



February 25, 2015

**Performance Audit**

# Albuquerque Convention Center Renovation – Phase II Change Orders

City of Albuquerque

**Report No. 15-102**



**CITY OF ALBUQUERQUE  
OFFICE OF INTERNAL AUDIT**

PERFORMANCE AUDIT REPORT  
ALBUQUERQUE CONVENTION CENTER RENOVATION-  
PHASE II CHANGE ORDERS  
DEPARTMENT OF MUNICIPAL DEVELOPMENT  
REPORT NO. 15-102

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## Executive Summary

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### **Background**

In order to better represent the City of Albuquerque, Mayor Richard J. Berry approved the renovation of the Albuquerque Convention Center in 2012. The renovation project was separately bid in two Phases. Phase I was completed in September 2013 and Phase II began in October 2013 and was on-going throughout the audit. Phase II involved exterior and interior improvements to the West and East buildings of the Convention Center. This audit addresses only change orders to the Phase II renovation contract.

The Phase II renovation lump sum contract was awarded to Bradbury Stamm and totaled \$12,944,572. The six approved change orders added a total of \$1,186,170 to the base contract, a 9.2 percent increase, bringing the total cost of the Phase II construction to \$14,130,742.

### **Findings**

Familiarity and compliance with contractual specifications, along with independent monitoring and review of change orders and change order requests are needed. Net cost savings totaling \$13,123 were identified throughout the audit and stem from the following items:

- Separate contract for movable furniture and equipment,
- Excluded equipment charges,
- Mathematical errors,
- Duplicate charges of gross receipts tax, and
- Unapplied credits due to the City.

Work for change order requests often begins prior to the final approval of the change order. Additionally, verbal authorization is often given, and the City does not formally document when work is authorized to begin for each change order request.

**Recommendations and management responses are included within the audit report.**



# City of Albuquerque

## *Office of Internal Audit*

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February 25, 2015

Accountability in Government Oversight Committee  
P.O. Box 1293  
Albuquerque, New Mexico 87103

Audit: Performance  
Albuquerque Convention Center Renovation - Phase II Change Orders  
Audit No. 15-102

**FINAL**

## INTRODUCTION

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The Office of Internal Audit (OIA) conducted a performance audit of the renovation of the City of Albuquerque's Convention Center – Phase II Change Orders. The audit was included in OIA's fiscal year (FY) 2015 audit plan. Information pertaining to the audit objectives, scope and methodology can be found in **Appendix A**.

To better represent the City of Albuquerque, in 2012 Mayor Richard J. Berry approved the Convention Center's renovation. The renovation project was separately bid in two Phases. Phase I was completed in September 2013 and Phase II began in October 2013 and was on-going throughout the audit. This audit addresses only change orders of the Phase II renovation.

At the time of audit fieldwork completion, there were six approved change orders. Following audit fieldwork, change order seven was submitted and approved by all parties. This audit does not address change order seven.

