

Capital Project Request Form



Request Type:

Department: Date:

Title of Request:

Department Priority

Linked to another project?
 Yes
 No

Project Request is: New Estimated Useful Life:
 Replacement
 Modification

This is a limited field, please attach documents for more detail.

Description:

Basis of Cost: Quote Total Cost
 Bid
 Estimate

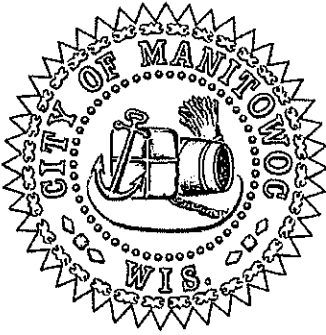
Revenue (if any) Net Cost

Will there be additional costs in future years to complete this project?

select one: Yes If yes, amount?
 No

Finance Dept: Account Sent to Dept:

Action:



22-0773

Standing Committee: Public Safety Committee

Document Name: Request for Rapid Flashing Beacon signs to be installed at the intersection of S. 23rd Street and Dewey Street.

Action:

Place on File - No Council action needed

Refer to: Finance / CAWG

Refer to Council

Consent

Non-Consent

Committee Recommendation:

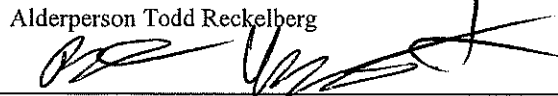
Install RRFB's at the intersection of S. 23rd St / Dewey St. Submit unbudgeted CAWG request.


Attest:

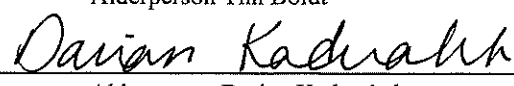

Chair - Alderperson Bill Schlei

Date


Alderperson Todd Reckelberg


Alderperson Brett Vanderkin


Alderperson Tim Boldt


Alderperson Darian Kaderabek

Approved:

Justin M. Nickels
Mayor

Date

Kim Lynch

From: Kim Lynch
Sent: Tuesday, September 20, 2022 10:22 AM
To: Adam Tegen; Nick Reimer; Todd Blaser; Dan Koski; Jeremy Walvoord; Greg Vadney; Kim Lynch
Subject: CAWG request for RRFB S 23 & Dewey
Attachments: CAWG request RRFB S 23 & Dewey.pdf

| Tracking: | Recipient | Response |
|------------------|------------------|-----------------------------|
| | Adam Tegen | Approve: 9/20/2022 10:24 AM |
| | Nick Reimer | Approve: 9/20/2022 10:44 AM |
| | Todd Blaser | Approve: 9/20/2022 10:32 AM |
| | Dan Koski | Approve: 9/20/2022 10:25 AM |
| | Jeremy Walvoord | Approve: 9/20/2022 12:24 PM |
| | Greg Vadney | |
| | Kim Lynch | Approve: 9/20/2022 10:50 AM |

This is unbudgeted, so this will need to go to the Finance Committee.

Use voting buttons above.

Kim Lynch | ***Interim Finance Director***

City of Manitowoc
900 Quay Street
Manitowoc, WI 54220
(920) 686-6962



Amber Noworatzky

From: Greg Minikel
Sent: Wednesday, August 31, 2022 9:43 AM
To: Tim Boldt; Dan Koski
Cc: Bill Schlei; Nick Reimer; Amber Noworatzky; Mark DeZeeuw; 'Amy Jo Deringer'
Subject: RE: 23rd And Dewey
Attachments: External: Carmanah R920 RRFB Quote, Info; Traffic Count Summary 2017 - S. 23rd & Dewey St..pdf

Hi Ald. Boldt,

I was looking into this a little bit as well and also talked to Dan and the Chief about it.

The PS Comm. only wanted us to install advanced warning signs for the crosswalk, which we did.

We could hire a consultant to do the traffic counts and analyze the data for a possible traffic signal, but this would cost around \$5,000 based on quotes we received for 3 other intersections. Dan and I do not believe that the traffic data will meet the requirements or meet the warrants for a traffic signal.

Therefore, the Chief and I were thinking that maybe it just makes sense to simply install the RRFB's on the east crosswalk. Based on the 2017 traffic counts, there were more pedestrians crossing at the east crosswalk than the west one.

