

ARROWBOARDS (Group I)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 2.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip:	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

2.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-mac ST-4815-PRO 15 Light Single Mast Stealth Solar Trailer	\$ 4,216.00
	Ver-mac ST-4825-PRO 25 Light Single Mast Stealth Solar Trailer	\$ 4,896.00
	Warranty Length (In days, months, or years)	3 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-VM-T
2.2	Discount to be applied to Price List <small>*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.</small>	0%
2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Ver-mac OPT-AB-5 Amp Charger 5 AMP Battery Charger	\$ 278.00
	Ver-Mac OPT-Smart AB	\$ 1,357.00
	Ver-Mac WZLS Work Zone Location Sensor	\$ 3,482.00
	SSR JACKSET Swivel Jack Package (Set of 4)	\$ 553.33
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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Email Address:	mkrengel@streetsmartrental.com

2.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-mac VM-4815 15 Light 4 x 8 Arrow Board Vehicle Mount	\$ 1,873.00
	Ver-Mac VM-4825 25L Arrowboard w/Wireless Remote Control	\$ 2,500.00
	Ver-mac VM-4825L-ST 25 Light 4 x 8 Solar Arrow Board Vehicle Mount	\$ 2,086.00
	Ver-mac SM-4815 15 Light Folding Skid Mount	\$ 3,814.00
	Ver-mac SM-4825 25 Light Folding Skid Mount	\$ 4,472.00
	Warranty Length (In days, months, or years)	3 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-VM-VM4
2.2	Discount to be applied to Price List <small>*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.</small>	0%
2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Ver-mac VMS-A48 Manual Rack for 4 x 8 Arrow Board	\$ 376.00
	Ver-mac VMS-A16 Power Rack for 4 x 8 Arrow Board	\$ 1,749.00
	Ver-mac VMS-A21 Bed Rail Rack (Bottom)	\$ 314.00
	Ver-mac VMS-A15 Bed Floor Rack (Bottom)	\$ 314.00
	Ver-mac OPT-Atten Pkg Battery/solar/frame for Attenuator Trailers	\$ 2,344.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

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2.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-mac VM-367215 15 Light 3 x 6 Arrow Board Vehicle Mount	\$ 2,040.00
	Ver-mac VM-367225 25 Light 3 x 6 Arrow Board Vehicle Mount	\$ 2,465.00
	Warranty Length (In days, months, or years)	3 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-VM-VM3
2.2	Discount to be applied to Price List <small>*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.</small>	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Ver-mac VMS-A49 Manual Rack for 3 x 6 Arrow Board	\$ 398.00
	Ver-mac VMS-A22 Power Rack for 3 x 6 Arrow Board	\$ 1,833.00
	Ver-mac VMS-A21 Bed Rail Rack (Bottom)	\$ 314.00
	Ver-mac VMS-A15 Bed Floor Rack (Bottom)	\$ 314.00
	Ver-mac OPT-Atten Pkg Battery/solar/frame for Attenuator Trailers	\$ 2,344.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

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2.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-mac VM-306015 15 Light 30" x 60" Arrow Board	\$ 1,955.00
	Ver-mac VM-306025 25 Light 30" x 60" Arrow Board	\$ 2,380.00
	Warranty Length (In days, months, or years)	3 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-VM-TM30
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Ver-mac VMS-A50 Manual Rack for 30" x 60" Arrow Board	\$ 388.00
	Ver-mac VMS-A21 Bed Rail Rack (Bottom)	\$ 314.00
	Ver-mac VMS-A21 Bed Rail Rack (Bottom)	\$ 314.00
	Ver-mac VMS-A15 Bed Floor Rack (Bottom)	\$ 314.00
	Ver-mac OPT-Atten Pkg Battery/solar/frame for Attenuator Trailers	\$ 2,344.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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2.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-mac VM-14V 14 Light Double Arrow Arrow Board	\$ 1,870.00
	Warranty Length (In days, months, or years)	3 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-VM-14
2.2	Discount to be applied to Price List <small>*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.</small>	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-mac VMS-A01 Manual Rack for VM-14V	\$ 477.00
	Ver-mac VMS-A03 Power Rack for VM-14V	\$ 1,751.00
	Ver-mac VMS-A21 Bed Rail Rack (Bottom)	\$ 314.00
	Ver-mac VMS-A15 Bed Floor Rack (Bottom)	\$ 314.00
	Ver-mac OPT-Atten Pkg Battery/solar/frame for Attenuator Trailers	\$ 2,344.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

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2.0	Information Requested	Answer
	Manufacturer	Wanco
	Make and Model	
	Wanco WTSP55-LSA 15 Light Folding Arrow Board Trailer	\$ 4,177.00
	Wanco WTSP55-LSAC 25 Light Folding Arrow Board Trailer	\$ 4,620.00
	Wanco WTSV-LSA 15 Light Vertical Arrow Board Trailer	\$ 4,177.00
	Wanco WTSV-LSAC 25 Light Vertical Arrow Board Trailer	\$ 4,620.00
	Warranty Length (In days, months, or years)	5 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-W-T
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add N/A	
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Wanco Combo Combo Hitch Ball & Pintle	\$ 238.00
	Wanco 101978-001P1 Wanco AB pintle hitch	\$ 118.00
	Wanco JackFour JacksFour corner Hand-crank jacks	\$ 164.00
	Wanco 202484 Solar panel upgrade 50 to 65W	\$ 182.00
	Wanco 205263 Solar panel upgrade 50 to 85W	\$ 364.00
	Wanco 215455 Battery Charger - 2A Duracell	\$ 87.00
	Wanco 206335 Additional 12V Sealed Lead Acid Battery	\$ 127.00
	iCone Work Zone Connectivity Box 3 Yr Plan	\$ 1,260.00
	iCone iPin 3 Yr Plan	\$ 1,190.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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Email Address:	mkrengel@streetsmartrental.com

2.0	Information Requested	Answer
	Manufacturer	Wanco
	Make and Model	
	Wanco WSSP55-LSA Skid Mount 15-Light Pivoting Arrow Board	\$ 4,231.00
	Wanco WSSP55-LSAC Skid Mount 25-Light Pivoting Arrow Board	\$ 4,615.00
	Wanco WS1SB8-LSA Rigid Mount 15-Light Rigid Arrow Board	\$ 3,974.00
	Wanco WS1SB8-LSAC Rigid Mount 25-Light Arrow Board	\$ 4,359.00
	Warranty Length (In days, months, or years)	5 Years
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-W-SM
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add N/A	
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Wanco 202484 65-watt solar (replaces standard solar, 30% increase)	\$ 182.00
	Wanco 205263 85-watt solar (replaces standard solar, 70% increase)	\$ 364.00
	Wanco 215455 2-amp Smart Battery Charger	\$ 87.00
	Wanco 206335 Additional 12V Sealed Lead Acid Battery (Three – 12VDC Batteries - 54 Ah total capacity)	\$ 127.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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2.0	Information Requested	Answer
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Manufacturer		Wanco
Make and Model		
Wanco WB5-LSAC 30x60 25 Light LED Truck Mount Arrow Board	\$	2,000.00
Wanco WB6-LSAC 36x72 25 Light LED Truck Mount Arrow Board	\$	2,287.67
Wanco WSBLA-14 14 LED Vehicle Mount Arrow Shaped Sign	\$	1,712.33
Wanco WFB5-LSAC 30x60 25 Light LED Truck Mount Arrow Board Manual	\$	2,273.97
Wanco WFB6-LSAC 36x72 25 Light LED Truck Mount Arrow Board Manual	\$	2,561.64
Wanco WFB8-LSAC 4x8-25 Light LED Truck Mount Arrow Board Manual	\$	3,191.78
Wanco WFBP5-LSAC 30x60 25 Light LED Truck Mount Arrow Board Power	\$	2,575.34
Wanco WFBP6-LSAC 36x72 25 Light LED Truck Mount Arrow Board Power	\$	4,095.89
Wanco WFBP8-LSAC 4x8-25 Light LED Truck Mount Arrow Board Power	\$	3,082.19

Warranty Length (In days, months, or years)		5 Years
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2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-W-VM
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2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
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2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014

2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
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2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost.	(Specify days, months, or years extended term N/A)
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2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Wanco Wireless Controller w/ 15' Extension	\$ 870.00

2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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2.0	Information Requested	Answer
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Manufacturer	American Signal Company
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Make and Model		
American Signal AMS30115301 T615 LED Flashing 15-Light Arrow Board Trailer 3x6	\$	4,467.00
American Signal AMS30115321 T625 LED Flashing 25-Light Arrow Board Trailer 3x6	\$	4,922.00
American Signal AMS30115401 T815 LED Flashing 15-Light Arrow Board Trailer 4x8	\$	4,578.00
American Signal AMS30115421 T825 LED Flashing 25-Light Arrow Board Trailer 4x8	\$	5,232.00

Warranty Length (In days, months, or years)	1 year
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2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-AS-T
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2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
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2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014

2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
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2.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term)	
	2 year extended warranty	\$ 200.00
	5 year extended warranty	\$ 500.00

2.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	American Signal PAINTADV Optional Trailer Paint Advantage (All FAP)	\$ 303.00
	American Signal OPT30065102 Locking Lug Nuts	\$ 72.00
	American Signal OPT30065096-3 J-Bar Wheel Lock	\$ 119.00
	American Signal OPT30065110 Tongue-Mounted Spare Tire	\$ 182.00
	American Signal OPT30065255-x Towing Hitch Options - 3" lunette eye / combination / adjustable height	\$ 242.00

2.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

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2.0	Information Requested	Answer
	Manufacturer	American Signal Company
	Make and Model	
	American Signal AMS30115380 Y615 LED Flashing 15-Light Arrow Board Vehicle Mount 3x6	\$ 3,638.00
	American Signal AMS30115390 Y625 LED Flashing 25-Light Arrow Board Vehicle Mount 3x6	\$ 3,717.00
	American Signal AMS30115480 Y815 LED Flashing 15-Light Arrow Board Vehicle Mount 4x8	\$ 3,610.00
	American Signal AMS30115490 Y825 LED Flashing 25-Light Arrow Board Vehicle Mount 4x8	\$ 4,000.00
	Warranty Length (In days, months, or years)	1 year
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-AS-VM
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term)	
	2 year extended warranty	\$ 200.00
	5 year extended warranty	\$ 500.00
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	American Signal AMS96066105 Skid-Mount Assembly (Available for Yoke Models)	\$ 2,868.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$

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2.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar Tech AB-0525 Silent Sentinel 25L Arrow Board Trailer	\$ 5,229.00
	Solar Tech AB-0515 Silent Sentinel 15L Arrow Board Trailer	\$ 5,393.00
	Warranty Length (In days, months, or years)	5 Year
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-ST-T
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term)	N/A
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2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Solar Tech AB-80W Upgrade to 80W Solar Array	\$ 230.00
	Solar-Tech OP-BAT4 Upgrade to 4 Standard Flooded Batteries	\$ 500.00
	Solar-Tech AB-2MFB Upgrade to 2 Maintenance Free Batteries (Specify AGM or Gel-Cell)	\$ 450.00
	Solar-Tech AB-4MFB Upgrade to 4 Maintenance Free Batteries (Specify AGM or Gel-Cell)	\$ 1,400.00
	Solar-Tech OP-0045 Battery Charger - 45A - 120VAC	\$ 350.00
	Solar-Tech OP-0055 Battery Charger - 55A - 120VAC	\$ 400.00
	Solar Tech OP-00045 Arrow Board LED Tail Light Upgrade - AB / MB2 / MB3	\$ 67.00
	Solar Tech OP-0174 Wheel Lock Kit	\$ 64.00
	Solar-Tech OP-CONE Traffic Cone Carrier	\$ 255.00
	Solar-Tech OP-00215 Tongue Jack with Swivel Wheel	\$ 255.00
	Solar-Tech AB-OBBOX Controller Mounted on Side-Rail (Outside Battery Box)	\$ 175.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System (per Box)	\$ 275.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 200.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,357.00

2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

ARROWBOARDS (Group I)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 2.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

2.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar Tech AT-B15-3060 Silent Sentinel Vehicle Mount Type B (30"x60") 15 Lamp LED Arrow Panel	\$ 1,425.00
	Solar Tech AT-B15-3672 Silent Sentinel Vehicle Mount Type B (36"x72") 15 Lamp LED Arrow Panel	\$ 1,525.00
	Solar Tech AT-C15-4896 Silent Sentinel Vehicle Mount Type C (48"x96") 15 Lamp LED Arrow Panel	\$ 1,625.00
	Solar Tech AT-B25-3060 Silent Sentinel Vehicle Mount Type B (30"x60") 25 Lamp LED Arrow Panel	\$ 1,975.00
	Solar Tech AT-B25-3672 Silent Sentinel Vehicle Mount Type B (36"x72") 25 Lamp LED Arrow Panel	\$ 2,075.00
	Solar Tech AT-C25-4896 Silent Sentinel Vehicle Mount Type C (48"x96") 25 Lamp LED Arrow Panel	\$ 2,175.00
	Warranty Length (In days, months, or years)	5 Year
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-ST-VM
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as	N/A
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Solar Tech AT-UMK Universal Fixed Mount	\$ 100.00
	Solar Tech AT-CP-MANUAL Center Pivot Mount Manual Lift	\$ 750.00
	Solar Tech AT-CP-POWER Center Pivot Mount Power Lift	\$ 1,900.00
	Solar Tech Model ATB-RM Over-the-Cab Power Pivoting Mount	\$ 1,375.00
	Solar Tech AT-PM-PIVOT Pivoting Mount Frame Only (Power Lift)	\$ 1,725.00
	Solar Tech AT-PM-SKIDM Pivoting Mount Skid Mount Base w/Manual Winch	\$ 1,000.00
	Solar Tech AT-PM-SKIDP Pivoting Mount Skid Mount Base (Power Lift)	\$ 2,100.00
	Solar Tech AT-PM-BED Pivoting Mount Bed Rail Base (Power Lift)	\$ 2,200.00
	Solar-Tech AT-POW16 In Cab Controls w/o Auxiliary Battery Pack - 16' Power & Control Cables	\$ 675.00
	Solar-Tech AT-POW30 In Cab Controls w/o Auxiliary Battery Pack - 30' Power & Control Cables	\$ 700.00
	Solar-Tech AT-POW50 In Cab Controls w/o Auxiliary Battery Pack - 50' Power & Control Cables	\$ 775.00
	Solar-Tech AT-CONTROL Wireless In Cab Controls w/o Auxiliary Battery Pack	\$ 1,200.00
	Solar-Tech AT-POWBAT16 In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries) - 16' Power & Control Cables	\$ 1,500.00
	Solar-Tech AT-POWBAT30 In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries) - 30' Power & Control Cables	\$ 1,550.00
	Solar-Tech AT-POWBAT50 In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries) - 50' Power & Control Cables	\$ 1,600.00
	Solar-Tech AT-BATCAB Wireless In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries)	\$ 2,025.00
	Solar-Tech AT-BATCON In Battery Box Controls - Self Contained Unit	\$ 1,375.00
	Solar-Tech OP-GPS Integrated GPS Receiver & Private Network Cell Transceiver	\$ 850.00
	Solar-Tech AT-40W Add 40W Solar Array	\$ 300.00
	Solar-Tech OP-BAT4 Upgrade to 4 Standard Flooded Batteries	\$ 500.00
	Solar-Tech AT-2MFB Upgrade to 2 Maintenance Free Batteries (Specify AGM or Gel-Cell)	\$ 450.00
	Solar-Tech AT-2MFB Upgrade to 4 Maintenance Free Batteries (Specify AGM or Gel-Cell)	\$ 1,400.00
	Solar-Tech OP-0045 Battery Charger - 45A - 120VAC	\$ 275.00
	Solar-Tech OP-0055 Battery Charger - 55A - 120VAC	\$ 350.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 400.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System (Per Box)	\$ 200.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

ARROWBOARDS (Group I)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 2.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

2.0	Information Requested	Answer
	Manufacturer	Hill & Smith
	Make and Model	
	Hill & Smith 267746 PL-15 Light Pro Line Mast Arrow Bd	\$ 4,340.00
	Hill & Smith 268495 PL-25 Light Pro Line Mast Arrow Bd	\$ 4,648.00
	Hill & Smith 402525 M90 EZ 17 -15 Light Arrow Bd	\$ 4,340.00
	Hill & Smith 409734 M90 EZ 17 -25 Light Arrow Bd	\$ 4,648.00
	Warranty Length (In days, months, or years)	5 Year
2.1	Date & I.D. of Price List	10/7/2019 SSR-AB-HS-T
2.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
2.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
2.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
2.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost.	(Specify days, months, or years extended term N/A
2.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
	Hill & Smith 266214 ASSET TRACKER GPS Only	\$ 389.00
2.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

ARROWBOARDS (Group I)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 2.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

2.0

Information Requested

Answer

Manufacturer	Hill & Smith	
Make and Model		
Hill & Smith 401657 48" x 96" 15 Lamp LED Arrow Panel (Vehicle Powered)	\$	2,033.00
Hill & Smith 401658 48" x 96" 25 Lamp LED Arrow Panel (Vehicle Powered)	\$	2,316.00
Hill & Smith 410010 30" x 60" 15 Lamp LED Arrow Panel (Vehicle Powered)	\$	1,747.00
Hill & Smith 410011 30" x 60" 25 Lamp LED Arrow Panel (Vehicle Powered)	\$	1,957.00
Hill & Smith 269140 48" x 96" 15 Lamp LED Arrow Panel (Solar Pkg)	\$	2,943.00
Hill & Smith 269141 48" x 96" 25 Lamp LED Arrow Panel (Solar Pkg)	\$	3,225.00
Hill & Smith 411120 30" x 60" 15 Lamp LED Arrow Panel (Solar Pkg)	\$	2,512.00
Hill & Smith 411121 30" x 60" 25 Lamp LED Arrow Panel (Solar Pkg)	\$	2,775.00
Hill & Smith 402552 15 lamp 72" x 36" Arrow Panel with Automatic Actuator	\$	3,067.00
Hill & Smith 409284 25 lamp 72" x 36" Arrow Panel with Automatic Actuator	\$	3,419.00
Hill & Smith 402563 15 lamp 72" x 36" Arrow Panel with Manual Lift	\$	2,716.00
Hill & Smith 409285 25 lamp 72" x 36" Arrow Panel with Manual Lift	\$	3,348.00
Hill & Smith 402551 15 lamp 60" x 30" Arrow Panel with Automatic Actuator	\$	3,075.00
Hill & Smith 409326 25 lamp 60" x 30" Arrow Panel with Automatic Actuator	\$	3,284.00
Hill & Smith 402562 15 lamp 60" x 30" Arrow Panel with Manual Lift,	\$	2,731.00
Hill & Smith 409327 25 lamp 60" x 30" Arrow Panel with Manual Lift	\$	2,984.00
Hill & Smith 402550 15 Lamp 48" x 24" Arrow Panel with Automatic Actuator	\$	3,271.00
Hill & Smith 402561 15 lamp 48" x 24" Arrow Panel with Manual Lift	\$	2,665.00

Warranty Length (In days, months, or years)	5 Year
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2.1 Date & I.D. of Price List	10/7/2019 SSR-AB-HS-VM
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2.2 Discount to be applied to Price List	0%
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***Note:** The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.

2.3 Price per loaded mile for delivery	\$ 1.00
Delivery Starting Point Address	Lino Lakes, MN 55014

2.4 Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
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2.5 PERFORMANCE/WARRANTY OPTIONS:	
Use this section to offer performance/extended warranty options and include cost.	(Specify days, months, or years extended term)
	N/A
	\$
	\$

2.6 OPTIONAL UPGRADE ITEM(S)	
Use this section for items not listed in manufacturer's price list. These items must be an upgrade to arrowboard operation or functionality. *Responder must give	
Hill & Smith 402393 Truck Bed Mounted Stand	\$ 520.00
Hill & Smith 402391 Truck Rail Mounted Stand	\$ 551.00
Hill & Smith 268900 Wired Cab-Mounted or Handheld Controller	\$ 95.00
Hill & Smith 269365 Wireless Controller	\$ 225.00

2.7 MNDOT TRAILER WIRING	
Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
Price:	\$0.00

TRUCK & TRAILER-TRUCK MOUNTED ATTENUATORS (Group II)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 3.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

3.0

Information Requested

Answer

Manufacturer	Traffix Devices, Inc.
Make and Model	
Traffix 10002-TL3-12TA Scorpion TL-3 Trailer Attenuator NCHRP 350	\$22,151.00
Traffix 10000-TL3M-12TA Scorpion II MASH TL-3 Trailer Attenuator	\$24,529.00
Traffix 10002 - TL2-12TA Scorpion TL-2 Trailer Attenuator NCHRP 350	\$15,774.00
Warranty Length (In days, months, or years)	1 year

3.1

Date & I.D. of Price List	10/7/2019 SSR-TR-TA
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3.2

Discount to be applied to Price List	0%
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*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.

