

# AUDIT REPORT

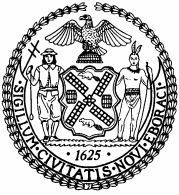


CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
BUREAU OF FINANCIAL AUDIT  
**WILLIAM C. THOMPSON, JR., COMPTROLLER**

## **Audit Report on Compliance with Comptroller's Directive #7 by the Engineering Audit Office, Department of Sanitation**

FR08-058A

**June 27, 2008**



THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET  
NEW YORK, N.Y. 10007-2341

WILLIAM C. THOMPSON, JR.  
COMPTROLLER

**To the Citizens of the City of New York**

Ladies and Gentlemen:

In accordance with the responsibilities of the Comptroller contained in Chapter 5, § 93, of the New York City Charter, my office has audited compliance with Comptroller's Directive #7 by the Engineering Audit Office, Department of Sanitation.

The Department's Engineering Audit Office—a part of the Bureau of Financial Management and Administration—is responsible for performing independent audits of capital payments for construction projects, design and construction management contracts, equipment purchases, and certain types of expense vouchers in accordance with Comptroller's Directive #7. We audit compliance with Directives such as this to ensure that City agencies are only paying vendors for work that has been authorized and completed.

The results of our audit, which are presented in this report, have been discussed with officials of the Department of Sanitation, and their comments have been considered in preparing this report. Their complete written responses are attached to this report.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at [audit@Comptroller.nyc.gov](mailto:audit@Comptroller.nyc.gov) or telephone my office at 212-669-3747.

Very truly yours,

A handwritten signature in cursive script that reads "William C. Thompson, Jr.".

William C. Thompson, Jr.

WCT/fh

**Report: FR08-058A**  
**Filed: June 27, 2008**

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*The City of New York  
Office of the Comptroller  
Bureau of Financial Audit*

**Audit Report on Compliance with  
Comptroller's Directive #7 by the  
Engineering Audit Office, Department of Sanitation**

**FR08-058A**

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**AUDIT REPORT IN BRIEF**

We performed an audit of the compliance with the New York City Comptroller's Directive #7 by the Department of Sanitation's Engineering Audit Office. Comptroller's Directive #7 "provides agency Engineering Audit Officers (EAO's) with guidelines for independently pre-auditing payment requests for a variety of construction and related consultant services contracts. EAO's have the important responsibility of insuring, prior to payment, that the City has received appropriate value under these contracts."

The Department's engineering audit office—a part of the Bureau of Financial Management and Administration—is responsible for performing independent audits of capital payments for construction projects, design and construction management contracts, equipment purchases, and certain types of expense vouchers.

In Fiscal Year 2007, the Department's engineering audit office approved for payment \$114,733,866 in vouchers for capital projects.

**Audit Findings and Conclusions**

The audit determined that the Department's engineering audit office has not fully complied with Comptroller's Directive #7 provisions regarding change-order work. We found that the engineering audit office authorized for payment \$1,678,491 in vouchers associated with change orders not registered with the Comptroller's Office. In addition, the engineering audit office authorized for payment: vouchers that lacked substantiating documentation; vouchers whose amounts exceeded estimated costs; and vouchers whose associated change orders lacked a required certification of cost reasonableness.

In contrast to problems that pertain to change-order payments, the Department's engineering audit office generally complied with the other major requirements of Comptroller's Directive #7 that relate to auditing and authorizing the payments concerning work originally specified under the construction and consultant contracts.

## **Audit Recommendations**

This report makes a total of 10 recommendations as follows:

The Department should:

- Cease its practice of authorizing change-order voucher payments for change orders that have not been registered and ensure that all change orders are promptly registered with the Comptroller's Office.
- Immediately submit for registration the change orders cited in this report that are still not registered.
- Ensure that required documentation to substantiate time and material payments is included in the voucher documentation and reviewed accordingly by the engineering audit office.
- Obtain supporting documentation to properly review the voucher payments noted in this audit, and if required, make any adjustments to the voucher amounts paid to contractors.
- Ensure that the engineering audit office maintains all required file documentation to substantiate voucher payments.
- Ensure that the engineering audit office approves payments that are consistent with authorized change-order amounts.
- Recoup \$73,164 in payments to Dart Mechanical Corporation.
- Perform required checks of prices and material quantities and conduct field visits to verify the percentage of work completed.
- Ensure that the engineering audit office complies with Directive #7 provisions for certifying change orders for cost reasonableness. The engineering audit office should not authorize any payments for which the required certification or cost estimate has not been made.
- Ensure that the engineering audit office submits to the agency head or the head's designee the required reports for change orders that exceed the \$75,000 threshold.

# INTRODUCTION

## **Background**

The Department of Sanitation (Department) collects and disposes of more than 12,000 tons of residential and institutional refuse and recyclables daily. The Department's engineering audit office—a part of the Bureau of Financial Management and Administration—is responsible for performing independent audits of capital payments for construction projects, design and construction management contracts, equipment purchases, and certain types of expense vouchers.

The New York City Comptroller's Directive #7 "provides agency Engineering Audit Officers (EAO's) with guidelines for independently pre-auditing payment requests for a variety of construction and related consultant services contracts. EAO's have the important responsibility of insuring, prior to payment, that the City has received appropriate value under these contracts."

