EVERGREEN ESTIMATING

SERVICES • TECHNOLOGY • RESOURCES

ESTIMATOR-IN-TRAINING 505

- FIVE DAYS OF ESTIMATING 101 -

Course Outline & Agenda

SUMMARY

This five day comprehensive training course provides all of the fundamentals that a Junior Estimator needs in order launch his/her career in the field of construction estimating. This course uses examples that a traditional building General Contractor would encounter during the normal estimating process.

This course covers five of the major areas of knowledge that an Estimator-in-Training must come to know, live, and breath in order to be proficient as a career estimator.

I. Learning the Fundamentals and Basics of Estimating
II. Interpretation of Plans, Specifications, & Documentation
III. Learning about Quantity Take-Off and Accuracy
IV. Utilization of estimating software to Organize, Price, Report, and Job Cost
V. Learning Bid Management Practices & the entire Estimating Process

ESTIMATING SOFTWARE SOLUTION SPONSORS

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SMARTBIDNET®

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DAY 1 – ESTIMATING FUNDAMENTALS 101

I. INTRODUCTION TO ESTIMATING

- A. Lifecycle of a Construction Project
- B. Different Levels of Estimate Detail
- C. The Estimating Process

II. THE JOB DESCRIPTION OF AN ESTIMATOR

- A. Responsibilities
- B. Duties and Tasks
- C. Career Development
- D. Job Opportunities

III. ESTIMATING BASICS

- A. What goes into an estimate
- B. Direct and Indirect Labor defined
- C. Labor
- D. Material
- E. Equipment
- F. Subcontractors
- G. Other

IV. RESOURCES DEFINED

- A. Brief Overview of Estimating Software
- B. Resource Tables
- C. Crews
- D. Labor Rate Tables
- E. Estimating spreadsheets

V. ESTIMATE STRUCTURE

- A. Above the Line Costs Defined
- B. Trade costs
- C. Below the Line Costs Defined
- D. Cost and Price defined

VI. PRICING METHODS

A. Budget Price – Lump Sum
B. Budget Price – Per Unit
C. Subcontractor Price – Lump Sum
D. Subcontractor Price – Per Unit
E. Self-Performed Price – Lump Sum
F. Self-Performed Price – Per Unit
G. Self-Performed Price – Productivity Based Price
H. WAG
I. Experiential
J. Intuition

VII. LABOR COSTS

A. Definition of Labor Cost
B. Resources
C. Crews
D. Labor Rate Table
E. Total Cost of Crew
F. Labor Productivity Factor
G. Labor Coefficient
H. Crew Hours & Man Hours

VIII. MATERIAL COSTS

A. Definition of Material Cost & Price
B. Vendor Solicitation
C. Waste Factors
D. Material Conversion Factors
E. Order Quantity – Take Off Quantity
F. Shipping & Handling
G. Delivery & Storage

IX. EQUIPMENT COSTS

- A. Owned Equipment
- B. Cost of Owning Equipment
  - i. Utilization
  - ii. Insurance
  - iii. Delivery & Storage
  - iv. Fuel, Oil, Gas
  - v. Maintenance
- C. Equipment Rentals
  - i. Utilization
  - ii. Rental Duration
  - iii. Delivery / Pickup Fees
  - iv. Fuel, Oil, Gas
  - v. No Maintenance
- D. Rented vs. Owned Decision

X. SUBCONTRACTOR COSTS

- A. Solicitation
- B. Request for Pricing
- C. Request for Proposals
- D. Scope Definition
- E. Specialty Sub-Trades
- F. Certifications & Accreditations
- G. Risk Management
- H. Self-Perform vs. Subcontract Decision

XI. OTHER COSTS

- A. Indirect Costs
- B. Building Permits
- C. Professional Fees
- D. Insurances
- E. Bonding
- F. Manual Adjustments
- G. Miscellaneous Costs