3.3

Price per loaded mile for delivery	\$ 1.00
Delivery Starting Point Address	Lino Lakes, MN 55014

3.4

Price for additional set of manuals (service, parts, & operations)	Paper: \$0
	Digital: \$0

3.5

PERFORMANCE/WARRANTY OPTIONS:	
Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	N/A

3.6

INSTALLATION	
Use this section to offer installation costs to mount TMA, arrow & message boards, etc. Add as many lines as needed.	
Arrowboard/ CMS/ Upright Frame Installation to Trailer Attenuator	\$ 500.00
	\$
	\$

3.7

OPTIONAL UPGRADE ITEM(S)	
Use this section for items not listed in manufacturer's price list. These items must be an upgrade to TMA operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
Traffix 10480 Upright Frame Assembly	\$ 2,258.00
Traffix VUL 10419 Vertical Upright AB Lift	\$ 2,499.00
Traffix MnDOT Light Package	\$ 145.00
Traffix 10588-02 Strobe Light Kit	\$ 210.00
Traffix 13147-KIT Trailer Tongue Extender 4.25"	\$ 576.00
Traffix 13260 Spare Tire	\$ 187.00
Ver-Mac OPT-Attenuator Package Battery, 40 Watt Panel & Frame	\$ 1,692.00
Ver-Mac VM-4825 25 Light Arrowboard w/ Wireless Controller	\$ 2,500.00
Ver-Mac VM-4825L-ST 25 Light Arrowboard w/ Wireless Controller (use with Solar)	\$ 2,535.00
Ver-Mac VMS-A16 Electric Actuator Rack for 4 x 8 Arrowboards (Top Part)	\$ 1,714.00
Solar-Tech ATC-UMK-25-WR Silent Sentinel 25L Arrowboard - Wireless Controller	\$ 2,175.00
DigiKey NEMA Enclosure	\$ 185.00

3.8

MNDOT TRAILER WIRING	
Cost for Trailer Wiring per MNDOT Specification. See attached drawing	

Price: \$0.00

TRUCK & TRAILER-TRUCK MOUNTED ATTENUATORS (Group II)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 3.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

3.0	Information Requested	Answer
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Manufacturer	Traffix Devices, Inc.
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Make and Model	
Traffix 10000 -TL3-12C Scorpion TMA TL-3 NCHRP 350 Truck Mount	\$18,814.00
Traffix 10000 - TL3M-12C Scorpion II MASH TL-3 Truck Mount	\$19,520.00
Traffix 10000-TL2-12DT Model A-TL2 for Dump Trucks	\$15,956.00
Traffix 10000-TL2-12FB Model A-TL2 for Flat Bed Trucks	\$15,928.00

Warranty Length (In days, months, or years)	1 year
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3.1	Date & I.D. of Price List	10/7/2019 SSR-TR-TMA
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3.2	Discount to be applied to Price List	0%
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***Note:** The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.

3.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014

3.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
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3.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. extended term covers) Add as many lines as needed.	(Specify days, months, or years)
		N/A
		\$
		\$

3.6	INSTALLATION Use this section to offer installation costs to mount TMA, arrow & message boards, etc. Add as many lines as needed.	
		\$
		\$
		\$

3.7	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to TMA operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Traffix *P6 6" Fast Trak Extension Frame	\$ 2,296.00
	Traffix *P2 12" Fast Trak Extension Frame	\$ 2,684.00
	Traffix *P8 18" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 3,505.00
	Traffix *P4 24" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 3,999.00
	Traffix *P0 30" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,546.00
	Traffix *P3 36" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,743.00
	Traffix *T6 6" Fast Trak Extension Frame	\$ 2,549.00
	Traffix *T2 12" Fast Trak Extension Frame	\$ 2,937.00
	Traffix *T8 18" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 3,236.00
	Traffix *T4 24" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,252.00
	Traffix *T0 30" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,799.00
	Traffix *T3 36" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,996.00
	Traffix *P2LP 12" Fast Trak Extension Frame	\$ 2,602.00
	Traffix *P8LP 18" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,213.00
	Traffix *P4LP 24" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,216.00
	Traffix *P0LP 30" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,220.00
	Traffix *P3LP 36" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$ 4,417.00
	Traffix *T2LP 12" Fast Trak Extension Frame	\$ 2,855.00

Traffix	*T8LP 18" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$	4,466.00
Traffix	*T4LP 24" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$	4,469.00
Traffix	*T0LP 30" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$	4,473.00
Traffix	*T3LP 36" Fast Trak Extension Frame & A/B Lift Receiver Tubes	\$	4,670.00
Traffix	10750 Drop Jack Bracket (qty 1)	\$	130.00
Traffix	10725 Drop Jack with 6" Caster (qty 1)	\$	145.00
Traffix	10701 MNJ Heavy Duty Swivel Jack 6" Caster (qty 1)	\$	366.00
Traffix	10390 Permanent Mount Hydraulic Lift	\$	4,418.00
Traffix	10310-SD Upgrade to Super Duty Jacks from HD Swivel Jacks	\$	1,180.00
Traffix	10729-06 Upgrade Strut Rear Jacks to Super Duty Crank Jacks	\$	1,052.00
Traffix	10476-06-LD 6" High Reach w/ Light Duty Swivel Jacks	\$	1,636.00
Traffix	10476-06-HD 6" High Reach w/ Heavy Duty Swivel Jacks	\$	1,826.00
Traffix	10476-06-SD 6" High Reach w/ Super Duty Bolt on Jacks	\$	2,384.00
Traffix	10476-12-HD 12" High Reach w/ Heavy Duty Swivel Jacks	\$	2,237.00
Traffix	10476-12-SD 12" High Reach w/ Super Duty Bolt on Jacks	\$	2,795.00
Traffix	10476-18-HD 18" High Reach w/ Heavy Duty Swivel Jacks	\$	3,714.00
Traffix	10476-18-SD 18" High Reach w/ Super Duty Bolt on Jacks	\$	4,272.00
Traffix	10476-24-HD 24" High Reach w/ Heavy Duty Swivel Jacks	\$	3,885.00
Traffix	10476-24-SD 24" High Reach w/ Super Duty Bolt on Jacks	\$	4,443.00
Traffix	10476-30-HD 30" High Reach w/ Heavy Duty Swivel Jacks	\$	5,174.00
Traffix	10476-30-SD 30" High Reach w/ Super Duty Bolt on Jacks	\$	5,732.00
Traffix	10511A-8FT 8 Foot Longer Cord for Lights	\$	87.00
Traffix	10928-8FT 8 Foot Longer Side Battery Cable	\$	121.00
Traffix	10929 Quick Release Kit T-Pin	\$	965.00
Traffix	11027 In Cab Controller with 30' Cable	\$	277.00
Traffix	11088 12" Extender Frame Kit with 4 T-Pins for Quick Removal	\$	2,004.00
Traffix	11087 24" Extender Frame Kit with 4 T-Pins for Quick Removal	\$	3,794.00
Traffix	11130 Flat Bed Side Support Upgrade	\$	655.00
Traffix	11154 Dump Truck Side Support Upgrade	\$	500.00
Traffix	11160-A Fast Trak Vertical AB Hydraulic Lift	\$	2,262.00
Solar-Tech	ATC-UMK-25-WR Silent Sentinel 25L Arrowboard - Wireless Controller	\$	2,175.00
SSR	SSR-TA-1 Smart Brick Trailer Attenuator Message Board	\$	11,869.00
SSR	SSR-TA-Mount SSR-TA Electric Actuator Mount	\$	2,571.00
Ver-Mac	TM-548/B5GCTDI TM-548 Message Board	\$	8,840.00
Ver-Mac	VM-4825 25L Arrowboard w/Wireless Remote Control	\$	2,500.00
Wanco	WB8-LSAC 4 x 8 25 Light Arrowboard with 15' harness - No Mount	\$	2,614.00

3.8

MNDOT TRAILER WIRING

Cost for Trailer Wiring per MNDOT Specification. See attached drawing

Price: \$0.00



U.S. Department
of Transportation

Federal Highway
Administration

1200 New Jersey Ave., SE
Washington, D.C. 20590

September 15, 2017

In Reply Refer To:
HSST-1/CC-138

Mr. Felipe Almanza
TraFFix Devices Inc.
160 Avenida La Pata
San Clemente, CA 92673

Dear Mr. Almanza:

This letter is in response to your May 4, 2017 request for the Federal Highway Administration (FHWA) to review a roadside safety device, hardware, or system for eligibility for reimbursement under the Federal-aid highway program. This FHWA letter of eligibility is assigned FHWA control number CC-138 and is valid until a subsequent letter is issued by FHWA that expressly references this device.

Decision

The following devices are eligible, with details provided in the form which is attached as an integral part of this letter:

- Scorpion II Trailer Attenuator

Scope of this Letter

To be found eligible for Federal-aid funding, new roadside safety devices should meet the crash test and evaluation criteria contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual for Assessing Safety Hardware (MASH). However, the FHWA, the Department of Transportation, and the United States Government do not regulate the manufacture of roadside safety devices. Eligibility for reimbursement under the Federal-aid highway program does not establish approval, certification or endorsement of the device for any particular purpose or use.

This letter is not a determination by the FHWA, the Department of Transportation, or the United States Government that a vehicle crash involving the device will result in any particular outcome, nor is it a guarantee of the in-service performance of this device. Proper manufacturing, installation, and maintenance are required in order for this device to function as tested.

This finding of eligibility is limited to the crashworthiness of the system and does not cover other structural features, nor conformity with the Manual on Uniform Traffic Control Devices.

Eligibility for Reimbursement

Based solely on a review of crash test results and certifications submitted by the manufacturer, and the crash test laboratory, FHWA agrees that the device described herein meets the crash test and evaluation criteria of the AASHTO's MASH. Therefore, the device is eligible for reimbursement under the Federal-aid highway program if installed under the range of tested conditions.

Name of system: Scorpion II Trailer Attenuator
Type of system: Trailer Mounted Attenuator (TMA)
Test Level: MASH Test Level 3 (TL3)
Testing conducted by: KARCO
Date of request: May 1, 2017

FHWA concurs with the recommendation of the accredited crash testing laboratory as stated within the attached form.

Full Description of the Eligible Device

The device and supporting documentation, including reports of the crash tests or other testing done, videos of any crash testing, and/or drawings of the device, are described in the attached form.

Notice

This eligibility letter is issued for the subject device as tested. Modifications made to the device are not covered by this letter and will need to be tested in accordance with all recommended tests in AASHTO's MASH as part of a new and separate submittal.

You are expected to supply potential users with sufficient information on design, installation and maintenance requirements to ensure proper performance.

You are expected to certify to potential users that the hardware furnished has the same chemistry, mechanical properties, and geometry as that submitted for review, and that it will meet the test and evaluation criteria of AASHTO's MASH.

Issuance of this letter does not convey property rights of any sort or any exclusive privilege. This letter is based on the premise that information and reports submitted by you are accurate and correct. We reserve the right to modify or revoke this letter if: (1) there are any inaccuracies in the information submitted in support of your request for this letter, (2) the qualification testing was flawed, (3) in-service performance or other information reveals safety problems, (4) the system is significantly different from the version that was crash tested, or (5) any other information indicates that the letter was issued in error or otherwise does not reflect full and complete information about the crashworthiness of the system.

Standard Provisions

- To prevent misunderstanding by others, this letter of eligibility designated as FHWA control number CC-138 shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed upon request.
- This letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder.
- If the subject device is a patented product it may be considered to be proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects: (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.

Sincerely,



Robert Ritter
Acting Director, Office of Safety
Technologies
Office of Safety

Enclosures

Request for Federal Aid Reimbursement Eligibility of Highway Safety Hardware

Submitter	Date of Request:	May 01, 2017	<input checked="" type="radio"/> New <input type="radio"/> Resubmission
	Name:	Felipe Almanza	
	Company:	Traffix Devices Inc.	
	Address:	160 Avenida La Pata San Clemente CA 92672	
	Country:	United States	
	To:	Michael S. Griffith, Director FHWA, Office of Safety Technologies	

I request the following devices be considered eligible for reimbursement under the Federal-aid highway program.

Device & Testing Criterion - Enter from right to left starting with Test Level

!-!-!

System Type	Submission Type	Device Name / Variant	Testing Criterion	Test Level
'CC': Truck-Mounted Attenuators (TMA)	<input checked="" type="radio"/> Physical Crash Testing <input type="radio"/> Engineering Analysis	Scorpion II Trailer Attenuator	AASHTO MASH	TL3

By submitting this request for review and evaluation by the Federal Highway Administration, I certify that the product(s) was (were) tested in conformity with the AASHTO Manual for Assessing Safety Hardware and that the evaluation results meet the appropriate evaluation criteria in the MASH.

Individual or Organization responsible for the product:

Contact Name:	Felipe Almanza	Same as Submitter <input checked="" type="checkbox"/>
Company Name:	Traffix Devices Inc.	Same as Submitter <input checked="" type="checkbox"/>
Address:	160 Avenida La Pata San Clemente CA 92672	Same as Submitter <input checked="" type="checkbox"/>
Country:	United States	Same as Submitter <input checked="" type="checkbox"/>

Enter below all disclosures of financial interests as required by the FHWA 'Federal-Aid Reimbursement Eligibility Process for Safety Hardware Devices' document.

Traffix Devices Inc. and Karco Engineering LLC share no financial interests between the two organizations. This includes no shared financial interest but not limited to:

- i. Compensation included wages, salaries, commissions, professional fees, or fees for business referrals
- iii. Research funding or other forms of research support;
- iv. Patents, copyrights, licenses, and other intellectual property interests;
- vi. Business ownership and investment interests;

PRODUCT DESCRIPTION

- New Hardware or Significant Modification
 Modification to Existing Hardware

The Scorpion Trailer Attenuator (TA) is a mobile crash cushion designed with a trailer tongue and axle/wheel assembly for towing by a support vehicle. The TA connects directly to the support vehicle's trailer connection and from a lunette eye on the attenuator. The TA may be used on shadow vehicle's, stationary block vehicle's, or on advanced warning vehicle's upstream of a moving or stationary operation. The Scorpion TA can be used on support vehicles with a min. actual/curb weight of 12,000 lbs with no upper weight limit (infinite weight). Lighting consists of LED or incandescent brake, directional, and running lights meeting FMVSS requirements and optional strobe/flashing lights can be accommodated for enhancement of advanced warning to drivers. The TA has overall dimensions of 17.8 ft (5.4 m) x 7.8 ft (2.4 m) x 4.3 ft (1.3 m) with ground clearance of 12.0 in \pm 1.0 in (305 mm \pm 25 mm). The Scorpion TA consists of three (3) main components: the trailer tongue, front Strut, and rear Cartridge. The Strut and Cartridge are the attenuation components. The trailer tongue is positioned nearest to the support vehicle, the Strut is bolted to the tongue and Cartridge. The Cartridge is the rear most component, furthest away from the support vehicle. The Cartridge is typically the first component impacted by an errant vehicle. The trailer tongue acts as a standard trailer single point connection under normal towing conditions by the support vehicle. The trailer tongue is designed with an integral Telescoping Anti-Rotation System (TARS) that is activated when the TA is impacted. The forward sliding action occurs during an impact, upon completion of the full telescoping action the outboard anti-rotation supports come into contact with the impact zone which in turn prevents angular rotation about the rear of the host vehicle. The TARS impact zone is a designated impact space on the rear of the host vehicle which the TARS anti-rotation support will come into contact when the TARS system engages in the designed forward action. The TARS impact zone is symmetrical left to right and is approximately 6" [152.4 mm] X 10" [254.0 mm] and 12" [304.8 mm] from the centerline of the support vehicle. The TARS tongue has overall dimensions of 4.8 ft. (1.5 m) X 6.3 ft. (1.9 m) X 2.2 ft. (0.7 m). The Strut consists of four (4) outboard convex aluminum tubes (two on each side) forming an aluminum structural weldment. The aluminum structural weldments bolt directly to the TARS tongue and the rear Cartridge. The structural assembly encompasses the aluminum crush Module D. The Module is made from an aluminum outer skin that contains expanded aluminum honeycomb and has overall dimensions of 4.0 ft. (1.2 m) x 6.7 ft. (2.0 m) x 2.0 ft. (0.6 m). The complete assembled Strut consists of two aluminum tube weldments and Module D. The Strut has overall dimensions of 4.8 ft. (1.5 m) x 7.8 ft. (2.4 m) x 2.2 ft. (0.7 m). The Cartridge consists of four (4) outboard convex aluminum tubes (two on each side) forming an aluminum structural weldment. The aluminum structural weldments bolt directly the Strut's steel angles and rear trailer diaphragm. The TA uses a Cartridge Trailer Diaphragm with an axle/wheel attachment for towing the TA. The structural assembly encompasses the two-aluminum crush Module C's. Attached to the rear most end of the Cartridge is the single crush Module A. The complete Cartridge consists of two aluminum tube weldments, axle diaphragm, mounting angles, one Module A, and two Module C's. The modules are made from an aluminum outer skin that contains expanded aluminum honeycomb. Module A has overall dimensions of 1.0 ft. (0.3 m) x 5.0 ft. (1.5 m) x 2.0 ft. (0.6 m) and each Module C has overall dimensions of 2.0 ft. (0.6 m) x 5.0 ft. (1.5 m) X 2.0 ft. (0.6 m). The complete assembled Cartridge has overall dimensions of 8.3 ft. (2.5 m) x 7.8 ft. (2.4 m) x 3.0 ft. (0.9 m). An optional display panel lifting frame was utilized for all tests to validate the safe performance of a TA with the lifting frame and a mounted display panel. The lift frame rotates a display panel from a horizontal stored position to vertical deployed position with a manual or electrical power lift.

CRASH TESTING

By signature below, the Engineer affiliated with the testing laboratory, agrees in support of this submission that all of the critical and relevant crash tests for this device listed above were conducted to meet the MASH test criteria. The Engineer has determined that no other crash tests are necessary to determine the device meets the MASH criteria.

Engineer Name:	Robert L. Ramirez	
Engineer Signature:	Robert Ramirez	<small>Digitally signed by Robert Ramirez DN: cn=Robert Ramirez, o=KARCO Engineering, ou=Project Engineer, email=rramirez@karco.com, c=US Date: 2017.05.04 09:30:24 -0700</small>
Address:	9270 Holly Rd. Adelanto, CA 92301	Same as Submitter <input type="checkbox"/>
Country:	United States	Same as Submitter <input type="checkbox"/>

A brief description of each crash test and its result:

Required Test Number	Narrative Description	Evaluation Results
3-50 (1100C)	<p>The TA was positioned in line with the test vehicle's centerline. The inline centered position examines the TA's energy dissipation capacity, structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2012 Kia Rio 4-door sedan with test inertial mass of 2,458.1 lbs (1,115.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TA at a velocity of 60.19 mph (96.87 km/hr) and at an impact angle of 0.8°.</p> <p>The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sustained moderate collapse of the outboard convex tube weldments and minimal crush of Module D.</p> <p>The TA system contained a display panel mounted to the lifting frame and was raised into the vertical deployed position. The display panel and lift frame did not pose or show potential to be a hazard in the impact event.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicle's occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS

Required Test Number	Narrative Description	Evaluation Results
3-51 (2270P)	<p>The TA was positioned in line with the test vehicle's centerline. The inline centered position examines the TA'S energy dissipation capacity, structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2012 RAM 1500 4-door pickup truck with test inertial mass of 5,006.6 lbs (2,271.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 63.54 mph (103.25 km/hr) and at an impact angle of 0.4°.</p> <p>The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to a near flattened state. The TA system contained a display panel mounted to the lifting frame and was raised into the vertical deployed position. The display panel and lift frame did not pose or show potential to be a hazard in the impact event.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicle's occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS

3-52 (2270P)	<p>The TA was positioned offset 1/3 of the test vehicles width to the centerline of the test vehicle. The offset position examines the capability of a TA to safely attenuate off-center impacts, the TMA's structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2011 RAM 1500 4-door pickup truck with test inertial mass of 5,002.2 lbs (2,269.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TA at a velocity of 60.60 mph (97.52 km/hr) and at an impact angle of 1.3°.</p> <p>The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to a near flattened state. The TA system contained a display panel mounted to the lifting frame and was raised into the vertical deployed position. The display panel and lift frame did not pose or show potential to be a hazard in the impact event.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicle's occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration</p>	PASS
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3-53 (2270P)	<p>The TA was positioned offset ¼ of the test vehicles width and at a nominal angle of 10° with the center of the test vehicle. The offset and angular position impact examines the energy dissipation capacity of a TA, the TA's structural adequacy, occupant risk, and with a minimum support vehicle weight of 13,560.4 lbs (6,151.0 kg) with the parking brake engaged and the transmission in 2nd gear. The recorded roll ahead for the support vehicle was 20.3 ft (6.2 m). The test was conducted using a commercially available 2012 RAM 1500 4-door pickup truck with test inertial mass of 4,998.9 lbs (2,267.50 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 63.12 mph (101.58 km/hr) and at an impact angle of 9.8°. The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C made contact with each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to near a near flattened state. The TA system contained a display panel mounted to the lifting frame and was raised into the vertical deployed position. The display panel and lift frame did not pose or show potential to be a hazard in the impact event.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicle's occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS
3-54 (1500A)	Per MASH Test is optional	Non-Critical, not conducted

Full Scale Crash Testing was done in compliance with MASH by the following accredited crash test laboratory (cite the laboratory's accreditation status as noted in the crash test reports.):

Laboratory Name:	KARCO Engineering, INC	
Laboratory Signature:	Robert Ramirez	<small>Digitally signed by Robert Ramirez DN: cn=Robert Ramirez, o=KARCO Engineering, ou=Project Engineer, email=rramirez@karco.com, c=US Date: 2017.05.04 09:31:54 -0700</small>
Address:	9270 Holly Rd.	Same as Submitter <input type="checkbox"/>
Country:	United States	Same as Submitter <input type="checkbox"/>
Accreditation Certificate Number and Dates of current Accreditation period :	TL-371; December 18, 2015 through December 18, 2017	

Submitter Signature*: *Felipe Almanza*

Digitally signed by Felipe Almanza
DN: cn=Felipe Almanza, o=Traffic Devices
Inc., ou
email=falmanza@traffdevices.com, c=US
Date: 2017.04.27 17:34:27 -0700

Submit Form

ATTACHMENTS

Attach to this form:

- 1) Additional disclosures of related financial interest as indicated above.
- 2) A copy of the full test report, video, and a Test Data Summary Sheet for each test conducted in support of this request.
- 3) A drawing or drawings of the device(s) that conform to the Task Force-13 Drawing Specifications [[Hardware Guide Drawing Standards](#)]. For proprietary products, a single isometric line drawing is usually acceptable to illustrate the product, with detailed specifications, intended use, and contact information provided on the reverse. Additional drawings (not in TF-13 format) showing details that are relevant to understanding the dimensions and performance of the device should also be submitted to facilitate our review.

