

SECTION 28 23 10

VIDEO MANAGEMENT ALARM NOTIFICATION SYSTEM

PART 1 GENERAL

1.01 DESCRIPTION

- A. General Description: This specification section covers the furnishing and installation of a complete emergency alarm notification system through the existing Video Insight VMS.
- B. Contractor shall coordinate, furnish any needed licenses, and install hardware devices, mounting brackets, power supplies, and other components of the system as shown and specified.
- C. Furnish and install special boxes, cable, connectors, wiring, and other accessories necessary to complete the system installation.
- D. General Conditions: Provide the work in accordance with Section 28 05 00, Security System General Requirements.

1.02 QUALIFICATIONS

- A. Provide the work in accordance with Section 28 05 00, Security System General Requirements.

1.03 GENERAL CONDITIONS

- A. In accordance with Section 28 05 00, Security System General Requirements

1.04 RELATED WORK

- A. In accordance with Section 28 05 00, Security System General Requirements

1.05 APPLICABLE PUBLICATIONS

- A. In accordance with Section 28 05 00, Security System General Requirements

1.06 PRECEDENCE

- A. Obtain, read and comply with General Conditions and applicable sub-sections of the contract specifications. Where a discrepancy may exist between any applicable sub-section and directions as contained herein, this section shall govern.

1.07 SHOP DRAWINGS & EQUIPMENT SUBMITTAL

- A. In accordance with Section 28 05 00, Security System General Requirements

1.08 OPERATING AND MAINTENANCE MANUALS

- A. In accordance with Section 28 05 00, Security System General Requirements.

1.09 WARRANTY

- A. In accordance with Section 28 05 00, Security System General Requirements

1.10 SERVICE AND MAINTENANCE

- A. In accordance with Section 28 05 00, Security System General Requirements

1.11 TRAINING

- A. In accordance with Section 28 05 00, Security System General Requirements

1.12 OWNER'S RIGHT TO USE EQUIPMENT

- A. The Owner reserves the right to use equipment, material and services provided as part of this work prior to Acceptance of the Work, without incurring additional charges and without commencement of the Warranty period.

1.13 TECHNICAL REQUIREMENTS, VIDEO SURVEILLANCE ALARM NOTIFICATION SYSTEM

A. General

1. The following information is provided to establish required system performance for the complete operating Video Management System (VMS) Alarm Notification System (ANS) for the Denver Public Schools (DPS) system. Some of the performance requirements noted herein are supported and supplied by existing systems in concert with new equipment and software which shall be provided by the Contractor under this scope of work. Contractor shall provide equipment, wiring and software programming at all sites as necessary to provide a complete system as described herein and as shown on the drawings.
2. The VMS ANS components provided under this scope of work shall be compatible with the existing VMS and shall function as an integral part thereof. The existing enterprise-wide network video system is manufactured by Video Insight.
3. Contractor shall be responsible for providing equipment, licenses and software to achieve the specified system performance described herein and, by reference, realize absolute and seamless compatibility with the existing system.
4. Contractor shall ensure system additions and modifications provided under this scope of work have no negative effect on the existing systems and operations, and no permanent effect beyond that specified or implied by the scope of work unless otherwise noted herein.

B. Purpose

1. The System shall provide the ability to notify security personal and administration of an emergency lockdown situation.
2. When an alarm is engaged, initiate a lock down sequence determined by the owner through rules management.
3. When an alarm is engaged an all-call tone managed by the VMS shall be engaged through the schools existing public address system.

C. Environment

1. The system shall be wholly contained within the District buildings, but shall also be fully integrated with the District's global and enterprise Electronic Access Control systems (EACS) at the DPS Department of Technology Network Operations Center and other remote sites.
2. IP Components shall be distributed and located in the nearest MDF/IDF rooms, as shown on the drawings or as directed by the Owner.
3. Infrastructure Connectivity

D. Attributes

1. General
 - a. The system shall comprise panic buttons, network monitors, network strobes, network media player, and ancillary equipment assembled into a fully operating system.

PART 2 PRODUCTS

2.01 GENERAL

- A. Product Acceptability: The Products section contains lists of acceptable products. If product substitutions are proposed, they must be made based upon a comparison of equivalence to the product specified. Considerations may include but shall not be limited to functional, physical, aesthetic and/or interface aspects. The Owner shall be the sole judge of whether or not a submitted substitution is deemed to be "equivalent" to that specified.

