

City of New York

OFFICE OF THE COMPTROLLER

John C. Liu COMPTROLLER



FINANCIAL AUDIT

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Deputy Comptroller for Audit

Audit Report on the Department of Sanitation's Oversight of Construction Management Consultants

7E12-112A

March 12, 2013

http://comptroller.nyc.gov



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John C. Liu

March 12, 2013

To the Residents of the City of New York:

My office has audited the New York City Department of Sanitation (DOS) to determine whether it is effectively monitoring construction management consultants to ensure that all work is being performed effectively and in a timely manner. We audit agencies such as DOS as a means of ensuring that the City's capital program is being properly managed.

The audit found that DOS is effectively monitoring construction management consultants with the exception of the Bureau of Engineering, which is not doing so. Construction of the three projects associated with the DOS Bureaus of Long Term Export and Waste Management Engineering were completed on time or with delays necessitated by unforeseen conditions. However, the three projects associated with the Bureau of Engineering were delayed for up to six years and resulted in the payment of more than \$13 million to construction management consultants. Moreover, the delay in completing one project resulted in the imposition of monetary penalties totaling more than \$8 million. Furthermore, the City may be liable to pay an additional \$5.9 million in penalties if another project is not completed in a timely manner, thereby yielding more than \$14 million in monetary penalties.

The audit recommends that DOS should ensure the expeditious completion and close-out of the projects mentioned in this report, compile standard written procedures for overseeing projects that are managed by construction management consultants, devise a computerized tracking system, seek recoupment for payments made to construction managers if any project and close-out delays are attributable to construction management consultants, ensure that the amount of liquidated damages is sufficient to adequately protect the City's interests, and ensure that all consultant and contractor performance evaluations are submitted in the City's VENDEX system.

The results of the audit have been discussed with DOS officials, and their comments have been considered in preparing this report. Their complete written response is attached to this report.

If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov.

Sincerely,

John C. Liu

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THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER FINANCIAL AUDIT

Audit Report on the Department of Sanitation's Oversight of Construction Management Consultants

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AUDIT REPORT IN BRIEF

The Department of Sanitation (Department) collects daily over 10,500 tons of residential and institutional refuse and 1,760 tons of recyclables. To carry out this task, the Department operates 59 sanitation garages and 10 waste transfer stations within the five boroughs. At present, the Department is constructing or "closing out" six projects totaling \$850 million to build three new garages and two marine transfer stations and to close and cover the Fresh Kills landfill. To carry out these improvements, the Department has contracts with five construction management consultants totaling \$65 million that are responsible for managing the timely completion and close-out of the projects.

Audit Findings and Conclusion

The Department is effectively monitoring construction management consultants to ensure that work is being performed effectively and in a timely manner with the exception of the Bureau of Engineering, which is not doing so. Construction of the three projects associated with the Department's Bureaus of Long Term Export and Waste Management Engineering were completed on time or with delays necessitated by unforeseen foundation conditions. However, the three projects associated with the Bureau of Engineering were delayed for up to six years and resulted in the payment of more than \$13 million to construction management consultants. Moreover, the delay in completing one project resulted in the imposition of monetary penalties totaling more than \$8 million. Furthermore, the City may be liable to pay an additional \$5.9 million in penalties if another project is not completed in a timely manner, thereby yielding more than \$14 million in monetary penalties.

Audit Recommendations

This report makes a total of 13 recommendations, including that the Department:

 Ensure the expeditious completion and close-out of the Garage projects mentioned in this report.

- Compile standard written procedures for overseeing projects that are managed by construction management consultants. In that regard, promulgate uniform standards for assigning in-house personnel to oversee construction management consultants.
- Devise a computerized tracking system to oversee construction progress.
- Seek recoupment for payments made to construction managers if any project and close-out delays are attributable to construction management consultants.
- Ensure that the amount of liquidated damages is sufficient to adequately protect the City's interests in cases where delays are due to contractors.
- Ensure that all consultant and contractor performance evaluations are submitted in the City's VENDEX system.

Department Response

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 October 11, 2012, and discussed at an exit conference held on December 4, 2012. On December 17, 2012, we submitted a draft report to Department officials with a request for comments. We received a written response from the Department on January 7, 2013.

In their response, Department officials stated that they reviewed the draft audit "and continue to have some comments and concerns that we have mentioned several times regarding the findings and recommendations."

Specifically, "The report goes on to further highlight the deficiencies of one Bureau, but it does not adequately recognize the other Bureaus nor the Agency for the projects audited which were successful, well administered and executed."

"We believe the report should recognize the overall quality of work performed by the other Bureaus and supporting functions."

Notwithstanding the Department's complaint, the audit report prominently concluded that it was effectively monitoring construction management consultants with the exception of the Bureau of Engineering. In addition the Department agreed with 10 recommendations. We consider the Department to have disagreed with three recommendations.

INTRODUCTION

Background

The New York City Department of Sanitation (the Department) collects daily over 10,500 tons of residential and institutional refuse and 1,760 tons of recyclables. To carry out this task, the Department operates 59 sanitation garages and 10 marine transfer stations within the five boroughs. Citywide garages are used to maintain and keep a fleet of 2,022 collection trucks, 450 mechanical brooms, and 365 salt/sand spreader vehicles. Marine transfer stations are used to handle and transfer City trash to barges for disposal in out-of-state landfills.

The City's Ten-Year Capital Strategy for Fiscal Years 2012 to 2021 provides for \$83.9 million for the construction and reconstruction of garages and \$406.9 million for the construction of transfer stations. At present, the Department is constructing or "closing out" six projects totaling \$850 million to build three new garages and two marine transfer stations and to close and cover the Fresh Kills landfill.¹ To carry out these improvements, the Department has contracts with five construction management consultants totaling \$65 million that are responsible for managing the timely completion and close-out of the projects.²

Three Department Bureaus are responsible for overseeing the construction management consultants. Staff of the Bureau of Engineering is responsible for constructing garages. The Engineering Bureau has one active project in the construction phase and two active projects in the close-out phase. The Bureau of Long Term Export is responsible for constructing Marine Transfer Stations; there are two active projects in the construction phase. The Bureau of Waste Management Engineering is responsible for one active project to close and cover the Fresh Kills Landfill.

Objective

To determine whether the Department of Sanitation is effectively monitoring construction management consultants to ensure that all work is being performed effectively and in a timely manner.

Scope and Methodology Statement

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. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter. This audit was conducted by auditors with engineering backgrounds.

The scope of this audit covers Fiscal Year 2011. Please refer to the Detailed Scope and Methodology at the end of this report for the specific procedures and tests that were conducted.

¹ The Fresh Kills Landfill was in operation from 1948 until its closure in 2001. The long-term goal for the landfill is to restore ecological systems and create a large scale park that includes a range of activities and programs for the public. Funding for the Fresh Kills closure is contained in the City's expense budget.

² The construction management consultants were Jacobs Facilities Inc., LiRo Engineering, Lehrer McGovern Bovis, Inc., URS Corp., and a joint venture between URS Corp. and LiRo Engineering.

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 October 11, 2012, and discussed at an exit conference held on December 4, 2012. On December 17, 2012, we submitted a draft report to Department officials with a request for comments. We received a written response from the Department on January 7, 2013.

In their response, Department officials stated that they reviewed the draft audit "and continue to have some comments and concerns that we have mentioned several times regarding the findings and recommendations."

Specifically, they write, "The report goes on to further highlight the deficiencies of one Bureau, but it does not adequately recognize the other Bureaus nor the Agency for the projects audited which were successful, well administered and executed.

In addition, it does not adequately document the positive aspects of your audit, such as the comments of approval you have made throughout the audit in relation to project design aesthetics, on-going construction and post-construction quality, work area condition, etc. We have not had anything negative surface in those areas, but the report does not adequately highlight your favorable impression of the facilities during your site visits.

We believe the report should recognize the overall quality of work performed by the other Bureaus and supporting functions."

Additionally, the Department stated that "The \$13,800,334 in additional payments for construction management consultant services were made to the construction manager, as a result of, in most cases, unanticipated delays during the construction and closeout phases of the projects."