FHWA Official Business Only:

Eligibility Letter		
Number	Date	Key Words

SECTION 4

MASH TEST 3-50 SUMMARY

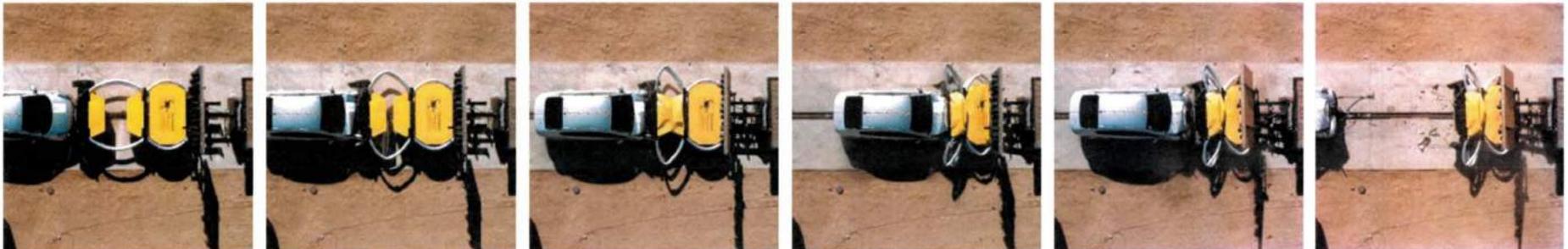
Test Article: TraFFix Devices Scorpion II TL3 TA

Project No. P36284-01

Test Program: MASH 3-50

Test Date: 11/10/16

SEQUENTIAL PHOTOGRAPHS



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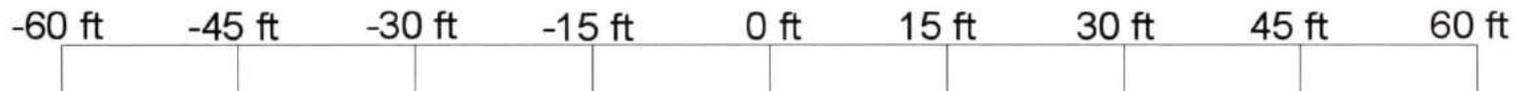
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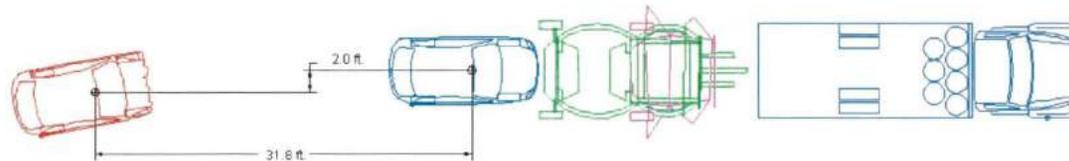
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PLAN VIEW



Pre-Test
● Article
● Vehicle
Post-Test
● Article
● Vehicle



SECTION 4 ... (CONTINUED)

MASH TEST 3-50 SUMMARY

Test Article: TrafFix Devices Scorpion II TL3 TA

Project No. P36284-01

Test Program: MASH 3-50

Test Date: 11/10/16

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36284-01	EXIT ANGLE	
TEST DESIGNATION	3-50	VEHICLE STABILITY	Satisfactory
TEST DATE	11/10/16	FINAL VEHICLE POSITION	31.8 ft. (9.7 m) rearward and 2.0 ft. (0.6 m) right from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion II TL3 TA	VEHICLE POCKETING	None
TYPE	Trailer Mounted Attenuator	MAXIMUM ROLL ANGLE	1.5°
KEY ELEMENTS	Curved Tubes, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	3.8°
ARTICLE LENGTH	17.8 ft. (5.4 m)	MAXIMUM YAW ANGLE	-2.9°
HEIGHT FROM GROUND	12.4 in. (315 mm)	KINETIC ENERGY	297.7 kip-ft (403.6 kJ)
MAXIMUM WIDTH	7.8 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 33.5 ft/s (10.2 m/s)
SUPPORT VEHICLE			Lateral 0.0 ft/s
TOTAL INSTALLATION LENGTH	45.2 ft (13.8 m)	RIDEDOWN ACCELERATION	Longitudinal -12.7 g
YEAR, MAKE AND MODEL	1991 Ford F700		Lateral 3.1 g
RESTRAINT	Blocked Against Roll Ahead	THIV	33.1 ft/s (10.1 m/s)
TEST VEHICLE		PHD	12.8 g
TYPE / DESIGNATION	1100C	ASI	1.68
YEAR, MAKE AND MODEL	2012 Kia Rio	TEST ARTICLE DEFLECTIONS	
CURB MASS	2,539.7 lbs (1,152.0 kg)	DYNAMIC DEFLECTION	8.92 ft. (2.72 m)
TEST INERTIAL MASS	2,458.1 lbs (1,115.0 kg)	STATIC DEFORMATION	7.48 ft. (2.28 m)
GROSS STATIC MASS	2,631.2 lbs (1,193.5 kg)	ARTICLE DAMAGE	Damage to cartridge, strut, and tongue sections.
IMPACT CONDITIONS		VEHICLE DAMAGE	
IMPACT VELOCITY	60.19 mph (96.87 km/h)	VEHICLE DAMAGE SCALE	12-FD-4
IMPACT ANGLE	0.8°	COLLISION DAMAGE CLASSIFICATION	12FDEW4
IMPACT LOCATION / ORIENTATION	0.5 in. (13 mm) right of TA centerline.		

SECTION 4

MASH TEST 3-51 SUMMARY

Test Article: TrafFix Devices Scorpion II TL3 TA

Project No. P36017-01

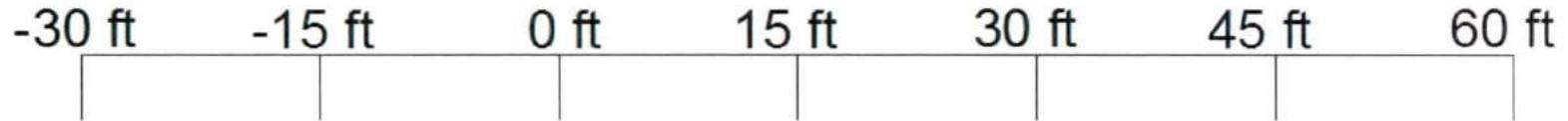
Test Program: MASH 3-51

Test Date: 12/09/16

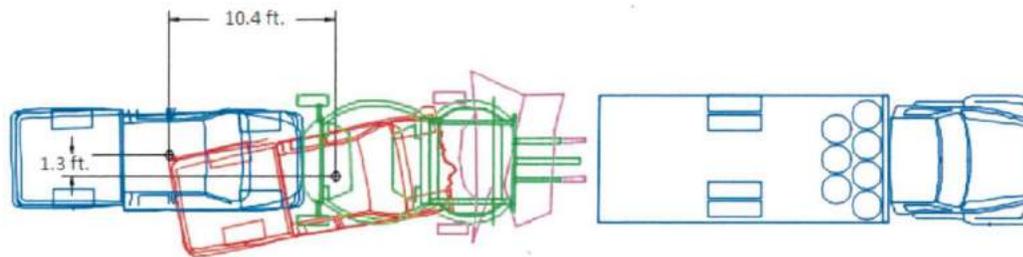
SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



- Pre-Test**
- Article
- Vehicle
- Post-Test**
- Article
- Vehicle



SECTION 4 ... (CONTINUED)

MASH TEST 3-51 SUMMARY

Test Article: TrafiX Devices Scorpion II TL3 TA

Project No. P36017-01

Test Program: MASH 3-51

Test Date: 12/09/16

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36017-01	EXIT ANGLE	
TEST DESIGNATION	3-51	VEHICLE STABILITY	Satisfactory
TEST DATE	12/09/16	FINAL VEHICLE POSITION	10.4 ft. (3.2 m) forward and 1.3 ft. (0.4 m) right from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion II TL3 TA	VEHICLE POCKETING	None
TYPE	Trailer Mounted Attenuator	MAXIMUM ROLL ANGLE	4.9°
KEY ELEMENTS	Curved Rails, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	6.6°
ARTICLE LENGTH	17.8 ft. (5.4 m)	MAXIMUM YAW ANGLE	-14.7°
HEIGHT FROM GROUND	12.8 in. (325 mm)	KINETIC ENERGY	675.7 kip-ft (916.2 kJ)
MAXIMUM WIDTH	7.8 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 31.2 ft/s (9.5 m/s)
SUPPORT VEHICLE			Lateral 0.7 ft/s (0.2 m/s)
TOTAL INSTALLATION LENGTH	45.2 ft (13.8 m)	RIDEDOWN ACCELERATION	Longitudinal -19.3 g
YEAR, MAKE AND MODEL	1991 Ford F700		Lateral -2.5 g
RESTRAINT	Blocked Against Roll Ahead	THIV	31.2 ft/s (9.5 m/s)
TEST VEHICLE		PHD	12.8 g
TYPE / DESIGNATION	2270P	ASI	1.45
YEAR, MAKE AND MODEL	2012 RAM 1500	TEST ARTICLE DEFLECTIONS	
CURB MASS	4,935.0 lbs (2,238.5 kg)	DYNAMIC DEFLECTION	11.98 ft. (3.65 m)
TEST INERTIAL MASS	5,006.6 lbs (2,271.0 kg)	STATIC DEFORMATION	10.24 ft. (3.12 m)
GROSS STATIC MASS	5,006.6 lbs (2,271.0 kg)	ARTICLE DAMAGE	Damage to cartridge, strut, and tongue sections.
IMPACT CONDITIONS		VEHICLE DAMAGE	
IMPACT VELOCITY	63.54 mph (103.25 km/h)	VEHICLE DAMAGE SCALE	12-FD-3
IMPACT ANGLE	0.4°	COLLISION DAMAGE CLASSIFICATION	12FDEW2
IMPACT LOCATION / ORIENTATION	0.68 in. (17 mm) left of TMA centerline.		

SECTION 4

MASH TEST 3-52 SUMMARY

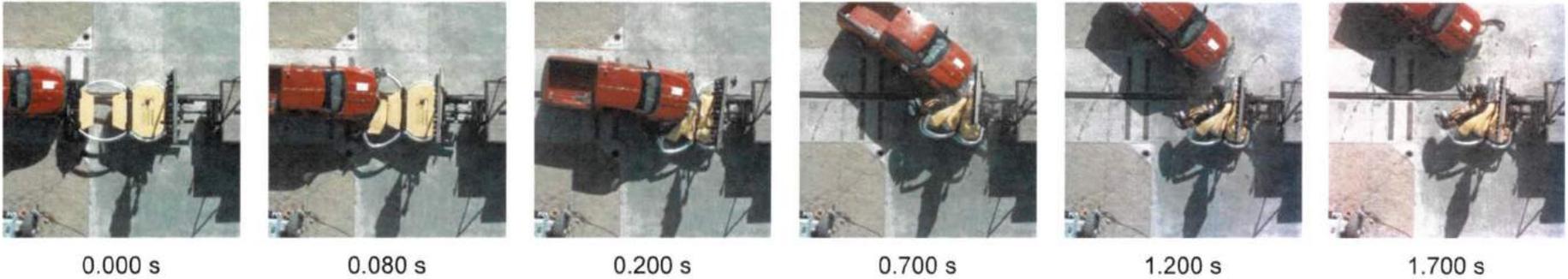
Test Article: TrafFix Devices Scorpion II TL3 TA

Project No. P36165-01

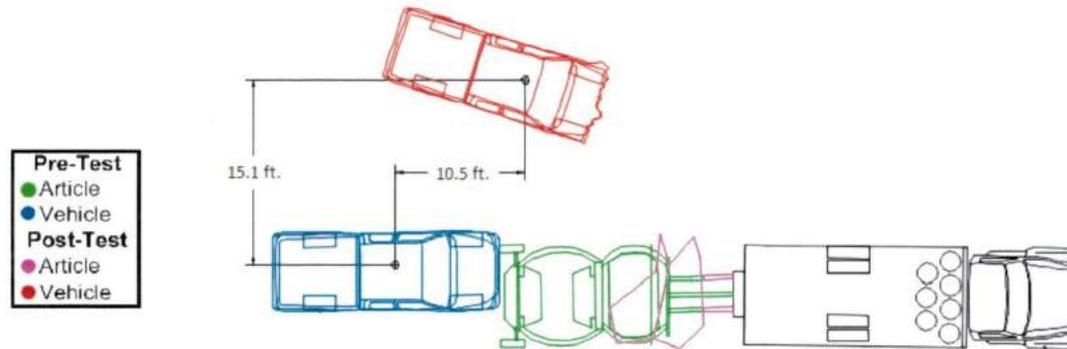
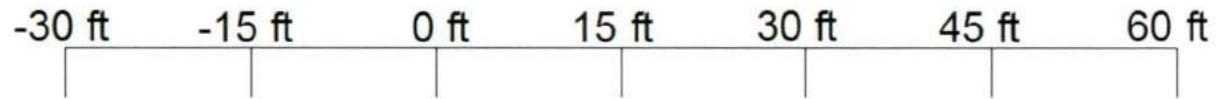
Test Program: MASH 3-52

Test Date: 12/20/16

SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



SECTION 4 ... (CONTINUED)
MASH TEST 3-52 SUMMARY

Test Article: TrafiX Devices Scorpion II TL3 TA
 Test Program: MASH 3-52

Project No. P36165-01
 Test Date: 12/20/16

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36165-01	EXIT ANGLE	
TEST DESIGNATION	3-52	VEHICLE STABILITY	Satisfactory
TEST DATE	12/20/16	FINAL VEHICLE POSITION	10.5 ft. (3.2 m) forward and 15.1 ft. (4.6 m) left from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion II TL3 TA	VEHICLE POCKETING	None
TYPE	Trailer Mounted Attenuator	MAXIMUM ROLL ANGLE	9.5°
KEY ELEMENTS	Curved Rails, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	-19.8°
ARTICLE LENGTH	17.8 ft. (5.4 m)	MAXIMUM YAW ANGLE	36.3°
HEIGHT FROM GROUND	12.8 in. (325 mm)	KINETIC ENERGY	614.1 kip-ft (832.6 kJ)
MAXIMUM WIDTH	7.8 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 30.2 ft/s (9.2 m/s)
SUPPORT VEHICLE			Lateral 1.6 ft/s (0.5 m/s)
TOTAL INSTALLATION LENGTH	45.2 ft (13.8 m)	RIDEDOWN ACCELERATION	Longitudinal -10.0 g
YEAR, MAKE AND MODEL	1991 Ford F700		Lateral -2.4 g
RESTRAINT	Blocked Against Roll Ahead	THIV	30.2 ft/s (9.2 m/s)
TEST VEHICLE		PHD	10.1 g
TYPE / DESIGNATION	2270P	ASI	0.88
YEAR, MAKE AND MODEL	2011 RAM 1500	TEST ARTICLE DEFLECTIONS	
CURB MASS	4,985.7 lbs (2,261.5 kg)	DYNAMIC DEFLECTION	11.32 ft. (3.45 m)
TEST INERTIAL MASS	5,002.2 lbs (2,269.0 kg)	STATIC DEFORMATION	10.56 ft. (3.22 m)
GROSS STATIC MASS	5,002.2 lbs (2,269.0 kg)	ARTICLE DAMAGE	Damage to cartridge, strut, and tongue sections.
IMPACT CONDITIONS		VEHICLE DAMAGE	
IMPACT VELOCITY	60.60 mph (97.52 km/h)	VEHICLE DAMAGE SCALE	12-FD-4
IMPACT ANGLE	1.3°	COLLISION DAMAGE CLASSIFICATION	12FDEW3
TARGET OFFSET/ ACTUAL OFFSET	26.5 in. (674 mm) / 25.8 in. (655 mm)		

SECTION 4

MASH TEST 3-53 SUMMARY

Test Article: TraFFix Devices Scorpion II TL3 TA

Project No. P36177-01

Test Program: MASH 3-53

Test Date: 12/21/16

SEQUENTIAL PHOTOGRAPHS



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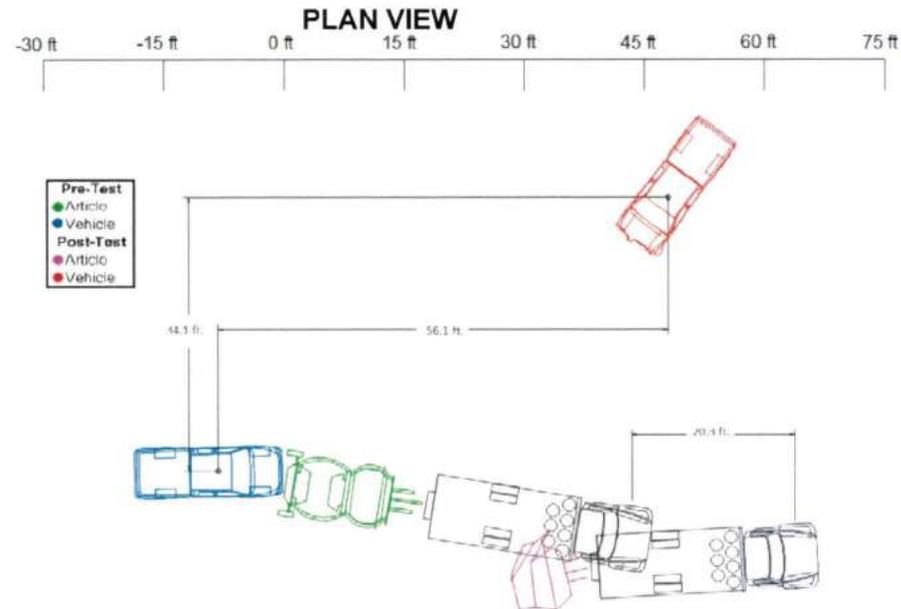
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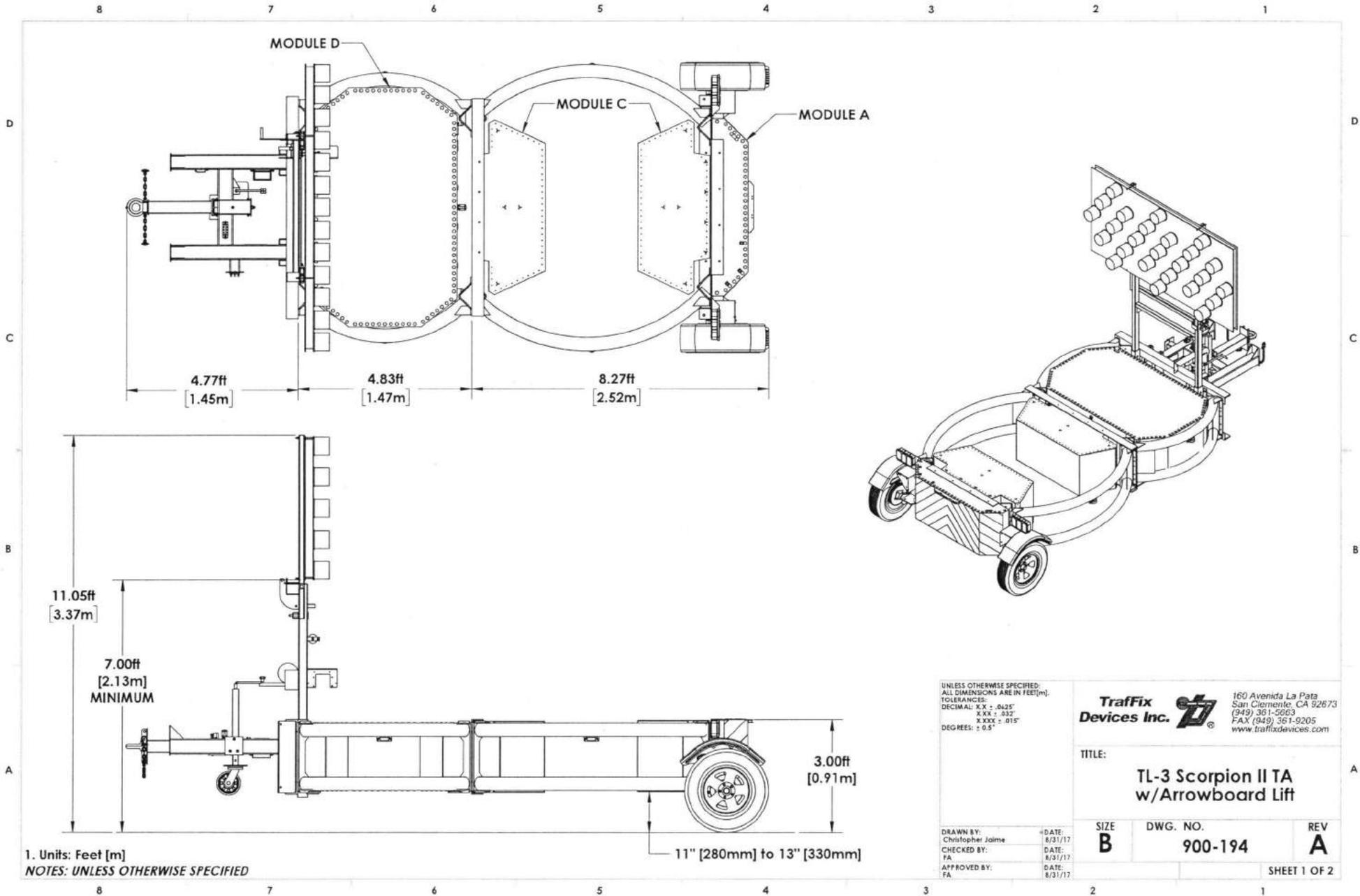


