

SERIAL 05168 C TRAFFIC SIGNAL HEADS & COMPONENTS (NIGP 55089)

DATE OF LAST REVISION: November 28, 2006 CONTRACT END DATE: April 30, 2009

CONTRACT PERIOD THROUGH APRIL 30, 2009

TO: All Departments

FROM: Department of Materials Management

SUBJECT: Contract for **TRAFFIC SIGNAL HEADS & COMPONENTS (NIGP 55089)**

Attached to this letter is published an effective purchasing contract for products and/or services to be supplied to Maricopa County activities as awarded by Maricopa County on **April 05, 2006**.

All purchases of products and/or services listed on the attached pages of this letter are to be obtained from the vendor holding the contract. Individuals are responsible to the vendor for purchases made outside of contracts. The contract period is indicated above.

Wes Baysinger, Director
Materials Management

WP/ks
Attach

Copy to: Clerk of the Board
 Jim Baker, MCDOT
 Kathy Sicard, Materials Management

(Please remove Serial 00168-E from your contract notebooks)

SPECIFICATIONS ON INVITATION FOR BID FOR: **TRAFFIC SIGNAL HEADS & COMPONENTS
(NIGP CODE 55089)****1.0 INTENT:**

The intent of this invitation for bids is to establish a contract for TRAFFIC SIGNAL HEADS as specifically listed herein, in addition to a blanket discount **for related supplies as covered by a current pricing list(s)**. Amendments, supplements and/or revisions will be effective upon receipt of notice to the Department of Materials Management. These Maricopa County Department of Transportation Specifications are to describe standard traffic signal heads. The quantities estimated in this specification are for reference only. The County reserves the right to adjust the quantities to meet its needs. This is a requirements contract and the County will purchase the materials described herein on an as required basis over the period of the contract. Material ordered shall be delivered to the Maricopa County Department of Transportation, 2222 S. 27th Ave., Phoenix, Arizona as covered by a purchase order only.

2.0 TECHNICAL SPECIFICATIONS:**2.1 TRAFFIC SIGNAL HEAD:****2.1.1 DESCRIPTION:**

Vehicular traffic signal heads shall be assembled of standard 12-inch lens size signal sections with the number of sections or combination of sections specified on the signal plan, the Traffic Signal Standard Drawings Number 4773,4778-1, and 4778-2 found in the Maricopa County Department of Transportation, Traffic Signal and Intersection Lighting Standard Specifications and Traffic Signal and Highway Lighting Standard Detail Drawings, current edition and the requirements of the Manual on Uniform Traffic Control Devices. The optical performance and design of signal heads shall conform to the requirements of the Institute of Transportation Engineers Standards for Vehicular Traffic Control Signal Heads (I.T.E. Publication No. ST008B), and the provisions of these specifications.

2.2 STANDARD SIGNAL SECTION:**2.2.1 Housing:**

A standard 12-inch signal section shall be a one- piece housing with hinged door for housing all optical and electrical components.

Both the one-piece signal section housing and door shall be fabricated of corrosive resistant die cast aluminum conforming to Institute of Transportation Engineers Standards. The top and bottom of the housing shall have openings to accommodate standard 1 1/2-inch pipe size fitting. Each opening shall have a locking "Shurlock" boss, or equal, integrally cast into the housing section. The housing door shall be hinged to the signal section housing by stainless steel roll pins and hinge lugs integrally cast on the left side of the door and housing. Latch jaws shall be cast on the right side of each door.

A corrosion resistant latch screw and wing nut on the right side of the housing shall provide for opening and closing of the door (12-inch sections require two latching bolts). A gasket groove on the inside of the door shall accommodate a neoprene gasket to form a positive seal between the door and signal housing when the door is closed and latched. Four quick-change type lens clips and four stainless steel screws shall be provided for securing the lens and lens gasket in the door lens opening. Four stainless steel washer head-type screws shall be provided to secure the signal visor. Signal section housings shall be fastened together by two-cadmium cloverleaf style plated clamping washers and three carriage bolts and lock washers. Each complete signal head assembly shall be pre-drilled to accommodate 10/32 stainless steel self-tapping screws for mounting of signal back-plate

All signal sections and visors shall be painted gloss black. The inside of the visor shall be painted luster-less black.

