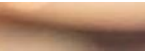




40th *Annual*
SCAGPO
PROFESSIONAL
DEVELOPMENT
FORUM & TRADESHOW





Construction: Keys to Success

Office of State Engineer

Phil Gerald, PE

Deputy State Engineer

Construction: Keys to Success

“If you fail to plan, you’re planning to fail”



Division of Procurement Services Office of State Engineer

John White, PE
State Engineer

Margaret Jordan, PE
Deputy State Engineer

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Admin. Coordinator

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Stan Gailey, AIA
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Office of State Engineer (OSE)

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Columbia, SC 29201

<https://www.procurement.sc.gov>

OSE Spartanburg
USC-Upstate/ OSE
800 University Way
Spartanburg, SC 29303

OSE Charleston
23B Ehrhardt St.
Charleston, SC 29425

We are the Authority Having Jurisdiction (AHJ) for the Design and Construction of State Funded Buildings (SC Law 10-1-180)

We are not:

Office of School Facilities (OSF)
(Schools K-12)

Department of Transportation (DOT)
(Roads, Bridges, etc.)

Construction: Keys to Success

Are there rules to follow?

What stops us from doing what ever we want?

What gives us authority?

Laws and Regulations



Construction: Keys to Success

South Carolina Consolidated Procurement Code

- §11-35-830
 - Office is led by the State Engineer
 - Create the Manual for Planning and Execution of State Permanent Improvements (the Manual)
- §11-35-845 and SC Reg 19-445.2000.B(4)
 - Oversee all procurements involving construction, architectural & engineering, construction management, and land surveying services

Construction: Keys to Success

Keys to a successful construction project:

- 1) Communication
- 2) Planning
- 3) Execution
- 4) Performance & Monitoring
- 5) Closure

Construction: Keys to Success

Communication – define the scope of the project and the project delivery method for design and construction



Construction: Keys to Success

Planning – create comprehensive documents for the construction of a facility



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Construction: Keys to Success

Execution – use an efficient project delivery method to construct the facility



Construction: Keys to Success

Performance & Monitoring – monitor construction and manage performance



Construction: Keys to Success

Closure – facility is complete and usable for its intended purpose



Construction: Keys to Success

How does the Office of State Engineer use the five keys?

First, Communication



Construction: Keys to Success

Communication

Manual is our communication device to the Agency, A/E, and Contractor:

- Applicable Building Code editions
- Procedures for A/E procurement
- Procedures for Construction Procurement
- Procedures for Construction Contract Administration
- Procedures for Miscellaneous Procurements
 - Small Purchases
 - Indefinite Delivery Contracts
- State Forms and SC AIA contract documents

Construction: Keys to Success

Communication

OSE Manual, 2018 edition:

Chapter 1 – General Information

Chapter 2 – Minority Business

Chapter 3 – Project Planning

Chapter 4 – Procuring Professional Services

Chapter 5 – Design Construction Documents & Standards

Chapter 6 – Procurement of Design-Bid-Build Construction

Chapter 7 – Construction Contract Administration

Chapter 8 – Miscellaneous Procurements

Chapter 9 – Indefinite Delivery Contracts

Chapter 10 – Real Property

Chapter 11 – Construction Management at Risk

Chapter 12 – Design-Build, Design-Build-Operate-Maintain, Design-Build-Finance-Operate-Maintain, Guaranteed Energy Savings Contracts

Construction: Keys to Success Communication

What's it like to read the OSE Manual?



Construction: Keys to Success

Second, Planning



Construction: Keys to Success Planning

We can assist our Agencies/Owners as they plan for the design and construction of their facilities.

Many Agencies will hire a Design Professional to assist in the Master Planning of a campus or Programming for individual facilities

Construction: Keys to Success

Planning

Facility

What is the scope of the facility?

Where will the facility be located?

Who will be occupying the facility?

When is the facility required to be completed?

