

**CAPACITY  
BUILDING  
TRAINING  
PLAYBOOK**

## **PROGRAM OVERVIEW**

- 1. SAFETY /INSURANCE / BONDING**
- 2. ACCOUNTING & FINANCE**
- 3. MARKETING & SALES**
- 4. PROCUREMENT & CONTRACTS**
- 5. BUSINESS PLANNING**
- 6. ESTIMATING & PROPOSALS**
- 7. PROJECT MANAGEMENT**
- 8. COST CONTROLS**
- 9. OWNER/ARCHITECT/ENGINEER**
- 10. DEI/ESG / CONTRACT COMPLIANCE / HUMAN RIGHTS**

## **SAFETY INSURANCE & BONDING**

- I. Introduction
- II. Contract Requirements
- III. Why We Buy Insurance
- IV. Workers Compensation
  - a. Determining Workers Compensation Cost
  - b. Workers Compensation Codes
  - c. Workers Compensation Rates
  - d. Experience Modification Rate
  - e. Safety and Insurance Cost
- V. General Liability
  - a. Codes & Rates
- VI. Automobile Insurance
- VII. Umbrella and Excess Liability
- VIII. Property
- IX. Environmental
- X. Builders Risk
- XI. Bond
  - a. Bid
  - b. Performance
  - c. Payment
  - d. Fidelity
- XII. Group Discussion

## SAFETY (OSHA)

- Subpart A - General
- Subpart B - General Interpretations
- Subpart C - General Safety and Health Provisions
  - [Compliance Assistance Quick Start: Construction Industry](#)
  - [Medical and First Aid](#)
  - [Carbon Monoxide in Construction/Portable Gas-Powered Equipment \(Video\)](#)
  - [Sprains and Strains in Construction/Laying Stone \(Video\)](#)
  - [Sprains and Strains in Construction/Pulling Cables \(Video\)](#)
  - [Struck-By Accidents in Construction/Swinging Cranes \(Video\)](#)
- Subpart D - Occupational Health and Environmental Controls
  - [Hazard Communication](#)
  - [Hydrogen Sulfide](#)
  - [Lead](#)
  - [Molds](#)
- Subpart E - Personal Protective and Life Saving Equipment
  - [Personal Protective Equipment \(PPE\) - Construction](#)
  - [Eye and Face Protection](#)
  - [Eye and Face eTool - OSHA Requirements](#)
  - [Occupational Noise Exposure - Construction](#)
  - [Respiratory Protection](#)
  - [Respiratory Protection eTool](#)
  - [Ventilation](#)
  - [Asphalt Fumes](#)
- Subpart F - Fire Protection and Prevention
  - [Fire Safety](#)
- Subpart G - Signs, Signals and Barricades
  - [Highway Work Zones and Signs, Signals, and Barricades](#)
  - [Struck-by Accidents in Construction/Vehicle Back-Over \(Video\)](#)
- Subpart H - Material Handling, Storage, Use and Disposal
  - [Ergonomics: Solutions for Electrical Contractors eTool](#)
    - [Materials Handling: Heavy Lifting](#)
- Subpart I - Tools - Hand and Power
  - [Hand and Power Tools](#)
  - [Ergonomics: Solutions for Electrical Contractors eTool](#)
    - [Installation and Repair: Using Tools](#)
    - [Supplemental Information: Tool Index](#)
  - [Carbon Monoxide in Construction/Portable Gas-Powered Equipment \(Video\)](#)
- Subpart J - Welding and Cutting
  - [Welding, Cutting, and Brazing](#)
- Subpart K - Electrical
  - [Construction eTool - Electrical Incidents](#)
  - [Control of Hazardous Energy \(Lockout/Tagout\)](#)
  - [Electrical Contractors Industry](#)
  - [Electrical - Construction](#)
- Subpart L - Scaffolds
  - [Scaffolding - Construction](#)
  - [Scaffolding eTool](#)
  - [Construction eTool - Improper Scaffold Construction](#)
  - [Falls in Construction/Fixed Scaffolds \(Video\)](#)
- Subpart M - Fall Protection

- Preventing Falls in Construction
  - Fall Protection in Residential Construction
  - Fall Protection - Construction
  - Construction eTool - Falls
  - Falls in Construction/Floor Openings (Video)
  - Falls in Construction/Reroofing (Video)
  - Falls in Construction/Sky Lights (Video)
- Subpart N - Cranes, Derricks, Hoists, Elevators, and Conveyors
  - Cranes and Derricks in Construction — See Subpart CC
  - Crane, Derrick, and Hoist Safety
- Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations
  - Preventing Backovers
  - Motor Vehicle Safety - Construction
  - Construction eTool - Vehicles
  - Struck-by Accidents in Construction/Vehicle Back-Over (Video)
- Subpart P - Excavations
  - Trenching and Excavation - Construction
  - Construction eTool - Trenching and Excavation
  - Excavations in Construction/Soil Classification (Video)
  - Excavations in Construction/Trenching (Video)
- Subpart Q - Concrete and Masonry Construction
  - Concrete and Concrete Products - Manufacturing and Construction
  - Construction eTool - Unguarded Protruding Steel Rebars
- Subpart R - Steel Erection
  - Steel Erection
  - Steel Erection eTool
  - Revision to the Steel Erection Directive
  - Falls in Construction/Bridge Decking (Video)
  - Falls in Construction/Leading Edge Work (Video)
- Subpart S - Underground Construction, Caissons, Cofferdams, and Compressed Air
- Subpart T - Demolition
  - Demolition
- Subpart U - Blasting and the Use of Explosives
- Subpart V - Power Transmission and Distribution
  - Electric Power Generation, Transmission, and Distribution Industry - Construction
  - Electric Power Generation, Transmission, and Distribution eTool
- Subpart W - Rollover Protective Structures; Overhead Protection
- Subpart X - Ladders
  - Construction eTool - Misuse of Portable Ladders
  - Walking/Working Surfaces
- Subpart Y - Commercial Diving Operations
  - Commercial Diving
- Subpart Z - Toxic and Hazardous Substances
  - Chemical Hazards and Toxic Substances
  - Asbestos - Construction
  - Formaldehyde
  - Toxic Metals
  - Hexavalent Chromium
- Subpart AA – Confined Spaces in Construction
  - Confined Spaces
- Subpart CC – Cranes & Derricks in Construction
  - Cranes and Derricks in Construction