I received a quote last week from Decker supply to install a new RRFB at the east crosswalk of the intersection at a cost of \$8,000. The cost to do both crosswalks would be about \$16,000.

So, it would only be another \$3,000 more than just doing the traffic count study and analysis.

I guess we can certainly discuss this at the next PS Committee if you and the Chairman want to put it on the agenda.

Assuming the P.S. Committee approves the RRFB's, we would still have to take this request to the CAWG for approval of an unbudgeted item.

-----Original Message-----

From: Tim Boldt
Sent: Tuesday, August 30, 2022 9:09 PM
To: Dan Koski <dkoski@manitowoc.org>; Greg Minikel <gminikel@manitowoc.org>
Cc: Bill Schlei <bschlei@manitowoc.org>; Nick Reimer <nreimer@manitowoc.org>
Subject: Re: 23rd And Dewey

Good evening gentleman,

As I was reviewing my emails, I noticed that I needed to be more specific on this one.

We had a discussion on the possibility of putting up traffic lights on this intersection.

The main issue of the complaints, is the kids needing to cross before and after school.

The original study was from 2017. However, since then the schools age group has changed. Brining in even younger children to cross that road.

Thanks for taking the time to review this.

Tim Boldt

Amber Noworatzky

From: Greg Minikel
Sent: Tuesday, August 23, 2022 4:00 PM
To: Nick Reimer; Dan Koski
Cc: Mark DeZeeuw; Amber Noworatzky
Subject: FW: 23rd And Dewey

According to the January 10, 2022 PS Comm. Meeting Minutes, they wanted us to install advance crosswalk ahead signs in both directions, which we did in short order.

There is nothing in the minutes about doing a study before school was out, unless it is on the video of the meeting, but not in the minutes. So, I am a little confused by Ald. Boldt's comments below.

It would cost us right around \$5,000 to have a consultant do the traffic study and analyze the data, based on quotes I got from TADI last December for 3 other intersections.

It will only cost about \$7,000 to \$9,000 to install the RRFB's. I have asked Decker Supply to get us a quote.

So, Nick and I are thinking, maybe we just install the RRFB's and save the money on the traffic count data and put it towards the RRFB's.

Even if the PS Committee approves it, we would still need to submit an unfunded or unbudgeted request to the CAWG for funding of the project.

-----Original Message-----

From: Tim Boldt
Sent: Saturday, August 20, 2022 8:01 AM
To: Dan Koski <dkoski@manitowoc.org>; Greg Minikel <gminikel@manitowoc.org>
Cc: Bill Schlei <bschlei@manitowoc.org>; Nick Reimer <nreimer@manitowoc.org>
Subject: 23rd And Dewey

Good Morning gentlemen,

In early spring, we addressed this problem after I received some complaints (possibly installing stop lights). Well kids are going back to school and I am receiving them again. I drive this route everyday, and the complaints do merit concerns. (Driver's driving habits definitely are an issue) A study was supposed to be done before school let out. What was the results?

Do we want to measure it with our traffic measuring device once school is in session? This would give us two different time frames for our data, to move forward. I could have this put on the Public Safety Agenda Please let me know which route we would like to take.

Thank You

Tim Boldt

Sent from my iPad

Sent from my iPad

> On Aug 20, 2022, at 8:00 AM, Tim Boldt <tboldt@manitowoc.org> wrote:

>

> Good Morning gentlemen,

> In early spring, we addressed this problem after I received some

> complaints (possibly installing stop lights). Well kids are going back to school and I am receiving them again. I drive this route everyday, and the complaints do merit concerns. (Driver's driving habits definitely are an issue) A study was supposed to be done before school let out. What was the results?

> Do we want to measure it with our traffic measuring device once school

> is in session? This would give us two different time frames for our data, to move forward. I could have this put on the Public Safety Agenda Please let me know which route we would like to take.