2.02 ALARM NOTIFICATION SYSTEM

- A. Front Office Network Monitor Kit
 - 1. Video Insight Part Number: TD-642 Network Monitor
- B. Front Office Button
 - 1. Provide a discreet notification button, behind or under the front office desk or counter.
 - 2. Provide at least 2 versions of a panic button to accommodate different installation locations and configurations.
 - 3. Each button must have protection against accidental activation by means of a recessed button, physical cover or other physical device.
 - 4. Coordinate with the owner for exact button placement.
 - 5. Quantity: 1 per front office
 - 6. Honeywell 269R or approved equal.
- C. Network Monitor Interface
 - 1. Provide a network interface for the Front Office – Must be fully compatible with the Video Insight TD-646 Network Strobe. Must be capable of sending a network message, properly encapsulated to Video Insight Server and be incorporated into rules engine of VI software. The Network Interface must have the following features:
 - a. Integrated Network Switch with POE Pass Through – The network interface must be capable of attaching to an existing network drop and then allowing an additional downstream device to be re-connected and powered by POE.
 - b. Must be PoE powered and support both the AF and AT PoE Standards
 - c. Must provide SSL Authentication for e-mail services
 - d. Quantity: 1 Per Front Office Location
- D. Administration Notification Box
 - 1. Video Insight Part Number: TD-646 Network Strobe
 - 2. Provide an alert system strobe that is connected to Video Insight.
 - 3. Capable of receiving and distinguishing FTP and HTTP messages from Video Insight Server and TD-642.
 - 4. Connections
 - a. 24 Volts Power
 - b. Network Connection
 - c. Dry Contact Relay Connections – Provide connections for Normally Closed, Normally Open, and Common for each of the relays provided with the system.
 - 5. Controls
 - a. Alarm Reset/Test Button
 - b. Up & Down arrow to scroll through alerts
 - c. Alarm Cancel
 - d. Dry Contract Relays
 - i. Provide 3 double pole, double throw dry contact relays, which are activated upon receiving an alert message.
 - 6. Indicators
 - a. Power – LCD Illumination

- b. 2-Line LCD Display – displays location and date/time of alert that is received
 - c. Audible Alarm
 - d. Visual Alarm (strobe)
 - e. Coordinate with owner for exact placement.
 - f. Quantity: 1 in Dispatch, 1 in Security Office
- E. Network Media Player
- 1. Video Insight Part Number: TD-650 Network Media Player
 - 2. Provide a network media player that is connected to Video Insight.
 - 3. Capable of receiving HTTP messages from Video Insight Server and playing media file that is assigned by DPS. Media file to be programmed as part of rules manager for lock down procedures.
 - 4. Connections
 - a. Power
 - 1) 802.3af PoE on RJ-45 connector, 48 VDC nominal, 12 Watt max Power
 - b. Network Connection
 - 1) Ethernet
 - (a) 10/100Mbps auto rate, full/half duplex
 - (b) RJ-45 connector with integrated Link/Activity LED
 - (c) 802.3af PoE support
 - (d) Protocols: TCP/IP, UDP, RTP, DHCP, Multicast capable
 - c. Contact Closure
 - 1) Discrete I/O (Contact Closure Input)
 - 2) 1 discrete / dry contact input
 - d. Audio output of audio file via:
 - 1) Analog Line Output (mono)
 - 2) Transformer isolated, balanced (600 Ω)
 - 3) Output level software controllable
 - e. Controls
 - 1) Control via HTTP messaging
 - 2) Control contact closure and play audio via audio output
 - 3) Upon file completion, release contact closure

PART 3 EXECUTION

3.01 GENERAL

- A. In accordance with Section 28 05 00, Security System General Requirements.

3.02 SYSTEM CONFIGURATION

- A. Contractor shall coordinate with the Owner to determine the required pre-programmed surveillance and event-initiated configurations.

3.03 ACCESS CONTROL SYSTEM INTEGRATION

- A. Provide Access Control system integration equipment, software, and programming, in accordance with Section 28 05 00, Security System General Requirements.

3.04 EQUIPMENT RACK AND CONSOLE INSTALLATION

A. In accordance with Section 28 05 00, Security System General Requirements.

3.05 GROUNDING PROCEDURES

A. Provide grounding of all systems and equipment in accordance with Section 28 05 00, Security System General Requirements.

3.06 WIRE AND CABLE INSTALLATION PRACTICES

A. Provide wire and cable installation in accordance with Section 28 05 00, Security System General Requirements.

3.07 DATABASE PREPARATION, CHECKING, AND ACTIVATION

A. Provide database preparation, checking and activation for systems and equipment in accordance with Security System General Requirements, Section 28 05 00.

3.08 START-UP RESPONSIBILITY

A. Provide start-up services for all systems and equipment in accordance with Security System General Requirements, Section 28 05 00.

3.09 PRELIMINARY INSPECTION AND TESTING

A. Provide preliminary inspection and testing services for systems and equipment in accordance with Testing and Commissioning, Section 28 08 00.

3.10 SYSTEM PERFORMANCE TESTING AND ADJUSTING PROCEDURES

A. Provide performance testing, burn-in, and adjusting of systems and equipment in accordance with Testing and Commissioning, Section 28 08 00.

B. VMS ANC Performance Testing

1. Demonstrate local alarm and lockdown functionality.
2. Demonstrate wide area lockdown functionality.
3. Demonstrate PA system all call functionality.
4. Demonstrate alarm clearing functionality.

3.11 BURN-IN PERFORMANCE PERIOD

A. Provide a burn-in performance period to demonstrate the stability of the system, in accordance with Testing and Commissioning, Section 28 08 00.

3.12 COMMISSIONING AND VALIDATION

A. Provide commissioning and validation services to prove and improve the effectiveness of the system, in accordance with Testing and Commissioning, Section 28 08 00.

B. Coordinate with the Owner, or the Owner's representative, for the provision of these services.

3.13 FINAL PROCEDURES

A. Perform final procedures in accordance with Section 28 05 00, Access Control General Requirements.

END OF SECTION 28 23 10