ASPE Richmond, Chapter 82 Highland Springs Technical Center - November 1, 2012

## Map

## **Construction Estimating Workshop #1**

## Agenda:

Overview of estimating: (30-45 minutes for this category)

- Instructor 1 -
  - 1. Take-offs (plans and scales provided)
  - 2. Calculations ("unit-in-place" method of pricing/summary. Quantity TO for each trade. Material-labor-equipment price per unit provided (i.e. SF, CY, EACH, LF, etc.). Then they can extend, total the costs, and add appropriate Instructor 2ups at the bottom of the estimating form)
  - 3. Bid period and bid day activity overview.
- Instructor 2
  - 1. What it's like to organize this effort as a general contractor.
  - 2. Overview of bidding structure (subs, general, self perform) and what each sub is typically responsible for doing.
- Instructor 3
  - 1. What it's like from a sub-contractor's perspective.
  - 2. Sub-contractor's other costs such as mobilization, overhead, and profit.

## Bid Simulation: (45 minutes)

- 30-40 students will breakup into the following teams:
  - Two competing general contractors (3 students each.) Instructor 2 is GC Coach.

Each general contractor team will be provided with the following preestablished lump sum bids:

- Sitework
- Framing
- Interiors
- Two or three of the following trades, will provide bids to either GC upon request of the GC: Instructor 3 is Sub-Contractor Coach.
  - Concrete (2 students each)
  - masonry (2 students each)
  - Roofing (2 students each)
  - Electrical (2 students each)
  - Mechanical (Plumbing & HVAC) (2 students each)
  - Roofing (2 students each)
- Subs and GC's will be given simple estimating sheets and Bid Forms.
  Simple construction documents will be issued (maybe a small ranch house).
- Then the bid period will start and last 30 minutes exactly. Instructor 1 is owner's agent. During that time, the generals will solicit bids from the subs. Everyone

bidding will estimate their trade including the generals self-perform work. Then with 12 minutes to go, a simple addendum will be issued that changes something and the affected trades will have to modify their calculations in some way. Another very simple addendum will be issued with 5 minutes left. Finally, everyone will have to scramble and get their bids turned in on-time.

• The bids will be read aloud and evaluated to determine if they were turned-in legally (signed, on-time, etc.)

Total time for complete workshop: Approximately 2 hours.