



Ocean County Board of Commissioners

OFFICE OF THE
OCEAN COUNTY COMMISSIONERS

Director Joseph H. Vicari
Deputy Director Gary Quinn
Commissioner Barbara Jo Crea
Commissioner Virginia E. Haines
Commissioner John P. Kelly

101 Hooper Avenue
Toms River, New Jersey
08754-2191
Tel: (732)929-2005
Fax: (732)505-1918

Board Meeting Agenda

Date: August 16, 2023 - 4:00 PM
Location: Administration Building
Room 119
101 Hooper Avenue
Toms River, NJ 08754

Agenda: Awarding Contracts for the furnishing and delivery of SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS to K. Moorea Co. LLC DBA Traffic Plan; National Highway Products, Inc.; and United Rentals (North America), Inc., the lowest qualified bidders. (B2023-139)

Official Resolution#	2023001174						
Meeting Date	08/16/2023						
Introduced Date	08/16/2023						
Adopted Date	08/16/2023						
Agenda Item	I-3						
CAF #							
Purchase Req. #	B2023-139						
Result	Adopted						
COUNTY COMMISSIONER	PRES.	ABS.	MOVE	SEC	AYE	NAY	ABST.
Vicari	<				<		
Quinn	<				<		
Crea	<		<		<		
Haines	<			<	<		
Kelly	<				<		

I HEREBY CERTIFY THAT THIS DOCUMENT IS A TRUE, COMPLETE AND ACCURATE COPY OF THIS RESOLUTION, ADOPTED BY OCEAN COUNTY BOARD OF COMMISSIONERS, NJ AT THE MEETING REFERENCED THEREON

Michelle I. Gunther

Clerk Of The Board

CONTRACT NO. MUST BE ON ALL
PAPERS, DOCUMENTS, INVOICES, VOUCHERS
NO. B2023-139

N R E S O L U T I O N

August 16, 2023

WHEREAS, on June 27, 2023, pursuant to legal advertisements therefor, sealed bids were received for the furnishing and delivery of SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS for the County of Ocean; and

WHEREAS, at the advertised time, responses were received from the following bidders:

Name and Address of Bidder

Name and Address of Bidder

K. Moorea Co. LLC DBA Traffic Plan
5300 Asbury Rd.
Farmingdale, NJ 07727
(732) 984-1697

National Highway Products, Inc.
301 Riverside Drive
Millville, NJ 08332
(856) 692-7572

United Rentals (North America), Inc.
2035 State Route 34
Wall, NJ 07719
(877) 874-4468

Traffic Logix Corporation
3 Harriet Lane
Spring Valley, NY 10977
(518) 744-8568

; and

WHEREAS, after receipt and examination of same, the County Purchasing Agent has now recommended to this Board that the lowest qualified bid, according to specifications, be accepted namely that of K. MOOREA CO. LLC. DBA TRAFFIC PLAN; NATIONAL HIGHWAY PRODUCTS, INC. and UNITED RENTALS (NORTH AMERICA), INC.

NOW, THEREFORE, BE IT RESOLVED by the BOARD OF COMMISSIONERS of the COUNTY OF OCEAN, STATE OF NEW JERSEY, as follows:

1. The Director and Clerk of this Board are hereby authorized and directed to enter into contracts, for the furnishing and delivery of Solar Powered Message Signs and Portable Light Towers for the County of Ocean, for the contract period from date of award through August 15, 2024, a period of one (1) year, OR until delivery is complete unless otherwise stated. The County reserves the right to extend the term of the contract pursuant to N.J.S.A. 40A:11-15.

A. K. MOOREA CO. LLC DBA TRAFFIC PLAN for one (1) item, to wit:

ITEM NO. 1.

This vendor has extended this contract to County Cooperative Contract System Participants.

B. NATIONAL HIGHWAY PRODUCTS, INC. for two (2) items, to wit:

ITEM NOS. 2 and 5.

This vendor has extended this contract to County Cooperative Contract System Participants.

C. UNITED RENTALS (NORTH AMERICA), INC. for two (2) items, to wit:

ITEM NOS. 3 and 4.

This vendor has extended this contract to County Cooperative Contract System Participants.

2. Payments for the equipment to be acquired by this contract shall be made upon the approval of vouchers submitted by the successful bidders in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. Delivery shall be made upon receipt of a Purchase Order issued by the Ocean County Department of Purchase, upon which delivery locations and needed quantities shall be indicated.

