



Hamilton

CITY OF HAMILTON

CITY MANAGER'S OFFICE
Audit Services Division

TO: Chair and Members Audit, Finance and Administration Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: February 2, 2011	
SUBJECT/REPORT NO: Audit Report 2010-09 - Facilities Maintenance and Administrative Controls (AUD11010) (City Wide)	
SUBMITTED BY: Ann Pekaruk Director, Audit Services City Manager's Office	PREPARED BY: Ann Pekaruk 905-546-2424 x4469
SIGNATURE:	

RECOMMENDATION

- (a) That Report AUD11010 respecting Audit Report 2010-09, Facilities Maintenance and Administrative Controls, be received; and
- (b) That the management action plans as detailed in Appendix "A" of Report AUD11010 be approved and the General Managers of Public Works and Community Services direct the appropriate staff under their responsibility to have the plans implemented.

EXECUTIVE SUMMARY

The 2010 Internal Audit work plan approved by Council included the carryover of this audit from 2009 due to staffing shortages. The processes utilized to manage and maintain City facilities as well as to ensure the long-term sustainability of these assets were assessed.

The results of the audit are presented in a formal audit report containing observations, recommendations and management responses. In addition, an Addendum which identifies issues, risks or inefficiencies (not necessarily control deficiencies which appear in the main report) is included and management has been asked to address these points also. The Report and Addendum are attached as Appendix "A" to Report AUD11010.

Alternatives for Consideration – See page 5.

FINANCIAL / STAFFING / LEGAL IMPLICATIONS (for Recommendation(s) only)

Financial: The development of a complete inventory of all equipment, furniture and fixtures related to individual facilities (recommendation #3) may require financial resources that will be addressed at a later date. As staff deal with renovation and repair items identified in the ReCAPP Condition Assessment (recommendation #6), additional operating and capital funds may be requested.

Staffing: The development of a complete inventory of all equipment, furniture and fixtures related to individual facilities (recommendation #3) may require staffing resources that will be addressed at a later date.

Legal: None.

HISTORICAL BACKGROUND (Chronology of events)

This audit was scheduled as part of the 2009 Internal Audit work plan. However, due to staff vacancies and a lack of adequate resources, the audit was carried forward to the 2010 work plan.

The fieldwork was completed in July, 2010. The results of the audit are attached as Appendix "A" of Report AUD11010.

The Audit, Finance and Administration Committee receives and approves final audit and review reports as part of its responsibilities for the oversight of governance and control.

POLICY IMPLICATIONS

Ontario Building and Fire Codes

RELEVANT CONSULTATION

The attached report includes management action plans which reflect the responses of management and staff responsible for the maintenance and administration of City facilities – Community Services (Recreation) and Public Works (Corporate Facilities of Energy, Fleet, Facilities & Traffic) Departments.

ANALYSIS / RATIONALE FOR RECOMMENDATION

(include Performance Measurement/Benchmarking Data, if applicable)

The City owns or leases various facilities. For tracking purposes, each property is assigned an internal building code (type and number) for identification. There are 12 building code categories and 677 active building codes (excluding HECFI and Hamilton Police Service) comprising in excess of 4.4 million square feet of space across 528 distinct addresses. Corporate Facilities Management (Public Works) is responsible for the maintenance and upkeep of so called corporate facilities. Community facilities such as arenas, pools and recreation centres are administered by Recreation (Community Services). Heritage and historical facilities are managed by the Culture division of Community Services but are excluded from this audit.

**FACILITIES INVENTORY
As at May, 2009**

	Description Type	# of Bldg. Codes	Square Footage ⁽¹⁾	# of Addresses
Corporate (Responsibility of Public Works)				
	Civic Buildings	167		163
	Corporate Buildings	51	1,217,189	46
	Fire Facilities	32	267,641	31
	Libraries	23	391,335	20
	Water Facilities	15	25,567	3
	Yards	74	1,280,873	39
	Totals	362	3,182,605	302
Community (Responsibility of Community Services)				
	Arenas	22	706,432	18
	Pools	16	48,951	10
	Parks	172	31,527	130
	Recreation Centres	63	462,694	48
	Heritage	21	3,941	14
	Historical	21	8,747	6
	Totals	315	1,262,292	226
	Grand Totals	677	4,444,897	528

(1) Only if drawings available on Archibus

The above Table excludes HECFI and Hamilton Police Service facilities.

