RESOLUTION NO.	

A RESOLUTION AUTHORIZING THE ADMINISTRATOR FOR THE DEPARTMENT OF TRANSPORTATION TO ENTER INTO AN AGREEMENT WITH THOMAS BROTHERS CONSTRUCTION RELATIVE TO CITY CONTRACT NO. T-14-040 FOR CONSTRUCTION SERVICES ASSOCIATED WITH INSTALLING PROTECTED BICYCLE LANES ALONG BROAD STREET, FOR AN AMOUNT NOT TO EXCEED TWO HUNDRED FIFTY-FIVE THOUSAND DOLLARS (\$255,000.00).

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the Administrator for the Department of Transportation to enter into an agreement with Thomas Brothers Construction relative to City Contract No. T-14-040 for construction services associated with installing protected bicycle lanes along Broad Street, for an amount not to exceed \$255,000.00.

ADOPTED:	 , 2015
/mem	

# City of Chattanooga

### Resolution/Ordinance Request Form



Date Prepared: June 15, 2015				
Preparer: Bert Kuyrkendall		Department	: Transportation	·
Brief Description of Purpose for Reso	ution/Ordinar	ce: Res./Ord.#	Council Dist	rict #7_
A City Council Resolution is requested to auth	orize the Admini	strator of the Departmen	t of Transportation to enter into	an agreement
with Thomas Brothers Construction, relative to				
			ton correct about the fi	totalining protocte
picycle lanes along Broad Street, for an amou	it not to exceed	\$255,000.		
			····	
A DODONEO METU COMOTIONO	<del></del>			
APPROVED WITH CONDITIONS				
N				
Name of Vendor/Contractor/Grant, etc.	Thomas Brothers	· · · · · · · · · · · · · · · · · · ·	Contract/Project? (Yes or No)	
Total project cost		<del></del>	Budgeted? (YES or NO)	Yes
Total City of Chattanooga Portion			Provide Fund	
City Amount Funded		,000.00	Provide Cost Center	
New City Funding Required		<del>, , , , , , , , , , , , , , , , , , , </del>	nding Source if not budgeted	N/A
City's Match Percentage		<del></del>	Grant Period (if applicable)	N/A
ist all other funding sources and amou	int for each co	entributor.		
Amount(s)		· <del>************************************</del>	Grantor(s)	
gency Grant Number				
FDA Number If known				
PDA Number il knowij				
Other comments: (Include contingency amo	unt, contractor,	and other information	useful in preparing resolution	on)
		ā 4 t	MAS DY	
		Approved t	<del></del>	
eviewed by: FINANCE OFFICE lease submit completed form to @budget, City		the Election Officer	DESIGNATED OFFICIAL	ADMINISTRATOR

Revised: October, 2011

BID TABULATION
CONTRACT NUMBER T-14-040-201
PROTECTED BIKE LANE AND NEIGHBORHOOD GREENWAY DESIGN: BROAD STREET CYCLE TRACK

The bids tabulated herein were received by the City of Chattanooga and read aloud May 28, 2015

Alta Planning + Design reviewed the bidder's bid form for errors, omissions, unbalancing of unit prices, mathematical extensions, and totals. No errors were found with either bid.

