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Introduction to Specialty Forms

Bidtab IV has two specialized forms that are usually prepared before a project is advertised for bids:

- The *DBE Goals Worksheet Form* is used to designate items in the Estimate that may be accomplished by a DBE Contractor and to print the *DBE Goals Worksheet*.
- The *Federal Aid Coding Form* is used to assign various project costs to Federal Aid Improvement Codes using either the Engineer's Estimate or Low Bid and to print the *Final Project Agreement Estimate and Coding Backup* report.

What you should learn in this module

By the completion of this module you should be able to answer the following questions:

1. Which keystroke will give you additional help on any form?
2. How do you designate a DBE Item?
3. How do you indicate there are at least 3 providers in the state for a sub-contractible item?
4. Can you designate only a portion of an item's cost as DBE eligible?
5. How does Bidtab IV calculate the DBE Goal?
6. What is the purpose of the DBE Worksheet Report?
7. What is the *Project Estimate And Coding Backup*?
8. Where can you find Federal Appropriation Codes?
9. What is an Improvement Type Code?
10. What two major steps are involved in creating a Project Estimate And Coding Backup?
11. Do you need special permission to create an ad hoc Improvement Type code for your Project?
12. Who can modify the Standard Improvement Codes?
13. What important details are added to a Standard Improvement Code before it is included in the Code Summary list for the project?
14. What costs are shown in the Code Summary List?
15. How you switch between Estimate and low bid costs?
16. How can you tell which Costs you are using?
17. How you code multiple items at the same time?
18. How can you create a list of the items assigned to a particular code?
19. How he designate a cost as nonparticipating?
20. What categories of project costs may be split between the Improvement Codes?
21. What are Formulated Costs?
22. Does using a Primary Code save paper? Does it add clarity to the report???
23. After you have created a Project Estimate And Coding Backup using the Engineer's Estimate, can you modify the Formulated Costs using the low bid amounts? What happens to your original calculations?

Disadvantaged Business Enterprise Program (DBE)

The Department has a program that is intended to provide contracting opportunities on federally funded projects to DBE-owned firms. In essence, a DBE utilization goal is established as a percentage of the total contract award amount. This goal becomes a contract requirement so that all contractors who submit bids are required to comply with the goal. This goal is based in part upon the value of the subcontractable pay items that can be performed by DBE companies the Department has certified.

Using Bidtab IV you can easily create a DBE Goals Worksheet that identifies the subcontractable pay items, indicates the availability of certified DBEs and establishes the DBE goal.

DBE Goals Worksheet Form

DBE Item	3 DBEs?	DBE Amount	Percent of Total	Section & Chapter	Pay Item	Quantity & Unit	Unit Price	Amount
				Basic Bid C100 R554	645(1) Training Program, 6 Trainees/Apprentices	3,000 Labor Hour	1.00	3,000.00
Yes		1,000.00	0.00% Sec 100.00%	Basic Bid C100 R1156	646(1) CPM Scheduling	1 Lump Sum	1,000.00	1,000.00
				Basic Bid C100 R0	647(2) Wide Pad Dozer, 48 KW Minimum	500 Hour	100.00	50,000.00
				Basic Bid C100 R0	669(1) Automated Traffic Recorder, H1, H2	1 Lump Sum	36,000.00	36,000.00
Yes		113,400.00	0.31% Sec 100.00%	Basic Bid C100 R1037	670(10B) Methyl Methacrylate Pavement Markings	7,560 Liter	15.00	113,400.00
Yes		187,800.00	0.52% Sec 100.00%	Basic Bid C100 R1038	670(10C) Methyl Methacrylate Pavement Markings, Inlay	12,520 Liter	15.00	187,800.00
				Basic Bid C100 R1039	670(10D) Milling for Inlayed Markings	21,200 Meter	11.50	243,800.00
		302,200.00	0.83% Sec	Basic Bid	Pay Item Total	109 Items	=	36,237,903.25
				Basic Bid	Minus Contractor Furnished Construction Engineering Items			(0.00)
								36,237,903.25

hello

1. Select Who prepared the DBE Goal. 2. Enter the Dbe Goal as a Percentage **7.70 %**

Name: **Jim Elieff**
 Title: **DBE Official**
 Address: **2301 Peeler Rd**
 Phone: **455-3492**
 MailStop: **MS-2550**

Ready to Rumble... User: jim Can Authorize, Can Change System, GLOBAL ACCESS

To Designate DBE pay items: Left-Click on a cell in the column labeled:

- *DBE Item*, to select or deselect the Item as a DBE Item.
- *3 DBE's* column to indicate the pay item has at least 3 providers.
- *DBE Amount* column to enter the amount you want included in the DBE calculation.

Project Estimate & Coding Backup

Before a federally funded project is advertised for bids, the Department enters into a contract with the sponsoring agency. On projects funded by the Federal Highway Administration this contract is called the *FHWA Project Agreement*, which includes a section that is referred to as the *Project Estimate And Coding Backup*.