All repairs and maintenance work is to flow through the Facilities Help Desk for assignment and completion. All activities and the summarization of statistical information are tracked through Archibus software. More than 13,000 work orders (both internal and external) were issued in 2008. Per the PeopleSoft financial records, building repairs (including painting, electrical, grounds maintenance, carpentry, etc.) and contractual expenses (including maintenance contracts, snow removal, cleaning, elevator maintenance, etc.) amount to over \$32 million for 2008. Archibus, on the other hand, has an accumulated amount significantly less due to download difficulties from PeopleSoft, use of set labour rates rather than actual wages for internal staff costs and other issues identified in the observations and recommendations of the audit report.

The audit focused on the activities of Facilities (maintenance and administrative area) for the 2008 fiscal year and included sampling of documents relating to facility maintenance (work orders, facility inspections, vendor invoices, preventative maintenance). In addition, maintenance and repair activities carried out by Community Services – Recreation group – were also sampled and reviewed.

The audit identified many opportunities for improved controls, increased managerial oversight and accountability and potential effectiveness and efficiency improvements.

A formal audit report containing observations, recommendations and resulting management action plans was issued and is attached as Appendix “A” of Report AUD11010. Twenty-four (24) recommendations were included in the Report and Addendum. Highlights of some of the recommendations made are as follows:

- Develop, implement and adhere to a corporate standard for the maintenance of the City’s facilities including a review and alignment of responsibilities.
- Promote the accuracy, completeness and usefulness of information stored in Archibus by ensuring all work requests are directed through Archibus; training staff on the work order processing system in Archibus and enforcing its use; resolving interface issues between PeopleSoft and Archibus to capture the cost of all external work completed; reminding trades people to close work orders when work has been completed; linking Archibus internal work order and PeopleSoft Payroll systems to ensure actual hours worked by internal trades people are billed to facilities; continuing to investigate ways of updating Archibus with the details of actual work carried out; and ensuring full utilization of the Archibus modules covered by the City’s existing licence.
- Develop and upload a complete inventory of all equipment, furniture and fixtures into Archibus, ensuring the inventory is updated and kept current.
- Link the information contained in the ReCAPP condition assessment reports to the budgeting process to ensure identified defects are included in the operating and capital budgets. Pursue the possibility of linking ReCAPP reports to the Condition Assessment and the Work Order Processing modules in Archibus to enable ReCAPP to be electronically updated with details of completed work orders.

- Develop and document Preventative Maintenance programs for all equipment and facilities managed by the Recreation Division of Community Services and upload the programs into Archibus to link to the work order system, enabling automatically generated work orders at pre-set times.
- Finalize service level agreements with client departments ensuring service levels are mutually agreed upon and clearly define each party's responsibility and the basis of cost allocations.
- Prepare detailed written procedures for the Help Desk function and review and update annually, as necessary.
- Measure key performance indicators at regular intervals for management analysis and corporate reporting.

ALTERNATIVES FOR CONSIDERATION

(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)

The City could decide to forego maintenance and repair activities on its facilities. This is not practical due to the financial, environmental, safety and liability risks that would result.

CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Financial Sustainability

- ◆ Delivery of municipal services and management of capital assets/liabilities in a sustainable, innovative and cost effective manner.

Environmental Stewardship

- ◆ Reduced impact of City activities/operations on the environment.