2.3 Visors:

- 2.3.1 Each signal section shall have a tunnel type visor with a 5-7 degree downward tilt provided.
- 2.3.2 Unless otherwise specified, 12-inch signal sections shall be furnished with 9 ½ - 12-inch long visors. All visors shall have twist on attaching ears and shall be secured to the face of the signal door with stainless steel washer head type machine screws.

2.4 Backplates:

Backplates and backplate mounting hardware shall be furnished with each vehicular signal head assembly. The back plate shall be fabricated of anodized sheet aluminum. Five inch border louvered back plates shall be provided for 12-inch signal head assemblies. All back plates shall be painted dull black.

2.5 **ELEVATOR PLUMBIZER:**

An elevator plumbizer conforming to the requirements of the Traffic Signal Standard Drawings Number S-210-3 & S-210-4; 4778-1 & 4778-2 shall be installed in all 12-inch signal heads. The plumbizer elongated through bolt-hole shall be positioned to align with the signal pole mast arm bolt hole (drilled 2-1/2 inches from the end of the mast arm. The plumbizer signal head mounting position shall be in accordance with the requirements of the Traffic Signal Standard Drawings Number S-208-1. 4773.

2.6 **LED MODULE:**

- 2.6.1 LED traffic signal modules shall be designed to fit traffic signal housings that meet MCDOT specifications. The module shall be weather tight and shall fit securely in the housing and shall have wire leads long enough for easy connection to the traffic signal head wire terminal block. The wire shall have crimped-on terminal connectors. The LED signal module shall be a single, self-contained device. The power supply shall be integral to the sealed LED module.
- 2.6.2 The Contractor shall ensure that the date of installation is filled in on the module label on each LED module. Multiple color modules are not permitted.
- 2.6.3 The LED lamp unit shall be a single self-contained device, not requiring on-site assembly for installation. The assembly and manufacturing process for LED Traffic Signal Lamp unit assembly shall be such as to withstand mechanical shock and vibration caused by winds up to 80 mph. Signal lens shall be convex to minimize sunlight reflectance.
- 2.6.4 The LED shall be manufactured using AllnGaP Technology or equal with low susceptibility to temperature degradation (AlGaS LEDs will not be allowed). The LED signal lamps will be provided in 3 colors: red, yellow and green.
- 2.6.5 Each LED traffic signal lamp shall meet the minimum laboratory light intensity values, color (chromatically), and light output distribution as described in ITE Standards as shown in Section 11.04, Table I and Section 8.04, Figure 1 of the Vehicle Traffic Control Signal Head Standard. Each LED traffic signal lamp shall meet the minimum requirements for light output for the entire range of allowed voltage.

2.7 **GUARANTEE/WARRANTY:**

All equipment, units and components shall be guaranteed in accordance with the following:

- 2.7.1 Guarantee that the equipment offered is free from defects in design and construction and that it will give continuous and efficient service under normal conditions for a period of five (5) years from date of delivery.

- 2.7.2 Guarantee that the equipment is the manufacturer's standard design in construction and that no changes or substitutions have been made.
- 2.7.3 Guarantee and agree to replace promptly without cost of any nature to the County during the period of 12 months from date of delivery any and all parts failing because of defects in design and/or construction, excepting those parts that may fail as a result of accident, fire, or negligence on the part of the operating personnel ("Promptly" in this case is defined to mean within twenty-four (24) hours from time of demand).
- 2.7.4 Traffic Signal Head: minimum guarantee requirements for this equipment are twelve (12) months from date of delivery.

2.8 QUALITY:

The materials and supplies called for herein shall be the best of their grade and types, prepared according to the best available standards or accepted formulas, and thoroughly tested and subjected to rigid examination and standardization. Items not meeting these requirements shall be replaced at no cost to the County upon due notice of deficiency.

2.9 CURRENT PRODUCTION EQUIPMENT:

Only new, unused equipment in current production by manufacturers with at least five years experience in this field will be considered. The equipment offered shall be of the latest design in current production. Each proposal shall include a complete description of each item to be furnished, including manufacturer, model number or other specific identification, descriptive literature and specifications sheets.