The *Project Estimate And Coding Backup* report differentiates between participating and non-participating costs so that the sponsoring agency can accurately determine its financial obligation to the State. It also classifies each project cost into categories defined by a system of *Appropriation Codes* and *Improvement Type Codes* specified by the FHWA.

The FHWA sponsors hundreds of programs and projects¹. Each is assigned an *Appropriation Code (APPN)*. Sometimes a project has many Appropriation codes. The point being: seek the advise of a professional before specifying an *Appropriation Code*! Because the number of APPNs is in a constant state of flux, Bidtab IV does not provide a means to easily select an APPN from a list.

Improvement Type Codes: Currently, FHWA is using a relatively short list of Improvement codes, which describe the kind of improvement that is being made. Bidtab IV allows you to select these codes from a list.

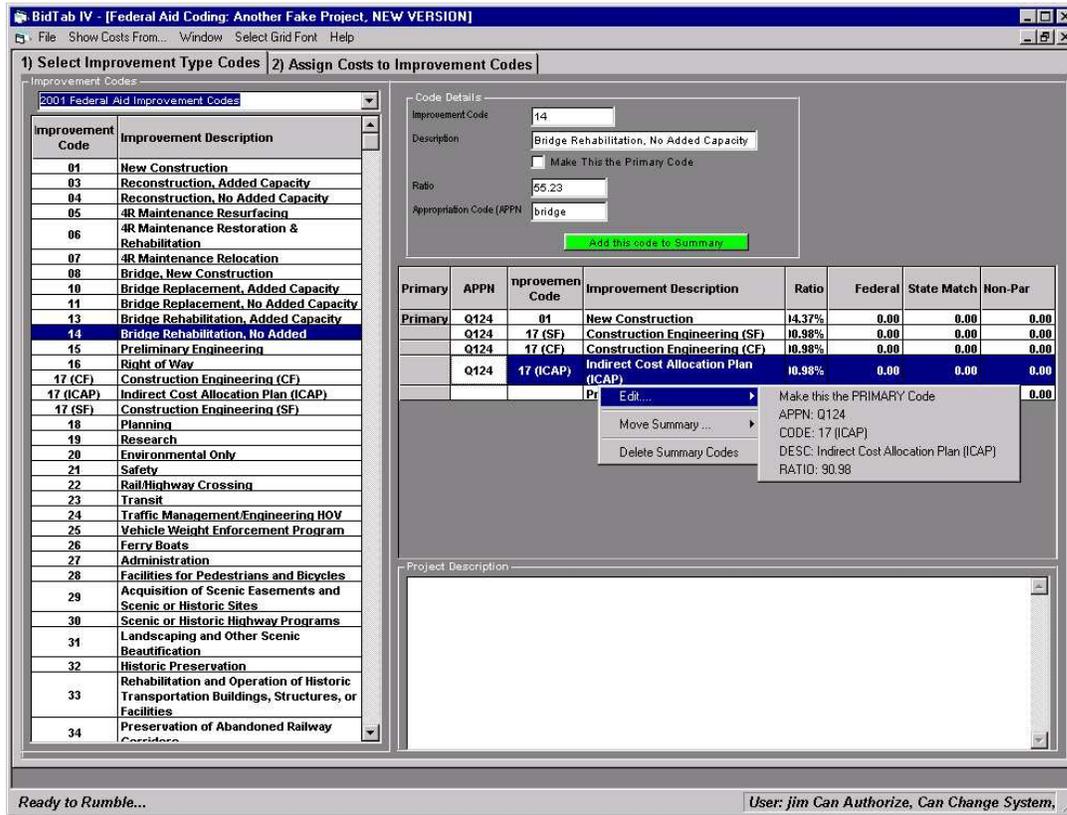
The FHWA Project Agreement is generally prepared prior to advertising the project for bids. Because of this, the *Project Estimate And Coding Backup* is initially based upon the costs from the Engineer's Estimate. Following award of the contract, the Department prepares an amended *Project Estimate And Coding Backup* using the construction contract bid prices. This amended version is sent to the FHWA and the Project Agreement is modified accordingly.

Using the Bidtab IV *Federal Aid Coding Form* you can prepare the *Project Estimate And Coding Backup* using the costs identified in the Engineer's Estimate to establish the *FHWA Project Agreement*. With a simple menu selection, you can automatically create a *Project Estimate And Coding Backup* modified with the bid prices.

