SHEET NOTES:

1) ALL SENSORS & DETECTORS SHALL BE CEILING MOUNTED UNLESS NOTED OTHERWISE

2) ALL CCTV's SHALL BE INDEPENDANT OF SEP SYSTEM

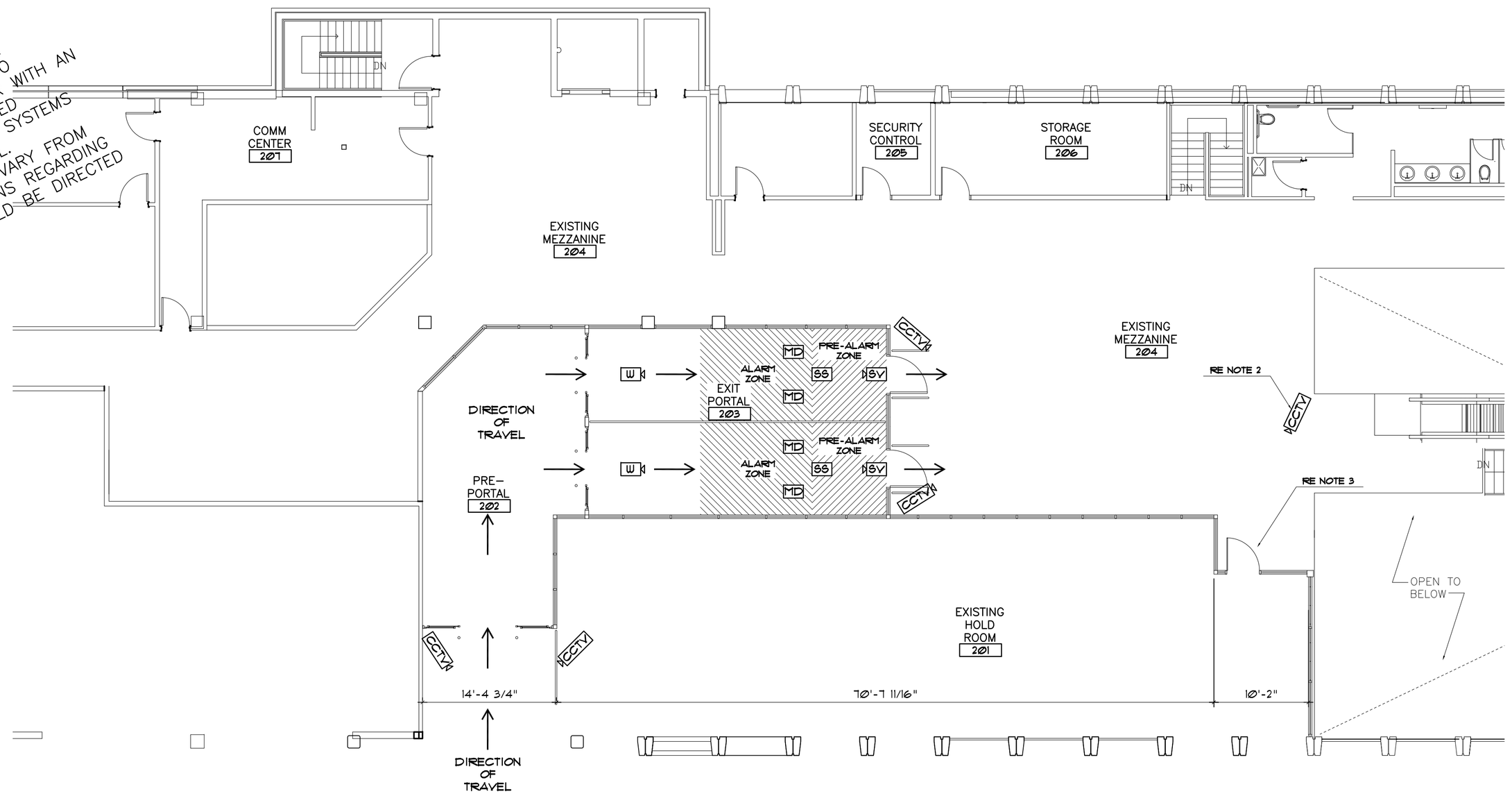
3) DOOR HARDWARE SHALL INCLUDE:
PIN PROX, AUDIBLE STROBE & CARD READER TIED INTO PUM ACCESS CONTROL

CODE:

- SS — SPEAKER/ STROBE
- SV — SURVEILLANCE CAMERA
- MD — MOTION DETECTOR (B&W CAMERA)
- W — WATCHER (SURVEILANCE) COLOR CAMERA
- CCTV — CLOSED CIRCUIT TELEVISION

NOTE: NOT FOR CONSTRUCTION

THIS DRAWING IS FOR INFORMATIONAL PURPOSES ONLY. IT IS INTENDED TO PROVIDE THE GENERAL CONTRACTOR WITH AN OVERVIEW OF HOW TYCO INTEGRATED SECURITY WILL INSTALL SECURITY SYSTEMS WITHIN THE SECURE EXIT PORTAL. CONSTRUCTION SPECIFICS MAY VARY FROM THOSE SHOWN. ALL QUESTIONS REGARDING THE SECURITY SYSTEM SHOULD BE DIRECTED TOWARD TYCO.



