Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (http://www.portlandoregon.gov//bds/article/519984)



APPEAL SUMMARY

Status: Hold for Additional Information

Appeal ID: 28236	Project Address: 1000 SW Broadway
Hearing Date: 2/1/23	Appellant Name: Nathan Morris
Case No.: B-012	Appellant Phone: 5037039875
Appeal Type: Building	Plans Examiner/Inspector: Geoffrey Pena
Project Type: commercial	Stories: 25 Occupancy: Mixed Construction Type: Tenant Improvement
Building/Business Name: 1000 Broadway / Northwest Children's Theater	Fire Sprinklers: Yes - 100%
Appeal Involves: Alteration of an existing structure	LUR or Permit Application No.:
Plan Submitted Option: pdf [File 1]	Proposed use: Theater Production House

APPEAL INFORMATION SHEET

Appeal item 1

Code Section OSSC 909 Smoke Control

Requires The "Code" requires total smoke detection for this building since they do not have duct smoke

detectors.

Code Modification or Alternate Requested We are requesting the ability to perform a manual bypass on a select few smoke detectors located in the Northwest Children's Theater during productions using theatrical fog.

Proposed Design

The Northwest Children's Theater (NWCT) is moving into the old theater basement at the 1000 Broadway building located on 1000 SW Broadway. The current state of the building is as follows; the building is equipped with 100% fire sprinkler coverage, total area smoke detection for the smoke control system, and a voice evacuation notification system. The theater has an existing smoke control system dating back the original Moyer Theater.

During our fire alarm design meetings, it was brought to our attention that the NWCT intends to use a machine to generate theatrical fog for some shows in the several spaces. However, since the fog has the same light obfuscation properties of smoke the Fire alarm/smoke control system will treat the detection of the fog as a normal smoke event thus initiating the building alarm as well as activating the smoke control sequence. This is in addition to any smoke that may be created during the construction of stages and normal stagecraft operations. After an internal review at JCI with their design and service teams, it appears that the original Theater had taken precautionary measures evidenced by the "Bypass" buttons present on the FACP during the time of the original Theater tenure. If allowed, we intend to change the programming for these bypasses to reflect the new devices being installed in the NWCT.

The proposed process for the bypass will be manual in nature. The staff, either Theater or Building Management, will press the labeled bypass button before a theatrical fog production. Once the bypass is in place a trouble condition will be annunciated and the trouble indicator will illuminate at the FACP, associated Annunciators, and transmitted to the monitoring station. Once the production is complete and the space has been properly ventilated and free of fog. The staff will need to manually disengage the bypass by pressing the bypass button again at the FACP. At which time all effected devices will return to normal operation and the trouble condition will clear at the FACP/Annunciators with a restore signal being sent to the monitoring station.

We have discussed with Building Management some of the procedures they will need to have in place in order to facilitate this operation. Such as maintaining a schedule as it pertains to bypasses, maintaining a record of who bypassed the system, having a written procedure posted at the FACP, allowing adequate time for the fog to ventilate, and a competent person remaining on sight postproduction until the system is restored to normal operation. The record documents will need to have a copy kept with the Fire alarm documents for review if required. We will also provide training to Building Management staff on the proper operation as part of the project closeout.

Reason for alternative The NFPA 72 mandates that installers and designer create their systems in a fashion that avoids false alarms. By allowing building management and their authorized representatives to perform a manual bypass of the indicated smoke detectors during events that will produce nuisance alarm causing aerial particulates. We mitigate the false alarms while still keeping the rest of the building operational and the life safety systems functioning to protect the people inside.

APPEAL DECISION

Smoke control bypass during productions using theatrical fog: Hold for additional information.

Appellant may contact Michael Silva (503 793-4641) with questions.

PLEASE READ THE NOTE BELOW when providing Board requested Additional Information or when submitting a reconsideration after 1st time appeal Denial.

A reconsideration is submitted online following the same submittal process and using the same appeals form as the original appeal. Indicate at the beginning of the appeal form that you are filing a reconsideration and include the original assigned Appeal ID number. The reconsideration will receive a new appeal number.

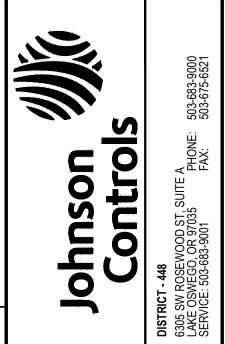
Include the original attachments and appeal language. Provide new text with only that information that is specific to the reconsideration in a separate paragraph(s) clearly identified as "Reconsideration Text" with any new attachments also referenced. Once submitted, the appeal cannot be revised.

No additional fee is required when the Board has requested additional information or for the first reconsideration of a denied appeal if submitted within 6 months of the original appeal. In these two specific instances please ignore the auto-generated request for another fee.



1000 BROADWAY NW CHILDREN'S THEATER FIRE ALARM SYSTEM

LEGENDS



BRIAN BOWLSBY LICENSE #4771LEA EXPIRES 10/01/2023

Sheet List Tabl	ام
Sheet Number	Sheet Title
FA-001	COVER SHEET
FA-101	DEVICE PLACEMENT PLAN - BASEMENT
FA-102	DEVICE PLACEMENT PLAN - MEZZANINE
FA-103	DEVICE PLACEMENT PLAN - 1ST FLOOR
FA-501	PANEL DETAIL & RISER DIAGRAM
EA 601	CALCULATIONS

CALCULATIONS
WIRING TYPICALS

DRAWING INDEX

SYMBOL	DESCRIPTION	BRAND	MODEL	BACKBOX	WIRE TYPE
PANELS					
NAC#	4009 IDNET NAC EXTENDER PANEL, 120 VAC, BEIGE	SIMPLEX	4009-9201	SIMPLEX CABINET	N/A
INITIATING	DEVICES		1		
(S)	ADDRESSABLE PHOTOELECTRIC SMOKE SENSOR W/ STANDARD BASE	SIMPLEX	4098-9714 HEAD 4098-9792 BASE	4" OCT, 1-1/2" D	М
(ADDRESSABLE STANDARD HEAT SENSOR W/ STANDARD BASE	SIMPLEX	4098-9733 HEAD 4098-9792 BASE	4" OCT, 1-1/2" D	М
(S) _B	BLACK ADDRESSABLE PHOTOELECTRIC SMOKE SENSOR W/ STANDARD BASE, BLACK	SIMPLEX	4098-9774 HEAD 4098-9776 BASE	- 4" OCT, 1-1/2" D	М
MODULES A	AND RELAYS				
AIM	INDIVIDUAL ADDRESSABLE MODULE	SIMPLEX	4090-9001	SINGLE GANG 2-1/2" D W/COVER	M Z
AOM	RELAY IAM	SIMPLEX	4090-9002	4" SQ. 2-1/8" D W/ DBL. GANG COVER	M R
R	TRACK MOUNTED SINGLE RELAY DPDT W/ ENCLOSURE, APOLLO AMERICA INC MR-201/C	SIMPLEX	2088-9010	TRACK MOUNT, WITH ENCLOSURE	R
NOTIFICATI	ON APPLIANCES ** TAP ALL SPEAKERS AT 70.7 VOLTS **				
X #	CONVENTIONAL MULTI-CANDELA STROBE ,CEILING MOUNT, WHITE, CLEAR LENS, FIRE	SIMPLEX	4906-9104	SINGLE GANG 2-1/2" D	V
#W 💆 #	CONVENTIONAL MULTI-CANDELA SPEAKER/STROBE ,CEILING MOUNT, WHITE, CLEAR LENS, FIRE	SIMPLEX	4906-9154	4" SQ. 1-1/2" D W/ 1-1/2" EXT RING	S V
#W # C	CONVENTIONAL MULTI-CANDELA SPEAKER/STROBE ,CEILING MOUNT, RED, CLEAR LENS, FIRE	SIMPLEX	4906-9160	4" SQ. 1-1/2"D W/ 1-1/2" EXT.	S
	END-OF-LINE RESISTOR 3.3K (EOL)	$\overline{}$	4081-9002		
#K ★	END-OF-LINE RESISTOR 4.7K (EOL)	SIMPLEX	4081-9003		
≨	END-OF-LINE RESISTOR 6.8K (EOL) END-OF-LINE RESISTOR 10K (EOL)		4081-9004 4081-9008		

-	RE ALARM W	IRE LEGE	ND						30R *	
	CIRCUIT DESCRIPTION	CONSTRUCTION	GAUGE	CIRCUIT PROPERTIES	FPLR	FPLP	HE.	TFFN	OUTDOOR	-
М	MAPNET/IDNET	STP SOLID	18 AWG	0.60µF MAX TOTAL LINE CAPACITANCE	Х	Х				
R	RELAY	2 COND. SOLID	14 AWG		Х	Х	Х	Х		
s	AUDIO - SPEAKER	UTP SOLID	18 AWG	30pf/ft. MAX CAPACITANCE RECOMMENDED	Х	Х				
٧	VISUAL	2 COND. SOLID	14 AWG		Х	Х				
Z	ZONE CIRCUIT	2 COND. SOLID	14 AWG		Х	Х	Х	Х		
	CONDUIT SIZE	MAX CONDUCTOR	AREA	CONDUIT SIZE	М	AX C	ONDU	ICTO	R ARE	EΑ
	1/2"	0.122 SQ. INCH	l*	1-1/4"		0.	598 S	Q INC	:H*	
	3/4"	0.213 SQ INCH	*	1-1/2"		0.8	814 S	Q INC	:H*	
	1"	0.346 SQ INCH	*	2"		1.3	342 S	Q INC	H*	
	* 40% CONDUIT	FILL PER N.E.C.		STP = SHIELDED T	WISTE	PAIF	₹			