¹ "program" - One of the many components or categories that make up the overall Federal-Aid Highway Program. Congress separately funds programs. They may be system related (e.g., National Highway System, Surface Transportation Program), or they may exist for special purposes (e.g., Congestion Mitigation and Air Quality Improvement Program, Highway Bridge Replacement and Rehabilitation Program). See *A Guide To Federal-Aid Programs And Projects*, FHWA Publication No. FHWA-IF-99-006

"project" - Not to be confused with State "projects", An FHWA project is generally a broad undertaking to construct, reconstruct, or improve a particular portion of a highway. Congress specifically designates FHWA Projects. (e.g., Alaska Highway, Shakwak)

Federal Aid Coding Form



Preparing the *Federal Aid Project Estimate and Coding Backup* is a two-step process. The form has been designed accordingly:

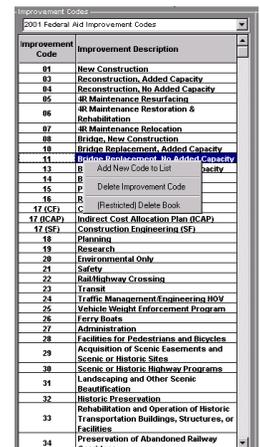
1. *Select Improvement Type Codes.* This Frame is used to designate which FHWA Appropriation Code and Improvement Code combinations you want to use on the project. Only the code combinations you create on this frame are available to you on the second frame. One of the Codes can be designated as being the *Primary Code*. Primary Codes usually have most of the Costs coded to them and, if used, can reduce the length of the Coding Backup Report.
2. *Assign Costs to Improvement Codes.* You will use this Frame to assign the various project costs to the Appropriation code/Improvement Code combinations you specified in frame 1.

1. Select Improvement Type Codes Frame

The *Select Improvement Type Codes* Frame has four elements:

The Improvement Codes Pane

The *Improvement Codes Pane* displays a standard list of Improvement Type Codes to use on the project. Select which set of codes to use from the Pull-down text box at the top of the Pane. A code is moved to the *Details Pane* by simply clicking on it. Be cognizant of the order you add codes to the *Code Summary List*.

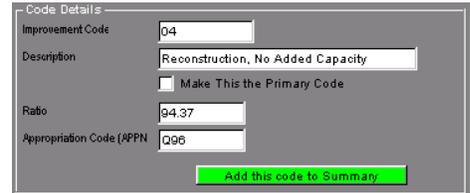


It can save you a lot of work reordering improvement codes later. Adding the *Primary Code* first (if you plan on using one) is a good place to start.

If you have permission to *Modify Master Lists* you can add or delete Improvement Codes. Right-Click on the Improvement Codes List to display the popup menu.

Code Details Pane

The *Code Details Pane* is used to add the Appropriation Code (APPN) and *Federal Participation Ratio* to an Improvement Code. Once you have done this, you click on the *Add this code to Summary* command button to move the code to the *Code Summary List* where it is finally associated with your project.



You are not restricted to using just the Codes from the *Improvement Codes Pane*. You can create any Improvement Code Number or Description you need to use on your Project by simply typing this information into the text boxes.

The Code Summary List

The *Code Summary List* displays the list of code combinations you have created to use on the project. Federal, State match and Non-Par amounts are displayed for the Costs you have assigned to each code on the *Assign Costs to Improvement Codes Frame*.

Primary	APPN	Improvement Code	Improvement Description	Ratio	Federal	State Match	Non-Par
	Q96	04	Reconstruction, No Added Capacity	94.37%			
	Q96	10	Bridge Replacement, Added Capacity	94.37%			
	Q96	17 (CF)	Construction Engineering (CF)	94.37%			
	Q96	17 (SF)	Construction Engineering (SF)	94.37%			
	Q96	17 (ICAP)	Indirect Cost Allocation Plan (ICAP)	94.37%			
			Project Totals	%			



The *Code Summary List* has a popup menu that allows you to edit, reposition or delete a code combination.

Project Description Pane

The *Project Description Pane* is where you can provide a description for the project. This Description is included in the *Federal Aid Project Estimate and Coding Backup* report.

Selecting Estimate or Low Bid Costs

If a low bidder has been determined, you can switch between estimated and low bid costs from the Main Menu selection *Show Costs From*.

2. Assign Costs to Improvement Codes Frame

After you have a created the Appropriation/Improvement Code combinations you want use on the Project, select Frame 2. *Assign Costs to Improvement Codes.*

