

Construction Contract Auditing

Presenters

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Principal

Fort Hill Associates, LLC

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Senior Construction Auditor

Fort Hill Associates, LLC

Introduction – Fort Hill Associates, LLC

- *Consultancy focused solely on Construction Contract Auditing*
- *Founded in 2006*
- *Audit philosophy of identifying potential issues and establishing financial controls prior to contract execution*
- *Significant focus on Higher Education projects*
 - Virginia Tech
 - Radford University
 - James Madison University
 - Old Dominion University
 - University of Richmond
 - Emory University
 - West Virginia University
 - Duke University
 - Wake Forest University
 - Clemson University
 - University of Wyoming
 - Vanderbilt University
- *Virginia Tech Contract #UCP- TP-004-13 available to VASCUPP members*

Introduction – Presenters

- *Curt Plyler*
 - Founding member of firm in 2006
 - Certified Construction Auditor & a CFA charterholder
 - Engagement Manager for the University of Richmond, Duke University, Wake Forest University and the University of Maryland

- *Jim McCoy*
 - Joined firm in 2016 after 30 years in Facilities Management at Virginia Tech
 - Certified Construction Auditor & a licensed Professional Engineer
 - Engagement Manager for Virginia Tech, James Madison University, Radford University, Old Dominion University and West Virginia University

Introduction – Session Objective #1

Understand the benefit of a comprehensive Financial audit of a Construction Manager's allowable project charges to complement existing Procedural audits of internal project management processes

- Procedural audits are often used to measure compliance with internal processes, but a Financial audit ensures the Institution has been billed for project construction costs in accordance with contract requirements
- Construction contract auditing often identifies overpayments and additional opportunities for cost avoidance on most large construction projects
- The Institution's internal staff may not have the resources and/or skill sets to effectively audit the Construction Manager's charges at a transactional level

Introduction – Session Objective #2

Understand how specific contract language determines what and how the Construction Manager is compensated by the Institution

- Larger, more complex projects are increasingly being constructed using contracts requiring the Institution to reimburse a Construction Manager's direct costs versus the payment of a fixed, lump sum amount
- The Construction Manager's direct costs must be thoroughly evaluated to determine which charges are allowable/not allowable relative to the contract terms
- The *Department of General Services (DGS)* construction contract template utilized by most state agencies has unique language with respect to how costs are categorized and compensated

Introduction – Session Objective #3

Understand the value of a Pre-Construction Contract Review to establish effective financial controls

- Mitigates potential problems & issues before they occur
 - Reconcile any differing contract interpretations and clarify the intent of 'actual cost incurred'
 - Establish expectations for required backup documentation to support payments to the Construction Manager
- Enables a more efficient audit process during the project as the focus is on compliance with previously established financial controls
- Potential cost savings are realized over the entire project, eliminating the need for a "settlement" at project closeout

Presentation Outline

- 1) Overview of Cost Plus Construction Contracts**
- 2) Auditing Cost Plus Construction Contracts**
- 3) Pre-Construction Contract Reviews**

Construction Contracting Methodology

- A Construction Contract Audit effectively measures the Construction Manager's compliance with the billing requirements set forth in the Contract
- As such, a basic understanding of the construction contract type is essential for assessing Institutional risk, identifying project financial controls and developing an effective audit plan
- The value of a Construction Contract Audit varies significantly depending upon the contract type
- "Cost Plus" Construction Contracts (i.e., CM at Risk, GMP, etc.) between the Institution and a "Construction Manager" offer a much greater opportunity to identify costs savings in an audit than conventional lump sum/hard bid contracts

Cost Plus Construction Contracts

- As opposed to simply paying a fixed contract amount, the Institution reimburses the Construction Manager for their direct/actual construction Cost(s), Plus the Institution pays the Construction Manager any fixed fees as defined by the Contract
- The original Contract amount is **not** fixed, but typically capped at some level (Guaranteed Maximum Price – GMP, GMAX)
- Final/Actual contract amount is **often less** than GMP amount
- Open-Book contract provision allows the Institution to have full access to the Construction Manager's cost records

DGS Construction Manager at Risk Construction Contract

COMPENSATION TO BE PAID TO THE CONSTRUCTION MANAGER: The Owner agrees to pay and the Construction Manager agrees to accept as just and adequate compensation for the performance of the Work in accordance with the Contract Documents the sum of

The Cost of the Construction Work – As defined in the General Conditions of the Construction Manager “At Risk” Construction Contract (CO-7CM)

The General Conditions Fee in the amount of:

_____ dollars (\$_____).

The Insurance and Taxes Fee in the amount of _____ percent (___%) of the Cost of the Construction Work.