The Department agreed with 10 recommendations. We consider the Department to have disagreed with three recommendations. The full text of the written comments from the Department is included as an addendum to this report. However, we did not include as part of the addendum nine attachments of documentation that the Department provided with its response which are available at our office. After an examination of the attachments we concluded that the information contained in the documentation did not materially alter our audit findings and conclusions.

Notwithstanding the Department's complaint, the audit report prominently concluded that it was effectively monitoring construction management consultants with the exception of the Bureau of Engineering. We reported our findings as required under the December 2011 Government Auditing Standards §7.19: "Auditors should include in the audit report (1) the scope of their work on internal control and (2) any deficiencies in internal control that are significant within the context of the audit objectives and based upon the audit work performed." Accordingly, it was our responsibility to report on the internal control deficiencies we found given their significance and considerable monetary effect.

We challenge the Department's allegation that \$13.8 million in construction management consultant payments were a result of "in most cases, unanticipated delays." Of the \$13.8 million, our audit attributed \$10.26 million (74 percent) to the delayed construction of the Manhattan 4/4A/7 Garage. Our report also noted that the Department lacked a delay analysis for the Garage, and therefore could not identify whether project delays were attributable to the construction manager, construction contractors, or the Department. Therefore, it is still unknown whether the almost six years of delays to the Garage were "in most cases, unanticipated." The Department acknowledged this fact in its response (see Manhattan 4/4A/7)

by writing "A CPM consultant has been retained to perform a delay analysis. The delay analysis is currently in progress. DSNY will determine if any delays were attributable to the contractor, and if necessary, assess liquidated damages against the responsible parties."

In fact, delay analyses that were conducted for two other garage projects (Brooklyn 1&4 and Queens 14) attributed many of the delays to the Department itself—delays that resulted in \$1.21 million in additional construction management costs.

FINDINGS AND RECOMMENDATIONS

The Department is effectively monitoring construction management consultants to ensure that work is being performed effectively and in a timely manner with the exception of the Bureau of Engineering, which is not doing so. Construction of the three projects associated with the Department's Bureaus of Long Term Export and Waste Management Engineering were completed on time or with delays necessitated by unforeseen foundation conditions. However, the three projects associated with the Bureau of Engineering were delayed for up to six years and resulted in the payment of more than \$13 million to construction management consultants. Moreover, the delay in completing one project resulted in the imposition of monetary penalties totaling more than \$8 million. Furthermore, the City may be liable to pay an additional \$5.9 million in penalties if another project is not completed in a timely manner, thereby yielding more than \$14 million in monetary penalties.

Problems with the Oversight of Construction Management Consultants

The Department's Bureau of Engineering is not effectively monitoring construction management consultants to ensure that work is being performed effectively and in a timely manner. Construction of three projects associated with the Engineering Bureau was delayed between 2.2 years and 5.8 years, (see Table 1 on page 7). Additionally, two of the three projects have not been "closed out" after more than 2.7 years to 4.7 years, respectively, elapsed since construction was deemed substantially complete by the Department.³ As a result of project delays, the Department paid \$13,800,334 in additional costs for construction management consultant services and \$8,250,000 in monetary penalties to the Friends of Hudson River Park, et al. Moreover, the City may need to pay additional monetary penalties totaling \$5,995,000 beginning in 2013 for delays attributable to the replacement of the Gansevoort Garage.⁴ The combined total of these additional costs is \$28,045,334.

³ A project is substantially complete when all major construction items are complete: Brooklyn 1&4 was deemed substantially complete on December 6, 2007, and Queens 14 was deemed substantially complete on December 11, 2009.

⁴ As discussed on page five, responsibility for the construction of the Gansevoort replacement facility was transferred to the Department of Design and Construction in 2011.

Table 1

Delayed Projects

Project	Scheduled Construction Duration	Actual Construction Duration	Construction Duration Overrun	Closeout Duration
Brooklyn 1&4	3.5 years	6.1 years	2.6 years	4.7 years *
Queens 14	3 years	5.2 years	2.2 years	2.7 years *
Manhattan 4/4A/7	3.5 years	9.1 years	5.8 years	In construction

^{*} Close-out is still ongoing

Interviews with Department officials indicated that the bureaus that oversee construction-managed projects provide substantially different levels to monitor construction management consultants. The Bureaus of Long Term Export and Waste Management Export assigned inhouse personnel on a full-time basis to oversee the work of construction managers. In contrast, the Bureau of Engineering assigned in-house personnel part-time, a factor which may have contributed to delays of projects overseen by the Engineering Bureau.

The Department lacks its own written procedures that govern the oversight of construction management consultants and lacks a computerized project tracking system. The Department relies on various documents from multiple sources, including Comptroller and Mayor's Office of Contracts Directives and the Department of Transportation's "Manual of Uniform Record Keeping," which establishes procedures for maintaining project records. These procedures, however, are inadequate because they do not contain provisions for specifying the number of inhouse personnel to be assigned to a project, their qualifications, the responsibilities and authority of Department personnel, and criteria for dealing with construction managers and contractors that fail to perform adequately.

Recommendations

The Department should:

1. Promulgate uniform standards for assigning in-house personnel to oversee construction management consultants.

Department Response: "Currently project and contract management oversight procedures are established on an individual project basis. The assignment of overseeing in-house personnel is dependent upon the magnitude and complexity of the project. There is no uniform standard for assigning personnel to projects since each project is unique and has different staffing requirements.

With regard to the Bureau of Engineering, improvements can be made regarding the management of CM contract services. However, a decision was made by the Commissioner and the Mayor's Office to reassign the function of new garage construction to the Department of Design and Construction (DDC). As a result, the Bureau was downsized by 50% and the majority of the capital construction projects were assigned to DDC."

Auditor Comment: Obviously, the Department's practice of establishing oversight procedures on an individual project basis rather than promulgating uniform standards contributed to the problems we identified in its oversight of Engineering Bureau projects.

Additionally, the three cited projects commenced in 2001, 2003, and 2004 and were scheduled to be completed in 2005, 2006, and 2007—several years before the 2011 decision to transfer projects to the Department of Design and Construction's jurisdiction.

2. Ensure that the Manhattan 4/4A/7 garage is completed and closed out expeditiously.

Department Response: "DSNY will make every effort to ensure that Manhattan 4/4A/7 is completed and closed out as expeditiously as possible.

In 2011, the Commissioner and other senior staff focused their efforts on completing this project and subsequently the Deputy Mayor's Office also got directly involved in early 2012 to complete and closeout the project."

3. Ensure that the Brooklyn 1&4 and Queens 14 Garages are closed out expeditiously.

Department Response: "DSNY will make every effort to ensure that both the Brooklyn 1&4 and Queens 14 Garages are closed out as expeditiously as possible. The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy for the Brooklyn 1 & 4 Garage will be obtained in early January 2013. The Temporary Certificate of Occupancy for Queens 14 is expected to be obtained in February 2013."

Auditor Comment: Our review of the Department of Buildings "Building Information System" website on January 22, 2013, indicates that the Department renewed the temporary certificate-of-occupancy for the Brooklyn 1&4 Garage. There are still 10 outstanding work items that must be resolved before a final certificate-of-occupancy can be obtained.

4. Compile standard written procedures for overseeing projects that are managed by construction management consultants.

Department Response: "DSNY recognizes one of the Bureaus involved in this audit needs to address the above-mentioned issues. The two other Bureaus already have established procedures on a project basis with clear performance and progress standards incorporated into the construction contract. These Bureaus' requirements are tracked, reported, projected, reviewed and assessed on a monthly, quarterly and annual basis.

We will carefully review the existing procedures of each Bureau and evaluate the need to develop standard written procedures as necessary."

Auditor Comment: The Department should clarify its position about developing standard procedures. Its apparent agreement with our recommendation to "evaluate the need to develop standard written procedures" is not consistent with its Recommendation no. 1 response: "There is no uniform standard for assigning personnel to projects since each project is unique and has different staffing requirements."

