FACILITIES SERVICES:

Project management practices improved

September 2010

LaVonne Griffin-Valade City Auditor

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OFFICE OF THE CITY AUDITOR

CITY OF PORTLAND

Office of City Auditor LaVonne Griffin-Valade

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September 29, 2010

TO: Mayor Sam Adams Commissioner Randy Leonard Commissioner Nick Fish Commissioner Amanda Fritz Commissioner Dan Saltzman Ken Rust, Chief Administrative Officer

SUBJECT: Facilities Services: Project management practices improved (Report #394)

The attached report contains the results of our audit of Facilities Services' implementation of recommendations we made in our January 2008 report on contracts managed by Facilities Services (Report #348A).

We found that Facilities Services fully implemented two of our four recommendations, and is in the process of implementing the other two. Since our 2008 audit it improved project planning, the process of completing design documents prior to construction bidding, and documentation of changes during construction.

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LaVonne Griffin-Valade City Auditor

Audit Team: Drummond Kahn Beth Woodward

Attachment

FACILITIES SERVICES:

Project management practices improved

Summary Project managers in the City's Facilities Services program handle a wide range of projects, from designing and constructing new build-ings to remodeling City buildings for new uses. Facilities Services' policies and practices to manage work are important factors in completing projects cost-effectively and on time. Communication with their client bureaus is an essential part of that work.

We reviewed Facilities Services' current project management policies and practices as they relate to the four recommendations we made in an audit we published in January 2008, *Construction Contracts: Facilities Services needs to improve coordination with bureaus to reduce costs and delays* (Report #348A). We found that Facilities Services has, for the most part, implemented our recommendations. Two recommendations were fully implemented and the other two are in the process of being implemented.

Since our 2008 audit, Facilities Services' project managers improved project planning; improved the process for completing design documents prior to construction bidding; and improved documentation of changes needed as work progresses. Facilities Services also improved contract language and enforcement for consultant contracts.

Introduction Facilities Services, a division of the City's Office of Management and Finance (OMF), is responsible for operating City buildings, including City Hall, the Portland Building, and other major structures. A small group within Facilities Services, the Project Management program,

plans and manages the capital improvement projects needed to construct or renovate City facilities. Each project manager is responsible for specific projects involving real property managed by Facilities Services or by other bureaus that request project management services. Therefore, the Project Management program manages a wide variety of projects such as constructing new buildings or planning space. Its major projects currently include design of the new Emergency Coordination Center involving several City Bureaus, with estimated cost approximately \$20 million; ongoing improvements to Union Station (Figure 1), estimated cost \$8 million to \$10 million; and remodeling two fire stations.

Figure 1 Portland's Union Station



Source: Audit Services Division photo, R. Cowan

Project managers accomplish the vast majority of project work through contracts with professional specialists and construction contractors. Facilities Services' policies and practices managing those contracts are important factors in completing projects cost-effectively and on time. Communication with their client bureaus – those which use the building space – is also an essential part of that work. In our January 2008 audit of construction contracts managed by Facilities Services, *Construction Contracts: Facilities Services needs to improve coordination with bureaus to reduce costs and delays* (Report #348A), we found that construction cost was affected by management of design contracts on some projects. We also found inconsistent application of contract conditions and insufficient documentation. Our 2008 audit contained four recommendations to address those problems. We undertook this current audit to determine whether our recommendations have been implemented or are otherwise resolved.

Facilities Services improved project management

Overall, we found that Facilities Services is implementing the recommendations we made in our January 2008 audit. Our recommendations are listed in Figure 2 with the implementation status of each. The status of two recommendations is listed as "in-process," because they are not fully implemented, but some actions have been taken and management is continuing work on the portions not yet implemented. Facilities Services began clarifying policy in response to our audit findings soon after receiving the report draft, before our 2008 audit was published.

Projects managed by Facilities Services vary a great deal in size, in type of work, in the level of knowledge that client bureaus have about the process of capital improvement, and in client bureaus' level of involvement. Due to this project variability, policies may not be applied the same way on every project, and projects discussed here are not necessarily representative of all other projects. Facilities Services management drafted guidelines intended for client bureau staff that summarize the planning, design, and construction process of developing or renovating City buildings. It plans to tailor the information for use on specific projects, to control project costs by getting input from client bureaus at the right times during the process. The draft guidelines support implementation of all four of our 2008 recommendations.