Oregon Structural Specialty Code, 2019 Edition	MARK HULQUIST MARK.E.HULQUIST@JCI.COM	MARIA GERRONE MARIA.GERRONE@JCI.COM PHONE:503-683-9000
Oregon Fire Code, 2019 Edition	PHONE:503-683-9000	PHONE:503-683-9000 NICET LEVEL IV #126987
Oregon Mechanical Specialty Code, 2019 Edition	<u>Scheduling</u>	
Oregon Electrical Specialty Code, 2021 Edition	MEGAN WISE MEGAN.WISE@JCI.COM PHONE:503-683-9000	
National Fire Alarm Code (NFPA 72), 2016 Edition	F11ONL.303-003-9000	
Portland Fire Code 2016 Edition		
OCCUPANCY TYPE(S): A-1 ASSEMBLY GROUP SPRINKLER PROTECTION: BUILDING IS FULLY SPRINKLERED		
A-3 ASSEMBLY GROUP B BUSINESS GROUP		
S-2 STORAGE GROUP		
SCOPE OF WORK	PROJECT DIREC	TORY
MODIFY EXISTING FIRE ALARM SYSTEM: PROVIDE NEW DEVICES, RELOCATE AND DEMO EXISTING DEVICES AS SHOWN ON DRAWING		Johnson Controls District - 448
ALL NEW WIRING TO BE CLASS B.	1000 BROADWAY	
THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DISCONNECTED OR TAKEN OUT OF SERVICE WITHOUT WRITTEN PERMISSION FRO	1000 SW BROADWAY PORTLAND, OR 97205	6305 SW ROSEWOOD ST, SUITE A LAKE OSWEGO, OR 97035 PHONE: 503.683.9000
S THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER THE TIMING OF ANY EXISTING FIRE ALARM SYSTEM DEM	MOLITION WORK.	PHONE: 503-683-9000 FAX: 503-675-6521 SERVICE: 503-683-9001
DESIGN IS FOR FIRE ALARM INITIATION AND NOTIFICATION OF NWCT. TWO 4009 NAC PANELS TO BE ADDED TO IN MEZZANINE LEVEL	<u> </u>	<u>Installer</u>
	NAI ELLIOTT 901 NE GLISAN ST PORTLAND, OR 97232	DYNALECTRIC 2225 NW 20TH AVE. PORTLAND, OR 97209
		. 5
ABBREVIATIONS LEGEND	DEVICE TAG LEG	GEND
AC = ABOVE CEILING NEC = NATIONAL ELECTRIC CODE	ACIATION!	
AFF = ABOVE FINISHED FLOOR NFPA = NATIONAL FIRE PROTECTION ASSO AHJ = AUTHORITY HAVING JURISDICTION NIC = NOT IN CONTRACT ALM = ALARM NPU = NETWORK PROCESSING UNIT	FANLL	. DESIGNATOR 'A: = FACP (NON-NETWORK)
ALM = ALARM ANN = ANNUNCIATOR ANS = BUILDING MANAGEMENT SYSTEM NTS = NOT TO SCALE BMS = BUILDING MANAGEMENT SYSTEM PAP = PRE-ACTION PANEL		:: = NODE NUMBER #: = TRANSPONDER NUMBER
C = CEILING MOUNTED RC = EXISTING TO REMOVE AND COVER CD = CANDELA RATING RD = EXISTING DEVICE TO BE RELOCATE	• #	:T# = NODE:TRANSPONDER NUMBER I#: = NAC EXTENDER NUMBER
DET = DETECTOR DGP = DATA GATHERING PANEL RD = EXISTING BEVICE TO BE RELOCATE RL = RELOCATED DEVICE RR = REMOVE EXISTING & REPLACE WITH	CIRCU	IT DESIGNATOR # = IDNAC ¹ CIRCUIT NUMBER
E = EXISTING TO REMAIN E = EXISTING TO REMAIN SCC = STATUS COMMAND CENTER EOL = END OF LINE SLC = SIGNALING LINE CIRCUIT	• D	# = DOOR HOLDER CIRCUIT NUMBER
EPO = EMERGENCY POWER OFF SMK = SMOKE ER = ELEVATOR RECALL SUPV = SUPERVISORY		# = FIRE PHONE CIRCUIT # = AUDIBLE (HORN) CIRCUIT NUMBER
FAA = FIRE ALARM ANNUNCIATOR TAC = TRUEALERT ADDRESSABLE CONTR	WILEN I	# = IDNET LOOP NUMBER # = POWER CIRCUIT NUMBER
FACP = FIRE ALARM CONTROL PANEL TOS = TOP OF SHAFT FATC = FIRE ALARM TERMINAL CABINET TRBL = TROUBLE	• S	# = SPEAKER CIRCUIT NUMBER
FBO = FURNISHED BY OTHERS TS = TAMPER SWITCH FCC = FIRE COMMAND CENTER TYP = TYPICAL		/# = VISUAL CIRCUIT NUMBER :# = ZONE NUMBER
FSD = FIRE SMOKE DAMPER UON = UNLESS OTHERWISE NOTED FTR = FIRE ALARM TRANSPONDER VCC = VOICE COMMAND CENTER		E NUMBER CH / ISOLATED LOOP DESIGNATOR:
$H = HIGH HUMIDITY \qquad \qquad VT = VALVE TAMPER \ HT = HEIGHT \qquad W = WATTAGE$	• (L	_#) = IDNET ISOLATED LOOP NUMBER
HVAC = HEATING VENTILATION & AIR CONDITIONING W/ = WITH IMS = INFORMATION MANAGEMENT SYSTEM W/O = WITHOUT		#) = IDNAC BRANCH NUMBER E#:#) = EPR ² NUMBER:BRANCH NUMBER
MAX = MAXIMUM MIN = MINIMUM WF = WATERFLOW WG = WIRE GUARD		AC = ADDRESSABLE NOTIFICATION CIRCUIT = ENHANCED POWER REPEATER
N/A = NOT APPLICABLE WP = WEATHERPROOF	1.12.72-1(L1.1) 2. LFN	- ENHANCED FOWER REFEATER
NAC = NOTIFICATION APPLIANCE CIRCUIT XP = EXPLOSION PROOF NDU = NETWORK DISPLAY UNIT		
SYSTEM SEQUENCE OF OPERATIONS		

JOHNSON CONTROLS CONTACTS

Drawings Reviewed By

Sales Representative

APPLICABLE CODES & STANDARDS

IURISDICTIONS WITHIN THE STATE MAY HAVE AMENDMENTS TO THE STATE ADOPTED CODE. CHECK

WITH THE LOCAL JURISDICTION AUTHORITY FOR MORE DETAILS.

GENERAL NOTES

- THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS IS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
 SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM WHAT IS INDICATED ON THESE DRAWINGS WHICH CAUSE MAJOR DEVIATIONS IN
- THE WORK SHOWN, THE CONTRACTOR SHALL CONTACT JOHNSON CONTROLS IN A TIMELY MANNER SO AS NOT TO IMPAIR THE CONSTRUCTION SCHEDULE.

 3. CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE.
- ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.

 4. A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION.

 5. THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING, LOCK-ON PROVISION AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL
- UNIT.

 6. UPDATE THE AS-BUILT DRAWING SET DAILY WITH JOB PROGRESS. RETURN THE AS-BUILT DRAWING SET TO JOHNSON CONTROLS NO LATER THAN 7 DAYS AFTER FINAL TEST.

 7. THE CONTRACTOR WILL MAINTAIN ALL AREAS OF THE BUILDING IN A NEAT AND WORKMANLIKE MANNER.
- DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A FACTORY TRAINED JOHNSON CONTROLS TECHNICAL REPRESENTATIVE.
 ANY SMOKE DETECTOR HEAD INSTALLED BEFORE THE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST. ANY FALSE ALARMS DUE TO DIRT CONTAMINATED HEADS SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM INSTALLER.
 THE FIRE ALARM INSTALLER WILL MAINTAIN THE FIRE RESISTANCE INTEGRITY OF ALL WALL, CEILING, AND ROOF ASSEMBLIES ANY TIME THAT WORK IS NOT ACTIVELY BEING PERFORMED.
- 11. INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. POWER LIMITED AND NON-POWER
 LIMITED FIELD WIRING MUST BE INSTALLED WITHIN THE FACP ENCLOSURE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND
 APPLICABLE ELECTRICAL CODES. REFER TO 'APPLICABLE CODES & STANDARDS' FOR SPECIFIC CODE REFERENCES.
 12. ALL WIRING SHALL BE INSTALLED ACCORDING TO APPLICABLE ELECTRICAL CODES.
- 13. FIRE ALARM CIRCUITS SHALL BE IDENTIFIED IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES. MARK ALL FIRE ALARM WIRES IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODE SECTIONS FOR POWER LIMITED AND NON-POWER LIMITED WIRE.
 14 FIRE ALARM CABLE INSTALLED IN DUCTS, PLENUM, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR SHALL BE TYPE FPLP.
 15. FIRE ALARM CABLE INSTALLED IN THE VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR OR CABLES INSTALLED IN VERTICAL
- RUNS IN SHAFTS SHALL BE TYPE FPLR.

 16. FIRE ALARM CABLE INSTALLED IN UNDERGROUND CONDUIT OR OTHER WET LOCATIONS SHALL BE UL LISTED FOR WET LOCATIONS.

 17. FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE APPLICABLE
- ELECTRICAL CODES, WHERE APPLICABLE.

 18. ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.

 10. ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FILL LENGTH OF THE WIRE
- 19. ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.20. ONLY SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
- 21. 120VAC IS NOT PERMITTED IN THE SAME CONDUIT WITH LOW VOLTAGE WIRING.22. MAINTAIN MAXIMUM CONDUIT FILL RATIO AS PER APPLICABLE ELECTRICAL CODES REQUIREMENTS.
- 23. EXISTING CONDUITS MAY BE USED BY THE INSTALLATION CONTRACTOR AS DEEMED NECESSARY; HOWEVER, ANY EXISTING CONDUIT WILL BE USED ONLY IF CONDUITS MEET CURRENT STANDARDS AND CODES. JOHNSON CONTROLS MAKES NO STATEMENTS WRITTEN OR VERBAL AS TO THE CONDITION OF EXISTING CONDUITS.

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SYCHEM SHIRTING	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTUATE APPROPRIATE LOCATION INDICATOR	ACTUATE ALL AUDIBLE EVACUATION SIGNALS	ACTUATE ALL VISIBLE EVACUATION SIGNALS	UNUSED	DISPLAY CHANGE OF STATUS	TRANSMIT ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	UNUSED	RELEASE ELEVATOR FIRE DOORS	MAIN FLOOR ELEVATOR RECALL	ALTERNATE FLOOR ELEVATOR RECALL	REMOTELY DISPLAY ACTIVE STATUS
	C	TRL	UNIT	ANN	UNCI	ATIO	N		1	NOTI	FICA	TION	l		FIRE	SAF	ETY (CONT	roi
SYSTEM INPUTS	Α	В	С	D	Ε	F	G	Н	I	J	K	L	M	N	0	Р	Q	R	U
SENSOR/DETECTOR	X	X					X	Χ	X		Х	X							Х
L PULL STATION	X	X					X	Χ	X		Х	X							Х
ENSOR/DETECTOR	X	X					X	Х	X		Х	X							Х
R. ELEV. LOBBY SMOKE DETECTOR	X	X					X	Х	X		Х	Χ				X	<u> </u>	X	Х
OR LOBBY SMOKE DETECTORS (EXC. MAIN FLR)	X	X					X	Х	X		Х	Χ				X	X		Х
OR MECH. ROOM HEAT DETECTOR	X	X					X	Х	X		X	X				<u> </u>		-	X
OR MECH. ROOM SMOKE DETECTOR	X	X					X	X	X		X	X				<u> </u>	X		X
OR SHAFT HEAT DETECTOR	X	X					X	X	X		X	X				<u> </u>	v		X
OD CLIAFT CHACKE DETECTOR	X	X					X	X	X		X	X				_	X		X
		v									- X	x	1	1	1	1 '			
FLOW SWITCH	X	Х	v	v				^	^		_	_	v			 	\vdash	\vdash	
FLOW SWITCH R SWITCH		Х	Χ	X		v	X	^	^		χ		Χ	v					Х
FLOW SWITCH R SWITCH ARM AC POWER FAILURE		X	X	X	X	X		^	^		X X		X	X					X
TOR SHAFT SMOKE DETECTOR RFLOW SWITCH R SWITCH LARM AC POWER FAILURE LARM SYSTEM LOW BATTERY CIRCUIT OR GROUND FAULT		X	X	X	X X X	X X X		^			χ		X	X X X					Х

ISSUE LOG:

MARK DATE CAD CHK DESCRIPTION

1 11/28/22 RWH MG TURNER REVIEW COMMENTS

1 11/28/22 RWH MG TURNER REVIEW COMMENTS

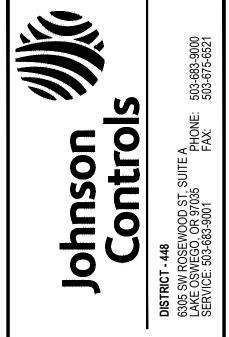
DRAWN BY: R. HERMANT
CHECKED BY: M. GERRONE
ISSUE DATE: 10/31/22
JOB #:
PROJECT #: 448:650252308
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STEM:
FIRE ALARM SYSTEM

COVER SHEET

- ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.
 SET ALL SPEAKER VOLTAGE JUMPERS TO THE 70.7V SETTING.

DEMO EXISTING DEVICES IN EXISTING FIRE ALARM TERMINAL CABINET (FATC).
REPLACE EXISTING WATERFLOW AND TAMPER SWITCH MONITORING MODULES
WITH NEW IDNET (4090-9001) MONITORING MODULES IN FATC.