The Department's engineering audit office consists of an engineering audit officer and deputy director, five engineering auditors, one management auditor, one prevailing wage auditor, and clerical staff. Requests for payments from vendors are initiated by five Department bureaus and processed by the Department's fiscal unit, the Bureau of Fiscal Services, which submits payment vouchers to the engineering audit office for review.<sup>1</sup> Payment vouchers obtained from the fiscal unit are date-stamped upon receipt in the engineering audit office, and pertinent information (e.g., payment number, voucher number, vendor name, and contract number) is manually recorded in a log book. Typical voucher requests are for initial and ongoing payments, substantial and final completion payments, and payments for change-order work. According to Directive #7, engineering auditors must conduct field or desk audits to ensure that work has been performed and that vendors have complied with applicable contract provisions pertaining to insurance, permits, specifications, and prevailing wages. Based on auditors' reviews, requested payment amounts may be either approved or revised. After completing reviews, vouchers are resubmitted by the engineering audit office to the fiscal unit for payment to the vendor.

In Fiscal Year 2007, the Department's engineering audit office approved for payment \$114,733,866 in vouchers for capital projects.<sup>2</sup>

## **Objectives**

The objective of this audit was to determine whether the Department of Sanitation's engineering audit office is complying with major provisions of the Comptroller's Directive #7.

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<sup>1</sup>The five bureaus are Waste Disposal, Building Maintenance/Motor Equipment, Waste Management/Landfill Engineering, Long Term Export, and Engineering.

<sup>2</sup> Capital projects include \$4,179 for land acquisition, \$58,836,712 for construction, \$10,785,204 for consulting, and \$45,107,771 for capital equipment purchases.

## **Scope and Methodology**

The scope of this audit covered vouchers for construction and consultant service contracts that were approved for payment by the Department's engineering audit office in Fiscal Year 2007.

We reviewed Comptroller's Directive #7 ("Audit of Payment Vouchers Issued under Contracts for Construction, Equipment and Related Consultant Services") and Department policies and procedures. We also reviewed Citywide rules and regulations governing the review of payment vouchers and change orders, including the City's Procurement Policy Board Rules (PPB Rules), the New York City Charter, and Comptroller's Directive #24 ("Agency Purchasing Procedures and Controls"). To understand the Department's internal controls for reviewing vouchers and compliance with Directive #7, we interviewed Department personnel who oversee the engineering audit office. We documented our understanding of these controls in written descriptions.

We obtained from the Department's Bureau of Fiscal Services an electronic file of voucher payments made in Fiscal Year 2007, and tested its reliability, completeness, and accuracy by comparing it with a file independently generated by the Comptroller's Information Technology Audit Division.

In Fiscal Year 2007, the engineering audit office reviewed 436 payment vouchers totaling \$58,836,712 associated with 96 construction contracts, and 224 payment vouchers totaling \$10,785,204 associated with 30 consultant contracts. We sorted the construction contracts by type of payment (i.e., initial, ongoing, substantial, and final), and by classification (i.e., general construction, plumbing, mechanical, and electrical), and selected a judgmental sample (of the largest dollar amounts for each type of payment and classification) of 85 vouchers totaling \$37,928,979 and 21 change-order voucher payments totaling \$1,172,385. These 21 vouchers contained payments for 69 change orders. The 69 change orders consisted of payments for 65 change orders whose cumulative total as of the end of Fiscal Year 2007 was \$2,636,160, and credits for four change orders whose cumulative total as of the end of Fiscal Year 2007 was \$473,320. Therefore, our review consisted of these cumulative payments for these 69 change orders.

Similarly, we sorted the consultant contracts by type of payment and selected a judgmental sample of 27 vouchers totaling \$3,322,108. Thus, our overall sample consisted of 133 payment vouchers for construction, consultant, and change-order work.

To determine whether the Department is properly complying with Directive #7, we reviewed file documentation for the 133 selected voucher payments. We reviewed these payment files to ascertain whether they contained required documentation such as insurance, warranties, bonds, and award letters for competitively bid contracts and whether the payments were for required work scopes outlined in the respective contracts. We determined whether the payments were processed within the required time frame in accordance with Directive #7. We reviewed each sample file to verify that it contained evidence of the engineering audit office's independent reviews and estimates as required by the Directive. In addition, we determined whether the engineering audit office verified invoiced quantities and prices by comparing the amount approved for payment with the supporting documentation.

We looked for evidence in the voucher files to ascertain whether the engineering audit office conducted field visits when necessary to certify that work performed was sufficiently advanced to warrant payment. To determine whether prevailing wages were paid to employees by the contractors, we reviewed the certified payroll reports submitted with payment requests. Finally, we assessed the accuracy of the sampled payments by reviewing the supporting documentation for work performed in each phase of the contract and compared the invoiced amount to the percentage of work completed.

Our review of the change orders required additional testing in accordance with Directive #7. Specifically, we determined whether the 69 sampled change orders were registered with the Comptroller's Office. We examined each change order for required engineering audit office approvals and reviews of the work and cost. We compared authorized voucher amounts for change-order work with the engineering audit office's cost estimate for that work to determine whether payments were accurate. In addition, our audit engineers determined whether the change-order amounts were reasonable by performing independent cost estimates based on the scope of work specified in each change order. Finally, we determined whether all payments for time and material change orders that were within the sampled population contained required timesheets, material invoices, and receipts to justify the requested payment amount.

The results of our samples were not projected to their respective populations; however, our tests provide a reasonable basis to determine whether the Department is properly complying with Directive #7.