2.10 REPLACEMENT PARTS:

Bidders shall submit a current manufacturer price list(s) with their bid and enter percent of discount offered from this list on all replacement parts, subassemblies and other component items. Amendments, supplements and/or revisions will be effective upon receipt of notice to the Department of Materials Management. Technical and descriptive literature must accompany bid proposals.

2.11 ELECTRICAL:

- 2.11.1 Each unit shall incorporate a regulated power supply engineered to electrically protect the LEDs and maintain a safe and reliable operation. The power supply shall provide capacitor filtered DC regulated current to the LEDs per the LEDs manufacturer's specification. MCDOT does not require the unit be dimmable.
- 2.11.2 The LED traffic signal lamp shall operate on a 60Hz AC line voltage ranging from 80 volts RMS to 135 volts RMS. The circuitry shall prevent flickering over this voltage range. Nominal rated voltage for all measurements shall be 117 volts RMS.
- 2.11.3 The LED traffic signal lamp unit shall be operationally compatible with controllers and conflict monitors used by MCDOT.
- 2.11.4 The LED lamp units shall contain a disconnect that will show an open switch to the conflict monitor when less than 60% of the LEDs in the unit are operational.
- 2.11.5 Two, captive, color coded, 3 feet long, 600 V, 18 AWG minimum jacketed wires, conforming to the NEC, rated for service at 105° C, are to be provided for an electrical connection.

2.11.6 One Schematic diagram shall be provided for each LED lamp unit along with any necessary installation instructions. LEDs shall be arranged in no less than 6 loaded circuits. The LED shall operate with a minimum 0.90 power factor. Total harmonic distortion (current and voltage) induced into an AC power line by a signal module shall not exceed 20 percent.

2.11.7 LED modules shall have female quick-disconnect type terminals.

2.12 **Delivery is required F.O.B. Destination, freight pre-paid** within twenty-four (24) days of receipt of Purchase Order, to any delivery location within Maricopa County as specified by the County. Contractor shall indicate on Pricing Documentation (Attachment A) any additional freight or handling charges that would be associated with special shipping and/or handling delivery.

2.13 EXPEDITED DELIVERY:

If the Using Agency determines that rush shipping or other alternate shipping is required, it shall notify the Contractor. The Contractor shall determine any additional costs associated with such delivery terms and communicate that cost to the Using Agency via fax or other reasonable means.

The Using Agency shall not advise the Contractor to proceed with shipment until acceptable terms are negotiated and a purchase order is issued. Upon determining that the additional costs are reasonable and proper, the Using Agency shall advise the Contractor to proceed.

Upon receipt of material and invoicing, the Using Agency shall ensure that any additional charges are in compliance with and do not exceed those costs stated in the Contract. The Using Agency shall retain all documents related to these costs within the agency purchase order file, for audit purposes.

2.14 SHIPPING DOCUMENTS:

A packing list or other suitable shipping document shall accompany each shipment and shall include the following:

- (1) Name and address of the Contractor;
- (2) Name and address of the County Agency;
- (3) County purchase order number;
- (4) A description of material shipped, including item number, quantity, number of containers and package number, if applicable.

2.15 STOCK:

The Contractor shall be expected to stock sufficient quantities as may be necessary to meet the County's needs.

2.16 BRAND NAME:

Maricopa County reserves the right to request samples to determine quality and acceptability of products bid. In some cases brands have been listed to define quality of products desired and is not intended to be restrictive or limit competition. Products substantially equivalent to those designated shall qualify for consideration.

3.0 SPECIAL TERMS & CONDITIONS:

3.1 CONTRACT LENGTH:

This Invitation for Bids is for awarding a firm, fixed price purchasing contract to cover a three (3) year period.

3.2 OPTION TO EXTEND:

The County may, at their option and with the approval of the Contractor, extend the period of this Contract up to a maximum of three (3), one (1) year options. The Contractor shall be notified in writing by the Materials Management Department of the County's intention to extend the contract period at least thirty (30) calendar days prior to the expiration of the original contract period.