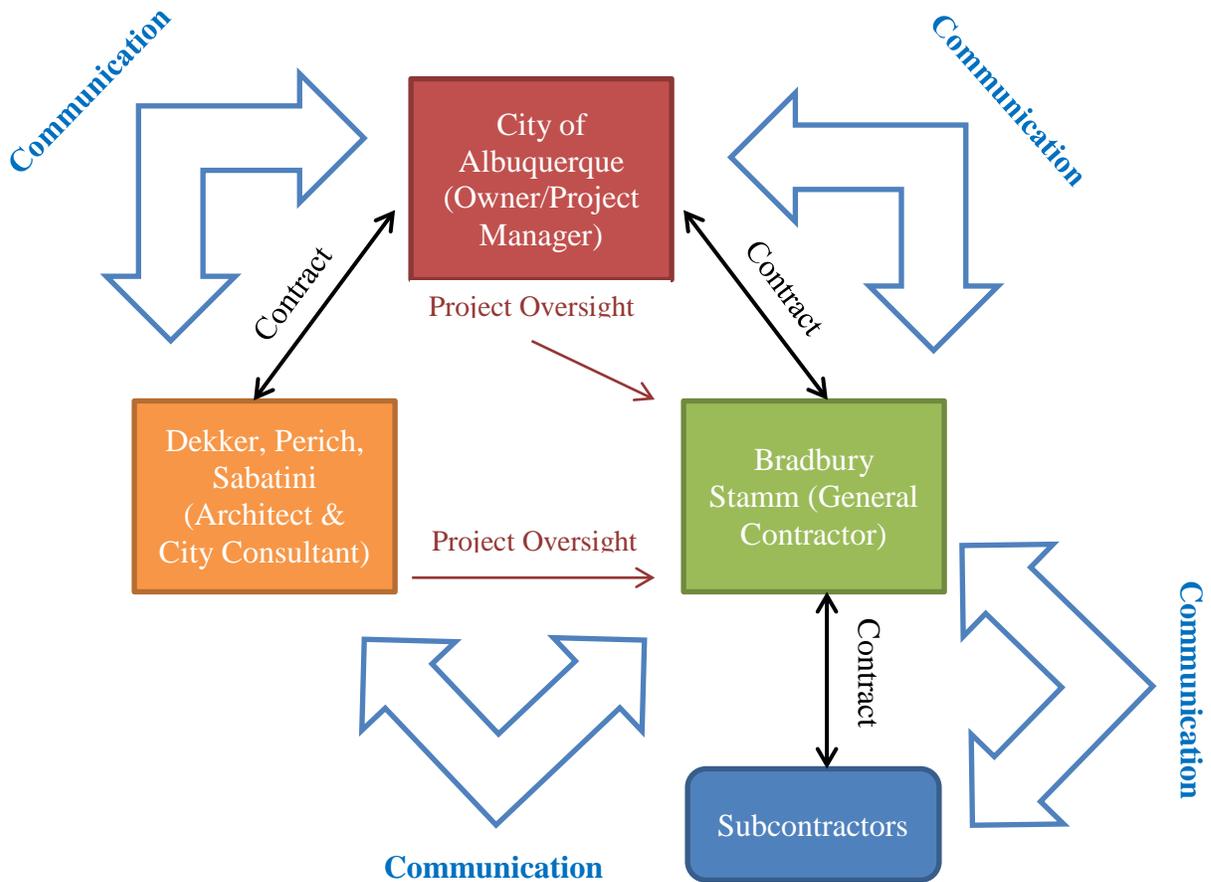
The project was awarded to Bradbury Stamm as a lump sum contract totaling \$12,944,572. A lump sum contract involves one price that includes the cost of work, fees, and general conditions. This type of contract is appealing in government as the majority of risk lies with the contractor.

The parties involved throughout the renovation project were:

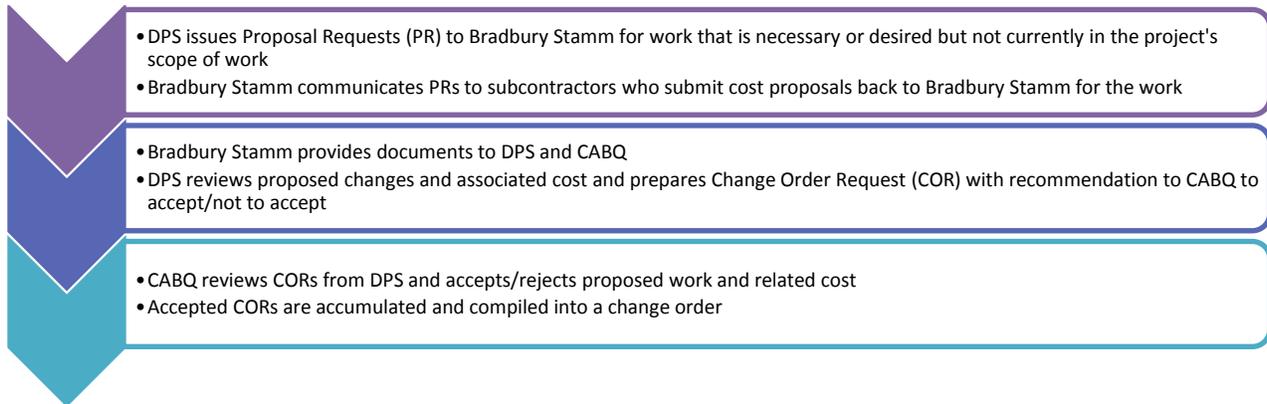
- City of Albuquerque, Department of Municipal Development,
- Bradbury Stamm, General Contractor,
  - Various subcontractors
- Dekker, Perich, Sabatini (DPS), Architects/Consultant to the City

A simplified illustration of the contractual relationship, project oversight, and communication between the parties is as follows:

**Contractual Relationship, Project Oversight & Communication**



The basic flow of communication between the parties involving change order work is depicted below:



Throughout the project, six change orders totaling \$1,186,170 were approved – a 9.2 percent increase overall. This audit included the six approved change orders for the Albuquerque Convention Center Renovation – Phase II.