This audit was conducted by staff that included auditors who are engineers. Furthermore, this audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered necessary. This audit was performed in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

### **Discussion of Audit Results**

The matters covered in this report were discussed with Department officials during and at the conclusion of this audit. A preliminary draft report was sent to Department officials on April 25, 2008, and was discussed at an exit conference on May 23, 2008. On June 2, 2008, we submitted a draft report to Department officials with a request for comments; the Department provided a written response on June 17, 2008. The Department agreed with 5 of the 10 recommendations and partially agreed with 3 recommendations to cease the practice of authorizing change-order voucher payments for change orders that have not been registered and insure that all change orders are promptly registered with the Comptroller's Office; recoup \$73,164 in payments to Dart Mechanical Corporation; and perform required checks of prices and material quantities and conduct field visits to verify the percentage of work completed. The Department disagreed with two recommendations to ensure that the engineering audit office approves payments that are consistent with authorized change-order amounts and ensure that the engineering audit office complies with Directive #7 provisions for certifying change orders for cost reasonableness before authorizing any payments for which the required certification or cost estimate has not been made.

The full text of the Department's response is included as an addendum to this report.



## **FINDINGS AND RECOMMENDATIONS**

The Department's engineering audit office has not fully complied with Comptroller's Directive #7 provisions regarding change-order work. Specifically, our review of sampled payment vouchers for change-order work found that the engineering audit office authorized for payment:

- \$1,678,491 in vouchers associated with change orders not registered with the Comptroller's Office.
- \$48,913 in vouchers despite the lack of substantiating timesheets and material invoices.
- \$321,553 in vouchers although the amounts exceeded the costs estimated by the engineering audit office.
- \$1,017,616 in vouchers although the associated change orders lacked required engineering audit certification of cost reasonableness.

In addition, none of the 13 change orders whose value exceeded \$75,000 contained required written reports for the agency head.

In contrast to the above problems that pertain to change-order payments, the Department's engineering audit office generally complied with the other major requirements of Comptroller's Directive #7 that relate to auditing and authorizing the payments concerning work originally specified under the construction and consultant contracts. Specifically, the Department ensured that payments were timely and accurate, reviewed for consistency, and were properly authorized.

Appendix I lists the change orders associated with the problems we identified.

### **Problems with Approving Payment Vouchers for Change-Order Work**

#### **Unauthorized Change Orders**

The engineering audit office authorized payment for vouchers that pertained to 40 (62%) of 65 sampled change orders despite the fact that the change orders were not registered with the Comptroller's Office at the time payments were made. The amount of the payments totaled \$1,678,491.<sup>3</sup> (See Appendix II for a list of the change orders.) Nine of the change orders were subsequently registered between 36 days and 264 days after payments were initially authorized

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<sup>3</sup> In addition, one of four change orders that reduced the contract amount by \$473,320 was not registered with the Comptroller's Office. These funds were used to pay for some of the change orders that were not registered and for which legitimate budgetary funds should have been allocated.

in Fiscal Year 2007.<sup>4</sup> Moreover, 29 of the 40 change orders totaling \$1,132,627 were still not registered at the conclusion of our field work on January 14, 2008. These change orders have remained unregistered between 193 days and 543 days after the engineering audit office initially authorized their payment in Fiscal Year 2007.<sup>5</sup>

Directive #7, §3.5, requires that the engineering audit office “must ensure that all appropriate approvals are in place and must refer to the PPB Rules, directives issued by the Office of the Director of Construction, and OMB’s Construction Standards, for guidelines on amendments to contractual work.” Thus, according to PPB Rules §2-12, “all contracts, agreements, contract changes, change orders, amendments . . . shall be presented to the Comptroller for registration.” In addition, City Charter §328a requires, “No contract or agreement . . . shall be implemented until (1) a copy has been filed with the Comptroller.”

Department officials justified the payment of these change-order vouchers by pointing to an April 29, 1987 internal Departmental policy that sanctions payment (of up to 75 percent) of a change order’s value as determined by the engineering audit officer. However, the Department’s practice of paying for change-order work before registration is a clear violation of Citywide policies that were promulgated after 1987. Bypassing City regulations weakens the City’s internal controls for funding capital projects by allowing contractors to obtain payment without appropriate monetary allocations from the Office of Management and Budget and review and registration by the Comptroller’s Office. Funding change orders from contract funds also reduces transparency with respect to a project’s costs and puts the completion of the contract work at risk. Therefore, the Department must cease its practice of authorizing payments before change orders have been properly implemented and registered.

### **Recommendations**

The Department should:

1. Cease its practice of authorizing change-order voucher payments for change orders that have not been registered and ensure that all change orders are promptly registered with the Comptroller’s Office.

**Department Response:** “The DSNY’s internal policy for the Change Order Procedure established in April 1987 included a provision to allow partial payment on the extra work performed by the Contractor prior to registration of the change order.

“This procedure has been utilized by the Department in construction related contracts and is strictly enforced by EAO in processing payment vouchers for the extra work for which the Department has benefited financially, by minimizing the delay during construction, as

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<sup>4</sup> Two other change orders that were subsequently registered were unregistered even longer since they were authorized for payment in prior fiscal years for which information was not available.

<sup>5</sup> Five of the 29 change orders that are still not registered may have been unregistered even longer since they were paid in prior fiscal years, for which information was not available.

well as the construction delay claims due to a change order approval process that takes 4 to 5 months to complete.