Design & Construction

Who is best qualified to design the facility?

What is the best Delivery Method?

Who will make sure the facility is constructed correctly?

Construction: Keys to Success Planning

As the Building Code Official for State funded construction projects, OSE is responsible to ensure state buildings are designed to meet or exceed the requirements of the International Building Codes:

- Building height, number of stories, square footage, occupancy, and occupancy loading

- Life Safety items, ie. sprinkler system, fire alarm system, means of egress, and rated construction

- ADA accessibility

- Historic Building Modifications

- Seismic Requirements (new and existing buildings)

- Energy Performance

Construction: Keys to Success Planning

For a particular State project, what is the most efficient project delivery?

- Design-Bid-Build
- Design-Build
- Construction Management at Risk
- Construction Indefinite Delivery Contract
- Construction Manager Advisor

Construction: Keys to Success Planning

Design-Bid-Build

- Select an A/E (AIA B101 SCOSE Edition)
- A/E designs for months
- Prequalification of bidders (?)
- Minimize (??) time from Advertisement to Bid Opening
- Award to lowest responsive & responsible bidder
- Possibility of change orders

Construction: Keys to Success Planning

Design-Build

- Owner produces program of desired facility, or
- Owner contracts with a design professional to produce “bridging documents”
- Advertise for D-B process via Qualifications Based Selection (QBS)
- Two step RFQ/RFP process
- Pay a stipend to qualified proposers
- Select Design-Builder per evaluation factors with cost as a small portion
- Negotiate D-B contract terms and cost
- Independent Peer Reviewer (Owner, D-B?)

Construction: Keys to Success Planning

Construction Management at Risk

- Select A/E (AIA B133 SCOSE Edition) and proceed to Schematic design
- Advertise for CM-R process via Qualifications Based Selection (QBS)
- Two step RFQ/RFP process
- Firms are shortlisted and asked to submit a Request for Proposal
- Shortlisted firms are interviewed, ranked, and submit a Preconstruction Fee (\$) and Construction Management Fee (% of Cost of the Work)

Construction: Keys to Success Planning

Construction Management at Risk (cont'd)

- Select per evaluation factors with cost as a small portion
- Negotiate CM-R contract terms, Pre-construction fee and Management fee
- Upon award, CM-R reviews A/E design towards GMP (AIA A132 SCOSE Edition)
- If Owner can afford GMP, amend contract to award construction
- If Owner can't afford GMP, documents bid as D-B-B

Construction: Keys to Success Planning

Indefinite Delivery Contracts (SC Law 11-35-3310)

- A/E provides construction documents of a Representative Project
- Representative Project used as bidding tool for IDC Contractor selection
- Lowest responsive & responsible contractors chosen (typically five)
- Lowest bidder of the five is awarded the Representative Project
- Future delivery orders are designed by an A/E and bid among the five IDC contractors

Construction: Keys to Success Planning

Construction Manager Advisor

- Owners may not have the expertise or the personnel to manage a construction project
- Owners may have the personnel, but need an extra pair of hands
- CM-A is hired as a professional service in accordance with Chapter 4 of the Manual via the AIA A132 SCOSE Edition
- Architect is hired via the AIA B132 SCOSE Edition
- Contractor is hired via the AIA A132 and the AIA C132

Construction: Keys to Success

Third, Execution



Construction: Keys to Success

Execution: A/E Procurement

A/E contract communicates:

Relationship between the Owner and A/E

Scope of the project

A/E Responsibilities and services

Owner Responsibilities

Deliverables

Time, or length of contract

Compensation

Insurance requirements

Claims & Disputes

Termination or Suspension

Construction: Keys to Success

Execution: A/E Procurement

1. Small Professional Services Contract (§11-35-3230)

- SE-230, SE-232, SE-235, SE-240
- Fees (less reimbursable) less than \$25,000
- A firm can be chosen for a specific project by the Agency
- Scope is defined, fee negotiated, and design begins (Communication)
- A firm cannot be awarded more than \$75k of small contracts in the previous 24 months

