

AUDITOR GENERAL'S REPORT ACTION REQUIRED

Toronto Water – Review of Construction Contracts

Date:	May 7, 2013
To:	Audit Committee
From:	Auditor General
Wards:	All
Reference Number:	

SUMMARY

The Auditor General's 2013Work Plan included a review of construction contracts managed by Toronto Water. Toronto Water oversees work performed by contractors engaged to install, repair and rehabilitate the City's water and wastewater systems. The objective of this review was to assess the extent to which management and administrative controls ensure the City's interest is protected, payments are accurate and contract terms are enforced.

This report contains 12 recommendations along with a management response to each of the recommendations. The implementation of these recommendations will strengthen controls, and improve the overall effectiveness of contract management and payment processes.

RECOMMENDATIONS

The Auditor General recommends that:

- 1. City Council request the General Manager, Toronto Water to ensure that revised purchasing documents, where required, are put in place on a timely basis.
- 2. City Council request the General Manager, Toronto Water to formalize and document the procedure for calculating estimates provided in tender documents for general repairs.
- 3. City Council request the General Manager, Toronto Water to develop criteria and implement procedures to determine when necessary repairs should be the subject of a project specific procurement process.

- 4. City Council request the General Manager, Toronto Water to consider incorporating a centralized warranty register in conjunction with any major system changes.
- 5. City Council request the General Manager, Toronto Water to ensure payments are made in accordance with contract terms, invoices are only paid after a thorough review to ensure goods and services have been received and appropriate documentation is retained to support all payments.
- 6. City Council request the General Manager, Toronto Water to consider the risk of additional errors in areas identified in the Auditor Generals review of invoices and take steps to recover any overpayments identified, including return of any unused material for credit.
- 7. City Council request the General Manager, Toronto Water to ensure compliance with the City Change Orders policy and procedures including the retention of appropriate supporting documentation.
- 8. City Council request the General Manager, Toronto Water to ensure contractors maintain the minimum levels of insurance coverage as required in their contracts with the City.
- 9. City Council request the General Manager, Toronto Water to implement the practice of comparing actual project costs to an established standard and investigate significant differences to the extent appropriate in the circumstances.
- 10. City Council request the General Manager, Toronto Water to ensure the District Contract Services Unit complies with Toronto Water documentation requirements.
- 11. City Council request the General Manager, Toronto Water, to ensure contractor performance is monitored, documented and, where necessary, reported as required by the Capital Works Projects Procurement and Administration Manual.
- 12. City Council request the General Manager, Toronto Water, in consultation with the Deputy City Manager, to consider including the frequency of reviews, time of final evaluation, opportunities for feedback and required action as part of his current review of contractor performance management practices.

Financial Impact

Implementation of recommendations in this report will improve control over contract management and payment processing. The extent of any resources required or potential cost savings resulting from implementing the recommendations in this report is not determinable at this time.

DECISION HISTORY

In 2007, the Auditor General, in his report titled "Management of Construction Contracts – Toronto Water and Sewer Repair Contracts made a number of recommendations. This report is available at:

http://www.toronto.ca/audit/2007/management of construction contracts audit report j ul2007.pdf

Toronto Water commits significant resources to construction projects. With our last review taking place six years ago the Auditor General determined it appropriate to carry out another review of Toronto Water's contract management practices.

COMMENTS

The audit report entitled "Toronto Water – Review of Construction Contracts" is attached as Appendix 1. Management's response to the audit recommendations is attached as Appendix 2.

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SIGNATURE

Jeff Griffiths, Auditor General

12-TWD-01

ATTACHMENTS

Appendix 1: Toronto Water – Review of Construction Contracts

Appendix 2: Management's Response to the Auditor General's report Toronto Water –

Review of Construction Contracts

AUDITOR GENERAL'S REPORT

Toronto Water – Review of Construction Contracts

April 15, 2013

Jeffrey Griffiths, C.A., C.F.E. Auditor General



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EXECUTIVE SUMMARY

Over the years the Auditor General has performed a number of audits related to the management of major construction contracts. Recommendations in various reports presented to Audit Committee have highlighted the need to improve management controls and processes and strengthen contract payment procedures.

