CEE 4333 - Estimating Planning and Control

Fall 2005 Amlan Mukherjee Homework 2

Homework 2 Homework due: 09/21/05, in class

September 13, 2005

Problem 1

Using the 2003 square foot costs information provided to you, estimate the combined design-construction cost of a 3 story Hospital with a total area of 85,000 SF to be built in the year 2008 in Seattle. The facility will have face brick with structural facing tile in the exterior walls supported by a reinforced concrete framing system. It will also have a story height of 10ft, and a total outer perimeter of 900LF. In addition it requires a closed circuit TV system for patient monitoring with a single station camera and monitor on each floor.

15 Points

The owner also wants a basement of area 10,000SF. She plans to use the basement for pathology labs starting in 2011 and is debating whether she should equip the basement with conductive flooring, oxygen piping and curtain partitions now or leave it for a later.

Provide the owner with a conceptual cost estimate for the facility and your suggestions regarding when she should complete the basement, now or later.

Use appropriate cost indices and an inflation rate of 3% and mention all assumptions you make.

Problem 2

Text book problem 4.1. 5 Points

Problem 3

Text book problem 4.3. 5 Points

Problem 4

Text book problem 4.8. 5 Points