

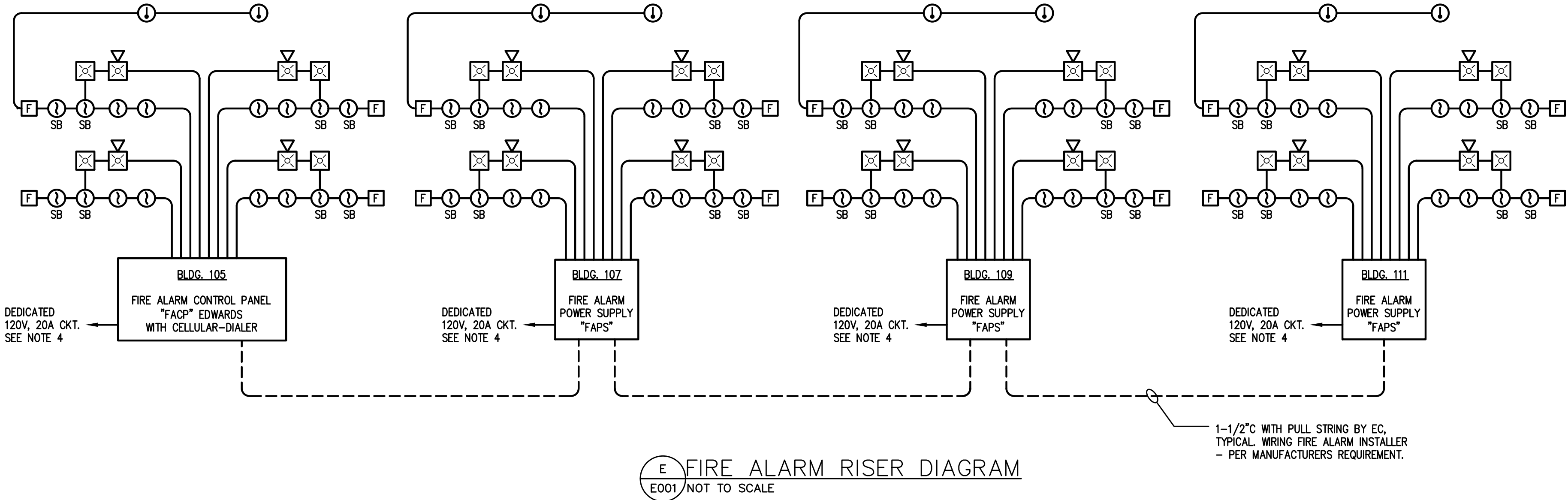
SYMBOL	DESCRIPTION
FIRE ALARM	
	CONDUIT RUN IN SLAB OR UNDERGROUND.
	CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS, UNLESS NOTED OTHERWISE.
	FIRE ALARM CONTROL PANEL
	FIRE ALARM POWER SUPPLY
	FIRE ALARM REMOTE ANNUNCIATOR
	AREA SMOKE DETECTOR. 'SB' INDICATES WITH 520HZ SOUNDER BASE. STEM INDICATES WALL MOUNTED.
	FIRE ALARM SYSTEM STROBE UNIT ONLY, CANDELA NOTED, 15cd IF NOT NOTED
	FIRE ALARM SYSTEM HORN/STROBE UNIT
	MANUAL FIRE ALARM PULL STATION
	COMBINATION RATE OF RISE AND FIXED TEMPERATURE OR RATE COMPENSATED HEAT DETECTOR
	MONITOR MODULE
	FIRE SUPPRESSION CONTROLLER. SEE DETAIL B/E001 FOR ADDITIONAL INFORMATION.
	RANGE SHUTOFF CONTROLLER, SEE DETAIL B/E001 FOR ADDITIONAL INFORMATION.
	FIRE SUPPRESSION MANUAL PULL STATION, SEE DETAIL B/E001 FOR ADDITIONAL INFORMATION.
	KNOX BOX, SURFACE MOUNTED, BRONZE FINISH. KNOX# KNOXBOX 3200 OR EQUAL.

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR	PNL	PANEL
BKR	BREAKER	PVC	POLYVINYL CHLORIDE CONDUIT
CU	COPPER	RECPT	RECEPTACLE (R.)