G1 / A-1 SECOND FLOOR PLAN: SECURE EXIT PORTAL
1/8" = 1'-0"

PORTLAND JETPORT
Exit*Sentry*® Exit Lane Anti-Backflow Security System
Basic System Concept

TECHNICAL APPROACH

I. Monitoring Exit Lane Backflow Using the Exit*Sentry* System

Exit*Sentry*® for Aviation (known hereafter as ExitSentry) is the industry-leading security monitoring and alarm system that automatically watches people and objects flow through airport exit lanes (defined as a passenger transition area containing a line of demarcation between the Sterile and non-Sterile area where passengers are unable to return without screening). ExitSentry forms the foundation technology of an Exit Lane Breach Control (ELBC) system. Using sophisticated and highly specialized video analytics software integrated with commercial off the shelf hardware (COTS), the ELBC system continuously, silently and automatically monitors the exit lane to accurately detect people travelling the wrong way and objects thrown from the public to the sterile side in the exit lane within the protected zones of detection, thus executing local & remote audible and visual notifications, live and recorded video of the event, and system control functions upon their detection. If optional containment measures (doors or other automatic barriers by others) are implemented at the secure end of the exit lane, the ExitSentry system can control the containment measures and prevent (contain) the advancing breach, whether it involves people or objects (or both).

An Exit Lane Breach is defined as:
1. A passenger "reverse-transition" across the line of demarcation from the non-sterile area toward the sterile area.
2. An object propelled into the exit lane from the non-sterile area.

The ELBC uses CCTV Video Surveillance, Video Analytic Sensors, audible messaging and audible/visual alarms to alert passengers and security personnel of an attempted exit lane breach and digitally records the incident. Locally, the system deploys a messaging loudspeaker, audible alarm signal and a visual strobe for passenger notifications. Remotely, the system notifies Security Operations of system events through obvious changes on the operator control station(s).

When passenger traffic flow is normal through the exit lane in the sterile to non-sterile direction, the ELBC system silently monitors and requires no action or concern from the passengers or Airport Security Operations. In the event of an alarm condition, the ELBC system automatically detects, annunciates and controls the situation providing audible and visual notification to the passengers and intuitive performance tools for Security Operations and other authorized airport security staff.

II. Brief Overview

A. Detailed Passenger and Security Operations (SO) Interaction:
During a period of passenger flow from the sterile area through the Exit Lane into the non-sterile area, a SO monitors passenger behavior through direct visibility or via CCTV surveillance technology mounted at the SO station near the exit lane, airport SOC or other location designated by the airport within 800 cable feet of the central control equipment. During normal passenger flow to the non-sterile side, ExitSentry monitors exit lane activity while remaining silent and causes no annunciation or control function. In the event, a person(s) reverses direction (possibly attempting to re-enter the sterile area), ExitSentry detects this abnormal behavior, sounds a local audible alarm, lights an alarm strobe and notifies the SO on the operator console of the attempted breach.
Optionally, ExitSentry also sends a control signal to exit lane containment barrier devices (provided by others), such as automatic doors installed at the sterile end of the lane, allowing the automatic barrier functions to actuate, and thus preventing the attempted breach from advancing into the sterile area/concourse. Passengers are alerted of an event, and the SO is provided with notification, surveillance and control which provide ability to detect, track, delay, and detain the offender.

Providing "pre-alarm", ExitSentry monitors the non-sterile end of the exit lane such that it automatically warns anyone who wonders near the Exit Lane (purposely or accidentally) to stop and turn around. If a person approaches the exit lane from the non-sterile end, they enter an unmarked area monitored by ExitSentry causing ExitSentry to detect their presence. ExitSentry plays a user-defined message over the lane's loudspeaker providing notice and direction to the offender (Typically "Stop! Do not enter!"). It also provides notification to the SO on the operator console.

Object detection is also a function performed by ExitSentry within the protected zones of detection. An object of minimum detectable size propelled into the exit lane from the non-sterile end is detected by ExitSentry, within certain height limitations as dictated by exit lane dimensions, camera mounting height and lens angle. This detection causes ExitSentry to sound the local audible alarm, lights the lane alarm strobe, notifies the SO on the operator console, and sends an automatic actuation signal to the containment control system.

