The PLANE Facts of Estimating

Aviation Department Outreach Workshop
December 12, 2013

City of Phoenix
WELCOME & OVERVIEW

- Expectations for Outreach and Why We Do These Workshops
- Why Are We Here
- Working with the Aviation Department
  - T3 Modernization Project
  - JOC projects
  - Other opportunities

These workshops are open to any small business firm interested in pursuing design and construction services and consultant opportunities, including concessions architects, on Aviation Department projects.
es·ti·mate
verb
/ˈɛstəˌmāt/

roughly calculate or judge the value, number, quantity, or extent of.
synonyms: calculate roughly, approximate, guess;

• Budget or Conceptual
• Lump Sum
• GMP
• Conceptual Design
• Schematic Design
• Design Development
• 50% - 100% Construction Documents
GOALS OF AN ESTIMATE

- Meet the owner's requirements and expectations without sacrificing budget
- Meet the design intent
- Reduce RISK!
TYPES OF ESTIMATES

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CHANCES OF SUCCESS 1 IN 2000

(Aviation Bureau of Labor Statistics)

FOR EVERY 100 CONTRACTORS THAT GO INTO BUSINESS

AFTER ONE YEAR IN BUSINESS

ONLY 5 CONTRACTORS ARE LEFT

FOR EVERY 100 CONTRACTORS WITH 1 YEAR OF EXPERIENCE

AFTER FIVE YEARS IN BUSINESS

ONLY ONE CONTRACTOR IS LEFT

CHANCES OF SUCCESS: 1 IN 2000

(US Bureau of Labor Statistics)
SO WHAT CAN BE DONE TO IMPROVE YOUR COMPANY’S CHANCES?

To get you from here

To here

And avoid ending up here!!!
UNDERSTAND THE CAUSES OF FAILURE

- Working Capital
- Business Capacity
- Your Contract
- Change Orders
- Your Customer
- Government Regulations
- Estimating Practices
UNDERSTANDING MARKUPS

- Overhead
- Cost of Work General Conditions
- General Conditions
- What is Profit?
  - “Assessment of Risk”
- Why should risk be assessed at different levels?
  - Labor
  - Material
  - Equipment
<table>
<thead>
<tr>
<th>OVERHEAD</th>
</tr>
</thead>
</table>
| • Office staff  
• Office and expenses  
• Indirect equipment (vehicle, gas, car insurance)  |
COST OF WORK GENERAL CONDITIONS

• Traffic control
• Scaffolding
• Lifts and hoisting
GENERAL CONDITIONS

- Project Manager
- Superintendent/field staff
- Lay down area and field office
### Working Capital Analysis

#### Cash Flow - Capitol Assets

<table>
<thead>
<tr>
<th>Description</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash on Hand</td>
<td>$100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable Less Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collections</td>
<td>$200,000</td>
<td>$0</td>
<td>$400,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Projected Cash Flow &quot;New Work&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Retention</td>
<td>($20,000)</td>
<td>$0</td>
<td>($40,000)</td>
<td>($10,000)</td>
</tr>
<tr>
<td></td>
<td>$180,000</td>
<td>$0</td>
<td>$360,000</td>
<td>$90,000</td>
</tr>
</tbody>
</table>

#### Cash Flow - Capitol Liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Deposits</td>
<td>8.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FICA - FUTA - SDI - SUTA</td>
<td>2.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Liability Insurance</td>
<td>3.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workman's Compensation</td>
<td>1.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>3.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable &quot;Materials&quot;</td>
<td>36.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overhead Expenses</td>
<td>0.8%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Phones</td>
<td></td>
<td></td>
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<tr>
<td>Equipment &quot;Trucks - Field Equipment&quot;</td>
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<tr>
<td>Fuel</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Small Tools</td>
<td></td>
<td></td>
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<tr>
<td>Safety Equipment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Office Staff</td>
<td>1.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountant &quot;Part Time&quot;</td>
<td>0.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager(s)</td>
<td>4.0%</td>
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<tr>
<td>Project Engineer(s)</td>
<td>1.8%</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Estimator</td>
<td>3.0%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Marketing</td>
<td>0.8%</td>
<td></td>
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<tr>
<td></td>
<td>$1,848</td>
<td>($172,152)</td>
<td>$175,848</td>
<td>($12,376)</td>
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<tr>
<td></td>
<td>($170,304)</td>
<td>$5,544</td>
<td>($6,832)</td>
<td></td>
</tr>
</tbody>
</table>
SUCCESS in the PRE-BID

- Good Estimating Practices
- Identify the Correct Scope
- Read Specifications
- Provide Schedule Requirements with Bid
SUCCESS during CONSTRUCTION

- Monitor Schedule
- Change Orders
- Trade Compression
- Exceptional Planning
<table>
<thead>
<tr>
<th>PREVENTATIVE MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve Estimating Practices</td>
</tr>
<tr>
<td>• Perform a complete and thorough review of plans and specs</td>
</tr>
<tr>
<td>• Improve presentation of your proposal</td>
</tr>
<tr>
<td>• Qualify what is included in your bid</td>
</tr>
<tr>
<td>• Improve planning</td>
</tr>
<tr>
<td>• Brief YOUR superintendent on scope and plan</td>
</tr>
<tr>
<td>• Control Company Growth!</td>
</tr>
</tbody>
</table>
REMEmBER

You must bid the WORK and NOT the COMPETITION!
CONTACTS

T3 Modernization Design-Build Team:
Hunt/Austin/DWL/Corgan/Smithgroup JJR
Simeon Terry (Austin) 214-356-2045

For JOC Subcontracting Opportunities
•Banicki Construction (Civil) Jeff Abraham 602-819-3783
•CSW (Civil) Matt Campbell 602-768-0620
•Brycon Construction (Buildings) Kevin Fries 602-920-6341
•Caliente Construction (Buildings) Doug Horton 602-421-7345

REMEMBER
City of Phoenix Newsletter subscription for Construction Opportunities:
http://lists.phoenix.gov/fms/eas-nwsltrsubscribe.html
CITY OF PHOENIX
AVIATION DEPARTMENT CONTACTS

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QUESTIONS