Based on the results of these previous reviews, and the significant amounts spent on construction projects, the Auditor General's 2013 Audit Work Plan included a review of construction contracts managed by the City and/or Agencies and Corporations. This review focused on construction contracts administered by the Major Capital Projects and District Contract Services Units within Toronto Water.

Toronto Water is responsible for water and sewer infrastructure

Toronto Water maintains the City's infrastructure for providing water and sewer services through construction, repair, and rehabilitation of water and sewer lines and corresponding treatment facilities. The majority of this work is completed by external contractors engaged through a competitive tender process.

Units reviewed provide project management and oversight services

The two Units we reviewed support operating units by providing project management services. These services include overseeing work performed by contractors and the third party Contract Administrator where this service is contracted out.

\$110 m in contracts

Our review focused on contracts awarded in 2011 and 2012 with a total value of approximately \$110 million. As of December 31, 2012 payments of \$70.8 million had been processed for these contracts.

Objective of audit

The objective of this review was to assess the extent to which management and administrative controls ensure the City's interest is protected, payments are accurate, and contract terms are enforced.

Key areas for improvement

maximums

reached

Services provided since August 2012 after contract and purchase order Our review identified the following areas where procedures could be further improved and controls strengthened to enhance the overall effectiveness of contract management practices:

1. One project, the Scott Street Sewage Pumping Station, has been significantly delayed. The project, originally expected to be completed in August 2012, is now targeted for completion in May 2013. The contract with the engineering firm engaged to provide site supervision and oversight services reached its maximum contract and purchase order value in August 2012. The firm continues to provide supervisory and oversight services without purchasing authority and has not been paid since August 2012. Currently, the total services provided amount to

Weaknesses in contract oversight

2. Inadequate oversight of construction contracts:

double the originally contracted amount.

- a. contractor general liability insurance policies not followed up
- b. non-compliance with contract payment terms
- c. inadequate support for payments made
- d. inadequate verification of materials received under the contract

Opportunities to improve contract administrative practices

- 3. Other administrative improvements required including:
 - a. maintaining a central warranty register
 - b. improving and documenting procedures for quantity estimates included in bid documents
 - c. comparing actual costs against cost guidelines for common types of repairs
 - d. improvements in contractor evaluation practices.

Conclusion

The report contains 12 recommendations. Implementation of the recommendations contained in the report will strengthen controls, and enhance the overall effectiveness of contract management and payment processes.

BACKGROUND

Toronto Water Division responsible for City's water and wastewater systems Toronto Water oversees all aspects of water production, transmission and distribution, wastewater collection and treatment, and stormwater collection and treatment. They are also responsible for supplying drinking water and for collecting and treating all city wastewater from sanitary sewers and stormwater systems.

Infrastructure is complex and large

The City's water and wastewater infrastructure includes:

- four water filtration plants
- four wastewater treatment plants
- two laboratories
- 510 kms of trunk watermains
- 5,015 kms of distribution watermains
- 4,305 kms of storm sewers
- 4,397 kms of sanitary sewers.

Units charged with managing contracts

Toronto Water's District Contract Services Unit is responsible for managing emergency and planned repair work to the City's major water/sewage lines. The Unit is also responsible for the installation and repair of water and sewer connections to these major lines. A separate Unit, Major Capital Projects, manages projects and contracts for repairs to the plants and major components of the City's water and sewage systems.

Most work is done by external contractors Toronto Water engages contractors for most of the installation, repair and rehabilitation projects. Successful management and administration of these contracts is important to maintain the City's water and wastewater infrastructure in a cost-effective manner and minimize the City's liability and risk exposure.

Six contracts selected for detailed review

Our review focused on contracts awarded in 2011 and 2012. These contracts had a total value of approximately \$110 million. As of December 31, 2012 payments of \$70.8 million had been processed for these contracts. From these contracts, we selected six, with a value of \$30.8 million, for review.

AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

Auditor General's 2013 Audit Work Plan

The Auditor General's 2013 Work Plan included a review of selected construction contracts. The purpose of the review was to assess the adequacy of contract management controls including administering payments under the contracts. The review focused on Toronto Water based on the significance of its repair and rehabilitation projects planned and in progress.

Audit objective

The objective of this review was to assess the extent to which proper management controls were in place to ensure:

- contracted services are delivered in accordance with contract terms and conditions
- contract payments are accurate, properly authorized and supported by adequate documentation
- City interests are adequately protected at all times

Audit scope

The review covered the period from January 1, 2011 to December 31, 2012.

We selected six construction contracts with payments totaling \$25.9 million as of December 31, 2012.

In some instances, general contract administration and oversight was also contracted out. We reviewed both the construction and administration contracts where applicable.

The scope of this review did not include an assessment of the original award of contracts.

Audit methodology

Our audit methodology included the following:

- review of policies and procedures
- interviews with relevant City staff
- site visits
- examination of documents and records
- evaluation of current management control processes
- review of relevant Council and Standing Committee reports
- review of construction contract and contract management audit reports previously issued by the Auditor General
- review of related reports issued in other municipalities
- analysis of data
- other procedures deemed appropriate

Compliance with generally accepted government auditing standards

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT RESULTS

A. MANAGEMENT PRACTICES REQUIRE IMPROVEMENT

A.1. Work Continues to Be Performed After Contract and Purchasing Approval Maximums Reached

The City uses a competitive tender process to engage consulting and engineering services to manage and test the work performed by contractors.

Project delays results in provision of engineering services without purchasing authority For one project, the Rehabilitation and Upgrade of the Scott Street Sewage Pumping Station, the contract with the engineering firm was based on providing services for a project to be completed in August 2012. There have been a number of delays in completing the project and the City continues to receive site supervision and oversight services from the engineering firm.

The contract with the engineering firm, and the related purchase order, included a maximum value for the work to be performed. The significant project delays have resulted in these maximums being exceeded in the range of one hundred per cent. Although the engineering firm continues to provide the professional services required, the absence of revised purchasing authority means the firm cannot be paid. The extended delays and contract overages could lead to future disputes over the amount payable.

Services provided without purchasing authority for over 7 months

Although services provided by the engineering firm are monitored, the services have been provided in excess of seven months without proper purchasing authority.

Outstanding payments not recorded in the financial system

Management monitors the hours charged by the engineering firm against work required. Outstanding payments are tracked outside the City's financial system with a final accounting to take place at the completion of the project which is expected to finish in May 2013.

We understand from management that the nature of these construction contracts requires some flexibility in extending services from professional firms. However, seven months without proper purchasing authority appears excessive and more diligence is needed in adhering to City procurement practices.

Recommendation:

1. City Council request the General Manager, Toronto Water to ensure that revised purchasing documents, where required, are put in place on a timely basis.

A.2. Management Trail of Estimates Included in Tender Document Needs Strengthening

Every two years contracts awarded to lowest bidder by district

Every two years the City issues a tender call for repair work that needs to be performed in each district. Bidders are provided projected activity levels for the two year period and requested to quote on a set of standard material and labour rates most often used in Toronto Water's repair projects. Contracts are awarded to the lowest bidder in each district based on rates quoted, multiplied by the projected quantity of work as described in the tender document. These contracts are referred to as General Repair Contracts.

Tender documents contain quantities for a number of standard items At the time of our review, there were approximately fifty standard material and labour quantities included in the tender documents provided as part of the bidding process.

Management advised that the quantities presented in the tender documents are based on actual work performed in previous years combined with projected future need. Obtaining the best pricing for the City requires that the estimated quantities are reasonably accurate.

Accuracy of estimated quantities is critical to the bid process

The need for reasonable estimations of quantities in emergency repair contract tender documents was identified in the Auditor General's report titled Management of Construction Contracts - Toronto Water and Sewer Emergency Repair Contracts dated July 30, 2007. This report is available at:

http://www.toronto.ca/audit/2007/management of construction contracts audit report jul2007.pdf

Significant variances noted

Based on the current review, we still have concerns regarding the reasonableness of estimates provided in tender documents.

