

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

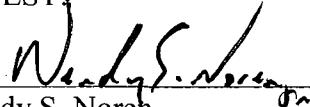
In the County Commission of said county, on the 2nd day of August 20 07


the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize the use of the Courthouse Grounds and Courtyard Square on September 27, 2007, from 7:30 p.m. to 8:30 p.m. for the Twilight Festival.

Done this 2nd day of August, 2007.

ATTEST:


Wendy S. Noreh
Clerk of the County Commission


Kenneth M. Pearson
Presiding Commissioner


Karen M. Miller
District I Commissioner


Skip Elkin
District II Commissioner

~~Ken Pearson~~
~~Ken Pearson~~, Presiding Commissioner
Karen M. Miller, District I Commissioner
Skip Elkin, District II Commissioner



Roger B. Wilson
County Government Center
301 East Walnut Room 245
Columbia, MO 65201-7732
573-886-4305 • FAX 573-886-4311

Boone County Commission

APPLICATION FOR ORGANIZATIONAL USE OF BOONE COUNTY FACILITIES

RECEIVED JUL 27 2007

The undersigned organization hereby applies for a permit to use the Boone County Courthouse Grounds and/or Government Center as follows:

Description of Use: Twilight Festival
Date(s) of Use: 9/27/2007
Time of Use: From: 7:30 a.m./p.m. thru 8:30 a.m./p.m.
Facility requested: Courthouse Grounds - Courtyard Square - Chambers - Chambers Atrium - Rm220 - Rm208 - Rm139

The undersigned organization agrees to abide by the following terms and conditions in the event this application is approved:

1. To notify the Columbia Police Department and Boone County Sheriff's Department of time and date of use and abide by all applicable laws, ordinances and county policies in using Courthouse grounds or designated rooms.
2. To remove all trash or other debris that may be deposited (by participants) on the courthouse grounds and/or in rooms by the organizational use.
3. To repair, replace, or pay for the repair or replacement of damaged property including shrubs, flowers or other landscape caused by participants in the organizational use of courthouse grounds and/or carpet and furnishings in rooms.
4. To conduct its use of courthouse grounds and/or rooms in such a manner as to not unreasonably interfere with normal courthouse and/or Boone County Government building functions.
5. To indemnify and hold the County of Boone, its officers, agents and employees, harmless from any and all claims, demands, damages, actions, causes of action or suits of any kind or nature including costs, litigation expenses, attorney fees, judgments, settlements on account of bodily injury or property damage incurred by anyone participating in or attending the organizational use on the courthouse grounds and/or use of rooms as specified in this application.

Name of Organization/Person: Central Columbia Association
Organization Representative/Title: Leslie Gale / Assistant Director
Address/Phone Number: 11 S. Tenth St., Columbia, MO 65201 / 573-442-6816
Date of Application: 7/24/07 573-442-6816

PERMIT FOR ORGANIZATIONAL USE OF BOONE COUNTY FACILITIES

The County of Boone hereby grants the above application for permit in accordance with the terms and conditions above written. The above permit is subject to termination for any reason by duly entered order of the Boone County Commission.

ATTEST:

BOONE COUNTY, MISSOURI

County Clerk

County Commissioner

DATE: _____

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
 County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

In the County Commission of said county, on the

2nd

day of

August

20

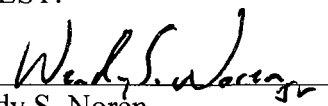
07


the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize the use of the Commission Chambers on August 18, 2007, from 9:00 a.m. to 5:00 p.m. for the State Conference for Missouri CURE.

Done this 2nd day of August, 2007.

ATTEST:


 Wendy S. Noren
 Clerk of the County Commission


 Kenneth M. Pearson
 Presiding Commissioner


 Karen M. Miller
 District I Commissioner


 Skip Elkin
 District II Commissioner

APPLICATION FOR ORGANIZATIONAL USE OF BOONE COUNTY FACILITIES

The undersigned organization hereby applies for a permit to use the Boone County Courthouse Grounds and/or Government Center as follows:

Description of Use: STATE CONFERENCE FOR MEMBERS OF ORG.

Date(s) of Use: AUGUST 18, 2007

Time of Use: From: 9:00 a.m./p.m. thru 5:00 a.m./p.m.

Facility requested: Courthouse Grounds - Courtyard Square - Chambers - Rm220 - Rm208 - Rm139
Centralia Clinic

The undersigned organization agrees to abide by the following terms and conditions in the event this application is approved:

1. To notify the Columbia Police Department and Boone County Sheriff's Department of time and date of use and abide by all applicable laws, ordinances and county policies in using Courthouse grounds.
2. To remove all trash or other debris that may be deposited (by participants) on the courthouse grounds and/or in rooms by the organizational use.
3. To repair, replace, or pay for the repair or replacement of damaged property including shrubs, flowers or other landscape caused by participants in the organizational use of courthouse grounds and/or carpet and furnishings in rooms.
4. To conduct its use of courthouse grounds and/or rooms in such a manner as to not unreasonably interfere with normal courthouse and/or Boone County Government building functions.
5. To indemnify and hold the County of Boone, its officers, agents and employees, harmless from any and all claims, demands, damages, actions, causes of action or suits of any kind or nature including costs, litigation expenses, attorney fees, judgments, settlements on account of bodily injury or property damage incurred by anyone participating in or attending the organizational use on the courthouse grounds and/or use of rooms as specified in this application.

Name of Organization/Person: MISSOURI CURE Phone # 816-650-5878

Organization Representative/Title: LSA HARRISON

Address/Phone Number: 721 S CENTRAL ST BUCKNER MO 64016

Date of Application: 7/24/07

PERMIT FOR ORGANIZATIONAL USE OF BOONE COUNTY FACILITIES

The County of Boone hereby grants the above application for permit in accordance with the terms and conditions above written. The above permit is subject to termination for any reason by duly entered order of the Boone County Commission.

ATTEST:

BOONE COUNTY, MISSOURI

County Clerk

County Commissioner

DATE: _____

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
 County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

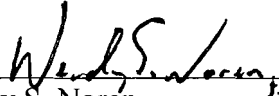
In the County Commission of said county, on the 2nd day of August 20 07


the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby ratify and confirm its acceptance of June 5, 2007 of the results of the election held by Unanimous Petition on April 23, 2007, as certified by the Circuit Court Clerk on May 9, 2007, authorizing a sales tax within the boundaries of the Cross Creek Transportation Development District.

Done this 2nd day of August, 2007.

ATTEST:


 Wendy S. Noren
 Clerk of the County Commission


 Kenneth M. Pearson
 Presiding Commissioner


 Karen M. Miller
 District I Commissioner


 Skip Elkin
 District II Commissioner

Now on this day the County Commission of the County of Boone does accept the judgment and order establishing the Cross Creek Transportation Development District.

Changed to:

Now on this day the County Commission of the County of Boone does hereby ratify and confirm its acceptance of June 5, 2007 of the results of the election held by Unanimous Petition on April 23, 2007, as certified by the Circuit Court Clerk on May 9, 2007, authorizing a sales tax within the boundaries of the Cross Creek Transportation Development District.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

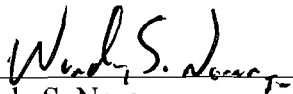
In the County Commission of said county, on the 2nd day of August 20 07

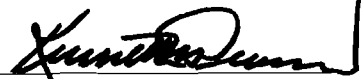
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize the agreement with Consolidated Public Water Supply District #1 for relocating of water meter at Howard Redden Road – Murphy Tract. It is further ordered the Presiding Commissioner is hereby authorized to sign said agreement.

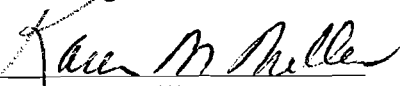
Done this 2nd day of August, 2007.

ATTEST:


Wendy S. Noren
Clerk of the County Commission



Kenneth M. Pearson
Presiding Commissioner



Karen M. Miller
District I Commissioner



Skip Elkin
District II Commissioner

**Consolidated Public Water Supply District # 1
Of Boone County, Missouri
1500 North 7TH Street
Columbia, MO 65201
Phone 573-449-8723 Fax 573-499-0578**

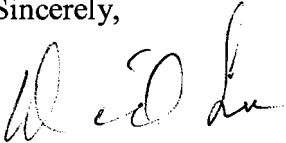
Date: 8/1/07

To: Bonne County Public Works

Re: Relocating of water meter at Howard Redden Road – Murphy Tract

The District is prepared to relocate the water meter for road work. Cost for this work is \$610.00. In order to expedite work please sign and return this estimate agreeing to pay District for these costs, allowing District to proceed with work.

Sincerely,



David Lee
Planning and Development

I authorize the Consolidated PWSD #1 to proceed with the above work and will pay above costs to District.

