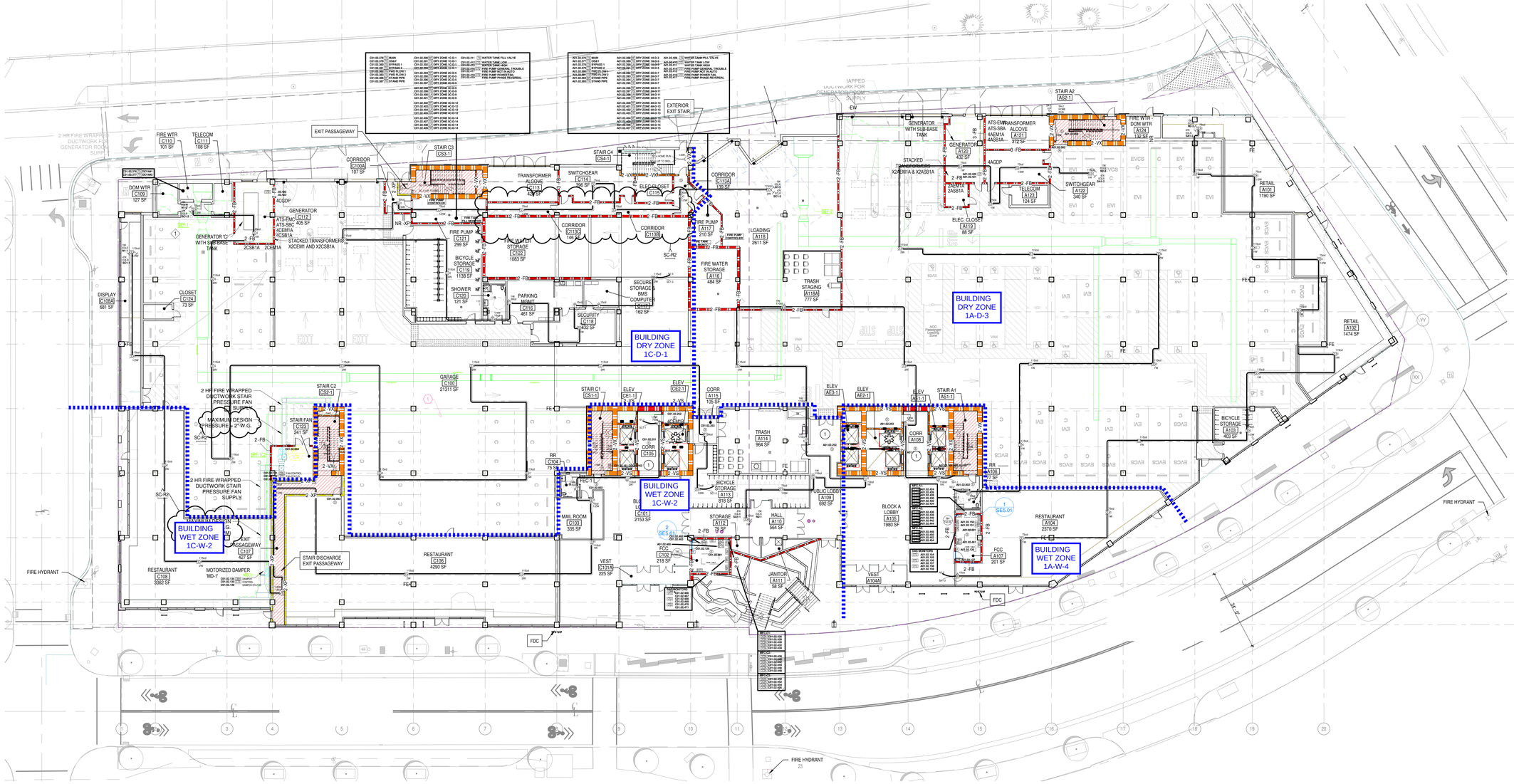


LEVEL 01

SCALE: 1/16" = 1'-0"

Sprinkler Systems

a)
- i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
- ii) Levels 2-5: Extend dry system into lobby spaces
- iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
- iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
- v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1. PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

WALL SEPARATION LEGEND

WALL HOURLY RATING

0	=	0 HOUR
1	=	1 HOUR
2	=	2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES

- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1. IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2. IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3. IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4. IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES7-4	FURNISHED BACKBOX 2-CAB218 (27.36"W X 47.75"H X 5.88"D)
NACP	NAC EXPANSION PANEL	EST IRP56A OR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.75"D (IRP56A / IRP610A)
APSP	ACM 24V POWER SUPPLY	EST APS6A	20"H X 15"W X 5.7"D
BAT1	BATTERY CABINET	EST BCDT-R	13.875"H X 25"W X 8"D
BAT2	BATTERY CABINET	EST BC-1R	18.25"H X 14.19"W X 7.25"D
FSCP	FIRE/FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST 4-MEMICA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACM	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE W/1-GANG MUDRING
ACT1	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE W/1-GANG MUDRING
ACT2	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
DP	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
DH	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
CCCS	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CCTS	MOUNTS IN NAC PANEL
CM	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE W/1-GANG MUDRING
CRS	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
CCI	DUAL INPUT SIGNAL MODULE	EST SIGA-CCI4	MOUNTS IN NFC MODULE CABINET
F	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
I	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-OSD	4" SQUARE DECTAGON STANDARD BOX
D_{FW}	SMOKE W/SOUNDER BASE	SIGA-DSD W/ SIGA-ABAOLF	4" SQUARE DEEP BOX
D_{FL}	HEAT DETECTOR W/BASE (ALARM & SUPERVISORY)	EST SIGA-HFD	4" SQUARE DECTAGON STANDARD BOX
D_{FT}	DUCT DETECTOR REMOTE TEST SWITCH	EST SIGA-DTRM	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
MS	CARBON MONOXIDE SENSOR, 24VDC	EST 2451CO	1-GANG STANDARD BOX
MFC	MODULE CABINET	EST MFC-A	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
LI	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
LT	ELEVATOR TU ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
SHT	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FH	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PSI	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA MFC-A CABINET
SCW	SPEAKER/STROBE, CEILING, 70V	EST-DCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SWW	SPEAKER/STROBE, WALL, 70V	EST G4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SWWP	SPEAKER/STROBE, WALL / CEILING, WP, 70V	EST SIGAWK-SVWC	EST MODEL A49
SWP	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL A45
ST	STROBE, CEILING	EST GCVWF WITH GP1G BACKPLATE	4" SQUARE STANDARD BOX
T	STROBE, WALL	EST GKVWF WITH GP1G BACKPLATE	4" SQUARE STANDARD BOX
FT	WATERFLOW BELL	BY OTHERS	BY OTHERS
H	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDH	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (A/M-R)

DEVICE TAG

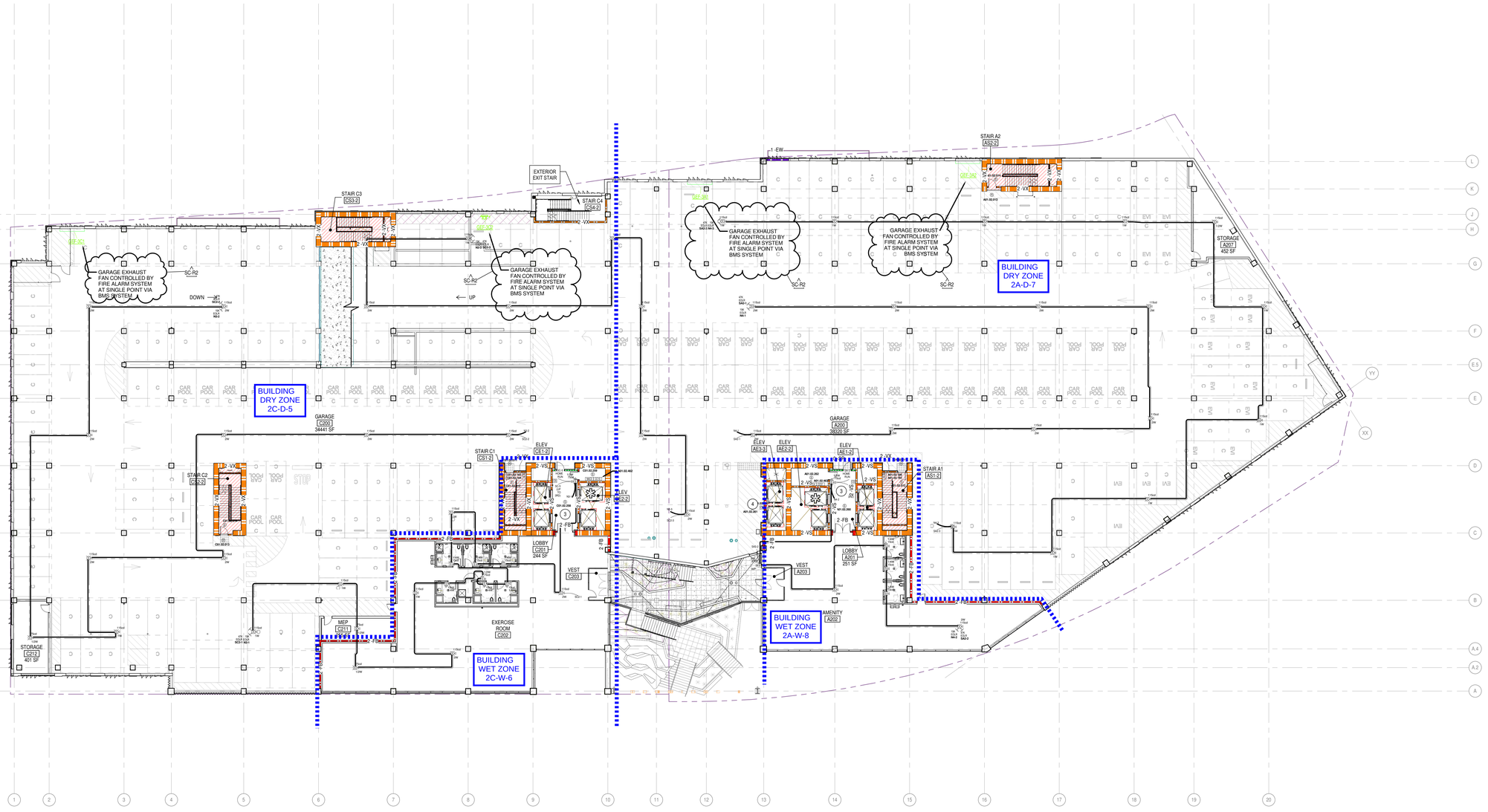
INITIATING DEVICES
S # # #
- 3-DIGIT DEVICE/ADDRESS #
- 2-DIGIT SLC CARD #

NOTIFICATION
NM-#
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

GC	GAYCELL
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONITE COVER

SC1.01



LEVEL 02

SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
ii) Levels 2-5: Extend dry system into lobby spaces
iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ECLIPSE	FURNISHED BACKBOX 2-CABS*18 (37.36"H X 47.75"W X 5.90"D)
NAC	NAC EXPANSION PANEL	EST IPSNA OR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.13"D (IPSPA / IPAS10A)
APS	AUX 24V POWER SUPPLY	EST APS6A	20"H X 10"W X 5.5"D
BAT	BATTERY CABINET	EST BCC7-R	23.07"H X 20"W X 8"D
BAT	BATTERY CABINET	EST BC-7R	18.25"H X 14"W X 7.25"D
FSCP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST 4-WIRMICA	MOUNTS ON REMOTE ANNUNCIATOR (FAA)
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE WI1-GANG MUDRING
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE WI1-GANG MUDRING
ACE	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
LA	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
HA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
SYNC	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CCT3	MOUNTS IN NAC PANEL
CRE	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE WI1-GANG MUDRING
CRS	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
CI	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN MFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CSD	4" SQUARE OR OCTAGON STANDARD BOX
DH	SMOKE W/SOUNDER BASE	SIGA-DSO W/ SIGA-ABAGLF	4" SQUARE DEEP BOX
DT	HEAT DETECTOR W/BASE (135 DEG. F. FIXED)	EST SIGA-HTD	4" SQUARE OR OCTAGON STANDARD BOX
DT	HEAT TEST DETECTOR W/ AUX. REV & SHIPS WIRE TURNS	EST SIGA-SD	FURNISHED WITH CRET FOR SURFACE MOUNT OR SNOCTAGON
RTS	DUCT DETECTION REMOTE TEST SWITCH	EST RTD-TRM	1-GANG STANDARD BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 2451-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST MFC-A	14"W X 8"H X 3.32"D
E	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
E	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
ES	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FH	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PS	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA MFC-A CABINET
SW	SPEAKER-STROBE, CEILING, 75V	EST-GCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SW	SPEAKER-STROBE, WALL, 75V	EST-G4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 75V	EST-G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SW	SPEAKER-STROBE, WALL / CEILING, WP, 75V	EST WGSWF-SVNC	EST MODEL 449
SW	SPEAKER, WALL / CEILING, WP, 75V	EST WGSWF-S	EST MODEL 449
S	STROBE, CEILING	EST GCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
S	STROBE, WALL	EST G4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
WF	WATERFLOW BELL	BY OTHERS	BY OTHERS
H	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-ICR	1-GANG STANDARD ELEC. BOX
SDC	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE
- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (-A#-H)

DEVICE TAG
INITIATING DEVICES
S # # # #
- 3-DIGIT DEVICE-ADDRESS #
- 2-DIGIT SLC CARD #

NOTIFICATION
NM-#
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

VE	CANCELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONITE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

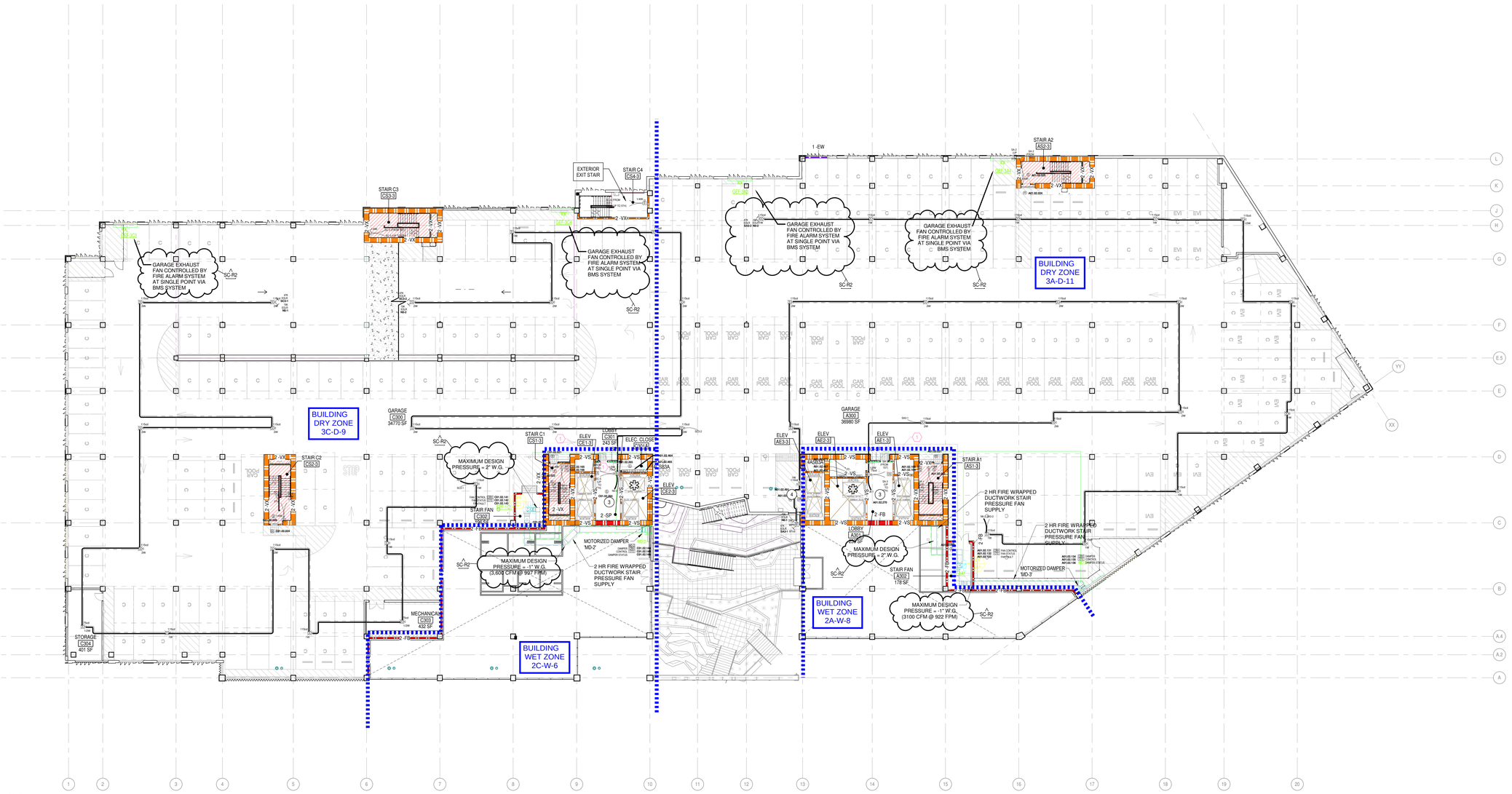
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION);
4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.02



LEVEL 03

SCALE: 1/16" = 1'-0"

Sprinkler Systems

a) Building
- i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
- ii) Levels 2-5: Extend dry system into lobby spaces
- iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
- iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
- v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1. PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES7-4	FURNISHED BACKBOX: 2-CABS118 27.36"W X 47.75"H X 5.38"D
NAC	NAC EXPANSION PANEL	EST IPS6A OR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.15"D (BPSNA / BPAS10A)
APS	AUX 24V POWER SUPPLY	EST AP56A	30"H X 15"W X 5.5"D
BAT-1	BATTERY CABINET	EST BCC7-R	13.25"H X 20"W X 8"D
BAT-2	BATTERY CABINET	EST BC-75	18.25"H X 14"W X 7.25"D
FSPC	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST F-RFMICA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACT	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACT2	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
WF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
DP	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
HA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCG	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CR	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
RR	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
PS	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN NFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-278	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CSD	5" SQUARE OR OCTAGON STANDARD BOX
D_{SB}	SMOKE W/SOUNDER BASE	SIGA-DSD W/ SIGA-ABAGLF	4" SQUARE DEEP BOX
D_{HB}	HEAT DETECTOR W/BASE (135 DEG. F FIXED)	EST SIGA-HTD	5" SQUARE OR OCTAGON STANDARD BOX
D_{DT}	HVAC DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR MOUNTING ON RAC DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST RD-TRM	1-GANG STANDARD ELEC. BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 285-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST NFC-A	14"W X 8"H X 3.50"D
K	ELEVATOR TU PRIMARY FLR. RELAY	EST SIGA-CR	VIA NFC-A CABINET
R	ELEVATOR TU ALTERNATE FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
ST	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA NFC-A CABINET
FS	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA NFC-A CABINET
PS	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA NFC-A CABINET
SW	SPEAKER-STROBE, CEILING, 75V	EST G2SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SW	SPEAKER-STROBE, WALL, 75V	EST G4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SW	SPEAKER-STROBE, WALL / CEILING, WP, 75V	BST WGWW-SVWC	EST MODEL 449
SW	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL 449
V	STROBE, CEILING	EST G2VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
V	STROBE, WALL	EST G4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
F	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MD	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (AWG)

DEVICE TAG

INITIATING DEVICES
- 5-DIGIT DEVICE/ADDRESS #
- 2-DIGIT SLC CARD #

NOTIFICATION
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
- 0 = 0 HOUR
- 1 = 1 HOUR
- 2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

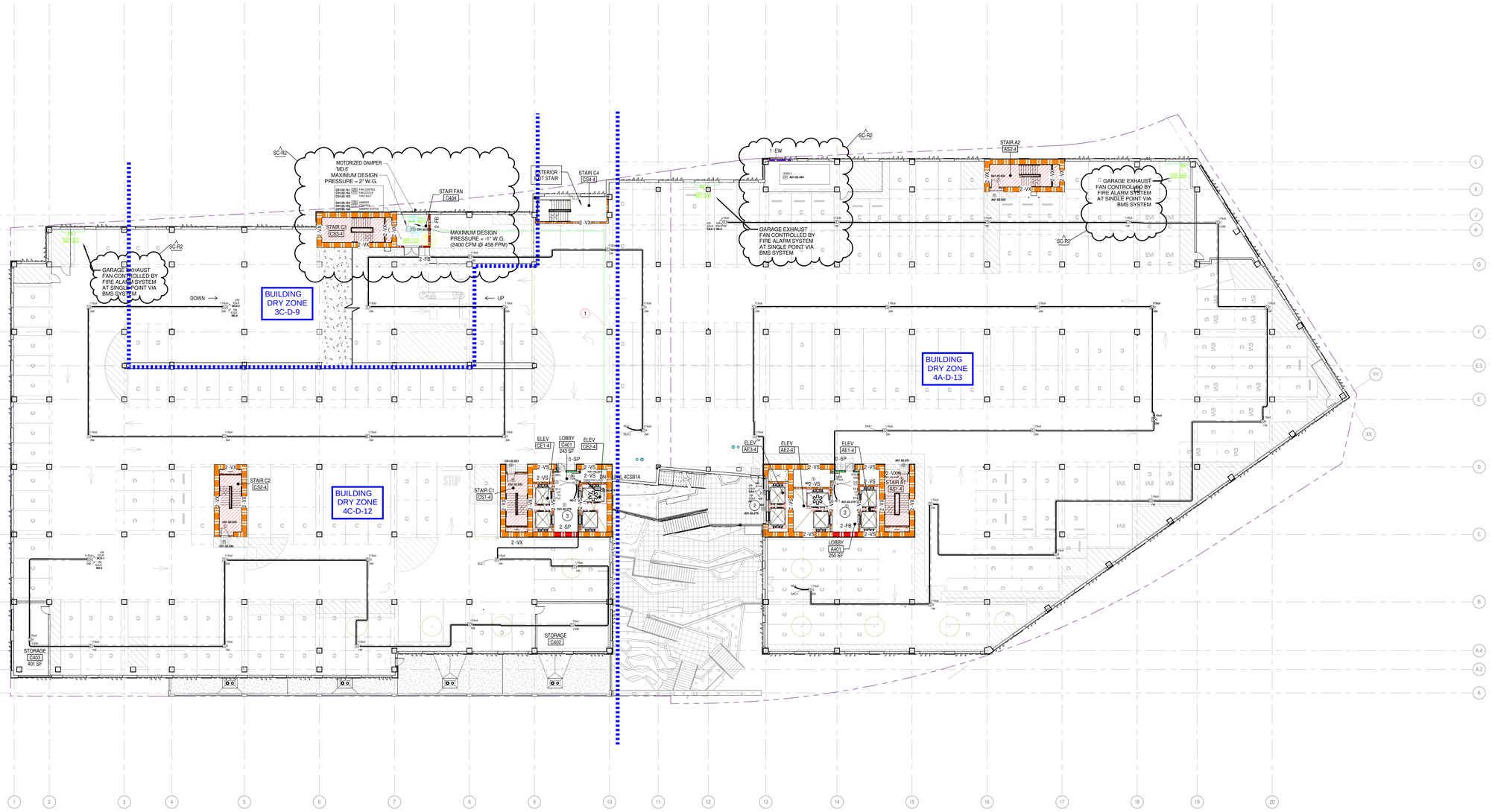
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1. IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2. IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3. IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4. IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.03



LEVEL 04

SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
- i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
- ii) Levels 2-5: Extend dry system into lobby spaces
- iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
- iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
- v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST-EST-4	FURNISHED BACKBOX 3 CABINET 27.36"W X 47.75"H X 5.8"D
NEX	NAC EXPANSION PANEL	EST BPSXA OR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.75"D (BPSXA / BPA5101A)
APS	4A/H 24V POWER SUPPLY	CST APS6A	30"H X 19"W X 5.5"D
BAT-1	BATTERY CABINET	EST BCC7-R	23.875"H X 25"W X 8"D
BAT-2	BATTERY CABINET	EST BC-YR	18.25"H X 14"W X 7.25"D
FSCM	FIRE/FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST-I-MIMICA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACM	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACO	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
D	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
H	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCOM	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CCTS	MOUNTS IN NAC-PANEL
CR	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CRH	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
FCI	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNT IN NFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CP2D	4" SQUARE DEEP OCTAGON STANDARD BOX
D_{SB}	SMOKE W/SCHNEIDER BASE	SIGA-DSD W/ SIGA-ABAGLF	4" SQUARE DEEP BOX
D_{HB}	HEAT DETECTOR W/BASE	EST SIGA-HTD	4" SQUARE DEEP OCTAGON STANDARD BOX
D	HVAC DUCT DETECTOR W/ 6X 4LOC RLY & SAMPLING TUBE	EST SIGA-DD	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
RS	DUCT DETECTOR REMOTE TEST SWITCH	EST RDU-TAM	1-GANG STANDARD BOX
MS	CARBON MONOXIDE SENSOR, 24VDC	EST 2451-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MCO	MODULE CABINET	EST NFC-A	14"W X 8"H X 3.30"D
E	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
E	ELEVATOR TU ALTERNATE FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
ER	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA NFC-A CABINET
FR	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA NFC-A CABINET
PR	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA NFC-A CABINET
SW	SPEAKER-STROBE, CEILING, 70V	EST-CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SW	SPEAKER-STROBE, WALL, 70V	EST-S4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST-S4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SW	SPEAKER-STROBE, WALL / CEILING, WP, 70V	EST WGWW-SVWF	EST MODEL #49
SW	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL #49
S	STROBE, CEILING	EST-SCVWF WITH GP10 BACKPLATE	4" SQUARE STANDARD BOX
S	STROBE, WALL	EST-S4VWF WITH GP10 BACKPLATE	4" SQUARE STANDARD BOX
FA	WATERFLOW BELL	BY OTHERS	BY OTHERS
H	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDB	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE	DEVICE TAG	ABBREVIATIONS
INDICATES NAC CIRCUIT WIRING	INITIATING DEVICES: # # # # — 5-DIGIT DEVICE/ADDRESS # — 2-DIGIT SLC CARD #	cd = CANDELLA
INDICATES SLC LOOP WIRING	NOTIFICATION: N#-# — CIRCUIT NUMBER / PANEL NUMBER	EOL = END OF LINE RESISTOR
INDICATES SPEAKER WIRING		EOL = END OF LINE
24V POWER CKT (AA-#)		WP = WEATHERPROOF
		EP = EXPLOSION PROOF
		PC = POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
EW = EXTERIOR WALL (PURPLE)
FB = FIRE BARRIER (RED)
SP = SMOKE PARTITION (GREEN)
VS = VERTICAL SHAFT (ORANGE)
VX = VERTICAL EXIT ENCLOSURE (ORANGE)
XP = EXIT PASSAGEWAY (YELLOW)

