Estimate Documentation Report

See <u>FDM 19-5-6</u> for full details. Guidance on filling out this form.

Date: 3/4/2021

Project: 1040-00-70

STH 57

Ozaukee

Saukville - Waldo

IH 43 To CTH W

Est. Doc.

Prepared Draft PS&E Plans

for:

Est. Doc.

Prepared Bhuvan Manandhar

By:

Preparer's Email:

Bhuvan.Manandhar@dot.wi.gov

Report

3/5/2021

finished on:

Independent

Click here to enter name.

Reviewer:

Tied Click here to enter tied project

Project(s): id's.

EXECUTIVE SUMMARY

PS&E Date: 5/1/2021 **LET Date:** 9/14/2021

Description of Proposed Work

Saukville – Waldo is a roadway preservation project on STH 57 from IH 43 to CTH W with length of less than 2 miles in Ozaukee county. The scope of the project includes diamond grinding the existing concrete pavement and concrete pavement repair SHES and concrete pavement replacement SHES (where needed) on STH 57 with its shoulder improvements. The scope also includes the relocating or modifying the existing beam guard/s on STH 57 and improvement of cross-over within the project limits.

Improvement Type -See <u>FDM 3-5-1.1</u> for definitions.

Click here to enter text.

ESTIMATING TOOL PARAMETERS

Estimator Parameters

Source Catalog Click here to enter source catalog.

Work type General Construction

Highway Type FP - Freeway, Principal Arterial

Urban/Rural type Rural
Season Spring
County Ozaukee
Region SE

Bid Express and Other Tool Parameters

Tool(s) Used: Bid Express

County(s): Click here to enter typical counties used.

Date Range: 2018-2021

Project: 1040-00-70 STH 57 | Saukville - Waldo (IH 43 To CTH W) | Ozaukee

Report Created: 3/4/2021

			Report Created: 3/4/2021
Other Parameters: rsrces/tools/estimating/mobilization		ot.gov/Document	s/doing-bus/eng-consultants/cnslt-
SIMILAR PROJECTS C	OR PROPOS	ALS	
List similar project/propos	sal IDs and ho	w they wer	e referenced
Click here to enter brief description.			
PROJECT CHARACTE	RISTICS		
Comments: Provide comments for	how other conside	erations impacte	ed estimate prices.
See <u>FDM 19-5-5</u> for more details.			
Schedule and Road User (Costs		
Let Date Anticipated Start Date Completion Date or Working or Calendar Days Interim completion Requirements Multiple Construction Seasons	9/14/2021 5/2/2022 6/30/2022 61		☐ Lane rental ☐ Enhanced liquidated damages ☐ Interim liquidated damages ☐ Accelerated schedule ☐ Extraordinary forces expected ☐ Other (Please explain)
Traffic Control			
Traffic Control Characteristics: (c	check all that apply	')	
 ☑ Mainline Closure ☐ Shoulder or No Closure ☐ Continuous Lane Closure ☑ Daily/Nightly Lane Closure ☐ Moving Lane Closure ☐ Flagging Operation 	☐ Complex/Unus ☐ Detour require ☐ Night work ex ☐ Peak hour res ☐ Limited work z	ed pected trictions	 □ Maintain bike/pedestrian access □ Temp concrete barrier used □ Temp/Crossover roadways □ Temp structures □ Temp traffic control signals □ Other (Please Explain)
Number of stages: Click here to e	enter number.		
Construction Conflicts			
 □ Aboveground utilities (existing to □ Underground utilities (existing to □ Utility work concurrent with cons □ Environmentally sensitive areas 	remain)	☐ Hazardous i ☐ Railroad cod ☐ Archeologica ☐ Other (Plea	ordination al Monitor
Competition of Contractor	' S		
Expected Competition	_	Choose an ite	em.

Project: 1040-00-70 STH 57 | Saukville - Waldo (IH 43 To CTH W) | Ozaukee

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Other Considerations	
☐ Multiple mobilizations	☐ Remote location
☐ Multiple, dispersed work locations	☐ Haul distance
□ Urban or □ Rural	☐ Current bid item trends
☐ Constrained work environment	☐ Material shortages
☐ Adjacent projects	☐ Other (Please explain)

STH 57 | Saukville - Waldo (IH 43 To CTH W) | Ozaukee

ITEM LEVEL DOCUMENTATION

Significant Items List – Top 20% of items out of total contract costs and lump sum items

Click here to enter brief description.