< END OF TRAINING DAY 1 >

DAY 2 – PLANS & QUANTITY TAKE-OFF 101

I. INTRODUCTION TO PLANS

A. Drawings
B. Specifications
C. Documentation

II. DRAWINGS

A. Title Sheet
B. Life Safety
C. Civil
D. Landscaping
E. Phasing
F. Foundation
G. Structural
H. Architectural
I. Finish
J. Furniture
K. Plumbing
L. Fire Protection
M. HVAC – Mechanical
N. Electrical
O. Miscellaneous Others

III. SPECIFICATIONS

A. PROJECT INFORMATION
    1. Invitation to Bid
    2. Instructions to Bidders
    3. General Conditions of the Contract (AIA)
    4. Supplemental General Conditions
B. TECHNICAL DOCUMENTS
    1. Existing Conditions Evaluations
    2. Subsurface Investigations
    3. Asbestos Reports
    4. Lead Reports
    5. PCB Reports
    6. Soil Boring Reports
    7. Engineering Reports

C. FRONT END DOCUMENTS
   1. General Requirements
   2. Project Scope
   3. Summary of Prime Contracts
   4. Alternates
   5. Unit Prices
   6. Project Supervision and Management
   7. Quality Control
   8. Temporary Facilities
   9. Temporary Utilities
   10. Temporary Construction
   11. Project Controls
   12. Waste and Debris Handling
   13. Progress & Final Cleaning
   14. Punch List
   15. Customer Demonstrations & Training
   16. Commissioning Facilities

D. TRADE SPECIFICATIONS
   1. Site Work, Demolition, Concrete, Masonry, Etc.
   2. Material Specifications
   3. Schedule of Materials
   4. Quality Control Requirements
   5. Manufacturer Training
   6. Testing
   7. Storage & Handling
   8. Execution and Installation
   9. Field Quality Control
   10. Final Cleanup
   11. Commissioning

IV. DOCUMENTATION

A. Addenda
B. Request for Information (RFI's)
C. Request for Material Substitution
D. Schedule of Values
E. Bid Forms
F. Unit Prices
G. Alternates

V. QUANTITY TAKE-OFF TYPES

- A. Counting
- B. Linear
- C. Curved
- D. Area
- E. Volume
- F. Imperial or Metric

VI. QUANTITY TAKE-OFF TOOLS - METHODS

- A. Ruler
- B. Architectural Scale
- C. Engineering Scale
- D. Rolling Wheel
- E. Digitizer Board
- F. Digitizer Tablet
- G. On-Screen Digital Take-Off Software
- H. 3-D Model Quantity Extraction

VII. DIGITAL TAKE-OFF SOFTWARE EXERCISES

- A. Drywall and Concrete Take-Off Examples
- B. Counting
- C. Linear
- D. Height
- E. Area
- F. Volume

VIII. EXPORTING, IMPORTING, & REPORTING TAKE-OFF DATA

- A. Exporting from Digital Take-Off
- B. Importing into Excel Spreadsheets
- C. Importing into Estimating Solutions
- D. Printing & Sorting Take-Off Reports

< END OF TRAINING DAY 2 >

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DAY 3 – ESTIMATING SOFTWARE BASICS 101

I. INTRODUCTION TO ESTIMATING SOFTWARE

A. Comparison to Excel Spreadsheets
B. Database Driven – No File/Save As
C. Estimate Management
D. Database Management
E. Reporting Capabilities
F. Accounting Interface

II. CREATING A NEW ESTIMATE

A. Basic Estimate Information
B. Labor Rate Table Selection
C. Equipment Rate Table Selection
D. Client Information
E. Architect & Engineer Information
F. Bidder Information
G. Bid & Award Results
H. Job Classification & Size

III. DATABASE ORGANIZATION

A. Construction Specifications Institute (CSI)
B. Master Format 1995, 2004, 2010
C. Sorting by Phase / Item
D. Sorting by Description
E. Searching by Description
F. Item Window and Configuration

