



SUMMIT BUILDING (KESSLER CENTER NETWORK) PORTABLE ADDITION 2022 FIRE ALARM SYSTEM



DISTRICT 458
9520 10TH AVENUE SOUTH, SUITE 100
SEATTLE, WA 98108
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LEGENDS

FIRE ALARM SYMBOL LEGEND

SYMBOL	DESCRIPTION	BRAND	MODEL	BACKBOX	WIRE TYPE
PANELS					
FACP	400TES IDNAC FIRE ALARM CONTROL PANEL, 120240 VAC, PLATINUM	SIMPLEX	4007-9202	SIMPLEX CABINET	N/A
GMP	GRAPHIC MAP (MOUNT 60" TO CENTER AFF)	KIRKLAND	18" x 24"		
INITIATING DEVICES					
⊕	ADDRESSABLE PHOTOELECTRIC SMOKE SENSOR W/ STANDARD BASE	SIMPLEX	4088-8714 HEAD 4088-8792 BASE	4" OCT, 1-1/2" D	M
⊕	ADDRESSABLE SINGLE ACTION MANUAL PULL STATION	SIMPLEX	4099-9004	4" SQ, 2-1/8" D W/ SINGLE GANG COVER	M
NOTIFICATION APPLIANCES					
⊕	ADDRESSABLE MULTI-CANDELA HORN/STROBE, WALL MOUNT, WHITE, CLEAR LENS, FIRE	SIMPLEX	49AV-WWF	4" SQ, 1-1/2" D	A
⊕	ADDRESSABLE MULTI-CANDELA HORN/STROBE, WALL MOUNT, APPLIANCE ONLY, CLEAR LENS	SIMPLEX	49AV-APPLW-O	49WPB-AVVOWR	A
⊕	ADDRESSABLE STROBE, WALL MOUNT, WHITE, CLEAR LENS, FIRE	SIMPLEX	49VQ-WWF	SINGLE GANG 1-1/2" D	A
MISCELLANEOUS DEVICES					
JB	JUNCTION BOX	BY OTHERS	BY OTHERS		
DH	DOOR HOLDER, SURFACE MOUNT, CHROME, 1224V	RS/GAAMES	DH1224SPC		D

APPLICABLE CODES & STANDARDS

JURISDICTIONS WITHIN THE STATE MAY HAVE AMENDMENTS TO THE STATE ADOPTED CODE. CHECK WITH THE LOCAL JURISDICTION AUTHORITY FOR MORE DETAILS.

TENANT IMPROVEMENT BUILDING CODES:
National Fire Alarm Code (NFPA 72), 2016 Edition
2018 International Building Code w/ Washington Amendments - WAC 51-50
2018 International Mechanical Code w/ Washington Amendments - WAC 51-52
2020 National Electrical Code w/ Washington Amendments
2018 International Fire Code w/ Washington Amendments - WAC 51-54A
ICC/ANSI A117.1-2009 Accessibility w/ WAC 51-50-1101.2

NATIONAL FIRE ALARM CODE (NFPA 72), 2013 Edition
2015 International Building Code w/ Washington Amendments - WAC 51-50
2015 International Mechanical Code w/ Washington Amendments - WAC 51-52
2017 National Electrical Code w/ Washington Amendments
2015 International Fire Code w/ Washington Amendments - WAC 51-54A
ICC/ANSI A117.1-2009 Accessibility w/ WAC 51-50-1101.2

OCCUPANCY TYPE(S):
B BUSINESS GROUP
E EDUCATIONAL GROUP

SPRINKLER PROTECTION:
BUILDING IS NOT SPRINKLERED

TENANT OCCUPANCY TYPE(S):
E EDUCATIONAL GROUP

TENANT SPRINKLER PROTECTION:
BUILDING IS NOT SPRINKLERED

JOHNSON CONTROLS CONTACTS

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SCOPE OF WORK

PROVIDE AND INSTALL NEW FIRE ALARM DEVICES FOR PORTABLE ADDITION, WIRE BACK TO THE FACP IN THE SUMMIT BUILDING AS SHOWN ON DRAWINGS FA-102.

ALL WIRING TO BE CLASS B NOTIFICATION APPLIANCE CIRCUITS, INITIATING DEVICE CIRCUITS, AND SIGNALING LINE CIRCUITS.

AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION. THE SUPERVISING STATION SHALL BE LISTED AS EITHER ULFUX OR ULJUS UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.

PROJECT DIRECTORY

Site
SUMMIT BUILDING
1501 39TH STREET
PUYALLUP, WA 98375

Johnson Controls District - 458
9520 10TH AVENUE SOUTH, SUITE 100
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PHONE: 206-291-1400
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SERVICE: 206-291-1400

Owner
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PUYALLUP, WA 98371

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BLACK DIAMOND, WA 98010
PHONE: 425-241-3882
CONTACT: JACK MCGANN

ABBREVIATIONS LEGEND

AC = ABOVE CEILING
AFF = ABOVE FINISHED FLOOR
AHL = AUTHORITY HAVING JURISDICTION
ALM = ALARM
ANN = ANNUNCIATOR
BMS = BUILDING MANAGEMENT SYSTEM
C = CEILING MOUNTED
CD = CANDELA RATING
DET = DETECTOR
DGP = DATA GATHERING PANEL
E = EXISTING TO REMAIN
EOL = END OF LINE
EPO = EMERGENCY POWER OFF
ER = ELEVATOR RECALL
FA = FIRE ALARM ANNUNCIATOR
FACP = FIRE ALARM CONTROL PANEL
FATC = FIRE ALARM TERMINAL CABINET
FBO = FURNISHED BY OTHERS
FCO = FIRE COMMAND CENTER
FTR = FIRE ALARM TRANSPONDER
H = HIGH HUMIDITY
HT = HEIGHT
HVAC = HEATING VENTILATION & AIR CONDITIONING
IMS = INFORMATION MANAGEMENT SYSTEM
MAX = MAXIMUM
MIN = MINIMUM
NA = NOT APPLICABLE
NAC = NOTIFICATION APPLIANCE CIRCUIT
NDU = NETWORK DISPLAY UNIT

NEC = NATIONAL ELECTRIC CODE ASSOCIATION
NFPA = NATIONAL FIRE PROTECTION ASSOCIATION
NIC = NOT IN CONTRACT
NPU = NETWORK PROCESSING UNIT
NTS = NOT TO SCALE
PAP = PREACTION PANEL
RC = EXISTING TO REMOVE AND COVER
RD = EXISTING DEVICE TO BE RELOCATED
RL = RELOCATED DEVICE
RR = REMOVE EXISTING & REPLACE WITH NEW
SCC = STATUS COMMAND CENTER
SLC = SIGNALING LINE CIRCUIT
SMK = SMOKE
SUPV = SUPERVISORY
TAC = TRUFAERT ADDRESSABLE CONTROLLER
TOS = TOP OF SHAFT
TRBL = TROUBLE
TS = TAMPER SWITCH
TYP = TYPICAL
UN = UNLESS OTHERWISE NOTED
VCC = VOICE COMMAND CENTER
VT = VALVE TAMPER
W = WATTAGE
W = WITH
WO = WITHOUT
WF = WATERFLOW
WG = WIRE GUARD
WP = WEATHERPROOF
XP = EXPLOSION PROOF

DEVICE TAG LEGEND

PANEL DESIGNATOR

- FA = FACP (NON-NETWORK)
- # = NODE NUMBER
- TR = TRANSPONDER NUMBER
- #TR# = NODE-TRANSPONDER NUMBER
- NR = NAC EXTENDER NUMBER

CIRCUIT DESIGNATOR

- AP = IDNAC CIRCUIT NUMBER
- DP = DOOR HOLDER CIRCUIT NUMBER
- FP = FIRE PHONE CIRCUIT
- HP = AUDIBLE (HORN) CIRCUIT NUMBER
- IP = IDNET LOOP NUMBER
- PP = POWER CIRCUIT NUMBER
- SP = SPEAKER CIRCUIT NUMBER
- VP = VISUAL CIRCUIT NUMBER
- Z# = ZONE NUMBER

DEVICE NUMBER

BRANCH / ISOLATED LOOP DESIGNATOR:

- (B) = ISOLATED LOOP NUMBER
- (B) = IDNAC BRANCH NUMBER
- (E#) = EPR# NUMBER BRANCH NUMBER
- (E#) = ADDRESSABLE NOTIFICATION CIRCUIT
- 2.EPR = ENHANCED POWER REPEATER

SYSTEM SEQUENCE OF OPERATIONS

SYSTEM OUTPUTS	SYSTEM INPUTS																			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
ACTIVATE COMMON ALARM SIGNAL INDICATOR	X	X																		
ACTIVATE AUDIBLE ALARM SIGNAL	X	X																		
ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR																				
ACTIVATE AUDIBLE SUPERVISORY SIGNAL																				
ACTIVATE COMMON TROUBLE SIGNAL INDICATOR																				
ACTIVATE AUDIBLE TROUBLE SIGNAL																				
ACTIVATE APPROPRIATE LOCATION INDICATOR																				
ACTIVATE ALL AUDIBLE EVACUATION SIGNALS																				
ACTIVATE ALL VISIBLE EVACUATION SIGNALS																				
DISPLAY CHANGE OF STATUS																				
TRANSMIT ALARM SIGNAL TO SUPERVISING STATION																				
TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION																				
TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION																				
RELEASE MAGNETICALLY HELD FIRE DOORS																				

FIRE ALARM WIRE LEGEND

CIRCUIT DESCRIPTION	CONSTRUCTION	GAUGE	CIRCUIT PROPERTIES	ACCEPTABLE CABLE TYPES					
				FPLR	FPLP	THIN	TFN	OUTDOOR*	
A ADDRESSABLE NOTIFICATION	UTP SOLID	14 AWG	60pF/ft. MAX CAPACITANCE; 3 nS/ft. MINIMUM	X	X	X	X		
D DOOR HOLDER	2 COND. SOLID	14 AWG		X	X	X	X		
M IDNET	UTP SOLID	18 AWG	60pF MAX TOTAL LINE CAPACITANCE	X	X				
N RS-485 COMMUNICATION	UTP SOLID	18 AWG	58pF/ft. MAX CAPACITANCE	X	X				
CONDUIT SIZE				MAX CONDUCTOR AREA		CONDUIT SIZE		MAX CONDUCTOR AREA	
1/2"				0.122 SQ INCH*		1-1/2"		0.98 SQ INCH*	
3/4"				0.213 SQ INCH*		1-1/2"		0.814 SQ INCH*	
1"				0.346 SQ INCH*		2"		1.342 SQ INCH*	

* 80% CONDUIT FILL PER N.E.C. STP = SHIELDED TWISTED PAIR

ITEMS SUCH AS CAPACITANCE BETWEEN CONDUCTORS AND WIRE GAUGE CAN BE CRITICAL TO THE CIRCUIT DESIGN OF THIS SYSTEM INSTALLATION. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR SELECTING AND INSTALLING CABLE MANUFACTURER AND MODEL THAT MEETS OR EXCEEDS THE ABOVE REQUIREMENTS. RECOMMENDED CABLE MANUFACTURERS AND MODEL NUMBERS ARE AVAILABLE UPON REQUEST.

NOTE: SUBSTITUTE APPROPRIATE CABLES FOR UNDERGROUND APPLICATIONS TO MEET ALL NEC REQUIREMENTS.

