

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Computers in Construction Estimating

Impact on Estimating Process

- ❑ Free Estimator
- ❑ Expert Systems
- ❑ GIGO
- ❑ Improve Precision Level
- ❑ First Run in Tandem

Computers in Construction Estimating

Estimating & Spreadsheet

- ❑ Design of Spreadsheet
 - Columns & Rows (Cells)
 - Mathematical Functions
- ❑ MS Excel

Computers in Construction Estimating

Dedicated Estimating Software

- ❑ A Variety is Available
- ❑ Simple vs. Integrated
- ❑ CAD, Estimating, Job Costing, & Scheduling Software

Computers in Construction Estimating

Dedicated Estimating Software

- ❑ Calculation Methods?
- ❑ Assumptions?
- ❑ Proper Training?

Computers in Construction Estimating

Common Elements of Most

1. Database

- ❑ Codes
- ❑ Items
- ❑ Historical Cost
- ❑ Productivity Info
- ❑ Timberline's (Fig. 2-4)

Computers in Construction Estimating

Common Elements of Most

2. Quantity Takeoff

- ❑ Item Quantities
- ❑ Variables and Formulas
- ❑ Digitizer
- ❑ CAD

Computers in Construction Estimating

Common Elements of Most

3. Cost Calculations

- ❑ labor
- ❑ Material
- ❑ Equipment
- ❑ Timberline Precision (Fig. 2-5)

Computers in Construction Estimating

Common Elements of Most

4. Bid Total

- ❑ Overhead
- ❑ Markup
- ❑ Timberline's Precision (Fig. 2-6)

Computers in Construction Estimating

Computer Aided Estimating (CAE)

- ❑ Exercise
- ❑ Civil CAD
- ❑ Others?
- ❑ Internet Search & Report

Questions?

Final thoughts

Thank you for listening!