3.3 ESCALATION:

Any request for reasonable price adjustments must be submitted thirty (30) days prior to the Contract expiration date. Justification for the requested adjustment in cost of labor and/or materials must be supported by appropriate documentation and must be within the Producer Price Index for the commodity. Increases are subject to approval in writing by the Materials Management Department prior to any adjusted invoicing submitted for payment.

3.4 EVALUATION CRITERIA:

The evaluation of this Bid will be based on, but not limited to, the following:

3.4.1 Compliance with specifications

3.4.2 Price

3.4.3 Determination of responsibility

The County reserves the right to award in whole or in part, by item or group of items, by section or geographic area, or make multiple awards, where such action serves the County's best interest.

3.5 UNCONDITIONAL TERMINATION FOR CONVENIENCE:

Maricopa County may terminate the resultant Contract for convenience by providing sixty (60) calendar days advance notice to the Contractor.

3.6 ORDERING AUTHORITY:

Contractors should understand that any request for purchase of materials or services shall be accompanied by a valid purchase order, issued by Materials Management, or by a CAPA (Certified Agency Procurement Aid

3.7 INDEMNIFICATION AND INSURANCE:

3.7.1 INDEMNIFICATION.

To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold harmless the County, its agents, representatives, officers, directors, officials, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney fees and costs, relating to this Contract.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

The scope of this indemnification does not extend to the negligence of the County.

3.7.2 Abrogation of Arizona Revised Statutes Section 34-226.

In the event that A.R.S. § 34-226 shall be repealed or held unconstitutional or otherwise invalid by a court of competent jurisdiction, then to the fullest extent permitted by law, **CONTRACTOR** shall defend, indemnify and hold harmless **COUNTY**, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or resulting from **CONTRACTOR'S** work or services. **CONTRACTOR'S** duty to defend, indemnify and hold harmless, **COUNTY**, its agents, representatives, officers, directors, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, injury to, impairment or destruction of property including loss of use resulting therefrom, caused in whole or in part by any act or omission of **CONTRACTOR**, anyone **CONTRACTOR** directly or indirectly employs or anyone for whose acts **CONTRACTOR** may be liable, regardless of whether it is caused in part by a party indemnified hereunder, including **COUNTY**.

The scope of this indemnification does not extend to the sole negligence of **COUNTY**.

3.7.3 Insurance Requirements.

CONTRACTOR, at **CONTRACTOR'S** own expense, shall purchase and maintain the herein stipulated minimum insurance from a company or companies duly licensed by the State of Arizona and possessing a current A.M. Best, Inc. rating of B++6. In lieu of State of Arizona licensing, the stipulated insurance may be purchased from a company or companies, which are authorized to do business in the State of Arizona, provided that said insurance companies meet the approval of **COUNTY**. The form of any insurance policies and forms must be acceptable to **COUNTY**.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of **COUNTY**, constitute a material breach of this Contract.

CONTRACTOR'S insurance shall be primary insurance as respects **COUNTY**, and any insurance or self-insurance maintained by **COUNTY** shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect **COUNTY**.

The insurance policies may provide coverage, which contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to **COUNTY** under such policies. **CONTRACTOR** shall be solely responsible for the deductible and/or self-insured retention and **COUNTY**, at its option, may require **CONTRACTOR** to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.

COUNTY reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. **COUNTY** shall not be obligated, however, to review such policies and/or endorsements or to advise **CONTRACTOR** of any deficiencies in such policies and endorsements, and such receipt shall not relieve **CONTRACTOR** from, or be deemed a waiver of **COUNTY'S** right to insist on strict fulfillment of **CONTRACTOR'S** obligations under this Contract.

The insurance policies required by this Contract, except Workers' Compensation, shall name **COUNTY**, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

The policies required hereunder, except Workers' Compensation, shall contain a waiver of transfer of rights of recovery (subrogation) against **COUNTY**, its agents, representatives, officers, directors, officials and employees for any claims arising out of **CONTRACTOR'S** work or service.

