

# CITY OF BALLWIN REQUEST FOR PROPOSAL

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RFP # 09-33 BIDS CLOSE 10:00 A.M. ON: November 10, 2009

DATE: 10/26/09

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This document constitutes a request for sealed proposals, including prices, from qualified individuals and businesses to furnish those services and/or items as described herein. All prices are to be quoted as F.O.B. destination.

Proposals must be mailed or hand-carried to the **Ballwin Police Department, 300 Park Drive, Ballwin, MO 63011**. Bids are to be clearly marked "**Request for Proposal RFP # 09-33 ATTENTION Major Saulters .**"

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{See Attached Detail List }

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The offeror hereby agrees to provide the services and/or items, at the prices quoted, pursuant to the instructions and general conditions of bidding as stated, and further agrees that when this document is countersigned by an authorized official of the City of Ballwin, Missouri, a binding contract, as defined herein, shall exist between the offeror and the City of Ballwin.

Offeror's  
Signature \_\_\_\_\_

Offeror's  
Printed Name \_\_\_\_\_

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Mailing Address \_\_\_\_\_

Telephone \_\_\_\_\_

City, State, Zip \_\_\_\_\_

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NOTICE OF AWARD: This proposal is accepted by the City of Ballwin.

\_\_\_\_\_  
City Administrator

\_\_\_\_\_  
Date

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# CITY OF BALLWIN OFFICE OF CITY ADMINISTRATOR

## REQUEST FOR PROPOSAL - ANNOUNCEMENT

Sealed bids, subject to the "Instructions and General Conditions of Bidding" listed below and any special conditions set forth herein, will be received at the **Ballwin Police Department**, 300 Park Drive, Ballwin, MO 63011 until **10:00 A.M.** on the date listed on Page 1.

The right is reserved to accept or reject all or any part of the bid, to waive technicalities and to accept the offer the City Administrator considers the most advantageous to the City of Ballwin.

### INSTRUCTIONS AND GENERAL CONDITIONS OF BIDDING

1. Bidders must use the bid forms provided for this purpose in submitting bids, must return the announcement and bid sheets comprising this bid, give unit price, extend totals, and sign the bid. Bidders must identify the bid number and date opening on the front of the sealed envelope. If you do not care to bid, please return bid sheet(s) and note your reason.
2. Identify the item you will furnish by brand or manufacturer's name and catalog numbers. Also furnish specifications and descriptive literature.
3. Whenever products or materials of any particular producer or manufacturer are mentioned in our specifications, such product or material mentioned is intended to be descriptive of type or quality and not restrictive to those mentioned.
4. Alternate bids may be submitted in addition to responding to the terms and conditions of the solicitation or as the only response to the solicitation. Alternatives must be clearly identified. The City will consider and evaluate alternative bids deemed advantageous to the bid purpose, but is under no obligation to accept alternative bids and reserves the right to reject such bids. Alternative bids must be clearly identified.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid prices as the City is exempt from them by law. Federal and State tax exemption certificates will be furnished upon request.
6. The delivery date(s) or when work will start shall be stated in definite terms, as they will be taken into consideration in making the award.
7. Late proposals will not be received for consideration. Any proposal received after the exact proposal closing date and time will not be opened and will not be evaluated regardless of the reason or mitigating circumstances. No fax proposals will be accepted.
8. The City of Ballwin reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In the case of delay, the Vendor or Contractor must notify the City Administrator.

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INSTRUCTIONS AND GENERAL CONDITION OF BIDDING

(Continued)

9. In case of default by the bidder or contractor, the City of Ballwin will procure the articles or

services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

10. Failure to deliver as guaranteed shall disqualify bidder from future bidding.
11. Prices must be stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered.
12. Partial payment for delivered items or quantities of a bid may be made by the City of Ballwin except in the case of "Lump Sum" bids. In the latter case, only one payment will be made in the amount of the lump sum price, with any cash discount quoted after all the materials, supplies, or equipment have been fully delivered to the satisfaction of the Head of the Department to which the items were furnished.
13. Failure to comply with any of the above instructions and general conditions of bidding will disqualify the bidder.
14. The City of Ballwin expressly denies responsibility for or ownership of any item purchased until the same is delivered to the City and is accepted by the Purchasing Agent.
15. **Any questions regarding the bid should be directed to:**

**Major Bobbie Saulters  
Ballwin Police Department  
300 Park Drive  
Ballwin, MO 63011**

**636-227-2583 (Office)  
636-207-2340 (Fax)**

**[bobbie.saulters@ballwin.mo.us](mailto:bobbie.saulters@ballwin.mo.us)**

**The City of Ballwin is requesting formal proposals from qualified firms for the purchase of six lightbar warning devices and six siren/light control systems to be mounted on police cruisers.**

# **LIGHTBAR WARNING DEVICE**

## **1. GENERAL DESCRIPTION:**

- 1a. The warning light device shall be a lightbar capable of single configuration. The lightbar shall utilize a design having all the warning light signals internally positioned within the lightbar.
- 1b. All primary and secondary warning signals shall be comprised of TriCore™ technology lighthoods.

