

MA 18P 18070500000000000002
MODIFICATION

State of Maine



Master Agreement

Effective Date: 07/05/18

Expiration Date: 07/31/21

Master Agreement Description: Signs, LED Flashing Speed, Stop Signs, Stop Ahead

Buyer Information

William Allen 207-624-7871 ext. NULL WJE.Allen@maine.gov

Issuer Information

Sharon Krechkin 207-624-3038 ext. sharon.krechkin@maine.gov

Requestor Information

Sharon Krechkin 207-624-3038 ext. sharon.krechkin@maine.gov

Agreement Reporting Categories

Reason For Modification: Extend for one year at current pricing

Authorized Departments

17A TRANSPORTATION

Vendor Information

Vendor Line #: 1

Vendor ID

VS0000012369

Vendor Name

K & K Systems, Inc.

Alias/DBA

Vendor Address Information

P. O. Box 1065

Verona, MS 38879

US

Bureau of Business Management – Division of Procurement Services
State of Maine – Department of Administrative and Financial Services
9 State House Station
Augusta, Maine 04333-0009

Contract Number
MA 180705*002

Tel. (207) 624-7340
Fax.# (207) 287-6578

EXTENSION OF MASTER AGREEMENT CONTRACT

Commodity Item: Signs, LED Flashing Speed, Stop Signs, Stop Ahead

Contractor: K & K Systems, Inc.

Mater Agreement Competitive Bid RFQ: RFQ 17A 180131-049

Contract Period Extended To: 7/31/21

Extended Contract Pricing: Current Pricing

Extension Clause: The State reserves the right to extend this contract for a period of one year, with the consent of the contractor.

Agreement to Extend Contract:

In accordance with the above referenced Extension Clause, the undersigned agrees to continue in effect said Contract No # MA 180705*002 through July 31, 2021 with all terms, conditions remaining as shown in the original contract.

Dollar value the vendor has recorded that State of Maine has spent on this contract from 08/01/19 to present:
\$ 0.00

Agreement to extend Master Agreement 18P – 1807050000000000002 authorized by:

State of Maine – Department of Administrative and Financial Services

DocuSigned by: 8/13/2020

6D6437754DD0459...
Jaime C. Schorr, Chief Procurement Officer

And

K & K Systems, Inc. 8/13/2020
DocuSigned by:

396A87B67578467
Alice K. Bingham, Account Manager

RIDERS

<input checked="" type="checkbox"/>	The following riders are hereby incorporated into this Contract and made part of it by reference: (check all that apply)
<input checked="" type="checkbox"/>	Rider A – Scope of Work and/or Specifications
<input checked="" type="checkbox"/>	Rider B – Terms and Conditions
<input type="checkbox"/>	Rider C - Exceptions
<input checked="" type="checkbox"/>	Bid Cover Page and Debarment Form – Appendix A from RFQ
<input checked="" type="checkbox"/>	Municipality Political Subdivision and School District Participation Certification – Appendix D from RFQ
<input checked="" type="checkbox"/>	Price sheet (attach excel spreadsheet to post on website)
<input type="checkbox"/>	Other – Included at Department's Discretion

RIDER A
Scope of Work and/or Specifications
MA 180705-002

Commodity: Signs, LED Flashing Speed, Stop Signs, Stop Ahead

Master Agreement Competitive Bid RFQ: 17A 180131-409

Contract Period: Through Jul 31, 2021. The State of Maine with vendor approval can opt to issue up to two (2) one (1) year extensions. *Final extension through July 31, 2021*

Vendor Contact Person: The vendor contact person will help consumers place orders, inquire about orders that have not been delivered, all shipping issues, quality issues and any issues pertaining to the Master Agreement (MA) contract. All orders not submitted through a Delivery Order will be sent through the vendor contact person. The vendor contact person for this MA is:

Name: Alice Bingham **Tel:** 888-414-3003 **Email:** ali@k-systems.com

Prices: Prices are with shipping terms of “Free on Board (FOB) – Destination”. The State intends for this to mean that all goods shall be priced to include shipping charges, if any, to the State’s desired location. The “FOB – Destination” shipping term is also intended to mean that the State shall not bear any responsibility for the goods in question until the State takes possession of them at the destination point of delivery.

Quantities: It is understood and agreed that the MA will cover the actual quantities required by the State over the length of the contract.

Ordering Procedures: Delivery Orders (DO) will be created in AdvantageME for all orders over \$5000.00. If a DO is used, the DO will be emailed to the email address referenced on the MA as a .pdf file. Orders less than \$5000.00 can be placed using a State of Maine issued P-Card (credit card).

Invoices and Payment: The Contractor shall submit an itemized bill to the Department for materials following delivery for approval and payment. Invoices shall minimally include the following: **Contractor name, address & Contract Number 18P 180705-002, Invoice Date & Number, Dates of Delivery**

Delivery: The Contractor will be responsible for the delivery of material in first class condition at the point of delivery, and in accordance with good commercial practice. The Contractor shall deliver the materials to the MaineDOT Sign Shop at 66 Industrial Drive in Augusta, ME. The Contractor shall notify MaineDOT, Steve Hunnewell, Telephone 207-592-4801, a minimum of one week prior to delivery for delivery coordination. Alternative contacts is: Robert Rooney, 207-287-2846. The Contractor shall deliver the materials only during the following times: Monday through Friday, 7:00 AM through 3:30 PM except for deliveries may not be made on holidays, or government closure days. The Department will not off-load the materials at the delivery site.

Description

The Flashing signs shall meet the material specification section of this section.



DOT Contract Administrator: The DOT contract administrator for this contract will be:

Name: Steve Hunnewell
Title: Assistant State Traffic Engineer
Address: Maine Department of Transportation
16 State House Station Road , Augusta, ME 04333-0016
Phone: 207-592-4801

Dispute Resolution If, in the performance of this Agreement, there arises a dispute between the Contractor and MaineDOT that cannot be resolved by the parties to the Contract, the parties may agree to submit the dispute to non-binding Alternate Dispute Resolution. All disputes shall be governed by Maine law, and all actions shall be filed in the Kennebec Superior Court, in Augusta Maine.

Conformity with Standards Unless otherwise provided in the contract, all materials shall conform to the following standards, as applicable.

- A. MDOT
- B. AASHTO
- C. ASTM
- D. AREMA

- E. Standard conditions and special conditions contained in any permit
- F. Manual on Uniform Traffic Control Devices (MUTCD)
- G. American with Disabilities Act (ADA)

Material Quality Materials and manufactured products shall be new unless otherwise specified, free from defect, and in conformity with the contract. If there is no applicable standard set forth in this Contract for a particular item, then the item shall be in accordance with industry standards prevailing at the time of bid. The Department has the authority to inspect all Materials and every detail of the Work.

When material is fabricated or treated with another material or where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, the Department may reject the finished product if any of the components do not comply with the specifications. The Department may reject materials not con-forming to the Specifications at any time.

Material Specifications The Contractor shall provide and deliver Flashing (LED) Sign: R2-1 Speed Limit (48 inch by 60 inch) as shown on the quantity sheet.

The Manufacturer shall provide a solar-powered BlinkerSign® LED-enhanced sign assembly. This sign's high-intensity Day-Viz® LEDs are visible in all weather and ambient light conditions to increase the conspicuity of the sign. AutoBright™ control circuitry monitors ambient light levels throughout the day and night, and automatically regulates the brightness of the LED array to provide optimum visibility.

The BlinkerSign® LED-enhanced sign is fully compliant with the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD). The LED array's color and shape help to convey the sign type to roadway users, both day and night. Sign shall have a minimum of 3 years of field history experience. References maybe requested.

Materials: The Day-Viz® BlinkerSign® assembly shall include the following items:

1. Sign

- a. All signs shall conform to 2009 Federal Highway Administration's MUTCD section 2A.07 on retroreflectivity and illumination. MUTCD standards. **MEETS**
- b. The sign face shall have 8 qty White LEDs. **MEETS**
- c. All signs blanks shall be .080" gauge aluminum minimum. **K&K HAS .080 FRONT, .236 BACK SKIN**

d. Sheeting used shall be 3M™ DG3 diamond grade and include anti-graffiti overlay protection. **MEETS**

e. All sign assemblies shall use anti-vandal fasteners to mount components to sign and sign to fixture. **MEETS**

f. The Speed Limit Signs will have the number left blank. ("Speed Limit" will be written on sign, but the speed number area will be left blank). **MEETS**

2. LEDs

a. Each sign assembly shall consist of up to 8 high power 1 watt Luxeon® LEDs that provide a maximum light intensity of up to 550,000mcd (millicandelas) with a viewing angle of 15°. **MEETS**

b. Each LED shall be sealed in 7/8" diameter, heat dissipating plastic enclosure to provide resistance to weather and vibration. **MEETS**

c. All LED enclosures shall be mounted in a 1" hole and ultrasonically welded to the sign assembly to provide maximum strength and rigidity. **BOLTED TOGETHER WITH RUBBER SEAL**

d. All LEDs shall be wired in strings to activate simultaneously per MUTCD standards and wired in a manner (parallel) that all LEDs continue to flash in the event of failure of an individual LED. **MEETS**

e. All wire used shall conform to military specifications, MIL-W-16878D, Type D, vinyl nylon jacket. **MEETS**

f. Wiring shall be encapsulated inside a 1" x 3/8" aluminum extrusion secured to the sign assembly, to provide weather resistance and protection. **IT IS INSERTED IN THE SIGN**

g. All LED connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series. **MEETS**

h. Visible from 2 miles line of sight at night and just under 1 mile during daylight hours. **MEETS**

3. Solar Panel

a. All solar panels shall be up appropriately sized for sign power requirements and all climate and geographical locations. **MEETS**

- b. All panels shall be mounted to an aluminum plate and bracket at an angle of 45°- 60° to provide maximum output. Bracket shall be secured to a 2-3/8" aluminum tube. (NOTE: COLLECTOR MUST FACE SOUTH) **MEETS**
- c. All fasteners used shall be anti-vandal. **MEETS**
- d. Wire used shall conform to military specifications, MIL-W-16878D, Type D, vinyl nylon jacket. **MEETS**
- e. All solar panel connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series. **MEETS**

4. Control Circuit

- a. The control circuit shall have the capability of independently flashing dual outputs. The flashing output current and duty cycle shall be programmable. **MEETS**
- b. The flashing output shall be 50 to 60 flashes per minute with 100msec duration on time. The outputs shall reach the output current as programmed for the duration of the 100msec pulse. **MEETS**
- c. The output current shall be individually programmable for day and night time operation. The day and night time mode will automatically be determined by solar panel charge input and adjust to match ambient lighting conditions. **MEETS**
- d. The controller shall provide 6 levels of brightness control determined by ambient conditions. **MEETS**
- e. The controller will manage the battery charge and LED brightness levels in order to accommodate 17 days of continuous use without any charge. **MEETS**
- f. The control circuit shall operate between the temperatures of -40° to +176°F (-40° to +80°C). **CONFORMAL COATING AND IN A NEMA 3R CABINET**
- g. All circuit connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series. **MEETS**

5. Battery

- a. Battery packs shall be 12 Volt Lead Acid. **YES AGM LEAD ACID**

- b. All batteries shall be sealed and maintenance free. **MEETS**
- c. All batteries shall operate between the temperatures of -40° to +176°F (-40° to +80°C). **MEETS**
- d. All battery connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series. **MEETS**

Warranty: Manufacturer shall offer a 3 year unconditional warranty against all defects in material and workmanship. **MEETS**

643.18 Method of Measurement

Each Flashing (LED) will be measured for payment by the each supplied and delivered.