## **ACCOUNTING & FINANCE**

1. Systems
2. Chart of Accounts
3. Team
4. Debits & Credits
5. Letter of Credit
6. Lines of Credit
7. Corporate Credit
8. Review
9. Compilation
10. Audited
11. Certification

## CONTRACT ADMINISTRATION

- I. Definition
- II. Basic Rights
  - a. Owner
    - i. Right to building
    - ii. Obligated to pay
  - b. Contractor
    - i. Right to Payment
    - ii. Obligated to build
- III. Obligations
  - a. Owners
    - i. Payment
    - ii. Accurate Documents
    - iii. Timely Approvals
    - iv. Cooperation
    - v. Free from interference
    - vi. Conformance of site
  - b. Contractor
    - i. Conformance to documents
    - ii. Timely performance
    - iii. Inspect work
    - iv. Change work
    - v. Stop work
    - vi. Terminate Contract
    - vii. Indemnification
    - viii. Others
- IV. Contract Types
  - a. Lumps Sum
  - b. Cost Plus
  - c. Cost Plus (GMP)

d. Construction Management

e. T&M

V. Contract Terms

a. Payment Terms

i. Mobilization

ii. Retainage

iii. Guarantees

iv. Late Payment – Interest

b. Warranties – Latent, Patent

c. Change of Conditions – Claims

i. Extra Scope

ii. Extension of time

iii. Delays

d. Termination

VI. Contract Review

a. Legal Advice

b. Negotiate

c. Deal Breaker

VII. Group Discussion



## **BUSINESS PLANNING**

- I. SBA Template
- II. Answer the Question???
  - a. Who
  - b. What
  - c. When
  - d. Where
  - e. How
  - f. Why
- III. Review and Update Yearly

## **MARKETING & SALES**

1. Public Relations
2. Community Relations
3. Client Relations
4. Branding
5. Website
6. Sales Management
7. Trade Show(s)
8. Certification(s)
9. SMPS
  - a. CPSM
  - b. SPSM
10. APMA
  - a. BPFC
  - b. BPPC
  - c. BPPC
  - d. CPC

## **PROCUREMENT & CONTRACTS**

- I. Purchasing Objectives
- II. Project Checklist
- III. Contractor Qualification
- IV. Invitation to Bid
- V. Items to be Acknowledged
- VI. Verbal Quotation
- VII. Quote Sheet
- VIII. Wish List – Generals
- IX. Wish List – Subs
- X. Federal Register
- XI. Payment Protection
- XII. Michigan Construction Lien Act Forms
- XIII. Liability Insurance – Asbestos Removal
- XIV. Stress Management

# ESTIMATING & PROPOSALS

## I. OVERVIEW

### a. Importance of a Good Estimate

#### i. Qualifications:

1. Must have background in and knowledge of construction and its techniques
2. Must be able to read and interpret blueprints and specifications
3. Should have some field experience in building and construction and courses in estimating or degree in construction
4. Ability to communicate well
5. Knowledge of various construction methods and materials, their characteristics, installation procedures and tolerances

#### ii. Role of estimator:

1. Quantify and price out work called for on documents.
2. Determined your company management costs for project.
3. Prepare a project schedule
4. Assemble estimate and review with management.
5. Obtain vendor quotations.
6. Prepare unit pricing/alternates required in bid.

#### iii. Characteristics of a good estimate:

1. Accurately determines cost of work described on documents
2. Qualifies assumptions made in arriving at estimated value, should documents be unclear.
3. Identifies any allowances for items of work which are not quantifiable.
4. Identifies drawings and specifications upon which estimate is based
5. Identify gray areas on bid documents for management review.

#### System

- SAGE
- RSMEANS

#### On Screen Take offs

#### Certification

- ASPE-CPE
- APM - CPM

## PROJECT MANAGEMENT

- II. 7P's
- III. Gantt Chart
- IV. Staff
- V. Elements
- VI. System(s)
- VII. Certification
  - a. CPM
    - i. APM
    - ii. PMI

## **COST CONTROL**

1. BID
2. CHANGE ORDER MANAGEMENT
3. ORDER QUANTITY DISCOUNTS
4. FINANCE CHARGES
5. MOBILIZATION

## **OWNER / ARCHITECT / ENGINEER**

**I. OWNER**

**II. ARCHITECT**

**III. ENGINEER**

**i. CONTRACT(S)**

**ii. NETWORKING**

**iii. PARTNERSHIP(S)**

# **DEI / ESG / CONTRACT COMPLIANCE / HUMAN RESOURCE**

I. DEI / ESG

II. CONTRACT COMPLIANCE

III. HUMAN RESOURCE

a. Davis Bacon

b. Prevailing Wage

c. Brooks Act

d. MBE/WBE/DBE/Section3

IV. Certification

a. ACCA – CCA

b. ACCA - MCA