GENERAL NOTES

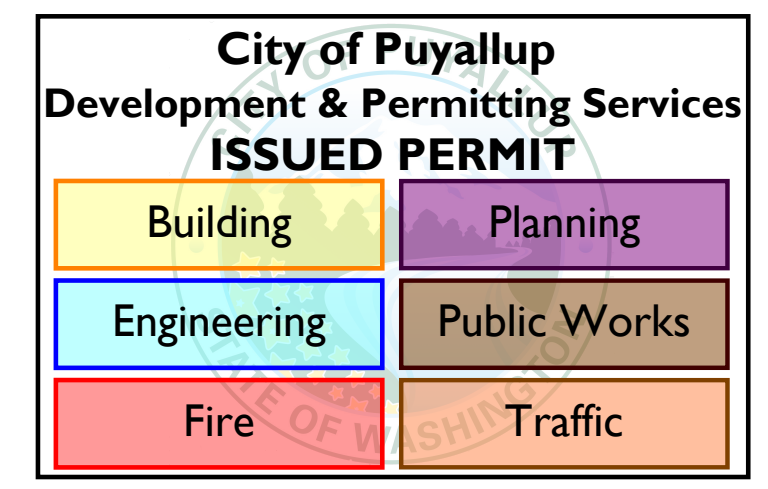
- THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS IS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
- SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM 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.
- ELECTRICAL 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.
- A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION.
- 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.
- 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.
- 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.
- 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.
- ALL WIRING SHALL BE INSTALLED ACCORDING TO APPLICABLE ELECTRICAL CODES.
- 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.
- FIRE ALARM CABLE INSTALLED IN DUCTS, PLENUM, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR SHALL BE TYPE FPLP.
- FIRE ALARM CABLE INSTALLED IN THE VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR OR CABLES INSTALLED IN VERTICAL RUNS IN SHIFTS SHALL BE TYPE FPLA.
- FIRE ALARM CABLE INSTALLED IN UNDERGROUND CONDUIT OR OTHER WET LOCATIONS SHALL BE UL LISTED FOR WET LOCATIONS.
- FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE APPLICABLE ELECTRICAL CODES, WHERE APPLICABLE.
- ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
- ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.
- ONLY SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
- 120VAC IS NOT PERMITTED IN THE SAME CONDUIT WITH LOW VOLTAGE WIRING.
- MAINTAIN MAXIMUM CONDUIT FILL RATIO AS PER APPLICABLE ELECTRICAL CODES REQUIREMENTS.

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SUMMIT BUILDING (KESSLER CENTER NETWORK)
PORTABLE ADDITION 2022
SUMMIT BUILDING
1501 39TH STREET
PUYALLUP, WA 98375

ISSUE NO.	DATE	BY	DESCRIPTION
1	06/20/22	RJL	ISSUE FOR PERMIT
2	06/22/22	RJL	ISSUE FOR PERMIT

DRAWN BY: R.SOLANO
CHECKED BY: J.BRIGSO
ISSUE DATE: 8/26/20
JOB #: 45837058
PROJECT #: 4258161908301
SYSTEM: JOHNSON CONTROLS S-6 2022
FIRE ALARM SYSTEM
SHEET:
COVER SHEET
FA-001

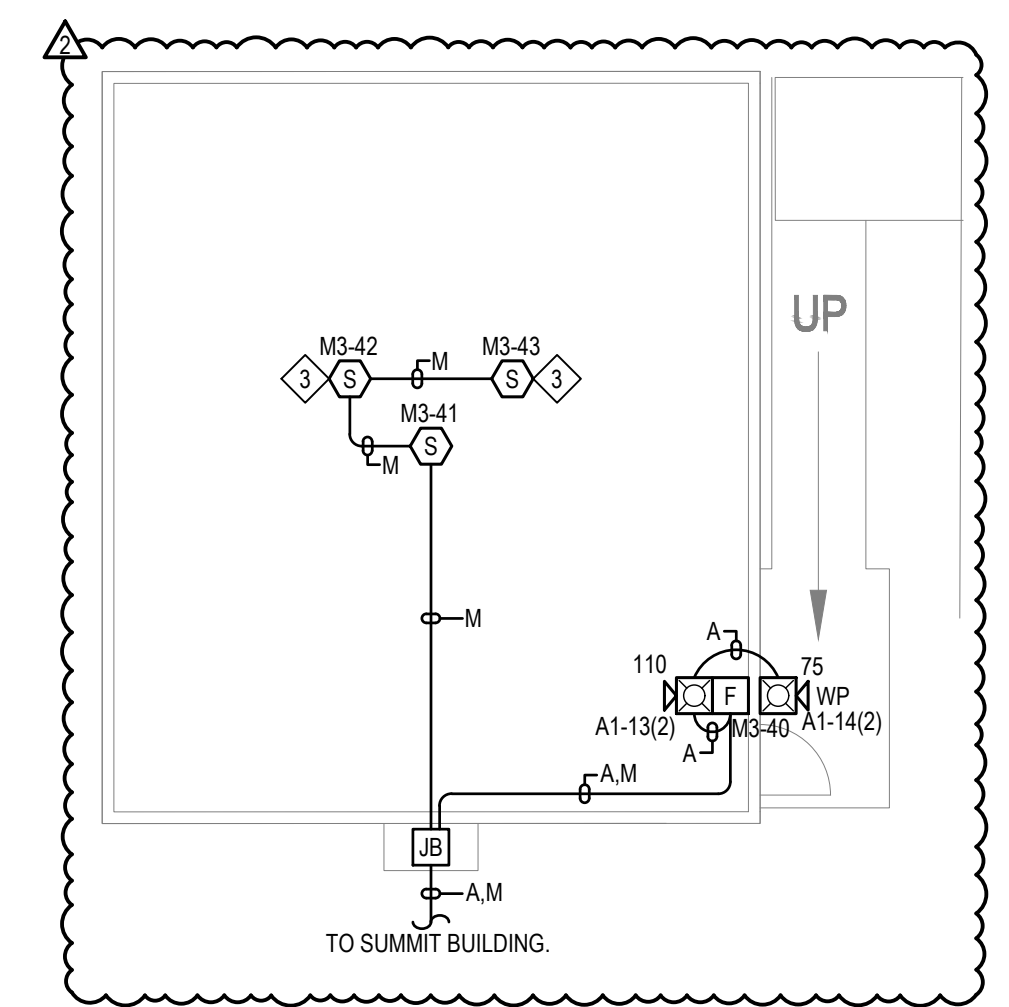
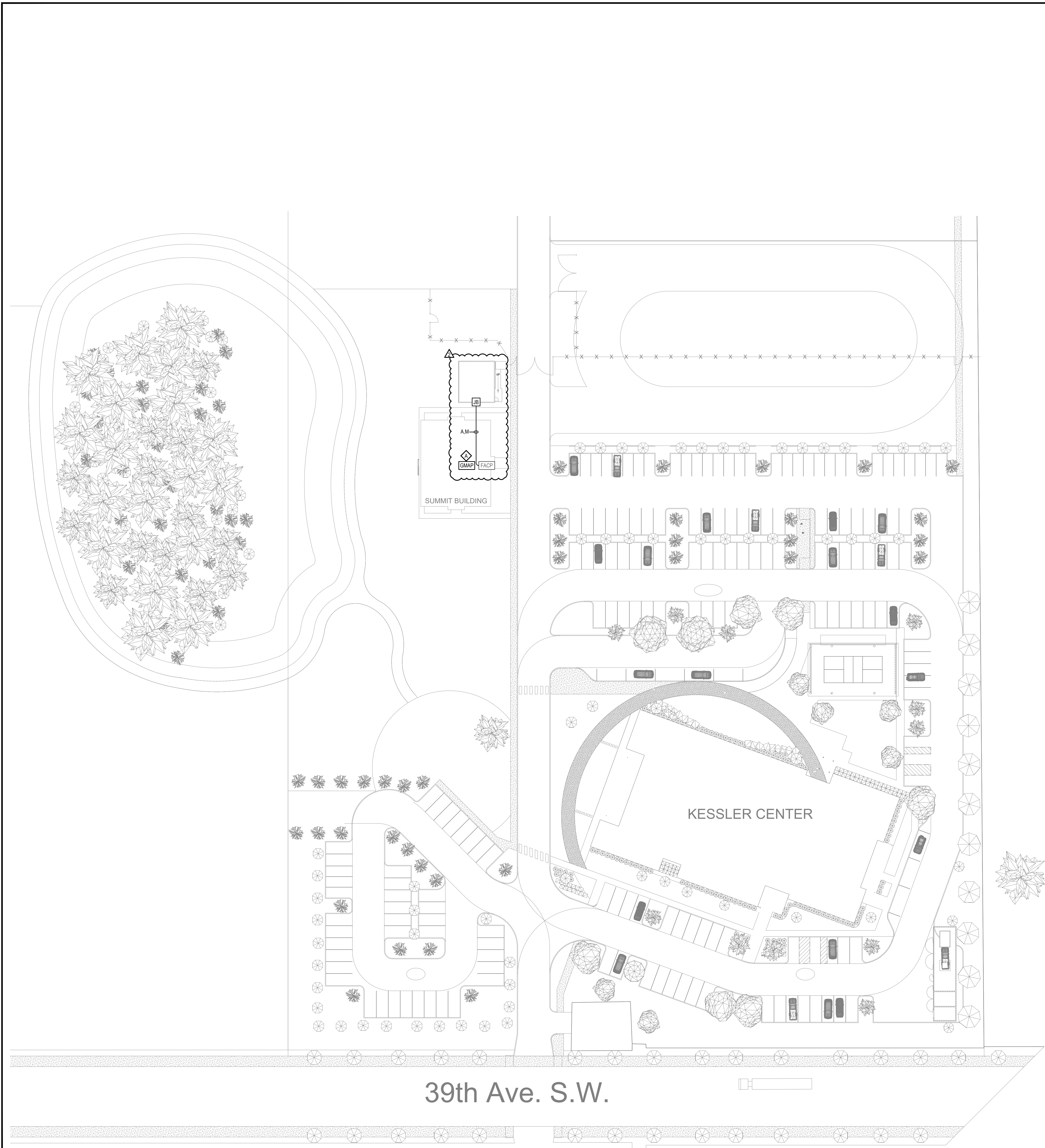


FILE PATH: C:\Users\jmcarron\OneDrive\Project Documents - 650243437 PSD\Kessler Ctr Portable Existing Diagram Fire Alarm System FA-102.dwg

LAST SAVED BY: jmcarron

LAST PRINTED: 8/23/2022 12:27 PM

30" x 42" - inch E Size



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

- GENERAL NOTES:**
1. ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.
 2. DO NOT CHANGE DEFAULT T APPLIANCE CONFIGURATION SWITCH SETTINGS ON ADDRESSABLE A.V. DEVICES (DTF1). REFER TO DEVICE DETAILS AND INSTALLATION INSTRUCTIONS FOR MORE INFORMATION.
 3. THE DEVICE ADDRESSES INDICATED ON THESE DRAWINGS ARE AN ALPHANUMERIC DESCRIPTION OF WHICH CIRCUIT THE DEVICE IS LOCATED ON. DEVICES MAY BE ASSIGNED A DIFFERENT NUMBER WITHIN THE PANEL PROGRAM. CONSULT WITH A JOHNSON CONTROLS TECHNICIAN BEFORE APPLYING A PHYSICAL LABEL TO ANY DEVICES.
- KEYNOTES:**
- ◇ GRAPHIC MAP, MOUNT BY FACP. LEAVE 6" MIN WALL SPACE BETWEEN PANEL AND MAP.
 - ◇ POWER SUPPLY REQUIRES 120VAC AND EARTH GROUND. SEE RISER DIAGRAM (FA-200 SERIES) FOR ADDITIONAL TERMINATIONS AND REQUIRED WIRE CONNECTIONS.
 - ◇ SMOKE DETECTOR INSTALLED WITHIN 36" OF PEAK ABOVE DROP TILE CEILING.
 - ◇ LOCATED ABOVE CEILING.
- REVISION 2 NOTES:**
1. EXISTING DEVICE LOCATIONS AND WIRING ARE SHOWN LIGHT AND ARE BASED UPON RECORD DRAWING INFORMATION PROVIDED BY OTHERS. FIELD VERIFY ALL LOCATIONS AND CONNECTIONS TO EXISTING EQUIPMENT. CONTRACTOR TO RED LINE AND NOTE ANY AND ALL CHANGES ON THE RECORD DRAWING SET.
- REVISION 2 KEYNOTES:**
- ◇ REPLACE EXISTING GRAPHIC MAP WITH UPDATED COPY PROVIDED.