The chart below includes potential savings identified throughout the audit. Each item is addressed later in the report.

**Potential Net Cost Savings**

<b>Finding</b>	<b>Cost Savings</b>
Separate contract for movable furniture and equipment should have been awarded.	\$12,402.25
Exclusion of two equipment charges listed on the change order request.	(\$1,251.46) undercharge to the City
Mathematical errors (overcharges & undercharges) were noted throughout the change orders.	\$666.47
Duplicate charges of New Mexico Gross Receipts Tax (NMGRT) noted on change orders.	\$1,180.37
Credits due to the City	\$126.14
<b>Total:</b>	<b>\$13,123.77</b>

*Source: OIA analysis of change orders #1-6*

## FINDINGS

*The following findings concern areas that OIA believes could be improved by the implementation of the related recommendations.*

1. DMD SHOULD BE AWARE OF AND ABIDE BY CONTRACTUAL REQUIREMENTS.

Though explicitly addressed in Section 011100 – Summary of Work, Item 1.5 of the contract, DMD did not award a separate contract for movable furniture and equipment totaling \$300,986. The contract states:

1.5 WORK BY OTHERS

A. Owner will award **separate construction contracts** or perform work with Owner personnel for:

**1. Movable furniture and equipment** [emphasis added]

By using a change order to purchase the items rather than awarding a separate contract, the City was required to pay the general contractor’s mark-up, bond fee, and New Mexico Gross Receipts Tax (NMGRT) on the mark-up and bond fee. As a result, the City was charged an additional \$12,402 as illustrated in the table below.

**Cost Associated with Furniture & Equipment**

Item	Cost	General Contractor’s Mark-up*	1% Bond (charged on mark-up)	NMGRT (charged on m/u & bond)	Total
Furniture	\$266,034.75	\$ 7,981.04	\$ 79.81	\$ 564.26	\$8,625.11
Upholstery	\$ 678.36	\$ 67.84	\$ 0.68	\$ 4.80	\$ 73.32
Televisions	\$ 9,272.42	\$ 927.24	\$ 9.27	\$ 65.56	\$1,002.07
Conference Room Table	\$ 25,000.00	\$ 2,500.00	\$ 25.00	\$ 176.75	\$2,701.75
<b>Total</b>	<b>\$300,985.53</b>	<b>\$ 11,476.12</b>	<b>\$ 114.76</b>	<b>\$ 811.37</b>	<b>\$12,402.25</b>

Source: OIA audit documentation

\* General contractor’s mark-up on furniture is 3 percent, 10 percent on all other items

The DMD Project Manager stated that the furniture was directly related to the renovation project and was qualified to be processed as a change order. Although a separate contract was not awarded for the furniture, DMD worked with the general contractor and negotiated a reduced mark-up of 3 percent rather than the 10 percent contracted rate.

RECOMMENDATION:

DMD should abide by the conditions specified in the contract and award separate contracts for movable equipment and furniture. The department should be fully aware of contractual requirements so they fully comply with contract terms.

RESPONSE FROM DMD:

*Section 10.1 of the General Conditions of the contract states, in part, “Without invalidating the Agreement and without notice to any surety and without releasing any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work, including such increases or decreases in quantities of Bid Items as OWNER determine to be necessary or desirable.*

*The entire supplemental Technical specification states*

**WORK BY OTHERS**

- A. Owner will award separate construction contracts or perform work with owner personnel for:**
- 1. Movable furniture and equipment**
  - 2. Provision, installation and/or alteration of voice/data communication systems and wiring (not including speakers, j-boxes nor conduit).**
  - 3. Provision, installation and/or alteration of internet wireless access system and equipment.**
  - 4. Provision, installation and/or alteration of security system cameras and wiring (not including j-boxes and conduit).**
- B. Items noted “NOT IN CONTRACT” (NIC) on Drawings will be supplied and installed by owner.**
- C. Contractor’s responsibilities:**
- 1. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this contract or other contracts. Coordinate the Work of this contract with requirements of City and other installers to allow for their timely installations and construction.**