APPENDICES / SCHEDULES

Appendix "A" to Report AUD11010.

ap:dt

**CITY OF HAMILTON
AUDIT REPORT 2010-09
FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS**

**Rec – Recreation
CF – Corporate Facilities**

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
1.	<p><u>Processing of Work Orders</u> The City uses an infrastructure & facility management system called Archibus to manage facilities. To process work orders, staff place requests online by remotely logging into Archibus or by direct work requests to the Facilities Helpdesk by phone, e-mail or fax.</p> <p>An analysis of work orders generated through Archibus indicated that staff in Corporate Facilities generally direct work requests to the Facilities Helpdesk or remotely process work requests through City-issued Blackberries. On the contrary, the extent of use of the Facilities Helpdesk and the Archibus system for processing work orders by the Recreation Division is extremely limited. Area Supervisors and their staff generally place orders directly with vendors. Such orders are not recorded in Archibus and there is no assurance that adequate investigation was carried out to obtain the best quality and price.</p> <p>In addition, there does not appear to be an adequate segregation of duties in those divisions because Recreation Area Supervisors who retain a vendor are also responsible for approving the vendor's invoice for payment.</p>	<p>That management in the Recreation Division enforce the requirement for all work requests to be directed to the Facilities Helpdesk.</p>	<p>Rec – Agreed. Upon completion of restructuring, Recreation management will institute procedures and protocols related to demand maintenance requests. Work requests will be submitted by designated staff and vetted through Archibus to be dispatched accordingly to either internal staff or external contractors. Workflow will be monitored with Archibus to make certain compliance of the procedures is being adhered to. Supervisors, through their District meetings, have been reminded by their Manager to initiate the work orders through the help desk.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
1.	<p><u>Processing of Work Orders (Cont'd)</u> It is important that all facility and equipment maintenance work orders be channeled through the Helpdesk and recorded in Archibus. Recording all maintenance work in Archibus ensures that the system has a complete maintenance history for all the City's facilities and equipment. A complete and accurate maintenance history is vital for planning purposes and for providing a credible defense in the event of legal claims against the City.</p>	<p>That staff responsible for facility management in Recreation Division be provided with the necessary training on Archibus and be granted the requisite system access to enable them to fully utilize the Archibus work order processing system.</p>	<p>Rec – Agreed. In the 2nd quarter of 2011, Recreation management staff will ensure the necessary training on the Archibus system is provided for all supervisors who are responsible for maintenance. Management will ensure that all supervisors will be granted access to the Archibus system enabling them to process work orders.</p>
2.	<p><u>Preventative Maintenance (PM)</u> Sometime in 2009, the Facilities Division of the Public Works Department started developing preventative maintenance programs for its equipment and buildings. The schedules documented preventative maintenance frequencies, the trades people or vendor responsible for the maintenance and other details including the type and nature of maintenance required. The preventative maintenance programs have been uploaded into the Archibus system and are linked to the system's work order system such that, when the maintenance is due, a work order is automatically generated and forwarded to the responsible trades people with a copy to the Supervisor responsible for the facility.</p>		