However, the Department will discontinue the practice of authorizing Change-Order voucher payments for change orders newly initiated as of the date of this response” (Emphasis in original.)

**Auditor Comment:** We are pleased that the Department will discontinue for newly initiated change orders its practice of authorizing voucher payments for change orders that have not been registered. However, the Department should also ensure that it promptly registers all current change orders mentioned in the audit report before authorizing any further payments.

The Department justified its existing change-order payment policy by citing its lengthy four- to five-month change-order approval process. However, we must point out that a large number of the sampled change orders have been unregistered for as long as 17 months—far longer than five months. Therefore, the Department should review its internal procedures for approving change orders to ensure that change orders are promptly registered.

2. Immediately submit for registration the change orders cited in this report that are still not registered.

**Department Response:** “The Department will submit, as soon as possible, all change orders cited in this report for registration with the NYC Comptroller.”

### **Questionable Payments**

The engineering audit office authorized the payment of vouchers associated with 8 of 18 (44%) sampled time and material change orders despite the lack of substantiating documentation. As a result, \$48,913 in payments was questionable. (See Table I on page 9.) The required documentation should have included valid time sheets and receipts for purchased materials, all of which were lacking in file documentation and are necessary to ensure that contractors are paid appropriately.

Comptroller’s Directive #7, §5.2, requires the engineering audit officer to ensure that documentation be “sufficiently thorough to support the audit findings, payment voucher certifications, disputed payments or any other action taken.” Furthermore, Directive #7, §3.1.1, states that the engineering audit officer “must follow appropriate audit procedures to ensure that the payment requests are justified.”

**Table I**  
Change-Order Payments Lacking Documentation

	<b>Voucher No.</b>	<b>Contractor</b>	<b>Change Order No.</b>	<b>Amount Paid</b>
1	7SX00000652	Tully Const. Corp.	1-38	\$4,174.
2	7SX00000652	Tully Const. Corp.	1-42	\$2,756.
3	7SX00000106 & 7SX00000652	Tully Const. Corp.	1-49	\$1,100.
4	7SX00000652	Tully Const. Corp.	1-53	\$1,155.
5	7SX00000652	Tully Const. Corp.	1-57	\$630
6	7SX00000427 & 7SX00000652	Tully Const. Corp.	1-68	\$7,200
7	7SX00000652	Tully Const. Corp.	1-78	\$24,098
8	7SX00000692	DART Mechanical	3-10R	<u>\$7,800</u>
		<b>Total</b>		<b>\$48,913</b>

The engineering audit subsequently reduced by \$515 two of the questionable payments (Voucher Nos. 7SX00000106 and 7SX00000427) after the contractor submitted substantiating documentation. Clearly, this indicates that the engineering audit office should not authorize any payments without the submission of valid time sheets and receipts verifying numbers of laborers, hours worked, and materials delivered for time and material work.

**Recommendations**

The Department should:

3. Ensure that required documentation to substantiate time and material payments is included in the voucher documentation and reviewed accordingly by the engineering audit office.

**Department Response:** “We agree. The Chief Engineer’s office (DSNY) is now making it mandatory to submit the Time and Material (T&M) records together with the contractor’s payment requisitions to EAO. As a result, the EAO will maintain all necessary T&M records received with the T&M change order payment requisitions.”

4. Obtain supporting documentation to properly review the voucher payments noted in this audit, and if required, make any adjustments to the voucher amounts paid to contractors.

**Department Response:** “We agree. The Chief Engineer’s office (DSNY) is now making it mandatory to submit the Time and Material (T&M) records together with the contractor’s payment requisitions to EAO. As a result, the EAO will maintain all necessary T&M records received with the T&M change order payment requisitions.”

**Auditor Comment:** However, as stated in our recommendation, the Department also needs to review the questionable payments cited in the audit and make any necessary adjustments to the payments.

5. Ensure that the engineering audit office maintains all required file documentation to substantiate voucher payments.

**Department Response:** “We agree. The Chief Engineer’s office (DSNY) is now making it mandatory to submit the Time and Material (T&M) records together with the contractor’s payment requisitions to EAO. As a result, the EAO will maintain all necessary T&M records received with the T&M change order payment requisitions.”

**Excessive Payments**

The engineering audit officer approved payments for three of the sampled change orders although the requested voucher amounts exceeded the engineering audit office’s cost estimates for those change orders. As a result, two contractors were overpaid \$321,553. (See Table II below.) Directive #7, §3.1.1, states that the engineering audit officer “must follow appropriate audit procedures to ensure that the payment requests are justified.”

**Table II**  
Change-Order Payments That Exceeded Estimate

	<b>Voucher #</b>	<b>Contractor</b>	<b>CO #</b>	<b>(A) Amount Paid</b>	<b>(B) EAO Estimate</b>	<b>(A) - (B) Excess Payment</b>
1	7RX00000017	Sound Beyond Electrical	4-1	\$364,587.75	\$169,000.00	\$195,587.75
2	7RX00000017	Sound Beyond Electrical	4-32	\$104,475.00	\$51,674.00	\$52,801.00
3	7SX00000429	Dart Mechanical Corp.	3-05	\$153,750.00	\$80,585.60	\$73,164.40
		<b>Totals</b>		<b>\$622,812.75</b>	<b>\$301,259.60</b>	<b>\$321,553.15</b>

The Department was subsequently able to recover \$248,388 in overpayments from one contractor (Sound Beyond Electrical Corp.) as part of an overall monetary settlement after its

contract was terminated for reasons unrelated to the overpayment.<sup>6</sup> The \$73,164 overpayment to Dart Mechanical has not been recouped from the contractor.