The Construction Manager’s Fee in the amount of:

_____ dollars (\$_____).

In no case shall the total compensation to the Construction Manager exceed the Guaranteed Maximum Price (GMP) of:

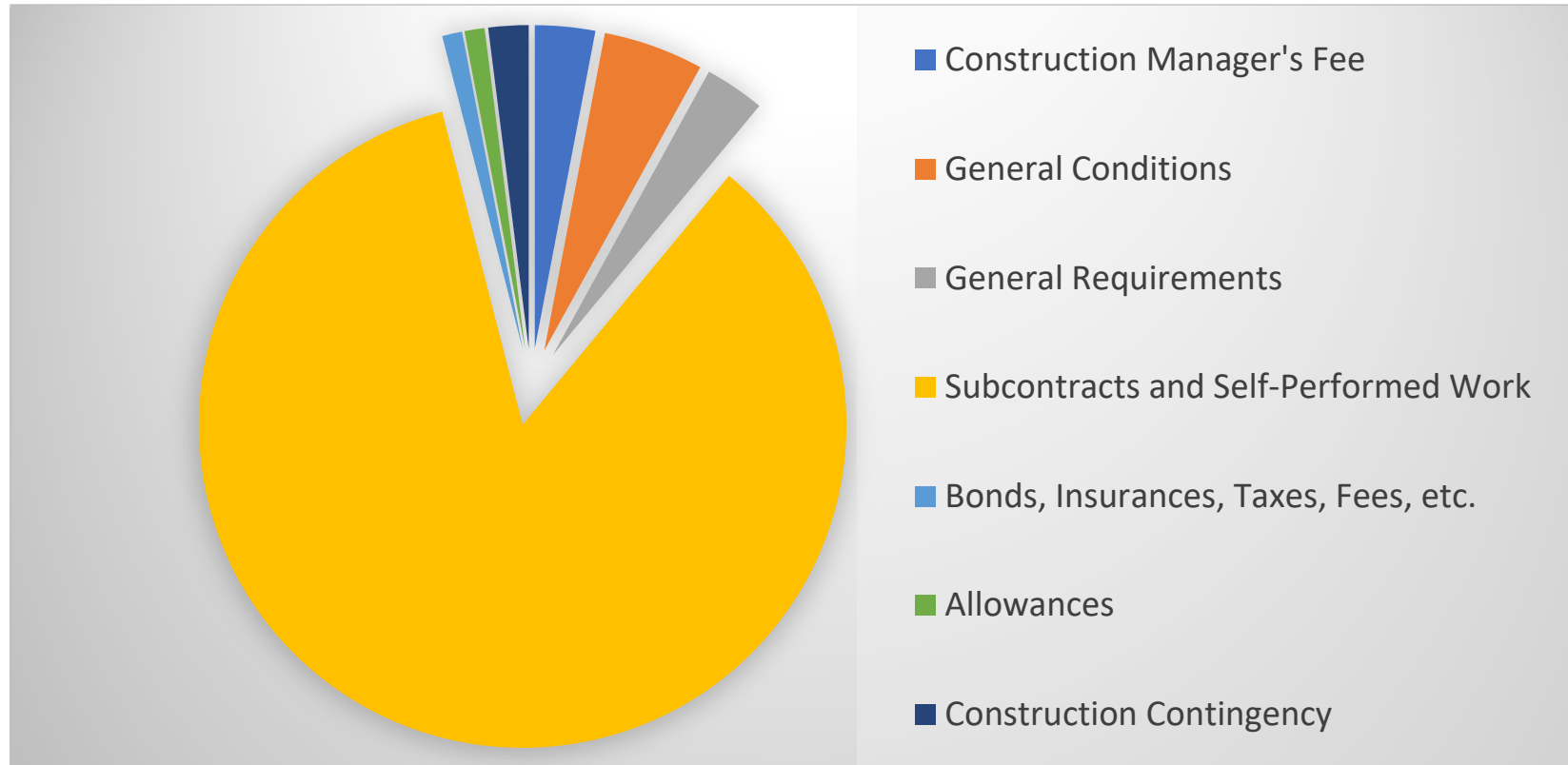
_____ dollars (\$_____).