February 14, 2018

**BIDDER'S AFFIRMATIVR STATEMENT
FOR RFQ # 17A1801310000000000409**

K & K Systems, Inc. can confirm that the bid that we are submitting does comply with all requirements of this RFQ. If there are any questions or any assistance is needed please contact Alice K. Bingham at 888-414-3003 or 662-566-2025 and ali@k-ksystems.com

Troy G. Keith, Pres.

**TROY G. KEITH, PRESIDENT
K & K SYSTEMS, INC.
687 PALMETTO RD.
TUPELO, MS 38801
P: 888-414-3003
F: 662-566-2025**



Tel: 888-414-3003
Web: www.k-systems.com
Fax: 662-566-7123
Email: Sales@k-systems.com

MANUFACTURER'S STANDARD WARRANTY

1. The manufacturer warrants that all products manufactured by K & K Systems, Inc. will be free from defects in material and workmanship for a period of three (3) years from date of shipment, subject to the conditions and restrictions contained herein.
2. This warranty does not apply to a product that has not been installed or maintained in accordance with the manufacturer's instructions, has been subjected to damage in an accident, abused or neglected during operation, repaired or modified by persons other than manufacturer, its employees or authorized agents, or failed to have normal maintenance.
3. The buyer expressly agrees that the buyer's sole remedy and the manufacturer's sole responsibility, in respect to a warranty claim, is exclusively limited to repair or replacement at the manufacturer's option, of product or a portion thereof found by the manufacturer to be defective. The manufacturer is not responsible for labor or other expended charges by buyer including transportation charges, and shall not be liable for any incidental or consequential damages connected with repair of a product deemed to be defective or with installation or replacement of repaired product. Further, the manufacturer disclaims any liability for any incidental or consequential damages, including lost or duplicated time or expense accruing for any reason, to the owner or user of any products sold by the manufacturer, whether claim is made in contract or in tort or under any theory of warranty, negligence or otherwise.
4. The manufacturer reserves the right to make changes in its products from time to time, without incurring any obligation to incorporate such improvements in any products previously sold or in service.
5. The terms and conditions of the warranty cannot be altered without the written consent of the manufacturer.
6. The foregoing warranty is exclusive and in lieu of all other express, statutory and implied warranties **INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE**. There are no warranties which extend beyond the language in the previous six (6) paragraphs.

If you have any further questions, please feel free to call us at our toll-free number of 888-414-3003, email info@k-systems.com or you might want to look us up on the Internet at www.k-systems.com.

643.19 Basis of Payment

The Flashing (LED) Sign will be paid for by each, which payment will be full compensation for furnishing all materials including, but not limited to the Sign, LED's, Solar Panel, Control Circuit, and Battery and all appurtenances and incidentals required for a complete and functioning sign package.

Payment will be made under:

<i>Description</i>	<i>Pay Unit</i>
Flashing (LED) Sign:R1-1 36 inch	Each
Flashing (LED) Sign:R2-1 24x30 inch	Each
Flashing (LED) Sign:R3-1 36 inch	Each
Flashing (LED) Sign:R4-1 36 inch	Each

Vendor K & K SYSTEMS, INC.

SCHEDULE OF ITEMS

<i>Description</i>	<i>Unit Price</i>
Flashing (LED) Sign:R1-1 (36 inch Stop Signs)	<u>\$1,117.31</u>
Flashing (LED) Sign:R2-1 (24 inch by 30 inch Speed Limit)	<u>\$1,117.31</u>
Flashing (LED) Sign:R3-1 (36 inch Stop Ahead)	<u>\$1,117.31</u>
Flashing (LED) Sign:R4-1 (36 Inch blank warning sign)	<u>\$1,117.31</u>

Please include FOB Destination shipping in your bid prices!

K&K Systems

Systems

QUOTATION

687 Palmetto Road
 Tupelo, MS 38801
www.k-systems.com

email: ali@k-systems.com
 Phone: 662-566-2025
 Fax: 662-566-7123 TollFree: 888-414-3003

Quotation #: Q180214AB-1-ME-STATEOFMAINE
 Quotation Date: 2/14/2018
 Customer Type: Retail

Customer Contact: STEVE HUNNEWELL
 Quote Valid: 45 days
 Prepared by: **Ali Bingham**

Bill To:	Ship To:
Name: Steve Hunnewell	(Update if different than Bill To address)
Company Name: Maine Department of Transportation	Name: Steve Hunnewell
Street Address: 16 State House Station Rd.	Company Name: Maine Department of Transportation
Address 2:	Street Address: MaineDOT Sign Shop
City, ST ZIP Code Augusta, ME 04333-0016	Address 2: 66 Industrial Drive
Tel: 207-592-4801	City, ST ZIP Code Augusta, ME 04333-0016
Cell:	Tel: 207-592-4801
Fax:	Cell:
email:	Fax:
	email:

Product	Model #	Description	Base Price
	R1-1-3636-HI-8-DC20	Stop Sign - 36", High Intensity, 8 LEDs, DC20 Solar pack with mounting bracket, SPLasher (controller) and 18a battery. Octagon shaped.	\$1,117.31

Packaging	Options and Accessories - PER UNIT
Pack On Pallet	

QTY per Unit	Item #	Description	Price Each	Price per Unit
1	SA-DG	Use Diamond Grade sheeting instead of High Intensity sheeting.	INCLUDED	INCLUDED
1	SA-AG	Anti-graffiti coating	INCLUDED	INCLUDED

Special Notes

ALL WIRE USED SHALL CONFORM TO MILITARY SPECS/DELIVERY SHALL BE WITHIN 4 WEEKS OF AWARD

Terms of Purchase	Per System Total:	
FOB: Tupelo, MS 38801	Total QTY of Systems: 1	\$1,117.31
Delivery (weeks): 4-6 Weeks	Total Shipping Costs:	INCLUDED
Warranty: 1 year limited warranty, Factory Depot	Taxes: 7.00%	
	GRAND TOTAL:	\$1,117.31

Sales Person Signature:

Sales Manager Signature: Timothy Keith

Work Order#

Client PO#

Please note: The above specifications and quotation does not include shipping, permits, or taxes unless otherwise stated. The freight charge is an approximate estimate for your reference; the actual charge may vary. There will be an additional 3% charge on all credit card orders unless otherwise stated. *Lead-time committed is based on the date Purchase Order is received by K&K Systems and deposit made and/or credit approved. Lead time is not based on the date quoted.

K&K Systems

Systems

QUOTATION

687 Palmetto Road

Tupelo, MS 38801

www.k-systems.comemail: ali@k-systems.com

Phone: 662-566-2025

Fax: 662-566-7123 TollFree: 888-414-3003

Quotation #: **Q180214AB-2-ME-STATEOFMAINE**
 Quotation Date: **2/14/2018**
 Customer Type: **Retail**

Customer Contact: **STEVE HUNNEWELL**
 Quote Valid: **45 days**
 Prepared by: **Ali Bingham**

<u>Bill To:</u>	<u>Ship To:</u> (Update if different than Bill To address)
Name: Steve Hunnewell	Name: Steve Hunnewell
Company Name: Maine Department of Transportation	Company Name: Maine Department of Transportation
Street Address: 16 State House Station Rd.	Street Address: MaineDOT Sign Shop
Address 2:	Address 2: 66 Industrial Drive
City, ST ZIP Code Augusta, ME 04333-0016	City, ST ZIP Code Augusta, ME 04333-0016
Tel: 207-592-4801	Tel: 207-592-4801
Cell:	Cell:
Fax:	Fax:
email:	email:

Product

<u>Model #</u>	<u>Description</u>	<u>Base Price</u>
R2-1-2430-HI-8-DC20	Speed Limit Sign - 24"x30", High Intensity, 8 LEDs, DC20 Solar pack with mounting bracket, SPLasher (controller) and 18a battery, Horizontal Rectangle	\$1,117.31

Packaging Pack On Pallet ---**Options and Accessories - PER UNIT**

<u>QTY per Unit</u>	<u>Item #</u>	<u>Description</u>	<u>Price Each</u>	<u>Price per Unit</u>
1	SA-DG	Use Diamond Grade sheeting instead of High Intensity sheeting.	INCLUDED	INCLUDED
1	SA-AG	Anti-graffiti coating	INCLUDED	INCLUDED

Special Notes**ALL WIRE USED SHALL CONFORM TO MILITARY SPECS/DELIVERY SHALL BE WITHIN 4 WEEKS OF AWARD****Terms of Purchase**

FOB: Tupelo, MS 38801
Delivery (weeks): 4-6 Weeks
Warranty: 1 year limited warranty, Factory Depot

Per System Total: **\$1,117.31**
 Total QTY of Systems: **1** **\$1,117.31**
 Total Shipping Costs: **INCLUDED**
 Taxes: **7.00%**
GRAND TOTAL: \$1,117.31

Sales Person Signature:**Work Order#****Sales Manager Signature:** Timothy Keith**Client PO#**

Please note: The above specifications and quotation does not include shipping, permits, or taxes unless otherwise stated. The freight charge is an approximate estimate for your reference; the actual charge may vary. There will be an additional 3% charge on all credit card orders unless otherwise stated *Lead-time committed is based on the date Purchase Order is received by K&K Systems and deposit made and/or credit approved. Lead time is not based on the date quoted.

