SECTION 28 3800 – ENTERPRISE MOBILE DURESS SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Specification Sections:

1. 27 0000 – General Technology Requirements
2. 27 1000 – General Cabling Requirements

1.2 SUMMARY

A. This Section includes the following major components related to the emergency response system:

1. Enterprise Mobile Duress System

B. The Owner is inviting proposals from qualified contractors/vendors to install a new Enterprise Mobile Duress System (e.g., "Panic Button" system) for notification during emergency response.

1.3 SYSTEM DESCRIPTION

A. Furnish and install a complete and operable Enterprise Mobile Duress (EMD) System to comply with the following specification and in accordance with FEMA Incident Management best practices.

B. EMD needs to include: supervision of all components, integration of EMD System with first responders through a cloud-based critical incident management application, complete operation during a power failure, secure from unauthorized disabling, and 24/7/365 operation.

C. System architecture must generate its own self-sustaining mesh network configuration capable of precision location of the activated duress alarm.

D. System will use Portable Personal Alarm Transmitters that are bi-directional (e.g., transmitters provide users with positive feedback that the alarm has been activated).

E. System must provide management software.

F. When the Portable Personal alarm Transmitter is activated:

1. An emergency incident alert is sent to the control panel.

2. Text (SMS), email, and/or Push Notifications are automatically sent out to designated groups of staff, faculty, and first responders. Notifications are to be fully integrated to the system and allow access to the following pertinent information during an active incident:

a. Building address of active incident
b. Location information within building

c. Building layout indicating location of device activation
d. Access to pertinent emergency documents

3. The EMD System platform is automatically activated to provide authorized users with access to the following information and abilities from any internet enabled device during an active incident:

a. Duress (Panic Button) locations.
b. Secure Access to all IP addressable security camera feeds within building (to be established at the Owner's cost separate from this project, and in coordination with the approved/selected contractor/vendor).
c. Ability to review and disseminate to designated people or groups emergency documents.

4. System must be self-monitoring, with the ability to report low battery warnings and tamper alarms for individual system components.

5. System must be capable of expansion, with the ability to add additional hardware items including, but not limited to: strobe lamps, LED displays, and fixed location alarm buttons.

1.4 DEFINITIONS

A. EMD: Enterprise Mobile Duress System

B. MCP: Master Control Panel

C. PPAT: Portable Personal Alarm Transmitter

D. WRP: Wireless Repeater

E. WRC: Wireless Receiver

F. SR: System Radio

G. PS: Power Supply

1.5 SUBMITTALS

A. Product Data: For each type of product indicated, provide a product data sheet in both hard-copy and electronic (PDF) formats. Data sheets indicating multiple products must have the applicable product highlighted or marked.

1. MCP
2. PPAT
3. WRP
4. WRC
5. SR

B. Shop Drawings:

1. Include a schematic drawing of the overall system identifying all components and the interconnection of components. Include both existing equipment and systems provided by others that will integrate with the system.

C. Qualification Data:

1. Include written confirmation from the manufacturer that the contractor is an authorized installer for the submitted products.

D. Contractor shall install in accordance with all applicable codes and standards, including FCC, NEC (NFPA 70), federal, state, and local codes and authorities.

1.6 COORDINATION

A. Coordinate layout and installation of the work of this section with the Owner's equipment, furniture, electrical, mechanical, architectural, and other technology trades.

1.7 WARRANTY

A. The contractor must maintain staff, equipment, replacement parts, and vehicles capable of providing ongoing service for the installed solution.

B. The contractor warrants the system to be free of defects of workmanship or products and will inspect and repair the system during the warranty period at no additional cost to the Owner. Contractor agrees to correct system deficiencies and replace components that fail in materials or workmanship including deficiencies arising when used according to the manufacturer or Contractor's written instructions. No warranty or terms therein shall limit or be interpreted to limit remedies as provided by law

C. The warranty period shall be three (3) years and shall begin on the date of substantial completion.

D. The warranty shall include hardware warranty for all equipment unless noted below, manufacturer phone support, software assurance, firmware updates, and any other special warranties. **Contractor must provide evidence of manufacturer warranty and duration.**

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. The following are acceptable manufacturers for general equipment within this section, unless noted otherwise for any product. Any substitutions must be included in the bid as a voluntary alternate and if accepted approved in writing by Lapeer Community Schools.

1. BluePoint Alert Solutions
2. SecurAlert
3. Approved equal

2.2 COMPONENTS

A. The system architectures vary. Owner is only seeking a self-sustaining mesh network configuration, bi-directional wireless mobile panic devices solution which will communicate with a master control unit and integrate with cloud-based critical incident management applications. Contractors are to provide all applicable hardware and software as it relates to the installation of the proposed solutions. Future components may include pull stations (Wired, wireless), strobes, covers for a complete system design, and installation.