For a number of water and sewer repair hours and material quantities actual amounts were significantly different from the original estimates. Two examples are included in Table 1.

Table 1: Examples of Actual to Estimated Tender Items

Item	Esti	mated	Actual		Difference
	Quantity	Amount	Quantity	Amount	
A	1000	\$369,000	330	\$121,700	(67%)
В	200	\$92,200	1039	\$479,150	520%

Lack of a management trail

We were unable to determine if adequate attention was applied to the tender estimates since management was unable to provide documentation supporting the original estimates.

We understand that the nature of repair work makes it difficult to estimate exactly the work that will actually be performed. However, the scope of the variances noted in the above examples indicates that estimation improvements may be possible. Ensuring tender documents contain reasonably accurate estimates is essential for the City to get the best pricing for goods and materials.

An adequate management trail and retention of how these quantities are arrived at is important to support numbers used and form the basis for making future projections.

Recommendation:

2. City Council request the General Manager, Toronto Water to formalize and document the procedure for calculating estimates provided in tender documents for general repairs.

A.3. Guidelines for Determining Nature of Project Is Needed

Contracts in place for quick response to smaller emergency repair projects At the conclusion of the tendering process for the General Repair Contract, the City signs contracts for each of the four districts.

There are no clear guidelines to assist management in determining if a particular repair job should be included as part of the General Repair Contracts. These contracts are established to allow for a quick response to repair projects of an emergency nature, of a short duration and corresponding lower dollar value.

The contracts are not designed for larger more complex projects since the City may receive better value by submitting these larger projects to a separate procurement process.

Extent of work that may be required is not always known Since most of Toronto Water's infrastructure is below ground, the extent of repair work required is not always evident until certain excavation is performed. There are instances where initial work reveals a bigger problem leading to an expanded project scope.

Some large projects administered under the General Repair Contract A number of projects administered under the General Repair Contract appear to be more than typical repair work. For example, for two projects we reviewed the costs were \$556,000 and \$237,000 respectively. These costs significantly exceed the cost for a typical water/sewer main repair administered under the contract.

We recognize that operational need and the emergency nature of some repair work heavily influence the ultimate decision to proceed with a repair job under the General Repair Contract rather than separately tendering a project. However, a formal process to be followed whenever initial work leads to an expanded project scope is recommended. Formal criteria, which includes items such as emergency nature of the project, extent of scope change, and dollar threshold should be developed to guide management in making this decision.

Recommendation:

3. City Council request the General Manager, Toronto Water to develop criteria and implement procedures to determine when necessary repairs should be the subject of a project specific procurement process.

A.4. Central Warranty Register Is Recommended

Central warranty register is not maintained

Contractors performing repair work for Toronto Water generally guarantee their work for a specified period of time. Where a warranty does exist, it is prudent to assess the work immediately prior to warranty expiration where possible. Identification of problems prior to warranty expiration can ensure that any deficiencies are corrected under the warranty. It is difficult for City staff to identify when warranties are expiring and if any deficiencies identified are covered by a warranty since warranty information is not easily accessible.

Use of multiple systems leads to different levels of warranty data and practices Toronto Water's operations are supported by multiple systems which contributes to an environment where warranty information is stored in different systems and maintenance of this data varies from unit to unit. This makes it difficult to plan and monitor warranty inspections.

Central register should be considered in implementation of new system Creation of a centralized warranty register does not appear feasible with current systems. However, Toronto Water is in the initial stages of implementing a new work management system to consolidate operations across all units. This provides an opportunity to plan centralization of warranty information.

Recommendation:

4. City Council request the General Manager, Toronto Water to consider incorporating a centralized warranty register in conjunction with any major system changes.

