

Bid Item Determination and Quantity Estimation

Design Manual
Chapter 1
General Information
Originally Issued: 12-30-11
Revised: 06-25-19

Refer to the [Letting Guidelines](#) provided by the Office of Contracts for information concerning the plan review conducted by the Office of Contracts.

Determining Bid Items and Estimating Quantities

A *bid item*, also referred to as a *contract item*, is defined in Article [1101.03](#) of the Standard Specifications as, “A specifically described unit of work for which a price (either unit or lump sum) is provided in the contract.”



All work done on a project must be covered by a bid item or be incidental to a bid item.

Bid items reflect the work done on a project. Bid items can be determined by:

- Totaling tabulations within the plan. Several tabulations have items that are bid items identified with a circle note.
- Standard Road Plans. Many of the Standard Road Plans referenced within the plan also indicate ‘Possible Contract Items’ that may necessitate inclusion in the estimation of quantities.
- Detail sheets (U sheets).
- Typical Cross Section sheets (B sheets).
- Default Items (Refer to Section [20J-82](#)).

The 1G Series of Design Manual Sections covers several common bid items and when they should be included.

Inputting Bid Items

Bid items and estimate reference information are input into the Project Scheduling System (PSS). For information pertaining to using PSS to enter bid item and estimate reference information, refer to Section [20J-82](#).

Bid Items

Project quantities are determined by the Method of Measurement (MOM) and Basis of Payment (BOP) for each particular item (typically defined in the [Standard Specifications](#)). This may not always correspond to the tabulated total (for example, for a grading project silt fence is bid as 125% of the tabulated quantity). If a bid item is not covered by the Standard Specifications, the ‘Measure/Payment’ column will list one of the documents listed below in PSS. Adjust column widths in PSS to view the full text in the ‘Measure/Payment’ column. The following actions should be taken based on the contents of the ‘Measure/Payment’ column:

- Developmental Specification—Requires the application of a Developmental Specification to the project in PSS. Click here for a link to the current [Developmental Specifications](#). Refer to Section [120A-2](#).
- General Supplemental Specifications— No action is required.

- **Project Plans**—Requires that designers include specifications in the estimate reference information. This is most commonly the MOM and BOP.
- **Proposal Form**— Generally the Office of Contracts is responsible for applying Proposal Notes; however, designers need to be aware that the Proposal Notes may affect quantity calculations.
- **Special Provision**—Requires the application of a Special Provision to the project in PSS. Click here for a link to the current [Special Provisions](#). Designers are responsible for preparing the Special Provisions. Refer to Section [120A-3](#).
- **Supplemental Specification**—Requires the application of a Supplemental Specification to the project in PSS. Generally the Office of Contracts is responsible for applying Supplemental Specifications; however, designers need to be aware that the Supplemental Specification may affect quantity calculations. Click here for a link to the current [Supplemental Specifications](#).
- **Standard Road Plans**—Requires that designers include the appropriate Standard Road Plan.
- **Standard Specifications**—No action is required.

“2599-” Bid Items

“2599-” bid items are those defined by the designer because standard bid items are not available for the work required. These bid items should be used with extreme caution and are not covered by the [Standard Specifications](#). Therefore, “2599-” bid items require that the designer include all five parts of the Specifications: Description, Materials, Construction, MOM, and BOP in the estimate reference information.

Mobilization

Mobilization is a default bid item that should be included in all plans; however, when road plans are combined with bridge plans the following conditions apply:

- If roadway sheets are included in a bridge plan (D4), then a mobilization item is not included with the roadway bid items.
- If the roadway plan is a separate plan from the bridge plan, but combined together for bidding, then mobilization is included in the roadway bid items.

Estimate Reference Information

Bid items often have an estimate reference note. The estimate reference information should refer the contractor to the appropriate tabulation, Standard Road Plan, Detail sheet (U sheet), or Typical Cross Section sheet (B sheet). When any of the five parts of the Specifications are not covered, they should be included in the Estimate Reference Information.

Some bid items contain default estimate reference notes that can be imported directly from PSS. Some bid items may share common estimate reference notes (for example, various diameters of roadway culverts and sizes of aprons are likely listed in the same tabulation) that can also be set in PSS. Refer to Section [20J-82](#) for further guidance.

If special notes are necessary for a project, they should be placed in the estimate reference information for the bid items that are affected, regardless of the note’s presence elsewhere in the plan.

Importing Bid Items

The final step in this process is to import the bid items and estimate reference information into a Tabulation sheet (obtained from CopySeed) within MicroStation. Refer to Section [20J-82](#) for further guidance.

If bid items or estimate reference information is modified in PSS, the designer must repeat the importing process in MicroStation to obtain the most up-to-date information for the Tabulation sheet.

Chronology of Changes to Design Manual Section:

001G-001 Bid Item Determination and Quantity Estimation

6/25/2019	Revised Updated hyperlinks. Updated header logo and text.
1/22/2015	Revised Clearing and grubbing items are now tabbed. Grammatical modifications throughout the document.
12/31/2011	NEW New.