NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROPS						
West End Place Portland, ME						
PANEL	CIRCUIT	LENGTH	CURRENT DRAW	VOLTAGE DROP	VOLTAGE LOSS	END VOLTAGE
FACP	NAC 1	296 FT	1.056A	1.58VDC	6.58%	22.42VDC
FCPS	NAC 1	256 FT	1.078A	1.39VDC	5.79%	22.61VDC
FCPS	NAC 2	284 FT	2.298A	3.30VDC	13.75%	20.7VDC
FCPS	NAC 3	230 FT	1.752A	2.04VDC	8.50%	21.96VDC
FCPS	NAC 4	299 FT	2.298A	3.47VDC	14.46%	20.53VDC
FCPS	NAC 1	250 FT	1.752A	2.21VDC	9.21%	21.79VDC
FCPS	NAC 2	320 FT	1.984A	3.21VDC	13.38%	20.79VDC
FCPS	NAC 3	270 FT	1.908A	2.60VDC	10.83%	21.40VDC
FCPS	NAC 4	172 FT	0.704A	0.61VDC	2.54%	23.39VDC
Calculated using 14# AWG Wire						

MOUNTING HEIGHT	LEGEND	
48 INCHES	PS	PULL STATION
	S	SMOKE DETECTOR
	H	HEAT DETECTOR
	CO	CARBON MONOXIDE DETECTOR
	NMM 100	MONITOR MODULE (100P=MINI MODULE)
	NC 100R	RELAY MODULE
80 INCHES	HS XX WP	HORN/STROBE (XX NOTES CANDELA) (WP=WEATHERPROOF)
80 INCHES	S XX WP	STROBE (XX NOTES CANDELA) (WP=WEATHERPROOF)
80 INCHES	MH	LOW FREQUENCY MINI HORN

WIRE LEGEND

A 1 PR #12 AWG TWISTED PAIR CABLE(Up to 10,000 ft)
A 1 PR #14 AWG TWISTED PAIR CABLE(Up to 8,000 ft)
A 1 PR #16 AWG TWISTED PAIR CABLE(Up to 4,500 ft)
B 1 PR #14 AWG FPL CABLE
C 1 CAT5 CABLE
D 1 PR #18 AWG TWISTED UNSHIELDED CABLE
E 1 PR #18 AWG TWISTED SHIELDED CABLE

DEVICE ADDRESSES:

IMPORTANT! DUPLICATE ADDRESSES BETWEEN DEVICES AND MODULES ARE NOT AN ERROR. 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 WAS DETERMINED BY THE AVAILABLE DIMENSIONED OR SCALED FLOOR PLAN DEVICE LAYOUT. PLEASE REFERENCE THE *VOLTAGE DROP CALCULATIONS* LOCATED ON THIS PRINT FOR DISTANCE LIMITATIONS. THE INDICATED DISTANCES IN THE *VOLTAGE DROP CALCULATIONS* FOR EACH CIRCUIT SHALL BE CONSIDERED THE MAXIMUM LENGTH. ANY DISTANCES EXCEEDING THOSE IN THE *VOLTAGE DROP CALCULATIONS* MUST BE BROUGHT TO THE ATTENTION OF NORRIS INC. TO ASSURE PROPER FUNCTIONALITY AND COMPLIANCE OF THE NOTIFICATION APPLIANCES.

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.

REVISION 2	DATE:	
REVISION 1	DATE:	
REVISION 0 SUBMITTAL	DATE:	05/05/2014

FACP WIRING RISER

PROJECT NAME **WEST END PLACE** 44 PINE STREET PORTLAND, ME	SCALE NTS
	BY: JRS
	CK BY:
NORRIS INC Prepared For Tomorrow; Delivered Today 2257 BROADWAY, SOUTH PORTLAND, MAINE	SAVED AS:

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 01/12/15