

## Chapter 4

# PAY ITEMS AND ESTIMATES FOR ALTERNATIVE CONTRACTS

### 4.1 General Information

This chapter includes information to the designer and estimator. Additional instructions may be provided in the Construction Project Administration Manual (CPAM) and Estimates Handbook.

Designers should work with the District Specifications and Estimates Office(s) to ensure that the appropriate specifications and pay items are incorporated into the Alternative Contract.

### 4.2 Lump Sum Proposals

Lump sum contracting involves the contractor providing the Department with a lump sum price to complete a project, as opposed to bidding on individual pay items and quantities. The contractor is provided a set of bid documents and required to develop a lump sum bid for all work for the project.

#### 4.2.1 Pay Items

Lump Sum proposals consist of one or more Lump Sum projects. The following is an example of a typical Lump Sum projects' pay items:

Pay Item	Description	Unit	Qty
999-2	Lump Sum Contract, Alternative Bidding (123456-1-52-01)	LS	1
999-25	Initial Contingency Amount, Do Not Bid (123456-1-52-01)	LS	1

Supplemental descriptions for each lump sum pay item are necessary to distinguish between projects when more than one project is in a proposal. See additional guidance in Chapter 9.

Complete Summary Boxes/Tabulation Sheets or Summary Tables, in accordance with Chapter 8, are still required for a lump sum project. Designers enter Pay Items in a duplicate project with the letters "LS" appended to the project number and a duplicate proposal is created with the letters "LS" appended to the proposal number, for estimating purposes.

#### 4.2.2 DQE Instructions

Estimators will prepare a detailed estimate for the duplicate "LS" projects and proposal

and enter the total amounts in the projects and proposal used for bidding purposes.

### 4.2.3 Estimating Guidance

Ensure all pay items are included in Summary Boxes/Tabulation Sheets or Summary Tables in the plans.

## 4.3 Design-Build Proposals

Design-Build is a special type of lump sum project and proposal which combines the design and construction phases of one or more projects into a single proposal.

### 4.3.1 Pay Items

Design-Build proposals consist of one or more Design-Build projects. The following is an example of a typical Design-Build proposals' pay items:

Pay Item	Description	Unit	Qty
0-50-4	Design / Build, Bridge Construction (123456-1-52-01)	LS	1
0-50-4	Design / Build, Bridge Construction (123456-1-52-01)	LS	1
0-50-4	Design / Build, Bridge Construction (123456-2-52-01)	LS	1
999-16	Partnering, Do Not Bid (123456-1-52-01)	LS	1
999-20-1	Disputes Review Board, Meeting-Do Not Bid	DA	55
999-20-2	Disputes Review Board, Hearing-Do Not Bid	EA	2
999-25	Initial Contingency Amount, Do Not Bid (123456-1-52-01)	LS	1
999-25	Initial Contingency Amount, Do Not Bid (123456-2-52-01)	LS	1

Supplemental Descriptions for each lump sum pay item are necessary to distinguish between projects when more than one project is in a proposal. See additional guidance in Chapter 9.

### 4.3.2 DQE Instructions

Design-Build projects and proposals may be estimated in either LRE or DQE. Estimators will prepare a detailed estimate for the duplicate "DB" projects and proposal and enter the total amounts in the projects and proposal used for bidding purposes.

At this time the dollar amount is restricted to a maximum amount of \$99,999,999.99. If the Design-Build pay item estimated amount or anticipated bid amount is \$100,000,000.00 or more, enter multiples of the same pay item which will be combined for a total amount.

### 4.3.3 Estimating Guidance

An allowance for the design work is estimated either in LRE or DQE to account for the design fees for each project.

Even though Design-Build proposals follow a different procurement process than traditional Design-Bid-Build proposals, every Design-Build project and proposal has an Authorization Estimate and Official Estimate estimated in DQE by the Estimator.

