




















































































ELECTRICAL SYMBOL SCHEDULE





















SOME OF THESE SYMBOLS SHOWN MAY NOT BE USED ON THIS PROJECT

POWER SYMBOLS	
	MOTOR OUTLET
	FUSED DISCONNECT SWITCH
	HEAVY DUTY NON-FUSED DISCONNECT SWITCH
	MOTOR STARTER
	COMBINATION MOTOR STARTER
	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD
	VARIABLE FREQUENCY DRIVE
	AUTOMATIC TRANSFER SWITCH
	AUTOMATIC TRANSFER SWITCH
	AUTOMATIC TRANSFER SWITCH WITH BY-PASS SWITCH
	TRANSFORMER
	TRANSFORMER
	TRANSFORMER
	GENERATOR
	STATIONARY CIRCUIT BREAKER, RATING AS SHOWN ON PLANS
	DRAWOUT CIRCUIT BREAKER, RATING AS SHOWN ON PLANS
	SWITCH AND FUSE, RATING AS SHOWN ON PLANS
	SWITCH AND FUSE, RATING AS SHOWN ON PLANS
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	GROUND ROD IN GROUND WELL
	TIME CLOCK
	CONTROL PANEL FURNISHED WITH EQUIPMENT
	LIGHTING CONTACTOR
	ELAPSE CLOCK
	AUTO SINK TOILET OUTLET
	WALL MOUNTED AUTO SINK TOILET OUTLET

LIGHTING SYMBOLS	
	FLUORESCENT, SURFACE OR RECESSED LIGHT FIXTURE AND OUTLET BOX, NORMAL
	FLUORESCENT, SURFACE OR RECESSED LIGHT FIXTURE AND OUTLET BOX, CRITICAL
	WALL MOUNTED LIGHT FIXTURE AND OUTLET BOX, NORMAL
	WALL MOUNTED LIGHT FIXTURE AND OUTLET BOX, CRITICAL
	FLUORESCENT STRIP, SURFACE, RECESSED OR SUSPENDED LIGHT FIXTURE, NORMAL
	FLUORESCENT STRIP, SURFACE, RECESSED OR SUSPENDED LIGHT FIXTURE, CRITICAL
	PENDANT LIGHT FIXTURES, NORMAL
	PENDANT LIGHT FIXTURES, CRITICAL
	LIGHTING TRACK WITH FIXTURES, LENGTH AS SHOWN ON PLANS
	EXIT SIGN, SINGLE FACE, CEILING OR WALL MOUNTED; ARROWS AND FACE AS SHOWN ON PLANS
	EXIT SIGN, DOUBLE FACE, CEILING OR WALL MOUNTED; ARROWS AND FACES AS SHOWN ON PLANS
	WALL MOUNTED EXIT SIGN LOW LEVEL

WIRING DEVICE SYMBOLS		NOTES
	120V, DUPLEX RECEPTACLE OUTLET	
	120V, DUPLEX RECEPTACLE OUTLET, SPECIAL MOUNTING HEIGHT, MOUNT AS NOTED ON PLANS OR SEE SPECIFICATIONS	
	120V, QUADPLEX RECEPTACLE OUTLET	
	120V, QUADPLEX RECEPTACLE OUTLET, SPECIAL MOUNTING HEIGHT, MOUNT AS NOTED ON PLANS OR SEE SPECIFICATIONS	
	120V, CONTROLLED DUPLEX RECEPTACLE OUTLET	
	120V, CONTROLLED QUADPLEX RECEPTACLE OUTLET	
	120V, DUPLEX HOSPITAL GRADE, DEDICATED OUTLET, ROUTED THROUGH RF FILTER	
	120V, 5MA GFCI TYPE DUPLEX RECEPTACLE OUTLET	
	120V, 5MA GFCI TYPE DUPLEX RECEPTACLE OUTLET, SPECIAL MTG HEIGHT, MOUNT AS NOTED ON PLANS OR SEE SPECIFICATIONS	
	120V, 5MA GFCI TYPE QUADPLEX RECEPTACLE OUTLET	
	120V, 5MA GFCI TYPE QUADPLEX RECEPTACLE OUTLET, SPECIAL MTG HEIGHT, MOUNT AS NOTED ON PLANS OR SEE SPECIFICATIONS	
	SINGLE SPECIAL PURPOSE RECEPTACLE	
	VOLTAGE AND NEMA RECEPTACLE TYPE AS NOTED	
	DUPLEX SPECIAL PURPOSE RECEPTACLE, VOLTAGE AND NEMA RECEPT. TYPE AS NOTED	
	DUPLEX SPECIAL PURPOSE RECEPTACLE, VOLTAGE AND NEMA RECEPT. TYPE AS NOTED	
	120V, DUPLEX RECEPTACLE OUTLET, CEILING MOUNTED	
	120V, DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED	
	120V, QUADPLEX RECEPTACLE OUTLET, FLOOR MOUNTED	
	120V, SPECIAL PURPOSE RECEPTACLE, FLOOR MOUNTED	
	FLOOR POLE THROUGH-J-BOX	
	POWER POLE CONNECTION TO MODULAR FURNITURE	
	CEILING MOUNTED JUNCTION BOX	
	WALL MOUNTED JUNCTION BOX	
	RECEPTACLE STRIP - TYPE, OUTLETS, SPACING AND FINISH AS NOTED	
	POWER CONNECTION; PROVIDE RECEPTACLE OR HARD WIRED CONN.	
	S SINGLE POLE SWITCH	
	S _S TWO SINGLE POLE SWITCHES UNDER COMMON FACEPLATE PROVIDING DUAL LEVEL SWITCHING OF FIXTURES	
	S ₂ DOUBLE POLE SWITCH	
	S ₃ 3-WAY POLE SWITCH	
	S ₄ 4-WAY POLE SWITCH	
	S _L SINGLE POLE SWITCH WITH PILOT LIGHT	
	S _K SINGLE POLE KEY OPERATED SWITCH	
	S _D DIMMER SWITCH	
	S _D DIMMER SWITCH WITH 3-WAY SWITCHING	
	S _V VARIABLE INTENSITY CONTROL FOR SURGICAL LIGHT	
	S _{LV} LOW VOLTAGE MOMENTARY CONTACT SWITCH (TOGGLE STYLE)	
	S _B PUSH BUTTON SWITCH	
	S _O WALL MOUNTED OCCUPANCY SENSOR W/OVERRIDE SWITCH	
	S _C CEILING MOUNTED OCCUPANCY SENSOR	
	S _W WALL MOUNTED OCCUPANCY SENSOR	
	S _{WD} WALL MOUNTED OCCUPANCY SENSOR WITH DIMMING SWITCH	
	P _F PUSH PLATE (FOR AUTOMATIC DOOR)	
	P _B PUSH BUTTON (FOR AUTOMATIC DOOR)	
	PC PHOTOCELL	

WIRING DEVICE KEYED NOTES	
①	THE FOLLOWING NOTATIONS MAY BE USED WITH ANY RECEPTACLE TYPE TO FURTHER DEFINE THE SYMBOL.
E	= EMERGENCY BRANCH RECEPTACLE, PROVIDE RED DEVICE AND RED COVER PLATE IF PLACED, SEE SPECIFICATIONS
I	= ISOLATED GROUND RECEPTACLE
L	= LOCKING
M	= FOR MONITORING EQUIPMENT, COORDINATE MOUNTING HEIGHT WITH EQUIPMENT
T	= TAMPER RESISTANT RECEPTACLE
WP	= WEATHERPROOF, CORD CAN BE PLUGGED IN WITH COVER CLOSED
①	WP = WEATHERPROOF DEVICE AND COVER

DESIGNATION SYMBOLS	
	COLUMN LINE
	FEEDER DESIGNATION TAG
	KEY NOTE TAG
	DETAIL REFERENCE BUBBLE
	DETAIL NUMBER
	SHEET BEARING DETAIL
	MOTOR DESIGNATION TAG
	FIXTURE DESIGNATION
	LUMINAIRE TYPE
	CIRCUIT NUMBER (WHERE SHOWN)
	CIRCUIT NUMBER (WHERE SHOWN)
CONDUIT SYMBOLS	
	CONDUIT INSTALLED CONCEALED ABOVE CEILINGS, IN WALLS IN FINISHED AREAS, OR EXPOSED IN UNFINISHED AREAS
	CONDUIT INSTALLED BELOW FINISHED FLOOR OR BELOW GRADE
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUBBED OUT WITH BUSHING
	CONDUIT STUBBED OUT AND CAPGED
	FLEXIBLE CONDUIT WITH SINGLE POINT OF CONNECTION AT ELECTRICAL EQUIPMENT
	GROUNDING CONDUCTOR
	CONDUIT HOMERUN; ROUTE TO PANELBOARD, CABINET, OR TERMINAL BOARD INDICATED, AND TERMINATE CONDUCTORS TO CIRCUIT OR OVER CURRENT PROTECTIVE DEVICE

