



CHICAGO HOUSING AUTHORITY OFFICE OF INSPECTOR GENERAL CHICAGO, IL

OIG Report, OIG case #16-0001
2016 Audit of Construction Change Orders

Elissa Rhee-Lee, Inspector General
James McNally, Deputy Inspector General
Ellaye Accoh, OIG Senior Auditor
Beatriz Martinez, OIG Senior Auditor

Table of Contents

Section	Page Number
---------	-------------

A. Executive Summary

I. Background	3
II. Objective	3
III. Scope	3
IV. Approach and Methodology	4
V. Data Overview of Open Contracts in 2016	4
VI. Data Overview of Approved Closed Contracts in 2015	4
VII. Sample Selection	5
VIII. Summary of Results	6

B. Observations and Recommendations

I. Lack of Documented Policy and Procedure	8
II. Change Order Process Not in Compliance with CHA's Procurement Manual	10
III. Use of Fire Suppression Allowance	11
A. Insufficient Initial Assessment and Testing of Construction Projects in Contract #11120	11
B. Using Fire Suppression Allowance for Unrelated Task in Contract #11121	12
C. Disproportional Labor Rates in Contract #11121	14
D. Overhead and Profit Improperly Charged in Contract #11120	16
IV. C.O. Committee Roles Are Not Clearly Defined	17
V. Proof for Bond Adjustments Not Confirmed	18
VI. CHA's Significant Action Policy is Not Consistently Applied	19
VII. Cost Analysis is Not Rigorous	20

Appendices

A. Open Capital Construction Contracts with at Least a 25% Increase as of May 2016	22
B. Closed Capital Construction Contracts in 2015	23

A. Executive Summary

I. Background

The authority to perform this audit is pursuant to the Board approved *Inspector General Charter*, which states that the OIG has the power and duty to audit the administrative programs of the Chicago Housing Authority (CHA). The OIG is tasked to identify inefficiencies, waste, fraud, potential for misconduct, and to promote economy, efficiency, effectiveness, and integrity in the administration of CHA programs and operations. The role of the OIG is to audit CHA operations and make recommendations for improvement, when appropriate. CHA management is responsible for establishing and maintaining processes to ensure that CHA programs operate economically, efficiently, effectively, and with integrity.

The OIG conducts audits of programs in accordance with *Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States and Principles and Standards for Offices of the Inspector General*. Those standards require that we plan and perform the audit to obtain sufficient, and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. The OIG audits main objectives are to identify conditions that results in fraud, waste, abuse or mismanagement and/or identify an environment that could result in fraud, waste, abuse or mismanagement. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on these audit objectives.

Due to previous audit observations from the CHA Internal Audit Department, and as part of the OIG 2016 Audit Program Plan, the OIG selected an audit of the change order (C.O.) practices for construction by the CHA Capital Construction Department (CCD).

All departments impacted by this audit cooperated fully with the OIG staff. We thank CHA management for its cooperation and willingness to better improve the program.

II. Objective

1. Review CCD's change order (C.O.) process for compliance with applicable HUD regulations, CHA's Procurement Manual, and CCD's Policies and Procedures.
2. Assess the roles and responsibilities of internal stakeholders such as CCD, Legal Department, and Department of Procurement and Contract (DPC) during the C.O. process.
3. Assess the risk environment and the existing controls to minimize potential for fraud, waste and abuse.

III. Scope

CCD's change orders associated with contracts closed from January 1, 2015 through December 31, 2015. The contracts were initiated from 2012 to 2013.

IV. Approach and Methodology

The audit was performed by conducting interviews, reviewing documentation, inspections, testing and other measures deemed necessary. Other measures include, but are not limited to, utilizing investigative techniques to collect, analyze, evaluate and interpret relevant data. The OIG met with CCD management and/or key personnel to discuss OIG's preliminary observations and recommendations. The OIG provided the CCD management the draft report with observations and recommendations and allowed management time to submit written responses. The OIG is presenting the Audit Committee this final report, including management responses. Interviews were conducted with key personnel from the following departments:

1. Capital Construction Department
2. Procurement Contract Department
3. Office of the General Counsel
4. Change Order Committee Members
5. Gilbane Contractor

V. Data Overview of Open Contracts in 2016

Although not included in the scope of this audit, CHA currently has 67 open capital construction contracts, totaling \$280,041,596. The OIG asserts no opinion on the appropriateness of these C.O.'s. Rather, this is only to provide information to demonstrate the significant funds expended on C.O.'s. The multiple C.O.'s from the 67 open contracts reflect a total increase of \$314,517,650 from the total value of the original contracts as of May 2016. In other words, the total value of the C.O.'s is \$34,476,054 (See Appendix A for details on open contracts with an increase of 25% or greater of the original amount).

VI. Data Overview of Approved Closed Contracts in 2015

During Fiscal Year 2015, CCD approved and closed 28 contracts. These contracts had 145 total C.O.'s, resulting in additional costs of \$2,925,607.56. (See Appendix B for details on the population of closed contracts with C.O.'s in 2015).

VII. Sample Selection

Using a stratified sampling method, the OIG selected nine (32%) of the aforementioned approved closed contracts for review, including contracts that were initiated as early as of 2012, but were approved and closed in 2015.

These nine contracts account for 75% (\$49,551,979.40) of the total closed contract amount (\$66,474,806.56). At the same time, this sample selection represents 32% (\$938,042.77) of the total C.O. value (\$2,925,607.56).

Four contracts, from the selected sample, were Invitation For Bids (IFB) totaling \$39,114,370.78, while the other five contracts included in the sample were Indefinite Delivery Indefinite Quantity (IDIQ) task orders totaling \$10,437,608.62 (Table 1).