B. CONTRACT ADMINISTRATIVE PRACTICES REQUIRE STRENGTHENING

B.1. Process for Reviewing Invoices Prior to Payment Need Strengthening

Most payments to vendors that we reviewed in the course of this audit were processed accurately and in a timely manner.

However, there were two areas of a systemic nature that are a cause for concern. These were:

- not adequately validating material received against the amount of material billed; and
- not ensuring payments to contractors are made in compliance with the terms of the contract.

Toronto Water inspectors visit construction sites where work is being carried out. One of their primary control activities is the completion of an inspection report. The report is a key document for recording both work performed by the contractor and material delivered to the site. The inspection report is critical for validating amounts billed by contractors.

Overpayment of \$14,800 in 25% of change orders reviewed

Material billed by contractors is not consistently verified to details recorded on inspection reports in the District Contract Services Unit. We reviewed seventeen change orders from three separate contracts. Two of the contracts contained errors on change orders. For these two contracts, we reviewed 12 change orders with a total value of \$251,000. On these change orders, Toronto Water paid \$14,800 for material not received.

We observed the same issue to a lesser extent for payments not related to change orders. While our sample size was small, we noted overpayments of \$4,000 for material the City did not receive and payment for excess materials not used.

The inadequate review of materials received on these contracts has been brought to the attention of the appropriate management staff for corrective action.

Non- compliance with payment terms results in overpayments

With respect to the Major Capital Projects Unit we found a number of payment errors due to non-compliance with payment terms outlined in the contract.

Subcontractors were used to carry out work for one of the projects we reviewed. According to the City's contract with the main contractor, the main contractor is not entitled to apply a markup on overhead charges submitted by a subcontractor.

One Contractor's billing consistently included a markup on overhead charged by subcontractors. A more thorough review of invoices would likely have prevented these errors. Although the dollar amounts of errors observed was not significant, Toronto Water needs to ensure payments are consistent with contract terms.

Supporting documentation lacking

We also noted supporting documentation for progress payments was lacking in some instances. In our review of twenty seven "Other" expenditures on one project we noted approximately \$13,000 out of total charges of \$73,000 did not have adequate supporting documentation. The absence of appropriate supporting documentation indicates that charges were not properly validated.

Recommendations:

- 5. City Council request the General Manager, Toronto Water to ensure payments are made in accordance with contract terms, invoices are only paid after a thorough review to ensure goods and services have been received and appropriate documentation is retained to support all payments.
- 6. City Council request the General Manager, Toronto Water to consider the risk of additional errors in areas identified in the Auditor Generals review of invoices and take steps to recover any overpayments identified, including return of any unused material for credit.

B.2. Control Over Change Orders Requires Improvement

Construction projects often involve issuance of change orders

Construction projects often require change orders for additional or unanticipated extra work and materials. For the three Major Capital Projects Unit contracts reviewed there were forty eight change orders. These change orders totaled \$759,000 or 11.5 per cent of the original construction amount. For the most part, these change orders were reasonably well managed by this Unit.

General repair work leads to many change orders The District Contract Services Unit has a significantly higher number of contracts and change orders to manage. In 2011 and 2012, a total of 131 change orders totaling \$1.3 million were processed for the three contracts we reviewed in the Unit. The most change orders occurred on the General Repairs Contract where there were \$1.2 million in change orders on an initial contract value of \$10 million.

Price quotes often not obtained, extra work order not prepared, supervisor approval lacking For water and sewer repair, we reviewed 17 change orders totaling \$337,000 and found:

- 80 per cent did not have a price quote, estimation of material required, or labour rate to be charged prior to carrying out the extra work
- 43 per cent did not have an extra work report prepared by inspectors
- 11 per cent did not have supervisor approval on the inspector report

We understand that obtaining quotes is not always feasible for these water repair projects. However, the significant percentage of projects without quotes suggests this has become a default practice rather than an exception. The practice of obtaining price quotes is to ensure the City receives the best price for the work required.

Not preparing required extra work reports and obtaining supervisor approval violate standard control practices that could lead to overpayments or work performed unnecessarily.

