



INTERNAL AUDIT REPORT

Facility Management Audit

October 2019

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CONCLUSION AND SUMMARY

The Facility Management department has achieved several accomplishments over the last few years, including:

- Completing condition assessments on City owned facilities.
- Developing service level agreements to facilitate operational efficiency through collaboration.
- Strengthening the City of Vaughan's commitment to environmental stewardship through innovative energy reduction initiatives and sustainable practices.

While the department has made significant progress on several initiatives over the past number of years, further improvements will be required to ensure risks related to the execution of the City's facility maintenance activities are efficiently and effectively mitigated, while better supporting the City's strategic plan and corporate initiatives.

In July, a new portfolio called Infrastructure Development was created to deliver on projects and infrastructure from "cradle to grave" with the purpose of creating a clear line of accountability, capacity and focus to deliver on results. Facility Management was moved from the Community Services portfolio to join this new portfolio. This change has presented the City with the following opportunities:

- Ensuring roles and responsibilities with respect to facility maintenance are appropriately aligned to better support corporate objectives and decision making.
- Developing and implementing a risk based preventative and predictive maintenance program.
- Improving the management and administration of lease and license agreements at City owned facilities.
- Acquiring the appropriate tools and resources to improve department planning, business processes and service delivery.

The audit noted several examples where maintenance activities are being performed by staff outside of the department and other instances where Facility Management staff were assuming responsibilities that would be better suited to staff in other departments. By realigning roles and responsibilities, the City can eliminate duplication of effort while maximizing the strengths, skill sets and core competencies of both facilities and operational staff.

Municipalities continue to face growing pressures to fund the cost of repairing and replacing aging arenas, pools, community centers and other facilities. This can be mitigated somewhat by implementing a comprehensive preventative and predictive maintenance program. The goal of a successful preventive and predictive maintenance program is to establish consistent practices designed to improve the performance, equipment life and minimize any unplanned maintenance activity. Perhaps the most important reason to invest in preventive and predictive maintenance is to enhance the safety of City owned facilities.

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Facility Management has identified the need to establish a preventative and predictive maintenance program and has taken actions over the past few years to address this gap. In 2016, Facility Management hired a consultant to perform building condition assessments. Condition assessment is the most important function in the asset management process as it forms the basis of or the starting point for other functions such as the decisions to repair or replace. Condition assessments for all major buildings including libraries and fire halls were completed in 2019. The information gathered from these assessments should inform the capital investment strategy, preventative and predictive maintenance program and align with future master planning and maintenance efforts.

Several profit and non-profit organizations use City owned facilities to run their programs. These organizations contract with the City via license agreements, leases and rental contracts. We reviewed the agreements with the various organizations and found there to be inconsistencies. The City has not defined what the difference is between a lease agreement, a licensing agreement or a permitting agreement. Establishing clear guidelines will help ensure consistency and fairness.

A maintenance work order is a communication tool. It conveys all the information about a task to be completed, who requested the work, who it's assigned to, what material is required and what is expected. Yet it is estimated that only half of the work orders are generated for work done by the department. This is principally because the work order process is manual and not fully integrated. Work orders should be the key source of KPI's for an organization's maintenance operation. KPIs help organizations understand how well they are performing in direct relation to their strategic goals and objectives and therefore help to monitor the execution of strategy. They should clearly demonstrate the cause and effect relationship between departmental processes and outcomes to the results the City wants to achieve from the strategic plan.

Internal Audit will follow up on the status of outstanding management action plans related to this audit and will report the status at a future committee meeting.

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BACKGROUND

The Facility Management department oversees 89 City of Vaughan properties, facilities and capital projects. This represents approximately 2 million square feet of service space, outdoor water play features, park walkway and sports field lighting.

Facility Management delivers various property and facility operations management support services which enable the day-to-day operation of buildings and the delivery of programs in a safe and effective manner. The responsibilities include security, property/building management, engineering services, space planning and other support duties. This is achieved by effectively maintaining and preserving buildings and equipment, responding to requests for repairs and other services, as well as supervising third party vendors that provide various services including maintenance and repairs.

