



1459 Washington St.
Muscatine, IA 52761-5040
(563) 263-8933
Fax (563) 263-2127

Public Works**City Transit**
263-8152**MEMORANDUM****Equipment Maintenance**
Roadway Maintenance
Collection & Drainage
Building & Grounds
Engineering

To: Randy Hill, Public Works Director
FROM: Jim Edgmond, City Engineer
DATE: July 13, 2015
RE: Trail Crossing at Colorado Street

INTRODUCTION:

The new Colorado Street project has a trail crossing close to Bandag Drive. This trail crossing is now 43 feet of pavement to cross instead of the 22 feet of pavement that existed before.

BACKGROUND:

In the past a trail crossing like this would have had the solar powered radar/ speed limit signs installed to bring attention to maintaining a safe speed in the area of the trail crossing. Detailed discussions within the Traffic Committee have brought up an alternative to having the radar/ Speed limit signs at the crossing. This alternative is a pedestrian crossing sign with a solar array on top that powers a Rectangular Rapid Flash Beacon (RRFB). This flashing beacon is actuated by a push button on the sign and communicates wirelessly with the other sign on the other side of the street to flash rapidly to warn cars that a pedestrian is entering the cross walk. A study by FHWA (Federal Highway Administration) showed that driver compliance went from approximately 20% without this flashing beacon to 85% with this flashing beacon. This installation costs approximately \$6,700.00 for Colorado Street at the trail crossing. Comparable radar speed limit signs cost approximately \$12,000.00 per installation. The Traffic Committee concurred that these RRFB's would improve safety as much if not more than the radar speed limit signs and be less costly to install. It was recommended by the Traffic Committee to install these RRFB's at the Colorado Street trail crossing to evaluate how effective this signing will be in Muscatine and to assess the maintenance costs of this type of signing.

Two quotes for this sign installation were obtained. The first quote is from TAPCO for \$6,700.00. The second quote is from Brown Traffic Products Inc. for \$6,615.50. The TAPCO quote has a more robust sign base that is drilled into the ground. The Brown Traffic Products has just the driven square tube sign base that is used for most of the signs in Muscatine. The feedback from the Streets Department is that the more robust sign foundation would be a superior base for the sign due to the large surface area of the sign and the solar array. Brown Traffic Products does not supply a sign base similar to the one provided by TAPCO. Therefore the TAPCO quote is recommended.

RECOMMENDATION/RATIONALE:

Recommend city council approve a purchase order for the TAPCO quote attached for the RRFB's at the Colorado Street trail crossing signs to improve pedestrian safety.

BACKUP INFORMATION:

1. TAPCO quote
2. Brown Traffic Products quote



SALES QUOTE

Customer Copy

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5100 West Brown Deer Road, Brown Deer, Wisconsin 53223
Phone 1-800-236-0112 • www.tapconet.com • Fax 1-800-444-0331

DESIGN CRITERIA

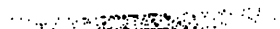
Sell To Cust. C14500	City of Muscatine 1459 Washington St. Muscatine, IA 52761 USA	Ship To Cust.	City of Muscatine 1459 Washington St. Muscatine, IA 52761 USA		
Reference #	Expires	Slspr	Terms	Freight	Ship Via
	7/6/2015	Richard Brown	Net 30 DAYS	PREPAY/ADD	BEST RATE

Item	Description	Quantity	UM	Price	UM	Extension
2180-RRFBXLS	RRFB-XL Pushbutton Activated Crosswalk System with Solar Power & Wireless Technology, Incl 2 13' Poles Includes:	1	EA	6,700.00	EA	\$6,700.00
RRFBXL2-NA1	RRFB XL2 Light Bar, One Ped Indicator Banding Mount w Snap Locks, for 2.375+ Inch OD	4	EA		EA	
RRFB-1DERABWNNAA	RRFB Controller Kit, 55W/48Ah, 4.5" OD Round, Wireless, No Modem	2	EA		EA	
C-RRFB-1BERPSWNNAA	RRFB Controller, 48Ah, 108045-PEM, Hollow, Contact	2	Each			
2180-BRKT-R	Cabinet Bracket Set, Fits Round Poles 2-3/8 & Up,	2	Each			
101494	Battery, DEKA Solar 12V 48Ah VRLA	2	Each			
SLR-55-B	55W/12V Solar Panel Package,	2	Each			
101620	Push Button Bulldog Add-On Option Kit Yellow, With LED	2	KT		KT	
373-05073	S1-1,30"x30" DG3 FYG, School Crossing (Symbol) Fed Spec Sign	4	EA		EA	
373-01757	W16-7PR, 24"x12" DG3 FYG, Down Diagonal Right Arrow (Fed Spec) Sign	2	EA		EA	
373-01759	W16-7PL, 24"x12" DG3 FYG, Down Diagonal Left Arrow (Fed Spec) Sign	2	EA		EA	
107265	Sign Mounting Kit, Banded, Flared Leg, Standard For Mounting 82B Static Signs to a Large Pole	4	EA		EA	
035-00008	Flared Leg Bracket, No Bolt, no Washer	16	Each			
052-00295	Nylon washer 5/16" x 7/8" OD	16	Each			
035-00010	Bolt, 5/16-18"x3/4" HEX S/S GS	18	Each			
2164-00044	WASHER FLAT 5/16ID X3/4OD S/S	16	Each			