SECTION 4 ... (CONTINUED)
MASH TEST 3-53 SUMMARY

Test Article: TrafiX Devices Scorpion II TL3 TA
 Test Program: MASH 3-53

Project No. P36177-01
 Test Date: 12/21/16

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36177-01	EXIT ANGLE	
TEST DESIGNATION	3-53	VEHICLE STABILITY	Satisfactory
TEST DATE	12/21/16	FINAL VEHICLE POSITION	56.1 ft. (17.1 m) forward and 34.1 ft. (10.4 m) left from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion II TL3 TA	VEHICLE POCKETING	None
TYPE	Trailer Mounted Attenuator	MAXIMUM ROLL ANGLE	10.9°
KEY ELEMENTS	Curved Rails, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	5.7°
ARTICLE LENGTH	17.8 ft. (5.4 m)	MAXIMUM YAW ANGLE	133°
HEIGHT FROM GROUND	12.75 in. (324 mm)	KINETIC ENERGY	665.8 kip-ft (902.7 kJ)
MAXIMUM WIDTH	7.8 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 27.9 ft/s (8.5 m/s)
SUPPORT VEHICLE			Lateral 3.9 ft/s (1.2 m/s)
TOTAL INSTALLATION LENGTH	45.2 ft (13.8 m)	RIDEDOWN ACCELERATION	Longitudinal -12.6 g
YEAR, MAKE AND MODEL	1991 Ford F700		Lateral -3.9 g
RESTRAINT	2nd Gear, Parking Brake Engaged	THIV	28.2 ft/s (8.6 m/s)
TEST VEHICLE		PHD	13.2 g
TYPE / DESIGNATION	2270P	ASI	1.08
YEAR, MAKE AND MODEL	2012 RAM 1500	TEST ARTICLE DEFLECTIONS	
CURB MASS	4,986.8 lbs (2,262.0 kg)	DYNAMIC DEFLECTION	9.83 ft. (3.00 m)
TEST INERTIAL MASS	4,998.9 lbs (2,267.5 kg)	STATIC DEFORMATION	9.10 ft. (2.77 m)
GROSS STATIC MASS	4,998.9 lbs (2,267.5 kg)	ARTICLE DAMAGE	Damage to cartridge, strut, and tongue sections.
IMPACT CONDITIONS		VEHICLE DAMAGE	
IMPACT VELOCITY	63.12 mph (101.58 km/h)	VEHICLE DAMAGE SCALE	12-FD-4
IMPACT ANGLE	3.8°	COLLISION DAMAGE CLASSIFICATION	12FDEW3
TARGET OFFSET/ ACTUAL OFFSET	19.9 in. (505 mm) / 19.4 in. (493 mm)		



UNLESS OTHERWISE SPECIFIED:
 ALL DIMENSIONS ARE IN FEET(m).
 TOLERANCES:
 DECIMAL: X.X ± .0425"
 X.XX ± .037"
 X.XXX ± .015"
 DEGREES: ± 0.5°



160 Avenida La Pata
 San Clemente, CA 92673
 (949) 361-5663
 FAX (949) 361-9205
 www.trafixdevices.com

TITLE:
**TL-3 Scorpion II TA
 w/Arrowboard Lift**

DRAWN BY:
 Christopher Jaime
 CHECKED BY:
 FA
 APPROVED BY:
 FA

DATE:
 8/31/17
 DATE:
 8/31/17
 DATE:
 8/31/17

SIZE
B

DWG. NO.
900-194

REV
A

SHEET 1 OF 2

1. Units: Feet [m]
 NOTES: UNLESS OTHERWISE SPECIFIED

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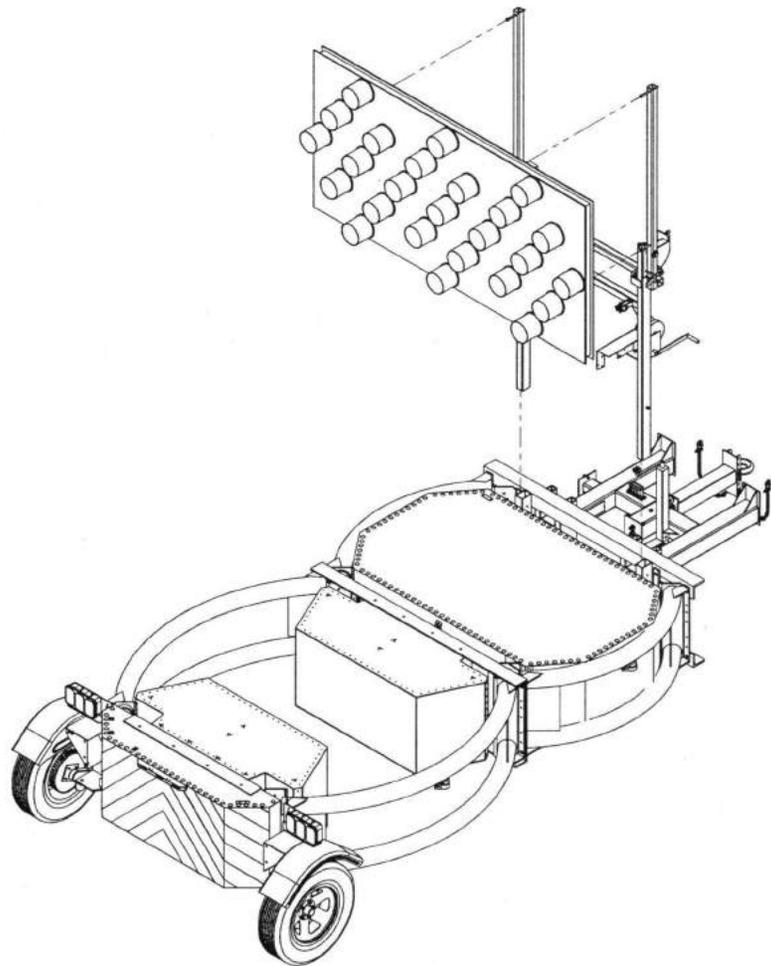
1

D

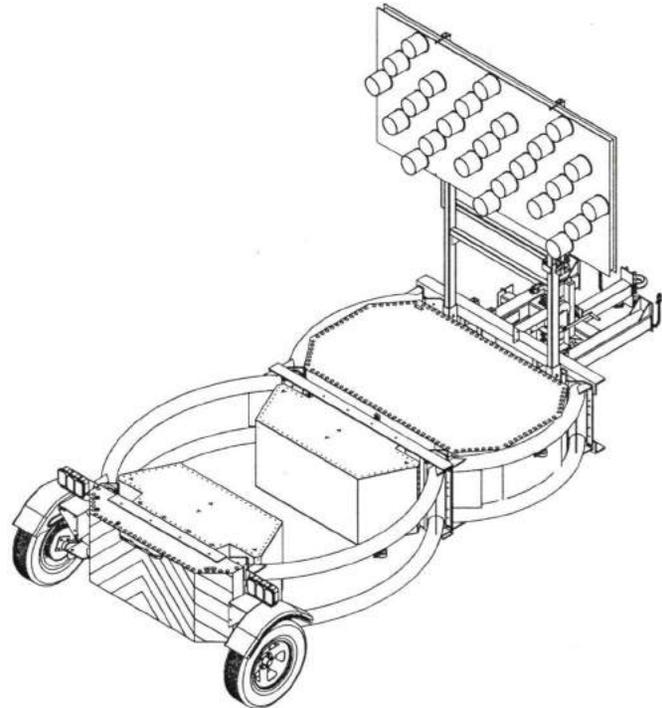
C

B

A



Exploded View of Arrowboard Lift Install
to Scorpion II TA



Assembled View of Arrowboard Lift Install
to Scorpion II TA

D

C

B

A

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN FEET[mm]
TOLERANCES:
DECIMAL: X.X ± .0425"
X.XX ± .032"
X.XXX ± .015"
DEGREES: ± 0.5°



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B

DWG. NO.
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REV
A

SHEET 2 OF 2

NOTES: UNLESS OTHERWISE SPECIFIED

8

7

6

5

4

3

2

1



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Ave., SE
Washington, D.C. 20590

June 15, 2017

In Reply Refer To:
HSST-1/CC-132

Mr. Felipe Almanza
TraFFix Devices Inc.
160 Avenida La Pata
San Clemente, CA 92673

Dear Mr. Almanza:

This letter is in response to your January 10, 2017 request for the Federal Highway Administration (FHWA) to review a roadside safety device, hardware, or system for eligibility for reimbursement under the Federal-aid highway program. This FHWA letter of eligibility is assigned FHWA control number CC-132 and is valid until a subsequent letter is issued by FHWA that expressly references this device.

Decision

The following devices are eligible, with details provided in the form which is attached as an integral part of this letter:

- Scorpion II

Scope of this Letter

To be found eligible for Federal-aid funding, new roadside safety devices should meet the crash test and evaluation criteria contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual for Assessing Safety Hardware (MASH). However, the FHWA, the Department of Transportation, and the United States Government do not regulate the manufacture of roadside safety devices. Eligibility for reimbursement under the Federal-aid highway program does not establish approval, certification or endorsement of the device for any particular purpose or use.

This letter is not a determination by the FHWA, the Department of Transportation, or the United States Government that a vehicle crash involving the device will result in any particular outcome, nor is it a guarantee of the in-service performance of this device. Proper manufacturing, installation, and maintenance are required in order for this device to function as tested.

This finding of eligibility is limited to the crashworthiness of the system and does not cover other structural features, nor conformity with the Manual on Uniform Traffic Control Devices.

Eligibility for Reimbursement

Based solely on a review of crash test results and certifications submitted by the manufacturer, and the crash test laboratory, FHWA agrees that the device described herein meets the crash test and evaluation criteria of the AASHTO's MASH. Therefore, the device is eligible for reimbursement under the Federal-aid highway program if installed under the range of tested conditions.

Name of system: Scorpion II
Type of system: Truck-Trailer Mounted Attenuator (TTMA)
Test Level: MASH Test Level 3 (TL3)
Testing conducted by: KARCO
Date of request: January 13, 2017

FHWA concurs with the recommendation of the accredited crash testing laboratory as stated within the attached form.

Full Description of the Eligible Device

The device and supporting documentation, including reports of the crash tests or other testing done, videos of any crash testing, and/or drawings of the device, are described in the attached form.

Notice

This eligibility letter is issued for the subject device as tested. Modifications made to the device are not covered by this letter and will need to be tested in accordance with all recommended tests in AASHTO's MASH as part of a new and separate submittal.

You are expected to supply potential users with sufficient information on design, installation and maintenance requirements to ensure proper performance.

You are expected to certify to potential users that the hardware furnished has the same chemistry, mechanical properties, and geometry as that submitted for review, and that it will meet the test and evaluation criteria of AASHTO's MASH.

Issuance of this letter does not convey property rights of any sort or any exclusive privilege. This letter is based on the premise that information and reports submitted by you are accurate and correct. We reserve the right to modify or revoke this letter if: (1) there are any inaccuracies in the information submitted in support of your request for this letter, (2) the qualification testing was flawed, (3) in-service performance or other information reveals safety problems, (4) the system is significantly different from the version that was crash tested, or (5) any other information indicates that the letter was issued in error or otherwise does not reflect full and complete information about the crashworthiness of the system.

Standard Provisions

- To prevent misunderstanding by others, this letter of eligibility designated as FHWA control number CC-132 shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed upon request.
- This letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder.
- If the subject device is a patented product it may be considered to be proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects: (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.

Sincerely,



Robert Ritter
Acting Director, Office of Safety
Technologies
Office of Safety

Enclosures

Request for Federal Aid Reimbursement Eligibility of Highway Safety Hardware

Submitter	Date of Request:	1-10-17	<input checked="" type="radio"/> New <input type="radio"/> Resubmission
	Name:	Felipe Almanza	
	Company:	TraFFix Devices Inc	
	Address:	160 Avenida La Pata San Clemente	
	Country:	United States	
	To:	Michael S. Griffith, Director FHWA, Office of Safety Technologies	

I request the following devices be considered eligible for reimbursement under the Federal-aid highway program.

Device & Testing Criterion - Enter from right to left starting with Test Level

!-!-!

System Type	Submission Type	Device Name / Variant	Testing Criterion	Test Level
'CC': Truck-Mounted Attenuators (TMA)	<input checked="" type="radio"/> Physical Crash Testing <input type="radio"/> Engineering Analysis	Scorpion II	AASHTO MASH	TL3

By submitting this request for review and evaluation by the Federal Highway Administration, I certify that the product(s) was (were) tested in conformity with the AASHTO Manual for Assessing Safety Hardware and that the evaluation results meet the appropriate evaluation criteria in the MASH.

Individual or Organization responsible for the product:

Contact Name:	Felipe Almanza	Same as Submitter <input checked="" type="checkbox"/>
Company Name:	TraFFix Devices Inc	Same as Submitter <input checked="" type="checkbox"/>
Address:	160 Avenida La Pata San Clemente	Same as Submitter <input checked="" type="checkbox"/>
Country:	United States	Same as Submitter <input checked="" type="checkbox"/>
Enter below all disclosures of financial interests as required by the FHWA 'Federal-Aid Reimbursement Eligibility Process for Safety Hardware Devices' document.		
TraFFix Devices Inc. and Karco Engineering LLC share no financial interests between the two organizations. This includes no shared financial interest but not limited to:		
i. Compensation included wages, salaries, commissions, professional fees, or fees for business referrals		
iii. Research funding or other forms of research support;		
iv. Patents, copyrights, licenses, and other intellectual property interests;		
vi. Business ownership and investment interests;		

PRODUCT DESCRIPTION

- New Hardware or Significant Modification
 Modification to Existing Hardware

The Scorpion Truck Mounted Attenuator (TMA) is a mobile crash cushion attached to the rear of a support vehicle's frame. The TMA may be used on shadow, stationary block vehicle, or on advanced warning vehicles upstream of a moving or stationary operation. The Scorpion TMA can be used on support vehicles with a min. actual/curb weight of 15,000 lbs with no upper weight limit (infinite weight). Lighting consists of LED or incandescent brake, directional, and running lights meeting FMVSS requirements and optional strobe/flashing lights can be accommodated for enhancement of advanced warning to drivers. The structural mounting system incorporates extender frames to provide clearance for support vehicles with excess bed overhang and to provide clearance of equipment on the back of a support vehicle when the TMA is in the stored position. The Scorpion TL-3 TMA has overall dimensions of 12.94 ft. (3.9 m) X 8.0 ft (2.4 m) X 2.0 ft (0.6 m) and has a ground clearance of 12 in ± 1 in (305 mm ± 25.4 mm) when deployed in the horizontal operating position. The Scorpion TMA consists of three main components: Strut, Cartridge, and backup/diaphragm frames. The Strut and Cartridge are the energy attenuation components. The Strut is positioned nearest to the support vehicle and the Cartridge is positioned furthest away from the support vehicle. The Cartridge is typically the first component impacted by an errant vehicle. The Strut consists of four outboard convex aluminum tubes (two on each side) forming an aluminum structural weldment. The aluminum structural weldments bolt to a structural steel diaphragm/backup frame. The structural assembly encompasses the aluminum crush Module D. The module is made from an aluminum outer skin that contains expanded aluminum honeycomb and has overall dimensions of 4.0 ft (1.2 m) X 6.7 ft (2.0 m) X 1.9 ft (0.6 m). Module D is designed to accommodate an assortment of rear facing reflective sheeting colors and patterns. The complete Strut consists of two aluminum tube weldments, diaphragm/backup, and one Module D and has overall dimensions of 5.2 ft (1.6 m) X 8.0 ft (2.4 m) X 2.2 ft (0.7 m). The Cartridge consists of four outboard convex aluminum tubes (two on each side) forming an aluminum structural weldment. The aluminum structural weldments bolt to a set of steel structural diaphragm frames. The structural assembly encompasses the two-aluminum crush Modules C. Attached to the rear most end of the Cartridge, is the single crush Module A. Crush Modules A and C are made from an aluminum outer skin that contains expanded aluminum honeycomb. Module A has overall dimension of 1.0 ft (0.3 m) X 5.0 ft (1.5 m) X 2.0 ft (0.6 m) and Module C has overall dimension of 2 ft (0.6 m) X 5 ft (1.594 m) X 2 ft (0.6 m). Module A is designed to accommodate an assortment of rear facing reflective sheeting colors and patterns. The complete Cartridge consists of two aluminum tube weldments, diaphragm's, one Module A, and two Module C and has overall dimensions of 7.71 (2.3 m) X 8 ft (2.4 m) X 2.2 ft (0.7 m). The steel diaphragm/backup frames are made from structural steel angles, plates, and channels that are welded into the backup and diaphragm components and are the supporting frame members for the aluminum tubes and crush modules. For Test 3-51 the lower Module A mounting angle was 4" (102 mm) X 4" (102 mm) and for Tests 3-50, 3-52, and 3-53 the lower Module A mounting angle is 4" (102 mm) X 6" (152 mm). The Scorpion TMA is rotated into the stored and deployed positions by means of an on board hydraulic system. The Scorpion TMA can be rotated in double 90° fold position over the support vehicles bed or in a single 90° fold in a vertical stored position. An optional hydraulic powered vertical lift can be utilized with the TMA to deploy a display panel when the TMA is lowered into the deployed position. The vertical lift is powered by the same onboard hydraulic system that rotates the TMA into the stored and deployed position. The vertical lift is sequenced to raise and lower a panel for displaying advanced messages, directional indicators, or other notifications.

CRASH TESTING

By signature below, the Engineer affiliated with the testing laboratory, agrees in support of this submission that all of the critical and relevant crash tests for this device listed above were conducted to meet the MASH test criteria. The Engineer has determined that no other crash tests are necessary to determine the device meets the MASH criteria.

Engineer Name:	Balbino A. Beltran	
Engineer Signature:	Balbino A. Beltran	Digitally signed by Balbino A. Beltran DN: cn=Balbino A. Beltran, o=KARCO Engineering, LLC, ou, email=abeltran@karco.com, c=US Date: 2017.01.13 16:35:04 -08'00'
Address:	9270 Holly Road, Adelanto, CA. 92301	Same as Submitter <input type="checkbox"/>
Country:	United States	Same as Submitter <input type="checkbox"/>

A brief description of each crash test and its result:

Required Test Number	Narrative Description	Evaluation Results
3-50 (1100C)	<p>The TMA was positioned in line with the test vehicle's centerline. The inline centered position examines the TMA's energy dissipation capacity, structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2013 Kia Rio 4-door sedan with test inertial mass of 2,431.17 lbs (1,103.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 60.83 mph (97.90 km/hr) and at an impact angle of 0.6°.</p> <p>The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sustained moderate collapse of the outboard convex tube weldments and minimal crush of Module D.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicles occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS

Required Test Number	Narrative Description	Evaluation Results
3-51 (2270P)	<p>The TMA was positioned in line with the test vehicle's centerline. The inline centered position examines the TMA'S energy dissipation capacity, structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2012 RAM 1500 4-door pickup truck with test inertial mass of 4920.6 lbs (2232.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 63.16 mph (101.65 km/hr) and at an impact angle of 0.9°.</p> <p>The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to a near flattened state. The TMA system contained the hydraulic powered vertical lift to raise and lower a display panel. The display panel and lift system did not pose or show potential to be a hazard in the impact event.</p> <p>The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicles occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS

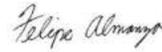
3-52 (2270P)	<p>The TMA was positioned offset 1/3 of the test vehicles width to the centerline of the test vehicle. The offset position examines the capability of a TMA to safely attenuate off-center impacts, the TMA's structural adequacy, occupant risk, with a rigidly blocked support vehicle for no upper support vehicle weight limit (infinite weight). The test was conducted using a commercially available 2012 RAM 1500 4-door pickup truck with test inertial mass of 4993.4 lbs (2265.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 63.31 mph (101.89 km/hr) and at an impact angle of 0.2°. The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C contacted each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to a near flattened state. The TMA system contained the hydraulic powered vertical lift to raise and lower a display panel. The display panel and lift system did not pose or show potential to be a hazard in the impact event. The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicles occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable limits. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS
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3-53 (2270P)	<p>The TMA was positioned offset $\frac{1}{4}$ of the test vehicles width and at a nominal angle of 10° with the center of the test vehicle. The offset and angular position impact examines the energy dissipation capacity of a TMA, the TMA's structural adequacy, occupant risk, and with a minimum support vehicle weight of 15,000 lbs (6803 kg) with the parking brake engaged and the transmission in 2nd gear. The recorded roll ahead for the support vehicle was 16.8 ft (5.1 m). The test was conducted using a commercially available 2012 RAM 1500 4-door pickup truck with test inertial mass of 4995.6 lbs (2266.0 kg). The vehicle was in good condition, was free of major body damage, and was not missing any structural components. The bumpers were standard equipment and were not modified for this test. Based on CarFax reporting there was no recorded history of major accidents, was not a salvage titled vehicle, not involved in flooding, or fire. The test vehicle impacted the TMA at a velocity of 64.05 mph (103.08 km/hr) and at an impact angle of 10.3°. The vehicle made initial contact with the rear Cartridge crushing Module A upon impact and the outboard convex tube weldments began to collapse. After the convex tube weldments fully collapsed the two inboard Cartridge Modules C made contact with each other and were crushed. The front Strut sets of outboard convex tube weldments fully collapsed and the inner Module D crushed to near a near flattened state. The TMA system contained the hydraulic powered vertical lift to raise and lower a display panel. The display panel and lift system did not pose or show potential to be a hazard in the impact event. The impacting vehicle was brought to a controlled stop and remained upright throughout the impact event. The test vehicles occupant compartment was not penetrated and there was no measurable in cab deformation beyond the maximum allowable. The maximum roll and pitch did not exceed 75° and occupant risk values are within limits per MASH specifications for Occupant Impact Velocity and Ridedown Acceleration.</p>	PASS
3-54 (1500A)	Per MASH Test is optional	Non-Critical, not conducted

Full Scale Crash Testing was done in compliance with MASH by the following accredited crash test laboratory (cite the laboratory's accreditation status as noted in the crash test reports.):

Laboratory Name:	KARCO Engineering, INC	
Laboratory Signature:	Balbino A. Beltran	<small>Digitally signed by Balbino A. Beltran DN: cn=Balbino A. Beltran, o=KARCO Engineering, LLC, ou, email=abeltran@karco.com, c=US Date: 2017.01.13 16:35:23 -0800</small>
Address:	9270 Holly Road, Adelanto, CA. 92301	Same as Submitter <input type="checkbox"/>
Country:	United States	Same as Submitter <input type="checkbox"/>
Accreditation Certificate Number and Dates of current Accreditation period :	TL-371; December 18, 2015 through December 18, 2017	

Submitter Signature*:



Digitally signed by Felipe Almanza
DN: cn=Felipe Almanza, o=Traffic Devices, Inc., ou,
email=falmanza@trafficdevices.com, c=US
Date: 2017.01.05 09:54:55 -0800

Submit Form

ATTACHMENTS

Attach to this form:

- 1) Additional disclosures of related financial interest as indicated above.
- 2) A copy of the full test report, video, and a Test Data Summary Sheet for each test conducted in support of this request.
- 3) A drawing or drawings of the device(s) that conform to the Task Force-13 Drawing Specifications [[Hardware Guide Drawing Standards](#)]. For proprietary products, a single isometric line drawing is usually acceptable to illustrate the product, with detailed specifications, intended use, and contact information provided on the reverse. Additional drawings (not in TF-13 format) showing details that are relevant to understanding the dimensions and performance of the device should also be submitted to facilitate our review.