We attribute the overpayments to Sound Beyond Electrical Corp. to the fact that the engineering audit office did not check the prices and material quantities listed in the voucher payment requests, as required by Directive #7, §3.2. In addition, there was no evidence that the engineering audit office conducted field inspections to verify the amount of work that was completed, as required by Directive #7, §3.4.1(b).

### **Recommendations**

The Department should:

6. Ensure that the engineering audit office approves payments that are consistent with authorized change-order amounts.

**Department Response:** “It has always been EAO’s practice to make the payment subject to verification of the construction manager’s cost while negotiation is still going on with the contractor. In the event, if the preliminary estimate prepared by EAO is less than the construction manager’s cost, necessary adjustment is made in the subsequent payments subject to finalization of the cost of the change order. Therefore, as cited in this audit report, the payments allowed based on the construction manager’s estimate should not be categorized as an over payment.”

**Auditor Comment:** Although the Department contends that payments are “subject to verification of the construction manager’s cost,” the Department did not even conform to this internal practice. Thus, payments for two of the three sampled change orders exceeded the construction manager’s cost estimates. In the first instance, the construction manager’s cost estimate for change order #4-1 was \$200,341; however, the engineering audit office authorized a payment of \$364,587. In the second instance, the construction manager’s cost estimate for change order #4-32 was \$51,674; however, the engineering audit office authorized a payment of \$104,475.

In any case, notwithstanding the Department’s internal practices, Directive #7, §3.1.1, requires that the engineering audit officer “must follow appropriate audit procedures to ensure that the payment requests are justified.” In the three cases cited in the audit, the engineering audit officer approved payments for three of the sampled change orders although the requested voucher amounts exceeded the engineering audit office’s cost estimates for those change orders. Accordingly, the Department should ensure that the engineering audit office only approves payments that are justified and consistent with authorized change-order amounts.

7. Recoup \$73,164 in payments to Dart Mechanical Corporation.

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<sup>6</sup> The Department terminated contract No. 20020003146 with Sound Beyond Electrical Corp., because of the contractor’s failure to perform the work adequately.

**Department Response:** “The EAO will make the necessary adjustment, if any, to the payments made against this change order upon finalization of the cost of this change order with the contractor.”

**Auditor Comment:** The Department did not explain why it authorized a \$153,750 payment to Dart Mechanical, even though the engineering audit office estimated the cost as \$80,585. Therefore, to comply with the Directive, the Department must immediately make the necessary cost adjustment by recouping the \$73,164 overpayment to the contractor.

8. Perform required checks of prices and material quantities and conduct field visits to verify the percentage of work completed.

**Department Response:** “It has always been EAO’s utmost priority to perform field audit to its greatest extent possible verifying the quality and quantity of the work performed by the contractor prior to processing any payment voucher. EAO’s staff has always been encouraged to field verify the quantity and quality of the work in compliance with the terms and conditions of the contract and requirement of the Comptroller’s Directive #7.”

**Auditor Comment:** Although the Department has acknowledged the importance of conducting field visits and checking prices and material quantities in accordance with Directive #7, there was no substantiating evidence that these activities were carried out before authorizing payments for the three sampled change orders. Therefore, the Department should ensure that it has adequate procedures for enforcing the requirement for field visits and price and material checks.

### **No Certification of Cost Reasonableness**

The engineering audit office approved payments for 20 change orders (whose cumulative total was \$1,017,616) of 65 change orders (whose cumulative total was \$2,636,160) that lacked either the required certification of cost reasonableness or evidence that the contractor’s cost proposal had been reviewed. Directive #7, §3.5.2.(c), states that when auditing change-order payments the EAO must “ensure that change order costs are reasonable, consistent with the contract terms, and adequately documented.” In addition, §4-02(b)(1)(ii) of the PPB Rules states, “Any such changes require appropriate price and cost analysis to determine reasonableness.”

Of the 20 change orders lacking required approvals, 14, totaling \$447,248, lacked both the certification of cost reasonableness and evidence that cost estimates had been reviewed. Department officials were unable to explain the absence of the required reviews and certifications. Adequate review and certification by the engineering audit office is critical for ensuring that payments are made only for change-order costs that can be substantiated.

In fact, our independent analysis of file documentation found that one of the change orders, totaling \$19,950 (No. 1-70 to Tully Construction Corporation), should have been valued at \$10,500—a difference of \$9,450. After the exit conference the Department provided us with a May 27, 2008 cost estimate that substantiated the higher cost of the change order. However, we

note that this information was not part of the original documentation that should have been reviewed before authorizing payment of this change order.

### **Recommendation**

9. The Department should ensure that the engineering audit office complies with Directive #7 provisions for certifying change orders for cost reasonableness. The engineering audit office should not authorize any payments for which the required certification or cost estimate has not been made.

**Department Response:** “There are instances where the EAO may not deem necessary to prepare a separate cost estimate, if the cost prepared by the construction manager and/or negotiated cost finalized with the contractor is found to be fair and reasonable. In these cases (as in the 20 change orders cited in the report), the partial payment was allowed based on the construction manager’s cost analysis or the cost negotiated with the contractor in accordance with the Department’s internal policy for the change order payment.” (Emphasis in original.)

