

Bedford County Department of Finance

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Shelbyville, TN 37160
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Request for Proposal

Jail Security Electronics Control System Bid No. 11-7

The Bedford County Department of Finance is requesting proposals for a Jail Security Electronics Control System. **Sealed bids will be received until 2:00 p.m., Wednesday, September 8, 2010**, in the office of the Bedford County Department of Finance and will be opened publicly at that time. The Department of Finance reserves the right to reject any and all bids and waive any irregularities for the purpose of making the award it feels is in the best interest of Bedford County. Any bids received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.

GENERAL BID TERMS AND CONDITIONS

Proposals from all responsible bidders will be considered. To qualify as a responsible bidder, the proposal submitted must:

1. **Meet or exceed the minimum requirements specified.**
2. **Furnish all documents requested by the representative of the Bedford County Department of Finance prior to and following the bid opening.**
3. **Submit their completed bid prior to the bid opening date and time.**
4. **Have bid name and bid number placed on the outside lower left corner of the sealed envelope containing the bid form. (Facsimile bids will not be considered.)**

Award

A purchase order from the Bedford County Department of Finance will be issued to the successful bidder acknowledging the award. A copy of these terms and conditions, specifications and the vendor's proposal form will become a part of the purchase order.

Prospective bidders may contact Lt. Trey Arnold, 931-684-4566, for any questions as to the specifications of the bid.

Prices **shall include** all freight and delivery costs.

Lowest and/or best bid will be awarded.

Other Considerations

Bedford County Department of Finance reserves the right to purchase only those bid items and quantities that conform to overall budgetary, functional, and performance constraints.

The terms of this bid will be extended to other local government agencies, other municipalities, and Boards of Education. Bedford County is responsible only for purchases made and received by Bedford County.

INSTRUCTIONS TO BIDDERS

All Proposals are to be made on the Proposal Form provided. Bids must be delivered in hand or by a mail service in a sealed envelope marked on the outside lower left corner, **Bid No. 11-7 Jail Security Electronics Control System.** Bids will be received and opened on **Wednesday, September 8, 2010, at 2:00 p.m.** **Any bids received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.**

Proposals are to be made complete in every detail as required and called for by said Proposal Form. Proposals that are incomplete, conditional, contain irregularities of any kind, or which are not in accord with the Instructions to Bidders and Proposal Form furnished by the Department of Finance may be rejected as informal.

The submission of a proposal will signify that the Bidder has thoroughly familiarized himself with all conditions and that he fully understands what will be expected of the successful bidder.

The Department of Finance reserves the right to accept or reject in whole or in part any or all proposals submitted, without liability whatsoever, and waive informalities therein, if deemed by the Department of Finance in their best interest to do so.

SYSTEM DESCRIPTION (Minimum requirements)

1. Locking and Controls:
 - a. The upgrade system shall utilize Touch Screen control panels to replace existing control panels. The PLC, intercom, and relay and termination equipment shall be mounted in existing electrical enclosure cabinets and additional steel electrical enclosures if necessary. The system shall consist of all new equipment including power supplies, locking and intercom control components, termination devices, fuse assemblies, and UPS devices. This system does not include replacement, adjustment, or repair of locks, doors, gates, or any field device hardware. The new system shall not be based on a data-distributed or networked type system. No logic or communication boards shall be installed or utilized at field devices. Only mechanical dry contact type relays shall be utilized for final power control of electric locks.
 - b. This system shall emulate the current system in intended basic operations as close as reasonably possible. One important exception is the fire emergency automatic release feature in the original Trentech system. The feature on the existing system is currently disabled and the replacement system will not include the feature. In place of the automatic release feature, the new system will include manual group/emergency release functions (or equivalent).
 - c. The existing control panels shall be replaced with a Touch Screen display mounted in a new desktop, slope-front turrets.

2. Intercom:
 - a. The intercom system shall consist of a programmable logic controller operated from the LCD Touch Screen. Interfacing accomplished through rack-mount switchbanks.

3. Camera/Monitor System:
 - a. The new Touch Screen system shall have a capability of expanding to control up to 16 cameras. Each panel location will have two LCD monitors.
 - i. One display up to 16 cameras in a grid format, size of grid determined by the number of connected cameras.
 - ii. The second monitor at each location is a spot monitor used to display full-screen shots of cameras associated with intercom station selections or directly selected by pressing an icon on the touch screen.
 - iii. Existing cameras will be utilized. No changes to the DVR system are included.

