

Print 2-sided on 8.5" x 11" Paper
Fold in half to create **EBASE Booklet**





EBASE Fundamentals

Data Entry Guide
Outlining the type of information
to be entered on the EBASE screens



To:



Thomas W. Hume-Pontius
Washington State Department of Transportation
Transportation Building
P.O. Box 47440
Olympia, Washington 98504

General Info Tab

Title Box

Line 1 - Route designator or Description

Line 2 - First Line of Title.

Line 3 - Second Line of Title (if applicable)

Line 4 - PS&E Job Number*

* Text must be entered on the 4th line for the title to appear on the reports. This number is assigned by the Region Plans Office. (the work order may be used here until the PS&E # has been assigned)

Summary of Quantities Revisions button
Use this button to add sheet numbers to the Summary of Quantities, and to add revision notes to the SQ for addendums.

Access button
Use this button to grant access to the estimate enabling other users to make revisions

Duplicate / New Version button
Use this button to create a new version of the estimate. (creating a new version is necessary to revise an estimate that has been locked) or to create a duplicate of the estimate with a different name

Contingency Percentage - Must contain a number - See Appendix B in the EBASE user's guide for the table of percentages. Enter zero if not applicable.

Engineering Percentage - Must contain a number - See Appendix B in the EBASE user's guide for the table of percentages. Enter zero if not applicable.

Work Order Number - Enter the complete L-Number (i.e. XL1234; OL1234)

Using the "Filter" Button

Using the Filter Function in EBASE to extract data is cumbersome due to the fact that it must actually be "Coded". Included here are some examples that should get you though in most cases.

PROJECT BY TITLE:
Example... to find all projects that contained "Seismic" in the title.

`title like '%'+ 'SEISMIC' + '%'`
(This is case sensitive, words in the title must be exact).

FIND AN ESTIMATE VERSION:
Example... To find versions greater than 10.

`version_number > 10`

FIND BY CONTRACT NUMBER:

`contract_number = '006801'`

A Pre-Existing Column must be selected to apply the Filter to. When filtering use the Columns box to select what criteria to filter by (i.g. by double clicking on "Title" you will be specifying to look in the Titles Table). NOTE: Available Column selections will vary depending on the screen you are filtering from.

ADVANCED FILTERING

TO FIND A RANGE:
Example... To find a Planned Quantity range

`planned_quantity > 5,000 and planned_quantity < 10,000`

TO FILTER BY 2 SETS OF CRITERIA:
Example... To find a Planned Quantity + an Award Date on or after a specified date.

`(planned_quantity > 5,000 and planned_quantity < 10,000) and award_date >= date(yyyy,mm,dd)` (enter your date in year, month, day)

TO FILTER BY 3 SETS OF CRITERIA:
`(region_code= '6') and (award_date >= date(yyyy,mm,dd)) and planned_quantity >= 2`

Percentage Entry Guide by Project size

Project Amount	Mob Range
Less than \$100,000	8% – 12%
\$100,000 – \$250,000	6% – 10%
\$250,000 – \$500,000	6% – 9%
\$500,000 – \$1,000,000	5% – 9%
\$1,000,000 – \$2,000,000	6% – 9%
\$2,000,000 – \$5,000,000	7% – 9%
\$5,000,000 – \$10,000,000	8% – 10%
\$10,000,000 – \$20,000,000	8% – 11%
Over \$20,000,000	7% – 10%

Mobilization
use the following percentage based on the size of project.

The Text Data tab Provides three areas to enter Project Level descriptive remarks

Project Remarks

CONSTRUCTION / ENCROACHMENT PERMIT WITH IDAHO DEPARTMENT OF TRANSPORTATION (ON FILE)

This screen is for entering special Project level remarks that you want to bring attention to. Any text entered here will be printed on the bottom of the Preliminary Estimate Summary Report.

