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Introduction

Bid Express is an online, searchable database of historical bid data developed by Info Tech Inc. An account is required. The database can be used to find average cost information for specific bid items, search for keywords in bid item descriptions and review awarded contracts. The data search can be tailored to include a specific date range, specific bid items or item descriptions.

Common Bid Express uses include:

- Designers developing construction estimates.
- Construction staff comparing and justifying change order item prices.
- Contractors asking questions about advertised proposals and submitting bids.

Bid Express can be used to find bid prices for any item in the Bid Tab Analysis Page and can be used to find tabulations of any awarded proposal in the Lettings Page.

- Bid Express should not be used for estimating Mobilization and the Traffic Control bid item. The <u>Similar Projects Tool</u> is ideal for estimating these two items. See <u>FDM 19-5-5.5 Tools and</u> <u>Resources</u>.
- Lump sum SPV items may not be similarly scoped. Similar projects likely are needed to find similarly scoped items.

The Bid Express user interface is being updated to New Roads. Screen captures in this guide will be updated to updated pages when we are aware of these changes. Menus and tabs are moving to the left side, and blue color theme is being used instead of green. The look and arrangement of updated pages is different, but the content on each page should remain the same. Links and information are moved to different parts of the page.

- To toggle the New Roads Updates:
 - o Log into Bid Express.
 - o In any classic, green page, select the MyBidx Icon on the top right of the page.
 - o In any updated, blue pages, select your username on the top left of the page.
 - In My Bidx Preference Page, select Enable Bid Express: New Roads or select Disable Bid Express: New Roads.

Start Up

Bid Express is at the following location: https://bidx.com/

Logon credentials are needed to use this site.

- DOT employees have access to Bid Express by requesting login ID and password from the hcci.dtid@dot.wi.gov mailbox. Include your name, email address and phone number in your request. Regions requesting access for multiple users should submit one spreadsheet with requested information to the HCCI mailbox.
- Consultants are not covered under the WisDOT license agreement. They need to acquire their own license at https://bidx.com/ to use Bid Express.

Login

Multiple approaches exist to log into Bid Express. You will need to login to view search results or letting information.

- When you go to https://bidx.com/, press the Login Button in the middle of the page.
- If you have already selected a Wisconsin Department of Transportation in the U.S. Agency Dropdown above the Login Button, or if you are already in the Letting or Bid Tab Analysis Pages, press Login on the top-right corner of the page.

Bid Express Overview

Once you have logged into Bid Express, you will be sent to the WisDOT agency homepage. Other pages on this site include Letting, Search, Advantage, Bid Tab Analysis and Small Business Network.

If you would like additional information about any Bid Express Page, you may look in the help pages linked throughout the Bid Express Site.

WIDOT Homepage

The agency's home page is where the agency posts any messages or news that it wants you to see. Links to updated letting files are also posted.

Lettings

The Lettings Page displays a list of every letting since the Bid Express service has been active for the agency, grouped together by year. Click the down arrow next to a year to see all the letting dates for that year. Click the up arrow to only show the year.

Information for each letting, and proposal is provided. This includes bid tabulations for each awarded proposal, bid summary, questions and answers and plan holders and eligible bidders.

Search

Search may be used to find items, bids or bidders. The basic search lists all fields that contain the search criteria. The advanced search narrows down the criteria to a more specified search.

Advantage

Only contractors can use all the functionality of the Advantage Page. We can only use View Contractor, which allows you to search for the bids of a specific contractor in a specified time frame.

Bid Tab Analysis

The Bid Tab Analysis Page is a common page used by designers. This page is used to find historical statistical information about item bid prices, including the average, high and low bid item prices, over a specified period. There are different ways to search for an item for analysis including item number, item description, proposal ID, county, unit and low bidders within date, quantity and price ranges. Using more than one field limits the return to those fields.

Small Business Network

Small Business Network is used by prime and subcontractors. They use it to request sub-quotes as a prime contractor or submit a response to sub-quote requests as a subcontractor.

Looking up Bid History

Looking up bid history in the Bid Tab Analysis may be used to estimate the following items:

- Quantifiable standard and STSP items,
- Lump sum standard and STSP items,
- Quantifiable SPV items,
- Lump sum SPV items.
 - Results may not be similarly scoped. Similar projects likely are needed to find similarly scoped items.

These items are defined in FDM 19-5-5.4 Estimate Types and Components. All bid items, current and obsolete, are listed in Item Overview in AASHTOWare Projects. Login credentials for AASHTOWare Preconstruction or Construction are required. If you do not see the Item Overview in AASHTOWare Projects, still try the link after logging into AASHTOWare Projects. You should have permission to see this page without seeing the link in AASHTOWare Projects Homepage.

Again, the Bid Tab Analysis Page is used to find historical statistical information about item bid prices, including the average, high and low bid item prices, over a specified period. There are different ways to search for an item for analysis using the various fields listed below.

Search Field	Field Format	Expected Result
Item	Item Number	A list of items and the proposals in which the item appears.
Smart Item	Check the box	Used with the Item Number field. Returns items where either part
Search		of the item number begins with the entered criteria. For example,
		if you enter 201, the Smart Item Search will return 201.#### and ###.201#.
Smart Item	Uncheck the box	Used with the Item Number field. Returns items where the item
Search		number begins with the entered criteria. For example, if you enter
		201., the Item Search will return the items beginning with 201.,
		which are all the items having a description of Clearing and
		Grubbing.
Description	Item Description	A list of items that match the description and the proposals
		containing the items. Supplemental descriptions are merged with
		item descriptions.
Proposal	Proposal ID	A list of items that appear in the entered proposal, plus every
Items	number	proposal in which those items appear.
County	County	A list of items from proposals that are in the specified county.
Unit	Unit	A list of items that use this unit plus the proposals in which the
		item appears.
Low Bidders	A number	A list of items and the proposals in which they appear for the
		number of bidders specified.