3. The contract number must be placed on all papers, documents, invoices and vouchers pertaining to said contract, the number being B2023-139.

4. BE IT FURTHER RESOLVED that certified copies of this Resolution shall be made available to the County Auditor, County Department of Purchasing, Department of Finance, Engineering Department, County Road Department, and the successful bidders.

K. MOOREA CO. LLC DBA TRAFFIC PLAN

PROPOSAL DOCUMENT REPORT
 Bid No. TBD
 SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf)
 Images (jpg, png, bmp, tiff)

K_MOOREA_LL_C_W-9_2021.pdfWBENC_Cert_-_2024.pdfTRAF_-_1552_Equipment_Line_Card_R1_(002).pdf

10. Acknowledgement of Submission of Forms from Current Bid Package*

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

Confirmed

11. Submission of Bid Package*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

Confirmed

PRICE TABLES

SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total Cost	No Bid	Comments
1	Furnish and Delivery of New Solar Powered Message Sign, American Signal Company Model #CMS-T333 LED, No Substitutions	3	EA	\$20,608.00	\$61,824.00		

PROPOSAL DOCUMENT REPORT

Bid - SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

✓ **ITEM # 1 - PORTABLE CHANGEABLE FULL MATRIX MESSAGE SIGN, AMERICAN SIGNAL COMPANY # CMS-T333 LED, AS SPECIFIED, NO SUBSTITUTIONS**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>GENERAL</u>		
Full Matrix 28 pixels x 50 pixels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1 line, 2 line, 3 line messages	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Graphics and Animation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18" - 53" characters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Up to 12 characters per line	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9 font sizes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SOLR™ Primary Power Charging System with 30 day nominal battery life and onboard AC charger	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height (Raised) 162"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height (Storage) 109.3"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Length 188.3"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width (Storage) 79.5"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LED Operating Temp -22° - +165° F	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronics Temp. Rating -30° - +165° F	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sign Case Height 79.5"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sign Case Width 137"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Control Console Display Backlit LCD	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-Programmed Messages 199	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User-defined Messages 199	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Message Sequences 250	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>LED DISPLAY</u>		
Update Speed: Variable in .10 sec. increments	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LED Color: ITE Amber/Yellow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18"-53" Character	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Four (4) - (30°) LEDs per pixel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>OTHER:</u>		
Sign raise/lower with electric hydraulic lift with manual backup	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weather tight control cabinet with backlit LCD handheld controller	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The following options shall be included in the base bid price:		
2" ball or lunette eye hitch with adjustable height	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Graphic User Interface (GUI) Software	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AIMSTAR™ Adjustable Solar Assembly	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PLEASE ENTER INFORMATION ON THE PRODUCT YOU ARE PROPOSING:

Make/Model: AMERICAN SIGNAL CMS-T333L PCMS, WEBBEXPRESS

Warranty: 1 YEAR

Delivery on A.R.O. August 16, 2023

Adopted on: August 16, 2023
 Remarks: Click here to enter text.

NATIONAL HIGHWAY PRODUCTS, INC.

PROPOSAL DOCUMENT REPORT
 Bid No. TBD
 SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

10. Acknowledgement of Submission of Forms from Current Bid Package*

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

Confirmed

11. Submission of Bid Package*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

Confirmed

PRICE TABLES

SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total Cost	No Bid	Comments
1	Furnish and Delivery of New Solar Powered Message Sign, American Signal Company Model #CMS-1333 LED, No Substitutions	3	EA	\$22,020.00	\$66,060.00		
2	Furnish and Delivery of New Light Tower, Wacker Neuson Model #L1W2QZ1, As Specified, or Equal	2	EA	\$28,742.00	\$57,484.00		ALLIANCE MAXI LITE
3	Furnish and Delivery of SolarTech Silent Messenger II Message Board Mid Sized, Model MB II, As Specified, or Equal	2	EA	\$22,566.00	\$45,132.00		
4	Furnish and Delivery of SolarTech Silent Messenger Full Size Message Board, Model MB III, As Specified, or Equal	2	EA	\$21,366.00	\$42,732.00		

PROPOSAL DOCUMENT REPORT

Bid - SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

NATIONAL HIGHWAY PRODUCTS, INC.