Table 1: Approved Closed Contracts in 2015 Selected for Review

Contract Type	Contract #	Project Cost	# of C.O.'s	Credit for Allowance	Cumulative C.O. VALUE	Date of Initiation
IDIQ	11095-53	\$ 1,160,761.28	6	\$ 114,900.00 ¹	\$ 10,961.28	8/26/2013
	11096-94	\$ 2,398,951.93	1	-	\$ 190,001.93	11/5/2014
	11088-24	\$ 2,078,345.20	4	\$74,000.00 ¹	\$ 12,047.20	8/22/2013
	11082-05	\$ 1,984,890.74	6	-	\$ 144,014.74	12/7/2012
	7071-58	\$ 2,814,659.47	11	\$597,790.00 ²	\$ 75,724.47	6/12/2012
IDIQ TOTAL		\$ 10,437,608.62	28	\$ 786,690	\$ 432,749.62	
IFB	11583	\$ 3,582,731.31	4	\$ 18,825.00	\$ 229,606.31	6/30/2015
	11117	\$ 1,545,605.84	4	-	\$ 108,105.84	5/21/2012
	11121	\$ 12,598,785.46	18	\$1,272,922.58 ³	\$ (116,167.17)	5/16/2012
	11120	\$ 21,387,248.17	11	\$248,311.73 ³	\$ 283,748.17	5/10/2012
IFB TOTAL		\$ 39,114,370.78	37	\$1,540,059.31	\$ 505,293.15	
SAMPLE SELECTED GRAND TOTAL		\$ 49,551,979.40	65	\$2,326,749.31	\$ 938,042.77	

¹ This amount includes credit for permit.

² This amount includes credit for sprinkler work that was performed under contract #11120, as well as credit for unused permit fee.

³ This amount includes credit for fire suppression allowance.

VIII. Summary of Results

CCD is currently reviewing and making process improvements to meet operational goals and objectives of the CHA Plan Forward.

The following table (Table 2) provides an overview of the observations and recommendations included in this report. Details of each observation, recommendation, and CCD management responses can be found in the Observations and Recommendations section. CCD concur with all but one observation.

Table 2: Audit Observations and Recommendations

	<u>Observations</u>	<u>Potential/ Actual Result</u>	<u>Risk Level⁴</u>	<u>Recommendations</u>
i.	CCD does not have formally approved policies and procedures for the department. There is no centralized system for construction	Potential Mismanagement	High	<ul style="list-style-type: none"> a) Develop a written policies and procedures manual in line with CHA’s governing documents. b) Train CCD’s staff of C.O. policies and procedures. c) Have a centralized depository location for construction project related documents.
ii.	C.O. process is not in compliance with CHA’s Procurement Manual requirement.	Potential Abuse and Waste	High	<ul style="list-style-type: none"> a) Establish a procedure to identify tasks that are out of scope of the original contract and ensure compliance with the CHA Procurement Manual b) CHA Department of Procurement and Contracts should consider revising Article V. Paragraph D. Section (iv)(b) of the CHA Procurement Manual to reflect best and current practices; or, in the alternative, provide the required documentation stating why the change order will not be competitively procured.

⁴ We ranked findings as High, Medium, or Low Risk to indicate urgency of recommended actions.

High Risk: Lack of prompt action by Management may severely impact the agency mission/operation in the short run and/or may expose the agency to violation of laws and regulations.

Medium Risk: Lack of corrective action by Management will materially and adversely impact operation in the long run. Action is needed to prevent or mitigate loss.

Low Risk: Action by Management is necessary to improve operations and/or to correct minor control weakness.

	<u>Observations</u>	<u>Potential/ Actual Result</u>	<u>Risk</u>	<u>Recommendations</u>
iii.	<p>Use of Fire Suppression Allowance:</p> <p>A. There may be a lack of comprehensive assessment of the general scope at the initiation of projects.</p> <p>B. CCD used Fire Suppression Allowance for a task unrelated to <i>The City of Chicago Life Safety and High-Rise Ordinance Fire Code</i> (i.e. to build a larger room for MDF equipment)</p> <p>C. Two comparable tasks had disproportional labor rates.</p> <p>D. Contractors improperly charged overhead and profit costs. The contract prohibited adding overhead and profit on sub-contractor's proposal.</p>	<p>Actual Waste</p> <p>A. Potential Waste</p> <p>B. Potential Abuse</p> <p>D. Actual Waste</p>	High	<p>A(a) Conduct a complete and thorough initial assessment of the project scope, prior to solicitation of general contract work in order to ensure that the scope of service is appropriate.</p> <p>B(a) Funds dedicated for Fire Suppression should not be used as contingency allowances to accomplish a task that does not fall under permissible use of Fire Suppression allowance. B(b) Use Fire Suppression Allowance to meet <i>The City of Chicago Life Safety and High-Rise Ordinance Fire Code only</i>. B(c) Change Order Committee should scrutinize all project-end C.O.'s to ensure contract compliance and proper review and oversight of C.O. costs and allowance usage.</p> <p>C(a) Independent estimator should perform due diligence to assess the reasonableness of the estimation. The estimation should include the basis used to develop the independent cost estimate (ICE).</p> <p>D(a) Review invoice and other documents submitted by G.C. for payment to ascertain that there are no labor overcharges (double profit), and the charges reflect the contract stipulations. (b) Review the accuracy of the initial fire allowance amount. (c) Recover the credit back from OCV for the overcharge. (d) Review internal process to prevent from reoccurring.</p>

⁴ We ranked findings as High, Medium, or Low Risk to indicate urgency of recommended actions.

High Risk: Lack of prompt action by Management may severely impact the agency mission/operation in the short run and/or may expose the agency to violation of laws and regulations.