Save

Engineering Percentages - (P) Preservation Projects

Preservation Projects Cost Range Table*										
Project Construction Cost	P-1		P-2			P-3				
	PA	PB	PC	PD	PE	PF	PG	PH		
\$0 – \$250,000	20%	20%	24%	18%	18%	23%	14%	21%		
\$250,000 – \$500,000	18%	18%	24%	16%	16%	20%	12%	18%		
\$500,000 – \$1,000,000	16%	16%	22%	16%	12%	18%	10%	16%		
\$1,000,000 – \$2,000,000	14%	14%	20%	14%	10%	16%	10%	16%		
\$2,000,000 – \$5,000,000	12%	12%	20%	14%	8%	14%	8%	14%		
\$5,000,000 – \$10,000,000	10%	10%	18%	14%	6%	14%	8%	14%		
\$10,000,000 – +	8%	8%	18%	14%	6%	14%	8%	14%		

* Highlighted percentages indicate there were not enough projects for an accurate sample.

Proposal Description

SR 18, IN KING COUNTY, MP 0.05 TO MP 2.77, EB OFF RAMP TO WEYERHAEUSER WAY AND WEYERHAEUSER WAY TO SR 167, A STATE PROJECT.*

*IF THIS PROJECT HAD FEDERAL FUNDS, THE LAST LINE WOULD READ: A FEDERAL AID PROJECT,

Enter the Route, County, Mile Posts, Project Title and if it is a State or a Federal Project. Always end this paragraph with a comma. This text is inserted into the paragraph at the top of the Proposal report

Save

Engineering Percentages - (I) Improvement Projects

Improvement Projects Cost Range Table*												
Project Construction Cost	I-1				I-2			I-3			I-4	
	IA	IB	IC	IQ	ID	IE	IF	IG	IH	II	IK	IL
\$0 – \$250,000	26%	18%	22%	22%	24%	22%	22%	20%	12%	12%	18%	22%
\$250,000 – \$500,000	23%	17%	22%	20%	22%	20%	20%	20%	12%	12%	18%	22%
\$500,000 – \$1,000,000	20%	16%	20%	20%	20%	18%	20%	18%	12%	12%	18%	22%
\$1,000,000 – \$2,000,000	17%	15%	20%	18%	18%	16%	18%	16%	12%	12%	18%	22%
\$2,000,000 – \$5,000,000	14%	14%	18%	16%	15%	14%	16%	14%	12%	12%	18%	22%
\$5,000,000 – \$10,000,000	13%	13%	16%	14%	13%	12%	14%	12%	12%	12%	18%	22%
\$10,000,000 – +	10%	10%	14%	12%	10%	10%	14%	10%	12%	12%	18%	22%

* Highlighted percentages indicate there were not enough projects for an accurate sample.

Type of Work

THIS PROJECT CONSISTS OF PREPARATION, GRADING, DRAINAGE, STORM SEWER, SURFACING, BRIDGE APPROACH SLAB, ASPHALT CONCRETE PAVEMENT, STRUCTURES, EROSION CONTROL, PLANTING, GUARDRAIL, PAVEMENT MARKING, SIGNING, SIGNALIZATION, INTELLIGENT TRANSPORTATION SYSTEM, ILLUMINATION, TRAFFIC CONTROL, AND OTHER WORK TO PERFORM THE WIDENING, STABILIZATION, AND SAFETY WORK ON SR 18.

Use this screen to enter a brief description of the Major items of work being performed. This text is limited to 4 lines, and will be printed at the top of the Preliminary Estimate Summary report

Save



Step 1 - Creating Funds

Fund Number	Double Click on Item For Fund Remarks/Agreement
5	
10	

A Fund Number is simply a place holder to group Participants together under.

Create your Fund numbers by clicking the ADD button and entering a sequence of numbers, 5, 10, 15; 2,4,6... You may use any sequence that makes sense to you.

If you would like to enter a special comment about any of the Funds you setup, Double click on the Fund Number and a window will be displayed for text entry. Any text entered here will be printed on the Fund Report.

Step 2 - Creating Participants

Participant Name	Federal Aid Project Number	Funding Indicator
FEDERAL	IM-0906(201)	Federal Aid
STATE		State

- Add a line for each Participant that will be contributing funds toward the construction of the project. Each Participant must have a unique name.
- A Federal Aid Project Number must be entered for all federal participants

(e.g. if there are two separate Federal funding sources, do not call them both FEDERAL. Make each distinct, such as FEDERAL IM, FEDERAL NH.) 17 place Character limit for these names

Step 3 - Defining Participant Grouping Under a Fund

Fund Number	Participant	Funding Sequence	Participation Percentage	Maximum Amount
5	FEDERAL	1	90.66%	
5	STATE	2	100.00%	
10	STATE	1	100.00%	