PROPOSAL DOCUMENT REPORT

Bid No. TBD

SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total Cost	No Bid	Comments
5	Trafficalm IQ1500 Permanent Mount Sign and Trailer, As Specified or Equal	2	EA	\$9,689.00	\$19,378.00		

√ **ITEM #2 – NEW LIGHT TOWER, WACKER NEUSON MODEL #LTW20Z1, AS SPECIFIED, OR EQUAL**

		<u>COMPLIANCE</u>	
		<u>YES</u>	<u>NO</u>
GENERAL			
Operating Weight	3,290	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Illumination coverage at 5 fc (54 lux) ft ²	12,960	<input type="checkbox"/>	<input type="checkbox"/>
Lamp type	Metal Halide; 4 X 1,100	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mast height in feet	30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dimensions in transport	177" L X 75.5" W X 74.5" H	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sound level (LA) at 23 ft. in dB	71.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power kW	20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency Hz	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Voltage V	120/240	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power Factor 1~	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power Factor 3~	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prime output kW	18.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Voltage Control %	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Idle to full load %	1.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ENGINE			
Generator insulation (class)	H	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RPM/Speed RPM	1,800	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Generator Model	Brushless w/ AVR	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine/Motor Type	Liquid-Cooled, 4-Cyl. Diesel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine Model	Isuzu	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Displacement in cubic inches	133	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operating HP/RPM	34.3/1,800	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performance Rated	SAE J1349 NET (without Fan)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank capacity	57 gallons	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel consumption gallons/hour	1.58	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fully equipped highway-ready trailer		<input checked="" type="checkbox"/>	<input type="checkbox"/>
WARRANTY			
Two (2) Year bumper/bumper machine warranty		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) Year/2,000 hour engine warranty		<input checked="" type="checkbox"/>	<input type="checkbox"/>

PLEASE ENTER INFORMATION ON THE PRODUCT YOU ARE PROPOSING:

Make/Model: ALLMAND MAXI LITE

Warranty: Click or tap here to enter text.

Delivery, A.R.O.: 6 MONTHS

Remarks: Click or tap here to enter text.

✓ **ITEM #5 – TRAFFICALM IQ1500 PERMANENT MOUNT SIGN AND TRAILER, AS SPECIFIED, OR EQUAL**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
LED AND RADAR COMPONENTS		
Speed Display Height: 15" High Characters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Configuration: Full Matrix Display	<input checked="" type="checkbox"/>	<input type="checkbox"/>
"Your Speed", or equal, Legend: 6" high highway gothic font (MUTCD Compliant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LED, ½ Cone Angel: Amber (500nm), ½ Angel, 15°, Rated 100,000 hours, 20,000 CDA/M ² , Auto Dimming Employed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Amber LED on Axis Intensity: 20,000 CDA/SQ Meter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
White LED (Cool White): ½ angel 60°, rated 100,000 hrs; 2,475 CDA/M ² , Auto Dimming Employed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sign Legibility: viewable range: 1,000 feet, legible range: 750 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speed Resolution and Range: Min 5 mph; Max 99 mph in 1 MPH steps, Range 600 feet. (Max 140 mpg available as custom order)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radar Specification and Range: K-band (24, 15GHz) direct sensing, license free (FCC part 15 compliant); average range at 450 feet (plus 400' or minus 100' depending on vehicle size).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATERIALS AND CONSTRUCTION		
Chassis Size/Total Weight: 30" width X 41" height X 3" depth; 36 lbs.		
Front Face Sheeting: 3M™ Diamond Grade™, or equal, high visibility prismatic, long life protective sheeting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sign Face Color: yellow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sign Mounting Construction: 3/16" thick aluminum brackets and 1/8" face; standard 3% tilt bracket configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vandal resistant construction:		
<ul style="list-style-type: none"> • Sealed electronics box (ECS) 1/16" thick aluminum enclosure attached to a 1/8" thick mounted plate, The ECS shall be removable from the chassis as a complete unit. • ¼" high impact polycarbonate face with high contrast mask; anti-glare graffiti and sunlight resistant • Provisions for padlocking in place are provided • Powder coat white color 	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronics Enclosure Rating: Weatherproof; NEMA 3R	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ITEM #5 - TRAFFICALM IQ1500 PERMANENT MOUNT SIGN AND TRAILER, AS SPECIFIED, OR EQUAL (CONT'D)