What to enter in the Fields

Especially for significant items, an initial review of at least 20-30 results is recommended to
ensure your selected price makes sense. Then, you would know what the bid price range is for
these items.

- Limited results from a constrained search may show some outlier prices that do not reflect expected unit prices and cause your estimate to be inaccurate.
- After reviewing broader results, reasonable prices ranges may be selected in the Quantity Range, Price Range or other fields.
- Multiple criteria may be used for each field. Separate multiple values in one field with a comma.
- For standard and STSP items, enter the item number in the Item Field.
 - For similar items such as concrete pavement, asphalt pavement, culvert and storm sewer items, enter all item numbers separated by commas.
 - Otherwise, the first part of an item number and a description may be entered for a variety of similar items.
 - Smart Item Search may have to be unselected to get the expected results.
 - For example, "520.3" may be entered in the Item Field for all class III culvert pipes, "24-Inch" may be entered in the Description Field for all items that contain 24-Inch. The result is all class III culvert pipes that are 24-Inch diameter.
- For SPV items, enter the item description in the description field.
 - Completing an initial search without limiting units may help find similar units or exchangeable units for your item. This includes each and lump sum, or square feet and square yards.
 - If you need to limit your results to specific units, you can enter the relevant SPV item number(s) in the Item Field or enter the relevant unit in the Unit Field, see FDM 19-15-80.1 Assigning Numbers to SPV Items (pages 20-22) for SPV item numbers, units and descriptions
- For finding bid history in areas that are geographically similar, enter the desired counties separated by commas.
 - Desired counties may be a one or two county radius around your project's county or the counties that are located on the roadway or in the region in which the project will occur.
 Appendix 1 contains a region and county map.
 - The <u>Asphalt Price Map</u> can be used to find nearby counties with similar asphalt prices, and these counties can be used in the Bid Express search criteria, see <u>FDM 19-5-5.6.3</u>
 Bid Item Estimating Guidance under Asphalt Pavement Items (page 18).
 - Saint Croix County needs to be entered as "St Croix" without a period or simply "Croix".
 - County and region wide codes are assigned to specific counties and regions.
 Appendix 2 contains county and region codes and Appendix 3 contains a Bid Express help sheet with all regions listed.
- The <u>Similar Projects Tool</u> may be used to search for bid history of similar projects. After filtering your results in the Similar Projects Tool, use the Copy Proposal IDs for BidX Button in the Filters, Results and Data Sheets. Broad filters should be used such as including similar Improvement Types. The button will copy the proposals from the filtered results. You can paste this proposal list in the Proposal Items Field. **Be sure to enter search criteria in the Item or Description Fields, otherwise the search will not work.**
- Change the Date Range to what is needed. Three months is entered by default and more results are typically needed. Bid history from the past year is recommended.
 - Less than a year may be needed if you want to review recent price trends.
 - Up to three years may be needed, especially when finding more than 20-30 results for broad searches.

- If bid history is older and limited, you likely need to adjust the historic bid price into current dollars using the WisDOT Chained Fisher Construction Cost Index, see <u>FDM 19-5.6.4</u> Unit Price Guidance under Adjusting Unit Prices (page 20).
- Use quantity ranges to refine your search results to projects with similar quantities.
 - Projects with a lot of spot work may want to include lower quantities completed in each stage or location.
- Entering Price Ranges can limit unbalanced items in the results. Adding a price range from \$0.02 would remove all penny bids, and other bids are averaged. Adding an upper price range would remove all unbalanced bids that are high.

When you have finished entering what is needed press search.

Review Results

The results provide item number, item description with supplemental description, average bid price, high bid price, low bid price, unit and number of bids. Expand search results for each item result. Expanded results also include the same information for each proposal with the letting date, proposal ID and county.

- The average bid price usually is used as the estimated price.
- Otherwise, you may select the proposal ID for the bid tabulations of that proposal and find the low bidder's unit price.

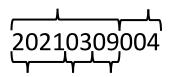
Multiple iterations of results may be needed. Increasing the geographic area and increasing the date range are easy ways to increase the number of results.

Looking Up Bid Tabulations

Bid tabulations are frequently found two ways, by selecting the proposal ID of Bid Tab Analysis Searches and within the Lettings Page.

The proposal ID is needed to find bid tabulation of desired projects in the Lettings Page. Proposal IDs can be found in the Data Sheet of the <u>Similar Projects Tool</u> if you have the controlling project ID or other project information. The proposal ID is made of eleven numerical digits. The first eight digits is the letting ID using the letting date. See below for the meaning of each numerical digit.

Letting ID Call Number



Year Month Day

Steps to View and Download Bid Tabulations

- 1. The Letting Page shows a list of lettings.
 - a. For each letting, the letting date, letting ID, number of proposals and if the letting date has not passed, the cut-off time for receiving bids is provided.

- b. Click the down arrow next to a year to see all the letting dates for that year. Click the up arrow to only show the year.
- 2. Select a letting date or the right-arrow to select a letting. Proposals in the letting are listed.
 - a. Information for each proposal is provided including proposal ID, project ID, proposal description, county and proposal work type.
 - b. Across the top,
 - i. Plan holders and eligible bidders for the letting are linked.
 - ii. Questions and answers for the letting are linked.
- 3. Select a proposal ID to select a proposal. Bid items and quantities are shown.
 - a. If the proposal has been awarded, on the right,
 - i. Bid tabulations is linked.
 - ii. Bid summary and viewing bids in the Advantage Page are linked.
 - b. Across the top,
 - i. Plan holders and eligible bidders for the proposal are linked.
 - ii. Questions and answers for the proposal are linked.
- 4. On the right, select the bid tabulations link. Bid tabulations are shown.
 - a. Bid summary is shown on the top.
 - b. Bid tabulations may be exported using the Export (csv) link on the top, right of the bid tabulations.