FHWA Official Business Only:

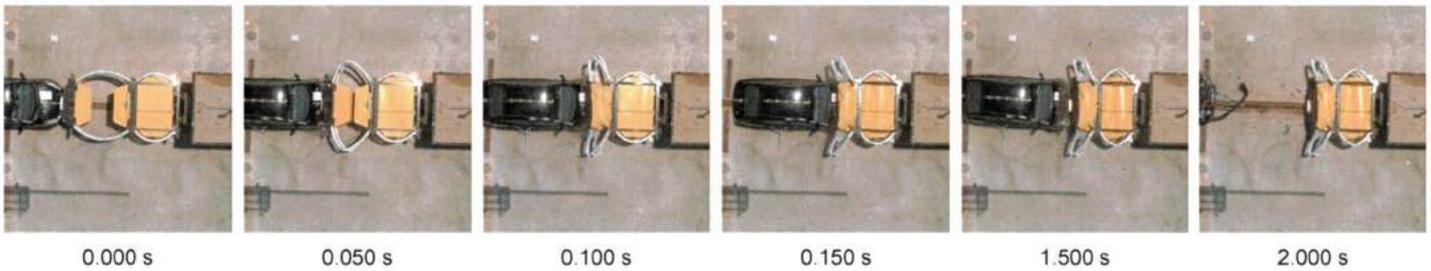
Eligibility Letter		Key Words
Number	Date	

**SECTION 4
MASH TEST 3-50 SUMMARY**

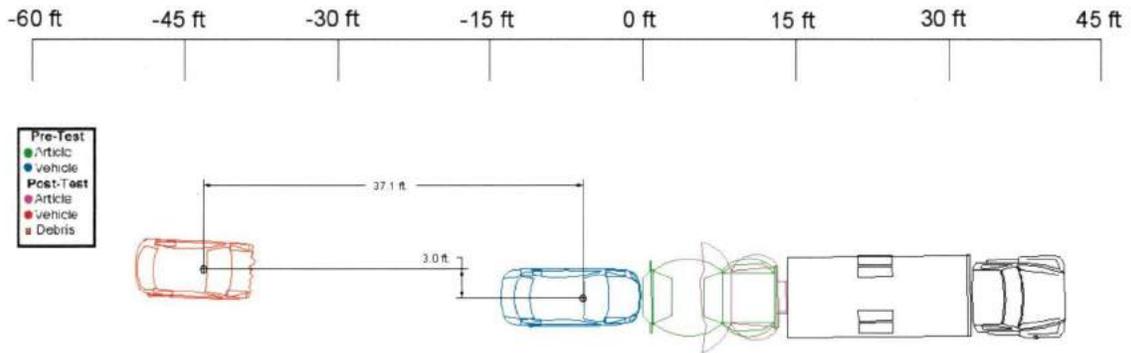
Test Article: TraFFix Devices Scorpion TL3 TMA
 Test Program: MASH 3-50

Project No. P36116-01
 Test Date: 06/24/16

SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



SECTION 4 ... (CONTINUED)

MASH TEST 3-50 SUMMARY

Test Article: TraFFix Devices Scorpion TL3 TMAProject No. P36116-01Test Program: MASH 3-50Test Date: 06/24/16

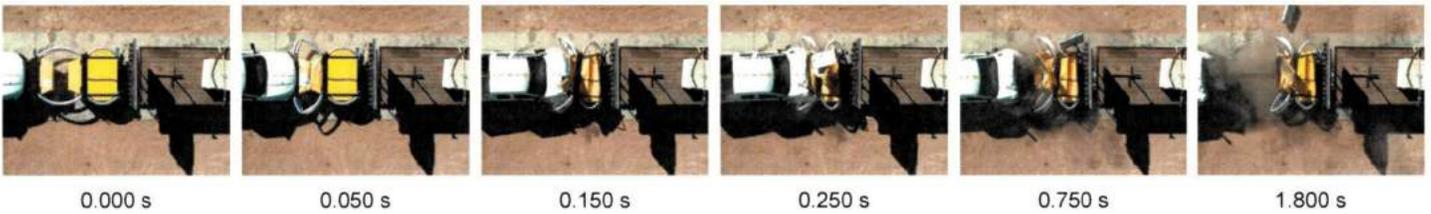
GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARGO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36116-01	EXIT ANGLE	
TEST DESIGNATION	3-50	VEHICLE STABILITY	Satisfactory
TEST DATE	06/24/16	FINAL VEHICLE POSITION	37.1 ft. (11.3 m) rearward and 3.0 ft. (0.9 m) left from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion TL3 TMA	VEHICLE POCKETING	None
TYPE	Truck Mounted Attenuator	MAXIMUM ROLL ANGLE	2.5°
KEY ELEMENTS	Curved Tubes, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	-5.1°
ARTICLE LENGTH	12.9 ft. (3.9 m)	MAXIMUM YAW ANGLE	2.4°
HEIGHT FROM GROUND	11.25 in. (286 mm)	KINETIC ENERGY	300.79 kip-ft (407.81 kJ)
MAXIMUM WIDTH	8.0 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 34.8 ft/s (10.6 m/s) Lateral 2.6 ft/s (0.8 m/s)
SUPPORT VEHICLE		RIDEDOWN ACCELERATION	Longitudinal -19.2 g Lateral -4.8 g
TOTAL INSTALLATION LENGTH	41.3 ft (12.6 m)	THIV	35.1 ft/s (10.7 m/s)
YEAR, MAKE AND MODEL	1991 Ford F700	PHD	19.7 g
RESTRAINT	Blocked Against Roll Ahead	ASI	1.37
TEST VEHICLE		TEST ARTICLE DEFLECTIONS	
TYPE / DESIGNATION	1100C	DYNAMIC DEFLECTION	6.8 ft. (2.1 m)
YEAR, MAKE AND MODEL	2013 Kia Rio	STATIC DEFORMATION	5.6 ft. (1.7 m)
CURB MASS	2,520.9 lbs (1,143.5 kg)	ARTICLE DAMAGE	Damage to cartridge, strut and tube sections.
TEST INERTIAL MASS	2,431.7 lbs (1,103.0 kg)	VEHICLE DAMAGE	
GROSS STATIC MASS	2,597.0 lbs (1,178.0 kg)	VEHICLE DAMAGE SCALE	12-FD-3
IMPACT CONDITIONS		COLLISION DAMAGE CLASSIFICATION	12FDEW4
IMPACT VELOCITY	60.83 mph (97.90 km/h)		
IMPACT ANGLE	0.6°		
IMPACT LOCATION / ORIENTATION	0.3 in. (8 mm) left of TMA centerline.		

SECTION 4
MASH TEST 3-51 SUMMARY

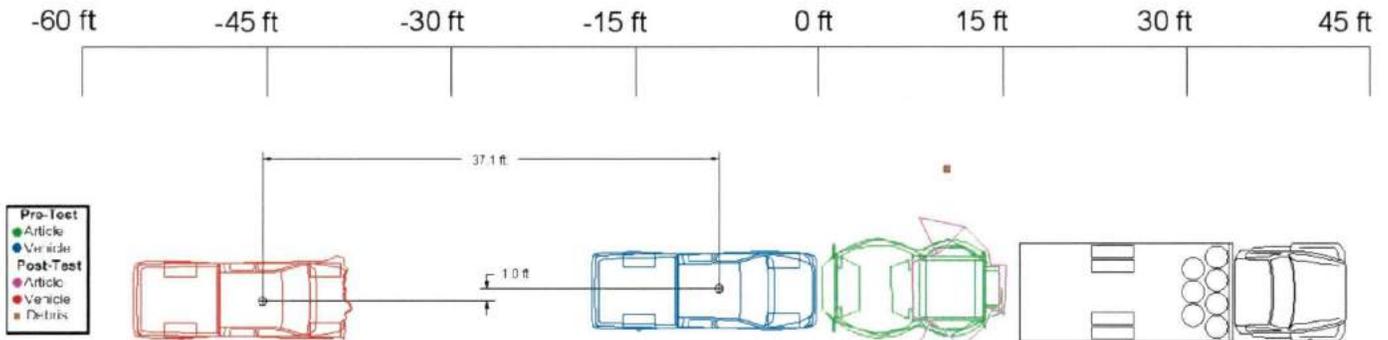
Test Article: TraFFix Devices Scorpion TL3 TMA
 Test Program: MASH 3-51

Project No. P35200-01
 Test Date: 10/22/15

SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



SECTION 4 ... (CONTINUED)

MASH TEST 3-51 SUMMARY

Test Article: Traffix Devices Scorpion TL3 TMAProject No. P35200-01Test Program: MASH 3-51Test Date: 10/22/15

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P35200-01	EXIT ANGLE	
TEST DESIGNATION	3-51	VEHICLE STABILITY	Satisfactory
TEST DATE	10/22/15	FINAL VEHICLE POSITION	37.1 ft. (11.3 m) rearward and 1.0 ft. (0.3 m) right from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion TL3 TMA	VEHICLE POCKETING	None
TYPE	Truck Mounted Attenuator	MAXIMUM ROLL ANGLE	-1.8°
KEY ELEMENTS	Curved Tubes, Aluminum Honeycomb, Support Frame, Cartridge Sections	MAXIMUM PITCH ANGLE	-5.9°
ARTICLE LENGTH	12.9 ft. (3.9 m)	MAXIMUM YAW ANGLE	-2.3°
HEIGHT FROM GROUND	11.75 in. (298 mm)	KINETIC ENERGY	656.6 kip-ft (889.8 kJ)
MAXIMUM WIDTH	8.0 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 38.7 ft/s (11.8 m/s) Lateral 1.0 ft/s (0.3 m/s)
SUPPORT VEHICLE		RIDEDOWN ACCELERATION	Longitudinal -20.0 g Lateral -3.7 g
TOTAL INSTALLATION LENGTH	41.3 ft (12.6 m)	THIV	38.4 ft/s (11.7 m/s)
YEAR, MAKE AND MODEL	1991 Ford F700	PHD	20.1 g
RESTRAINT	Blocked Against Roll Ahead	ASI	1.46
TEST VEHICLE		TEST ARTICLE DEFLECTIONS	
TYPE / DESIGNATION	2270P	DYNAMIC DEFLECTION	7.9 ft. (2.4 m)
YEAR, MAKE AND MODEL	2012 RAM 1500	STATIC DEFORMATION	7.2 ft. (2.2 m)
CURB MASS	4,901.9 lbs (2,223.50 kg)	ARTICLE DAMAGE	Damage to backup structure, strut section, cartridge section, and tubes. Module C detached.
TEST INERTIAL MASS	4,920.6 lbs (2,232.0 kg)		
GROSS STATIC MASS	4,920.6 lbs (2,232.0 kg)	VEHICLE DAMAGE	
IMPACT CONDITIONS		VEHICLE DAMAGE SCALE	12-FD-5
IMPACT VELOCITY	63.16 mph (101.65 km/h)	COLLISION DAMAGE CLASSIFICATION	12FDEW2
IMPACT ANGLE	0.9°		
IMPACT LOCATION / ORIENTATION	0.7 in. (18 mm) right of TMA centerline.		

**SECTION 4
MASH TEST 3-52 SUMMARY**

Test Article: TraFFix Devices Scorpion TL3 TMA
 Test Program: MASH 3-52

Project No. P36206-01
 Test Date: 08/22/16

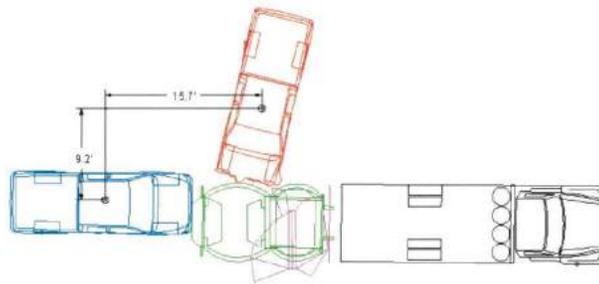
SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



- | | |
|------------------|-----------|
| Pre-Test | |
| ● Article | ● Vehicle |
| Post-Test | |
| ● Article | ● Vehicle |



SECTION 4 ... (CONTINUED)

MASH TEST 3-52 SUMMARY

Test Article: Traffix Devices Scorpion TL3 TMAProject No. P36206-01Test Program: MASH 3-52Test Date: 08/22/16

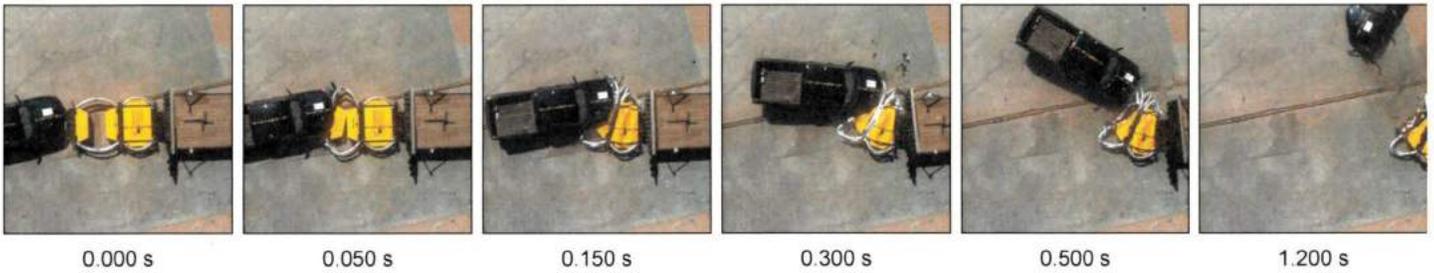
GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36206-01	EXIT ANGLE	
TEST DESIGNATION	3-52	VEHICLE STABILITY	Satisfactory
TEST DATE	08/22/16	FINAL VEHICLE POSITION	15.7 ft. (4.8 m) forward and 9.2 ft. (2.8 m) left from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion TL3 TMA	VEHICLE POCKETING	None
TYPE	Truck Mounted Attenuator	MAXIMUM ROLL ANGLE	18.9°
KEY ELEMENTS	Curved Tubes, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	-14.8°
ARTICLE LENGTH	12.9 ft. (3.9 m)	MAXIMUM YAW ANGLE	104.5°
HEIGHT FROM GROUND	11.42 in. (290 mm)	KINETIC ENERGY	669.11 kip-ft (907.19 kJ)
MAXIMUM WIDTH	8.0 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 37.7 ft/s (11.5 m/s) Lateral 6.2 ft/s (1.9 m/s)
SUPPORT VEHICLE		RIDEDOWN ACCELERATION	Longitudinal -18.6 g Lateral -2.6 g
TOTAL INSTALLATION LENGTH	41.3 ft (12.6 m)	THIV	38.1 ft/s (11.6 m/s)
YEAR, MAKE AND MODEL	1991 Ford F700	PHD	18.7 g
RESTRAINT	Blocked Against Roll Ahead	ASI	1.22
TEST VEHICLE		TEST ARTICLE DEFLECTIONS	
TYPE / DESIGNATION	2270P	DYNAMIC DEFLECTION	10.2 ft. (3.1 m)
YEAR, MAKE AND MODEL	2012 RAM 1500	STATIC DEFORMATION	9.2 ft. (2.8 m)
CURB MASS	5,046.3 lbs (2,289.0 kg)	ARTICLE DAMAGE	Damage to backup structure, strut section, cartridge section, and tubes.
TEST INERTIAL MASS	4,993.4 lbs (2,265.0 kg)		
GROSS STATIC MASS	4,993.4 lbs (2,265.0 kg)	VEHICLE DAMAGE	
IMPACT CONDITIONS		VEHICLE DAMAGE SCALE	12-FD-4
IMPACT VELOCITY	63.31 mph (101.89 km/h)	COLLISION DAMAGE CLASSIFICATION	12FDEW2
IMPACT ANGLE	0.2°		
IMPACT LOCATION / ORIENTATION	26.97 in. (685 mm) Right of Vehicle Centerline.		

