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Director of Planning and Urban Development Penny St. Louis

Job ID: <u>2011-06-1459-FAFS</u> <u>Installation of a Master box fire alarm</u> <u>system</u> For installation at: 947 WESTBROOK ST CBL: <u>199 - - A - 001 - 002 - - - - -</u>

### **Conditions of Approval:**

### Job specific conditions:

All fire alarm device labeling shall be verified to correspond with the final installation.

Annunciation shall indicate Floor, Room, device type and id.

Fire shutter control shall by groups. Two detectors on each side of a group of fire shutters shall close all shutters in the group with any two of the four detectors in alarm. A plan for manual control to close the fire shutters shall be approved by the Fire Prevention Bureau for emergency override and crowd control in an alarm/emergency event. In the event the plan for manual control is not adequate, shutter control shall be reprogrammed to operate as subsequently required by the Fire Prevention Bureau.

An AES master box is required as follows:

Zone 1: East Terminal Water Flow; Zone 2: City Disconnect; Zone 3: East Terminal pulls and detectors; Zone 4: West Terminal Water Flow; Zone 5: West Terminal pulls and detectors; Zone 8: AES tamper

Zones 1,3,4, and 5 shall have individual City Disconnect. The FACP and annunciators shall indicate "City Disconnect: East Terminal Water Flow" or the appropriate zone in disconnect.

Evacuation zones shall be East Terminal and West Terminal. Each zone shall have a full function annunciator, revolving red light and Knox Box at the fire department access point for that zone as approved by the Fire Prevention Bureau.

The Com Center shall have a hardwired fire fighter phone due to the elevator phones being routed to that location.

Records cabinet and all fire alarm equipment shall be keyed alike.

Delayed egress locks shall comply with NFPA 101-2009 edition.

All levels at grade shall be designated Floor 1. The upper level in the existing terminal and middle level at the new terminal shall be designated Floor 2. The upper level in the new terminal shall be designated Floor 3.

### Standard conditions:

The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.

In field installation shall be installed per code as conditions dictate.

Central Station monitoring for addressable fire alarm systems shall be by point.

All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS".

Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.

### Master Box Approval

Applicant: Jesse Klimaytis – E.S. Boulos	Emergency Contact: PWM Comm Center
App Phone #: 207-272-6986	Emergency phone #: 207-756-8310
Building Name: Portland International	Date of Application: 6/16/11
Jetport Building Address: 1001 Westbrook St	Billing Address: 43 Bradley Dr Westbrook, ME 04092
Occupancy: Assembly Assembly OL>300, 20 unit apartment building, etc.	Comments:

# Applicant completes red box and submits with Fire Alarm Permit

1	FIRE PREVENTION:	roved	$\sim 0$
<b>A</b>	<u>6 / 23 / 11</u> Date	Five Prevention	Officer
	Zone 1: East Terminal: Water flow	Zone 2: City disconnect	
	Zone 3: East Terminal: Pulls and detectors		er flow
	Zone 5: West Terminal: Pulls and detectors		
		Zone 8: AES Tamper switch	
	Modify City Box response to alarm sounding		•
2	FIRE ALARM: Box #:	and the second state of th	
3	ELECTRICAL DIVISION: D Approved Box Type: AES Radio Box / New Test Date:// In Service AES	Other	Fire Alarm Technician
	Circuit if applicable:		
	FIRE ALARM: Same Running As	signment As Box:	
4	Notifications: 🛛 All Stations 🖾 Run Books	Digitizer Computer	· □ Cad Box Test
	□ South Portland □		
	Other		Dispatcher
·1		·	
5	BILLING:   Entered  Final	ancial Officer	

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# **Fire Alarm Permit**

b|21/11 E.S. Boulos 45 Bradley Dr. mit Westbrook ME 04097



If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 1001 WESTBROOK ST	CBL: 204 A00/00/002
Exact location: (within structure) NEW TERMINAL	(WEST)
Type of occupancy(s) (NFPA & ICC): MIXED USE	
Building owner: PORTLAND INTERNATIONAL Must be	
System Designer (point of contact): <u>ALLAN</u> <u>PRENT</u>	ISS (NICET CERT # 90823)
Designer phone: <u>978-731-7246</u>	E-mail: <u>aprentisse Simplex Grinnell.com</u>
Installing contractor: E.S. BOULDS COMPANY	Certificate of Fitness No:O26
Contractor phone:	E-mail: jklimay-tise estou los.com
	AES Master Box: YES NO NO NO
Amendment to an existing permit: YES O NO O Perr	nit no:
The following documents shall be provided with this application:	
Floor plans	$COST OF WORK: \underline{207,000,00}$
Wiring diagram	PERMIT FEE: \$2,100.00
Annunciator details pdf copy (may be e-mailed)	(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)
Input/ Output Matrix Designer qualifications	RECEIVED
Equipment data sheets Battery/ voltage drop calcs	JUN 17 2011
Electrical Permit Pulled (check alarm/com)	
Master box approval only: YES NO NO (If yes check New AES Master Box above)	Dept. of Building Inspections City of Portland Maine
The designer shall be the responsible party for this application. I	Jownload a new copy of this application at
www.portlandmaine.gov/fire for every submittal. Submit all plans in o	electronic PDF in <u>addition</u> to readable 11 ½ x 17s to
the Building Inspections Department, 389 Congress Street, Room	315, Portland, Maine 04101.
Prior to acceptance of any fire alarm system, a complete commission	ing and acceptance test must be coordinated with all
fire system contractors and the Fire Department, and proper document	tation of such test(s) provided.
All installation(s) must comply with the City of Portland Technical S	tandard for Signaling Systems for the Protection of
Life and Property, available at www.portlandmaine.gov/fire.	
Applicant signature:	_ Date:

# City of Portland, Me.



, To the Chief Electrical Inspector, Portland Maine: The undersigned hereby applies for a permit to make electrical installations

in accordance with the laws of Maine, the City of Portland Electrical Ordinance, National Electrical Code and the following specifications:

7015 Date

Permit #_	· · · · · · · · · · · · · · · · · · ·
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SIGNATURE OF CONTRACTOR

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Portland International Jetport (PWM) Gensler Project 09.6395.000 Issued for Permit October 26, 2009

#### SECTION 28 31 00 - FIRE DETECTION AND ALARM

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 thru 34 Specification Sections, apply to this Section.
- B. Specification Section 271300 Communications Backbone and Horizontal Cabling

#### 1.2 DESCRIPTION

- A. Existing Condition: The fire alarm system at the Portland International Jetport is a two node SimplexGrinnell 4020 network, consisting of addressable and conventional devices with two annunciator panels.
- B. The contractor shall demolish, and furnish, install equipment, materials, tools, labor, programming, drawings, calculations, testing and provide associated documentation for a complete peer to peer, global annunciation, fiber optic networked fire alarm system with municipal signal transmission of alarms as described by these plans and specifications for the Portland International Jetport expansion and existing facility.
- C. The scope of work shall include the following:
  - 1. One (1) SimplexGrinnell 4100U FACP, associated transponder cabinets, booster power supplies, amplifiers, initiating devices, notification appliances, control and monitor modules and associated relays for building safety interfaces for terminal expansion. Programming, points
    - Iist and sequence of operation to be approved by the Owner, Engineer and City of Portland Fire Department.
  - 2. One (1) SimplexGrinnell fire command annunciator panel consisting of a InfoAlarm Command Center, fire department communication phone with capacity to hold 6 headsets and paging zone audio module in terminal expansion.
  - 3. Two way fire department communications in terminal expansion with 6 headsets.
  - 4. Two (2) SimplexGrinnell 4100U FACPs for replacement of two existing. SimplexGrinnell 4020 FACPs in existing locations. Programming, points list and sequence of operation to remain the same as approved by the Owner, Engineer and City of Portland Fire Department.

FIRE DETECTION AND ALARM

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- 5. SimplexGrinnell True Sight Workstation in the existing Operations Communication Center (OCC). New and existing fire sprinkler zones on floor plans shall be shown on the True Sight Workstation. Any condition in the fire system shall be graphically segregated by fire sprinkler zone. New fire sprinkler points shall show alarm condition in the area in which the device serves as well as its physical location.
- 6. Addressable strobes with emergency voice evacuation and paging capability in terminal expansion.
- 7. SimplexGrinnell remote annunciator replacing existing annunciator in existing terminal.
- 8. One Digitize DET-6B indoor masterbox for municipal fire alarm signal transmission adjacent to existing masterboxes. The fire alarm system shall be arranged in a way such that one master box does not serve more than 100,000 square feet of total fire area. Provide additional boxes for any portions that are greater than 100,000 square feet. Program initiating devices, Floor 1-2 of the new building as one zone and Floors 3-5 as another zone on the DET-6 with relays provided by Simplex. This shall be approved by the PFD.
- 9. Conduits, fittings, outlets, junction boxes, supports, hangers, wire and cable and other items incidental to and/or required to complete the installation, in accordance with the intent of the drawings and specifications. This shall include wire and conduit required to operate both new and existing equipment during each phase of the work. This shall also include steel supports for conduit, pull boxes, panels and other equipment, as indicated and/or required to complete the installation.
- 10. Perform all programming and downloads for the nodes during each phase of the system modificationNew and Existing Programming matrix shall be audited by the system manufacturer. Any corrections including changes to the existing NAC pairings for audio and visual shall be made and reflected on the contractor's shop drawings.
- D. Please refer to the project phasing plan and notes for specific criteria for construction sequencing. The contractor shall be responsible for a complete project phasing plan that shall be submitted in the shop drawing package for approval.
- E. Prior to the start of work, the contractor shall survey the existing terminal and all fire alarm equipment in its entirety and perform an initial system functionality test. Documented test results shall be submitted to the engineer for approval. contractor shall be responsible to determine existing points at the existing Fire Alarm Control Panel (FACP) in order to size the new 4100U panel and maintain existing sequence of operation.