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 FAC: 206.291.1400

DRAWINGS REVIEWED BY:
 Chad McCarron, SET
 WECT 195810
 Fire Alarm Systems, Level IV

**SUMMIT BUILDING (KESSLER CENTER NETWORK)
 PORTABLE ADDITION 2022**
 SUMMIT BUILDING
 1501 39TH STREET
 PUYALLUP, WA 98375

ISSUE NO.	DATE	BY	DESCRIPTION
1	08/23/22	RSC	ISSUE FOR PERMIT
2	08/23/22	RSC	ISSUE FOR PERMIT

**City of Puyallup
 Development & Permitting Services
 ISSUED PERMIT**

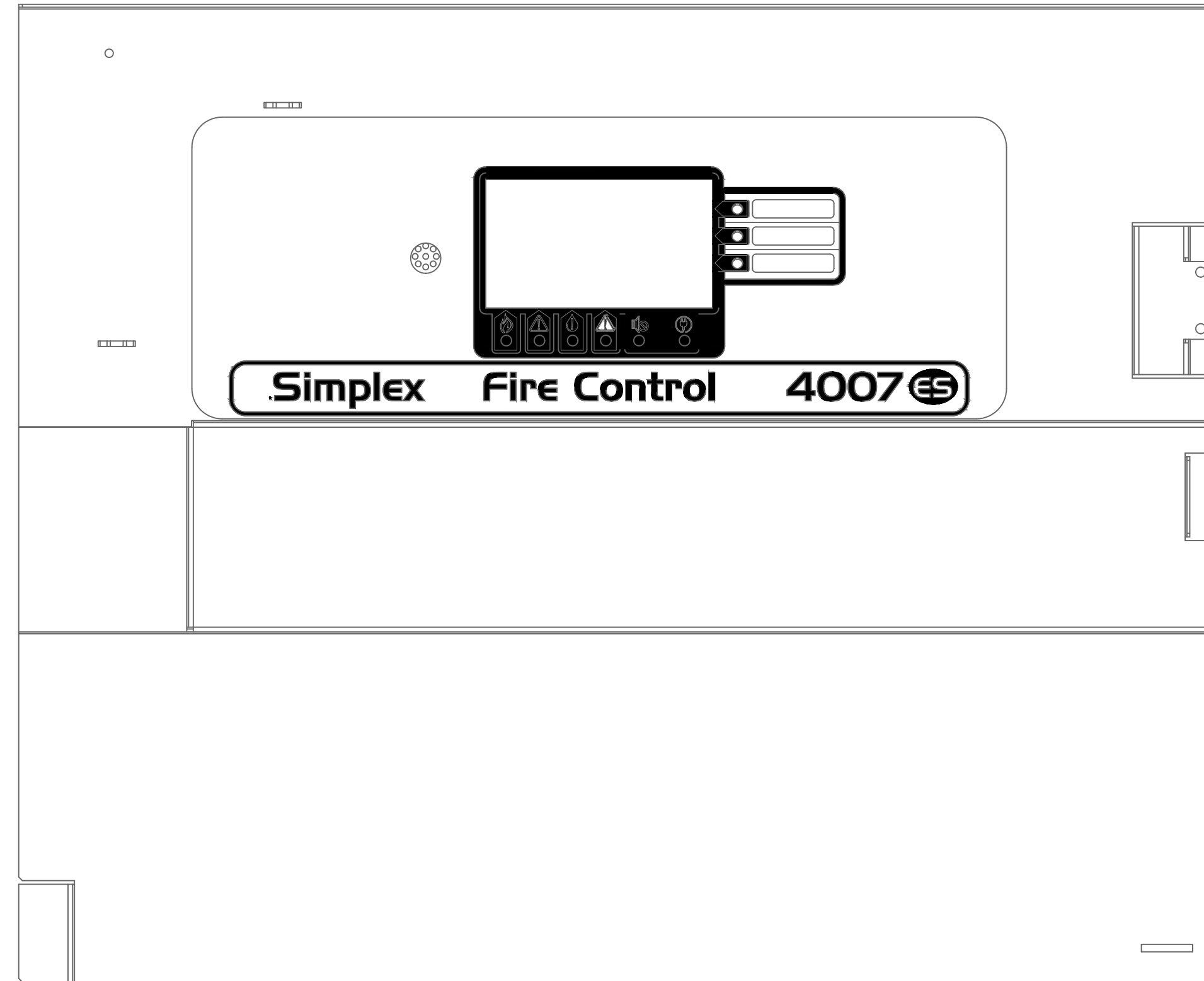
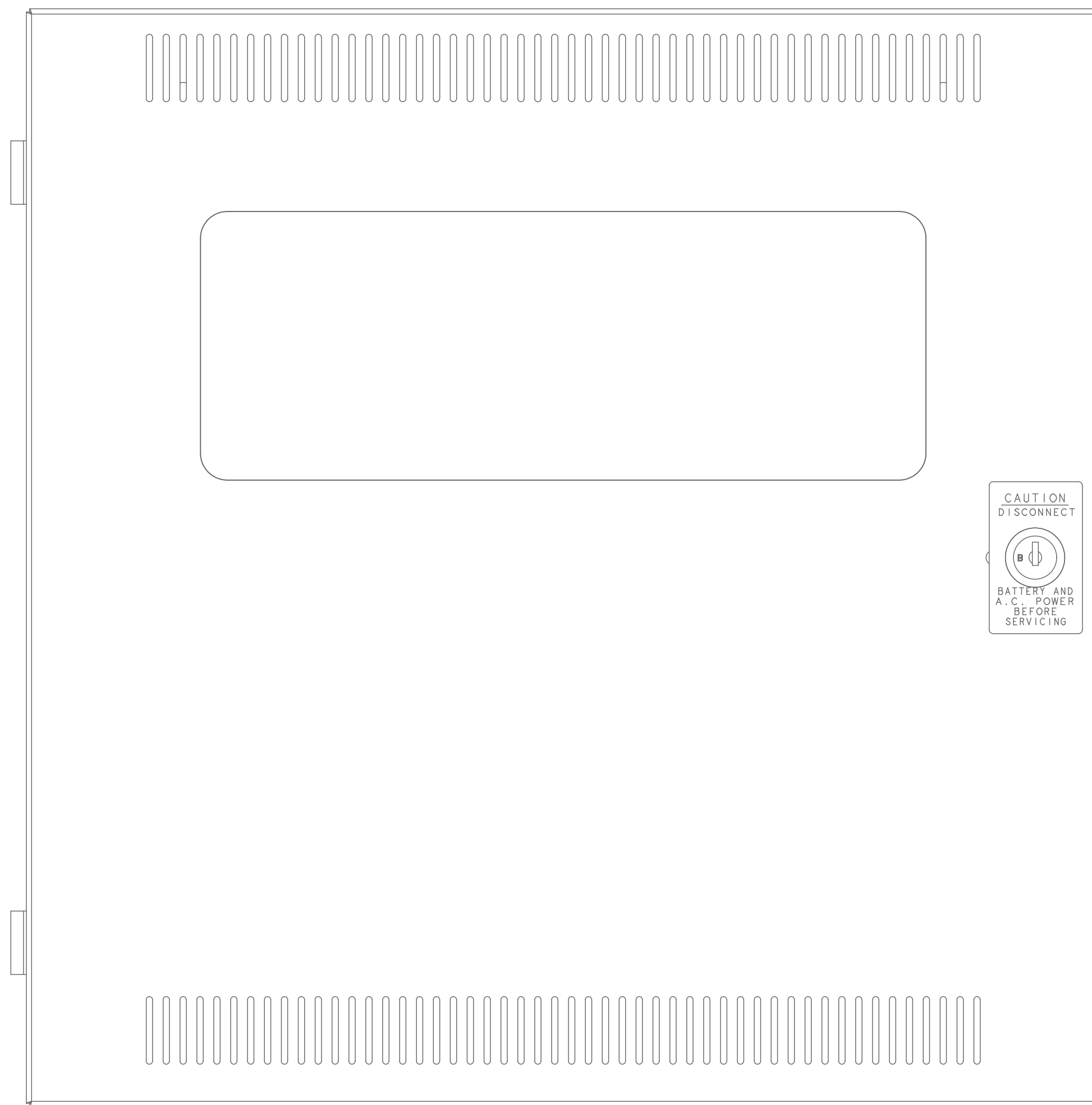
Building Planning
 Engineering Public Works
 Fire Traffic

SYSTEM: FIRE ALARM SYSTEM
 SHEET: DEVICE PLACEMENT PLAN - PORTABLE

FA-102

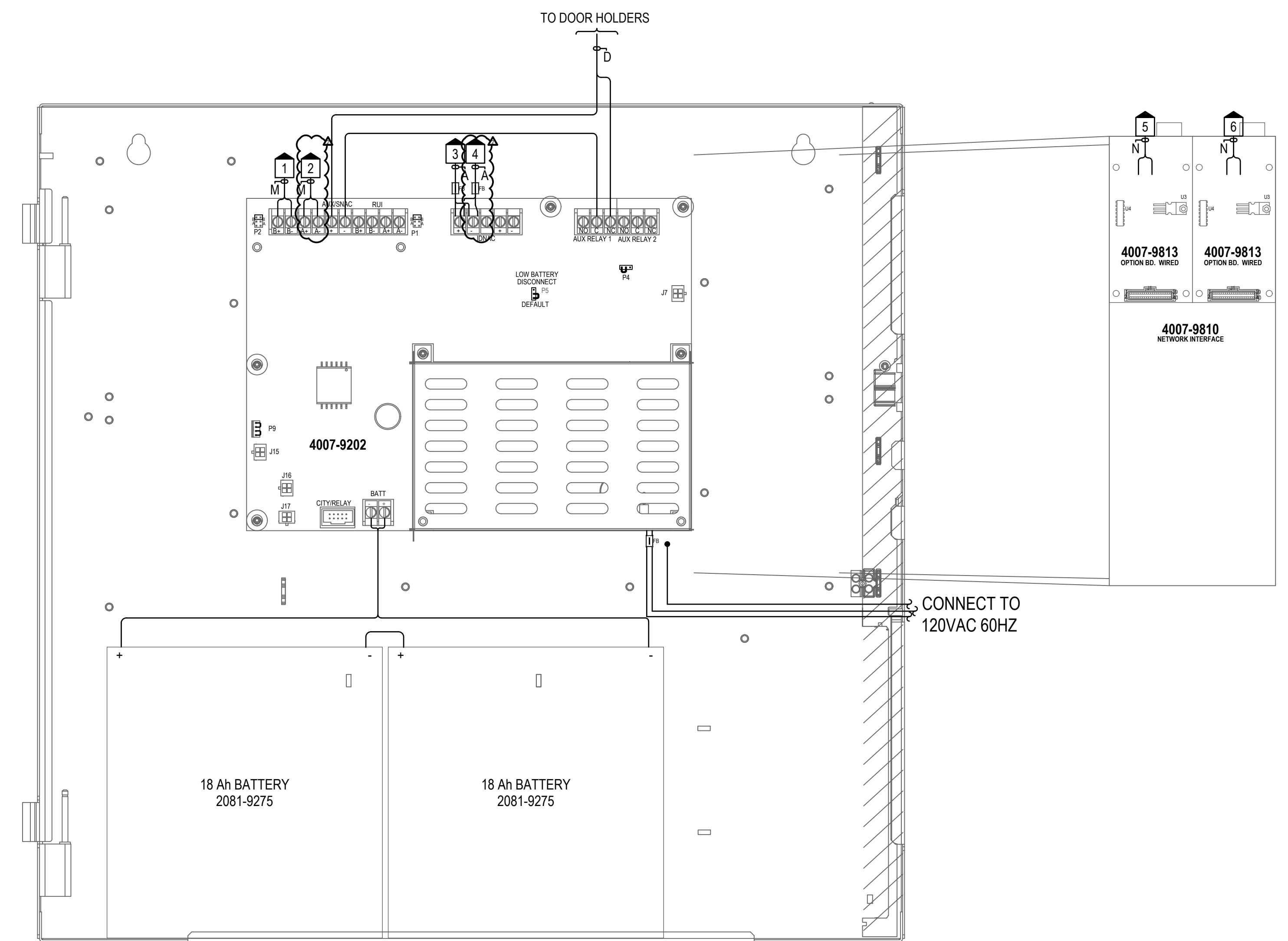
DEVICE PLACEMENT PLAN - SITE
 SCALE: 1/32" = 1'-0"

SCALE: 1/8" = 1'-0"
 IN FEET
 0 4 8 16



4007 TERMINATIONS

TERMINATION NUMBER	CIRCUIT LABEL	CKT DESCRIPTION	WIRE
1	M1	SUMMIT BLDG IDNET DEVICES	M
2	M1	PORTABLE IDNET DEVICES	M
3	A1(1)	SUMMIT BLDG IDNAC DEVICES	A
4	A1(2)	PORTABLE IDNAC DEVICES	A
5	NETWORK	TO KESSLER CENTER BLDG FACP	N
6	NETWORK	FROM KESSLER CENTER BLDG FACP	N



KEEP BATTERY WIRING TERMINALS TO THE FRONT OF THE BOX. IF THE DACT SPACE OR THE CITY/RELAY OPTION CARD IS USED, RUN 734-306 HARNESS WIRING ON THE BACK OF THE BOX TO MAINTAIN SEPARATION FROM BATTERY WIRING.