Maintenance is one of the most significant expenses related to owning a building and generally includes three primary interconnected activities:

- Preventative maintenance: scheduled, routine, and recurring maintenance to prevent breakdowns and mitigate deterioration.
- Corrective repair: work required to correct a non-emergency deficiency.
- Emergency corrective repair: work performed to immediately correct a problem that poses a threat to building security or public safety.

The role of the Facility Management department continues to evolve through their responsibility for maintaining what is arguably the City's largest and most valuable assets. In July, a new portfolio called Infrastructure Development was created to deliver on projects and infrastructure. The portfolio works closely with City departments and external organizations to ensure the City's infrastructure, parks, real estate and facility management meet and exceed the needs of citizens. The creation of this portfolio places the City in a better position to approach major capital projects from start to finish.

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OBJECTIVES AND SCOPE

The objective of the audit was to evaluate the adequacy and effectiveness of the internal controls, processes and procedures in place to mitigate the business risks associated with the execution of the City's maintenance strategies and programs.

The audit approach included a review of the strategic goals, objectives and oversight over facility maintenance, use of technology, a review of the procurement process, walkthrough of the facilities, review of City policies and procedures and interviews with staff and management.

The audit scope included Facility Management related activities that occurred in January 2018 to August 2019.

The audit scope did not include a review of the Corporate Security function.

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DETAILED REPORT

1. *Ensure Roles and Responsibilities with Respect to Facility Maintenance are Appropriately Aligned to Better Support Corporate Objectives and Decision Making*

The role of the Facility Management department continues to evolve through their responsibility for maintaining what is arguably the City's largest and most valuable assets. In July, a new portfolio called Infrastructure Development was created to deliver on projects and infrastructure from "cradle to grave" with the purpose of creating a clear line of accountability, capacity and focus to deliver on results. Facility Management was moved from the Community Services portfolio to join this new portfolio.

While it is anticipated that this reorganization will better align the department to support and advance corporate objectives, further work will be required to ensure roles, responsibilities and accountabilities with respect to corporate maintenance activities are better aligned within the organization.

The audit noted several examples where maintenance activities are being performed by staff outside of the department and other instances where Facility Management staff were assuming responsibilities that would be better suited to staff in other departments. For example:

- Facility Management is responsible for managing facility leases. In most organizations, this falls under the responsibility of the Real Estate department.
- Public Works has various agreements for catch basin cleaning, backflow prevention, pothole repairs, line painting and fire hydrant maintenance. Community centers and other City owned facilities are considered "private property" and are not maintained by these existing City programs. This has created a duplication of effort, as Facility Management has had to dedicate resources for securing separate agreements for the same activities that could have been covered under the Public Works' service contracts.
- Public Works staff are currently responsible for the maintenance of water pumping stations, salt domes and green houses. This has created a duplication of effort, as Facility Management has the skills and expertise and can leverage existing contacts and vendors to expedite repairs.
- Based on a realignment in September 2017, Recreation Services is responsible for maintenance at Recreation Centres. However, Facility Management is still processing invoices for Recreation Services.
- Facility Management has negotiated service level agreements with some City departments, including VFRS and VPL. However, service level agreements have not been finalized with other key client departments, such as Recreation Services. Service level agreements that outline the nature and standards of services to be provided, the

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basis of cost allocations and the extent of each party's responsibilities help prevent ambiguity and align expectations for all stakeholders.

The absence of a clearly-defined relationship between Facility Management and department-specific maintenance programs is problematic and may lead to maintenance deficiencies. In our walkthroughs of some of the community centers, libraries and other City owned facilities, we identified areas in need of repair, some of which appeared to be present for some time and that could potentially pose a hazard to staff and the public.