ELECTRICAL DRAWING INDEX - LEVEL 2 & 3	
SHEET NO	SHEET NAME
E000-2	ELECTRICAL COVER SHEET
E100-2	ELECTRICAL TITLE 24
E101-2	ELECTRICAL TITLE 24
E102-2	ELECTRICAL TITLE 24
E103-2	ELECTRICAL TITLE 24
E200-2	ELECTRICAL CORE & SHELL EXISTING CONDITIONS - LEVEL 2
E200-3	ELECTRICAL CORE & SHELL EXISTING CONDITIONS - LEVEL 3
E202	ELECTRICAL POWER - LEVEL 2
E203	ELECTRICAL POWER - LEVEL 3
E302	ELECTRICAL LIGHTING - LEVEL 2
E303	ELECTRICAL LIGHTING - LEVEL 3
E500-2	ELECTRICAL PANEL SCHEDULES
E501-2	ELECTRICAL PANEL SCHEDULES
E502-2	ELECTRICAL PANEL SCHEDULES
E600-2	ELECTRICAL SINGLE LINE DIAGRAM
E700-2	ELECTRICAL SPECIFICATIONS
E800-2	ELECTRICAL DETAILS
E801-2	ELECTRICAL DETAILS
E901A-2	ELECTRICAL - CT SCAN
E901B-2	ELECTRICAL - CT SCAN
E902A-2	ELECTRICAL - MRI
E902B-2	ELECTRICAL - MRI
E903A-2	ELECTRICAL - RAD/FLUORRO RM 2534
E903B-2	ELECTRICAL - RAD/FLUORRO RM 2534
E903C-2	ELECTRICAL - RAD/FLUORRO RM 2534
E903D-2	ELECTRICAL - RAD/FLUORRO RM 2534
E904A-2	ELECTRICAL - RAD/FLUORRO RM 2531
E904B-2	ELECTRICAL - RAD/FLUORRO RM 2531
E904C-2	ELECTRICAL - RAD/FLUORRO RM 2531
E905A-2	ELECTRICAL - GEN RAD RM 2526
E905B-2	ELECTRICAL - GEN RAD RM 2526

ABBREVIATIONS	
A, AMP	AMPERE
ACT	ALTERNATING CURRENT
AC	ALTERNATING CURRENT
ACT	ABOVE COUNTER TOP
AIC	AMPERE INTERRUPTING CAPACITY
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ATS	AUTOMATIC TRANSFER SWITCH
MECH	MECHANICAL
AF	FRAME RATING IN AMPERES
AS	SWITCH RATING IN AMPERES
MLO	MAIN LUGS ONLY
AT	TRIP RATING IN AMPERES
NC	NORMALLY CLOSED
AWG	AMERICAN WIRE GAUGE
NEC	NATIONAL ELECTRIC CODE
AV	AUDIO VISUAL
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
C	CONDUIT
NO	NORMALLY OPEN
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED
NTS	NOT TO SCALE
CL	CENTRELINE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CKT	CIRCUIT
PB	PULL BOX
CR	CRITICAL BRANCH
PH	PHASE
DC	DIRECT CURRENT
PNL	PANEL
DIST	DISTRIBUTION
PVC	POLYVINYL CHLORIDE CONDUIT
EQ	EQUIPMENT BRANCH
PTS	PNEUMATIC TUBE STATION
EL	EXISTING TO REMAIN
PWR	POWER
(ER)	REMOVE EXISTING
RSC	RIGID STEEL CONDUIT
SPDT	SINGLE POLE, DOUBLE THROW
EC	EMPTY CONDUIT
SPST	SINGLE POLE, SINGLE THROW
SWBD	SWITCHBOARD
SWGR	SWITCH GEAR
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
SVS	SYSTEM
EMT	ELECTRO METALIC TUBING
TV	TELEVISION
V	VOLT
EWC	ELECTRIC WATER COOLER
VA	VOLT AMPERES
W	WATT
WP	WEATHERPROOF
XMFR	TRANSFORMER

GENERAL NOTES	
1. REMOVE WIRING DEVICES, FIXTURES, COMPONENTS, ELECTRICAL EQUIPMENT, AND BOXES NOT REQUIRED TO REMAIN IN SERVICE IN AREA OF SCOPE OF WORK.	8. ALL EQUIPMENT TO BE INSTALLED OR PERMANENTLY CONNECTED (HARDWIRED) MUST BE LISTED, LABELED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
A. REMOVE WIRE, CONDUITS, AND BOXES FOR SUCH DEVICES BACK TO SOURCE. WHERE A CIRCUIT IS INTERRUPTED BY SUCH REMOVAL OF A DEVICE OR FIXTURE FROM THAT CIRCUIT, INSTALL WIRE AND CONDUIT AS REQUIRED TO RESTORE SERVICE TO THE REMAINING DEVICES AND FIXTURES ON THAT CIRCUIT.	9. IN ALL CASES, FOR ALL SYSTEMS AND COMPONENTS, USE ONLY EQUIPMENT IN ACCORDANCE WITH ITS LISTING.
B. WHERE THIS WORK IS NOT POSSIBLE WITHOUT DISTURBING AREAS NOT BEING RENOVATED, CONSULT WITH THE ARCHITECT BEFORE PERFORMING THE WORK.	10. USE ONLY EQUIPMENT MARKED (LISTED/LABELED) AS SUITABLE FOR INSTALLATION AND USE WITH HIGHER TEMPERATURE RATED CONDUCTORS AT THE IMPACT OF THE HIGHER RATED CONDUCTORS. REFER TO THE UL ELECTRICAL CONSTRUCTION MATERIAL DIRECTORY FOR CIRCUIT BREAKERS, SWITCHES, PANELBOARDS.
C. LEAVE IN PLACE CONCEALED CONDUIT LOCATED IN PARTITIONS OR HARD CEILING NOT TO BE DEMOLISHED. REMOVE CONDUCTORS FROM SUCH CONDUITS. USE PERMANENT MARKER PENS TO LABEL SUCH CONDUITS AS 'ABANDONED' AT EACH END. NO NOTE WHERE IT REEMERGES FROM THE CONCEALED AREA. CAP SUCH CONDUITS.	11. INSTALL RECEPTACLES ONLY ON CIRCUITS OF THE VOLTAGE CLASS AND CURRENT FOR WHICH THEY ARE RATED.
D. WHERE ELECTRICAL CIRCUITS, FEEDERS, OR WIRING RUNS THROUGH A SPACE TO BE DEMOLISHED, MAINTAIN THEM, REPAIR ANY DAMAGE CAUSED BY DEMOLITION OR CONSTRUCTION PERFORMED UNDER THIS CONTRACT.	12. INSTALL ONLY RECEPTACLE OUTLETS WITH GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION IN BATHROOMS, AS WELL AS ROOM OR AREAS WITH OUTLETS WITHIN 3 FEET OF THE EDGE OF THE SINK.
E. WHERE ELECTRICAL CIRCUITS, FEEDERS, OR WIRING RUNS SERVING OTHER AREAS ARE SERVED FROM THE SPACE TO BE IN THE AREA OF SCOPE OF WORK, RECONNECT THEM TO ORIGINAL SOURCES AS REQUIRED TO MAINTAIN SERVICE TO THE EXISTING DEVICES.	13. RECEPTACLES INSTALLED ON A BRANCH CIRCUIT SHALL HAVE A RATING IN ACCORDANCE WITH CEC 210.21(B).
2. WHERE DRAWINGS INDICATE EXISTING ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN IN SERVICE OR BE RE-USED, REFURNISH THEM, CLEAN SUCH ITEMS AND NOTIFY ARCHITECT OF ANY DEFECTS IN SUCH INSTALLATIONS. REPAIR ANY EXISTING DAMAGE, AND ANY DAMAGE CAUSED BY CONSTRUCTION PERFORMED UNDER THIS CONTRACT.	14. PROVIDE A BOX OR FITTING AT EACH CONDUCTOR SPICE CONNECTION POINT FOR THE CONNECTION OF RACEWAYS.
3. SEE ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION AND EXACT LOCATIONS OF ALL DEVICES. SEE ALSO Q/LA SERIES DRAWINGS FOR EQUIPMENT LOCATION.	15. PENETRATIONS OF PIPES, CONDUITS, ETC. IN WALLS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE LOCAL FIRE MARSHAL. [CEC 300.21]
4. REFER TO DIRT DRAWINGS FOR EQUIPMENT AND CONDUIT BRACING AND ANCHORAGE DETAILS.	16. FOR PERMANENTLY CONNECTED APPLIANCES RATED GREATER THAN 300 VOLTAMPERES OR 1/8 HORSEPOWER, PROVIDE A DISCONNECTING MEANS WITHIN SIGHT OF THE APPLIANCE. [CEC 422.31(B)]
5. REFER TO ARCHITECTURAL DRAWING FOR LOCATION OF ALL CEILING MOUNTED DEVICES.	17. A DISCONNECTING MEANS SHALL BE LOCATED WITHIN SIGHT OF ALL CONTROLLER LOCATIONS AND SHALL DISCONNECT THE CONTROLLER. [CEC 430.102(A)]
6. IN GENERAL, WIRE COUNTS ARE NOT INDICATED ON PLANS. FOR EACH 20 AMP 120 VOLT OR 277 VOLT CIRCUIT, PROVIDE 1 #12 PHASE CONDUCTOR, 1 #12 NEUTRAL CONDUCTOR, AND 1 #12 GROUNDING CONDUCTOR. WHERE MULTIPLE CIRCUITS ARE SHOWN, UP TO 3 SEPARATE AND DIFFERENT PHASED CIRCUITS (A, B AND C) SHALL BE PROVIDED WITH A SEPARATE NEUTRAL CONDUCTOR PER PHASE AND A SINGLE GROUNDING CONDUCTOR FOR THE PORTION OF THE CIRCUIT IN WHICH THEY SHARE A COMMON CONDUIT. IN CASES WHERE MORE THAN THREE CURRENT CARRYING CONDUCTORS ARE TO BE PROVIDED, ADHERE TO CEC 310.15(B)(3)(a) FOR VOLT DROP PERCENT REQUIREMENT, APPLY THE DERATING FACTOR TO THE CONDUCTORS FIRST, THEN APPLY THE VOLT DROP PERCENT REQUIREMENT.	18. PROVIDE A DISCONNECTING MEANS WITHIN SIGHT OF EACH MOTOR. [CEC 430.102(B)]
7. DO NOT COMBINE MORE THAN THREE SINGLE-PHASE CIRCUITS INTO A SINGLE CONDUIT. IN ALL CASES OF TWO OR THREE CIRCUITS IN A SINGLE HOME RUN CONDUIT, COMBINE CIRCUITS OF THREE DIFFERENT PHASES, CONSISTENT WITH GENERAL NOTE 6 ABOVE. IN ALL CASES OF TWO OR THREE CIRCUITS IN A SINGLE HOME RUN CONDUIT, THE CIRCUITS MAY SHARE A SINGLE GROUNDING ('NEUTRAL') CONDUCTOR AND A SINGLE GROUNDING CONDUCTOR FOR THE PORTION OF THE CIRCUIT IN WHICH THEY SHARE A COMMON CONDUIT. IN CASES WHERE MORE THAN THREE CURRENT CARRYING CONDUCTORS ARE TO BE PROVIDED, ADHERE TO CEC 310.15(B)(3)(a) FOR VOLT DROP PERCENT REQUIREMENT, APPLY THE DERATING FACTOR TO THE CONDUCTORS FIRST, THEN APPLY THE VOLT DROP PERCENT REQUIREMENT.	19. PROVIDE AN INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR FOR RECEPTACLES AND FIXED ELECTRIC EQUIPMENT IN PATIENT CARE AREAS. [CEC 517.13(B)]
	20. ALL LAMPS IN ALL FIXTURES SHALL BE PROTECTED AGAINST ACCIDENTAL BREAKAGE. [CEC 517.22(C)]
	21. KEEP EMERGENCY SYSTEM WIRING INDEPENDENT OF ALL OTHER WIRING. [CEC 517.30(C)(1)]
	22. PERMANENTLY MARK ALL BOXES AND ENCLOSURES FOR EMERGENCY CIRCUITS SO THEY WILL BE EASILY IDENTIFIED AS A COMPONENT OF AN EMERGENCY CIRCUIT OR SYSTEM LABEL ELECTRICAL DEVICES AS SPECIFIED ELSEWHERE. LABEL PULLBOX COVERS WITH CIRCUIT NUMBERS.
	23. CURRENT CODE IS THE 2016 SAN FRANCISCO ELECTRICAL CODE.