> Thank You

> Tim Boldt

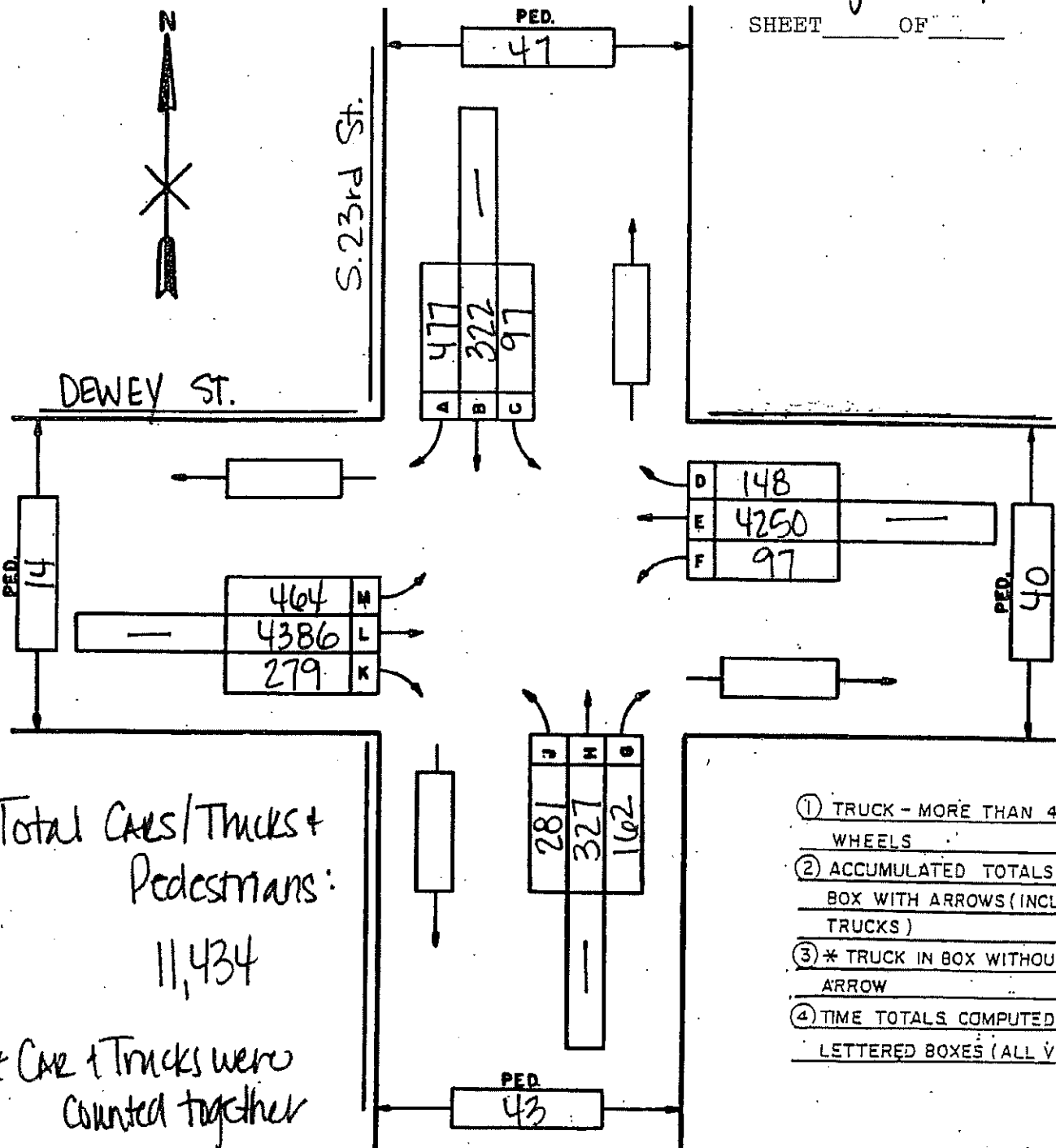
> Sent from my iPad

WISCONSIN
STATE HIGHWAY COMMISSION
TRAFFIC DEPARTMENT
VEHICLE VOLUME COUNT
GRAPHIC SUMMARY SHEET
FIGURE I

DATE June 8, 17 DAY Thursday WEATHER Sun/Warm TIME 6am to 10pm
LOCATION: DISTRICT _____ COUNTY Manitowoc RURAL _____ CITY Manitowoc
INTERSECTION S. 23rd St. AND Dewey St.

