

SECTION 285400 – DURESS, AND MISC SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Provisions of the Contract and of the Contract Documents apply to this section.

1.2 SUMMARY

- A. This section includes the requirements and operational characteristics for duress, and other miscellaneous systems, which are an integral part of the Security Control System.
- B. Provide all labor, equipment, materials, and supervision to install, program, calibrate, adjust, document, and test the total system as required herein and on the drawings.

1.3 SYSTEM DESCRIPTION

- A. Duress: Provide duress pushbutton stations as shown on the drawings. Each duress location shall annunciate separately at the touch screen control station(s) in control of that duress station's area, and also at the Central Control touch screen control station(s). Duress buttons at GUI control stations shall lock down the GUI controls when that duress is activated.
- B. Exit Pushbutton & Request to Exit Pushbuttons: Provide pushbutton stations as shown on the drawings. Each location shall be an input to the PLC for verification. These buttons are not hardwired to the lock. During the submittal phase, all architectural doors with electric locks shall be coordinated for request to exit devices. Provide either a motion sensor or exit pushbutton to shunt the door alarm at these doors.
- C. **Walk-Through Metal Detectors (Magnetometers) and X-Ray Unit: Provide as indicated on the Contract Documents. (ADDENDUM 04)**

1.4 SYSTEM FEATURES AND SOFTWARE REQUIREMENTS

- A. Duress Alarms
 - 1. Duress pushbutton stations shall be located in specific areas of the facility for the officers to press. Input and output signals from/to these stations shall be connected to the input and output modules of the PLC System.
 - 2. All duress alarms shall be annunciated on the local touch screen control station(s) and Central Control touch screen control station. The owner shall have the option of duress alarms annunciating on all touch screen control stations at no additional cost.
 - 3. Duress stations are normally hidden on the touch screen control station(s). They shall be displayed during an alarm condition only.
 - 4. Upon activation of a duress alarm, the audible alarm shall continually annunciate "DURESS" until the touch screen control station is SILENCED. The Site Plan shall flash in red the area in which the duress occurred to allow quick identification for the operator to select that screen. The audio output from the nearest intercom station shall automatically be broadcast through the touch screen control station speakers. The local CCTV camera video shall be displayed on the video call-up monitor in Central Control.
 - 5. When the area of the alarm is shown full screen, the duress icon shall flash in red at a rate of one time per second at the location of the active duress station. Multiple duress

stations will be shown individually, but shall only require one silent activation. When duress pushbutton stations with illuminated mushroom head pushbuttons are used, the lamp (activated by a PLC output) in the station will flash at a rate of one time per second once activated. Deactivating the duress at the station will not cancel the alarm at the touch screen control station. The duress pushbutton station lamp will become solid once the touch screen control station has SILENCED the alarm to alert the officer in duress that the duress alarm has been recognized.

6. When the local touch screen control station presses RESET, the icon shall become solid red. The duress situation will only be canceled once the remote station has been deactivated and the touch screen control station has RESET the alarm condition. Multiple duress stations must be individually RESET.
7. All duress alarms originating from duress pushbutton stations shall only be able to be reset at the physical duress pushbutton station location, requiring direct intervention of the staff. The touch screen control station shall only be able to silence the alarm annunciation.
8. Master Control's duress button shall annunciate to panels in Offices 111-114 and shall disable the touch screen. Master Control shall not be able to re-enable the touch screen until the Duress has been reset by the button in Office 114 or from Touch Screen N.

B. Miscellaneous Systems

1. Exit Pushbutton:
 - a. Activation of an exit pushbutton station shall request that the associated door be opened via the PLC System.
 - b. The pushbutton shall not be wired directly to the associated door's electrically powered lock, but to an input point of the PLC System. Activation of the pushbutton shall take into account all interlocking with other doors and shall not create a 'Door Violation' alarm.
2. Request to Exit (REX) devices shall be provided on the secured side at selected doors scheduled to be free-exiting. The REX shall provide an input signal to the PLC system for a valid unlock. Upon REX activation, these doors shall be configured without the touch screen control station(s) annunciating a 'Door Violation' alarm.

PART 2 - PRODUCTS

2.1 Duress Pushbutton Station, Wall-mounted Mushroom Head

1. Provide an Allen-Bradley 800-T series, illuminated, mushroom head, latching pushbutton mounted to a single-gang faceplate of 12-gauge stainless steel for all wall-mount applications. The text "DURESS" shall be laser-engraved on the faceplate.
2. Approved equal manufacturer: General Electric.

2.2 Duress Pushbutton Station, Under-Counter

1. The unit shall include double-pole, double-throw contacts.
2. The unit shall be supplied with a lock-mounted switch and one key.
3. The unit shall be designed for silent operation and housed in a stainless steel housing.
4. For under-counter duress pushbutton stations, provide a single gang box mounted at 18" AFF with 3/8" center hole coverplate and allow 6' of flexible connection to underside of

desk. Use cable tie base fasteners screwed to the walls and underside of the counter or desk. Coordinate exact placement at desks and counters with Owner.

5. Approved Manufacturer:
 - a. Ademco model #269R, or approved equal.

2.3 Request to Exit Pushbutton Station:

1. The switch shall be a momentary, pushbutton, dry contact type that is moisture and damage proof. The contacts shall be rated at three amperes, 300 watts AC with a non-inductive load. It shall be a single pole, single throw momentary action switch, attached to the faceplate from the rear so that it cannot be removed when installed.
2. The pushbutton shall be captive within the faceplate. It shall be constructed so that it does not provide a permanent closure or call-in indication when operated. The switch shall be mounted on a single-gang faceplate of 12-gauge stainless steel. The text "DOOR RELEASE" shall be laser-engraved on the faceplate.
3. Approved Manufacturer:
 - a. Southern Folger
 - b. Approved equal

2.4 **Walk-Through Metal Detector: (ADDENDUM 04)**

A. **Series/Manufacturer:**

1. **Checkgate MZ-8 / Auto Clear**
2. **CheckGate 9800 / Auto Clear**
3. **PD 6500i / L-3 Communications**
4. **HI-PE / CEIA USA**
5. **SMD600 MZ / Smiths Detection**

B. **Function:**

1. **Walk-through detector.**
2. **Minimum false alarming due to adjacent X-ray units, radio frequency, and electromagnetic interference.**
3. **Provide built-in control console to indicate alarms, settings, and status of the metal detector.**
4. **Metal detector shall be designed to operate in a temperature range of 0° C to 55° C and up to 100% humidity.**
5. **Power requirement: 115 VAC, 60 Hz.**
6. **Provide necessary auxiliary equipment and items necessary for a complete, fully-functional installation.**

2.5 **X-Ray Machine: (ADDENDUM 04)**

A. **Series/ Manufacturer:**

1. **Zorpro Autoclear 6040**
2. **Approved equal**

B. **Function:**

1. **Tunnel size: 24.4" x 16.5"**

2. **High resolution color monitor, 17"**
3. **Dimensions: 60.9" x 31.9" x 49.8" (LxWxH)**
4. **Material Penetration: 28-29 mm steel**
5. **Dose per inspections, 0.1 mR**
6. **Power, 105-125 VAC, 60 Hz (8 amp max)**
7. **Conveyor speed: 24 cm (9.4") per sec, 14.6 m (48') per minute**
8. **Pulling weight: 150 kg (331 lbs.)**

C. Options:

1. **Provide Uninterruptible power supply option.**

END OF SECTION 285400