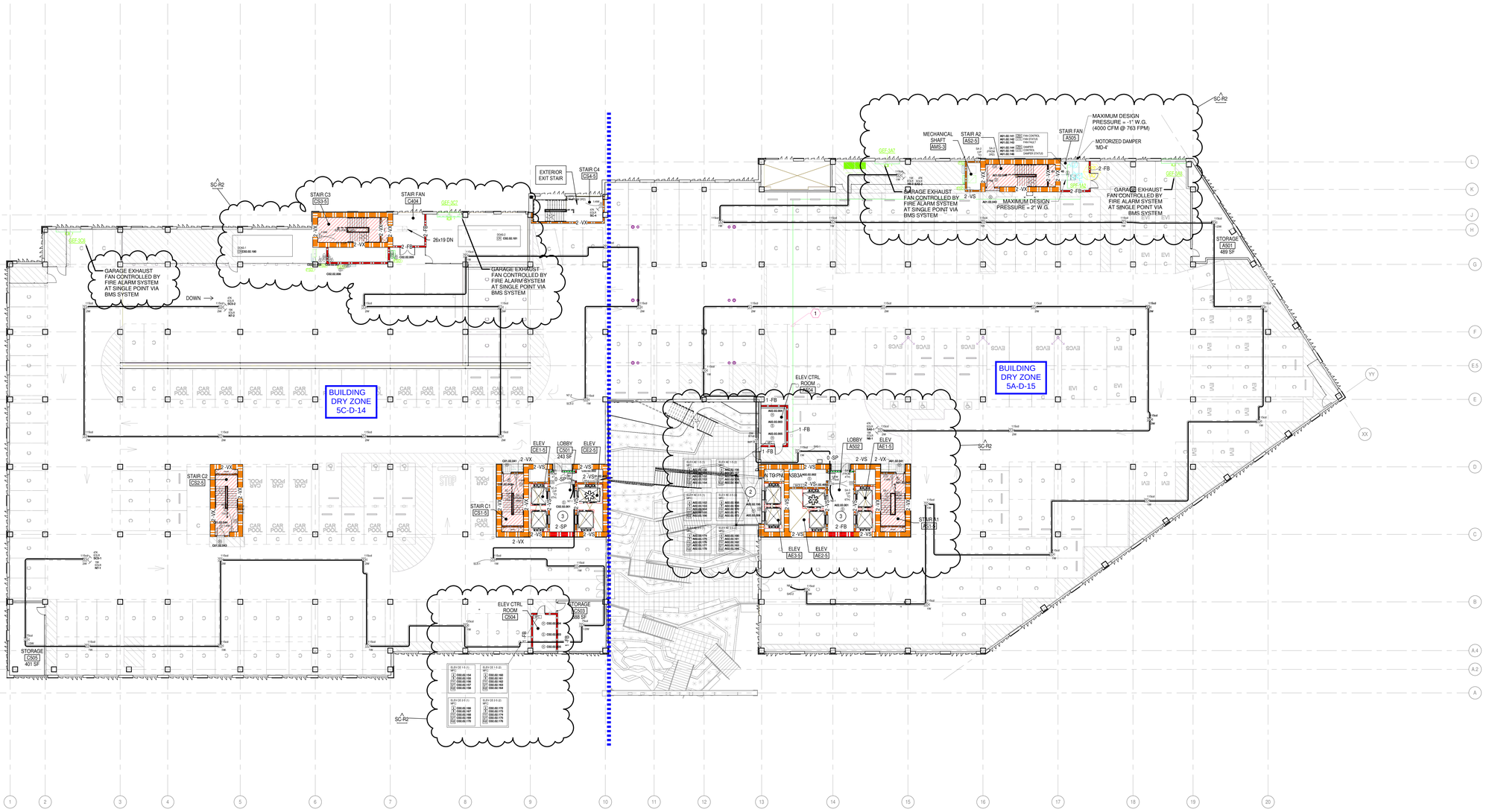
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.04



LEVEL 05

SCALE: 1/16" = 1'-0"

Sprinkler Systems

a) Building

i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms

ii) Levels 2-5: Extend dry system into lobby spaces

iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms

iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms

v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1. PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES3T-4	FURNISHED BACKBOX 3 CABT18 27.34"W X 47.75"H X 2.88"D
NAC	NAC EXPANSION PANEL	EST IRP556-DR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.5"D (RP5HA - RPA510A)
APS	AUX 24V POWER SUPPLY	EST AP56A	20"H X 15"W X 5.3"D
BAT	BATTERY CABINET	EST BCC7-R	33.875"H X 20"W X 6"D
BPS	BATTERY CABINET	EST BC-7R	18.25"H X 14"W X 7.25"D
FSCP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMC	REMOTE MICROPHONE	EST-I-RMMCA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACS	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACT	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACC	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
SM	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
D	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
HA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCS	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC-PANEL
OM	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CRA	CONTROL RELAY, HIGH POWER	EST SIGA-CR1	4" SQUARE DEEP BOX
I	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN NFC MODULE CABINET
M	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-OSD	4" SQUARE DEEP BOX W/ OCTAGON STANDARD BOX
D_{HD}	SMOKE W/SOUNDER BASE	SIGA-DSD W/ SIGA-ABAOLF	4" SQUARE DEEP BOX
D_{HT}	HEAT DET'S TYPE W/BASE	EST SIGA-HFD	4" SQUARE OR OCTAGON STANDARD BOX
P_{DT}	HIGH DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST RD-TRM	1-GANG STANDARD BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 2451-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MCS	MODULE CABINET	EST NFC-A	14"W X 8"H X 3.30"D
4	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
5	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
ST	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA NFC-A CABINET
FS	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA NFC-A CABINET
PM	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA NFC-A CABINET
S_{VS}	SPEAKER-STROBE, CEILING, 70V	EST CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S_{VS}	SPEAKER-STROBE, WALL, 70V	EST SAVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST SAVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
S_{VS}^{W}	SPEAKER-STROBE, WALL / CEILING, WP, 70V	EST WGWW-SVNC	EST MODEL 449
S_{V}^{W}	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL 449
VS	STROBE, CEILING	EST CCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
V	STROBE, WALL	EST GAVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
F	WATERFLOW BELL	BY OTHERS	BY OTHERS
H	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MSD	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (AM-H)

DEVICE TAG

INITIATING DEVICES
/
- 3-DIGIT DEVICE/ADDRESS #
- 2-DIGIT SLC CARD #

NOTIFICATION
100 #
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

cd	CANDELA
EOLR	END OF LINE RESISTOR
AFF	ABOVE FINISH
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONITE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING

0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES

- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

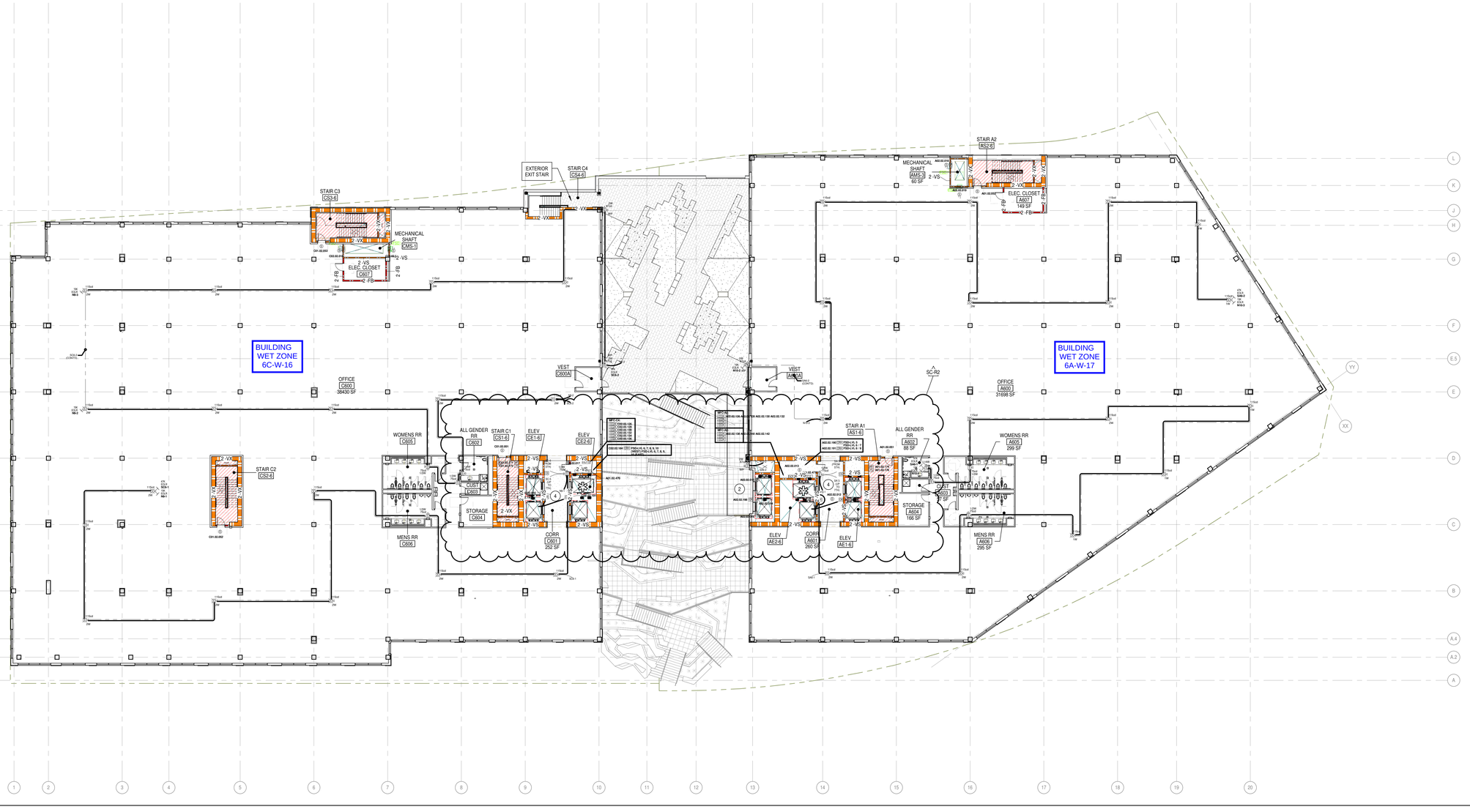
SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION

2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION

3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).

4 IBC 2018, 3006.3 ITEM 3. AD2L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).



LEVEL 06

SCALE: 1/16" = 1'-0"

Sprinkler Systems

a) Building
- i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
- ii) Levels 2-5: Extend dry system into lobby spaces
- iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
- iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
- v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1. PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST-ES7-4	FURNISHED BACKBOX 2-CAB218 27.36"H X 17.72"H X 3.35"D
NAC	NAC EXPANSION PANEL	EST-BPS5A OR 10A SEE RISER DIAGRAM	17"H X 13"W X 3.13"D (BPS5A / BPAS10A)
APS	AUX 24V POWER SUPPLY	EST-APS6A	26"H X 15"W X 5.3"D
BATT	BATTERY CABINET	EST-BCCT-R	13.875"H X 20"W X 6"D
BPCT	BATTERY CABINET	EST-BC-YR	18.25"H X 14"W X 7.25"D
FSCP	FIRE/FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST-4-RMICA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE WI1-GANG MUDRING
ACT	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE WI1-GANG MUDRING
ACG	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
A	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
AS	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE WI1-GANG MUDRING
LCCS	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CM	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE WI1-GANG MUDRING
CRS	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
CI	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN MFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CI2D	4" SQUARE DEYNOSW STANDARD BOX
D_{SB}	SMOKE W/SOUNDER BASE	SIGA-DSD W/ SIGA-ABAGLF	4" SQUARE DEEP BOX
D_{HB}	HEAT DETECTOR W/BASE	EST SIGA-HFD	4" SQUARE DEYNOSW STANDARD BOX
DP	HIGH SENSITIVITY SMOKE W/ ALM. RLY & SAMPLING TUBE	EST SIGA-SD	4" SQUARE WITH CUT FOR SURFACE MOUNT ON DUCTWORK
PS	DUCT DETECTOR REMOTE TEST SWITCH	EST RS-TAM	1-GANG STANDARD BOX
MD	CARBON MONOXIDE SENSOR, 24VDC	EST-285-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST-MFC-A	=H"W X 8"H X 3.50"D
4	ELEVATOR TO PRIMARY FLR. RELAY	EST SIGA-CR	VIA MFC-A CABINET
R	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
SH	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FH	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PW	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA MFC-A CABINET
SSA	SPEAKER-STROBE, CEILING, 75V	EST-CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SSW	SPEAKER-STROBE, WALL, 75V	EST-S4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST-S4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SSWP	SPEAKER-STROBE, WALL / CEILING, WP, 75V	EST WGWW-SVWD	EST MODEL 449
SWP	SPEAKER, WALL / CEILING, WP, 70V	EST WGWP-S	EST MODEL 449
V	STROBE, CEILING	EST-GCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
F	STROBE, WALL	EST-G4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
LF	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDH	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- ———— INDICATES NAC CIRCUIT WIRING
- —— —— INDICATES SLC LOOP WIRING
- — - — - INDICATES SPEAKER WIRING
- —— - —— 24V POWER CKT (AMHI)

DEVICE TAG

INITIATING DEVICES
S # # # #
- 5-DIGIT DEVICEADDRESS #
- 3-DIGIT SLC CARD #

NOTIFICATION
NA #
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
- 0 = 0 HOUR
- 1 = 1 HOUR
- 2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

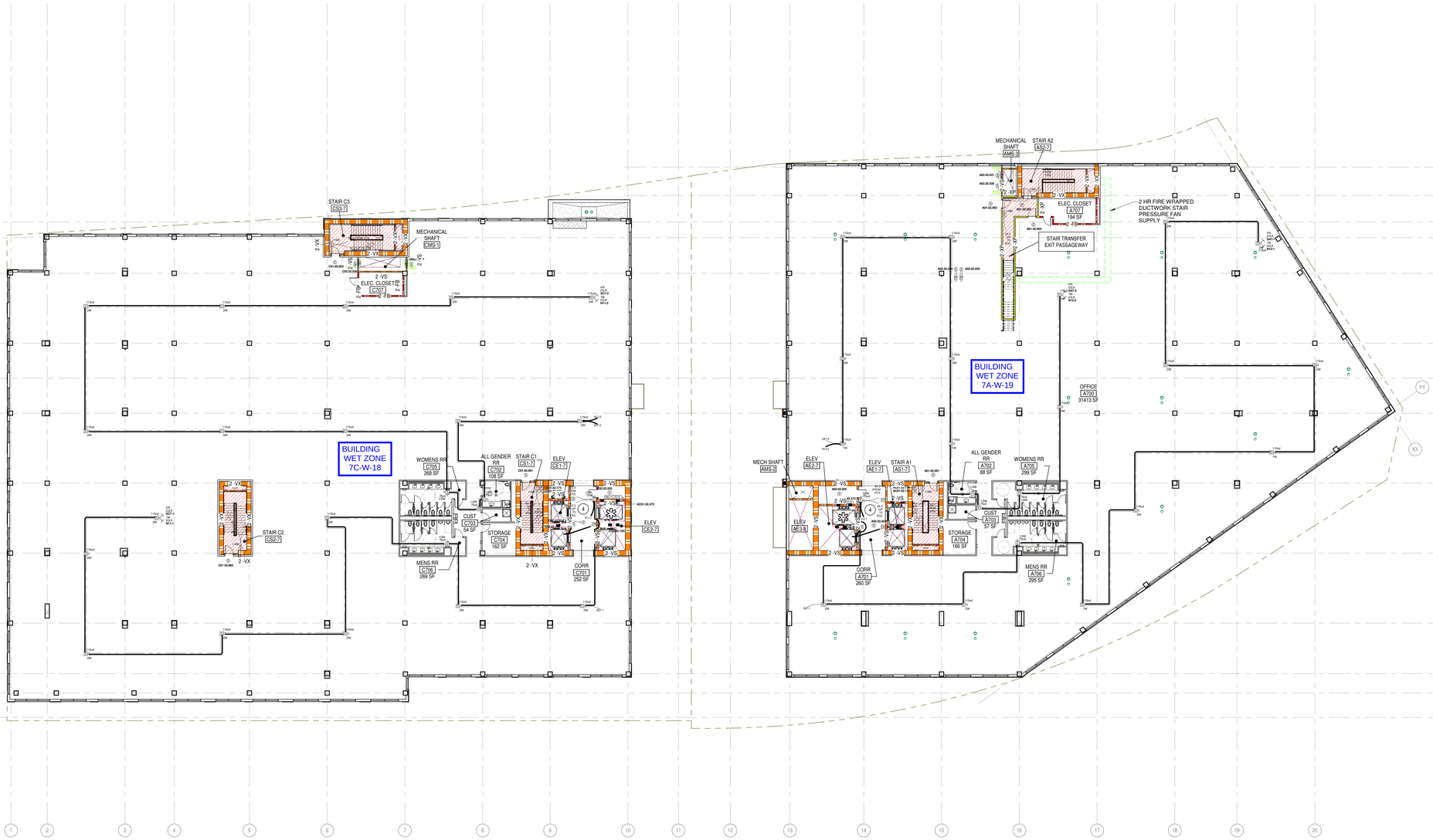
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1. IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2. IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3. IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4. IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.06



LEVEL 07

SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
ii) Levels 2-5: Extend dry system into lobby spaces
iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST-EST-4	FURNISHED BACKBOX 2-CAB2118 27.36"H X 17.72"D X 3.35"D
NAC	NAC EXPANSION PANEL	EST BPS5A OR 10A SEE RISER DIAGRAM	17"H X 13"W X 3.13"D (BPS5A / BPA510A)
APS	AUX 24V POWER SUPPLY	EST APS6A	26"H X 15"W X 5.37"D
BAT	BATTERY CABINET	EST BCCT-R	13.875"H X 25"W X 6"D
BPS	BATTERY CABINET	EST BC-YR	16.25"H X 14"W X 7.25"D
FSCP	FIRE/FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMC	REMOTE MICROPHONE	EST-4-REMOA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
AI	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
AIM	ADDRESSABLE INPUT MODULE	EST SIGA-CT1I	4" SQUARE 1911-GANG MUDRING
IDC6	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
PS	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
A	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
HAS	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCM	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CR	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CRP	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
CZ	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN NFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
S	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CI2D	3" SQUARE DEYNOSW STANDARD BOX
S_{WB}	SMOKE W/SOUNDER BASE	SIGA-DSD W/ SIGA-ABAOLF	4" SQUARE DEEP BOX
D_{HB}	HEAT DETECTOR W/BASE	EST SIGA-HTD	4" SQUARE OR OCTAGON STANDARD BOX
DP	DUCT DETECTOR W/ 90 ALUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
PS	DUCT DETECTOR REMOTE TEST SWITCH	EST RS-TRM	1-GANG STANDARD BOX
MD	CARBON MONOXIDE SENSOR, 24VDC	EST-285-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST-NFC-A	14"W X 8"H X 3.50"D
4	ELEVATOR TO PRIMARY FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
5	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
SHT	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA NFC-A CABINET
FH	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA NFC-A CABINET
PSR	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA NFC-A CABINET
SSA	SPEAKER-STROBE, CEILING, 75V	EST-CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SSW	SPEAKER-STROBE, WALL, 75V	EST-S4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 75V	EST-S4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SSWP	SPEAKER-STROBE, WALL / CEILING, WP, 75V	EST WGWW-SVWC	EST MODEL 449
SWP	SPEAKER, WALL / CEILING, WP, 75V	EST WGWP-S	EST MODEL 449
V	STROBE, CEILING	EST-CCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
V	STROBE, WALL	EST-S4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
FD	WATERFLOW BELL	BY OTHERS	BY OTHERS
H	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDR	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (AMHR)

DEVICE TAG

INITIATING DEVICES
X.X.X.X
- 5-DIGIT DEVICEADDRESS #
- 3-DIGIT SLC CARD #

NOTIFICATION
NA.#
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

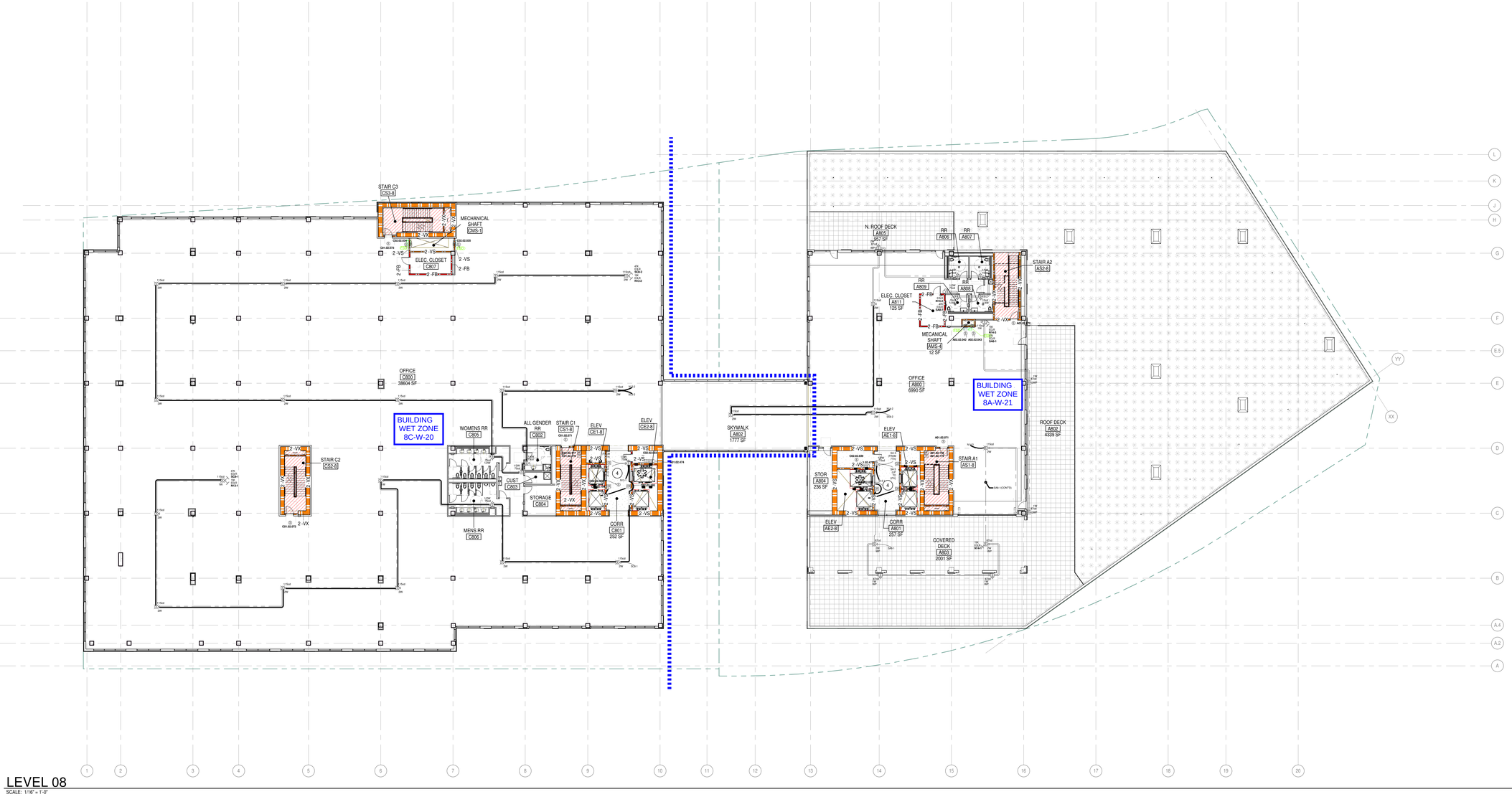
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.07