5. Devise a computerized tracking system to oversee construction progress.

Department Response: "Each Bureau has its own tracking and monitoring system based on its specific needs. DSNY recognizes that some Bureaus were stronger than others, but DSNY has mechanisms to track, document and develop reports on a monthly basis. However, we will assess the need to develop a computerized system(s) based on need and cost benefit."

More Than \$14 Million in Monetary Penalties

Penalties Totaling \$8.25 Million for the Manhattan Garage

Timely construction of the Manhattan 4/4A/7 Garage was critical in order to adhere to the requirements of an October 27, 2005, settlement agreement between the Friends of Hudson River Park, et al and the City of New York. According to that agreement, the Department needed to vacate an existing garage facility at Pier 97 in Manhattan by May 1, 2008, or be subject to monetary penalties. Under the agreement's 2010 second supplement, the amount of the penalties was increased and ranged up to \$350,000 per month.

Construction of the new Manhattan 4/4A/7 Garage to replace the existing facility was scheduled to commence on May 19, 2003, and be substantially complete on November 15, 2006, thereby providing ample time to close out the project and relocate Department personnel and operations by the May 1, 2008, deadline. Although the project commenced on time, the Department does not anticipate attaining substantial completion until the end of 2012—six years beyond the original completion date. As a result of the delay, the City paid \$8,250,000 in monetary penalties for the period between May 1, 2008, and March 2011.⁵

Department Response: "DSNY strongly disagrees with this statement and its inclusion as part of this audit report for the following reasons:

A. The \$8,250,000 in payments made to the Hudson River Park Trust was for the Agency's extended use and occupancy. It should also be noted that these payments to the Trust were restricted for use in constructing usable parkland and park facilities at Pier 97."

Auditor Comment: The Department was only required to pay the additional \$8,250,000 because it failed to comply with the requirements of the settlement agreement that required the Department to complete the Garage and relocate operations by May 1, 2008.

Potential Penalties Totaling \$5.99 Million for the Gansevoort Garage

In a related matter, the same settlement agreement also required the Department to vacate an existing garage facility at Gansevoort in Manhattan by December 31, 2012, or be subject to monetary penalties commencing in 2013. Construction of a new garage at Spring Street in Manhattan to replace the existing facility was scheduled to commence in December 2008 and be substantially complete in November 2012. The Department's Bureau of Engineering, however, did not commence project work until December 2010—two years beyond the milestone date stipulated in the settlement agreement. Responsibility for completing the project

⁵ The Department obtained beneficial occupancy for one section of the garage in March 2011 in order to relocate its operations and avoid paying additional penalties beyond that date. However, the remainder of the building is still under construction.

was subsequently transferred to the Department of Design and Construction in May 2011 and is not expected to be complete until November 2014. Consequently, the Department's failure to adhere to commence work in accordance with the original project schedule may obligate the City to pay an estimated \$5,995,000 million in penalties for the two- year delay.

The settlement agreement does, however, contain provisions for extending completion deadlines, which may result in the annulment of monetary penalties. Thus, Agreement paragraph 7 states, "The parties acknowledge that the City may not be able to adhere to a deadline contained in paragraphs 1 and/or 2 of this Agreement and order due to an event beyond the City's control, including, for example, an act of terrorism, court order, contractor strike or the like despite the City's due diligence to comply with the provisions of this Agreement and Order at issue." Accordingly, if, in fact, the delay in commencing project work was attributable to legitimate circumstances as warranted under the Agreement, the Department should attempt to obtain relief from the imposition of any monetary penalties that may be assessed.

Department Response: "B. The \$5.9 million dollars in penalties mentioned has not been paid out during the period under audit. Also it has no relevance to the scope and objective of this audit, since it does not relate to any construction or CM services. Furthermore, it is premature to include the \$5.9M as a liability to the Agency since it does not come into effect until January 2013 and is conditional upon the Agency's ability to vacate the Gansevoort Garage and move to the Spring Street Garage. The \$5.9M payment should not appear in this report.

The Spring Street Garage is not included in the projects that were audited. Therefore, we strongly believe that it should not be stated in this audit report.

However, if you decide to include the \$5.9M in the report, the following synopsis of upfront delays should also be included:

The construction of the Spring Street Garage commenced later than had been anticipated because of the complexities and time consuming process of negotiating and reaching agreement with UPS on the terms of a purchase and sale agreement (PSA), a condominium declaration and by-laws. DSNY will be sharing space with UPS at the Spring Street Garage, and the City and UPS had to negotiate the terms of the PSA as well as the details of the condominium relationship between the two parties. The PSA was executed in June 2010 and was registered in August 2010. The City could not commence construction until it had an ownership interest in the Spring Street property. Consequently, construction of the Spring Street Garage could not have commenced in November 2008 as originally envisioned in 2005 when the Settlement Agreement and Order was signed (See Attachment 3)."

Auditor Comment: The City may be potentially liable for \$5.9 million for failing to adhere to the deadline stipulated in the settlement agreement. Accordingly, and given that the project commenced under the Department's auspices, the inclusion of this matter is particularly relevant to the scope and objective of this audit. Moreover, although we noted that the Department could take steps to annul the penalty, the Department's comments at the exit conference and in its response indicate that it has not done so.

Recommendations

6. The Department should seek relief from the possible assessment of \$5.9 million in monetary penalties for the relocation of the Gansevoort Garage by ascertaining whether the delayed project commencement was attributable to extenuating circumstances.

Department Response: "As stated previously on Page 4 "The construction of the Spring Street Garage commenced later than had been anticipated because of the complexities and time consuming process of negotiating and reaching agreement with UPS on the terms of a purchase and sale agreement (PSA), a condominium declaration and by-laws. DSNY will be sharing space with UPS at the Spring Street Garage, and the City and UPS had to negotiate the terms of the PSA as well as the details of the condominium relationship between the two parties. The PSA was executed in June 2010 and was registered in August 2010. The City could not commence construction until it had an ownership interest in the Spring Street property. Consequently, construction of the Spring Street Garage could not have commenced in November 2008 as originally envisioned in 2005 when the Settlement Agreement and Order was signed. See Attachment 3- Cover sheet stating the Sales Agreement Date." (Emphasis added by the Department.)

Auditor Comment: If the Department is confident that the reason for the project's delayed commencement is valid, it should— as we recommend— seek relief from the possible assessment of \$5.9 million in monetary penalties. However, the Department's comments at the exit conference and in its response indicate that it has not done so.

More Than \$13 Million in Additional Consultant Costs \$13.10 Million for Construction Not Completed

Construction management consultants are compensated on a time and material basis. Therefore, projects whose construction and close-out are delayed and extended incur additional costs for construction management services that would otherwise be unnecessary if projects were completed in a timely manner. Accordingly, we calculated that the failure to complete construction on time of the three garages in Manhattan, Brooklyn, and Queens led to additional payments totaling \$13,105,578 to the Department's construction management consultants.

Manhattan 4/4A/7 Garage

The failure to complete construction of the Manhattan 4/4A/7 Garage on time led to additional payments to Lehrer McGovern Bovis, Inc. (LMB), the Department's construction management consultant. The original contract costs for LMB to provide construction management services (including staffing and "general conditions" costs) escalated from \$4,247,925 to \$14,512,382—an increase of \$10,264,457 or 242 percent for the 5.8 years of project delays. Moreover, given that the Department has not yet completed construction of the garage, it is likely that the cost to provide construction management services will increase even more.

At the time of our site visit on June 25, 2012, the Department lacked a delay analysis for the Manhattan 4/4A/7 Garage, and therefore could not identify whether project delays were attributable to the construction manager, construction contractors, or the Department. If any of the delays are, in fact, found to be attributable to the construction manager or contractors, the

Department should seek to recoup any payments made to the construction managers or assess liquidated damages against the contractors for those periods.

Brooklyn 1&4 Garage

Similarly, the failure to complete construction of the Brooklyn Garage on time led to additional payments to Jacobs Facilities Inc., the Department's construction management consultant. Jacobs Facilities' initial contract escalated from \$2,391,653 to \$3,690,033—an increase of \$1,298,380 or 65 percent for the 2.6 years of delays that occurred during the construction phase of the project.