OBSERVERS Engineering Summer

SHEET _____ OF _____



Total Cars/Trucks +
Pedestrians:
11,434

* Cars & Trucks were
counted together

- ① TRUCK - MORE THAN 4 WHEELS
- ② ACCUMULATED TOTALS IN BOX WITH ARROWS (INCL. TRUCKS)
- ③ * TRUCK IN BOX WITHOUT ARROW
- ④ TIME TOTALS COMPUTED FROM LETTERED BOXES (ALL VEH.)

R920-E

RECTANGULAR RAPID FLASHING BEACON



MUTCD-compliant, pedestrian-activated warning beacon for uncontrolled marked crosswalks

- The R920-E is the benchmark for Rectangular Rapid Flashing Beacons (RRFBs)
- Ultra-efficient optics and Energy Management System (EMS)
- Compact design to simplify installation
- Proven technology platform
- Meets and exceeds MUTCD requirements, including IA-21

RRFBs have been found to provide vehicle yielding rates between 72 and 96 percent for crosswalk applications, including 4 lane roadways with average daily traffic (ADT) exceeding 12,000*.

Superior Design and Technology

The R920-E utilizes a self-contained solar engine integrating the Energy Management System (EMS) with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. MUTCD interim approval IA-21 flash pattern and multiple configurations enable the R920-E to handle all crosswalk applications.

Easy Installation

With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retrofitting can be done where existing sign bases are used to enhance existing marked crosswalks in minutes, and new installations can be completed without the cost of larger poles, new bases, and trenching.

Advanced User-Interface

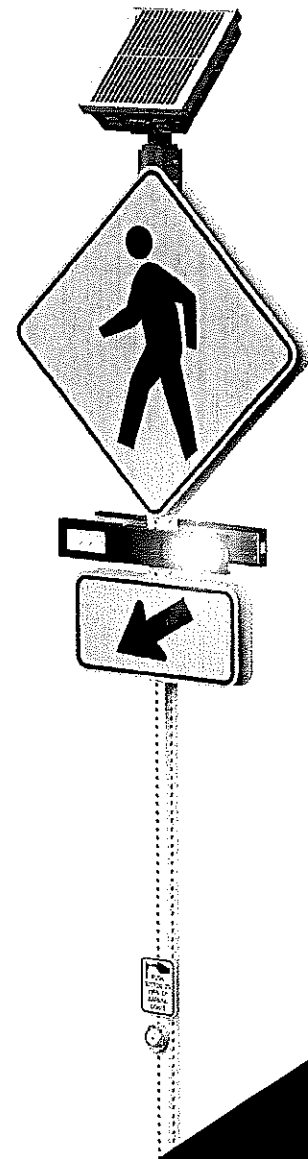
The R920-E comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Settings are automatically sent wirelessly to all units in the system.

Reliable

Designed with Carmanah's industry-leading solar modeling tools to provide dependable year-after-year operation.

Trusted

With thousands of installations, Carmanah's beacons are the benchmark in traffic applications and other transportation applications worldwide.



WE SIMPLIFY PLANNING.

Contact us to get your Energy Balance Report and purchase specifications.

☎ 1.844.412.8395

✉ traffic@carmanah.com

🌐 carmanahtraffic.com

REPRESENTED IN YOUR REGION BY:

* U.S. Department of Transportation Federal Highways Administration, Publication No. FHWA-HRT-10-043 - "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks"

R920-E

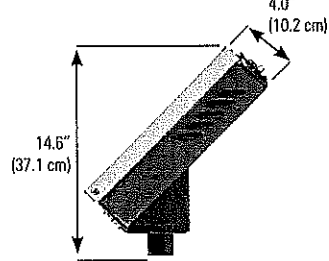
RECTANGULAR RAPID FLASHING BEACON

1.844.412.8395 | traffic@carmanah.com | carmanahtraffic.com

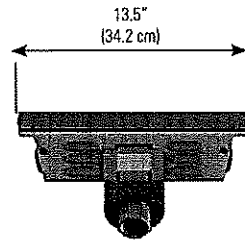


DIMENSIONS

Side View

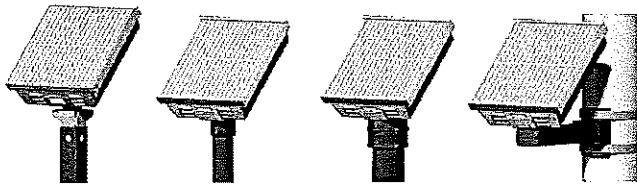


Bottom View



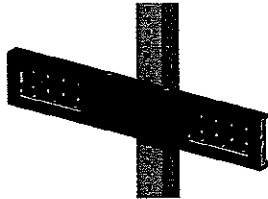
SOLAR ENGINE MOUNTING

2.0" - 2.5" Perforated Square Pole Mount 2.38" - 2.88" Diameter Round Pole Mount 4.0" - 4.5" Diameter Round Pole Mount Side Pole Mount