Quickly Viewing Bid Tabulations of Other Proposals

After you have completed the steps to view and download tabulations, you may want to quickly view and/or download bid tabulations for other proposals. You are recommended to obtain or at least review the bid tabulations of your similar projects. The assumption is, that you already have a list of proposals from the Similar Projects Tool or the proposal IDs of your similar projects.

- 1. In the bid tabulations page, go to the URL on the top of the browser. The proposal ID is at the end of the URL.
- 2. Replace the proposal ID with another proposal ID and press enter. Bid tabulations for the other proposal are shown.
 - a. If the proposal has not been awarded, a message page will open stating that bid tabulations are not available for this proposal.
- 3. Review and/or download the bid tabulations of the other proposal.
- 4. Repeat as necessary.

Tips and Tricks

Find a Proposal ID with any Project or Structure ID

Sometimes the project or structure IDs are known, but the Proposal ID is not and is needed. Some items have the project or structure ID as part of the supplemental description, and these items are in nearly all projects. The supplemental description is merged with the item description in Bid Express' Item Description. Find Proposal and Bidding Information, Using Structure IDs and Find Proposal and Project ID Information, Using Structure IDs are more in-depth and may be needed if these quick steps do not yield the desired results using structure IDs. It is assumed you have already read through Looking Up Bid History, as most of the steps are similar.

- 1. Go to the Bid Tab Analysis.
- 2. Enter the entire or a portion of the project or structure ID in the Description Field. Be sure to include a broad date range, especially if you do not know when the project or structure was let.
- 3. Select Search.
- 4. Expand all search results.
- 5. Select or note the relevant proposal ID(s).
- 6. Otherwise if necessary, repeat the search with broader date ranges or smaller portions of the IDs.

Find Proposal and Bidding Information, Using Structure IDs

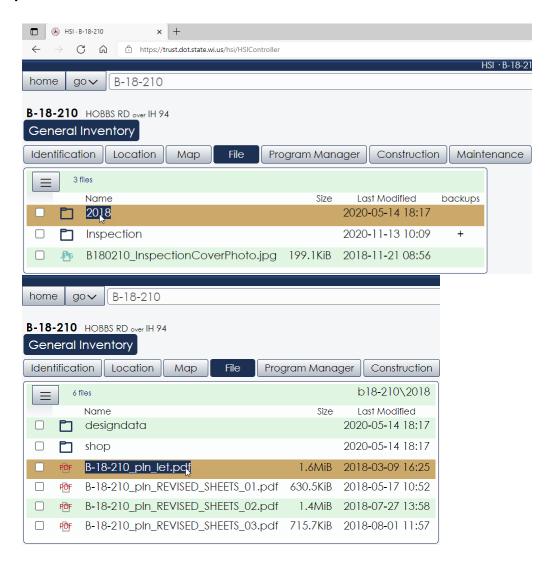
When trying to find projects with similar structure work, the <u>Highway Structures Information (HSI)</u>
<u>Application</u> can be used. It is linked in the <u>Highway Structures information System Webpage</u>.

The following is helpful when entering structure numbers, they begin with the following letters based on structure type: B, C, P, S, L, R, N, or M (<u>WisDOT Bridge Manual 2.5 Structure Numbers</u>). The beginning letter is the structure type designation.

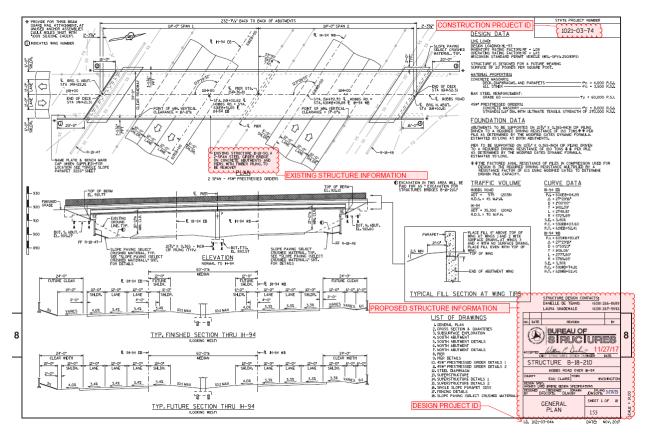
The structure type designation is then followed by a <u>two-digit county number</u>, a unique four-digit structure number, and in some cases a unit number. Note: leading zeroes may be omitted from the structure number (i.e. B-5-70).

Instructions

- 1. In HSI, enter a partial or complete structure number then search.
 - a. Under "General Inventory" select File followed by the most recent year folder
 - b. Select the most recent file that ends with "_pln_let.pdf"



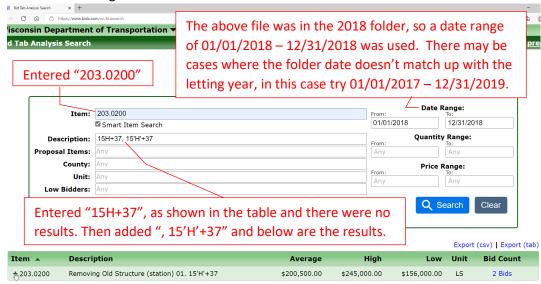
- 2. Plan sheets can now be viewed and examined for information about the structure:
 - a. Construction Project ID.
 - b. Existing structure information.
 - c. Proposed structure information.
 - d. Design Project ID.
 - e. Total Estimated Quantities.
 - f. Bid numbers and items used for structure.