#### **4.4 Push-Button/Work Document Proposals**

Push-button proposals are used to expeditiously resolve state roadway deficiencies at various locations concerning signalization, signing, pavement, pavement markings and other miscellaneous roadway deficiencies for a pre-determined contract term. Push-button proposals may be commonly referred to as Indefinite Delivery/Indefinite Quantity, Job Order, Task Work Order, or Work Document proposals. This contracting process establishes a defined scope of work to be completed by the Contractor and also includes establishing unit cost prices for predetermined work items which may be completed by the Contractor pursuant to the Department's issuance of Work Documents. The original scope of work as defined by the estimated number of units for each pay item is approximate and represents estimated planned work requirements based on historical or specific project needs. Work Documents will identify the location, description and amount of work to be performed. Under Push-button contracting, the Department does not guarantee any maximum quantity, minimum quantity, range of quantities, or work to be performed.

Award of Construction and Traffic Operations proposals are to be based on the Bid Factor method. Under this method, the Department provides quantities and predetermined Base Unit Prices for pay items which are included in the Contract Plans and Advertisement. In response to the Advertisement, bidders use the Department provided quantities and predetermined Base Unit Prices listed for each item to establish and include in their Bid Price Proposal a single Bid Factor expressed as a number carried out to 3 decimal places. The proposed Bid Factor will be applied to all predetermined pay item Base Unit Prices included in the Advertisement. The Bid Factor of 1.000 shall be 100% of the Base Unit Price, any number above 1.000 will increase the Base Unit Price, and any number below 1.000 will decrease the Base Unit Price. The lowest bidder will be determined by the lowest Bid Factor submitted in response to the Advertisement. Award of the contract is based upon the bidder who submits a responsive and responsible bid with the lowest Bid Factor.

##### **4.4.1 Pay Items**

Refer to Chapter 2 for guidance on Lump Sum pay items and alternative units of measure. Refer to Chapters 6 and 10 for use and formatting of Lump Sum pay items. Refer to Chapter 8 for additional guidance on documentation.

Designers will enter pay items through the Designer Interface into the proper Design Groups.

##### **4.4.2 DQE Instructions**

Estimators will prepare a balanced Authorization Estimate in DQE and coordinate with the State Estimates Office and Contracts Administration to set each pay item on the proposal to “fixed price” in AASHTOWare Project Preconstruction so that the Base Unit Prices will be displayed to the bidders.

Estimators will prepare an Official Estimate in DQE, in accordance with current procedures.

#### **4.4.3 Estimating Guidance**

In the past, the Department has experienced significantly unbalanced bids on Push-button contracts. These unbalanced bids limit the amount of work that can be performed under the contract. Therefore, it is important for the estimator to prepare an Authorization Estimate which is balanced. This Authorization Estimate Base Unit Price will be displayed to the bidders and the bidders will base their submitted single Bid Factor based on these prices.

An example of a Calculated Contract Unit Price is provided below:

Base Unit Price (\$439.20) x Bid Factor (0.988) = Calculated Contract Unit Price (\$433.93)

All Calculated Contract Unit Prices shall be rounded to the nearest penny. Payment under the executed contract is based upon actual quantities completed at the Calculated Contract Unit Price.

Please note that lump sum pay items are not included in Work Document contracts therefore the cost of lump sum items such as Mobilization are not accounted for in separate pay items and must be distributed among other items of work.

### **4.5 A + B Proposals**

Cost-plus-time bidding or A + B bidding, where A is the standard construction cost and B is the time bid, is designed to shorten the total contract time by allowing each contractor to bid the number of days to construct the project.

#### **4.5.1 Pay Items**

No special pay items are needed for an A + B proposal.

#### **4.5.2 DQE Instructions**

No special actions are needed in DQE for A + B proposal estimating.

#### **4.5.3 Estimating Guidance**

The number of days and road user cost per day will be entered by the Estimator in the time tab for the proposal in AASHTOWare Project Preconstruction. See AASHTOWare Project Preconstruction Role Help for additional guidance.

#### **Chapter 4 Revision History**

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