By: David M. Hill / Kenneth D. ...
Commissioner Signature

Date 8/2/07

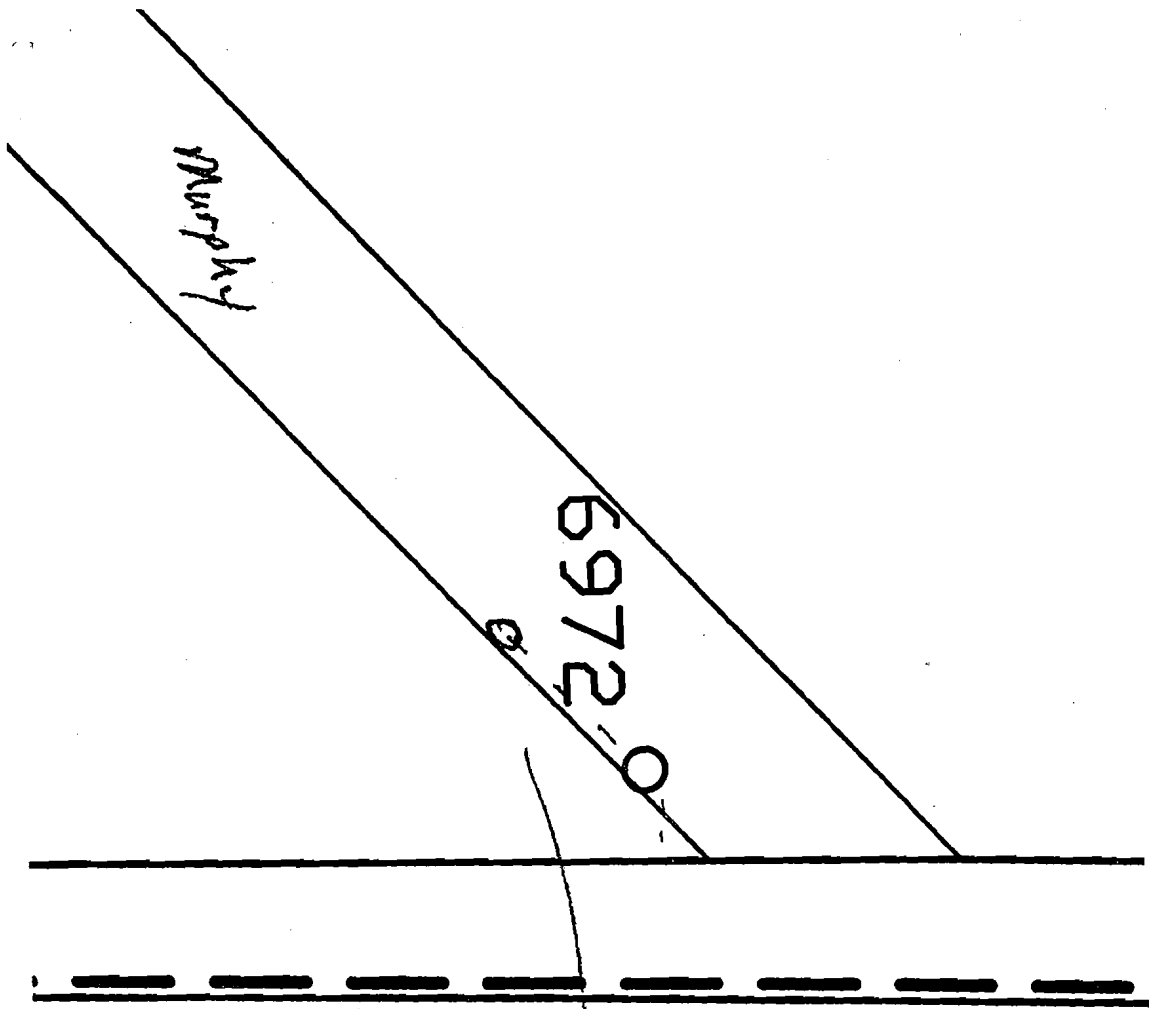
[Signature]
County Attorney

8/2/07
date

CERTIFICATION:

I certify that this contract is within the purpose of the appropriation to which it is to be charged and there is an unencumbered balance of such appropriation sufficient to pay the costs arising from this contract.

Jane E. Pitchford 8/2/07
Auditor by [Signature] Date
2640-71100



Relocate meter and lower
service line - fill ditch
in road area with 1" surface
rock

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

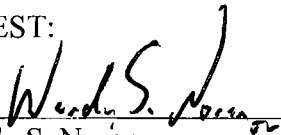
In the County Commission of said county, on the 2nd day of August 20 07

the following, among other proceedings, were had, viz:

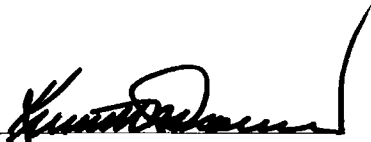
Now on this day the County Commission of the County of Boone does hereby authorize the agreement with Consolidated Public Water Supply District #1 for lowering of waterline for storm drain clearance between 1610 and 1630 Boris Drive. It is further ordered the Presiding Commissioner is hereby authorized to sign said agreement.

Done this 2nd day of August, 2007.

ATTEST:



Wendy S. Noren
Clerk of the County Commission



Kenneth M. Pearson
Presiding Commissioner



Karen M. Miller
District I Commissioner



Skip Elkin
District II Commissioner

**Consolidated Public Water Supply District # 1
Of Boone County, Missouri
1500 North 7TH Street
Columbia, MO 65201
Phone 573-449-8723 Fax 573-499-0578**

Date: 8/1/07

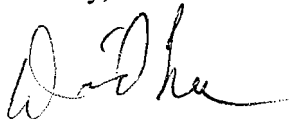
To: Bonne County Public Works

Re: Lowering of waterline for storm drain clearance between 1610 and 1630 Boris Drive

The District is prepared to lower the waterline for storm water drain work at the above location. Work includes cutting the 4" waterline and installing a 2" flush assembly and pulling two meter services from two water meters, under driveways and drain pipe area and reconnecting services to the 4" water line.

Cost for this work is \$2,208.93. In order to expedite work please sign and return this estimate agreeing to pay District for these costs, allowing District to proceed with work.

Sincerely,



David Lee
Planning and Development

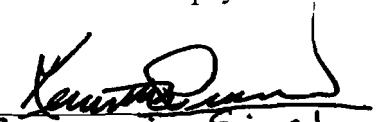
I authorize the Consolidated PWSD #1 to proceed with the above work and will pay above costs to District.

By: 

Date: 8/2/07

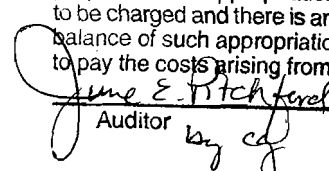

County Attorney

date

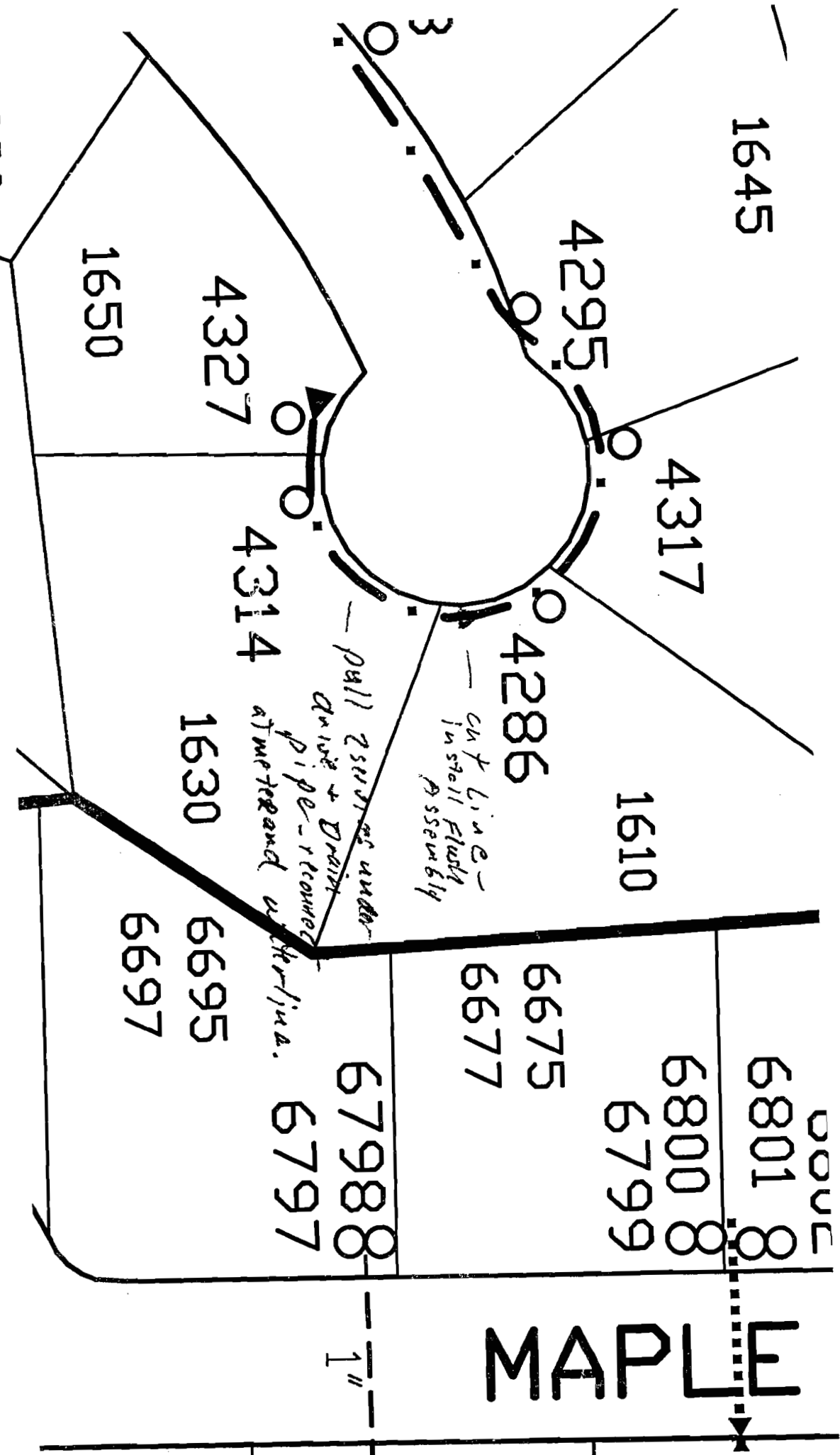

Commission Signature

CERTIFICATION:

I certify that this contract is within the purpose of the appropriation to which it is to be charged and there is an unencumbered balance of such appropriation sufficient to pay the costs arising from this contract.


Auditor by ef Date 8/2/07

2040-71100



1"

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

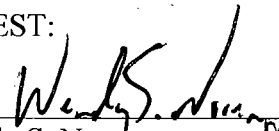
In the County Commission of said county, on the 2nd day of August 20 07


the following, among other proceedings, were had, viz:

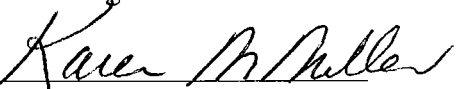
Now on this day the County Commission of the County of Boone does hereby award bid 53-26JUL07 – Trailer Mounted Variable Message Signs to ADDCO, Inc. It is further ordered the Presiding Commissioner is hereby authorized to sign said contract.

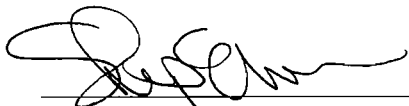
Done this 2nd day of August, 2007.

ATTEST:


Wendy S. Noren
Clerk of the County Commission


Kenneth M. Pearson
Presiding Commissioner


Karen M. Miller
District I Commissioner


Skip Elkin
District II Commissioner

**PURCHASE AGREEMENT FOR
TRAILER MOUNTED VARIABLE MESSAGE SIGNS**

THIS AGREEMENT dated the 2nd day of August 2007 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **ADDCO, Inc**, herein "Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for Trailer Mounted Variable Message Signs, bid number **53-26JUL07** including Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, the unexecuted Response Form, Standard Terms & Conditions, any applicable addenda, as well as the Contractor's bid response dated July 25, 2007 and executed by Blake Ralzar, on behalf the Contractor. All such documents shall constitute the contract documents which are attached hereto and incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, the terms, conditions, provisions and requirements contained in the bid specifications including Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, the unexecuted Response Form, Standard Terms & Conditions, and any applicable addenda shall prevail and control over the Contractor's bid response.
2. **Purchase** - The County agrees to purchase from the Contractor and the Contractor agrees to furnish, deliver and train the County with two (2) each of the Trailer Mounted Variable Message Signs @ \$11,477.00 each for a total contract price of \$22,954.00.
3. **Delivery** - Contractor agrees to deliver the equipment within 30-45 days after receipt of order.
4. **Billing and Payment** - All billing shall be invoiced to Boone County Public Work's Department and billings may only include the prices listed in the Contractor's bid response. No additional fees for delivery or extra services or taxes shall be included as additional charges in excess of the charges in the Contractor's bid response to the specifications. The County agrees to pay all invoices within thirty days of receipt; Contractor agrees to honor any cash or prompt payment discounts offered in its bid response if county makes payment as provided therein. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.
5. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.


6. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other bid or bid specification or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

7. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

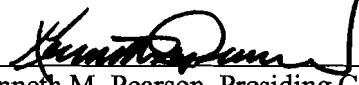
- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

ADDCO, INC.

by 
title Regional Manager

BOONE COUNTY, MISSOURI

by: Boone County Commission

Kenneth M. Pearson, Presiding Commissioner

APPROVED AS TO FORM:


County Counselor

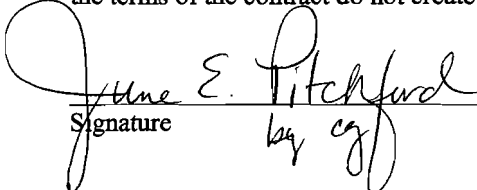
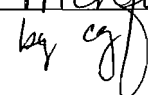
ATTEST:


Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 55.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of the contract do not create in a measurable county obligation at this time.)

2040/91300 – \$22,954.00


Signature by 

7/31/07
Date

Appropriation Account

4. Response Form

4.1. Company Name: ADDCo, Inc.
 4.2. Address: 240 Arlington Ave East
 4.3. City/Zip: St. Paul, MN 55117
 4.4. Phone Number: 651-558-3519
 4.5. Fax Number: 651-558-3600
 4.6. E-Mail Address: bpbalzart@adcco.com
 4.7. Federal Tax ID: 41-1609647

- 4.7.1. Corporation
 Partnership - Name _____
 Individual/Proprietorship - Individual Name _____
 Other (Specify) _____

4.8. PRICING		Unit Price	Qty	Extended Price
4.8.1.	Trailer Mounted Variable Message Signs Per Section 2	\$ 11,477	2	\$ 22,954
4.9.	Cash Discount	\$ —	net —	days
4.10.	GRAND TOTAL			\$ 22,954

4.11. **NOTE: INCLUDE ALL WARRANTY INFORMATION, PRODUCT LITERATURE, AND LOCATION OF NEAREST SERVICE LOCATION/REPAIR FACILITY AND PARTS DEPOT WITH THE BID RESPONSE**

4.12. Describe Any Deviations ADDCo will provide the MAG solar message sign that is in compliance with the performance and intent of this specification. Product variations are noted within the detailed specification.

4.13. The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with all requirements contained in the Request for Bid which have been read and understood, and all of which are made part of this order. By submission of this bid, the vendor certifies that they are in compliance with Section 34.353 and, if applicable, Section 34.359 ("Missouri Domestic Products Procurement Act") of the Revised Statutes of Missouri.

4.13.1. Authorized Representative (Sign By Hand):

Blake Balzart Date: 7-25-07

4.13.2. Print Name and Title of Authorized Representative

Blake Balzart

4.14. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri?

Yes No

4.15. Delivery ARO: 30-45 (ARO) days



July 25, 2007

Heather Turner
Boone County Public Works
Boone County Purchasing Department
601 E. Walnut, Room 209
Columbia, MO 65201

Dear Heather:

Thank you for your interest in the ADDSCO Mini Adjustable Graphic Sign (MAG) portable changeable message sign, bid number 53-26July07. This solar powered LED sign exhibits superior legibility and angularity characteristics by using the ADDSCO High Density BRICK. The High Density BRICK utilizes 30 degree LED's that provide optimum angularity and unsurpassed visibility in all lighting conditions. This sign is perfect for smaller shoulders and applications that require wide angles of view such as hills, curves, special events and parking.

The ADDSCO bid price includes delivery, training and a full two (2) year warranty.

ADDSCO value combines state-of-the-art technology, reliability and service to produce the most dependable, most commonly used PCMS in the industry. Please call me with any questions at (651) 558-3519.

Sincerely,

Blake Balzart
Central Regional Manager
(651) 558-3519 Direct
(651) 558-3600 Fax
BPBalzart@addco.com

240 Arlington Ave. E. St. Paul, MN 55117-3908
651.488.8600 f. 651.558.3600
www.ADDSCO.com

Procurement Specification
Mini Adjustable Graphic Sign

MAG Sign



240 Arlington Ave E . St. Paul MN 55117
651.488.8600 f: 651.558.3600
www.ADDCO.com

December 2006

**ADDCO MAG Sign
Mini Adjustable Graphic Sign
Procurement Specification**

*This document is a specification of a Mini Adjustable Graphic or MAG Sign.
The practitioner should realize that this specification typically needs to be
modified to meet a customer's particular requirements.*

BRICK® is a registered trademark of ADDCO, Inc. All rights reserved.

This specification is subject to change without notice.

(December 2006)

1. Product Overview

1.1. General Description

The ADDCO Mini Adjustable Graphic (MAG) Sign is a solar powered portable changeable message sign. It consists of an amber LED message board, onboard controller, communications and a power system consisting of solar photovoltaic (PV) panels with a set of batteries. All components are mounted on a small towable trailer.

The ADDCO Mini Adjustable Graphic (MAG) Sign shall meet the physical displays and operational requirements described in the Federal Manual on Uniform Traffic Control Devices (MUTCD).

1.2. Design Goals

1. To provide a small full matrix highly portable changeable message sign suitable for many messaging applications. The sign shall be capable of displaying 3 lines of 8 12" characters using a 5x7 character font.
2. To provide a portable changeable message sign that can be easily setup and used for temporary messaging applications.
3. To provide a portable changeable message sign that is environmentally friendly and requires less maintenance.

1.3. Features

4. Visibility
 - a) The full matrix sign shall be legible from 750 feet in day and night conditions.
 - b) Visibility and legibility shall be enhanced with sign modules featuring a UV inhibited mask to provide a high level of contrast and readability.
5. Power System
 - c) The PCMS shall operate from solar and battery or utility power of 120 VAC.
6. Maintenance
 - a) The Mini Adjustable Graphic Sign shall require no special scheduled maintenance other than those items detailed in the operating manual.
7. Solar Powered
 - a) The sign power system shall be designed for optimum efficiency utilizing the proper balance between solar panel, batteries and sign. The design shall provide for reliable operation minimizing downtime.

2. Overall Dimensions

2.1. Height

1. The sign height when fully raised shall be 11' 3". The height to the bottom of the sign when raised shall be 7' 1".
2. Sign height in transport position shall be 7' 11".

2.2. Length

1. The trailer length shall be 9' 2".

2.3. Width

2. The trailer width shall be 5' 8".

2.4. Gross Weight

1. The gross weight shall be approximately 1,400 lbs with 4 type 8D batteries. The weight may vary depending on number of batteries, number of solar panels and other features as may be included on the Mini Adjustable Graphic Sign.

3. Overall Specifications

3.1. Wind

1. Transport Mode
 - a) The Mini Adjustable Graphic Sign shall withstand 70 mph maximum sustained highway speeds.
2. Operation While Moving
 - a) Display panel and housing shall be designed and constructed to allow the unit to be operated in the displayed position while being towed at speeds of up to 15 mph.
3. Wind Loading
 - a) The trailer shall be designed to be set up on site and remain in place in 40 mph sustained winds without being hitched to a towing vehicle.

3.2. Paint

1. Trailer
 - a) Phosphate cleaned and powder coat highway safety orange; 2.5-3 mil minimum thickness.
2. Sign
 - a) Cleaned, finished with one coat corrosion inhibiting primer and one coat of flat black UV inhibited powder coat.

3.3. Temperature Range

1. Operational: 20 degrees to +140 degrees F.
 2. Storage: -40 degrees to +185 degrees F.
-

3.4. Electrical Interference

1. The Mini Adjustable Graphic Sign shall be unaffected by common RF interference.
-

3.5. Relative Humidity

1. The Mini Adjustable Graphic Sign shall be unaffected by relative humidity from 0 percent to 95 percent non-condensing.
-

4. Trailer

The trailer shall be self-contained and self-supporting and may be set up and operated by one person without the use of additional equipment or tools.

4.1. Frame

1. The trailer shall incorporate a unitized frame and deck assembly formed from a minimum of 10 gauge hot rolled steel, with gussets and reinforcements at all stress points. The tongue shall be an A-frame type constructed of 3" hot rolled structural steel channel. The frame uprights (sign support structure) shall be minimum 2" x 2" x 11 gauge square steel tubing. The entire frame, tongue and upright assembly shall be jig-welded to ensure proper alignment and maximum rigidity.
-

4.2. Axle

1. The trailer shall include an axle and suspension system including automotive type roller bearings, hubs and wheels appropriate for highway speed towing and machine size and weight.
 2. Ground clearance shall be 10" which allows for easier deployment and setup of the sign.
-

4.3. Hitch

1. The trailer shall have an adjustable height combination 3" pintle hitch/2" ball coupler and safety chains with connectors appropriate for the size and weight of the trailer. The hitch assembly shall be easily removable to prevent unauthorized towing of the trailer.
-

4.4. Tires

1. The trailer shall be equipped with tires appropriate for trailer size and weight with 13" 4 ply rated, load Range B tires suitable for towing at all legal highway speeds.

4.5. Leveling Jacks

1. The trailer shall have a 2000 pound capacity swivel screw-type tongue jack and be equipped with four adjustable outrigger leveling pads, one at each frame corner.

4.6. Removable Hitch

1. The hitch assembly shall be easily removable to help prevent unauthorized towing of the trailer.

4.7. Lights

1. The trailer shall be equipped with class A towing lights flush-mounted into the rear panel of the trailer deck to minimize the possibility of damage to the lights. These lights shall consist of stop, turn and tail light functions, and include a 4-contact male plug in harness (1239 connector) for connecting to towing vehicle lighting system.

4.8. Trailer Components Enclosure

1. The battery bank shall be protected from the elements and vandalism via a lockable color impregnated corrosion-proof ABS plastic cover.

5. Sign Lift

5.1. Winch

1. The trailer shall have a manually-operated braking winch with cable and pulley mechanism which shall allow one person to easily raise and lower the display panel assembly.
2. The trailer shall have positive locking devices to ensure that the display panel will remain fixed in the raised or lowered position.

6. Solar Panels

1. The solar panels shall be of current manufacture and shall feature high efficiency single crystal silicon cells. The panels shall have a non-reflective coating for improved efficiency.
2. The solar panels shall generate 150 watts and be installed in an anodized aluminum frame.
3. Solar array shall utilize a hinged self-erecting mechanism which allows the array to be always oriented skyward to allow maximum solar charging capacity whether the sign panel is in the travel or operating position.
4. The solar modules shall generate approximately 17 volts.

7. Electrical System

7.1. Batteries

1. The MAG Sign PCMS shall feature four 8D 12-volt heavy-duty, commercial marine deep-cycle batteries. The batteries shall be wired in parallel in a 12 volt configuration.
2. An automatic low voltage disconnect circuit shall be provided to monitor the battery charge level and protect batteries from over-discharging.

7.2. Charging System Option

1. A 120VAC charging system shall be offered as an option. The charging system shall completely recharge the PCMS batteries within 24 hours when connected to 120VAC power.