Our review of delay analyses prepared by the Department's construction management consultants indicated that the Department itself was responsible for 501 (52 percent) of the 952 days that the Brooklyn Garage was delayed. Therefore, we calculated that 52 percent of \$1,298,380 results in \$675,158 of additional construction management costs that were attributable to the Department ($$1,298,380 \times .52 = $675,158$).

Some of the project delays attributable to the Department included failure to ensure that work sites were vacated for construction to proceed, initiating change orders requiring redesign, and delays in reviewing shop drawings and approving change orders.

Department Response: "DSNY calculates an overall delay percentage of 19% as opposed to the 52% of delays represented in your finding.

The following are examples of major non-DSNY delays:

- Before construction, the site for this facility had undergone remediation to clean up historic contamination as ordered by, and under the regulatory supervision of, the New York State Department of Environmental Conservation, which deemed the remediation complete and issued the former owner a No Further Action letter. Unfortunately, after the City acquired the site and commenced construction, the site was found to contain additional contamination (unforeseen condition), thereby causing a delay in construction. As a result, the site had to be remediated pending approvals from the oversight agencies, before construction could resume. This must be taken into account when assessing the project delays (See Attachment 1A)."
- Initial delays in construction were due to delays in vacating the site by WMI (See Attachment 1B).

Auditor Comment: The Department's February 6, 2008 "Delay Analysis" (Analysis) states, "Based upon our analysis of the CPM [Critical Path Method] schedules that were utilized during the period of construction, it is our opinion that the status of the project resulted from the following: Delays totaling 501 calendar days **caused by the NYCDOS**" [highlighted for emphasis]. As previously noted, this represents 52 percent of delay days.

In contrast to the Department's contention that problems with remediating contamination and vacating the site were beyond its control, the approved Analysis noted that these problems resulted in 277 delay days that were attributable to the Department.

Queens 14 Garage

Similarly, the failure to complete construction of the Queens Garage on time led to additional payments to LiRo Engineering, the Department's construction management consultant. LiRo's

initial contract escalated from \$1,960,195 to \$3,502,936—an increase of \$1,542,741 or 79 percent.

Our review of delay analyses prepared by the Department's construction management consultant indicated that the Department itself was responsible for 277 (35 percent) of the 793 days that the Queens Garage was delayed. Therefore, we calculated that 35 percent of \$1,542,741 results in \$539,959 of additional construction management costs that were attributable to the Department ($$1,542,741 \times .35 = $539,959$).

Department Response: "DSNY calculates an overall delay percentage of 34%, as opposed to the 35% of delays represented in your finding. Delays attributed to DSNY should be reduced to 7% based on the delay analysis. The remaining 27% were non-DSNY delays. The dollar values associated with these delays should also be revised accordingly (See Attachment 2).

The following are examples of major non-DSNY delays:

- During the demolition process, problems were encountered with the backflow preventer, which was not indicated on contract drawings (See Attachment 2A-1).
- Originally the contract documents required buried petroleum piping without secondary containment. Subsequently, it was determined that secondary containment is a regulatory requirement and a change order was needed. While negotiating the costs, the Contractor delayed signing the change order which resulted in further delays in validating the secondary containment (See Attachment 2A-2)."

Auditor Comment: The Department's May 17, 2012 "Time Delay Analysis" (Analysis) states, "the details of each excusable delay as indicated in the CPM schedule are listed in the 'Reason for Delay' column of the analysis and **indicate the appropriate party responsible for the delay."** [highlight added for emphasis.] The Department is cited as the appropriate responsible party for 277 delay days, which represent 35 percent of the total number of days that the project was delayed.

In contrast to the Department's contention that problems with a backflow preventer and a change order for secondary containment were "examples of major non-DSNY delays," the Analysis noted that respectively 143 and 75 delay days, respectively, were attributable to the Department.

\$694,756 for Projects Not Closed Out in a Timely Manner

The Department failed to adequately monitor two construction management consultants to ensure that contractors timely completed outstanding Building Department work items that were required for obtaining final certificate-of-occupancies for garages in Brooklyn and Queens. As a result of the delay in closing out the projects—and despite negligible progress by the consultants in resolving these items and obtaining the certificates-of-occupancy—the Department approved additional payments to the consultants totaling \$694,756. Accordingly, to preclude similar problems from besetting the close-out of the Manhattan 4/4A/7 Garage after construction is completed, the Department must be vigilant in overseeing its construction management consultant and ensuring that all required approvals and sign-off documents will be obtained in a timely manner.

Brooklyn 1&4 Garage

The Department's Bureau of Engineering deemed the Brooklyn 1&4 Garage project substantially complete on December 6, 2007. A temporary certificate-of-occupancy that was issued on November 27, 2007, listed 14 outstanding items that needed to be resolved before a final certificate-of-occupancy could be granted. Although more than four years have passed, the most recent April 17, 2012, temporary certificate-of-occupancy showed that 13 (93 percent) of the initial 14 items were still outstanding.⁶

As a result of the delay in closing out the project, the Department approved additional payments totaling \$421,620 to the construction management consultant, Jacobs Facilities Inc., during the close-out phase from the project's December 6, 2007, substantial completion date to the conclusion of our audit field work on September 1, 2012—a period totaling 4.7 years. Furthermore, project close-out work is still ongoing.

Department Response: "With reference to the \$666,220 spent for projects not closed out in a timely manner. The Brooklyn 1 &4 portion (See Attachment 4A - \$349,156) was spent on close-out functions as well as other functions not related to the closeout.

This facility was occupied by the Department prior to full completion and resulted in the need for additional extended construction management services during the closeout. The closeout phase of this project was also extended due to the following issues:

- The rooftop HVAC equipment had not yet been fully installed at the time of initial occupancy.
- Completion of testing and commissioning of rooftop HVAC equipment had to be performed.
- Two of the contractors (Arnel and Dart) filed delay claim lawsuits and construction management was retained to provide assistance to the Corporation Counsel's office defending this legal action (See Attachments 5 (Arnel) and 5A (Dart)).
- CM was asked to review the dispute claims filed by the Contractors and to attend dispute meetings at the Comptroller's office during the closeout (See Attachment 6).

The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy will be obtained in early January 2013."

Auditor Comment: While we acknowledge the Department's assertion that certain functions may not be related to the close-out (i.e., providing assistance to the Corporation Counsel and reviewing dispute claims), the Department did not provide any evidence by which to substantiate this assertion and determine its cost. In any case, the Department acknowledged that the "average closeout period for projects of this size and nature usually ranges from 4-6 months." The Brooklyn 1&4 Garage was deemed substantially complete on December 6, 2007, and has still not been closed out—more than five years later.

Our review of the Department of Buildings "Building Information System" website on January 22, 2013, indicates that the Department renewed the temporary certificate-of-

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⁶ The outstanding items include Building Department approvals for mechanical sign-offs, curb cut sign-off, equipment use permits, and fuel storage sign-offs.

occupancy. Ten of the 14 work items are still outstanding since the project was deemed substantially complete on December 6, 2007.

Queens 14 Garage

Similarly, the Department's Bureau of Engineering deemed the Queens 14 Garage project substantially complete on December 11, 2009. The first temporary certificate-of-occupancy that was issued on January 27, 2010, listed 17 outstanding items that needed to be resolved before a final certificate-of-occupancy could be granted. Although more than two years have elapsed, 14 (82 percent) of the initial 17 items are still outstanding. Moreover, the last temporary certificate-of-occupancy expired on June 28, 2010, and has not been renewed, thereby jeopardizing the Department's use of the facility. As a result of the delay in closing out the project, the Department approved additional payments totaling \$273,136 to the construction management consultant, LiRo Engineering, during the close-out phase from the project's December 11, 2009, substantial completion date to the conclusion of our audit field work on September 1, 2012—a period of 2.7 years. Furthermore, project close-out work is still ongoing.

Department Response: The Q14 portion (See Attachment 4B - \$317,064) was spent on closeout functions as well as other functions unrelated to the closeout.