**City of Puyallup
Development & Permitting Services
ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

ISSUE NO.	DATE	CHK	DESCRIPTION
1	08/23/22	JRK	ISSUE FOR PERMIT
2	08/23/22	ARR	FOR PORTABLE ADDITION, 650243493

DRAWN BY:	R.SOLANO
CHECKED BY:	J.BRIGOSO
ISSUE DATE:	8/23/20
JOB #:	458437058
PROJECT #:	4238.61903301
SYSTEM:	JOHNSON CONTROLS © 2022

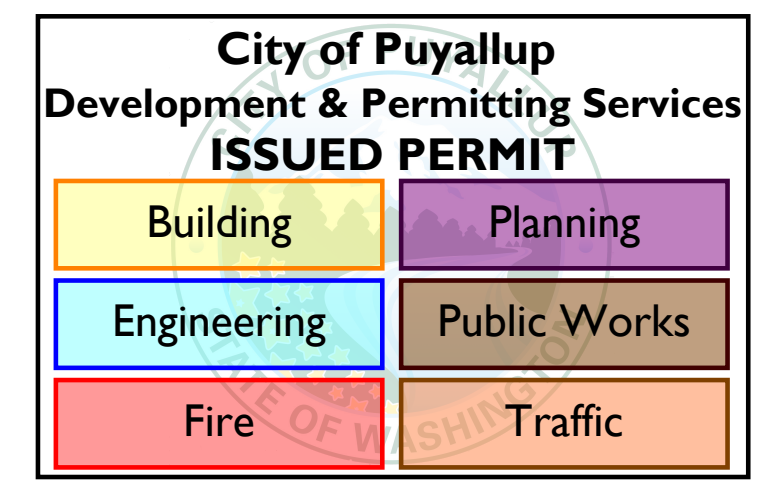
DRAWINGS REVIEWED BY:
 Chad McCarron, SET
 WSET 192810
 Fire Alarm Systems, Level IV

**SUMMIT BUILDING (KESSLER CENTER NETWORK)
 PORTABLE ADDITION 2022**
 SUMMIT BUILDING
 1501 39TH STREET
 PUYALLUP, WA 98375

ISSUE NO.	DATE	CLASS	DESCRIPTION
1	10/26/22	REV	ISSUE FOR PERMITS
2	06/22/22	REV	REVISED PERMITS

DRAWN BY: R.SOLANO
 CHECKED BY: J.BRISOLO
 ISSUE DATE: 8/26/20
 JOB #: 458437058
 PROJECT #: 4258.61903301
 SYSTEM: JOHNSON CONTROLS © 2022

SHEET:
 FACP - CALCULATIONS AND SCHEDULES



CORRIDOR AT WEST ENTRANCE - 4007es FACP				Standby Current	Total Standby	Alarm Current	Total Alarm
Module	Qty	Description					
Panel Equipment							
4007-9202	1	FIRE ALARM EPS CONTROL PANEL 100 PT ADDR. - PLATINUM		0.1800	0.1800	0.1850	0.1850
4100-6078	1	NETWORK IF CARD, MODULAR		0.0460	0.0460	0.0460	0.0460
4100-6056	2	NETWORK MEDIA CARD WIRED		0.0550	0.1100	0.0550	0.1100
4007-9813	2	WIRED MEDIA MODULE		0.0550	0.1100	0.0550	0.1100
4007-9810	1	NETWORK INTERFACE CARD		0.0300	0.0300	0.0300	0.0300
Panel Totals				0.4760			0.4810
IDNet Addressable Devices (SLC)							
4098-9714	29	TRUEALARM PHOTO SMOKE SENSOR		Constant current draw of .8mA standby and 1mA alarm per address used			
4098-9792	29	TRUEALARM SENSOR BASE		Devices requiring additional current are accounted for in the section labeled "Miscellaneous Peripheral Devices Requiring Additional System Power"			
4099-9004	2	ADDRESSABLE SINGLE ACTION MANUAL STATION					
IDNet Notification Appliances							
49AV-APPLW-O	3	AV WEATHERPROOF APPLIANCE ONLY, WALL MT	WP75	0.0008	0.0024	0.2380	0.7140
49AV-WWF	1	AV WALL MT, WHITE, FIRE LABEL	110	0.0008	0.0008	0.1390	0.1390
49AV-WWF	2	AV WALL MT, WHITE, FIRE LABEL	15	0.0008	0.0016	0.0290	0.1180
49AV-WWF	2	AV WALL MT, WHITE, FIRE LABEL	30	0.0008	0.0016	0.0670	0.1340
49AV-WWF	2	AV WALL MT, WHITE, FIRE LABEL	75	0.0008	0.0016	0.1070	0.2140
Total IDNet Device Current:				0.0112			1.5070
IDNet Current Boost for 29vdc Regulated Output **							0.8592
Peripheral Totals				0.0000			2.3662
RUI Totals				0			0.0000
Address Totals				31			0.0310
System Totals				Standby 0.5120			Alarm 2.8782

Standby Current	Standby Total	Alarm Current	Alarm Total
Battery Set #1 (Cabinet/Charger #1)			
Select All Power Supplies on this battery set:			
4007es	0.4872		1.9880
Sub Total		0.4872	1.9880
Additional Current Draws:			
IDNet Current Boost for 29vdc Regulated Output **			
RUI Connected Peripheral Devices	0	x 0.0035 = 0.0000	x 0.0035 = 0.0000
MAPNET/IDNet Device Address Communication Current	31	x 0.000800 = 0.0248	x 0.001000 = 0.0310
Sub Total		0.5120	2.8782
Spare addressable point capacity	0%	0	x 0.0008 = 0.0000
Total		0.5120	2.8782
Standby Time = 24 Hrs	x 0.5120 = 12.2880	Standby Ah	
Alarm Time = 5 Min	x 0.06333 x 2.8782 = 0.9111	Alarm Ah	
Additional Spare Battery Capacity = 0%		0.0000	
Battery Discharge Factor = 20%		12.5278	
Minimum Battery Required 2081-9275 18AH (2x)		2.5056	
Battery Supplied 2081-9275 18AH (2x)		15.0334	

** IDNet Current Boost formula: ((29.5 * IDNet Alarm Current) / 92) / 20.4 = Adjusted Current
 DC-DC Converter Output = 29.5vdc. Terminal Output is 29vdc due to 0.5vdc internal loss.
 Converter Worst Case efficiency is 92%; 20.4vdc represents battery output in 85% depleted state

IDNET CHANNEL NO	Address	Device Type	Point Type	Location Description	1	2	3	4	5	6	7	8
M3-1					X							ON
M3-2					X							ON
M3-3					X	X						ON
M3-4					X		X					ON
M3-5					X	X						ON
M3-6					X	X						ON
M3-7					X	X	X					ON
M3-8					X		X					ON
M3-9					X		X					ON
M3-10					X	X						ON
M3-11	ADRPUL	PULL		CORRIDOR BY FACP	3-11	X	X					ON
M3-12	PHOTO	SMOKE		CORRIDOR BY IAES 109	3-12	X	X					ON
M3-13	PHOTO	SMOKE		SUMMIT 110	3-13	X	X					ON
M3-14	PHOTO	SMOKE		IAES 109	3-14	X	X					ON
M3-15	PHOTO	SMOKE		TOILET 108	3-15	X	X					ON
M3-16	PHOTO	SMOKE		CORRIDOR BY RM OFFICE 103	3-16	X						ON
M3-17	PHOTO	SMOKE		SUMMIT 111	3-17	X						ON
M3-18	PHOTO	SMOKE		WOMEN 105	3-18	X						ON
M3-19	PHOTO	SMOKE		OFFICE 103	3-19	X						ON
M3-20	PHOTO	SMOKE		MEN 106	3-20	X						ON
M3-21	PHOTO	SMOKE		CONFERENCELOUNGE 104	3-21	X						ON
M3-22	PHOTO	SMOKE		STORAGE 107	3-22	X						ON
M3-23	PHOTO	SMOKE		SUMMIT 110 ABOVE CEILING EAST	3-23	X	X					ON
M3-24	PHOTO	SMOKE		IAES 109 ABOVE CEILING EAST	3-24	X	X					ON
M3-25	PHOTO	SMOKE		CONFERENCELOUNGE 104 ABOVE CEILING	3-25	X	X					ON
M3-26	PHOTO	SMOKE		OFFICE 103 ABOVE CEILING	3-26	X	X					ON
M3-27	PHOTO	SMOKE		SUMMIT 111 ABOVE CEILING WEST	3-27	X	X					ON
M3-28	PHOTO	SMOKE		SUMMIT 110 ABOVE CEILING WEST	3-28	X	X					ON
M3-29	PHOTO	SMOKE		SUMMIT 111 ABOVE CEILING EAST	3-29	X	X					ON
M3-30	PHOTO	SMOKE		IAES 109 ABOVE CEILING WEST	3-30	X	X					ON
M3-31	PHOTO	SMOKE		TOILET 108 ABOVE CEILING	3-31	X	X					ON
M3-32	PHOTO	SMOKE		STORAGE 107 ABOVE CEILING	3-32			X				ON
M3-33	PHOTO	SMOKE		OFFICE 103 ABOVE CEILING SOUTHWEST	3-33	X						ON
M3-34	PHOTO	SMOKE		MEN 106 ABOVE CEILING	3-34	X						ON
M3-35	PHOTO	SMOKE		WOMEN 105 ABOVE CEILING	3-35	X						ON
M3-36	PHOTO	SMOKE		CORRIDOR BY RM OFFICE 103 ABOVE CEILING	3-36	X						ON
M3-37	PHOTO	SMOKE		CORRIDOR BY IAES 109 ABOVE CEILING	3-37	X						ON
M3-38					X	X	X					ON
M3-40	ADRPUL	PULL		SUMMIT PORTABLE	3-40	X	X					ON
M3-41	PHOTO	SMOKE		SUMMIT PORTABLE	3-41	X	X					ON
M3-42	PHOTO	SMOKE		SUMMIT PORTABLE ABOVE CEILING WEST	3-42	X	X					ON
M3-43	PHOTO	SMOKE		SUMMIT PORTABLE ABOVE CEILING EAST	3-43	X	X					ON
M3-44					X	X	X					ON
M3-45					X	X	X					ON
M3-46					X	X	X					ON
M3-47					X	X	X					ON
M3-48					X	X	X					ON
M3-49					X	X	X					ON
M3-50					X	X	X					ON
M3-125					X	X	X	X				ON

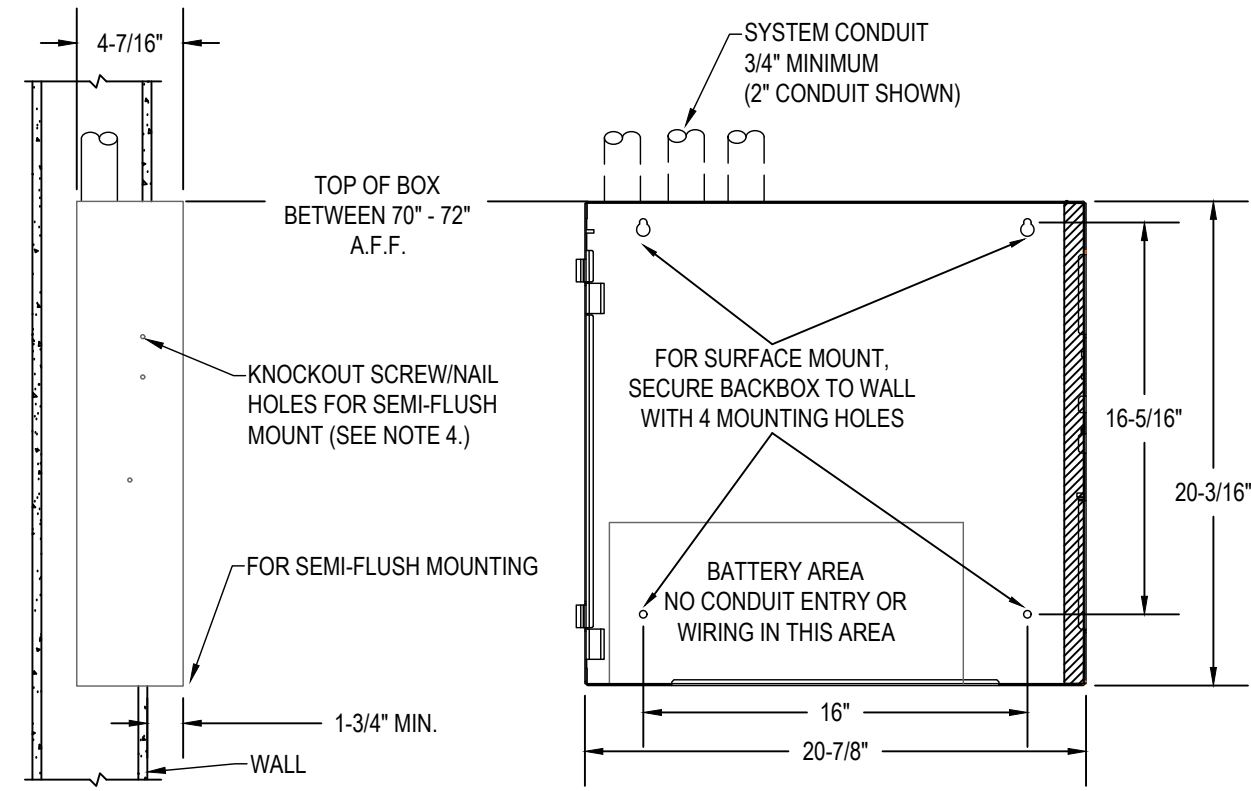
NOTE: THE LABELS SHOWN ABOVE WILL BE USED FOR PROGRAMMING PURPOSES.
 THE LABELS ARE BASED UPON INFORMATION SHOWN ON THE ARCHITECTURAL DRAWINGS.
 ANY CHANGES TO THESE LABELS MUST BE NOTED ON THE SUBMITTAL REVIEW, PRIOR TO PROGRAMMING.
 POINTS SHOWN IN ITALIC TEXT REFER TO EXISTING DEVICES.

