

## **SECTION 13700 – SECURITY ACCESS AND SURVEILLANCE**

### **PART 1 – GENERAL**

#### **1.1 SCOPE OF SECTION**

- A. This Section contains the requirements related to ELECTRONIC ACCESS CONTROL (CARDREADERS, ETC.). It is the intent of PPD that card access functionality be provided to at least one exterior ADA-accessible entry per building.

#### **1.2 DEFINITIONS**

- A. "PPD" refers to the University of Florida Physical Plant Department. PPD shall be the administrator of the central data management system. Project management for the centralized University of Florida electronic access control system shall reside with the Physical Plant Division (PPD).
- B. "USER" will refer to the college, department, division or other UF entity having administrative ownership of the building or defined space, which will utilize the SYSTEM.
- C. "SYSTEM" refers to the centralized University of Florida electronic access control system. The SYSTEM shall be a fully operational Lenel® OnGuard® Pro system using the latest software version supported by the software vendor. Lenel Systems International, Inc. shall be the software manufacturer for the SYSTEM.
- D. "UNIVERSITY" refers to The University of Florida.

#### **1.3 CODES AND STANDARDS**

- A. All card access devices shall be compliant with Section 11-4.27 of the Florida Building Code.
- B. All work, material, equipment and devices shall comply with the intent of UL 50: Enclosures for Electrical Equipment, UL 1076: Standard for Safety for Proprietary Burglar Alarm Units and Systems, and UL 294: Access Control System Units.
- C. All new or renovated installations shall meet all University Construction Standards for raceway and wiring. Other Standards to be referenced include Florida's Building Code and the latest edition of the National Electrical Code. Particular Articles of importance include:
  - NEC 250 / Grounding
  - NEC 720 / Circuits and Equipment Operating at Less Than 50 Volts.
  - NEC 725 / Class 1, 2 & 3 Remote Control, Signaling, and Power Limited Circuits.

#### **1.4 SUBMITTALS**

- A. The contractor shall supply three complete warranty, installation, and operation documents for each system component. One copy shall be delivered to each of the following: User, UF Project Manager and PPD's Architecture & Engineering, Documents Coordinator.

- B. The contractor shall supply three sets of as built wiring diagrams that show location(s) of all equipment and wiring for the system. One copy shall be delivered to each of the following: User, UF Project Manager and PPD's Architecture & Engineering Documents Coordinator.

## 1.5 **QUALITY ASSURANCE**

- A. Installer Qualifications
  - 1. Any contractor hired for installation and service shall be an authorized, certified Lenel® OnGuard® Pro dealer with factory-trained technicians thoroughly familiar with all aspects of the software and control hardware. The contractor shall have a fully staffed office and service department located within 125 miles of Gainesville. The contractor shall agree to provide both warranty and non-warranty service within 4 hours of notification of a problem. The contractor shall be able to perform any and all repairs to the system within 24 hours. Contact PPD for additional information concerning certified Lenel® OnGuard® Pro dealers.

## 1.6 **WARRANTY**

- A. System Warranty: The contractor shall warranty all parts and labor for a period of 1 year from the date of acceptance by the University. The contractor shall provide both warranty and non-warranty service within 4 hours of notification of a problem. The contractor shall be able to perform any and all repairs to the system within 24 hours.

## **PART 2 – PRODUCTS**

### 2.1 **GENERAL**

- A. Door hardware selection for card access shall be coordinated with either the PPD Facilities or Health Science Center Key Shops.
- B. All locking hardware shall accommodate a University of Florida key override system.
- C. Electro-mechanical exit devices, electro-mechanical locksets or electric strikes shall be used with the card access system. Magnetic locking devices commonly called "Mag Locks" are not acceptable.
- D. All exterior doors to be equipped with a magnetic card reader shall also be wired to accommodate a proximity access reader in the future.
- E. When possible, all wiring shall be in EMT conduit (minimum of ¾") sized to accept the required number of wires. Flexible metallic conduit may also be used where required. The intent is to have no wiring exposed to tampering.
- F. All systems and circuits shall be supervised. An alarm will occur if any system wiring is cut or shorted and if the system devices are tampered with.
- G. All system components shall utilize backup batteries capable of sustaining basic functioning for a minimum of four hours.
- H. All system cabinets shall be locked and equipped with a monitored tamper switch that will indicate an alarm at the operator terminal. Also, all junction boxes that contain splices or connections shall be equipped with a tamper switch. All

junction boxes shall be clearly identified.