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
2.	<p><u>Preventative Maintenance (PM) (Cont'd)</u> Except for HVAC systems and overhead doors, facilities and equipment managed by the Recreation Division does not have documented preventative maintenance programs. Without a pro-active preventative maintenance program, the maintenance of equipment and facilities may be reactive and unsystematic. There could also be an increased deterioration in the condition of assets which directly impacts the repair costs of those assets. A State of the Infrastructure Report developed by an independent consultant in 2008 gave a 'D' rating to equipment and facilities managed by the Recreation Division. The report also stated that "the current situation is clearly unsustainable" and recommended that management start "developing long-term policies and implementation plans in a rational and strategic way" in order to "stop the slide".</p>	<p>That the Superintendent of Preventative Maintenance in Recreation Division develop and document PM programs for all equipment and facilities managed by the Division.</p> <p>That, once the programs have been developed, they be uploaded into Archibus and linked to the work order system to enable work orders to be automatically generated at pre-set times.</p>	<p>Rec – Agreed. During restructuring, further plans will be developed. Existing information on Rec HVAC equipment, including historical data for demand and preventative maintenance, will be migrated to Archibus in agreement already established with vendors in 2011.</p> <p>Rec – Agreed. Data collected by a consultant on arena refrigeration room and pool equipment will be uploaded into Archibus in 2011-2012.</p> <p>CF – Agreed. CF management will engage the Recreation group and form a task group to develop and improve standards. Target date: 2011-2012.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
2.	<p><u>Preventative Maintenance (PM) (Cont'd)</u> Preventative maintenance schedules for Recreation's HVAC systems are quite comprehensive and were developed by an outside contractor. The programs are stored on the contractor's server and the City does not keep its own record of the schedules. While staff have remote access to this information through the contractor's web portal, it is vital that the City retains its own inventory of the equipment and the related preventative maintenance programs for internal use.</p> <p>The City owns high value facilities, some equipped with expensive equipment. Failure to proactively maintain such facilities results in an increased deterioration of the assets as well as more costly repairs or replacements.</p>	<p>That management in Corporate Facilities and the Recreation Division work collaboratively to ensure that a corporate standard for the maintenance of the City's facilities is developed and adhered to.</p> <p>That the Superintendent of Preventative Maintenance in the Recreation Division ensure that an electronic copy of HVAC PM programs are obtained from the vendor and integrated into the Archibus system.</p>	<p>Rec – Agreed. A consultant will establish a preventative maintenance protocol for all of this equipment.</p> <p>CF – Agreed. CF management will engage the Recreation group to form a task group to develop and improve standards. Target date: 2011-2012.</p> <p>Rec – Agreed. Existing information on Recreation HVAC equipment, including historical data for demand and preventative maintenance, will be migrated to Archibus in 2011 as already established with the vendor.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
3.	<p><u>Inventory of Assets</u> An inventory of buildings, yards, parks and other immovable property managed by the Facilities and Recreation Divisions has been compiled and uploaded into the Archibus system, showing such information as the facility's square footage, address, buildings contacts etc.</p> <p>However, other property such as each facility's equipment, furniture and fixtures has not been completely entered into Archibus. In most cases, items that have been recorded in the Archibus system are only those for which a preventative maintenance schedule has been developed. Further, there are some pieces of equipment that are included in preventative maintenance schedules but are not listed in the inventory list.</p> <p>Without a complete inventory of such movable assets, management cannot adequately safeguard the items. The replacement of such assets can be expensive.</p>	<p>That a complete inventory of all equipment, furniture and fixtures be developed, uploaded into Archibus and regularly updated to ensure that it remains current.</p>	<p>CF – Agreed. CF is working with the newly established Furniture Committee (created through Audit and Administration Committee). A process is being developed as part of the 2011 initiatives.</p> <p>Rec – Agreed. Recreation will address staffing and financial resources required and plans to develop a phased-in approach between 2011 and 2013.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
4.	<p><u>Full Utilization of the Archibus System</u> The Archibus system is a total infrastructure and facility management system (TIFM) with several integrated modules. Annually, the City pays approximately \$50,000 in license and training fees as well as internal payroll costs for staff to manage the system. Some modules included in the City's license include:</p> <ul style="list-style-type: none"> • Space Management and Floor Plan Management • Building Operations • Real Property and Lease Management • Condition Assessments • Furniture and Equipment Management • Capital Budgeting • Environmental Sustainability and Emergency Preparedness • Project Management • Reservations and Service Desk Management 		