Channel	Description	Alarm Current	% Drop	Unit Load	Wire Length	Spare Current	Spare Voltage Drop
A1	SUMMIT BLDG IDNAC DEVICES	1.507A	1.20%	14	464	30%	84%

A ENHANCED POWER SUPPLY - CHANNEL 1				SWITCH SETTINGS									
IDNac Address	Device Type	PID	Setting	Custom Label (Max 40 Characters)									
A1-1	AV	49AV-WWF	30cd	IAES 109	1-1	X							ON
A1-2	VO	49VO-WWF	15cd	TOILET 108	1-2	X							ON
A1-3	VO	49VO-WWF	15cd	WOMEN 105	1-3	X							ON
A1-4	AV	49AV-WWF	15cd	OFFICE 103	1-4		X						ON
A1-5	VO	49VO-WWF	15cd	MEN 106	1-5	X							ON
A1-6	AV	49AV-WWF	30cd	CONFERENCELOUNGE 104	1-6	X	X						ON
A1-7	AV	49AV-APPLW-O	WP75	CONFERENCELOUNGE 104 OUTSIDE	1-7	X	X						ON
A1-8	AV	49AV-WWF	15cd	CORRIDOR BY RM SUMMIT 111	1-8		X						ON
A1-9	AV	49AV-WWF	75cd	SUMMIT 111	1-9	X							ON
A1-10	AV	49AV-WWF	75cd	SUMMIT 110	1-10	X							ON
A1-11	VO	49VO-WWF	15cd	CORRIDOR BY FACP AT WEST ENTRANCE	1-11	X	X						ON
A1-12	AV	49AV-APPLW-O	WP75	SUMMIT 110 OUTSIDE	1-12	X	X						ON
A1-13	AV	49AV-WWF	110cd	INSIDE PORTABLE	1-13	X	X						ON
A1-14	AV	49AV-APPLW-O	WP75	OUTSIDE PORTABLE	1-14	X	X						ON

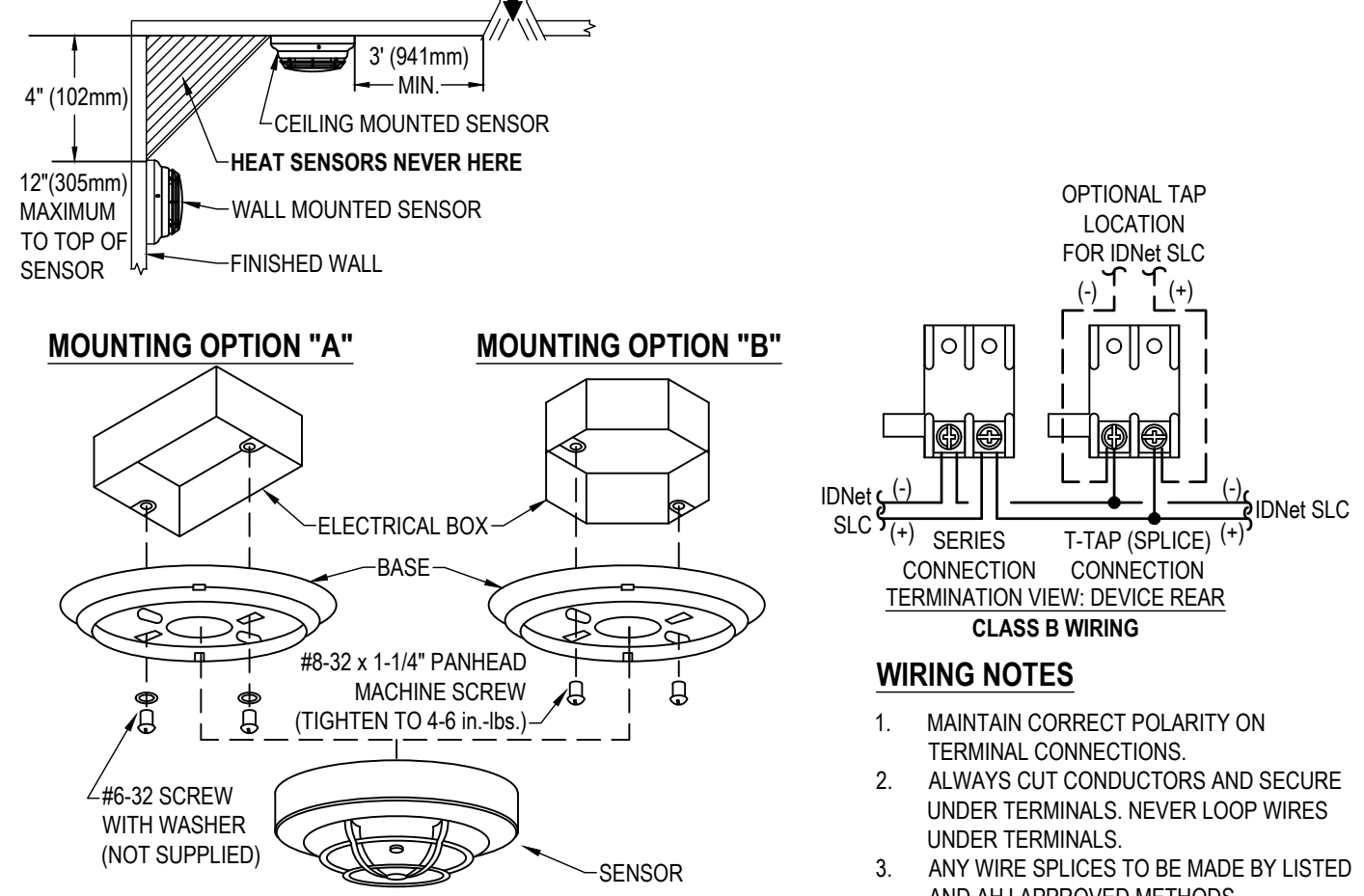
A1 Notification SLC Distributed Load Voltage Drop											
Starting Voltage: 29vdc		Primary Wire Gauge: 14ga		Wire Res. Per Ft. 0.003070 @ 75° Celsius							
Min. Device Voltage: 23 vdc		Home Run Wire Gauge: 14ga		Wire Res. Per Ft. 0.003070 @ 75° Celsius							
Allowable % Drop: 20.7%											
Class B Calculations											
Branch	Device #	From	Distance (Feet)	PID	Setting	Device Draw	Current at Device	Voltage Drop	Voltage at Device	% Vdrop	Wire Length
1	A1-1	A1-3	30	49AV-WWF	30cd	0.0670	0.114	0.021	28.772	Branch 1: 1.2%	
1	A1-2	A1-1	41	49VO-WWF	15cd	0.0470	0.047	0.012	28.760	Length: 354	
1	A1-3	A1-4	34	49VO-WWF	15cd	0.0470	0.047	0.010	28.793		
1	A1-4	A1-8	40	49AV-WWF	15cd	0.0590	0.411	0.101	28.803		
1	A1-5	A1-4	17	49VO-WWF	15cd	0.0470	0.047	0.005	28.798		
1	A1-6	A1-4	23	49AV-WWF	30cd	0.0670	0.305	0.043	28.760		
1	A1-7	A1-6	23	49AV-APPLW-O	WP75	0.2380	0.238	0.034	28.726		
1	A1-8	PANEL	28	49AV-WWF	15cd	0.0590	0.558	0.096	28.904	Branch 1: 1.2%	
1	A1-9	A1-9	37	49AV-WWF	75cd	0.1070	0.499	0.113	28.791	Length: 354	
1	A1-10	A1-9	11	49AV-WWF	75cd	0.1070	0.392	0.026	28.764		
1	A1-11	A1-10	35	49VO-WWF	15cd	0.0470	0.285	0.061	28.703		
2	A1-12	A1-11	35	49AV-APPLW-O	WP75	0.2380	0.238	0.051	28.652		
2	A1-13	PANEL	100	49AV-WWF	110cd	0.1390	0.377	0.231	28.769	Branch 2: 0.88%	
2	A1-14	A1-13	10	49AV-APPLW-O	WP75	0.2380	0.238	0.015	28.754	Length: 110	

FACP BACKBOX INSTALLATION
 SIMPLEX 4007es SERIES



- MOUNTING NOTES**
- REMOVE ELECTRONICS AND STORE IT IN A SAFE DRY AREA.
 - NO KNOCKOUTS PROVIDED. CUT CONDUIT/SERVICE OPENINGS. REFER TO ILLUSTRATION FOR PROPER LOCATIONS. CONDUIT PROTRUSION INTO BOX 1/2" MAX.
 - MOUNT BOX TO WALL. BOX MUST BE LEVEL AND PLUMB. FOR SURFACE MOUNT USE TEAR DROP AND CLEARANCE HOLES ON BACK SURFACE.
 - FOR SEMI-FLUSH MOUNT, USE KNOCKOUTS ON SIDE WALL AND SCREW OR NAIL BOX TO WALL STUDS.
 - IF PRESENT, USE WIRE MANAGEMENT BRACKETS ON BOX SIDES TO SECURE WIRE RUNS.
 - DO NOT LOCATE POWER LIMITED WIRING IN THE SHADY AREAS OF THE BACKBOX. THIS AREA IS RESERVED FOR NON-POWER LIMITED CIRCUITRY SUCH AS AC POWER, BATTERIES AND CITY CONNECTION.
 - USE SEPARATE CONDUIT ENTRANCES FOR POWER LIMITED AND NON-POWER LIMITED WIRING.
- FOR ADDITIONAL INFORMATION, DOWNLOAD DATA SHEET 54007-0003 FROM HTTP://WWW.SIMPLEX-FIRE.COM