7.3. Low Voltage Indicator

1. Red low-voltage "drive by" warning indicator shall be included.

8. Full Matrix Changeable Message Sign

8.1. Overall Sign Dimensions

1. The overall sign size shall depend on the number of BRICK® sign modules. The sign portion shall be approximately 3" in depth.
2. The full matrix sign shall be made from ADDCO BRICK® modules. Each BRICK® module features a 8x12 pixel arrangement. Each pixel shall be comprised of 4 LEDs.
3. The full matrix sign shall be offered in the following configurations:
 - a) Modules in a 6 wide x 2 high configuration with the modules oriented vertically. The display area shall be 38 in. x 84 in. The full matrix sign shall be 48 pixels wide by 24 pixels high.
 - b) Modules in a 5 wide x 2 high configuration with the modules oriented vertically. The display area shall be 38 in. x 70 in. The full matrix sign shall be 40 pixels wide by 24 pixels high.
 - c) Modules in a 6 wide x 1 high configuration with the modules oriented vertically. The display area shall be 19 in. x 84 in. The full matrix sign shall be 48 pixels wide by 12 pixels high.
4. The standard BRICK® sign modules shall feature a 30 degree cone of visibility.

8.2. Speed of Message Change

1. A full sign refresh shall be accomplished in 100 milliseconds maximum.

8.3. Legibility/Color

1. Each character displayed in each line shall be clearly visible from 800 feet.
2. The sign LEDs shall be amber in color at 590nm wavelength.

8.4. Sign Reliability and Repairability

1. The LEDs shall be rated for 1,500,000 hours operation under normal product operating conditions.
 - a) Character modules shall allow replacement in approximately 5 minutes.

8.5. Operating Principles/Methods of Construction

1. The full matrix message sign shall be composed of BRICK® LED modules.
 - a) The BRICK® sign modules shall be UV and impact resistant.
 - b) The modules shall be manufactured with a polycarbonate front and an ABS housing.
 - c) The enclosures shall be a two-part sealed thermoplastic box, with a front face made of UV inhibited Polycarbonate.
 - d) The tray that holds the printed circuit board shall be manufactured from high impact, specially formulated ABS.
 - e) The inside layer shall be rugged ABS for strength and durability.
 - f) The outside layer shall be designed to withstand weathering factors, like UV and exposure.
 - g) The front face shall be silk-screened with a UV inhibited mask to provide high level of contrast and readability.
 - h) The BRICK® modules shall be certified for temperature cycle; thermal shock; humidity; salt spray; immersion and splash (water, chemicals, and oils); steam cleaning and pressure washing; fungus; dust, sand and gravel bombardment; altitude; mechanical vibration; mechanical shock (drop and operational); electromagnetic immunity; electromagnetic emissions.
 - i) The BRICK® modules module shall be nominally 19" by 14" by 2.5", (34.93cm by 48.7cm by 5.08cm)
 - j) A BRICK® module shall weigh approximately 4.5 lbs, (2.04kg)
 - k) The operational temperature range for a BRICK® module shall be -40F to +185F, (-40C to +80C)
2. Each BRICK® module shall be individually removable from the sign and be completely interchangeable with all other BRICKs®.

9. Controller

9.1. Single Board Computer or SBC

1. A single board sign computer (SBC) shall be included as a standard feature.
2. The single board sign computer shall be the connection point for the power and communication inputs, and also provide for the control of the light output of the BRICKS® using a built-in photocell to adjust the brightness of the LED pixels relative to ambient light levels.
3. The SBC shall be completely solid state.
4. The SBC shall be housed in the sign panel assembly to provide weather and dust protection.
5. The SBC shall be capable of storing up to 99 different pre-programmed standard or customized message sign displays which may be selected utilizing a Hand Held Terminal. The environmentally sealed terminal shall provide a 4 x 20 character display and touch pad for simple display selection. An extended tether to the Hand Held Terminal shall allow the operator to make changes to the display from up to 20 feet away.

10. Literature

The following operational information shall be provided with the ADDCO Full Matrix Sign:

1. Owner's Manual including:
 - Operations
 - Parts Manual
 - Wiring Diagrams
 - Trouble Shooting Guide

11. Warranty

1. ADDCO warrants that each new changeable message sign will be free from defects in material and workmanship for a period of one year from date of shipment, subject to the conditions and restrictions of the current ADDCO written warranty.
2. BRICK® Modules are offered with an extended BRICK® Warranty. Please contact ADDCO, Inc. for a current copy.

12. Options

1. Remote communications via cell phone.
2. NTCIP compliant controller.

3. Screw jacks at four corners.
4. Rear hitch adapter (2" ball).
5. 75-amp heavy-duty portable battery charger (Fleet charger).
6. Built-in adapter for 75-amp charger (Fleet charger).
7. Built-in adapter for 55-amp charger (power supply, 120V).
8. Hinged door for accessory storage compartment.
9. Radar
 - a) The Mini Adjustable Graphic Sign can be fitted with a radar option for automated display of speeds and warning messages.

MAG SIGN

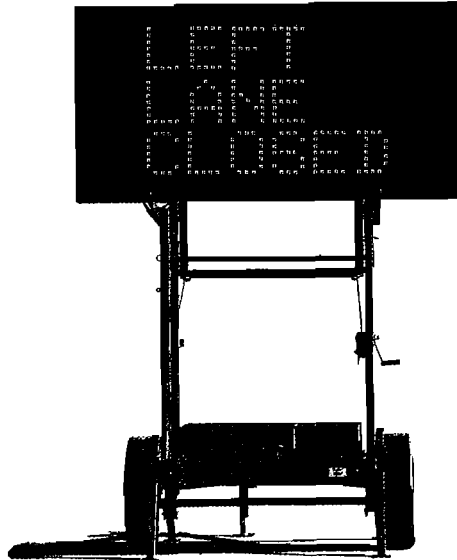
PCMS

Mini Adjustable Graphic Sign

The Mini Adjustable Graphic sign (MAG) is the ideal choice for use on narrow shoulders and arterial roads. It's also easy to maneuver in tight spaces such as airport entrances and special events.

Full matrix display allows programming of both text and graphics using either a hand-held controller or PC.

LED brightness is controlled by a photocell with automatic dimming from 10 to 100%.



Durable, reliable equipment yields better ROI

Choosing quality ADDCO trailers for your fleet sets you apart.

Our equipment is more reliable and requires less maintenance which gives you a low total cost of ownership and a good return on your investment. Plus, we offer round-the-clock customer service and a full warranty.

Reliable: Our MAG sign offers superior

legibility, flexibility of use and ease of operation. The rugged, all-steel trailer, low-maintenance BRICK® display and weather-resistant controller withstand extreme conditions and continuous use.

Customer Service: We have 24/7/365 customer service, ATSSA-certified technicians and a warranty we are proud to support.

A reputation for solid performance

Since its founding in 1953, ADDCO has earned a reputation for engineering and manufacturing durable products and providing exceptional customer service.

Our engineers create solutions for real-world problems. Our ISO 9001:2000 registration assures you that quality is at the heart of everything we do.

A proven track record in the field, reputation for product innovations and ISO 9001:2000 certification ensure that our products will perform consistently under the most demanding circumstances and in the most harsh environments.

BEST IN:

- Small spaces
- Arterial roads
- Daylight
- Twilight
- Night

APPLICATIONS:

- Lane Merge
- Lane Closure
- Shoulder Closure
- Street Sweeping
- Utility Work
- Emergency Response
- Evacuation
- Public Safety
- Traffic Calming
- Traffic Control
- Speed Reduction
- Temporary Hazard
- Special Events
- Work Zone ITS

THE BRICK

The MAG sign message display is made up of BRICK® components.

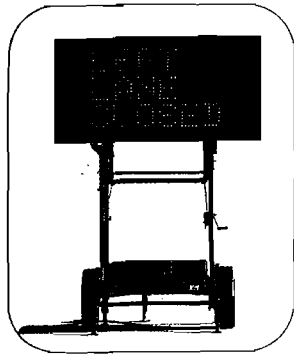
Each BRICK is a sealed module that contains 96 pixels of 4 LEDs each.

This modularity allows for various size configurations of the display.

Choose the size that best fits your message requirements and budget.

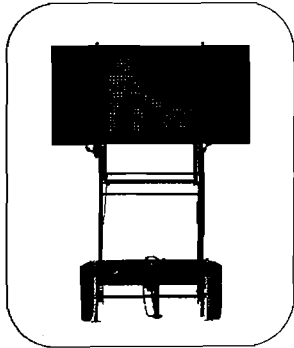
ADDCO
Smart Traffic Solutions™

SPECIFICATIONS



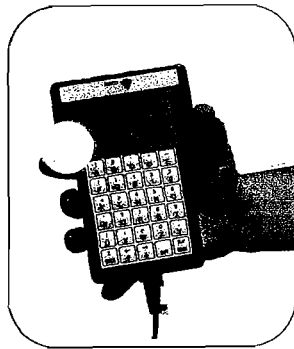
DISPLAY

- > 12" high characters
- > Supports multiple fonts
- > Photocell controls brightness
- > Automatic dimming 10-100%
- > Lift: Single manual brake winch and pulley system



HAND-HELD TERMINAL

- > Durable case
- > Reliable performance
- > Easy keypad entry
- > Backlit LCD display
- > Stores up to 99 messages
- > Operate from "safe zone"



TRAILER

- > Tubular steel with powder coat paint is 70% more durable than other applications
- > Removable tongue
- > Jacks: Screw jack on tongue; 4 slide levelers

DIMENSIONS

- > Overall
 - Height: 11'3" (raised)
 - Height: 7'11" (transport)
 - Trailer Width: 5'8"
 - Length: 9'2"
 - Gross Weight: 1,150 lbs.
 - Ground Clearance: 10"
- > Message panel
 - Height: 4'
 - Width: 8'
 - Depth: 2.5"

AVAILABLE OPTIONS

- > Radar
- > Cell phone
- > A/C charger
- > NTCIP compliance

Specifications describe standard products. Variations exist to meet particular project requirements. Specifications are subject to change without notice.

The BRICK® is a registered trademark of ADDCO, Inc.

VERSATILE MAG Sign: ARTERIAL ROADS TO WORK ZONE

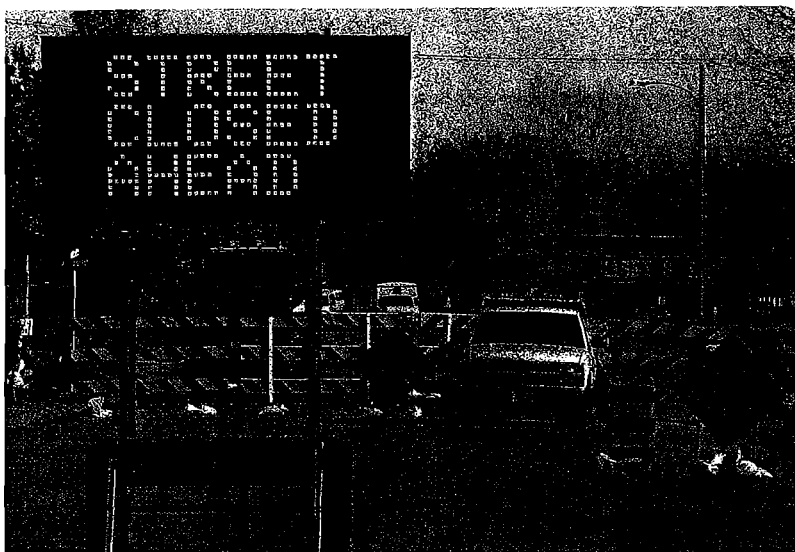
Mini Adjustable Graphic (MAG) Signs are often used by counties and municipalities as a cost-effective tool for managing multiple traffic issues.