**Auditor Comment:** Contrary to the Department’s understanding, we do not contend that the engineering audit office must prepare a “separate cost estimate.” Instead, our audit clearly indicates that the sampled change orders lacked evidence that the engineering audit office had undertaken either cost estimates or required certifications indicating that contractor proposals were reviewed. While the engineering audit office may in fact, deem a cost prepared by a construction manager as fair and reasonable, there was no evidence in Department files to indicate whether such a review had taken place. Therefore, the Department should ensure that it complies with Directive #7 provisions for certifying change orders for cost reasonableness.

### **Change-Order Reports Not Submitted**

Directive #7, §3.5.2(e), requires the engineering audit officer to “submit a written report that describes the results of the audit and provides recommendations to the agency head, or the agency head's designee for any change order over \$75,000.” Despite this requirement, file documentation lacked the required reports for 13 (20%) of 65 sampled change-order increases that exceeded the \$75,000 threshold. Reports such as these are an important internal control by which agency officials can obtain cost information about significant change orders affecting capital projects.

### **Recommendation**

10. The Department should ensure that the engineering audit office submits to the agency head or the head’s designee the required reports for change orders that exceed the \$75,000 threshold.

**Department Response:** “The EAO will implement this recommendation effective July 1, 2008. However, we note that Directive #7, originally issued in 1987, which included this \$15,000 threshold, was revised five years later in 1992, with a new threshold of \$75,000. Since 1992 the \$75,000 threshold has remained unchanged.”



APPENDIX I

**LIST OF CHANGE ORDERS WITH PROBLEMS**

Cont. Reg. #	C.O. #	Contractor	Amount Paid (As of 6/30/07)	EAO Proposal Review/ Independent Cost Estimate	Lacks EAO Approval of Cost Reasonableness	Missing Time and Material Sheets	Amount Paid Exceeds EAO Estimate	No Written Report for Change Order over \$75,000	Amount paid prior to Comptroller Registration
20030019416	1-05R	Tully Const. Corp.	\$252,000.00	\$280,000.00				X	
20030019416	1-18	Tully Const. Corp.	\$88,000.00	\$88,000.00				X	
20030019416	1-36	Tully Const. Corp.	\$19,000.00	\$19,000.00					X
20030019416	1-38	Tully Const. Corp.	\$4,174.00	\$11,700.00		X			X
20030019416	1-42	Tully Const. Corp.	\$2,756.00	\$49,000.00		X			
20030019416	1-43	Tully Const. Corp.	\$22,500.00	\$38,115.00					X
20030019416	1-46	Tully Const. Corp.	\$227.00	\$7,560.00	X				X
20030019416	1-48	Tully Const. Corp.	\$2,362.00	\$3,150.00					X
20030019416	1-49	Tully Const. Corp.	\$960.00	\$960.00		X(2)			
20030019416	1-50	Tully Const. Corp.	\$177,600.00	\$248,016.00				X	X
20030019416	1-53	Tully Const. Corp.	\$1,155.00	\$9,400.00		X			
20030019416	1-54	Tully Const. Corp.	\$33,600.00	\$42,000.00					X
20030019416	1-57	Tully Const. Corp.	\$630.00	\$21,000.00		X			X
20030019416	1-61	Tully Const. Corp.	\$20,300.00	\$20,300.00					X
20030019416	1-62	Tully Const. Corp.	\$45,336.00	\$60,448.00					X
20030019416	1-63	Tully Const. Corp.	\$20,476.00	\$27,300.00					X
20030019416	1-67	Tully Const. Corp.	\$36,686.00	\$48,914.00					X
20030019416	1-68	Tully Const. Corp.	\$6,825.00	\$9,500.00		X (2)			X
20030019416	1-69	Tully Const. Corp.	\$12,616.00	X(1)	X				X
20030019416	1-70	Tully Const. Corp.	\$11,970.00	X	X				X
20030019416	1-74	Tully Const. Corp.	\$13,965.00	\$139,650.00				X	X
20030019416	1-78	Tully Const. Corp.	\$24,098.00	\$50,000.00		X			
20030019416	1-79	Tully Const. Corp.	\$95.00	\$2,700.00					X
20030019416	1-80R	Tully Const. Corp.	\$504.00	\$16,800.00	X				X
20030019416	1-83	Tully Const. Corp.	\$4,489.00	X	X				X
20030019416	1-84	Tully Const. Corp.	\$1,969.00	X	X				X
20030019416	1-95	Tully Const. Corp.	\$37,986.00	\$45,794.21					X
20030019416	1-97	Tully Const. Corp.	\$1,654.00	X	X				X
20030019416	1-99	Tully Const. Corp.	\$1,890.00	X	X				X
20030019206	4-12	J. H. Electric	\$56,000.00	X	X			X(3)	X
20030019206	4-14	J. H. Electric	\$9,000.00	\$10,850.12	X				X
20030019206	4-17	J. H. Electric	\$125,797.62	\$600,000.00				X	X
20030019206	4-18	J. H. Electric	\$4,200.00	X	X				X
20030019206	4-19R	J. H. Electric	\$27,396.00	\$36,530.00					X
20020003146	4-1	Sound Beyond Electrical Corp	\$364,587.75	\$169,000.00	X		X	X	X
20020003146	4-2	Sound Beyond Electrical Corp	\$261,130.50	X	X			X	X
20020003146	4-22	Sound Beyond Electrical Corp	\$5,869.00	X	X				
20020003146	4-24	Sound Beyond Electrical Corp	\$1,533.00	\$1,281.00			X		X
20020003146	4-29	Sound Beyond Electrical Corp	\$63,750.00	\$200,000.00				X	
20020003146	4-32	Sound Beyond Electrical Corp	\$104,475.00	\$51,674.00			X		
20030019910	2-05	Almar Plumbing & Heating Corp	\$8,562.00	\$32,194.77					X
20030018684	3-01R	Dart Mechanical Corp.	\$30,400.00	X	X			X (3)	X
20030018684	3-05	Dart Mechanical Corp.	\$153,750.00	\$80,585.60	X		X	X	X
20030018684	3-10R	Dart Mechanical Corp.	\$7,800.00	\$9,600.00		X			X
20030018684	3-11	Dart Mechanical Corp.	\$1,560.00	X	X				X
20030018684	3-12	Dart Mechanical Corp.	\$145,500.00	\$150,000.00				X	X
20030018684	3-13	Dart Mechanical Corp.	\$42,300.00	\$101,325.95	X			X	X
20030018684	3-19	Dart Mechanical Corp.	\$6,000.00	X	X				X
20030018684	3-20	Dart Mechanical Corp.	\$47,500.00	X	X				X
<b>Total Count</b>	<b>49</b>			<b>14</b>	<b>20</b>	<b>8</b>	<b>4</b>	<b>13</b>	<b>40</b>
<b>Totals</b>			<b>\$2,312,933.87</b>	<b>\$447,247.50</b>	<b>\$1,017,616.25</b>	<b>\$48,913.00</b>	<b>\$321,805.15</b>	<b>\$2,757,352.91</b>	<b>See Appendix II</b>