As stated above this facility was occupied by the Department prior to full completion and resulted in the need for additional extended construction management services during the closeout. The closeout phase of this project was also extended due to the following issues:

- Vacating the existing Garage (Old Q14) in order to accommodate plans for economic redevelopment of the original site and area.
- The rooftop HVAC equipment had not yet been fully installed at the time of initial occupancy.
- Completion of testing and commissioning of rooftop HVAC equipment had to be performed.
- CM assisted Corporation Counsel in addressing the lawsuit filed by the General Contractor, which was not in the original contract (See Attachment 7).
- CM conducted a Project Completion Delay Analysis, which was not in the original contract. (See Attachment 8)
- CM assisted the Agency in defending contract disputes and provided information on contractors' disputes and claims, and attended meetings at the Comptroller's Office (See Attachment 9).

The Agency anticipates that all outstanding work would be completed and the Temporary Certificate of Occupancy will be obtained in February 2013.

Auditor Comments: While we acknowledge the Department's assertion that certain functions may not be related to the close-out (i.e., providing assistance to the Corporation Counsel and assisting in defending contract disputes), the Department did not provide any evidence by which to substantiate this assertion and determine its cost. Furthermore, providing these functions should not have precluded the Department from resolving outstanding work items, which would be required to close out the project and

⁷ The outstanding items included Building Department approvals for Builder's Pavement Plan sign-off, final electrical sign-off, gasoline tank sign-off, equipment use permits and sewer connection sign-offs required by the Department of Environmental Protection.

obtain a final certificate-of-occupancy. In any case, the Department acknowledged that the "average closeout period for projects of this size and nature usually ranges from 4-6 months." The Queens 14 Garage was deemed substantially complete on December 11, 2009, and has still not been closed out—more than three years later.

Recommendations

The Department should:

7. Perform a delay analysis for the Manhattan 4/4A/7 garage to ascertain whether any delays are attributable to contractors. If so, assess appropriate liquidated damages.

Department Response: "A CPM consultant has been retained to perform a delay analysis. The delay analysis is currently in progress. DSNY will determine if any delays were attributable to the contractors and, if appropriate, assess liquidated damages against the responsible parties."

8. Seek recoupment for payments made to construction managers if any project and close-out delays are attributable to construction management consultants.

Department Response: "If it is determined that project and close-out delays were attributable to the construction management consultants, DSNY will initiate appropriate recoupment action as necessary."

9. Ensure that construction management consultants immediately resolve all outstanding work items and obtain final certificates-of-occupancy for the Brooklyn 1&4 and Queens 14 Garages. In that regard, oversee all construction management consultants for other projects (including the Manhattan 4/4A/7 Garage) to ensure that any outstanding work items are resolved and final certificates-of-occupancy are obtained in a timely manner.

Department Response: "The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy for the Brooklyn 1 & 4 Garage will be obtained in early January 2013. With regards to the Queens 14 Garage, we anticipate that the Temporary Certificate of Occupancy will be obtained in February 2013. DSNY will make every effort to comply with your recommendation."

Auditor Comment: Our review of the Department of Buildings' "Building Information System" website on January 22, 2013 indicates that the Department renewed the temporary certificate-of-occupancy for the Queens Garage. Eleven of the 14 noted work items are still outstanding although the project was deemed substantially complete on December 11, 2009—more than three years later.

10. Ensure that the Department expeditiously carries out all work items under its jurisdiction.

Department Response: "DSNY will continue to work expeditiously to close-out and/or resolve all work items for those projects still under their purview. We do recognize the shortcomings of the Bureau of Engineering in carrying out pending work related to the closeout of projects. At the same time, DSNY would like to point out that the Bureau of Long Term Export and the Bureau of Waste Disposal's (BWD) Waste Management Engineering Unit have both performed competently and were timely with their closeout activities."

11. Immediately renew the temporary certificate-of-occupancy for the Queens 14 Garage.

Department Response: "DSNY will work closely with the construction management consultant to obtain all the necessary certificates and approvals to finalize this project."

Insufficient Liquidated Damages

If work is delayed beyond its scheduled completion date due to contractor poor or non-performance, the contractor may be required to compensate the City for delays by paying liquidated damages to the Department as specified in Schedule A of the contract.

However, given the Department's failure to complete the Manhattan 4/4A/7 Garage and vacate Pier 97 as scheduled, the daily amount of liquidated damages that was stipulated in the construction contracts for the Garage was insufficient to compensate the City for delays attributable to the contractors. As previously discussed, the City faced monetary penalties that, according to the 2010 second supplemental agreement, ranged up to \$350,000 per month (\$11,667 per day) if the existing garage was not vacated and its operations relocated to the new facility on time. However, the amount of daily liquidated damages that was stipulated by the Department in Schedule A of the construction contracts totaled only \$2,000 per day for the general construction contractor and \$1,000 per day for the plumbing, mechanical, and electrical contractors, respectively. Even if the Department were able to assess liquidated damages to the general construction contractor at \$2,000 per day for the entire duration that the project has been delayed, the City would still be required to pay an additional \$9,667 per day more than what the City would recoup in liquidated damages. On a monthly basis, the settlement agreement would require the City to pay penalties of \$290,010 per month more than the \$60,000 per month it would recoup from the contractor in liquidated damages. These additional payments could have been avoided if the Department completed the project on schedule.

Department Response: "This topic is not pertinent to the scope and objectives of this audit and should be deleted from this report. The scope of this audit, as indicated in the "Detailed Scope and Methodology" section of the draft report reads as follows: The scope covers capital construction projects under the Department's jurisdiction supervised by construction management consultants during Fiscal Year 2011. In addition, the objective of the audit was to determine whether DSNY is effectively monitoring construction management consultants.

The sufficiency or insufficiency of liquidated damages to be assessed by DSNY is dictated solely by the liquidated damages provisions outlined in the contract. These contractual provisions, which include the individual dollar amount of liquidated damages to be assessed, are determined by our Legal Department, and eventually approved by the City's oversight agencies, such as MOC and the Comptroller's Office.

Accordingly, DSNY's sole responsibility is to adhere to these provisions and assess damages accordingly. DSNY cannot arbitrarily assess liquidated damages to a contractor in order to compensate for any "additional penalties" incurred as a result of contractor negligence. DSNY does not have the authority to indiscriminately change these provisions."

Auditor Comments: The Department's response belies its statement that responds to our Recommendation no. 12: "DSNY must point out that the BWD's Waste Management Engineering Unit and the Bureau of Long Term Export have included special liquidated damages in their major and critical contracts. These additional liquidated damages

include critical schedule milestones to maintain and recover the project schedule. Liquidated damages and special liquidated damages are established on a contract/project basis, with consideration given to the daily costs for construction supervision, and potential damages such as regulatory non-compliance (i.e., fines and/or penalties), increased operational costs and/or lost revenues."

Recommendation

12. The Department should ensure that the amount of liquidated damages is sufficient to adequately protect the City's interests in cases where delays are due to contractors.

Department Response: "In our opinion, this recommendation should not be included in this audit report. Please see our response on pages 6 and 7 of this report. However, we offer the following comments.

While focusing on what you have outlined as a shortcoming in the Bureau of Engineering's contracts, DSNY must point out that the BWD's Waste Management Engineering Unit and the Bureau of Long Term Export have included special liquidated damages in their major and critical contracts. These additional liquidated damages include critical schedule milestones to maintain and recover the project schedule. Liquidated damages and special liquidated damages are established on a contract/project basis, with consideration given to the daily costs for construction supervision, and potential damages such as regulatory non-compliance (i.e., fines and/or penalties), increased operational costs and/or lost revenues."

Auditor Comment: The Department's belief that this recommendation not be included in the report is inconsistent with its description of the steps it asserts have been taken to ensure that the amount of liquidated damages is sufficient to adequately protect the City's interests. If actually carried out, these steps (i.e., special liquidated damages that include critical schedule milestones and potential damages such as regulatory non-compliance), would go a long way towards fulfilling the intent of the recommendation.

Other Issue

Missing Performance Evaluations

The Department did not submit to the City's VENDEX system all annual consultant and contractor performance evaluations as required by the Procurement Policy Board Rules. Our review found that the Department submitted in VENDEX only 19 of the required 43 (44 percent) consultant evaluations and 42 of the required 102 (41 percent) contractor evaluations.

