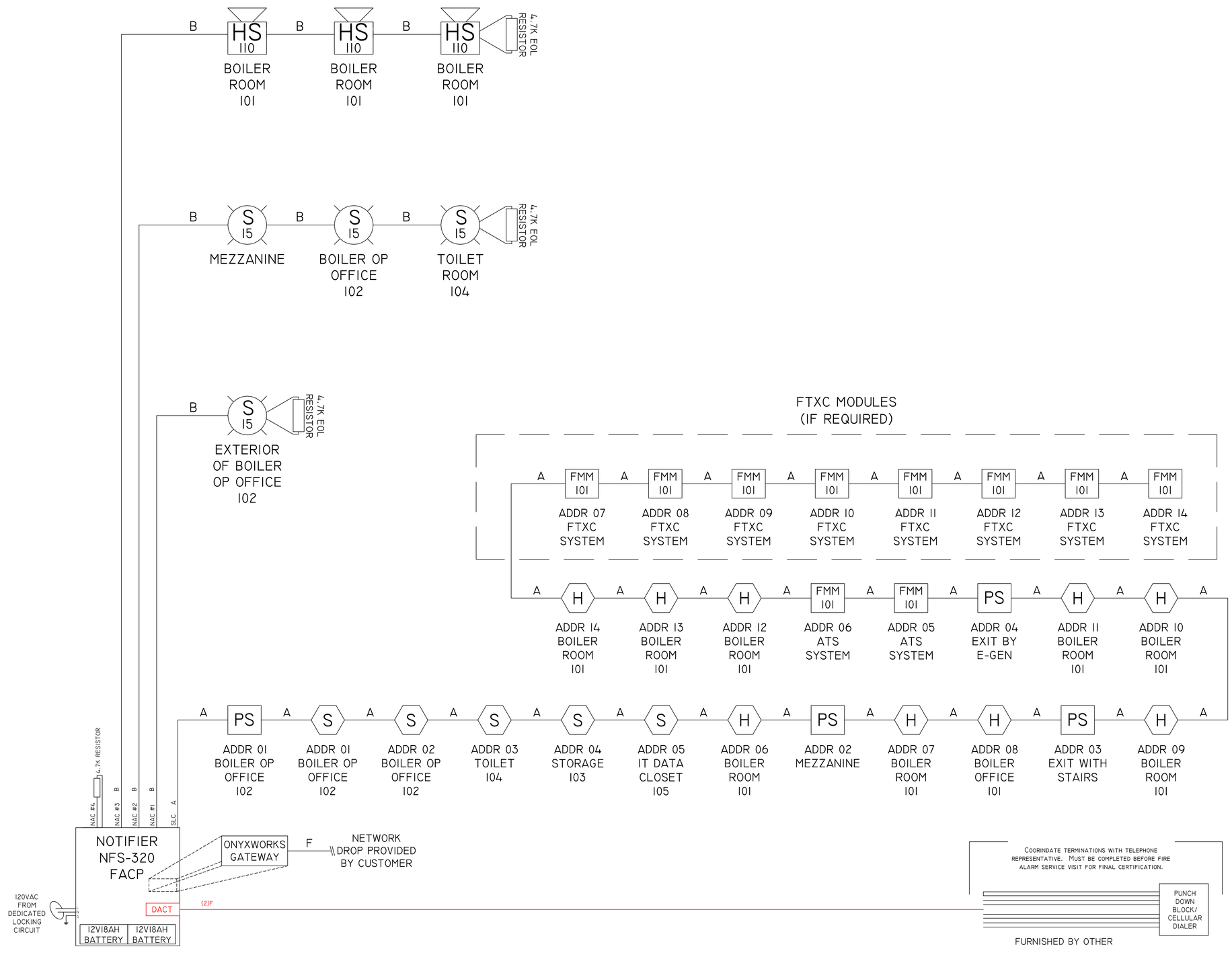

LEGEND

PS	PULL STATION
S	SMOKE DETECTOR
H	HEAT DETECTOR
FMM I	MONITOR MODULE (I01= MINI MODULE)
HS XX	SPEAKER STROBE (XX NOTES CANDELA SETTING)
S XX	STROBE (XX NOTES CANDELA SETTING)

WIRE LEGEND

A	2 COND #12/#14/#16 AWG TWISTED PAIR FPL CABLE
B	2 COND #14 AWG FPL CABLE
C	2 COND #18 AWG TWISTED PAIR FPL CABLE
D	2 COND #18 AWG TWISTED SHIELDED FPL CABLE
F	CAT-5 CABLE

DEVICE ADDRESSES:

IMPORTANT! DUPLICATE ADDRESSES BETWEEN DEVICES AND MODULES ARE NOT AN ERROR.
EACH DEVICE MUST BE LABELED WITH THE LOOP AND SLC ADDRESS.
DEVICE EXAMPLE: L1D001 MODULE EXAMPLE: L1M001
NOTE: PULL STATIONS ARE IDENTIFIED AS MODULES BY THE FIRE ALARM CONTROL PANEL.