Recommendation:

7. City Council request the General Manager, Toronto Water to ensure compliance with the City Change Orders policy and procedures including the retention of appropriate supporting documentation.

B.3. City's Interest Needs to Be Better Protected

Contract terms designed to protect the City's interest Contracts contain a number of clauses to protect the City's interest and ensure payments are based on agreed upon terms. Lack of compliance with contract terms increases the City's risk exposure.

All City tender documents and contracts contain a section specifying the Contractors obligation to provide various documents, including certificates of insurance. These documents are requested to ensure the City has some protection from claims, risk and losses in connection with activity performed under contract.

City exposed due to expired general liability insurance certificates We noted that the City was provided an expired certificate of insurance for one contract of the six contracts we reviewed. The contract requires the Contractor to keep these certificates of insurance current.

Recommendation:

8. City Council request the General Manager, Toronto Water to ensure contractors maintain the minimum levels of insurance coverage as required in their contracts with the City.

C. IMPROVED PROJECT MANAGEMENT PRACTICES REQUIRED

C.1. Review at the Project Level Is Warranted

Large number of individual jobs administered under General Repair Contract

There were 505 and 364 repair projects in 2011 and 2012 respectively administered under the General Repair Contract. Given the significant number of projects ongoing during the year, there is a need for a process to quickly bring potential problems to management's attention.

A standard repair cost can be implemented by type of repair job

Management does not currently measure actual costs for completing a particular job against a standard established for a typical and routine repair job. While it would be difficult to project the cost of each job, repairs can be grouped by several types each with a reasonable range of total expected costs. Formalizing a standard estimated cost by project type would assist in identifying projects that incur costs outside an expected range, allowing management to focus attention on these projects.

It is important to note that, given the underground nature of the infrastructure being repaired, such variances from estimated amounts are not automatically indicative of a problem. Rather, additional management review and analysis may be warranted to provide assurance that, should there be an issue, it will be identified and appropriate steps taken.

Recommendation:

9. City Council request the General Manager, Toronto Water to implement the practice of comparing actual project costs to an established standard and investigate significant differences to the extent appropriate in the circumstances.

C.2. Documentation Practices Need Improvement

Documentation required by policy not always on file

The retention of sufficient appropriate documentation is essential in assisting the City to effectively resolve potential claims by parties involved in a project. Documents required by the relevant Toronto Water manuals are not always kept on file.

Documentation deficiencies are particularly noticeable in the District Contract Services Unit. This Unit manages many short term projects and this appears to be a factor in the Unit's inability to retain the required documentation. For example, construction schedules are not consistently obtained and project progress meetings are not always documented. Toronto Water needs to determine the changes that are necessary, to either procedures or the administrative manuals, to ensure the Unit complies with documentation requirements.

Recommendation:

10. City Council request the General Manager, Toronto Water to ensure the District Contract Services Unit complies with Toronto Water documentation requirements.

C.3. Contractor Evaluations Should Be Consistently Performed

The City has procedures for documenting contractor performance

The Auditor General's report titled "Management of Construction Contracts – Toronto Water and Sewer Emergency Repair Contracts" commented on the need to consistently document and monitor contractor performance issues. In response, management implemented performance monitoring procedures and forms.

These are documented in the Capital Works Projects
Procurement and Administration Manual which specifies the
need for evaluation of a Contractor's performance. Poorly
performing contractors are to be reported to Council in
consultation with Purchasing and Materials Management
Division and Legal Services. Our review indicates performance
evaluations are not being done consistently.

We understand that changes to the contractor performance evaluation process are under review, however, until approved, evaluations should be carried out as required by City policy. This is of particular importance where projects experience significant delay as is the case with the Rehabilitation and Upgrade of the Scott Street Sewage Pumping Station.

The Capital Works Projects Procurement and Administration Manual does not address the frequency or reporting timeframe for each evaluation, when the final evaluation is to be completed or when feedback from the contractor should be provided.