**SECTION 4
MASH TEST 3-53 SUMMARY**

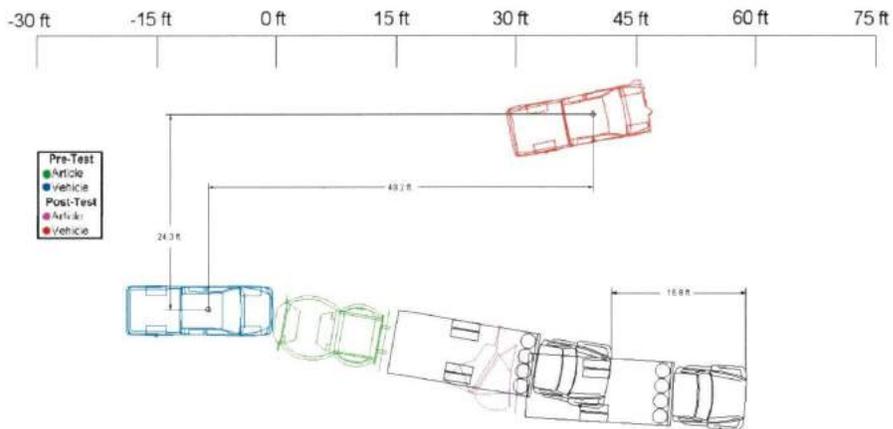
Test Article: Traffix Devices Scorpion TL3 TMA
 Test Program: MASH 3-53

Project No. P36129-01
 Test Date: 09/07/16

SEQUENTIAL PHOTOGRAPHS



PLAN VIEW



SECTION 4 ... (CONTINUED)

MASH TEST 3-53 SUMMARY

Test Article: Traffix Devices Scorpion TL3 TMAProject No. P36129-01Test Program: MASH 3-53Test Date: 09/07/16

GENERAL INFORMATION		EXIT CONDITIONS	
TEST AGENCY	KARCO Engineering, LLC.	EXIT VELOCITY	
TEST NUMBER	P36129-01	EXIT ANGLE	
TEST DESIGNATION	3-53	VEHICLE STABILITY	Satisfactory
TEST DATE	09/07/16	FINAL VEHICLE POSITION	48.2 ft. (14.7 m) forward and 24.3 ft. (7.4 m) left from its initial point on contact.
TEST ARTICLE		VEHICLE SNAGGING	None
NAME / MODEL	Scorpion TL3 TMA	VEHICLE POCKETING	None
TYPE	Truck Mounted Attenuator	MAXIMUM ROLL ANGLE	37.2°
KEY ELEMENTS	Curved Tubes, Aluminum Honeycomb, Support Frame, Cartridge Section	MAXIMUM PITCH ANGLE	20.9°
ARTICLE LENGTH	12.9 ft. (3.9 m)	MAXIMUM YAW ANGLE	164.6°
HEIGHT FROM GROUND	11.02 in. (280 mm)	KINETIC ENERGY	685.12 kip-ft (928.10 kJ)
MAXIMUM WIDTH	8.0 ft. (2.4 m)	OCCUPANT RISK VALUES	
ROAD SURFACE	Concrete	OCCUPANT IMPACT VELOCITY	Longitudinal 35.8 ft/s (10.9 m/s) Lateral 3.9 ft/s (1.2 m/s)
SUPPORT VEHICLE		RIDEDOWN ACCELERATION	Longitudinal -12.5 g Lateral -4.9 g
TOTAL INSTALLATION LENGTH	41.3 ft (12.6 m)	THIV	36.1 ft/s (11.0 m/s)
YEAR, MAKE AND MODEL	1991 Ford F700	PHD	12.8 g
RESTRAINT	2nd gear and parking brake engaged	ASI	1.10
TEST VEHICLE		TEST ARTICLE DEFLECTIONS	
TYPE / DESIGNATION	2270P	DYNAMIC DEFLECTION	11.2 ft. (3.4 m)
YEAR, MAKE AND MODEL	2012 RAM 1500	STATIC DEFORMATION	10.8 ft. (3.3 m)
CURB MASS	4,964.7 lbs (2,252.0 kg)	ARTICLE DAMAGE	Damage to backup structure, strut section, cartridge section, and tubes.
TEST INERTIAL MASS	4,995.6 lbs (2,266.0 kg)		
GROSS STATIC MASS	4,996.6 lbs (2,266.5 kg)	VEHICLE DAMAGE	
IMPACT CONDITIONS		VEHICLE DAMAGE SCALE	12-FD-4
IMPACT VELOCITY	64.05 mph (103.08 km/h)	COLLISION DAMAGE CLASSIFICATION	12FDEW2
IMPACT ANGLE	10.3°		
IMPACT LOCATION / ORIENTATION	10° and 20.6 in. (523 mm) from vehicle centerline		

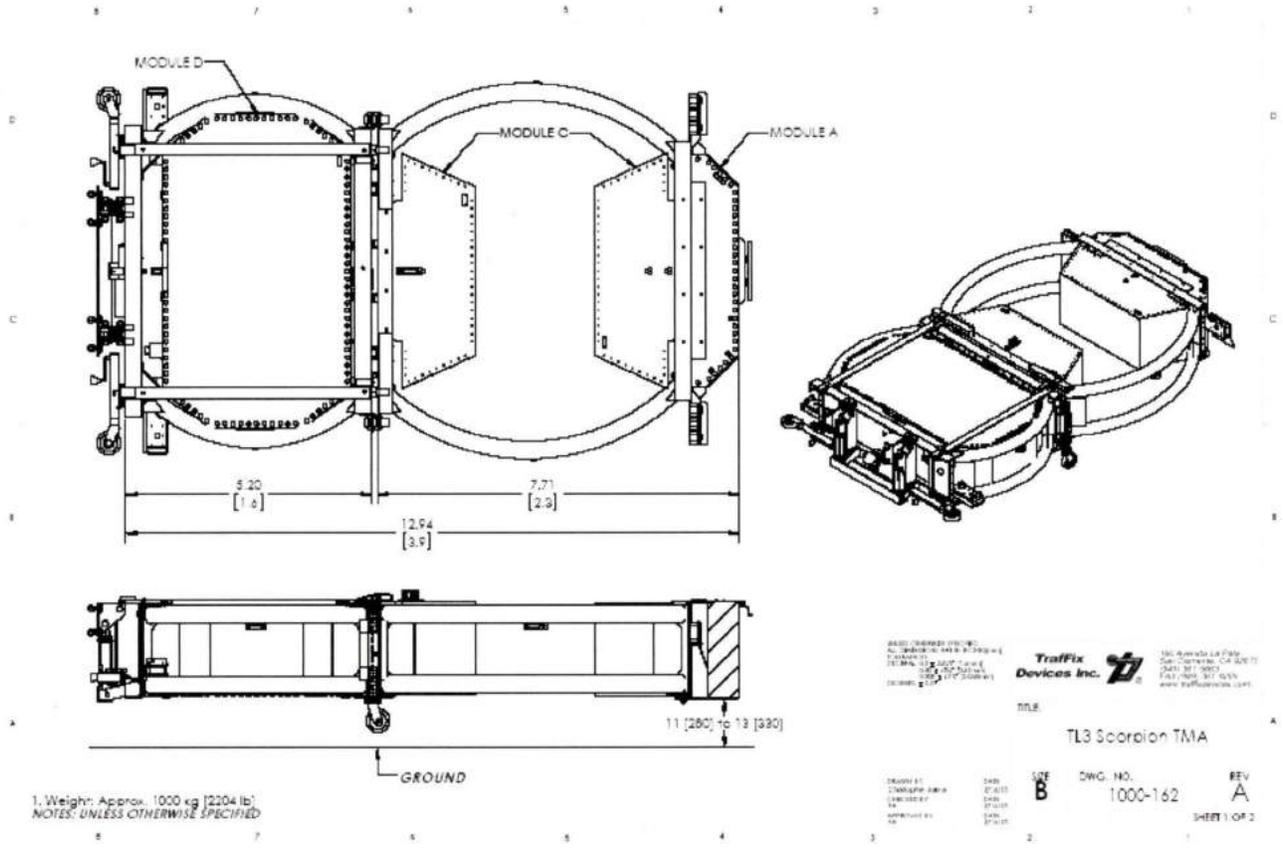


Figure 1: TL3 Scorpion TMA Sheet 1 of 2

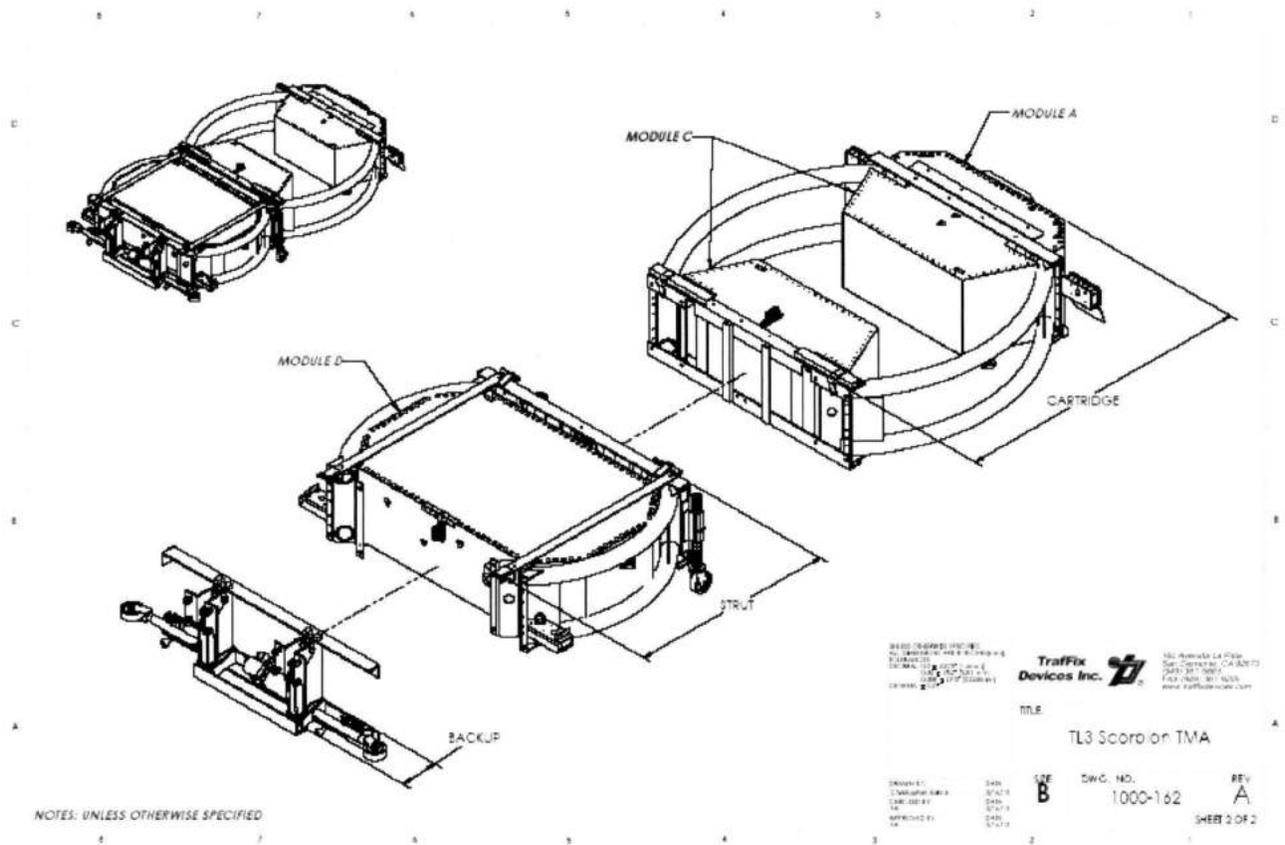


Figure 2: TL3 Scorpion TMA Sheet 2 of 2

AUTOMATED FLAGGER ASSISTANCE DEVICES (AFAD) (Group IV)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 5.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

5.0	Information Requested	Answer
	Manufacturer	North American Traffic
	Make and Model	
	North American Traffic RCF2.4 Radio controlled flagman AFAD (2 Trailers)	\$ 27,588.00
	Warranty Length (In days, months, or years)	10 Yr Structural, 2 yr electronic parts, 5 yr LED
5.1	Date & I.D. of Price List	10/7/2019 SSR-AF-NAT
5.2	Discount to be applied to Price List <i>*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.</i>	0%
5.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 2.00 Lino Lakes, MN 55014
5.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
5.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. extended term covers) Add as many lines as needed. (Specify days, months, or years)	
	Electronic Parts Warranty has been extended +1 years for this contract	N/A
		\$
5.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the AFAD operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	North American Traffic Handheld Wireless Manual Control	\$ 2,300.00
5.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

**PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
SWIFT EVENT NO. 9974**

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech MB-1548 Silent Messenger 76" x 126" Display	\$ 18,942.00
	Solar-Tech MB2-1548 Silent Messenger II 54 x 92 Display	\$ 14,551.00
	Solar-Tech MB2-1548-LR Silent Messenger II 54X92 Lift & Rotate Trailer	\$ 17,115.00
	Solar-Tech MB3-1548 Silent Messenger III 78" x 46" Display	\$ 13,782.00
	Solar-Tech MB3-1548-LR Silent Messenger III 46X78 Lift & Rotate Trailer	\$ 16,346.00
	Solar-Tech MB4-2738 Silent Messenger IV 30" x 60" Display 16 x 36 Pixel	\$ 11,891.00
	Solar-Tech MB4-2938 Silent Messenger IV 30" x 78" Display 16 x 48 Pixel	\$ 12,676.00
	Solar-Tech MB4-2838 Silent Messenger IV 33" x 78" Display 18 x 48 Pixel	\$ 13,147.00
	Solar-Tech MB4-51419 Silent Messenger IV 30" x 60" Display 32 x 72 Pixel	\$ 13,843.00
	Solar-Tech MB4-51919 Silent Messenger IV 30" x 78" Display 32 x 96 Pixel	\$ 15,122.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-ST-SM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech OP-240W 240W Solar Array Upgrade	\$ 520.00
	Solar-Tech OP-320W 320W Solar Array Upgrade	\$ 1,037.00
	Solar-Tech OP-160W 160W Solar Array Upgrade	\$ 520.00
	Solar-Tech MB2-4MFB Upgrade to 4 Maintenance Free Batteries	\$ 819.00
	Solar-Tech MB2-6MFB Upgrade to 6 Maintenance Free Batteries	\$ 1,900.00
	Solar-Tech MB2-8MFB Upgrade to 8 Maintenance Free Batteries	\$ 2,800.00
	Solar-Tech OP-0055 Battery Charger: 55 AMP - 120 VAC	\$ 55.00
	Solar-Tech OP-0090 Battery Charger - 90A - 120VAC	\$ 218.00
	Solar-Tech OP-6ROUND Trailer Lighting Plug - 6 Position Round	\$ 82.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 109.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 82.00
	Solar-Tech OP-HYDB Hydraulic Surge Brakes	\$ 1,174.00
	Solar-Tech OP-ELEB Electric Brakes - Please Specify Either 6 or 7 Pin Connector	\$ 519.00
	Solar-Tech MB-9021 Radar Speed Unit - MPH or KPH	\$ 1,774.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 278.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 300.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 218.00
	Solar-Tech MB2-GALV2 Galvanizing - Required w/ White & certain other colors	\$ 1,482.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech IRT-112-1548 Incident Response Trailer	\$ 23,782.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-ST-IRT
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech IRT-240W 240W Solar Array Upgrade	\$ 519.00
	Solar-Tech IRT-320W 320W Solar Array Upgrade	\$ 1,037.00
	Solar-Tech IRT-4MFB Upgrade to 4 Maintenance Free Batteries	\$ 819.00
	Solar-Tech OP-0055 Battery Charger: 55 AMP - 120 VAC	\$ 55.00
	Solar-Tech OP-0090 Upgrade Battery Charger - 90A - 120VAC	\$ 218.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 82.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 109.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 82.00
	Solar-Tech MB-9021 Radar Speed Unit - MPH or KPH	\$ 1,774.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 278.00
	Solar-Tech OP-BOX2 Battery Box Vandal Proof System (2 Battery Boxes)	\$ 601.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 218.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,872.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
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Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech MB-122-3048 Silent Messenger Double Sided Trailer Low Profile	\$ 37,418.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-ST-MBD
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery	\$ 1.00
	Delivery Starting Point Address	Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 300.00
	Solar-Tech MB2DS-480W 480W Solar Array Upgrade	\$ 1,092.00
	Solar-Tech MB2DS-12MFB Upgrade to 12 Maintenance Free Batteries	\$ 2,250.00
	Solar-Tech MB2DS-0055 Battery Charger: 55 AMP - 120 VAC	\$ 437.00
	Solar-Tech OP-0090 Upgrade Battery Charger - 90A - 120VAC	\$ 218.00
	Solar-Tech OP-CONSOLE Additional Control Console	\$ 3,822.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 82.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 109.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 82.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 278.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 300.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 218.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,872.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

**PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
SWIFT EVENT NO. 9974□**

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech RMVMS-19 Vehicle Mount w/Motor Rack 30x60 19mm	\$ 10,627.00
	Solar-Tech RMVMS-38 Vehicle Mount w/Motor Rack 30x60 38mm	\$ 8,785.00
	Solar-Tech MB3-3 Line 38mm Amber 18x48 Pixel (33"x78") LED Display Panel (MB3 - 2 Line)	\$ 5,150.00
	Solar-Tech MB3-2 Line 38mm Amber 27x48 Pixel (46"x78") LED Display Panel (MB3 - 3 Line)	\$ 6,363.00
	Solar-Tech MB2-2 Line 45mm Amber 18x48 Pixel (38"x92") LED Display Panel (MB2 - 2 Line)	\$ 6,666.00
	Solar-Tech MB2-3 Line 45mm Amber 27x48 Pixel (54"x92") LED Display Panel (MB2 - 3 Line)	\$ 9,089.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-ST-VM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech MT-UMK Universal Fixed Mount	\$ 109.00
	Solar-Tech RMVMS-OTC Over-the-Cab Power Pivoting Mount (Model RMVMS-19 or RMVMS-38)	\$ 1,501.00
	Solar-Tech MT-MP-PIVOT Pivoting Mount Frame Only (Power Lift)	\$ 1,884.00
	Solar-Tech MT-MP-SKIDM Pivoting Mount Skid Mount Base w/Manual Winch	\$ 1,092.00
	Solar-Tech MT-MP-SKIDP Pivoting Mount Skid Mount Base (Power Lift)	\$ 2,293.00
	Solar-Tech MT-MP-BED Pivoting Mount Bed Rail Base (Power Lift)	\$ 2,402.00
	Solar-Tech MT-CP-MANUAL Center Pivot Mount Manual Lift	\$ 819.00
	Solar-Tech MT-CP-POWER Center Pivot Mount Power Lift	\$ 1,900.00
	Solar-Tech OP-POW30 In Cab Controls w/o Auxiliary Battery Pack - 30' Power & Control Cables	\$ 3,350.00
	Solar-Tech OP-POW50 In Cab Controls w/o Auxiliary Battery Pack - 50' Power & Control Cables	\$ 3,450.00
	Solar-Tech OP-POWBAT20 In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries) - 20' Power & Control Cables	\$ 4,800.00
	Solar-Tech OP-POWBAT50 In Cab Controls w/Auxiliary Battery Pack (2 Standard Flooded Batteries) - 50' Power & Control Cables	\$ 4,950.00
	Solar-Tech OP-BATCON In Battery Box Controls - Self Contained Unit	\$ 4,600.00
	Solar-Tech OP-GPS Integrated GPS Receiver & Private Network Cell Transceiver	\$ 928.00
	Solar-Tech OP-80W Add 80W Solar Array	\$ 819.00
	Solar-Tech OP-120W Add 120W Solar Array	\$ 1,147.00
	Solar-Tech OP-BAT4 Upgrade to 4 Standard Flooded Batteries	\$ 546.00
	Solar-Tech RMVMS-2MFB Upgrade to 2 Maintenance Free Batteries	\$ 491.00
	Solar-Tech RMVMS-4MFB Upgrade to 4 Maintenance Free Batteries	\$ 1,529.00
	Solar-Tech RMVMS-0045 Battery Charger: 45 AMP - 120 VAC	\$ 382.00
	Solar-Tech RMVMS-0055 Battery Charger: 55 AMP - 120 VAC	\$ 437.00
	Solar-Tech MB-9021 Radar Speed Unit - MPH or KPH	\$ 1,774.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 218.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 300.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac PCMS-1210-PRO V-Touch 3 Line Message 71x133 Sign Trailer	\$ 17,204.00
	Ver-Mac PCMS-1500LP-PRO Full Matrix 76x131 Sign Trailer	\$ 18,699.00
	Warranty Length (In days, months, or years)	3 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-VM-PRO
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
		\$
		\$
4.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac OPT-MS-Modem Modem with GPS	\$ 1,166.00
	Ver-Mac OPT-MS-Radar Houston Radar	\$ 1,603.00
	Ver-Mac OPT-MS-Data Automation Data Logger	\$ 619.00
	Ver-Mac OPT-MS-Tilt-Rotate Tilt & Rotate for Solar Panel	\$ 364.00
	Ver-Mac OPT-MS-Stealth Charger 15 Amp Stealth Charger	\$ 291.00
	Ver-Mac OPT-Spare-Tire Spare Tire & Mount	\$ 291.00
	Ver-Mac OPT-MS-Camera Fixed-1 Axis P1214-E Fixed Camera	\$ 3,206.00
	Ver-Mac OPT-MS-Camera Fixed-2 Axis P1214-E Fixed Camera	\$ 4,371.00
	Ver-Mac OPT-MS-Outriggers	\$ 874.00
4.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac PCMS-1500C Extended 9 Character Full Matrix 83x145 Sign Trailer	\$ 24,984.00
	Ver-Mac PCMS-320 Mid-Size Full Matrix 63x98 Sign Trailer	\$ 17,361.00
	Ver-Mac PCMS-320RT Mid-Size Rainbow Color Full Matrix 66x104 Sign Trailer	\$ 28,644.00
	Ver-Mac PCMS-548/HYD Small Sized Full Matrix 45x80 Sign Trailer	\$ 14,797.00
	Ver-Mac PCMS-548LE Small Size Full Matrix 45x80 Sign Law Enforcement	\$ 16,521.00
	Ver-Mac PCMS-4880 City Size Full Matrix High Definition 3x56 Sign Trailer	\$ 13,833.00
	Warranty Length (In days, months, or years)	3 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-VM-VM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
		\$
		\$
4.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac OPT-MS-Modem Modem with GPS	\$ 1,164.00
	Ver-Mac OPT-MS-Radar Houston Radar	\$ 1,730.00
	Ver-Mac OPT-MS-Data Automation Data Logger	\$ 619.00
	Ver-Mac OPT-MS-30 Amp/IQ4 30 Amp Charger (For Std. Batteries)	\$ 510.00
	Ver-Mac OPT-MS-Stealth Charger 15 Amp Stealth Charger	\$ 291.00
	Ver-Mac OPT-MS-Stealth Maintenance Free in Hidden Storage Box (548/320)	\$ 874.00
	Ver-Mac OPT-MS-Maintenance Free 4 Maintenance Free (548 & 4880)	\$ 874.00
	Ver-Mac OPT-MS-TWJ Tongue Wheel Jack	\$ 175.00
	Ver-Mac OPT-MS-Camera PTZ Axis P5624-E PTZ Dome Camera	\$ 8,007.00
	Ver-Mac OPT-MS-Camera Fixed-1 Axis P1214-E Fixed Camera	\$ 3,206.00
	Ver-Mac OPT-MS-Camera Fixed-2 Axis P1214-E Fixed Camera	\$ 4,371.00
	Ver-Mac OPT-MS-Outriggers	\$ 874.00
4.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac TM-548 Truck Mount 43x73 Full Matrix Sign	\$ 9,200.00
	Ver-Mac TM-3048 Truck Mount 48x70 Full Matrix Sign	\$ 8,160.00
	Ver-Mac TM-2056 Truck Mounted 34x77 Two Line Full Matrix Sign	\$ 7,483.00
	Ver-Mac TM-1056 Truck Mount 18x77 One Line Full Matrix Sign	\$ 6,122.00
	Warranty Length (In days, months, or years)	3 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-VM-VM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +1 years for this contract	\$0.00
		\$
		\$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac OPT-Graph/W Wireless Remote Controller for TM-548	\$ 1,323.00
	Ver-Mac VMS-A56 Power Tilt Roof Rack (Top) for TM-548	\$ 1,749.00
	Ver-Mac VMS-A55 Manual Bed Floor Rack (Top) for TM-548	\$ 706.00
	Ver-Mac VMS-A21 Bed Rail Rack (Bottom) for TM-548	\$ 314.00
	Ver-Mac VMS-A15 Bed Floor Rack (Bottom) for TM-548	\$ 314.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
SWIFT EVENT NO. 9974 □

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0

Information Requested

Answer

Manufacturer Wanco

Make and Model

Wanco WTLMB(B) Full size 3 line LED, Hand-Operated Lift	\$	16,646.00
Wanco WTMMB(B) Full Matrix CMS Trailer, Hand-Operated Lift	\$	16,890.00
Wanco WVTM-5C 5-Color Matrix Message Sign, Hydraulic Lift	\$	29,938.00
Wanco WVT3(A) Mini 3-Line, Hydraulic Lift	\$	16,543.00
Wanco WVTM(A) Mini Matrix, Hydraulic Lift	\$	17,160.00
Wanco WVTMM-L Metro VMS - Large	\$	15,617.00

Warranty Length (In days, months, or years) 5 Years

4.1 Date & I.D. of Price List 10/7/2019 SSR-CMS-W-T

4.2 Discount to be applied to Price List 0%

***Note:** The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.

4.3 Price per loaded mile for delivery \$ 1.00
 Delivery Starting Point Address Lino Lakes, MN 55014

4.4 Price for additional set of manuals (service, parts, & operations) Paper: \$0
Digital: \$0

4.5 **PERFORMANCE/WARRANTY OPTIONS:**
 Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.