LEVEL 08

SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
- i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
- ii) Levels 2-5: Extend dry system into lobby spaces
- iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
- iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
- v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES7-4	FURNISHED BACKBOX 3 CAB6118 27.36"W X 47.75"H X 5.8"D
NACX	NAC EXPANSION PANEL	EST BPSXA OR 10A SEE RISER DIAGRAM	17"H X 12"W X 3 1/2"D (BPSXA / BPAS10A)
LPSF	4CX 24V POWER SUPPLY	EST APS6A	26"H X 15"W X 5.2"D
BATT	BATTERY CABINET	(2) BCCT-4	(2) 27"H X 23"W X 6"D
BPS	BATTERY CABINET	EST BC-YR	18.25"H X 14"W X 7.25"D
FSCP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
FARC	REMOTE MICROPHONE	EST 4-ARMACA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACI	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACTI	ADDRESSABLE INPUT MODULE	EST SIGA-CT1i	4" SQUARE 1911-GANG MUDRING
ACTO	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
A	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
HA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
SYNCH	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CCYS	MOUNTS IN NAC PANEL
CM	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CRH	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
FZ	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN MFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-270	1-GANG STANDARD ELEC. BOX
I	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-CP2I	4" SQUARE DEE OCTAGON STANDARD BOX
D_{SB}	SMOKE W/SOUNDER BASE	SIGA-DSO W/ SIGA-ABAGLF	4" SQUARE DEEP BOX
D_{HB}	HEAT DETECTOR W/BASE	EST SIGA-HTD	4" SQUARE DEE OCTAGON STANDARD BOX
D_{DT}	HIGH SENSITIVITY DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SID	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST RD-TAM	1-GANG STANDARD BOX
MD	CARBON MONOXIDE SENSOR, 24VDC	EST 285-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST MFC-A	14"W X 8"H X 3.75"D
E	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
E	ELEVATOR TU ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
ST	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FH	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PR	ELEVATOR POWER (LOW) 24VDC	EST SIGA-CT1	VIA MFC-A CABINET
SS	SPEAKER-STROBE, CEILING, 75V	EST-G2SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SW	SPEAKER-STROBE, WALL, 75V	EST-G4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST-G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SWP	SPEAKER-STROBE, WALL / CEILING, WP, 75V	EST WGWW-SVWC	EST MODEL 449
SW	SPEAKER, WALL / CEILING, WP, 70V	EST WGWW-S	EST MODEL 449
V	STROBE, CEILING	EST-GCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
V	STROBE, WALL	EST-G4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
WB	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MOD	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE	DEVICE TAG	ABBREVIATIONS
INDICATES NAC CIRCUIT WIRING	INITIATING DEVICES S # # # # — 5-DIGIT DEVICE/ADDRESS # — 3-DIGIT SLC CARD #	cd CANDELLA
INDICATES SLC LOOP WIRING		EOLR END OF LINE RESISTOR
INDICATES SPEAKER WIRING		EOL END OF LINE
24V POWER CKT (AWG)	NOTIFICATION N# # — CIRCUIT NUMBER — PANEL NUMBER	WP WEATHERPROOF
		EP EXPLOSION PROOF
		PC POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

WALL FIRE AND SMOKE PROTECTION TYPES
- EW = EXTERIOR WALL (PURPLE)
- FB = FIRE BARRIER (RED)
- SP = SMOKE PARTITION (GREEN)
- VS = VERTICAL SHAFT (ORANGE)
- VX = VERTICAL EXIT ENCLOSURE (ORANGE)
- XP = EXIT PASSAGEWAY (YELLOW)

SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

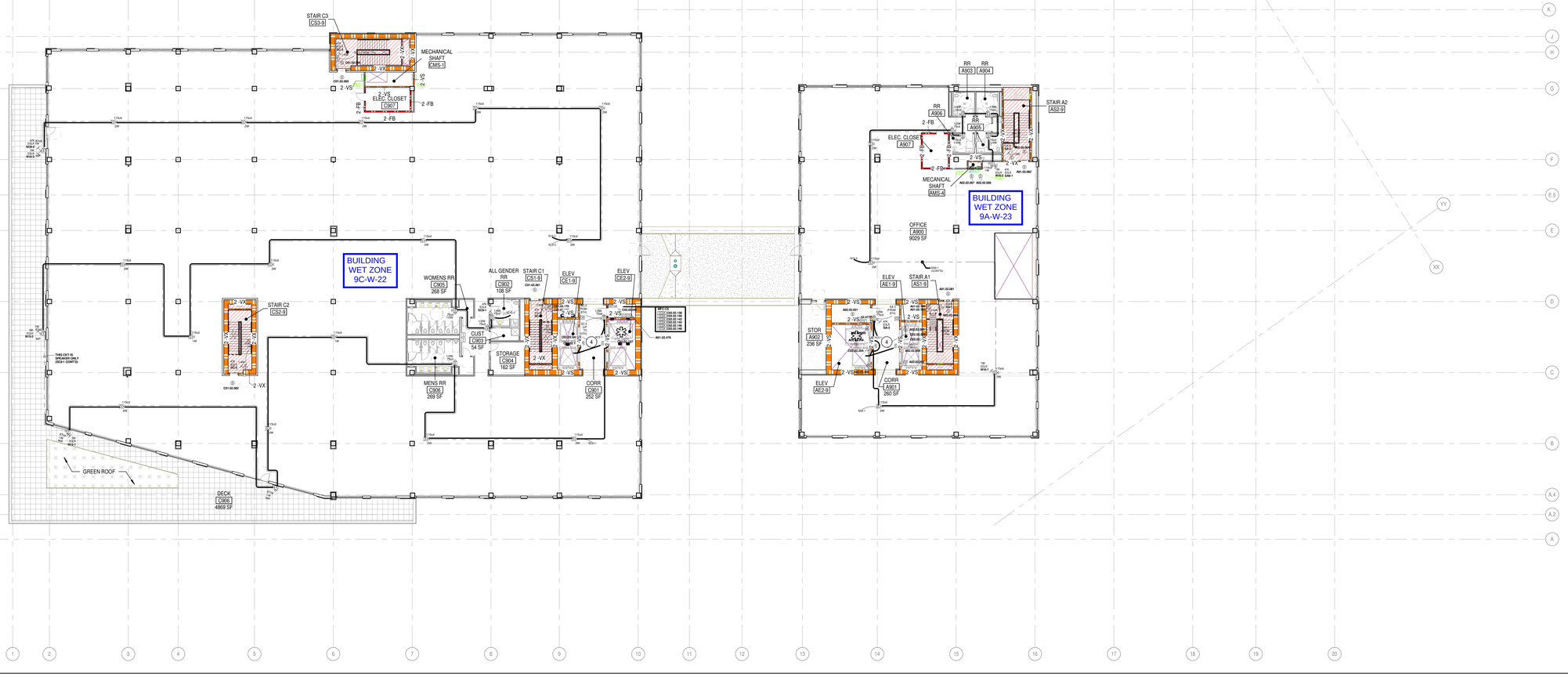
1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION

2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION

3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).

4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).

SC1.08



LEVEL 09
SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
ii) Levels 2-5: Extend dry system into lobby spaces
iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES7-F	FURNISHED BACKBOX 3 CAB218 27.34"W X 47.75"H X 7.95"D
NAC	NAC EXPANSION PANEL	EST IRP56A OR 10A SEE RISER DIAGRAM	17"W X 12"H X 3.5"D (IRP56A / IRP610A)
APS	AUX 24V POWER SUPPLY	CST AP56A	20"H X 15"W X 5.5"D
BAT	BATTERY CABINET	EST BCC7-R	23.875"H X 20"W X 8"D
BAT	BATTERY CABINET	EST BC-15	18.25"H X 14"W X 7.25"D
FSPP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMC	REMOTE MICROPHONE	EST 4-RMMCA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
AIM	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
AYM	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
CM	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
SF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
D	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
PS	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCS	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CM	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CR	CONTROL RELAY, HIGH POWER	EST SIGA-CR4	4" SQUARE DEEP BOX
FI	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN MFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-278	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-OSD	4" SQUARE OR OCTAGON STANDARD BOX
SB	SMOKE W/SOUNDER BASE	SIGA-OSD W/ SIGA-ASAGLF	4" SQUARE DEEP BOX
H	HEAT DETECTOR W/BASE (135 DEG. F, FIXED)	EST SIGA-HFD	4" SQUARE OR OCTAGON STANDARD BOX
D	HVAC DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR SURFACE MOUNT OR DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST RD-TRM	1-GANG STANDARD BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 2451-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MCO	MODULE CABINET	EST MFC-A	14"W X 8"H X 3.35"D
E	ELEVATOR TU PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
E	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
ST	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FC	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PM	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA MFC-A CABINET
SW	SPEAKER-STROBE, CEILING, 70V	EST CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
SW	SPEAKER-STROBE, WALL, 70V	EST SASVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SW	SPEAKER-STROBE, WALL / CEILING, WP, 70V	EST WGWW-SYNC	EST MODEL 449
SW	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL 449
ST	STROBE, CEILING	EST SCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
ST	STROBE, WALL	EST G4VWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
F	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDH	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (AWG)

DEVICE TAG

INITIATING DEVICES
S#### — 5-DIGIT DEVICE/ADDRESS #
2-DIGIT SLC CARD #

NOTIFICATION
100-6 — CIRCUIT NUMBER / PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
1 = 1 HOUR
2 = 2 HOUR

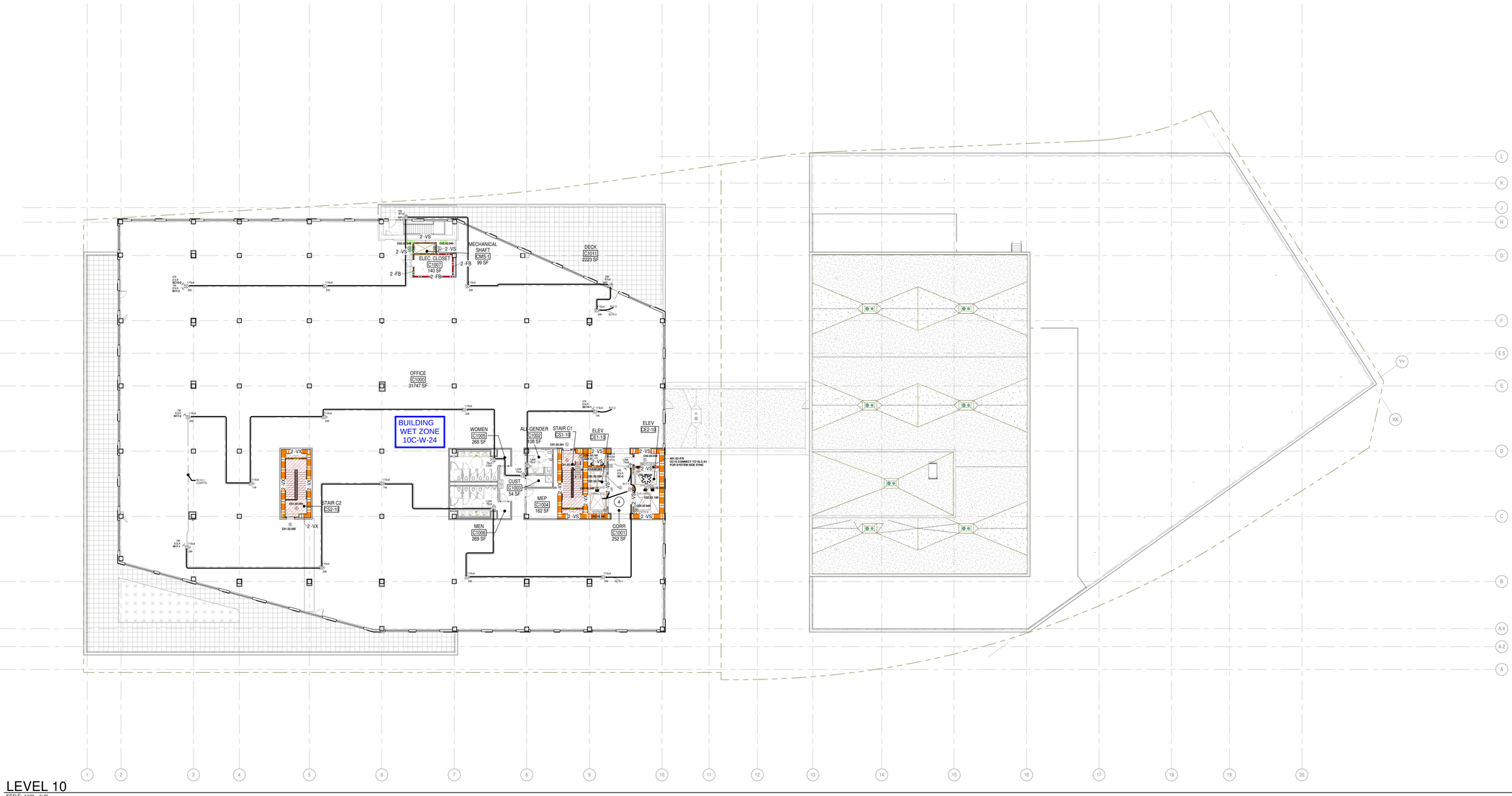
WALL FIRE AND SMOKE PROTECTION TYPES
EW = EXTERIOR WALL (PURPLE)
FB = FIRE BARRIER (RED)
SP = SMOKE PARTITION (GREEN)
VS = VERTICAL SHAFT (ORANGE)
VX = VERTICAL EXIT ENCLOSURE (ORANGE)
XP = EXIT PASSAGEWAY (YELLOW)

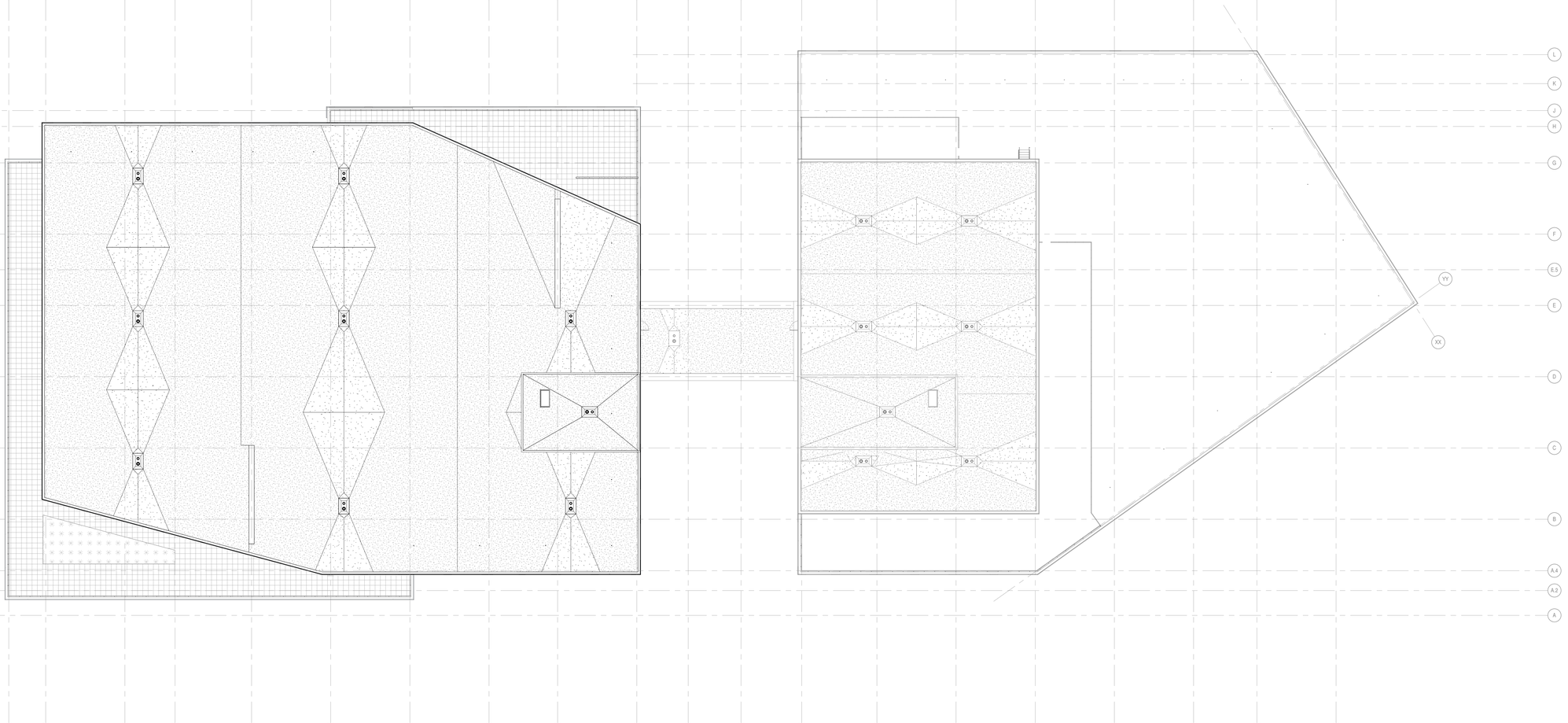
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
2 IBC 2018, 3006.3 EXCEPTION: 3. DOOR OPENING TO EXTERIOR: NO PROTECTION
3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).


2-VS
ELEC. CLOSET
C1007
140 SF
2-FB
MECHANICAL SHAFT
CMS-1
99 SF
DECK
C1011
2223 SF
OFFICE
C1000
31747 SF
BUILDING WET ZONE 10C-W-24
WOMEN
C1005
268 SF
ALL GENDER
C1002
108 SF
STAIR C1
CS1-10
ELEV
CE1-10
ELEV
CE2-10
CUST.
C1003
54 SF
MEP
C1004
162 SF
MEN
C1006
269 SF
CORR
C1001
252 SF
STAIR C2
CS2-10
2-VX
2-VS
SC1-1 CONTD
SC1-1
SC2-1
SC2-1 CONTD
SC2-2
SC2-3
SC2-5
SC2-6
SC2-7
SC2-8
SC2-9
SC2-10
SC2-11
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SC2-43
SC2-44



LEVEL 11
SCALE: 1/16" = 1'-0"

Sprinkler Systems
a) Building
i) Levels 1-5: Dry Sprinkler System in Garage/Storage Rooms
ii) Levels 2-5: Extend dry system into lobby spaces
iii) Levels 1: Wet Sprinkler System in Amenities, Retail, Lobbies, Bathrooms
iv) Levels 6-10: Wet Sprinkler Systems in Office Spaces, Bathrooms
v) Levels 6-10: Dry Sprinkler Systems on exterior balconies

KEYED NOTES

1 PRESSURIZATION FAN CONTROL WIRING CONDUIT AND STANDBY POWER CONDUIT ROUTED UNDERGROUND.

SC-R2

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST ES7-F	FURNISHED BACKBOX 3 CAB2118 27.34"W X 47.75"H X 7.55"D
NMCP	NAC EXPANSION PANEL	EST IPS56A-DR 10A SEE RISER DIAGRAM	17"H X 12"W X 3.5"D (IPS5A / IPS10A)
APSP	AUX 24V POWER SUPPLY	CST AP56A	20"H X 15"W X 5.5"D
BATT	BATTERY CABINET	EST BCC7-R	23.875"H X 20"W X 8"D
BATT	BATTERY CABINET	EST BC-YR	18.25"H X 14"W X 7.25"D
FSPP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
FRPC	REMOTE MICROPHONE	EST 4-REMCA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
ACE	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACT	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE 1911-GANG MUDRING
ACM	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
FF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
D	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
PA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE 1911-GANG MUDRING
CCCS	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CRE	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE 1911-GANG MUDRING
CRE	CONTROL RELAY, HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
FZ	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN NFC MODULE CABINET
I	MANUAL PULL STATION, DUAL ACTION	EST SIGA-278	1-GANG STANDARD ELEC. BOX
P	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-OSD	4" SQUARE DEEP BOX OCTAGON STANDARD BOX
S/B	SMOKE W/SOUNDER BASE	SIGA-OSD W/ SIGA-ASAGLF	4" SQUARE DEEP BOX
H/S	HEAT DETECTOR W/BASE (135 DEG. F. FIXED)	EST SIGA-HFD	4" SQUARE OR OCTAGON STANDARD BOX
(P)	HVAC DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR SURFACE MOUNT OR DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST RD-TRM	1-GANG STANDARD BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 2451-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MCA	MODULE CABINET	EST NFC-A	14"W X 8"H X 3.75"D
E	ELEVATOR TO PRIMARY FLR RELAY	CST SIGA-CR	VIA NFC-A CABINET
E	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA NFC-A CABINET
ST	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA NFC-A CABINET
FC	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA NFC-A CABINET
PM	ELEVATOR POWER SUPV. INPUT	CST SIGA-CT1	VIA NFC-A CABINET
SW	SPEAKER-STROBE, CEILING, 70V	EST CCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
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S	SPEAKER, WALL, 70V	EST G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
SW	SPEAKER-STROBE, WALL / CEILING, WP, 70V	EST WGWW-SVMC	EST MODEL 449
SW	SPEAKER, WALL / CEILING, WP, 70V	EST WGWF-S	EST MODEL 449
ST	STROBE, CEILING	EST SCVWF WITH GP1S BACKPLATE	4" SQUARE STANDARD BOX
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FD	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDH	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (AWG)

DEVICE TAG

INITIATING DEVICES
S#### — 3-DIGIT DEVICE/ADDRESS #
2-DIGIT SLC CARD #

NOTIFICATION
NF-#
CIRCUIT NUMBER
PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONATE COVER

WALL SEPARATION LEGEND

WALL HOURLY RATING
0 = 0 HOUR
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2 = 2 HOUR

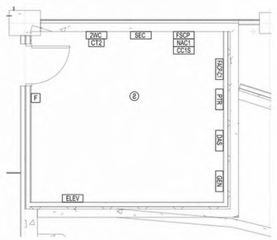
WALL FIRE AND SMOKE PROTECTION TYPES
EW = EXTERIOR WALL (PURPLE)
FB = FIRE BARRIER (RED)
SP = SMOKE PARTITION (GREEN)
VS = VERTICAL SHAFT (ORANGE)
VX = VERTICAL EXIT ENCLOSURE (ORANGE)
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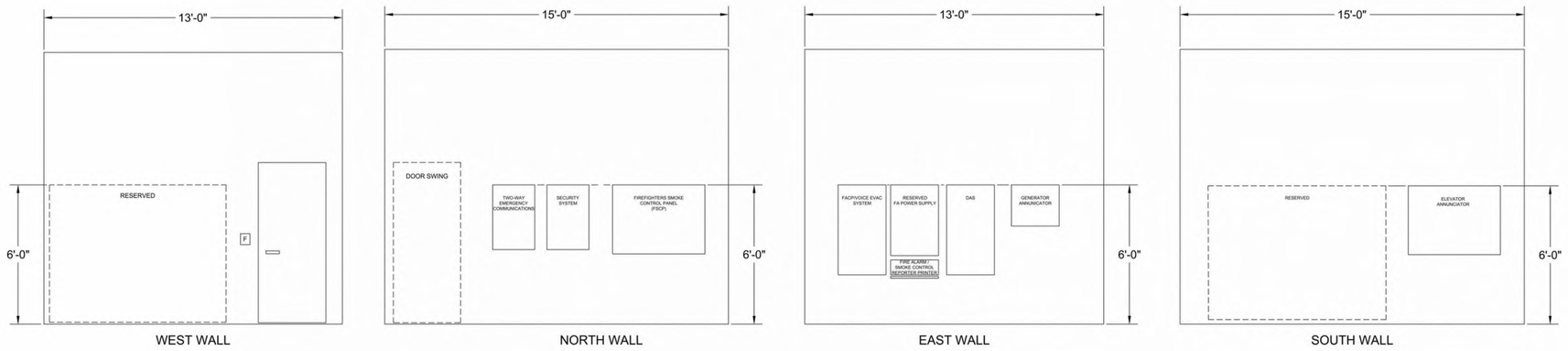
SMOKE CONTROL LEGEND

HATCH PATTERN INDICATES PRESSURIZED EXIT

SHEET NOTES - SMOKE CONTROL

1 IBC 2018, 3006.2 EXCEPTION: 2. DOOR OPENING TO LEVEL OF EXIT DISCHARGE: NO PROTECTION
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3 IBC 2018, 3006.2 ITEM: 2. SMOKE PARTITION (VESTIBULE DOOR & PENETRATION PROTECTION).
4 IBC 2018, 3006.3 ITEM: 3. ADD'L DOOR AT HOISTWAY OPENING (SMOKE CURTAIN PROPOSED).