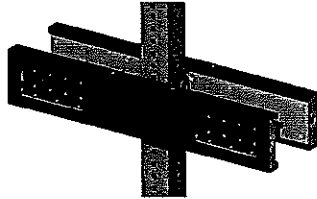


LIGHT BAY CONFIGURATION

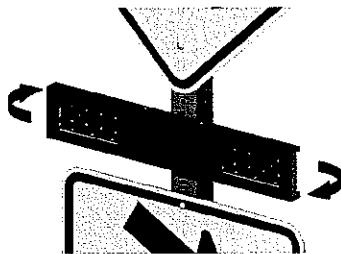
Uni-directional Configuration



Bi-directional Configuration



IN-FIELD AIMING



Rotate the light bar towards the incoming vehicle lane, independent of the wire hole location.

| | |
|-------------------------------|--|
| | Adjustable system settings with auto-scrolling LED display on our latest EMS |
| | System test, status, and fault detection: battery, solar, button, beacon, radio, day/night |
| | Flash patterns: RFB1 (WW+S), RFB2 (WSDOT), 0.5 sec. alternating (MUTCD), 0.5 sec. unison (MUTCD), 0.1 sec. unison, 0.25 sec. unison, 0.1 sec. x3 quick flashes unison, 0.1 sec. x3 quick flashes alternating |
| | Input: momentary for push button activation, normally open switch, normally closed switch |
| | Flash duration: 5 sec. to 1 hr. |
| On-Board User Interface (OBU) | Intensity setting: 20 to 1400 mA for multiple RFFBs, circular beacons, or LED enhanced signs |
| | Nighttime dimming: 10 to 100% of daytime intensity |
| | Ambient Auto Adjust: increases intensity during bright daytime |
| | Automatic Light Control: reduces intensity if the battery is extremely low |
| | Temperature correction: yellow or red beacons |
| | Calendar: internal time clock function |
| | Radio settings: enable/disable, selectable channel from 1 to 14 |
| | Output: enabled when beacons flashing daytime and nighttime, or nighttime only |
| | Activation counts and data reporting via OBU or optional USB connection |
| | MUTCD interim approval IA-21 and MUTCDC compliant |
| | Purpose-built light bar optics = maximum efficiency and no stray light |
| | Exceeds SAE J595 class 1 intensity by 2.5 to 3x when used as recommended |
| | Meets SAE J578 chromaticity |
| Optical | 3 in (76 mm) x 7 in (178 mm) clear, UV-rated polycarbonate lens with yellow LEDs |
| | High-power LEDs: +90% lumen maintenance (L90) based on IES LM-80 |
| | Side-emitting pedestrian confirmation LEDs |
| | Independent, stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness |
| | Yellow, black, or green powder coated light bar covers |
| | Encrypted, wireless radio with 2.4 GHz mesh technology |
| | Wireless update of settings from any unit to all systems on the same radio channel |
| | User-selectable multiple channels to group different beacons and ensure a robust wireless signal |
| Connectivity | Communicates with all other Gen III radio-enabled systems including our RB20-E, -F, and -G circular beacons |
| | Instantaneous wireless activation: <150 ms |
| | Wireless range: 1000 ft (305 m) |
| | Integrated, vandal-proof antenna |
| Energy Collection | 13 W high-efficiency photovoltaic solar panel |
| | 45 deg tilt for optimal energy collection |
| | Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all solar and battery conditions |
| Energy Storage | 12 V 14 Ahr. battery system |
| | Replaceable, recyclable, sealed, maintenance-free, best-in-class AGM batteries offer the widest temperature range and longest life |
| | Battery design life: +5 yrs. |
| | Tool-less battery change with quick connect terminals and strapping for easy installation |
| Solar Engine Construction | Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R) |
| | Lockable, hinged lid for access to on-board user interface and batteries |
| | Corrosion-resistant aluminum with stainless steel hardware |
| | Raw aluminum finish or yellow, black, or green powder coated |
| | Prewired to minimize installation time |
| | High-efficiency optics and EMS = the most compact, lightweight system |
| | 19 lb (8.6 kg) including batteries, excluding beacons and push button |
| Environmental | -40 to 165° F (-40 to 74° C) system operating temperature |
| | -40 to 140° F (-40 to 60° C) battery operating temperature |
| | 150 mph (241 kph) wind speed as per AASHTO LTS-6 |
| Activation | Push button: ADA-compliant, piezo-driven with visual LED and two-tone audible confirmation |
| Warranty | 5-year limited warranty |