K&K Systems

Systems

QUOTATION

687 Palmetto Road
Tupelo, MS 38801
www.k-ksystems.com

email: ali@k-ksystems.com
Phone: 662-566-2025
Fax: 662-566-7123 TollFree: 888-414-3003

Quotation #: **Q180214AB-3-ME-STATEOFMAINE**
Quotation Date: **2/14/2018**
Customer Type: **Retail**

Customer Contact: **STEVE HUNNEWELL**
Quote Valid: **45 days**
Prepared by: **Ali Bingham**

<u>Bill To:</u>	<u>Ship To:</u> (Update if different than Bill To address)
Name: Steve Hunnewell	Name: Steve Hunnewell
Company Name: Maine Department of Transportation	Company Name: Maine Department of Transportation
Street Address: 16 State House Station Rd.	Street Address: MaineDOT Sign Shop
Address 2:	Address 2: 66 Industrial Drive
City, ST ZIP Code Augusta, ME 04333-0016	City, ST ZIP Code Augusta, ME 04333-0016
Tel: 207-592-4801	Tel: 207-592-4801
Cell:	Cell:
Fax:	Fax:
email:	email:

Product

<u>Model #</u>	<u>Description</u>	<u>Base Price</u>
Wxxxx-3636-HI-8-DC20	Generic Square Sign (MUTCD # needed) - 36", High Intensity, 8 LEDs, DC20 Solar pack with mounting bracket, SPLasher (controller) and 18a battery. Square shaped.	\$1,117.31

Packaging Pack On Pallet ---

Options and Accessories - PER UNIT

<u>QTY per Unit</u>	<u>Item #</u>	<u>Description</u>	<u>Price Each</u>	<u>Price per Unit</u>
1	SA-DG	Use Diamond Grade sheeting instead of High Intensity sheeting.	INCLUDED	INCLUDED
1	SA-AG	Anti-graffiti coating	INCLUDED	INCLUDED

Special Notes

SIGN TO BE R3-1 (STOP AHEAD)/ALL WIRE USED SHALL CONFORM TO MILITARY SPECS/ DELIVERY SHALL BE WITHIN 4 WEEKS OF AWARD

Terms of Purchase

FOB: Tupelo, MS 38801
Delivery (weeks): 4-6 Weeks
Warranty: 1 year limited warranty, Factory Depot

Per System Total: **\$1,117.31**
Total QTY of Systems: 1 **\$1,117.31**
Total Shipping Costs: **INCLUDED**
Taxes: 7.00%
GRAND TOTAL: **\$1,117.31**

Sales Person Signature:

Work Order#

Sales Manager Signature: Timothy Keith

Client PO#

Please note: The above specifications and quotation does not include shipping, permits, or taxes unless otherwise stated. The freight charge is an approximate estimate for your reference; the actual charge may vary. There will be an additional 3% charge on all credit card orders unless otherwise stated. *Lead-time committed is based on the date Purchase Order is received by K&K Systems and deposit made and/or credit approved. Lead time is not based on the date quoted.

K&K Systems

Systems

QUOTATION

687 Palmetto Road
 Tupelo, MS 38801
www.k-ksystems.com

email: ali@k-ksystems.com
 Phone: 662-566-2025
 Fax: 662-566-7123 TollFree: 888-414-3003

Quotation #: **Q180214AB-4-ME-STATEOFMAINE** Customer Contact: **STEVE HUNNEWELL**
 Quotation Date: **2/14/2018** Quote Valid: **45 days**
 Customer Type: **Retail** Prepared by: **Ali Bingham**

<p><u>Bill To:</u> Name: Steve Hunnewell Company Name: Maine Department of Transportation Street Address: 16 State House Station Rd. Address 2: City, ST ZIP Code Augusta, ME 04333-0016 Tel: 207-592-4801 Cell: Fax: email:</p>	<p><u>Ship To:</u> (Update if different than Bill To address) Name: Steve Hunnewell Company Name: Maine Department of Transportation Street Address: MaineDOT Sign Shop Address 2: 66 Industrial Drive City, ST ZIP Code Augusta, ME 04333-0016 Tel: 207-592-4801 Cell: Fax: email:</p>
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Product

<u>Model #</u>	<u>Description</u>	<u>Base Price</u>
Wxxxx-3636-HI-8-DC20	Generic Square Sign (MUTCD # needed) - 36", High Intensity, 8 LEDs, DC20 Solar pack with mounting bracket, SPLasher (controller) and 18a battery. Square shaped.	\$1,117.31

Packaging Pack On Pallet --- ---

Options and Accessories - PER UNIT

<u>QTY per Unit</u>	<u>Item #</u>	<u>Description</u>	<u>Price Each</u>	<u>Price per Unit</u>
1	SA-DG	Use Diamond Grade sheeting instead of High Intensity sheeting.	INCLUDED	INCLUDED
1	SA-AG	Anti-graffiti coating	INCLUDED	INCLUDED

Special Notes
 SIGN TO BE R4-1 (36 IN BLANK WARNING SIGN)/ALL WIRE USED SHALL CONFORM TO MILITARY SPECS/DELIVERY SHALL BE WITHIN 4 WEEKS OF AWARD

Terms of Purchase

FOB: Tupelo, MS 38801
Delivery (weeks): 4-6 Weeks
Warranty: 1 year limited warranty, Factory Depot

Per System Total:	\$1,117.31
Total QTY of Systems: 1	\$1,117.31
Total Shipping Costs:	INCLUDED
Taxes: 7.00%	
GRAND TOTAL:	\$1,117.31

Sales Person Signature:

Sales Manager Signature: Timothy Keith

Work Order#

Client PO#

Please note: The above specifications and quotation does not include shipping, permits, or taxes unless otherwise stated. The freight charge is an approximate estimate for your reference; the actual charge may vary. There will be an additional 3% charge on all credit card orders unless otherwise stated *Lead-time committed is based on the date Purchase Order is received by K&K Systems and deposit made and/or credit approved. Lead time is not based on the date quoted.



February 14, 2018

K & K Systems, Inc. will meet all material specifications listed on RFQ # 17A1801310000000000409.

1. SIGN

- A. MEETS
- B. MEETS
- C. MEETS. HAS .080 FRONT WITH .236 BACK SKIN
- D. MEETS
- E. MEETS
- F. MEETS

2. LEDs

- A. MEETS. 1 WATT LED
- B. MEETS
- C. BOLTED TOGETHER WITH RUBBER SEAL
- D. MEETS
- E. MEETS
- F. IT IS INSERTED IN THE SIGN
- G. MEETS
- H. MEETS

3. SOLAR PANEL

- A. MEETS
- B. MEETS
- C. MEETS
- D. MEETS
- E. MEETS



4. CONTROL CIRCUIT

- A. MEETS
- B. MEETS
- C. MEETS
- D. MEETS
- E. MEETS
- F. CONFORMAL COATING AND IN A NEMA 3R CABINET
- G. MEETS
- H. PLACED IN A NEMA 3R CABINET

5. BATTERY

- A. YES AGM LEAD ACID
- B. MEETS
- C. MEETS
- D. MEETS

WARRANTY: MEETS. K & K SYSTEMS, INC. IS INCLUDING A 3 YEAR UNCONDITIONAL WARRANTY

If there are any questions or any assistance is needed please contact Alice Bingham at 888-414-3003 or 662-566-2025 and ali@k-systems.com

Troy G. Keith, Pres.

**TROY G. KEITH, PRESIDENT
K & K SYSTEMS, INC.
687 PALMETTO RD.
TUPELO, MS 38801
P: 888-414-3003
F: 662-566-7123**

MUTCD Sign Alert Systems

Solar

- Laminate: Glass /EVA / TPT (tedlar/pet/tedlar) or TP E
- Front Side: High-transmission 3.2mm tempered glass
- Back Side: TPT /TPE
- Frame: Clear anodized aluminum frame
- Output: Junction box
- Watts: 10W – 40W

LEDs

- Type: Round
- Size: 20mm
- DC Voltage (V): 12
- DC Voltage (A): .30
- Lumen, RED, AMBER or WHITE (per 2009 MUTCD Section 2A.07)

SPLasher

- Built-in solar controller/battery charger/2 channel flasher 50/50
- Advanced solar charger with Maximum Power-Point Tracking (MPPT)
- Multi-stage battery charger to maximize battery life
- Wide solar panel input voltage – up to 32VDC
- LED flasher outputs (x2)
- Intelligent auto-dimming for maximum battery run-time
- Operating temperature: -40°C to +85°C

Battery

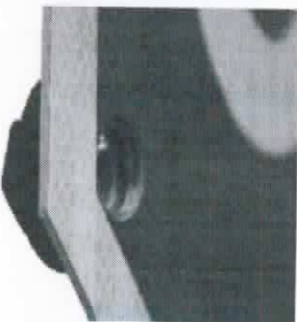
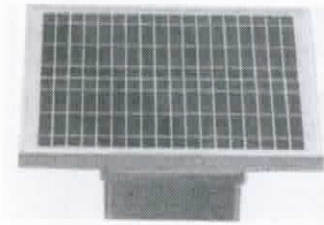
- SLA Type: AGM
- Voltage: 12VDC
- 20 A.H. Rate: 10.0A or 18.0A