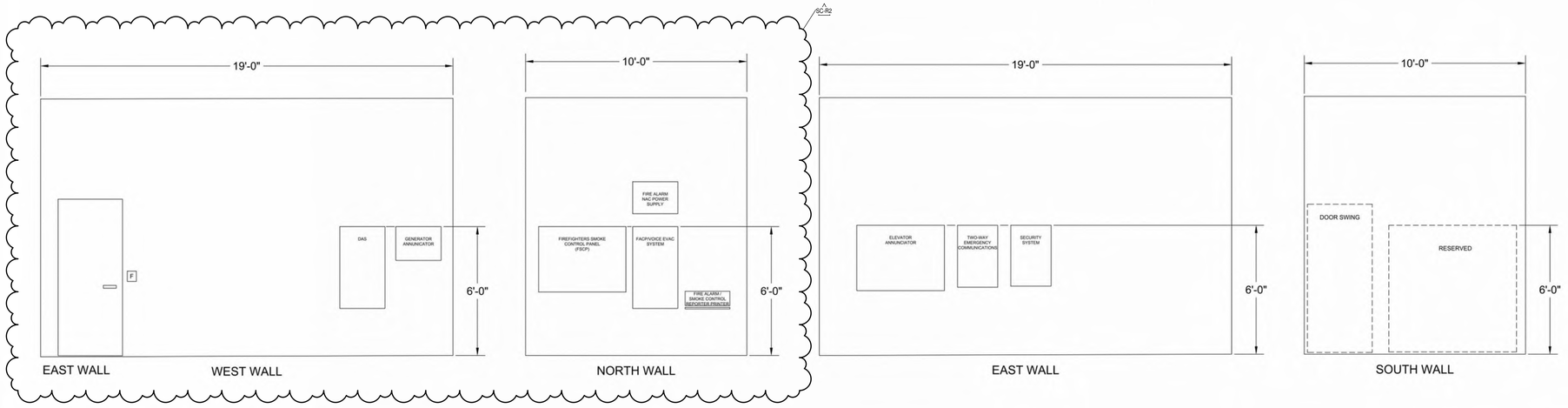
1 - FCC C102 ENLARGED PLAN

2' 4' 8'
0 6" 1' 2' 3' 4'
SCALE: 1/4"=1'-0"

2 - FCC C102 PANEL ELEVATIONS

1/2"=1'-0"
0 6" 1' 2' 3' 4' 5'





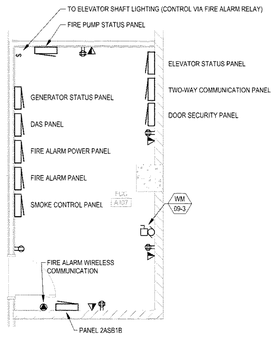
FCC A107 ENLARGED PLAN

2' 4' 8'
0 6" 1' 2' 3' 4'
SCALE: 1/4"=1'-0"

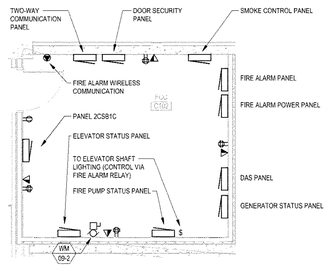
4 - FCC A107 PANEL ELEVATIONS

1/2"=1'-0"
0 6" 1' 2' 3' 4' 5'

SC2.1



1 ENLARGED ELECTRICAL SMOKE CONTROL PLAN - - FCC A107
1/4" = 1'-0"



2 ENLARGED ELECTRICAL SMOKE CONTROL PLAN - - FCC C102
1/4" = 1'-0"

LOAD SUMMARY - PANEL 4AGDP

	LOAD TYPE							
PANEL	LIGHTS	RECEPT	HEATING	KITCHEN	EQUIP	MOTORS	MISC	**TOTAL**
ATS-EM	31089 VA							31089 VA
ATS-SBA		4320 VA	2000 VA		35020 VA	225600 VA		267140 VA
FIRE PUMP 'A'						149580 VA		149580 VA
TOTAL	31089 VA	4320 VA	2000 VA		35020 VA	375360 VA		447809 VA
CODE FACTOR	125.00%	100.00%	125.00%		100.00%	109.96%		
CODE LOAD	38861 VA	4320 VA	2500 VA		35020 VA	412775 VA		493476 VA
** LARGEST MOTOR HAS BEEN CALCULATED AT 125%.						**593.6 277Y/480V,3Ø,4W**		

***** DURING EMERGENCY OPERATION (3) ELEVATORS WILL BE LOCKED OUT. LOADS OF LOCKED OUT ELEVATORS ARE CURRENTLY REFLECTED IN GDP TOTALS.

LOAD SUMMARY - PNL 4CGDP

	LOAD TYPE							
PANEL	LIGHTS	RECEPT	HEATING	KITCHEN	EQUIP	MOTORS	MISC	**TOTAL**
ATS-EMC	31924 VA							31924 VA
ATS-SBC		5220 VA			64153 VA	153784 VA		223157 VA
FIRE PUMP 'C'						149580 VA		149580 VA
TOTAL	31924 VA	5220 VA			64153 VA	303364 VA		404661 VA
CODE FACTOR	125.00%	100.00%			100.00%	112.33%		
CODE LOAD	39905 VA	5220 VA			64153 VA	340759 VA		450037 VA
** LARGEST MOTOR HAS BEEN CALCULATED AT 125%.						**541.3 277Y/480V,3Ø,4W**		

***** DURING EMERGENCY OPERATION (2) ELEVATORS WILL BE LOCKED OUT. LOADS OF LOCKED OUT ELEVATORS ARE CURRENTLY REFLECTED IN GDP TOTALS.

FIRE ALARM LEGEND

SYM	DESCRIPTION	MODEL NUMBER	BACKBOX
FACP	FIRE ALARM CONTROL PANEL	EST EST-4	FURNISHED BACKBOX 3-CAB21B 27.34"W X 47.75"H X 3.86"D
NAC#	NAC EXPANSION PANEL	EST BPS6A OR 10A SEE RISER DIAGRAM	17"H X 13"W X 3.5"D (BPS6A / BPAS10A)
APS#	AUX 24V POWER SUPPLY	EST APS6A	26"H X 15"W X 5.3"D
BATT 1	BATTERY CABINET	EST BCC7-R	23.875"H X 25"W X 6"D
BATT 2	BATTERY CABINET	EST BC-1R	18.25"H X 14"W X 7.25"D
FSCP	FIRE-FIGHTER SMOKE CONTROL PANEL	TBD	TBD
RMIC	REMOTE MICROPHONE	EST 4-REMICA	MOUNTS IN REMOTE ANNUNCIATOR (FAA)
AE(S)	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE W/1-GANG MUDRING
CT1	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE W/1-GANG MUDRING
CT2	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
TS	TAMPER SWITCH	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
WF	SPRINKLER WATER FLOW SENSOR	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
LA	DRY PIPE LOW AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
HA	DRY PIPE HIGH AIR ALARM	BY OTHERS EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
CC1S	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
CR	ADDRESSABLE OUTPUT MODULE	EST SIGA-CR	4" SQUARE W/1-GANG MUDRING
CRH	CONTROL RELAY; HIGH POWER	EST SIGA-CRH	4" SQUARE DEEP BOX
CC2	DUAL INPUT SIGNAL MODULE	EST SIGA-CC2A	MOUNTS IN MFC MODULE CABINET
F	MANUAL PULL STATION, DUAL ACTION	EST SIGA-278	1-GANG STANDARD ELEC. BOX
S	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-OSD	4" SQUARE OR OCTAGON STANDARD BOX
SB	SMOKE W/SOUNDER BASE	SIGA-OSD W/ SIGA-AB4GLF	4" SQUARE DEEP BOX
H	HEAT DETECTOR W/BASE (135 DEG. F. FIXED)	EST SIGA-HFD	4" SQUARE OR OCTAGON STANDARD BOX
D	HVAC DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
RTS	DUCT DETECTOR REMOTE TEST SWITCH	EST SD-TRM	1-GANG STANDARD BOX
CO	CARBON MONOXIDE SENSOR, 24VDC	EST 260-CO	4" SQUARE DEEP BOX WITH 1-GANG MUDRING
MFC	MODULE CABINET	EST MFC-A	14"W X 8"H X 3.50"D
↑	ELEVATOR TO PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
↓	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
SHT	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
FHR	ELEVATOR FIRE HAT RELAY	EST SIGA-CR	VIA MFC-A CABINET
PWR	ELEVATOR POWER SUPV. INPUT	EST SIGA-CT1	VIA MFC-A CABINET
S x2	SPEAKER-STROBE, CEILING, 70V	EST GCSVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S x2	SPEAKER-STROBE, WALL, 70V	EST G4SVWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX WITH EXTENSION
S	SPEAKER, WALL, 70V	EST G4SWF WITH GRSW BACKPLATE	4" SQUARE DEEP BOX
WP S x2	SPEAKER-STROBE, WALL / CEILING, WP, 70V	EST WG4WF-SVMC	EST MODEL 449
WP S x2	SPEAKER, WALL / CEILING, WP, 70V	EST WG4WF-S	EST MODEL 449
x	STROBE, CEILING	EST GCVWF WITH GP10 BACKPLATE	4" SQUARE STANDARD BOX
x	STROBE, WALL	EST G4VWF WITH GP10 BACKPLATE	4" SQUARE STANDARD BOX
F	WATERFLOW BELL	BY OTHERS	BY OTHERS
M	MAGNETIC DOOR HOLDER	BY OTHERS VIA EST SIGA-CR	1-GANG STANDARD ELEC. BOX
MDB	MOTORIZED DAMPER (SMOKE CONTROL)	BY OTHERS	BY OTHERS

CIRCUIT TYPE

- INDICATES NAC CIRCUIT WIRING
- INDICATES SLC LOOP WIRING
- INDICATES SPEAKER WIRING
- 24V POWER CKT (A#-#)

DEVICE TAG

INITIATING DEVICES

- 3-DIGIT DEVICE/ADDRESS #
- 2-DIGIT SLC CARD #

NOTIFICATION
N#-#
- CIRCUIT NUMBER
- PANEL NUMBER

ABBREVIATIONS

cd	CANDELLA
EOLR	END OF LINE RESISTOR
EOL	END OF LINE
WP	WEATHERPROOF
EP	EXPLOSION PROOF
PC	POLYCARBONITE COVER

FIRE ALARM CHECKLIST

Location	Yes	No	
			A/C Power:
			Dedicated 120 VAC for Fire Alarm Control Panel
			Dedicated Power for Remote NAC Power Supplies
			Circuit Breakers Location Recorded in FACP & NAC Panels
			Circuit Breaker Painted RED & Breaker Locks Installed
Location	**Yes**	**No**	**Raceways & Boxes:**
			40% Fill Rule is adhered to
			J-Boxes & Cans have covers installed
			Vertical Riser Cable is properly supported in Boxes
			Outside Boxes & conduit is weather tight
Location	**Yes**	**No**	**Wiring & Cabling:**
			Cable is proper size and type for project per calculations & Wire Schedule
			Non-Shielded wire used
			Open Cables properly strapped
			Open Cables below 7 ft. off of finished floor properly protected
			Check for "Opens" in wiring on all detection and notification circuits
			Check for "Shorts" in wiring on all detection and notification circuits
			Check for "Grounds" in Wiring on all detection and notification circuits
			"T" Taps and Junction boxes are clearly labeled on plans / as-builts
Location	**Yes**	**No**	**Fire Alarm Panels:**
			A/C Power location is labeled on all panels & power supplies
			Batteries have Manufacturer's date marked in Permanent Ink
			Panels are clean & professional looking
Location	**Yes**	**No**	**Field Devices:**
			Pull Stations at proper mounting height and location (48" to top of actionable part)
			Smoke detectors mounted per plans / spacing looks appropriate (no dead air space)
			Smoke detectors installed at least 4" from corners & not more than 12" below ceiling level
			Smoke detectors installed proper distance from Supply and Return Air Vents
			All devices are installed and accounted for on as-builts
			Horns / strobes at proper mounting height and location (80-96" AFF)
			Horns audibility meets minimum requirements
Location	**Yes**	**No**	**Functional Test:**
			All pull stations pulled for proper operation
			All smoke detectors activated with proper aerosol equipment
			All heat detectors tested according to manufacturer's instructions
			All sprinkler waterflows tested under actual flow condition
			All tamper / supervisory switches tested by valve actuation
			Duct detectors tested for proper function and universal shut down
			All Auxiliary relays operate according to system matrix
			Coordinated Trades (Performed by others)
Location	**Yes**	**No**	**Mechanical / HVAC:**
			All duct detectors are installed and operational
			All motorized dampers are installed and operational
			HVAC System is fully operational
Location	**Yes**	**No**	**Electrical:**
			Panels properly labeled (a/c, phones, batteries)
			A/C circuit breaker painted red & lock installed
			A/C circuit breaker dedicated
			Power to Door Holders dedicated & locked, painted red
Location	**Yes**	**No**	**Door Hardware:**
			All door holders are installed & powered up
			All door holders are properly aligned
Location	**Yes**	**No**	**Sprinkler:**
			All Flow Switches are installed
			All Tamper Switches are installed & adjusted
			Sprinkler Vault Switches are installed & adjusted
			P/V Valve & Switches are installed & adjusted
			Wall P/V's are installed & adjusted
			All Dry Flow Valves are installed
			Low Air Switches are installed
Location	**Yes**	**No**	**Security:**
			Door Releasing Hardware installed & powered up
			Interfacing functions according to matrix
Location	**Yes**	**No**	**Elevator:**
			Powered up, Programmed & Operational
			Elevator Functions Tested

DESIGN NARRATIVE:

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THIS FIRE AND LIFE SAFETY SYSTEM IS DESIGNED TO PROVIDE FOR HIGH-RISE (CONTROL BY FLOOR) VOICE EVACUATION, MANUAL AND AUTOMATIC SMOKE CONTROL AND GARAGE FAN CONTROL, FIRE SPRINKLER MONITORING, STATUS MONITORING FOR DAS/ERRS, GENERATOR, FIRE PUMP, FIRE WATER TANK, AND OTHER LIFE SAFETY SYSTEMS MONITORING. FIRE DETECTION AND CONTROLS ARE PROVIDED FOR PHASE 1 FIRE SERVICE ELEVATOR RECALL AND MECHANICAL SYSTEM FIRE/SMOKE DAMPER INTERFACE. THIS (B OCCUPANCY) OVER COMMON PARKING GARAGE (S-2 OCCUPANCY) STRUCTURE WILL HAVE TWO (2) INDEPENDENTLY FUNCTIONING FIRE COMMAND ROOMS ON THE GROUND FLOORS WITH ALL FIRE CONTROL PANELS OPERATING IN A PROGRAMMABLE PEER-TO-PEER NETWORK FOR FLEXIBILITY FOR OPERATION AND CUSTOM CONFIGURATION.

GENERAL NOTES

A. ONLY NAC WIRING SHOWN. INSTALLATION CONTRACTOR TO SHOW SLC LOOP WIRING, INCLUDING CONDUIT & J-BOX DISTRIBUTION ON AS-BUILT DRAWINGS.

B. LABEL ALL ADDRESSABLE FIELD DEVICES SUCH THAT ADDRESS INFORMATION CAN BE READ FROM FLOOR LEVEL, WITHOUT NEED FOR LADDER - OTHER BOXES AND DEVICES LABELED AND READILY LEGIBLE ALSO.

C. PER NATIONAL FIRE ALARM CODE (NFPA 72-2016, 17.7.1.11.2), WHERE DETECTORS ARE INSTALLED BUT NOT OPERATIONAL DURING CONSTRUCTION, THEY SHALL BE PROTECTED FROM CONSTRUCTION DEBRIS, DUST, DIRT, AND DAMAGE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND VERIFIED TO BE OPERATING IN ACCORDANCE WITH THE LISTED SENSITIVITY, OR THEY SHALL BE REPLACED PRIOR TO THE FINAL COMMISSIONING OF THE SYSTEM.

D. PER NATIONAL FIRE ALARM CODE (NFPA 72-2016, 17.7.4.1), IN SPACES SERVED BY AIR-HANDLING SYSTEMS, DETECTORS SHALL NOT BE LOCATED WHERE AIRFLOW PREVENTS OPERATION OF THE DETECTORS.

E. SYSTEM TO PROVIDE AUDIBLE NOTIFICATION TO ATTAIN 15db ABOVE AVERAGE AMBIENT SOUND LEVEL THROUGHOUT THE BUILDING OR SPACE.

F. STROBES SHALL BE SYNCHRONIZED WHERE TWO OR MORE STROBES ARE FOUND IN THE SAME FIELD OF VISION.

G. PROVIDE FA SYSTEM EQUIPMENT AND SERVICE LABELS PER AHJ REQUIREMENTS. THE LOCATION OF THE FACP PANEL TO BE PERMANENTLY NOTED AT THE ENTRY ANNUNCIATOR (TYPICALLY WITH SYSTEM ZONE MAP). THE LOCATION OF ALL NAC PANELS TO BE PERMANENTLY NOTED AT THE FACP PANEL. THE LOCATION OF THE POWER SOURCE CIRCUIT BREAKER PERMANENTLY LABELED AT FACP AND ALL NAC PANELS.

H. THE CONTRACTOR SHALL PRE-TEST THE SYSTEM TO VERIFY PROPER PERFORMANCE PRIOR TO INSPECTION.

I. FIRE ALARM SYSTEM WILL BE MONITORED BY A SUPERVISING STATION FOR ELECTRONICALLY MONITORED SYSTEMS. UL CERTIFIED CENTRAL STATION REQUIRED.
COMPANY NAME:_____
UL CERTIFICATION #:_____

J. SYSTEM IS DESIGNED IN ACCORDANCE WITH COV FIRE CODE, WAC 51-54A-0907 AND NFPA 72-2016. SYSTEM SHALL BE INSTALLED PER NFPA 70 (NEC) 2017.

K. DEDICATED BRANCH CIRCUIT(S) AND CONNECTIONS SHALL BE MECHANICALLY PROTECTED.

L. ALL SMOKE CONTROL WIRING, REGARDLESS OF VOLTAGE, SHALL BE FULLY ENCLOSED WITHIN CONTINUOUS RACEWAYS AS PRESCRIBED IN WSBC, SECTION 909.12.2 AND FURTHER DEFINE IN THE CITY OF VANCOUVER SMOKE CONTROL TECHNICAL STANDARDS. RACEWAY ON THIS PROJECT TO BE EMT OR MC CABLE AS PERMITTED BY THE CITY OF VANCOUVER.

M. ALL POWER AND CONTROL WIRING FIRE ALARM SERVING THE STAIR PRESSURIZATION SHALL BE 2-HOUR PROTECTED IN ACCORDANCE WITH SECTION 909.20.61 OF THE WSBC AND FURTHER DEFINED IN THE CITY OF VANCOUVER SMOKE CONTROL TECHNICAL STANDARDS.

N. IN ACCORDANCE WITH NFPA 72, SECTION 24.3.13.7, TWO-WAY IN-BUILDING WIRED EMERGENCY COMMUNICATIONS SYSTEM SHALL HAVE A PATHWAY SURVIVABILITY OF LEVEL 2 OR LEVEL 3.
EXCEPTION: LEVEL 1 SHALL BE PERMITTED WHERE THE BUILDING IS LESS THAN 2-HOUR FIRE RATED CONSTRUCTION.

O. PROVIDE THE FOLLOWING REQUIREMENTS FOR THE DISTRIBUTED ANTENNA SYSTEM IN ACCORDANCE WITH NFPA 1221 (2019 EDITION)

9.6.2.1: THE BACKBONE, ANTENNA DISTRIBUTION, OR ANY FIBER-OPTIC CABLES SHALL BE RATED AS PLENUM CABLES.

9.6.2.2: THE BACKBONE CABLES SHALL BE CONNECTED TO THE ANTENNA DISTRIBUTION, RADIATING, OR COPPER CABLES USING HYBRID COUPLER DEVICES OF A VALUE DETERMINED BY THE OVERALL DESIGN.

9.6.2.3: BACKBONE CABLES SHALL BE ROUTED THROUGH AN ENCLOSURE THAT MATCHES THE BUILDING FIRE FIRE RATING. NOTE: THE STAIR ENCLOSURE SHALL NOT BE USED FOR ROUTING CABLE.

9.6.2.4: THE CONNECTION BETWEEN THE BACKBONE CABLE AND THE ANTENNA CABLES SHALL BE MADE WITHIN AN ENCLOSURE THAT MATCHES THE BUILDING FIRE RATING AND PASSAGE OF ANTENNA DISTRIBUTION CABLE IN AND OUT OF THE ENCLOSURE SHALL BE FIRE-STOPPED.

9.6.3: SYSTEM SHALL HAVE LIGHTNING PROTECTION THAT COMPLIES WITH NFPA 780.

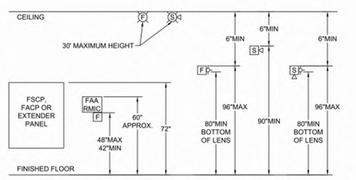
P. SMOKE CONTROL SYSTEMS SHALL HAVE AN AUTOMATIC WEEKLY SELF-TEST FEATURE. THE SELF-TEST FEATURE SHALL AUTOMATICALLY COMMAND ACTIVATION OF EACH ASSOCIATED FUCTION(S). ANY FUNCTION THAT FAILS TO OPERATE WITHIN THE REQUIRED TIME PERIOD WILL REPORT THE ABNORMAL CONDITIONS AUDIBLY AND VISUALLY, WILL BE ANNUNCIATED ON THE FSCP, TRANSMIT A SUPERVISORY SIGNAL TO A REMOTE CENTRAL STATION AND AND DOCUMENTED BY PRINTED REPORT.

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SEQUENCE OF OPERATION CONTROL MATRIX (GENERAL)

SYSTEM OPERATION DESCRIPTION (OUTPUTS)	SYSTEM DEVICES: System Smoke Detector	System Heat Detector	Sprinkler Water Flow	Sprinkler Valve Tamper Switch	Sprinkler Hi/Low Air Pressure	Pressurization Fan Duct Smoke Detector	Elevator Mach RM Smoke/Heat Detector	Elevator Lobby Smoke Detector	Manual Pull Station	FSCP GSF/GEF Manual Control	System Status Normal	Fire Alarm AC Power Failure	Fire Alarm System Low Battery	Fire Alarm Open Circuit	Fire Alarm Ground Fault	Pressurization Damper Fail to Open/Close	Hoistway Damper Fail to Open/Close	Smoke Control Fan Fail to Start/Stop	Fan or Damper Power Disconnect
FACP Audible	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X
FACP General Alarm Annun / Indication	X	X	X				X	X	X										
FACP Trouble Annun / Indication												X	X	X	X	X	X	X	X
FACP Supervisory Annun / Indication				X	X	X													
Illuminate Associated FSCP LED	X	X	X			X	X	X	X			X	X	X	X				
Illuminate FSCP FAULTED																X	X	X	X
Activate Building Audibles & Strobes	X	X	X				X	X	X										
Shutdown Building HVAC Units	X	X	X				X	X	X										
Close Corridor HVAC Dampers	X	X	X				X	X	X										
Open Stair Pressurization Dampers and Activate Fans	X	X	X				X	X	X										
Shutdown Respective Pressurization Fan						X													
Release All Elevator Fire-Smoke and Draft Doors	X	X	X				X	X	X										
Activate Garage Supply/Exhaust Fans to 100%										X									
Associated Elevator Phase 1 Recall							X	X											
Activate Associated Elevator Cab RedHat Indictor							X	X											

NOTES:
1) Provide Elevator Phase 1 Designated Level and Alternate Level Recall, Shunt Trip Function and Phase 2 FireFighters' In-Car Operation.