BRIAN BOWLSBY LICENSE #4771LEA EXPIRES 10/01/2023

1000 BROADWAY NW CHILDREN'S T

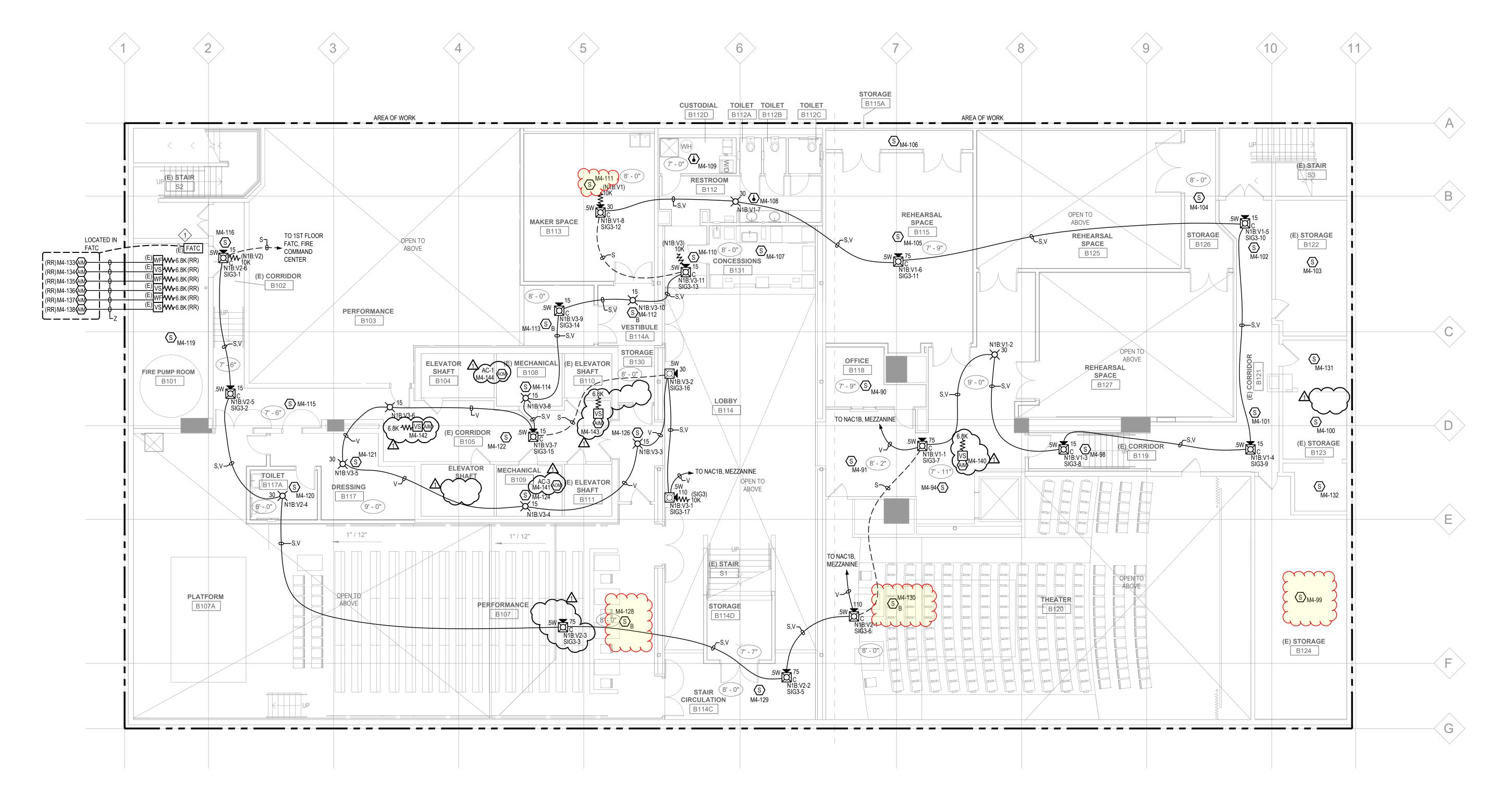
ISSUE DATE: 10/31/22 PROJECT #: 448:650252308 JOHNSON CONTROLS © 2022

FIRE ALARM SYSTEM

DEVICE PLACEMENT PLAN -**BASEMENT**

FA-101

Detectors effected by bypass.



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GENERAL NOTES:

1. ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION OF THE PROPERTY OF THE PROPE

ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.
 SET ALL SPEAKER VOLTAGE JUMPERS TO THE 70.7V SETTING.
 DEVICES IN HATCHED AREA ARE EXISTING TO REMAIN.

Johnson (Controls Sure Sweed) Sure Oswego, Or 97035 PHONE: 503-683-9001 FAX: 503-682-9000

BRIAN BOWLSBY
LICENSE #4771LEA
EXPIRES 10/01/2023

1000 BROADWAY

NW CHILDREN'S THEATER

1000 BROADWAY
1000 SW BROADWAY

DRAWN BY:
CHECKED BY:
SSUE DATE:

10/31/22

ISSUE DATE: 10/31/22

JOB #:

PROJECT #: 448:650252308

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SYSTEM:

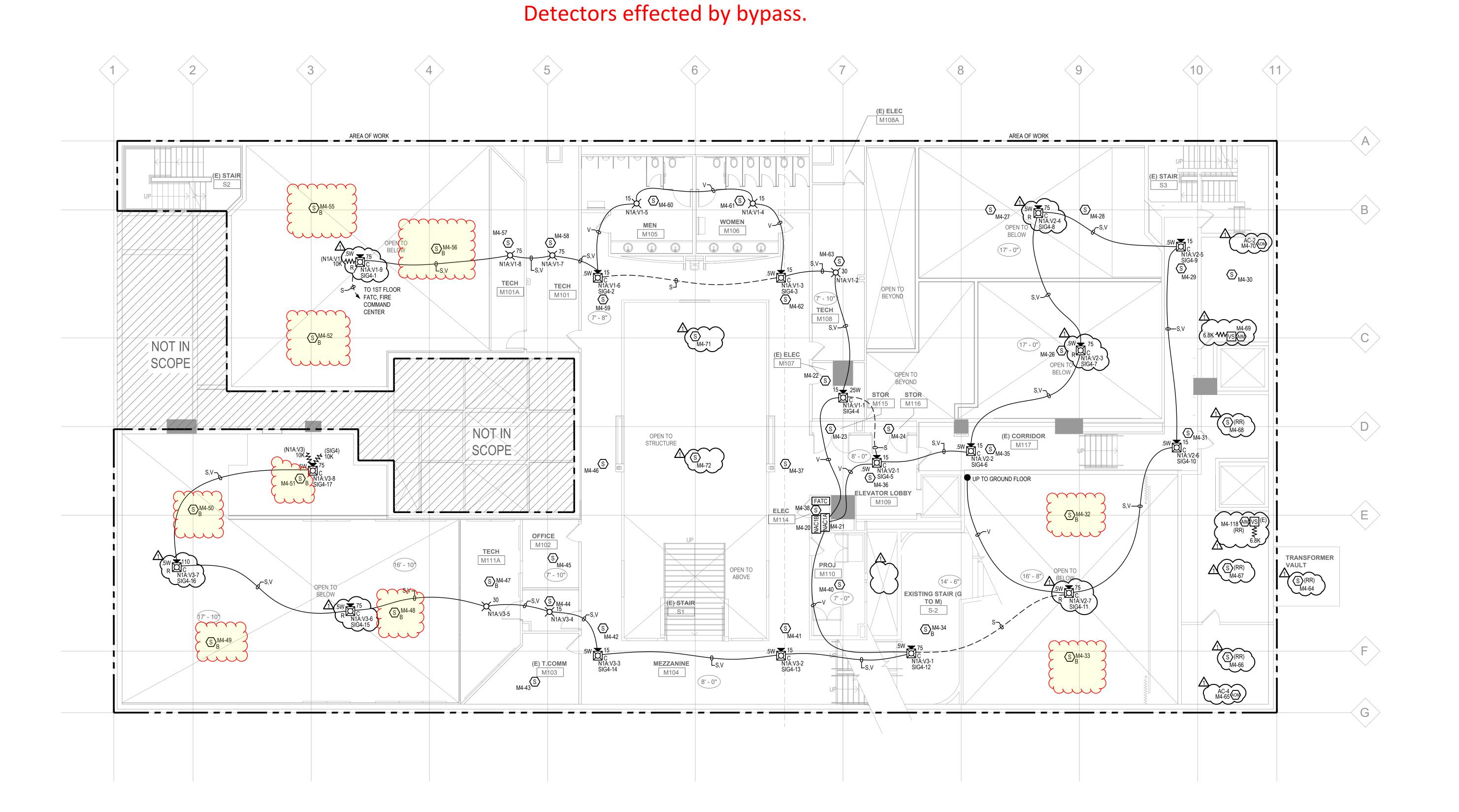
SYSTEM:
FIRE ALARM SYSTEM

DEVICE PLACEMENT PLAN -MEZZANINE

FA-102

DEVICE PLACEMENT PLAN - MEZZANINE
SCALE: 1/8" = 1'-0"

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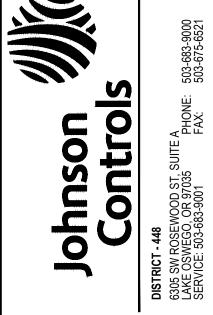


SCALE:1/8" = 1'-0" IN FEET

GENERAL NOTES:

- ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.
 SET ALL SPEAKER VOLTAGE JUMPERS TO THE 70.7V SETTING.
 DEVICES IN HATCHED AREA ARE EXISTING TO REMAIN.

DEMO EXISTING DEVICES IN EXISTING FIRE ALARM TERMINAL CABINET (FATC).
REPLACE EXISTING ELEVATOR CONTROLS FOR PRIMARY AND ALTERNATE RECALL
WITH NEW IDNET (4090-9002) ELEVATOR CONTROLS IN FATC.