LUMINAIRE SCHEDULE

LUMINAIRE SCHEDULE									
FIXTURE DESIGNATION	DESCRIPTION	LUMINAIRE LUMENS	LUMINAIRE WATTS	LAMP SOURCE	COLOR TEMP	DRIVER TYPE	VOLTS	MOUNTING	MANUFACTURER
F2	2'X4 WITH ANGLED NARROW CENTER RAIL, IMPACT-RESISTANT FROSTED ACRYLIC. 120" THICK LENS, AND EVEN ILLUMINATED FACE.	4626	35.1	LED	3500	0-10V		RECESSED	FINELITE HPRLED-EP-ANR-2X4-B-835-VOLT-SC-X
F2-1	2'X4 WITH ANGLED NARROW CENTER RAIL, IMPACT-RESISTANT FROSTED ACRYLIC. 120" THICK LENS, AND EVEN ILLUMINATED FACE.	6808	55	LED	3500	0-10V	277	RECESSED	FINELITE HPRLED-EP-ANR-2X4-V-835-X-SC-X
F2B	2'X2 WITH ANGLED NARROW CENTER RAIL, IMPACT-RESISTANT FROSTED ACRYLIC. 120" THICK LENS, AND EVEN ILLUMINATED FACE.	3276	28.6	LED	3500	0-10V	277	RECESSED	FINELITE HPRLED-EP-ANR-2X2-S-835-X-SC-X
F2B-1	2'X2 WITH ANGLED NARROW CENTER RAIL, IMPACT-RESISTANT FROSTED ACRYLIC. 120" THICK LENS, AND EVEN ILLUMINATED FACE.	2251	20	LED	3500	0-10V	277	RECESSED	FINELITE HPRLED-EP-ANR-2X2-S-835-X-SC-X-2251DL
F4	2'X4 SURGICAL TROFFER, IP65, ONE PIECE SEALED DOOR FRAME, ANTIMICROBIAL FINISH, CLOSED CELL SILICONE GASKET SEALS, CCEA APPROVED	11702	102	LED	3500	0-10V	277	RECESSED	KENALL / M4SEDI-24-100L-35K8-DCC-VOLT-2F-2H-XXX
F4A	2'X4 GREEN AND WHITE SURGICAL TROFFER, IP65, ONE PIECE SEALED DOOR FRAME, ANTIMICROBIAL FINISH, CLOSED CELL SILICONE GASKET SEALS, CCEA APPROVED	11703	102	LED	3500	0-10V	277	RECESSED	KENALL / M4SEDI-43G/100L-35K8-DCC-VOLT-2F-2H-XXX
F5	4" RECESSED SQUARE MICROFLANGED DOWNLIGHT, 40 DEGREE OPTIC.	757	7.5	LED	3500	0-10V	277	RECESSED	LUCIFER / F45MFT-1-WH-AG-80C-12A-3-4-N-1-ANA/NCM-F45-01
F5A	4" RECESSED SQUARE MICROFLANGED ADJUSTABLE DOWNLIGHT, 25 DEGREE OPTIC	1191	14	LED	3500	0-10V	277	RECESSED	LUCIFER / F45MAS-1-WH-BS-80C-12A-XXX
F6	4" LINEAR SLOTLIGHT WITH STRAIGHT LINEAR RUNS, 'L' AND SQUARE SHAPES WITH LIT CORNERS.	350 LF	3.7W LF	LED	3500	0-10V	277	RECESSED	ZUMTOBEL / SLDR-4-XX-1-N-3-835-CK-CR-P-W-U-X-S /...
F6A	SAA BUT ASSYMETRIC	301 LF	3.7W LF	LED	3500	0-10V	277	RECESSED	ZUMTOBEL / SLDR-4-XX-1-N-3-835-CK-CR-P-W-U-X-S /...
F9	4' LINEAR STRIP WITH FROSTED ACRYLIC LENS	4130	31	LED	3500	0-10V	277	SURFACE	DAYBRITE / LSS-4-40-835-1-UNV-DIM
F10	24-34" WALL MOUNTED VANITY LIGHT WITH HIGH IMPACT EXTRUDED WHITE ACRYLIC LENS.	477 LF	4.6 LF	LED	3500	0-10V	277	WALL MOUNTED	FINELITE / HP45M-X-B-835-F-X-X-SC
F11	2" RECESSED LINEAR WALL WASHER, EXTRUDED ALUMINUM BODY, KICKER REFLECTOR AND FROSTED DIFFUSER	375 LF	4.9 LF	LED	3500	0-10V	277	RECESSED	FINELITE/HP72WWR-K-V-835-X-SC-X
F12	2'X4 MRI GRAFIC PANEL, 18 GUAGE ALUMINUM, NON-FERROUS. INCLUDE EMF FILTER AND POWER...	3000	65	LED	6500	0-10V	120	RECESSED	KENALL / CSMRI44-G-10-26L65-24VD...
F12A	NON-FERROUS RF FREE CONSTRUCTION ALUMINUM...	3000	247.3	LED	6500	0-10V	120	RECESSED	SKY FACTORY EP-ELP
F14	5-7/8" SQUARE PERFORMANCE SEM-RECESSED WALL WASHER.	922	17	LED	3500	0-10	277	RECESSED	ELIPTIPAR/S22-M007-X-22-8-00-0-35-EL
X1	RECESSED EDGETL EXIT WITH UNIVERSAL FIELD INSTALLED ARROWS. CLEAR BACK SINGLE FACE, MIRROR BACKGROUND DOUBLE FACE, WITH 90 MIN BATTERY		2.3W	LED			277	RECESSED	EMERGILITE / LSNX-4243-N-G-C-W-UA

Alarm System and Elevator Landing and Stairway Two-Way Emergency Communication System