SI. #	Item #	Description	Units	Quantity	Price	Amount
1.	416.1715	Concrete Pavement Repair SHES	SY	1950.00	\$160.00	\$312,000.00
2.	420.1000	Continuous Diamond Grinding Concrete Pavement	SY	47,556	\$6.00	\$285,336.00
3.	460.5224	HMA Pavement 4 LT 58-28 S	TON	2,990.00	\$75.00	\$224,250.00
4.	416.1725	Concrete Pavement Replacement SHES	SY	1,200.00	\$150.00	\$180,000.00
5.	619.1000	Mobilization	EACH	1.00	\$150,000.00	\$150,000.00
6.	204.0120	Removing Asphaltic Surface Milling	SY	22,420.00	\$5.00	\$112,100.00
7.	416.0620	Drilled Dowel Bars	EACH	6,100.00	\$16.00	\$97,600.00
8.	646.1020	Marking Line Epoxy 4-Inch	LF	36,800.00	\$2.50	\$92,000.00
9.	690.0250	Sawing Concrete	LF	12,060.00	\$3.00	\$36,180.00
10.	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,140.00	\$30.0	34,200.00
11.	643.5000	Traffic Control	EACH	1.00	\$30,000.00	\$30,000.00
12.	614.0200	Steel Thrie Beam Structure Approach	LF	395.00	\$70.00	\$27,650.00
13.	416.0610	Drilled Tie Bars	EACH	2,256.000	\$12.00	\$27,072.00
14.	213.0100	Finishing Roadway (project)	EACH	1.00	\$20,000.00	\$20,000.00

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ATTACHMENTS

Attachments are optional and may be referenced in the above documentation.

Unit Price Documentation printout with notes (Estimator, Q2P, Excel spreadsheets)

Other Attachment(s)

Mobilization:

From the link: https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/mobilization-summary.pdf

The project cost lies in the range of \$1 million - \$2.0 million and we used the upper limit of expected range of 5.7%. This gives very close to \$100,000.00 and we used \$150,000.00 for mobilization unit rate.

Roadway Perpetuation (Resurfacing & Preservation/Restoration)	\$ 0.5M or less	\$ 0.5M to \$ 1M	\$ 1M to \$ 2M	\$ 2M to \$ 10M	\$ 10M to \$ 20M	
Sample Size:	19	46	86	152	14	
Expected Range (lower limit):	3.8%	2.7%	1.8%	2.7%	3.5%	
Typical Middle Value:	7.9%	5.6%	3.5%	4.3%	5.8%	
Expected Range (upper limit):	10.2%	7.7%	5.7%	6.4%	8.5%	

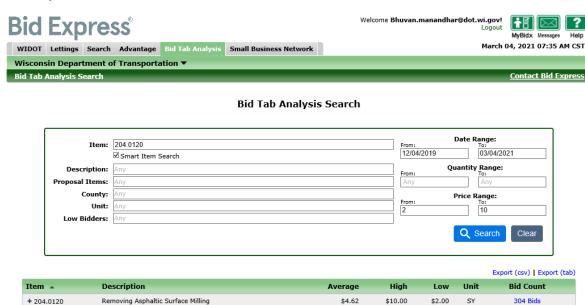
Item: 204.0120

+ 204.0120

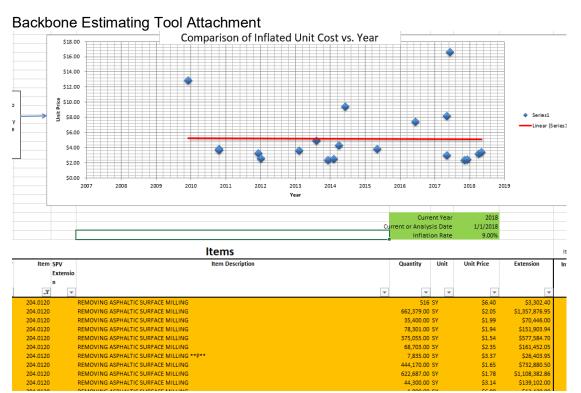
Description: Removing Asphaltic Surface Milling

