February 7, 2020
9:45-11:00 a.m. – Workshop: Battling Scope Creep

PANEL
Scott Rose, senior project manager/LEED AP, R&C Management Group LLC
Dan Junge, CEP, associate, Rider Levett Bucknall
Aaron Boyle, administrator for facilities development, Beaverton School District
Trevor Wyckoff, vice president-project executive, Skanska USA Building Inc.
What **IS** Scope Creep?

Scope creep, simply stated, is when your project gets bigger. This almost always has an impact to cost and time.

Construction costs have risen sharply over the last 5-6 years. Some things you cannot control – inflation, site conditions, and regulations. The panelists in this workshop will outline strategies for battling scope creep - something that you **CAN** control.
COST CONCERNS
(Estimator’s Perspective)

Construction Cost Escalation Since 2001
COST CONCERNS
(Contractor's Perspective)
Why?

- Commodities costs
- Tariffs or tariff threats
- Labor costs
- Subcontractor availability
- Commercial Activities Tax
- Construction market/timing
- Project schedules
- Enhanced school construction requirements
  - Energy codes, 1.5% solar, acoustical requirements
- Project scope/design
  - Essential facilities, safety and security, technology
Construction Costs
Portland CONSTRUCTION PUT-IN-PLACE VS. NUMBER OF WORKERS
Goals and Considerations of Pre-Bond Planning

- Setting realistic stakeholder expectations for program
- Establishing reasonable, conservative budgets that will accommodate the program based on accurate benchmarking data.
- Setting a reasonable, conservative allowance for escalation based on a realistic project time horizon and carry adequate contingencies.
- Being aware of and mitigating (through thorough documentation of existing conditions) the risk of including a large amount of deferred maintenance scope, which is inherently difficult to price due to the uncertainty of the final scope
- Cultivating Realistic Alternates
- Understanding Budget Challenges and Areas of Risk
- Get Stakeholder Buy-In Early on Cost Decisions
PRE-BOND STRATEGIES
(Estimator’s Perspective)
Limit Scope Creep by Adequately Defining the Scope Up Front

How do you do this?
• Define Scope
  • Educational Programming
  • Conditions Assessment
  • Capacity Analysis
• Planning
  • AHJ Coordination
  • Understanding Site Conditions
  • Develop Cost Estimates
Battling scope creep requires an investment in pre-bond planning for a FULL understanding of your “starting line”:

**DATA**

*Deferred Maintenance Assessments*
*Due Diligence Studies*
*Solutions & Options*
*Aggressive Scoping*
*Site Logistics / Phasing*
*Program Development Costs (HANDOUT)*
*Tiered Contingencies*
POST-BOND STRATEGIES
(Estimator’s Perspective)

TIPS FOR CONTROLLING COST POST-BOND

- Choose correct procurement model for your projects (not all procurement models are suitable for all projects).
- Conduct a thorough design phase estimating process and do not shortchange the estimate reconciliation.
- Utilize Target Value Design to identify cost risks and opportunities.
- Create a robust change order management program.
## Matrix of Project Delivery Methods

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<thead>
<tr>
<th>Contractual Organization</th>
<th>Owner</th>
<th>A/E</th>
<th>General Contractor (GC)</th>
<th>Subcontractors</th>
<th>Owner</th>
<th>A/E</th>
<th>Construction Manager/General Contractor (CM/GC)</th>
<th>Subcontractors</th>
<th>Owner</th>
<th>Design-Build</th>
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<tbody>
<tr>
<td><strong>Hard Bid Lump Sum or Stipulated Sum</strong></td>
<td>Owner selects an architect/engineer to begin and develop construction documents from which the owner solicits lump sum bids. Selection is based on the lowest responsible bid.</td>
<td>Construction Manager/General Contractor (CM/GC) provides assistance in evaluating costs, schedule, alternative design recommendations and systems and materials through design phase. CM/GC guarantees maximum price before construction, convertible to lump sum, GMP or cost plus, then completes construction, assuming the risk for any overages. Selection is based on criteria that combines qualifications and experience.</td>
<td>A single entity is contracted to provide both design and construction. The design-build team consists of contractor, architect/engineer. The design-builder contracts directly with the architect and subcontractors and is responsible for delivery of the project. Selection is based on the proposer offering the best value to the owner.</td>
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CM/GC and the Establishment of the Guaranteed Maximum Price (GMP)

POST-BOND STRATEGIES
(Contractor’s Perspective)
Leverage CM/GC to contain costs and control scope creep
Consider the project schedule
• Is the schedule reasonable?
• Does the schedule allow for adequate design duration?
• What is the premium for an accelerated construction schedule or decreased competition
• Does a fast-track design/construction schedule make sense for the project?
Considering Construction within an Occupied Campus

- Are there other solutions?
- How are costs for phasing, schedule and temporary construction being accounted for?
- Are your CM/GC and Architect working through solutions to minimize impact and cost?
Understand the subcontractor market

- Bidding conditions
- Trade availability, product selections and the impact to cost
- Engagement of subcontractors

POST-BOND STRATEGIES
(Contractor’s Perspective)
Within a school district, scope creep often presents itself as stakeholders with high influence who direct changes.

How do you control this?
- Agree on baseline scope upfront (Ed spec, project charter).
  - Understand that changes have budget/schedule implications
- Have a clearly defined chain of command.
  - Empowered decision maker, “gate keeper”
- Outline priorities, develop alternates.
  - Under promise, over deliver
  - Alternates are optional “nice-to-haves”, they can be omitted without impacting “the promise”
POST-BOND STRATEGIES
(District’s Perspective)

PM reviews requests to prevent conflicts with; district standards other stakeholder’s needs/concerns, building codes & AHU req’s equality & equity And prevents adding scope to the project.

Design team refines request information and provides detailed direction to General Contractor.

Construction Manager “The Gate Keeper”

General Contractor

Contractor distributes information to subcontractors and provides owner cost information. Final owner approval is required before work can be implemented.
There is a time, method, and benefit for implementing SAFE SCOPE CREEP:

**EARLY** in Design and **LATE** in Construction

**DESIGN PHASE**
- Simplify
- Value
- Trade-Offs
- Future Phases
- Alternates

**CONSTRUCTION PHASE**
- Promises Kept
- Reduced Risk
- Decision Process
- Separate Goals
- Stand-Alone Projects

**MARKET THE WINS !!!**
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