## **2. LIGHTBAR CONSTRUCTION:**

- 2a. The lightbar frame shall be made of extruded aluminum and shall be designed with two ridged spines that allow the frame to be twice as strong as older frame designs.
- 2b. The lightbar shall be designed to operate on 12.8 VDC on negative ground vehicles. The lightbar shall include 15' of cable outside the bar exiting underneath the lightbar.

## **3. SIZE AND SHAPE:**

- 3a. The lightbar shall have a pleasing shape designed to have a minimal effect on the performance of the vehicle to which it shall be attached. The lightbar shall be no larger than 2.25" in height and 13.5" wide. The length shall be 47", Driver side-Red, Passenger side- Blue. The lightbar shall consist of 4 front facing TC6 lighthoods (Each TC6 lighthood contains 6 TriCore modules), 4 corner TC6 lighthoods, 2 rear facing TC6 lighthoods( located in the outboard sections), Arrowstick consisting of 6 rear facing Amber TC3 lighthoods(Each TC3 lighthood contains 3 TriCore modules) located in the rear center sections. One TriCore Takedown light shall be mounted in each center section for a total of 2. One TriCore Alley light shall be mounted on the driver side and the passenger side of the lightbar.

## **4. MOUNTING:**

- 4a. The lightbar shall include a mounting kit that permits hook-on mounting on vehicles of various models and sizes.

## **5. LENSES:**

- 5a. The lenses shall be of an impact-resistant, polycarbonate plastic. The lenses shall be secured using counter-sunk rust-resistant screws that have a rubber sealing gasket to prevent water ingress at the screw head.
- 5b. To achieve a weather-tight seal, the lenses shall fit onto the frame using a side loaded gasket sealing system, employing a fixed horizontally compressed gasket. This design shall allow the device seal to be independent of the lens fastener system. Lightbars using vertically compressed gasket sealing systems which are dependent on the lens fasteners to create a weather-tight seal are not acceptable.
- 5c. All lenses shall be built with an inter-molded barrier to lessen internal heat and prevent UV degradation of lighthoods and internal wiring.
- 5d. The lightbar shall have clear outer lenses and a black inter-molded barrier at the top of the lenses. Optional colored barriers shall be available in Red, Blue, and/or Amber.

## **6. TRICORE TECHNOLOGY OR SIMILAR PRODUCT:**

- 6a. The lighthood, such as TriCore™ or a product with similar parameters, shall be designed to function as a flashing or steady burn stationary light in the lightbar. These lighthoods shall be available in Red, White, Blue, or Amber. These lighthoods shall be available to be mounted in any location within the lightbar. These lighthoods shall be able to be placed in either a corner or directional position without any additional modifications or enhancements.

- 6b. The lighthoods shall be available in two lengths: 5.2” and 2.7”. The lighthouse shall be designed to be attached to a mounting bracket using 2 screws. The lighthouse shall also be wired to a quick connect plug. All lighthoods shall be sealed against penetration by water, dirt or other debris. These lighthoods shall be uniquely designed and built to be replaced as a whole unit.
- 6c. The lighthoods shall be designed to run with a central controller board that allows multiple flash combinations and programming of the lighthoods for various needs within the lightbar.
- 6d. The lighthouse and electronics shall allow dimming of the lightbar for nighttime or other low light operational conditions, while still maintaining SAE 360° lighting compliance.
- 6e. (Option) The lightbar shall be available with a 795H Low-Profile LED Emitter. The Low-Profile LED Emitter shall assist authorized priority vehicles through signalized intersections by providing temporary right-of-way through vehicle operator interface to the system and through the use of common traffic controller functions. The emitter shall be installed the lightbar. Configurations that install the emitter outside of the lightbar are not acceptable.
- 6f. The lightbar meets all applicable SAE, California Title 13, NFPA, and ECE65 standards for 360° coverage, color and photometrics when properly configured

**7. TAKEDOWN LIGHTS:**

- 7a. The takedown light shall be 2.7” in length. The Takedown light shall be designed to give 12° of horizontal spread.

**8. ALLEY LIGHTS:**

- 8a. The alley light shall be 2.7” in length. The TriCore Alley light shall be designed to give 12° of horizontal spread.

**9. CENTRAL CONTROLLER CONSTRUCTION:**

- 9a. Central Controller (CC) shall control the functions of all the internal lighting devices of the lightbar. The CC shall provide at least ten different LED flash patterns and shall be selected with a designated conductor wire provided with the lightbar external cable.
- 9b. The CC shall utilize a separate master hot and ground cable as the main power input to the CC board. This cable shall utilize a plug-in connector design to the CC circuit board. The CC board shall have a power indicator and shall illuminate a green light that is visible from the top of the lightbar.
- 9c. The main output cable shall have 16 22-gauge conductors to provide the operating functions of the lightbar. The functions shall include, Emergency Mode levels #1, #2, #3, Take down lights operation for steady burn and flashing, Alley lights flashing and steady burn, Directional arrow signals, Front & Rear DIM. The Cruise lights and Dim functions shall utilize Pulse Width Modulation. The Central Controller shall provide a Self-check mode to verify equipment operation.