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
4.	<p><u>Full Utilization of the Archibus System (Cont'd)</u> The above modules are at varying levels of implementation. The Building Operations, Real Property and Lease Management and Space & Floor Plan Management modules are at advanced levels of implementation while others have only been partially implemented or not at all.</p> <p>For example, management may want to capture information such as the level of each facility's code and regulatory compliance, the location and procedures for handling hazardous material in buildings, the tracking of furniture and equipment assigned to employees and the tracking of asset conditions.</p> <p>Full implementation of the available Archibus modules will make information more accessible and will facilitate timelier and more informed decision making, therefore realizing the full benefits of the system.</p>	<p>That management of Corporate Facilities and the Recreation Division work with the Application & Systems Analyst to ensure that the City fully utilizes the Archibus modules covered by the existing license.</p>	<p>CF – Agreed. CF management will engage the Recreation group and have on-going training sessions. Target date: On-going through 2011.</p> <p>Rec – Agreed. Recreation will increase its use by a minimum of 5% annually of the associated Archibus modules to fully utilize its capability. A measurement method for Archibus systems will be developed. Further, Recreation will work with IT to allow access for vendors through a portal allowing them to update PM work in our system and provide close to real time reporting.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
5.	<p><u>Governance Structure</u> The City's facilities are managed by two departments, with the Transportation, Energy and Facilities division of Public Works (hereinafter referred to as "Corporate Facilities") managing City-owned and leased office buildings, town halls, fire halls and libraries and the Recreation Division of the Community Services department managing heritage & civic buildings, museums, community halls and recreation centres.</p> <p>While Corporate Facilities is the corporate lead on most issues related to facilities management, it does not have an overall oversight role to ensure that legislative standards are complied with and that consistent building maintenance policies, procedures and standards are developed and followed throughout the City. As such, there is no assurance that the City's inventory of buildings, equipment and other facility assets are maintained to the same standard.</p>	<p>That the General Managers of Public Works and Community Services review the existing governance structures with respect to facility management and ensure that responsibilities are aligned in a way that ensures that:</p> <ul style="list-style-type: none"> • A corporate standard for the management of the City's facilities is developed and implemented. • Staff and other resources are deployed in a way that ensures the best use of skills and avoids a duplication of roles and responsibilities. 	<p>CF – Agreed. As part of the 2011-2012 work plan, CF management will develop a service level agreement with Recreation to ensure the same standards and level of services are delivered consistently.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
5.	<p><u>Governance Structure (Cont'd)</u> Based on discussions with staff, the need for the Recreation Division to manage their own facilities is driven largely by the desire for better coordination of facility management with program delivery activities. In addition, to avoid program disruptions (as these facilities are used by members of the public mainly after hours and on weekends), there is a need to have staff on site in order to promptly attend to maintenance emergencies that may arise and affect programming.</p> <p>Management of the Recreation Division indicated that most of the issues raised in this observation are being addressed in a re-organization that is currently underway.</p> <p>An ineffective governance structure may result in a sub-optimal use of material and human resources demonstrated in a duplication of staff functions, the fast decline in asset conditions (as noted in the Recreation Division) and uncoordinated facility management efforts.</p>		

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
6.	<p><u>ReCAPP Condition Assessment Software</u> Annually, a consultant carries out a cyclical asset condition assessment on facilities and equipment managed by both the Corporate Facilities and the Recreation Division. The results of the assessment are entered into a software program called ReCAPP which records each asset's condition, its severity and urgency for repair, estimated repair costs and estimated year for repair. The database of asset conditions is accessible by facility Supervisors who use the information to schedule maintenance work and capital replacements.</p>		