Specifications subject to local environmental conditions, and may be subject to change.

All Carmanah products are manufactured in facilities that are certified to ISO quality standards.

US Patent No 6,573,859, Other patents pending.

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Document: SPEC_TRA_R920-E_RevS

Decker Supply Co Inc.
 1115 O'Neill Ave
 PO Box 8008
 Madison WI 53708

QUOTATION

Quote Number: 479351
 Quote Date: 08/25/22
 Page: 1

Customer Phone:
 Customer Fax: (920)683-4748

B
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CITY OF MANITOWOC PUBLIC WORKS
 P.O. BOX 1090
 MANITOWOC, WI 54221

S
H
I
P

CITY OF MANITOWOC PUBLIC WORKS
 2655 SOUTH 35TH STREET
 MANITOWOC, WI 54220
 920-686-6910
 ATTN: GREG

| | |
|--------------------|---------------------------|
| Entered By: JOSH | RFQ Number: |
| Location: | Ship Via: DIRECT/JOSH DEL |
| Account Cd: MANPUB | Taxable: Y |
| Salesperson: 7250 | Pmt Terms: NET 30 |

| Line | Order Qty | Part Number | Description | Price | UM | Ext Price | Est Ship |
|------|-----------|-----------------|---|--------------|----|------------|----------|
| 1 | 2.00 | R920-SOLAR | R920-E RRFB SOLAR ENGINE - NAT ALUM (84303) - EACH ENGINE WILL BE POWERING 2 LB'S AND 1 PB | \$1,762.0000 | EA | \$3,524.00 | 08/25/22 |
| 2 | 2.00 | R920-TELTOPMONT | R920 2-2.5" TELES PAR OR 2 3/8" ROUND TOP OF POLE MOUNT -NAT ALUM (82872) | \$99.0000 | EA | \$198.00 | 08/25/22 |
| 3 | 4.00 | E SERIES BATT | BATTERY (7 Ahr) FOR E SERIES RRFB (CARMANAH R920) - P/N: 67620 | \$41.0000 | EA | \$164.00 | 08/25/22 |
| 4 | 4.00 | R920 LIGHT BAR | R920 LIGHT BAR W/CONFIRMATION LIGHTS, BLACK - 87668 | \$580.0000 | EA | \$2,320.00 | 08/25/22 |
| 5 | 4.00 | LB HARNESS | LIGHT BAR HARNESS, 16', 78227 | \$65.0000 | EA | \$260.00 | 08/25/22 |
| 6 | 2.00 | PB-68319 | CARMANAH: POLARA BULLDOG PB, YELLOW | \$146.0000 | EA | \$292.00 | 08/25/22 |
| 7 | 2.00 | PB HARNESS | PUSH BUTTON HARNESS, 16', 84390 | \$65.0000 | EA | \$130.00 | 08/25/22 |
| 8 | 2.00 | PB-FRAME-9X12 | 9 X 12 PUSH BUTTON FRAME KIT, - YELLOW (79558) | \$127.0000 | EA | \$254.00 | 08/25/22 |
| 9 | 2.00 | R10-25 S8PW0912 | PUSH BUTTON TO TURN ON 9" X 12" PHI/CS .080 (BLK/WH) * PRISMATIC H.I. * | \$16.0000 | EA | \$32.00 | 08/25/22 |
| 10 | 2.00 | PS22544H12G | 4' X 2-1/4" SQ.TUBE 4-H 12GA | \$27.8500 | EA | \$55.70 | 08/25/22 |

