



Category 59 – Bridge Estimate Data

General Information

The Resident Engineer is responsible for preparing the “Contract Transactions Input” (Form HC-34). All entries on the Form HC-34 must be referenced to a source document. “The Bridge Estimate Data Record Book” (Category 59) provides source document information for quantities of bridge items to be entered on the “Contract Transactions Input” (Form HC-34). An exception to this is that the “Concrete Pour Record” (Form DS-C73) and the “Bar Reinforcing Steel Placing Record” (Form DS-C76) provides source document information for concrete and bar reinforcing steel quantities. The Bridge Representative is responsible for preparing and maintaining the basic source documents which provide "back-up" data for entries onto the Contract Transactions Input (Form HC-34).

Bridge Estimate Data Record Book

The Bridge Estimate Data Record Book will consist of a loose-leaf notebook (or notebooks) containing index tabs for each item of bridge work. The index tabs should be labeled with the category number, item number and name of item. For example, if Structure Excavation is Item No. 12, the index tab should be labeled 59.12 Structure Excavation.”Behind each item tab will be filed one or more summary sheets entitled “Summary of Estimate Data” (Form DH-OS-C42).

A properly completed summary sheet for a hypothetical structure excavation item with a fixed final pay quantity is shown on Attachment No. 1.

As shown on the example, the item description and item number, the Engineer's estimated or final pay quantity and the unit price are entered in the designated spaces at the top of the form. Under the column headed “Location of Work”, enter a brief description of any individual unit of work which the Contractor has completed. Of particular importance from the auditing standpoint is the information shown in the verification column. In the example the figures “E-D. 59.12-1” and “ED. 59.12-2” are identifying numbers for estimate data sheets on which the estimate quantity has been computed. Note that estimate data sheets are merely “back-up” calculations sheets which are prepared solely to support the payments made on progress pay estimates. These “back-up” calculation sheets should be filed behind the Summary of Estimate Data Sheets (Form DH-OS-C42) for the particular item, and should be sufficiently accurate to establish the amount due on the monthly estimate. These calculations need not be exact.

It is not always necessary to have the “back-up” calculations in the Bridge Estimate Data Record Book, The “back-up” data supporting the entries in this book may be located elsewhere.

If the verification shown on Form DH-OS-C42 is a source other than an estimate data sheet, this must be noted on the DH-OS-C42 with an appropriate reference. For example, for concrete

piling the reference might be “final quantity sheet 48-11-3” while for Structure Concrete (Bridge) the reference might be “Concrete Records - File 43.4.” For items such as Metal Railing Type 9 the reference probably would be to the field book or other document where the measured pay lengths were recorded.

Note that final quantity calculations are always filed in Category 48 but that they may be used as “back-up” data for an estimate quantity provided the proper reference to the 48 file is shown on the “Summary of Estimate Data Sheet” (Form DH-OS-C42).

Quantities shown on Form DH-OS-C42 for unit-price items, where the final quantity calculation has not yet been completed, must be referenced to an estimate data sheet showing the calculation and the method of arriving at the figure shown on the estimate.

In some cases it may be convenient to use the Bridge Design Group's D22 estimate of quantities as the back-up for quantities shown on the Summary of Estimate Data Sheets, Quantities calculated by the Bridge Design Group are summarized on a special form (Form DH-OS-D22) which is placed in the RE Pending file after the Engineer's Estimate is prepared. When used as an estimate data back-up sheet, Form DH-OS-D22 should be filed behind the corresponding summary sheet in the same manner as any other estimate data back-up sheet.

When making entries on Form DH-OS-C42, the most important point to keep in mind is that there must always be a reference to an estimate data sheet, a quantity calculation sheet or some other record (such as a field book) which verifies the figures shown.

The Posting Reference column is used to permit posting directly to the Contract Transactions Input (Form HC-34). It should contain reference to the sheet number and line number upon which the entry is made. The date of the entry and the signature of the person making the entry must also be shown.

The Remarks column at the right of the sheet may be used to facilitate any distribution or segregation of costs which may be required, or for such other purposes as the Bridge Representative may choose.

When work on any item has been completed, indicate this fact on the Summary of Estimate Data Sheet (Form DH-OS-C42) and enter the final pay quantity under the *Total Quantity to Date-This Item* column. Make reference to the 48 File where the Final Pay Quantity is filed. (Note that a retention should be made for items that are substantially complete but on which incidental work remains to be done. Calculations showing how the retention amount was determined must be filed behind the appropriate item in the Bridge Estimate Data Book.)

DEPARTMENT OF TRANSPORTATION
 SUMMARY OF ESTIMATE DATA
 UM408 (REV. 11/73)

SHEET 1 OF 1

JOB STAMP

LINE	LOCATION OF WORK	VERIFICATION REFERENCE	QUANTITY THIS LOCAT. THIS EST.	QUANTITY THIS ITEM THIS EST.	TOTAL QUANTITY TO DATE THIS ITEM	POSTING REF	REMARKS	
						DATE/BY	By: No. 6-133	By: No. 6-130A
1	Inland View Abut. 1	E. D. 59.12-1	135				135	
2	Turntable Bay Abut. 1	E. D. 59.12-2	51					51
3	Inland View Pier 1	E. D. 59.12-1	124				124	
4	Pay Est. #1			310	310	60-12/2 3/20 K. Jones	259	51
5	Inland View Pier 3	E. D. 59.12-1	120				120	
6	✓ Pier 4	✓	105				105	
7	Turntable Bay Bent 1	E. D. 59.12-2	25					25
8	✓ Bent 3	✓	30					30
9	Pay Est. #2			780	590	60-12/5 4/20 K. Jones	484	106
10	Inland View Pier 3	E. D. 59.12-1	108				108	
11	✓ Abut. 6	✓	116				116	
12	Turntable Bay Abut. 4	E. D. 59.12-2	56					56
13	Adjust Quantity		+5				2	3
14	Engineer's Estimate	60.12-1 Final Pay		285	875	60-12/8 5/20 K. Jones	710	165

ITEM: Structure Encroachment (Bridge)
 ENGINEERS: FINAL PAY 875 BY
 UNIT PRICE: \$4.50
 ITEM NO.: 12

FILE CATEGORY 00. 12