Recommendations

We recommend that management realign roles and responsibilities to eliminate duplication of effort while maximizing the strengths, skill set and core competencies of staff. For the purposes of this audit, this would include investigating the feasibility of:

- Moving the responsibility for managing and administrating leases from Facility Management to the Real Estate Department.
- Embedding City owned facilities into contracts managed and administered by the Public Works Portfolio for catch basin cleaning, fire hydrant inspections and maintenance, line painting, pothole repairs and any other service contracts that Facility Management may be duplicating.
- Finalize the service level agreements with all City departments to clarify roles and responsibilities, general level of response and availability of Facility Management as a provider of services.

Management Action Plan

Management agrees with these recommendations.

The organizational refresh (July 1, 2019) has aligned departments with major interdependencies. The Infrastructure Development portfolio offers opportunities to improve efficiency, maximize existing resources and align service delivery strategically. As part of this alignment of services, leasing is being assessed in terms of roles and responsibilities and where it will ultimately reside. The estimated date of completion is Q1 2020.

Facility Management is responsible for 52 service contracts. These contracts cover a wide range of external services required to maintain operating conditions, standards, security and safety. Facility Management will work with Public Works to leverage contracts for similar services and avoid any duplication. The estimated date of completion is Q1 2020.

Service Level Agreements are an important tool. Agreements are now in place with Fire and Rescue Services and Vaughan Public Library. The agreement with Recreation Services is in development and our goal is to have it in place by Q1, 2020.

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We will be negotiating service level agreements with all client departments. These agreements clarify roles and responsibilities and can identify opportunities to align service delivery with departments taking advantage of department expertise and resources. The estimated date of completion is Q4, 2020.

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2. Develop and Implement a Risk Based Preventative and Predictive Maintenance Program

Preventive¹ and predicative² maintenance is typically considered the most effective facility maintenance activity. The goal of a successful preventive maintenance program is to establish consistent practices designed to improve the performance and safety of buildings and equipment. Planned and predictive maintenance of assets help to improve equipment life and avoid any unplanned maintenance activity.

The City does not currently have comprehensive, systematic preventative or predictive maintenance program in place. The audit has identified the following issues:

- Facility Management has consistently exceeded their general maintenance budget for the last 3 years by an average of over \$649K per year, as much of the City's maintenance work is reactive in nature.
- When preventative maintenance activities are not planned, there is an increased risk that the City's infrastructure will begin to fail before its expected life expectancy. A good example of this is roof maintenance. At one facility, a roof had been spot-repaired so many times that it had become unrepairable. This resulted in a significant unplanned cost to properly repair the roof. The cost of reactive maintenance is high due to the potential damage to assets, overtime, and callout fees caused by the uncertain timing and nature of failures.
- In 2018, Facility Management was the biggest user of low dollar purchases (LDM's) at the City. The \$3 million in LDM spend represented 37% of the \$8.1 million in overall LDM spend. Additionally, there is currently no formal inventory of equipment and parts in place, or alternately a formal approach to ensure quick access to such items in order to respond to critical maintenance and repair situations. Spare parts are acquired as needed from various sources, including retail outlets. While reactive management can be beneficial during a crisis, the essence of successful management is the ability to prevent problems before they arise. The absence of appropriate purchasing arrangements with external vendors increases the risk that the City may be overpaying for goods/services and/or receiving substandard quality. In addition, a perception of improper purchasing practices can harm the City's reputation.
- When Facility Management purchases parts and supplies, invoices require signature by two individuals before they are processed for payment. Facility Management personnel have the ability to prepare purchase requisitions, retain the vendor/authorize purchases, receive goods and are not required to use an inventory ledger or attach packing slips to invoices as proof of receipt. This inadequate

¹ Preventive maintenance can be defined as a sequence of steps and measures that are taken in order to prevent the occurrence of failures and to better monitor the performance of an operation.

² The aim of predictive maintenance is first to predict when equipment failure might occur, and secondly, to prevent the occurrence of the failure by performing maintenance. Monitoring for future failure allows maintenance to be planned before the failure occurs. Ideally, predictive maintenance allows the maintenance frequency to be as low as possible to prevent unplanned reactive maintenance, without incurring costs associated with doing too much preventive maintenance.

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segregation of duties significantly weakened the system of internal controls over the purchasing process.