Promptly submitting performance evaluations in the VENDEX system is critical so that City agencies can determine the responsibility of consultants and contractors before awarding them new contracts.

Department Response: "... a higher number of P/Es were prepared and submitted to MOC, yet did not appear on VENDEX. This may be an indication that MOCS did not transmit all P/Es into VENDEX."

Agency Comments: The Department failed to provide any documentation that it submitted additional performance evaluations to the Mayor's Office of Contract Services for inclusion in the VENDX system.

Recommendation

13. The Department should ensure that all consultant and contractor performance evaluations are submitted in the City's VENDEX system.

Department Response: "In the future, DSNY will ensure that all contractor performance evaluations are completed and submitted to VENDEX in a timely manner."

DETAILED SCOPE AND METHODOLOGY

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. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter. This audit was conducted by staff that included auditors with engineering backgrounds.

The scope of the audit covers capital construction projects under the Department's jurisdiction supervised by construction management consultants during Fiscal Year 2011. This audit addresses active capital projects that were in either the construction or close-out phases.

The Department provided a list and represented that there were six capital construction projects being supervised by construction management consultants during Fiscal Year 2011. In addition, we became aware of a seventh capital construction project—construction of a new garage at Spring Street in Manhattan to replace an existing Gansevoort facility—that was included in the 2005 settlement agreement between the Friends of Hudson River Park, et al and the City of New York. This project was originally under the Department's jurisdiction when it commenced in December 2008 and fell behind schedule before the project was transferred to the Department of Design and Construction (DDC) in May 2011. We included this project as part of our audit because it was under the Department's authority during a portion of 2011. However, we limited our review of this project to comparing the initial start and completion dates listed in the settlement agreement with the actual start and currently anticipated completion dates. Our review of the Gansevoort project did not go into the same detail as the six primary projects in our audit sample because it is now under DDC's jurisdiction.

Our sample consisted of all six projects. To understand the policies, procedures, and internal controls governing the Department's oversight of construction management consultants, we interviewed Department personnel, including Assistant Commissioners, Directors, and project managers. We documented our understanding of these interviews in memoranda and asked Department officials to review and confirm the accuracy of our understanding.

To determine whether the Department is effectively monitoring construction management consultants to ensure that all work is being performed effectively and in a timely manner, we:

- Reviewed and compared the original project commencement and completion schedules with the actual completion schedules to determine whether projects were being completed on schedule.
- Confirmed the assignment of either full-time or part-time Department personnel responsible for overseeing construction management consultants on each project.
- Confirmed whether consultant and contractor performance evaluations were submitted in the VENDEX system according to Procurement Policy Board Rules.

To determine if the work performed was of good quality and at the completion percentages reported by the Department, we conducted site visits to all of the projects reviewed.

We reviewed construction management consultant and contractor payments to ensure that payments were reviewed prior to issuing payments and that appropriate dollar amounts were withheld for outstanding items after substantial completion was declared.



ADDENDUM Page 1 of 14 JOHN J. DOHERTY Commissioner 125 Worth Street, Room 720 New York, NY 10013

January 7, 2013

The Honorable Tina Kim
Deputy Comptroller for Audit
Office of the Comptroller
1 Centre Street, Room #100
New York, NY 10007

Re: Audit Report on the Department of Sanitation's Oversight of Construction Management Consultants (7E12-112A) dated December 17, 2012

Dear Deputy Comptroller Kim,

We wish to thank you for the opportunity to review and comment on the findings and 13 recommendations contained in the recent audit report on the Department of Sanitation's Oversight of Construction Management Consultants. We trust that our comments will be seriously considered by your office and reflected in the final audit report.

Thank you.

Sincerely

∄ohn J. Doherty Commissioner DSNY has reviewed the Draft Report of the Construction Management Consultants Audit #7E12-112A, dated December 17, 2012, and continue to have some comments and concerns that we have mentioned several times regarding the findings and recommendations.

General Observation

DSNY continually assesses its various divisions to identify strengths and weaknesses. Prior to the audit, in 2011, a decision was made by the Commissioner and the Mayor's Office to reassign the function of new garage construction to the Department of Design and Construction (DDC) in order to improve the performance and efficiency of the construction of critical DSNY infrastructure. The responsibility for construction of marine transfer stations was also transferred to DDC. As a result, the Bureau of Engineering was downsized by 50% and the majority of the capital construction projects were assigned to DDC.

The Draft Report makes thirteen (13) recommendations. While many of the recommendations are directed at addressing findings on specific Bureau of Engineering projects, it is not clear if some of these recommendations are proposed to be implemented Department-wide. If the Bureaus of Long Term Export and Waste Management Engineering were found to be effectively monitoring the construction management consultants and ensuring that work is being performed effectively and in a timely manner, then recommendations may not apply as broadly as represented in the draft report. Specific instances are addressed below.

Page 6

Paragraph 1

Your report briefly states, "The Department is effectively monitoring construction management consultant...work is being performed effectively and in a timely manner with the exception of the Bureau of Engineering." The report goes on to further highlight the deficiencies of one Bureau, but it does not adequately recognize the other Bureaus nor the Agency for the projects audited which were successful, well administered and executed.

In addition, it does not adequately document the positive aspects of your audit, such as the comments of approval you have made throughout the audit in relation to project design aesthetics, on-going construction and post-construction quality, work area condition, etc. We have not had anything negative surface in those areas, but the report does not adequately highlight your favorable impression of the facilities during your site visits.

We believe the report should recognize the overall quality of work performed by the other Bureaus and supporting functions.

FINDINGS

Problems with Oversight of Construction Management Consultants

In order to adequately represent the findings and magnitude of work, we request that Table 1 indicate the construction cost of each project, since all three projects are different in size and nature.

Project Delays

Table1 on page seven of the report shows the various delays by project during the construction and closeout phases. We do acknowledge that there were delays in each of the projects, but in many cases the delays were not solely attributable to the Agency. Some of the delays were unanticipated and others were beyond the control of the Agency.

The delays stated as DOS delays in the Delay Analysis provided to you for BK 1&4 Garage and Queens 14 Garage also include delays caused by others, which we have broken down by DSNY delays and non-DSNY delays (See Attachments 1 and 2).

Construction Delays

Brooklyn 1&4

DSNY calculates an overall delay percentage of 19% as opposed to the 52% of delays represented in your finding.

The following are examples of major non-DSNY delays:

• Before construction, the site for this facility had undergone remediation to clean up historic contamination as ordered by, and under the regulatory supervision of, the New York State Department of Environmental Conservation, which deemed the remediation complete and issued the former owner a No Further Action letter. Unfortunately, after the City acquired the site and commenced construction, the site was found to contain additional contamination (unforeseen condition), thereby causing a delay in construction. As a result, the site had to be remediated pending approvals from the oversight agencies, before construction could resume. This must be taken into account when assessing the project delays (See Attachment 1A).

• Initial delays in construction were due to delays in vacating the site by WMI (See Attachment 1B).

Queens 14

DSNY calculates an overall delay percentage of 34%, as opposed to the 35% of delays represented in your finding. Delays attributed to DSNY should be reduced to 7% based on the delay analysis. The remaining 27% were non-DSNY delays. The dollar values associated with these delays should also be revised accordingly (See Attachment 2).

The following are examples of major non-DSNY delays:

- During the demolition process, problems were encountered with the backflow preventer, which was not indicated on contract drawings (See Attachment 2A-1).
- Originally the contract documents required buried petroleum piping without secondary containment. Subsequently, it was determined that secondary containment is a regulatory requirement and a change order was needed. While negotiating the costs, the Contractor delayed signing the change order which resulted in further delays in validating the secondary containment (See Attachment 2A-2).

Manhattan 4/4A/7

A CPM consultant has been retained to perform a delay analysis. The delay analysis is currently in progress. DSNY will determine if any delays were attributable to the contractor, and if necessary, assess liquidated damages against the responsible parties.