(1) At the time when the payments were made against this change order, the EAO cost estimate was not done.

(2) Payments made to Tully Const. Corp. without the necessary supporting T&M documentation for CO #1-49 in payment voucher # 7SX00000106 and CO #1-68 in payment voucher # 7SX00000427 was \$1,100 and \$7,200 respectively; however, after receiving the T&M in a later payment this amount was reduced to \$960 and \$6,825 respectively.

(3) We used the Construction Manager's estimates of \$316,047.36 and \$80,000 for CO #4-12 and # 3-01R respectively because the EAO cost estimate was not on file.

Appendix II

List of Unregistered Change Orders

	Contractor	Change Order No.	Amount Paid Prior to CO Registration	Amount Paid with CO still Not Registered
<b>Change Orders increasing contract dollar value</b>				
1	J. H. Electric	4-12R		\$56,000.00
2		4-14		\$9,000.00
3		4-17	\$83,488.19	
4		4-18		\$4,200.00
5		4-19R		\$27,396.00
6	Sound Beyond Electrical C	4-1		\$364,587.75
7		4-2		\$261,130.50
8		4-24		\$1,533.00
9	Almar Plumbing & Heating	2-05	\$8,562.00	
10	Dart Mechanical Corp.	3-01R		\$30,400.00
11		3-05		\$153,750.00
12		3-10R		\$7,800.00
13		3-11		\$1,560.00
14		3-12	\$108,000.00	
15		3-13		\$42,300.00
16		3-19		\$6,000.00
17		3-20		\$47,500.00
18	Tully Construction Corp.	1-36	\$ 14,250.00	
19		1-38		\$ 4,174.00
20		1-43	\$ 30,000.00	
21		1-46		\$ 227.00
22		1-48	\$ 2,362.00	
23		1-50	\$ 177,600.00	
24		1-54	\$ 27,300.00	
25		1-57		\$ 630.00
26		1-61	\$ 12,280.00	
27		1-62	\$ 45,336.00	
28		1-63		\$ 20,476.00
29		1-67	\$ 36,686.00	
30		1-68		\$ 6,825.00
31		1-69		\$ 12,616.00
32		1-70		\$ 11,970.00
33		1-74		\$ 13,965.00
34		1-79		\$ 95.00
35		1-80R		\$ 504.00
36		1-83		\$ 4,489.00
37		1-84		\$ 1,969.00
38		1-95		\$ 37,986.00
39		1-97		\$ 1,654.00
40		1-99		\$ 1,890.00
<b>Total ALL</b>		<b>40</b>	<b>\$545,864.19</b>	<b>\$1,132,627.25</b>
<b>Total \$ value of all 65 CO increases paid in sample population as of 6/30/07 =</b>				<b>\$ 2,636,159.67</b>
<b>Change Order Credits decreasing contract dollar value</b>				
1	Tully Construction Corp.	1-02		\$ (432,000.00)
<b>C/O amt used and not registered as of 1/14/08 =</b>				<b>\$ (432,000.00)</b>
<b>Total \$ value of the 4 credit COs in our sample population =</b>				<b>\$ (473,320.00)</b>



# sanitation

**JOHN J. DOHERTY**  
Commissioner  
125 Worth Street, Room 720  
New York, New York 10013

June 17, 2008

Mr. John Graham  
Deputy Comptroller for Audits, Accountancy and Contracts  
Office of the Comptroller  
1 Centre Street, Room 530 South  
New York, NY 10007-2341

**Re: Audit Report on Compliance with Comptroller's Directive #7  
by the Engineering Audit Office, Department of Sanitation  
FR08-058A**

Dear Deputy Comptroller Graham:

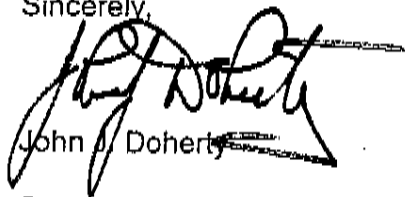
Thank you for the chance to review your draft Audit Report issued on June 2, 2008 on DSNY's compliance with Comptroller's directive # 7 for the pre-auditing of payment vouchers processed during the fiscal year 2007 by our Engineering Audit Office (EAO).