INSTALLATION NOTES:

FIELD WIRING SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF **NFPA 70: NATIONAL ELECTRIC CODE(2014)**, ALL APPLICABLE **MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS,** AS WELL AS ALL **MANUFACTURER GUIDELINES FOR INSTALLATION.**

CONTROL PANELS, DEVICES, AND ALL OTHER SYSTEM COMPONENTS SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF **NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE(2013)**, ALL APPLICABLE **MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS,** AS WELL AS ALL **MANUFACTURER GUIDELINES FOR INSTALLATION.**

THE INSTALLER SHALL FOLLOW CORRECT CONDUCTOR POLARITY, INDICATED CIRCUIT DIVISIONS, PROPER GROUNDING AND SHIELDING WITHOUT EXCEPTION. IMPROPER INSTALLATION CAN RESULT IN INTERFERENCE, TRANSIENT VOLTAGE, OR SHORT CIRCUITS CAUSING UNDESIRED OPERATION OR DAMAGE TO THE CONTROL PANEL, DEVICES AND ANY OTHER INTEGRATED COMPONENTS.

THE GAUGE OF WIRE USED FOR THE SLC LOOP (IDENTIFIED AS "A" ON THIS PRINT), SHALL BE DETERMINED BY THE INSTALLER FOLLOWING GUIDELINES AND LIMITATIONS SET FORTH BY THE MANUFACTURER(NOTIFIER DOCUMENT #51253, *INTELLIGENT CONTROL PANEL SLC WIRING MANUAL*). THE SLC WIRING RISER IS SHOWN DIAGRAMMATICALLY ONLY TO ALLOW FOR VARIANCES IN ACTUAL WIRE DISTANCE, DEVICE PLACEMENT AND STRUCTURAL OR ENVIRONMENTAL REQUIREMENTS.

ANY T-TAPPING OF SLC WIRING SHALL FOLLOW ALL REQUIREMENTS IN NOTIFIER DOCUMENT #51253, *INTELLIGENT CONTROL PANEL SLC WIRING MANUAL*.

WIRE FOR THE NOTIFICATION APPLIANCE CIRCUITS (IDENTIFIED AS "B" ON THIS PRINT), SHALL FOLLOW THE SPECIFIC REQUIREMENTS OF THE **WIRING LEGEND.**

THIS SYSTEM MEETS NFPA REQUIREMENTS FOR OPERATION AT 32-120°F AND A RELATIVE HUMIDITY OF 91-95% AT 87-93°F. HOWEVER, THE USEFUL LIFE OF THE SYSTEM'S STANDBY BATTERIES AND THE ELECTRONIC COMPONENTS MAY BE ADVERSELY AFFECTED BY EXTREME TEMPERATURE RANGES AND HUMIDITY. THEREFORE, IT IS RECOMMENDED THAT THIS SYSTEM AND ITS PERIPHERALS BE INSTALLED IN AN ENVIRONMENT WITH A NORMAL ROOM TEMPERATURE OF 60-80°F.
END OF LINE DEVICES MUST BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION AND CLEARLY MARKED OR LABELED.

DESIGN NOTES:

SYSTEM DESIGN PERFORMANCE AND COMPLIANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS IS THE RESPONSIBILITY OF THE DESIGNING ENGINEER. PROPER INSTALLATION OF THIS SYSTEM AND ITS COMPONENTS IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. ANY ALTERATIONS, CHANGES, OR DEFICIENCIES MUST BE BROUGHT TO THE ATTENTION OF THE DESIGNING ENGINEER.

NORRIS INC. ASSUMES NO RESPONSIBILITY FOR ERRORS IN SYSTEM DESIGN OR INSTALLATION, AS WELL AS ANY COSTS ASSOCIATED WITH CORRECTING THESE ERRORS, IF ANY EXIST, UNLESS SYSTEM DESIGN OR INSTALLATION WAS PERFORMED BY NORRIS INC.

NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROPS
USM Central Heat Plant
Portland, Maine

PANEL	CIRCUIT	LENGTH	CURRENT DRAW	VOLTAGE DROP	VOLTAGE LOSS	END VOLTAGE
FACP	NAC 1	18 FT	.057A	.006VDC	.022%	23.994VDC
FACP	NAC 2	55 FT	.171A	.020VDC	.20%	23.952VDC
FACP	NAC 3	150 FT	.591A	.45VDC	1.88%	23.55VDC

Calculated Using #14 AWG Wire @ Maximum Distance/Current

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/06/15

SUBMITTAL DATE: 04/09/2015

FACP WIRING RISER

PROJECT NAME
CENTRAL HEAT PLANT
USM
PORTLAND CAMPUS

BY: JRS
SCALE: NONE
SHEET: FA-1

NORRIS INC
Prepared For Tomorrow; Delivered Today
2257 BROADWAY, SOUTH PORTLAND, MAINE