**2. Inform City of required installation dates for work by others.**

**D. City’s responsibilities: Schedule work by others.**

***STS 011100-1.5 specifically sets forth several items that are frequently included in construction contracts that are not to be included within the contractors price.***

***The Department was aware of and did abide by the contractual requirements. Although the supplemental technical specification indicates that the acquisition of furniture will be done by other, the properly executed change order changed that. At the time of bid, furniture specifications were not adequately developed to include in the bid. Changes were also made to accommodate other design changes. By including the furniture in the contract through the change order, the City avoided coordination conflicts referenced in STS D11100 1.5C and D and reduced the overall project timeline. The final cost of furniture including contractor markup, was less than the Architects’ estimate of furniture cost. Inclusion of furniture like every other item listed in STS 011100 1.5, in a construction contract is an accepted practice in the industry. The incremental increase in cost was justified. The City also avoided the transactional cost of issuing a bid through Purchasing.***

**ESTIMATED COMPLETION DATE:**

***“No date required.”***

**2. DMD SHOULD PERFORM AN INDEPENDENT REVIEW OF CHANGE ORDERS AND CHANGE ORDER REQUESTS (COR) TO ENSURE ACCURACY.**

Monitoring and review of change orders should be strengthened as multiple errors and discrepancies were noted. During the review of change orders, the following items were noted:

**Results of Change Order Review**

<b>Change Order #</b>	<b>Finding</b>	<b>Result</b>	<b>Net Financial Result to the City</b>
4	Two equipment charges listed on the COR were excluded from the calculated subtotal.	The City was undercharged the cost of the equipment.	(\$1,251.46) undercharge
1 – 6	Mathematical errors (overcharges & undercharges) were noted throughout the change orders.	21 mathematical errors were noted that ranged from \$.01 to \$556.95 and resulted in a net overcharge to the City and inflations in the general contractor mark-up, bond calculation, and gross receipts tax paid on the overcharge.	\$666.47 net overcharge
4	Supporting documentation for a \$640 charge was not included in the change order.	The final, approved change order is incomplete.	Potential savings
3, 5 & 6	Duplicate charges of New Mexico Gross Receipts Tax (NMGRT)	Gross receipts tax was charged by the subcontractor (subcontractor to contractor) and then charged again by the contractor (contractor to City). Two of the duplicate tax charges resulted in inflated general contractor mark-up and bond charges.	\$1,180.37 overcharge
4 & 6	Credits due to the City	General contractor mark-up and bond fees were not credited to the City on one COR and the general contractor’s mark-up on the change in upholstery was higher than the mark-up charged on the original purchase.	\$126.14 overcharge
<b>Net Result:</b>			<b>\$721.52 overcharge</b>

*Source: OIA analysis of change orders #1-6*

The consultant’s contract states that the consultant is responsible to “prepare change orders for review and approval by the City....” DMD’s Project Manager’s Manual states that “the Project Manager is responsible to assist in the review of the change order....” Additionally, the contract’s general conditions states that “the amount of credit to be allowed to owner for any change which results in a net decrease in the cost for such

change order shall include the combined overhead and profit of contractor....”

The City’s consultant reviewed the COR documentation received from the contractor but did not identify the errors. DMD relied on the consultant’s recommendation to accept the COR and did not perform an independent review of the COR documentation for accuracy.

According to the CIP Fiscal Manager, the department does not have the expertise to perform gross receipts tax reviews, and has hired a local CPA firm to perform a gross receipts tax analysis. However, according to the CPA firm, the analysis performed is on the payment applications and not on individual subcontractor charges. Therefore, duplicate tax charges are not identified by the CPA firm’s review.

Without an independent review of change orders and CORs, errors and discrepancies existed and remained unnoticed by the City. Although none of the errors included in the table above is independently material to the overall project, the aggregate total of multiple errors could have been. Multiple undiscovered mathematical errors, over the life of the project indicate inattention to detail and could result in unintended consequences.

