

## **CITY OF VAUGHAN**

### **EXTRACT FROM COUNCIL MEETING MINUTES OF MAY 23, 2018**

Item 11, Report No. 5, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on May 23, 2018.

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#### **11     MOBILITY & DIGITAL TRANSFORMATION OF BUILDING INSPECTION SERVICES**

**The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Deputy City Manager, Planning and Growth Management, dated May 7, 2018:**

##### **Recommendations**

1.     THAT a 2018 capital project be created for the acquisition of digital resources to modernize building field inspection services, with a budget of \$260,000 inclusive of applicable taxes and administration recovery and funded from the Building Standards Service Continuity Reserve; and
2.     THAT the inclusion of this matter on a Public Committee or Council agenda with respect to amending the Capital Budget identified as “Mobility & Digital Transformation of Building Inspection Services” is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002, as amended.

Item:



## Finance, Administration and Audit Committee Report

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**DATE:** Monday, May 07, 2018

**WARD(S):** ALL

**TITLE: MOBILITY & DIGITAL TRANSFORMATION OF BUILDING  
INSPECTION SERVICES**

**FROM:**

Jason Schmidt-Shoukri, Deputy City Manager, Planning and Growth Management

**ACTION:** DECISION

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**Purpose**

To modernize the building inspection process, staff is seeking Council approval to create a 2018 capital project for the acquisition of digital resources to transition field inspection documentation from a manual to a digital method.

**Recommendations**

1. THAT a 2018 capital project be created for the acquisition of digital resources to modernize building field inspection services, with a budget of \$260,000 inclusive of applicable taxes and administration recovery and funded from the Building Standards Service Continuity Reserve; and
2. THAT the inclusion of this matter on a Public Committee or Council agenda with respect to amending the Capital Budget identified as "Mobility & Digital Transformation of Building Inspection Services" is deemed sufficient notice pursuant to Section 2(1)(c) of By-Law 394-2002, as amended.

### **Report Highlights**

- Mobile inspection solution will facilitate the instantaneous sharing of inspection results with office staff, and, in the future, building permit applicants through an online portal
- Mobile inspection solution will improve efficiency of the inspection process by eliminating double entry, improving data capture, reducing errors and, improved reporting and issuance of digital documents
- Digital transformation of the inspection process was noted as a future enhancement in the extract from Council Meeting Minutes from November 19, 2013; Item 3 AUTOMATION UPGRADES AND ENHANCEMENTS AMANDA COMPUTER SYSTEM BUILDING STANDARDS DEPARTMENT and is aligned with both the Digital Strategy and the Corporate Technology Strategic Plan

### **Background**

The City of Vaughan Building Standards Department (BSD) performs legislative duties and responsibilities on behalf of council. The BSD issues permits for the construction, renovation, demolition and re-zoning of buildings. It also issues building permits for the installation, alteration, extension or repair of onsite sewage systems, plumbing systems and mechanical systems such as heating, ventilation and air conditioning.

The Building Inspection Section of the BSD provides inspection services for all building-related construction, responds to Ontario Building Code complaints and inquiries, issues Building Code Act Orders and commences legal proceeding where necessary. The building code mandates inspection service levels and stages of construction that must be inspected. In 2017 the BSD performed over 41,000 inspections. 100% of those inspections were performed within legislative time frames with over 90% being performed within 24 hours, a service level standard that is expected and appreciated by industry stakeholders. Given the continued growth and development of the City and the increased volumes of building permits and inspections, digital modernization of inspection services is necessary to maintain service levels commensurate to the growth.

Currently, building inspectors manually record field inspection notes. These notes are then entered manually into AMANDA the following day. On a limited basis and where necessary, in-field hand written field inspections notes are given to customers. This manual method of documenting, transferring and sharing of inspection notes with customers creates inefficiencies and an administrative burden on our resources, and creates delays for our customers in getting timely information. Transitioning to a digital model of recording inspection documentation will be highly advantageous and result in improved service delivery.

Digital transformation is a key priority area for the City. Specifically, the following two focus areas of the Digital Strategy are relevant to this initiative:

*Focus 2: Citizens Can Do Business with The City Through Digital Channels; and*

#### *Focus 4: Internal Digital Transformation*

Digital transformation will also support the following Term of Council Priority:

*Invest, renew and manage infrastructure and assets*

To ensure that the BSD continues to meet both legislative and industry service level expectations, improve customer experience and provide enhanced service delivery consistent with the overall Digital Strategy (2017) and Corporate Technology Strategic Plan (2014) of the Corporation, the BSD is seeking to transition to digital method of recording in-field building inspection documentation.