Unit Rate Preferred: \$5.00/SY

Bid Express Attachment



Contacts Training Center Terms of Use Product Updates



Project: 1040-00-70

STH 57 | Saukville - Waldo (IH 43 To CTH W) | Ozaukee

Report Created: 3/4/2021

Item: 305.0110

Description: Removing Asphaltic Surface Milling

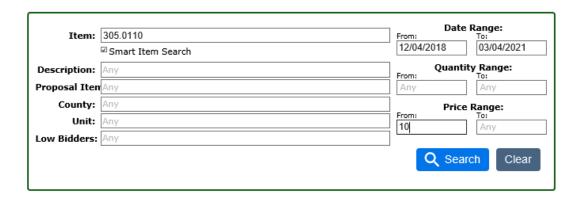
Unit Rate Preferred: \$30.00/TON

Bid Express Attachment

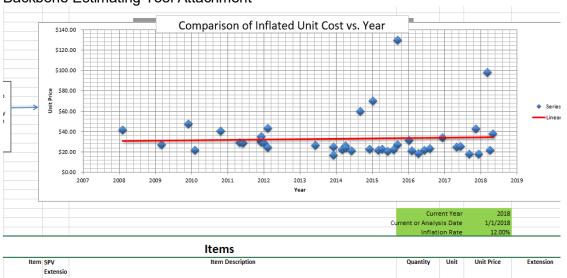




Bid Tab Analysis Search







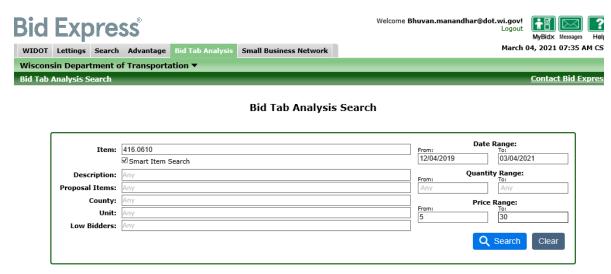
				Quantity			
Item §	SPV	V Item Description			Unit	Unit Price	Extension
E	xtensio						
n	1						
"T	-		~	-	-	~	
305.0110		BASE AGGREGATE DENSE 3/4-INCH		878	TON	\$13.50	\$11,853.
305.0110		BASE AGGREGATE DENSE 3/4-INCH		5,260.00	TON	\$9.90	\$52,074
305.0110		BASE AGGREGATE DENSE 3/4-INCH		502	TON	\$19.00	\$9,538.
305.0110		BASE AGGREGATE DENSE 3/4-INCH		445	TON	\$8.75	\$3,893.
305.0110		BASE AGGREGATE DENSE 3/4-INCH		8,074.00	TON	\$18.00	\$145,332.
305.0110		BASE AGGREGATE DENSE 3/4-INCH		129	TON	\$13.65	\$1,760
305.0110		BASE AGGREGATE DENSE 3/4-INCH		2,380.00	TON	\$13.50	\$32,130.