0	Appropriation Code (APFN)		Q96	Q96	Q96	Q96	Q96
1	Improvement Code		04	10	17 (CF)	17 (SF)	17 (ICAP)
2	Improvement Descr	Project Totals	Reconstruction, No Added Capacity	Bridge Replacement, Added Capacity	Construction Engineering (CF)	Construction Engineering (SF)	Indirect Cost Allocation Plan (ICAP)
3	Ratio		94.37%	94.37%	94.37%	94.37%	94.37%
4	Federal	0.00	0.00	0.00	0.00	0.00	0.00
5	State	0.00	0.00	0.00	0.00	0.00	0.00
6	Non-Par	0.00	0.00	0.00	0.00	0.00	0.00
7	Total	0.00	0.00	0.00	0.00	0.00	0.00
8							
ITEM	680 (11) Furnish and Install Two Innerducts 4,829 Meter @ 82.00	395,978.00					
ITEM	680 (12) Install Three Innerducts 53.68 Meter @ 28.00	1,500.24					
ITEM	680 (13) Furnish Two and Install Five Innerducts 2,599.6 Meter @ 108.00	275,557.60					
ITEM	680 (14) Install Two Conduits 12 Meter @ 115.50	1,386.00					
ITEM	680 (15) Install 2 Conduits, 3 Innerducts, Furnish & Install 2 Innerducts 45 Meter @ 120.50	5,422.50					
ITEM	680 (16) Install 2 Conduits and 3 Innerducts, Concrete Encased 802.18 Meter @ 115.50	104,201.79					
ITEM	680 (17) Install Fiber Optic Cable 3,436.1 Meter @ 13.00	44,669.30					
	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:	Contractor Furnished CENG Items:
ITEM	644 (1) Field Office 1 Lump Sum @ 10,000.00	10,000.00					
ITEM	644 (2) Field Laboratory 1 Lump Sum @ 50,000.00	50,000.00					
	PART. Formulated Costs:	PART. Formulated Costs:	PART. Formulated Costs:	PART. Formulated Costs:	PART. Formulated Costs:	PART. Formulated Costs:	PART. Formulated Costs:
CENG	CENG @ 15% All Items are Participating: 13,886,359.38 -60,000.00 CF-CENG ----- 13,826,359.38 Subtotal ----- 2,073,953.91 CENG @ 15% -60,000.00 CF-CENG	2,013,953.91					

Code To: Q96-17 (CF)-Construction Engineering (CF)

Code To: Q96 - 04 - Reconstruction, No Added Capacity

Code To: Q96 - 10 - Bridge Replacement, Added Capacity

Code To: Q96 - 17 (CF) - Construction Engineering (CF)

Code To: Q96 - 17 (SF) - Construction Engineering (SF)

Code To: Q96 - 17 (ICAP) - Indirect Cost Allocation Plan (ICAP)

Change Non-Participating Quantity

Split Cost...

Assigning Costs to Codes

To assign costs to your codes is a simple process:

- Select one or more cells from the Grid using your mouse. In the example shown, I have selected 2 Contractor Furnished CE Pay-Items.
- Right-Click in the area you have highlighted to display the Popup Menu.
- Select the Improvement Code you want to assign these costs to from the popup menu. If you select only one column, as in the example, the Code identified with that column will always be displayed at the top of the popup menu, which is kind of handy.

- The grid is automatically updated to show the results of the cost assignment.

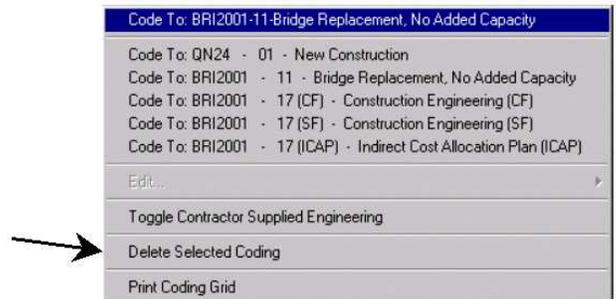
Each cell shows the federal, state match, nonparticipating and total amount assigned to the Code. The *code cost summary*, at the top of the column, is also updated with the new assignments. In turn, the *project totals* are also updated.

Appropriation Code (APPN)	Q06 04	Q06 10	Q06 17 (CF)	Q06 17 (SF)	Q06 17 (ICAP)
Improvement Code	Reconstruction, No Added Capacity	Bridge Replacement, Added Capacity	Construction Engineering (CF)	Construction Engineering (SF)	Indirect Cost Allocation Plan (ICAP)
Improvement Descr	Ratio	Ratio	Ratio	Ratio	Ratio
Project Totals	94.37%	94.37%	94.37%	94.37%	94.37%
Federal	221,789.50	0.00	221,789.50	0.00	0.00
State	13,239.50	0.00	13,239.50	0.00	0.00
Non-Par	0.00	0.00	0.00	0.00	0.00
Total	235,029.00	0.00	235,029.00	0.00	0.00
647(2) Wide Pad Dozer, 500 Hour	50,000.00				
659(1) Automated Traffic Recorder, H1, H2	36,000.00				
1 Lump Sum					
670(10B) Methyl Methacrylate Pavement Markings	113,400.00				
7,560 Liter					
670(10C) Methyl Methacrylate Pavement Markings, Inlay	107,800.00				
12,500 Liter					
670(10D) Milling for Inlaid Markings	243,800.00				
21,200 Meter					
Contractor Furnished Construction Eng. Items:					
644(1) Field Office	20,000.00		18,874.00 F	1,126.00 S	0.00 N
1 Lump Sum			20,000.00 T	9,437.00 F	563.00 S
644(2) Field Laboratory	10,000.00		10,000.00 T	4,716.50 F	0.00 N
1 Lump Sum			10,000.00 T	281.50 S	0.00 N
644(3) Cubing Shed	5,000.00		5,000.00 T	180,740.00 F	11,260.00 S
1 Lump Sum			5,000.00 T	0.00 N	200,000.00 T
644(7) Vehicle	200,000.00				
10 Each					
State Furnished Construction Eng. Additional Costs: Basic Bid	5,563,185.48				
1980es Pay-off	150,000.00				
Indirect Cost Allocation Plan (3.8%) of Participating Costs	1,629,671.37				

Deleting Coded Costs

To Delete costs assigned to your codes:

- Select one or more Costs from the Grid using your mouse.
- Right-Click in the area you have highlighted to display the Popup Menu.
- Select the *Delete Selected Coding* from the popup menu.
- Once again, the Grid is automatically updated to reflect the current totals.