Medium Risk: Lack of corrective action by Management will materially and adversely impact operation in the long run. Action is needed to prevent or mitigate loss.

Low Risk: Action by Management is necessary to improve operations and/or to correct minor control weakness.

	<u>Observations</u>	<u>Potential/ Actual Result</u>	<u>Risk Level⁴</u>	<u>Recommendations</u>
IV.	C.O. Committee members do not have a consistent understanding of their roles, functions, responsibilities and deliverables during the C.O. committee process.	Potential Mismanagement	Medium	a) As part of CCD's written procedures, clearly define roles, responsibilities and deliverables of all internal stakeholders representing the C.O. committee (See Recommendation 1.a). b) CCD should work with committee members to agree on how many days in advance they need to review PCO documents prior to the committee meetings.
V.	Bonding requirements cannot be confirmed for the bond adjustments related to the C.O.'s. Even though CHA reimbursed the General Contractor (G.C.) for the cost of the bond adjustments no supporting documentation were provided by the G.C. that verified additional bond was purchased.	Potential Fraud & Waste	High	a) Establish a process to ensure that bonding requirements are met and bond and insurance documents are included within the C.O. files. b) Develop a tracking mechanism to monitor compliance with bonding and insurance requirement.
VI.	There is an inconsistent application of the Significant Action Policy.	Potential Mismanagement	Medium	Establish a process to ensure consistent application of the Significant Action Policy.
VII.	The independent cost estimate (ICE) and the G.C.'s cost proposal are not congruent. For example, one occasion identified that CHA did not negotiate with the G.C. when the projected cost was over 10% of the ICE.	Potential Waste	Medium	a) Pursuant to Article V. Paragraph D. Section (iv)(b) of the CHA's Procurement Manual, CCD should solicit cost deviation of C.O.'s. b) Consider establishing an acceptable percentage deviation with the G.C.'s proposal and ICE. c) See Recommendation (d) on Observation II (C).

A. Observations and Recommendations

Observation I: Lack of Documented Policy and Procedure Risk Level: High

The audit indicated that CCD did not have formally approved policies and procedures for the department. In lieu of a Policies and Procedures Manual, CCD has a flow chart documenting the C.O. process flow.

During the audit, the CCD provided the OIG with a five-page document labeled "CHA/CCD Procedure Manual" effective as of 12/31/2015. Page 3 of the document makes reference to

⁴ We ranked findings as High, Medium, or Low Risk to indicate urgency of recommended actions.

High Risk: Lack of prompt action by Management may severely impact the agency mission/operation in the short run and/or may expose the agency to violation of laws and regulations.

Medium Risk: Lack of corrective action by Management will materially and adversely impact operation in the long run. Action is needed to prevent or mitigate loss.

Low Risk: Action by Management is necessary to improve operations and/or to correct minor control weakness.

Program Management Plan, Policies and Procedures Manual. CCD staff stated that the manual is neither approved, nor used by the department.

Furthermore, there is no centralized system for construction related documents. CCD documents are scattered in the E: drive, F: drive, P: drive, Prologue and in paper files. Currently, employees and contractors can delete and move files within the various electronic repositories. IT is unable to provide an audit trail in the event an electronic file is moved intentionally or inadvertently.

Risk:

1. Lack of consistency in processing C.O.'s.
2. Difficulty in retrieving documents for review and for CCD operations.
3. Possibility of losing current and historical data.
4. Potential mismanagement.

Recommendation:

- a) Develop a written policies and procedures manual in line with CHA's governing documents.
- b) Train CCD's staff of C.O. policies and procedures.
- c) Have a centralized depository location for construction related documents.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>Toward the end of 2015, Gilbane (CCD's external consultant) started the preparation of a department Procedures & Compliance policies manual but did not complete it. CCD has undergone a change in leadership since mid-January 2016, with the naming of a new Chief, the replacement of the Deputy Chief and the additions of a Director of Construction and a Director of Design, all of whom are seasoned professionals with institutional and/or public sector experience. The new CCD leadership team is currently working on a Procedures and Compliance policies manual and expects to complete it by the end of the year, although it has already started to implement operationally on an initial steps basis industry best practices in respect of monitoring of job site performance, reporting, real time engagement of architects and engineers to resolve project issues, as necessary, and internal and external accountability. In terms of reporting, contract modifications (including change order review and processing) and normal payment processing, E-Builder is expected to go-live at the end of Q3 2016. Once E-Builder is implemented, CCD will have a better opportunity to document, streamline, and improve the process and procedures with the Change Order process. The initial roll-out will require training before and after implementation. E-Builder will also house all relevant files in a central location. Procedures regarding the Change Order process will be documented.</p>		
Custodian:	CCD	
Implementation Timeline:	12/31/2016	

Observation II: Change Order Process Not in Compliance with CHA’s Procurement Manual **Risk Level: High**

The audit indicated that the C.O. process is not in compliance with CHA’s Procurement Manual requirement.

Article V. Paragraph D. Section (iv) (b) of the CHA’s Procurement Manual stated: *“The change order must be competitively procured or state an acceptable reason why it was not. The User department must: 1. Competitively solicit bids for the value of the deviation; or 2. Document the impracticality of bidding the changed work; or 3. Document the overwhelming value received from the bid of the current contractor so as to obviate the solicitation of additional bids.”*

Currently, CHA is not following the above cited C.O. procedure, including cases where a C.O. is out of the general scope of the contract. The table below (Table 3) illustrates some C.O.’s that were unrelated to the original scope of the contracts.