Recommendations:

- 11. City Council request the General Manager, Toronto Water, to ensure contractor performance is monitored, documented and, where necessary, reported as required by the Capital Works Projects Procurement and Administration Manual.
- 12. City Council request the General Manager, Toronto Water, in consultation with the Deputy City Manager, to consider including the frequency of reviews, time of final evaluation, opportunities for feedback and required action as part of his current review of contractor performance management practices.

CONCLUSION

Effective contract management requires the support of effective protocols and procedures including adequate management oversight. In our review of six contracts we noted opportunities for strengthened controls over monitoring contract payments and compliance with contract terms and conditions.

Implementing the recommendations in this report will help enhance the overall efficiency of managing City contracts.

APPENDIX 2

Management's Response to the Auditor General's Review of Toronto Water - Review Of Construction Contracts

Rec	Recommendations	Agree	Disagree	Management Comments:	Action Plan/Time Frame
No.		(X)	(X)	(Comments are required only for	
				recommendations where there is disagreement.)	
1.	City Council request the General	X		Agreed.	The General Manager, Toronto Water
	Manager, Toronto Water to ensure				will issue a memorandum to all
	that revised purchasing documents,				Directors addressing this
	where required, are put in place on a				recommendation and advising that if
	timely basis.				undue delays are expected in
					completing negotiations for revised
					purchasing documents, that the matter
					be escalated up to the Director or
					General Manager for information.
					Time Frame: end of Q2-2013
2.	City Council request the General	X		Toronto Water evaluates quantity	The Director, District Operations and
	Manager, Toronto Water to formalize			estimates year over year and adjusts	the Manager, District Contact Services
	and document the procedure for			accordingly prior to issuing new contracts.	will develop an estimation strategy for
	calculating estimates provided in			Contracts for general repairs cover many	General Repair type contracts.
	tender documents for general repairs.			different activities and it is difficult to	
	_			predict the types of repairs and quantities	Time Frame: to be implemented by
				given that external factors affect the	Q1-2014 in advance of the next
				number and type of repairs year over year	contract cycle.
				(i.e. weather impacts and staffing	
				complement in operations units).	

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: (Comments are required only for recommendations where there is disagreement.)	Action Plan/Time Frame
3.	City Council request the General Manager, Toronto Water to develop criteria and implement procedures to determine when necessary repairs should be the subject of a project specific procurement process.	X		Toronto Water is using alternative procurement methods to affect certain repairs that are not deemed emergency or priority. However, Toronto Water agrees that formal criteria and procedures would assist staff in determining the most appropriate procurement method to use for specific situations.	The Director, District Operations and the Manager, District Contact Services will develop work flow and process maps to help staff review work assignments and type of alternative procurement process to use. Time Frame: end of Q3-2013.
4.	City Council request the General Manager, Toronto Water to consider incorporating a centralized warranty register in conjunction with any major system changes.	X		Toronto Water currently maintains Warranty registries in several locations throughout the Division based on work locations and the particular work management systems deployed. Warranty information can be found on network share drives and within both Work Management Systems in use within the Division (i.e. Hansen and Avantis).	The General Manager, Toronto Water will consider incorporating a centralized warranty registry as part of the defined divisional business needs during the procurement of a new Work Management System. Time Frame: end of Q4-2014
5.	City Council request the General Manager, Toronto Water to ensure payments are made in accordance with contract terms, invoices are only paid after a thorough review to ensure goods and services have been received and appropriate documentation is retained to support all payments.	X		Overpayments that occurred may have been prevented with a more thorough review of invoices. Although the dollar amount of errors observed was minimal in relation to the total dollar value of work completed, Toronto Water agrees there is a need to ensure payments are consistent with all contract terms. Toronto Water will recover overpayments or request the return of material paid for but not installed. Some overpayments have already been recovered.	The General Manager, Toronto Water will issue a memorandum to all Directors reminding staff that invoices be thoroughly reviewed to ensure goods and services have been received and all payments be made in accordance with contract terms. Any overpayments will be recovered. Time Frame: end of Q2-2013