STANDARD SENSOR BASE
 SIMPLEX 4098-9792

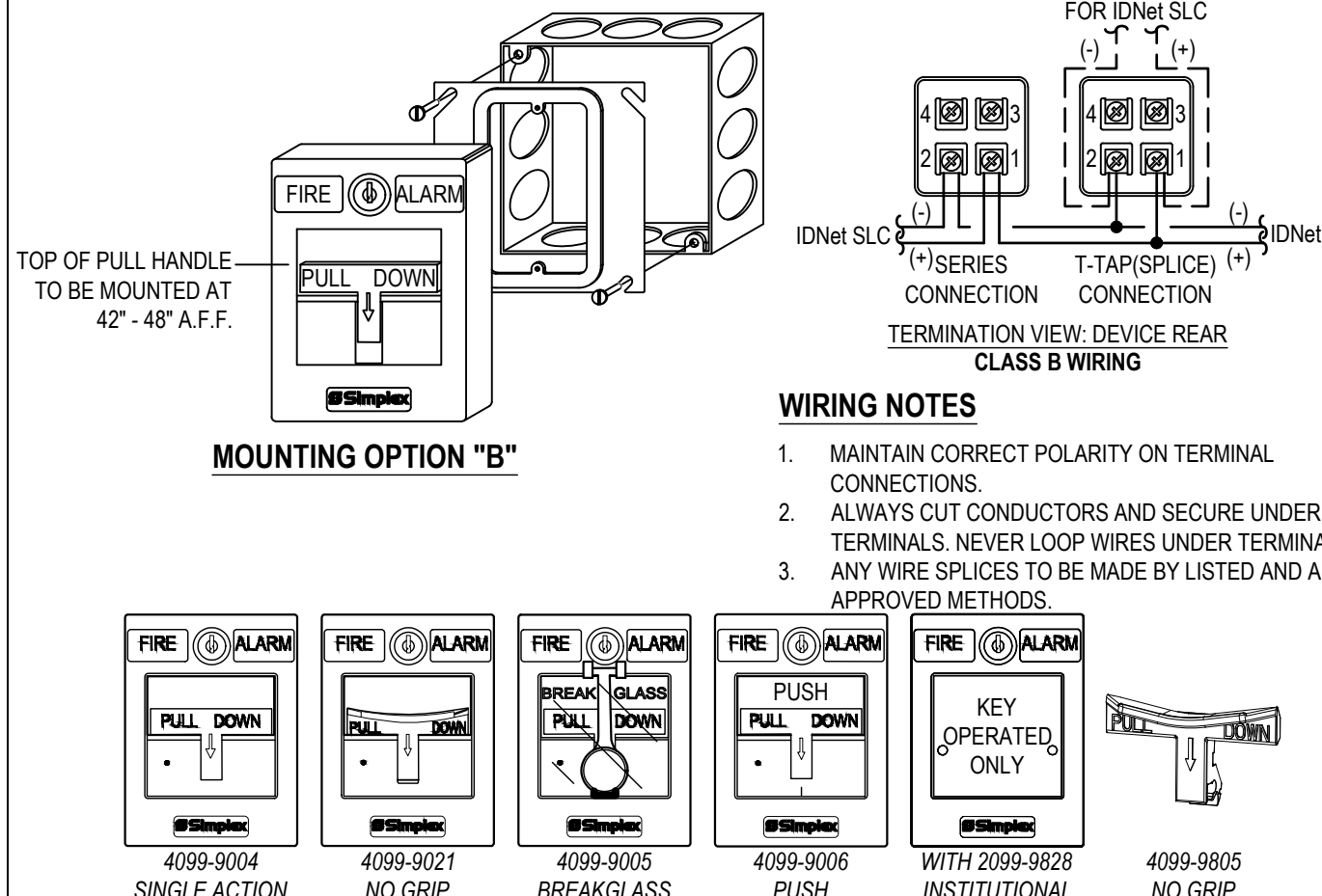


MOUNTING OPTIONS

OPTION	DESCRIPTION	NOTE
A	SINGLE GANG BOX, 2-1/8" (64mm) DEEP - FLUSH MOUNT	BY OTHERS
B	4" (102mm) OCTAGONAL BOX, 1-1/2" (38mm) DEEP - MINIMUM - FLUSH MOUNT	BY OTHERS
C	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN) W/ SIMPLEX 4098-9832 ADAPTER KIT	BY OTHERS
D	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN) W/ SINGLE GANG COVER PLATE 3/4" (19mm) EXTENSION	BY OTHERS

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 4098-0019 FROM HTTP://WWW.SIMPLEX-FIRE.COM

ADDRESSABLE PULL STATIONS
 SIMPLEX 4099 SERIES

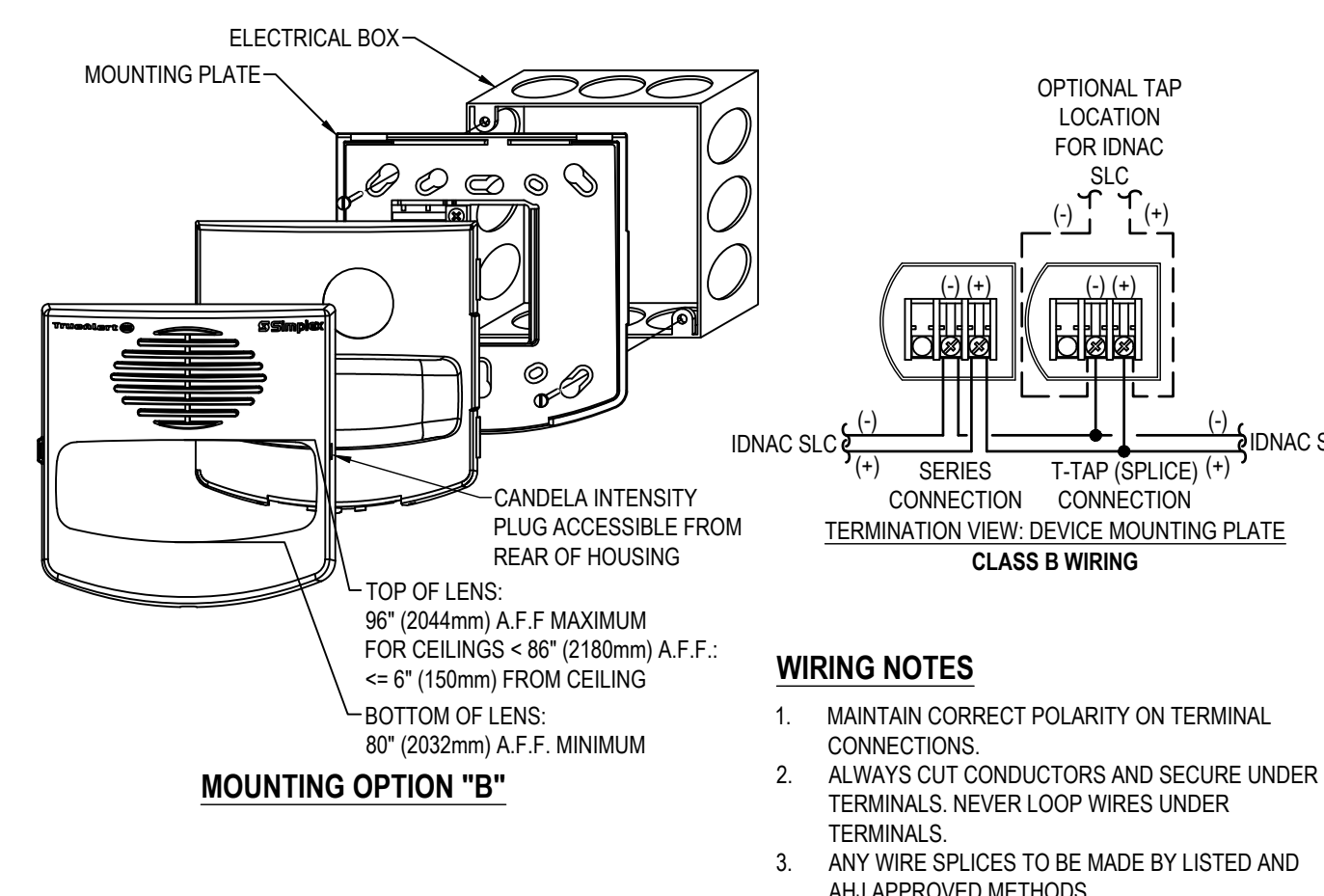


MOUNTING OPTIONS

OPTION	DESCRIPTION	NOTE
A	SINGLE GANG BOX, 2-1/2" (64mm) DEEP	BY OTHERS
B	4" (102mm) SQUARE BOX, 2-1/8" DEEP (MIN) W/ SINGLE GANG COVER PLATE 3/4" (19mm) EXTENSION	BY OTHERS
C	SIMPLEX 2975-9022 - 5H x 3-7/8"W x 2-3/16"D (127mm x 98mm x 56mm)	ORDERED SEPARATELY
D	SIMPLEX 2975-9118 - 5-3/4"W x 3-7/8"W x 2-3/16"D (127mm x 102mm x 56mm)	ORDERED SEPARATELY

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 4099-0005 FROM HTTP://WWW.SIMPLEX-FIRE.COM

TrueAlert ES ADDRESSABLE APPLIANCES
 SIMPLEX 49AV SERIES WALL MOUNTED AUDIBLE / VISUAL

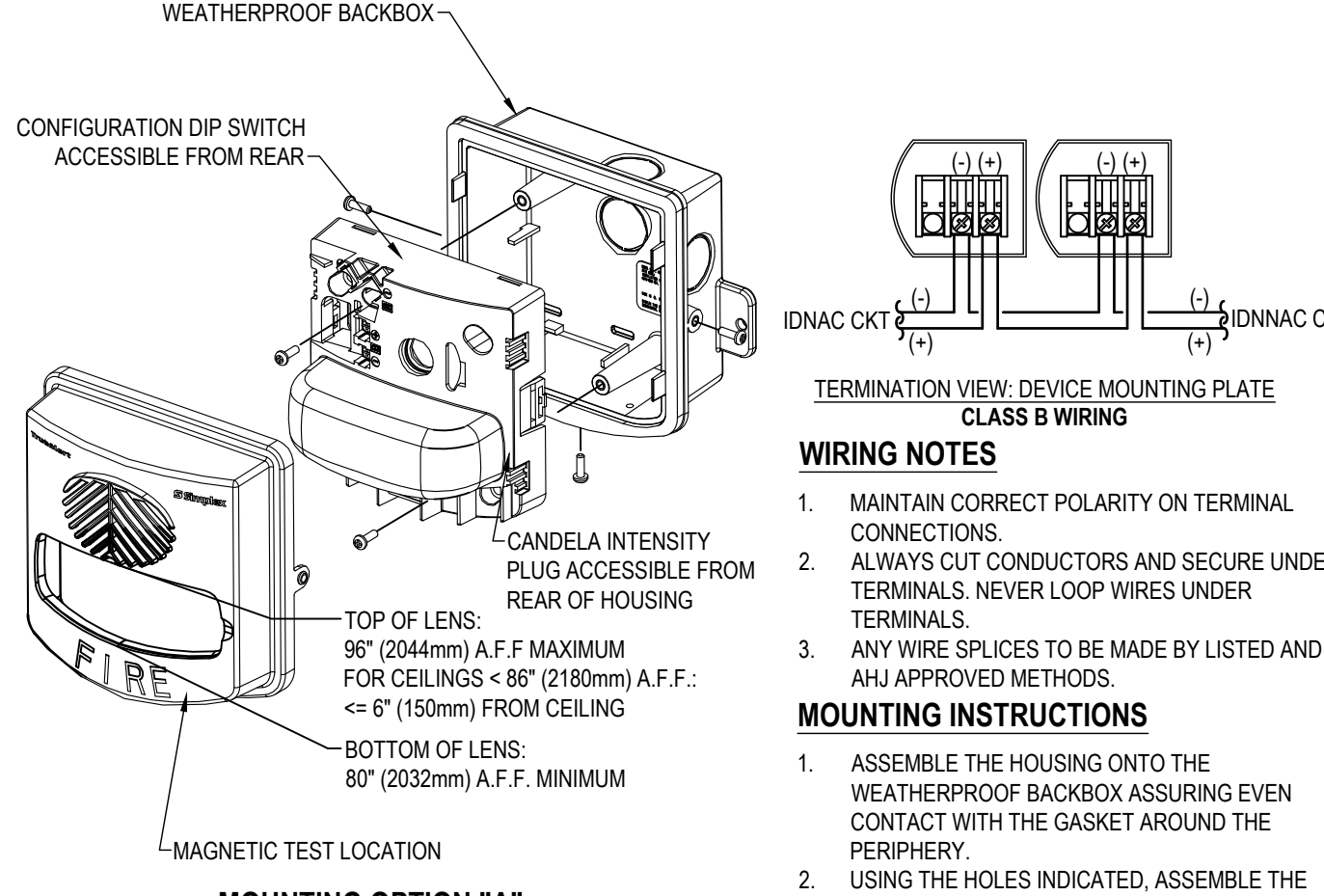


MOUNTING OPTIONS

OPTION	DESCRIPTION	NOTE
A	SINGLE GANG OR DOUBLE GANG BOX, 1-1/2" (38mm) DEEP (MIN)	BY OTHERS
B	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN)	BY OTHERS
C	SIMPLEX 2975-9146 - 7-7/8"W x 5-1/8"W x 3-3/4"D (127mm x 98mm x 56mm) REQUIRES 4995-9931 PLATE	ORDERED SEPARATELY

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 49AV-0001 FROM HTTP://WWW.SIMPLEX-FIRE.COM