SFFD FIRE ALARM SUBMITTAL CHECKLIST		LOCATION ON SHEET (PLAN #)
ITEM #	SUBMITTAL CHECK LIST	LOCATION ON SHEET (PLAN #)
A	Names of owner and occupant;	FA-0.01
B	Address of building, including assessor's block and lot number.	FA-0.01
C	Contractor's name, address, telephone number, and license number.	ALL SHEETS
D	Two sets of plans with the wet signature and stamp of the engineer, architect or C-10 design-build contractor. Designers name must be clearly indicated. New or replacement fire alarm systems for high-rise buildings require an engineer's stamp and signature.	ALL SHEETS
E	Symbol list.	FA-0.01
F	Point of compass, surrounding street names, location of main entrance/fire department response point to the building, and full-height cross section of the building, if required for clarity, including ceiling construction and wall with wall-mounted ceiling device locations.	FA-0.01, FA-1.02
G	Locations of partitions and walls, indicating which ones extend through concealed spaces.	FA-1.02
H	Use of each area or room (specifically label private/public offices, private/public storage rooms, and employee work areas).	FA-1.02
I	Location of each device.	FA-0.01
J	Mourning heights of manual fire alarm boxes and visual notification appliances.	FA-1.02
K	Equipment list showing quantity, make, model, and CFSM listing number for each device; (differentiate between new and existing devices)	FA-0.01
L	Manufacturer's specification sheets and CFSM listing sheets (may be loose leaf, highlight all proposed parts; Type and size of wire, cable, and conduit (include conduit fill ratio); Specify wire types, sizes and number of conductors between all devices/components on all shop drawings. Note plans.	SUB BOOKS
M	Single line fire diagram. The single line Riser Diagram shall show all wire types, sizes and number of conductors coordinated with the floor plans.	FA-0.01
N	Point-to-point wiring diagram between all panels and special devices, modules and appliances.	FA-0.01, FA-0.02
O	Wiring diagram showing the correct polarity, power source and phase line.	FA-0.01, FA-0.04
P	Standby battery calculations. For notification appliances circuits, all standby and alarm currents used in the calculation shall be supported by catalog cutouts sheets or documentation from the manufacturer. Highlight all values of all standby and alarm currents used in the calculation.	FA-3.01
R	Speaker power calculations for voice systems (indicate wattage tap per speaker, power per audio circuit, and total power for each amplifier)	FA-3.01
S	Voltage drop calculations not to exceed 10% voltage drop per circuit.	FA-3.01
T	Sequences-of-operation manual. Provide a Sequence of Operation Matrix using the format of NFPA 72, 2010 Edition Figure A-16.5-2-401.	FA-0.02
U	Type of system (i.e., supervising station, protected premises).	FA-0.01
V	Assignment of class designation to device circuits per NFPA 72 Chapter 12;	FA-0.02
W	Description of annunciation zones or list of device locations and their addresses;	FA-0.01
X	If LED device annunciator is required, provide a Fire Alarm Annunciator (FAA) Bulletin B-301, provide a schematic layout of this panel on the plans. Annunciators for high-rise buildings shall comply with SFFD AB 3.01.	FA-0.02
Y	For partial evacuation/relocation buildings or for buildings having large floor areas, unusual designs with area separation walls, or multiple buildings served by a single fire alarm system, a graphic annunciator must be required. The location and configuration of the Graphic Annunciator shall be determined by the SFFD.	N/A
Z	Pre-recorded voice message content (and languages) and all associated evacuation/relocation alert tones preceding and following the message. For example: steady tone 1-3 sec; temporal 3 tone, in accordance with NFPA 72, Chapter 24.	FA-0.02
AA	Description of ancillary features and operations (e.g., type of smoke control system, fire/smoke damper operation, fan shutdown, special extinguishing systems etc.)	N/A
BB	Description of any special features such as detector cross zoning or alarm verification;	N/A
CC	Name of alarm service company (including UL N) which will be responsible initially for inspection, testing, and maintenance of the system after it is accepted.	FA-0.01
DD	If system is to be monitored by a Central Station, indicate name and UL listing number;	FA-0.01
EE	Describe the degree the building is protected by automatic sprinklers (fully or partially sprinklered); Indicate if the elevator hoistway and/or the elevator machine room are protected by sprinklers.	FA-0.01
FF	For high-rise buildings, provide a copy of the facility emergency plan. Indicate the fire alarm system evacuation method (full evacuation, partial evacuation, or relocation). If 24 requirements of sequence of operation shall be consistent with the facility emergency plan. If relocation of occupants is required provide a relocation matrix on the plans (See example matrix in Addendum B).	FA-0.02
GG	In partial evacuation or relocation buildings, show how system survivability is achieved (via a 2-hour integrity barrier, fire alarm box, etc.). Comply with NFPA 72 Chapter 24 requirements for survivability. Provide a separate survivability report on the plans showing the 2-hour protection (See example survivor diagram in Addendum C).	SEE CORE SUBMITTAL
HH	If only one manual fire alarm box is required in a fully sprinklered building (or for a sprinkler monitoring building), the fire alarm box shall be installed adjacent to FACP. This manual fire alarm box shall generate full building manual fire alarm (total evacuation) when the fire alarm system is protected by a sprinkler monitoring system. If a manual fire alarm box shall generate an alarm signal at the fire alarm control panel and transmit an alarm signal to the supervising station.	FA-1.02
	Dedicated fire alarm fire alarm systems (such as sprinkler monitoring system, elevator recall and supervisory systems) are permitted to not incorporate more than a single device. For example, provide a recall smoke detectors and/or duct smoke detectors may be tied into a sprinkler monitoring system control panel for supervisory purposes, if a fire alarm system is not existing in the building. A separate dedicated control panel for each function is not required. A sign indicating that all control functions shall be provided adjacent the control panel (For example: "Sprinkler Monitoring and elevator recall and supervisory control panel").	SEE CORE SUBMITTAL
JJ	Buildings with elevators shall clearly show the elevator location and include the following information on the plans (to be obtained from the elevator service company):	FA-0.02

SCOPE OF WORK	
PROJECT INFORMATION	
BUILDING OWNER:	
PROJECT TYPE:	
BLOCK & LOT NUMBER:	
OCCUPANCY:	
CONSTRUCTION TYPE:	
ALLOWABLE AREA:	
ALLOWABLE HEIGHT:	
GROSS FLOOR AREA:	
ACTUAL BUILDING HEIGHT:	
CENTRAL STATION:	
ALARM SERVICE COMPANY:	
APPLICABLE CODES	
CITY AND COUNTY OF SAN FRANCISCO BUILDING CODE, 2010 EDITION BASED ON 2010 CALIFORNIA BUILDING CODE, WITH SAN FRANCISCO AMENDMENTS.	
2010 CALIFORNIA BUILDING CODE (CBC) BASED ON 2009 INTERNATIONAL BUILDING CODE WITH CALIFORNIA AMENDMENTS. TITLE 24, PART 2.	
2010 CALIFORNIA ELECTRICAL CODE (CEC) BASED ON 2008 NATIONAL ELECTRICAL CODE WITH CALIFORNIA AMENDMENTS. TITLE 24, PART 3.	
2010 CALIFORNIA MECHANICAL CODE (CMC) BASED ON 2009 UNIFORM MECHANICAL CODE WITH CALIFORNIA AMENDMENTS. TITLE 24, PART 4.	
2010 CALIFORNIA PLUMBING CODE (CPC) BASED ON 2009 UNIFORM PLUMBING CODE WITH CALIFORNIA AMENDMENTS. TITLE 24, PART 5.	
2010 CALIFORNIA FIRE CODE (CFC) BASED ON 2009 INTERNATIONAL FIRE CODE WITH CALIFORNIA AMENDMENTS. TITLE 24, PART 9.	
2010 AMERICANS WITH DISABILITY ACT ACCESSIBILITY GUIDELINES (ADAAG).	
NFPA 22 2003 EDITION TO BE MET FOR FIRE WATER TANK.	
NFPA 20 2007 EDITION TO BE MET FOR FIRE PUMP.	
NFPA 14 2007 EDITION TO BE MET FOR STAND PIPE.	
NFPA 72 2010 EDITION TO BE MET FOR FIRE ALARM CODE.	
NFPA 5000 2009 EDITION ANNEX G.	
SFCC - 2010 SECTION 510.4	
CALIFORNIA ELEVATOR CODE: COR TITLE 8 ELEVATOR SAFETY ORDERS GROUP 4 ELEVATORS - ASME A17.1-2004	
NOTE: PROVIDES 2 FIRE SERVICE ACCESS ELEVATOR PER CODE EQUIVALENCY ON A2.4.	
NOTE: WE WILL COMPLY WITH CHAPTER 11 OF THE 2013 CBC IN ORDER TO COMPLY WITH FUTURE TENANT IMPROVEMENTS.	
GENERAL NOTES	
1. ALL DEVICE LOCATIONS, WIRING, CONDUITS SHOWN ON DRAWINGS ARE SUBJECT TO FIELD VERIFICATION. ANY DEVIATION MUST BE APPROVED BY THE FIRE ALARM CONTRACTOR AND MUST COMPLY WITH THE NATIONAL AND LOCAL CODES LISTED ON THIS SHEET.	
2. 120VAC PRIMARY POWER SOURCE TO FIRE ALARM PANELS AND POWER SUPPLIES MUST BE ON A MECHANICALLY PROTECTED DETACHED BRANCH CIRCUIT WITH DISCONNECTING MEANS PERMANENTLY IDENTIFIED AT THE CONTROL UNIT. DISCONNECTING MEANS TO BE IDENTIFIED AS FIRE ALARM CIRCUIT IN RED MARKING AND ACCESSIBLE ONLY TO AN AUTHORIZED PERSONNEL.	
3. 120VAC AND FIRE ALARM CIRCUITS MUST MAINTAIN A 1/4" SEPARATION. NEVER RUN IN SAME RACEWAY.	
4. AFTER COMPLETION OF WORK, ELECTRICAL CONTRACTOR MUST PROVIDE TO THE FIRE ALARM CONTRACTOR A COMPLETE SET OF "RECORD DRAWINGS" SHOWING ALL DEVICE LOCATIONS, DEVICE ADDRESSES, CIRCUIT NUMBERS AND WIRING (IF APPLICABLE).	
5. SEE DETAIL SHEETS FOR DEVICE MOUNTING HEIGHTS AND INSTALLATION INFORMATION. ANY DEVIATION MUST BE APPROVED BY THE FIRE ALARM CONTRACTOR AND MUST COMPLY WITH THE NATIONAL AND LOCAL CODES LISTED ON THIS SHEET.	
6. BACKBOXES, JUNCTION BOXES AND TERMINAL CABINETS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR. TERMINAL CABINETS FOR FIRE ALARM USE MUST BE LABELED "FAC" AND JUNCTION BOXES TO HAVE RED COVERS.	
FIRESTOPPING	
PENETRATIONS THRU WALLS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL, SHALL BE A UL LISTED ASSEMBLY INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. SEE DRAWING A9.01 AND THROUGH PENETRATIONS FIRESTOP BINDER FOR INFORMATION AND DETAILS	