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
ELECTRICAL SPECIFICATIONS		
Power Requirements: 12VDC (10.5 VDC to 16VDC), 23W at max brightness with maximum message displayed, 10W at average brightness with maximum message displayed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Voltage Requirements: 9V-30VDC, 12VDC Nominal (Battery protection at 11.5 VDC and 10.8VDC; startup at 12.3VDC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power Options:		
• Solar Kits: 150W kits		
• Battery charger kits and battery boxes shall be supplied		
Operating Temperature: Internal components: -29°F to +165°F	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Warranty: 3 year limited warranty on sign and options (excluding batteries)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SOFTWARE		
SafetyCalm™ or equal, license free	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Event Logging with Time Stamp: Event data: 60 days with a circular buffer; applied voltage (VDC); internal temperature (°F); ambient light (lux); display functional status; traffic status; shock sensor events; parameter events	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicle Data Logging Capacity: Speed data 90 days with circular buffer (oldest reading replaced by newest) based on 24/7 operation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Programmable Display Features:		
• Minimum speed limit, speed limit, over speed, and maximum speed to display		
• Display type: blank (stealth mode); actual speed; speed limit; flashing digits; steady digits; external beacon control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedules: Repeating daily: nine (9) events; repeating weekly; nine (9) events; non-repeating dated: nine (9) events (27 events in each 24 hour period, 365 days per year while powered)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Communications: Remote access through secure network	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System Requirements:		
• Operating System: Compatible with Windows 10		
• Screen resolution: 1024 X 768 or better		
• Communications interfaces: Bluetooth class 1 or 2 adapters (capabilities V1.0, V1.2, V2.0, V2.1+EDC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ITEM #5 - TRAFFICALM IQ1500 PERMANENT MOUNT SIGN AND TRAILER, AS SPECIFIED, OR EQUAL (CONT'D)

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
TRAILER		
Weight: 353 Lbs with Solar and 150Ah batteries; Weight is with battery <i>installed</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Size: Folded and ready for travel 46" wide X 48" long (86" with tongue extended) X 38" Tall; Erected with Solar: 88" Tall	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tire Size: 14"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Color: Powder Coated white	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Warranty: Assembly warranted against manufacturer defect for three (3) years; excluding batteries and tires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Basic Features:		
• Brake Lights and turn signals are provided	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Metal fenders strong to support minimum of 250 lbs., Powder coat finish for corrosion resistance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Tongue shall be properly sized to ensure easy towing using a 2" ball	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Controls:		
• Control panel provided to operate the connections to the solar panel and sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safety/Security:		
• Meets DOT regulations & requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Safety chains shall be provided	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Ball hitch system is stowed & secured when not towing; hitch beam collapses and locks into trailer body or shall be removable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stabilizers:		
• Provided with two (2) drop-down stabilizers that drop to the level of grade & are secured by pins and one (1) hand-crank stabilizer.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Stow in fully retracted position secured by pins for travel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Static Regulatory Signs: speed is 25 mph on base; placards are 1,3,0,4 which allow speeds from 05-45 mph	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ELECTRICAL SPECIFICATIONS		
Batteries:		
• Includes two (2) 75Ah batteries	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Each battery shall be individually fused	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Negative terminal of each battery shall be electrically common to the trailer chassis	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Cushioned battery mount to reduce vibration and shock	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Box:		
• Housed in weatherproof chamber separate from battery compartment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Sealed from air movement with provisions for thermal transfer, moisture control and drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ITEM #5 – TRAFFICALM IQ1500 PERMANENT MOUNT SIGN AND TRAILER, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE
YES **NO**

TRAILER (Cont'd)

ELECTRICAL SPECIFICATIONS (Cont'd)

Integrated Solar Charging:

- 60 Watt Solar Panel
- Solar Panel shall be deployed to a position higher than the sign
- Solar Panel shall stow flat over the sign for optimal skyward exposure
- 20A Solar Charge Control Device (14.4 V regulation temperature compensating)

Wiring:

- Wire is properly sized; rated 194°F minimum
- All interconnecting cables and wires are routed through the frame or in conduit for protection

PLEASE ENTER INFORMATION ON THE PRODUCT YOU ARE PROPOSING:

Make/Model: TRAFFICALM IQ1500

Warranty: Click or tap here to enter text.

Delivery, A.R.O.: 12 WEEKS

Remarks: Click or tap here to enter text.

UNITED RENTALS (NORTH AMERICA), INC.