N/A
\$
\$

4.6 **OPTIONAL UPGRADE ITEM(S)**
 Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.

Wanco Combo 103412-002 Combo Hitch 2" Ball & 3" Pintle	\$	371.00
Wanco 100936-001P1 Wanco CMS 3" Pintle Hitch	\$	213.00
Wanco OutriggerFour Four telescoping Auto-Locking Outriggers	\$	371.00
Wanco 203553 45-amp 12V Battery Charger (Replaces 15-amp)	\$	192.00
Wanco 218759-C1 Wanco Standard Battery Box (Six – 6VDC Std. Batteries)	\$	538.00
Wanco 218760-C1 Wanco Standard Battery Box (Two – 12VDC AGM Batteries)	\$	538.00
Wanco 218761-C1 Wanco Standard Large Battery Box (Three – 12VDC AGM Batteries)	\$	1,423.00
Wanco 218766-C1 Wanco Security Battery Box (Four – 6VDC Std. Batteries)	\$	385.00
Wanco 218767-C1 Wanco Security Battery Box (Six – 6VDC Std. Batteries)	\$	923.00
Wanco 218768-C1 Wanco Security Battery Box (Two – 12VDC AGM Batteries)	\$	923.00
Wanco 212010-C1 Wanco Large Security Battery Box (Three – 12VDC AGM Batteries)	\$	1,808.00
Wanco 202493 130-watt solar (replaces standard solar)	\$	250.00
Wanco 202495 170-watt solar (replaces standard solar)	\$	357.00
Wanco 202498 260-watt solar (replaces standard solar)	\$	571.00
Wanco Tilt/Rotate170 Solar Tilt/Rotate Frame– Includes 170-watt solar	\$	1,071.00
Wanco Tilt/Rotate260 Solar Tilt/Rotate Frame– Includes 260-watt solar	\$	1,286.00
Wanco 219034-C1 Radar For Wanco CMS	\$	1,357.00
Wanco 221837 Wanco Traffic Data Classifier System	\$	2,500.00
Wanco 217510 Digital Modem w/GPS (AT&T, Sprint, or Verizon)	\$	1,571.00
Wanco WancoCamPkg Camera Option, Modem, GPS, 260W Solar	\$	14,667.00
Wanco CustomCOLOR Custom Color Scheme – Electrostatic Powder Coat	\$	650.00

4.7 **MNDOT TRAILER WIRING**
 Cost for Trailer Wiring per MNDOT Specification. See attached drawing

Price: \$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Wanco
	Make and Model	
	Wanco WVMB-2LP Truck Mount Full Matrix - 2 line	\$ 10,135.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-W-VM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
		N/A
		\$
		\$
4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Wanco 207173 Tall Mounting Frame for Truck Bed Installation	\$ 817.00
	Wanco 206389 Low Mounting Frame with C-Channel	\$ 808.00
4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0

Information Requested

Answer

Manufacturer American Signal Company

Make and Model

American Signal AMS30064625 GP-465T Advantage-S LED CMS Full Matrix Trailer-Mount	\$	14,500.00
American Signal AMS30065211 T331 LED CMS Character Matrix Trailer-Mount	\$	14,700.00
American Signal AMS30065251 T332 LED CMS Line Matrix Trailer-Mount	\$	15,950.00
American Signal AMS30065271 T333 LED CMS Full Matrix Trailer-Mount	\$	17,200.00
American Signal AMS30146005 TRI-COLOR CMS Full Matrix Trailer-Mount	\$	25,000.00

Warranty Length (In days, months, or years) 1 Year

4.1 Date & I.D. of Price List 10/7/2019 SSR-CMS-AS-TM

4.2 Discount to be applied to Price List 0%

***Note:** The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.

4.3 Price per loaded mile for delivery \$ 1.00
 Delivery Starting Point Address Lino Lakes, MN 55014

4.4 Price for additional set of manuals (service, parts, & operations) Paper: \$0
Digital: \$0

4.5 **PERFORMANCE/WARRANTY OPTIONS:**
 Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.

	N/A
	\$
	\$

4.6 **OPTIONAL UPGRADE ITEM(S)**
 Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.

American Signal BAT-195 AGM Batteries (per Battery)	\$	500.00
American Signal LOK00000075/76 Hidden Shackle Locks x2	\$	375.00
American Signal LOK00000040 Keyed Locking Latch for Pedestal	\$	125.00
American Signal OPT30125076 Radar Overspeed Detection	\$	1,125.00
American Signal OPT30155096-1 Data Traffic Logger	\$	2,000.00
American Signal OPT30065102 Locking Lug Nuts	\$	75.00
American Signal OPT30065096-3 J-Bar Wheel Lock	\$	125.00
American Signal OPT30069229-x PTZ Dome Camera with telescoping mast	\$	8,750.00
American Signal OPT30074522-x Sidefire Radar with telescoping mast	\$	10,750.00
American Signal CHG00000155 75A AC Charger	\$	540.00
American Signal OPT30065074 Tongue-Mounted Jack w/ 6" Swivel Wheel	\$	150.00
American Signal OPT30065255-x Towing Hitch Options	\$	250.00
American Signal OPT30065121 Electric Brakes	\$	940.00
American Signal HIT00000010 Hydraulic Surge Brakes	\$	625.00
American Signal OPT30125310 AT&T/VZW/T-Mobile Cellular Option with GPS	\$	1,250.00
American Signal OPT30205080 Sprint Cellular Option with GPS	\$	1,250.00
American Signal OPTSPARE Frame-Mounted Spare Tire	\$	267.00
American Signal OPT30065099 Extendable Outriggers for leveling jacks	\$	600.00
American Signal OPT30025000 VoiceStar HAR single transmitter	\$	22,500.00
American Signal OPT30025035 VoiceStar HAR dual transmitter	\$	45,000.00
American Signal PAINT33X Optional Trailer Paint, 33x Series	\$	500.00
American Signal PAINT465T Optional Trailer Paint, 465T	\$	450.00
American Signal OPT30065098-9 AimStar Tilt/Rotate Solar Assembly 2 x 225W	\$	2,500.00
American Signal OPT30065520 AimStar Tilt/Rotate Solar Assembly, 2x 80W	\$	1,250.00

4.7 **MNDOT TRAILER WIRING**
 Cost for Trailer Wiring per MNDOT Specification. See attached drawing

Price: \$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
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Manufacturer		American Signal Company
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Make and Model	American Signal AMS30064051 GP-465Y CMS Full Matrix Vehicle Mount	\$ 14,500.00
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Warranty Length (In days, months, or years)		1 Year
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4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-AS-VM
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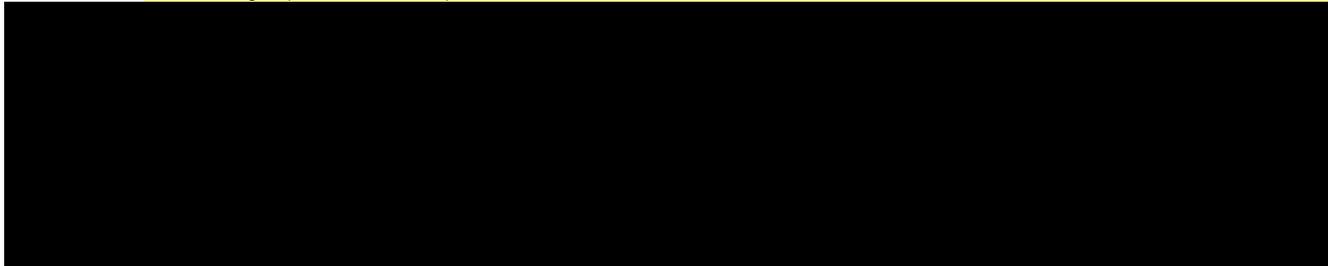
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
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4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
-----	---	---------------------------------

4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
-----	--	----------------------------

4.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
		N/A
		\$
		\$

4.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	American Signal BAT-195 AGM Batteries (per Battery)	\$ 500.00
	American Signal LOK0000075/76 Hidden Shackle Locks x2	\$ 375.00



4.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Hill & Smith
	Make and Model	
	Hill & Smith 262059 SMC 2000 FM ST Message Center	\$ 17,249.00
	Hill & Smith 402468 SMC 1000 ST-17 Message Center	\$ 15,885.00
	Hill & Smith 409826 SMC 5000 Mast Mini 17 Message Center	\$ 11,794.00
	Hill & Smith 409825 SMC 4000 Mast Mini 17 Message Center	\$ 13,158.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-HS-T
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A
		\$
		\$
4.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Hill & Smith 251420 Airlink Digital Modem with Antenna	\$ 1,080.00
	Hill & Smith 266217 Annual Contractor Grade Communication Service	\$ 262.00
	Hill & Smith Annual Platinum Grade Service	\$ 762.00
4.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) (Group III)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 4.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
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City, State, Zip	Lino Lakes, MN 55014
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Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

4.0	Information Requested	Answer
	Manufacturer	Hill & Smith
	Make and Model	
	Hill & Smith 409999 Series 5000 (4'x6') w/Automatic Actuator	\$ 8,565.00
	Hill & Smith 410106 Series 5000 (4'x6') w/Manual Lift	\$ 7,010.00
	Hill & Smith 402279 Series 6000 (4'x4') w/Automatic Actuator	\$ 8,485.00
	Hill & Smith 410107 Series 6000 (4'x4') w/Manual Lift	\$ 6,640.00
	Warranty Length (In days, months, or years)	5 Years
4.1	Date & I.D. of Price List	10/7/2019 SSR-CMS-HS-TM
4.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
4.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
4.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
4.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. extended term covers) Add as many lines as needed.	(Specify days, months, or years) N/A
		\$
		\$
4.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to PCMS operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Hill & Smith 268900 Wired Cab-Mounted or Handheld AW controller	\$ 231.00
	Hill & Smith 402393 Truck Bed Mounted Stand	\$ 562.00
	Hill & Smith 402391 Truck Rail Mounted Stand	\$ 598.00
4.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech SPCT-3000 30' Solar Powered Tower Trailer System w/ Camera Package	\$ 20,641.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-SPCT
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
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7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech SPCT-400W 400W Solar Array	\$ 725.00
	Solar-Tech SPCT-480W 480W Solar Array	\$ 1,450.00
	Solar-Tech OP-8BAT 8 Standard Flooded Batteries	\$ 1,300.00
	Solar-Tech OP-4BAT 12 Standard Flooded Batteries	\$ 2,600.00
	Solar-Tech SPCT-8MFB 8 Maintenance Free Batteries	\$ 1,500.00
	Solar-Tech SPCT-12MFB 12 Maintenance Free Batteries	\$ 3,550.00
	Solar-Tech OP-0055 Battery Charger - 55A - 120VAC	\$ 50.00
	Solar-Tech OP-0090 Battery Charger - 90A - 120VAC	\$ 200.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 75.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 100.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 75.00
	Solar-Tech OP-HYDB Hydraulic Surge Brakes	\$ 1,075.00
	Solar-Tech OP-ELEB Electric Brakes - 6 or 7 Pin Connector	\$ 475.00
	Solar-Tech OP-PWIN Power Winch for Tower Extension/Retraction	\$ 800.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 255.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 275.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 200.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,714.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,643.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 1,020.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,162.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,518.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
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MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech SPLT-3000 30' Solar Powered Tower Trailer System w/ Light Tower Package	\$ 17,949.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-SPLT
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
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7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech SPLT-50W6 Six (6) 50 Watt LED Lights (30,000 Lumens Total Output)	\$ 700.00
	Solar-Tech SPLT-50W8 Eight (8) 50 Watt LED Lights (40,000 Lumens Total Output)	\$ 1,271.00
	Solar-Tech SPLT-12MFB 12 Maintenance Free Batteries	\$ 2,250.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 74.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 100.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 75.00
	Solar-Tech OP-HYDB Hydraulic Surge Brakes	\$ 1,075.00
	Solar-Tech OP-ELEB Electric Brakes - 6 or 7 Pin Connector	\$ 475.00
	Solar-Tech OP-PWIN Power Winch for Tower Extension/Retraction	\$ 800.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 255.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 275.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 200.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,714.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,643.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 1,020.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,162.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,518.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
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MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech SPTT-3000 30' Solar Powered Tower Trailer System	\$ 10,769.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-SPTT
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
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7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech RST-4MFB 4 Maintenance Free Batteries	\$ 1,400.00
	Solar-Tech OP-0045 Battery Charger - 45 Amp	\$ 395.00
	Solar-Tech RST-0055 Battery Charger - 55 Amp	\$ 452.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 84.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 113.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 85.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 288.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 310.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 226.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,714.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,643.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 1,020.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,162.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,518.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
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MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech RST-1000 Silent Advisor Radar Trailer 117" x 56" Low Speed Application	\$ 9,646.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-RST1000
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
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7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech RST-4MFB 4 Maintenance Free Batteries	\$ 1,400.00
	Solar-Tech OP-0045 Battery Charger - 45 Amp	\$ 395.00
	Solar-Tech RST-0055 Battery Charger - 55 Amp	\$ 452.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 84.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 113.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 85.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 288.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 310.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 226.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,714.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,643.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 1,020.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,162.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,518.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
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MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech RST-2000 Silent Advisor Radar Trailer 112' x 75' High Speed Application	\$ 10,160.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-RST2000
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
-----	--	-----------------

7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech RST-4MFB 4 Maintenance Free Batteries	\$ 1,400.00
	Solar-Tech OP-0045 Battery Charger - 45 Amp	\$ 395.00
	Solar-Tech RST-0055 Battery Charger - 55 Amp	\$ 452.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 84.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 113.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 85.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 288.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 310.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 226.00
	Solar-Tech OP-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,714.00
	Solar-Tech RST2000-CONE Traffic Cone Carrier	\$ 288.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,643.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 1,020.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,162.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,518.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
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MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Solar Technology
	Make and Model	
	Solar-Tech SLT-2000 Variable Speed Limit Trailer	\$ 10,096.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ST-SLT
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0

7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
		N/A
		\$
		\$

7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Solar-Tech SLT-4MFB 4 Maintenance Free Batteries	\$ 750.00
	Solar-Tech OP-0055 Battery Charger - 55A - 120VAC	\$ 50.00
	Solar-Tech OP-6GROUND Trailer Lighting Plug - 6 Position Round	\$ 75.00
	Solar-Tech OP-7ROUND Trailer Lighting Plug - 7 Position Round	\$ 100.00
	Solar-Tech OP-7RV Trailer Lighting Plug - 7 Position RV/Blade Style	\$ 75.00
	Solar-Tech OP-ELEB Electric Brakes - 6 or 7 Pin Connector	\$ 475.00
	Solar-Tech OP-00215 Swivel Jack w/Wheel	\$ 255.00
	Solar-Tech OP-BOX Battery Box Vandal Proof System	\$ 275.00
	Solar-Tech OP-COLOR Custom Color - Special Order	\$ 200.00
	Solar-Tech SLT-GALV Galvanizing - Required w/ White & certain other colors	\$ 1,357.00

7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
		Price: \$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip:	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac CT-2320 CAM Portable Solar Trailer - Mid Size 20' Mast	\$ 11,560.00
	Ver-Mac CT-2430 CAM Portable Solar Trailer - Full Size 30' Mast	\$ 22,100.00
	Ver-Mac CT-2320 DR Portable Solar Trailer - Mid Size 20' Mast	\$ 13,600.00
	Ver-Mac CT-2320 MW Portable Solar Trailer - Mid Size 20' Mast	\$ 19,720.00
	Ver-Mac PST-110-09 DR Portable Solar Trailer - Small Size 15' Mast	\$ 8,840.00
	Ver-Mac PST-110-09 MW Portable Solar Trailer - Small Size 15' Mast	\$ 14,960.00
	Ver-Mac PSD-4000S Portable Security System	\$ 45,480.00
	Warranty Length (In days, months, or years)	3 years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-VM-ITS
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A

7.6	OPTIONAL UPGRADE ITEM(S)	Price
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac OPT-ST-Modem Modem with GPS	\$ 947.00
	Ver-Mac OPT-SP-30 Amp/IQ4 30 Amp Charger	\$ 510.00
	Ver-Mac OPT-SP-Data Log Data Logger	\$ 546.00
	Ver-Mac OPT-ST-Microwave Microwave Sensor	\$ 8,160.00
	Ver-Mac OPT-ST-Reset Box Reset Box	\$ 401.00
	Ver-Mac OPT-ST-Radar Radar	\$ 1,749.00
	Ver-Mac PSS Comm Yearly Comm Fee for Analytics	\$ 3,944.00
	Ver-Mac SP MAC SC Charger	\$ 408.00
	Ver-Mac SP MAC 2.0 Speed Sensor	\$ 5,576.00
	Ver-Mac SP MAC VP Speed Sensor	\$ 6,256.00
	Trafficcast International BT SYSTEM SOFTWARE Bluetooth System Software - 1 YR	\$ 986.00
	Trafficcast International BT-ETH-SPECTRA-POE Bluetooth Data Collection	\$ 6,311.00
	Houston Radar Armadillo Tracker Traffic Data Collection	\$ 4,093.00
	Houston Radar DR500 STATS Stats Package for Doppler Radar	\$ 284.00
	Houston Radar DR500S-BOM2 Traffic Data Collection	\$ 714.00
	Houston Radar DR600 Traffic Data Collection	\$ 1,026.00
	Houston Radar SpeedLanePro Traffic Data Collection	\$ 5,564.00
	Axis P5635-E MK II PTZ HDTV 1080p Dome Network Camera	\$ 2,164.00
	Axis Q6125-LE PTZ PTZ High Speed w/ Infrared Dome Network Camera	\$ 3,497.00
	Axis Q6155-E PTZ PTZ HDTV 1080p w/WDR Dome Network Camera	\$ 3,519.00
	Axis P5624-E MK II PTZ HDTV 720p w/Continuous 360° pan	\$ 1,726.00
	Axis P1214-E HDTV 720p Miniature Bullet Camera Network Camera	\$ 570.00
	Axis T81B22 Axis POE Switch	\$ 113.00
	Axis T91L61 Pole Mount for Camera	\$ 113.00
	Wavetronix WX-CLK-200 Smart Sensor Data Storage Click 200	\$ 416.00
	Wavetronix WX-SS-126 Microwave Sensor	\$ 6,300.00
	Wavetronix SS-706-20 SS126 20' wire harness. 10 pin	\$ 214.00
	Sierra Wireless RV50 AirLink 4G Cellular Modem	\$ 824.00
	SSR Smart Sensor Box Nema Rated Box for Electronic Components (inc. wire harness)	\$ 214.00
	Redlion Controls SN-6921-VZ Verizon 4G Cellular Modem	\$ 1,189.00

7.7	MNDOT TRAILER WIRING	Price:
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	\$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac SP-3248V High Speed Radar Trailer w/ Full Matrix Display	\$ 9,452.00
	Ver-Mac SP-3248V Speed Cam High Speed Radar Trailer w/ Speed Cam	\$ 21,760.00
	Ver-Mac SP-710V High Speed Radar Trailer	\$ 8,160.00
	Ver-Mac SP-710VSL Variable Speed Limit Trailer	\$ 11,424.00
	Ver-Mac SP-710-DSL Digital Speed Limit Trailer	\$ 9,656.00
	Warranty Length (In days, months, or years)	3 years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-VM-SP
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac OPT-SP-Data Log Data logger	\$ 546.00
	Ver-Mac OPT-SP-30 Amp/IQ4 30 Amp Battery Charger with IQ4	\$ 510.00
	Ver-Mac OPT-SP-Modem-NonSWZ 4G Modem with GPS	\$ 656.00
7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