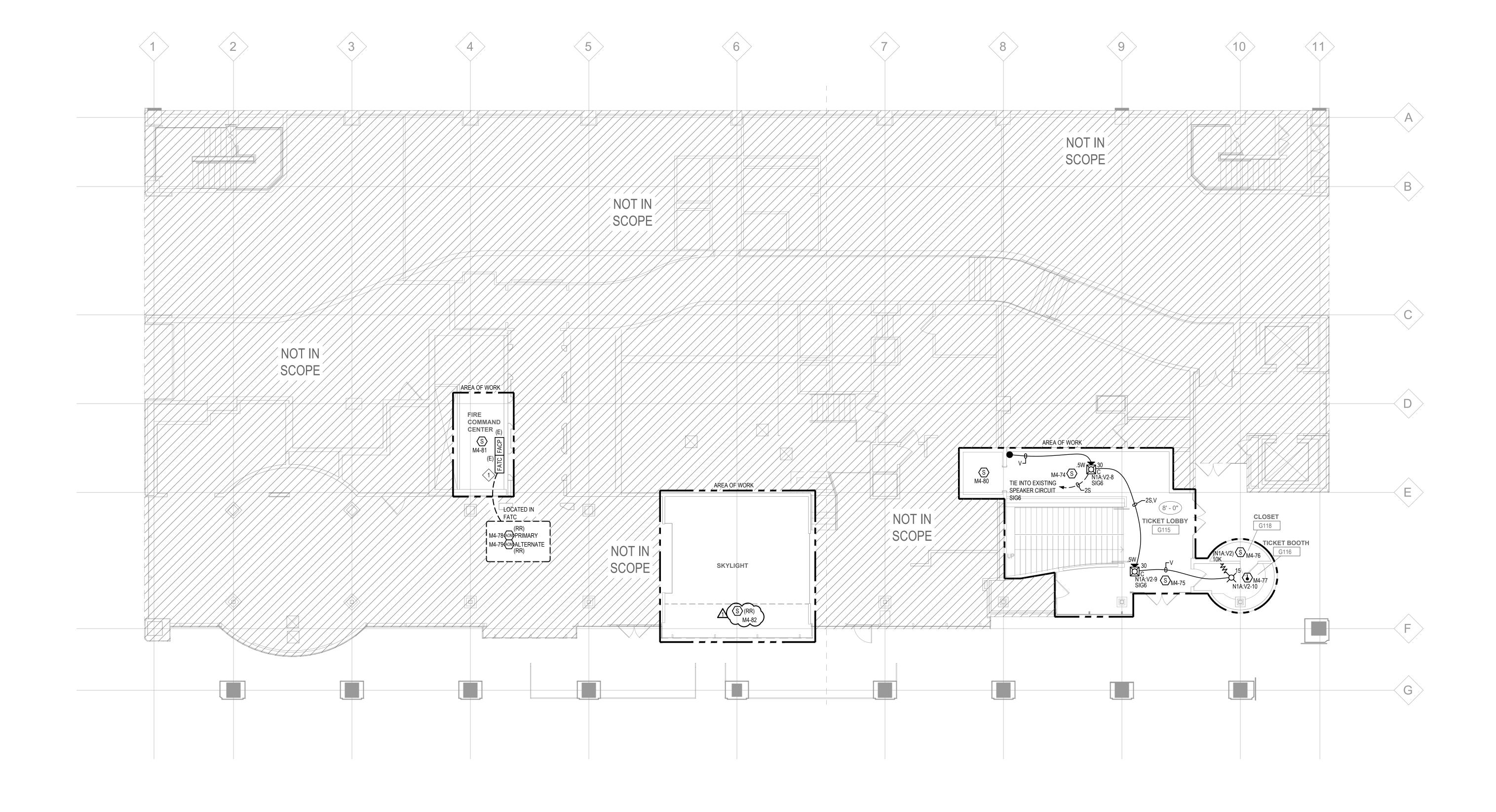
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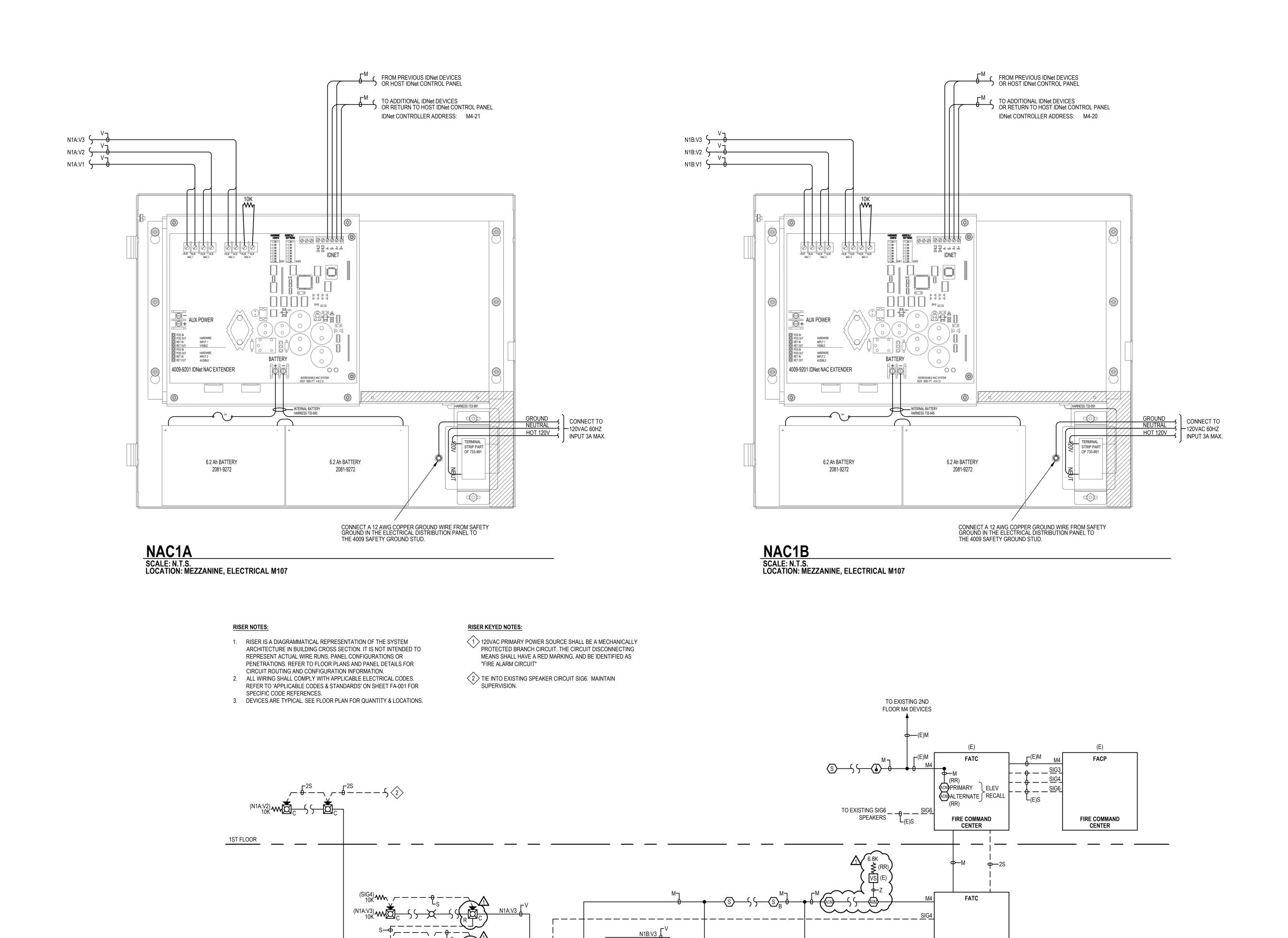
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HECKED BY: M. GERRONE ISSUE DATE: 10/31/22 PROJECT #: 448:650252308 JOHNSON CONTROLS © 2022

FIRE ALARM SYSTEM

DEVICE PLACEMENT PLAN -**1ST FLOOR**





N1B:V2

N1B:V1 👃

NAC1A

 $^{(SIG3)}_{10K}$ \sim $^{S}_{-}$ \sim $^{S}_{-}$

(N1B:V3) **(N1B:V3)** (N1B:V3) (

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ELEC M107, M5120 VOLT AC MEZZANINE

4009 NAC1B

MEZZANINE

ELEC M107, // S120 VOLT AC

ELEC M114 MEZZ

Johnson Controls
STRICT - 48
KE OSWEGO, OR 97035 PHONE: 503-683-9000 FAX: 503-675-6521

BRIAN BOWLSBY
LICENSE #4771LEA
EXPIRES 10/01/2023

1000 BROADWAY
NW CHILDREN'S THEATER

ISSNE FOG:	10G:			Revisions shown with 📤 symbol
MARK	DATE	CAD	SHK	MARK DATE CAD CHK DESCRIPTION
_	11/28/22	RWH	MG	11/28/22 RWH MG TURNER REVIEW COMMENTS

DRAWN BY: R. HERMAN I
CHECKED BY: M. GERRONE
ISSUE DATE: 10/31/22
JOB #:
PROJECT #: 448:650252308
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SYSTEM:
FIRE ALARM SYSTEM

SHEET:

PANEL DETAIL & RISER DIAGRAM

ONET CHANNEL N	Device Type	Point Type	ADDRESSES IN USE: 107 (42.8%) SPARE ADDRESSES: 143 (57.26	/0) 1	2/3/4			IDNET CHANNEL Address		<u> </u>	ADDRESSES IN USE: 107 (42.8%) SPARE ADDRESSES: 143 (57.2%)	//1	2 3 4	SETTING 5 6	7_8/
M4-1 M4-2				/	X /		ON ON	M4-126 M4-127/1	\sim	SMOKE		X Z		X X X	Х
M4-3 M4-4 M4-5				X	XXX		ÓN	M4-128 M4-129 M4-130	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	BSMT STAIR CIRCULATION B114C	4-128 X 4-129 X 4-130 X	+		X X X
M4-6 M4-7					XX		ON	M4-131 M4-132	PHOTO PHOTO	SMOKE SMOKE	BSMT STORAGE B123 NORTH	4-131 X X	(X		X
M4-8 M4-9				<u> </u>	X		ON	M4-133 M4-134	IAM	WATER SO	BSMT B101 THEATER & MEZZ WATERFLOW	4-133 X 4-134	X		X
M4-10 M4-11	RÍAM	RELAY SUPERV	2FL DAMPER CONTROL 2FL POWER MONITOR	4-10 4-11 X	X X		ÓN ON	M4-135 M4-136	IAM	WATER SO		4-135 X Z	(X X		X
M4-12 M4-13	IAM	SUPERV	2FL DAMPÉR STATUS	4-12 X	X X X X X X X X X X		ON	M4-137 M4-138	IAM	WATER SO		4-137 X 4-138 Z	X X X		X
M4-14 M4-15				<u> </u>	x x x		ON ON	M4-139 M4-140	YAM			4-140	X X X		X
M4-16 M4-17				X		X	ON ON	M4-141 M4-142	IAM	RELAY SO	BSMT ELEV SHAFT TAMPER	4-141 X 4-142 X	X X X X X		X X X
M4-18 M4-19 M4-20	4009A8	SIGNAL	MEZZ ELEC M107 NAC1B	4-20	X	X	ON	M4-143 M4-144 M4-145	RIAM	SO RELAY	BSMT ELEV SHAFT TAMPER BSMT MECHANICAL B108 AC-1	4-143 X X		X	X
M4-21 M4-22	4009A8 PHOTO	SIGNAL	MEZZ ELEC M107 NAC1A MEZZ ELEC M107 ABOVE PANELS	4-21 X 4-22	X X	X	ON ON	M4-146 M4-147				(X)	() () () () () () () () () ()	X	X
M4-23 M4-24	PHOTO PHOTO	SMOKE SMOKE	MEZZ STOR M115 MEZZ STOR M116	4-23 X 4-24	^	X	ON ON	M4-148 M4-149				X	X	X	/ X /
M4-25 / / M4-26	РНОТО	SMOKE	MEZZ REHEARSAL SPACE B127	4-26	X X	Χ	ON	M4-150 M4-151				X	(X /	X	X
M4-27 M4-28 M4-29	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	MEZZ REHEARSAL SPACE B125 N MEZZ REHEARSAL SPACE B125 S MEZZ CORRIDOR M117 E	4-27 X 4-28 4-29 X	хх	+-	ON ON ON	M4-152 M4-153 M4-154				X	X X X	1 1 1	XXXX
M4-30 M4-31	PHOTO PHOTO	SMOKE SMOKE	MEZZ CORRIDOR M117 E MEZZ CORRIDOR M117 SE MEZZ CORRIDOR M117 SW	4-30	X X X X	Χ	ON ON	M4-155 M4-156				x	X X	X	X
M4-32 M4-33	PHOTO PHOTO	SMOKE SMOKE	MEZZ THEATER B120 E MEZZ THEATER B120 W	4-32 4-33 X		X	ON ON	M4-157 M4-158				X	X X X	X	X
M4-34 M4-35	PHOTO PHOTO	SMOKE SMOKE	MEZZ EXISTING STAIR (G TO M) S-2 MEZZ CORRIDOR M117 NW	4-34 4-35 X	X X	X	ON ON	M4-159 M4-160				X /	XXX	XX	/ X / X
M4-36 M4-37	PHOTO PHOTO	SMOKE SMOKE	MEZZ ELEVATOR LOBBY M109 MEZZ MEZZANINE M104 S	4-36 4-37 X	X	X	ON ON	M4-161 M4-162				X	<u> </u>	X	X
M4-38 M4-39 1 M4-40	PHOTO	SMOKE SMOKE	MEZZ ELEC M114 MEZZ PROJ M110	4-38 X	XX	X	ON ON ON	M4-163 M4-164 M4-165				X	X	X	X X X
M4-40 M4-41 M4-42	PHOTO PHOTO	SMOKE SMOKE	MEZZ PROJ M110 MEZZ MEZZANINE M104 SW MEZZ MEZZANINE M104 NW	4-40 4-41 X 4-42	X X	X X	ON ON	M4-165 M4-166 M4-167				/ / /	x x x x x x x x x x x x x x x x x x x	X	/ X / X
M4-43 M4-44	PHOTO PHOTO	SMOKE SMOKE	MEZZ T.COMM M103 MEZZ CORR TO TECH M111A	4-43 X 4-44	x x	X X	ON ON	M4-168 M4-169				X	X	X	X
M4-45 M4-46	PHOTO PHOTO	SMOKE SMOKE	MEZZ OFFICE M102 MEZZ MEZZANINE M104 N	4-45 X 4-46	X X X	X	ON ON	M4-170 M4-171				X	(X	XX
M4-47 M4-48	PHOTO PHOTO	SMOKE SMOKE	MEZZ TECH M111A MEZZ PLATFORM B107A SW	4-48	X X X	хх	ON ON ON	M4-172 M4-173				X	XX	X	X
M4-49 M4-50 M4-51	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	MEZZ PLATFORM B107A NW MEZZ PLATFORM B107A NE MEZZ PLATFORM B107A SE	4-49 X 4-50 4-51 X	X	X X X X X X X X X X	ON	M4-174 M4-175 M4-176				X	(XXXXX	XXXX
M4-51 M4-52	PHOTO	SMOKE	MEZZ PERFORMANCE B103 NW	4-52	X	ХХ	ON	M4-177 M4-178				X	X	XX	X
M4-54 M4-55	РНОТО	SMOKE	MEZZ PERFORMANCE B103 NE		x x		ON/	M4-179 M4-180				X	////	XX	//
M4-56 M4-57	PHOTO PHOTO	SMOKE SMOKE	MEZZ PERFORMANCE B103 S MEZZ TECH M101A	4-56 4-57 X	+	(X X (X X	 	M4-181 M4-182				X	X X	X X X	X
M4-58 M4-59	PHOTO PHOTO	SMOKE SMOKE	MEZZ TECH M101 MEZZ MEZZANINE M104 NE	4-58 4-59 X	x x	(X X (X X	ON ON	M4-183 M4-184				X	X X /	XX	X
M4-60 M4-61 M4-62	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	MEZZ MEN M105 MEZZ WOMEN M106 MEZZ MEZZANINE M104 SE	4-60 4-61 X 4-62	++-	(X X (X X	ON ON ON	M4-185 M4-186 M4-187				X	XXX	X X X X X X X X X X X X X X X X X X X	XXXX
M4-63 M4-64	РНОТО	SMOKE	MEZZ TECH M108 TRANSFORMER VAULT		X X X	+-+	 	M4-188 M4-189				X	X X X X		X
M4-65 M4-66	RIAM	RELAY SMOKE	MEZZ SOUTHWEST AC-4 MEZZ SOUTHWEST	4-65 X 4-66	x		X ON)	M4-190 M4-191				X	X X X	XX	X
M4-67 M4-68	PHOTO PHOTO	SMOKE SMOKE	MEZZ SOUTHWEST MEZZ SOUTH	4-67 X 4-68	X X		X ON	M4-192 M4-193				X			X X X X
M4-69 M4-70	RIAM	SO RELAY	MEZZ ELEV SHAFT TAMPER MEZZ SOUTHEAST AC-2 MEZZ LOBBY B114	4-69 X 4-70	хх		X ON Y	M4-194 M4-195 M4-196				x	K /		X X X X X X
M4-71 M4-72 M4-73	PHOTO	SMOKE		4-71 X 4-72			X ON X	M4-197 M4-198				X	X		у Х Х Х
M4-74 M4-75	PHOTO PHOTO	SMOKE SMOKE	1FL ELEV LOBBY 1FL TICKET LOBBY G115	4-74 4-75 X	X X	(X ON	M4-199 M4-200				x :	(XXX		XX
M4-76 M4-77	PHOTO HEAT	SMOKE HEAT	1FL CLOSET G118 1FL TICKET BOOTH G116	4-76 4-77 X	X X	(X ON ON	M4-201 M4-202				X	X X		X X X
M4-78 M4-79	RIAM	PRIMARY ALTERN	1FL FIRE COMMAND CENTER PRI 1FL FIRE COMMAND CENTER ALT	+	X X X	(X ON X ON	M4-203 M4-204				X X	X X X		XX
M4-80 M4-81 M4-82	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	1FL TOP OF SHAFT 1FL FIRE COMMAND CENTER 1FL NEAR SKYLIGHT	4-80 4-81 X 4-82	X	X	X ON X ON	M4-205 M4-206 M4-207				X	X X X X X X X X		X X X X X X
M4-83 M4-84				X	XX	X	X ON	M4-208 M4-209				X		x /	X X X X
M4-85 M4-86				/// x	x x	X	X ON	M4-210 M4-211				X	(/ / / / / / / / / / / / / / / / / / /	X	X X X X
M4-87 M4-88				X	XX	X	X ON	M4-212 M4-213				X	X	X /	XX
M4-89 / / M4-90 M4-91	PHOTO PHOTO	SMOKE SMOKE	BSMT OFFICE B118 BSMT ELEV LOBBY	4-90 4-91 X	х	(X <u>/</u> (X)	X ON X ON	M4-214 M4-215 M4-216				X	XX	X	X X X X X X
M4-91 / M4-92 / M4-93	11010	J. J. J.		4-31 X	X X X X X	X	X ON ON	M4-217 M4-218				X	X X X	X	X X X X
M4-94 M4-95	РНОТО	SMOKE	BSMT ELEV LOBBY	4-94 X	X X X	X	X ON	M4-219 M4-220				x	x x x x	X / X / /	X X X X
M4-96 M4-97				x		X	X ON	M4-221 M4-222				/ / /	X X X X X	X	X X X X
M4-98 M4-99	PHOTO PHOTO	SMOKE SMOKE	BSMT CORRIDOR B119 BSMT STORAGE B124 BSMT STORAGE B123	4-98 4-99 X 4-100	X	X	X ON X ON	M4-223 M4-224 M4-225				X X	X X X	X	X X X X
M4-100 M4-101 M4-102	PHOTO PHOTO PHOTO	SMOKE SMOKE SMOKE	BSMT STORAGE B123 BSMT CORRIDOR B121 WEST BSMT CORRIDOR B121 EAST	4-100 X 4-101 X 4-102	XXX	X	X ON X ON	M4-225 M4-226 M4-227				X Y	X	X	X X X X X X
M4-103 M4-104	PHOTO PHOTO	SMOKE SMOKE	BSMT STORAGE B122 BSMT STORAGE B126	4-103 X 4-104	X X	X X	X ON X ON	M4-228 M4-229				<u> </u>	X	X	x x x x
M4-105 M4-106	PHOTO PHOTO	SMOKE SMOKE	BSMT REHEARSAL SPACE B115 BSMT STORAGE B115A	4-105 X 4-106	X X	X X	X ON X	M4-230 M4-231				x	x x /	X	XX
M4-107 M4-108	PHOTO HEAT	SMOKE HEAT	BSMT CONCESSIONS B131 BSMT RESTROOM B112	4-107 X 4-108	X X X	X X	X ON ON	M4-232 M4-233				X	X	/ x /	X X X X
M4-109 M4-110 M4-111	PHOTO PHOTO	HEAT SMOKE SMOKE	BSMT CUSTODIAL B112D BSMT CORR BY CONCESSIONS B131 BSMT MAKER SPACE B113	4-109 X 4-110 4-111 X	XXX	X X	X ON X ON	M4-234 M4-235 M4-236				X	X	X	X X X X X X
M4-111 M4-112 M4-113	PHOTO PHOTO	SMOKE SMOKE	BSMT MAKER SPACE B113 BSMT VESTIBULE B114A BSMT PERFORMANCE B103	4-111 X 4-112 4-113 X		хх	<u> ^ </u>	M4-236 M4-237 M4-238				X	x x x x x	X	X X X X X X
M4-114 M4-115	PHOTO PHOTO	SMOKE SMOKE	BSMT MECHANICAL B108 BSMT CORRIDOR B105 NORTH	4-114 4-115 X	х	X X X X X X X X X X	X ON	M4-239 M4-240				$\overline{}$	x x x	-/-/-	x x
M4-116 	РНОТО	SMOKE	BSMT CORRIDOR B102	4-116	X	X X	X ON	M4-241 M4-242				X	X//	XX	x x x x
M4-118	IAM PHOTO	SO Z	MEZZ ÉLEV SHÁFT TAMPER BSMT FIRE PUMP ROOM	4-118 4-119 X	X X X	X X X X	X ON	M4-243 M4-244				X	X X	XX	X X X X
M4-120 M4-121	PHOTO PHOTO	SMOKE SMOKE	BSMT TOILET B117A BSMT DRESSING B117 BSMT CORRIDOR B405 SOUTH	4-120 4-121 X	Х	x x		M4-245 M4-246					X X /	X X	X / X /
M4-122 M4-123 M4-124	PHOTO	SMOKE SMOKE	BSMT CORRIDOR B105 SOUTH BSMT MECHANICAL B109	4-122 X 4-124	x x	(X ON	M4-247 M4-248 M4-249				X	// X	X X X X	X X
M4-125/1	7,	SINORE	BSMT MECHANICAL BTU9	7-124 X	x x	(X X	X ON ON	7HRU					<u> </u>		

Module	Qty	Description		Standby Current	Total Standby	Alarm Current	Tota Alarr
el Equipment							
4100-9111	1	4100 CONFIG. DOMESTIC 120V	*	0.3730	0.3730	0.4700	0.470
4100-1241	1	MESSAGE EXPANSION BOARD - 8 MINUTES		0.0020	0.0020	0.0170	0.01
4100-1252	1	1 CHANNEL AUDIO OPERATOR INTERFACE		0.0000	0.0000	0.0240	0.024
4100-1270	1	MASTER TELEPHONE, PHONE CONTROL		0.0800	0.0800	0.1400	0.140
4100-1272	3	EXPANSION PHONE CONTROLLER		0.0800	0.2400	0.1400	0.420
4100-1280	6	8 SWITCH, 8 RED LED MODULE		0.0000	0.0000	0.0240	0.14
4100-1288	2	64/64 LED/SWITCH CONTROLLER		0.0200	0.0400	0.2120	0.424
4100-1290	6	24 POINT GRAPHIC I/O MODULE		0.0340	0.2040	0.0750	0.45
4100-1315	5	ANALOG 100W AMP W/6 B NACS 120VAC 70V		0.0850	0.4250	3.8000	19.00
4100-3102	3	MAPNET MODULE, UP TO 127 PTS	*	0.2550	0.7650	0.2750	0.82
4100-3204	6	4 RELAYS - 2 AMP		0.0150	0.0900	0.0600	0.360
4100-5005	2	ZONE MODULE, 8 IDC, CLASS B		0.0750	0.1500	0.1950	0.39
4100-5101	3	EXPANSION PWR SUPPLY (XPS) - 120VAC 60HZ		0.0500	0.1500	0.0500	0.15
4100-6046	1	DUAL RS-232 INTERFACE CARD 4X5		0.0600	0.0600	0.0600	0.06
4100-6052	1	EVENT REPORTING DACT		0.0300	0.0300	0.0400	0.040
4100-9620	1	BASIC AUDIO WITH MICROPHONE - ANALOG		0.2550	0.2550	0.3630	0.36
t Addressable De	vices (SI		nel Totals		2.8640		23.27
4009-9201	2	4009 IDNET NAC EXTENDER, 120 VAC	*				
4090-9001	13	IDNET SUPERVISED IAM	*				
4090-9002	6	IDNET RELAY IAM	*				
4090-9008	1	ADDRESSABLE DUAL CONTACT RELAY IAM	*	Constant current dr			
4098-9714	66	TRUEALARM PHOTO SMOKE SENSOR			g additional current eous Peripheral Dev		
4098-9733	3	TRUEALARM HEAT SENSOR	*	IGDOIGG WIIGGOIGH	Power		antioniai O
4098-9774	16	TRUEALARM PHOTO SMOKE SENSOR, BLACK					
	1	TRUE ALADM OF NOOR DAGE. BLACK		\dashv			