Cost Plus Construction Contract Components

- 1) Construction Manager's Fee (2%-3%)
- 2) General Conditions Fee (4%-6%)*
- 3) Insurance and Taxes Fee (2%-3%)*
- 4) Cost of the Construction Work
 - a. Construction Manager Labor, Equipment and Materials (0%-10%)
 - b. Subcontracts (75%-85%)
 - c. Allowances and Construction Contingency (2%-4%)

** For Private Institutions using an AIA construction contract, costs associated with General Conditions and Bonds/Insurances are categorized as Cost of the Work and compensated as direct costs.*

Cost Plus Construction Contract Components



Auditing Cost Plus Construction Contracts

Construction Manager's Fee

- Construction Manager's Overhead and Profit
- Compensated by the Institution as a fixed amount* (DGS construction contract) or percentage of the Cost of the Work (AIA construction contract)

*Costs included within the Construction Manager's Fee must be clearly defined by the Institution to avoid any duplication of similar costs billed as Cost of the Construction Work (See Sample Construction Cost Matrix Handout)

Auditing Cost Plus Construction Contracts

General Conditions Fee

- Fee includes the Construction Manager's project specific costs associated with:
 - Project Management Labor (Project Manager, Project Engineer(s), Superintendent(s), etc.)
 - Project Management Operating Costs (Trailer Rental, Office Furnishings & Supplies, Vehicles, Information Technology, Telecommunication, etc.)
 - Jobsite Safety and Security
 - Jobsite Signage
 - Other
- Compensated by the Institution as a fixed amount* (DGS construction contract) or a direct cost (AIA construction contract)

*Costs included within the General Conditions Fee must be clearly defined by the Institution to avoid any duplication of similar costs billed as Cost of the Construction Work (See Sample Construction Cost Matrix Handout)

Auditing Cost Plus Construction Contracts

Insurance and Taxes Fee

- Fee includes the Construction Manager's project specific costs associated with:
 - General Liability Insurance
 - Builder's Risk Insurance
 - Performance and Payment Bonds
 - Local Business License Fees
- Compensated by the Institution as a percentage of the **Cost of the Construction Work*** (DGS construction contract) or a direct cost (AIA construction contract)

*Costs included within the Insurances and Taxes Fee must be clearly defined by the Institution to avoid any duplication of similar costs billed as Cost of the Construction Work (See Sample Construction Cost Matrix Handout)

Auditing Cost Plus Construction Contracts

Cost of the Construction Work - Construction Manager Labor, Equipment and Materials

- Includes the Construction Manager's costs associated with actual construction activities versus project management activities
- Work scope may include "General Requirements" and/or specific Trades Packages
- The Construction Manager must provide a clear delineation of costs incurred to properly evaluate any duplication of costs that should be covered by the General Conditions Fee
- Potential for added profit in Labor charges (excessive markup for Labor Burden) and Equipment charges (rental charges for CM-Owned equipment exceed industry standards)
- Compensated by the Institution as a direct cost (DGS construction contract and AIA construction contract)

Auditing Cost Plus Construction Contracts

Cost of the Construction Work - Subcontracts

- Subcontract agreements are typically awarded by the Construction Manager on a lump sum basis. Cost Plus subcontracts should be audited to the same level as the Institution's Contract with the Construction Manager
- Cost for Subcontractor insurances and/or bonds are sometimes paid directly to the Construction Manager through a Contractor Controlled Insurance Program (CCIP) and/or Subcontractor Default Insurance Program (Subguard)
- Audit should ensure that the Institution does not pay the Construction Manager more than the amount the Construction Manager has been billed by the Subcontractors
- Audit should ensure an **acknowledgement and acceptance** of prior payments is received from each Subcontractor with the submission of a new payment application
- Compensated by the Institution as a direct cost (DGS construction contract and AIA construction contract)