- I. Control panels, power supplies, (including 12 volt for accessories and 24 volt lock power) and all other components shall be located in a single room within the building. In multi-story buildings there may be equipment in such rooms on more than one floor. The room(s) selected to house the electronic access components shall not contain mechanical or elevator controls equipment. All components shall be contained in enclosures each of which shall be mounted on backboard of 4'x8' plywood  $\frac{3}{4}$ " thick painted grey with fireproof paint. Enclosures shall be mounted at locations and heights that ensure ease of service.
- J. Contractor shall provide initial programming and configuration of the access control system. This shall include configuration of the central campus system to incorporate the new USER system, as well as the installation and configuration of the USER's client software and basic administrator training, configuration of the local computer software as necessary to integrate into the central campus system. Contractor shall coordinate with PPD-ITS and the User's IT organization for assistance with the integration.
- K. The card access system shall utilize the existing campus network using approved protocols for communications between the building controllers, client workstations and the central database server.
- L. All AC power shall be fed from the buildings power source supported by an emergency backup generator where applicable. If no generator is available an uninterruptible Power Supply (UPS) device shall be included with the system that will provide continuous power for a minimum of 30 minutes. The source of the AC power feed shall be identified at termination point of equipment.
- M. All system power shall be isolated/dedicated circuits with surge protection and dedicated grounds.

## **2.2 ACCEPTABLE MANUFACTURERS**

- A. Acceptable manufacturers for access control field hardware
  1. Lenel® Intelligent System Controllers (building panels) - no substitutions
  2. Lenel® Input Control Module - no substitutions
  3. Lenel® Output Control Module - no substitutions
  4. Lenel® Reader Interface Modules - no substitutions
  5. Magnetic card access reader - Lenel® model LNL-2010W, LNL 2005W or approved equal
  6. Magnetic card access reader with keypad - Lenel® model LNL-2020W or approved equal
  7. Proximity access reader - HID MaxiProx® or approved equivalent.(2-3' range required for use on an ADA-compliant entrances); otherwise, HID 5355 Prox Pro or approved equal.
  8. Power supplies - Altronix -ULX, -ULACM or -PD8 series or approved equal.
  9. Star-Multiplexer - Lenel® model LNL-8000--no substitutions

10. Tamper switches - Amseco PSW1 or approved equal
  11. Network Connectivity Devices:
    - a. For use with Lenel model LNL-500 and LNL-2000 Intelligent System Controllers—CoBox Micro Serial Server (LNL-ETHLAN-MICR)
    - b. For use with Lenel model LNL-1000 Intelligent System Controllers—Lantronix Device Server model UDS10 or MSS100 (or approved equal)
- B. Acceptable manufactures of access control door hardware.
1. Door contact (monitor switch) - Sentrol 1078-C or equal
  2. Request to exit (REX) device (when using electric strike) - Detection Systems DS-150i
  3. Electric door strike - Von Duprin or equal (model to suit applications)
  4. Power transfer hinge - Stanley 8-wire, Sargent 8100 or equal (for renovations)
  5. Electrical power transfer device - Von Duprin or equal (replaces item 11d for new construction)
  6. Electric exit device (crash bar) - Von Duprin or Sargent (with integral REX)
  7. Electric mortise lock – Best or Corbin Russwin (with integral REX).  
The selection of a model with a Temperature Control Module is recommended when the lock is expected to remain in its non-default state for extended periods of time (i.e. normally closed lock held open during office hours).

END OF SECTION