Engineer's Estimate System (EES)

WFLHD
User's Guide

Table of Contents

Some Useful Files

- Engineer's Estimate System - USC

    T:\Contract\EE_FP03_usc\Lastees\lastees8.exe

- Engineer's Estimate System – Metric

    T:\Contract\EE_FP03_metric\Lastees\lastees8.exe

- Pay Item Table

    http://wflnet.wfl.fhwa.dot.gov/departments/acquisition/specifications.htm

- Files and Information for A/E's

    ftp://198.145.188.2/bid_hist_0302/EES_AE_WFLHD/

- Excel Spreadsheets
    I:\Project_Dev\Design\Forms\Estimate.xlsx
    I:\Project_Dev\Design\Forms\Summary.xlsx
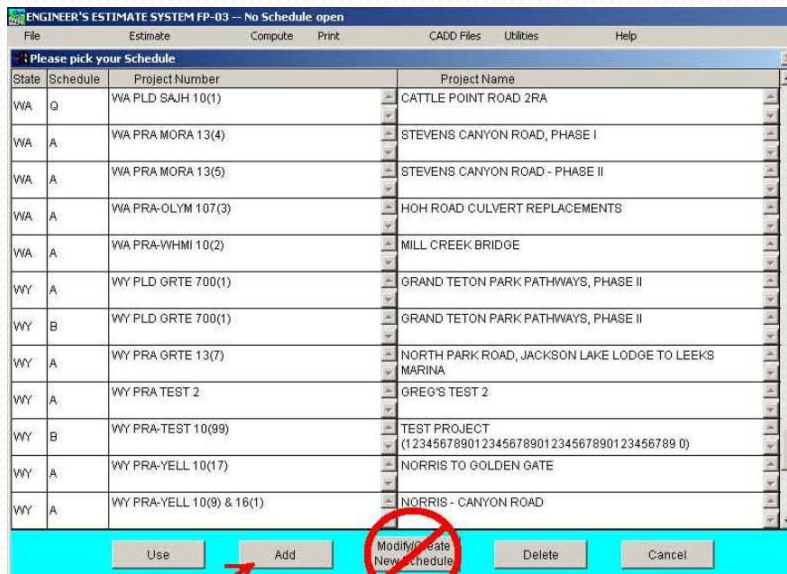
Excel Spreadsheet – Estimate

- The Estimate.xlsx spreadsheet is used to create the Engineer's Estimate and Summary of Quantities <u>prior</u> to final design and sign-off.

- This spreadsheet was developed by Steve Chapman as an interim product until incorporation of the new EEBACS system.

Excel Spreadsheet – S of Q

- The Summary.xlsx spreadsheet is used to create the <u>Final</u> Summary of Quantities plan sheet.

- This spreadsheet utilizes outputs from the EES program (i.e., TX1, TX2, etc.)

- The EES **<u>MUST</u>** be used to develop the final Engineer's Estimate and the Summary of Quantities.
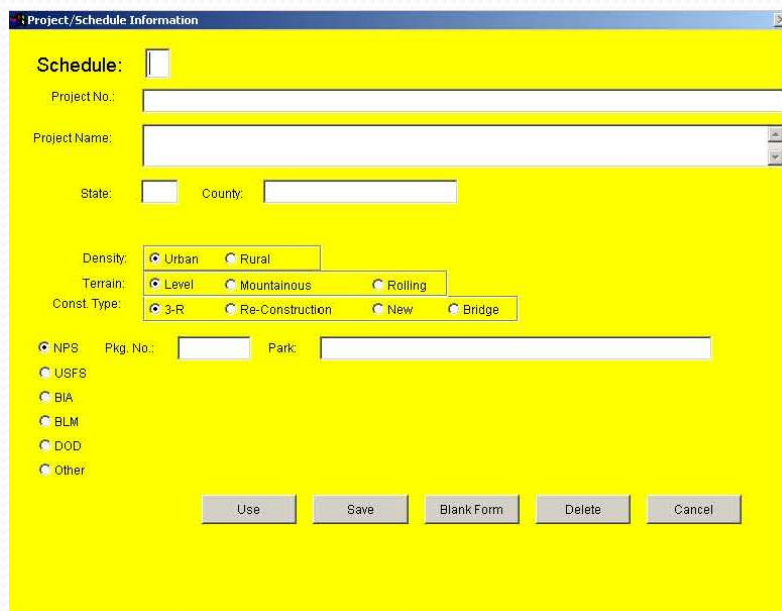
EES – Starting A New Project

- Use the "Add" button.
- Do NOT use the "Modify/Create New Schedule" button.