Auditing Cost Plus Construction Contracts

Cost of the Construction Work - Allowances and Construction Contingency

- **Allowances** – funding within the GMP to address specific elements of work that are known, but not defined to the point that they can be quantified
Construction Contingency – funding within the GMP to address unforeseen elements of work
- Individual disbursements against Allowance and/or Construction Contingency funds require prior approval of the Institution. This is best accomplished by utilizing the same procedures and forms used for the review/approval of contract Change Orders.
- The Construction Manager should maintain a log identifying usage amount and purpose
- Allowances and Construction Contingency funds should be reconciled at project closeout
- Unused funds, if any, should revert to the Institution unless otherwise specified in the contract

Auditing Cost Plus Construction Contracts

Change Orders

All contract Change Orders should be audited to:

- Confirm that Institutional approvals of the Change Order document have been obtained
- Confirm that applicable backup documentation has been provided to support direct costs being claimed by the Construction Manager and/or Subcontractors
- Confirm that contract-allowed markups have been calculated and applied correctly
- Identify any indirect costs for items that should be covered by the markup for Overhead and Profit
- Identify any phantom costs for additional labor, equipment and/or materials that were not actually provided

Auditing Cost Plus Construction Contracts

Determining the Final Contract Amount

- Obtain a consolidated Job Cost Report (JCR) from the Construction Manager to evaluate the direct costs being charged to the project.
- Identify and delete any JCR transactions defined by the Contract to be non-reimbursable
- Calculate/add the amount of the Insurance and Taxes Fee and then add the amounts of the Construction Manager's Fee and the General Conditions Fee to determine the Construction Manager's "allowable charges"
- Institution compensates the Construction Manager for their "allowable charges" or the GMP amount, whichever is less
- **Do not rely on the Construction Manager to determine the Final Contract Amount!**

Pre-Construction Contract Review

A Pre-Construction Contract Review can preemptively mitigate many compensation issues that might occur during the construction period as well as facilitate the overall Construction Audit process.

Pre-Construction Contract Review – What is Reviewed?

Construction Contract Documentation

- Identify gaps, inconsistencies, ambiguities and conflicts within the documents
- Confirm the financial controls associated with various contract components

Establish the basis for billing Fixed Fees and Direct Costs

- Project Management Labor
- Construction Manager-Owned Leased Equipment
- Information Technology
- Insurances, Bonds, etc.

Pre-Construction Contract Review – What is Reviewed?

Payment Application Support

- What does the Construction Manager intend to provide?
- What does the Institution expect to receive?
- What should the Contract require?
 - Annotated Schedule of Values indicating percent of work completed
 - Invoices, Cost Reports, Subcontractor Payment Applications, etc.

Change Order Pricing Methodology and Support

- Agree on extent of cost itemization necessary for Institution review/approval
- Review Contract limitations for markups to be applied by the Construction Manager and the Subcontractors

Pre-Construction Contract Review – Who is Involved?

Facilities

- Construction contract administrators ultimately charged with managing the project
- Can provide a thorough understanding of internal processes and procedures

Internal/External Audit

- Provides the skill set to accurately assess the Construction Manager's billing methodologies in relation to the Institution's expectations
- Identify Contract language potentially in conflict with the Institution's intent for both reimbursable & non-reimbursable project costs
- Identify process deficiencies and offer recommendations for improvement

Construction Manager

- Document desired billing methodologies
- Encourages participation and acceptance of financial controls

Pre-Construction Contract Review – What are the Benefits?

- Ensures transparency to both the Institution and the Construction Manager as to how the Contract will be administered
- Mitigates the potential for the Construction Manager to utilize hidden profit centers to realize profit in excess of the Construction Manager's Fee
- The Institution gets the full benefit of any Contract clarifications and/or modifications – in a traditional closeout audit, the findings are often negotiated at project closeout for less than full value

** All understandings from the Pre-Construction Contract review should be documented in an audit report or memorandum of understanding and applied to the Construction Contract as appropriate*

**“Auditing isn’t painful. Getting shot is painful.
Getting stabbed in the rib is painful.”**

-Tony Soprano

Questions?