B. Exit Lane Detection equipment:

Each exit lane (In the case of Portland Jetport there will be two monitored lanes functioning independently but basically reporting as one), will have commercial off the shelf (COTS) components including multiple CCTV cameras, a central equipment rack (preferably located in a nearby electrical closet or IDF), alerting devices, interconnections, and an operator's control station referred to as the Remote Command Terminal (RCT), which can be installed up to 800 cable feet from the central equipment rack over one (1) CAT-5E cable (Two CAT5E cables if system printer is to be collocated with the RCT).

1. Cameras:
   - Two ExitSentry Watcher color cameras provide a full-width view of the exit lanes looking from the sterile end toward the non-sterile area and are used for:
     a. Video documentation of an individual who enters the exit lane from the non-sterile area, providing a snapshot of the exit lane at time of the alarm (face-on view of the offender), and a configurable video loop of the alarm event.
     b. Real-time monitoring of activity in the Exit Lane.
   - Two ExitSentry Detector cameras in each of two lanes, ceiling mounted looking vertically down and are used for:
     a. An individual who enters the exit lane from the non-sterile area.
     b. An individual in the lane traveling in the wrong direction alone or within a moving crowd.
     c. Objects thrown into the exit lane from the non-sterile area end within the detection areas.

   NOTE: ExitSentry uses high definition analog cameras for analysis and detection of wrong way motion of people and objects. This coupled with a highly-specialized and sophisticated video analytics software designed specifically for the exit lane monitoring application assures total accuracy of detection capabilities, particularly with the TSA's small object detection requirements, which has proven impractical with megapixel IP cameras due to extreme processor power requirements and inconsistent frame-rate (packet delivery) over IP video systems.

2. Central equipment rack containing following major components:
   - ExitSentry Server - A main system computer providing:
     a. Video processing, analytics and control for the ExitSentry watcher and detector cameras.
     b. Signal processing of alerts and alarms for local and remote annunciation and display.
     c. Control processing of input/output interfaces.
     d. Primary storage of alarm event snapshots (logged with time/date stamp), and alarm video loops.
   - Video Servers (Encoders - provided by others) - Converts camera output video signal and alarm closed contact input signal to an IP stream for compatibility with the airport's digital video management system (VMS). Other shall provide a typical video encoder compatible with the airport VMS with at least four inputs that has the same minimum capabilities as the Axis 241Q for this application.
   - Connection Panel - Termination board for wiring external devices and control signals.
   - Network Switch - TCP/IP control and connection point of local ELBC system Ethernet network.
   - KVM Switch - Controller allowing one client workstation in the ECS to select between multiple lanes one-at-a-time to remotely control that lane's keyboard, video and mouse.
   - KVM Extender - Module that connects the ExitSentry server to the RCT located at the exit lane SO desk; allows remote control of the ExitSentry server's keyboard, video and mouse.
   - UPS - Uninterruptable power supply filters system power and provides short-term alternate power source in the event of a main power loss.
   - Video Distribution Amp - Splits and amplifies video signal for undistorted sharing of video signal to several destinations.
3. Alerting Devices:
   - Speaker/Strobe - Ceiling or wall mounted toward the midpoint of the exit lane and adjacent to the containment barrier location:
     a. Speaker provides audio playback of the Pre-alarm zone violation warning message.
     b. Speaker provides audible alarm tone indicating that the ExitSentry system is in alarm due to an exit lane breach.
     c. Strobe provides visual indication that the ExitSentry system is in pre-alarm or alarm caused by an exit lane breach.
4. Interconnections - Termination interface panel for connections to external control systems including the containment barriers.
5. Remote Operator's Terminal (RCT)
   - ExitSentry video monitor, custom keyboard and mouse for (remote) monitor and control of the ExitSentry Server.
   - Password protected system administration functions.

Reference the Portland Jetport ExitSentry system design drawings, ExitSentry system block diagram and attached Sequence of Operations for specific architecture and functionality of the ExitSentry system as proposed for Portland Jetport.

END

General Notes

ISSUED FOR CONSTRUCTION
11/5/2012

No.	Revision/Issue	Date

Facilities & Engineering
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Portland, ME 04102
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Project Name and Address
SECURE EXIT PORTAL AND ASSOCIATED RENOVATIONS

Sheet Title
SECURITY OVERVIEW

Project Number:	Sheet:
12-102	SEC-1
Date: Issued For Construction 11/5/2012	
Scale: Reference Individual Drawings	