DNet Addressable De	evices (S	LC)							
4009-9201	2	4009 IDNET NAC EXTENDER, 120 VAC	*						
4090-9001	13	IDNET SUPERVISED IAM	*						
4090-9002	6	IDNET RELAY IAM	*						
4090-9008	1	ADDRESSABLE DUAL CONTACT RELAY IAM	*	Constant current dra					
4098-9714	66	TRUEALARM PHOTO SMOKE SENSOR			g additional current eous Peripheral Dev				
4098-9733	3	TRUEALARM HEAT SENSOR	*		Power		,		
4098-9774	16	TRUEALARM PHOTO SMOKE SENSOR, BLACK							
4098-9776	16	TRUEALARM SENSOR BASE, BLACK	*						
4098-9792	69	TRUEALARM SENSOR BASE	*						
lapnet Addressable	Devices	(SLC)							
2190-9155	73	MAPNET CLASS B MONITOR ZAM	*						
2190-9161	53	MAPNET CLASS B SIGNAL ZAM	*						
2190-9163	55	MAPNET UNSUPERVISED CONTROL ZAM	*						
2190-9172	10	MAPNET SUPERVISED IAM	*						
2099-9795	6	MAPNET SINGLE ACTION PULL STATION	*	Constant current draw of .8mA standby and 1mA alarm per address Devices requiring additional current are accounted for in the sec labeled "Miscellaneous Peripheral Devices Requiring Additional S					
4098-9714	2	TRUEALARM PHOTO SMOKE SENSOR							
4098-9792	2	TRUEALARM SENSOR BASE	*		Power	r".	·		
2098-9652	76	ADDRESSABLE SMOKE DETECTOR BASE	*						
2098-9576	76	IONIZATION SMOKE DETECTOR	1						
4098-9732	2	TRUEALARM HEAT SENSOR							
4090-9008	2	ADDRESSABLE DUAL CONTACT RELAY IAM	*						
liscellaneous Periph	eral Dev	ces That Require (Additional) System Power			,				
4603-9101	1	SERIAL LCD ANNUNCIATOR		0.0650	0.0650	0.1400	0.1400		
			Peripheral Totals		0.0650		0.1400		
			RUI Totals	1	0.0035		0.0035		

2.	Backup Amplifier assumes Main Amplifier alarm current on failure.

* Device Address current draw included below (See Additional Current Draws):

1. 2-wire detector alarm current is included in the alarm current of the Initiating Device Circuit.

		Standby	Standby	Alarm	Alarm
Battery Set #1 (Cabinet/Charger #1)		Current	Total	Current	Total
Select ALL Power Supplies on this battery set:					
XPS-1			0.0500		0.0500
XPS-2			0.0500		0.0500
XPS-3			0.0500		0.0500
SPS-1			2.3540		4.2670
Amp-1			0.0850		3.8000
Amp-2			0.0850		3.8000
Amp-3			0.0850		3.8000
Amp-4			0.0850		3.8000
Amp-5			0.0850		3.8000
		Sub Total	2.9290		23.4170
Additional Current Draws:					
RUI Connected Peripheral Devices	1	x 0.0035	= 0.0035	x 0.0035	= 0.0035
MAPNET/IDNet Device Address Communication Current	389	x 0.001452	= 0.5650	x 0.001507	= 0.5864
		Sub Total	3.4975		24.0069
Spare addressable point capacity 0%	0	x 0.001452	= 0.0000	x 0.001507	= 0.0000
		Total	3.4975		24.0069
Standby Time = 24	Hrs	x 3.4975	= 83.9400 S	standby Ah	
Alarm Time = 15	Min	0.25 x 24.0069	= 6.0017 A		
/	141111	0.20 X 2 110000	89.9417		
Additional Spare Battery Capacity = 0%		+	0.0000		
. , , , , , , , , , , , , , , , , , , ,	=	· <u>-</u>	89.9417		
Battery Discharge Factor = 20%		+	17.9883		
Minimum Battery Required 2081-9279	110AH (2	_	107.9301		
Battery Supplied 2081-9279			107.3301		

	Amplifier	Watts	Alarm	Expansion	Avail.	Used	%
	Wattage	Used		Card?	Ckts.	Ckts.	Used
Amp-1	100	30.25W	3.800A	No	6	6	30.25%
Amp-2	100	73.W	3.800A	No	6	6	73.00%
Amp-3	100	73.W	3.800A	No	6	6	73.00%
Amp-4	100	56.5W	3.800A	No	6	6	56.50%
Amp-5	100	60.W	3.800A	No	6	6	60.00%

*Circuit Voltage = 70vrms [Et]																	MAXIMUM -3 dB DROP		
SPEAKER CIRCUIT DESCRIPTION		Plan Circuit	Speaker Tap	Speaker Tap	Speaker Tap	Total Spkrs per	Total Watts [P]		Wire Gauge	Est. Ckt. Length [D] in	Wire Res. Per Foot [Rw]	Circuit Resistance [RI=2D*Rw]	Speaker Current [I=P/Et]	Speaker Resistance [Rs=Et/I]	Voltage At End [Es=(Et*Rs)	Watts At End [Pe=(Es)	Actual dB Loss [dB=Log10	Max Allowable Ckt. Length [ML=(0.414*Rs)	
	Amp#	Number	.25 Watt	.5 Watt	1. Watt	Circuit				Feet					/(Rs+RI)]	^2/Rs]	(Pe/P)*10]	/(2*Rw)]	
AUDIO RIŞER THEATERS (ŞIĞ3)	Amp-1/	SIG3		17		/ 1/1/	4 / / /	5 Watts		665	0.0078	10.334	/ 0,121	576.47 1		8.203			
WEZZANINE SPEAKERS (SIG4)	Amp-1	SiG4/	1	16		/ 1/1	8.2;	5 Watts		615	0.0078	9.557	/ 0,118/			<u> </u>		/	
ELEVATOR CABS 7-8 SPEAKERS (SIG5)	Amp-1	SIG5		1/2/	$\mathbb{Z}///$	//2/	///1	l. Watts		/ 1,000,		15.540	/ 0,014	4900.000	69.779	X / /		// 130541 Fi	
ST/FLØOR/SPÉAKERS/(SIG6)	Amp-1/	SIG6/		25		<u>/ 25 /</u>	// /12.5	5 Watts		/	0.0078	38.850	<u>/ 0,179</u>	392.000	63.688	<u> </u>		/	
BPARE////////////////////////////////////	Amp-1/	SIG7/			X//Z		4 / / /	. Watts			0.0078	0.000	/ 0,000	// 0.00 ₀				////0/f1	
SPARE////////////////////////////////////	Amp-1/	SIG8/	X////	1///	X/Z		4	. Watts			0.0078	0.000	/ 0,000	// 0.000		<u> </u>			
STAIRS 2 AND 4 SPEAKERS (SIG7)	Amp-2/	SIG9	X////	46/	<u> </u>	<u>/ 46 /</u>	4 / / /	3. Watts		/	/ / /	//20.202	/ 0.329	213.043		19.188			
AUDIO RIȘER FLOORS 2-6 (SIG8)	Amp-2	SIG10	<i>X////</i>	/ 100/	$\times / / /$	/ 100/	50). Watts		/ / 2,000,	0.0078	/ / 31.080	/ 0.714	/ /98.000	53.145	28.821	/2.39 db	///2611/F1	
)PARE////////////////////////////////////	Amp-2	SIG11	<i>X////</i>	1///	$\times / / /$./Watts			0.0078	// 0.000	0.000	/// 0.000				/////0/f1	
BPARE////////////////////////////////////	Amp-2/	SIG12	X////	X////	X/I/I	///		Watts	18ga		0.0078	/// 0.000	0.000	/ / 0,000	0.000	0.000	// _db	/////0/F1	
BPARE////////////////////////////////////	Amp-2/	SIG13	X////	X////	X/I/I	///		Watts	18ga		0.0078	/// 0.000	0.000	/ / 0,000	0.000	0.000	// _/db	/////0/F1	
SPARE////////////////////////////////////	Amp-2/	SIG14	X////	1///	$\chi////$	///		Watts			0.0078	0.000	0.000	0,000	0.000	0.000	// ,db	////0/Ft	
AUDIO RISER FLOORS 7-11/(SIG9)	Amp-3/	SIG15	<i>X////</i>	100	////	/ 100 /	50). Watts		/ 2000	0.0078	31.080	0.714	98,000	53.145	28.821	-2.39 db	2611 F1	
STAIRS 3 AND 5 SOUTH (SIG10)	Amp-3/	SIG16	X////	46	////	46 /	///23	3. Watts	/18ga	/ 1300	0.0078	20.202	0.329	213,043	63.937	19.188	79 db	//////////////////////////////////////	
SPARE////////////////////////////////////	Amp-3/	SIG17	1777	1///	////	///		Watts	/18ga	////	0.0078	0.000	0.000	0,000	0.000	0.000	//,db	/////0/4	
SPARE////////////////////////////////////	Amp-3/	SIG18	X////	1///	////	///	777	Watts	/18ga		0.0078	0.000	0.000	0,000	0.000	0.000	//,db	/////0/F1	
SPARE////////////////////////////////////	Amp-3/	SIG19	X////	1///	////	///	////	Watts	/18ga		0.0078	0.000	0.000	0,000	0.000	0.000	//,db	/////0/F1	
SPARE////////////////////////////////////	Amp-3/	SIG20	1777	1///	////	///		Watts	/18ga	////	0.0078	/// 0.000	0.000	0,000	0.000	0.000	//,db	/////0/51	
AUDIÓ RÍSER FLOORS 12-18 (SIG1)	Amp-4/	SJG21	/////	//1/12/	////	/1/12/	56	. Watts	/ 18ga	/ 1900	0.0078	29.526	0.800	87,500	52.339	31.307	/-2.53 _/ db	///2331_F1	
ELEVATOR CAB 9 SPEAKER (SIG12)	Amp-4/	SJG22	/////	//1/	////	/1/	///.;	5 Watts	/ 18ga	//1000	0.0078	15.540	0.007	9,800,000	69.889	0.498	01/db	261081 F1	
SPARE////////////////////////////////////	Amp-4/	SJG23	/////	1///	////	///		Watts	/ 18ga	////	0.0078	0.000	0.000	0,000	0.000	0.000	//,db	////0,41	
SPARE////////////////////////////////////	Amp-4/	SJG24	/////	1///		///		, Watts	/18gá	////	0.0078	0.000	0.000	///0,000	0.000	0.000	//,db	////0/5	
SPARÉ////////////////////////////////////	Amp-4/	SJG25	/////	1///		///		, Watts	/18ga	///	0.0078	0.000	0.000	///0,000	0.000	0.000		////0F	
PARÉ////////////////////////////////////	Amp-4/	SIG26	/////	1///		///		, Watts	/18gá	///	0.0078	0.000	0.000	///0,000	0.000	0.000	, db	////0,F	
ISER 19-23 PH, & ELEV 1-6 (SIG13)	Amp-5	SJG27	X////	120		120 /	// /60), Watts	/18gá	/ 2000	0.0078	31.080	0.857	/ /81,667/	50.704	31.480	-2.8 db	2176 F	
PARÉ ////////////////////////////////////	Amp-5	SIG28	V////	1///			1///	, Watts	/18ga	///	0.0078	0.000	0.000	0,000	0.000	0.000	,ďb	///0,F	
BPARÉ////////////////////////////////////	Amp-5	SJG29	V////	1///				, Watts	/18ga	///	0.0078	0.000	0.000	0,000	0.000	0.000	,ďb	///0 _F	
SPARÉ////////////////////////////////////	Amp-5	SIG30	V////	1///				, Watts	/18gá	///	0.0078	0.000	0.000	0,000	0.000	0.000	,ďb	////0 _F	
SPARÉ ////////////////////////////////////	Amp-5	SIG31/	V////	X/// /		///	1///	, Watts	/18ga		0.0078	0.000	0.000	0,000	0.000	0.000	.db	////0F	
SPARÉ ////////////////////////////////////	Amp-5	SIG32		////			1///	Watts	/ 18ga	///	0.0078	0.000	0.000	0,000					

NOTES:
JOHNSON CONTROLS WAS NOT PROVIDED WITH SPEAKER CIRCUIT INFORMATION. CIRCUIT LOADS AND LEGNTHS ARE ESTIMATED.