Construction: Keys to Success

Execution: A/E Procurement

2. Large Professional Services Contract (§11-35-3220)

- AIA B101, SCOSE Edition
- Fees (less reimbursable) greater than \$25,000
- Advertise in South Carolina Business Opportunities
- Firms submit resumes' via the FS Form 330
- Agency Selection Committee reviews resumes and “shortlists” a minimum of three firms per the nine criteria contained in §11-35-3220
- Shortlisted firms are interviewed and ranked
- Agency posts Notice of Selection for Negotiation and 10 day protest period begins
- Agency negotiates with highest ranked firm

Construction: Keys to Success

Execution: A/E Procurement

3. Professional Services Small Indefinite Delivery Contract, two year term (§11-35-3310)

- SE-630, SE-640
- Fees (less reimbursable) less than \$25k per delivery order (\$50K for Higher Ed)
- A firm is chosen by the Agency
- Scope is defined, fee negotiated, and design begins (Communication)
- A firm cannot be awarded more than \$75k of small contracts in the previous 24 months (\$150k for Higher Ed)

Construction: Keys to Success

Execution: A/E Procurement

4. Professional Services Large Indefinite Delivery Contract (§11-35-3310)

- SE-640, SE-645
- Term of contract = 2 years, or limited to \$300k total fees (\$500k for Higher Ed)
- Delivery orders limited to \$100k fee (\$200k for Higher Ed)
- Hiring of firms is similar to Large Professional Services Contracts, ie. SCBO, resumes', interviews, etc.

Construction: Keys to Success

Fourth, Performance & Monitoring



Construction: Keys to Success

Performance & Monitoring

- Preconstruction Conference
- IBC Building Inspections (Statewide Contract)
- IBC Special Inspections (Statewide Contract)
- OSE Inspections
- A/E site visits and inspections
- Owner site visits and inspections
- Mediate Contract Controversy

Construction: Keys to Success

Performance & Monitoring

Construction Inspections

- Inspections performed and reports are received
- Job-site Inspection Logbook is complete
- Job-site Inspection Deficiency Log indicates all deficiencies have been corrected

Construction: Keys to Success

Fifth, Closure



Construction: Keys to Success Closure

Substantial Completion (the Good)

- Contractor performs Substantial Completion walk-thru
- Contractor provides a list of incomplete items to A/E
- Contractor considers the project Substantially Complete and requests A/E and Owner to inspect
- If the facility is sufficiently complete for “its intended use”, it is Substantially Complete
- A/E declares Substantial Completion and issues the SE-550 form
- OSE issues the Certificate of Occupancy (SE-585)



Construction: Keys to Success Closure

Substantial Completion (the Bad)

- A/E combines his punch-list with the Contractors
- Contractor now has 30 days to complete the project and reach Final Completion
- Accrual of Liquidated Damages stops
- Warranties begin



Construction: Keys to Success Closure

Substantial Completion (the Ugly)

- If the A/E determines the project is not Substantially Complete, contractor may be charged for re-inspection costs and additional Substantial Completion inspection
- Accrual of Liquidated Damages continues



Construction: Keys to Success Closure

Final Completion

- Contractor has 30 days from Substantial Completion to reach Final Completion
- Final Inspection conducted by A/E and Owner
- Final pay application submitted with closeout
 - Release of Liens
 - Warranties
 - Consent of Surety
 - O&M Manuals

Construction: Keys to Success Closure

Final Completion

- “Final” means Final
- No pending Change Orders
- No Outstanding Items
- Contractor is no longer on site

Construction: Keys to Success

What are they?

1. Communication
2. Planning
3. Execution
4. Performance & Monitoring
5. Closure

They are “keys” and not “guarantees” to success

Construction: Keys to Success

Thank you for your attendance

Are there any questions?