3.7.3.1 Commercial General Liability. **CONTRACTOR** shall maintain Commercial General Liability Insurance (CGL) and, if necessary, Commercial Umbrella Insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$2,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification provisions of this Contract which coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00 01 10 93 or any replacements thereof. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

The policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, or any provision, which would serve to limit third party action over claims.

The CGL and the commercial umbrella coverage, if any, additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form CG 20 10 10 01, and shall include coverage for **CONTRACTOR'S** operations and products.

3.7.3.2 Automobile Liability. **CONTRACTOR** shall maintain Automobile Liability Insurance and, if necessary, Commercial Umbrella Insurance with a combined single limit for bodily injury and property damage of no less than \$1,000,000, each occurrence, with respect to **CONTRACTOR'S** vehicles (including owned, hired, non-owned), assigned to or used in the performance of this Contract. If hazardous substances, materials, or wastes are to be transported, MCS 90 endorsement shall be included and \$5,000,000 per accident limits for bodily injury and property damage shall apply.

3.7.3.3 Workers' Compensation. **CONTRACTOR** shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of **CONTRACTOR'S** employees engaged in the performance of the work or services, as well as Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

CONTRACTOR waives all rights against **COUNTY** and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by **CONTRACTOR** pursuant to this agreement.

In case any work is subcontracted, **CONTRACTOR** will require the Subcontractor to provide Workers' Compensation and Employer's Liability insurance to at least the same extent as required of **CONTRACTOR**.

3.7.4 Certificates of Insurance.

3.7.4.1 Prior to commencing work or services under this Contract, Contractor shall furnish the County with certificates of insurance, or formal endorsements as required by the Contract in the form provided by the County, issued by Contractor's insurer(s), as evidence that policies providing the required coverage, conditions and limits required by this Contract are in full force and effect. Such certificates shall identify this contract number and title.

In the event any insurance policy(ies) required by this contract is(are) written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of **CONTRACTOR'S** work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to **COUNTY** fifteen (15) days prior to the expiration date.

3.7.4.2 Cancellation and Expiration Notice.

Insurance required herein shall not be permitted to expire, be canceled, or materially changed without thirty (30) days prior written notice to the County.

3.8 PROCUREMENT CARD ORDERING CAPABILITY:

It is the intent of Maricopa County to utilize a procurement card that may be used by the County from time to time, to place and make payment for orders under the Contract. Contractors without this capability may be considered non-responsive and not eligible for award consideration.

3.9 INQUIRIES AND NOTICES:

All inquiries concerning information herein shall be addressed to:

MARICOPA COUNTY
DEPARTMENT OF MATERIALS MANAGEMENT
ATTN: CONTRACT ADMINISTRATION
320 W. LINCOLN ST.
PHOENIX, AZ 85003

Administrative telephone inquiries shall be addressed to:

WALT PRICE, PROCUREMENT CONSULTANT, 602-506-3454
(wprice@mail.maricopa.gov)

Technical telephone inquiries shall be addressed to:

JIM BAKER, PROCUREMENT MANAGER, TRANSPORTATION, 602-506-3454
(JimBaker@mail.maricopa.gov)

Inquiries may be submitted by telephone but must be followed up in writing. No oral communication is binding on Maricopa County.

3.10 PRE-BID CONFERENCE:

THERE WILL BE A MANDATORY PRE-BID CONFERENCE ON NOVEMBER 8, 2005 AT 10:00 A.M. AT THE DEPARTMENT OF TRANSPORTATION, 2222 S. 27TH AVENUE, PHOENIX, AZ 85009.

3.11 SUBMISSION PRICE CLARITY:

For reasons of clarity all submissions of pricing (Attachment A) shall be priced in the same unit (size, volume, quantity, weight, etc.) as the bid specifications request. Submissions (bids) failing to comply with this requirement may be declared non-responsive.

3.12 INSTRUCTIONS FOR PREPARING AND SUBMITTING BIDS:

Respondents are to provide one (1) original (labeled), one extra hard copy and one (1) electronic copy of pricing on CD or disc, in exactly the same Excel format as in Attachment A, Pricing. Respondents are to identify their responses with the bid serial number, title and return address to Maricopa County, Department of Materials Management, 320 West Lincoln, Phoenix, Arizona 85003. **A corporate official who has been authorized to make such commitments must sign bids.**

3.13 CONTRACTOR REVIEW OF DOCUMENTS:

Contractor shall review its bid submission to assure the following requirements are met.