- Add one Fund/Participant line at a time and complete before adding another.
- A Funding sequence must be entered to show who pays first, second etc. Each fund may have up to four participants.
- It is Ok for a participant contribute to more than one fund.
- A Participation Percentage must be entered for each - in decimal format.
- If a Maximum Amount is entered for a participant who has agreed to pay a set dollar amount, the Maximum amount will over ride any Participation Percentage that has been entered. In most cases a Max. Amount participant should be entered as a Funding Sequence of 1, the *Primary* participant, with a Participation Percentage shown as 100%.
- Should it be necessary to remove the Max Amount either enter a zero, or delete and re-add the participant/fund match line

Project title not appearing in footer of reports:

Check on the General Info tab, In the Title box, there must be text entered on the 4th line before the Project Title will be displayed.

Project Title appearing incomplete in footer of reports:

This is caused when the incorrect apostrophe is used in the Project title. Do not use (') always use (`)

Reports generated, but appear blank:

No printers attached, setup a printer to use.

Fund Report Missing Information:

Check the Groups tab, make sure all Groups are assigned to a Fund.

Database Error Screen pops up:

This is usually related to the Funds tab. Check the Funds sub tab and the Fund/ Participant Matching subtab, make sure that all lines on these tabs are complete. If the error continues Close EBASE and log back in. If the error still persists contact your EBASE support person for further help.

Summary of Quantities Report, Item Missing or out of Order:

Go to the Bid Items tab, make sure that all your bids Items have the correct Section Heading.

EBASE opens to the wrong Region and/or Estimates you create are not Saved to your Region:

Login to EBASE, Close the broadcast message screen when it appears. When the Gray screen is displayed click on "FILE", "CHANGE REGION", select your Region and click "CLOSE". This will re-assign your Login ID to the Region you are currently logging in from.

DBPROCESS Error:

The Server that EBASE lives on has went down or your connection to it has been otherwise interrupted. Click on "FILE", "ReConnect".

>>> If you get the eternal hour glass while using or trying to log in to EBASE, the server has went down. If this has locked up your machine, ALT+CNTRL+DELETE to view the Task Manager, End the EBASE task and try again later.

A separate Group will be necessary when:

- There is a change in the Program Number (PIN).
- A change in the Program or Sub-Program (P1, I2, etc.)
- A change in Funding (participants, rates, source of funding)
- Control Section break.
- A separate Group is required for Third Party Damages.

Click "ADD to add a new Group. First select a County for the Group, EBASE will generate a Control Section table based on the County entered.

Select a Control Section number that applies to the area where the work is to be performed. When a Control Section is selected the State Route Number and Tax Rate fields will automatically be completed.

Assign a Fund to the Group.

Enter a Group description, that is descriptive of the type of work being performed and / or the location of the work.

Select Program and enter a Program Item Number.

Select a Federal Work Type Code (if applicable). For Bridge, Modify X000 as indicated in the EBASE Users Guide.

Use the "Move Group" button to re-position a Group in the sequence.

(i.e. move group 5 to group 3... group 5 becomes group 3, group 3 becomes group 4, and group 4 becomes group 5).

All Groups must be assigned to a Column.

Maximum allowed number of Groups in an estimate is: **99**

RESOURCES:
 Control Sections - State Hwy Log
<http://www.wsdot.wa.gov/mapsdata/tdo/statehighwaylog.htm>
 Program Codes - Chart of Accounts
<http://www.wsdot.wa.gov/fasc/engineeringpublications/library.htm>
 Program Item No. (PIN) - CCIP
<http://www.wsdot.wa.gov/projects/cipp/>
 Federal Work Type Codes - EBASE Users Guide, Appendix C
 Project Summary - Filemakerdatabase

Text Data	Funding	Groups	Columns	Bid Items
Column Number	Group Number	Column Heading		
1	1	99+08 TO 301+70		
2	2	301+70 TO 353+44		
3	2	345+58 TO 387+22		
4	3	TRIP PARTY DANCES		

PLEASE NOTE: Column Headings are limited to 10 characters per line!

