123 Engineer's Project Cost Development

123.1 General

Establishing a complete and accurate construction project cost is a critical aspect of project development. The engineer is responsible for developing and submitting an Engineer's Project Cost to the district at every phase of a project in accordance with the ***Engineer's Project Cost Handbook***. Ensure all scope and risk items are included and accounted for in the construction project cost. For lump sum items, provide detailed justification of included items and cost. Use the following documents to develop a construction project cost at every phase of the project, as available:

(1) The contract plans set, including all component sets, e.g., structures, architectural.

(2) The specifications, including the supplemental specifications and technical special provisions.

(3) The ***Standard Plans*** referenced on the key sheet of the contract plans.

(4) The current ***BOE Manual***.

(5) The Estimated Quantities Report.

Modification for Non-Conventional Projects:
Delete ***FDM 123.1*** and replace with the following: **123.1 General** Establishing a complete and accurate construction project cost is a critical aspect of project development. The engineer is responsible for developing and submitting an Engineer's Project Cost to the district at every phase of a project in accordance with the ***Engineer's Project Cost Handbook***. Ensure all scope and risk items are included and accounted for in the construction project cost. For lump sum items, provide detailed justification of included items and cost. Use the following documents to develop a construction project cost at every phase of the project: (1) The Concept Plans, including an Estimated Quantities Report, if available. (2) The Request for Proposal or Request for Qualification.

123.2 Basis of Estimates

The ***Standard Specifications*** establish the method of measurement, basis of payment, and pay items for work specified for road and bridge construction. The ***BOE Manual*** contains design aids, notes, pay item structure, a list of currently open pay items, and computation information to aid the engineer in developing the construction project cost.

Pay items for the various categories of construction should be identified as those components are completed. For example, pay items for base and pavement construction may be identified as the pavement design is completed; signal pay items may be identified as the signal design is completed. The engineer preparing the design and specifications should be knowledgeable about what work is to be done and which pay items are needed.

Use the ***BOE Manual*** to identify pay items on all types of projects, e.g., resurfacing, widening, safety, bridge. If any work on a project is not covered by existing specifications, then a technical special provision and possibly a new pay item description, unit of measure, and basis of payment may be required. If a desired pay item is not available, contact the FDOT Project Manager or District Estimates Office for assistance. Additional details for requesting pay items are available in ***Chapter 6*** of the ***BOE Manual***.

Modification for Non-Conventional Projects:
Delete ***FDM 123.2***.

123.3 Designer Interface for AASHTOWare Project Preconstruction™ (formerly Trns•port)

The Designer Interface, available through the Forecasting and Performance Office webpage via the Webgate login, is used to build categories and to add pay items and quantities to categories. Contact the District Estimates Office for more information.

Modification for Non-Conventional Projects:
Delete ***FDM 123.3*** and replace with the following: **123.3 Designer Interface for AASHTOWare Project Preconstruction™ (formerly Trns•port)** Use the ***BOE Manual*** to select the design-build pay items.

123.4 Estimated Quantities

123.4.1 Compiling and Reporting Quantities

See ***FDM 902*** for information on compiling and reporting quantities. See the ***BOE Manual*** for further details. Place detailed documentation on calculations in the project's Calculations folder and include in the CADD_[FPID].ZIP file with the Final Plans Submittal. See the ***CADD Manual*** for details.

123.4.1.1 Plan Quantity

The Department's current practice is to provide for final payment under the plan quantity concept for a large number of commonly used items. Refer to the ***Standard Specifications*** to determine if an item is paid by plan quantity. This concept requires that the estimated quantities be calculated and documented as accurately as possible. Do not include contingencies in the quantity calculations for plan quantity pay items. The Design EOR is responsible for the final pay quantity for all plan quantity items.

123.4.1.2 Final Measurement Concept

The Design EOR is responsible to estimate a quantity for all final measure items. Because there are many variables associated with these items, the final pay quantity will be determined by measurements performed in the field when the item is being used or constructed.

123.4.2 Breakdown of Quantities

Pay item quantities are loaded into the Designer Interface system by category, to reflect the work shown in each design group. When incidental work from one design group is included in the component plans for another group, the pay items must continue to be loaded in the appropriate category for the work to be completed. When a contract contains more than one Financial Project ID, pay item quantities for each project are loaded separately. The Estimated Quantities Report must show separate quantities for each project. Only the Summary of Pay Items run from the Department's WebGate Reporting menu will show the project totals, as well as the combined proposal/contract total. Additional information is available in ***Chapter 9*** of the ***BOE Manual***.

123.5 Contract Time

Contract duration is the time required for the complete construction of the contract. Pay items measured per day need an accurate estimate of construction duration. Before completion of the design project, the plans package is submitted to the District Construction Office scheduling engineer for establishing the contract duration. Large complex projects should have the desired contract duration established earlier in the design process.

Modification for Non-Conventional Projects:
Delete FDM 123.5.

123.6 Alternative Contracting Practices

When alternative contracting is called for by the Department, coordinate the PS&E preparation with the FDOT Project Manager.

Modification for Non-Conventional Projects:
Delete the previous paragraph and replace with the following: When design-build contracting method is called for by the Department, coordinate the project cost development with the FDOT Project Manager.