#### BASE BID

	Approx. Unit of E		Enginee	Engineer's Estimate		Thomas Brothers		Chase Plumbing and Mech.	
Item	Description	Quantity	Measure	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
15-A	Removal of Concrete Sidewalk/Curb	117	SF	\$15.00	\$1,755.00	\$26.00	\$3,042.00	\$20.00	\$2,340.00
16-A	Concrete Curb Ramp	117	SF	\$15.00	\$1,755.00	\$36.40	\$4,258.80	\$50.00	\$5,850.00
17-A	Extruded Concrete Curb	3685	LF	\$17.50	\$64,487.50	\$12.00	\$44,220.00	\$20.00	\$73,700.00
717-A	Mobilization	1	LS	\$34,190.00	\$34,190.00	\$58,000.00	\$58,000.00	\$125,000.00	\$125,000.00
712-01	Traffic Control	1	LS	\$14,090.00	\$14,090.00	\$29,000.00	\$29,000.00	\$35,000.00	\$35,000.00
713-02.14	Flexible Delineator (White)	71	EΑ	\$60.00	\$4,260.00	\$89.64	\$6,364,44	\$80.00	\$5,680.00
713-11.01	"U" Section Steel Posts	1091	LB	\$5.00	\$5,455.00	\$1.43	\$1,560.13	\$2.00	\$2,182.00
713-11.02	Perforated/Knockout Square Tube Post	64	LB	\$7.00	\$448.00	\$2.35	\$150.40	\$3.00	\$192.00
713-13.02	Flat Sheet Aluminum Signs (0.080" Thick)	390	SF	\$20.00	\$7,800.00	\$26.00	\$10,140.00	\$30.00	\$11,700.00
716-02.04	Plastic Pavement Marking(Channelization Striping)	26	SY	\$25.00	\$650.00	\$23.73	\$616.98	\$28.00	\$728.00
716-02.05	Plastic Pavement Marking (Stop Line)	545	LF	\$13.00	\$7,085.00	\$19.50	\$10,627.50	\$25.00	\$13,625.00
716-02.06	Plastic Pavement Marking (Turn Lane Arrow)	13	EA	\$225.00	\$2,925.00	\$552.50	\$7,182.50	\$600.00	\$7,800.00
716-02.08	Plastic Pavement Marking (8" Dotted Line)	30	LF	\$10.00	\$300.00	\$2.93	\$87.90	\$5.00	\$150.00
716-02.09	Plastic Pavement Marking (Longitudinal Cross-Walk)	10	LF	\$35.00	\$350.00	\$32.50	\$325.00	\$35.00	\$350.00
716-03.01	Plastic Word Pavement Marking (Only)	2	LF	\$350.00	\$700.00	\$357.50	\$715.00	\$350.00	\$700.00
716-13.03	Spray Thermo Pvmt Mrkng (60 Mil) (8IN Barrier Line)	298	EΑ	\$1.50	\$447.00	\$1.95	\$581.10	\$2.50	\$745.00
716-03.10	Plastic Word Pavement Marking (Walt Here)	2	EA	\$400.00	\$800.00	\$682.50	\$1,365.00	\$600.00	\$1,200.00
716-03.11	Plastic Word Pavement Marking (Loading Zone)	12	ΕA	\$500.00	\$6,000.00	\$812.50	\$9,750.00	\$800.00	\$9,600.00
716-04,11	Plastic Pavement Marking (Bloycle Symbol W/Rider)	54	EΑ	\$250.00	\$13,500.00	\$520.00	\$28,080.00	\$600.00	\$32,400.00
716-04.13	Plastic Pavement Marking (Bike Lane Arrow)	48	ΕA	\$175.00	\$8,400.00	\$422.50	\$20,280.00	\$500.00	\$24,000.00
716-04.15	Plastic Pavement Marking-Bike Symbol/Arrow Shared	4	EA	\$300.00	\$1,200.00	\$520.00	\$2,080.00	\$600.00	\$2,400.00
716-04.17	Plastic Pavement Marking (Green Blcycle)	2521	SF	\$11.00	\$27,731.00	\$16.58	\$41,798.18	\$15.00	\$37,815.00
716-04.18	Plastic Pavement Marking (Pedestrian Symbol).	2	EA	\$200.00	\$400.00	\$455.00	\$910.00	\$500.00	\$1,000.00
716-08.01	Removal of Pavement Marking (Line)	6060	Ŧ	\$1.50	\$9,090.00	\$1.07	\$6,484.20	\$2.00	\$12,120.00
716-08.05	Removal of Pavement Marking (Stop Line)	530	LF	\$5.00	\$2,650.00	\$13.00	\$6,890.00	\$15.00	\$7,950.00
716-13.01	Spray Thermo Pvmt Mrkng (60 Mil) (4IN Line)	1.49	ĹM	\$6,000.00	\$8,940.00	\$4,550.00	\$6,779.50	\$4,800.00	\$7,152.00
716-13.02	Spray Thermo Pvmt Mrkng (60 Mil) (61N Line)	0.35	LM	\$15,000.00	\$5,250.00	\$5,850.00	\$2,047.50	\$6,500.00	\$2,275.00
716-13.04	Spray Thermo Pvmt Mrkng (60 Mil) (41N Dotted Line)	620	LF	\$1,50	\$930.00	\$6.89	\$4,271.80	\$6.00	\$3,720.00
716-13.05	Spray Thermo Pvmt Mrkng (60 Mil) (6IN Dotted Line)	1272	ĹF	\$2.00	\$2,544.00	\$7.72	\$9,819.84	<b>\$</b> 7.50	\$9,540.00

F:Q514438 Chellanongs Protected 84s Langel-Products/Cost Estimate/8id Analysis - Broad Street.nbs.