Audit Recommendation *		Status
1	Perform more pre-project planning with client bureaus to better define project scope of work and design contract deliverables, which can be utilized to develop Requests for Proposals and establish clear expectations in formal Professional, Technical, and Expert services contracts.	Implemented
2	Complete project design and obtain formal sign-off by client bureaus before advertising for construction bids.	Implemented
3	Improve the clarity of contract provisions and strictly enforce those provisions, including the terms for paying contractors.	In-Process
4	Improve administration and documentation of changes to both design and construction contracts; include a formal sign-off by the client bureau for each change.	In-Process

Figure 2 Status of recommended actions

* Our 2008 report (#348A) includes additional explanatory information for each recommendation

Improved project planning with client bureaus (Status of actions on Recommendation 1)

Facilities Services management told us that they take time with client bureaus to develop the scope of work necessary to meet their desired project outcomes. They said that providing cost estimates is an important part of this planning because client bureaus typically modify the proposed scope when they learn about cost. Facilities Services project managers use professional cost estimators. A challenge for Facilities Services management is that early planning work by Facilities Services does not always have a source of project funding.

Facilities Services management told us that project managers are improving communication with client bureaus about project budgets. In addition to making sure clients understand the elements in a budget estimate, they include explicit amounts as contingency in project budgets, in case of possible future changes. As work progresses and some changes are made, the initial contingency amount is reduced. Improved communication about the initial budget therefore may improve administration and reduce the number of changes later in the project.

Facilities Services policy states, as of March 2008, that all Requests for Proposals (RFPs) "shall include detailed information that specifically describes deliverables...." We found that the scope of work section in recent RFPs provided evidence of improved early project planning. For example, the scope of work section in the RFP for design of the new Emergency Coordination Center (May 2009) is four pages long and includes design criteria.

Staff in client bureaus that have worked closely with Facilities Services project managers confirmed that Facilities Services performed early project planning for incorporation in the RFPs. Although one of the three that we interviewed said that implementation of our recommendation to do more pre-project planning was still in-process, the RFP for that project also includes a detailed scope of work.

Completing project design prior to construction bid advertisement (Status of actions on Recommendation 2)

Providing complete contract documents to bidders may reduce the number of additional documents needed and ensure that all work is clear to bidders and subject to the bidding process. In addition, bureau involvement during the design process can help reduce changes, and therefore the cost of changes, during project construction, although Facilities Services' project managers cannot compel client bureaus to review design documents.

As of December 2008, Facilities Services policy states that drawings and specifications must be 100 percent complete prior to bid advertisement. In addition, all Facilities Services project managers are responsible for transmitting drawings and specifications to client representatives at each stage of design, and requesting the client bureau's written review comments. According to policy, the project manager performs at least one technical review and sends comments to the design contractor, and prior to advertising for bids to construct, submits the completed bid package and copies of client reviews to Facilities Services' Supervising Project Manager to check for completion. Documentation of the Fire Station 1 seismic upgrade and remodel project, for which design was completed in 2008, is an example of a Facilities Services project manager involving the client bureau in design decisions. This practice helps to avoid some changes during construction, when they cost more.

Clarification of contract provisions (Status of actions on Recommendation 3)

In contracts for professional services as well as construction contracts, the contract language should be clear enough to prevent different parties to the contract from interpreting its provisions in different ways.

To improve payment provisions in contracts for professional services, and avoid mixing payment by hourly rate with payment by lumpsum, Facilities Services policy states, as of June 2008, that project managers "shall determine which compensation method they wish to use on any given project," check invoices against the contract language, and, "...not approve invoices that do not follow the ...con-tract." The design contracts for the new Emergency Communications Center and the Fire Station No. 18 upgrade are examples of improved contract payment provisions.

Because Facilities Services does not have independent authority to modify the City's pre-approved construction contract conditions for payment (General Conditions), it requested that the City Attorney's Office clarify the contract provisions limiting contractors' markup rates. The City Attorney's Office and Facilities Services' Supervising Project Manager are in the process of revising the General Conditions to improve clarity as we recommended.