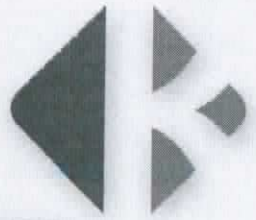
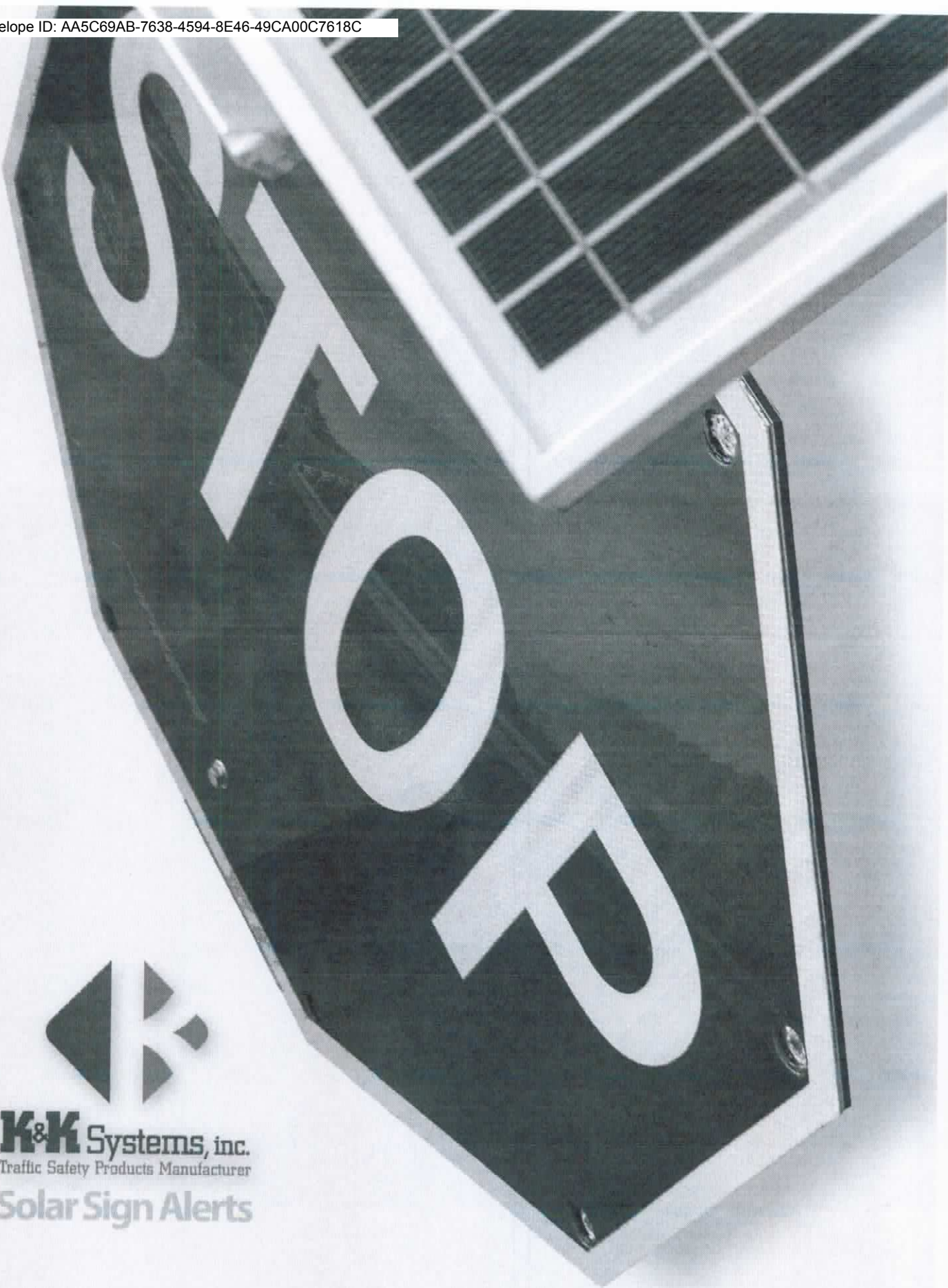
Composite

- Aluminum on both sides coated with polyester paint (.30 mm each)
- High Density Polyethylene (HDPE) core (5.4mm)
- Heavier aluminum to prevent surface dings and resists scratching and denting better than any other substrate

MUTCD Signs

- .080 Aluminum sheeting
- Reflective surface sheeting grade per state specifications





K&K Systems, inc.
Traffic Safety Products Manufacturer

Solar Sign Alerts



Solar Sign Alert Systems

Solar-Powered LED Inserts for Highway Signs

Brighter signs mean safer roads.

K&K Systems' Solar Sign Alert Systems are powered by a solar panel and designed to enhance the visibility of highway signs in any weather conditions to increase road safety. With Sign Alert's ultra-bright LEDs, drivers are cautioned in advanced of dangerous intersections or curves, hazardous road conditions, or entering work zones or school zones and much more. K&K's smart controller allows our sign alert systems to preserve energy and battery life with its auto-dimming feature while maintaining brightness. K&K Sign Alert Systems paired with K&K SMART Add-Ons can be activated using our moisture sensor, radar sensor, high water sensor, push button, key fob remote, or by using any one of our timing systems such as the CrossTalk. Any sign can be a Sign Alert!

Download our Sign Alert app for Apple or Android to build your own Sign Alert and get an instant quote.



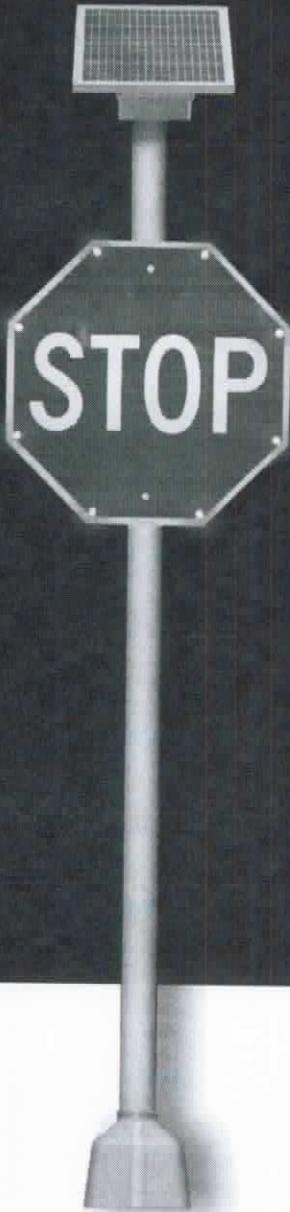
apple



android

K&K Systems, Inc. has been serving the traffic industry since 1997. Since that time we have become a leader in the traffic safety industry. K&K Systems offers a complete line of traffic safety products that include solar beacons, variable message boards, arrow boards, radar speed monitors, solar school zone flashers, solar 24-hour stop beacons, solar 24-hour warning flashers, and many other quality products that serve our industry today.

Should K&K not have a system that meets your needs, we will custom design a system to meet your specifications.



Regulatory Signs

Solar Stop Sign Alert, Solar Yield Sign Alert, Solar Wrong Way Sign Alert, and many more! K&K Systems can make any sign a Sign Alert Sign. If you don't see a sign you need, contact our sales department for a product quote.

24" x 24" R1-2 30" x 30" R1-2 36" x 36" R1-2	18" x 18" R1-1 24" x 24" R1-1 30" x 30" R1-1	18" x 18" R5-1 24" x 24" R5-1 30" x 30" R5-1	60" x 30" R11-3 *Specify miles	60" x 30" R11-4	60" x 30" R11-18 *Specify miles	48" x 30" R11-2B	48" x 30" R11-2	30" x 30" R3-7L	30" x 30" R3-7R	18" x 24" R12-1 24" x 30" R12-1	24" x 30" R6-7	24" x 30" R6-6	24" x 30" R2-5C						
12" x 12" R8-3S 30" x 30" R8-3S	24" x 24" R3-2S 30" x 30" R3-2S	24" x 24" R3-1S 30" x 30" R3-1S	30" x 18" R5-9 36" x 24" R5-9	30" x 36" R3-5A	30" x 36" R3-5R	30" x 36" R3-5L	24" x 36" R3-9B	24" x 36" R12-5	24" x 36" R10-6	18" x 24" R10-11 24" x 30" R10-11	18" x 24" R10-12 24" x 30" R10-12	12" x 18" R2-1 18" x 24" R2-1	30" x 30" R3-8	24" x 30" R4-7S	24" x 30" R4-8S	24" x 30" R2-5A	24" x 30" R10-6A		
24" x 24" R3-4S 30" x 30" R3-4S	24" x 24" R5-2S 30" x 30" R5-2S	24" x 24" R3-1R 30" x 30" R3-1R	18" x 6" R1-4	24" x 18" R10-19 36" x 30" R10-19	24" x 18" R14-2	24" x 18" R5-2P	24" x 18" R3-2P	24" x 18" R4-7P	24" x 18" R3-1P	24" x 18" R3-4P	36" x 12" R6-1L 30" x 12" R6-1R	24" x 30" R2-5E	24" x 30" R10-7	24" x 30" R4-1					
24" x 24" R5-5B 36" x 36" R5-5B	24" x 24" R5-1A	24" x 24" R11-5	24" x 24" R5-2A	24" x 24" R5-3	18" x 24" R-9A	18" x 24" R3-1A	18" x 24" R3-2A	18" x 24" R-63	18" x 24" R5-804	18" x 24" R5-805	18" x 24" R14-3	18" x 24" R-95	18" x 24" R4-7A	18" x 24" R4-8A	18" x 24" R6-2R	18" x 24" R6-2L	24" x 24" R2-2 30" x 30" R2-2	18" x 24" R15-2	18" x 24" R3-4A



Warning Signs

Solar Warning Sign Alert Systems are perfect for enhancing any warning sign. Our advanced Warning Sign Alert Systems are equipped with high-intensity, optimized LED inserts to enhance the signs visibility and create advanced warning to drivers. In addition, our warning signs can be activated using any of the available add-on devices located on the back of this brochure.