② TYPICAL FIRE ALARM DEVICE MOUNTING HEIGHTS
NOT TO SCALE

SHEET INDEX

SHEET NUMBER	DESCRIPTION
SC0.01	COVER SHEET - SMOKE CONTROL
SC0.02	SCHEDULES - SMOKE CONTROL
SC0.03	SCHEDULES - SMOKE CONTROL
SC0.04	BATTERY CALCS - SMOKE CONTROL
SC0.05	BATTERY CALCS - SMOKE CONTROL
SC0.06	BATTERY CALCS & SPEAKER LOADS - SMOKE CONTROL
SC0.07	SMOKE CONTROL PANEL DIAGRAM - SMOKE CONTROL
SC1.00	RISER DIAGRAM - SMOKE CONTROL - SMOKE CONTROL
SC1.01	RISER DIAGRAM - DETECTION & CONTROLS - SMOKE CONTROL
SC1.02	RISER DIAGRAM - NOTIFICATION - SMOKE CONTROL
SC2.00A	LEVEL 1 - FLOOR PLAN - SMOKE CONTROL
SC2.00B	LEVEL 1 - FLOOR PLAN - SMOKE CONTROL
SC2.01A	LEVEL 2 - FLOOR PLAN - SMOKE CONTROL
SC2.01B	LEVEL 2 - FLOOR PLAN - SMOKE CONTROL
SC2.02A	LEVEL 3 - FLOOR PLAN - SMOKE CONTROL
SC2.02B	LEVEL 3 - FLOOR PLAN - SMOKE CONTROL
SC2.03A	LEVEL 4 - FLOOR PLAN - SMOKE CONTROL
SC2.03B	LEVEL 4 - FLOOR PLAN - SMOKE CONTROL
SC2.04A	LEVEL 5 - FLOOR PLAN - SMOKE CONTROL
SC2.04B	LEVEL 5 - FLOOR PLAN - SMOKE CONTROL
SC2.05A	LEVEL 6 - FLOOR PLAN - SMOKE CONTROL
SC2.05B	LEVEL 6 - FLOOR PLAN - SMOKE CONTROL
SC2.06A	LEVEL 7 - FLOOR PLAN - SMOKE CONTROL
SC2.06B	LEVEL 7 - FLOOR PLAN - SMOKE CONTROL
SC2.07A	LEVEL 8 - FLOOR PLAN - SMOKE CONTROL
SC2.07B	LEVEL 8 - FLOOR PLAN - SMOKE CONTROL
SC2.08A	LEVEL 9 - FLOOR PLAN - SMOKE CONTROL
SC2.08B	LEVEL 9 - FLOOR PLAN - SMOKE CONTROL
SC2.09A	LEVEL 10 FLOOR PLAN - SMOKE CONTROL
SC2.09B	LEVEL 10 FLOOR PLAN - SMOKE CONTROL
SC2.10A	LEVEL ROOF BLOCK .OOR PLAN - SMOKE CONTROL
SC3.00	PANEL ELEVATION - SMOKE CONTROL - SMOKE CONTROL
SC5.00	DETAILS - SMOKE CONTROL

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FACP-C1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0102	001	PHOTO SMOKE	FCC C102
C0102	002	PHOTO SMOKE	1ST FL STAIR C1 ENTRY
C0102	003	PHOTO SMOKE	1ST FL STAIR C2 ENTRY
C0102	004	DUCT DETECT.	SPR-1C2 SUPPLY
C0102	005		
C0102	006		
C0102	007		
C0102	008		
C0102	009		
C0102	010		
C0102	011	HEAT DETECT.	2ND FL STAIR C1 ENTRY
C0102	012	PHOTO SMOKE	2ND FL STAIR C1 LANDING
C0102	013	HEAT DETECT	2ND FL STAIR C2 ENTRY
C0102	014	PHOTO SMOKE	2ND FL STAIR C2 LANDING
C0102	015		
C0102	016		
C0102	017		
C0102	018		
C0102	019		
C0102	020		
C0102	021	HEAT DETECT	3RD FL STAIR C1 ENTRY
C0102	022	PHOTO SMOKE	3RD FL STAIR C1 LANDING
C0102	023	DUCT DETECT.	SPF-1C1 SUPPLY
C0102	024	HEAT DETECT	3RD FL STAIR C2 ENTRY
C0102	025	PHOTO SMOKE	3RD FL STAIR C2 LANDING
C0102	026		
C0102	027		
C0102	028		
C0102	029		
C0102	030		
C0102	031	HEAT DETECT.	4TH FL STAIR C1 ENTRY
C0102	032	PHOTO SMOKE	4TH FL STAIR C1 LANDING
C0102	033	DUCT DETECT.	SPF-AIR PSI DRY ZONE SC-D-8 PUMP RM C12
C0102	034	HEAT DETECT	4TH FL STAIR C2 ENTRY
C0102	035	PHOTO SMOKE	4TH FL STAIR C2 LANDING
C0102	036		
C0102	037		
C0102	038		
C0102	039		
C0102	040		
C0102	041	HEAT DETECT	5TH FL STAIR C1 ENTRY
C0102	042	PHOTO SMOKE	5TH FL STAIR C1 LANDING
C0102	043	HEAT DETECT.	5TH FL STAIR C2 ENTRY
C0102	044	PHOTO SMOKE	5TH FL STAIR C2 LANDING
C0102	045		
C0102	046		
C0102	047		
C0102	048		
C0102	049		
C0102	050		
C0102	051	PHOTO SMOKE	6TH FL STAIR C1 ENTRY
C0102	052	PHOTO SMOKE	6TH FL STAIR C2 ENTRY
C0102	053	PHOTO SMOKE	6TH FL STAIR C3 ENTRY
C0102	054		
C0102	055		
C0102	056		
C0102	057		
C0102	058		
C0102	059		
C0102	060		
C0102	061	PHOTO SMOKE	7TH FL STAIR C1 ENTRY
C0102	062	PHOTO SMOKE	7TH FL STAIR C2 ENTRY
C0102	063	PHOTO SMOKE	7TH FL STAIR C3 ENTRY
C0102	064		
C0102	065		
C0102	066		
C0102	067		
C0102	068		
C0102	069		
C0102	070		
C0102	071	PHOTO SMOKE	8TH FL STAIR C1 ENTRY
C0102	072	PHOTO SMOKE	8TH FL STAIR C2 ENTRY
C0102	073	PHOTO SMOKE	8TH FL STAIR C3 ENTRY
C0102	074		
C0102	075		
C0102	076		
C0102	077		
C0102	078		
C0102	079		
C0102	080		
C0102	081	PHOTO SMOKE	9TH FL STAIR C1 ENTRY
C0102	082	PHOTO SMOKE	9TH FL STAIR C2 ENTRY
C0102	083	PHOTO SMOKE	9TH FL STAIR C3 ENTRY
C0102	084	PHOTO SMOKE	9TH FL TOP OF STAIR C3
C0102	085		
C0102	086		
C0102	087		
C0102	088		
C0102	089		
C0102	090		
C0102	091	PHOTO SMOKE	10TH FL STAIR C1 ENTRY
C0102	092	PHOTO SMOKE	10TH FL STAIR C2 ENTRY
C0102	093	PHOTO SMOKE	10TH TOP OF STAIR C1
C0102	094	PHOTO SMOKE	10TH TOP OF STAIR C2
C0102	095		
C0102	096		
C0102	097		
C0102	098		
C0102	099		
C0102	100		ADDRESSES CONTINUE TO 125
C0102	101		
C0102	102		
C0102	103		
C0102	104		
C0102	105		
C0102	106		
C0102	107		
C0102	108		
C0102	109		
C0102	110		
C0102	111		
C0102	112		
C0102	113		
C0102	114		
C0102	115		
C0102	116		
C0102	117		
C0102	118		
C0102	119		
C0102	120		
C0102	121		
C0102	122		
C0102	123		
C0102	124		
C0102	125		

FACP-C1 - EST (EDWARDS EST4) SYSTEM
CARD #03-SLC LOOP #1

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0102	126	PULL STATION	FCC C102
C0102	127	OUTPUT MODULE (CR)	OUTPUT TO BMS FOR GEF-C CONTROL
C0102	128		
C0102	129		
C0102	130		
C0102	131	OUTPUT MODULE (CRH)	PRESS. FAN SPF-1C2 CONTROL
C0102	132	DUAL INPUT MOD (CT2)	PRESS. FAN SPF-1C2 ON-OFF STATUS
C0102	133		PRESS. FAN SPF-1C2 FAULT
C0102	134	OUTPUT MODULE (CRH)	MOTOR DAMPER MD-1 CONTROL
C0102	135	DUAL INPUT MOD (CT2)	MOTOR DAMPER MD-1 OPEN STATUS
C0102	136		MOTOR DAMPER MD-1 CLOSED STATUS
C0102	137		
C0102	138		
C0102	139		
C0102	140		
C0102	141	OUTPUT MODULE (CRH)	PRESS. FAN SPF-1C1 CONTROL
C0102	142	DUAL INPUT MOD (CT2)	PRESS. FAN SPF-1C1 ON-OFF STATUS
C0102	143		PRESS. FAN SPF-1C1 FAULT
C0102	144	OUTPUT MODULE (CRH)	MOTOR DAMPER MD-2 CONTROL
C0102	145	DUAL INPUT MOD (CT2)	MOTOR DAMPER MD-2 OPEN STATUS
C0102	146		MOTOR DAMPER MD-2 CLOSED STATUS
C0102	147		
C0102	148		
C0102	149		
C0102	150		
C0102	151	OUTPUT MODULE (CRH)	PRESS. FAN SPF-1C3 CONTROL
C0102	152	DUAL INPUT MOD (CT2)	PRESS. FAN SPF-1C3 ON-OFF STATUS
C0102	153		PRESS. FAN SPF-1C3 FAULT
C0102	154	OUTPUT MODULE (CRH)	MOTOR DAMPER MD-3 CONTROL
C0102	155	DUAL INPUT MOD (CT2)	MOTOR DAMPER MD-3 OPEN STATUS
C0102	156		MOTOR DAMPER MD-3 CLOSED STATUS
C0102	157		
C0102	158		
C0102	159		
C0102	160		
C0102	161	DUAL INPUT MOD (CT2)	WATERFLOW- 1ST FL STAIR C1
C0102	162		VALVE TAMPER -1ST FL STAIR C1
C0102	163	DUAL INPUT MOD (CT2)	WATERFLOW- 2ND FL STAIR C1
C0102	164		VALVE TAMPER - 2ND FL STAIR C1
C0102	165	DUAL INPUT MOD (CT2)	WATERFLOW- 3RD FL STAIR C1
C0102	166		VALVE TAMPER - 3RD FL STAIR C1
C0102	167		
C0102	168		
C0102	169		
C0102	170		
C0102	171	DUAL INPUT MOD (CT2)	WATERFLOW- 6TH FL STAIR C1
C0102	172		VALVE TAMPER - 6TH FL STAIR C1
C0102	173	DUAL INPUT MOD (CT2)	WATERFLOW- 7TH FL STAIR C1
C0102	174		VALVE TAMPER - 7TH FL STAIR C1
C0102	175	DUAL INPUT MOD (CT2)	WATERFLOW- 7TH FL STAIR C1
C0102	176		VALVE TAMPER - 7TH FL STAIR C1
C0102	177	DUAL INPUT MOD (CT2)	WATERFLOW- 8TH FL STAIR C1
C0102	178		VALVE TAMPER - 8TH FL STAIR C1
C0102	179	DUAL INPUT MOD (CT2)	WATERFLOW- 9TH FL STAIR C1
C0102	180		VALVE TAMPER - 9TH FL STAIR C1
C0102	181	DUAL INPUT MOD (CT2)	WATERFLOW- 10TH FL STAIR C1
C0102	182		VALVE TAMPER - 10TH FL STAIR C1
C0102	183		
C0102	184		
C0102	185		
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C0102	187		
C0102	188		
C0102	189		
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C0102	221		
C0102	222		
C0102	223		
C0102	224		
C0102	225		ADDRESSES CONTINUE TO 250
C0102	226		
C0102	227		
C0102	228		
C0102	229		
C0102	230		
C0102	231		
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C0102	249		
C0102	250		

FACP-C1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #2

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0102	251	PHOTO SMOKE	1ST FL ELEVLOBBY C105
C0102	252	PHOTO SMOKE	1ST FL ELEC CLOSET C105A
C0102	253	PHOTO SMOKE	1ST FL ELEVLOBBY A115
C0102	254		
C0102	255		
C0102	256		
C0102	257		
C0102	258	PHOTO SMOKE	2ND FL ELEVLOBBY C201
C0102	259	PHOTO SMOKE	2ND FL ELEC CLOSET C201A
C0102	260		
C0102	261		
C0102	262		
C0102	263		
C0102	264	PHOTO SMOKE	3RD FL ELEVLOBBY C301
C0102	265	PHOTO SMOKE	3RD FL ELEC CLOSET C301A
C0102	266		
C0102	267		
C0102	268		
C0102	269		
C0102	270	PHOTO SMOKE	4TH FL ELEVLOBBY C401
C0102	271	PHOTO SMOKE	4TH FL ELEC CLOSET C401A
C0102	272		
C0102	273		
C0102	274		
C0102	275		
C0102	276		
C0102	277		
C0102	278		
C0102	279		
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C0102	363		
C0102	364		
C0102	365		CONTINUES TO ADDRESS 375
C0102	366		
C0102	367		
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C0102	372		
C0102	373		
C0102	374		
C0102	375		

FACP-C1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #2

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0102	376	DUAL INPUT MOD (CT2)	DCVA#1 TAMPER FIRE WTR C110
C0102	377		DCVA#2 TAMPER FIRE WTR C110
C0102	378	DUAL INPUT MOD (CT2)	MAN VALVE TAMPER FIRE PUMP C121
C0102	379		OS&Y VALVE TAMPER FIRE PUMP C121
C0102	380	DUAL INPUT MOD (CT2)	BYPASS #1 TAMPER FIRE PUMP C121
C0102	381		BYPASS #2 TAMPER FIRE PUMP C121
C0102	382	DUAL INPUT MOD (CT2)	FLOWTEST #1 TAMPER FIRE PUMP C121
C0102	383		FLOWTEST #2 TAMPER FIRE PUMP C121
C0102	384		
C0102	385		
C0102	386	DUAL INPUT MOD (CT2)	STANDPIPE WATERFLOWFIRE PUMP C121
C0102	387		STANDPIPE VALVE TAMPER FIRE PUMP C121
C0102	388		
C0102	389		
C0102	390	DUAL INPUT MOD (CT2)	WATERFLOWDRY ZONE 1C-D-1 PUMP RM C12
C0102	391		VALVE TAMP DRY ZONE 1C-D-1 PUMP RM C121
C0102	392	DUAL INPUT MOD (CT2)	LOWAIR PSI DRY ZONE 1C-D-1 PUMP RM C121
C0102	393		HIGH AIR PSI DRY ZONE 1C-D-1 PUMP RM C121
C0102	394	DUAL INPUT MOD (CT2)	WATERFLOWDRY ZONE 2C-D-5 PUMP RM C121
C0102	395		VALVE TAMP DRY ZONE 2C-D-5 PUMP RM C121
C0102	396	DUAL INPUT MOD (CT2)	LOWAIR PSI DRY ZONE 2C-D-5 PUMP RM C121
C0102	397		HIGH AIR PSI DRY ZONE 2C-D-5 PUMP RM C121
C0102	398	DUAL INPUT MOD (CT2)	WATERFLOWDRY ZONE 3C-D-9 PUMP RM C121
C0102	399		VALVE TAMP DRY ZONE 3C-D-9 PUMP RM C121
C0102	400	DUAL INPUT MOD (CT2)	LOWAIR PSI DRY ZONE 3C-D-9 PUMP RM C121
C0102	401		HIGH AIR PSI DRY ZONE 3C-D-9 PUMP RM C121
C0102	402	DUAL INPUT MOD (CT2)	WATERFLOWDRY ZONE 4C-D-12 PUMP RM C12
C0102	403		VALVE TAMP DRY ZONE 4C-D-12 PUMP RM C12
C0102	404	DUAL INPUT MOD (CT2)	LOWAIR PSI DRY ZONE 4C-D-12 PUMP RM C12
C0102	405		HIGH AIR PSI DRY ZONE 4C-D-12 PUMP RM C12
C0102	406	DUAL INPUT MOD (CT2)	WATERFLOWDRY ZONE 5C-D-14 PUMP RM C12
C0102	407		VALVE TAMP DRY ZONE 5C-D-14 PUMP RM C12
C0102	408	DUAL INPUT MOD (CT2)	LOWAIR PSI DRY ZONE 5C-D-14 PUMP RM C12
C0102	409		HIGH AIR PSI DRY ZONE 5C-D-14 PUMP RM C12
C0102	410		
C0102	411	INPUT MODULE (CT1)	WATERTANK FILL VALVE TAMPR PUMP RM C121
C0102	412	DUAL INPUT MOD (CT2)	WATER TANK LOW FIRE WATER STOR C122
C0102	413		WATER TANK HIGH FIRE WATER STOR C122
C0102	414		
C0102	415		
C0102	416	DUAL INPUT MOD (CT2)	FIRE PUMP TROUBLE FIRE PUMP C121
C0102	417		FIRE PUMP NOT IN AUTO FIRE PUMP C121
C0102	418	DUAL INPUT MOD (CT2)	FIRE PUMP POWER FAIL FIRE PUMP C121
C0102	419		FIRE PUMP PHASE REVERSAL FIRE PUMP C121
C0102	420		
C0102	421		
C0102	422	DUAL INPUT MOD (CT2)	GENERATOR TROUBLE C112
C0102	423		GENERATOR RUNNING C112
C0102	424		
C0102	425		
C0102	426	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-1 / MFC-C1 / FCC C102
C0102	427		SPEAKER CKT (SPARE) / MFC-C1 / FCC C102
C0102	428	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-2 / MFC-C1 / FCC C102
C0102	429		SPEAKER CKT (SPARE) / MFC-C1 / FCC C102
C0102	430	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-3 / MFC-C1 / FCC C102
C0102	431		SPEAKER CKT (SPARE) / MFC-C1 / FCC C102
C0102	432	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-4 / MFC-C1 / FCC C102
C0102	433		SPEAKER CKT (SPARE) / MFC-C1 / FCC C102
C0102	434	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-5 / MFC-C1 / FCC C102
C0102	435		SPEAKER CKT (SPARE) / MFC-C1 / FCC C102
C0102	436		
C0102	437		
C0102	438	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-1 / MFC-C2 / FCC C102
C0102	439		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	440	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-1 / MFC-C2 / FCC C102
C0102	441		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	442	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-1 / MFC-C2 / FCC C102
C0102	443		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	444	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-2 / MFC-C2 / FCC C102
C0102	445		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	446	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-2 / MFC-C2 / FCC C102
C0102	447		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	448	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-2 / MFC-C2 / FCC C102
C0102	449		SPEAKER CKT (SPARE) / MFC-C2 / FCC C102
C0102	450	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-3 / MFC-C3 / FCC C102
C0102	451		SPEAKER CKT (SPARE) / MFC-C3 / FCC C102
C0102	452	SPEAKER ZONE (CC2A)	SPEAKER CKT SC-3 / MFC-C3 / FCC C102
C0102	453		SPEAKER CKT (SPARE) / MFC-C3 / FCC C102
C0102	454	SPEAKER ZONE (CC2A)	SPEAKER CKT SC4-1 / MFC-C3 / FCC C102
C0102	455		SPEAKER CKT (SPARE) / MFC-C3 / FCC C102
C0102	456	SPEAKER ZONE (CC2A)	SPEAKER CKT SC4-2 / MFC-C3 / FCC C102
C0102	457		SPEAKER CKT (SPARE) / MFC-C3 / FCC C102
C0102	458		
C0102	459		
C0102	460		
C0102	461		
C0102	462	DUAL INPUT MOD (CT2)	TWO WAY COMM TELCO TBL FCC C102
C0102	463		TWO WAY COMM POWER TBL FCC C102
C0102	464		
C0102	465		
C0102	466	DUAL INPUT MOD (CT2)	DAS AC FAIL FCC C102
C0102	467		DAS CHARGER FAIL FCC C102
C0102	468	DUAL INPUT MOD (CT2)	DAS ANTENNA FAIL FCC C102
C0102	469		DAS BOOSTER FAIL FCC C102
C0102	470	DUAL INPUT MOD (CT2)	DAS BATTERY FAIL FCC C102
C0102	471		DAS (SPARE) FCC C102
C0102	472		
C0102	473		
C0102	474	OUTPUT MODULE (CRH)	4TH FL FSD CONTROL ELEC CLOSET C401A
C0102	475		
C0102	476		
C0102	477		
C0102	478		
C0102	479		
C0102	480		
C0102	481		
C0102	482		
C0102	483		
C0102	484		
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C0102	486		
C0102	487		
C0102	488		
C0102	489		
C0102	490		CONTINUES TO ADDRESS 500
C0102	491		
C0102	492		
C0102	493		
C0102	494		
C0102	495		
C0102	496		
C0102	497		
C0102	498		
C0102	499		
C0102	500		

FACP-C2 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0202	001	PHOTO SMOKE	5TH FL ELEVLOBBY C501
C0202	002	PHOTO SMOKE	5TH FL ELEC CLOSET C501A
C0202	003	PHOTO SMOKE	5TH FL ELEVCTRL RM C504
C0202	004	HEAT DETECT.	5TH FL ELEVCTRL RM C504
C0202	005	HEAT DETECT.	5TH FL ELEVCTRL RM C504
C0202	006	DUCT DETECT.	5TH FL FSD AT DOAS-1
C0202	007	DUCT DETECT.	5TH FL FSD AT DOAS-1
C0202	008	DUCT DETECT.	5TH FL FSD AT DOAS-2
C0202	009	DUCT DETECT.	5TH FL FSD AT DOAS-2
C0202	010		
C0202	011		
C0202	012		
C0202	013		
C0202	014		
C0202	015		
C0202	016	PHOTO SMOKE	6TH FL ELEVLOBBY C601
C0202	017	PHOTO SMOKE	6TH FL ELEC CLOSET C601A
C0202	018	DUCT DETECT.	6TH FL FSD AT ELEC CLOSET C607
C0202	019	DUCT DETECT.	6TH FL FSD AT ELEC CLOSET C607
C0202	020		
C0202	021		
C0202	022		
C0202	023		
C0202	024	PHOTO SMOKE	7TH FL ELEVLOBBY C701
C0202	025	PHOTO SMOKE	7TH FL ELEC CLOSET C701A
C0202	026	DUCT DETECT.	7TH FL FSD AT ELEC CLOSET C707
C0202	027	DUCT DETECT.	7TH FL FSD AT ELEC CLOSET C707
C0202	028		
C0202	029		
C0202	030		
C0202	031		
C0202	032	PHOTO SMOKE	8TH FL ELEVLOBBY C801
C0202	033	PHOTO SMOKE	8TH FL ELEC CLOSET C801A
C0202	034	DUCT DETECT.	8TH FL FSD AT ELEC CLOSET C807
C0202	035	DUCT DETECT.	8TH FL FSD AT ELEC CLOSET C807
C0202	036		
C0202	037		
C0202	038		
C0202	039		
C0202	040	PHOTO SMOKE	9TH FL ELEVLOBBY C901
C0202	041	PHOTO SMOKE	9TH FL ELEC CLOSET C901A
C0202	042		
C0202	043		
C0202	044		
C0202	045		
C0202	046	PHOTO SMOKE	10TH FL ELEVLOBBY C1001
C0202	047	PHOTO SMOKE	10TH FL ELEC CLOSET C1001A
C0202	048	PHOTO SMOKE	TOP OF ELEVC5E-1 HOISTWAY
C0202	049	HEAT DETECT.	TOP OF ELEVC5E-1 HOISTWAY
C0202	050	HEAT DETECT.	TOP OF ELEVC5E-1 HOISTWAY
C0202	051		
C0202	052	PHOTO SMOKE	TOP OF ELEVC5E-2 HOISTWAY
C0202	053	HEAT DETECT.	TOP OF ELEVC5E-2 HOISTWAY
C0202	054	HEAT DETECT.	TOP OF ELEVC5E-2 HOISTWAY
C0202	055		
C0202	056	DUCT DETECT.	10TH FL FSD AT ELEC CLOS C1007
C0202	057	DUCT DETECT.	10TH FL FSD AT ELEC CLOS C1007
C0202	058		
C0202	059		
C0202	060		
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C0202	099		
C0202	100		ADDRESSES CONTINUE TO 125
C0202	101		
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C0202	106		
C0202	107		
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C0202	122		
C0202	123		
C0202	124		
C0202	125		

FACP-C2 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEVICE ADDRESS	DEVICE TYPE	DESCRIPTION
C0202	126	SPEAKER ZONE (CC2A)	SPEAKER CKT SC5-1 / MFC-C4 / ELEC C601A
C0202	127		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	128	SPEAKER ZONE (CC2A)	SPEAKER CKT SC5-2 / MFC-C4 / ELEC C601A
C0202	129		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	130	SPEAKER ZONE (CC2A)	SPEAKER CKT SC6-1 / MFC-C4 / ELEC C601A
C0202	131		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	132	SPEAKER ZONE (CC2A)	SPEAKER CKT SC6-2 / MFC-C4 / ELEC C601A
C0202	133		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	134	SPEAKER ZONE (CC2A)	SPEAKER CKT SC7-1 / MFC-C4 / ELEC C601A
C0202	135		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	136	SPEAKER ZONE (CC2A)	SPEAKER CKT SC7-2 / MFC-C4 / ELEC C601A
C0202	137		SPEAKER CKT (SPARE) / MFC-C4 / ELEC C601A
C0202	138	SPEAKER ZONE (CC2A)	SPEAKER CKT SC8-1 / MFC-C5 / ELEC C601A
C0202	139		SPEAKER CKT (SPARE) / MFC-C5 / ELEC C601A
C0202	140	SPEAKER ZONE (CC2A)	SPEAKER CKT SC8-2 / MFC-C5 / ELEC C601A
C0202	141		SPEAKER CKT (SPARE) / MFC-C5 / ELEC C601A
C0202	142	SPEAKER ZONE (CC2A)	SP

FACP-A1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0102	001	PHOTO SMOKE	FCC A107
A0102	002	PHOTO SMOKE	1ST FL STAR A1 ENTRY
A0102	003	PHOTO SMOKE	1ST FL STAR A2 ENTRY
A0102	004		
A0102	005		
A0102	006		
A0102	007		
A0102	008		
A0102	009		
A0102	010		
A0102	011	HEAT DETECT.	2ND FL STAR A1 ENTRY
A0102	012	PHOTO SMOKE	2ND FL STAR A1 LANDING
A0102	013	HEAT DETECT.	2ND FL STAR A2 ENTRY
A0102	014	PHOTO SMOKE	2ND FL STAR A2 LANDING
A0102	015		
A0102	016		
A0102	017		
A0102	018		
A0102	019		
A0102	020		
A0102	021	HEAT DETECT.	3RD FL STAR A1 ENTRY
A0102	022	PHOTO SMOKE	3RD FL STAR A1 LANDING
A0102	023	DUCT DETECT.	SPF-1A1 SUPPLY
A0102	024	HEAT DETECT.	3RD FL STAR A2 ENTRY
A0102	025	PHOTO SMOKE	3RD FL STAR A2 LANDING
A0102	026		
A0102	027		
A0102	028		
A0102	029		
A0102	030		
A0102	031	HEAT DETECT.	4TH FL STAR A1 ENTRY
A0102	032	PHOTO SMOKE	4TH FL STAR A1 LANDING
A0102	033	HEAT DETECT.	4TH FL STAR A2 ENTRY
A0102	034	PHOTO SMOKE	4TH FL STAR A2 LANDING
A0102	035		
A0102	036		
A0102	037		
A0102	038		
A0102	039		
A0102	040		
A0102	041	HEAT DETECT.	5TH FL STAR A1 ENTRY
A0102	042	PHOTO SMOKE	5TH FL STAR A1 LANDING
A0102	043	HEAT DETECT.	5TH FL STAR A2 ENTRY
A0102	044	PHOTO SMOKE	5TH FL STAR A2 LANDING
A0102	045	DUCT DETECT.	SPF-1A2 SUPPLY
A0102	046		
A0102	047		
A0102	048		
A0102	049		
A0102	050		
A0102	051	PHOTO SMOKE	6TH FL STAR A1 ENTRY
A0102	052	PHOTO SMOKE	6TH FL STAR A2 ENTRY
A0102	053		
A0102	054		
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A0102	056		
A0102	057		
A0102	058		
A0102	059		
A0102	060		
A0102	061	PHOTO SMOKE	7TH FL STAR A1 ENTRY
A0102	062	PHOTO SMOKE	7TH FL STAR A2 VESTIBULE
A0102	063	PHOTO SMOKE	7TH FL STAR A2 VEST WENTRY
A0102	064	PHOTO SMOKE	7TH FL STAR A2 VEST E ENTRY
A0102	065		
A0102	066		
A0102	067		
A0102	068		
A0102	069		
A0102	070		
A0102	071	PHOTO SMOKE	8TH FL STAR A1 ENTRY
A0102	072	PHOTO SMOKE	8TH FL STAR A2 ENTRY
A0102	073		
A0102	074		
A0102	075		
A0102	076		
A0102	077		
A0102	078		
A0102	079		
A0102	080		
A0102	081		
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A0102	124		
A0102	125		