SYMBOL LEGEND										
SYM.	MFG.	MODEL #	TOTAL QTY.	2nd TL.	DESCRIPTION	BACKBOX	CSFM			
[FACU 01]	EST	EST-3	1		FIRE ALARM CONTROL UNIT	3-CAB14B	7165-1657-0186			
		3-CPU3-1	1		CENTRAL PROCESSING UNIT MODULE	3-CAB14B	7165-1657-0186			
		3-RS485A-1	1		NETWORK COMMUNICATIONS CARD	3-CAB14B	7165-1657-0186			
		3-RS232-1	1		RS-232 COMMUNICATION CARD	3-CAB14B	7165-1657-0186			
		3-PP5M	1		PRIMARY POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186			
		3-MODCOM-1	1		MODEMDIALER (DACT)	3-CAB14B	7165-1657-0186			
		3-SDOC1-3	3		DUAL SIGNATURE DRIVER CONTROLLER	3-CAB14B	7165-1657-0186			
		3-ASU4	1		AUDIO SOURCE UNIT WITH MICROPHONE & 4 RAIL MODULES	3-CAB14B	7165-1657-0186			
		3-LCD	1		LIQUID CRYSTAL DISPLAY MODULE	3-CAB14B	7165-1657-0186			
		3-12S1GV1	3		12 SWITCHES W/ 1 GRN & 1 Y/LW LED PER SWITCH DISPLAY	3-CAB14B	7165-1657-0186			
		3-LRMF	3		LOCAL RAIL MODULE FILLER	3-CAB14B	7165-1657-0186			
		3-XFP	1		EXTENDER FILLER PLATE	3-CAB14B	7165-1657-0186			
		3-CHAS7-2	2		CHASSIS ASSEMBLY - 7 LOCAL RAIL MODULE SPACES	3-CAB14B	7165-1657-0186			
		3-CAB14B	1		WALLBOX	INCLUDED	7165-1657-0186			
BY OTHERS	3-CAB14D	1		INNER & OUTER DOORS FOR WALLBOX	3-CAB14B	7165-1657-0186				
	RJ31X	2		ALARM SYSTEM JACK	3-CAB14B					
	SPACE AGE	BICA SPEC GRAY	1		BATTERY CABINET	INCLUDED	-			
	POWER PATROL	SLA1180	2		65AH 7.5 AMP TIME FUSE	BOA-SPEC GRAY	-			
[BATT]	BUSSMAN	BPIAGC-7-1/2-R	4		FUSE BLOCK HOLDER	BOA-SPEC GRAY	-			
	COLE HERSEE	M-674-BX	1		FIRE ALARM NODE 02	3-CAB14B	7165-1657-0186			
[NODE 02]	EST	EST-3	1		CENTRAL PROCESSING UNIT MODULE	3-CAB14B	7165-1657-0186			
		3-CPU3	1		NETWORK COMMUNICATIONS CARD	3-CAB14B	7165-1657-0186			
		3-RS485A-1	1		PRIMARY POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186			
		3-PP5M	1		BOOSTER POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186			
		3-BPS5	1		20 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186			
		3-2A20B	6		40 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186			
		3-2A40B	11	1	24 RED LED DISPLAY MODULE	3-RC2C21R	7165-1657-0186			
		3-24R	3		24 YELLOW LED DISPLAY MODULE	3-RC2C21R	7165-1657-0186			
		3-24Y	1		24 GREEN LED DISPLAY MODULE	3-RC2C21R	7165-1657-0186			
		3-XAG	1		12 SWITCHES WITH 1 GREEN & 1 YELLOW LED PER SWITCH DISPLAY	3-RC2C21R	7165-1657-0186			
		3-12S1GV1	3		EXTENDER FILLER PLATE	3-RC2C21R	7165-1657-0186			
		3-XFP	1		CHASSIS ASSEMBLY - 7 LOCAL RAIL MODULE SPACES	3-RC2C21R	7165-1657-0186			
		3-CHAS7	1		RED WALLBOX & DOOR	INCLUDED	7165-1657-0186			
		3-RC2C21R	1		BATTERY CABINET	INCLUDED	7165-1657-0186			
[BATT]	EST	BC-1	1		BATTERY SHELF	BC-1	-			
		3-BATS	2		55AH BATTERY	BC-1	-			
		PS-12550	2		EC-7.5 AMP TIME FUSE	BC-1	-			
		BUSSMAN	BPIAGC-7-1/2-R	4		FUSE BLOCK HOLDER	BC-1	-		
		COLE HERSEE	M-674-BX	4		FIRE ALARM NODE 03	3-CAB14B	7165-1657-0186		
		[NODE 03]	EST	EST-3	1		CENTRAL PROCESSING UNIT MODULE	3-CAB14B	7165-1657-0186	
				3-CPU3-1	1		NETWORK COMMUNICATIONS CARD	3-CAB14B	7165-1657-0186	
				3-RS485A-1	1		PRIMARY POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186	
				3-PP5M	1		BOOSTER POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186	
				3-BPS5M	1		DUAL SIGNATURE DRIVER CONTROLLER	3-CAB14B	7165-1657-0186	
				3-SDOC1-2	2		20 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186	
				3-2A20B	1		40 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186	
				3-2A40B			CHASSIS ASSEMBLY - 7 LOCAL RAIL MODULE SPACES	3-RC2C21R	7165-1657-0186	
				3-CHAS7	3		RED WALLBOX & DOOR	INCLUDED	7165-1657-0186	
3-RC2C21R	1				BATTERY CABINET	INCLUDED	7165-1657-0186			
[BATT]	EST			BC-1	1		BATTERY SHELF	BC-1	-	
				3-BATS	2		55AH BATTERY	BC-1	-	
				PS-12550	2		EC-7.5 AMP TIME FUSE	BC-1	-	
				BUSSMAN	BPIAGC-7-1/2-R	4		FUSE BLOCK HOLDER	BC-1	-
		COLE HERSEE	M-674-BX	4		FIRE ALARM NODE 03	3-CAB14B	7165-1657-0186		
		[PRINT]	EST	EST-3	1		CENTRAL PROCESSING UNIT MODULE	3-CAB14B	7165-1657-0186	
				3-CPU3-1	1		NETWORK COMMUNICATIONS CARD	3-CAB14B	7165-1657-0186	
				3-RS485A-1	1		PRIMARY POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186	
				3-PP5M	1		BOOSTER POWER SUPPLY WITH LOCAL RAIL MODULE	3-CAB14B	7165-1657-0186	
				3-BPS5M	1		DUAL SIGNATURE DRIVER CONTROLLER	3-CAB14B	7165-1657-0186	
				3-SDOC1-2	2		20 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186	
				3-2A20B	1		40 WATT ZONED AUDIO AMPLIFIER	3-CAB14B	7165-1657-0186	
				3-2A40B			CHASSIS ASSEMBLY - 7 LOCAL RAIL MODULE SPACES	3-RC2C21R	7165-1657-0186	
				3-CHAS7	3		RED WALLBOX & DOOR	INCLUDED	7165-1657-0186	
3-RC2C21R	1				BATTERY CABINET	INCLUDED	7165-1657-0186			
[BATT]	EST			BC-1	1		BATTERY SHELF	BC-1	-	
				3-BATS	2		55AH BATTERY	BC-1	-	
				PS-12550	2		EC-7.5 AMP TIME FUSE	BC-1	-	
				BUSSMAN	BPIAGC-7-1/2-R	4		FUSE BLOCK HOLDER	BC-1	-
		COLE HERSEE	M-674-BX	4		FIRE ALARM NODE 03	3-CAB14B	7165-1657-0186		
		[PRNT]	EST	PT-1S	1		SERIAL PRINTER	RC-1	7165-1657-0186	
				[FCP 04]	EST	3-ANNCPU3	1	FIREFIGHTER'S FAN CONTROL PANEL	RSO-GR-GP4	7120-1657-0193
						3-EVPVRA	1	ANNUNCIATOR POWER SUPPLY CARD	ANN-GR-GP4	7165-1657-0199
						3-EVDVRA	10	LED / SWITCH DRIVER MODULE	RSO-GR-GP4	7120-1657-0199
						3-EVDTR	3	PLASTIC MOUNTING AND EXTRUSION FOR EVDVRA	RSO-GR-GP4	7120-1657-0199
				HR KIRKLAND	RSO-GR-GP4	CABINET - 32" W5W x 41H x 4W TDD	1	INCLUDED	7120-11780-00	
						3-4ANN-1	1	EMERGENCY RESPONDERS RADCO COVERAGE SYSTEM ANNUNCIATOR (INCLUDES (2) 3-ANNSM, CPU & DOOR)	3-4ANNB-S	7120-1657-0193
				[ERRCS 05]	EST	3-4ANNB-S	1	WALLBOX - SURFACE MOUNT	3-4ANNB-S	7120-1657-0193
						3-24Y	1	24 YELLOW LED DISPLAY MODULE	3-4ANNB-S	7120-1657-0193
3-ANNBF	1					BLANK FILLER PLATE	3-4ANNB-S	7120-1657-0193		
3-CPUDDR	1					ICU DOORS WITH FILLER PLATE	3-4ANNB-S	7165-1657-0186		
[MOC #G1/RSO5]	EST			3-RC2C21R	1	WALLBOX - SURFACE MOUNT	INCLUDED	7165-1657-0186		
				18	UNIVERSAL INPUT/OUTPUT MODULE MOTHERBOARD	3-RC2C21R	7300-1657-0121			
[P]	EST			SIGA-MC72	45	DUAL INPUT MODULE - UIO MOUNT	3-RC2C21R	7300-1657-0121		
		SIGA-MC81	60	CONTROL RELEASE - UIO MOUNT	3-RC2C21R	7300-1657-0121				
[P]	EST	SIGA-278	1	ADUAL ACTION MANUAL PULL STATION	4" SQ. DEEP BOX WITH 1 GANG RING	7150-1657-0129				
		[DR]	POTTER	RMS-1T-LP YELLOW EMERGENCY DOOR RELEASE	1	YELLOW EMERGENCY DOOR LOCK RELEASE PULL STATION	SINGLE GANG	7150-1039-001		
SIGA-CT1	1			0	SINGLE INPUT MODULE	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657-0121			
[CAB]	EST	SIGA-UIO6R	2	UNIVERSAL INPUT/OUTPUT MODULE MOTHERBOARD WITH 6 RISER INPUTS	MFC-A	7300-1657-0121				
		MFC-A	2	MULTI-FUNCTION FIRE CABINET	INCLUDED	7300-1657-0121				
[UN-C]	EST	SIGA-MCC1	9	SIGNAL MODULE - UIO MOUNT	MFC-A	7300-1657-0121				
		SIGA-CC1	1	SIGNAL MODULE	4" SQ DEEP BOX WITH 2 GANG RING	7300-1657-0121				