Showing Costs Assigned To A Specific Code

You can filter the Grid to show only the costs assigned to a specific code by Left-Clicking on the column heading for the Code. The column heading will be highlighted in red, indicating the grid is being filtered. Only Items assigned to the Code will be displayed in the grid. To clear the filter and display all Items, click on the cell highlighted in green in the first column.

Coding Based Upon the Engineer's Estimate					
Appropriation Code (APPN)	Q06 04	Q06 10	Q06 17 (CF)	Q06 17 (SF)	Q06 17 (ICAP)
Improvement Code	Reconstruction, No Added Capacity	Bridge Replacement, Added Capacity	Construction Engineering (CF)	Construction Engineering (SF)	Indirect Cost Allocation Plan (ICAP)
Improvement Descr	Ratio	Ratio	Ratio	Ratio	Ratio
Project Totals	94.37%	94.37%	94.37%	94.37%	94.37%
Federal	3,846,263.69	2,387,460.00	427,824.25	221,789.50	0.00
State	191,736.40	143,000.00	25,075.75	13,239.50	0.00
Non-Par	0.00	0.00	0.00	0.00	0.00
Total	3,228,000.00	2,480,000.00	452,899.00	235,029.00	0.00
CLICK HERE TO REMOVE FILTER					
643(3) Permanent Construction Signs	5,000.00	2,359.25 F	2,359.25 F	0.00 S	0.00 N
1 Lump Sum		140.75 S	140.75 S	0.00 H	0.00 T
643(15) Flagger	600,000.00	141,555.00 F	424,665.00 F	0.00 S	0.00 N
1 Contingent Sum		8,445.00 S	25,335.00 S	0.00 H	0.00 T
643(16) Pilot Car	220,000.00	215,163.00 F	0.00 F	0.00 S	0.00 N
3,000 Hour		12,836.40 S	0.00 S	0.00 H	0.00 T
643(23) Traffic Price Adjustment	0.00	225,000.00 T	0.00 T	0.00 F	0.00 S
1 Contingent Sum		0.00 S	0.00 S	0.00 H	0.00 T
643(25) Traffic Control	1,500,000.00	1,415,550.00 F	0.00 F	84,450.00 S	0.00 S
1 Contingent Sum		0.00 H	0.00 H	0.00 N	0.00 T
643(30) Temporary Crossing	650,000.00	612,400.00 F	0.00 F	36,595.00 S	0.00 S
1 Lump Sum		0.00 H	0.00 H	0.00 N	0.00 T
643(31) Public Information Program	10,000.00	650,000.00 T	0.00 T	0.00 F	0.00 S
1 Lump Sum		0.00 H	0.00 H	563.00 S	0.00 N
		10,000.00 T	0.00 T		
Contractor Furnished Construction Eng. Items:					
Additional Costs: Basic Bid					

Printing the Coding Grid

Simply select *Print Coding Grid* from the popup menu. Whatever is displayed will be printed. If a filter is active then only items assigned to that Code would be printed.

Splitting Costs Between Codes

Sometimes is necessary to Split costs between Codes. In the example below I have already assigned all of the Unclassified Excavation cost to the *Reconstruction, No Added Capacity* Code. Now I want to split out a portion of the cost for Unclassified Excavation and assign it to the *Bridge Replacement* Code.

Appropriation Code (APPN)		096	096	096	096	096
Improvement Code		04	10	17 (CF)	17 (SF)	17 (ICAP)
Improvement Descr	Project Totals	Reconstruction, No Added Capacity	Bridge Replacement, Added Capacity	Construction Engineering (CF)	Construction Engineering (SF)	Indirect Cost Allocation Plan (ICAP)
Ratio		94.37%	94.37%	94.37%	94.37%	94.37%
Federal	7,435,148.06	6,786,354.31	427,024.25	221,769.50	0.00	0.00
State	443,571.84	404,865.89	25,475.75	13,230.50	0.00	0.00
Non-Par	0.00	0.00	0.00	0.00	0.00	0.00
Total	7,878,720.00	7,191,220.00	452,500.00	235,000.00	0.00	0.00
202(17) Removal of Bridge No. 548 1 Lump Sum	250,000.00					
203(3) Unclassified Excavation 775,120 Cubic Meter	4,650,720.00	4,388,884.46 F 261,835.54 S 0.00 N 4,650,720.00 T				
203(6A) Borrow, Type A 1,142,809 Meqagram	4,571,236.00					
203(6C) Borrow, Type C 274,895 Meqagram	1,099,540.00					
203(9) Obliteration of Roadway 4,185 Square Meter	6,277.50					
203(12) Horizontal Drain Holes 1,200 Meter	21,600.00					
203(14) Rock Dowels 15 Each	15,000.00					
203(16) Rock Bolts 15 Each	30,000.00					
205(1) Excavation for Structures	229,910.00					