- Facility Management has not developed key performance indicators (KPI's) to measure the performance of maintenance activities.

Facility Management has identified the need to establish a preventative and predictive maintenance program and has taken actions over the past few years to address this gap. In 2016, Facility Management hired a consultant to perform building condition assessments³. Condition assessment is the most important function in the asset management process as it forms the basis of or the starting point for other functions such as the decisions to repair or replace. Condition assessments for all major buildings including libraries and fire halls were completed in 2019. The information gathered from these assessments should inform the capital investment strategy, preventative and predictive maintenance program and align with future master planning and maintenance efforts.

The Facility Management team has also been working on moving away from LDM's and implementing vendors of record (VOR's). Some VOR agreements are already in place, however opportunities exist to fully leverage this procurement channel through spend analysis, providing training and developing procedures to optimize the VOR program.

The City owns high value facilities, some equipped with expensive equipment. Failure to proactively maintain facilities increases the risk of premature deterioration of buildings and assets as well as more costly repairs or replacements.

Recommendation

We recommend that management:

- Continue to develop and then implement a risk based preventative and predictive maintenance program. This should include processes to:
 - Maintain and update facility condition information, and establishment of a set of reassessment cycles.
 - Setting standards and KPI's, accompanied by a system to monitor performance and compare performance to the standards.
- Continue to leverage more appropriate procurement arrangements to better align with a proactive maintenance strategy.
- Work with Infrastructure Planning & Corporate Asset Management to implement software to keep track of City assets and inventory. This will help ensure that appropriate spare parts, materials and other supplies are available when needed.

³ Condition assessment is defined as "a process of systematically evaluating an organization's capital assets in order to project repair, renewal, or replacement needs that will preserve their ability to support the mission or activities they are assigned to serve."

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Management Action Plan

Management agrees with these recommendations.

Although the department is engaged in preventative maintenance activities, it is manually based and lacks resources, tools and technology to be a robust, effective and sustainable program. Many building-industry and facility-management groups agree on the benefits of well-planned preventive and predictive maintenance. They advocate preventive and predictive maintenance for its effects on improving equipment's operating efficiency, preventing premature replacement of components, and avoiding interruptions for building occupants.

An important step to developing an effective maintenance program is having the ability to track, manage and organize data from different sources. While it's not impossible to do this manually, it is often a system riddled with error, ineffective in providing accurate data and does not support a predictive program. The department has identified the importance and need for a technology-based platform to ensure that City owned assets meet or exceed life cycle.

KPIs are a challenge. Without the resources and technology to maintain databases, it's difficult to quantify performance. One of the critical tools in any comprehensive facility management system is the use of work orders. Currently the department is using the Customer Tracking System (JD Edwards) as a substitute for Computer Facility Management software to manage workorders. A robust asset management software program with a work order module can assist with KPIs.

Addressing the above technology and program needs is contingent on the implementation of the Asset Management Strategy.

Due to the type of work the department is involved in and the diverse nature of the City's assets, there is frequently a need for parts and components to repair or maintain City assets. This has resulted in a large number of LDM's being processed by the department. Management also realizes the benefits of moving away from a reactive procurement process to a more strategic sourcing framework. The department has worked with Procurement Services and introduced the use of pre-qualified vendors on term contracts. Facility Management has developed a list of VORs. There are thirty-five vendors pre-qualified to provide services in remediation, mechanical, building automation, energy management, asset management, fire protection and more. Three main areas were identified: mechanical, electrical and plumbing. These areas represent approximately 40% of all LDM purchases. Other areas are under consideration and we expect to have a comprehensive list of VOR's by Q3, 2020.

Technology can be leveraged to support a quality control program to manage and monitor inventories. Although the department has experienced no problem with vendors with a "just in time" approach, small to medium parts inventories are carried on department vehicles. This is an area that will be investigated. The estimated date of completion is Q2, 2020.