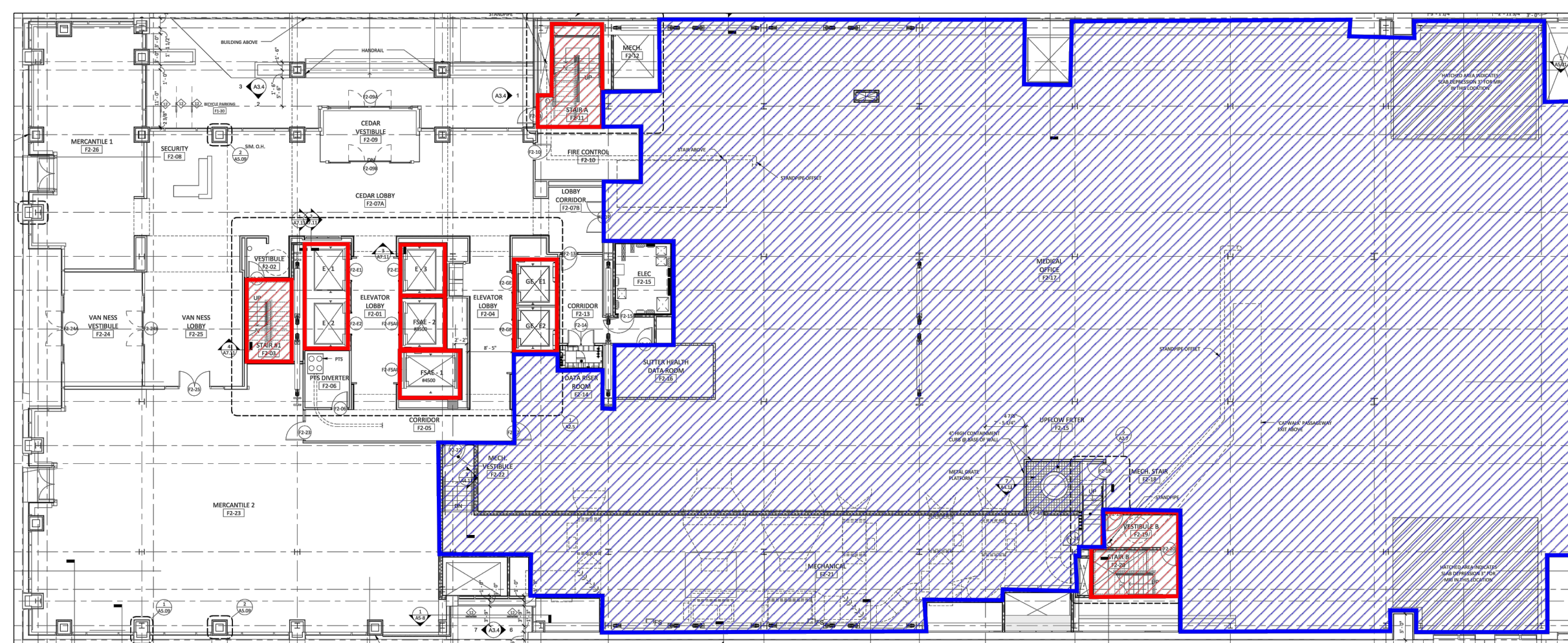
NOTE: TOTAL QUANTITY OF FIRE ALARM DEVICES OF THE ENTIRE BUILDING SHOWN FOR REFERENCE ONLY

SYMBOL LEGEND							
SYM.	MFG.	MODEL #	TOTAL QTY.	2nd TL.	DESCRIPTION	BACKBOX	CSFM
	EST	SIGA-CC1S	15		SYNCHRONIZATION OUTPUT MODULE	4" SQ. DEEP BOX WITH 2 GANG RING	7300-1657/0121
	EST	SIGA-CR	77		CONTROL RELAY	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0121
	EST	SIGA-CRH	15		HIGH POWER CONTROL RELAY	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0121
	EST	SIGA-CT1	31		SINGLE INPUT MODULE	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0121
	EST	SIGA-CT2	160		DUAL INPUT MODULE	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0121
	EST	SIGA-IO	80		INPUT/OUTPUT MODULE	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0210
	SYSTEM SENSOR	PR-1	353		MULTI-VOLTAGE RELAY	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1653/01
	EST	SIGA-PD	115	2	PHOTO SMOKE DETECTOR	SIGA-SB4	7272-1657/0331
	EST	SIGA-SB4	115	2	4" DETECTOR MOUNTING BASE	4" OCTAGON BOX	7300-1657/0120
	EST	SIGA-PD	2		PHOTO SMOKE DETECTOR (WALL MOUNTED)	SIGA-SB4	7272-1657/0331
	EST	SIGA-SB4	2	0	4" DETECTOR MOUNTING BASE	4" OCTAGON BOX	7300-1657/0120
	EST	SIGA-PD	18	0	PENDANT MOUNT PHOTO SMOKE DETECTOR	SIGA-SB4	7272-1657/0331
	EST	SIGA-SB4	18	0	4" DETECTOR MOUNTING BASE	4" OCTAGON BOX	7300-1657/0120
	EST	SIGA-PD	21		PHOTO SMOKE DETECTOR	SIGA-SB	7272-1657/0331
	SIGA-DMP	21			DETECTOR MOUNTING PLATE	INCLUDED	-
	SIGA-SB	21			DETECTOR MOUNTING BASE	SIGA-DMP	7300-1657/0120
	EST	SIGA2-HRS	11		FIXED TEMP. / RATE-OF-RISE HEAT DETECTOR	SIGA-SB4	7272-1657/0288
	EST	SIGA-SD	11	0	4" DETECTOR MOUNTING BASE	4" OCTAGON BOX	7300-1657/0120
	EST	SIGA-SD	53		SMOKE DETECTOR	INCLUDED	3242-1657/0223
	EST	SD-TW3	3		SAMPLING TUBE	-	-
	POWER SONIC	BPS6A	33	2	6.5 AMP BOOSTER POWER SUPPLY	INCLUDED	7300-1657/0229
	EST	PS-1270	66	4	7AH BATTERY	-	-
	EST	757A-W	1		WEATHERPROOF HORN-STROBE 110CD (WALL - CEILING)	757A-WB	7125-1657/0189
	EST	757A-WB	1	0	WEATHERPROOF BOX	-	-
	EST	LKC-1	1	0	LENS KIT	-	-
	EST	757A-WB	1		WEATHERPROOF SPEAKER-STROBE - 110CD WALL, 60CD CEILING	757A-WB	7125-1657/0181
	EST	LKC-1	1	0	LENS KIT	-	-
	EST	GCHF-WF-S7	70	7	CEILING MOUNT SPEAKER	4" SQ. DEEP BOX	7320-1657/0324
	EST	G4F-S7	61		WALL MOUNT SPEAKER	4" SQ. DEEP BOX	7320-1657/0211
	EST	G4F-STVM	39		WALL MOUNT SPEAKER-STROBE (115, 30, 75, 110 SELECTABLE CANELLA OUTPUT)	4" SQ. DEEP BOX	7320-1657/0211
	EST	GCHF-WF-STVMC	507	53	CEILING MOUNT SPEAKER-STROBE (115, 30, 75, 95 SELECTABLE CANELLA OUTPUT)	4" SQ. DEEP BOX	7320-1657/0324
	EST	GCHF-WF-STVMCH	80		CEILING MOUNT SPEAKER-STROBE (115, 115, 150, 177 SELECTABLE CANELLA OUTPUT)	4" SQ. DEEP BOX	7320-1657/0324
	EST	G1F-VM	1		WALL MOUNT STROBE (115, 30, 75, 110 SELECTABLE CANELLA OUTPUT)	SINGLE GANG	7125-1657/0218
	EST	GCF-VM	205	19	CEILING MOUNT STROBE (115, 30, 75, 95 SELECTABLE CANELLA OUTPUT)	4" SQ. DEEP BOX	7125-1657/0219
	EST	CS405-7A-T	6		WEATHERPROOF STROBE 1575CD	449	7125-1657/0184
	EST	449	6	0	WEATHERPROOF BOX	-	-
	EST	LKC-1	6	0	LENS KIT	-	-
	RATH	2500-28RCF	1		2-WAY EMERGENCY COMMUNICATION SYSTEM MAIN PANEL W/ FLUSH MOUNT CABINET	INCLUDED	-
	RATH	2500-28RCF	1		DISTRIBUTION MODULE	INCLUDED	-
	RATH	2400-805SP	21		AREA OF REFUGE ASSISTANCE CALL BOXES, SURFACE MOUNT	INCLUDED	-
	RATH	7049	21		BACKBOX	INCLUDED	-
	RATH	RP7700104	1		INSTRUCTION SIGN - RAISED LETTER AND BRAILLE	INCLUDED	-
	RATH	2500-RPSM	1		24VDC POWER SUPPLY (FOR CALL BOXES)	INCLUDED	-
	HR KIRKLAND	RSE-L-GR	1		24VDC POWER SUPPLY W/ BATTERY BACKUP	INCLUDED	-
	EST	3-EVDVRA	2		FSAE ELEVATOR LOBBY TEMPERATURE PANEL ANNUNCIATOR CABINET - 24.2PVA x 28.14 x 17.5D	RSE-L-GR	7120-1178/0100
	EST	3-EVDVRX	1		LED / SWITCH DRIVER MODULE	RSC-L-GR	7120-1657/0199
	EST	3-EVDVRX	1		PLASTIC MOUNTING EXTRUSION FOR EVDVRA	RSC-L-GR	7120-1657/0199
	OMEGA	CN13233	15		TEMPERATURE CONTROLLER	SINGLE GANG	-
	VERIS	TWLA	15		ELEVATOR LOBBY TEMPERATURE SENSOR	SINGLE GANG	-
	EST	BPS6A	1	0	6.5 AMP BOOSTER POWER SUPPLY	INCLUDED	7300-1657/0229
	POWER SONIC	PS-1270	2	0	7AH BATTERY	BPS6A	-
	BY OTHERS	-	68		DOOR HOLDER	-	-
	BY OTHERS	-	15		FIRE ALARM TERMINAL CABINET	-	-
	BY OTHERS	-	143		FIRESMOKE DAMPER	-	-
	BY OTHERS	-	38		WATERFLOW SWITCH	-	-
	BY OTHERS	-	39		VALVE TAMPER SWITCH	-	-
	TEL GUARD	TG-7FS LTE-V	1	0	CELLULAR ALARM COMMUNICATOR	INCLUDED	7300-1402/0109
	POWER SONIC	PS-1270	2	0	7AH BATTERY	BPS6A	-
	EST	SIGA-CT1	1		SINGLE INPUT MODULE	4" SQ. DEEP BOX WITH 1 GANG RING	7300-1657/0121