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
6.	<p><u>ReCAPP Condition Assessment Software (Cont'd)</u> Once an asset has been repaired or replaced, departments are supposed to provide feedback to the ReCAPP Technologist to enable him to update the system and drop the asset from the 'deferred maintenance' list. Although a "ReCAPP Facility Update Form" exists, departments do not always provide updates to the Technologist. As a result, items that have been repaired remain on the 'deferred maintenance' list, thereby overstating the value of the maintenance backlog.</p>	<p>That information contained in the ReCAPP condition assessment reports be linked to the budgeting process by ensuring that the identified defects are included in the operating and capital budgets.</p>	<p>CF – Agreed. To be developed for the 2012 budget process. Target date: September 2011.</p> <p>Rec – Agreed. Recreation management staff, on an annual basis, will review the ReCAPP condition assessments for each recreation facility. Renovation and repair items greater than \$50,000 will be submitted for consideration in the division's annual capital budget program. Renovation and repair items identified within the ReCAPP reports with a dollar amount lower than the \$50,000 capital threshold and deemed critical will be considered within the current year's operating budget. If the item cannot be corrected within the current year's operation budget, an enhancement will be submitted to the following year's operating budget for the facility requiring the repair.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
6.	<p><u>ReCAPP Condition Assessment Software (Cont'd)</u> There is also no evidence that Supervisors use the detailed ReCAPP condition assessments when preparing operating and capital budgets. The full value of having the building assessments is therefore not being realized if the information is not incorporated in the budgeting process. In addition, the square footage of facilities in ReCAPP does not agree with the square footages recorded in Archibus.</p>	<p>That, upon completing the repair work, staff update the ReCAPP system by completing the ReCAPP Facility Update Form.</p> <p>That the correct square footage in each of the City's facilities be determined and used in both the ReCAPP program and Archibus.</p>	<p>CF – Agreed. CF management and CPI have put together a working group to ensure the best use of corporate systems, integration and synergy opportunities. The team is developing a project close out form to be updated into ReCAPP. Target date: 4th quarter 2011.</p> <p>Rec – Agreed. Upon completion of the repairs listed within the ReCAPP reports, staff will complete the facility update forms to ensure that the system will be updated.</p> <p>CF – Agreed. Working group from CPI and CF management will perform a quality assessment of information and ensure data in both systems is consistent. Target date: 4th quarter 2011.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
AUGUST 2010**

Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
6.	<p><u>ReCAPP Condition Assessment Software (Cont'd)</u> As Archibus is the system through which all facility maintenance work orders are to be processed, staff indicated that there may be value in linking the two systems so that the ReCAPP system is electronically updated whenever a work order is processed.</p>	<p>That the Application & Systems Analyst continue to pursue the possibility of linking the ReCAPP reports to the Condition Assessment and the Work Order Processing modules in Archibus to enable ReCAPP to be electronically updated with details of completed work orders.</p>	<p>CF – Agreed. CF and CPI have put together a working group to ensure the best use of corporate systems, integration and synergy opportunities. Target date: 1st quarter 2012.</p>
7.	<p><u>Service Level Agreements</u> The Corporate Facilities Division provides facility management and related administrative services to other City agencies and departments that include Fire, Libraries, Culture, Recreation, HECFI and DARTS. Presently, Corporate Facilities does not have service level agreements with their client entities.</p> <p>Without service level agreements that clearly spell out the nature of services to be provided, the basis of cost allocations and the extent of each party's responsibilities, roles become ambiguous and accountability is reduced. This may also increase the likelihood of conflict.</p>	<p>That the Manager, Corporate Buildings & Technical Services finalize service level agreements with client departments for implementation by January 2011. Service levels should be mutually agreed upon and each party's responsibilities and the basis of cost allocations should be clearly defined.</p>	<p>CF – Agreed. The Service Level Agreement with Fire/EMS has been completed and was signed in 2008. A review and update is currently underway for 2010 and execution is expected in January 2011.</p> <p>The Service Level Agreement for DARTS is in its final stages with expected to be executed before December 2010.</p> <p>The 2011 work plan will focus on the Library and other client departments.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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Rec – Recreation / CF – Corporate Facilities

#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
7.	<p><u>Service Level Agreements</u> Corporate Facilities is in the process of developing service level agreements that are planned for finalization and adoption in 2011. It is important for there to be extensive consultation with client entities regarding the content of the agreements and the nature of their relationship with Corporate Facilities. Mutually acceptable agreements will clarify roles and reduce service level ambiguities.</p> <p>Management in Corporate Facilities has also indicated that, in the near future, the whole division's costs will be charged out to departments using an activity based costing system. When developing the costing system, it is important that discussions be had with clients in order to derive a mutually acceptable basis of allocating costs.</p>		