The versatility of the MAG Sign helps it play an important role in Work Zone safety.

For example, the New Mexico Big I interchange rebuilding project included MAG Signs.

Project results:

- 44% reduction in incident response and roadway clear time
- Fewer secondary crashes
- Enabled operations to better maintain traffic flow



ADDCO
Smart Traffic Solutions™

240 Arlington Ave E St. Paul, MN 55117
651.488.8600 f: 651.558.3600
sales@addco.com www.addco.com

MAG SIGN

PCMS

Mini Adjustable Graphic Sign

The Mini Adjustable Graphic sign (MAG) is the ideal choice for use on narrow shoulders and arterial roads. It's also easy to maneuver in tight spaces such as airport entrances and special events.

Full matrix display allows programming of both text and graphics using either a hand-held controller or PC.

LED brightness is controlled by a photocell with automatic dimming from 10 to 100%.



BEST IN:

- Small spaces
- Arterial roads
- Daylight
- Twilight
- Night

APPLICATIONS:

- Lane Merge
- Lane Closure
- Shoulder Closure
- Street Sweeping
- Utility Work
- Emergency Response
- Evacuation
- Public Safety
- Traffic Calming
- Traffic Control
- Speed Reduction
- Temporary Hazard
- Special Events
- Work Zone ITS

THE BRICK

The MAG sign message display is made up of BRICK® components.

Each BRICK is a sealed module that contains 96 pixels of 4 LEDs each.

This modularity allows for various size configurations of the display.

Choose the size that best fits your message requirements and budget.

Durable, reliable equipment yields better ROI

Choosing quality ADDCO trailers for your fleet sets you apart.

Our equipment is more reliable and requires less maintenance which gives you a low total cost of ownership and a good return on your investment. Plus, we offer round-the-clock customer service and a full warranty.

Reliable: Our MAG sign offers superior

legibility, flexibility of use and ease of operation. The rugged, all-steel trailer, low-maintenance BRICK® display and weather-resistant controller withstand extreme conditions and continuous use.

Customer Service: We have 24/7/365 customer service, ATSSA-certified technicians and a warranty we are proud to support.

A reputation for solid performance

Since its founding in 1953, ADDCO has earned a reputation for engineering and manufacturing durable products and providing exceptional customer service.

Our engineers create solutions for real-world problems. Our ISO 9001:2000 registration assures you that quality is at the heart of everything we do.

A proven track record in the field, reputation for product innovations and ISO 9001:2000 certification ensure that our products will perform consistently under the most demanding circumstances and in the most harsh environments.

ADDCO
Smart Traffic Solutions™



Smart Traffic Solutions

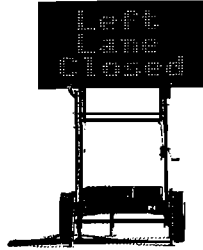
COMMITMENT. VALUED. EXPERIENCE.



Traffic Control equipment engineered specifically to meet the needs of Municipalities, Counties and Schools

Arrow Dynamic Sign

- >>>>>>>>>>>>>>>>>>>>>>>>
- Small footprint
- Display arrow, text, and graphics
- Four sizes of message displays
- Easy to tow, set up and maneuver
- Multiple uses



Arrowboard

- >>>>>>>>>>>>>>>>>>>>>>>>
- Small footprint
- 15- or 25-lamp display
- Easy to tow, set up, maneuver
- Multiple uses



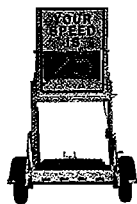
Driver Feedback Sign

- >>>>>>>>>>>>>>>>>>>>>>>>
- Measure & display vehicle speed
- Data Collection
- Drivers observe the posted speed
- Analyze and change driver behavior



Speed Display Trailer

- >>>>>>>>>>>>>>>>>>>>>>>>
- Durable, lightweight
- Equipped to specifications
- Easy to tow, set up and maneuver
- Add radar and/or communications



Variable Speed Limit

- >>>>>>>>>>>>>>>>>>>>>>>>
- Change speed limit
- Adjust to changing conditions
- Manage traffic flow
- Increase safety



Vehicle-Mounted Sign

- >>>>>>>>>>>>>>>>>>>>>>>>
- Universal mounting system
- Incident-specific messaging
- Mount on pick-up, van, plow
- Display text, graphics or both

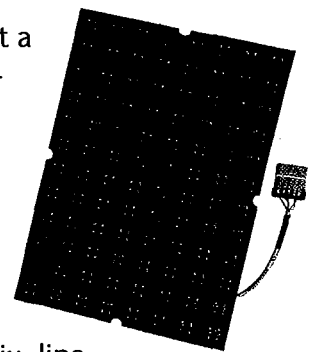


MUNICIPAL . COUNTY . SCHOOL

ABOUT THE BRICK®

The BRICK® is the building block of ADDCO's Dynamic Message Sign. Modular construction makes it reliable and easy to maintain.

Each BRICK® is sealed and impervious to dirt, moisture and road grime. Maintenance is minimal. Replacement, if needed, takes just a few minutes.



BRICK® signs are available in full-matrix, line-matrix and character-matrix configurations.

ABOUT ADDCO

Since our founding more than 50 years ago, we have earned a reputation for engineering and manufacturing durable products and providing exceptional customer service.

We offer factory training for your crews. Need support in the field? Help is just a phone call away on our 24/7/365 customer support hotline.

CONTACT ADDCO

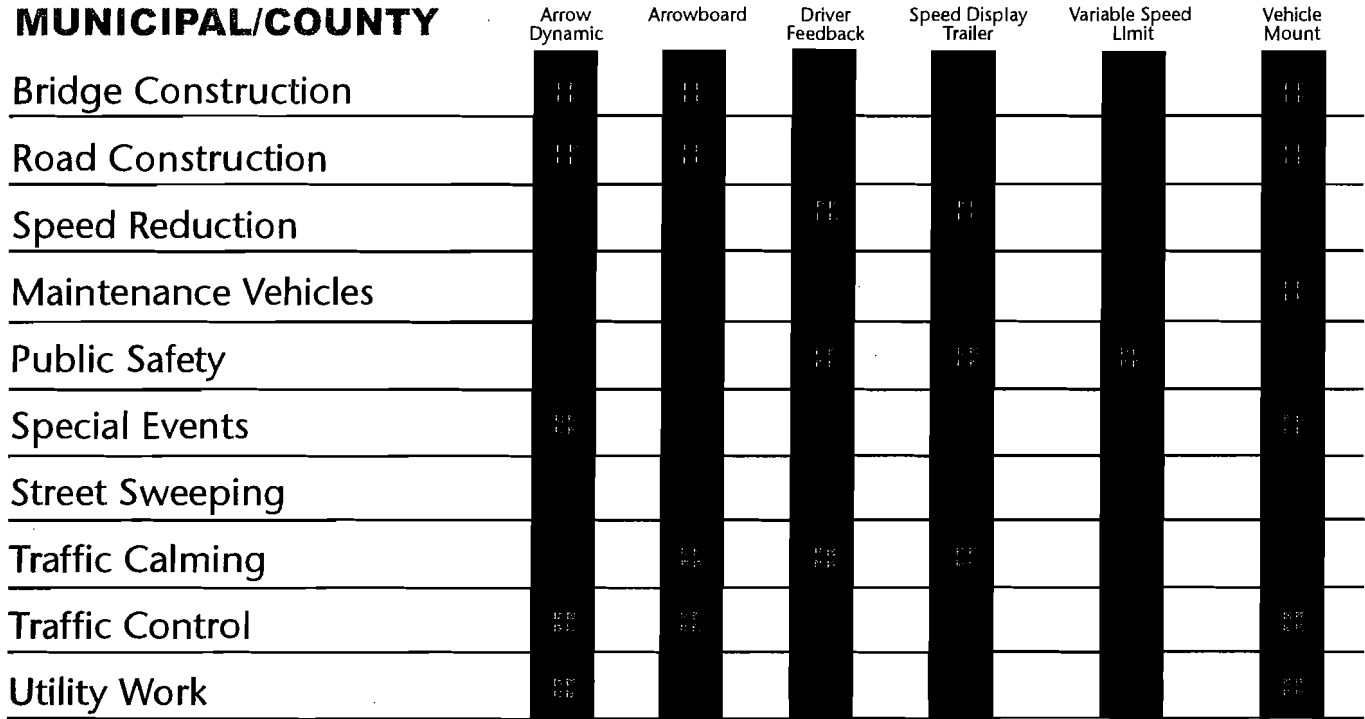
651.488.8600
sales@addco.com
www.addco.com

applications

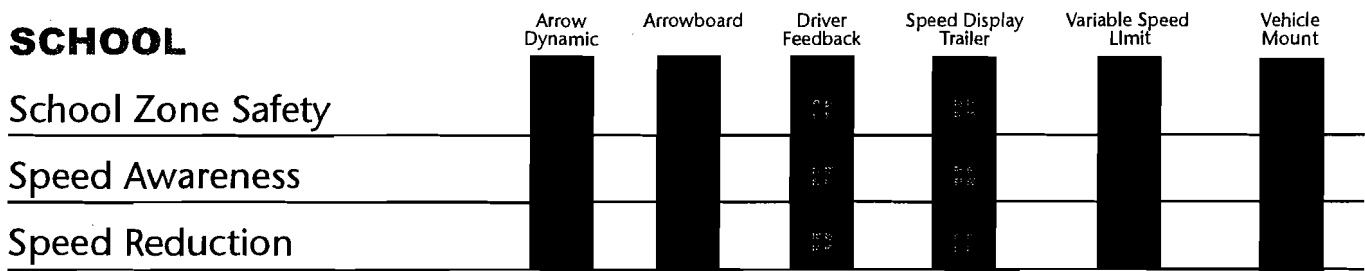


MUNICIPAL . COUNTY . SCHOOL

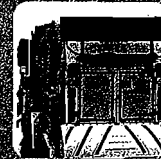
MUNICIPAL/COUNTY



SCHOOL



240 Arlington Ave E . St. Paul, MN 55117
 651.488.8600 f: 651.558.3600
 www.addco.com



Traffic Control equipment engineered specifically to meet the needs of Municipalities, Counties and Schools

Arrow Dynamic Sign

- > > > > > > > > > > > > > > > > > >
- Small footprint
- Display arrow, text, and graphics
- Four sizes of message displays
- Easy to tow, set up and maneuver
- Multiple uses