B. Portable Personal Alarm Transmitter: (PPAT).

1. Provide break-away lanyard or belt clip for each per Owners request.

2. All PPAT are to be individually identifiable within the system and marked accordingly.

3. PPAT to include integrated supervision for low battery, and loss of communication.

Lanyard Building and Quantities:

	Building	Quantity
1.	Administrative Services Center	28
2.	Center for Innovation	65
3.	Cramton Elementary School	20
4.	Lapeer High School	60
5.	Lynch Elementary School	20
6.	Mayfield Elementary School	35
7.	Murphy Elementary School	31
8.	Rolland Warner Middle School	47
	i. Kids and Company Preschool and Childcare (Included in Rolland Warner Middle School)	
9.	Schickler Elementary School	37
10.	Turrill Elementary School	39
11.	Zemmer Middle School	47

C. Wireless Repeater: (WRP)

1. Wireless Repeater are to be located to provide complete coverage throughout the facility, and, if required on the drawings, for the entire property or campus.

2. A series of WRP's to act as a range expander for creating an dedicated RF "Mesh Network"

3. WRP to have full battery back-up.

4. WRP to include integrated supervision for low battery, loss of line power, and tamper.

D. Wireless Receiver (WRC)

1. Wireless Receiver to integrate with MCP and provide for integrated interface with WMPS and WMP.

E. Power Supply: (PS)

1. Provide UL-Listed 24VDC, 6amp power supply(ies) with battery backup

PART 3 - EXECUTION

3.1 EXAMINATION

A. It is the Contractor's responsibility to review the architectural, structural, mechanical, and electrical drawings, specifications, and field conditions, for any details that may impact the installation or provisioning of the system.

B. Power requirements must be provided.

C. Prior to installation, a site survey must be performed to determine equipment placement and conditions for compliance with requirements for installation tolerances or other conditions affecting performance of the work or system. Any issues with the systems, design, or installation must be brought to the attention of Lapeer Community Schools before the bid is submitted.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install system with manufacturer approved, trained and certified installer, and in accordance with all manufacturer's instructions and requirements.

1. Splices or connections shall be made within approved junction boxes and with approved fittings.

B. Cabling Requirements.

1. Verify cable types with manufacturer.
2. Wiring from the master control panel to the peripheral components shall be as identified or as per manufacturer.
3. All cabling color shall be coordinated with the owner prior to installation and labeled "EMD" prominently printed in white lettering or tag wiring to identify it from any other cabling of other low voltage systems – red jacket cabling is NOT to be used.
4. Splices or connections shall be made within approved junction boxes and with approved fittings.

C. Conduit

1. Install conduit where required per local jurisdiction or where cables will be exposed. **Paint exposed conduit to match the surrounding surface**.
2. Wiring shall be separated from any other building wiring.

3.3 DEVICE MOUNTING

A. Master Control Panel.

1. Mount control panel location shall be coordinated with the owner and/or in approved MDF closet (if applicable) as shown on the drawings.

3.4 INCIDENT COMMAND AND COMMUNICATION

A. Review and establish with Owner:

1. Individuals comprising the district-level user group and which users will have full access to the platform or have limited ability within the platform (i.e. which individuals can send out communications to groups of people).
2. What information or links will be provided to the various groups of people?

B. Provide initial programing of the EMD System with designated contact information separated into user groups per Owner's discretion

C. Upload building layout diagrams with device location information and ability to highlight activated devices.

D. Upload and organize Owner-provided emergency documents. Include programming to automatically disseminate documents based on system activation.

E. Be prepared to, as a separate project and as a separate expense to the Owner, establish communications links between Owner's security cameras and the critical incident management platform for efficient streaming of camera feeds to necessary individuals or groups of people.

3.5 FIELD QUALITY CONTROL

A. Test all wiring to be free from grounds, opens, and shorts.

B. Perform complete functional test of system upon completion of installation.

3.6 DELIVERY STORAGE AND HANDLING

A. Deliver all components to the site in the manufacturer's original packaging. Packaging shall contain manufacturer's name and address, product identification number, and other related information. Contractor to dispose of all packaging either off-site or in a Contractor-provided dumpster. The Owner's dumpster is not to be used.

3.7 CLEANING

A. Clean construction debris from interior of equipment.

3.8 DEMONSTRATION

A. Demonstrate complete and proper hardware system operation in the presence of the Owner, any specified staff / personnel, and local police jurisdictions.

B. Demonstrate the operation of the MCP software system with the Owner, any specified staff / personnel, and local police jurisdictions.

3.9 INSTRUCTION AND TRAINING

A. The manufacturer's authorized representative shall provide on-site instruction and training to designated individuals of the Owner for all products furnished under this section. Coordinate scheduling to meet the Owner's requirement.

B. All training and demonstration will be provided at no cost to the District.

C. The Contractor's trainer will supply system documentation and training aids customized to this installation for each type of handset covering common system and voicemail functions.

3.10 MAINTENANCE AND MONITORING SERVICES

A. Manufacturer requires yearly inspection and testing of entire system by a qualified technician, and wireless device battery replacement at a maximum of 2 year intervals. Include yearly inspection through warranty period.

3.11 DOCUMENTATION

A. As-Built Documentation:

1. As-built CAD drawings of each building showing equipment locations and cable pathways.
2. As-built schematic diagram showing components, interconnections, phone numbers, etc.

B. Manufacturer's Instructions: Provide complete installation, set-up and maintenance instructions.

END OF SECTION 28 3800