GENERAL NOTES:

1. DEVICES IN HATCHED AREA ARE EXISTING TO REMAIN.

KEY NOTES:

1 DEVICE NEEDS DESCRIPTION CHANGE IN PROGRAMING.

Johnson

Controls

BISTRICT - 448

G305 SW ROSEWOOD ST, SUITE A

BRIAN BOWLSBY LICENSE #4771LEA EXPIRES 10/01/2023

1000 BROADWAY

NW CHILDREN'S THEATE

1000 BROADWAY
1000 SW BROADWAY
1000 SW BROADWAY
PORTLAND, OR 97205

DRAWN BY: R. HERMANT
CHECKED BY: M. GERRONE
ISSUE DATE: 10/31/22

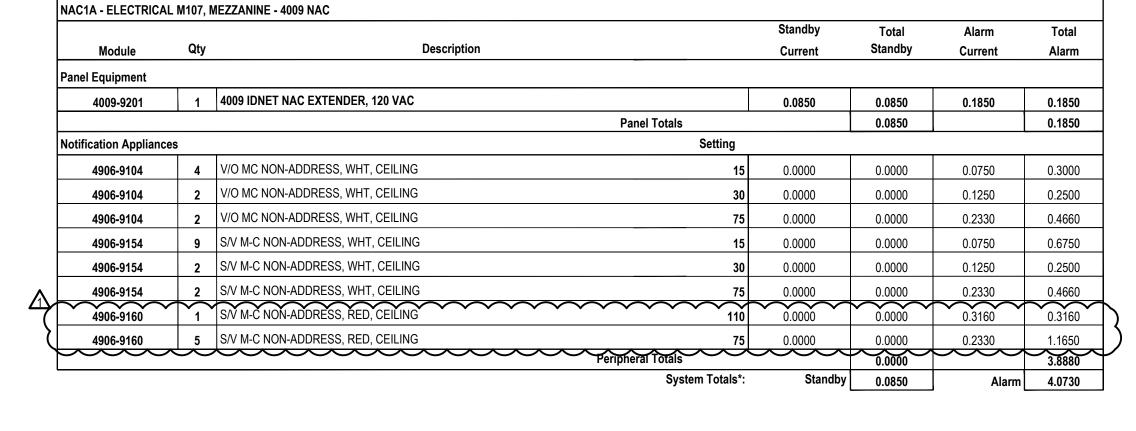
JOB #:
PROJECT #: 448:650252308

JOHNSON CONTROLS © 2022

SYSTEM:
FIRE ALARM SYSTEM

SHEET:

CALCULATIONS



				Standby	Standby	Alarm	Alarm
Battery Se	et #1 (Cabinet/Charger #1)			Current	Total	Current	Total
Select ALL Pov	ver Supplies on this battery set:						
	4009				0.0850		4.0730
				Sub Tot	tal 0.0850		4.0730
Additional Current Draws:							
_	RUI Connected Periphera	l Devices	0	x 0.0035	= 0.0000	x 0.0035	= 0.0000
	MAPNET/IDNet Device Address Communication	n Current	t 0	x 0.000000	= 0.0000	x 0.000000	= 0.0000
				Sub Tot	tal 0.0850		4.0730
	Spare addressable point capacity	0%	0	x 0	= 0.0000	x 0	= 0.0000
				Tot	tal 0.0850		4.0730
	Standby Time =	24	Hrs	x 0.0850	= 2.0400	Standby Ah	
	Alarm Time =	15	– Min	0.25 x 4.073	= 1.0183	Alarm Ah	
	_				3.0583	_	
	Additional Spare Battery Capacity =	0%			+ 0.0000	_	
	_				3.0583	_	
	Battery Discharge Factor =	20%			+0.6117	_	
	Minimum Battery Required	2081-927	'2 6.2AH (2x)	3.6699	-	
	Battery Supplied						

Plan				
Circuit	Description		Load	% Drop
N1A:V1	MEZZANINE NOTIFICATION EAST	SIG1	1.199A	5.27%
N1A:V2	MEZZANINE, 1ST FLOOR NOTIFICATION SOUTH	SIG2	1.324A	8.23%
N1A:V3	MEZZANINE NOTIFICATION WEST	SIG3	1.365A	8.96%
N1A:V4	SPARE	SIG4	0.000A	0.00%
	•		3.888A	Total

N1A:V1	Distributed Load V	oltage Drop				
	Allowable % Drop:	17.9%	,	Wire Res. Per Ft.	0.003070	@ 75° Celsiu
	Wire Gauge:	14ga	Min	n. Device Voltage:	16.vdc	
	Starting Voltage:	19.5vdc		% Voltage Drop	5.27%	
	Circuit Capacity	2.A		•		
					Normal Operat	tion
			Distance	Device	Voltage	Voltage /
Device #	PID	Setting	(Feet)	Current	Drop	Device
N1A:V1-1	4906-9154	15cd	23	0.075	0.169	19.33
N1A:V1-2	4906-9104	30cd	22	0.125	0.321	19.18
N1A:V1-3	4906-9154	15cd	11	0.075	0.389	19.11
N1A:V1-4	4906-9104	15cd	27	0.075	0.542	18.96
N1A:V1-5	4906-9104	15cd	30	0.075	0.698	18.80
N1A:V1-6	4906-9154	15cd	29	0.075	0.836	18.66
N1A:V1-7	4906-9104	75cd	21	0.233	0.926	18.57
N1A:V1-8	4906-9104	75cd	17	0.233	0.975	18.53
N1A:V1-9	<u>/1</u> (4906-9160	75cd	37	0.233	1.028	18.47
		Totals:	217 Ft.	1.199A		

N1A:V2	Distributed Load V	oltage Drop				
	Allowable % Drop:	17.9%	,	Wire Res. Per Ft.	0.003070	@ 75° Celsius
	Wire Gauge:	14ga	Min	. Device Voltage:	16.vdc	1
	Starting Voltage:	19.5vdc		% Voltage Drop	8.23%	1
	Ckt Capacity	2.A		_		_
					Normal Operat	ion
			Distance	Device	Voltage	Voltage A
Device #	PID	Setting	(Feet)	Current	Drop	Device
N1A:V2-1	4906-9154	15cd	18	0.075	0.146	19.35
N1A:V2-2	4906-9154	15cd	28	0.075	0.361	19.14
N1A:V2-3	<u>/1</u> X 4906-9160	75cd	46	0.233	0.693	18.81
N1A:V2-4	4906-9160	75cd /	40	0.233	0.924	18.58
N1A:V2-5	4906-9154	15cd	40	0.075	1.098	18.40
N1A:V2-6	4906-9154	15cd	45	0.075	1.273	18.23
N1A:V2-7	4906-9160	75cd	53	0.233	1.454	18.05
N1A:V2-8	4906-9154	30cd	56	0.125	1.566	17.93
N1A:V2-9	4906-9154	30cd	25	0.125	1.597	17.90
N1A:V2-10	4906-9104	15cd	17	0.075	1.604	17.90
		Totals:	368 Ft.	1.324A		

N1A:V3	Distributed Load V	oltage Drop				
	Allowable % Drop:			Wire Res. Per Ft.	0.003070	@ 75° Celsius
	Wire Gauge:		Min	. Device Voltage:	16.vdc	<u>_</u>
	Starting Voltage:			% Voltage Drop	8.96%	
	Ckt Capacity	2.A				
					Normal Operati	on
			Distance	Device	Voltage	Voltage A
Device #	PID	Setting	(Feet)	Current	Drop	Device
N1A:V3-1	4906-9154	75cd	70	0.233	0.587	18.91
N1A:V3-2	4906-9154	15cd	32	0.075	0.809	18.69
N1A:V3-3	4906-9154	15cd	41	0.075	1.075	18.42
N1A:V3-4	4906-9104	15cd	26	0.075	1.232	18.27
N1A:V3-5	4906-9104	30cd	22	0.125	1.354	18.15
N1A:V3-6	4906-9160	75cd	34	0.233	1.518	17.98
N1A:V3-7	4906-9160	110cd	47	0.316	1.676	17.82
N1A:V3-8	4906-9154	75cd	49	0.233	1.746	17.75
		Totals:	321 Ft.	1.365A		

				Standby	Total	Alarm	Total
Module	Qty	Description		Current	Standby	Current	Alarm
anel Equipment							
4009-9201	1	4009 IDNET NAC EXTENDER, 120 VAC		0.0850	0.0850	0.1850	0.1850
			Panel Totals		0.0850		0.185
otification Appliance	es		Setting				
4906-9104	5	V/O MC NON-ADDRESS, WHT, CEILING	15	0.0000	0.0000	0.0750	0.375
4906-9104	4	V/O MC NON-ADDRESS, WHT, CEILING	30	0.0000	0.0000	0.1250	0.500
4906-9153	1	S/V M-C NON-ADDRESS, WHT, WALL	110	0.0000	0.0000	0.2520	0.252
4906-9153	1	S/V M-C NON-ADDRESS, WHT, WALL	30	0.0000	0.0000	0.0940	0.094
4906-9154	1	S/V M-C NON-ADDRESS, WHT, CEILING	110	0.0000	0.0000	0.3160	0.316
4906-9154	8	S/V M-C NON-ADDRESS, WHT, CEILING	15	0.0000	0.0000	0.0750	0.600
4906-9154	1	S/V M-C NON-ADDRESS, WHT, CEILING	30	0.0000	0.0000	0.1250	0.125
4906-9154	4	S/V M-C NON-ADDRESS, WHT, CEILING	75	0.0000	0.0000	0.2330	0.932
_	•		Peripheral Totals		0.0000		3.194

					Standby		Standby	Alarm	Alarm
Battery Set #1 (Cabi	net/Charger #1)				Current		Total	Current	Total
Select ALL Power Supplie	s on this battery set:								
4009							0.0850		3.379
					Sub T	otal	0.0850		3.379
Additional Current Draws:									
	RUI Connected Peripheral	I Devices	s	0	x 0.0035		= 0.0000	x 0.0035	= 0.000
MAPNE	T/IDNet Device Address Communication	n Curren	ıt	0	x 0.000000		= 0.0000	x 0.000000	= 0.000
					Sub T	otal	0.0850		3.379
	•								
	Spare addressable point capacity	0%		0	x 0		= 0.0000	x 0	= 0.000
					T	otal	0.0850		3.379
	Standby Time =	24	Hrs		x 0.0850		= 2.0400	Standby Ah	
	Alarm Time =	15	— Min		0.25 x 3.379		= 0.8448	Alarm Ah	
	_						2.8848	•	
	Additional Spare Battery Capacity =	0%				+	0.0000		
							2.8848		
	Battery Discharge Factor =	20%				+	0.5770	_	
	Minimum Battery Required	2081-927	72 6.2A	H (2x)		3.4617	•	
	Battery Supplied								

Plan				
Circuit	Description		Load	% Drop
N1B:V1	BASEMENT NOTIFICATION SE	SIG1	1.066A	6.08%
N1B:V2	BASEMENT NOTIFICATION NW	SIG2	1.057A	4.80%
N1B:V3	BASEMENT NOTIFICATION NORTH	SIG3	1.071A	6.91%
N1B:V4	SPARE	SIG4	0.000A	0.00%
	•		3.194A	Total