 24" W3-66 30" W3-68 36" W3-66	 24" W3-1A 30" W3-1A 36" W3-1A	 24" W18-2 30" W18-2 36" W18-2	 24" W15-6 30" W15-6 36" W15-6	 24" W2-2A 30" W2-2A 36" W2-2A	 24" W8-7 30" W8-7 36" W8-7	 24" W8-2 30" W8-2 36" W8-2	 24" W8-1A 30" W8-1A 36" W8-1A	 24" W8-4 30" W8-4 36" W8-4	 24" W8-6 30" W8-6 36" W8-6	 24" W16-4 30" W16-4 36" W16-4	 24" W8-1 30" W8-1 36" W8-1	 24" W18-18 30" W18-18 36" W18-18	 24" W5-1 30" W5-1 36" W5-1	
 24" W14-4 30" W14-4 36" W14-4	 24" W14-2 30" W14-2 36" W14-2	 24" W5-3 30" W5-3 36" W5-3	 24" W9-2 30" W9-2 36" W9-2	 24" W9-2R 30" W9-2R 36" W9-2R	 24" W14-1 30" W14-1 36" W14-1	 24" W8-11 30" W8-11 36" W8-11	 24" W8-5A 30" W8-5A 36" W8-5A	 24" W-64 30" W-64 36" W-64	 24" W16-5 30" W16-5 36" W16-5	 24" W-62 30" W-62 36" W-62	 24" W16-7 30" W16-7 36" W16-7	 24" W18-1 30" W18-1 36" W18-1	 24" W16-3 30" W16-3 36" W16-3	
 24" W9-1 30" W9-1 36" W9-1	 24" W9-1L 30" W9-1L 36" W9-1L	 24" W5-5 30" W5-5 36" W5-5	 24" W8-9B 30" W8-9B 36" W8-9B	 24" W8-11 30" W8-11 36" W8-11	 24" W8-11A 30" W8-11A 36" W8-11A	 24" W8-8 30" W8-8 36" W8-8	 24" W8-9 30" W8-9 36" W8-9	 24" W-34 30" W-34 36" W-34	 36" x 48" x 48" W14-3	 24" W17-1A 30" W17-1A 36" W17-1A	 24" W18-5 30" W18-5 36" W18-5	 24" W3-3L 30" W3-3L 36" W3-3L	 24" W2-3R 30" W2-3R 36" W2-3R	
 24" W1-3R 30" W1-3R 36" W1-3R	 24" W1-3L 30" W1-3L 36" W1-3L	 24" W1-2R 30" W1-2R 36" W1-2R	 24" W1-2L 30" W1-2L 36" W1-2L	 24" W8-15 30" W8-15 36" W8-15	 24" W4-1 30" W4-1 36" W4-1	 24" W4-1 30" W4-1 36" W4-1	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4	 24" W2-4 30" W2-4 36" W2-4
 24" W1-4R 30" W1-4R 36" W1-4R	 24" W2-1 30" W2-1 36" W2-1	 36" x 18" W1-6 48" x 24" W1-6	 36" x 18" W1-7 48" x 24" W1-7	 18" x 18" W11-15	 24" W12-1 30" W12-1 36" W12-1	 24" W11-2A 30" W11-2A 36" W11-2A	 24" W3-9 30" W3-9 36" W3-9	 24" W3-15 30" W3-15 36" W3-15	 24" W3-25 30" W3-25 36" W3-25	 24" W1-15 30" W1-15 36" W1-15	 24" W1-35 30" W1-35 36" W1-35	 24" W1-35 30" W1-35 36" W1-35	 24" W1-35 30" W1-35 36" W1-35	 24" W1-35 30" W1-35 36" W1-35
 24" W11-75 30" W11-75 36" W11-75	 24" W11-85 30" W11-85 36" W11-85	 24" W11-105 30" W11-105 36" W11-105	 24" W11-115 30" W11-115 36" W11-115	 24" W11-14 30" W11-14 36" W11-14	 24" W11-55 30" W11-55 36" W11-55	 24" W11-65 30" W11-65 36" W11-65	 24" W11-15 30" W11-15 36" W11-15	 24" W8-55 30" W8-55 36" W8-55	 24" W7-15 30" W7-15 36" W7-15	 24" W11-35 30" W11-35 36" W11-35	 18" x 18" W13-1R18 12" x 16" OM-3C 12" x 16" G-10SR 12" x 16" G-10SL 10" x 10" G-10SR 10" x 10" G-10SL 6" x 24" G-10SR 6" x 24" G-10SL	 18" x 12" W11-15P 24" x 18" W11-15P	 18" x 12" W11-2P 24" x 18" W11-2P	 6" x 24" G-10SR 6" x 24" G-10SL

*Replace R with L for Left Arrow

Specify height
18" x 18" W13-1R18
12" x 16" OM-3C
12" x 16" G-10SR
12" x 16" G-10SL
10" x 10" G-10SR
10" x 10" G-10SL
6" x 24" G-10SR
6" x 24" G-10SL

School Signs

K&K Systems' Solar School Sign Alerts feature high-intensity LEDs that can be programmed to activate during specific times of the day to reflect when students are present using one of three methods:

- **7-Day Timer**
- **CrossLink** which allows users to schedule times wirelessly via computer for a single location.
- **Web-Based** which allows users to schedule or activate multiple sign alerts at multiple locations.

Our timer-activated systems are easy to use no matter the system you choose. See the back page for more information.



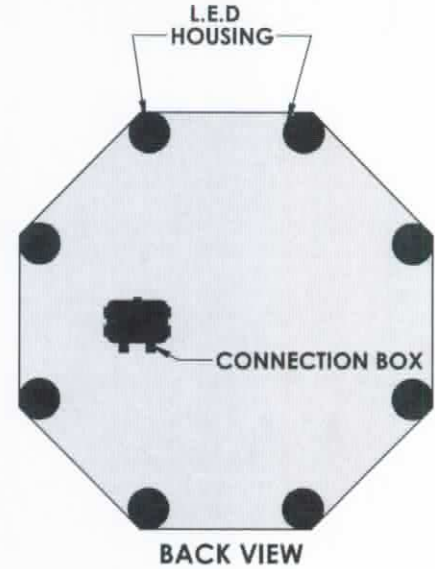
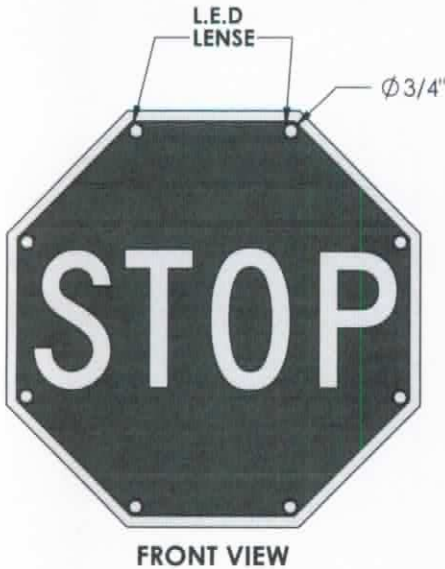
 24"x 48" 55-1	 30"x 30" S1-1 36"x 36" S1-1	 24"x 24" W-29 30"x 30" W-29	 30"x 30" 53-1	 30"x 30" 53-1
 24"x 8" 54-3	 24"x 30" 52-8	 24"x 30" 55-2	 18" x 18" S2-23 WHEN CHILDREN ARE PRESENT	 30"x 30" 53-15
 30" W21-4 36" W21-4 48" W21-4	 30" W20-10 36" W20-10 48" W20-10	 30" W26-7A 36" W26-7A 48" W26-7A	 30" W20-2 36" W20-2 48" W20-2	 30" W20-1 36" W20-1 48" W20-1
 30" W8-12 36" W8-12 48" W8-12	 30" W3-3 36" W3-3 48" W3-3	 30" W21-1B 36" W21-1B 48" W21-1B	 30" W-65 36" W-65 48" W-65	 30" W23-1 36" W23-1 48" W23-1
 30" W20-75 36" W20-75 48" W20-75	 30" W21-15 36" W21-15 48" W21-15	 24" x 18" M4-2A	 36" x 18" G20-2B	 60" x 54" G30-2
				 48" x 18" M4-10R <i>Replace it with R for Left Arrow</i>

Construction Signs

K&K Systems' Solar Alerts Construction Warning Signs are designed for areas that are under long-term or short-term construction. They alert vehicular traffic to use extreme caution when approaching the area due to working personnel and equipment, changing road surfaces, as well as, lane or route reconfigurations. Our high-intensity signage is optimized with LED inserts that enhance the visibility of the sign to provide an advanced systems that can be activated using any of the options on the back of this brochure.



R1-1 "PER STATE DOT REGULATIONS"



OFFICE: (662)-566-2025
 WWW.k-ksystems.com

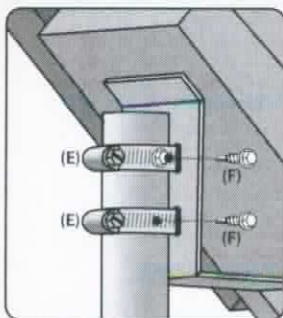
TITLE:
**R1-1
 RED L.E.D STOP SIGN**

SIZE	DWG. NO.	REV
A		
SCALE: 1:8		SHEET 1 OF 1

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF "INSERT COMPANY NAME HERE". ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF "INSERT COMPANY NAME HERE" IS PROHIBITED.

MUTCD SIGN ALERT SYSTEMS

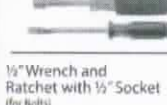
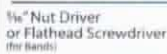
For Signs up to 36" wide



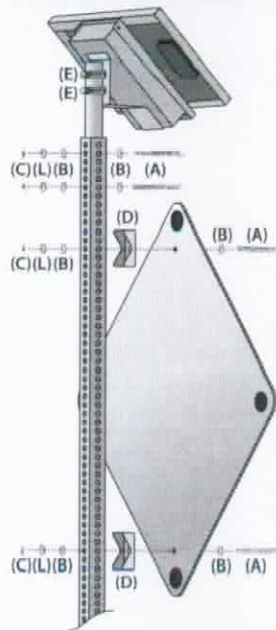
Solar Panel must point South.

Drive Self-tapping screws through side of Bands and into post to prevent unwanted rotation and slipping of Solar Panel.