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
8.	<p><u>Accuracy and Completeness of Information Stored in Archibus</u> Work order information that is recorded in the Archibus system is not always accurate. Some work orders remain open (i.e. issued and in progress) for considerable lengths of time (some in excess of 400 days), long after the work has been completed and the vendor paid. Staff stated several reasons for this occurring which include the following:</p> <p>a) The PeopleSoft/Archibus interface that is run each month to capture paid invoices and match work order information frequently does not function properly. Vendors do not always include the work order number on the invoice or the work order number format is different from that used in Archibus, making the electronic matching not possible.</p>	<p>That the Application & Systems Analyst investigate and resolve technical problems being experienced with the PeopleSoft/Archibus interface to ensure that the Archibus system captures the cost of all external work completed.</p> <p>That the management of Corporate Facilities and the Recreation Division regularly communicate to their staff the requirement to have all facility maintenance work orders processed through the Archibus system.</p>	<p>CF – Agreed. CF management will be developing an activity base costing strategy as part of the 2011-2013 work plan. Target date: 1st quarter 2012</p> <p>On-going training and orientation is available for all parties throughout 2011.</p> <p>Rec – Agreed. Rec will develop a communication and training plan for frontline and supervisory staff in all aspects of Archibus to ensure information is captured, costs identified and that invoices contain all pertinent information to be input for Archibus, ReCAPP and PeopleSoft.</p> <p>CF – Agreed. Ongoing training and orientation is available for all parties.</p> <p>Rec – Agreed. Recreation will develop a communication plan for frontline and supervisory staff in all aspects of Archibus in the 2nd quarter of 2011 with a completion date for supervisors to be trained by the end of the 3rd quarter of 2011.</p>

**FACILITIES MAINTENANCE AND ADMINISTRATIVE CONTROLS
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#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
8.	<p><u>Accuracy and Completeness of Information Stored in Archibus (Cont'd)</u> b) Internal trades people do not always record the time spent on a project against the work order. Therefore, the work order remains open and costs are not allocated to the job or the facility.</p> <p>Periodically, the Application & Systems Analyst reviews open work orders and closes them. As there is no consultation with the responsible Supervisors, there is no assurance that the orders should actually be closed, the costs have been accurately reflected or that the work was actually performed.</p>	<p>That the management of Corporate Facilities and the Recreation Division reinforce with vendors the requirement to include Archibus work orders on all invoices to enable the PeopleSoft/Archibus interface to capture all invoice information.</p> <p>That trades people be regularly reminded to close work orders once the work has been completed and to include the numbers of hours worked.</p>	<p>CF – Agreed. CF management will send out letters to all vendors reminding them of the process. Target date: 1st quarter of 2011.</p> <p>Rec – Agreed. Recreation will develop a training plan for frontline and supervisory staff in all aspects of Archibus to ensure information is captured, costs identified and that invoices contain all pertinent information to be inputted for Archibus and PeopleSoft.</p> <p>CF – Agreed. CF will be developing an activity base costing strategy as part of the 2011-2013 work plan. Target date: 1st quarter 2012.</p>

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#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
8.	<p><u>Accuracy and Completeness of Information Stored in Archibus (Cont'd)</u> Further, because not all Supervisors place work requests through Archibus, work order information recorded in the system is not indicative of the true level of maintenance activity going on. As some maintenance work is not recorded, the usefulness of Archibus as a comprehensive database becomes limited. A well documented maintenance history may become a vital basis for defence against claims and litigation in respect of injuries and damages sustained by facility users. Without such a documented maintenance history it may be difficult for the City to demonstrate due diligence.</p> <p>In addition, although Archibus stores work order details, the system is not updated with the details of actual work done once the work has been completed. There is, therefore, no electronic trail of the actual service work done by vendors to enable management to track the repair hours put in, the type of replacement material used etc.</p>	<p>That the Archibus internal work order system be linked to the PeopleSoft Payroll system to ensure that actual hours worked by internal trades people are billed to facilities.</p> <p>That the Application & Systems Analyst continues to investigate ways of updating the Archibus system with the details of actual work carried out.</p>	<p>CF – Agreed. CF management will be developing an activity base costing strategy as part of the 2001-2013 work plan. Target date: 1st quarter 2012.</p> <p>CF – Agreed. CF management has established a southern Ontario Archibus user group to network and find "lessons learned" from other users.</p> <p>Fac – Agreed. Facilities has established a Southern Ontario Archibus User Group to network and find "lessons learned" from other users.</p>