To split the cost:

- Left-Click on the *Bridge Replacement* Cell and then Right-click to display the Popup Menu.
- Select *Split Cost* from the menu.
- You will be asked to provide the *Quantity* for the selected Item that you want to allocate to this Improvement Code. Even Lump Sum and Contingent Sum Items can be Split. There Total *Quantity* must simply equal one (1).

Split Quantity

Enter Split QUANTITY for: 10-Bridge Replacement, Added Capacity

Total Quantity = 775,120

OK Cancel

- If the total cost allocation is over or under the total item cost then all of the allocated Costs on that Row will be shown in Red.

1 Lump Sum				
203(3) Unclassified Excavation	4,650,720.00	4,388,884.46 F	8,493.30 F	
775,120 Cubic Meter		261,835.54 S	506.70 S	
		0.00 N	0.00 N	
		4,650,720.00 T	9,000.00 T	

To fix this situation, you must now split the *Reconstruction, No Added Capacity* Code. Following the same routine, Bidtab IV will automatically display the split quantity required to remedy the problem.

You may wonder why Bidtab IV does not automatically fix errors in splits. The reason is because you can split between more than just two Codes.

Split Quantity

Enter Split QUANTITY for: 04-Reconstruction, No Added Capacity

Total Quantity = 775,120

OK Cancel

Designating Non-Participating Costs

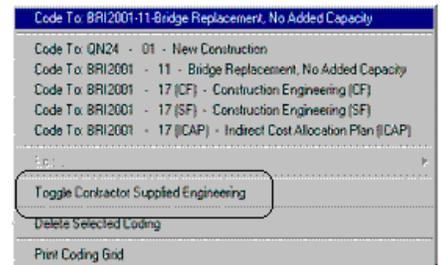
Each pay item in an estimate can have a portion of the total quantity designated as nonparticipating. Such a designation is usually done on the Engineer's Estimate Form. In case this wasn't done, and needs to be, you can designate a portion of the quantity for any Item as nonparticipating. This is important because it will modify the way Construction Engineering and the Indirect Cost Allocation Plan amounts are calculated.

Designating Costs as nonparticipating follows exactly the same routine as splitting a cost. The only difference is that you select *Change Non-Participating Quantity* from the popup menu. Again you will be asked to provide the Quantity you want to designate as nonparticipating. All nonparticipating cost assignments are highlighted in light blue on the grid.

Be aware that splitting items between codes that have also have nonparticipating Costs can be very tricky and is not recommended.

Designating Contractor Supplied Engineering Items

Any Pay Item in an estimate can be designated as being a part of Contractor Furnished Engineering. Again, such a designation is usually done on the Engineer's Estimate Form but can be accomplished on this form also. To designate items simply select them from the grid with your mouse, display the popup menu and select *Toggle Contractor supplied Engineering*.

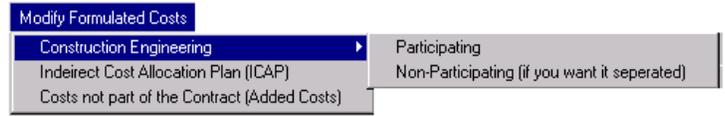


The selected items will be moved from their existing location on the grid to a special Location near the bottom of the estimate section.

670(10D) Milling for Inlayed Markings 21,200 Meter	243,800.00			
Contractor Furnished Construction Eng. Items:				
644(1) Field Office 1 Lump Sum	20,000.00		18,874.00 F 1,126.00 S 0.00 N	20,000.00 T
644(2) Field Laboratory 1 Lump Sum	10,000.00		9,437.00 F 563.00 S 0.00 N	10,000.00 T
644(3) Curing Shed 1 Lump Sum	5,000.00		4,718.50 F 281.50 S 0.00 N	5,000.00 T
644(7) Vehicle 10 Each	200,000.00		188,740.00 F 11,260.00 S 0.00 N	200,000.00 T
State Furnished Construction Eng	5,563,185.49			

Changing Formulated Costs

Formulated Costs such as Construction Engineering, the Indirect Cost Allocation Plan percentage and costs



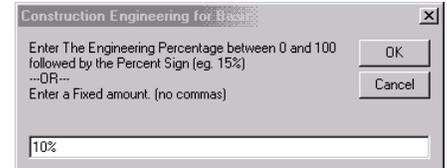
that are not part of the Contract can be modified from the Main Menu by selecting *Modify Formulated Costs*.

All formulated costs are located at the end of each estimate section on the grid. Formulated Costs are coded much in the same way as you would code pay-item costs. However there are several differences that we will discover.