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Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Wanco
	Make and Model	
	Wanco WCYS-MINI-SD Solar Camera Trailer - 20' Tower	\$ 24,118.00
	Wanco WLC2000BI Balloon Light Cart 16' Tower	\$ 5,000.00
	Wanco WLTS-MM4A-1050 Solar Light Tower - 20' Tower	\$ 19,651.00
	Wanco WSD-TF Radar Speed Trailer-Tall Folding	\$ 8,133.00
	Wanco WSDT3-S Radar Speed Trailer-Full Matrix Compact	\$ 7,588.00
	Wanco WSDT3-SPD Radar Speed Trailer for Law Enforcement	\$ 8,095.00
	Warranty Length (In days, months, or years)	5 Years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-W-ITS
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A
		\$
7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items MUST be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Wanco Modem Kit with GPS- AT&T, Verizon - Micro Hard	\$ 1,000.00
	Wanco Modem Kit with GPS- AT&T, Verizon - RV50	\$ 1,428.57
	Wanco Kit, Radar, LMB(A) - Linux MPH	\$ 1,357.14
	Wanco Solar Panel Upgrade from 170W to 260W	\$ 807.14
	Wanco Add (2) 6V deep cycle Batteries (6 total, std box)	\$ 521.43
	Wanco Add (4) 6V deep cycle Batteries (8 total, larger box)	\$ 992.86
	Wanco AGM Sealed 4D Batteries, Qty Two (400 total AH) *upgrade from 4-6V dc flooded	\$ 521.43
	Wanco AGM Sealed 4D Batteries, Qty Three (600 total AH) *upgrade from 4-6V dc flooded	\$ 1,378.57
	Wanco Security Battery Box - replaces std 4-6 battery box	\$ 371.43
	Wanco Security Battery Box - replacing larger eight battery box	\$ 428.57
	Wanco Electric Brake upgrade, 2" Ball	\$ 642.86
	Wanco Hydraulic Brakes upgrade, 2" Ball	\$ 971.43
	Wanco Telescoping Outriggers (4)	\$ 371.43
	Wanco Hydraulic Manual Hand Pump for Hydraulic Units	\$ 214.29
7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
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P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
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Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	American Signal Company
	Make and Model	
	American Signal AMS30062700 T25 Accessory Portable Trailer 30' Mast	\$ 8,125.00
	Warranty Length (In days, months, or years)	1 Year
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-AS-ITS
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	2 year warranty	\$ 400.00
	5 year warranty	\$ 900.00
		\$
7.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	American Signal BAT-195 AGM Batteries (per Battery)	\$ 500.00
	American Signal LOK0000075/76 Hidden Shackles x2	\$ 375.00
	American Signal LOK0000040 Keyed Locking Latch for Pedestal	\$ 125.00
	American Signal OPT30125076 Radar Overspeed Detection	\$ 1,125.00
	American Signal OPT30069229-x PTZ Dome Camera with telescoping mast	\$ 8,750.00
	American Signal OPT30155096-1 Data Traffic Logger, for use with radar overspeed detection	\$ 2,000.00
	American Signal OPT30065102 Locking Lug Nuts	\$ 75.00
	American Signal OPT30065096-3 J-Bar Wheel Lock	\$ 125.00
	American Signal CHG00000155 75A Charger	\$ 540.00
	American Signal OPT30065074 Tongue-Mounted Jack w/ 6" Swivel Wheel	\$ 150.00
	American Signal OPT30065110 Tongue-Mounted Spare Tire	\$ 190.00
	American Signal OPT30065255-x Towing Hitch Options - 3" lunette eye / combination / adjustable height	\$ 250.00
	American Signal OPT30065121 Electric Brakes	\$ 940.00
	American Signal HIT00000010 Hydraulic Surge Brakes	\$ 625.00
	American Signal OPT30125310 AT&T/VZW/T-Mobile Cellular Option with GPS	\$ 1,250.00
	American Signal OPT30205080 Sprint Cellular Option with GPS	\$ 1,250.00
	American Signal PAINTADV Optional Paint Advantage	\$ 315.00
7.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
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P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	American Signal Company
	Make and Model	
	American Signal AMS60065226 CMS-T131 DigiBrite Advantage LED Radar Speed Trailer	\$ 7,500.00
	Warranty Length (In days, months, or years)	1 Year
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-AS-RST
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	2 year warranty	\$ 400.00
	5 year warranty	\$ 900.00
		\$
7.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	American Signal BAT-195 AGM Batteries (per Battery)	\$ 500.00
	American Signal LOK0000075/76 Hidden Shackle Locks x2	\$ 375.00
	American Signal LOK0000040 Keyed Locking Latch for Pedestal	\$ 125.00
	American Signal OPT30155096-1 Data Traffic Logger, for use with radar overspeed detection	\$ 2,000.00
	American Signal OPT30065102 Locking Lug Nuts	\$ 75.00
	American Signal OPT30065096-3 J-Bar Wheel Lock	\$ 125.00
	American Signal OPT30069229-x PTZ Dome Camera with telescoping mast	\$ 8,750.00
	American Signal CHG00000155 75A Charger	\$ 540.00
	American Signal OPT30065074 Tongue-Mounted Jack w/ 6" Swivel Wheel	\$ 150.00
	American Signal OPT30065110 Tongue-Mounted Spare Tire	\$ 190.00
	American Signal OPT30065255-x Towing Hitch Options - 3" lunette eye / combination / adjustable height	\$ 250.00
	American Signal OPT30065121 Electric Brakes	\$ 940.00
	American Signal HIT00000010 Hydraulic Surge Brakes	\$ 625.00
	American Signal OPT30125310 AT&T/VZW/T-Mobile Cellular Option with GPS	\$ 1,250.00
	American Signal OPT30205080 Sprint Cellular Option with GPS	\$ 1,250.00
	American Signal PAINTADV Optional Paint Advantage	\$ 315.00
7.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	American Signal Company
	Make and Model	
	American Signal AMS60065226 CMS-T131 DigiBrite Advantage LED Radar Speed Trailer	\$ 19,375.00
	Warranty Length (In days, months, or years)	1 Year
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-AS-CAM
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	2 year warranty	\$ 400.00
	5 year warranty	\$ 900.00
		\$
7.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	American Signal BAT-195 AGM Batteries (per Battery)	\$ 500.00
	American Signal LOK0000075/76 Hidden Shackle Locks x2	\$ 375.00
	American Signal LOK0000040 Keyed Locking Latch for Pedestal	\$ 125.00
	American Signal OPT30125076 Radar Overspeed Detection	\$ 1,125.00
	American Signal OPT30155096-1 Data Traffic Logger, for use with radar overspeed detection	\$ 2,000.00
	American Signal OPT30065102 Locking Lug Nuts	\$ 75.00
	American Signal OPT30065096-3 J-Bar Wheel Lock	\$ 125.00
	American Signal CHG00000155 75A Charger	\$ 540.00
	American Signal OPT30065074 Tongue-Mounted Jack w/ 6" Swivel Wheel	\$ 150.00
	American Signal OPT30065110 Tongue-Mounted Spare Tire	\$ 190.00
	American Signal OPT30065255-x Towing Hitch Options - 3" lunette eye / combination / adjustable height	\$ 250.00
	American Signal OPT30065121 Electric Brakes	\$ 940.00
	American Signal HIT00000010 Hydraulic Surge Brakes	\$ 625.00
	American Signal OPT30125310 AT&T/VZW/T-Mobile Cellular Option with GPS	\$ 1,250.00
	American Signal OPT30205080 Sprint Cellular Option with GPS	\$ 1,250.00
	American Signal PAINTADV Optional Paint Advantage	\$ 315.00
7.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

MOBILE TRAILERS (Group VII)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
 SWIFT EVENT NO. 9974□

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Mobile PRO Systems
	Make and Model	
	MobilePro Captain 3100 20' Mast Trailer w/PTZ Infrared Camera, Gas Generator Solar System	\$ 41,121.00
	MobilePro Contractor 3100 20' Mast Trailer w/PTZ Infrared Dome Camera, Gas Generator Solar LED Flood and Strobe lights	\$ 50,850.00
	MobilePro Contractor 3400 36' Mast Trailer w/PTZ Infrared Dome Camera, Gas Generator Solar System	\$ 70,415.00
	MobilePro Defender 3400 36' Mast Trailer w/PTZ Infrared Dome Camera, Gas Generator Solar LED Flood and Strobe lights	\$ 77,691.00
	Warranty Length (In days, months, or years)	1 Year
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-MP-CAM
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
		N/A
		\$
		\$
7.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
		\$
7.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

**MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974**

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
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Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

7.0

Information Requested

Answer

Manufacturer		Hill & Smith
Make and Model		
Hill & Smith QUEUE ST17	\$	8,197.00
Hill & Smith QUEUE AG17	\$	8,910.00
Hill & Smith QUEUE RW17	\$	4,633.00
Hill & Smith QUEUE 230ST17	\$	14,211.00
Hill & Smith QUEUE 230ST17AG	\$	14,888.00
Hill & Smith QUEUE ST25	\$	8,910.00
Hill & Smith QUEUE AG25	\$	9,623.00
Hill & Smith QUEUE RW25	\$	5,346.00
Hill & Smith QUEUE 230ST25	\$	14,888.00
Hill & Smith QUEUE 230ST25AG	\$	15,564.00
Hill & Smith CAM ST30	\$	19,173.00
Hill & Smith CAM RW30	\$	14,888.00
Hill & Smith CAM 560ST30	\$	24,453.00
Hill & Smith CAM 560ST30AG	\$	24,807.00
Hill & Smith CAM ST40	\$	19,826.00
Hill & Smith CAM RW40	\$	16,394.00
Hill & Smith CAM 560ST40	\$	24,807.00
Hill & Smith CAM 560ST40AG	\$	25,459.00
Hill & Smith VSL NCST140	\$	10,692.00
Hill & Smith VSL OHST140	\$	10,692.00
Warranty Length (In days, months, or years)		1 Year
7.1 Date & I.D. of Price List		10/7/2019 & SSR-MT-HS-ITS
7.2 Discount to be applied to Price List		0%
*Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.		
7.3 Price per loaded mile for delivery	\$	1.00
Delivery Starting Point Address		Lino Lakes, MN 55014
7.4 Price for additional set of manuals (service, parts, & operations)		Paper: \$0
		Digital: \$0

7.5 PERFORMANCE/WARRANTY OPTIONS:

Use this section to offer performance/extended warranty options and include cost.
(Specify days, months, or years extended term covers) Add as many lines as needed.

	N/A
	\$
	\$

7.6 OPTIONAL UPGRADE ITEM(S)

Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.

Hill & Smith	BLUE BTOAD	\$	8,447.00
Hill & Smith	MODEM LS300	\$	1,157.00
Hill & Smith	MODEM GX450	\$	1,157.00
Hill & Smith	MODEM RV50	\$	1,157.00
Hill & Smith	ASSET TRACKER	\$	451.00
Hill & Smith	DATA PLAN CG	\$	243.00
Hill & Smith	DATA PLAN PG	\$	693.00
Hill & Smith	DATA PLAN CAM	\$	1,100.00
Hill & Smith	DATA PLAN ASSET	\$	128.00
Hill & Smith	DATA PLAN BLUE BT	\$	1,146.00
Hill & Smith	ASTI WS49	\$	7,637.00
Hill & Smith	ASTI WS99	\$	13,365.00
Hill & Smith	ASTI WS100	\$	26,730.00
Hill & Smith	ASTI ARCHIVE CAM	\$	1,833.00
Hill & Smith	SS-200E	\$	7,384.00
Hill & Smith	SS-704-020	\$	244.00
Hill & Smith	102-0412	\$	1,529.00
Hill & Smith	CLK-301	\$	884.00
Hill & Smith	SS-B01-0003	\$	2,291.00
Hill & Smith	SS-705-001	\$	2,978.00
Hill & Smith	SS-705-002	\$	13,031.00
Hill & Smith	SS-611	\$	319.00
Hill & Smith	SS-710	\$	283.00
Hill & Smith	RACK CLK-114	\$	657.00
Hill & Smith	100-0277	\$	17.00

7.7 MNDOT TRAILER WIRING

Cost for Trailer Wiring per MNDOT Specification. See attached drawing

Price: \$0.00

MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974

File: A210-08-2019

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Toll Free #:	888-653-6800
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Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
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Manufacturer	Hill & Smith
Make and Model	
Hill & Smith 236549 SPEED ALERT TRAILER	\$ 7,333.00
Hill & Smith 255216 SPEED ALERT TRAILER EZ	\$ 7,333.00
Warranty Length (In days, months, or years)	1 Year

7.1 Date & I.D. of Price List	10/7/2019 & SSR-MT-HS-RTS
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7.2 Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
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7.3 Price per loaded mile for delivery	\$ 1.00
Delivery Starting Point Address	Lino Lakes, MN 55014

7.4 Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
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7.5 <u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
---	-----------------

7.6 <u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	\$ \$ \$
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7.7 <u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00
---	---------------

**MOBILE TRAILERS (Group VII)
BASE UNIT REQUIREMENTS - SPECIFICATION NO. 7.0
SWIFT EVENT NO. 9974**

File: A210-08-2019

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Email Address:	mkrengel@streetsmartrental.com

7.0	Information Requested	Answer
	Manufacturer	Street Smart Rental
	Make and Model	
	Street Smart SQWS 1000 Smart Queue Warning System Trailer w/ Sensor Box	\$ 12,420.00
	Street Smart TES 1000 Trucks Entering/ Exiting System Trailer (set of 2 Trailers)	\$ 15,630.00
	Warranty Length (In days, months, or years)	2 years
7.1	Date & I.D. of Price List	10/7/2019 & SSR-MT-ITS
7.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
7.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
7.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
7.5	<u>PERFORMANCE/WARRANTY OPTIONS:</u> Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A
7.6	<u>OPTIONAL UPGRADE ITEM(S)</u> Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the mobile trailer operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Street Smart AQW AS Automation Software Monthly	\$ 1,500.00
	Street Smart AQW MS Monitoring Software Monthly	\$ 750.00
7.7	<u>MNDOT TRAILER WIRING</u> Cost for Trailer Wiring per MNDOT Specification. See attached drawing	Price: \$0.00

PORTABLE TRAFFIC CONTROL SIGNALS (PTCS) (Group V)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 6.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

Vendor Name:	Street Smart Rental, LLC
Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
City, State, Zip:	Lino Lakes, MN 55014
Phone #:	651-653-4648
Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

6.0	Information Requested	Answer
	Manufacturer	Horizon Signal
	Make and Model	
	Horizon Signals SQ2 SQ2MPR - 4 Telescoping Carts System	\$ 40,600.00
	Horizon Signals SQ2T2 Trailer Mounted Signals-Tandem Tow	\$ 29,500.00
	Warranty Length (In days, months, or years)	10 Yr Structural, 2 yr electronic parts, 5 yr LED
6.1	Date & I.D. of Price List	10/7/2019 SSR-PTS-H-SQ2
6.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
6.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
6.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
6.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +3 years for this contract	N/A
		\$
		\$
6.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the AFAD operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Horizon Signals 647 SQ2 Trailer - Enclosed 6'x12'	\$ 8,450.00
	Horizon Signals 648 SQ2 Trailer - Enclosed 8'x16'	\$ 12,900.00
	Horizon Signals Traffic Sensors (Includes 2 sensors)	\$ 2,350.00
	Horizon Signals SQ2Solar SQ2 Solar Assist Package - (2 Cart)	\$ 2,640.00
	Horizon Signals SQ2OUT SQ2 Outriggers - (2 Cart)	\$ 1,320.00
	Horizon Signals SQ2Solar SQ2 Solar Assist Package - (2 Cart)	\$ 4,100.00
	Horizon Signals SQ2Solar-4 SQ2 Solar Assist Package - (4 Cart)	\$ 8,200.00
	Horizon Signals 150 Wireless Remote Manual Control	\$ 3,150.00
	Horizon Signals CABLED REMOTE Cabled Remote Manual Control	\$ 375.00
	Horizon Signals 228 Pilot Car / Flagger Module	\$ 3,260.00
6.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE TRAFFIC CONTROL SIGNALS (PTCS) (Group V)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 6.0
 SWIFT EVENT NO. 9974

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Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

6.0	Information Requested	Answer
	Manufacturer	Horizon Signal
	Make and Model	
	Horizon Signals SQ3TS Solar Assist Signal Trailers - Tandem Tow (includes 2 trailers)	\$ 57,950.00
	Horizon Signals SQ4 Trailer Mtd Signals- Emergency Trailer with 4 heads	\$ 29,990.00
	Warranty Length (In days, months, or years)	10 Yr Structural, 2 yr electronic parts, 5 yr LED
6.1	Date & I.D. of Price List	10/7/2019 SSR-PTS-H-SQ3
6.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
6.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
6.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
6.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +3 years for this contract	N/A
		\$
		\$
6.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the AFAD operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Horizon Signals 441 Video Detection (includes 1 video, monitor, interface)	\$ 5,550.00
	Horizon Signals RMS Remote Monitoring System RMS - (Each)	\$ 1,050.00
	Horizon Signals RMS-12 RMS Recurring Annual Fee (Required w/ RMS System)	\$360/yr
	Horizon Signals Traffic Sensors (Includes 2 sensors)	\$ 2,350.00
	Horizon Signals Wireless Interface (Knockdown Kit)	\$ 8,000.00
	Horizon Signals Generator Enclosure SQ3TS Generator Enclosure	\$ 1,250.00
	Horizon Signals PED CROSSWALK Pedestrian Crosswalk Signals with Controller	\$ 3,600.00
	Horizon Signals FLOOD LIGHT SQ3TS Work Zone Flood Light	\$ 3,350.00
	Horizon Signals 150 Wireless Remote Manual Control	\$ 3,150.00
	Horizon Signals CABLED REMOTE Cabled Remote Manual Control	\$ 375.00
	Horizon Signals 00292T Left Turn Arrow Head with 1 Controller	\$ 4,350.00
	Horizon Signals 228 Pilot Car / Flagger Module (Includes 1 pilot box)	\$ 3,260.00
6.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE TRAFFIC CONTROL SIGNALS (PTCS) (Group V)
 BASE UNIT REQUIREMENTS - SPECIFICATION NO. 6.0
 SWIFT EVENT NO. 9974

File: A210-08-2019

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Contact Person:	Matt Krengel
Street Address:	7526 4th Ave
P.O. Box:	548
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Toll Free #:	888-653-6800
Fax #:	651-653-4631
Email Address:	mkrengel@streetsmartrental.com

6.0	Information Requested	Answer
	Manufacturer	North American Traffic
	Make and Model	
	North American Traffic PTL2.4X - 2 Trailers w/ Wireless Comm	\$ 56,975.00
	Warranty Length (In days, months, or years)	10 Yr Structural, 2 yr electronic parts, 5 yr LED
6.1	Date & I.D. of Price List	10/7/2019 SSR-PTS-NAT-PLT
6.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0%
6.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 2.00 Lino Lakes, MN 55014
6.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
6.5	PERFORMANCE/WARRANTY OPTIONS:	
	Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	
	Electronic Parts Warranty has been extended +1 years for this contract	N/A
		\$
		\$
6.6	OPTIONAL UPGRADE ITEM(S)	
	Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the AFAD operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	North American Traffic Traffic Sensors (Price includes 2 sensors)	\$ 2,550.00
	North American Traffic Trafficcam Video Detection (Include 1 camera & Interface)	\$ 6,150.00
	North American Traffic Emergency Vehicle Pre Emption (Tomar, strobe)	\$ 1,750.00
	North American Traffic GPS Cellular mobil asset tracker	\$ 1,225.00
	North American Traffic Annual GPS Cell monitoring fee	\$ 365.00
	North American Traffic Lead/Acid Battery upgrade from 12 to 16	\$ 1,275.00
	North American Traffic Handheld Wireless Manual Control	\$ 2,300.00
6.7	MNDOT TRAILER WIRING	
	Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00

PORTABLE TRAFFIC CONTROL SIGNALS (PTCS) (Group V)
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 SWIFT EVENT NO. 9974

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6.0	Information Requested	Answer
	Manufacturer	Ver-Mac
	Make and Model	
	Ver-Mac TLD-3612-G3 Traffic Light System: Solar Assist, Tandem Tow	\$ 59,425.00
	Warranty Length (In days, months, or years)	3 yr parts, 5 Year LED
6.1	Date & I.D. of Price List	10/7/2019 SSR-PTS-VM
6.2	Discount to be applied to Price List *Note: The "Discount to be Applied to Price List" must be a numeric percentage, which may include 0%. Not listing a numeric percentage may result in your bid being rejected.	0.00%
6.3	Price per loaded mile for delivery Delivery Starting Point Address	\$ 1.00 Lino Lakes, MN 55014
6.4	Price for additional set of manuals (service, parts, & operations)	Paper: \$0 Digital: \$0
6.5	PERFORMANCE/WARRANTY OPTIONS: Use this section to offer performance/extended warranty options and include cost. (Specify days, months, or years extended term covers) Add as many lines as needed.	N/A \$ \$
6.6	OPTIONAL UPGRADE ITEM(S) Use this section for items not listed in manufacturer's price list. These items must be an upgrade to the AFAD operation or functionality. *Responder must give manufacturer name and item number. Add as many lines as needed.	
	Ver-Mac TLD-RDR Traffic Sensors (includes 2 sensors)	\$ 3,400.00
	Ver-Mac OPT-TS-COUNTDOWN Countdown Module (1 unit)	\$ 1,285.00
	Ver-Mac OPT-TS-30 Amp/IQ4 30 Amp Battery Charger with IQ4 (each)	\$ 500.00
	Ver-Mac OPT-TS-WL CTRL Wireless Controller	\$ 1,360.00
6.7	MNDOT TRAILER WIRING Cost for Trailer Wiring per MNDOT Specification. See attached drawing	
	Price:	\$0.00