Item: 416.0610

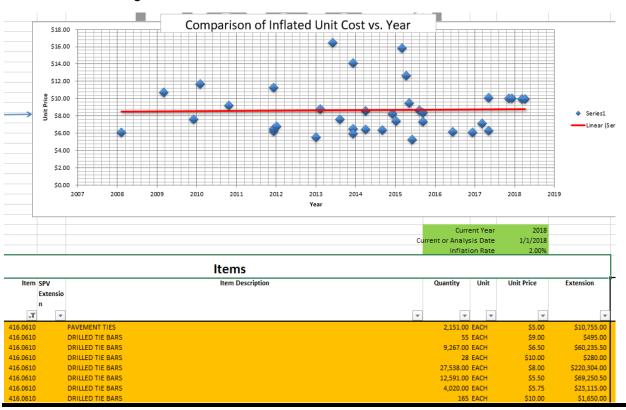
Description: Drilled Tie Bars

Unit Rate Preferred: \$12.00/EACH

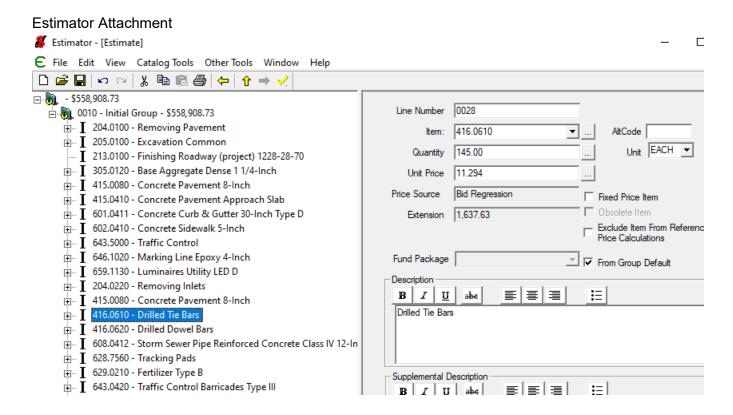
Bid Express Attachment



						Export (csv) Export (ta
Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 416.0610	Drilled Tie Bars	\$11.73	\$30.00	\$5.00	EACH	287 Bids



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Item: 416.0620

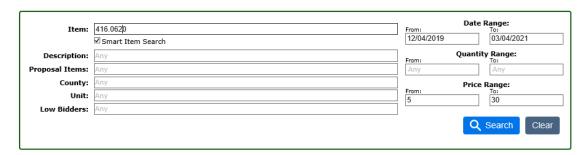
Description: Drilled Dowel Bars

Unit Rate Preferred: \$16.00/EACH

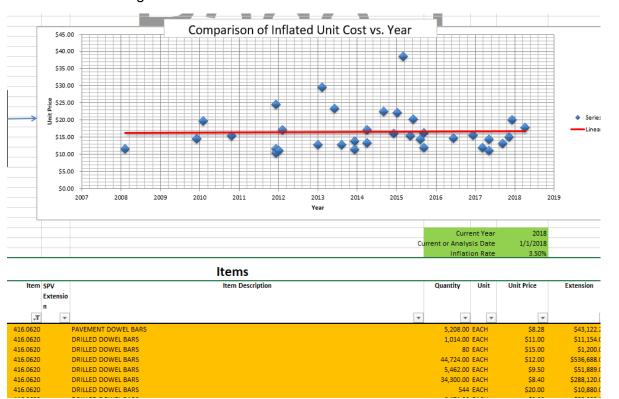
Bid Express Attachment



Bid Tab Analysis Search

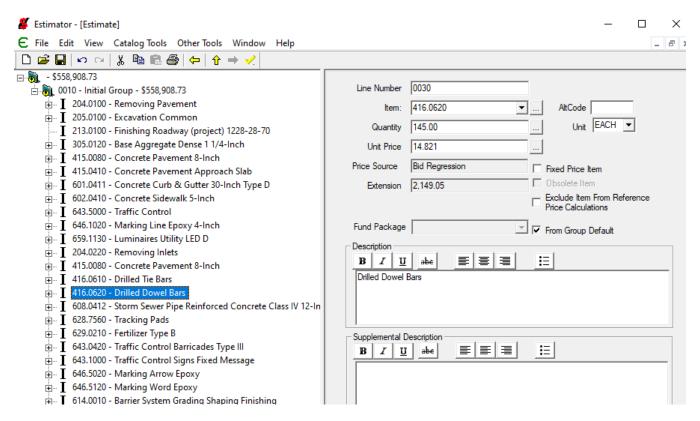


						Export (csv) Export (tab)
Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 416.0620	Drilled Dowel Bars	\$15.74	\$30.00	\$5.00	EACH	224 Bids



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Estimator Attachment



Item: 416.1715

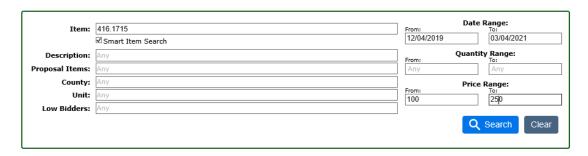
Description: Concrete Pavement Repair SHES