FACP-A1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0102	126	PULL STATION	FCC A107
A0102	127	OUTPUT MODULE (CR)	OUTPUT TO BMS FOR GARAGE FAN CONTROL
A0102	128		
A0102	129		
A0102	130		
A0102	131	OUTPUT MODULE (CRH)	PRESS. FAN SPF-1A1 CONTROL
A0102	132	DUAL INPUT MOD (CT2)	PRESS. FAN SPF-1A1 ON-OFF STATUS
A0102	133		PRESS. FAN SPF-1A1 FAULT
A0102	134	OUTPUT MODULE (CRH)	MOTOR DAMPER MD-3 CONTROL
A0102	135	DUAL INPUT MOD (CT2)	MOTOR DAMPER MD-3 OPEN STATUS
A0102	136		MOTOR DAMPER MD-3 CLOSED STATUS
A0102	137		
A0102	138		
A0102	139		
A0102	140		
A0102	141	OUTPUT MODULE (CRH)	PRESS. FAN SPF-1A2 CONTROL
A0102	142	DUAL INPUT MOD (CT2)	PRESS. FAN SPF-1A2 ON-OFF STATUS
A0102	143		PRESS. FAN SPF-1A2 FAULT
A0102	144	OUTPUT MODULE (CRH)	MOTOR DAMPER MD-4 CONTROL
A0102	145	DUAL INPUT MOD (CT2)	MOTOR DAMPER MD-4 OPEN STATUS
A0102	146		MOTOR DAMPER MD-4 CLOSED STATUS
A0102	147		
A0102	148		
A0102	149		
A0102	150	DUAL INPUT MOD (CT2)	TWO WAY COM@TELCO TBL FCC A107
A0102	151		TWO WAY COM@POWER TBL FCC A107
A0102	152		
A0102	153		
A0102	154	DUAL INPUT MOD (CT2)	DAS AC FAIL FCC A107
A0102	155		DAS CHARGER FAIL FCC A107
A0102	156	DUAL INPUT MOD (CT2)	DAS ANTENNA FAIL FCC A107
A0102	157		DAS BOOSTER FAIL FCC A107
A0102	158	DUAL INPUT MOD (CT2)	DAS BATTERY FAIL FCC A107
A0102	159		DAS (SPARE) FCC A107
A0102	160		
A0102	161		
A0102	162		
A0102	163		
A0102	164	DUAL INPUT MOD (CT2)	WATERFLOW- 1ST FL STAIR A1
A0102	165		VALVE TAMPER - 1ST FL STAIR A1
A0102	166	DUAL INPUT MOD (CT2)	WATERFLOW- 2ND FL STAIR A1
A0102	167		VALVE TAMPER - 2ND FL STAIR A1
A0102	168	DUAL INPUT MOD (CT2)	WATERFLOW- 3RD FL STAIR A1
A0102	169		VALVE TAMPER - 3RD FL STAIR A1
A0102	170		
A0102	171		
A0102	172		
A0102	173		
A0102	174	DUAL INPUT MOD (CT2)	WATERFLOW- 6TH FL STAIR A1
A0102	175		VALVE TAMPER - 6TH FL STAIR A1
A0102	176	DUAL INPUT MOD (CT2)	WATERFLOW- 7TH FL STAIR A1
A0102	177		VALVE TAMPER - 7TH FL STAIR A1
A0102	178	DUAL INPUT MOD (CT2)	WATERFLOW- 7TH FL STAIR A1
A0102	179		VALVE TAMPER - 7TH FL STAIR A1
A0102	180	DUAL INPUT MOD (CT2)	WATERFLOW- 8TH FL STAIR A1
A0102	181		VALVE TAMPER - 8TH FL STAIR A1
A0102	182	DUAL INPUT MOD (CT2)	WATERFLOW- 9TH FL STAIR A1
A0102	183		VALVE TAMPER - 9TH FL STAIR A1
A0102	184		
A0102	185		
A0102	186		
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A0102	195		ADDRESSES CONTINUE TO 250
A0102	196		
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A0102	250		

FACP-A1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #2

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0102	251	PHOTO SMOKE	1ST FL ELEVLOBBY A108
A0102	252	PHOTO SMOKE	1ST FL ELEVA-3 PKG SIDE
A0102	253	PHOTO SMOKE	1ST FL ELEC CLOSET A108A
A0102	254		
A0102	255		
A0102	256		
A0102	257		
A0102	258		
A0102	259		
A0102	260	PHOTO SMOKE	2ND FL ELEVLOBBY A201
A0102	261	HEAT DETECT.	2ND FL ELEVA-3 PKG SIDE
A0102	262	PHOTO SMOKE	2ND FL ELEC CLOSET A201A
A0102	263		
A0102	264		
A0102	265		
A0102	266		
A0102	267		
A0102	268		
A0102	269		
A0102	270	PHOTO SMOKE	3RD FL ELEVLOBBY A301
A0102	271	HEAT DETECT.	3RD FL ELEVA-3 PKG SIDE
A0102	272	PHOTO SMOKE	3RD FL ELEC CLOSET A301A
A0102	273		
A0102	274		
A0102	275		
A0102	276		
A0102	277		
A0102	278	PHOTO SMOKE	4TH FL ELEVLOBBY A401
A0102	279	HEAT DETECT.	4TH FL ELEVA-3 PKG SIDE
A0102	280	PHOTO SMOKE	4TH FL ELEC CLOSET A401A
A0102	281		
A0102	282		
A0102	283		
A0102	284		
A0102	285		
A0102	286		
A0102	287		
A0102	288		
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A0102	375		

FACP-A1 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #2

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0102	376	DUAL INPUT MOD (CT2)	MAIN VALVE TAMPER FIRE PUMP A117
A0102	377		OS&Y VALVE TAMPER FIRE PUMP A117
A0102	378	DUAL INPUT MOD (CT2)	BYPASS #1 TAMPER FIRE PUMP A117
A0102	379		BYPASS #2 TAMPER FIRE PUMP A117
A0102	380	DUAL INPUT MOD (CT2)	FLOWTEST #1 TAMPER FIRE PUMP A117
A0102	381		FLOWTEST #2 TAMPER FIRE PUMP A117
A0102	382		
A0102	383		
A0102	384	DUAL INPUT MOD (CT2)	STANDPIPE WATERFLOW/FIRE PUMP A117
A0102	385		STANDPIPE VALVE TAMPER FIRE PUMP A117
A0102	386		
A0102	387		
A0102	388	DUAL INPUT MOD (CT2)	WATERFLOW/DRY ZONE 1A-D-3 PUMP RM A117
A0102	389		VALVE TAMP/ DRY ZONE 1A-D-3 PUMP RM A117
A0102	390	DUAL INPUT MOD (CT2)	LOW AIR PSI DRY ZONE 1A-D-3 PUMP RM A117
A0102	391		HIGH AIR PSI DRY ZONE 1A-D-3 PUMP RM A117
A0102	392	DUAL INPUT MOD (CT2)	WATERFLOW/DRY ZONE 2A-D-7 PUMP RM A117
A0102	393		VALVE TAMP/ DRY ZONE 2A-D-7 PUMP RM A117
A0102	394	DUAL INPUT MOD (CT2)	LOW AIR PSI DRY ZONE 2A-D-7 PUMP RM A117
A0102	395		HIGH AIR PSI DRY ZONE 2A-D-7 PUMP RM A117
A0102	396	DUAL INPUT MOD (CT2)	WATERFLOW/DRY ZONE 3A-D-11 PUMP RM A117
A0102	397		VALVE TAMP/ DRY ZONE 3A-D-11 PUMP RM A117
A0102	398	DUAL INPUT MOD (CT2)	LOW AIR PSI DRY ZONE 3A-D-11 PUMP RM A117
A0102	399		HIGH AIR PSI DRY ZONE 3A-D-11 PUMP RM A117
A0102	400	DUAL INPUT MOD (CT2)	WATERFLOW/DRY ZONE 4A-D-13 PUMP RM A117
A0102	401		VALVE TAMP/ DRY ZONE 4A-D-13 PUMP RM A117
A0102	402	DUAL INPUT MOD (CT2)	LOW AIR PSI DRY ZONE 4A-D-13 PUMP RM A117
A0102	403		HIGH AIR PSI DRY ZONE 4A-D-13 PUMP RM A117
A0102	404	DUAL INPUT MOD (CT2)	WATERFLOW/DRY ZONE 5A-D-15 PUMP RM A117
A0102	405		VALVE TAMP/ DRY ZONE 5A-D-15 PUMP RM A117
A0102	406	DUAL INPUT MOD (CT2)	LOW AIR PSI DRY ZONE 5A-D-15 PUMP RM A117
A0102	407		HIGH AIR PSI DRY ZONE 5A-D-15 PUMP RM A117
A0102	408		
A0102	409	INPUT MODULE (CT1)	WATERTANK FILL VALVE TAMPR PUMP RM A117
A0102	410	DUAL INPUT MOD (CT2)	WATER TANK LOW/FIRE WATER STOR A116
A0102	411		WATER TANK HIGH FIRE WATER STOR A116
A0102	412		
A0102	413		
A0102	414	DUAL INPUT MOD (CT2)	FIRE PUMP TROUBLE FIRE PUMP A117
A0102	415		FIRE PUMP NOT IN AUTO FIRE PUMP A117
A0102	416	DUAL INPUT MOD (CT2)	FIRE PUMP POWER FAIL FIRE PUMP A117
A0102	417		FIRE PUMP PHASE REVERSAL FIRE PUMP A117
A0102	418		
A0102	419		
A0102	420	DUAL INPUT MOD (CT2)	GENERATOR TROUBLE A120
A0102	421		GENERATOR RUNNING A120
A0102	422		
A0102	423		
A0102	424	SPEAKER ZONE (CC2A)	SPEAKER CKT SA-1 / MFC-A1 / FCC A107
A0102	425		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	426	SPEAKER ZONE (CC2A)	SPEAKER CKT SA-2 / MFC-A1 / FCC A107
A0102	427		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	428	SPEAKER ZONE (CC2A)	SPEAKER CKT SA-3 / MFC-A1 / FCC A107
A0102	429		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	430	SPEAKER ZONE (CC2A)	SPEAKER CKT SA1-1 / MFC-A1 / FCC A107
A0102	431		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	432	SPEAKER ZONE (CC2A)	SPEAKER CKT SA1-2 / MFC-A1 / FCC A107
A0102	433		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	434	SPEAKER ZONE (CC2A)	SPEAKER CKT SA1-3 / MFC-A1 / FCC A107
A0102	435		SPEAKER CKT (SPARE) / MFC-A1 / FCC A107
A0102	436	SPEAKER ZONE (CC2A)	SPEAKER CKT SA2-1 / MFC-A2 / FCC A107
A0102	437		SPEAKER CKT (SPARE) / MFC-A2 / FCC A107
A0102	438	SPEAKER ZONE (CC2A)	SPEAKER CKT SA2-2 / MFC-A2 / FCC A107
A0102	439		SPEAKER CKT (SPARE) / MFC-A2 / FCC A107
A0102	440	SPEAKER ZONE (CC2A)	SPEAKER CKT SA2-3 / MFC-A2 / FCC A107
A0102	441		SPEAKER CKT (SPARE) / MFC-A2 / FCC A107
A0102	442	SPEAKER ZONE (CC2A)	SPEAKER CKT SA3-1 / MFC-A2 / FCC A107
A0102	443		SPEAKER CKT (SPARE) / MFC-A2 / FCC A107
A0102	444	SPEAKER ZONE (CC2A)	SPEAKER CKT SA3-2 / MFC-A2 / FCC A107
A0102	445		SPEAKER CKT (SPARE) / MFC-A2 / FCC A107
A0102	446		
A0102	447		
A0102	448	SPEAKER ZONE (CC2A)	SPEAKER CKT SA4-1 / MFC-A3 / FCC A107
A0102	449		SPEAKER CKT (SPARE) / MFC-A3 / FCC A107
A0102	450	SPEAKER ZONE (CC2A)	SPEAKER CKT SA4-2 / MFC-A3 / FCC A107
A0102	451		SPEAKER CKT (SPARE) / MFC-A3 / FCC A107
A0102	452	SPEAKER ZONE (CC2A)	SPEAKER CKT SA5-1 / MFC-A3 / FCC A107
A0102	453		SPEAKER CKT (SPARE) / MFC-A3 / FCC A107
A0102	454	SPEAKER ZONE (CC2A)	SPEAKER CKT SA5-2 / MFC-A3 / FCC A107
A0102	455		SPEAKER CKT (SPARE) / MFC-A3 / FCC A107
A0102	456		
A0102	457		
A0102	458		
A0102	459		
A0102	460	SYNC SIGNAL MOD (CC1S)	NAC1 TRIP/SYNC FCC C102
A0102	461	SYNC SIGNAL MOD (CC1S)	NAC2 TRIP/SYNC FCC A107
A0102	462	SYNC SIGNAL MOD (CC1S)	NAC3 TRIP/SYNC ELEC CLOSET C201A
A0102	463	SYNC SIGNAL MOD (CC1S)	NAC4 TRIP/SYNC ELEC CLOSET A201A
A0102	464	SYNC SIGNAL MOD (CC1S)	NAC5-1,-2 TRIP/SYNC ELEC CLOSET C301A
A0102	465	SYNC SIGNAL MOD (CC1S)	NAC5-3,-4 TRIP/SYNC ELEC CLOSET C301A
A0102	466	SYNC SIGNAL MOD (CC1S)	NAC6-1,-2 TRIP/SYNC ELEC CLOSET A301A
A0102	467	SYNC SIGNAL MOD (CC1S)	NAC6-3,-4 TRIP/SYNC ELEC CLOSET A301A
A0102	468	SYNC SIGNAL MOD (CC1S)	NAC7 TRIP/SYNC ELEC CLOSET C501A
A0102	469	SYNC SIGNAL MOD (CC1S)	NAC8 TRIP/SYNC ELEC CLOSET A502A
A0102	470	SYNC SIGNAL MOD (CC1S)	NAC9 TRIP/SYNC ELEC CLOSET C801A
A0102	471	SYNC SIGNAL MOD (CC1S)	NAC10 TRIP/SYNC ELEC CLOSET A601A
A0102	472	SYNC SIGNAL MOD (CC1S)	NAC11 TRIP/SYNC ELEC CLOSET C701A
A0102	473	SYNC SIGNAL MOD (CC1S)	NAC12 TRIP/SYNC ELEC CLOSET A701A
A0102	474	SYNC SIGNAL MOD (CC1S)	NAC13 TRIP/SYNC ELEC CLOSET C801A
A0102	475	SYNC SIGNAL MOD (CC1S)	NAC14 TRIP/SYNC ELEC CLOSET A801A
A0102	476	SYNC SIGNAL MOD (CC1S)	NAC15 TRIP/SYNC ELEC CLOSET C801A
A0102	477	SYNC SIGNAL MOD (CC1S)	NAC16 TRIP/SYNC ELEC CLOSET A601A
A0102	478	SYNC SIGNAL MOD (CC1S)	NAC17 TRIP/SYNC ELEC CLOSET C1001A
A0102	479		
A0102	480		
A0102	481		
A0102	482		
A0102	483		
A0102	484		
A0102	485		
A0102	486		
A0102	487		
A0102	488		
A0102	489		
A0102	490	OUTPUT MODULE (CR)	2ND FL SMOKE CURTAIN ELEVA-3 PKG SIDE
A0102	491	OUTPUT MODULE (CR)	3RD FL SMOKE CURTAIN ELEVA-3 PKG SIDE
A0102	492	OUTPUT MODULE (CR)	4TH FL SMOKE CURTAIN ELEVA-3 PKG SIDE
A0102	493		
A0102	494	OUTPUT MODULE (CR)	DOAS-3 SHUTDOWN - 4TH FL BLOCK A
A0102	495		
A0102	496		
A0102	497		
A0102	498		
A0102	499		
A0102	500		

FACP-A2 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0202	001	PHOTO SMOKE	5TH FL ELEVLOBBY A602
A0202	002	PHOTO SMOKE	5TH FL ELEC CLOSET A602A
A0202	003	PHOTO SMOKE	5TH FL ELEVCTRL RM A504
A0202	004	HEAT DETECT.	5TH FL ELEVCTRL RM A504
A0202	005	HEAT DETECT.	5TH FL ELEVCTRL RM A504
A0202	006	HEAT DETECT.	5TH FL ELEVA-3 PKG SIDE
A0202	007		
A0202	008		
A0202	009		
A0202	010		
A0202	011		
A0202	012	PHOTO SMOKE	6TH FL ELEVLOBBY A601
A0202	013	PHOTO SMOKE	6TH FL ELEC CLOSET A601A
A0202	014	PHOTO SMOKE	ELEVA-3 TOP OF HOISTWAY
A0202	015	HEAT DETECT.	ELEVA-3 TOP OF HOISTWAY
A0202	016	HEAT DETECT.	ELEVA-3 TOP OF HOISTWAY
A0202	017		
A0202	018	DUCT DETECT.	6TH FL FSD AT SHAFT AMS-3
A0202	019	DUCT DETECT.	6TH FL FSD AT SHAFT AMS-3
A0202	020		
A0202	021		
A0202	022		
A0202	023		
A0202	024	PHOTO SMOKE	7TH FL ELEVLOBBY A701
A0202	025	PHOTO SMOKE	7TH FL ELEC CLOSET A701A
A0202	026		
A0202	027		
A0202	028	DUCT DETECT.	7TH FL FSD AT NW/OPEN AREA
A0202	029	DUCT DETECT.	7TH FL FSD AT NW/OPEN AREA
A0202	030	DUCT DETECT.	7TH FL FSD AT SHAFT AMS-3
A0202	031	DUCT DETECT.	7TH FL FSD AT SHAFT AMS-3
A0202	032		
A0202	033		
A0202	034		
A0202	035		
A0202	036		
A0202	037		
A0202	038	PHOTO SMOKE	8TH FL ELEVLOBBY A801
A0202	039	PHOTO SMOKE	8TH FL ELEC CLOSET A801A
A0202	040		
A0202	041		
A0202	042	DUCT DETECT.	8TH FL FSD AT SHAFT AMS-4
A0202	043	DUCT DETECT.	8TH FL FSD AT SHAFT AMS-4
A0202	044		
A0202	045		
A0202	046		
A0202	047		
A0202	048		
A0202	049		
A0202	050	PHOTO SMOKE	9TH FL ELEVLOBBY A901
A0202	051	PHOTO SMOKE	9TH FL ELEC CLOSET A901A
A0202	052		
A0202	053		
A0202	054	PHOTO SMOKE	TOP OF ELEVA-1
A0202	055	HEAT DETECT.	TOP OF ELEVA-1
A0202	056	HEAT DETECT.	TOP OF ELEVA-1
A0202	057		
A0202	058	PHOTO SMOKE	TOP OF ELEVA-2
A0202	059	HEAT DETECT.	TOP OF ELEVA-2
A0202	060	HEAT DETECT.	TOP OF ELEVA-2
A0202	061		
A0202	062		
A0202	063	PHOTO SMOKE	TOP OF STAIR A1
A0202	064	PHOTO SMOKE	TOP OF STAIR A2
A0202	065		
A0202	066		
A0202	067	DUCT DETECT.	9TH FL FSD AT SHAFT AMS-4
A0202	068	DUCT DETECT.	9TH FL FSD AT SHAFT AMS-4
A0202	069		
A0202	070		
A0202	071		
A0202	072		
A0202	073		
A0202	074		
A0202	075		
A0202	076		
A0202	077		
A0202	078		
A0202	079		
A0202	080		
A0202	081		
A0202	082		
A0202	083		
A0202	084		
A0202	085		
A0202	086		
A0202	087		
A0202	088		
A0202	089		
A0202	090		
A0202	091		
A0202	092		
A0202	093		
A0202	094		
A0202	095		ADDRESSES CONTINUE TO 125
A0202	096		
A0202	097		
A0202	098		
A0202	099		
A0202	100		
A0202	101		
A0202	102		
A0202	103		
A0202	104		
A0202	105		
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A0202	108		
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A0202	110		
A0202	111		
A0202	112		
A0202	113		
A0202	114		
A0202	115		
A0202	116		
A0202	117		
A0202	118		
A0202	119		
A0202	120		
A0202	121		
A0202	122		
A0202	123		
A0202	124		
A0202	125		

FACP-A2 - EST (EDWARDS EST4) SYSTEM
CARD #02-SLC LOOP #1

ADDRESS PREFIX	DEMCE ADDRESS	DEVICE TYPE	DESCRIPTION
A0202	126	SPEAKER ZONE (CC2A)	SPEAKER CKT SA6-1 / MFC-A4 / ELEC A601A
A0202	127		SPEAKER CKT (SPARE) / MFC-A4 / ELEC A601A
A0202	128	SPEAKER ZONE (CC2A)	SPEAKER CKT SA6-2 / MFC-A4 / ELEC A601A
A0202	129		SPEAKER CKT (SPARE) / MFC-A4 / ELEC A601A
A0202	130	SPEAKER ZONE (CC2A)	SPEAKER CKT SA7-1 / MFC-A4 / ELEC A601A
A0202	131		SPEAKER CKT (SPARE) / MFC-A4 / ELEC A601A
A0202	132	SPEAKER ZONE (CC2A)	SPEAKER CKT SA7-2 / MFC-A4 / ELEC A601A
A0202	133		SPEAKER CKT (SPARE) / MFC-A4 / ELEC A601A
A0202	134		
A0202	135		
A0202	136		

POV
FACP-C1
EST 4 SERIES FIRE ALARM / SMOKE CONTROL PANEL BATTERY CALCULATION

DEVICE DESCRIPTION/MODEL	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Volt Drop Pt to Pt Method	Drop% Pt to Pt Volt	Volt Drop EOL Method	Drop% EOL Volt	Volt Drop LoadCntr Method	Drop% LoadCntr Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
Central Processing Unit (EST 4-CPU)	1									0.2110	0.2110	0.2110	0.2110
Booster Power Supply (EST 4-PPSM)	2									0.0500	0.0500	0.1000	0.1000
Liquid Crystal Display Module (EST 4-LCDLE)	1									0.0400	0.0930	0.0400	0.0930
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
USB Hub Module (EST 4-USBHUB) (one port used)	1									0.1290	0.1290	0.1290	0.1290
Signature Dual Loop Card (EST 3-SDDC1) FULLY LOADED	1									0.2640	0.3360	0.2640	0.3360
Modem/Dialer (EST 3-MODCOM)	1									0.0600	0.0950	0.0600	0.0950
12 Switch (EST 4-24L12S)	2									0.0060	0.0060	0.0120	0.0120
Audio Interface Unit (EST 4-AUDTELS)	1									0.0850	0.1010	0.0850	0.1010
Remote Microphone (EST 4-MIC)	1									0.0080	0.0380	0.0080	0.0380
20 Watt Zoned Amplifier (EST 3-ZA20B)	1									0.0620	1.1200	0.0620	1.1200
95 Watt Zoned Amplifier (EST 3-ZA95)	3									0.0850	5.5400	0.2550	16.6200
Graphic Annunciator CPU card (EST 4-CPUGRPH)	1									0.1230	0.1230	0.1230	0.1230
Power Supply Assembly (EST 3-EVPWRA)	1									0.0000	0.0000	0.0000	0.0000
LED/SWITCH Driver Module Assembly (EST 3-EVDVRA)	3									0.0000	0.0000	0.0000	0.0000
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
AUX POWER		0	#14	0.000	0.00%	0.000	0.00%	0.000	0.00%	**Amps= 0.0000**			
										CURRENT TOTALS (A)-->	**Nac Ckts: 0.000**	1.477	19.106

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	1.477
TOTAL SYSTEM ALARM (A)	19.106
TOTAL SYSTEM STANDBY (AH)	35.45
TOTAL SYSTEM ALARM (AH)	4.78
MINIMUM AH BATTERY REQUIRED	40.225
WITH 20% SPARE CAPACITY (AH)	48.269
BATTERIES PROVIDED AT 12VDC (AH)	(2) 55.0 HOUSED IN "3-RCC7R" CABINET

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
FACP-A1
EST 4 SERIES FIRE ALARM / SMOKE CONTROL PANEL BATTERY CALCULATION