Construction Engineering Costs

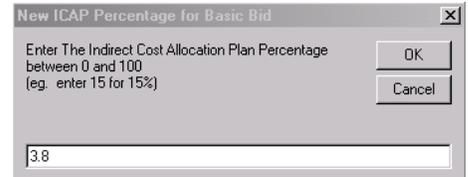
You can modify the way Construction Engineering is calculated for each Estimate Section. When entering CENG you have two choices:

- Percent of Items, enter a percent sign (%) after the number. Bidtab IV will calculate the CENG by adding up all of the items in the section, except Contractor Furnished CENG Items. It will then multiply by the percentage you have specified to determine the CENG amount.
- Fixed Amount, just enter the fixed amount.



Indirect Cost Allocation Plan Costs

You can specify the percentage used in each estimate section used to calculate Indirect Cost Allocation Plan Costs from the *Modify Formulated Costs* Menu. A dialog will appear where you simply enter the Percentage to apply.



ICAP is calculated by adding up all the *participating* costs in the Section and multiplying by the percentage you have specified. *ICAP costs cannot be split between codes.*

Added Costs (not part of the Contract)

Sometimes it is necessary to include Added Costs, which are not part of the Contract, in the Code Summary. Selecting this option from the *Modify Formulated Costs* Menu will activate a dialog form where you can enter the description and the amount for each added cost.

All costs not part of the Contract are assumed to be participating costs. You may not designate any part of the added cost as nonparticipating. You can, however, split an added cost between Codes.

Project Estimate And Coding Backup Report

After you have completed coding your estimate, you can print the *Project Estimate And Coding Backup report* from the Main Menu, *File* selection. When bids come in you can then switch to using bid prices for the Final Project Agreement Estimate.

This is an excerpt from the first page.

FINAL PROJECT AGREEMENT ESTIMATE State of Alaska Department of Transportation & Public Facilities		Project: Glenn Highway MP 100-109 Caribou Creek			
Improvement Code Types: 04, 10, 17 (CF), 17 (SF), 17 (ICAP), 43		Project No.: IM-BR-OA1-5(19)/55264 / 55264 Prepared: November 10, 2004			
Project Description: This is a very big project that replaces the Bridge over Cariboo Creek on the Glenn Highway.		Bid Opened: Pending Report is Based Upon the Engineer's Estimate			
I am using this project to demonstrate the Federal Aid Coding Form.					
This description is entered on the Project Description Pane.					
Basic Bid					
Item No.	Item Description	Unit	Unit Price	Quantity	Amount
201(1A)	Clearing	Hectare	4,000.00	55	220,000.00
201(2A)	Grubbing	Hectare	4,000.00	43	172,000.00
201(4A)	Hand Clearing	Hectare	6,500.00	0.16	1,040.00
202(1)	Removal of Structures and Obstructions	Lump Sum	25,000.00	All Required	25,000.00
202(2)	Removal of Pavement	Square Meter	2.00	127,282	254,564.00
202(4)	Removal of Culvert Pipe	Meter	15.00	957.7	14,365.50
202(12)	Double Mail Box Installation	Each	400.00	28	11,200.00
202(17)	Removal of Bridge No. 548	Lump Sum	250,000.00	All Required	250,000.00
203(3)	Unclassified Excavation	Cubic Meter	6.00	775,120	4,650,720.00
203(6A)	Borrow, Type A	Megagram	4.00	1,142,809	4,571,236.00
203(6B)	Borrow, Type B	Megagram	4.00	274,884	1,099,536.00

Non-Par Items are identified following the item listings:

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Basic Bid					
Item No.	Item Description	Unit	Unit Price	Quantity	Amount
644(2)	Field Laboratory	Lump Sum	10,000.00	All Required	10,000.00
644(3)	Curing Shed	Lump Sum	5,000.00	All Required	5,000.00
644(7)	Vehicle	Each	20,000.00	10	200,000.00
645(1)	Training Program, 6 Trainees/Apprentices	Labor Hour	1.00	3,000	3,000.00
646(1)	CPM Scheduling	Lump Sum	1,000.00	All Required	1,000.00
647(2)	Wide Pad Dozer, 48 KW Minimum	Hour	100.00	500	50,000.00
669(1)	Automated Traffic Recorder, H1, H2	Lump Sum	36,000.00	All Required	36,000.00
670(10B)	Methyl Methacrylate Pavement Markings	Liter	15.00	7,560	113,400.00
670(10C)	Methyl Methacrylate Pavement Markings, Inlay	Liter	15.00	12,520	187,800.00
670(10D)	Milling for Inlayed Markings	Meter	11.50	21,200	243,800.00
Total Basic Bid (Includes 41,040.00 non-participating)					37,322,903.25
Basic Bid: Breakout of Non-Participating Items					
Item No.	Item Description	Unit	Unit Price	Quantity	Amount
201(1A)	Clearing	Hectare	4,000.00	10	40,000.00
201(4A)	Hand Clearing	Hectare	6,500.00	0.16	1,040.00
Total Non-Participating in Basic Bid					41,040.00

And, finally, the Coding Back-up is printed. In this case I used the *Reconstruction, No Added Capacity* code (04) as the Primary Code so the report does not list all of the items coded to it. Rather, in the second box down, it subtracts the other code totals from the grand total to derive the amount for (04). This supposedly saves paper.