Use the "Add" button to create new projects.

EES – Starting A New Project

- A new dialog box will open. (Project/Information Screen)
- Enter data.
- Click the "Use" button when done.

EES – Starting A New Project
Creating Multiple Schedules

- A design project may have multiple schedules (i.e., Schedule A, Schedule B, etc.), however, within the EES, schedules should be created as if they are separate projects.

- Use the "Add" button to create a new project. The project information can be the same, with only the "schedule" being the differing field.

EES – Starting A New Project
Creating Multiple Schedules

- Do NOT use the "Utilities" pull-down and "Copy an Estimate" pick choice.

Do NOT use this function to generate multiple schedules.

Create a new project, with a different schedule designation using the "Add" button

EES – Entering Project Information

- On start-up of the project, the main dialog box, shown below, will open.
- Use the "Estimate" pull-down menu to enter additional project information.

Initial and main dialog box

Additional project data can be entered via the "Estimate" pull-down menu and choosing the "Modify Acc't Summary" pick choice.

EES – Entering Project Information
The "Estimate" Pull-Down Menu – Schedule ID Tab

- Enter relevant information.
- Information entered is at the designer's discretion.

EES – Entering Project Information
The "Estimate" Pull-Down Menu – Account Numbers Tab

- Account information is required if you have more than one account and will be using the Acc't Split function. (More on this later)
- Account information is optional if you ONLY have one account.
- Account information can be the account string #, a description, etc.

EES – Entering Project Information
The "Estimate" Pull-Down Menu – Schedule Cost Tab

- This tab contains information beyond the normal construction pay item costs.

- Information includes auto-calculated items. (i.e., Materials and Smoothness incentives)

- Information includes designer entered items. (i.e., Partnering or other items)

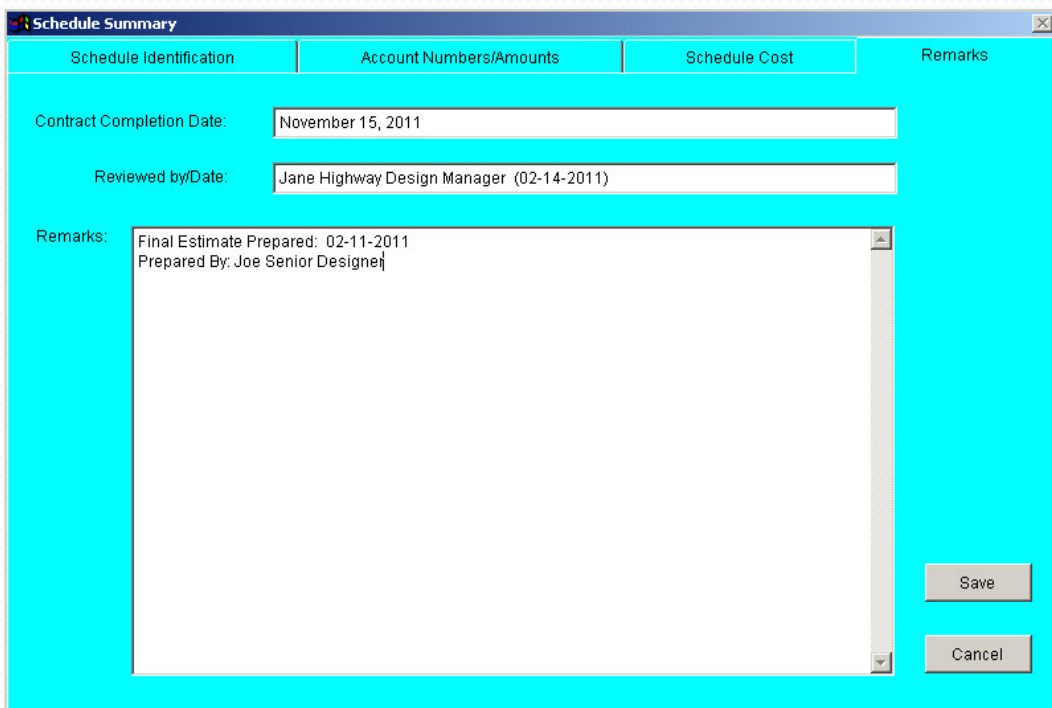- Asphalt binder incentive is a special case and will be discussed later.