Unit Rate Preferred: \$160.00/SY

Bid Express Attachment

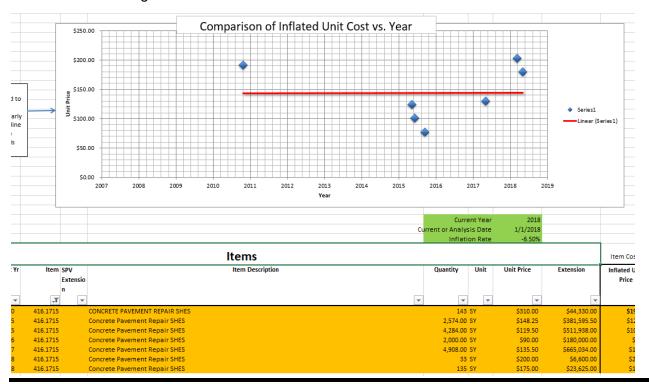


Bid Tab Analysis Search



						Export (csv) Export (tab)
Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 416.1715	Concrete Pavement Repair SHES	\$155.18	\$207.68	\$100.00	SY	22 Bids

Contacts Training Center Terms of Use Product Updates



Item: 416.1725

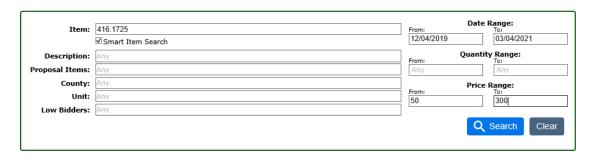
Description: Concrete Pavement Replacement SHES

Unit Rate Preferred: \$15.000/SY

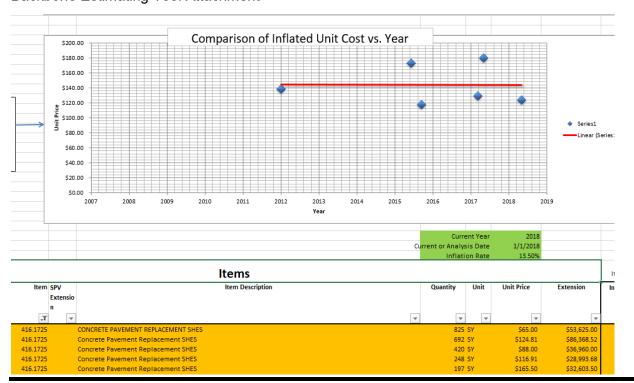
Bid Express Attachment



Bid Tab Analysis Search



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Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 416.1725	Concrete Pavement Replacement SHES	\$141.89	\$290.00	\$55.00	SY	51 Bids



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Item: 420.1000

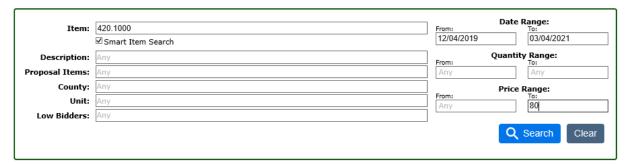
Description: Continuous Diamond Grinding Concrete Pavement

Unit Rate Preferred: \$6.00/SY

Bid Express Attachment

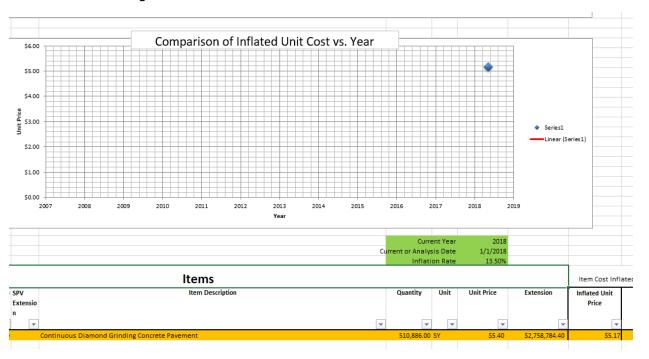


Bid Tab Analysis Search



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Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 420.1000	Continuous Diamond Grinding Concrete Pavement	\$5.43	\$11.17	\$2.95	SY	19 Bids