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3. *Determine the Optimal Level of Resources, Staff Complement and Composition of the Facility Management Department*

As part of realigning roles and responsibilities and developing and implementing a risk based preventative and predictive maintenance program, opportunities exist to reevaluate the current composition of the Facility Management department to ensure that it can deliver upon its mandate. This includes assessing:

- The optimal level of leadership resources required within the department to provide direction on strategy, expected outcomes, management oversight and performance management. Existing supervisors are responsible for 35-45 buildings plus park buildings and splash pads when they open in the summer. In addition, there are limited processes in place to formally and consistently monitor maintenance and repair work to ensure they are carried out in accordance with defined standards and terms.
- The optimal number of project managers required for efficient and effective operation. The department has approximately 300 maintenance projects scheduled that vary in size and complexity. Given the existing staff complement, only a small number of these projects can be initiated and completed annually.
- The appropriate mix between the use of internal and external resources to complete maintenance activities. The department recently hired an in-house electrician. Management has indicated reduced turn-around times and a significant reduction in the need to outsource these services. Other disciplines, such as plumbing, should be considered based on a cost benefit assessment.
- What skill sets are required in the department to ensure appropriate training, safe and effective operations. Although all mandatory and legislated training is delivered to staff, tracking of the staff training records and up-dating the files is very manual and not always up-to-date.

Optimizing the resources and composition of the Facility Management department will help mitigate the risk of operational inefficiencies and better align the department to meet the growing demands of the City.

Recommendation

We recommend that management develop a resourcing strategy to determine the ideal composition of the Facility Management department in order to effectively and efficiently achieve its corporate mandate and strategic goals.

Management Action Plan

Management agrees with these recommendations.

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The department will develop a strategy to address the need for additional resources realizing that more is needed to relieve pressure on existing resources and to meet the growing demand on service delivery. The estimated date of completion is Q1 2020.

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4. *Improving the Management and Administration of Lease and License Agreements at City Owned Facilities*

Several profit and non-profit organizations use City owned facilities to run their programs. These organizations contract with the City via license agreements, leases and rental contracts. Recreation Services is responsible for short term rental/permitting. Facility Management administers longer-term leases and licenses. The practice has been to present all lease or license space arrangements in City owned facilities for Council approval and enact the necessary by-laws required by the City.

Internal Audit reviewed the agreements with the various organizations and found there to be inconsistencies. Lease terms vary from as little as month to month, to terms of up to 40 years or more. Other agreements were allowed to expire and are now month to month. Lease rates also vary from organization to organization. The City has also not defined the differences between lease agreements, licensing agreements or rental/permitting agreements and when each should be used.

At the Finance, Administration and Audit (FA&A) Committee meeting of April 1, 2019, Council directed staff to report back with a list of all contracts and leases that the City of Vaughan has with profit and non-profit organizations. This report was presented to FA&A on May 6, 2019. The report outlines the objective of developing a standardized leasing process and establishing consistent guiding principles and terms⁴.

In July of 2019, the City issued a consulting RFP to review and update the Community Service Organization Policy and Facility Allocation Policy. This will include developing guiding principles that will assist in determining how best to allocate facilities (lease, agreement, permit, etc. including recommended terms and cost recovery) such as heritage homes and satellite buildings. A strong focus of the study will be to provide sustainable recommendations and direction to position the City to respond to the changing recreation and facility needs of its citizens.

There were no compliant bids received for this RFP. Management is currently in the process of reevaluating next steps.

The absence of clear guidelines for long-term lease or license agreements increases the risk that persons/entities will not be treated consistently, increased financial cost to the City and potential reputational risk.

Recommendation

We recommend that management, in consultation with Legal Services:

- Define the difference between lease, license and permit agreements and develop a standardized process and consistent guiding principles and terms for when each should be used.

⁴ Summary of Lease and License Agreements Operating in City Owned Facilities;
<https://pub-vaughan.escribemeetings.com/FileStream.aspx?DocumentId=14102>

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- Develop consistent contract language for lease, license and permit agreements.
- Clarify appropriate roles, responsibilities and accountabilities with respect to who is authorized to enter into lease, license and permit agreements on behalf of the City.

