

## **2.27 ESTIMATE REVIEW BY ENGINEERING ESTIMATES AND MARKET ANALYSIS UNIT**

### **2.27.01 Engineer's Estimate**

On the fundamental level, the Engineering Estimates and Market Analysis (EEMA) Unit has two roles to play in the CDOT project development process: efficient allocation of funds and vigilant protection of public funds. The former is done by helping set the project budgets and the latter is done mainly through post-bid analyses to decide whether to award a project to the apparent low bidder.

Estimates produced/reviewed by EEMA are called Engineer's Estimates (EE). EEMA prices only biddable items. Non-bid items are priced by the region project team. Together they form the basis for total project costs, or Preliminary Detailed Estimates.

Project design and cost estimates are integral parts of the project development process which is iterative in nature. An estimate that is higher than previously thought may lead to reduction in project scope or increased funding. On the other hand, a lower estimate may lead to increased project scope or funds moved away from the current project. Currently, CDOT only commits real funds to a project 90 days before Ad.

The various estimates produced prior to FOR are parametric in nature. They are based on information available during a timeframe of 0 to 60% design and are subject to scope and market changes as the design process evolves. These estimates are preliminary and may be used to establish a preliminary project construction budget. However, the confidence placed on them should be at an appropriate level.

At FOR, the project is fully itemized for the first time and the EE revised to a higher level of accuracy. The EE produced based on FOR plans and specs, and the revisions based on comments at FOR, should be the basis for setting or adjusting project construction budgets.

After the FOR EE is completed, neither EEMA nor the project team should change the EE without letting the other side know.

There may be many reasons an EE could be modified, including but not limited to:

1. The scope has been changed;
2. The quantities of certain major items have been changed dramatically;

3. New quotes are available from the supplier for major items;
4. The market/trend in general has changed dramatically.

When considering making changes to EE after FOR, one should keep the “efficient allocation of funds” criteria in mind. For EEMA, the most important thing is to pass the new information to the project team and not just to make the EE more accurate. For the project team, the most important thing is to communicate updated project info to EEMA, the Region and CDOT management in a timely manner so that sound decisions may be made based on the most up-to-date information.

When a project is under Ad, adjustments to the EE should not occur. At time of bid opening, if a large difference occurs between the EE and apparent low bid, reasons should be documented to the project file and appropriate processes followed for award, where applicable. If the total cost of the project is projected to be higher than the Approved Commission Budget Level, the project team should follow Policy Directive 703.0 (Effective August 27, 2014) to acquire additional funding.

Of note, CDOT has been granted a three-year relief from the automatic rejection Statute starting April 7, 2015. For cases where there are fewer than three bidders and the low bid is higher than the EE by previous statutory thresholds, award can still occur with Executive Director review and approval.

### **2.27.02 Estimate Security**

Engineer’s Estimates are confidential until award. Follow Procedural Directive 511.1, Security and Confidentiality of the Engineer’s Detailed Estimate.

### **2.27.03 Additional References:**

1. 23 CFR Part 630B, Plans, Specifications and Estimates
2. HB15-1046, Highway Project Contract Amount Limit Waivers, Effective April 2015
3. *CDOT Manual on Bidding and Award Procedures (Effective July 2014, CDOT Procedural Directive 303.01, Award of Contract – Justification of Bid was repealed)*
4. *CDOT Procedural Directive 511.1, Security and Confidentiality of the Engineer’s Detailed Estimate*
5. Estimated Total Project Cost (see [Section 1.02](#) of this manual)