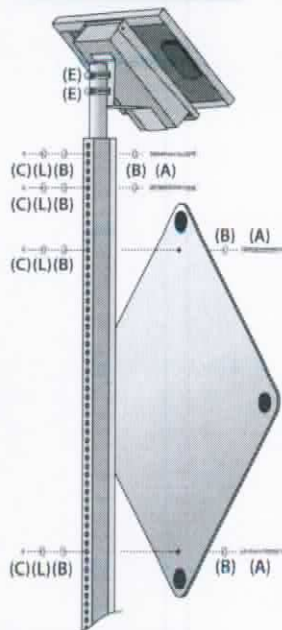
Tools Required



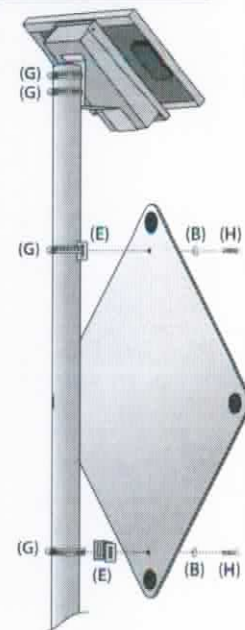
Square Post mount



U-Channel mount



Round Post mount



Square Post and U-Channel			Round Pole		
Item	Description	Quantity	Item	Description	Quantity
(A)	3/8" x 4-1/2" All-thread bolts	(4)	(G)	4-1/2" Bands	(4)
(B)	3/8" Washers	(8)	(F)	Self-tapping screws	(4)
(C)	3/8" Nuts	(4)	(H)	3/8" Washers	(2)
(D)	4" mounting brackets (Square post only)	(2)	(E)	3/8" x 1/2" All-thread bolts	(2)
(E)	2" bands	(2)	(I)	1-1/2" Pre-threaded Mounting brackets	(2)
(F)	Self-tapping screws	(2)			
(L)	3/8" Lock Washers				

K&K Systems, inc.
 Traffic Safety Products Manufacturer
 www.k-ksystems.com
 Office (888) 414-3003

MSAS 12/28/2016

SPLasher™

Solar Beacon Control

Battery Light

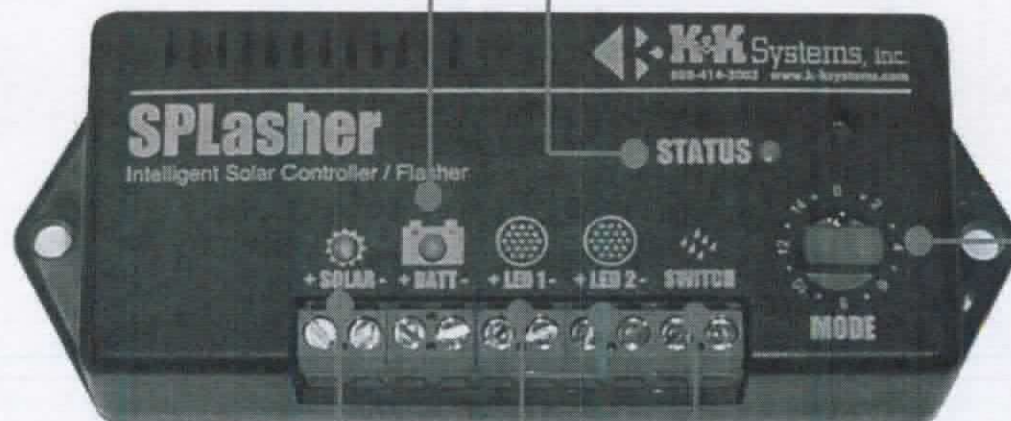
Battery status light for safe accurate battery connections:
Green = Good Connection
Red = Reverse Polarity

Status Light

The status light flashes in sequence with the first output, letting you know the flasher is active and at what rate it is flashing

Key Points

- All-In-One Solar Controller, Flasher, and Auto-Dimmer
- Maximum Power Point Tracking (MPPT)- Extract maximum power from the solar panel regardless of environment
- Multi-Stage Battery Charger to Maximize Battery Life.
- Works with all 24/7 LED beacons and most specialty lights
- Small compact design
- LED flasher outputs (x2)
- Microprocessor-based Smart Controller
- Duty Cycle adjustable between 10% and 50%
- OEM/Custom options available



Solar Light

Solar controller status indicator shows when battery is being charged:
Green = Full Charge
Yellow = Charging

Load

12V LED/ DC Flasher outputs/ switches (x2).
Maximum load 50W per output.

Switch

Switch/dry-contact:
Optional activation

- Moisture Sensor
- Push Button
- Water Level Sensor
- Motion Sensor
- Overspeed Sensor

MODE Switch

- 0: 50/50 Flash Mode -24/7
- 1: 50/50 Flash Mode -Switched -1 minute
- 2: 50/50 Flash Mode -Switched -3 minutes
- 3: 50/50 Flash Mode -Switched -(1 sec) Custom time
- 4: 90/10 Flash Mode -24/7
- 5: 90/10 Flash Mode -Switched -1 minute
- 6: 90/10 Flash Mode -Switched -3 minutes
- 7: 90/10 Flash Mode -Switched -(1 sec) Custom time
- 8: 50/50 -90/10 24/7 flasher (LED1=50/50, LED2= 90/10)
- 9: 50/50 -90/10 Switch or radio triggered 1 minute flasher (LED1=50/50, LED2 = 90/10)
- 10: 50/50 - 90/10 Switch or radio triggered 3 - minute flasher (LED1 = 50/50, LED2 = 90/10)
- 11: 50/50 - 90/10 Switch or radio triggered (1 sec) Custom time (LED 1 = 50/50, LED2 = 90/10)
- 12: ON-No Flash-No Dimming - Switched (1sec) Custom time
- 13: Wig/Wag; Switched (1sec) Custom time
- 14: Wig/Wag - Switch or radio triggered 3-minute flasher
- 15: Wig/Wag - Switch or radio triggered 1- minute flasher

Wireless Control

Optional wireless antenna module for remote control





K&K Systems, Inc.
687 Palmetto Road
Tupelo, MS 38801

Tel: 888-414-3003
Fax: 662-566-7123
Web: www.k-ksystems.com
Email: info@k-ksystems.com

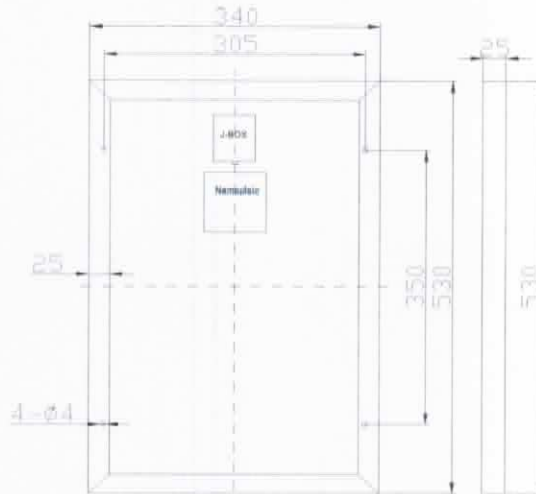
DS-A1-20 Panels Specifications



- Laminate:** Glass /EVA / TPT (tedlar/pet/tedlar) or TPE
- Front Side:** High-transmission 3.2mm tempered glass
- Back Side:** TPT /TPE
- Frame:** Clear anodized aluminum frame
- Output:** Junction box

Module Type	Pm(Wp)±5% (Watts)	Vmpp(V)	Impp(A)	Voc(V)	Isc(A)	Module size	NET
DS-A1-20	20	17.3	1.16	21.6	1.29	530*340*25 (mm) 20.9*13.4*1 (inch)	2.3 kg 5.07 lbs

- Operation Temperature Range:** - 40°C ~ 85°C
- NOCT:** 48°C±3C
- Temperature coefficients of Im:** + 0.1 %/C
- Temperature coefficients of Vm:** - 0.38 %/°C
- Maximum System Voltage:** DC715V
- STC:** 1000W/m², 25°C, AM1.5



All the data on this sheet is subject to change without notice.



Huaxiang Power Technology Co., Ltd.

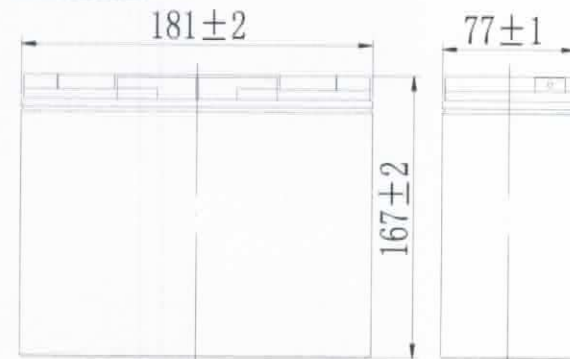
HX12-18(12V18Ah)

Specifications

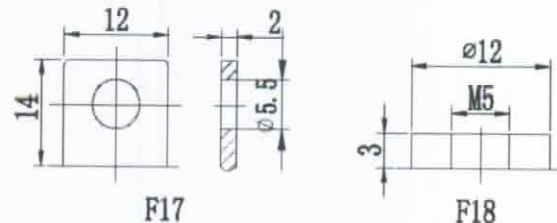
Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	18 Ah
	10HR(10.5V)	16.8Ah
	1HR(9.60V)	11.8Ah
Dimension	Length	181±2mm (7.13inch)
	Width	77±1mm (3.03inch)
	Height	167±2mm (6.57inch)
	Total Height	167±2mm (6.57inch)
Approx. Weight		5.25kg (11.57lbs)±5%
Terminal type		F17/F18
Internal resistance (Fully charged, 25°C)		Approx. 16mΩ
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C±3°C(77°F±5°F)
Operating temperature range	Discharge	-15°C~50°C(5°F~122°F)
	Charge	-10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		5.4A
Maximum discharge current		270A(5 sec.)
Designed floating life(20°C)		5 years



Dimensions



Terminal



Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	43.6	34.0	19.2	11.8	6.45	4.46	3.69	3.14	2.04	1.70	0.91
9.90V	42.3	33.2	18.8	11.6	6.41	4.44	3.67	3.12	2.03	1.70	0.91
10.2V	40.5	32.0	18.2	11.3	6.35	4.40	3.64	3.10	2.01	1.69	0.91
10.5V	38.8	30.9	17.8	11.1	6.26	4.37	3.62	3.08	2.00	1.68	0.90
10.8V	36.6	29.3	17.1	10.8	6.10	4.24	3.51	2.99	1.94	1.65	0.88

Constant Power Discharge Characteristics (Watt, 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	491	388	220	137	75.5	53.0	44.0	37.5	24.5	20.5	11.0
9.90V	477	379	215	134	75.0	52.7	43.7	37.3	24.3	20.4	10.9
10.2V	457	365	209	131	74.3	52.3	43.4	37.0	24.1	20.3	10.9
10.5V	437	352	204	128	73.2	52.0	43.1	36.8	24.0	20.2	10.8
10.8V	413	334	196	125	71.4	50.4	41.8	35.6	23.3	19.7	10.6

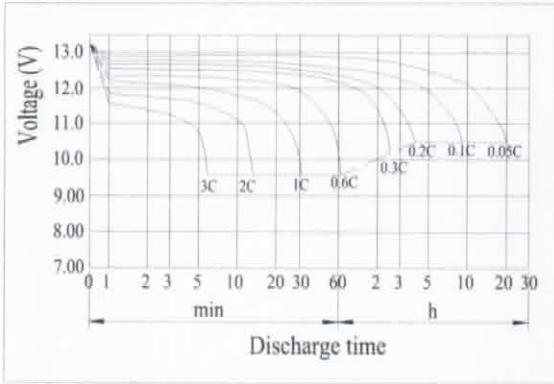
Note: The above characteristics data can be obtained within three charge/discharge cycles.