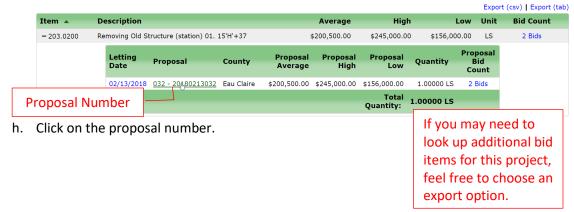
TOTAL ESTIMATED QUANTITIES

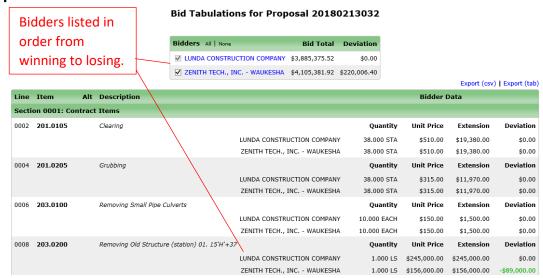
BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	PIER	NORTH ABUT.	TOTALS
203.0200	REMOVING OLD STRUCTURE STA, 15H+37	LS					1
203.0210.5	ABATEMENT OF ASBESTOS CONTAING MATERIAL B-18-50	LS					1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-18-210	LS					1
210.1500	BACKFILL STRUCTURE TYPE A	TON	_	219		210	429
502.0100	CONCRETE MASONRY BRIDGES	CY	348	54	76	53	531
502.3200	PROTECTIVE SURFACE TREATMENT	SY	873				873
502.3210	PIGMENTED SURFACE SEALER	SY	188	15	_	15	218
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	1,373				1,373
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	_	3,310	1,580	3,170	8,060
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	71,420	3,290	11,370	3,240	89,320
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	24				24
506.4000	STEEL DIAPHRAGMS B-18-210	EACH	20				20
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY		11	_	11	22
550.2106	PILING CIP CONCRETE 10 3/4" X 0.365-INCH	LF		1,105	3,420	1,105	5,630
604.0600	SLOPE PAVING SELECT CRUSHED MATERIAL	SY		76	_	87	163
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH		2		2	4
SPV.0090	FENCE CHAIN LINK POLYMER COATED 6-FT.	LF	465	35		35	535

- 3. In Bid Tab Analysis search for the 203.0200 Removing Old Structure item such as with STA. 15H+37 in this example.
 - a. Enter item number.
 - b. Enter date range from January 1st to December 31st of the folder year above.
 - c. Enter supplemental description.
 - d. Select "Search"
 - e. If no results are available, try one or more of the following:
 - i. For the date range, try adjusting it a year or two.
 - ii. For the description, add additional criteria.
 - f. Select "Search" again.

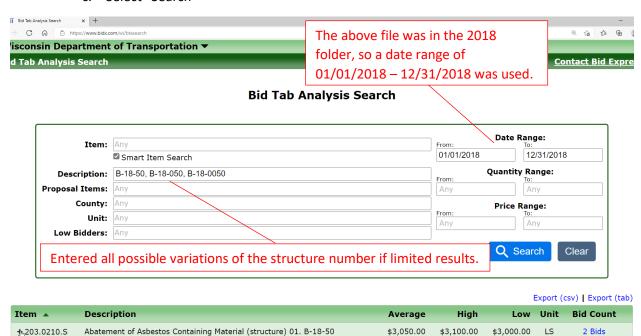


g. Expand all relevant search results.





- 4. In Bid Tab Analysis search for the desired structure ID, such as B-18-50 in this example.
 - a. Enter date range from January 1st to December 31st of the folder year above.
 - b. Enter supplemental description in the description field.
 - i. Structure numbers begin with the following letters based on structure type: B, C, P, S, L, R, N, or M (WisDOT Bridge Manual 2.5 Structure Numbers)
 - ii. The structure type designation is then followed by a <u>two-digit county number</u>, a unique four-digit structure number, and in some cases a unit number. Note: leading zeroes may be omitted from the structure number (i.e. B-5-70). If no results show up for the description shown on the plan, try different combinations.
 - c. Select "Search"



d. Expand all relevant search results

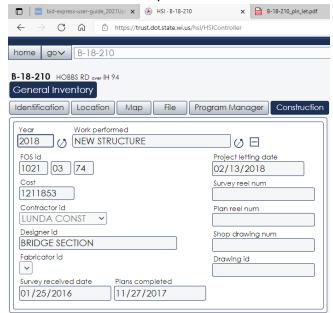
Export (csv) | Export (tab)

Item 🔺	Description					Average	High	Low	Unit
- 203.0210.S	Abatement of A	Abatement of Asbestos Containing Material (structure) 01. B-18-50 \$					\$3,100.00	\$3,000.00	LS
	Letting Date	Proposal	County	Proposal Average	Proposal High	Proposal Low	OHANTITY	Propos Bid Cou	
	02/13/2018	032 - 20180213032	Eau Claire	\$3,050.00	\$3,100.00	\$3,000.00	1.00000 L	S 2 Bids	5
		, and the second				Total Quantity:	1.00000 L	s	

e. Click on the proposal number to view bidders as shown in step "3 h." above.