Payment of "Monetary Penalties"

The paragraph states that DSNY will pay a combined total of \$28,045,334 in additional costs. We disagree with this conclusion as it does not provide a fair representation of these payments. Furthermore, it includes payments that are not pertinent to this audit.

More Than \$14 Million in Monetary Payments

DSNY strongly disagrees with this statement and its inclusion as part of this audit report for the following reasons:

- A. The \$8,250,000 in payments made to the Hudson River Park Trust was for the Agency's extended use and occupancy. It should also be noted that these payments to the Trust were restricted for use in constructing usable parkland and park facilities at Pier 97.
- B. The \$5.9 million dollars in penalties mentioned has not been paid out during the period under audit. Also it has no relevance to the scope and objective of this audit, since it does not relate to any construction or CM services. Furthermore, it is premature to include the \$5.9M as a liability to the Agency since it does not come into effect until January 2013 and is conditional upon the Agency's ability to vacate the Gansevoort Garage and move to the Spring Street Garage. The \$5.9M payment should not appear in this report.

The Spring Street Garage is not included in the projects that were audited. Therefore, we strongly believe that it should not be stated in this audit report.

However, if you decide to include the \$5.9M in the report, the following synopsis of upfront delays should also be included:

The construction of the Spring Street Garage commenced later than had been anticipated because of the complexities and time consuming process of negotiating and reaching agreement with UPS on the terms of a purchase and sale agreement (PSA), a condominium declaration and by-laws. DSNY will be sharing space with UPS at the Spring Street Garage, and the City and UPS had to negotiate the terms of the PSA as well as the details of the condominium relationship between the two parties. The PSA was executed in June 2010 and was registered in August 2010. The City could not commence construction until it had an ownership interest in the Spring Street property. Consequently, construction of the Spring Street Garage could not have commenced in November 2008 as originally envisioned in 2005 when the Settlement Agreement and Order was signed (See Attachment 3).

More Than \$13 Million in Additional Consultant Costs

The \$13, 800,334 in additional payments for construction management consultant services were made to the construction manager, as a result of, in most cases, unanticipated delays during the construction and closeout phases of the projects.

DSNY would like the report to include a breakdown of the \$13M by project, as indicated in the table below:

Location	Additional CM Costs Per Comptroller	Delay % Per Comptroller's Report	Delay Costs- Per Comptroller	Revised % Per DSNY	Delay Costs Per DSNY
Brooklyn 1&4	\$1,298,318	52%	\$675,158	19%	\$246,680
Queens 14	\$1,542,741	35%	\$539,959	7%	\$107,991
Manhattan 4/4A/7	\$10,264,457	100%	N/A	Unknown	N/A
Totals	\$13,105,578		\$1,215,117		\$346,671

We recognize that the Department has incurred the additional CM Services costs due to the delays during the construction as well as closeout phases of these projects. However, if a comparison of the original fees for the CM Services is made against the current construction cost, the fees as a percentage of the construction cost would be about 2.75%-5.5%, which, in our opinion, seems to be in the lower to mid-range of the anticipated fees for contracts of this size and nature. The actual fees range from about 4.5% to 10%. We recognize that costs have increased considerably in comparison to the original fees but not to an extreme percentage of the overall construction figures.

\$694,756 for Projects Not Closed Out in a Timely Manner

DSNY has reviewed all payments and determined that the amount should be reflected as \$666,220. This includes \$349,156 and \$317,064, for BK 1&4 and QN 14 Garages, respectively (See Attachment 4). With regard to the overall closeout cost of the CM Services, we are of the opinion that an average closeout period for projects of this size and nature usually ranges from 4-6 months with costs averaging around \$150,000 - \$225,000. We do acknowledge the amount spent during closeout (\$349,156 for BK 1&4 and \$317,064 for Q14) was larger than the range stated above, but the additional cost incurred was, in part, due to some of the additional activities performed that were not included in the original contract. Furthermore, we offer the following breakdown of conditions that contributed to the need for additional construction management services:

Closeout Delay

Brooklyn 1 &4

With reference to the \$666,220 spent for projects not closed out in a timely manner. The Brooklyn 1 &4 portion (See Attachment 4A - \$349,156) was spent on close-out functions as well as other functions not related to the closeout.

This facility was occupied by the Department prior to full completion and resulted in the need for additional extended construction management services during the closeout. The closeout phase of this project was also extended due to the following issues:

- The rooftop HVAC equipment had not yet been fully installed at the time of initial occupancy.
- Completion of testing and commissioning of rooftop HVAC equipment had to be performed.
- Two of the contractors (Arnel and Dart) filed delay claim lawsuits and construction management was retained to provide assistance to the Corporation Counsel's office defending this legal action (See Attachments 5 (Arnel) and 5A (Dart)).
- CM was asked to review the dispute claims filed by the Contractors and to attend dispute meetings at the Comptroller's office during the closeout (See Attachment 6).

The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy will be obtained in early January 2013.

Queens 14

The Q14 portion (See Attachment 4B - \$317,064) was spent on closeout functions as well as other functions unrelated to the closeout.

As stated above this facility was occupied by the Department prior to full completion and resulted in the need for additional extended construction management services during the closeout. The closeout phase of this project was also extended due to the following issues:

- Vacating the existing Garage (Old Q14) in order to accommodate plans for economic redevelopment of the original site and area.
- The rooftop HVAC equipment had not yet been fully installed at the time of initial occupancy.
- Completion of testing and commissioning of rooftop HVAC equipment had to be performed.
- CM assisted Corporation Counsel in addressing the lawsuit filed by the General Contractor, which was not in the original contract (See Attachment 7).

- CM conducted a Project Completion Delay Analysis, which was not in the original contract. (See Attachment 8)
- CM assisted the Agency in defending contract disputes and provided information on contractors' disputes and claims, and attended meetings at the Comptroller's Office (See Attachment 9).

The Agency anticipates that all outstanding work would be completed and the Temporary Certificate of Occupancy will be obtained in February 2013.

Insufficient Liquidated Damages

This topic is not pertinent to the scope and objectives of this audit and should be deleted from this report. The scope of this audit, as indicated in the "Detailed Scope and Methodology" section of the draft report reads as follows: The scope covers capital construction projects under the Department's jurisdiction supervised by construction management consultants during Fiscal Year 2011. In addition, the objective of the audit was to determine whether DSNY is effectively monitoring construction management consultants.

The sufficiency or insufficiency of liquidated damages to be assessed by DSNY is dictated solely by the liquidated damages provisions outlined in the contract. These contractual provisions, which include the individual dollar amount of liquidated damages to be assessed, are determined by our Legal Department, and eventually approved by the City's oversight agencies, such as MOC and the Comptroller's Office.

Accordingly, DSNY's sole responsibility is to adhere to these provisions and assess damages accordingly. DSNY cannot arbitrarily assess liquidated damages to a contractor in order to compensate for any "additional penalties" incurred as a result of contractor negligence. DSNY does not have the authority to indiscriminately change these provisions.

In light of the above, we strongly feel that this topic should not appear in this report. We also disagree for the reasons outlined below:

- The Hudson River Park (HRP) Agreement and Order was unavailable at the time
 of bidding. The HRP agreement was made in 2005, several years after the
 original bid requiring the City to pay additional payments in the event the project
 extended beyond May 2008.
- The dollar amount of the liquidated damages could not be estimated at a rate comparable to the amount of the legal settlement stipulated in the HRP

agreement which required additional payments to be made starting May 2008, which is after the original completion date of this project.

 Even if an agreement was made prior to bid letting for additional payment for any delays beyond May 2008, we could not have anticipated the occurrence of such an extensive delay: as a result, we could not have associated any value to the delay, nor put it into the contract liquidated damages portion of the bid that may have resulted in higher project costs from the onset even without delays.

Such an after-the-fact analysis may have led to this recommendation; however it is not a fair critique.

Furthermore, we do not agree with your assertion of the Liquidated Damages based on the monetary penalties of \$350,000 per month stated in your report. In our opinion, the monetary penalties should be adjusted to reflect an average cost over the entire project delay instead of using the peak dollar amounts to characterize the penalties. Considering the 5.8 years of delay on this project, the monetary penalties of \$350,000 per month should be revised to \$118,500 per month; \$11,667 per day should be \$3,950 per day. As a result, the additional \$9,667 per day or \$290,010 per month in penalties should be changed to \$1,950 per day or \$58,500 per month.