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: (Comments are required only for	Action Plan/Time Frame
6. 7.	City Council request the General Manager, Toronto Water to consider the risk of additional errors in areas identified in the Auditor Generals review of invoices and take steps to recover any overpayments identified, including return of any unused material for credit. City Council request the General Manager, Toronto Water to ensure compliance with the City Change Orders policy and procedures including the retention of appropriate	X		recommendations where there is disagreement.) The overpayments that occurred may have been prevented with a more thorough review of invoices. Although the dollar amount of errors observed was minimal in relation to the total dollar value of work completed, Toronto Water agrees there is a need to ensure payments are consistent with the terms of all contracts. Toronto Water will recover overpayments or request the return of material paid for but not installed. Some overpayments have already been recovered. In addition to City Change Order policies, Toronto Water has developed adequate Divisional policy and procedure manuals for managing capital projects. Staff are trained and familiar with the existing	The General Manager, Toronto Water will issue a memorandum to all Directors reminding staff that invoices be thoroughly reviewed to ensure goods and services have been received and all payments be made in accordance with contract terms. Any overpayments will be recovered. Time Frame: end of Q2-2013 The General Manager, Toronto Water will issue a memorandum to all Directors reminding staff to comply with City and Divisional Change Order policies and procedures.
8.	city Council request the General Manager, Toronto Water to ensure contractors maintain the minimum levels of insurance coverage as required in their contracts with the City.	X		In addition to adequate terms contained within City contracts, Toronto Water has developed Divisional policy and procedure manuals for managing capital projects. Staff are trained and familiar with existing policies and procedures.	Managers will hold "Tailgate Training Sessions" with staff as required. Time Frame: end of Q3-2013 The General Manager, Toronto Water will issue a memorandum to all Directors reminding staff to ensure contractors maintain minimum levels of insurance coverage as required in contracts. Time Frame: end of Q2-2013

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: (Comments are required only for	Action Plan/Time Frame
9.	City Council request the General Manager, Toronto Water to implement the practice of comparing actual project costs to an established standard and investigate significant differences to the extent appropriate in the circumstances.	X		recommendations where there is disagreement.) Toronto Water will develop a database documenting standard costs for routine work based on various types of repairs.	The Director, District Operations and the Manager, District Contact Services will review actual costs over the past three years and develop standard repair costs for typical repair types. A protocol to enhance Management controls will be developed. Time Frame: Q1-2014.
10.	City Council request the General Manager, Toronto Water to ensure the District Contract Services Unit complies with Toronto Water documentation requirements.	X		Toronto Water will review procedures and the documentation requirements contained in administrative manuals to ensure the requirements are current and relevant.	The Director, District Operations and the Manager, District Contact Services will complete a review of administration manuals and amend procedures to better reflect operational requirements. Time Frame: Q1-2014.
11.	City Council request the General Manager, Toronto Water, to ensure contractor performance is monitored, documented and, where necessary, reported as required by the Capital Works Projects Procurement and Administration Manual.	X		Toronto Water, in conjunction with the Purchasing and Materials Management Division (PMMD), has developed a pilot evaluation form as part of a new Contractor Evaluation Procedure that will eventually be implemented City-wide.	Training for the new pilot evaluation procedure is scheduled for May/June 2013. PMMD will review the success of the pilot program and implement a City-wide Contractor Evaluation Procedure later in 2013. Time Frame: Q1-2014.

Rec	Recommendations	Agree	Disagree		Action Plan/Time Frame
No.		(X)	(X)	(Comments are required only for	
12.	City Council request the General Manager, Toronto Water, in consultation with the Deputy City Manager, to consider including the frequency of reviews, time of final evaluation, opportunities for feedback and required action as part of his current review of contractor performance management practices.	X		recommendations where there is disagreement.) These additional requirements will be incorporated into the new City-wide Contractor Evaluation Procedure being developed by PMMD to be implemented later in 2013.	Training for the new pilot evaluation procedure is scheduled for May/June 2013. PMMD will review the success of the pilot program and implement a City-wide Contractor Evaluation Procedure later in 2013. Time Frame: Q1-2014.
	performance management practices.				