N1B:V1	Distributed Load V	oltage Drop				
	Allowable % Drop:	17.9%		Wire Res. Per Ft.	0.003070	
	Wire Gauge:	14ga	Mir	n. Device Voltage:	16.vdc	
	Starting Voltage:	19.5vdc		% Voltage Drop	6.08%	
	Circuit Capacity	2.A				
					Normal Operat	tion
			Distance	Device	Voltage	Volta
Device #	PID	Setting	(Feet)	Current	Drop	Dev
N1B:V1-1	4906-9154	75cd	48	0.233	0.314	19.
N1B:V1-2	4906-9104	30cd	26	0.125	0.447	19.
N1B:V1-3	4906-9154	15cd	26	0.075	0.560	18.
N1B:V1-4	4906-9154	15cd	40	0.075	0.716	18.
N1B:V1-5	4906-9154	15cd	47	0.075	0.877	18.
N1B:V1-6	4906-9154	75cd	72	0.233	1.090	18.
N1B:V1-7	4906-9104	30cd	45	0.125	1.159	18.
N1B:V1-8	4906-9154	30cd	34	0.125	1.185	18.
	•	Totals:	338 Ft.	1.066A		

N1B:V2	Distributed Load V	oltage Drop				
	Allowable % Drop:	17.9%	,	Wire Res. Per Ft.	0.003070	@ 75° Celsius
	Wire Gauge:	14ga	Min	ı. Device Voltage:	16.vdc	
	Starting Voltage:	19.5vdc		% Voltage Drop	4.80%	
	Ckt Capacity	2.A		_		
					Normal Opera	tion
			Distance	Device	Voltage	Voltage At
Device #	PID	Setting	(Feet)	Current	Drop	Device
N1B:V2-1	4906-9154	110cd	66	0.316	0.428	19.07
N1B:V2-2	4906-9154	75cd	32	0.233	0.574	18.93
N1B:V2-3	4906-9154	75cd	44	0.233	0.711	18.79
N1B:V2-4	4906-9104	30cd	69	0.125	0.828	18.67
N1B:V2-5	4906-9154	15cd	35	0.075	0.860	18.64
N1B:V2-6	4906-9154	15cd	33	0.075	0.875	18.62

N1B:V3	Distributed Load V	oltage Drop				
	Allowable % Drop:	17.9%		Wire Res. Per Ft.	0.003070	@ 75° Cel
	Wire Gauge:	14ga	Min. Device Voltage: % Voltage Drop		16.vdc	1
	Starting Voltage:	19.5vdc			6.91%	1
	Ckt Capacity	2.A				_
					Normal Operati	on
			Distance	Device	Voltage	Volta
Device #	PID	Setting	(Feet)	Current	Drop	Dev
N1B:V3-1	4906-9153	110cd	78	0.252	0.513	18.
N1B:V3-2	4906-9153	30cd	30	0.094	0.664	18.
N1B:V3-3	4906-9104	15cd	26	0.075	0.780	18.
N1B:V3-4	4906-9104	15cd	38	0.075	0.931	18.
N1B:V3-5	4906-9104	30cd	44	0.125	1.087	18.
N1B:V3-6	4906-9104	15cd	25	0.075	1.156	18.
N1B:V3-7	4906-9154	15cd	38	0.075	1.243	18.
N1B:V3-8	4906-9104	15cd	17	0.075	1.274	18.
N1B:V3-9	4906-9154	15cd	29	0.075	1.314	18.
N1B:V3-10	4906-9104	15cd	24	0.075	1.337	18.
N1B:V3-11	4906-9154	15cd	23	0.075	1.347	18.
	<u> </u>	Totals:	372 Ft.	1.071A	<u> </u>	

.OG: Revisions shown with 🐴	DATE CAD CHK DESCRIPTION	11/28/22 RWH MG TURNER REVIEW COMMENTS							
F0G:	DATE	11/28/22 F							
ISSNE LOG:	MARK	1							
DRAWN BY:			R. HERMANT						

1000 BROADWAY
1000 BROADWAY
1000 SW BROADWAY
1000 SW BROADWAY
PORTLAND, OR 97205

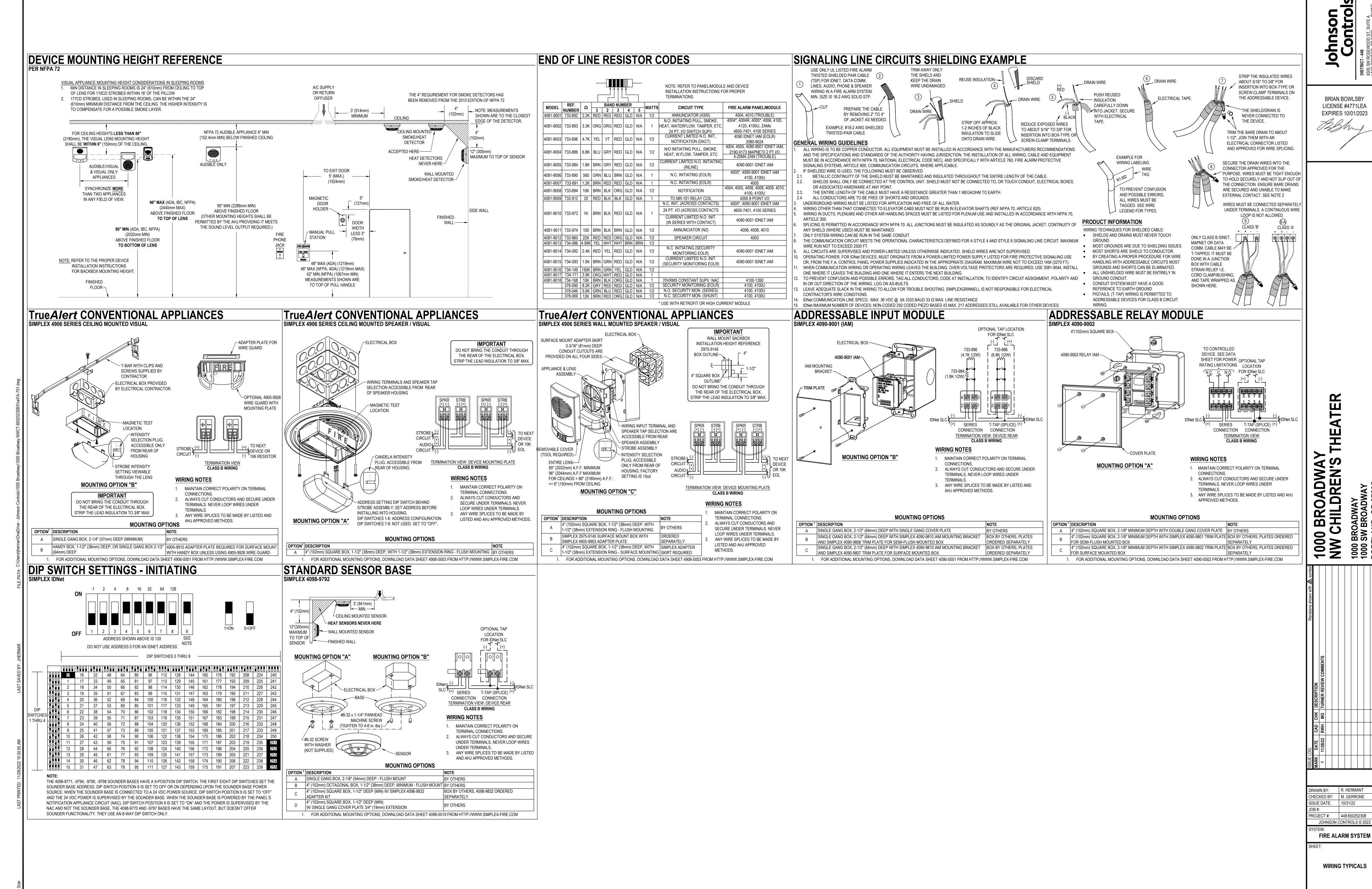
BRIAN BOWLSBY LICENSE #4771LEA EXPIRES 10/01/2023

DRAWN BY:	R. HERMANT			
CHECKED BY:	M. GERRONE			
ISSUE DATE:	10/31/22			
JOB #:				
PROJECT #:	448:650252308			
JOHNSON CONTROLS © 2022				
SYSTEM: FIRE ALARM SYSTEM				

CALCULATIONS

FA-602

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Development Services

From Concept to Construction



More Contact Info (http://www.portlandoregon.gov//bds/article/519984)



APPEAL SUMMARY

Status:	APPR	OVED
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Appeal ID: 28236	Project Address: 1000 SW Broadway, Portland, OR.
Hearing Date: 1/12/23	Appellant Name: Nathan Morris
Case No.: 23-02	Appellant Phone: 5037039875
Appeal Type: Fire	Plans Examiner/Inspector: Geoffrey Pena
Project Type: commercial	Stories: 25 Occupancy: Mixed Construction Type: Tenant Improvement
Building/Business Name: 1000 Broadway / Northwest Children's Theater	Fire Sprinklers: Yes - 100%
Appeal Involves: Alteration of an existing structure	LUR or Permit Application No.:
Plan Submitted Option: pdf [File 1]	Proposed use: Theater Production House

APPEAL INFORMATION SHEET

Appeal item 1

Requires The "Code" requires total smoke detection for this building since they do not have duct smoke

detectors.

Code Modification or Alternate Requested

We are requesting the ability to perform a manual bypass on a select few smoke detectors located in the Northwest Children's Theater during productions using theatrical fog.

Proposed Design

The Northwest Children's Theater (NWCT) is moving into the old theater basement at the 1000 Broadway building located on 1000 SW Broadway. The current state of the building is as follows; the building is equipped with 100% fire sprinkler coverage, total area smoke detection for the smoke control system, and a voice evacuation notification system. The theater has an existing smoke control system dating back the original Moyer Theater.

During our fire alarm design meetings, it was brought to our attention that the NWCT intends to use a machine to generate theatrical fog for some shows in the several spaces. However, since the fog has the same light obfuscation properties of smoke the Fire alarm/smoke control system will treat the detection of the fog as a normal smoke event thus initiating the building alarm as well as activating the smoke control sequence. This is in addition to any smoke that may be created during the construction of stages and normal stagecraft operations. After an internal review at JCI with their design and service teams, it appears that the original Theater had taken precautionary measures evidenced by the "Bypass" buttons present on the FACP during the time of the original Theater tenure. If allowed, we intend to change the programming for these bypasses to reflect the new devices being installed in the NWCT.

The proposed process for the bypass will be manual in nature. The staff, either Theater or Building Management, will press the labeled bypass button before a theatrical fog production. Once the bypass is in place a trouble condition will be annunciated and the trouble indicator will illuminate at the FACP, associated Annunciators, and transmitted to the monitoring station. Once the production is complete and the space has been properly ventilated and free of fog. The staff will need to manually disengage the bypass by pressing the bypass button again at the FACP. At which time all effected devices will return to normal operation and the trouble condition will clear at the FACP/Annunciators with a restore signal being sent to the monitoring station.

We have discussed with Building Management some of the procedures they will need to have in place in order to facilitate this operation. Such as maintaining a schedule as it pertains to bypasses, maintaining a record of who bypassed the system, having a written procedure posted at the FACP, allowing adequate time for the fog to ventilate, and a competent person remaining on sight postproduction until the system is restored to normal operation. The record documents will need to have a copy kept with the Fire alarm documents for review if required. We will also provide training to Building Management staff on the proper operation as part of the project closeout.

Reason for alternative The NFPA 72 mandates that installers and designer create their systems in a fashion that avoids false alarms. By allowing building management and their authorized representatives to perform a manual bypass of the indicated smoke detectors during events that will produce nuisance alarm causing aerial particulates. We mitigate the false alarms while still keeping the rest of the building operational and the life safety systems functioning to protect the people inside.

APPEAL DECISION

The Administrative staff has reviewed your appeal regarding bypassing smoke detectors during a performance when theatrical fog is used and any smoke that is crated during the construction of stages. The fire code appeal is granted provided a fire department standby is present during performances and a fire watch is in place by your staff during construction activities.