Move Column

Print Add Delete

A Minimum of one Column must be created for each Group
Additional Columns may be created for a Group with multiple Bridges and Walls to distinguish the item quantities in each.
Pit Sites must have a Column of their own as well.

An exception to creating one Column for each structure would be in small projects with a single br. or wall. These small amount item quantities could be combined with another column if the quantities have been clearly tabulated in the plans.
Paving across multiple bridges would be another exception. These quantities could be combined with the mainline paving.

Use the "Move Column" button to revise the sequence of the Columns. All Group and Bid Item ties to the column will remain intact.

Never leave Columns in your estimate that have no bid items assigned to them, doing so may cause unexpected errors in the estimate reports.

Maximum allowed number of Columns in an estimate is: **99**

RESOURCES:

Column Break Rules - PPM
See Section 400.06(5)(b)
of the Plans Preparation Manual

Non-bid items are those items of work or materials furnished, that are charged to the cost of the project, but not performed or bid on by the contractor.

Non-Bid Items			
Number	Column	Item Description	Unit Price
760	10	SIGNAL CABINET AND EQUIPMENT	20,000.0000
761	13	SIGNAL REVISION ON SPRAGUE AVE	1,000.0000
762	4	STATE FORCE WORK - TDO LOOPS	7,500.0000
763	2	WWP WORK	10,000.0000
800	4	RAILROAD FLAGGING	100,000.0000
860	9	SIGNAL REVISION ON BROADWAY WB RAMP	1,000.0000
Total:			\$139,500.00

Numbers 700 thru 799 range are to be used for work to be performed by others such as Utility agreement work and work by State forces other than the DOT.
(These items will have Construction engineering and contingencies applied to them, but no sales tax).

Numbers 800 thru 899 range are to be used for State Force Work or State Furnished Materials.
(These items will have no sales tax, construction engineering or contingencies applied to them).

Keep in mind that **800 thru 859** are for Fed aid items, and **860 thru 899** are non-fed participating items.



Section Header tab

Sect No.	Section Description	Alt Code
11	BITUMINOUS SURFACE TREATMENT	
12	ASPHALT TREATED BASE	
13	CEMENT CONCRETE PAVEMENT	
14	ASPHALT CONCRETE PAVEMENT	
15	SEAL COAT	
16	IRRIGATION AND WATER DISTRIBUTION	
17	EROSION CONTROL AND PLANTING	
18	TRAFFIC	
19	OTHER ITEMS	
20	BUILDING	
29	SUPERSTRUCTURE	
30	OBSOLETE ITEMS HIDEOUT	
35	ALTERNATE A1 - WALL 1	A1
36	ALTERNATE A2 - WALL 2	A2
50	ROAD USER COST	R1

Accumulate Alternates
 Include Road User Cost

Print Add Delete Save Sort

All Standard and most Non-Standard Bid Items will be assigned to the list of Standard Section Headers. For Standard Bid Items, the Section Header has been pre-determined and is imported when the Standard Item is entered. For Non-Standard items the Section Header must be selected from the menu in the Item details area of the Bid Items tab. If a Section Header was not previously imported with a Standard item, it may not be in the active list.

To add a Section Header, click the "Add" button enter a "Sect. No." and select a Section Description from the menu.

For some speciality contracts you may need to add a Non-Standard Section Header, Follow the same procedure as above, but use a Sect. No. in the 30's range and manually type the Section Description.

Alternates follow the procedure above, plus enter the appropriate "Alt Code". If the Alternates are accumulative i.e A1 + A2, also check the "Accumulate Alternates" box. (See the EBASE Users Guide for a detailed explanation of Alternates.)

Road User Cost (a+b bidding) is set up just like alternates except the Sect. No. to use is 50 and above, and the Alt Code is entered as R1, R2 etc. The Road User Cost box must be checked before EBASE will include items assigned to this type of Section Header. (See the EBASE Users Guide for a detailed explanation of Road User Cost.)