Table 3: Tasks Unrelated to Original General Scope

Contract Type	Description	Contract #	C.O. #	C.O. Value	Notes from Change Order File & Interviews of CCD Staff
IFB	Exterior wall repair.	11583	C.O. #1	\$ 108,217.35	“Remove existing A/C sleeve, thru A/C interior wall. This work was not part of initial scope” (As stated on Change Order File)
	ADA retrofit and Envelope improvements	11121	C.O.#3	\$ 92,135.00	Add 7 security cameras for exterior surveillance
			C.O.#6	\$ 15,981.00	Level and fence of parking lot at 4227 Oakenwald
			C.O.#18	\$ 188,542.70	Build a larger room for Main distribution frame (MDF) equipment and replace 3 existing Juniper switches for CCTV
IDIQ	ADA retrofit, life safety upgrade	11095-53	C.O.#4	\$ 72,352.34	Installed 13 cameras in the lobbies

Risk:

Lack of compliance with HUD and/or CHA’s Procurement requirements.

Recommendation:

- a) Establish a procedure to identify tasks that are out of the scope of the original contract and ensure compliance with the CHA Procurement Manual.
- b) The CHA Department of Procurement and Contracts should consider revising Article V. Paragraph D. Section (iv)(b) of the CHA Procurement Manual to reflect best and current

practices; or, in the alternative, provide the required documentation stating why the change order will not be competitively procured.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>CCD’s Chief will be meeting with CHA General Counsel and Chief Procurement Officer to discuss these issues, among other things, to better educate staff within their respective departments as to responsibility for monitoring and enforcement of compliance and real-time communication of results and follow-through on remedial measures (such as training for “repeat offender” contractors) where warranted. Going forward if the change order committee feel that the work associated with a change order diverges from the original intent and scope of a project, we will either procure the work through a separate, new project, or provide documentation explaining why the change order should be processed under the existing project.</p>		
Custodian:	CCD	
Implementation Timeline:	Will report progress to Audit Committee by September 10, 2016.	

Observation III: Use of Fire Suppression Allowance **Risk Level: High**

The following table provides information for the four sub-observations referenced below, which are all related to the use of the fire suppression allowance in contracts 11121 and 11120:

Table 4: Fire Suppression Price Proposal vs. CCD Allowance Amount

Contract #	Original G.C. Price Proposal	CCD Allowance Amount	Variance relative to G.C proposal	Fire Allowance Credited Back to CHA
11120	\$ 2,993,018.15	\$ 3,500,000.00	17%	\$ 248,311.73
11121	\$ 3,693,764.22	\$ 5,000,000.00	35%	\$ 1,272,922.58

A. Insufficient Initial Assessment and Testing of Construction Projects in Contract #11120

The audit showed evidence that there may be a lack of comprehensive assessment of the general scope at the initiation of projects. For example, in May 2012, CHA issued contract #11120 for envelope improvements with mechanical and plumbing upgrades at Patrick F. Sullivan Apartments, while in June 2012 issued task order #7071-58 (contract 7071) for ADA non-dwelling retrofit at that same building (Patrick F. Sullivan Apartments). Both contracts have, respectively, a fire suppression allowance of \$3,500,000 and \$605,300 in the base contract. The

initial scope of the fire suppression tasks of contract #11120 did not take into consideration the fire suppression task listed within Task Order 7071-58.

Risk:

1. Inefficient administration of the project.
2. Overpriced C.O.'s and budget overruns.
3. Potential waste due to change orders necessitated by insufficient initial assessment.

Recommendation:

- a) Conduct a complete and thorough initial assessment of the project scope, prior to solicitation of general contract work in order to ensure that the scope of service is appropriate.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>In the sample selected, the fire suppression system was a last minute add to the contract. The scope wasn't fully developed which gave rise to an allowance for the fire suppression system. This was the circumstance within the contracts selected for this audit and is an anomaly. CCD (design team specifically) will ensure a complete and thorough initial assessment. As with any allowance any unused funds should be deducted from the contract via a deductive change order. The PM should present the detail of funds spent to arrive at the final amount during change order presentation.</p>		
Custodian:	CCD	
Implementation Timeline:	Effective Immediately	

B. Using Fire Suppression Allowance for Unrelated Task in Contract #11121

CCD used the Fire Suppression Allowance for a task unrelated to *The City of Chicago Life Safety and High-Rise Ordinance Fire Code* (Table 4).

Table 5: Use of Fire Suppression Allowance for Unrelated Task

Contract #	Description	C.O. #	C.O. Value	Notes from Change Order File & Interviews of CCD Staff
11121	ADA retrofit and Envelope improvements	C.O.#18	188,542.70	Build a larger room for Main distribution frame (MDF) equipment and replace 3 existing Juniper switches for CCTV

Risk:

1. Potential abuse of allocated fund.
2. Noncompliance with contract terms.

Recommendation:

- a) Funds dedicated for Fire Suppression should not be used as contingency allowances to accomplish a task that does not fall under permissible use of Fire Suppression allowance.
- b) Use Fire Suppression Allowance to meet *The City of Chicago Life Safety and High-Rise Ordinance Fire Code* only.
- c) Change Order Committee should scrutinize all Project-end C.O.’s to ensure contract compliance and proper review and oversight of C.O. costs and allowance usage.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>For the period reviewed, the Change Order Committee did not conduct a consistently rigorous review of change orders presented, and junior members of CCD as well as members from other departments, including Legal and Asset Management, did not regularly voice any objection to change orders presented. With the change in leadership in CCD in early 2016, all members of the Change Order Committee are reminded to review all proposed change orders with a critical eye and presenters who have not prepared to answer questions from the Committee see their proposals rejected or tabled until they can produce the requested supporting documentation or explanations for contract modifications. In connection with the February 2016 Board meeting of the CHA and as a result of an approximately \$5.8 million aggregate change order proposal across two legacy projects presented for Board approval, CCD promised to improve the change order process for all CCD projects, in particular, 2012-2013 legacy projects which started as life safety upgrades but which turned into major modernization projects because of limited and short-sighted project scoping at project inception. The CCD Chief formed a Change Order Policy Working Group in February to create interim guidelines for all change orders going forward and to forecast as accurately as possible and on a continuing basis, best and worst case change order scenarios for legacy projects. These interim guidelines have been communicated to the Board and to the Change Order Committee and to CCD staff, are presently being implemented and are noted to be evolving to take into account lessons learned on a continuing basis. A copy of the initial version of the change order guidelines was provided to the OIG. The change order guidelines, as they may evolve and be amended with the collaboration among CCD, Legal and Asset Management, will ultimately be incorporated into the CCD’s Procedures and Compliance Manual.</p>		
Custodian:	CCD	
Implementation Timeline:	Effective Immediately. Change order guidelines, as they may be amended in the interim, will be incorporated into the final CCD Procedures and Compliance Manual.	

C. Disproportional Labor Rates in Contract #11121

Two comparable tasks had disproportional labor rates. The following table (Table 7) illustrates such evidence, as for painting walls and ceilings, the labor cost in contract #11120 was disproportionate to the labor cost in contract #11121.

Table 6: Two Comparable Tasks with Disproportional Labor Rates

Contract Description: Paint Walls & Ceiling	Labor Cost Per Hour	Total Number of Hours	Total Labor Cost⁴	Total SF	Labor Cost Per SF⁵	Material Unit Cost
11120	\$ 95.00	888	\$84,360.00	8,000.00	\$ 10.55/ SF	\$1.50/SF
11121	\$ 85.00	8	\$ 680.00	1,560.00	\$ 0.44/ SF	\$0.22/SF

Although the level of effort required to perform each task may vary, the amount of labor per square foot should be reasonably similar. For this reason, the labor cost per square foot was calculated and included in the table above to highlight the disproportionality between the two contracts. Specifically, the labor cost was \$10.55 per square foot in contract #11130 and \$0.44 per square foot om contract #11121.

There was also a difference in the cost of the materials used to paint walls and ceilings. For contract #11120, the materials cost \$1.50 per square foot compared to \$0.22 per square foot under contract #11121.

Thus, this example suggests that CCD did not compare proposed prices for a C.O. with prices for similar items and/or services negotiated under existing contracts, nor with prices negotiated under past contracts. If the prices were compared, there was no explanation given to explain the disparity.

⁴ Total labor cost is calculated by multiplying the labor cost per hour by the total number of hours.

⁵ Labor Cost Per SF is calculated by dividing the total labor cost by total square feet (SF).

Risk:

No comparison between related tasks

Recommendation:

- a) Independent estimator should perform due diligence to assess the reasonableness of the estimate. The estimate should include the basis used to develop the independent cost estimate (ICE).

Management Response:		
<input type="checkbox"/> Concur with observation and recommendation	<input checked="" type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>The Independent Cost Estimates are comprehensive, thorough and complete. The basis for construction estimates are based on current market conditions and standardized union labor rates. In the scenario presented above, the hourly labor rates had a difference of \$10 per hour. The largest variance associated with the two projects' labor rates stems from the difference in the number of hours worked for each project (888 hours compared to 8 hours). The labor rates highlighted above accounted for vastly different types of work that are not comparable. The work presented in Contract #11120 was for painting, caulking and drywall for soffits, whereas the work presented in Contract #11121 was for painting only. Drywall is technically difficult work that requires equipment, precision and expertise especially when installing drywall on soffits around existing structural columns and/or plumbing. These examples highlight the various levels of complexity in pricing individual construction line items in change orders.</p> <p>Since Contact #11120 required caulking, drywall work and painting around soffits, the material prices were approximately \$1.28 more because the work required the general contractor to purchase the actual gypsum board or "drywall" material in addition to installing the drywall. The other line items in Contract #11120 show each component of the new painted drywall system individually broken out to illustrate all the work required.</p>		
Custodian:	CCD	
Implementation Timeline:	N/A	

D. Overhead and Profit Improperly Charged in Contract #11120

The contract #11120 between CHA and Old Veteran Construction (OVC) incorporates the installation of automatic sprinkler equipment (Fire Suppression).

OVC submitted a proposal to CHA for \$3,251,688.27 (out of \$3,500,000) allowed making up the final total cost for the aforementioned installation. The proposal specifically included \$2,388,487.24 for a task that was completed by a sub-contractor.

However, at the completion of the work, OVC submitted a certified lien waiver stating that the Fire Suppression work performed by the sub-contractor amounted to \$2,009,395 (a lump sum sub-contract) and the said amount was paid with zero balance.

The variance between the \$2,009,395 paid to the sub-contractor and the final cost of \$2,388,487.24 is \$379,092.24 (this included 11% profit and overhead charge). This variance was either unaccounted for or unallocated.

In addition, the audit demonstrated that OVC improperly charged 5% profit on tasks performed by subcontractor in violation of the contract agreement. In the Fire Suppression portion of Contract #11120, it states, *“Should the decision be made to install a fire sprinkler system during the life of the contract issued to the Awardee for this solicitation, the following process will be followed...The Awardee may NOT add profit and overhead to the sub-contractor’s proposal.”* The profit charges by G.C. on sub-contractor tasks amounted to \$143,571.02. Of this amount, only \$11,506 profit and overhead on the G.C.’s material and equipment cost is permissible. Therefore, \$132,065.02 is impermissible profit to OVC.