Arrowboard

- > > > > > > > > > > > > > > > > > >
- Small footprint
- 15- or 25-lamp display
- Easy to tow, set up, maneuver
- Multiple uses



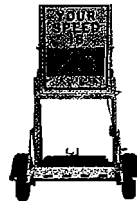
Driver Feedback Sign

- > > > > > > > > > > > > > > > > > >
- Measure & display vehicle speed
- Data Collection
- Drivers observe the posted speed
- Analyze and change driver behavior



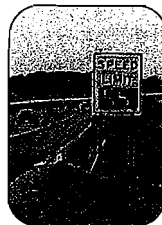
Speed Display Trailer

- > > > > > > > > > > > > > > > > > >
- Durable, lightweight
- Equipped to specifications
- Easy to tow, set up and maneuver
- Add radar and/or communications



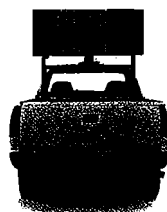
Variable Speed Limit

- > > > > > > > > > > > > > > > > > >
- Change speed limit
- Adjust to changing conditions
- Manage traffic flow
- Increase safety



Vehicle-Mounted Sign

- > > > > > > > > > > > > > > > > > >
- Universal mounting system
- Incident-specific messaging
- Mount on pick-up, van, plow
- Display text, graphics or both

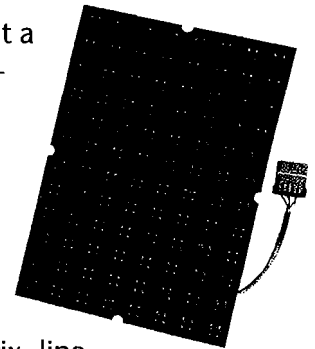


MUNICIPAL • COUNTY • SCHOOL

ABOUT THE BRICK®

The BRICK® is the building block of ADDSCO's Dynamic Message Sign. Modular construction makes it reliable and easy to maintain.

Each BRICK® is sealed and impervious to dirt, moisture and road grime. Maintenance is minimal. Replacement, if needed, takes just a few minutes.



BRICK® signs are available in full-matrix, line-matrix and character-matrix configurations.

ABOUT ADDSCO

Since our founding more than 50 years ago, we have earned a reputation for engineering and manufacturing durable products and providing exceptional customer service.

We offer factory training for your crews. Need support in the field? Help is just a phone call away on our 24/7/365 customer support hotline.

CONTACT ADDSCO

651.488.8600
sales@addco.com
www.addco.com

applications

MUNICIPAL . COUNTY . SCHOOL

MUNICIPAL/COUNTY

	Arrow Dynamic	Arrowboard	Driver Feedback	Speed Display Trailer	Variable Speed Limit	Vehicle Mount
Bridge Construction						
Road Construction						
Speed Reduction						
Maintenance Vehicles						
Public Safety						
Special Events						
Street Sweeping						
Traffic Calming						
Traffic Control						
Utility Work						

SCHOOL

	Arrow Dynamic	Arrowboard	Driver Feedback	Speed Display Trailer	Variable Speed Limit	Vehicle Mount
School Zone Safety						
Speed Awareness						
Speed Reduction						



240 Arlington Ave E . St. Paul, MN 55117

651.488.8600 f: 651.558.3600

www.addco.com



Request For Bid (RFB)

Boone County Purchasing
601 E. Walnut, Room 209
Columbia, MO 65201

Heather Turner, Senior Buyer
573/886-4392 - FAX 573/886-4390
Email: hturner@boonecountymo.org

Bid Data

Bid Number: **53-26JUL07**
Commodity Title: **Variable Message Signs-Trailer Mounted**

DIRECT BID FORMAT OR SUBMISSION QUESTIONS TO THE PURCHASING DEPARTMENT

Bid Submission Address and Deadline

Day / Date: **THURSDAY, July 26, 2007**
Time: **10:30 AM (Bids received after this time will be returned unopened)**
Location / Mail Address: **Boone County Purchasing Department
Boone County Johnson Building
601 E. Walnut, Room 209
Columbia, MO 65201**

Directions: The Johnson Building is located on the Northeast corner at 6th St. and Walnut St. Enter the building from the East Side. Wheel chair accessible entrance is available on the West side of the building.

Bid Opening

Day / Date: **THURSDAY, July 26, 2007**
Time: **10:30 AM**
Location / Address: **Boone County Johnson Building Conference Room
601 E. Walnut, Room 213
Columbia, MO 65201**

Bid Contents

- 1.0: Introduction and General Terms and Conditions of Bidding**
- 2.0: Primary Specifications**
- 3.0: Response Presentation and Review**
- 4.0: Response Form**
- Standard Terms and Conditions**
- "No Bid" Form**

1. Introduction and General Conditions of Bidding

- 1.1. **INVITATION** - The County of Boone, through its Purchasing Department, invites responses, which offer to provide the goods and/or services identified on the title page, and described in greater detail in Section 2.
- 1.2. **DEFINITIONS**
 - 1.2.1. **County** - This term refers to the County of Boone, a duly organized public entity. It may also be used as a pronoun for various subsets of the County organization, including, as the context will indicate:
Purchasing - The Purchasing Department, including its Purchasing Director and staff.
Department/s or Office/s - The County Department/s or Office/s for which this Bid is prepared, and which will be the end user/s of the goods and/or services sought.
Designee - The County employee/s assigned as your primary contact/s for interaction regarding Contract performance.
 - 1.2.2. **Bidder / Contractor / Supplier** - These terms refer generally to businesses having some sort of relationship to or with us. The term may apply differently to different classes of entities, as the context will indicate.
Bidder - Any business entity submitting a response to this Bid. Suppliers, which may be invited to respond, or which express interest in this bid, but which do not submit a response, have no obligations with respect to the bid requirements.
Contractor - The Bidder whose response to this bid is found by Purchasing to meet the best interests of the County. The Contractor will be selected for award, and will enter into a Contract for provision of the goods and/or services described in the Bid.
Supplier - All business/s entities which may provide the subject goods and/or services.
 - 1.2.3. **Bid** - This entire document, including attachments. A Bid may be used to solicit various kinds of information. The kind of information this Bid seeks is indicated by the title appearing at the top of the first page. An "Invitation For Bid" is used when the need is well defined. An "Invitation For Proposal" is used when the County will consider solutions, which may vary significantly from each other or from the County's initial expectations.
 - 1.2.4. **Response** - The written, sealed document submitted according to the Bid instructions.
- 1.3. **BID CLARIFICATION** - Questions regarding this Bid should be directed in writing, preferably by fax, to the Purchasing Department. Answers, citing the question asked but not identifying the questioner, will be distributed simultaneously to all known prospective Bidders. Note: written requirements in the Bid or its Amendments are binding, but any oral communications between County and Bidder are not.
 - 1.3.1. **Bidder Responsibility** - The Bidder is expected to be thoroughly familiar with all specifications and requirements of this Bid. Bidders failure or omission to examine any relevant form, article, site or document will not relieve them from any obligation regarding this Bid. By submitting a Response, Bidder is presumed to concur with all terms, conditions and specifications of this Bid.
 - 1.3.2. **Bid Amendment** - If it becomes evident that this Bid must be amended, the Purchasing Department will issue a formal written Amendment to all known prospective Bidders. If necessary, a new due date will be established.
- 1.4. **AWARD** - Award will be made to the Bidder(s) whose offer(s) provide the greatest value to the County from the standpoint of suitability to purpose, quality, service, previous experience, price, lifecycle cost, ability to deliver, or for any other reason deemed by Purchasing to be in the best interest of the County. Thus, the result will not be determined by price alone. The County will be seeking the least costly outcome that meets the County needs as interpreted by the County. The County reserves the right to compare the lowest bid received with the current State contract pricing, and award in the best interest of the County.
- 1.5. **CONTRACT EXECUTION** - This Bid and the Contractor's Response will be made part of any resultant Contract and will be incorporated in the Contract as set forth, verbatim.
 - 1.5.1. **Precedence** - In the event of contradictions or conflicts between the provisions of the documents comprising this Contract, they will be resolved by giving precedence in the following order:
 - 1) the provisions of the Contract (as it may be amended);
 - 2) the provisions of the Bid;
 - 3) the provisions of the Bidder's Response.
- 1.6. **COMPLIANCE WITH STANDARD TERMS AND CONDITIONS** - Bidder agrees to be bound by the County's standard "boilerplate" terms and conditions for Contracts, a sample of which is attached to this Bid.

2. Primary Specifications

2.1. **ITEMS TO BE PROVIDED** – Boone County, hereafter referred to as “County”, proposes to contract with an individual(s) or organization(s), hereinafter referred to as “Contractor” for a contract for the furnishing and delivery of two (2) new model Variable Message Signs, trailer mounted.

2.1.1. **Quantity** –2

2.2. MINIMUM TECHNICAL SPECIFICATIONS**2.2.1. Display Cabinet**

- 2.2.1.1. Size: 96” Long x 55 ”High x 12” Thick, boards has five degree taper from top to bottom to help reduce glare.
- 2.2.1.2. Letter Arrangement: Full matrix arrangement, 48 pixels wide x 27 pixels high (1296 total pixels)
- 2.2.1.3. Characters: Minimum letter size will produce 4 lines of 14 letters; Maximum letter size will produce one line of 7 letters. Character sizes (5 x 7 pixel): 12.0” (30.5cm) high x 9.12” (23.2cm) wide. Character Spacing for standard three line message: 6” between lines and 3” between letters.

2.2.2. Sign Construction

- 2.2.2.1. Material: Aluminum sheet 5052-H32, 0.062” thick
- 2.2.2.2. Construction: All panels riveted together, internal ribs to add lateral strength.
- 2.2.2.3. Paint: Interior and exterior has flat black powder coating and oven baked for added durability and corrosion.
- 2.2.2.4. Door Type: Single piece construction hinged at top for easier servicing of sign.
- 2.2.2.5. Door Material: Aluminum extruded frame with sheet metal corner brackets.
- 2.2.2.6. Door Paint: Powder coated flat black.
- 2.2.2.7. Window: Lexan solar grade polycarbonate, 0.150” thick. Bulb type weather seal ensures tight fit and seal between window and extrusion.
- 2.2.2.8. Serviceability: When sign in stored position, door fully opens to service the sign.

2.2.3. Hardware

- 2.2.3.1. Hinges: Stainless steel butt hinges are bolted to top of cabinet and to door assembly.
- 2.2.3.2. Door props: Each side of the sign has telescoping prop slides to hold door open for service.
- 2.2.3.3. Fans: The circulation of air throughout the cabinet keeps the electronics components cooler. Two cooling fans located at top of cabinet provide circulation through and out of cabinet. A duct is located at the top of the cabinet to ensure even airflow. The temperature sensor is mounted on the photocell pc board. Each fan has different thermal settings adjustable by the on-board computer so it will not waste battery power.
- 2.2.3.4. Vibration Mounts: Each letter character is mounted to the sign by four rubber vibration isolators. This decreases any physical shock to each letter module during transportation and isolates characters from chassis ground.