Management Action Plan

Management agrees with these recommendations.

Facility Management has had discussions with Legal, Real Estate and Recreation departments to address issues such as the various names (leases, licenses, permits) given to agreements. These discussions will continue in the larger context of an overall review and assessment of facility leasing.

Some actions have been taken with agreements. Contracts for use of the facilities have been moved to month to month terms, fees have been reviewed and assessed. Substantial work remains including but not limited to developing a consistent standardized leasing process and establishing guiding principles and terms. Upon Council approval, current agreements will transition under the new guidelines.

The estimated date of completion is Q2 2020.

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5. Enhance Oversight Over Contract Administration

Facility Management oversees approximately 60 contracts ranging from janitorial services to elevator contracts. Contract administration involves all activities related to the monitoring of suppliers, contractors and service providers' performance in the fulfillment of their contractual obligations, and to ensure appropriate actions are taken to promptly remedy any deficiencies observed in contract implementation, scope or terms and conditions.

The challenge has been the sheer number of contracts in place and the lack of contract administration tools at the City. The specific nature and extent of contract administration varies from contract to contract. For instance, typically each contract has a WSIB and insurance certificate component. Follow-up is required to ensure that insurance certificates don't expire and WSIB records are current. Processes such as these are currently manual and can be very time consuming.

The need for improved project management and contract administration has been a common theme in many of our recent audit reports. Each department that is engaged in contracting is responsible for implementing internal controls in order to safeguard that contracts are managed to ensure delivery of product/service, efficiencies and to mitigate risk. Due to the manual nature of this work, staff often allocate more time to awarding contracts rather than administering existing contracts. This can lead to problems in contractor performance, non-compliance to contract provisions, cost overruns, and delays in receiving goods and services. Automating contract management at the City would streamline administrative tasks by creating a centralized and uniform record for each contract's processes.

Recommendations

We recommend that management:

- Develop a contract management manual/framework that highlights the most immediate and critical actions that must be taken by the contract administrator while managing the contracts in place.
- Investigate the feasibility of implementation of contract lifecycle management software to automate and streamline contract administration processes across the City, including the ability to generate, report and capture contracts and legal agreements.

Management Action Plan

Management agrees with these recommendations.

The department will undertake a complete review of the existing contract management processes and procedures and revise accordingly.

Facility Management recently entered discussions with OCIO to explore the contract administration module available in JD Edwards. Those discussions will be revisited. The estimated date of completion is Q2 2020.

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6. *Continue to Review and Enhance the Standard Operating Procedures Available to Staff*

A Standard Operating Procedure (SOP) is a set of written instructions that document a routine or repetitive activity followed by staff. They document the way activities are to be performed to facilitate consistent conformance to technical and quality system requirements and to support data quality. They may describe, for example, fundamental programmatic actions and technical actions such as analytical processes, and processes for maintaining, calibrating, and using equipment.

Facility Management have developed a number of SOP's to guide staff in performing their duties but acknowledged the need to continue to develop and revisit their existing SOP documents to ensure that they are appropriate, up to date and comprehensive to help ensure consistency, quality and safety.

The development and use of SOPs are an integral part of a successful quality system, as it provides individuals with the information to perform a job properly and facilitates consistent implementation in the quality and integrity of the end-result.

Facility Management has indicated that they will continue to develop and implement Standard Operating Procedures. To date over forty SOP have been completed with more underway.

Internal Audit is satisfied with the action management is currently undertaking to address this observation and have no further recommendations.

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7. Enhance Monitoring and Oversight Over Work Order Administration

A maintenance work order is a communication tool. It conveys all the information about a task to be completed, who requested the work, who it's assigned to, what material is required and what is expected. Work orders are crucial to an organization's maintenance operation. They help everyone from maintenance supervisors to technical staff organize, assign, prioritize, track, and complete key tasks.

Work orders can originate from multiple sources including residents, staff and Council. For the period of January 1, 2018 - December 31, 2018 approximately 3,000 work orders were processed for Facility Management. However, it is estimated that this is about half the work orders that should have actually been generated for the department.