The combined total of impermissible profit and overhead (379,092.24 and 132,065.02) charged by OVC is \$511,157.26, which represents 16% of the total cost of the work, \$3,251,688.27.⁶

Risk:

1. Project cost over run.
2. Inflated labor hours and rates.
3. Waste of CHA funds (\$511,157.26)

Recommendation:

- a) Review invoice and other documents submitted by G.C. for payment to ascertain that there are in accordance with contract requirement and there are no labor overcharges.
- b) Review the accuracy of the initial fire allowance amount.
- c) Recover the credit back from OCV for the overcharge.
- d) Review internal process to ensure from reoccurring.

⁶ The Audit noted that there were other instances of charging overhead and profit on top of already loaded labor rates in other C.O. tasks (unrelated to Fire Suppression) for contract 11120.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>CDC Budgets staff will work with Construction Managers to ensure that labor rates and contractor costs reported in payment applications identify overhead and profit and are not double counted. This information is then auditable to actual payrolls submitted by contractors and subcontractors. Evaluating labor rates per the proposal with the ICE for reasonableness would serve as safeguard as well. For this particular instance, CCD met with the general contractor on two separate occasions to discuss the procedure for recouping the funds. The general contractor agreed to reimburse the CHA for all charged overhead and for any subcontractor direct costs that cannot be substantiated. We are currently awaiting their formal response and will report back ASAP.</p>		
Custodian:	CCD	
Implementation Timeline:	10/31/2016	

Observation IV: C.O. Committee Roles Are Not Clearly Defined Risk Level: Medium

Assessment of current Change Order Committee functions, responsibilities and deliverables identified that some internal stakeholders’ (i.e. CCD, DPC, Legal Department and Budget Department) roles are not clearly defined or understood.

Risk:

1. Confusion regarding the roles of committee members in the C.O. process.
2. Inability of the committee members to make a thorough and appropriate decision with regard to approval or disapproval of a potential C.O.

Recommendation:

- a) As part of CCD’s written procedures, clearly define roles, responsibilities and deliverables of all internal stakeholders representing the C.O. committee (See Recommendation 1a).
- b) CCD should work with committee members to agree on how many days in advance they need to review PCO documents prior to the committee meetings.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>CCD's Chief will be meeting with CHA General Counsel and Chief Procurement Officer to discuss these issues, among other things, to better educate staff within their respective departments as to responsibility for monitoring and enforcement of compliance and real-time communication of results and follow-through on remedial measures (such as training for "repeat offender" contractors) where warranted.</p>		
Custodian:	CCD to include Legal, DPC, and OBM	
Implementation Timeline:	10/31/2016; CCD to report progress to OIG by September 10, 2016.	

Observation V: Proof for Bond Adjustments Not Confirmed Risk Level: High

24 CFR Part 85.36 Section (h). 2. states the minimum bonding requirement for construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold (\$100,000) as “a performance bond on the part of the contractor for 100 percent of the contract price.”

In every CHA Authorization to Proceed with Change Order Request, it states that “The bond and insurance included within the contractor’s proposal associated with this PCO/COR are reimbursable expenses and payment is subject to the verification of the Contractor’s actual costs.”

Review of the C.O. documents indicated that bonding requirements cannot be confirmed. Even though CHA reimbursed the General Contractor (G.C.) for the cost of original contract bond premium adjustment, no supporting documentation was provided by the G.C. for verification.

Risk:

1. There is no assurance that the CHA is protected against financial loss if the contractor defaults.
2. No certitude that laborers, material suppliers and subcontractors have a remedy if they are not paid, without consequence to the Authority.

Recommendation:

- a) Establish a process to ensure that bonding requirements are met and that bond and insurance documents are included within the C.O. files.
- b) Develop a tracking mechanism to monitor compliance with bonding and insurance requirements.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
Procurement requires and reviews initial bonding and insurance and therefore should manage any change to those documents for change orders. The department practice is that supporting documentation for the required bond should be obtained by the project manager and filed with applicable pay applications.		
Custodian:	CCD and DPC	
Implementation Timeline:	Working on presently. Will report back to OIG on progress by September 10, 2016.	

Observation VI: CHA Significant Action Policy is Not Consistently Applied

Risk Level: Medium

CHA has a Significant Actions Policy that states “*Board approval must be obtained prior to CHA incurring liabilities in excess of \$100,000. Modernization activities, change orders, or cumulative change orders in excess of 5% of the contract amount or \$100,000, whichever is greater, must receive Board approval.*”

According to the audit, the Significant Actions Policy was inconsistently applied. Some C. O’s. that were above the significant action threshold, but did not have a contingency amount, were not submitted for board action, as required.

At the same time, some C. O’s that were under the significant action threshold were submitted for board approval, even though approval was not required. The following table illustrates such inconsistencies:

Table 8: Application of CHA’s Significant Action Policy

Contract #	C.O. #	PCO #	PCO Amount	PCO % of Original Contract	Cumulative % of Original Contract	Seek Board Approval
11121	1	1, 4	\$ 53,993.00	0.43%	0.43%	Yes
	9	17, 18, 22	\$ 84,670.41	0.67%	3.40%	Yes
	12	30	\$ 23,216.16	0.18%	4.71%	Yes
11096-94	1	1	\$ 190,001.93	8.6%	8.6%	No
7071-58	5	7	\$ 215,386.91	7.86%	-7.6%	No
	7	16, 18	\$ 155,526.70	5.70%	-0.5%	No

Notably, the last three C.O.'s listed in the table (under contracts 11096-94 and 7071-58) were IDIQ contracts. The amount of these IDIQ were significant and should warrant approval.

Risk:

Lack of compliance with CHA's Board resolution with regard to Significant Actions Policy.