- 9d. The flash pattern selection shall allow the pattern change to be selected at any Emergency Mode Level without having to follow protocol steps.
- 9e. The CC shall be designed with self-protection from over-current, reverse polarity, and over temperature. The operating voltage range shall be from 10-16 volts DC.
- 9f. The system shall be hardened against radio frequency interference (RFI).

# **SIREN/LIGHT CONTROL SYSTEM SPECIFICATIONS**

## **1. GENERAL REQUIREMENTS**

- 1a. The siren/light control system shall consist of a siren amplifier section and a warning control system section in one single package.
- 1b. The system shall have a 5-year factory warranty.

## **2. CONTROL SECTION**

- 2a. The control section shall contain a four position lever switch (Off, Warning Level #1, Warning Level #2, & Warning Level #3) with Light Emitting Diode (LED) switch position indication. This switch shall be capable of handling loads up to 50 amps.
- 2b. The control section shall contain five On/Off switches for operation of accessory features and 1 momentary switch for operation of shotgun release. These switches shall illuminate a green LED when any of them are in the On position.
- 2c. The control section shall include 1 SPDT and 8 SPST switching capacity relays installed in the same amplifier. Any other system that requires the switching capacity relays to be mounted elsewhere shall not be acceptable.
- 2d. The main power connection shall be done through an #8 gauge wire located on the back of the unit. This connection shall provide power for the four position lever switch. Auxiliary power connection shall be done with the pressure plate type terminal block. Connections for the four position lever switch shall be done with the pressure plate type terminal block. The push-button connections shall be done with plug-in connector. All connectors shall be mounted on the exterior of the system. The control section shall operate completely independent of the siren section.

## **3. ADDITIONAL CONTROL SECTION SPECIFICATION**

- 3a. The control section shall include an indicator notifying the operator has left a control switch in the On position.

## **4. SIREN AMPLIFIER SECTION**

- 4a. The siren amplifier section shall contain all of the necessary electronics and controls to produce and amplify the automatic siren tones (Wail, Yelp, HyperYelp Hi-Lo and HyperLo), manual Wail, air horn, radio rebroadcast, and public address. The controls shall consist of a rotary switch (Radio, Standby, Wail, Yelp, and Hi-Lo), a momentary push-button for Manual, a momentary push-button for Air Horn, and an On/Off volume control to adjust Public Address volume and turn the power on and off to the siren unit.
- 4b. The Manual push-button shall operate the siren tone Wail when in the Standby position, Yelp when in the Wail position, HyperYelp when in the Yelp position, and HyperLo when in the Hi-Lo position.

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- 4c. The system shall have a built-in horn ring transfer circuit allowing the Manual push-button and Air horn push-button tones to transfer either to the horn switch or a remote switch.
- 4d. The siren shall include a pre-connected noise-canceling microphone. This microphone shall allow for instant public address by simply keying "the push to talk" button on the microphone. Any other siren systems requiring additional steps for public address are not acceptable.
- 4e. This amplifier shall be capable of operating a combination of siren speakers up to 200 watts on a continuous basis, and shall operate on 10 to 16 volts DC and require no more than 9 amps for one 100 watt siren speaker.
- 4f. The front panel graphics and legends shall be back lighted for night visibility. Identification legends, for the six on/off switches, shall be included with each unit, and shall be user replaceable and changeable.

- 4g. All the siren connections shall use a plug-in connector located on the exterior back-side of siren unit.
- 4h. Park kill deactivates the siren tones when the vehicle is shifted into park. Once Park Kill is activated the siren will remain deactivated until an action occurs such as moving the selector switch to STANDBY, returning lighting level switch to position #1 or keying the microphone. Any action will enable the siren tones to function again with the exception of the auxiliary lighting pushbuttons. On the 3892L6, lighting Level #3 if activated will also shut down if the vehicle is put in park (see Lighting Level #3 Drop Out).

## **5. DIMENSIONS & MATERIAL**

- 5a. The siren/light control system shall be enclosed in an painted extruded aluminum case measuring no greater than 6.75" wide by 2.875" tall by 6.75" deep, excluding knobs, connectors and terminal blocks.

The lightbar should be similar to the Code 3 Defender Lightbar and must be compatible with Chevrolet Impala Police Cruiser. The siren/light control system should be similar to the Code 3 Mastercom Model 3892L6.

The Vendor must also be capable of accepting trade-in lightbars for monetary compensation. The used lightbars are one Code 3 Mx7000, one Code 3 Excalibur, four Code 3 2100 LEDs and two Code 3 V-con siren/ light control boxes.

Any and all shipping or unloading costs must be included in the unit price.