

Report to: General Committee Meeting Date: November 29, 2021

SUBJECT: 201-S-21 Automated Material Handling Equipment for Milliken

Mills, Unionville and Thornhill Community Centre Libraries

PREPARED BY: June Fry, Ext 2539

Sugun Rao, Ext 4868

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RECOMMENDATION:

1. THAT the report entitled "201-S-21 Automated Material Handling Equipment for Milliken Mills, Unionville and Thornhill Community Centre Libraries" be received; and

- 2. THAT staff be authorized to award a contract to Bibliotheca Canada Inc. for Milliken Mills Branch for one (1) flex AMH System 5-bin sorter with one (1) patron return and one (1) staff induction station in the amount of \$177,321.67 (including freight, installation, training and HST impact); and,
- 3. THAT staff be authorized to award a contract to Bibliotheca Canada Inc. for Unionville Branch for two (2) self-check kiosks and Thornhill Community Centre Branch for two (2) self-check kiosks and one (1) flex AMH System 9-bin sorter with one (1) patron return and one (1) staff induction station in the amount of \$308,424.01 (including freight, installation, training and HST impact); and,
- 4. THAT the tendering process be waived in accordance with Purchasing By-Law 2017-8, Part II, Section 11.1 (b) Non Competitive Procurement, "Where there is only one source of supply for the goods to be purchased; and,
- 5. THAT the capital costs for Milliken Mills Branch be funded from capital project 20139, Milliken Mills Community Centre Lobby Enhancement, GL account 500-101-5399-20139, which has an available budget of \$280,000.00; and,
- 6. THAT the remaining budget in the amount of \$102,678.33 (\$280,000.00 \$177,321.67) shall remain in the capital project 20139, Milliken Mills Community Centre Lobby Enhancement, to fund the budget shortfall of the construction works required for the Milliken Mills Community Centre Lobby Enhancement via separate procurement process RFT 133-T-21; and,
- 7. THAT the capital costs for Unionville Branch and Thornhill Community Centre Branch be funded from capital project 20282, ITS Library Bibliotheca (3M), GL account 049-6150-20282-005, with an available budget of \$465,043.20; and,
- 8. THAT the remaining budget in the amount of \$156,619.19 (\$465,043.20 \$308,424.01) remain in the project budget 20282, ITS Bibliotheca (3M), to fund the media lab equipment at Thornhill Community Centre Branch; and,

- 9. THAT the net operating impact for maintenance cost of \$13,872.49 inclusive of HST be charged to the ITS Computer Hardware Acct #400-404-5460 following the expiry of the one year warranty period (mid 2023), which will be addressed during the 2023 operating budget process
- 10. THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to obtain approval to award the contract 201-S-21 Automated Material Handling Equipment for Milliken Mills, Unionville and Thornhill Community Centre Libraries.

BACKGROUND:

In October 2015, Bibliotheca Canada Inc. acquired the 3M Library Systems business (including 3M Canada Company), with the intention of creating a single library-focused business dedicated to the delivery and support of security gate, sorter, self-check and staff RFID technologies that are used by the library.

Since 2001, library staff have sourced library equipment from 3M Canada Company every year.

In 2009, the City issued a request for quotation on behalf of the Markham Library for the provision of two (2) 7420 RFID/Barcode enabled self-check units from 3M Canada Company for the Thornhill Community Library. The bid was released to the market and closed with only one (1) submission from 3M Canada Company. Of the proponents that picked up the bid document but did not submit a bid, it was advised either they could not supply the commodity or integrate with the current system. One supplier advised that their library business was sold to 3M Canada Company and they were unable to comply with the City's requirements.

Rationale for Non-Competitive Award

Based on the feedback received and further research undertaken, it was determined that Bibliotheca Canada Inc. is the only supplier that could supply compatible equipment that integrates seamlessly with our existing 3M hardware and software. Some of the benefits to use their technology includes:

- Full compatibility with existing our hardware, software and Integrated Library System.
- Consistency in provision of service and familiarity with use of the same equipment at all locations for both customers and staff.
- Switching to a different vendor is cost prohibitive as existing RFID tags, and equipment would all have to be replaced.
- 3M/Bibliotheca equipment has proven to be reliable and user-friendly. In the occasional
 event of breakdown, service response both with respect to response time and problem
 resolution has been excellent to date.
- At this moment there are no other providers that can supply equipment which is compatible with the tags and other equipment from 3M Canada Company.
- Since 2009, sorter equipment has been procured for the Cornell, Markham Village and Aaniin Library.

Sorters – Driving Efficiency

Sorter technology is fundamental to Markham Public Library's position as one of the most efficiently operated public library systems in Canada. Sorters reduce the need for material handling by staff by automating the process of checking in and sorting returned items. When library items are returned through the sorter, the sorter places the items into predetermined bins (based on shelving location within the library). Staff then empty the contents of the bins onto carts and arrange them based on the call number affixed to the item, making them ready for shelving. This process reduces the turnaround time for re-shelving, ensuring that items get into the hands of customers faster. This improves resident access to library materials, increases usage, and delivers a higher ROI on municipal budgets for library materials. With time saved sorting items coming off the sorter, staff can be deployed to the delivery of higher-value services, including promotion, outreach, educational programs and support for literacy, including Science, Technology, Engineering and Mathematics (STEM) and digital literacy. In addition to more convenient and efficient automated return and check-in of library materials, users will experiencer shorter queues at the service desk and improved access to staff support.