TrueAlert ES ADDRESSABLE APPLIANCES
 SIMPLEX 49WP SERIES WEATHERPROOF WALL MOUNTED VISUAL ONLY & AUDIBLE / VISUAL

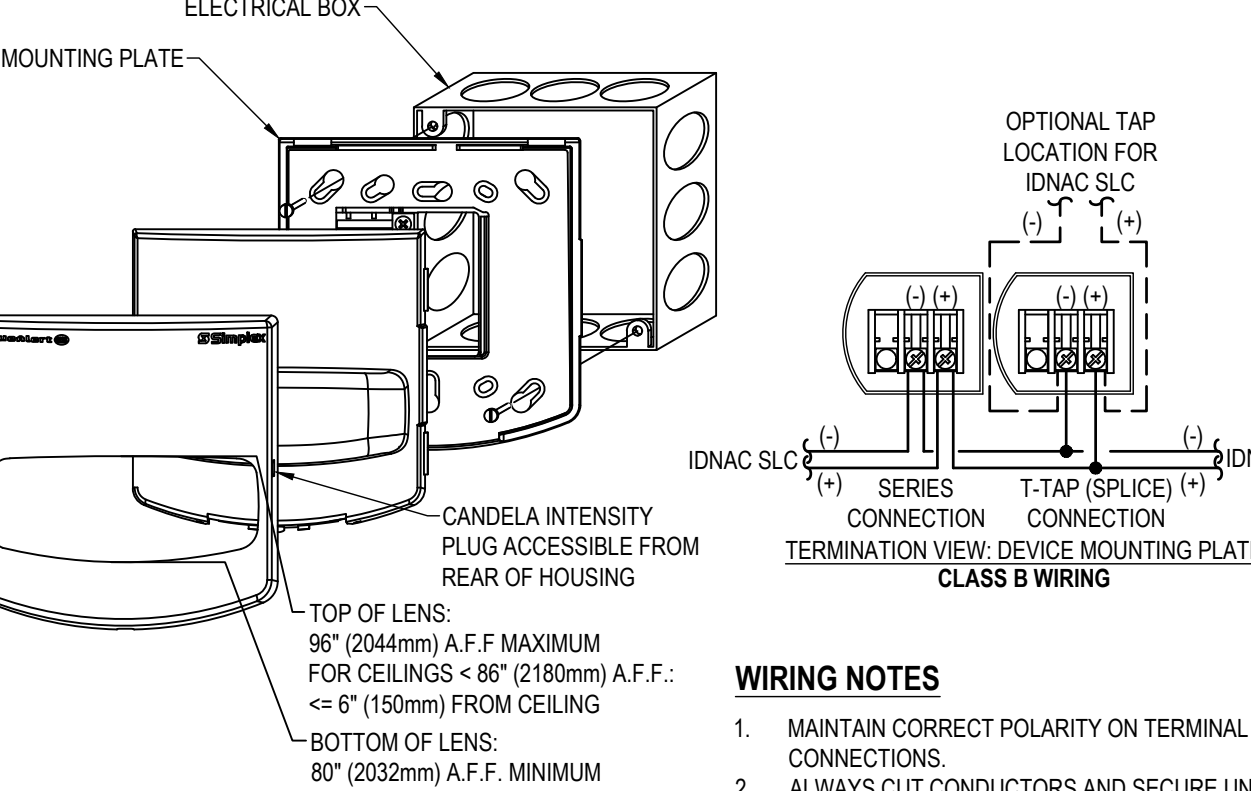


MOUNTING OPTIONS

OPTION	DESCRIPTION	NOTE
A	SIMPLEX 49WP98-AV00WR 1-1/2" DEEP WEATHERPROOF BOX - RED	ORDERED SEPARATELY
B	SIMPLEX 49WP98-AV00WR 1-1/2" DEEP WEATHERPROOF BOX - WHITE	ORDERED SEPARATELY

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 49WP-0001 FROM HTTP://WWW.SIMPLEX-FIRE.COM

TrueAlert ES ADDRESSABLE APPLIANCES
 SIMPLEX 49VO SERIES WALL MOUNTED VISUAL ONLY

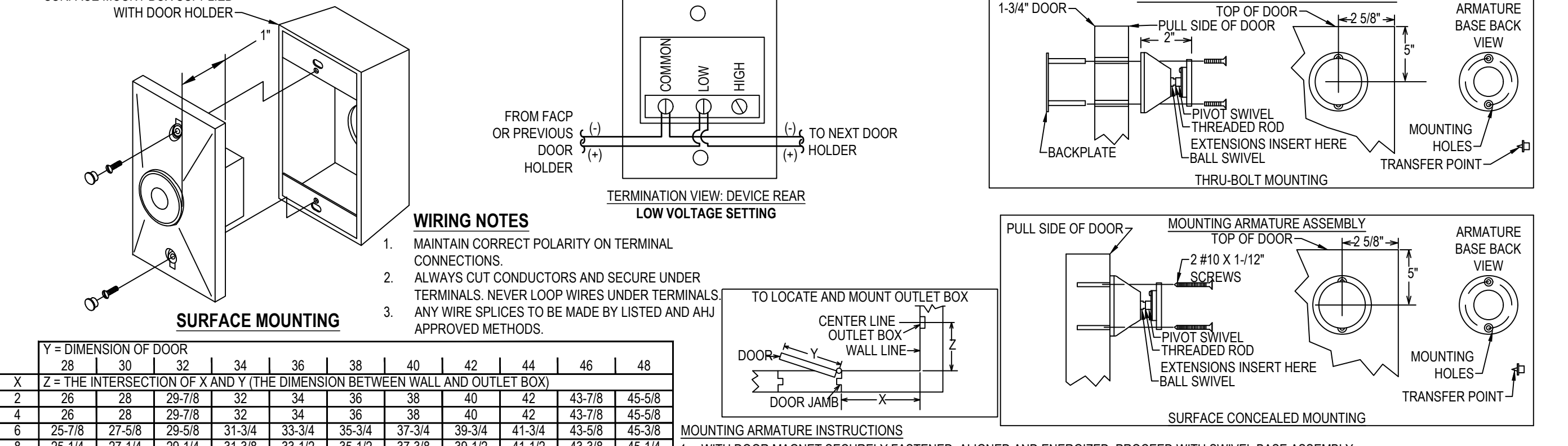


MOUNTING OPTIONS

OPTION	DESCRIPTION	NOTE
A	SINGLE GANG OR DOUBLE GANG BOX, 1-1/2" (38mm) DEEP (MIN)	BY OTHERS
B	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN)	BY OTHERS
C	SIMPLEX 2975-9146 - 7-7/8"W x 5-1/8"W x 3-3/4"D (127mm x 98mm x 56mm) REQUIRES 4995-9931 PLATE	ORDERED SEPARATELY

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 49VO-0001 FROM HTTP://WWW.SIMPLEX-FIRE.COM