Item: 460.5224

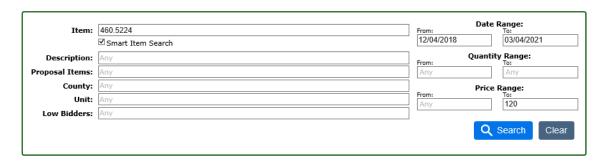
Description: HMA Pavement 4 LT 58-28 S

Unit Rate Preferred: \$75.00/TON

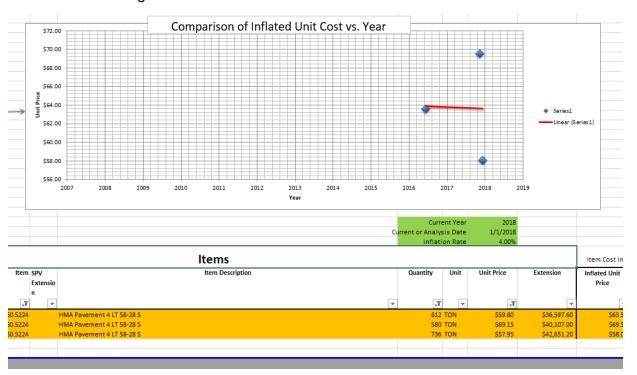
Bid Express Attachment



Bid Tab Analysis Search



						Export (csv) Export (
Item 🔺	Description	Average	High	Low	Unit	Bid Count
- 460.5224	HMA Pavement 4 LT 58-28 S	\$75.32	\$118.70	\$46.47	TON	365 Bids



Item: 614.0200

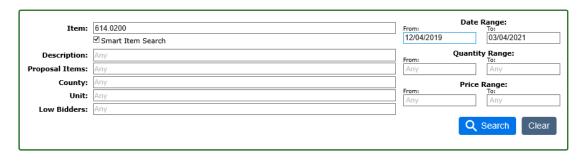
Description: Steel Thrie Beam Structure Approach

Unit Rate Preferred: \$70.00/LF

Bid Express Attachment



Bid Tab Analysis Search



						Export (csv) Export (tab)
Item 🔺	Description	Average	High	Low	Unit	Bid Count
- 614.0200	Steel Thrie Beam Structure Approach	\$70.44	\$91.00	\$58.00	LF	105 Bids
	Letting	Droposal Droposal	Droposal		Drono	cal



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Report Created: 3/4/2021

Item: 646.1020

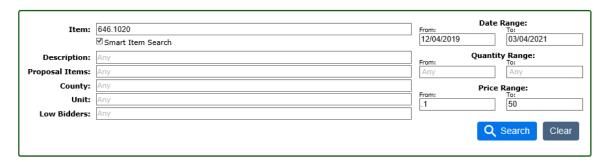
Description: Marking Line Epoxy 4-Inch

Unit Rate Preferred: \$2.50/LF

Bid Express Attachment



Bid Tab Analysis Search



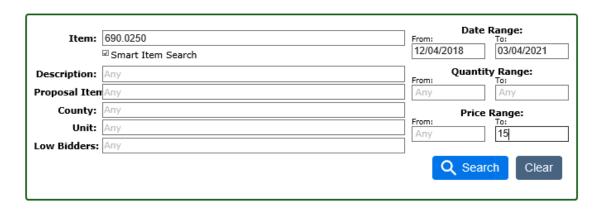
						Export (csv) Export
Item 🔺	Description	Average	High	Low	Unit	Bid Count
- 646.1020	Marking Line Epoxy 4-Inch	\$2.34	\$34.00	\$0.20	LF	991 Bids
						Droposal

Item: 690.0250

Description: Sawing Concrete
Unit Rate Preferred: \$3.00/LF

Bid Express Attachment

Bid Tab Analysis Search



Export (csv) | Export (tab)

Report Created: 3/4/2021

Item 🔺	Description	Average	High	Low	Unit	Bid Count
+ 690.0250	Sawing Concrete	\$2.98	\$14.00	\$1.00	LF	943 Bids