Find Proposal and Project ID Information, Using Structure IDs

- 1. In the HSI Application, enter a partial or complete structure number, then search.
 - a. Under "General Inventory" select "Construction"



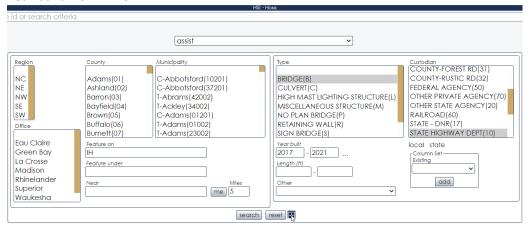
- b. The FOS id is typically the Construction Project ID, the project letting date was 02/13/2018, so the Proposal Number would start with 20180213 followed by the Proposal number for that letting. Additional information is also provided for this structure.
- 2. In Bid Express enter the following:
 - a. Date range from January 1st to December 31st of the year above or more precisely the letting date.
 - b. The bid item numbers for Construction Staking Structure Layout, Item 650.6500 followed by the Special Provisions (SPV) Bid item for Lump Sum (LS), Item SPV.0105, as some projects have been assigned a Lump Sum survey item.
 - c. Supplemental descriptions for the bridge number include all possible combinations, and the Project ID.
 - d. Starting digits of the Proposal Number

Bid Tab Analysis Search

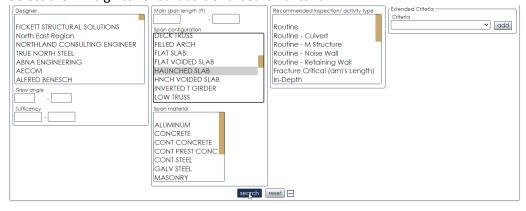


Assist Function in HSI to Find Similar Structures or Maintenance Work Performed

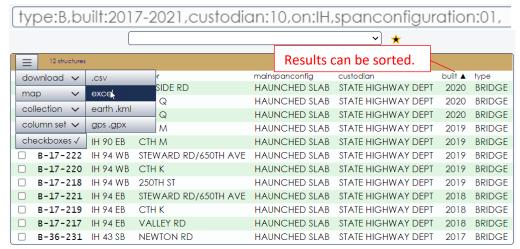
- 1. In HSI, select "assist" from the dropdown menu in the center of the screen and select or enter the following:
 - a. Feature on: IHb. Type: Bridge(B)
 - c. Custodian: State Highway Dept(10)
 - d. Year built: 2017 2021



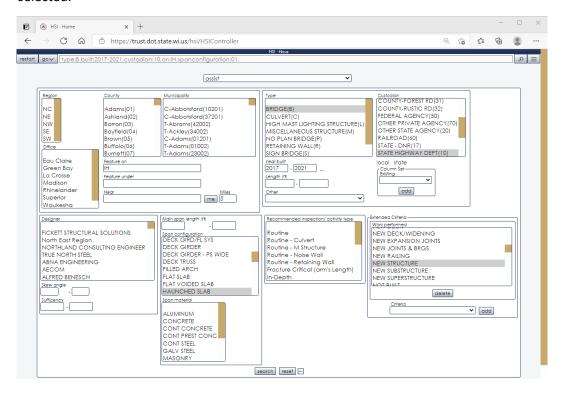
e. Select the "+" sign to reveal additional search criteria.



- f. Span configuration: "Haunched Slab"
- g. Select "Search"



- 2. The results can then be saved to a collection, downloaded in an excel format, or individually selected to determine the project and proposal ID as mentioned previously.
- It should be noted that the Extended Criteria, criteria can be useful as you can add criteria such as "Work performed" will then give another dropdown menu and "NEW STRUCTURE" could be selected.



Modifying the URL to Find Information on Additional Proposals

The proposal ID or letting ID is commonly part of the URL for any webpage. You may directly enter a new proposal ID or letting in the URL and you will be sent to the same page for the new proposal or letting.

- Lettings Summary Pages
- Proposal Items Pages
 - o The letting ID and proposal ID need to be changed.
- Bid Tabulation Pages, which is previously shown in this guide.
- Bid Summary Pages
- Proposal Questions and Answers Pages
- Exporting CSVs
- And more.

Filter and Graph Bid Tab Analysis Results in Excel

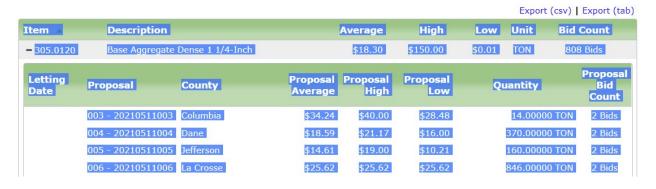
A regression curve is created in Excel. Additional effort is required to use Excel to filter and graph Bid Tab Analysis results. This method is recommended for quantifiable significant items and is not worthwhile for non-significant items. The following items can be used:

- Quantifiable SPVs
- Similar quantifiable items such as varying depths of concrete pavement or similar culvert pipes.
- Similar quantifiable items with different units.
 - Excel is used to convert quantities and prices such as base aggregate dense in TONs and CY.