Construction

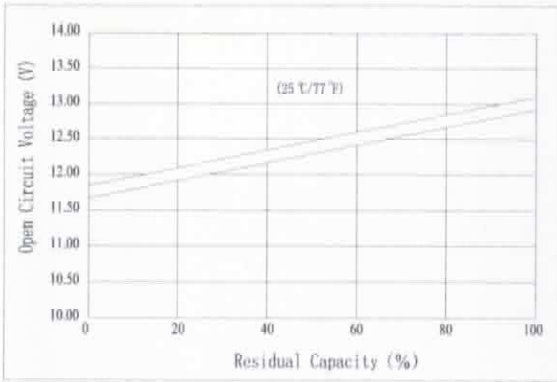
Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper



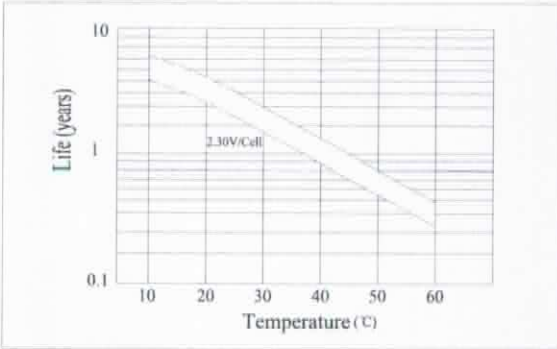
Discharge Characteristics(25°C)



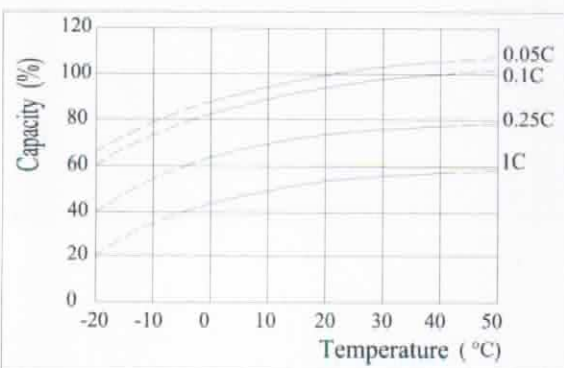
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



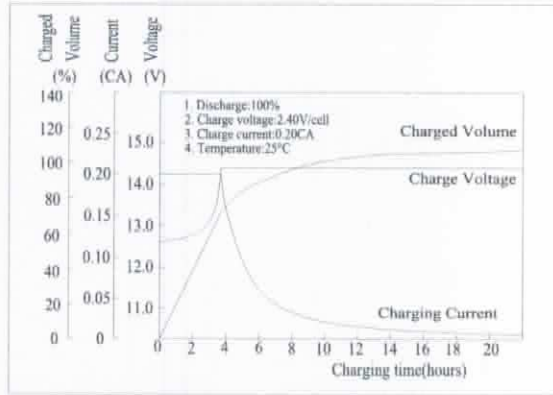
Floating Life on Temperature



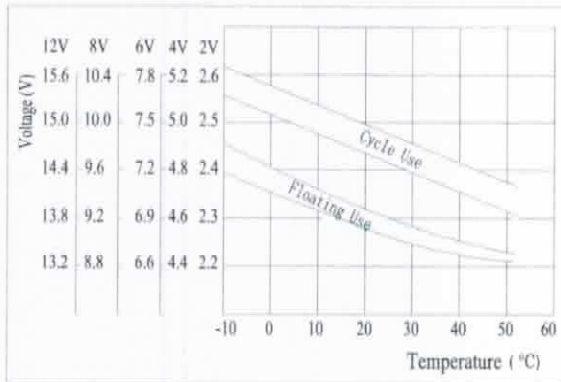
Effect of Temperature on Capacity



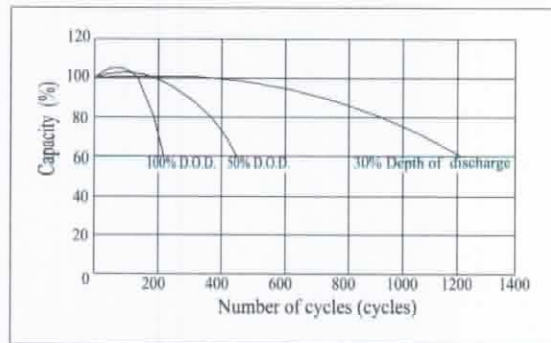
Charging Characteristics(25°C)



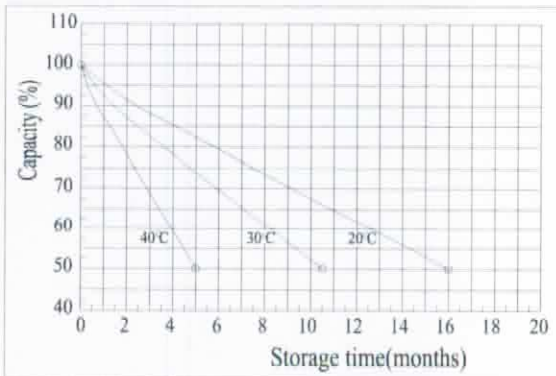
The Relationship for Charging Voltage and Temperature



Cycle Life on D.O.D(25°C)



Self-discharge Characteristics



RIDER B
TERMS AND CONDITIONS

- 1. DEFINITIONS:** The following definitions are applicable to these standard terms and conditions:
 - a. The term “Buyer” or “State” shall refer to the Government of the State of Maine or a person representing the Government of the State of Maine.
 - b. The term “Department” or “DAFS” shall refer to the State of Maine Department of Administrative and Financial Services.
 - c. The term “Bureau” or “BGS” shall refer to the State of Maine Bureau of General Services.
 - d. The term “Division” shall refer to the State of Maine Division of Purchases.
 - e. The term “Contractor”, “Vendor”, or “Provider” shall refer to the organization that is providing goods and/or services through the contract to which these standard terms and conditions have been attached and incorporated.
 - f. The term “Contract” or “Agreement” shall refer to the contract document to which these standard terms and conditions apply, taking the format of a Buyer Purchase Order (BPO) or Master Agreement (MA) or other contractual document that is mutually agreed upon between the State and the Contractor.

- 2. WARRANTY:** The Contractor warrants the following:
 - a. That all goods and services to be supplied by it under this Contract are fit and sufficient for the purpose intended, and
 - b. That all goods and services covered by this Contract will conform to the specifications, drawing samples, symbols or other description specified by the Division, and
 - c. That such articles are merchantable, good quality, and free from defects whether patent or latent in material and workmanship, and
 - d. That all workmanship, materials, and articles to be provided are of the best grade and quality, and
 - e. That it has good and clear title to all articles to be supplied by it and the same are free and clear from all liens, encumbrances and security interest.

Neither the final certificate of payment nor any provision herein, nor partial nor entire use of the articles provided shall constitute an acceptance of work not done in accordance with this agreement or relieve the Contractor liability in respect of any warranties or responsibility for faulty material or workmanship. The Contractor shall remedy any defects in the work and pay any damage to other work resulting therefrom, which shall appear within one year from the date of final acceptance of the work provided hereunder. The Division of Purchases shall give written notice of observed defects with reasonable promptness.

3. TAXES: Contractor agrees that, unless otherwise indicated in the order, the prices herein do not include federal, state, or local sales or use tax from which an exemption is available for purposes of this order. Contractor agrees to accept and use tax exemption certificates when supplied by the Division as applicable. In case it shall ever be determined that any tax included in the prices herein was not required to be paid by Contractor, Contractor agrees to notify the Division and to make prompt application for the refund thereof, to take all proper steps to procure the same and when received to pay the same to the Division.

4. PACKING AND SHIPMENT: Deliveries shall be made as specified without charge for boxing, carting, or storage, unless otherwise specified. Articles shall be suitably packed to secure lowest transportation cost and to conform to the requirements of common carriers and any

applicable specifications. Order numbers and symbols must be plainly marked on all invoices, packages, bills of lading, and shipping orders. Bill of lading should accompany each invoice. Count or weight shall be final and conclusive on shipments not accompanied by packing lists.

5. DELIVERY: Delivery should be strictly in accordance with delivery schedule. If Contractor's deliveries fail to meet such schedule, the Division, without limiting its other remedies, may direct expedited routing and the difference between the expedited routing and the order routing costs shall be paid by the Contractor. Articles fabricated beyond the Division's releases are at Contractor's risk. Contractor shall not make material commitments or production arrangements in excess of the amount or in advance of the time necessary to meet delivery schedule, and, unless otherwise specified herein, no deliveries shall be made in advance of the Division's delivery schedule. Neither party shall be liable for excess costs of deliveries or defaults due to the causes beyond its control and without its fault or negligence, provided, however, that when the Contractor has reason to believe that the deliveries will not be made as scheduled, written notice setting forth the cause of the anticipated delay will be given immediately to the Division. If the Contractor's delay or default is caused by the delay or default of a subcontractor, such delay or default shall be excusable only if it arose out of causes beyond the control of both Contractor and subcontractor and without fault of negligence or either of them and the articles or services to be furnished were not obtainable from other sources in sufficient time to permit Contractor to meet the required delivery schedule.

