Main from Hwy. 7 to Railway do not have flower pot hangers, banner arms, electrical box or Wifi aperture

- East Lane Unit
 - Height of Pole – 5.5 m (added height to address width of parking and lane)
 - Lantern – top mounted on pole, lantern with polycarbonate clear lens
 - Material – Cast Aluminum Alloy Luminaire, Steel Pole
 - Colour – black
 - Light Intensity – 40 to 60 watts – 3000K Colour Temperature, Average horizontal illuminance level around 15 to 20 lux
 - Banner Arms – No
 - Flower Planter Arms – No
 - Upper Electrical Box – No
 - Lower Electrical Box – No
- Feature of Note –Wifi Infrastructure

- See proposed infrastructure depicted on the street light pole illustration.
- Size of Unit: 259mm x 233mm x 81mm (10.2in x 9.2in x 3.2in)
- Staff indicated that: 1) prefer not to have these units attached to the light poles at all as they do intrude on the historic character of the pole; and 2) if these units are to be installed, the revised unit seem less intrusive especially as there will be a banner next to it. Colour should match the pole (black). This design uses an AP with an internal antenna to eliminate a second unit on the backside (a previous concept that was reviewed) and the CISCO Access Point being used does come with an optional cover that can be painted. This is much less obtrusive than the white units staff initially reviewed. If considered acceptable, the consultant will have this finalized and included in their specifications for lighting (wifi equipment would come after the fact but would be accommodated on the pole).

Suggested Recommendation for Heritage Markham

That Heritage Markham Committee receive the update on the Unionville Main Street Streetscape Project – Detailed Design regarding light poles and WiFi infrastructure.

And That Heritage Markham Committee has no objection from a heritage perspective.

Appendices

Appendix A- Proposed Light Standard

Appendix B – Material from the Master Plan

Appendix C – WiFi Box Illustration

File:

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Study Area



Appendix A- Light Pole



Appendix B

Material from the Master Plan

5.4 Heritage Markham Committee

The streetscape study including a review of the options were presented to the Heritage Markham Committee on March 13, 2019 to obtain feedback from a heritage perspective as the study area is within the Unionville Heritage Conservation District.

The Committee expressed a preference for Concept 2 related to the road alignment with a preference for 2.0m sidewalks with the larger boulevard on the east side, in order to eliminate parking opportunities and driveway conflicts on the west side and allow delivery opportunities on the east side boulevard (without blocking traffic).

The Committee also offered general comments on streetscape features:

- A desire to not over-design the street;
- Enhance pedestrian/village experience;
- Consider wooden poles versus metal banner poles
- Disguising electrical control boxes (serviceable but not visible)
- Making the street more winter friendly;
- Appropriate/traditional lighting (colour temperature, direction and projection);
- Desire for, and treatment of, new trees;
- Consider a more ambitious approach with regard to better quality materials (both placement and use) while considering operational and maintenance requirements.

6.2 Streetscape Components and Elements

Street Lighting

- Current lights in Commercial Core are dated and not performing to identified standards.
- New light standards should meet energy and dark sky requirements, and be LED in accordance with City sustainability initiatives.
- A lantern style fixture top-mounted on a pole is suggested to reflect the former lighting used in the village. A black colour is suggested.
- Any new light fixture on Main Street should include provisions for electricity for festival/special event users, accommodate banner arms and a cross-bar for hanging planters.
- All light poles on Main Street should have power receptacles at the appropriate location for energizing seasonal decorations.
- The same light fixture to be introduced on Main Street should also be used on the East Lane right-of-way.
- The final new design should be determined through community consultation including Heritage Markham Committee

WiFi/5G

- Consider opportunities to incorporate infrastructure for future Smart City pilot initiatives.
- On-street WiFi with the upgraded street lighting fixtures and poles can be accommodated utilizing 'Meraki' type outdoor wireless devices.
- Empty conduit under Main Street for future 5G infrastructure and wiring should be considered at detailed design.



Appendix C

WiFi Box

AP Paintable Cover Kit

You can install a cover C9124-CVR1= and paint these covers to match the remote cabled antennas, the shield may need to be in

Figure 21. AP with Paintable Cover Kit

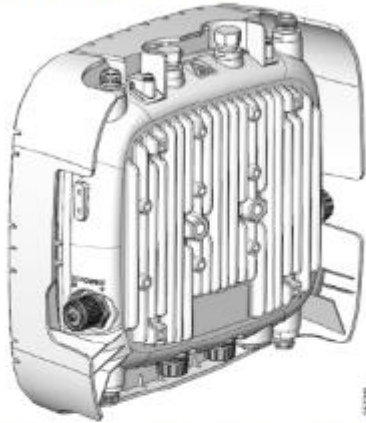
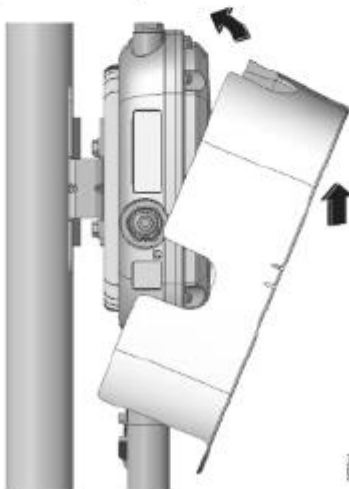


Figure 22. Installing the AP Cover on an Installed AP



Procedure

access points, resilient, secure, and intelligent