Improved administration and documentation of changes to contracts (Status of actions on Recommendation 4)

Facilities Services has implemented our fourth 2008 recommendation as it applies to construction contracts, and is beginning to implement it as it applies to amendments, the term used for changes to contracts for professional services. It is in the process of improving the clarity of amendments to design contracts by explicitly stating the manner in which the scope of work is changed by the amendment. Although this practice is not consistent, policy requires using the City's format for amendments, which suggests identifying how the contract scope of work is modified. We had difficulty finding examples of amendments that specified how the scope was changed. Management told us that Facilities Services will continue working to improve implementation of this aspect of our recommendation.

Policy also requires that project managers use required City format for change orders on construction projects, and maintain a log of change orders for each project, showing who initiated each change, a description of the change, and the cost. Facilities Services has improved its administration and documentation of changes to construction contracts in several ways.

Policy provides, as of December 2008, that when client bureaus request changes during the construction phase of a project the Facilities Services project manager must either obtain the bureau's signed approval of the resulting proposed change, or attach equivalent documentation, before a change order is issued. Change orders for fire station upgrades show the difference in policy. For a 2005 project reviewed in our prior audit, a typical change order listed more than ten changes with one set of signatures for all. Those approval signatures did not include the bureau's approval. However, each change order for the 2008-09 Fire Station 1 seismic upgrade and remodel project shows only one change, and approval signatures include the Fire Bureau project representative.

Conclusion Facilities Services has improved its policy and practices managing projects, with respect to issues we highlighted in our four 2008 audit recommendations. It fully implemented two recommendations and is in the process of implementing the other two recommendations.

Objective, Scope, and Methodology

The objective of this audit was to determine the current status of implementation of each recommendation we made in Audit #348A, *Construction Contracts: Facilities Services needs to improve coordination with bureaus to reduce costs and delays*, published in January 2008. The scope was focused on Facilities Services' current internal controls (policies) and practices, and actions taken to date, with respect to implementation of the recommendations.

To assess the status of implementation we reviewed statements in three memoranda from Facilities Services' management and documentation managers provided showing policy and examples of work products. We also interviewed Facilities Services management, two project managers, and staff in three client bureaus.

We reviewed examples of work obtained independently from City records and current Procurement guidance documents.

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.

Responses to the Audit



Office of Mayor Sam Adams City of Portland

September 10, 2010

LaVonne Griffin-Valade City Auditor 1221 SW 4th Avenue, Room 140 Portland, Oregon 97204

Dear Auditor Griffin-Valade,

Thank you for allowing me the opportunity to respond to Audit Report #394- *Facilities Services: Project management practices improved.* We recognize the importance of following up on past audits and are pleased that we are able to showcase the work we've done to improve our services.

The recommendations presented in Audit #348A- *Construction Contracts: Facilities Services needs to improve coordination with bureaus to reduce costs and delays* (published January 2008) were constructive and insightful. As you point out in your current audit, "Facilities Services began clarifying policy in response to our audit findings soon after receiving the report draft, before our 2008 audit was published." This proactive response continued as Facilities Services worked to ensure that all of your concerns were addressed. We are proud to say that we have fully implemented two of the recommendations and are in the process of fulfilling the other two recommendations.

We appreciate your thorough analysis of Facilities Services' current project management policies and practices. Thank you for recognizing the achievements we have made to date and for your help in ensuring that our progress continues.

Best Regards,

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Sam Adams Mayor City of Portland

Sam Adams, Mayor



CITY OF **P**ORTLAND

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DATE:	September 14, 2010
TO:	LaVonne Griffin-Valade, City Auditor
FROM:	Ken Rust, Chief Administrative Officer
SUBJECT:	Response to Audit Report #394 – Facilities Services: Project Management Practices Improved, September 2010

Thank you for the opportunity to comment on Audit Report #394 (the Report) referenced above. As noted in the Report this is a follow up audit to review the recommendations your office made in the January 2008 Audit Report #348A.

I am pleased to hear that Facilities Services has taken the appropriate actions to initiate and fully adopt two of the recommendations. We will continue efforts currently underway to fully implement the remaining recommendations to clarify the General Conditions of the contract and to improve the clarity of contract amendments.

Again, we appreciate the opportunity to respond to the Report and we will continue our efforts to establish efficient and effective project management practices.

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Facilities Services: Project management practices improved

Report #394, September 2010

Audit Team Member: Beth Woodward

LaVonne Griffin-Valade, City Auditor Drummond Kahn, Director of Audit Services

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