IV. TAKE-OFF METHODS

A. Quick Take-Off
B. Item Take-Off
C. Assembly Take-Off
D. Model Take-Off
E. One-Time Item Take-Off

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V. SPREADSHEET MANIPULATION & ORGANIZTION

A. Modifying Spreadsheet Take-Off Information
B. Estimating Sequences
C. Spreadsheet Layouts
D. WBS Codes & Sorting

< END OF TRAINING DAY 3 >

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DAY 4 – ESTIMATING SOFTWARE BASICS 101

I. ESTIMATE SUMMARY PAGE & TOTALS

- A. Creating Estimate Summary Add-Ons
- B. Applying Add-Ons to Estimate Costs
- C. Summarizing Sub-Totals
- D. Profit & Overhead
- E. Taxes and Fees
- F. Insurances
- G. Bond Tables
- H. Manual Adjustments
- I. Estimate Summary Templates

II. PRICING METHODS & ADJUSTMENTS

- A. Updating the Estimate from Database
- B. Updating the Database from Estimate
- C. Updating Material Costs by Price Code
- D. Using Cost Indexes
- E. Adjustments by Percentage
- F. Unit Conversion (Metric – Imperial)

III. REPORTING

- A. Spreadsheet Reports
- B. Estimate Reports
- C. Field Reports
- D. Bill of Material Reports
- E. Comparison Reports
- F. Variance Reports

IV. JOB COST CODES & ACCOUNTING INTERFACE

- A. Job Cost Codes
- B. Quantities to Export to Job Cost
- C. Transaction File
- D. Organization prior to Exporting
- E. Importing into Job Cost

< END OF TRAINING DAY 4 >

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DAY 5 – BID MANAGEMENT 101

I. LEAD GENERATION & CONSTRUCTION DATA SERVICES

A. Subscription Services with access to construction bid availability
B. Leads on projects early in design
C. Lead Management
D. Newspapers
E. Publications
F. Business Development Managers
G. Word-Of-Mouth
H. Referrals
I. Public Agencies
J. Trade Associations & Networking Groups

II. BID MANAGEMENT SYSTEMS (DEMO)

A. Invitations-To-Bid
B. Document Management & Distribution
C. Bid Package Definition
D. Pre-Bid Communications
E. Pre-Qualification
F. Bid Submission

III. SUBCONTRACTOR RELATIONSHIP MANAGEMENT

A. Being early on the street
B. Soliciting Pre-Bid Communications
C. Being “Fair” and “Ethical”
D. Scope comparison
E. Bid Shopping
F. Bid Peddling
G. Collusion
H. Spreading the work around
I. Minimum Sub-Bid Requirements
J. Post-Bid Submissions
K. Pre-Bid Negotiations
L. BAFO – Best and Final Offer
M. Reporting bid results to subcontractors

IV. ESTIMATING PRACTICES & PROCEDURES

A. Invitations-To-Bid sent out at least 3-4 weeks ahead of bid day
B. Follow-up with material vendors immediately after ITB is sent
C. Follow-up with major subcontractors within 1 day after ITB is sent
D. Follow-up with minor subcontractors within 1 week after ITB is sent
E. Material Take-Offs are done 1 week prior to bid day and forwarded to material suppliers
F. Material pricing completed 3 days prior to bid day
G. Self-performed labor pricing completed 2 days prior to bid day
H. Subcontractors contacted each day, 2 days prior to bid day to determine bidding status
I. Subcontractor scopes due 1 day prior to bid day to perform scope analysis and plug holes

V. ESTIMATE SUMMARY WORKSHEET & ORGANIZATION

A. Conforms to Bid Forms
B. Conforms to Requested Alternates and Requested Break-Outs
C. Easy to read and understand
D. Organized according to CSI Specifications and / or major trades associated with project
E. Easily “Plug & Play” various scopes from subcontractors
F. Ability to easily modify “Below-the-Line” costs
G. Ability to make manual adjustments as necessary
H. Make sure all “Holes” are represented with “plug” numbers in anticipation of missing subcontractor scopes
I. Easily transfer information to Bid Forms