DEVICE DESCRIPTION/MODEL	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Volt Drop Pt to Pt Method	Drop% Pt to Pt Volt	Volt Drop EOL Method	Drop% EOL Volt	Volt Drop LoadCntr Method	Drop% LoadCntr Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
Central Processing Unit (EST 4-CPU)	1									0.2110	0.2110	0.2110	0.2110
Booster Power Supply (EST 4-PPSM)	2									0.0500	0.0500	0.1000	0.1000
Liquid Crystal Display Module (EST 4-LCDLE)	1									0.0400	0.0930	0.0400	0.0930
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
USB Hub Module (EST 4-USBHUB) (one port used)	1									0.1290	0.1290	0.1290	0.1290
Signature Dual Loop Card (EST 3-SDDC1) FULLY LOADED	1									0.2640	0.3360	0.2640	0.3360
Modem/Dialer (EST 3-MODCOM)	1									0.0600	0.0950	0.0600	0.0950
12 Switch (EST 4-24L12S)	2									0.0060	0.0060	0.0120	0.0120
Audio Interface Unit (EST 4-AUDTELS)	1									0.0850	0.1010	0.0850	0.1010
Remote Microphone (EST 4-MIC)	1									0.0080	0.0380	0.0080	0.0380
20 Watt Zoned Amplifier (EST 3-ZA20B)	1									0.0620	1.1200	0.0620	1.1200
95 Watt Zoned Amplifier (EST 3-ZA95)	3									0.0850	5.5400	0.2550	16.6200
Graphic Annunciator CPU card (EST 4-CPUGRPH)	1									0.1230	0.1230	0.1230	0.1230
Power Supply Assembly (EST 3-EVPWRA)	1									0.0000	0.0000	0.0000	0.0000
LED/SWITCH Driver Module Assembly (EST 3-EVDVRA)	3									0.0000	0.0000	0.0000	0.0000
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
AUX POWER		0	#14	0.000	0.00%	0.000	0.00%	0.000	0.00%	**Amps= 0.0000**			
										CURRENT TOTALS (A)-->	**Nac Ckts: 0.000**	1.477	19.106

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	1.477
TOTAL SYSTEM ALARM (A)	19.106
TOTAL SYSTEM STANDBY (AH)	35.45
TOTAL SYSTEM ALARM (AH)	4.78
MINIMUM AH BATTERY REQUIRED	40.225
WITH 20% SPARE CAPACITY (AH)	48.269
BATTERIES PROVIDED AT 12VDC (AH)	(2) 55.0 HOUSED IN "3-RCC7R" CABINET

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
FACP-C2
EST 4 SERIES FIRE ALARM / SMOKE CONTROL PANEL BATTERY CALCULATION

DEVICE DESCRIPTION/MODEL	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Volt Drop Pt to Pt Method	Drop% Pt to Pt Volt	Volt Drop EOL Method	Drop% EOL Volt	Volt Drop LoadCntr Method	Drop% LoadCntr Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
Central Processing Unit (EST 4-CPU)	1									0.2110	0.2110	0.2110	0.2110
Booster Power Supply (EST 4-PPSM)	2									0.0500	0.0500	0.1000	0.1000
Liquid Crystal Display Module (EST 4-LCDLE)	1									0.0400	0.0930	0.0400	0.0930
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
Signature Single Loop Card (EST 3-SSDC1) FULLY LOADED	1									0.1440	0.2040	0.1440	0.2040
95 Watt Zoned Amplifier (EST 3-ZA95)	3									0.0850	5.5400	0.2550	16.6200
AUX POWER		0	#14	0.000	0.00%	0.000	0.00%	0.000	0.00%	**Amps= 0.0000**			
										CURRENT TOTALS (A)-->	**Nac Ckts: 0.000**	0.814	17.292

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.814
TOTAL SYSTEM ALARM (A)	17.292
TOTAL SYSTEM STANDBY (AH)	19.54
TOTAL SYSTEM ALARM (AH)	4.32
MINIMUM AH BATTERY REQUIRED	23.859
WITH 20% SPARE CAPACITY (AH)	28.631
BATTERIES PROVIDED AT 12VDC (AH)	(2) 35.0 HOUSED IN "BC-1R" CABINET

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
FACP-A2
EST 4 SERIES FIRE ALARM / SMOKE CONTROL PANEL BATTERY CALCULATION

DEVICE DESCRIPTION/MODEL	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Volt Drop Pt to Pt Method	Drop% Pt to Pt Volt	Volt Drop EOL Method	Drop% EOL Volt	Volt Drop LoadCntr Method	Drop% LoadCntr Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
Central Processing Unit (EST 4-CPU)	1									0.2110	0.2110	0.2110	0.2110
Booster Power Supply (EST 4-PPSM)	2									0.0500	0.0500	0.1000	0.1000
Liquid Crystal Display Module (EST 4-LCDLE)	1									0.0400	0.0930	0.0400	0.0930
Network Communication Card (4-NET-TP)	2									0.0320	0.0320	0.0640	0.0640
Signature Single Loop Card (EST 3-SSDC1) FULLY LOADED	1									0.1440	0.2040	0.1440	0.2040
95 Watt Zoned Amplifier (EST 3-ZA95)	3									0.0850	5.5400	0.2550	16.6200
AUX POWER		0	#14	0.000	0.00%	0.000	0.00%	0.000	0.00%	**Amps= 0.0000**			
										CURRENT TOTALS (A)-->	**Nac Ckts: 0.000**	0.782	17.260

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.782
TOTAL SYSTEM ALARM (A)	17.260
TOTAL SYSTEM STANDBY (AH)	18.77
TOTAL SYSTEM ALARM (AH)	4.32
MINIMUM AH BATTERY REQUIRED	23.083
WITH 20% SPARE CAPACITY (AH)	27.700
BATTERIES PROVIDED AT 12VDC (AH)	(2) 35.0 HOUSED IN "BC-1R" CABINET

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
FACP-C3
EST 4 SERIES FIRE ALARM / SMOKE CONTROL PANEL BATTERY CALCULATION

DEVICE DESCRIPTION/MODEL	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Volt Drop Pt to Pt Method	Drop% Pt to Pt Volt	Volt Drop EOL Method	Drop% EOL Volt	Volt Drop LoadCntr Method	Drop% LoadCntr Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
Central Processing Unit (EST 4-CPU)	1									0.2110	0.2110	0.2110	0.2110
Booster Power Supply (EST 4-PPSM)	2									0.0500	0.0500	0.1000	0.1000
Liquid Crystal Display Module (EST 4-LCDLE)	1									0.0400	0.0930	0.0400	0.0930
Network Communication Card (4-NET-TP)	1									0.0320	0.0320	0.0320	0.0320
95 Watt Zoned Amplifier (EST 3-ZA95)	3									0.0850	5.5400	0.2550	16.6200
AUX POWER		0	#14	0.000	0.00%	0.000	0.00%	0.000	0.00%	**Amps= 0.0000**			
										CURRENT TOTALS (A)-->	**Nac Ckts: 0.000**	0.638	17.056

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.638
TOTAL SYSTEM ALARM (A)	17.056
TOTAL SYSTEM STANDBY (AH)	15.31
TOTAL SYSTEM ALARM (AH)	4.26
MINIMUM AH BATTERY REQUIRED	19.576
WITH 20% SPARE CAPACITY (AH)	23.491
BATTERIES PROVIDED AT 12VDC (AH)	(2) 28.0 HOUSED IN "BC-1R" CABINET

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
NAC1
EST BPS6A REMOTE BOOSTER SUPPLY (NAC#1) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**580 FT**	**#14**	**3.07**	**1.781**	**18.830**	**16.00**	**1.576**	**7.70%**	**Ckt. Amps=**	**0.441**		
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**640 FT**	**#14**	**3.07**	**1.965**	**18.793**	**16.00**	**1.607**	**7.88%**	**Ckt. Amps=**	**0.409**		
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCWF Strobe 30cd, Ceiling		1										0.0240		0.0240
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
NAC CKT #3			**570 FT**	**#14**	**3.07**	**1.750**	**18.661**	**16.00**	**1.739**	**8.53%**	**Ckt. Amps=**	**0.497**		
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4WF Strobe 15cd, Wall		1										0.0280		0.0280
G4WF Strobe 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 30cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 30cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 30cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts= 1.347**	0.070	1.617

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.617
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.40
MINIMUM A/H BATTERY REQUIRED	2.084
WITH 20% SPARE CAPACITY (A/H)	2.501
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
NAC2
EST BPS6A REMOTE BOOSTER SUPPLY (NAC#1) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**430 FT**	**#14**	**3.07**	**1.320**	**19.513**	**16.00**	**0.887**	**4.35%**	**Ckt. Amps=**	**0.336**		
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**440 FT**	**#14**	**3.07**	**1.351**	**19.379**	**16.00**	**1.021**	**5.01%**	**Ckt. Amps=**	**0.378**		
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**435 FT**	**#14**	**3.07**	**1.335**	**19.203**	**16.00**	**1.197**	**5.87%**	**Ckt. Amps=**	**0.448**		
G4WF Strobe 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts= 1.162**	0.070	1.432

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.432
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.36
MINIMUM A/H BATTERY REQUIRED	2.038
WITH 20% SPARE CAPACITY (A/H)	2.446
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

POV
NAC3
EST BPS6A REMOTE BOOSTER SUPPLY (NAC#1) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**372 FT**	**#14**	**3.07**	**1.142**	**19.249**	**16.00**	**1.151**	**5.64%**	**Ckt. Amps=**	**0.504**		
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
G4SVWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**590 FT**	**#14**	**3.07**	**1.811**	**19.132**	**16.00**	**1.268**	**6.22%**	**Ckt. Amps=**	**0.350**		
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**390 FT**	**#14**	**3.07**	**1.197**	**19.813**	**16.00**	**0.587**	**2.88%**	**Ckt. Amps=**	**0.245**		
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts= 1.099**	0.070	1.369

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.369
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.34
MINIMUM A/H BATTERY REQUIRED	2.022
WITH 20% SPARE CAPACITY (A/H)	2.427
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

SC-R2
SC3.2B

NAC4

POV

EST BPS6A REMOTE BOOSTER SUPPLY (NAC#1) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**450 FT**	**#14**	**3.07**	**1.382**	**19.626**	**16.00**	**0.774**	**3.79%**	**Ckt. Amps=**	**0.280**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**275 FT**	**#14**	**3.07**	**0.844**	**19.554**	**16.00**	**0.846**	**4.15%**	**Ckt. Amps=**	**0.501**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G45VWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G45VWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G45VWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**610 FT**	**#14**	**3.07**	**1.873**	**19.089**	**16.00**	**1.311**	**6.43%**	**Ckt. Amps=**	**0.350**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**1.131**	0.070	1.401

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.401
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.35
MINIMUM A/H BATTERY REQUIRED	2.030
WITH 20% SPARE CAPACITY (A/H)	2.436
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC5

POV

EST BPS6A REMOTE BOOSTER SUPPLY (NAC#1) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**740 FT**	**#14**	**3.07**	**2.272**	**18.492**	**16.00**	**1.908**	**9.35%**	**Ckt. Amps=**	**0.420**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**590 FT**	**#14**	**3.07**	**1.811**	**19.284**	**16.00**	**1.116**	**5.47%**	**Ckt. Amps=**	**0.308**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**555 FT**	**#14**	**3.07**	**1.704**	**18.993**	**16.00**	**1.407**	**6.90%**	**Ckt. Amps=**	**0.413**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #4			**655 FT**	**#14**	**3.07**	**2.011**	**18.711**	**16.00**	**1.689**	**8.28%**	**Ckt. Amps=**	**0.420**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**1.561**	0.070	1.831

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.831
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.46
MINIMUM A/H BATTERY REQUIRED	2.139
WITH 20% SPARE CAPACITY (A/H)	2.565
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC6

POV

EST BPS SERIES REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**520 FT**	**#14**	**3.07**	**1.596**	**18.309**	**16.00**	**2.091**	**10.25%**	**Ckt. Amps=**	**0.655**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G45VWF Speaker-Strobe, 110cd, Wall		1										0.0280		0.0280
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
NAC CKT #2			**570 FT**	**#14**	**3.07**	**1.750**	**19.175**	**16.00**	**1.225**	**6.00%**	**Ckt. Amps=**	**0.350**		
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**490 FT**	**#14**	**3.07**	**1.504**	**18.514**	**16.00**	**1.886**	**9.25%**	**Ckt. Amps=**	**0.827**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
NAC CKT #4			**680 FT**	**#14**	**3.07**	**2.088**	**18.648**	**16.00**	**1.754**	**8.60%**	**Ckt. Amps=**	**0.420**		
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**2.052**	0.070	2.322

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	2.322
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.58
MINIMUM A/H BATTERY REQUIRED	2.261
WITH 20% SPARE CAPACITY (A/H)	2.713
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC7

POV

EST BPS SERIES REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**555 FT**	**#14**	**3.07**	**1.704**	**18.993**	**16.00**	**1.407**	**6.90%**	**Ckt. Amps=**	**0.413**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 75cd, Clg		1										0.0350		0.0350
GCSVWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**655 FT**	**#14**	**3.07**	**2.011**	**18.711**	**16.00**	**1.689**	**8.28%**	**Ckt. Amps=**	**0.420**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**0.833**	0.070	1.103

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.103
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.28
MINIMUM A/H BATTERY REQUIRED	1.956
WITH 20% SPARE CAPACITY (A/H)	2.347
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC8

POV

EST BPS SERIES REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**510 FT**	**#14**	**3.07**	**1.566**	**18.327**	**16.00**	**2.073**	**10.16%**	**Ckt. Amps=**	**0.662**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**680 FT**	**#14**	**3.07**	**2.088**	**18.500**	**16.00**	**1.900**	**9.31%**	**Ckt. Amps=**	**0.455**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**1.117**	0.070	1.387

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.387
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.35
MINIMUM A/H BATTERY REQUIRED	2.027
WITH 20% SPARE CAPACITY (A/H)	2.432
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC9

POV

EST BPS SERIES REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**475 FT**	**#14**	**3.07**	**1.458**	**19.420**	**16.00**	**0.980**	**4.80%**	**Ckt. Amps=**	**0.336**		
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #2			**325 FT**	**#14**	**3.07**	**0.998**	**19.883**	**16.00**	**0.517**	**2.53%**	**Ckt. Amps=**	**0.259**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G45VWF Speaker-Strobe, 15cd, Wall		1										0.0280		0.0280
G45VWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #3			**375 FT**	**#14**	**3.07**	**1.151**	**18.528**	**16.00**	**1.872**	**9.18%**	**Ckt. Amps=**	**0.813**		
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
NAC CKT #4			**0 FT**	**#14**	**3.07**		**20.400**	**16.00**			**Ckt. Amps=**			
(Spare)														
											CURRENT TOTALS (A)-->	**Nac Ckts=**	**1.408**	0.070	1.678

STANDBY HOURS REQUIRED	24
ALARM SOUNDING MINUTES	15
TOTAL SYSTEM STANDBY (A)	0.070
TOTAL SYSTEM ALARM (A)	1.678
TOTAL SYSTEM STANDBY (A/H)	1.68
TOTAL SYSTEM ALARM (A/H)	0.42
MINIMUM A/H BATTERY REQUIRED	2.100
WITH 20% SPARE CAPACITY (A/H)	2.519
BATTERIES PROVIDED AT 12VDC	(2) 7 AH

Voltage Drop Calculation Notes:
1) Calculations use the NFPA70(NEC 2017) Wire Resistance Values for 167 Degrees Fahrenheit [See Chp. 9, Table 8].
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices.

NAC10

POV
EST BPS SERIES REMOTE BOOSTER SUPPLY BATTERY CALCULATION

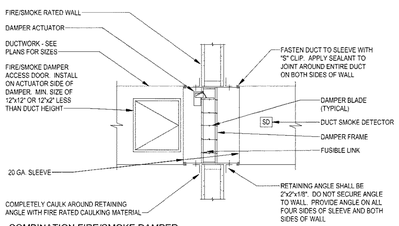
MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at EoI	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BP6A	Remote Booster Supply, 6A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			**490 FT**	**#14**	**3.07**	**1.504**	**19.242**	**16.00**	**1.158**	**5.68%**	**Ckt. Amps=**	**0.385**		
G4SWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350
G4SWF Speaker-Strobe, 75cd, Wall		1										0.0280		0.0280
G4SWF Speaker-Strobe, 150cd, Wall		1										0.0280		0.0280
NAC CKT #2			**85 FT**	**#14**	**3.07**	**0.261**	**20.067**	**16.00**	**0.333**	**1.63%**	**Ckt. Amps=**	**0.638**		
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
WG4WF-SVMC Speaker-Strobe, 87cd, Wall		1										0.3190		0.3190
NAC CKT #3			**455 FT**	**#14**	**3.07**	**1.397**	**19.520**	**16.00**	**0.880**	**4.31%**	**Ckt. Amps=**	**0.315**		
GCSWF Speaker-Strobe, 115cd, Clg		1										0.0350		0.0350

SC-R2

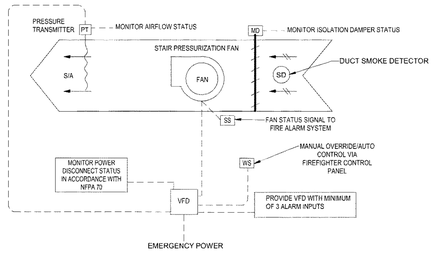
FAN SCHEDULE

TAG	DESCRIPTION	TYPE	FAN							ELECTRICAL DATA		REMARKS
			AIRFLOW	PRESS	MOTOR							
			CFM	ESP	DRIVE TYPE	POWER	VFD	SERVICE FACTOR	UNIT WEIGHT	VOLT	PH	
GEF-1	GARAGE	TUBE AXIAL	22,590	2.0 in-wg	DIRECT	20 HP	YES	1.15	820 LBS	480 V	3	PROVIDE WITH CO CONTROLS, BACKDRAFT DAMPER AND VFD (SEE NOTE 1)
GEF-2	GARAGE	TUBE AXIAL	17,820	2.0 in-wg	DIRECT	20 HP	YES	1.15	820 LBS	480 V	3	PROVIDE WITH CO CONTROLS, BACKDRAFT DAMPER AND VFD (SEE NOTE 1)
GEF-3A1 THRU GEF-3A8	GARAGE EXHAUST	SIDEWALL PROPELLER	15,000	0.61 in-wg	DIRECT	5 HP	YES	1.15	220 LBS	480 V	3	PROVIDE WITH CO CONTROLS, BACKDRAFT DAMPER AND VFD (SEE NOTE 1)
GEF-3C1 THRU GEF-3C7	GARAGE EXHAUST	SIDEWALL PROPELLER	15,000	0.61 in-wg	DIRECT	5 HP	YES	1.15	220 LBS	480 V	3	PROVIDE WITH CO CONTROLS, BACKDRAFT DAMPER AND VFD (SEE NOTE 1)
SPF-1A1	STAIR PRESSURIZATION FAN STAIR A1	UTILITY SET	3,100	1.5 in-wg	BELT	2 HP	YES	1.15	550 LBS	480 V	3	PROVIDE WITH PRESSURE CONTROLS, BACKDRAFT DAMPER, EMERGENCY POWER FROM GENERATOR, 1.5 X NUMBER OF BELTS REQUIRED (MINIMUM, 2 GROOVE PULLEY). FAN TO BE UL-705 LISTED WITH TEMPERATURE RATING OF 500°F FOR 4 HOURS.
SPF-1A2	STAIR PRESSURIZATION FAN STAIR A2	UTILITY SET	4,000	1.5 in-wg	BELT	2 HP	YES	1.15	550 LBS	480 V	3	PROVIDE WITH PRESSURE CONTROLS, BACKDRAFT DAMPER, EMERGENCY POWER FROM GENERATOR, 1.5 X NUMBER OF BELTS REQUIRED (MINIMUM, 2 GROOVE PULLEY). FAN TO BE UL-705 LISTED WITH TEMPERATURE RATING OF 500°F FOR 4 HOURS.
SPF-1C1	STAIR PRESSURIZATION FAN STAIR C2	UTILITY SET	3,600	1.5 in-wg	BELT	2 HP	YES	1.15	550 LBS	480 V	3	PROVIDE WITH PRESSURE CONTROLS, BACKDRAFT DAMPER, EMERGENCY POWER FROM GENERATOR, 1.5 X NUMBER OF BELTS REQUIRED (MINIMUM, 2 GROOVE PULLEY). FAN TO BE UL-705 LISTED WITH TEMPERATURE RATING OF 500°F FOR 4 HOURS.
SPF-1C2	STAIR PRESSURIZATION FAN STAIR C1	UTILITY SET	3,800	1.5 in-wg	BELT	2 HP	YES	1.15	550 LBS	480 V	3	PROVIDE WITH PRESSURE CONTROLS, BACKDRAFT DAMPER, EMERGENCY POWER FROM GENERATOR, 1.5 X NUMBER OF BELTS REQUIRED (MINIMUM, 2 GROOVE PULLEY). FAN TO BE UL-705 LISTED WITH TEMPERATURE RATING OF 500°F FOR 4 HOURS.
SPF-1C3	STAIR PRESSURIZATION FAN STAIR C1	UTILITY SET	2,400	1.5 in-wg	BELT	2 HP	YES	1.15	550 LBS	480 V	3	PROVIDE WITH PRESSURE CONTROLS, BACKDRAFT DAMPER, EMERGENCY POWER FROM GENERATOR, 1.5 X NUMBER OF BELTS REQUIRED (MINIMUM, 2 GROOVE PULLEY). FAN TO BE UL-705 LISTED WITH TEMPERATURE RATING OF 500°F FOR 4 HOURS.

NOTE 1: SMOKE DETECTION WITH AUTOMATIC SHUT-OFF NOT REQUIRED PER WA STATE MECHANICAL CODE SECTION 606.2.1, EXCEPTION #2.



2 COMBINATION FIRE/SMOKE DAMPER INSTALLATION DETAIL
NO SCALE



3 STAIRWELL PRESSURIZATION FAN CONTROLS
1/8" = 1'-0"

SMOKE CONTROL DAMPER SCHEDULE		
EQUIPMENT	CONTROL SYSTEM	SERVES
FSD	BMS	DOAS-1
FSD	BMS	DOAS-3
FSD	BMS	DOAS-3
FSD	BMS	DOAS-3
FSD	BMS	DOAS-3
FSD	BMS	SVAV-A2
FSD	BMS	EVAV-A2
FSD	BMS	SVAV-A3
FSD	BMS	EVAV-A3
FSD	BMS	SVAV-A4
FSD	BMS	EVAV-A4
FSD	BMS	SVAV-C5
FSD	BMS	EVAV-C5
FSD	BMS	SVAV-C4
FSD	BMS	SVAV-C3
FSD	BMS	EVAV-C3
FSD	BMS	SVAV-A2
FSD	BMS	EVAV-A2
FSD	BMS	EVAV-C1
FSD	BMS	SVAV-C1
FSD	BMS	DOAS-1
FSD	BMS	DOAS-2
FSD	BMS	DOAS-2
FSD	BMS	EVAV-C4
FSD	BMS	DOAS-3
FSD	BMS	DOAS-3
FD	BMS	EF-3A

MOTORIZED DAMPER SCHEDULE		
EQUIPMENT	CONTROL SYSTEM	SERVES
MD-1	FIRE ALARM	SPF-1C2
MD-2	FIRE ALARM	SPF-1C1
MD-3	FIRE ALARM	SPF-1A1
MD-4	FIRE ALARM	SPF-1A2
MD-5	FIRE ALARM	SPF-1C3

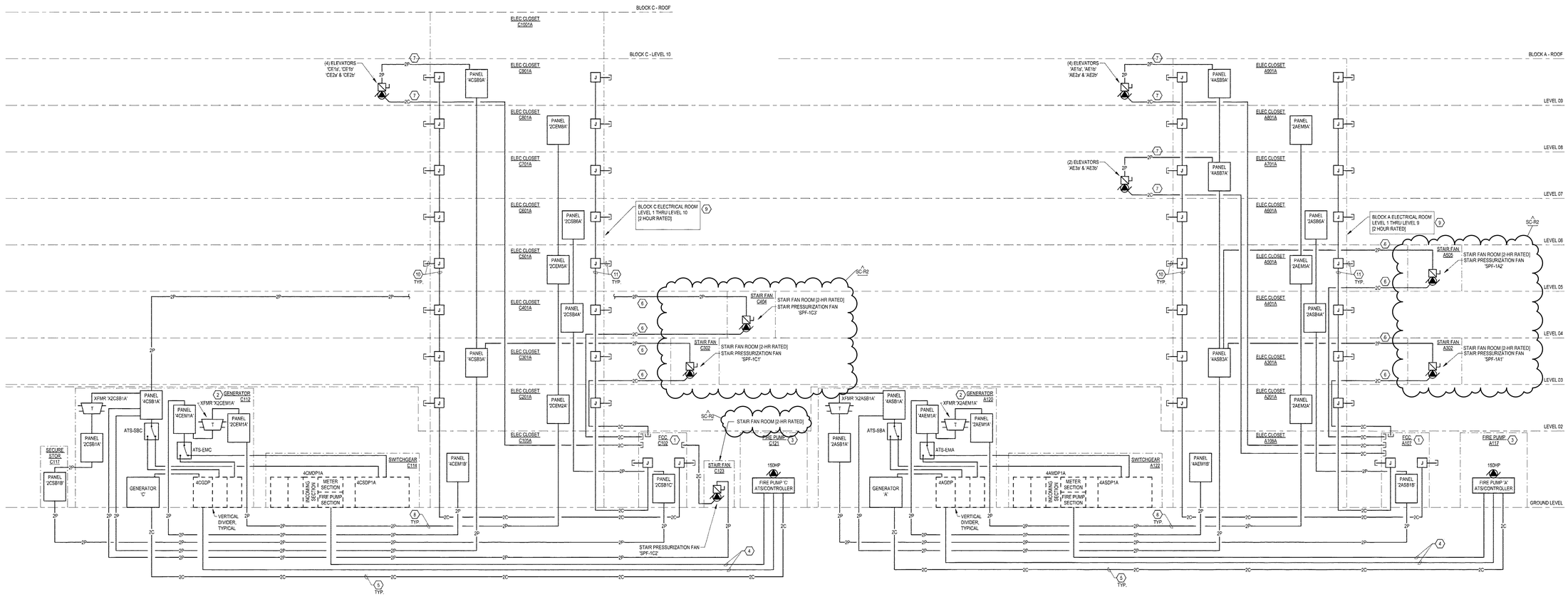
FIRE RESISTANT RATING (FRR) LINETYPE LEGEND	
— 1C —	1-HOUR CONTROL FRR
— 1P —	1-HOUR POWER FRR
— 2C —	2-HOUR CONTROL FRR
— 2P —	2-HOUR POWER FRR

CODE REFERENCES

1. 2018 WASHINGTON STATE BUILDING CODE (WSBC)
2. 2018 WASHINGTON STATE FIRE CODE (WSFC)
3. 2021 NEC

KEYED NOTES

1. FIRE COMMAND CENTER WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 911.1.2 (1-HOUR)
   - WSFC 508.1.2 (2-HOUR)
2. GENERATOR ROOM WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 909.11.1 (1-HOUR)
   - WSBC 403.4.8.1 (2-HOUR)
   - NFPA 110.7.2.1.1 (2-HOUR)
3. FIRE PUMP ROOM WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 913.2.1 (2-HOUR)
   - NFPA 20 4.14.1.1.1 (2-HOUR)
4. ROUTE OUTSIDE OF BUILDING OR IN 2" CONCRETE ENCASEMENT.
   - NEC 695.6 (A)
5. ROUTE IN 2" CONCRETE ENCASEMENT OR 2-HOUR FIRE-RATED ASSEMBLY.
6. STAIR PRESSURIZATION FAN. ROUTE IN 2-HOUR RATED ASSEMBLY.
   - WSBC 909.20.6.1 PER ELECTRICAL CODE
7. FIRE SERVICE ACCESS ELEVATOR WIRING WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 3007.8.1
8. EMERGENCY LIGHTING CABLES / RACEWAYS INSTALLED IN AREAS FULLY PROTECTED BY FIRE SUPPRESSION SYSTEM OR PROTECTED WITH A 2-HOUR RATING.
   - NEC 700.12
9. STACKED ELECTRICAL ROOMS WITH 2-HOUR FIRE RESISTANCE RATING.
10. DAS BACKBONE CABLING TO BE INSTALLED IN 2" CONDUIT. 2" CONDUIT SLEEVES FOR HORIZONTAL CABLING.
11. FIRE ALARM CABLING TO BE INSTALLED IN 2" CONDUIT. (2) 1" CONDUIT SLEEVES FOR HORIZONTAL CABLING.