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#	OBSERVATION OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN
9.	<p><u>Help Desk Procedures</u> The Facilities Help Desk is the hub of all maintenance work request activity. From this starting point, trades people are assigned to particular jobs and work orders are issued.</p> <p>Although work request instructions are included on the divisional drive, the procedures are not current and lack detailed directions for processing such requests.</p> <p>When there are no detailed written procedures to refer to, the employee currently carrying on the process relies on personal understanding and experience, which could result in incorrect or inconsistent application. It would also be problematic and inefficient for the successor to commence his/her duties within a short period of time.</p>	<p>That detailed written procedures be prepared for the Help Desk function and they be reviewed on an annual basis and updated, as necessary.</p>	<p>CF – Agreed. The preparation of written procedures is part of the CF management 2010-2011 work plan.</p>

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ADDENDUM

The following items were noted during the course of the audit. Although they do not present internal control deficiencies, they are indicated in this Addendum so management is aware of the issues, risks and inefficiencies and can address them appropriately.

1. Activity Based Costing

The management of Corporate Facilities has indicated an intention to adopt an activity based costing system through which the Division's costs will be cost allocated to user departments and individual facilities. It is anticipated that the activity based costing system will result in the Corporate Facilities Division charging out all of its operating costs and thus having no net tax levy impact for the Division. Presently, the cost of trades people, management and overhead are not cost allocated to individual facilities while the cost of capital project managers and the Help Desk in this Division are charged to user departments using a variety of methods. In 2009, the capital project managers' deptID had a surplus of over \$30,000 resulting from 'cost recoveries' from capital projects. These recoveries were based on 7% of a capital project's budget and, therefore, not directly related to the amount of time staff spend on the capital projects.

It is recommended:

That before implementing the activity based costing system, management develop a comprehensive and consistent methodology for allocating costs to user departments. Such methodology must be directly linked to the amount of staff time spent on the individual projects and facilities and must be mutually agreed upon with user departments.

Management Response:

CF - Agreed. This will be part of the 2011-2013 work plan. Under CF management, Facility Planning and Customer Services Business Unit will be taking the lead.

2. Archibus system

Work requests and work orders are sequentially generated from the Archibus system. In 2008, there were more than 13,000 work orders entered into the system. There were several instances noted during the testing when work order numbers were deleted by the Application and Systems Analyst due to system errors or duplication. No log was kept of deleted numbers. The integrity of the numbering system is compromised when all numbers in a sequence cannot be accounted for.

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It is recommended:

That the Archibus Application and Systems Analyst account for all instances where there is a gap in the sequential work order numbering and document the reasons for the missing numbers.

Management Response:

CF - Agreed. A change in practice has been implemented. As of the 2nd quarter 2010, all unwanted work orders (duplicates, errors, etc.) are archived rather than deleted. Additionally, an audit log on all work orders, leases and other key tables has been implemented. This audit will capture the date, time and identify if records are manually deleted for any reason.

3. Performance Measures

The Facilities Division has drafted expected performance measures for maintenance requests. For example, for a demand request, response time is expected within five business days ninety per cent of the time. There is currently no formal tracking mechanism to capture the data for these measures.

It is recommended:

That key performance indicators be measured at regular intervals for management analysis and corporate reporting.

Management Response:

CF - Agreed. CF management is currently working on an exercise to identify key performance indicators. An analysis of work requests differentiating from demand maintenance requests and preventative maintenance, internal versus external work orders, closure rates, time frames and work orders by building craft person and type have recently been completed. This information is compiled monthly and saved electronically on the CF management N drive and emailed to the CF management Senior Management Team.

CF management's intent is to expand reporting to other areas of the business which include key performance indicators relating to churn rates, space optimization, costing and budgeting. These initiatives are on-going with a completion date of the 3rd quarter of 2012. The end result will be a CF management score card presented to Senior Management and client groups.