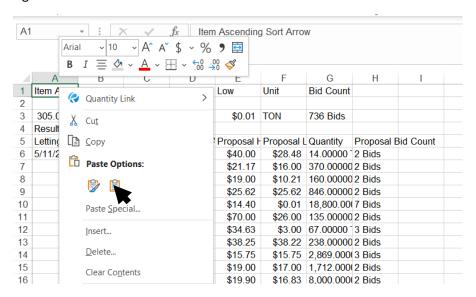
Instructions

An Excel Example file is available at the following location: https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/bidx-example.xlsx

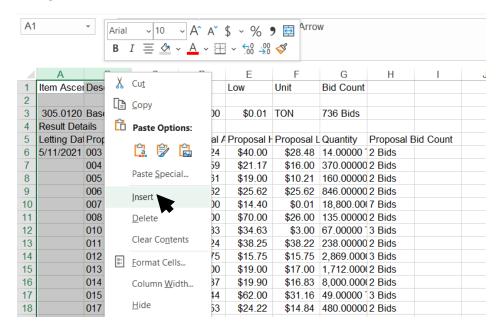
- 1. In Bid Tab Analysis, use broad searches to quickly gather all data we need and use Excel to filter results.
 - a. Expand all relevant search results.
 - b. Highlight all text in search results from the headings down to the last relevant search result.
 - c. Hold Control and press C to copy this text to your clipboard.



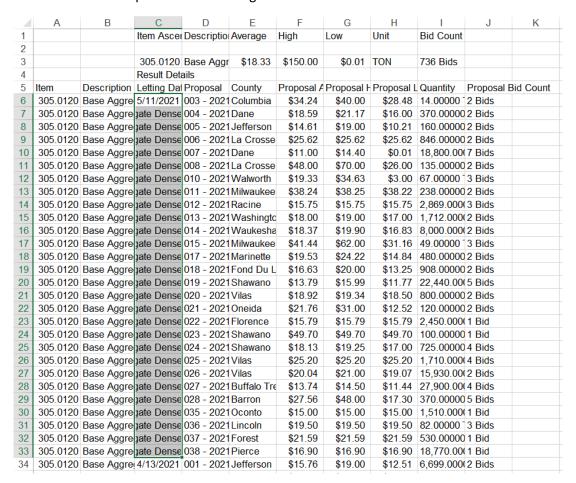
- 2. Paste values in a new Excel file or tab.
 - a. Open a new Excel file or tab.
 - b. Right-click on Cell A1 and select the Match Destination Formatting Paste Option.
 - c. Now all the text you select has been moved to Excel. We will need a few more steps to get this into a usable format.



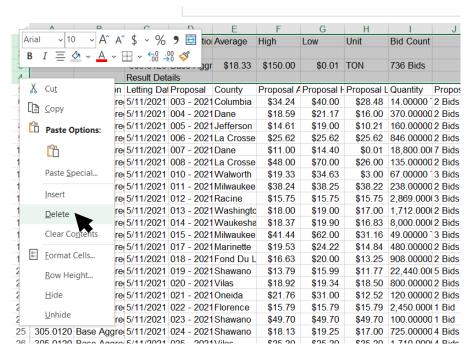
- 3. Insert two columns left of Column A.
 - a. Highlight Columns A & B as shown.
 - b. Right-click on the Column labels A or B and Select Insert.



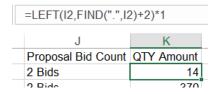
- 4. Enter Item and Description as column names in Row 5.
 - a. Then copy the item numbers and their descriptions to the relevant rows.
 - Be sure to copy the correct item numbers and description if there are results for multiple items.
 - b. If you want to filter by letting date, you will need to copy the letting dates to the empty letting date cells.
 - i. Only the first row containing a new letting date contains the letting date.
 - ii. Select the Letting Date Column for one letting for one item result from top to bottom.
 - 1. The first cell selected should contain the letting date, and the rest of the cells should be empty.
 - iii. Hold Control and press D to fill down the values.
 - iv. Repeat for each letting and each item.



- 5. When you are done copying over the item numbers and item descriptions, delete the unnecessary rows and adjust column widths.
 - a. If there are multiple items, be sure to remove the unnecessary rows between the item results.

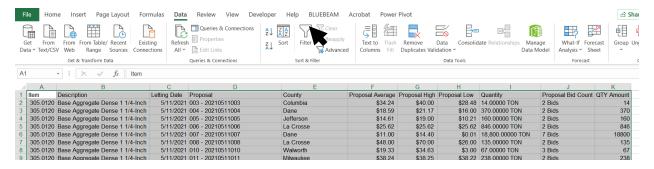


- 6. Create a numeric quantity column.
 - a. Proposal Average and Quantity needs to be graphed. Quantity needs to be a number and not text.
 - b. Create a new column that contains the numerical value from Quantity.
 - i. We will be using the Find Function inside the Left Function. This full function example is on the top of the screen.
 - The LEFT function returns the first characters in a text string, based on the number of characters you specify. In this example, we want everything past two decimal places and not the unit.
 - 2. The decimal's location varies for each project, which is why we are using the Find Function. The FIND function locates specified text within a text string and returns the number characters from the starting position. We are finding how many characters there are until the decimal is found.
 - 3. The "+ 2" indicates the number of characters we want after the decimal.
 - 4. Multiplying the entire function by 1 causes Excel to register these values as a number instead of text.

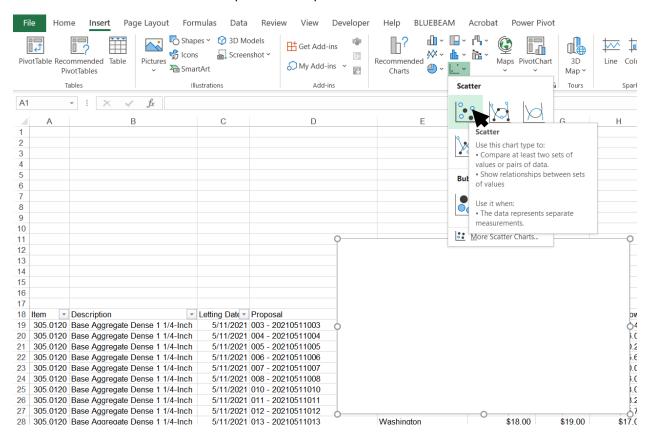


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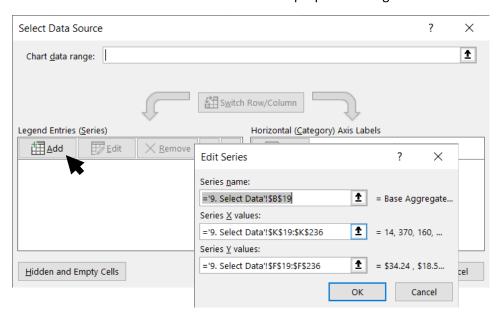
- 7. Add a filter to the data.
 - a. Highlight all the data in columns A through K.
 - b. Select Filter in the Data Ribbon.



