

## **SECTION 27 51 00 - DISTRIBUTED AUDIO-VIDEO COMMUNICATION SYSTEMS**

### **PART 1 - GENERAL**

#### **1.1 REFERENCES**

- A. General provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections.
- B. Architectural, Electrical, and Technology Drawings. Other systems drawings may apply. Division 26 Basic Electrical Materials and Methods sections apply to work of this section.

#### **1.2 SUMMARY**

- A. Section 27 51 00 describes the codes, standards, specifications, recommendations, and practices required for Emergency Notification LED Boards placement and installation at the The University of Colorado Denver | Anschutz Medical Campus (the University). Section 27 51 00 applies to all university campuses.

#### **1.3 SUBMITTALS**

- A. General: Submit the following in accordance with Conditions of contract and Division 1 Specification Section.
- B. Product Data for the following products:
  - 1. LED Board.
- C. Installation Instructions: Manufacturer's written installation instructions for wireway, surface raceway, and nonmetallic raceway products.

#### **1.4 QUALITY ASSURANCE**

- A. Electrical Component Standard: Components and installation shall comply with NFPA 70 "National Electrical Code."
- B. NEMA Compliance: Comply with applicable requirements of NEMA standards pertaining to raceways.
- C. UL Compliance and Labeling: Comply with applicable requirements of UL standards pertaining to electrical raceway systems. Provide raceway products and components listed and labeled by UL.
- D. Manufacturers: Firms regularly engaged in manufacture of electrical boxes and fittings, of types, sizes, and capacities required, whose products have been in satisfactory use in similar service for not less than five years.
- E. Installer's Qualifications: Firms with at least five years of successful installation experience on projects utilizing electrical boxes and fittings similar to those required for this project.
- F. NEC Compliance: Comply with NEC as applicable to construction and installation of electrical wiring boxes and fittings.
- G. UL Compliance: Comply with applicable requirements of UL 50, UL 514-Series, and UL 886 pertaining to electrical boxes and fittings. Provide electrical boxes and fittings which are UL-listed and labeled.
- H. NEMA Compliance: Comply with applicable requirements of NEMA Stds/Pub No.'s OS1, OS2 and PUB 250 pertaining to outlet and device boxes, covers and box supports.

- I. Federal Specification Compliance: Comply with applicable requirements of FS W-C 586, “Electrical Cast Metal Conduit Outlet Boxes, Bodies, and Entrance Caps.”

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

#### 1.6 SEQUENCING AND SCHEDULING

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

#### 1.7 PROJECT SITE CONDITIONS

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

#### 1.8 WARRANTY

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

#### 1.9 SPECIFICATION RESPONSE

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

#### 1.10 DEFINITIONS

- A. Refer to Section 27 05 00 for requirements that shall be fulfilled as part of this specification section.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. LED Board
  - 1. Inova – OnAlert
  - 2. Inova – Lightlink

#### 2.2 APPROVED INSTALLERS/INTEGRATORS

- A. Xcite Audiovisuals – 7167 S. Alton Way, Centennial, CO 80112 (720-771-1011) Contact: Brian Seid([brian@xciteav.com](mailto:brian@xciteav.com))
- B. Ford AV – 4230 Carson Street, Denver, CO 80239 (720-374-2345) Contact: Eric Paulsen([paule@fordav.com](mailto:paule@fordav.com))
- C. AVI/SPL – 15700 Parkerhouse Road, Suite 200, Parker, CO 80134(303-792-3090) Contact: Howard Zucker( [howard.zucker@avispl.com](mailto:howard.zucker@avispl.com))

### PART 3 - EXECUTION

#### 3.1 LED EMERGENCY MESSAGING BOARD INSTALLATION REQUIREMENTS

- A. LED Emergency Messaging Board Placement.
  - 1. LED Emergency Messaging Board are placed in common areas and areas where large groups congregate including but not limited to elevator lobbies, large (75+ seat) classrooms waiting rooms and all public areas that could anticipate containing 10 or more visitors.

- B. Installation Practice.
  - 1. IT conduits and back-boxes. IT Services requires one Trade Size 1, 1-inch conduit to support data connectivity to the LED Board. Back-box shall be 2-gang deep type with single gang mud ring. Back-Box should typically be provided between 8-10ft above finished floor, coordinate final mounting location and height with the University.
  
- C. Power Requirements
  - 1. LED boards are to be Power over Ethernet (PoE).
  
- D. Communications Media.
  - 1. All LED Board communications media is provided by the IT Services department and is managed under a separate contract.

**END OF SECTION 27 51 00**