2.2.4. Wiring

- 2.2.4.1. Type: All harnesses are modularized for easy service. All wiring terminates at a single terminal strip inside sign cabinet.
- 2.2.4.2. Certification: All connectors and procedures are per CSA standards.
- 2.2.4.3. Protection: Wiring service loop from computer box to sign is routed inside liquid tight loom and P-clamped to trailer frame. Service loop length designed for 360-degree sign rotation.
- 2.2.4.4. Letter module connectors: All characters have quick connect connectors for easy service.
- 2.2.4.5. Protection: Wiring service loop from computer box to sign is routed inside liquid tight loom and P-clamped to trailer frame. Service loop length designed for 360-degree sign rotation.
- 2.2.4.6. Letter module connectors: All characters have quick connect connectors for easy service.

2.2.5. Letter Characters

- 2.2.5.1. Physical characteristics: Character nominal size: 14.19”(36.0cm) wide x 16.0”(40.6cm) high; Pixel type: Four amber LED's form a pixel. Number of pixels per character: 8 wide x 9 high, total = 72; Size of LED pixel = 0.75”(19mm) x 0.75”(19mm). **Operating temperature: All electronics are selected with extended temperature range. –40C - +80C;** Relative humidity: Each letter module is conformal coated with Dow Corning 1-2577 Low Voc Silicone Conformal Coating a mil-spec

coating, to protect it from corrosion or shorts due to high humidity. The characters are completely coated with coverage of 1-2 mil thick. This coating is rated up to 95% relative humidity. Mounting: Each letter module mounts to the cabinet with four studded rubber vibration mounts. The vibration mounts isolate the characters from road vibration and chassis ground. Program chip: A program chip is socket replaceable for easy program upgrading.

2.2.5.2. LED information: Type: AllnGap II technology, T-1 ¾ size, through hole auto-insertion. Color: Amber color range of 589.5 – 592 nm, Peak pulsed forward current: 100ma, Operating temperature: -40C - + 100C

2.2.6. **Optical Lenses and Sunshades**

2.2.6.1. Purpose: Optical lenses and sunshades enhance the brightness and angularity of the LED's, while greatly improving the power consumption of the sign. This LED enhancement enables the message sign to operate at approximately ½ the power over message signs without enhancement. This dramatic energy savings enables the system to operate with ½ the solar panels and batteries while providing increased battery autonomy without sun. Reducing the number of solar panels and batteries reduce the trailer weight and reduce future maintenance cost.

2.2.6.2. Sunshades: Each letter module has polycarbonate sunshades over the character face to prevent sun washout. The sunshades snap onto the pc board requiring no tools.

2.2.6.3. Lenses: Each pixel has an optical lens over the pixel. Each LED of the four LED pixel has optical enhancement. The lens snaps into the polycarbonate sunshade. The lens redirects the light output of each LED.

2.2.6.4. Viewing performance: Legibility Distance (Word recognition): 750 feet

2.2.6.5. Angularity: 50 degree total viewing.

2.2.7. **Photocell dimming**

2.2.7.1. Purpose: Two photocells track the level of ambient light on the message sign. These photocells in conjunction with the computer, adjust the brightness to the LED's. The brighter the ambient light the brighter the LED's. The computer adjusts the LED brightness to the photocell with the brightest light reading

2.2.7.2. Location: Photocells are mounted in the sign, one facing rear and one facing front.

2.2.8. **Software design:**

2.2.8.1. Driver design: The LED's are controlled through 30ma pulse-width modulation design.

2.2.8.2. Addressing: Each letter characters address is selected through a software command. This address will not change until re-programmed. No dipswitches are used. This special addressing prevents the message from shifting due to an individual character failure.

2.2.8.3. Pixel test: Each character is equipped with individual pixel failure notification.

2.2.9. **Control Console**

2.2.9.1. Type: Self contained on-board computer. No lap top computer required to program or run sign display. Operator can sit on the trailer frame to comfortably program unit.

2.2.10. **Console Box**

2.2.10.1. Type: NEMA 4 (IP53) type, dust and weatherproof steel box. Locking latch: A keyed, 3-point lockable handle locks door closed. Serviceability: Entire console box is removable for service. All wiring has quick connect plugs.

2.2.11. **Control Panel**

2.2.11.1. Panel light: A night-light controlled by magnetic reed switch on door illuminates the control panel and manual area for nighttime reading. The light will automatically shut off if no keyboard activity.

2.2.11.2. LCD Display: Type: Full matrix, 160 pixels wide x 128 pixels high; Viewing area: 101mm x 82mm; Pixel size: Large pixel size for better viewing, 0.56mm wide and high; Back lighting: Green LED or Blue EL backlit. Contrast adjustment: Rotary switch adjusts the contract brightness for optimum viewing. Activation switch: A toggle switch activates the LCD and keyboard. Temperature rated: -20C to +70C

2.2.11.3. Master computer board: Type: High efficiency micro-controller; Size: 8.75"w x 6.25"h; Connectors: All keyed and labeled for easy serviceability. Protections: Reverse polarity and over current protected. Memory capacity: 1.0 MB main flash, removable for easy upgrading; 128kb sram; Construction: multi-layer pc board w/ surface mounted components

Number of serial ports: Five; Keyboard port: ISA 101 keyboard; Real time clock: Battery backed with 20-year battery.

Reset indicator: Red LED; Conformal coating: Each assembly is conformal coated with a mil-spec coating to protect it from corrosion or shorts due to high humidity. This coating rated up to 95% relative humidity. Operating temperature: -20C - +80C

- 2.2.11.4. Power board: Function: Monitors and controls environmental parameters of message sign. Slave to master computer board. Type: High efficiency micro-controller with analog conversion. Size: 8.50”w x 3.13”h; Connectors: All keyed and labeled for easy serviceability. Protections: Board: Reverse polarity, over current protected and over voltage / over current protected. System: Replaceable automotive style fuses for battery and solar panel circuits. Current monitoring: Monitors the solar panel charging current as well as sign output current. Construction: multi-layer pc board with surface mounted solid-state circuitry. No mechanical relays. Conformal coating: Each letter module is conformal coated with a mil-spec coating to protect it from corrosion or shorts due to high humidity. This coating rated up to 95% relative humidity. Operating temperature: -20C - +80C
- 2.2.11.5. Switch board: Function: Auxiliary interface and status indicator board. Eliminates excessive wiring. Size: 3.38”w x 3.00”h; Switches: Hydraulic tower lift switch and computer system reset switch; Connectors: All keyed and labeled for easy serviceability. Indicator LEDs: Indicates “ON” conditions, i.e., battery saver shutdown, sign powered, radar powered, schedule program activated. (Actual LEDs depend on option selected)
Protection: Over current replaceable fuse; Conformal coating: Each letter module is conformal coated with a mil-spec coating to protect it from corrosion or shorts due to high humidity. This coating rated up to 95% relative humidity.
- 2.2.11.6. Keyboard: Detachable standard desktop IBM compatible 101 keyboard.. Replacement: Keyboard replaceable through any computer component store.
- 2.2.12. **Controller Software**
- 2.2.12.1. Type: Full NTCIP compliant software. Password protection: Three levels of password protection.
- 2.2.13. **Messaging**
- 2.2.13.1. Quick Messaging: One-touch quick message selection from 12 pre-programmed function keys on keyboard. One-tough sign blanking / power off. Permanent messages: over 50 including arrows and FHWA standards
Changeable messages: 100 changeable messages stored in NV flash; Temporary/ Volatile messages: 10, for ITS systems.
- 2.2.13.2. Maximum number of frames per sequence: Six; Sequencing speed: 0.1sec to 25.5sec.; Text alignment: Selectable from: left, center or right and top, middle or bottom; Fonts: Standard 5 x 7 pixel font supported. Blinking: Each character can individually blink. Adjustable timing and duty cycle.
- 2.2.13.3. Arrow board functions: Sign can display the following full size arrow functions: Number of modes: 12 Type: Single flashing left or right arrow, Sequencing left or right arrow, Sequencing stem left or right arrow, Chevron left or right arrows, Four-corner caution warning, Caution bar warning, and Alternating diamonds. Bold graphics: Each arrow and bar is 5 pixels wide. Fast key activation: All 12 modes are activated by key board function keys F1 – 12.
- 2.2.13.4. Message preview: LCD shows operator a preview of new message before sending it to sign. Clock: Real-time clock/ calendar with DST control. Troubleshooting help: A status and diagnostic menu available to assist in troubleshooting.
- 2.2.14. **Trailer Construction**
- 2.2.14.1. Frame: Trailer frame constructed of rectangular steel tubing 2” x 3” x 11ga wall. Tie down loops: One on each corner of frame.
- 2.2.14.2. Axle Assembly: 2000 Lb. capacity with a 5 on 4.5” B.C. idler hub. Springs: Double eye leaf springs.
- 2.2.14.3. Tires: ST205/75D15 trailer tire, 15” diameter.
- 2.2.14.4. Fenders: Round, full wheel coverage with inner splash panel on each fender. Fenders are bolted to trailer frame.