Recommendation:

- a) Establish a process to ensure consistent application of the Significant Action Policy.

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
<p>CCD's Chief will be discussing with CHA Legal the language and interpretation of the Significant Actions Policy as questions have arisen internally at the higher levels of leadership in CCD and Legal over its interpretation and implementation, in particular, the possibility for different interpretations of the Policy as written. With the CHA General Counsel and CCD Chief being relatively new additions to CHA, they do not have institutional history for the Policy language. CCD believes that while it is currently interpreting and implementing the Policy to the best of its ability and understanding, there is room for clarification and improved consistency and, accordingly, will be working the CHA Legal toward this end.</p>		
Custodian:	CCD	
Implementation Timeline:	In Process; Will report updates to OIG by September 10, 2016.	

Observation VII: Cost Analysis is Not Rigorous Risk Level: Medium

The Audit noted certain instances where the independent cost estimate (ICE) and the general contractors' proposal were not congruent.

When conducting interviews, CCD staff stated that if the G.C proposal is greater than 10% of the ICE, the cost would have to be negotiated. Yet, CDD did not solicit cost deviation of C.O.'s. For example, under contract #11121 the G.C.'s proposal was 25% greater than the ICE. Although this would require the cost to be negotiated, the actual cost is the same as the G.C.'s proposal. The following table shows such discrepancies between the ICE and the G.C.'s cost proposal:

Table 9: Differences b/w G.C. Proposal and ICE

Contract #	PCO #	G.C Proposal	ICE	% difference b/w G.C. proposal and ICE	Actual Cost	% difference b/w ICE and Actual Cost
11121	1	\$26,475.19	\$19,939.62	+ 25%	\$26,475.19	-25%
7071-58	7	\$236,714.50	\$439,410.00	- 86%	\$215,386.91	94%
11120	6	\$41,787.66	\$46,731.00	- 12%	\$42,310.00	12%

Risk:

CHA is not receiving competitive prices.

Recommendation:

- a) Pursuant to Article V. Paragraph D. Section (iv) (b) of the CHA’s Procurement Manual (“...*The User department must: 1. Competitively solicit bids for the value of the deviation; or 2. Document the impracticality of bidding the changed work; or 3. Document the overwhelming value received from the bid of the current contractor so as to obviate the solicitation of additional bids.*”) CCD should solicit cost deviation of C.O.’s (See Observation II for full language of Article V).
- b) Consider establishing an acceptable percentage deviation of G.C.’s proposal and ICE.
- c) See Recommendation (d) on Observation III (C).

Management Response:		
<input checked="" type="checkbox"/> Concur with observation and recommendation	<input type="checkbox"/> Do not concur with observation and recommendation	<input type="checkbox"/> Concur with part of the observation and recommendation
We will review the OIG recommendations against current practices and report back our measures to address the discrepancies, including obtaining better documentation from General Contractors as to their cost estimates and monitoring more closely our own Construction Manager’s review of the scope of proposed work and cost estimates. CCD will report back to OIG its recommended guidelines for addressing circumstances where competitive bidding is impractical.		
Custodian:	Jordan Townes	
Implementation Timeline:	Immediately. Report progress to OIG in 30 days.	

**Appendix A: Open Capital Construction Contracts With
At Least a 25% Increase as of May 2016**

Contract #	Contract Description	Vendor	Orig. Contract	Cumulative C.O.'s	# of C.O.'s	Revised Contract	Total % Increase
11438	Modernization & Life Safety Upgrades at Minnie Riperton Apartments	Old Veteran Construction, Inc.	\$ 3,989,900.00	\$ 5,391,105.67	6	\$ 19,381,005.67	39%
11464	Modernization & Life Safety at Caroline Hedger Apartments	Madison Construction	\$ 30,437,001.13	\$ 12,660,311.82	7	\$ 43,097,312.95	42%
11081-T-090	Altgeld Library Conversion at 950 E. 132nd Place	All Chicago Inc.	\$ 2,292,328.00	\$ 655,228.22	7	\$ 2,947,556.22	29%
11086-105	Judge Fisher Apartments - Kitchen Cabinet Replacement 5821 N. Broadway	Madison Construction	\$ 2,882,337.00	\$ 911,222.95	5	\$ 3,793,559.95	32%
11087 - TO 057	Scattered Sites Modernization at 1903 S. May St Chicago, IL 60608	Maxwell Services Inc.	\$ 470,256.00	\$ 124,448.15	7	\$ 594,704.15	26%
11087-072	Scattered Sites Modernization	Maxwell Services Inc.	\$ 694,397.00	\$ 180,436.40	5	\$ 874,833.40	26%
11090 - TO 066	Gut Rehab / Make Ready of Scattered Site - 1414 N Talman Ave.	Cordos Development & Associates LLC	\$ 468,159.00	\$ 392,489.37	7	\$ 860,648.37	84%
11092-089	Task Order 89 - Steam Line Replacement at Lathrop Homes	Friedler Construction Co.	\$ 1,838,800.00	\$ 1,940,750.19	2	\$ 3,779,550.19	106%
11095-011	Ada & Life Safety Update at 3920 N Clark Street	Old Veteran Construction, Inc.	\$ 1,194,109.00	\$ 538,704.38	9	\$ 1,732,813.38	45%
11095-077	Facade Repairs at Ella Flagg	Old Veteran Construction, Inc.	\$ 1,843,058.00	\$ 607,726.30	3	\$ 2,450,784.30	33%
11095-095	Gut Rehab at 654-656 Grace	Old Veteran Construction, Inc.	\$ 1,189,900.00	\$ 343,629.85	3	\$ 1,533,529.85	29%
11095-103	Ada Upgrades to Charles A. Hayes Family Investment Center	Old Veteran Construction, Inc.	\$ 1,362,536.00	\$ 668,887.84	12	\$ 2,031,423.84	49%
11562-003	Make Ready Services at Lathrop Homes Chicago IL, 60614	Done Rite Construction Services	\$ 496,000.00	\$ 127,463.00	3	\$ 623,463.00	26%
<u>TOTAL</u>			<u>\$59,158,781.13</u>	<u>\$24,542,404.14</u>	<u>76</u>	<u>\$83,701,185.27</u>	