		Approx.	Unit of	Engineer's Estimate		s Estimate Thomas Brothers		Chase Plumbing and Mech.	
Item	Description	Quantity	Measure	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
730-01.02	Removal of Signal Equipment	2	EA	\$200.00	\$400.00	\$325.00	\$650.00	\$350.00	\$700.00
730-02.09	Signal Head Assembly (130 With Backplate)	2	EA	\$1,500.00	\$3,000.00	\$1,105.00	\$2,210.00	\$1,500.00	\$3,000.00
730-26.07	Flashing Warning Beacon (Rectangular Rapid Flashing Beacon)	2	EΑ	\$7,500.00	\$15,000.00	\$8,528.00	\$17,056.00	\$8,500.00	\$17,000.00
730-41.25	Rework of Controller	2	EA	\$500.00	\$1,000.00	\$1,170.00	\$2,340.00	\$1,800.00	\$3,600.00
			Total Bid:		\$253,532.50		\$339,683.77		\$461,214.00

hereby certify that this bid tabulation is a correct and accurate tabulation of the bids received.

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111 East Chapel Hill Street, Suite 100 Durham, NC 27701 (919) 484-8448 www.altaplanning.com

June 15, 2015

Bertran Kuyrkendall, P.E.
City Transportation Engineer
Chattanooga Department of Transportation
1250 Market Street, Suite 3030
Chattanooga, TN 37402

Re: Recommendation for Approval of Broad Street Value Engineering Items

Contract No. T-14-040-201

Dear Mr. Kuyrkendall,

Per your request, Alta Planning + Design has performed an analysis to determine the cost savings associated with the elimination of proposed improvements on Aquarium Way, west of Broad Street, along Chestnut Street, and the removal of parking meters, signs, and bike racks.

A spreadsheet has been prepared and is attached that compares the original bid items, quantities, and unit prices submitted by the winning bidder, Thomas Brothers Construction Company, Inc. and the revised quantities and unit prices based on the proposed reduction of the project scope. The revised construction bid was reduced from the winning bid of \$339,683.77 to \$254,885.27. Given the elimination of work on Aquarium Way, west of Broad Street and along Chestnut Street will not impact the function of the Broad Street cycle track, we recommend that the City accept the revised bid from Thomas Brothers Construction Company, Inc.

Sincerely,

Alta Planning + Design, Inc.