RECOMMENDATIONS:

- DMD should perform an independent review of COR documentation to ensure that all change orders and CORs:
  - Are accurate;
    - Mathematical computations are correct,
    - Gross receipts tax is properly applied, and
    - Credits are properly applied.
  - Have supporting documentation and breakdown of costs; and
  - Contain negotiated general contractor’s mark-up.
- DMD should expand the standard contractual language regarding the consultant’s review of change orders to specifically address accuracy and the City’s expectations for the review.

RESPONSE FROM DMD:

*“Generally the department agrees that minor mathematical errors were made and efforts should be taken to avoid all errors. The department will review consultant contract language to determine if the language should be modified to address this issue.”*

ESTIMATED COMPLETION DATE:

*“Three months.”*

3. DMD SHOULD FORMALLY DOCUMENT CITY APPROVAL WHEN CHANGE ORDER WORK IS AUTHORIZED TO BEGIN.

Work for a COR often begins prior to the final approval of the change order, a practice which conflicts with the DMD Project Manager’s Manual. Additionally, as verbal authorization is often given, the City does not formally document when change order work is authorized to begin.

According to the Project Manager, it is common practice for work in a change order to begin prior to receipt of the final, fully authorized/signed change order, as waiting for the final change order would cause project delays. CORs that have been recommended by the City’s consultant, and accepted by the City are not immediately processed as a change order. Rather, multiple CORs are collected and processed as a single change order. There were 79 CORs combined in the six change orders reviewed. CORs range from \$220 to \$347,525.

Though the subcontractors are accepting the risk of beginning work cited on a change order prior to the final approval of the change order, the City would be held liable for payment of work performed should the change order not be approved.

RECOMMENDATIONS:

- DMD should not authorize change order work to begin prior to the final approval of the change order.
- DMD should create a documented pre-approval process to allow COR work to begin prior to the formal approval of the change order when significant project delays would occur.
- DMD should consider increasing the number of change orders so that they can be approved before work begins.

RESPONSE FROM DMD:

*“Waiting for fully executed change orders prior to beginning change order work would potentially lead to significant project delays. DMD will work to create a written pre-approval process that will allow change order work to begin prior to formal change order approval. When the pre-approval process is in place, there will not be a need to increase the number of change orders.”*

ESTIMATED COMPLETION DATE:

*“Three months.”*

CONCLUSION

Familiarity and compliance with contractual specifications, along with independent monitoring and review of change orders and change order requests are needed. By addressing these items, DMD will improve project management and may help to identify additional cost savings in future projects. Strengthening and clarifying the contractual language regarding the consultant’s review of change orders will assist and benefit the City by increasing the level of confidence placed on the consultant in the future.

Throughout the audit, the Department of Municipal Development personnel were cooperative and involved. We greatly appreciate the department’s active participation and wish to thank DMD, Bradbury Stamm, and Dekker, Perich, Sabatini for providing their time and assistance.

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Contract Auditor

REVIEWED:

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Internal Audit Manager

APPROVED:

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Debra Yoshimura, CPA, CIA, CGAP, CICA  
Director, Office of Internal Audit

APPROVED FOR PUBLICATION:

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Chairperson, Accountability in  
Government Oversight Committee

## APPENDIX A

### OBJECTIVES

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The objectives of the audit were:

- To determine if all change orders of the Albuquerque Convention Center Renovation Phase II were necessary, justified, and completed.
- To determine whether the pricing and billing of all Phase II change orders were accurate and in compliance with the contract documents.

### SCOPE

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Our audit did not include an examination of all functions and activities related to the Albuquerque Convention Center Phase II renovation. Our scope was limited to the objectives above for Phase II Change Orders.

This report and its conclusions are based on information taken from a sample of transactions and do not represent an examination of all related transactions and activities. The audit report is based on our examination of activities through the completion of fieldwork on November 26, 2014 and does not reflect events or accounting entries after that date.

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.

## METHODOLOGY

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Methodologies used to accomplish the audit objectives include but are not limited to the following.

- Review of applicable contract documents,
- Preparation of a control schedule of change orders,
- Preparation of a breakdown of change order cost components,
- Review of change order supporting documentation,
- Recalculation of change order computations,
- Review of change orders for appropriate application of contract terms,
- Verification of change orders scope of work, and
- Other methodologies as needed.