Shipment within _____
Acceptance By _____
Date _____
By _____

Merchandise	Freight	Tax	Total
\$6,700.00	\$0.00	\$0.00	\$6,700.00

THANK YOU FOR CALLING TAPCO!!! THIS OFFER IS SUBJECT TO TERMS AND CONDITIONS SHOWN ON REVERSE SIDE



SALES QUOTE

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Thank you! - Rich Brown
#414-292-6606
richard.brown@tapconet.com

Shipment within _____
Acceptance By _____
Date _____
By _____

Merchandise	Freight	Tax	Total
\$6,700.00	\$0.00	\$0.00	\$6,700.00

THANK YOU FOR CALLING TAPCO!!! THIS OFFER IS SUBJECT TO TERMS AND CONDITIONS SHOWN ON REVERSE SIDE

Customer: MUS0003

Muscatine, City Of
City Hall
215 Sycamore StreetMuscatine IA 52761-3899
United States

Date: 06/11/2015

Prepared By: Jorgensen, Cathy L.

Phone: 319-264-1550

Description: Carmanah R920 RRFB

Part #	Description	Quantity	Price	Extended
CAR-R920-YEL	R920 Rectangular Rapid Beacon Solar Engi	2	\$1,890.00	\$3,780.00
CAR-68362-Y	R920 2"-2 1/2" Square Post Mount (Yellow	2	\$82.75	\$165.50
PBL08673-001	LIGHTBAR: CONFIRMATION(BOTH ENDS),BLK	4	\$495.00	\$1,980.00
CAR-68319	Polara Bulldog Push Button, Yellow	2	\$185.00	\$370.00
CAR-69978	9 x 12 Sign Frame with Push Button Mount	2	\$120.00	\$240.00
CAR-69982	9 x 12 MUTCD Compliant Pushbutton Sign	2	\$40.00	\$80.00

yes her wire less com:

Sale Amount:	\$6,615.50
Sales Tax:	0.00
Misc Charges:	0.00
Total Amount:	\$6,615.50

Notes:

QUOTATION DOES INCLUDE FREIGHT.

Terms:

THIS QUOTE IS BASED ON THE ENTIRE VALUE AND VOLUME OF ALL LINE ITEMS - Prices listed on this quote are valid only in the event of purchase of all line items in the quantities listed, in their entirety. Purchases of individual line items will require a new quote prior to acceptance of any purchase orders.

Shipment of the material will be approximately 90 days after receipt of both an acceptable purchase order and approved submittal data if required. PAYMENT TERMS ARE NET 30 DAYS with prior approved credit. Brown Traffic Products, Inc. retains title to material until paid in full. A service charge of 1.5% per month (18% annual rate) will be assessed against all past due accounts. Prices and delivery quoted are firm for 30 days from the date of bid. The above quote does not include installation of the products quoted. On-Site technical assistance is available and will be quoted upon request.

Quotation does not include sales tax. Sales tax will be added at time of invoice unless a valid Sales Tax Exempt certificate has been provided. Sales tax exempt certificate should accompany customer Purchase Order.

Limited Warranty: Brown Traffic Products only obligations shall be to replace such quantity of the product proven to be defective.

Warranty Period: The length of warranty manufacturers have conveyed to the seller and which can be passed on to the buyer.

Additional terms and conditions apply - See Brown Traffic Products Terms & Conditions document at our website:
www.browntraffic.com.

Thank you for the opportunity to provide this quote.