Section Numbers & Related Description

1	Preparation
2	Grading
3	Stockpiling
4	Draining
5	Storm Sewer
5	Sanitary Sewer
7	Water Lines
8	Structure
9	Surfacing
10	Liquid Asphalt
11	Bituminous Surface Treatment
12	Asphalt Treated Base
13	Cement Concrete Pavement
14	Asphalt Concrete Pavement
15	NOT USED
16	Irrigation and Water Distribution
17	Erosion Control and Planting
18	Traffic
19	Other Items
20	Building
21-28	RESERVED
29	Superstructure
31-49	Use these for Alternates or Special
50	Use for Road User Cost (A+B bidding)



Bid Items

Items

Item Number	Std Item Num
1	
2	6979
3	7725
4	7728

Section Headers

Column Number	Planned Quantity
1	147,191.00

Buttons: Add Item, Add Column, Standard Items, Non-Standard Items, Re-Set Item Num, UBA History Data, Specifications, Delete Item, Delete Column, Sort, Save, Move Item, Spreadsheet, Item Report, Lump Sum Breakout Items, Item Comments (none)

Section Header: 1 PREPARATION Prorate Item:

Standard Item:

Non-Standard Item:

Description: RHETT'S CREEK BRIDGE 904/4.25

Unit Price: 1.0000 Unit Measure: L.S. Prequal Code: G2

fig. 1

Button Panel

- Add Item Button** - used to add one Standard or Non-Standard item at a time.
- Standard Items Button** - Used to select and import multiple Standard Items from the Standard Item Table.
- Non-Standard Item** - Has not been implemented.
- Re-Set Item Num** - Resets the item number to it's current position in the list.
- UBA History Data** - Returns Low Bid history for the item currently selected.
- Specifications** - Displays specification revision history for the selected item.
- Item Comments** - Provides a note box to enter special conditions for the selected bid item.
- Sort** - Sorts the listed items by their assigned Item Number.
- Move Item** - Allows for an item to be moved to a new position in the list.
- Spreadsheet** - opens a spreadsheet view of the bid items.
- Item Report** - Generates the Preliminary Estimate Item Report.

Lump Sum Breakout Items button

The Lumpsum Breakout Items button opens a worksheet that is used to calculate the total cost of the selected Lumpsum bid item. Enter all elements/quantities/unit prices that comprise the L.S. bid item and EBASE will calculate a L.S. total. Transfer this total to the Planned Quantity field for the bid item.

Job: LSBREK Version: 1 Item: RHETT'S CREEK BRIDGE 904/4.25

Standard Item Number	Planned Quantity	Unit Of Measure	Unit Price	Total Cost
6419	512.00	S.Y.	2.0000	\$1,024.00
Description: SEEDING AND FERTILIZING BY HAND				
6751	125.00	L.F.	20.0000	\$2,500.00
Description: BEAM GUARDRAIL TYPE 1				
7540	420.00	L.F.	4.0000	\$1,680.00
Description: CONSTRUCTION GEOTEXTILE FOR TEMPORARY SILT FENCE				
Lump Sum Break Out Items Total:				\$147,919.00

Buttons: Print, Sort, Add, Delete, Save, Save As, Close

fig. 3

Items

Item Number	Std Item Num
1	0001
2	0280
3	0049
4	0061
5	0565
6	0575
7	0585
8	0595
9	0182
10	0185
11	0887

Section Headers

Column Number	Planned Quantity
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Section Header: 1 PREPARATION Prorate Item:

Standard Item: 0001 MOBILIZATION

Non-Standard Item:

Prorate Amount: 1,129,250.0000 Unit Measure: L.S. Prequal Code: A1

fig. 2

Some Lumpsum (L.S.) bid items, their cost will be Prorated across multiple columns of work. To prorate an item: Add all the columns in which you must include the item, Click the "Prorate Item" box, Enter the amount that will be prorated in the "Prorate Amount" field.

If the item was first created as a non prorated L.S. item, Make sure that all the "Planned Quantity" fields are zero'd out before checking the "Prorate Item" box.

NOTES:

Non-Standard Items - Do not enter a Non-Standard item #. Enter the Non-Standard description in the "Description" field. (as shown in the example for fig. 1) Remember, when entering a non-standard item, to enter a Section Header #, a Unit of measure and a Prequal Code.

Deleting Items for Addendum -

Do not delete the bid item, change the Standard Item # to "7800", In the Planned Quantity field enter ".01" and In the Unit Price field enter "0001".

L.S., CALC., EST. - All bid items with these units of measure Must have the Unit Price entered as 1.00 and the dollar amount entered in the Planned Quantity field (Exception L.S. items that have been Prorated)