4. Documentation:
 - a. Upon completion of systems, a complete documentation package shall be turned over to the facility. This package shall include programming and wiring databases and basic test and repair procedures. A complete, licensed software package with interface cabling shall be provided. This will enable the facility service staff to reprogram or edit the control system if ever necessary.

5. Warranty:
 - a. All equipment installed under these contracts will be warranted for one year commencing on completion and proper operation of systems.

SYSTEM SPECIFIC INFORMATION

1. Control System Equipment and Manufacturing
 - a. Replacement Control Equipment
Installation of all equipment shall be performed directly by the manufacturer of the replacement control system. No subcontractors or individuals not directly employed by the control system manufacturer shall be allowed to perform the equipment installation.
2. Locking Operations
 - a. Door Position Status (Monitored Only)
There shall be a red and green indicator located on the LCD Touch Screen for each monitored door to indicate the status of the door. The red indicator shall be illuminated when the door is unsecured and a green indicator when door is secure.
 - b. Interlock Group Status and Function
There shall be a yellow indicator located on the LCD Touch Screen panel in association with each door that is included in an interlock group. All yellow indicators in an interlock group shall illuminate steadily when any one door in that group is unsecured. When an interlock group is active as a result of one or more doors in an interlocked group indicating an unsecured status, the remaining doors in the group shall not open from the control panel switch unless the interlock override function is utilized. When all doors in the interlock group are secure the yellow indicators shall be extinguished.
 - c. Interlock Override Switches
There shall be a switch that shall provide the capability to override any interlocked group of doors. An associated flashing red indicator and pulsing audible tone shall provide indication of an interlock override condition. Depressing the LCD Touch Screen switch shall be required to activate the Interlock Override Function. While the Interlock Override Function is active, momentarily depressing the desired UNLOCK switch in an interlock group where one lock or locking device is already unsecured shall allow a second or more locks or locking device(s) to be opened.
 - d. Unlock Switch
There shall be Touch Screen switches located on the LCD Touch Screen that shall provide control for locks. Momentarily depressing the UNLOCK switch shall apply power to the lock and activate the UNLOCK cycle. Unlock duration and proper control shall be determined by the specifications of the

lock manufacturers. The associated red indicator shall illuminate when the lock/door is unsecured and shall be extinguished and returned to green when the lock/door is secured.

3. Intercom Operations

a. Intercom Master

- i. All intercom functions are accomplished with the LCD TouchScreen panel.
- ii. Incoming calls shall be indicated by an audible tone and a flashing green indicator at the associated position of the intercom station on the LCD Touch Screen. Pressing the associated Touch Screen switch shall establish a communication path, silence the audible tone, and cause the green indicator to glow steadily. Upon completion of communication, pressing the RESET switch shall return the display to the initial mode and the green indicator shall extinguish.

4. Auxiliary Operations

a. Switch Tones

The depression of a graphic panel switch shall produce an audible tone (beep) to indicate that the switch has been depressed and acknowledged by the control system.

b. Auxiliary Functions

Existing auxiliary functions such as lighting, receptable, and exhaust fans shall be controlled by functions of the Touch Screen/PLC control systems.

5. Wiring Standards

- a. All control wiring systems shall use stranded copper conductors (with the exception of the 25 pair, solid conductor cables). All terminations shall be made on SEMS type terminal strips or shall be made with crimp type lugs correctly sized for terminations to non-Sems type terminal strips and applied to conductor with crimping tool intended for use with the lug or connector used.
- b. All wiring systems shall be labeled and color coded with labeling and coding shown on shop drawings. White conductors shall be used only for neutral conductors, green only for grounding conductors with exceptions of low voltage control wiring that meet the requirements of Article 725 of the National Electric Code. Control system conductors shall not be spliced.

SPECIFICATIONS

- ❖ Logic Control System – Programmable Logic Controllers (PLC)
- ❖ Turret-Mount Touch Screen
- ❖ Electronic Control Relay /Electronic Wiring
- ❖ Uninterruptible Power Supply System (15 minute minimum, control system only – not locking power or CCTV)
- ❖ Operational Intercom
- ❖ All necessary equipment and hardware to make operational a complete upgrade/replacement control system.
- ❖ Note: Does not include provisions to utilize an “Audio Level Alert” system

PROPOSAL FORM

**TO: Bedford County Department of Finance
841 Union Street, Suite 102
Shelbyville, Tennessee 37160**

Re: Bid No. 11-7

Gentlemen:

We (I) submit the following proposal for the **Jail Security Electronics Control System:**

Total Bid Price \$ _____

Company Name: _____

Mailing Address: _____

Signature and title of bidder: _____

Date: _____

Telephone Number: _____