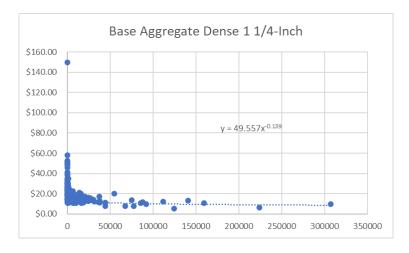
- 8. Now, insert a graph.
 - a. Insert 17 rows on top to make room for the regression graph.
 - b. Select an empty cell.
 - c. Insert an X-Y Scatterplot in the Insert Ribbon.
 - d. Move the X-Y Scatterplot to the top of the sheet.



- 9. Select the graph data.
 - a. Right-click on the chart and click on Select Data.
 - b. In the Select Data Source Window, Select Add
 - c. In the Edit Series Window, add the series name, X and Y values.
 - i. For Series Name, select one of the cells with the item description.
 - 1. The X-values should be all the numerical quantities.
 - 2. The Y-values should be the proposal averages.



- 10. Now, add a trendline by clicking on the chart data, right-click and select Add Trendline.
 - a. In the Trendline Options, select a power trendline and select display equation on chart.
- 11. Use the graph and filters.
 - a. When you're done, the graph should look like the one shown here. The graph automatically updates when you adjust your filters. Using these filters, you may:
 - i. Show only nearby counties.
 - ii. Remove high or low quantities.
 - iii. Selecting specific proposals.
 - b. If there are less than 20 to 30 projects filtered, the trendline will be less reliable.



Conversion Example

Items of different units may be converted in bid results with multiple items, and Excel may be used in the conversion. Links to quantity conversions is in <u>FDM 19-5 Attachment 3.1 Quantity Reference Table</u>.

- A simple way to verify conversions are done correctly is to ensure the amount spent on the item, unit price times quantity, is the same before and after the conversion.
- Ensure the converted quantities and unit prices are selected in the graph.

The <u>Bid Express Excel Example</u> contains a conversion example in the Conversion Example Sheet. Columns L, M and N contain the conversion factor, converted proposal average and converted quantity. In this example, the project is using CY for Base Aggregate Dense 1 ¼-Inch. Most bid history for this item is in TONs, so it needs to be converted from TONs to CY.

- A RIGHT function in an IF function is used for the conversion factor.
 - The RIGHT function figures out the last two characters of Column I to find the item's unit in the Quantity Column.
 - The IF shows a conversion factor of 1 if CY is the unit or shows a conversion factor of 2 if CY is not the unit.

Appendix 1: County and Region Map Bayfield Douglas Iron Vilas Washburn Sawyer **Ashland** Forest Florence Price **Burnett** Oneida North Central Marinette Polk Barron Rusk Lincoln Taylor Oconto Langlade St. Croix **Northwest** Marathon Menominee Clark Chippewa Dunn Pierce Shawano Door Eau Claire Pepin Waupaca **Portage** Kewaunee Wood Outagamie **Buffalo** Northeast Jackson Trempeleau Juneau Waushara Manitowoc **Adams** Calumet Monroe Marquette Winnebago La Crosse Sheboygan Fond du Lac Vernon Columbia Sauk Dodge Ozaukee Richland Southwest Crawford Washington Dane Milwaukee Waukesha Grant Iowa Jefferson Rock Walworth Green Lafayette Racine

Kenosha

Appendix 2: County and Region Codes

REGION	<u>TITLE</u>	CODE	REGION	<u>TITLE</u>	CODE			
SW	SW RgnWide	81	NC	Adams*	1			
SE	SE RgnWide	82		Florence	19			
NE	NE RgnWide	83		Forest	21			
NC	NC RgnWide	84		Green Lake	24			
NW	NW RgnWide	85		Iron	26			
				Langlade	34			
SW	Columbia	11		Lincoln	35			
	Crawford	12		Marathon	37			
	Dane	13		Marquette	39			
	Dodge	14		Menominee	73			
	Grant	22		Oneida	43			
	Green	23		Portage	49			
	Iowa	25		Price	50			
	Jefferson	28		Shawano	58			
	Juneau	29		Vilas	63			
	La Crosse	32		Waupaca	68			
	Lafayette	33		Waushara	69			
	Monroe	41		Wood	71			
	Richland	52						
	Rock	53	NW	Ashland*	2			
	Sauk	56		Barron*	3			
	Vernon	62		Bayfield*	4			
				Buffalo*	6			
SE	Kenosha	30		Burnett*	7			
	Milwaukee	40		Chippewa*	9			
	Ozaukee	45		Clark	10			
	Racine	51		Douglas	16			
	Walworth	64		Dunn	17			
	Washington	66		Eau Claire	18			
	Waukesha	67		Jackson	27			
				Pepin	46			
NE	Brown*	5		Pierce	47			
	Calumet*	8		Polk	48			
	Door	15		Rusk	54			
	Fond du Lac	20		Sawyer	57			
	Kewaunee	31		St. Croix**	55			
	Manitowoc	36		Taylor	60			
	Marinette	38		Trempealeau	61			
	Oconto	42		Washburn	65			
	Outagamie	44	* When enter	ing counties that hav	e a single digit			
	Sheboygan	59	code, add a "-"after the single digit, try also					
	Winnebago	70	prefixing them with "0". Ex: B-2-, B-02, etc.					
			** When ente	ring St. Croix, try ento	ering it as "St			
			Croix".					