Material: Steel 16 ga,

- 2.2.14.5. Drawbar Assembly: Type: Straight tubular steel design that is removable for shipping and for added theft protection if needed. Material: Square tubing, 3" x 3/16" wall. Length: Extends 60" beyond trailer frame; Mounting: Telescopes inside trailer frame receiver, secures with two 1/2" dia. Bolts; Hitch: 2" Ball coupler SAE Class 2, 3500 Lb. capacity. Bolts to drawbar, easy repair if damaged. Tow Chains: Proof coil chains assembly with 'Latching' hooks. Chain assemblies attached to tongue with quick connectors. Jack: Top wind swivel, 800 lb. capacity with caster wheel. Tail light cable: A sealed molded cable assembly plugs drawbar wiring into trailer wiring. A molded flat four connector plugs into tow vehicle.
- 2.2.14.6. Paint: Steel is high-pressure hot water cleaned with degreaser and phosphate coating for improved adhesion and corrosion protection. Paint: MFG's standard color, powder coated and oven baked for added durability.
- 2.2.14.7. Stabilizers: Four, 2000LB capacity swivel jacks with foot pad are located on each corner of the trailer; Stance: 72" wide x 76" long.
- 2.2.14.8. Trailer lights: The trailer has sealed stop, turn and tail lights mounted on the rear of the trailer frame. A lighted license plate light and holder is mounted on the sign storage bracket.
- 2.2.14.9. Other Features: Reflective tape: Rear trailer frame has red / white reflective tape for increased visibility. Reflectors: Front sides of trailer have amber reflectors and rear sides have red reflectors. Sign storage: Sign stores parallel with the trailer length. The sign stores in two cradles, no pins required.
- 2.2.15. **Tower Assembly**
- 2.2.15.1. Type: A heavy-duty hand crank winch that has a safety brake raises the message sign. The sign can rotate 360 degrees
- 2.2.15.2. Telescoping height: Sign can be telescoped to seven feet, bottom of sign to ground. Sign can be held at any height, from travel to full telescoped position
- 2.2.15.3. Sign rotation: Tower rotates 360 degrees and can be locked at any point by a mechanical friction brake caliper. Tension on caliper is adjustable for maximum clamping force
- 2.2.15.4. Tower Material: Tower made from square steel tubing. The inner section is zinc plated
- 2.2.15.5. Sight Tube: A sight tube for aiming the message sign to desired location is located on the tower mast
- 2.2.15.6. Locking pin: A spring loaded pin locks the inner tower section in the up and down position preventing the tower to fall if the winch or cable fail.
- 2.2.15.7. Winch: Hand winch raises board from travel to operating position. Capacity: 1500 lb.; Brake: Safety brake prevent message sign from falling should operator loose grip on winch handle. Cable: 1/4" dia galvanized aircraft cable
- 2.2.16. **Power/Charging System**
- 2.2.16.1. Type: The message board unit operates from a 12VDC power system
- 2.2.16.2. Battery Box: Type: Riveted together all steel construction. All parts powder coated before assembling. Location: Left hand side of trailer centered over axle. Latches: Dual pad lockable latches secure the lid closed. Ventilation: Sides of the battery box are louvered for cross ventilation. Batteries may be charged with lid closed and locked. Flexibility: The standard box can configured to hold (6 or 8) 6Vdc golf cart type batteries; Safety label: A safety / maintenance label is mounted on the battery box lid.
- 2.2.16.3. Standard batteries: Type: Deep cycle golf cart type, wired parallel/series to obtain 12Vdc. Number: Six; Voltage: 6Vdc; Wet Weight: 63 lbs. each; Bank capacity: 675 AH.
- 2.2.16.4. Remote Charger: Location: Inside battery box on divider opposite batteries. Output Volts: 14Vdc; Output Capacity: 45A; Watts (draw): 750; Input voltage: 96 - 140Vac, three-prong plug; Frequency: 40 - 70 Hz; Cooling: Fan cooled when charger temperature reaches 35C; Protection: Automotive style replaceable fuses.
- 2.2.16.5. Solar Panels: Type: High efficiency multi-crystal photovoltaic module; Number of modules: (Three with 80/85 Watts) or (Two with 120/130 Watts); Location: Above message sign over tower. Array lays flat, raises and rotates with message sign. No shadowing affect of any trailer component. Maximum module power: 85 Watts (Total power =255 Watts) or 130 Watts (Total

power =260 Watts); Maximum module current: 4.75A (85 Watt) or 7.39A (130 Watt); Maximum Voltage: 17.9V; Open short circuit current: 5.15A (85Watt) or 8.02A (130Watt); Open short circuit voltage: 21.8V; Regulation: Solar panels regulated by controller power board. Security: Solar panel array bolted to message sign frame with security screws and special security nut. Tool nut for array mounted inside computer control console.

- 2.3. **Manuals:** Operator's manual, parts book and service/repair manual shall be furnished with each machine upon delivery. Manuals may be in the form of CD's or DVD's.
- 2.4. **Vendor Service/Repair Facilities:** The vendor shall state in the returned bid the location of the nearest service and repair facility and parts depot.
- 2.5. **Demonstration:** Prior to awarding the bid, vendor(s) may be requested to demonstrate equipment on-site at the Boone County Public Works Department.
- 2.6. **Warranty:** Manufacturers standard warranty applies. Vendor shall include description and price schedules for any extended warranty programs offered by the manufacturer.
- 2.7. **Designee** – Boone County Public Works
- 2.8. **Contact** – Heather Turner, Boone County Purchasing Department, 601 E. Walnut, Room 209, Columbia, MO 65201. Telephone: 573-886-4392 Facsimile: 573-886-4390
- 2.9. **Delivery:** Units shall be delivered with Bill of Sale.
- 2.10. **Delivery Terms:** FOB- Destination. Boone County Public Works Department, Maintenance Operations, 5551 Highway 63 South, Columbia, MO 65201
- 2.11. **ADDITIONAL TERMS AND CONDITIONS:**
 - 2.11.1. Equipment shall be properly serviced, including grease and oil to the proper levels.
 - 2.11.2. Vendor to include product literature for each proposed piece of equipment.
 - 2.11.3. Bid evaluation will be based on quality, reliability, delivery time ARO, and cost. Quality and reliability may be determined by using information contained in product reviews from established publications and demonstration of machine. Availability of parts, speed of service, and location of service/warranty work will weigh into consideration of award.

3. Response Presentation and Review

- 3.1. **RESPONSE CONTENT** - In order to enable direct comparison of competing Responses, Bidder must submit Response in strict conformity to the requirements stated herein. Failure to adhere to all requirements may result in Bidder's Response being disqualified as non-responsive. All Responses must be submitted using the provided Response Sheet. Every question must be answered and if not applicable, the section must contain "N/A." Manufacturer's published specifications for the items requested shall be included with the response.
- 3.2. **SUBMITTAL OF RESPONSES** - Responses MUST be received by the date and time noted on the title page under "Bid Submission Information and Deadline". NO EXCEPTIONS. The County is not responsible for late or incorrect deliveries from the US Postal Service or any other mail carrier.
- 3.2.1. **Advice of Award** - If you wish to be advised of the outcome of this Bid, the results may also be viewed on our web page www.showmeboone.com.
- 3.3. **BID OPENING** - On the date and time and at the location specified on the title page, all Responses will be opened in public. Brief summary information from each will be read aloud, and any person present will be allowed, under supervision, to scan any Response.
- 3.3.1. **Removal from Vendor Database** - If any prospective Bidder currently in our Vendor Database to whom the Bid was sent elects not to submit a Response and fails to reply in writing stating reasons for not bidding, that Bidder's name may be removed from our database. Other reasons for removal include unwillingness or inability to show financial responsibility, reported poor performance, unsatisfactory service, or repeated inability to meet delivery requirements.
- 3.4. **RESPONSE CLARIFICATION** - The County reserves the right to request additional written or oral information from Bidders in order to obtain clarification of their Responses.
- 3.4.1. **Rejection or Correction of Responses** - The County reserves the right to reject any or all Responses. Minor irregularities or informalities in any Response which are immaterial or inconsequential in nature, and are neither affected by law nor at substantial variance with Bid conditions, may be waived at our discretion whenever it is determined to be in the County's best interest.
- 3.5. **EVALUATION PROCESS** - The County's sole purpose in the evaluation process is to determine from among the Responses received which one is best suited to meet the County's needs at the lowest possible cost. Any final analysis or weighted point score does not imply that one Bidder is superior to another, but simply that in our judgment the Contractor selected appears to offer the best overall solution for our current and anticipated needs at the lowest possible cost.
- 3.5.1. **Method of Evaluation** - The County will evaluate submitted Responses in relation to all aspects of this Bid.
- 3.5.2. **Acceptability** - The County reserves the sole right to determine whether goods and/or services offered are acceptable for County use.
- 3.5.3. **Endurance of Pricing** - Bidder's pricing must be held until contract execution or 60 days, whichever comes first.

4. Response Form

4.1. Company Name: _____

4.2. Address: _____

4.3. City/Zip: _____

4.4. Phone Number: _____

4.5. Fax Number: _____

4.6. E-Mail Address: _____

4.7. Federal Tax ID: _____

4.7.1. () Corporation

() Partnership - Name _____

() Individual/Proprietorship - Individual Name _____

() Other (Specify) _____

4.8. PRICING		Unit Price	Qty	Extended Price
4.8.1.	Trailer Mounted Variable Message Signs Per Section 2	\$ _____	2	\$ _____
4.9.	Cash Discount	\$ _____ net _____ days		
4.10.	GRAND TOTAL	\$ _____		
4.11.	NOTE: INCLUDE ALL WARRANTY INFORMATION, PRODUCT LITERATURE, AND LOCATION OF NEAREST SERVICE LOCATION/REPAIR FACILITY AND PARTS DEPOT WITH THE BID RESPONSE			
4.12.	Describe Any Deviations			

4.13. The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with all requirements contained in the Request for Bid which have been read and understood, and all of which are made part of this order. By submission of this bid, the vendor certifies that they are in compliance with Section 34.353 and, if applicable, Section 34.359 ("Missouri Domestic Products Procurement Act") of the Revised Statutes of Missouri.

4.13.1. Authorized Representative (Sign By Hand): _____

Date: _____

4.13.2. Print Name and Title of Authorized Representative _____

4.14. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri?

_____ Yes _____ No

4.15. Delivery ARO: _____



Standard Terms and Conditions

Boone County Purchasing
601 E. Walnut, Room 209
Columbia, MO 65201

Heather Turner, Senior Buyer
573/886-4392 - FAX 573/886-4390

1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Quotation and/or Proposal.
2. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an "all or none" basis, whichever is in the best interest of the County.
3. Bidders must use the bid forms provided for the purpose of submitting bids, must return the quotation and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid.
4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County from them.
6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed shall disqualify Bidder from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
11. No bid transmitted by fax machine will be accepted.
12. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
13. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms.

Boone County Purchasing
Heather Turner
Senior Buyer



601 E. Walnut-Room 209
Columbia, MO 65201
Phone: (573) 886-4392
Fax: (573) 886-4390

“NO BID” RESPONSE FORM

NOTE: COMPLETE AND RETURN THIS FORM ONLY IF YOU DO NOT WISH TO SUBMIT A BID

If you do not wish to respond to this bid request, but would like to remain on the Boone County vendor list **for this service/commodity**, please remove form and return to the Purchasing Department. The reverse side of the form is pre-addressed, so that it can be folded in thirds, sealed with tape, and mailed. *If you would like to FAX this “No Bid” Response Form to our office, the FAX number is (573) 886-4390.*

If you have questions, please call the Purchasing Office at (573) 886-4392. Thank you for your cooperation.

Bid Number **53-26JUL07 Electronic Message Boards**

(Business Name)

(Date)

(Address/P.O. Box)

(Telephone)

(City, State, Zip)

(Contact)

REASON(S) FOR NOT SUBMITTING A BID:

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
 County of Boone } ea.

August Session of the July Adjourned

Term. 20 07

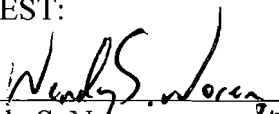
In the County Commission of said county, on the 2nd day of August 20 07

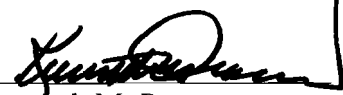
the following, among other proceedings, were had, viz:


Now on this day the County Commission of the County of Boone does hereby authorize the Presiding Commissioner to sign the attached Finding of Public Nuisance and Order for Abatement of a public nuisance located at 4345 and 4347 Bethany Drive in Columbia, Missouri.

Done this 2nd day of August, 2007.

ATTEST:


 Wendy S. Noren
 Clerk of the County Commission


 Kenneth M. Pearson
 Presiding Commissioner


 Karen M. Miller
 District I Commissioner


 Skip Elkin
 District II Commissioner