EES – Entering Project Information
The "Estimate" Pull-Down Menu – Remarks Tab

- Enter relevant information.
- Information entered is at the designer's discretion.

EES – Entering Project Information
The "Cadd Files" Pull-Down Menu – Column Headings

- Enter the column data prior to entering quantity and cost information.

- Click the "Save CADD headings" button when done.

- The "Path for CADD files" text box and the "Create files" button will be discussed later.

- The "Create and Print files" button is not used.

EES – Main Dialog Box
Entering Pay Items, Quantities, and Cost Data

- Pay items can be added using the "Add From Master Item Table" button.

- Quantities, allowances, and unit prices can be directly entered by the designer.

- In the case of LPSM items, the designer can enter the dollar value directly in the "Unit Price Used" box.

EES – Main Dialog Box
Additional Information - Other

- The number of bid decimals is shown for each pay item.

- Items can be designated as CQ.

- They type of incentive, if any, is shown here. Note ~ The only time this setting needs to change is if Type 5 Pavement Smoothness is specified. In this case, switch the setting from "Smooth & Mat" to "Materials".

- Do NOT change the account # in this dialog box.

EES – Main Dialog Box
Additional Information – Mobilization

- The Mobilization item is traditionally a Lump Sum (LPSM) item.

- Mobilization is generally a percentage of the final construction cost and can usually be left to self-calculate.

- The designer has the option to override the auto-calculation and enter a set value.

EES – Main Dialog Box
Additional Information – Flagger Rate

- The unit of measure used in WFL for Flaggers is Fixed Hr Rate.   (Item # 63509-1000)

- This is a Davis-Bacon rate that is site specific, often a function of the distance from the project site to a major city or post office.

- Flagger rates are subject to change on a weekly basis. (FLH has no control over changes.)

- Designers are welcome to ask for Flagger rates and updates at any stage of their project, but <u>MUST</u> acquire an update for the Final Engineer's Estimate and just prior to Contracts Hand-Off.

- To request flagger rates contact:

    Greg Kwock (360.619.7987 / <u>greg.kwock@dot.gov</u>)

    LeeAnn Bush (360.619.7746 / <u>leeann.bush@dot.gov</u>)

EES – Main Dialog Box

Additional Information – Existing and New Pay Items

- Existing pay item descriptions can be supplemented. Use parenthesis to enclose additional description.
- Existing pay item descriptions cannot be deleted or modified.
- Contact Greg Kwock to request new pay items. (360.619.7987 / greg.kwock@dot.gov)

EES – Acc't Splits

- Acc't Splits should be done after all pay items and quantities have been entered.

- Splitting accounts are done via the Utilities pull-down menu and "Acc't No. Splits" pick choice.

- Each item's quantity is individually split

- Note ~ this is the ONLY area you will be able to see how the item was split (until you print the EE details)

EES – Computing Total Project Cost
Adding Incentives

- From the "Estimate" pull-down menu, "Schedule Cost" tab, you will see costs for incentives, partnering, CE, and any other costs you add beyond normal pay items.

- If you have a 40101 pay item in your EE, then you will need to add an additional cost for Asphalt Binder Incentive. This cost should be 1% of the cost of your 40101 pay item.

EES – Computing Total Project Cost
Updating Total Costs - Mobilization, Incentives, and CE

- Mobilization and CE costs ~ Reenter the % required <u>whenever the EE is updated</u>.

- Materials and Smoothness incentives are auto-calculated at 5% of the total cost of the pay items in question.

- The "Save" button MUST be clicked or the values shown here will not be transferred to your finalized EE.

EES – Computing Total Project Cost
EES Print-Out: Summary Page

EES – Final Summary of Quantities
Creating txt Files To Use In the Summary.xlsx Spreadsheet

- To produce the txt file that is used to generate the Summary of Quantities sheet, go to the Column Headings dialog box.

- In the text box titled "Path for CADD files:", type in the path you want to save the txt files to. (Note ~ copy and paste will not work here.)

- Do NOT change the filename.

- Click the "Create files" button.

- Follow the instructions in the Summary.xlsx spreadsheet to generate the Summary of Quantities.