6. FORCE MAJEURE: The State may, at its discretion, excuse the performance of an obligation by a party under this Agreement in the event that performance of that obligation by that party is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party. The State may, at its discretion, extend the time period for performance of the obligation excused under this section by the period of the excused delay together with a reasonable period to reinstate compliance with the terms of this Agreement.

7. INSPECTION: All articles and work will be subject to final inspection and approval after delivery, notwithstanding prior payment, it being expressly agreed that payment will not constitute final acceptance. The Division of Purchases, at its option, may either reject any article or work not in conformity with the requirements and terms of this order, or re-work the same at Contractor's expense. The Division may reject the entire shipment where it consists of a quantity of similar articles and sample inspection discloses that ten (10%) percent of the articles inspected are defective, unless Contractor agrees to reimburse the Division for the cost of a complete inspection of the articles included in such shipment. Rejected material may be returned at Contractor's risk and expense at the full invoice price plus applicable incoming transportation charges, if any. No replacement of defective articles of work shall be made unless specified by the Division.

8. INVOICE: The original and duplicate invoices covering each and every shipment made against this order showing Contract number, Vendor number, and other essential particulars, must be forwarded promptly to the ordering agency concerned by the Vendor to whom the order is issued. Delays in receiving invoice and also errors and omissions on statements will be considered just cause for withholding settlement without losing discount privileges. All accounts are to be carried in the name of the agency or institution receiving the goods, and not in the name of the Division of Purchases.

9. ALTERATIONS: The Division reserves the right to increase or decrease all or any portion of the work and the articles required by the bidding documents or this agreement, or to eliminate all or any portion of such work or articles or to change delivery date hereon without invalidating this Agreement. All such alterations shall be in writing. If any such alterations are made, the contract amount or amounts shall be adjusted accordingly. In no event shall Contractor fail or refuse to continue the performance of the work in providing of articles under this Agreement because of the inability of the parties to agree on an adjustment or adjustments.

10. TERMINATION: The Division may terminate the whole or any part of this Agreement in any one of the following circumstances:

- a. The Contractor fails to make delivery of articles, or to perform services within the time or times specified herein, or
- b. If Contractor fails to deliver specified materials or services, or
- c. If Contractor fails to perform any of the provisions of this Agreement, or
- d. If Contractor so fails to make progress as to endanger the performance of this Agreement in accordance with its terms, or
- e. If Contractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors or if a receiver is appointed because of its insolvency, or
- f. Whenever for any reason the State shall determine that such termination is in the best interest of the State to do so.

In the event that the Division terminates this Agreement in whole or in part, pursuant to this paragraph with the exception of 8(f), the Division may procure (articles and services similar to those so terminated) upon such terms and in such manner as the Division deems appropriate, and Contractor shall be liable to the Division for any excess cost of such similar articles or services.

11. NON-APPROPRIATION: Notwithstanding any other provision of this Agreement, if the State does not receive sufficient funds to fund this Agreement and other obligations of the State, if funds are de-appropriated, or if the State does not receive legal authority to expend funds from the Maine State Legislature or Maine courts, then the State is not obligated to make payment under this Agreement.

12. COMPLIANCE WITH APPLICABLE LAWS: Contractor agrees that, in the performance hereof, it will comply with applicable laws, including, but not limited to statutes, rules, regulations or orders of the United States Government or of any state or political subdivision(s) thereof, and the same shall be deemed incorporated herein by reference. Awarding agency requirements and regulations pertaining to copyrights and rights in data. Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers and records of the Contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h), section 508 of the Clean Water Act, (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000). Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

13. INTERPRETATION: This Agreement shall be governed by the laws of the State of Maine as to interpretation and performance.

14. DISPUTES: The Division will decide any and all questions which may arise as to the quality and acceptability of articles provided and installation of such articles, and as to the manner of performance and rate of progress under this Contract. The Division will decide all questions, which may arise as to the interpretation of the terms of this Agreement and the fulfillment of this Agreement on the part of the Contractor.

15. ASSIGNMENT: None of the sums due or to become due nor any of the work to be performed under this order shall be assigned nor shall Contractor subcontract for completed or substantially completed articles called for by this order without the Division's prior written consent. No subcontract or transfer of agreement shall in any case release the Contractor of its obligations and liabilities under this Agreement.

16. STATE HELD HARMLESS: The Contractor agrees to indemnify, defend, and save harmless the State, its officers, agents, and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, material men, laborers and other persons, firm or corporation furnishing or supplying work, services, articles, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of this Agreement.

17. SOLICITATION: The Contractor warrants that it has not employed or written any company or person, other than a bona fide employee working solely for the Contractor to solicit or secure this Agreement, and it has not paid, or agreed to pay any company, or person, other than a bona fide employee working solely for the Contractor any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon, or resulting from the award for making this Agreement. For breach or violation of this warranty, the Division shall have the absolute right to annul this agreement or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee.

18. WAIVER: The failure of the Division to insist, in any one or more instances, upon the performance of any of the terms, covenants, or conditions of this order or to exercise any right hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant, or condition or the future exercise of such right, but the obligation of Contractor with respect to such future performance shall continue in full force and effect.

19. MATERIAL SAFETY: All manufacturers, importers, suppliers, or distributors of hazardous chemicals doing business in this State must provide a copy of the current Material Safety Data Sheet (MSDS) for any hazardous chemical to their direct purchasers of that chemical.

20. COMPETITION: By accepting this Contract, Contractor agrees that no collusion or other restraint of free competitive bidding, either directly or indirectly, has occurred in connection with this award by the Division of Purchases.

21. INTEGRATION: All terms of this Contract are to be interpreted in such a way as to be consistent at all times with this Standard Terms and Conditions document, and this document shall take precedence over any other terms, conditions, or provisions incorporated into the Contract.

Appendix A

**STATE OF MAINE
DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES
DIVISION OF PROCUREMENT SERVICES**

BID COVER PAGE and DEBARMENT FORM

Bidder's Organization Name: K & K SYSTEMS, INC.		
Chief Executive - Name/Title: TROY G. KEITH, PRESIDENT		
Tel: 888-414-3003	Fax: 662-566-7123	E-mail: info@k-systems.com
Headquarters Street Address: 687 PALMETTO RD.		
Headquarters City/State/Zip: TUPELO, MS 38801		
<i>(provide information requested below if different from above)</i>		
Lead Point of Contact for Bid - Name/Title: ALICE K. BINGHAM, ACCOUNT MANAGER		
Tel: 888-414-3003 OR 662-566-2025	Fax: 662-566-7123	E-mail: ali@k-systems.com
Street Address: 687 PALMETTO RD.		
City/State/Zip: TUPELO, MS 38801		

Are you a Maine Business as defined in this RFQ under RFQ Requirements, Section 6. Quotation Evaluation and Selection?

 Yes

 No

By signing below Bidder affirms:

- Their bid complies with all requirements of this RFQ; and
- This bid and the pricing structure contained herein will remain firm for a period of 180 days from the date and time of the bid opening; and
- That no personnel currently employed by the Department or any other State agency participated, either directly or indirectly, in any activities relating to the preparation of the Bidder's proposal; and
- That no attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a proposal; and
- The undersigned is authorized to enter into contractual obligations on behalf of the above-named organization.

Name: TROY G. KEITH	Title: PRESIDENT
Authorized Signature: <i>Troy G. Keith, Pres.</i>	Date: <i>2/14/18</i>

Debarment, Performance, and Non-Collusion Certification

By signing this document I certify to the best of my knowledge and belief that the aforementioned organization, its principals, and any subcontractors named in this proposal:

- a. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from bidding or working on contracts issued by any governmental agency.
- b. Have not within three years of submitting the proposal for this contract been convicted of or had a civil judgment rendered against them for:
 - i. fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government transaction or contract.
 - ii. violating Federal or State antitrust statutes or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - iii. are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
 - iv. have not within a three (3) year period preceding this proposal had one or more federal, state or local government transactions terminated for cause or default.
- c. Have not entered into a prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies, equipment, or services and this proposal is in all respects fair and without collusion or fraud. The above mentioned entities understand and agree that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.

- **Failure to provide this certification may result in the disqualification of the Bidder's proposal, at the discretion of the Department.**

To the best of my knowledge all information provided in the enclosed proposal, both programmatic and financial, is complete and accurate at the time of submission.

Name: TROY G. KEITH	Title: PRESIDENT
Authorized Signature: Troy G. Keith, Pres.	Date: 2/14/18

Appendix D

STATE OF MAINE
DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES
DIVISION OF PROCUREMENT SERVICES

Municipality Political Subdivision and School District
Participation Certification

RFQ # 17A1801310000000000409

Master Agreement for Flashing Speed & Stop Signs

The Division of Procurement Services is committed to providing purchasing opportunities for **municipalities, political subdivisions and school districts** in Maine by allowing them access, through our vendors, to our contract pricing. A bidder's willingness to extend contract pricing to these entities will be taken into consideration in making awards.

Will you accept orders from political subdivisions and school districts in Maine at the prices quoted?

Yes

Yes with conditions as follows:

No

Name of Company:

K & K SYSTEMS, INC.

Address:

687 PALMETTO RD. TUPELO, MS 38801

Signature: Troy G. Keith, Pres.

Date: 2/14/18

SUPPLIER PART NUMBER	ITEM DESCRIPTION	EXTENDED DESCRIPTION	UNIT OF MEASURE	LIST PRICE	DELIVERY DAYS
R1-1-3636-HI-8-DC20	SIGN, STOP LED FLASHING 36 INCH, 8, 1 WATT BULBS	INCLUDES FOB DESTINATION PRICING	EA	\$1,117.31	42
R2-1-2430-HI-8-DC20	SIGN, SPEED LIMIT LED FLASHING, 24 x 30, 8, 1 WATT BULBS	INCLUDES FOB DESTINATION PRICING	EA	\$1,117.31	42
R3-1-3636-HI-8-DC20	SIGN, STOP AHEAD, 36 INCH, 8, 1 WATT BULBS	INCLUDES FOB DESTINATION PRICING	EA	\$1,117.31	42
Wxxxx-3636-HI-8-DC20	SIGN, BLANK LED FLASHING 36 INCH, R4-1, 8, 1 WATT BULBS	INCLUDES FOB DESTINATION PRICING	EA	\$1,117.31	42