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 PO Box 8008
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QUOTATION

Quote Number: 479351
 Quote Date: 08/25/22
 Page: 2
 Customer Phone:
 Customer Fax: (920)683-4748

B CITY OF MANITOWOC PUBLIC WORKS
I P.O. BOX 1090
L MANITOWOC, WI 54221
L

S CITY OF MANITOWOC PUBLIC WORKS
H 2655 SOUTH 35TH STREET
I MANITOWOC, WI 54220
P 920-686-6910
 ATTN: GREG

| | |
|--------------------|---------------------------|
| Entered By: JOSH | RFQ Number: |
| Location: | Ship Via: DIRECT/JOSH DEL |
| Account Cd: MANPUB | Taxable: Y |
| Salesperson: 7250 | Pmt Terms: NET 30 |

| Line | Order Qty | Part Number | Description | Price | UM | Ext Price | Est Ship |
|------|-----------|-----------------|--|-----------|----|-----------|----------|
| 11 | 2.00 | PS25018ODA12G | 18" X 2-1/2" SQ.TUBE 4-H 12GA (OMNI DIRECTIONAL ANCHOR) | \$29.5000 | EA | \$59.00 | 08/25/22 |
| 12 | 2.00 | PS2124H12G | 12' 2" X 2" SQ.TUBE 4-H 12GA | \$68.7000 | EA | \$137.40 | 08/25/22 |
| 13 | 4.00 | W11-2 S8FY30DI | PEDESTRIAN ADVANCE SYMBOL 30" DI DG/CS .080 (BLK/FLYL) | \$53.0000 | EA | \$212.00 | 08/25/22 |
| 14 | 2.00 | W16-7L S8FY2412 | DIAGONAL ARROW DOWN LEFT 24" X 12" DG/CS (BLK/FLYL) | \$22.0000 | EA | \$44.00 | 08/25/22 |
| 15 | 2.00 | W16-7R S8FY2412 | DIAGONAL ARROW DOWN RIGHT 24" X 12" DG/CS (BLK/FLYL) | \$22.0000 | EA | \$44.00 | 08/25/22 |
| 16 | 2.00 | CORNER BOLT MED | CORNER BOLT MEDIUM FOR 2 1/2" | \$0.0000 | EA | \$0.00 | 08/25/22 |
| 17 | 2.00 | JAM NUT | JAM NUT FOR CORNER BOLT | \$0.0000 | EA | \$0.00 | 08/25/22 |
| 18 | 8.00 | WASHER 3/8NYLON | NYLON WASHER 3/8"X1-1/4"X.080 (STATE SPEC) | \$0.0000 | EA | \$0.00 | 08/25/22 |
| 19 | 8.00 | DRIVE RIVET | DRIVE RIVET FOR SQUARE POSTS (ALL STEEL) | \$0.0000 | EA | \$0.00 | 08/25/22 |

- ADD FREIGHT, LISTED BELOW
 - SALESPERSON: JOSH

Decker Supply Co Inc.
1115 O'Neill Ave
PO Box 8008
Madison WI 53708

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Quote Number: 479351
Quote Date: 08/25/22
Page: 3

Customer Phone:
Customer Fax: (920)683-4748

B CITY OF MANITOWOC PUBLIC WORKS
I P.O. BOX 1090
L MANITOWOC, WI 54221
L

S CITY OF MANITOWOC PUBLIC WORKS
H 2655 SOUTH 35TH STREET
I MANITOWOC, WI 54220
P 920-686-6910
ATTN: GREG

Entered By: JOSH
Location:
Account Cd: MANPUB
Salesperson: 7250

RFQ Number:
Ship Via: DIRECT/JOSH DEL
Taxable: Y
Pmt Terms: NET 30

| Line | Order Qty | Part Number | Description | Price | UM | Ext Price | Est Ship |
|------|-----------|-------------|-------------|-------|----|-----------|----------|
|------|-----------|-------------|-------------|-------|----|-----------|----------|

Thank you for the opportunity
of quoting.

Prices are good for 45 days
from quotation date.

| | |
|------------|-------------------|
| Subtotal: | <u>\$7,726.10</u> |
| Sales Tax: | \$0.00 |
| Freight: | \$225.00 |
| Total: | <u>\$7,951.10</u> |