

# CEE 4333 - Estimating Planning and Control

*Fall 2005*

*Amlan Mukherjee*

## **Homework 1**

**Homework due: 09/14/05, in class**

September 7, 2005

### **Problem 1**

Review the bids included in Appendix A. Which one is the lowest responsible bid? *10 Points*  
Are there any clerical mistakes in the bids? If so, would they affect the selection of the lowest responsible bid? Why or why not?

### **Problem 2**

Perform a payment schedule calculation taking bid #4 (Appendix A) as the owner's estimate, and bid #2 (Appendix A) as the contractor's estimate. Is there evidence of an unbalanced bid? Why or why not? *10 Points*

### **Problem 3**

The CEO of the Denver Construction Company is concerned about the fact that the company is bidding a little bit too high in the latest projects, thus reducing their competitiveness. Therefore, she has ordered cost control audit reports in several ongoing projects. Calculate the cost audit report for one of those projects based on the information provided in Table 1 Does the report confirm the CEO's worries? *10 Points*

Table 1: Available Data

Division Number	Estimated Total Cost	Percentage of Completion	Cash Expenditures
1:	135,500	50	60,600
2:	120,600	95	125,500
3:	607,800	45	210,800
4:	245,400	25	52,900
Others:	2,748,500	0	0

Estimated total cost, percentages of completion and expenditures by division:  
Inventory Valuation:

- 8,000 concrete masonry units \$1.5 per unit
- 7,500 units of lumber for forms \$0.5 per units
- 350 sheets of plywood for forms \$30 per sheet

Accounts Payable:

- \$4,000 for concrete masonry units
- \$1,000 for plywood sheets
- \$35,000 for concrete pouring