Bid Analysis and Review

Overview by
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LADOTD Cost Estimate &
Value Engineering Director

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Topics Covered

- Why Analyze Bids
- Terms and Definitions
- Bid Analysis
- LADOTD Bid Analysis Lite
- Confidentiality
- Bid Review

- Factors to Consider
- Additional Factors to Consider
- Making Recommendations
- Documentation
- Bid Review Form
Why Analyze Bids?

➢ To protect tax payer’s money
Why Analyze Bids?

2016 Louisiana Standard Specifications For Roads And Bridges

102.08 IRREGULAR BIDS
Why Analyze Bids? (2016)

102.08(11) If unit prices are obviously distorted or unbalanced to reflect an advantage to the contractor which would result in undue expenditure of public funds and/or overrun of total cost of project.
102.08(k) If unit prices are obviously distorted or unbalanced to reflect an advantage to the contractor which would result in undue expenditure of public funds and/or overrun of total cost of project.
Why Analyze Bids?

Title 23 of the Code of Federal Regulations (CFR) 635.114(c)
23 CFR 635.114(c): Following the opening of bids, the STD (State Transportation Department) shall examine the unit bid prices of the apparent low bid for reasonable conformance with the engineer's estimated prices.
Why Analyze Bids?

23 CFR 635.114(c) Continued: A bid with extreme variations from the engineer's estimate, or where obvious unbalancing of unit prices has occurred, shall be thoroughly evaluated.
Why Analyze Bids?

23 CFR 635.114(d): Where obvious unbalanced bid items exist, the STD's decision to award or reject a bid shall be supported by written justification. A bid found to be mathematically unbalanced, but not found to be materially unbalanced, may be awarded.
According to 23 CFR 635.102:

**Mathematically unbalanced bid** means a bid containing lump sum or unit bid items which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs.
Terms and Definitions

According to 23 CFR 635.102:

**Materially unbalanced bid** means a bid which generates a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the Federal Government.
Bid Analysis

A bid analysis will be performed for all projects that are bid.
Bid Analysis

Usually begins by comparing the bids to LADOTD’s estimate to determine if the bid seems “reasonable” to LADOTD.
Bid Analysis

If the low bid does not seem "reasonable", other comparisons are made in order to explain the discrepancies.
Bid Analysis

One method of comparison is used to determine whether or not an item is significant to the contract.
Bid Analysis

An individual item will be considered significant to the contract if any bidder has an item included in the bid where the absolute value of the difference between the total cost of the item in the bid and the estimated cost of the item, expressed as a percent of the estimated total contract cost, is
Bid Analysis

\[ \frac{|\text{Bid Item Total} - \text{Est. Item Total}|}{\text{Est. Contract Total}} \]

- Greater than 0.50% for contracts less than $2,000,000
- Greater than 0.25% for contracts $2,000,000 and larger.
Bid Analysis

An example of an item that is significant to the contract for a $3 million project is as follows:

- Low Bidder bids $1 per LB for 75,000 LB = $75,000
- Estimate is $0.75 per LB of 75,000 LB = $56,250
- Difference = $75,000 - $56,250 = $18,750
- $18,750/$3 million = 0.63% > 0.25%
Bid Analysis

Another method of comparison is used to determine whether or not an item is significantly unbalanced.
Bid Analysis

An item will be considered **significantly unbalanced** if the difference between the low bidder's unit price and the estimate, expressed as a percentage of the estimate, is
## Bid Analysis

\[
\frac{(\text{Bid Item Unit Price} - \text{Est. Item Unit Price})}{\text{Est. Item Unit Price}}
\]

- Greater than +50%
- OR
- Is less than -75%
Bid Analysis

An example of an item that is **significantly unbalanced** is as follows:

- Low Bidder bids $3 per EACH for 1,000 = $3,000
- Estimate is $14 per EACH for 1,000 = $14,000
- Difference in Unit Price is $3 - $14 = -$11
- -$11/$14 = -78.57% < -75% (Significantly Unbalanced)
- An item may be significantly unbalanced, while not necessarily significant to the contract.
LADOTD Bid Analysis Lite

- This tool identifies items that significantly impact construction cost based on how the low bidder bid.
- Also identifies items whose unit prices were bid significantly different from what was estimated.
LADOTD Bid Analysis Lite

- Allows you to compare these low bid items with the other contractor’s bids.
- A service request can be submitted from the La. DOTD intranet home page to have La. DOTD Bid Analysis Lite set-up on your workstation. Be sure to mention in the request to coordinate with Mr. Mike Curley.
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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**Analyze Bid**

**Raw Data:** Bid Data

**Bid Tabs A:** Formatted Bid Results with significant Items Highlighted that for a Contract Amount:

Less Than $2,000,000, contributed to more than 0.50% of the difference in the Total Proposal Cost.