OPTIONS/ DISCUSSION:

The Milliken Mills Community Centre Lobby Enhancement Project included repurposing library space to include a sorter room for the Milliken Mills Branch. Early stages included a plan to convert men's and women's washrooms to one universal one and the exact dimensions of the available sorter space was unknown. The sorter budget was based on the last one purchased at the Aaniin branch with an 11 bin sorter. Based on the final size and layout of the room, the recommended equipment to purchase is a 5-bin sorter with a patron return and a staff induction station. This technology offers the community the opportunity to experience the same customer service standards that are already in place at most of our branches.

In addition to adding a sorter to Milliken Mills, regular life cycle replacement of self-service equipment at Thornhill Community Centre (1 sorter and 2 self-check machines) and Unionville (2 self-check machines) library branches were set for 2020. This project was deferred to 2021 due to the pandemic.

Library customers have readily embraced and are accustomed to using self-service technology in all MPL branches. Automated self-check-in technology permits customers to return their own Library materials and receive a receipt confirmation of their returns. Automated self-checkout technology allows customers to check out their library items using an automated kiosk. This technology improves customer service through reduced wait times, as people no longer have to wait for staff to manually check in or out their materials.

Circulation of materials in Markham has remained high relative to comparator municipalities over the past number of years. MPL leads our comparator libraries, in the GTHA (including Vaughan, Richmond Hill and Toronto), in borrows and visits per capita. In 2019, MPL had a total circulation of 5.6 million borrows, an increase of 3% over the year prior. Of these materials borrowed, approximately 85% of check-outs and check-ins were done through the library's automated self-service machines.

In general, there is strong public demand for physical materials across the public library sector, and this trend is anticipated to rebound in the post-pandemic environment. Customer surveys indicate that users view library materials as the most important aspect of public library services

FINANCIAL CONSIDERATIONS

The cost of award includes the following components:

- **Milliken Mills Branch** Cost for the initial acquisition of new hardware equipment (inclusive of freight, installation, and training), as follows: one (1) flex AMH System 5-bin sorter with one (1) patron return and one (1) staff induction station.
- Unionville and Thornhill Community Centre Branches Cost for replacement hardware equipment (inclusive of freight, installation, and training), as follows: four (4) self-check machines (2 for Unionville and 2 for Thornhill Community) and one (1) 9-bin sorter with one (1) patron return and one (1) staff induction station for the Thornhill Community Centre Branch.
- Milliken Mills, Unionville and Thornhill Community Centre Branches Recurring operating costs for maintenance services.

Capital Costs

The cost for initial acquisition and replacement of hardware equipment (inclusive of freight, installation, and training) is \$485,745.68 (\$177,321.67 Milliken Mill Branch + \$308,424.01 Thornhill and Unionville Branches), inclusive of HST impact. These costs will be funded from Capital Project 20139, Milliken Mills Community Centre Lobby Enhancement, and Capital Project 20282, ITS – Bibliotheca (3M), with a combined available budget of \$745,043.20 (\$280,000.00 + \$465,043.20).

Project	Amount	
20139 - Milliken Mills Community Centre Lobby		
Enhancement	\$280,000.00	(A)
20282 - ITS – Bibliotheca (3M)	\$465,043.20	(B)
Budget Available	\$745,043.20	(C)=(A)+(B)
Acquisition of Hardware Equipment (inclusive of freight, installation, and training) Milliken Mills Library Branch Unionville and Thornhill Community Centre Branches Total Capital Costs	\$177,321.67 \$308,424.01 \$485,745.68	(D) (E) (F)=(D)+(E)
Budget Remaining	\$259,297.52	(G) = (C)-(F)

The \$259,297.52 budget remaining of is from two sources: \$102,678.33 (\$280,000.00 – \$177,321.67) from project 20139, Milliken Mills Community Centre Lobby Enhancement and \$156,619.19 (\$465,043.20 – \$308,424.01) from project 20285, ITS – Bibliotheca (3M).

The \$102,678.33 budget remaining from project 20139 - Milliken Mills Community Centre Lobby Enhancement, is a result of purchasing a 5-bin sorter compared to the 11-bin sorter included in the

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budget. This amount will remain in project account to fund the budget shortfall of the construction works for the Milliken Mills Community Centre Lobby Enhancement via separate procurement process RFT 133-T-21. The report for the construction award is also on the November 29, 2021 General Committee.

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In addition, the overall project budget for 20282 - ITS – Bibliotheca (3M), includes funding for the media lab equipment at Thornhill Library in the amount of \$156,619.19 inclusive of HST, which shall remain in the project account to be awarded in the future via a separate procurement process.

Operating Costs

It is expected that the equipment will be installed in mid-2022 and a 12-month warranty will follow. New maintenance costs in the amount of \$52,007.21, inclusive of HST impact, for both new and replacement equipment will commence after the warranty period has expired, which is expected to be mid-2023. The current maintenance cost for the existing equipment at Thornhill Library and Unionville Library is \$38,134.71, inclusive of HST impact. The net operating impact in maintenance cost is \$13,872.49 and will be funded from GL account 400-404-5460 in mid-2023 following the expiry of the warranty and will be addressed during the 2023 operating budget process.

	2023 Budget Impact	
Current Annual Budget for Maintenance	\$ 38,134.71	(L)
2 nd Year Maintenance Cost	\$ 52,007.21	(M)
2023 Operating Budget Shortfall	\$(13,872.49)	(N) = (L) - (M)

The Life Cycle Reserve Study will be updated upon project completion.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not Applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Markham Public Library

RECOMMENDED BY:

Catherine Biss Morgan Jones

Chief Executive Officer Markham Commissioner, Community Services

Public Library

Trinela Cane Commissioner, Corporate Services

ATTACHMENTS:

None