In reference to your comment on the Spring Street Garage on page 10, paragraph 3, which states "This project.....fell behind schedule before the project was transferred to DDC....." Please see our comment below.

As stated previously on Page 4 "The construction of the Spring Street Garage commenced later than had been anticipated because of the complexities and time consuming process of negotiating and reaching agreement with UPS on the terms of a purchase and sale agreement (PSA), a condominium declaration and by-laws. DSNY will be sharing space with UPS at the Spring Street Garage, and the City and UPS had to negotiate the terms of the PSA as well as the details of the condominium relationship between the two parties. The PSA was executed in June 2010 and was registered in August 2010. The City could not commence construction until it had an ownership interest in the Spring Street property. Consequently, construction of the Spring Street Garage could not have commenced in November 2008 as originally envisioned in 2005 when the Settlement Agreement and Order was signed. See Attachment 3- Cover sheet stating the Sales Agreement Date.

Submission of Performance Evaluations

The table below shows the number of Performance Evaluations (P/Es) that were prepared and submitted to MOCS by DSNY, and the number of P/Es that appeared on VENDEX per Comptroller's and DSNY.

	Su	mmary of Per	rformance	Evaluation	ons	_	
		P/Es Prepared & Submitted to MOCS by DSNY		P/Es on VENDEX per Comptroller's		P/Es on VENDEX per DSNY	
Description	Required P/Es	# P/Es	%	# P/Es	%	# P/Es	%
Consultants	51	24	47%	19	37%	22	43%
Contractors	102	86	84%	42	41%	51	50%
Totals	153	110	72%	61	40%	73	48%

As indicated in the above table, a higher number of P/Es were prepared and submitted to MOC, yet did not appear on VENDEX. This may be an indication that MOCS did not transmit all P/Es into VENDEX.

Audit Recommendations and Agency Responses

The Department should:

1. <u>Promulgate uniform standards for assigning in-house personnel to oversee</u> construction management consultants.

Currently project and contract management oversight procedures are established on an individual project basis. The assignment of overseeing in-house personnel is dependent upon the magnitude and complexity of the project. There is no uniform standard for assigning personnel to projects since each project is unique and has different staffing requirements.

With regard to the Bureau of Engineering, improvements can be made regarding the management of CM contract services. However, a decision was made by the Commissioner and the Mayor's Office to reassign the function of new garage construction to the Department of Design and Construction (DDC). As a result, the Bureau was downsized by 50% and the majority of the capital construction projects were assigned to DDC.

2. Ensure that the Manhattan 4/4A/7 garage is completed and closed out expeditiously.

DSNY will make every effort to ensure that Manhattan 4/4A/7 is completed and closed out as expeditiously as possible.

In 2011, the Commissioner and other senior staff focused their efforts on completing this project and subsequently the Deputy Mayor's Office also got directly involved in early 2012 to complete and closeout the project.

3. Ensure that the Brooklyn 1&4 and Queens 14 Garages are closed out expeditiously.

DSNY will make every effort to ensure that both the Brooklyn 1&4 and Queens 14 Garages are closed out as expeditiously as possible. The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy for the Brooklyn 1 & 4 Garage will be obtained in early January 2013. The Temporary Certificate of Occupancy for Queens 14 is expected to be obtained in February 2013.

4. Compile standard written procedures for overseeing projects that are managed by construction management consultants.

DSNY recognizes one of the Bureaus involved in this audit needs to address the abovementioned issues. The two other Bureaus already have established procedures on a project basis with clear performance and progress standards incorporated into the construction contract. These Bureaus' requirements are tracked, reported, projected, reviewed and assessed on a monthly, quarterly and annual basis.

We will carefully review the existing procedures of each Bureau and evaluate the need to develop standard written procedures as necessary.

5. Devise a computerized tracking system to oversee construction progress.

Each Bureau has its own tracking and monitoring system based on its specific needs. DSNY recognizes that some Bureaus were stronger than others, but DSNY has mechanisms to track, document and develop reports on a monthly basis. However, we will assess the need to develop a computerized system(s) based on need and cost benefit.

6. The Department should seek relief from the possible assessment of \$5.9 million in monetary penalties for the relocation of the Gansevoort Garage by ascertaining whether the delayed project commencement was attributable to extenuating circumstances.

As stated previously on Page 4 "The construction of the Spring Street Garage commenced later than had been anticipated because of the complexities and time consuming process of negotiating and reaching agreement with UPS on the terms of a purchase and sale agreement (PSA), a condominium declaration and by-laws. DSNY will be sharing space with UPS at the Spring Street Garage, and the City and UPS had to negotiate the terms of the PSA as well as the details of the condominium relationship between the two parties. The PSA was executed in June 2010 and was registered in August 2010. The City could not commence construction until it had an ownership interest in the Spring Street property. Consequently, construction of the Spring Street Garage could not have commenced in November 2008 as originally envisioned in 2005 when the Settlement Agreement and Order was signed. See Attachment 3- Cover sheet stating the Sales Agreement Date.

7. Perform a delay analysis for the Manhattan 4/4A/7 garage to ascertain whether any delays are attributable to contractors. If so, assess appropriate liquidated damages.

A CPM consultant has been retained to perform a delay analysis. The delay analysis is currently in progress. DSNY will determine if any delays were attributable to the contractors and, if appropriate, assess liquidated damages against the responsible parties.

8. Seek recoupment for payments made to construction managers if any project and close-out delays are attributable to construction management consultants.

If it is determined that project and close-out delays were attributable to the construction management consultants, DSNY will initiate appropriate recoupment action as necessary.

9. Ensure that construction management consultants immediately resolve all outstanding work items and obtain final certificates-of-occupancy for the Brooklyn 1&4 and Queens 14 Garages. In that regard, oversee all construction management consultants for other projects (including the Manhattan 4/4A/7 Garage) to ensure that any outstanding work items are resolved and final certificates-of-occupancy are obtained in a timely manner.

The Agency anticipates that all outstanding work would be completed and the final Certificate of Occupancy for the Brooklyn 1 & 4 Garage will be obtained in early January 2013. With regards to the Queens 14 Garage, we anticipate that the Temporary Certificate of Occupancy will be obtained in February 2013. DSNY will make every effort to comply with your recommendation.

10. Ensure that the Department expeditiously carryout all work items under its jurisdiction.

DSNY will continue to work expeditiously to close-out and/or resolve all work items for those projects still under their purview. We do recognize the shortcomings of the Bureau of Engineering in carrying out pending work related to the closeout of projects. At the same time, DSNY would like to point out that the Bureau of Long Term Export and the Bureau of Waste Disposal's (BWD) Waste Management Engineering Unit have both performed competently and were timely with their closeout activities.

11. <u>Immediately renew the temporary certificate-of-occupancy for the Queens 14</u> Garage.

DSNY will work closely with the construction management consultant to obtain all the necessary certificates and approvals to finalize this project.

12. The Department should ensure that the amount of liquidated damages is sufficient to adequately protect the City's interests in cases where delays are due to contractors.

In our opinion, this recommendation should not be included in this audit report. Please see our response on pages 6 and 7 of this report. However, we offer the following comments.

While focusing on what you have outlined as a shortcoming in the Bureau of Engineering's contracts, DSNY must point out that the BWD's Waste Management Engineering Unit and the Bureau of Long Term Export have included special liquidated damages in their major and critical contracts. These additional liquidated damages include critical schedule milestones to maintain and recover the project schedule. Liquidated damages and special liquidated damages are established on a contract/project basis, with consideration given to the daily costs for construction supervision, and potential damages such as regulatory non-compliance (i.e., fines and/or penalties), increased operational costs and/or lost revenues.

13. The Department should ensure that all consultant and contractor performance evaluations are submitted in the City's VENDEX system.

In the future, DSNY will ensure that all contractor performance evaluations are completed and submitted to VENDEX in a timely manner.