- 3.13.1 One (1) original, one extra hard copy and one (1) electronic copy (CD or disc, in exactly the same Excel format as in Attachment A, Pricing Pages) of all submissions is MANDATORY
- 3.13.2 Pricing pages, MANDATORY (Attachment A)
- 3.13.3 Agreement page, MANDATORY (Attachment B)
- 3.13.4 References, MANDATORY (Attachment C)
- 3.13.5 Catalogs, Pricing Documents; Components, MANDATORY
- 3.13.6 Technical and Descriptive Literature, MANDATORY

BROWN WHOLESALE ELECTRIC, 210 S 29TH STREET, PHOENIX, AZ 85034

PRICING SHEET C631001/B0600741/NIGP 55089

WILL YOUR FIRM ACCEPT A PROCUREMENT CARD FOR INVOICE PAYMENT? YES NO

IF YES, MAY THE COUNTY TAKE ADVANTAGE OF DISCOUNTS OFFERED BY YOUR FIRM IN THIS BID/RFP WHEN PAYING WITH A PROCUREMENT CARD? YES NO

OTHER GOV'T. AGENCIES MAY USE THIS CONTRACT: YES NO

1.0 PRICING:

<u>ANNUAL QUANTITIES</u>	Price Increase Eff. 11/21/06
1.1 48 or more TRAFFIC SIGNAL HEADS TYPE "F" with Plumbizer in accordance with drawing 4773:	\$ 427.00 \$ 491.05 /each
Manufacturer/Model: McCain M32813	
1.2 12 or more TRAFFIC SIGNAL HEADS TYPE "G" with Plumbizer in accordance with drawing 4773:	\$ 599.00 \$ 688.85 /each
Manufacturer/Model: McCain M32886	
1.3 16 or more TRAFFIC SIGNAL HEADS TYPE "G" without Plumbizer in accordance with drawing 4773:	\$ 565.00 \$ 649.75 /each
Manufacturer/Model: McCain M33003	
1.4 16 or more TRAFFIC SIGNAL HEADS TYPE "R" with Plumbizer in accordance with drawing 4773:	\$ 400.00 \$ 460.00 /each
Manufacturer/Model: McCain M32813	
1.5 96 or more TRAFFIC SIGNAL HEADS TYPE "F" without Plumbizer in accordance with drawing 4773:	\$ 392.00 \$ 450.80 /each
Manufacturer/Model: McCain M21657	
1.6 16 or more TRAFFIC SIGNAL HEADS TYPE "Q" with Plumbizer in accordance with drawing 4773:	\$ 685.00 \$ 787.75 /each
Manufacturer/Model: McCain M33602	
1.7 32 or more TRAFFIC SIGNAL HEADS TYPE "Q" without Plumbizer in accordance with drawing 4773:	\$ 650.00 \$ 747.50 /each
Manufacturer/Model: McCain M31187	
1.8 32 or more TRAFFIC SIGNAL HEADS TYPE "R" without Plumbizer in accordance with drawing 4773:	\$ 364.00 \$ 418.60 /each
Manufacturer/Model: McCain M21657	

BROWN WHOLESALE ELECTRIC, 210 S 29TH STREET, PHOENIX, AZ 85034

1.9 Warranty (state in writing, attachments may be included only as amplifying info:

5 YEARS WARRANTY, EXCEPT PAINT WHICH IS 2 YEARS.

1.10 Delivery (days ARO): 50

1.11 Blanket discount for related supplies 15%
Catalog date(s):Wesco Catalog 2004/2005

Terms: Net 30

Vendor Number: W000001461 X

Telephone Number: 602-275-8521

Fax Number: 602-296-9632

Contact Person: Laura Sundberg

E-mail Address: sales@brownwholesale.com

Company Web Site: www.brownwolesale.com

Certificates of Insurance Required

Contract Period: To cover the period ending **April 30, 2009.**