Work orders may not be generated for a number of reasons:

- There are no clear criteria as to when work orders should be generated.
- The work order system is not intuitive and work order fields are not consistently entered, so the information is not standardized or easily analyzed/reportable.
- The work order process is manual and not fully integrated. Work is still assigned to maintenance staff on hard copy forms. Although the staff have been provided with Toughpads⁵, they are not being used because the system is not integrated into a Computerized Maintenance Management System (CMMS⁶).

The lack of consistency in work order generation is problematic in that Facility Management cannot use this data to accurately monitor and evaluate their own operations. For example, the Maple Community Center is slated to undergo some significant renovations. In planning for these renovations, a history of repairs and maintenance that have taken place at this facility is not readily available. Therefore, Facility Management and Infrastructure Delivery are left to rely on memory or piecing together the limited available documentation to collate the work that has been done at this facility over the years.

When well executed, work orders allow you to capture information, share it, and use it to get the work done as efficiently as possible. They should be the key source of maintenance metrics (KPI's). They can quantify the daily activity of maintenance, and in doing so, paint a clear picture of how staff and assets are working. By not objectively prioritizing work orders and utilizing available resources effectively to maintain the City's physical assets, important maintenance and repair needs may not be addressed, and the condition of the City's facility assets will decline.

In 2014, Internal Audit conducted a Road Operations Audit and TSPFO staff acknowledged that opportunities existed to improve the effectiveness of the work order management

⁵ Tablets that are ruggedized to withstand vibration, drops, spills, extreme temperature, and rough handling.

⁶ Sometimes referred to as Enterprise Asset Management (EAM) software.

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processes. Recommendations to improve the work order system were also referenced in several audit reports since then.

Action plans to address those recommendations are still ongoing, and upon complete implementation, will help ensure completeness and accuracy of the system data and thereby increasing management's ability to determine compliance to contracted or legislated specifications. It will also assist with performance tracking, budgeting and project prioritization.

Internal Audit is satisfied with the action management is currently undertaking to address this observation and have no further recommendations.

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8. *Develop Facility Standards for Building Infrastructure Projects*

As reported in the May 2018 Internal Audit Report - Construction Audit of Fire Station 7-4 Phase 1: “the City has not developed general design and construction standards for reoccurring building infrastructure projects such as fire stations, community centres and libraries...” This is particularly pertinent to the Facility Management department, since they will ultimately be required to maintain these assets.

Many City buildings serve similar functions and although they are not necessarily identical, the shape, form, and, interior relationships are common from one facility to the next. The objective of design standardization is to take successful designs and/or elements of a facility type and uses them for subsequent similar projects and reduces the effort of designing those facilities each time they are needed. More importantly it helps ensure consistent quality, maintenance, and functional life-cycle productivity across the inventory of City facilities.

Further, the physical environment has a significant impact on health and safety. In our walk-through of some City facilities, we noted inconsistencies in the deployment of safety standards. For example, some facilities use roof anchors for fall protection, while others do not have roof anchors installed. Some City facilities deploy fixed ladder cages, while others do not. We also noted the use of single wall chemical containment tank at a community center verses the safer double wall tanks.

Facility design standards should be implemented with the explicit goal of enhancing staff and public safety through facility design. These standards should also address consistent accessibility guidelines for all City owned facilities.

In the Internal Audit Report - Construction Audit of Fire Station 7-4 Phase 1, management acknowledged that opportunities existed to develop building infrastructure standards for City facilities.

According to management, action plans to address those recommendations are still ongoing. Funding for this project was approved as part of the 2019 budget. The Terms of Reference (TOR) are being developed and were finalized in Q3-2019. The TOR will be incorporated into the RFP for the consulting services needed to undertake this work. In coordination with Procurement Services, the RFP is scheduled to be released in Q4-2019. The project will create general design and construction standards for municipal buildings, such as fire stations, community centres and libraries.

Internal Audit is satisfied with the action management is currently undertaking to address this observation and have no further recommendations.