MAGNETIC SURFACE MOUNT DOOR HOLDERS
 DH1224 SERIES

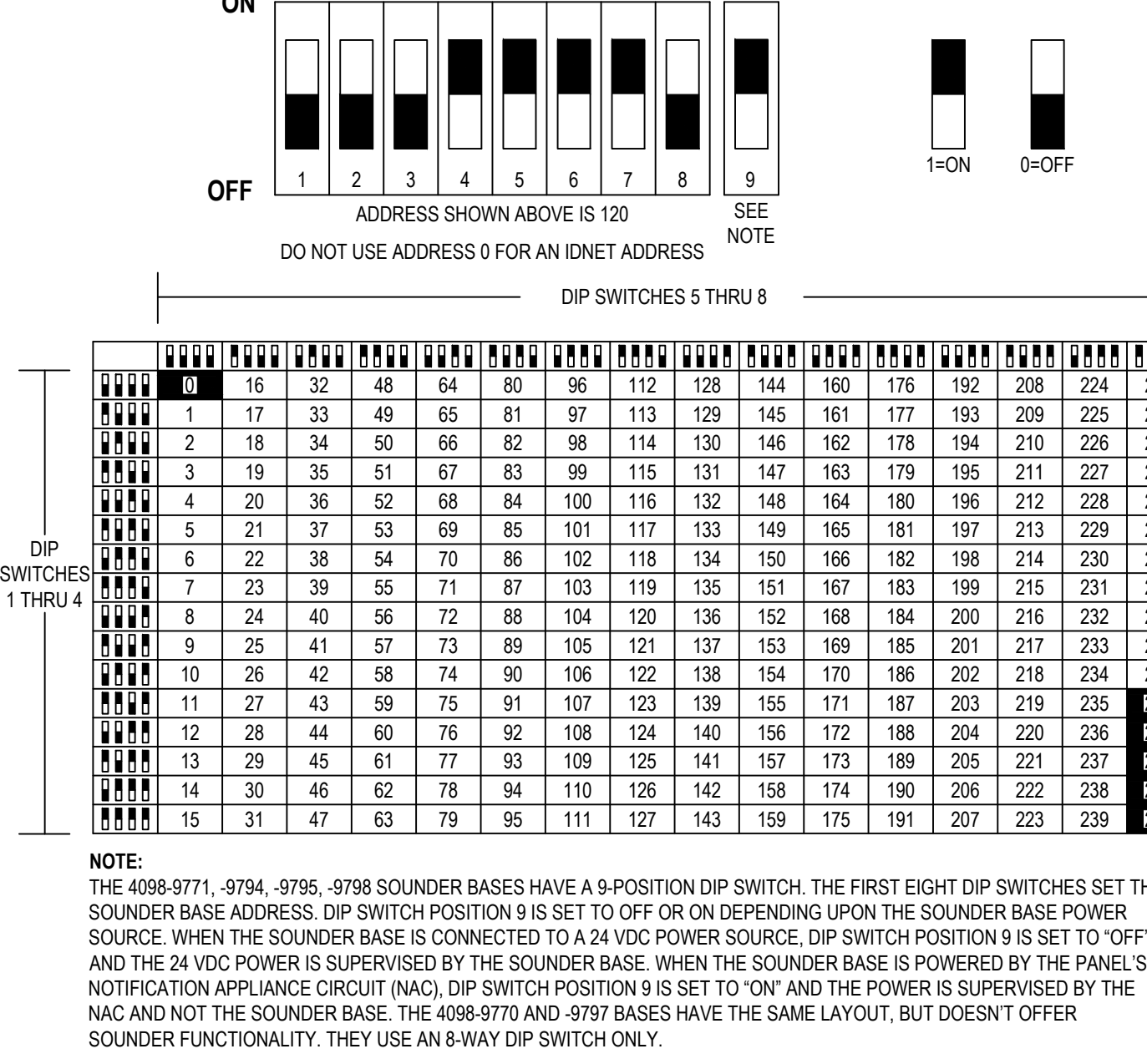


MOUNTING OPTIONS

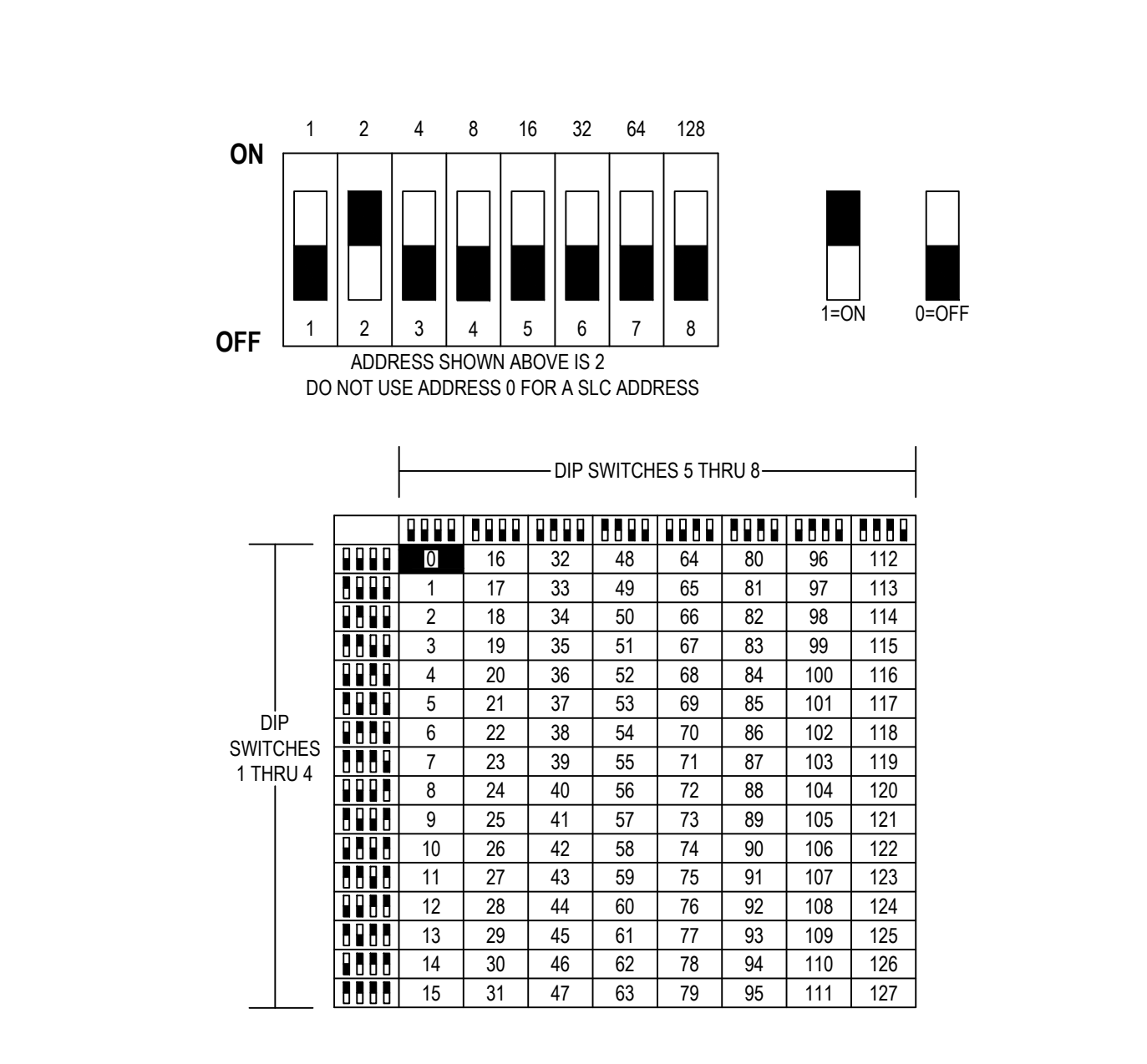
OPTION	DESCRIPTION	NOTE
A	SINGLE GANG OR DOUBLE GANG BOX, 1-1/2" (38mm) DEEP (MIN)	BY OTHERS
B	4" (102mm) SQUARE BOX, 1-1/2" DEEP (MIN)	BY OTHERS
C	SIMPLEX 2975-9146 - 7-7/8"W x 5-1/8"W x 3-3/4"D (127mm x 98mm x 56mm) REQUIRES 4995-9931 PLATE	ORDERED SEPARATELY

1. FOR ADDITIONAL MOUNTING OPTIONS, DOWNLOAD DATA SHEET 49VO-0001 FROM HTTP://WWW.SIMPLEX-FIRE.COM

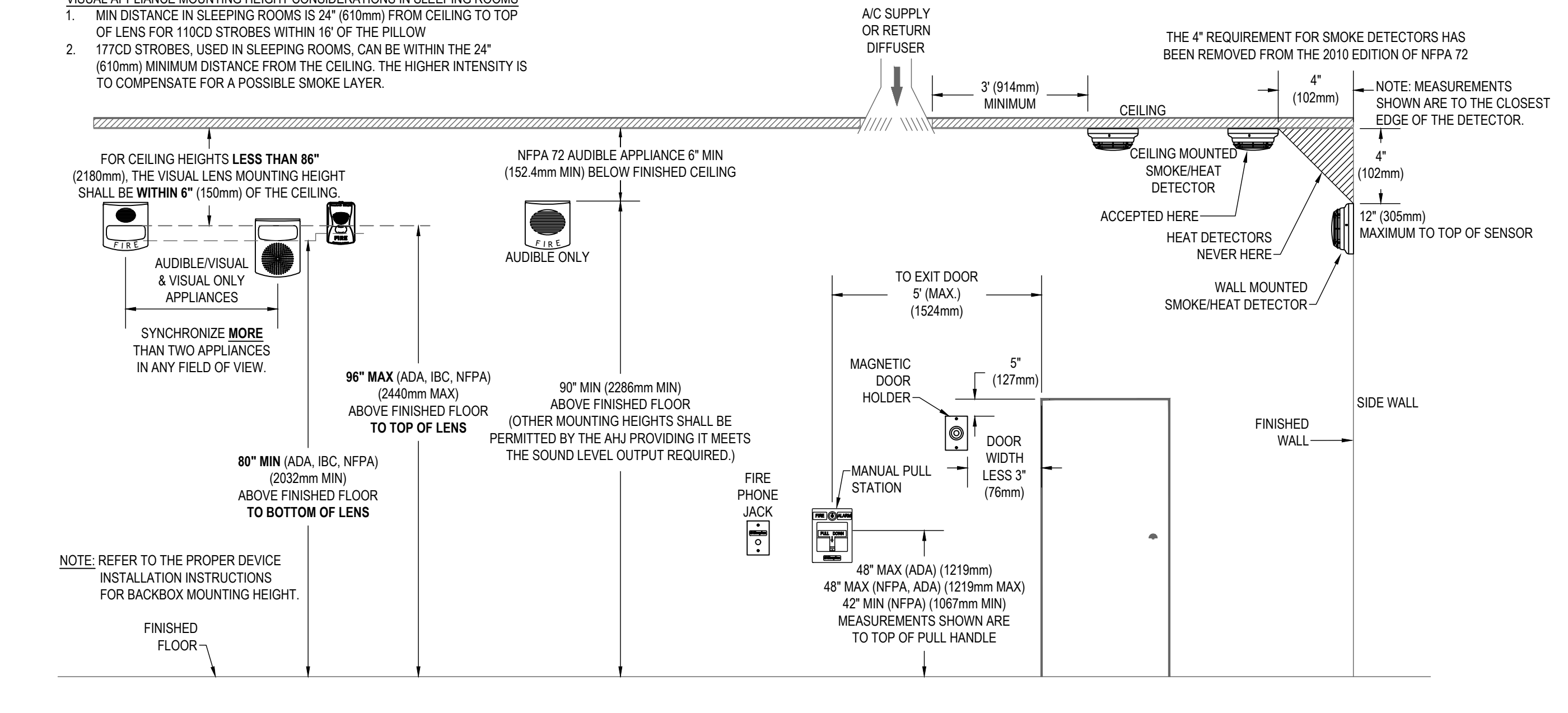
DIP SWITCH SETTINGS - INITIATING
 SIMPLEX IDNet



DIP SWITCH SETTINGS - NOTIFICATION
 SIMPLEX TRUEALERT ES / IDNAC



DEVICE MOUNTING HEIGHT REFERENCE
 PER NFPA 72



DRAWINGS REVIEWED BY:
 Chad McCormick, SET
 Fire Alarm Systems, Level II

SUMMIT BUILDING (KESSLER CENTER NETWORK)
PORTABLE ADDITION 2022
 SUMMIT BUILDING
 1501 39TH STREET
 PUYALLUP, WA 98375

ISSUE NO.	DATE	DESCRIPTION
1	06/20/22	ISSUE FOR PERMIT
2	06/20/22	ISSUE FOR PERMIT

DRAWN BY:	R.SOLANO
CHECKED BY:	J.BRIGGS
ISSUE DATE:	8/26/20
JOB #:	458437058
PROJECT #:	4258.61903301
SYSTEM:	JOHNSON CONTROLS e-2022
SHEET:	FIRE ALARM SYSTEM
WIRING TYPICALS	

City of Puyallup
 Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

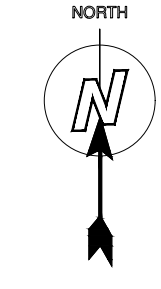
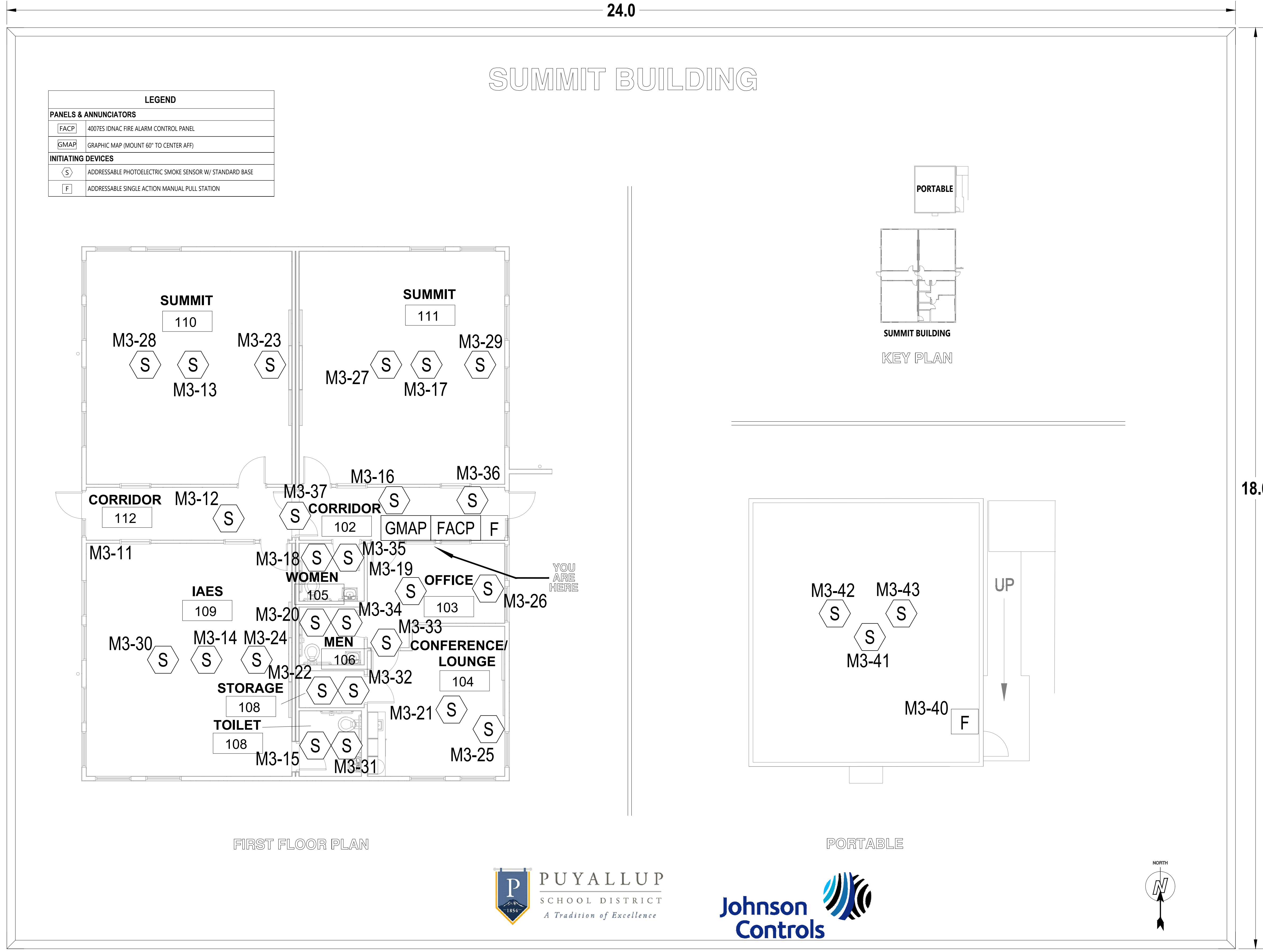
ISSUE NO.	DATE	CLASS	CHK	DESCRIPTION
1	08/26/22	DESIGN	JRS	ISSUE FOR PERMITS
2	08/22/22	ASB	EOB	PORTABLE ADDITION: 65024343

DRAWN BY:	R.SOLANO
CHECKED BY:	J.BRISOLO
ISSUE DATE:	8/26/20
JOB #:	458437058
PROJECT #:	452617983301

SYSTEM:
 FIRE ALARM SYSTEM

SHEET:
 GRAPHIC MAP

FA-801



**City of Puyallup
 Development & Permitting Services
 ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

30" x 42" - ARCH E SIZE
 LAST PRINTED: 8/22/2022 12:23:45 PM
 LAST DRAWN BY: JHALLA
 FILE PATH: C:\Users\jhallac\OneDrive\Documents - 65024343\Fire Alarm System\FA-801.dwg