The DSNY would also like to take this opportunity to thank you and your audit staff for performing an audit of our EAO and acknowledge that your review of our EAO's audit procedures and actions taken are found to be generally in compliance with Directive 7 with the exception of the payment process on the Change Order (CO) work. This CO work represents about 2.75% of the total value of the vouchers reviewed by the Comptroller's office, and are in compliance with an internal change order procedure established by the Department.

Enclosed please find the DSNY's response (Attachment I) to the recommendations included in this draft audit report.

Please contact our audit liaison, Mr. Cris Gonzales, at (917) 237-5326 if you or your staff require further information.

Sincerely,



John J. Doherty

C: Marla Simpson, Director, Mayor's Office of Contracts  
Jeffery Kaye, Director, Mayors Office of Operations  
Michael A. Bimonte, First Deputy Commissioner  
Lorenzo Cipollina, Deputy Commissioner of Administration and Finance  
Robert Orlin, Deputy Commissioner for Legal Affairs  
Danny Walsh, Chief Engineer -DSNY  
Harshad Shah, Director, Engineering Audit Office  
Cris Gonzales, Director of Internal Audit

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ATTACHMENT I

RESPONSE TO DRAFT AUDIT REPORT ON COMPLIANCE  
WITH COMPTROLLER'S DIRECTIVE #7 BY DSNY'S  
ENGINEERING AUDIT OFFICE  
Audit Number FR08-058A

**Recommendations:**

1. **Cease the practice of authorizing change-order voucher payments for change orders that have not been registered and ensure that all change orders are promptly registered with the Comptroller's Office.**

**Response:** The DSNY's internal policy for the Change Order Procedure established in April 1987 included a provision to allow partial payment on the extra work performed by the Contractor prior to registration of the change order.

This procedure has been utilized by the Department in construction related contracts and is strictly enforced by EAO in processing payment vouchers for the extra work for which the Department has benefited financially, by minimizing the delay during construction, as well as the construction delay claims due to a change order approval process that takes 4 to 5 months to complete.

However, the Department will discontinue the practice of authorizing Change-Order voucher payments for change orders newly initiated as of the date of this response.

2. **Immediately submit for registration the change orders cited in this report that are still not registered.**

**Response:** The Department will submit, as soon as possible, all change orders cited in this report for registration with the NYC Comptroller.

**The Department should:**

3. **Ensure that required documentation to substantiate time and material payments is included in the voucher documentation and reviewed accordingly by the engineering audit office.**
4. **Obtain supporting documentation to properly review the voucher payments noted in this audit, and if required, make any adjustments to the voucher amounts paid to contractors.**
5. **Ensure that the engineering audit office maintains all required file documentation to substantiate voucher payments.**

**Response:** We agree. The Chief Engineer's office (DSNY) is now making it mandatory to submit the Time and Material (T&M) records together with the contractor's payment requisitions to EAO. As a result, the EAO will maintain all necessary T&M records received with the T&M change order payment requisitions.

**The Department should:**

6. **Ensure that the engineering audit office approves payments that are consistent with authorized change order amounts.**

**Response:** It has always been EAO's practice to make the payment subject to verification of the construction manager's cost while negotiation is still going on with the contractor. In the event, if the preliminary estimate prepared by EAO is less than the construction manager's cost, necessary adjustment is made in the subsequent payments subject to finalization of the cost of the change order. Therefore, as cited in this audit report, the payments allowed based on the construction manager's estimate should not be categorized as an over payment.

7. **Recoup \$73,164 in payments to Dart Mechanical Corporation.**

**Response:** The EAO will make the necessary adjustment, if any, to the payments made against this change order upon finalization of the cost of this change order with the contractor.

8. **Perform required checks of prices and material quantities and conduct field visits to verify the percentage of work completed.**

**Response:** It has always been EAO's utmost priority to perform field audit to its greatest extent possible verifying the quality and quantity of the work performed by the contractor prior to processing any payment voucher. EAO's staff has always been encouraged to field verify the quantity and quality of the work in compliance with the terms and conditions of the contract and requirement of the Comptroller's Directive #7.

9. **The Department should ensure that the engineering audit office comply with Directive #7 provisions for certifying change orders for cost reasonableness. The engineering audit office should not authorize any payments for which the required certification or cost estimate has not been made.**

**Response:** There are instances where the EAO may not deem necessary to prepare a separate cost estimate, if the cost prepared by the construction manager and/or negotiated cost finalized with the contractor is found to be fair and reasonable. In these cases (as in the 20 change orders cited in the report), the partial payment was allowed based on the construction manager's cost analysis or the cost negotiated with the contractor in accordance with the Department's internal policy for the change order payment.

10. **The Department should ensure that the engineering audit office submits to the agency head or the head's designee the required reports for change orders that exceed the \$75,000 threshold.**

**Response:** The EAO will implement this recommendation effective July 1, 2008. However, we note that Directive # 7, originally issued in 1987, which included this \$15,000 threshold was revised five years later in 1992, with a new threshold of \$75,000. Since 1992 the \$75,000 threshold has remained unchanged.