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Q96 Improvement Code Summary					
Notes	Code	Total	Ratio	Federal Funds	State Funds
1	04	30,175,706.75	94.37 %	28,436,085.01	1,696,581.74
	10	6,912,196.50	94.37 %	6,523,039.84	389,156.66
2	17 (CF)	235,000.00	94.37 %	221,769.50	13,230.50
3	17 (SF)	5,563,185.49	94.37 %	5,244,168.73	312,860.76
4	17 (ICAP)	1,633,577.92	94.37 %	1,541,607.49	91,970.44
Q96	Subtotal	44,519,666.66	94.37 %	41,968,670.56	2,503,890.70

UTIL Improvement Code Summary					
Notes	Code	Total	Ratio	Federal Funds	State Funds
5	43	150,000.00	45.23 %	67,845.00	82,155.00
UTIL	Subtotal	150,000.00	45.23 %	67,845.00	82,155.00
PROJECT	TOTAL	44,669,666.66	%	42,036,515.56	2,585,955.70

- 1) Includes \$ 41,040.00 Non-Participating.
- 2) Includes \$ 235,000.00 Contractor Furnished Construction Engineering Items.
- 3) Includes \$ 6,156.00 Non-Participating.
- 4) Includes \$ 1,633,577.92 Indirect Cost Allocation Plan (ICAP).
- 5) Includes \$ 150,000.00 Not Part of Construction Contract.

04	Reconstruction, No Added Capacity, Coding Backup				94.37 %	Q96
Code	Item	Total	Federal	State	Non-Participating	
	Basic Bid	44,669,666.66	42,036,515.56	2,585,955.10	47,196.00	
10	Bridge Replacement, Added Capacity	(6,912,196.50)	(6,523,039.84)	(389,156.66)		
17 (CF)	Construction Engineering (CF)	(235,000.00)	(221,769.50)	(13,230.50)		
17 (SF)	Construction Engineering (SF)	(5,563,185.49)	(5,244,168.73)	(312,860.76)	(6,156.00)	
17 (ICAP)	Indirect Cost Allocation Plan (ICAP)	(1,633,577.92)	(1,541,607.49)	(91,970.44)		
43	Utilities	(150,000.00)	(67,845.00)	(82,155.00)		
04	Total	30,175,706.75	28,436,085.01	1,696,581.74	41,040.00	

10	Bridge Replacement, Added Capacity, Coding Backup				94.37 %	Q96
Code	Item	Total	Federal	State	Non-Participating	
	502(1)					
	502(1)					
	503(1)					
	503(2)					
	505(5)					
	505(5)					
	505(6)					
	507(2)					
	508(1)					
	511(1)					
	516(1)					
	516(2)					
	516(3)					
	516(4)					
	518(1A)					
10	Total					

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17 (CF) Construction Engineering (CF), Coding Backup					
Code	Item	Total	Federal	State	Non-Participating
	644(1)	20,000.00	18,874.00	1,126.00	
	644(2)	10,000.00	9,437.00	563.00	
	644(3)	5,000.00	4,718.50	281.50	
	644(7)	200,000.00	188,740.00	11,260.00	
17 (CF)	Total	235,000.00	221,769.50	13,230.50	

CENG for Basic Bid					
Code	Item	Total	Federal	State	Non-Participating
	Basic Bid	37,322,903.25	35,182,894.35	2,098,968.90	41,040.00
17 (CF)	644(1)	(20,000.00)	(18,874.00)	(1,126.00)	
17 (CF)	644(2)	(10,000.00)	(9,437.00)	(563.00)	
17 (CF)	644(3)	(5,000.00)	(4,718.50)	(281.50)	
17 (CF)	644(7)	(200,000.00)	(188,740.00)	(11,260.00)	
	Subtotal	37,087,903.25	34,961,124.85	2,085,738.40	41,040.00
17 (SF)	15 %	5,563,185.49	5,244,168.73	312,860.76	6,156.00

Additional Costs Not part of the Construction Contract					
Code	Item	Total	Federal	State	Non-Participating
43	Utilities, Coding Backup				45.23 % UTIL
	Basic Bid	150,000.00	67,845.00	82,155.00	
43	Total	150,000.00	67,845.00	82,155.00	

Indirect Cost Allocation Plan					
Code	Item	Total	Federal	State	Non-Participating
17 (ICAP)	Indirect Cost Allocation Plan (ICAP), Coding Backup				94.37 % Q96
	Basic Bid	1,633,577.92	1,541,607.49	91,970.44	
17 (ICAP)	Total	1,633,577.92	1,541,607.49	91,970.44	