PROPOSAL DOCUMENT REPORT
 Bid No. TBD
 SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total Cost	No Bid	Comments
3	Furnish and Delivery of SolarTech Silent Messenger II Message Board Mid-Sized, Model MB II, As Specified, or Equal	2	EA	\$19,241.00	\$38,482.00		AS SPECIFIED: SOLAR TECH MBII
4	Furnish and Delivery of SolarTech Silent Messenger Full Size Message Board, Model MB III, As Specified, or Equal	2	EA	\$17,955.00	\$35,910.00		AS SPECIFIED: SOLAR TECH MBIII
5	Trafficalm IQ2500 Permanent Mount Sign and Trailer, As Specified or Equal		EA	No Bid	No Bid	X	

ITEM #3 - SOLARTECH SILENT MESSENGER II MESSAGE BOARD MID-SIZED, MODEL MB II WITH TRAILER, AS SPECIFIED OR EQUAL

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
DISPLAY PANEL		
Panel Size: 92" X 54"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pixel Array/Size: 27" X 48" pixel array with 1.77" pitch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Character Height: 9" to 46"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Panel Construction: all aluminum, modular construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Panel Face: 3/16" polycarbonate, non-glare	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Characters per line: up to twelve (12)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Graphics capability: full matrix with full animation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Technology: LED (amber, 592 nm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Brightness: > 10,000 candela per square meter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Life Expectancy: 10 years typical	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Viewing Angle: >30°	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TRAILER		
Length Overall (operating): 112" (284 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1,000 lb. automatic brake, winch & cable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Length Overall (towing): 112" (284 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width Overall 92" (234 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width Across: Fenders 75" (191 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height Traveling: 92" (234 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground Clearance: 13" (33 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height Operating: 142" (360 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weight of Panel: 1,560 lbs. (708 kg)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coupler: 2" (50 mm) ball or 2.5" (64 mm) pintle ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lifting Mechanism: 1,000 lb. automatic brake, winch & cable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Axle/Suspension: (for both) Torq flex, independent	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tires: Load Range C; 13 inch wheels with 5-lug pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CONTROL CONSOLE		
Console Circuitry: Ultra-low power solid state	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Console Touchscreen: Weather-resistant, backlit, full-color GUI, intuitive icon-driven, multi-lingual	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Programming Software: Proprietary, field upgradable for units not connected to Command Center	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Message Capacity: Pre-programmed and user-defined (> 250 each)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Message Display Time: User-selectable (0.1 to 99 seconds)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Update Time: Instantaneous	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Volatile Memory: 16GB Micro SD card	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Adopted on: August 16, 2023
 Non-Volatile Memory: 16GB Micro SD card

ITEM #3 - SOLARTECH SILENT MESSENGER II MESSAGE BOARD MID-SIZED, MODEL MB II WITH TRAILER, AS SPECIFIED OR EQUAL

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
CONTROL CONSOLE (Cont'd)		
Password Protection: User-selectable, multi-level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operator Interface: Easy-to-use icons (no manual required)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Connectivity: Supports NTCIP version 3 via UDP/IP over Ethernet, and PMPP over RS-232	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Units with Remote Communications Option: UDP/IP over the built-in cellular modem	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ENERGY SOURCE		
Operating Voltage: 12 Volts DC (nominal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Type: 6 Volt heavy duty, deep cycle (GC-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Number of Batteries: Four (4) standard lead acid (flooded)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Bank Capacity: 520 amp hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Status Indicator: Displays battery voltage, charging activity and low battery condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Array Construction: Top-mounted solar panels in aluminum frame	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Array Power Output: Standard 160 watt (nominal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Charge Controller: Automatic, temperature compensated, MPPT (Maximum Power Point Tracking)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BRAKES		
Hydraulic Surge Brakes (5,000 lb. Capacity)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric Brakes	<input type="checkbox"/>	<input type="checkbox"/>
SOLAR ARRAY		
220 amp tilt and rotate solar panels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BATTERY CHARGER		
55 amp battery charger	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BATTERY SECURITY		
Battery compartment with padlocks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PAINT		
Powder coated orange color	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PLEASE ENTER INFORMATION ON THE PRODUCT YOU ARE PROPOSING:

Make/Model: SOLARTECH MBII

Warranty: 5 YEAR LIMITED WARR. FROM DATE OF SALE, 6 YEARS FROM DATE OF MFR

Delivery, A.R.O.: 2-3 WEEKS ARO

Introduced on: August 16, 2023

Remarks: N/A August 16, 2023

Official Resolution#: 2023001174

ITEM #4 - SOLARTECH SILENT MESSENGER FULL SIZE MESSAGE BOARD, MODEL MB III, WITH TRAILER, AS SPECIFIED OR EQUAL

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
DISPLAY		
Panel Size: 126" x 76" (320 cm x 193 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Panel Construction: All aluminum, modular construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Panel Face: 3/16" polycarbonate, non-glare	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Matrix Size: 27 x 48 pixels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pixel Pitch: 2.6" x 2.6" (66 mm x 66 mm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Number of Fonts: Twelve (12)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Character Height: 13" to 68" (33 cm to 173 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Graphics Capability: Full matrix with full animation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Technology: LED (amber, 592 nm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Brightness: > 10,000 candela per square meter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Viewing Angle: >30°	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Life Expectancy: 10 years typical	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lifting Mechanism: 2,000 lb. capacity electro-hydraulic	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TRAILER		
Length Overall: 180" (457 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width Overall: 92" (234 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height Traveling: 103" (262 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Height Operating: 162" (412 cm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground Clearance: 13" (33 cm) minimum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weight (minimum): 2,400 lbs. (1,089 kg)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weight (maximum): 2,960 lbs. (1,343 kg)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coupler (Class 111): 2" (50 mm) ball or 3" (76 mm) pintle ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Axle/Suspension: (both) Torq flex independent	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tires: Load Range C; 13 inch wheels with 5-lug pattern	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MEGA-TECH CONTROL CONSOLE		
Console Circuitry: Ultra-low power solid state	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Console Touchscreen Weather-resistant, backlit, full-color GUI, intuitive icon-driven, multi-lingual, field upgradable (for units not connected to Command Center)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Message Capacity: Pre-programmed and user-defined (> 250 each)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: August 16, 2023

Official Resolution#: 2023001174

ITEM #4 - SOLARTECH SILENT MESSENGER FULL SIZE MESSAGE BOARD, MODEL MB III, WITH TRAILER, AS SPECIFIED OR EQUAL (CONT'D)

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
MEGA-TECH CONTROL CONSOLE (Cont'd)		
Message Display Time: User-selectable (0.1 to 99 seconds)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Display Update Time: Instantaneous	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Volatile Memory 16 GB Micro SD card	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Password Protection: User-selectable, multi-level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operator Interface: Easy-to-use icons (no manual required)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Connectivity: Supports NTCIP version 3 via UDP/IP over Ethernet, and PMPP over RS-232	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Units with Remote Communications Option: UDP/IP over the built-in cellular modem.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ENERGY SOURCE		
Operating Voltage: 12 Volts DC (nominal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Type: 6 Volt heavy duty, deep cycle (GC-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Number of Batteries Four (4) standard lead acid (flooded)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Bank Capacity: 520 amp hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Status Indicator: Displays battery voltage, charging activity low battery condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Array Construction: Top-mounted solar panels in aluminum frame	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Array Power Output: Standard 160 watt (nominal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solar Charge Controller: Automatic, temperature compensated (Maximum Power Point Tracking)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BRAKES		
Hydraulic Surge Brakes (5,000 lb. Capacity)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric Brakes	<input type="checkbox"/>	<input type="checkbox"/>
SOLAR ARRAY		
220 amp tilt and rotate solar panels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BATTERY CHARGER		
55 amp battery charger	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BATTERY SECURITY		
Battery compartment with padlocks	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduced on: August 16, 2023
 Adopted on: August 16, 2023
 Official Resolution#: 2023001174

COMPLIANCE PAGES - SOLAR POWERED MESSAGE SIGNS AND PORTABLE LIGHT TOWERS

ITEM #4 - SOLARTECH SILENT MESSENGER FULL SIZE MESSAGE BOARD, MODEL MB III, WITH TRAILER, AS SPECIFIED OR EQUAL (CONT'D)

COMPLIANCE
YES **NO**

PAINT

Powder coated orange color

PLEASE ENTER INFORMATION ON THE PRODUCT YOU ARE PROPOSING:

Make/Model: SOLARTECH MBIII

Warranty: 5 YEAR LIMITED WARR. FROM DATE OF SALE, 6 YEARS FROM DATE OF MFR

Delivery, A.R.O.: 2-3 WEEKS ARO

Remarks: N/A