Appendix B: Closed Capital Construction Contracts in 2015

Property Name	Project Name	GC	GC Contract #	GC TO #	Contract Amount	Project Cost	Variance	# of C.O.'s
Patrick F. Sullivan Apartments	Major Modernization	Oakley	7071	58	\$2,738,935	\$ 2,814,659.47	\$ 75,724.47	11
Scattered Sites - North Central	Scattered Sites - Unit Modernization	All Chicago	11081	48	\$498,627	\$ 665,591.36	\$ 166,964.36	9
Abraham Lincoln Centre	ADA Retrofits	Apex	11082	5	\$498,272	\$ 595,384.72	\$ 97,112.72	3
Edith Spurlock Sampson Apartments	Life Safety & Common Area ADA Retrofit	Apex	11082	10	\$1,365,506	\$ 1,589,887.56	\$ 224,381.56	3
Hattie Callner Apartments	Life Safety & Common Area ADA Retrofit	Apex	11082	16	\$1,840,876	\$ 1,984,890.74	\$ 144,014.74	6
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Apex	11082	51	\$526,644	\$ 822,129.70	\$ 295,485.70	4
Irene McCoy Gaines Apartments	Life Safety & Common Area ADA Retrofit	Koal	11085	17	\$1,490,778	\$ 1,536,298.59	\$ 45,520.59	7
Dearborn Homes	Management Office	Madison	11086	4	\$755,937	\$ 940,260.69	\$ 184,323.69	6
Edith Spurlock Sampson Apartments	Life Safety & Common Area ADA Retrofit	Madison	11086	14	\$1,241,621	\$ 1,443,569.29	\$ 201,948.29	5
Major Adams Center Henry Horner Homes	Major Adams Computer Lab Renovations	Madison	11086	23	\$161,297	\$ 174,571.95	\$ 13,274.95	2
Lidia Pucinska Apartments	NonDwelling ADA/504 Site Improvements	Madison	11086	40	\$297,947	\$ 335,339.75	\$ 37,392.75	6
Ada S. Dennison-McKinley Apartments	Life Safety & Common Area ADA Retrofit	Oakk	11088	7	\$1,434,964	\$ 1,728,598.70	\$ 293,634.70	4
Lowden Homes	Computer Lab	Oakk	11088	22	\$137,155	\$ 169,058.93	\$ 31,903.93	2
Robert Brooks Homes	Life Safety & Common Area ADA Retrofit	Oakk	11088	24	\$2,066,298	\$ 2,078,345.20	\$ 12,047.20	4

Appendix B: Closed Capital Construction Contracts in 2015 (continued)

Property Name	Project Name	GC	GC Contract #	GC TO #	Contract Amount	Project Cost	Variance	# of C.O.'s
Harry J. Schneider Apartments	Life Safety & Common Area ADA Retrofit	Coleman	11089	8	\$1,430,000	\$ 1,405,755.84	\$ (24,244.16)	3
Scattered Sites - North Central	Management Office	Cordos	11090	41	\$261,973	\$ 276,355.00	\$ 14,382.00	3
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Done Rite	11091	54	\$616,900	\$ 627,550.54	\$ 10,650.54	3
Zelda Ormes Apartments	Life Safety & Common Area ADA Retrofit	Old Veteran	11095	33	\$1,889,249	\$ 1,970,384.60	\$ 81,135.60	6
Elizabeth Wood Apartments	Life Safety & Common Area ADA Retrofit	Old Veteran	11095	53	\$1,149,800	\$ 1,160,761.28	\$ 10,961.28	6
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Powers & Sons	11096	44	\$1,078,817	\$ 1,190,616.39	\$ 111,799.39	6
Fannie Emanuel	Fannie Emanuel Demolition	Powers & Sons	11096	94	\$2,208,950	\$ 2,398,951.93	\$ 190,001.93	1
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Tropic	11097	46	\$341,880	\$ 441,234.81	\$ 99,354.81	4
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Tropic	11097	47	\$476,601	\$ 535,811.86	\$ 59,210.86	3
Scattered Sites - North Central	Scattered Sites - Unit Modernization	Tropic	11097	50	\$459,900	\$ 474,426.88	\$ 14,526.88	1
Dearborn Homes	Fire Lanes	PanOceanic	11117	N/A	\$1,437,500	\$ 1,545,605.84	\$ 108,105.84	4
Patrick F. Sullivan Apartments	Life Safety & Common Area ADA Retrofit	Old Veteran	11120	N/A	\$21,103,500	\$ 21,387,248.17	\$ 283,748.17	11
Lake Parc Place	Major Modernization	Old Veteran	11121	N/A	\$12,686,147	\$ 12,598,785.46	\$ (87,361.54)	18
Daniel Hudson Burnham Apartments	Façade Repairs	B.E.T.O.N.	11583	N/A	\$3,353,125	\$ 3,582,731.31	\$ 229,606.31	4
TOTAL					<u>\$63,549,199</u>	<u>\$66,474,806.56</u>	<u>\$2,925,607.56</u>	<u>145</u>

Note: GC TO #: General Contractor Task Order Number.