Appendix 3: Bid Express Help Sheet All Regions Listed

Southwest Region Counties

Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Juneau, La Crosse, Lafayette, Monroe, Richland, Rock, Sauk, Vernon

County Codes:

11, 12, 13, 14, 22, 23, 25, 28, 29, 32, 33, 41, 52, 53, 56, 62, 81 (Region Wide)

Bridge Structures:

B-11, B-12, B-13, B-14, B-22, B-23, B-25, B-28, B-29, B-32, B-33, B-41, B-52, B-53, B-56, B-62

Culvert Structures:

C-11, C-12, C-13, C-14, C-22, C-23, C-25, C-28, C-29, C-32, C-33, C-41, C-52, C-53, C-56, C-62

Southeast Region Counties

Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, Waukesha

County Codes:

30, 40, 45, 51, 64, 66, 67, 82 (Region Wide)

Bridge Structures:

B-30, B-40, B-45, B-51, B-64, B-66, B-67

Culvert Structures:

C-30, C-40, C-45, C-51, C-64, C-66, C-67

Northeast Region Counties

Brown, Calumet, Door, Fond du Lac, Kewaunee, Manitowoc, Marinette, Oconto, Outagamie, Sheboygan, Winnebago

County Codes:

5, 8, 15, 20, 31, 36, 38, 42, 44, 59, 70, 83 (Region Wide)

Bridge Structures:

B-5-, B-05, B-8-, B-08, B-15, B-20, B-31, B-36, B-38, B-42, B-44, B-59, B-70

Culvert Structures:

C-5-, C-05, C-8-, C-08, C-15, C-20, C-31, C-36, C-38, C-42, C-44, C-59, C-70

North Central Region Counties

Adams, Florence, Forest, Green Lake, Iron, Langlade, Lincoln, Marathon, Marquette, Menominee, Oneida, Portage, Price, Shawano, Vilas, Waupaca, Waushara, Wood

County Codes:

1, 19, 21, 24, 26, 34, 35, 37, 39, 73, 43, 49, 50, 58, 63, 68, 69, 71, 84 (Region Wide)

Bridge Structures:

B-1-, B-01, B-19, B-21, B-24, B-26, B-34, B-35, B-37, B-39, B-73, B-43, B-49, B-50, B-58, B-63, B-68, B-69, B-71

Culvert Structures:

C-1-, C-01, C-19, C-21, C-24, C-26, C-34, C-35, C-37, C-39, C-73, C-43, C-49, C-50, C-58, C-63, C-68, C-69, C-71

Northwest Region Counties

Ashland, Barron, Bayfield, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Jackson, Pepin, Pierce, Polk, Rusk, Sawyer, St Croix, Taylor, Trempealeau, Washburn

County Codes:

2, 3, 4, 6, 7, 9, 10, 16, 17, 18, 27, 46, 47, 48, 54, 57, 55, 60, 61, 65, 85 (Region Wide)

Bridge Structures:

B-2-, B-02, B-3-, B-03, B-4-, B-04, B-6-, B-06, B-7-, B-07, B-9-, B-09, B-10, B-16, B-17, B-18, B-27, B-46, B-47, B-48, B-54, B-57, B-55, B-60, B-61, B-65

Culvert Structures:

C-2-, C-02, C-3-, C-03, C-4-, C-04, C-6-, C-06, C-7-, C-07, C-9-, C-09, C-10, C-16, C-17, C-18, C-27, C-46, C-47, C-48, C-54, C-57, C-55, C-60, C-61, C-65

Region Wide

SW, SE, NE, NC, NW

County Codes:

81, 82, 83, 84, 85

EXAMPLE BREAK DOWNS FOR NORTHWEST REGION

Eau Claire Office Counties on IH 94

St Croix, Dunn, Eau Claire, Trempealeau, Jackson

County Codes:

55, 17, 18, 61, 27

Bridge Structures:

B-55, B-17, B-18, B-61, B-27

Culvert Structures:

C-55, C-17, C-18, C-61, C-27

Eau Claire Office Counties

St Croix, Dunn, Chippewa, Taylor, Pierce, Pepin, Eau Claire, Clark, Buffalo, Trempealeau, Jackson

County Codes:

55, 17, 9, 60, 47, 46, 18, 10, 6, 61, 27

Bridge Structures:

B-55, B-17, B-9-, B-09, B-60, B-47, B-46, B-18, B-10, B-6-, B-06, B-61, B-27

Culvert Structures:

C-55, C-17, C-9-, C-09, C-60, C-47, C-46, C-18, C-10, C-6-, C-06, C-61, C-27

Superior Office Counties

Ashland, Barron, Bayfield, Burnett, Douglas, Polk, Rusk, Sawyer, Washburn

County Codes:

2, 3, 4, 7, 16, 48, 54, 57, 65

Bridge Structures:

B-2-, B-02, B-3-, B-03, B-4-, B-04, B-7-, B-07, B-16, B-48, B-54, B-57, B-65

Culvert Structures:

C-2-, C-02, C-3-, C-03, C-4-, C-04, C-7-, C-07, C-16, C-48, C-54, C-57, C-65