#### **Previous Reports/Authority**

Extract from Council Meeting Minutes from November 19, 2013: Item 3 AUTOMATION UPGRADES AND ENHANCEMENTS AMANDA COMPUTER SYSTEM BUILDING STANDARDS DEPARTMENT Link:

[http://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Finance1104\\_3.pdf](http://www.vaughan.ca/council/minutes_agendas/AgendaItems/Finance1104_3.pdf)

Extract from Council Meeting Minutes from April 8, 2014: Item 1 CORPORATE TECHNOLOGY STRATEGIC DIRECTION Link:

[http://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Priorities0317\\_14\\_1.pdf](http://www.vaughan.ca/council/minutes_agendas/AgendaItems/Priorities0317_14_1.pdf)

#### **Analysis and Options**

The BSD is committed to maintaining inspection service levels during this time of rapid growth for the City. With major projects, currently being constructed and many more soon to begin construction, the BSD must find ways to effectively use available resources and leverage technology to find efficiencies in service delivery.

Information was collected on a potential mobile solution that could deliver efficiencies in inspection documentation and improve service levels. This review was finalized in Q4 of 2017. The proposed mobility & digital transformation includes the purchase of a mobile inspection app, server and Toughbook computers. Collectively, these digital solutions are estimated to deliver time savings of approximately 24 minutes per staff per day in data entry and up to a total of 48 hours a week across the department. These efficiencies would allow the department to more effectively use existing resources to deliver inspection services as inspection complexity and volumes continue to increase.

The LMCBO (Large Municipalities Chief Building Officials Organization) has partnered with Partho Technologies to develop a standardized mobile application, mobiINSPECT. Through this venture, a mobile app solution specifically tailored for building inspectors has been developed. This will standardize technology used by building inspectors in municipalities across Ontario, uniting building officials and providing an Ontario Standard for building inspection. This application updates the files in AMANDA, allows for the data collection on trends and issues to be shared with participating Ontario Municipalities, consolidates data storage and promotes a uniform application of the Ontario Building Code by participating Municipalities in the greater horseshoe area of the Province. Partho Technologies MobiINSPECT, developed in consultation with

LMCBO, is the sole solution providing this functionality. As a participating member in the LMCBO and a progressive department, the BSD will play an active role in future developments and enhancements to the app.

The digital transformation of building inspection documentation also consists of upgrading technology resources to enable inspectors to complete work remotely. Mobile technology is becoming increasingly important and helps the BSD address space constraints at City Hall. The BSD can maximize the building inspector's office space by creating a new plug-n-play desk arrangement. If approved, the proposal is to:

1. Replace building inspector's desktop computers with Toughbook computers,
2. Reconfigure the inspector's office area at City Hall and install docking stations,
3. Construct plug-n-play offices in select community centers across the City, and
4. Equip City owned building inspector's vehicles with Toughbook computer mounts.

When fully implemented, valuable office floor space at City Hall will be freed up for new BSD office staff.

The proposed technological upgrade provides multiple benefits of improved service delivery, enhanced customer satisfaction, continued modernization of services and efficient use of office space. Given these benefits and the timelines required for project implementation, it is proposed that the project commence as early as possible.

### **Financial Impact**

The estimated cost of implementing the building inspection services mobility & digital transformation project is approximately \$260,000 inclusive of applicable taxes and administration recovery. This figure includes one-time costs of purchasing and implementing the mobile inspection app, server, Toughbook computers, mobile devices and monitors for field inspectors.

It is recommended that a 2018 capital project be created with a budget of \$260,000 inclusive of applicable taxes and administration recovery to fund these one-time implementation costs. The capital project would be funded from the Building Standards Service Continuity Reserve.

The City will be entering into a *Software as a Service Subscription Agreement* for license and subscription of a proprietary software developed by Partho Technologies Inc. for LMCBO in alignment with Corporate Procurement Policy Section 19.4(h).

Ongoing annual operating costs would be approximately \$90,000 and include annual licensing costs for the mobile inspection app, additional licenses for the AMANDA software and cellular data costs for mobile devices. An operating budget adjustment would be required as part of a future annual budget process to incorporate these costs into the BSD's annual operating budget. As the BSD's operating budget is funded from

Building Permit fees or the Building Standards Service Continuity Reserve, the budget increase would not impact the City's property tax levy.

### **Broader Regional Impacts/Considerations**

N/A

### **Conclusion**

The City's Digital Strategy and Corporate Technology Strategic Plan envisions more choices for our citizens to engage with the City. If Council approves the recommendations, the BSD in collaboration with OCIO will move forward with the acquisition of digital resources in Q2, 2018. The digital transition of recording inspection documentation will provide efficiencies, support the BSD commitment to maintain service level, and make better use of office space at City Hall. This initiative will also set the ground work for an online portal to share inspection information with building permit applicants.

This report has been prepared in consultation with Office of the Chief Information Officer, Financial Planning and Development Finance and Procurement Services.

For more information, please contact: Ben Pucci, Interim Director of Building Standards, ext. 8872.

### **Attachments**

None

### **Prepared by**

Ben Pucci, Director of Building Standards, ext. 8872

Frank Di Palma, Chief Information Officer, ext. 8052

Item:



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