1 ELECTRICAL SMOKE CONTROL FIRE RESISTANT BARRIER RATINGS - PATHWAYS AND SPACES
N.T.S.

CODE REFERENCES

1. 2018 WASHINGTON STATE BUILDING CODE (WSBC)
2. 2018 WASHINGTON STATE FIRE CODE (WSFC)
3. 2021 NEC

KEYED NOTES ⟨X⟩

1. FIRE COMMAND CENTER WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 911.1.2 (1-HOUR)
   - WSFC 508.1.2 (2-HOUR)
2. NOT USED
3. FIRE PUMP ROOM WITH 2-HOUR FIRE RESISTANCE RATING.
   - WSBC 913.2.1 (2-HOUR)
   - NFPA 20 4.14.1.1.1 (2-HOUR)
4. NOT USED
5. WIRING REQUIRED TO BE PROTECTED IN EITHER: A 2-HR RATED ASSEMBLY, ENCASED IN A MINIMUM OF 2-INCHES OF CONCRETE, OR IN A UL LISTED 2-HR RATED CABLE SYSTEM
6. NOT USED
7. NOT USED
8. NOT USED
9. STACKED ELECTRICAL ROOMS WITH 2-HOUR FIRE RESISTANCE RATING.

SHEET NOTE:

A. DEVICE ADDRESSES C01.02.001 THRU C01.02.250 ARE CONNECTED TO FACP-C1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

B. DEVICE ADDRESSES C01.02.251 THRU C01.02.500 ARE CONNECTED TO FACP-C1, SLC LOOP #2.

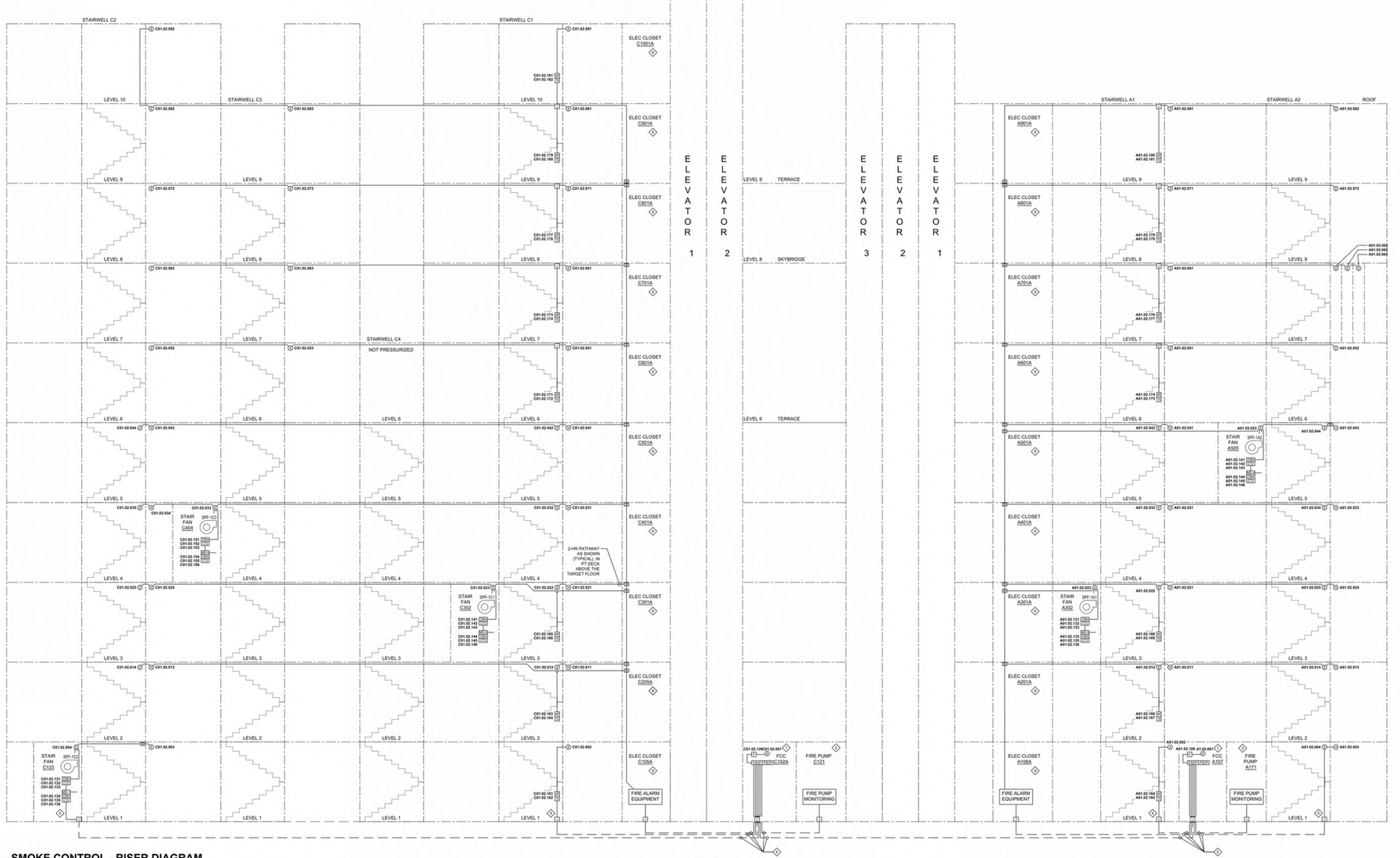
C. DEVICE ADDRESSES C02.02.001 THRU C02.02.250 ARE CONNECTED TO FACP-C2, SLC LOOP #1.

D. DEVICE ADDRESSES A01.02.001 THRU A01.02.250 ARE CONNECTED TO FACP-A1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

E. DEVICE ADDRESSES A01.02.251 THRU A01.02.500 ARE CONNECTED TO FACP-A1, SLC LOOP #2.

F. DEVICE ADDRESSES A02.02.001 THRU A02.02.250 ARE CONNECTED TO FACP-A2, SLC LOOP #1.

SC-R2



1 SMOKE CONTROL - RISER DIAGRAM
NO SCALE

KEY NOTES

1. ALL CC1S MODULES ARE CONNTECTED TO THE SAME SLC CKT: A1-02-XXX, FOR SYSTEM WIDE STROBE SYNC.
2. SYSTEM DATA NETWORK FOR PANEL TO PANEL COMMUNICATIONS (NOT SLC)

SHEET NOTE:

A. DEVICE ADDRESSES C01.02.001 THRU C01.02.250 ARE CONNECTED TO FACP-C1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

B. DEVICE ADDRESSES C01.02.251 THRU C01.02.500 ARE CONNECTED TO FACP-C1, SLC LOOP #2.

C. DEVICE ADDRESSES C02.02.001 THRU C02.02.250 ARE CONNECTED TO FACP-C2, SLC LOOP #1.

D. DEVICE ADDRESSES A01.02.001 THRU A01.02.250 ARE CONNECTED TO FACP-A1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

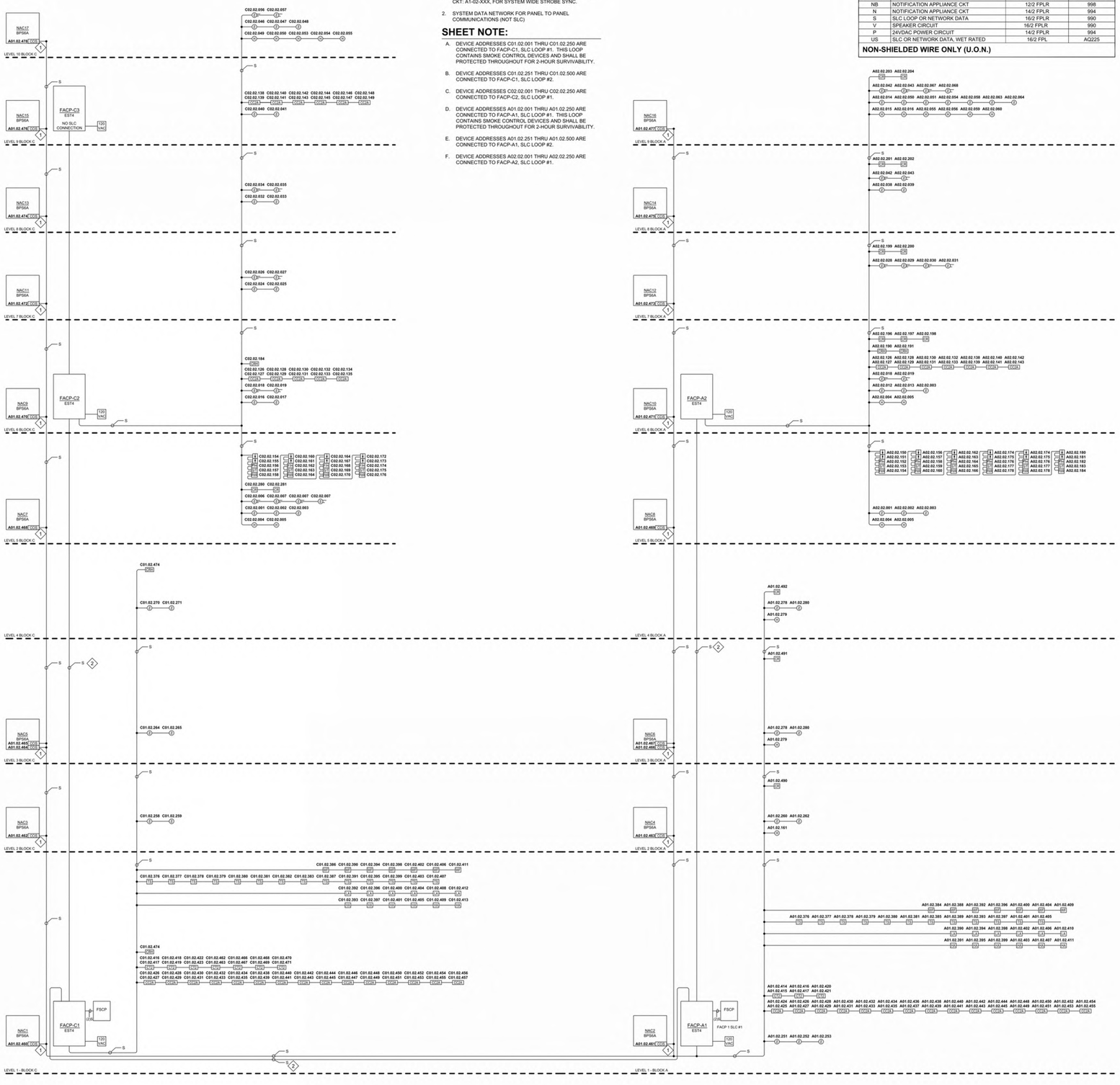
E. DEVICE ADDRESSES A01.02.251 THRU A01.02.500 ARE CONNECTED TO FACP-A1, SLC LOOP #2.

F. DEVICE ADDRESSES A02.02.001 THRU A02.02.250 ARE CONNECTED TO FACP-A2, SLC LOOP #1.

WIRE SCHEDULE

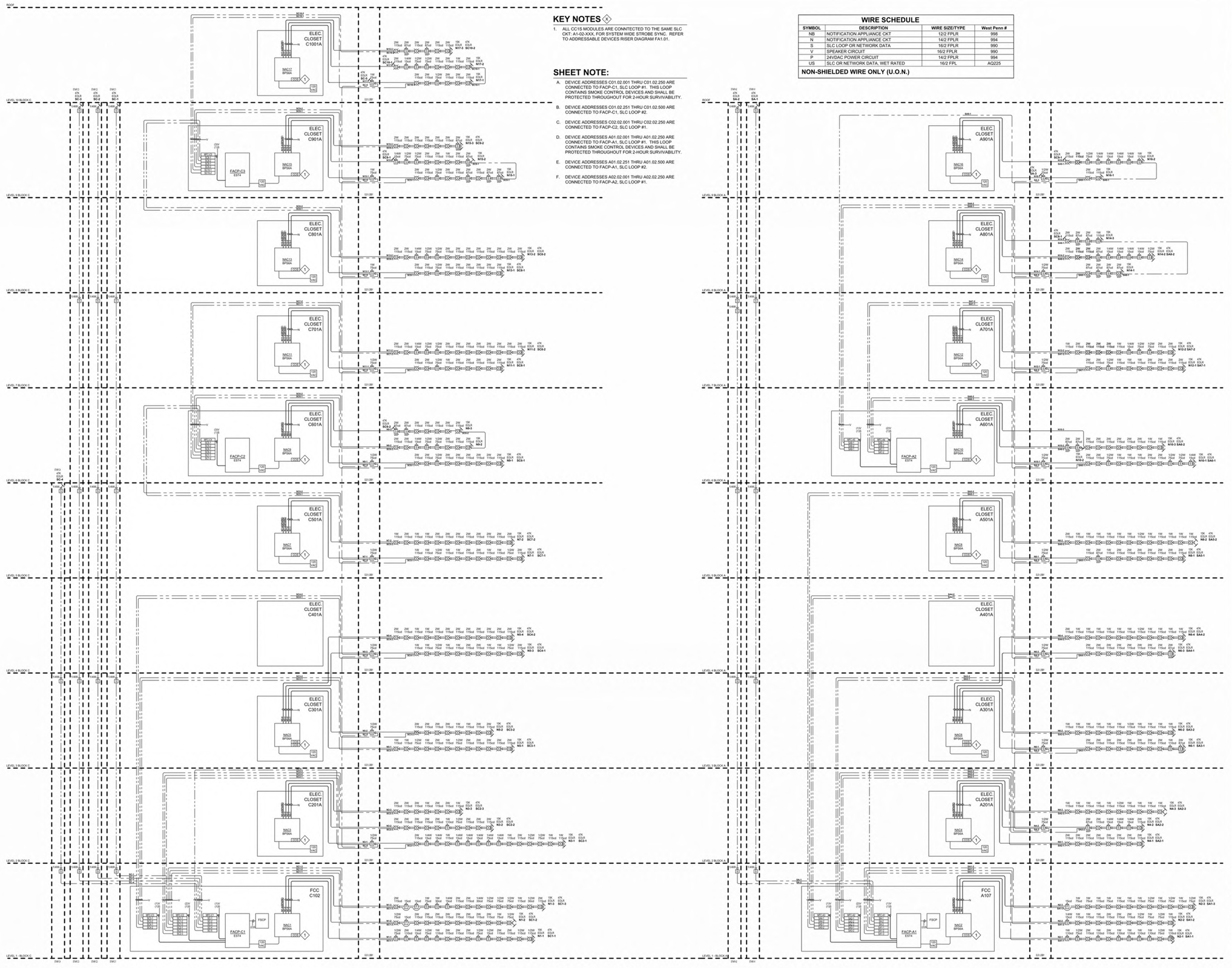
SYMBOL	DESCRIPTION	WIRE SIZE/TYPE	West Penn #
NB	NOTIFICATION APPLIANCE CKT	12/2 FPLR	998
N	NOTIFICATION APPLIANCE CKT	14/2 FPLR	994
S	SLC LOOP OR NETWORK DATA	16/2 FPLR	990
V	SPEAKER CIRCUIT	16/2 FPLR	990
P	24VDAC POWER CIRCUIT	14/2 FPLR	994
US	SLC OR NETWORK DATA, WET RATED	16/2 FPL	AQ225

NON-SHIELDED WIRE ONLY (U.O.N.)



1 RISER DIAGRAM - DETECTION AND CONTROLS - FIRE ALARM
NOT TO SCALE

SC6.2A



KEY NOTES

1. ALL CC1S MODULES ARE CONNTECTED TO THE SAME SLC CKT: A1-02-XXX, FOR SYSTEM WIDE STROBE SYNC. REFER TO ADDRESSABLE DEVICES RISER DIAGRAM FA1.01.

SHEET NOTE:

A. DEVICE ADDRESSES C01.02.001 THRU C01.02.250 ARE CONNECTED TO FACP-C1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

B. DEVICE ADDRESSES C01.02.251 THRU C01.02.500 ARE CONNECTED TO FACP-C1, SLC LOOP #2.

C. DEVICE ADDRESSES C02.02.001 THRU C02.02.250 ARE CONNECTED TO FACP-C2, SLC LOOP #1.

D. DEVICE ADDRESSES A01.02.001 THRU A01.02.250 ARE CONNECTED TO FACP-A1, SLC LOOP #1. THIS LOOP CONTAINS SMOKE CONTROL DEVICES AND SHALL BE PROTECTED THROUGHOUT FOR 2-HOUR SURVIVABILITY.

E. DEVICE ADDRESSES A01.02.251 THRU A01.02.500 ARE CONNECTED TO FACP-A1, SLC LOOP #2.

F. DEVICE ADDRESSES A02.02.001 THRU A02.02.250 ARE CONNECTED TO FACP-A2, SLC LOOP #1.

WIRE SCHEDULE

SYMBOL	DESCRIPTION	WIRE SIZE/TYPE	West Penn #
NB	NOTIFICATION APPLIANCE CKT	12/2 FPLR	998
N	NOTIFICATION APPLIANCE CKT	14/2 FPLR	994
S	SLC LOOP OR NETWORK DATA	16/2 FPLR	990
V	SPEAKER CIRCUIT	16/2 FPLR	990
P	24VDAC POWER CIRCUIT	14/2 FPLR	994
US	SLC OR NETWORK DATA, WET RATED	16/2 FPL	AQ225

NON-SHIELDED WIRE ONLY (U.O.N.)

1 RISER DIAGRAM - NOTIFICATION - FIRE ALARM
NOT TO SCALE

SC-R2

SC6.2B

52.8900

40.8900

Note: This door will be hinged on the left/lock on the right.

The display and equipment will be mounted behind a clear pane. (Security)
The door must be opened to operate the switches.

FIREFIGHTERS SMOKE CONTROL PANEL

ADDRESS

VANCOUVER WA, 98660

SC-R2

SYSTEM STATUS

BUILDING A	BUILDING B
(W) SYSTEM NORMAL	(W) SYSTEM NORMAL
(R) WATERFLOW	(R) WATERFLOW
(R) MANUAL PULL	(R) MANUAL PULL
(R) CORRIDOR SMOKE	(R) CORRIDOR SMOKE
(R) STAIR SMOKE	(R) STAIR SMOKE
(R) LOBBY SMOKE	(R) LOBBY SMOKE
(R) AREA SMOKE	(R) AREA SMOKE
(R) HEAT DETECTOR	(R) HEAT DETECTOR
(Y) DUCT DETECTOR	(Y) DUCT DETECTOR
(Y) AC POWER LOSS	(Y) AC POWER LOSS
(Y) FAULT	(Y) FAULT

BUILDING C

STAIRWELL C2 | STAIRWELL C3 | STAIRWELL C1

LEVEL 10 / LEVEL 9 / LEVEL 8 / LEVEL 7 / LEVEL 6 / LEVEL 5 / LEVEL 4 / LEVEL 3 / LEVEL 2 / LEVEL 1

(R) PRESS. STAIR ENTRY SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW

(R) PRESS. STAIR ENTRY HEAT
(R) PRESS. STAIR SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW
(Y) DUCT DETECTOR

(R) PRESS. STAIR ENTRY HEAT
(R) PRESS. STAIR SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW
(Y) DUCT DETECTOR

SPF-1C3 MD-S
SPF-1C1 MD-2
SPF-1C2 MD-1

ELEVATOR 1 | ELEVATOR 2

LEVEL 8 SKYBRIDGE

LEVEL 6 TERRACE

ELEVATOR 3 | ELEVATOR 2 | ELEVATOR 1

ALTERNATE RECALL FLOOR - LEVEL 2

PRIMARY RECALL FLOOR - LEVEL 1

(OFF-C-GARAGE) SMOKE CONTROL (W) ON / AUTO / (R) OFF

FCC C102 — (R) PULL STATION

(OFF-A-GARAGE) SMOKE CONTROL (W) ON / AUTO / (R) OFF

FCC A107 — (R) PULL STATION

BUILDING A

STAIRWELL A1 | STAIRWELL A2

(R) PRESS. STAIR ENTRY SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW

(R) PRESS. STAIR ENTRY HEAT
(R) PRESS. STAIR SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW
(Y) DUCT DETECTOR

(R) PRESS. STAIR ENTRY HEAT
(R) PRESS. STAIR ENTRY SMOKE
(R) ELEVATOR LOBBY SMOKE
(R) WATERFLOW
(R) PULL STATION

PRV

SPF-1A2 MD-4
SPF-1A1 MD-3

Requires Potter Lock

(W) ON / AUTO / (R) OFF — (Y) FAULT

STAIRWELL C2 SPF-1C2 — DAMPER STATUS: MD-1 — SPF-1C2 DUCT DETECTOR
STAIRWELL C3 SPF-1C3 — DAMPER STATUS: MD-S — SPF-1C3 DUCT DETECTOR
STAIRWELL C1 SPF-1C1 — DAMPER STATUS: MD-2 — SPF-1C1 DUCT DETECTOR

DAMPER STATUS: (W) OPEN / (R) CLOSED / (Y) FAULT
ALARM ACTIVE (Y)

BLOCK C GENERATOR STATUS: (W) NORMAL / (R) RUNNING / (Y) FAULT

BLOCK C FIRE PUMP STATUS: (W) NORMAL / (R) RUNNING / (Y) FAULT

BLOCK A GENERATOR STATUS: (W) NORMAL / (R) RUNNING / (Y) FAULT

BLOCK A FIRE PUMP STATUS: (W) NORMAL / (R) RUNNING / (Y) FAULT

STAIRWELL A1 SPF-1A1 — DAMPER STATUS: MD-3 — SPF-1A1 DUCT DETECTOR
STAIRWELL A2 SPF-1A2 — DAMPER STATUS: MD-4 — SPF-1A2 DUCT DETECTOR

BUILDING | BUILDING

STAIRWELL C4
FIRE PUMP (BLDG A)
GENERATOR
STAIRWELL A2
STAIRWELL C3
FIRE PUMP (BLDG C)
GENERATOR
BUILDING
BUILDING
STAIRWELL C2
STAIRWELL C1
ELEVATOR C1
ELEVATOR C2
FCC C102
STAIRWELL A1
FCC A107
ELEVATOR A1
ELEVATOR A2
ELEVATOR A3

SC-R2

FIRST FLOOR PLAN

NORTH

FD VIEW

UNLOCK ALL ACCESS CONTROL DOORS
(G) UNLOCK
(W) AUTO

PANEL OPERATING INSTRUCTIONS

SWITCH AND BUTTON OPERATION

FAN SWITCH: ROTATE TO OFF, AUTO, OR ON POSITION
LAMP TEST BUTTON: PUSH BUTTON TO LIGHT ALL LEDS

(W) SYSTEM NORMAL: LED WILL EXTINGUISH UPON FIRE ALARM, ACTIVATION OF SWITCH, OR MONITORED FAULT CONDITION

FAN OR DAMPER STATUS LEDS
- FAN OR DAMPER STATUS IS ON OR OPEN.
- FAN OR DAMPER STATUS IS OFF OR CLOSED.
- FAN OR DAMPER STATUS IS IN FAULT.

LAMP TEST

(W) SYSTEM NORMAL

Door Finish:
(X) Black Texture, (Standard Interior)
( ) Stainless Steel, (Standard Exterior)
( ) Other _____

1 **SMOKE CONTROL PANEL - FIRE ALARM**
NO SCALE