VI. DELIVERY OF ESTIMATE AND / OR PROPOSAL

A. Arrive 1-Hour prior to bid submission
B. Locate premises where bid is to be submitted
C. Verify the clock settings at the bid submittal room
D. Report clock settings to Estimating Bid Team
E. Complete forms according to requested formation, written and in numbers; single or duplicate
F. Seal envelopes or forms according to specifications
G. Confirm with bid receiver that bid was accepted and is on-time
H. Stay at bid and record all bid results from all contractors for all contracts
I. Report bid results to Estimating Team prior to departing bid

VII. POST BID ACTIVITIES

A. Completion of required documentation for low-bidders
B. Submittal of Schedule of Values
C. Submittal of MWBE "Good Faith" Documentation
D. Scope review and verification of completeness and accuracy
E. Phone calls to competing contractors to learn and identify areas where estimate is high or low
F. Document bid results in historical database or comparable Estimating Software Solution

VIII. TRAINING WRAP-UP

A. Free class time to wrap up any loosed ends or details that were passed over or deferred until end of class
B. Questions & Answers
C. Self-Graded Quiz
D. Certificate Hand-Out

< END OF TRAINING DAY 5 >

(OPTIONAL)

DAY 6 – HAND'S ON ESTIMATING PROJECT

I. HANDS-ON ESTIMATING PROJECT

A. Searching for Jobs using Construction Data Services
B. Downloading Project Documents
C. Document and Scope Analysis
D. "Go-No Go" Project Evaluation
E. Creation an Invitation-To-Bid (ITB) for Subcontractor and Material Supplier Solicitation with Bid Management Software
F. Perform Digital Take-Offs
G. Create and organize estimate in Estimating Software
H. Labor and Material Pricing
I. Estimate organization and spreadsheet manipulation
J. Create Request-for-Information (RFI) to Architect / Engineer
K. Estimate Summary Review
L. Posting estimate information on Bid Summary Sheet
M. Subcontractor "Buy" and Scope Review
N. Exporting Estimate and Field Reports
O. Exporting Job Cost Data to Accounting
P. Post-Bid Estimate Audit

< END OF OPTIONAL TRAINING DAY 6 >

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PRICING & COURSE DETAILS

TRAINING MODULES

In order to provide you and your company the flexibility to complete the training course in separate modules, the following options are available. You can take them all at the same time or break it up over time in order to meet your busy bidding schedule.

Module 1 : Estimating Fundamentals – 2-Day of Instructor Led Training covering Estimating Fundamentals 101 & Plans & Take-Off 101

Module 2 : Estimating Software Training – 2 Days of Instructor Led Training including Estimating Software Basics 101

Module 3 : Estimating Bid Management – 1 Day of Instructor Let Training covering Estimating Bid Management 101

Module 4 : Hands-On Estimating Project (Optional) - 1 Day of Hands-On Training utilizing learned training skills to execute an entire estimating project.

PRICING

The following pricing applies to the Estimator-In-Training 505 Program. Discounts are available for pre-purchasing groups of modules. Students who complete modules 1-3 will receive a Certificate-Of-Training. Module 4 is optional.

- Module 1 - $1,000
- Module 2 - $1,000
- Module 3 - $500
- Module 4 (Optional) - $500

If Modules 1-3 are pre-purchased, a $300 discount will apply
If Modules 1-4 are pre-purchased, a $500 discount will apply

COURSE DETAILS

- Course will be held in Indianapolis, IN for individuals traveling from various locations
- Course can be held on-site for a minimum of 5 students
- Course can be “customized” to suit your company's need or industries served
- Classes will be scheduled on an “as-needed” basis depending on demand

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- Full payment is required prior to participation to schedule training resources and facilities
- A 2 week notice is required for cancellation and full refund
- After the 2 week notice students who do not attend scheduled training can participate in the next course offering

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