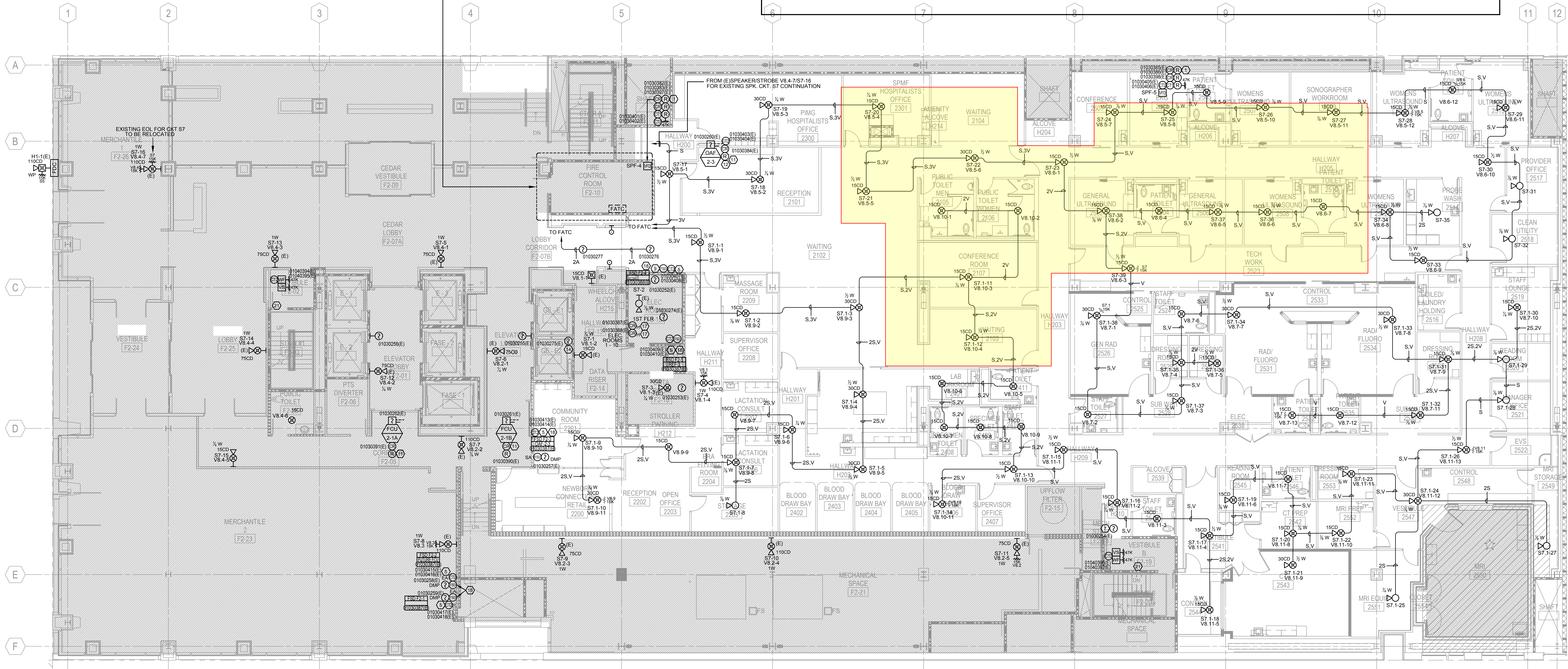
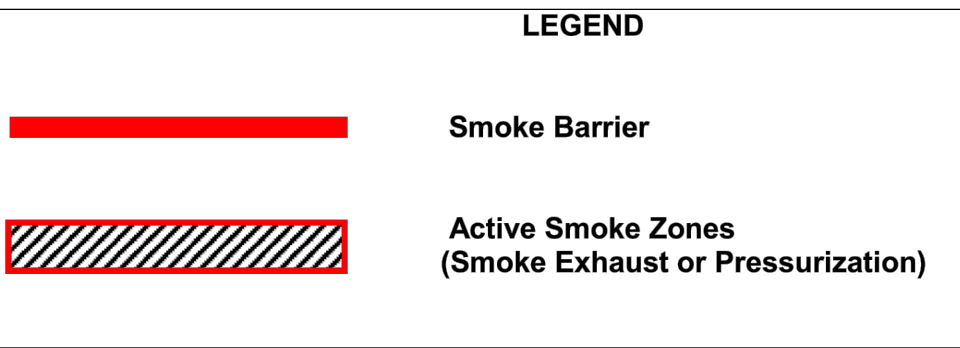
ELECTRICAL CONTRACTOR:		
STAMP:		
REV	DESCRIPTION	DATE
DRAWN BY: - PROJECT ENGINEER: - PROJECT MANAGER: - JOB NUMBER: SCALE: Not Applicable DATE: 02-15-18		
FIRE ALARM SYSTEM		
TITLE:		
DRAWING:		

FA-0.01

2ND FLOOR SMOKE CONTROL ZONE MAP



PARTITION GRAPHIC LEGEND			
GRAPHIC	DESCRIPTION	TYPE	PRIORITY
[Symbol]	2 HOUR SMOKE BARRIER/FIRE PART.	2AB	HIGH
[Symbol]	2 HOUR FIRE BARRIER / SHAFTHALL	2Aa	
[Symbol]	2 HOUR FIRE BARRIER	2Aa	
[Symbol]	2 HOUR FIRE PARTITION ON 2 HOUR SHAFTHALL	2Ma	
[Symbol]	2 HOUR SHAFTHALL ON 2 HOUR SHAFTHALL	2Ma	
[Symbol]	2 HOUR CHALK FIRE BARRIER	2Ma	
[Symbol]	1 HOUR SMOKE BARRIER	1AB	
[Symbol]	1 HOUR FIRE BARRIER / SHAFTHALL	1Sa	
[Symbol]	1 HOUR FIRE BARRIER/SHAFTHALL	1Sa	
[Symbol]	1 HOUR FIRE PARTITION	1Ac	
[Symbol]	1 HOUR SHAFTHALL ON 1 HOUR SHAFTHALL	1Ma	
[Symbol]	1 HOUR CHALK FIRE BARRIER	1Ma	
[Symbol]	SOUND PARTITION	DAF	
[Symbol]	2 HR RATED SOUND PARTITION	2Aa	
[Symbol]	FULL HEIGHT PARTITION	DAa	
[Symbol]	PARTIAL HEIGHT PARTITION	OPa	LOW



SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL UNIT	[BPSA]	6.5 AMP BOOSTER POWER SUPPLY
[NODE]	FIRE ALARM NODE	[WPC]	WEATHERPROOF HORN/STROBE
[FCP]	FIREFIGHTER'S CONTROL PANEL	[WPCD]	WEATHERPROOF HORN/STROBE WITH AMBER LENS
[FSA]	FIRE ALARM ANNUNCIATOR	[WPCD]	WEATHERPROOF WALL MOUNTED SPEAKER-STROBE
[FSAE]	FIRE SERVICE ACCESS ELEVATOR STATUS PANEL	[WPCD]	WEATHERPROOF CEIL. MOUNTED CEILING MOUNT STROBE
[ECS]	EMERGENCY TWO-WAY COMMUNICATION SYSTEM CONTROL PANEL	[WPCD]	WEATHERPROOF CEIL. MOUNTED CEILING MOUNT STROBE
[ERRCS]	EMERGENCY RESPONDERS RADIO COVERAGE SYSTEM ANNUNCIATOR	[SPEAKER]	SPEAKER
[PRINT]	PRINTER	[SPEAKER-STROBE]	SPEAKER-STROBE
[MFC]	MULTI-FUNCTION CABINET	[SPEAKER-STROBE]	CEILING MOUNT SPEAKER-STROBE
[I/O]	INPUT/OUTPUT MODULE	[SPEAKER-STROBE]	CEILING MOUNT SPEAKER-STROBE
[S/I]	SINGLE INPUT MODULE	[SPEAKER-STROBE]	CEILING MOUNT SPEAKER-STROBE
[D/I]	DUAL INPUT MODULE	[SPEAKER-STROBE]	CEILING MOUNT SPEAKER-STROBE
[C/R]	CONTROL RELAY	[FATC]	FIRE ALARM TERMINAL CABINET
[H/P]	HIGH POWER CONTROL RELAY	[STAIRWELL]	STAIRWELL LOCK RELEASE STATION
[S/M]	SIGNAL MODULE	[TEMPERATURE]	TEMPERATURE SENSOR
[S/O]	SYNCHRONIZATION OUTPUT MODULE	[TEMPERATURE]	TEMPERATURE CONTROLLER
[S/P]	SPDT RELAY	[CALL]	CALL STATION
[P/S]	PULL STATION	[WATER]	WATER FLOW SWITCH
[S/D]	SMOKE DETECTOR	[VALVE]	VALVE TAMPER SWITCH
[S/D]	SMOKE DETECTOR - PENDANT MOUNT	[POST]	POST INDICATOR VALVE
[S/D]	SMOKE DETECTOR WITH DUCT MOUNTING PLATE	[OSBY]	OSBY VALVE
[S/D]	DUCT SMOKE DETECTOR	[FIRE]	FIRE/SMOKE DAMPER
[FTR]	FIXED TEMPERATURE-RATE-OF-RISE HEAT DETECTOR	[FIRE]	EA = EXHAUST AIR; RA = RETURN AIR; SA = SUPPLY AIR
[ECS]	ECS DISTRIBUTION MODULE	[DOOR]	DOOR HOLDER
[RPSM]	ECS POWER SUPPLY	[FIRE]	FIRE DEPARTMENT CONNECTION
		[JUNCTION]	JUNCTION BOX (BY OTHERS)
		[SUBSCRIPTS]	WP = WEATHERPROOF