OR
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<td>202-02-0400</td>
<td>Removal of Bridge-Sta. 120+03.58: 26 x 212 Concrete deck and Bents with steel I beams.</td>
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<td>1</td>
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<td>Clearing and Grubbing</td>
<td>ACRE</td>
<td>3.16</td>
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**Project Number:** H.12345.6

**Project Name:** LA 34: Local Town to Farmers Market

**Worktype:** B1

**District:** 08

**Parish:** 64

**Number of Bidders:** 6

**Letting Date:** 9/16/2017

**Estimate Total:** $15,629,589.23
In the snapshots of the example project used in this presentation, all names, characters, and incidents portrayed in these snapshots are fictitious. No identification with actual persons (living or deceased), places, buildings, and products is intended or should be inferred. No person or entity associated with this project received payment or anything of value, or entered into any agreement, in connection with the possible depiction of bid collusion. No animals were harmed in the making of these snapshots, however, there may have been some emotional distress.
Confidentiality

Item Level Engineer’s Estimated Unit Prices – should never be reported outside the department, especially during the bidding process.
Confidentiality

Engineer’s Estimate of Total Cost – should only be made available after all final bids have been received. Prior to final bids, costs are only reported using standard cost ranges.

See Section 4.b, Confidentiality of The Engineer’s Estimate, at the following link:
https://www.fhwa.dot.gov/programadmin/contracts/ta508046.cfm
Bid Review

➢ There is no such thing as a default award.

➢ Every project must be reviewed for irregularities, imbalances or other factors which could affect the bid, award or construction of the project.
Bid Review

- When the low bid comparison to the estimate falls outside the 75% to 110% range, the explanation should address reasons why the total low bid price was not in line with the estimate.
Bid Review

- Estimated unit prices for all items identified as being significantly unbalanced must be reviewed for correctness.
- Estimated quantities for all items found to be significant to the contract will be checked and verified to confirm that there are no errors.
Bid Review

- If estimated unit prices and quantities are correct, other factors/explanations for the identified differences must be explored.
Factors to Consider

- **Number of bids submitted** – This is usually a good indication of the level of competition involved. When there is less than 3 bidders, prices tend to be higher.
Factors to Consider

- **Urgency of the project** – Projects with accelerated schedules tend to involve higher costs.
Factors to Consider

Distribution or Range of bids received – If the bids are not consistent with one another, this may be an indication that the work is not clearly identified.
Factors to Consider

➢ **Identity and geographic location of bidders** – in general, contractors closest to the project site are likely to have a competitive edge.
Factors to Consider

Current market conditions – Material/Labor costs may increase in market value due to shortages.
Factors to Consider

- **Contractor work load** – If the logical bidders for a project are already involved with plenty of other projects that were previously let in that same area, they may bid higher prices to make it worth their while or not bid at all, leading to a lack of competition in the area.
Additional Factors to Consider

- Relative size of the project/quantities
- Location of the project
Additional Factors to Consider

- Difficulty of working conditions – Such as nearby utilities or crowded urban areas where buildings, intersections, etc., may hinder access.
Additional Factors to Consider

- Work zone lane closure restrictions
- Complexity, phasing
Additional Factors to Consider

- Check with La. DOTD Head Quarters Area Engineer to determine if there may be any field conditions or constructability issues that could cause the discrepancies.
Additional Factors to Consider

- If applicable, include design consultant’s comments.

- If available, review previous bid review comments for similar projects.
Additional Factors to Consider

FHWA’s “Guidelines on Preparing Engineer's Estimate, Bid Reviews and Evaluation”

http://www.fhwa.dot.gov/programadmincontracts/ta508046.cfm
Documentation

It is always a good idea to keep backup material for documentation, in case questions arise in the future concerning the bid review. It may also come in handy for future bid review.

Keep a copy of...
Documentation

- The bid analysis.
- The identified factors affecting the bid results.
- Comments that are pertinent to the bid review.
Bid Review Form

In completing the Bid Review Form, include the following:

- Identified factors affecting the bid results.
- Recommended Actions such as...
Bid Review Form

- Award
- Reject
Bid Review Form

- Additional recommendations such as items of work to be monitored that may pose a risk during construction due to the way they were bid.

- Explanation for recommendations.
Bid Review Form

In the event it is recommended to award a project with a price that is outside the range of 75% to 110% of the cost estimate, a comment should be included suggesting that we would not expect a different result if the project were re-advertised.
Bid Review Form

Remember to stick to the facts and refrain from including any personal opinions.

A simple statement that prices were higher or lower than estimated is not an acceptable explanation.
Questions?
Comments?

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