G. Wade Walker, P.E.

Principal

#### VALUE ENGINEERING ANALYSIS

CONTRACT NUMBER T-14-040-201
PROTECTED BIKE LANE AND NEIGHBORHOOD GREENWAY DESIGN: BROAD STREET CYCLE TRACK

BASE BID	SE BID ORIGINAL BID						BID WITH R	EVISED QUAN	ITITIES
		Approx.	Unit of	Thoma	s Brothers	Approx.	Unit of	Thomas Brothers	
ltem	Description	Quantity	Measure	Unit Price	Amount	Quantity	Measure	Unit Price	Amount
15-A	Removal of Concrete Sidewalk/Curb	117	SF	\$26.00	\$3,042.00	117	SF	\$26.00	\$3,042.00
16-A	Concrete Curb Ramp	117	SF	\$36.40	\$4,258.80	117	SF	\$36.40	\$4,258.80
17-A	Extruded Concrete Curb	3685	LF	\$12.00	\$44,220.00	2900	ŁF	\$12.00	\$34,800.00
717-A	Mobilization	1	LS	\$58,000.00	\$58,000.00	1	LŞ	\$47,000.00	\$47,000.00
712-01	Traffic Control	1	L\$	\$29,000.00	\$29,000.00	1	LS	\$29,000.00	\$29,000.00
713-02.14	Flexible Delineator (White)	71	EA	\$89.64	\$6,364.44	57	EA	\$89.64	\$5,109.48
713-11.01	"U" Section Steel Posts	1091	LB	\$1.43	\$1,560.13	949	LB	\$1,43	\$1,357.07
713-11.02	Perforated/Knockout Square Tube Post	64	LB	\$2.35	\$150.40	32	LB	\$2.35	\$75.20
	Flat Sheet Aluminum Signs (0.080" Thick)	390	SF	\$26.00	\$10,140.00	284	\$F	\$26.00	\$7,384.00
716-02.04	Plastic Pavement Marking(Channelization Striping)	26	SY	\$23.73	\$616.98	26	SY	\$23.73	\$616.98
716-02.05	Plastic Pavement Marking (Stop Line)	545	LF	\$19.50	\$10,627.50	445	LF	\$19.50	\$8,677.50
716-02.06	Plastic Pavement Marking (Turn Lane Arrow)	13	EA	\$552.50	\$7,182.50	9	ĒΑ	\$552.50	\$4,972.50
716-02.08	Plastic Pavement Marking (8" Dotted Line)	30	LF	\$2.93	\$87.90	0	LF	\$2.93	\$0.00
716-02.09	Plastic Pavement Marking (Longitudinal Cross-Walk)	10	LF	\$32.50	\$325.00	٥	LF	\$32.50	\$0.00
716-03.01	Plastic Word Pavement Marking (Only)	2	LF	\$357.50	\$715.00	0	LF	\$357.50	\$0.00
716-13.03	Spray Thermo Pvmt Mrkng (60 Mil) (8IN Barrier Line)	298	EΑ	\$1.95	\$581.10	0	<b>L</b> F	\$1.95	\$0.00
716-03.10	Plastic Word Pavement Marking (Wait Here)	2	EA	\$682.50	\$1,365.00	1	EA	\$682.50	\$682.50
716-03.11	Plastic Word Pavement Marking (Loading Zone)	12	ĒΑ	\$812.50	\$9,750.00	10	EA	\$812.50	\$8,125.00
716-04.11	Plastic Pavement Marking (Bicycle Symbol W/Rider)	54	EΑ	\$520.00	\$28,080.00	42	ĒA	\$520.00	\$21,840.00
716-04.13	Plastic Pavement Marking (Bike Lane Arrow)	48	EA	\$422.50	\$20,280.00	32	EA	\$422.50	\$13,520.00
716-04.15	Plastic Pavement Marking-Bike Symbol/Arrow Shared	4	EA	\$520.00	\$2,080.00	2	EA	\$520.00	\$1,040.00
716-04.17	Plastic Pavement Marking (Green Bicycle)	2521	SF	\$16.58	\$41,798.18	1936	SF	\$16,58	\$32,098.88
716-04.18	Plastic Pavement Marking (Pedestrian Symbol)	2	EA	\$455.00	\$910.00	0	EA	\$455.00	\$0.00
716-08.01	Removal of Pavement Marking (Line)	6060	LF	\$1.07	\$6,484.20	5000	LF	\$1.07	\$5,350.00
716-08.05	Removal of Pavement Marking (Stop Line)	530	LF	\$13.00	\$6,890.00	460	LF	\$13.00	\$5,980.00
716-13.01	Spray Thermo Pvmt Mrkng (60 Mil) (4IN Line)	1.49	LM	\$4,550.00	\$6,779.50	1	LM	\$4,550.00	\$4,550.00
716-13.02	Spray Thermo Pvmt Mrkng (60 Mil) (6IN Line)	0.35	LM	\$5,850.00	\$2,047.50	0.23	LM	\$5,850.00	\$1,345.50
716-13.04	Spray Thermo Pvmt Mrkng (60 Mil) (4IN Dotted Line)	620	LF	\$6.89	\$4,271.80	554	LF	\$6.89	\$3,817.06
716-13.05	Spray Thermo Pvmt Mrkng (60 Mil) (6IN Dotted Line)	1272	LF	\$7.72	\$9,819.84	990	LF	\$7.72	\$7,642.80
730-01.02	Removal of Signal Equipment	2	EA	\$325.00	\$650.00	1	EA	\$325.00	\$325.00
730-02.09	Signal Head Assembly (130 With Backplate)	2	EΑ	\$1,105.00	\$2,210.00	1	EA	\$1,105.00	\$1,105.00
730-26.07	Flashing Warning Beacon (Rectangular Rapid Flashing Beacon)	2	EA	\$8,529.00	\$17,056.00	0	EΑ	\$8,528.00	\$0.00
730-41.25	Rework of Controller	2	EA	\$1,170.00	\$2,340.00	1	EΑ	\$1,170.00	\$1,170.00
			i	Total Bid;	\$339,683.77	<u></u>	Total Bid:	•	\$254,885.27

## THOMAS BROTHERS CONSTRUCTION COMPANY

# 7849 Dayton Pike Hixson, Tennessee 37343 (423) 842-6233

6/15/2015

RE: T-14-040-201

**Broad Street Cycle Track** 

Value Engineering / Cost Savings for Project

Dear Mr. Kuyrkendall,

Thomas Brothers Construction Company, Inc. has evaluated cost saving items to reduce the overall project costs for the Broad Street Cycle Track project. The summaries of proposed value engineered costs savings for the project are as follows:

		BID WITH REVISED QUANTITIES						
		Approx.	Unit of	Thomas Brothers				
Item	Description	Quantit	Measure	Unit Price	Amount			
15-A	Removal of Concrete Sidewalk/Curb	0	SF	\$26.00	\$0.00			
16-A	Concrete Curb Ramp	0	SF	\$36.40	\$0.00			
17-A	Extruded Concrete Curb	785	LF	\$12.00	\$9,420,00			
717-A	Mobilization	0	LS	\$47,000.0	\$11000.00			
712-01	Traffic Control	O	LS	\$29,000.0 0	\$0.00			
713-02.14	Flexible Delineator (White)	14	EA	\$89.64	\$1,254.96			
713-11.01	"U" Section Steel Posts	142	LB	\$1.43	\$203.06			
713-11,02	Perforated/Knockout Square Tube Post	32	LB	\$2.35	\$75.20			
713-13.02	Flat Sheet Aluminum Signs (0.080" Thick)	106	SF	\$26.00	\$2,756.00			
716-02.04	Plastic Pavement Marking(Channelization Striping)	0	SY	\$23.73	\$0.00			
716-02.05	Plastic Pavement Marking (Stop Line)	100	LF	\$19.50	\$1,950.00			
716-02.06	Plastic Pavement Marking (Turn Lane Arrow)	4	EA	\$552.50	\$2,210.00			
716-02.08	Plastic Payement Marking (8" Dotted Line)	30	LF.	\$2.93	\$87.90			
716-02.09	Plastic Pavement Marking (Longitudinal Cross-Walk)	10	LF	\$32.50	\$325.00			
716-03.01	Plastic Word Pavement Marking (Only)	2	ĻF	\$357.50	\$715.00			
716-13.03	Spray Thermo Pvmt Mrkng (60 Mil) (8IN Barrier Line)	298	LF	\$1.95	\$581.10			
716-03.10	Plastic Word Pavement Marking (Wait Here)	1	EA	\$682.50	\$682.50			
716-03.11	Plastic Word Pavement Marking (Loading Zone)	2	EA	\$812.50	\$1,625.00			
716-04.11	Plastic Pavement Marking (Blcycle Symbol W/Rider)	12	EA	\$520.00	\$6,240.00			
716-04.13	Plastic Pavement Marking (Bike Lane Arrow)	16	EA	\$422.50	\$6,760.00			
716-04.15	Plastic Pavement Marking-Bike Symbol/Arrow Shared	2	EA	\$520.00	\$1,040.00			
716-04.17	Plastic Pavement Marking (Green Bicycle)	585	SF	\$16.58	\$9,699.30			
716-04.18	Plastic Pavement Marking (Pedestrian Symbol)	2	EA	\$455.00	\$910.00			
716-08.01	Removal of Pavement Marking (Line)	1060	Ľ.	\$1.07	\$1,134.20			
716-08.05	Removal of Pavement Marking (Stop Line)	70	LF	\$13.00	\$910.00			
716-13.01	Spray Thermo Pvmt Mrkng (60 Mil) (4tN Line)	0.49	LM	\$4,550.00	\$2,229.50			
716-13.02	Spray Thermo Pymt Mrkng (60 Mil) (6IN Line)	0.12	LM	\$5,850.00	\$702.00			
716-13.04	Spray Thermo Pvmt Mrkng (60 Mil) (4IN Dotted Line)	66	LF	\$6.89	\$454.74			
716-13.05	Spray Thermo Pymt Mrkng (60 Mil) (6IN Dotted Line)	282	LF	\$7.72	\$2 <sub>,</sub> 177.04			
730-01.02	Removal of Signal Equipment	1	EA	\$325.00	\$325.00			
730-02.09	Signal Head Assembly (130 With Backplate)	1	EA	\$1,105.00	\$1,105.00			
730-26.07	Flashing Warning Beacon (Rectangular Rapid Flashing Beacon)	2	EA	\$8,528.00	\$17,056.00			
730-41.25	Rework of Controller	1	EA	\$1,170.00	\$1,170.00			
		Tota	al Savings:		\$84,798.50			

The total value of the engineered cost savings for the Broad Street Cycle Track is \$84,798.50 based on the assumptions itemized above.

Please let me know if you have any questions regarding the information provided above.

Sincerely,

Jamie Thomas, President

Thomas Brothers Construction Company, Inc.

Agreed:

Pertran Kuyrkendall, City Transportation Engineer

City of Chattanooga, Department of Transportation