GENERAL SHEET NOTES

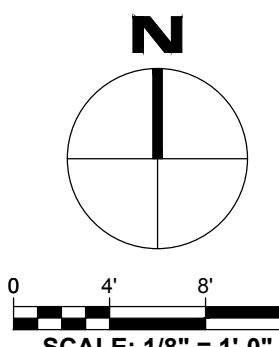
- WIRING ON FLOOR PLANS SHOWN FOR REFERENCE ONLY. ACTUAL WIRE PATHS TO BE DETERMINED UPON FIELD VERIFICATION AND ANY DEVIATIONS MUST BE DISCUSSED PRIOR TO INSTALLATION AND NOTED ON "AS-BUILT" DRAWINGS.
 - ANY DEVICE EXPOSED TO OUTSIDE ENVIRONMENT MUST BE IN A WEATHERPROOF ENCLOSURE PROVIDED BY OTHERS.
- FIRE/SMOKE DAMPER DESIGNATION**
- LEVEL AHU FSD NUMBER
- FSD-XXXXXX INPUT/OUTPUT MODULE ADDRESS
- ADDRESS CIRCUIT LEGEND**
- LRM CARD# PANEL# DEVICE ADDRESS#
- STROBE CIRCUIT LEGEND**
- STROBE POWER SUPPLY # CIRCUIT # DEVICE #
- SPEAKER CIRCUIT LEGEND**
- SIGNAL TYPE CIRCUIT # DEVICE #

KEYED SHEET NOTES

- *MODULES FOR FAN CONTROL AND STATUS. CONTROL MODULES FOR FAN ON & FAN OFF STATUS MONITOR MODULES FOR FAN POWER SUPERVISION.
- *MODULES FOR FIRE/SMOKE DAMPER CONTROL AND OPEN/CLOSED STATUS.
- *MONITOR MODULE FOR WATER STORAGE HIGH AND LOW LEVEL SUPERVISION.
- *MONITOR MODULE FOR GENERATOR FUEL LEAK SUPERVISION.
- *MONITOR MODULE FOR FIRE/SMOKE DAMPER OPEN / CLOSED STATUS.
- *MODULES FOR FIRE PUMP SUPERVISION.
- *RUNNING - PHASE REVERSAL - TROUBLE.
- *DETECTOR ACTIVATES STAIR PRESSURIZATION FAN(S).
- *SMOKE DETECTOR FOR DOOR CONTROL TO BE MOUNTED WITHIN 5 FEET OF DOOR(S).
- *FIRE/SMOKE DAMPER / FAN ACTIVATES VIA AREA SMOKE DETECTION.
- *MODULES FOR ELEVATOR CONTROL.
- *RECALL - ALTERNATE FLOOR RECALL - FIREFIGHTER'S HAT SIGNAL.
- *RELAY FOR FAN SHUTDOWN.
- *MONITOR MODULE FOR FAN ON / FAN OFF STATUS.
- *CONTROL RELAY FOR FSAE HOISTWAY LIGHTING CONTROL.
- *TOP OF HOISTWAY SMOKE DETECTOR. AN ACCESSIBLE UL LISTED 90 MINUTE FIRE RATED WATCH ACCESS DOOR TO BE PROVIDED (BY OTHERS). SEE "ELEVATOR HOISTWAY SMOKE DETECTOR INSTALLATION DETAIL" ON SHEET FA-1.2.
- *SMOKE DETECTOR TO BE PROVIDED DURING FUTURE TENANT IMPROVEMENT.
- *MODULES FOR GENERATOR SUPERVISION.
- *RUNNING - LOW FUEL - TROUBLE - OUT OF AUTO.
- *CONTROL RELAY FOR FIRE/SMOKE DAMPER CONTROL.
- *CONTROL RELAY FOR FIRE/SMOKE DAMPER LOCATED IN ELECTRICAL ROOM.
- *CONTROL RELAY FOR FIRE/SMOKE DAMPER LOCATED IN THE ELECTRICAL ROOM ON THE 2ND FLOOR.
- *CONTROL RELAY FOR FIRE ALARM INPUT TO BAS.
- *SEE RISER DIAGRAM ON SHEET FA-2.01/FA-2.02 FOR WIRING.
- *CONTROL RELAY FOR DOOR HOLDER CONTROL.
- *CONTROL RELAY FOR DOOR LOCK CONTROL.
- *SIGNAL MODULE FOR SPEAKER CIRCUIT ACTIVATION.
- *SIGNAL MODULE FOR HORN/STROBE ACTIVATION.
- *MONITOR MODULE FOR FSAE EQUIPMENT POWER SUPERVISION.
- *MONITOR MODULE FOR PHASE II EMERGENCY IN-CAR OPERATION.
- *TEMPERATURE CONTROL AND SENSOR TEMPERATURE/POWER MONITORING. SEE RISER DIAGRAM IN SHEET FA-2.02 FOR WIRING.
- *FAN INTERFACE MODULES ARE IN THE MCC CABINET, MCC #G1, LOCATED IN ELEC ROOM G1-05 GARAGE 1 LEVEL.
- *FAN INTERFACE MODULES ARE IN THE MCC CABINET, MCC #G1, LOCATED IN ELEC ROOM G1-05 GARAGE 1 LEVEL.
- *SEE SHEET FA-1.10 FOR MCC #G1 FAN INTERFACE MODULES WIRING.
- *SEE SHEET FA-1.11 FOR MCC #G5 FAN INTERFACE MODULES WIRING.
- *CONTROL RELAY MODULE AND PR-1 RELAY FOR FSAE HOISTWAY LIGHTING ACTIVATION.
- *FIRE ALARM RELAY MODULE USED TO INITIATE CONTROL FUNCTIONS SHALL BE LOCATED WITHIN 3 FEET OF THE CONTROLLED CIRCUIT OR APPLIANCE (2010 NFPA 72, 21.2.4).

CABLE LEGEND

SEE SHEET FA-0.02 FOR PART NUMBER AND CSFM LISTING	NOTE
A DATA CABLE (PLENUM) DATA CABLE (NON-PLENUM) #16 AWG TWISTED PAIR 300 FEET MAXIMUM DISTANCE 35F MAXIMUM CAPACITANCE 79 OHMS MAXIMUM RESISTANCE MAXIMUM OF 124 T-TAPS PER LOOP	1. OUTGOING AND RETURN RISERS SHALL HAVE 12 INCH VERTICAL AND 4 FOOT HORIZONTAL SPACING. ALL AUDIO AND NETWORK DATA WIRING SHALL BE IN A 2-HOUR FIRE RATED ENCLOSURE OR 2-HOUR CABLE ASSEMBLY MAY BE REQUIRED AS SHOWN PER NFPA 72, 2010, SECTION 24.4.1.8.4.3. ALL CIRCUITS NECESSARY FOR THE OPERATION OF THE NOTIFICATION APPLIANCE SHALL BE PROTECTED UNTIL THEY ENTER THE EVACUATION SIGNALING ZONE THAT THEY SERVE. ANY OF THE FOLLOWING METHODS SHALL BE CONSIDERED ACCEPTABLE AS MEETING THE REQUIREMENTS OF THIS SUBSECTION.
NA AUDIO DATA RISER CABLE #16 AWG TWISTED SHIELDED PAIR NO T-TAPS ALLOWED	2. NFPA 72, 2010 12.4.3, 12.4.4 AND 24.3.5.8.1. PATHWAY SURVIVABILITY SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING: (1) 2 HOUR FIRE RATED CIRCUIT INTEGRITY (CI) CABLE (2) 2 HOUR FIRE RATED CABLE SYSTEM (ELECTRICAL CIRCUIT PROTECTIVE SYSTEMS) (3) 2-HOUR FIRE RATED ENCLOSURE OR PROTECTED AREA (4) 2-HOUR PERFORMANCE ALTERNATIVES APPROVED BY THE AUTHORITY HAVING JURISDICTION.
ND NETWORK DATA RISER CABLE #16 AWG TWISTED PAIR NO T-TAPS ALLOWED	
P 24V AC/DC POWER CABLE #12 AWG T-TAPS ALLOWED	
S SPEAKER TERMINATION CABLE #16 AWG TWISTED SHIELDED PAIR NO T-TAPS ALLOWED	
SR SPEAKER RISER CABLE #14 AWG TWISTED SHIELDED PAIR NO T-TAPS ALLOWED	
V NOTIFICATION CABLE #12 AWG NO T-TAPS ALLOWED	
M MSC MAKE-UP CABLE #16 AWG TWISTED PAIR NO T-TAPS ALLOWED	



ELECTRICAL CONTRACTOR:

STAMP:

REV	DESCRIPTION	DATE

DRAWN BY: PROJECT ENGINEER -
PROJECT MANAGER -
JOB NUMBER: SCALE: 1/8" = 1'-0" DATE: 06-15-16

TITLE: FIRE ALARM SYSTEM

LEVEL 2 FIRE ALARM PLAN

DRAWING: FA-1.02