CKT	CIRCUIT	REQD	REQUIRED
DWG	DRAWING	RGS	RIGID GALVANIZED STEEL
EC	ELECTRICAL CONTRACTOR	TYP	TYPICAL
EMT	ELECTRICAL METALLIC TUBING	UNO	UNLESS NOTED OTHERWISE
FWE	FURNISHED WITH EQUIPMENT	UGND	UNDERGROUND
MFR	MANUFACTURER	W/	WITH
NTS	NOT TO SCALE	WP	WEATHER PROOF

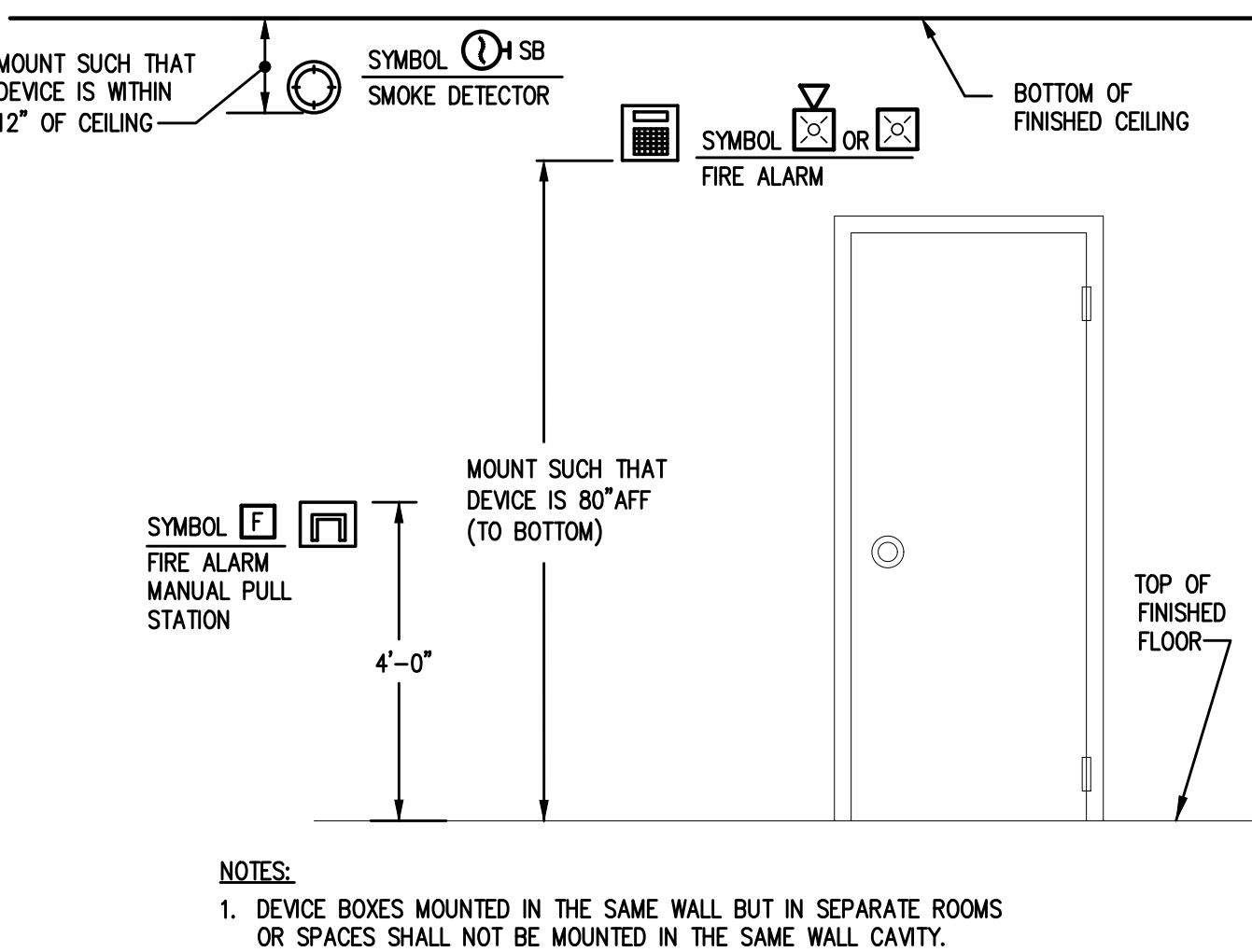
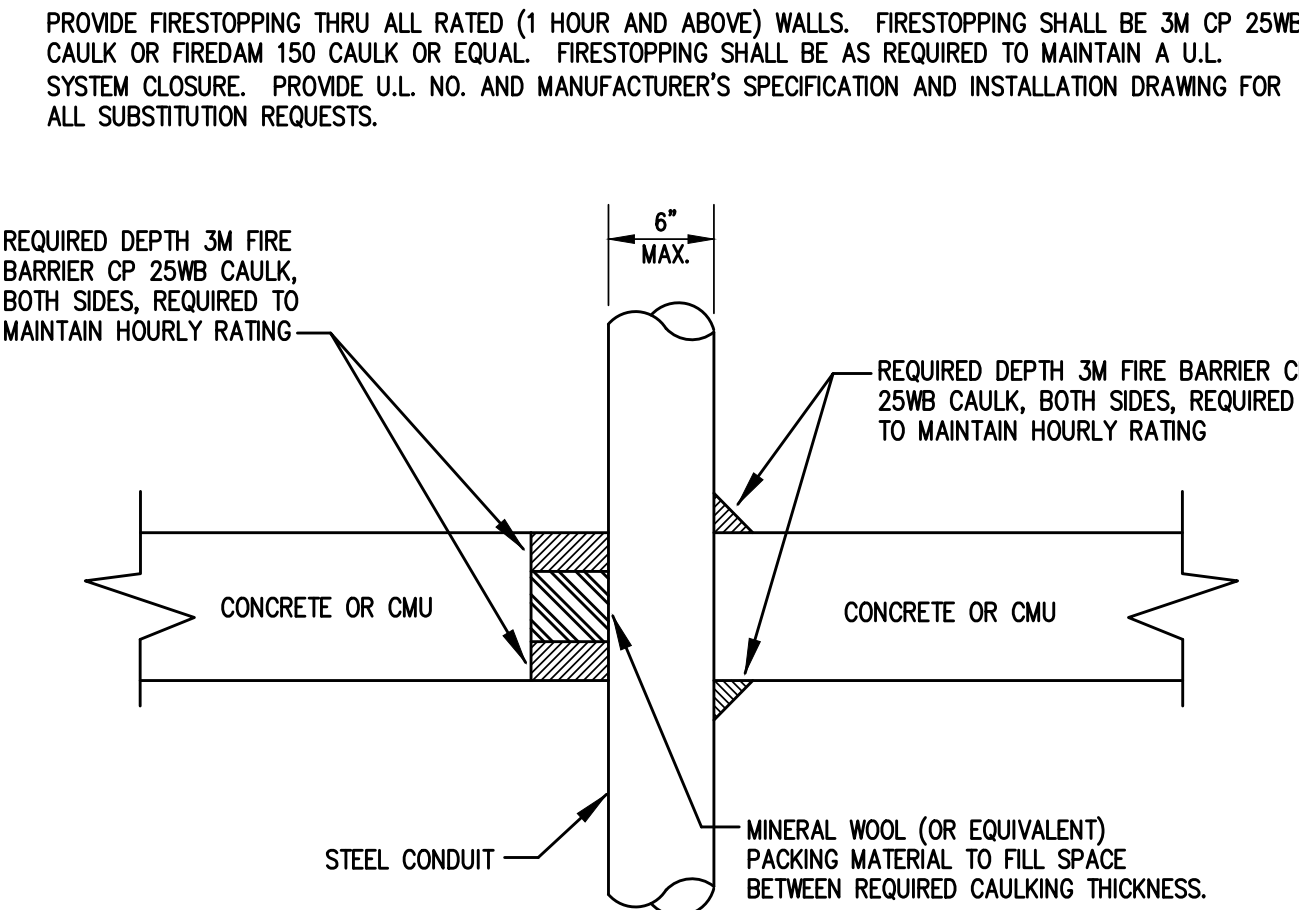
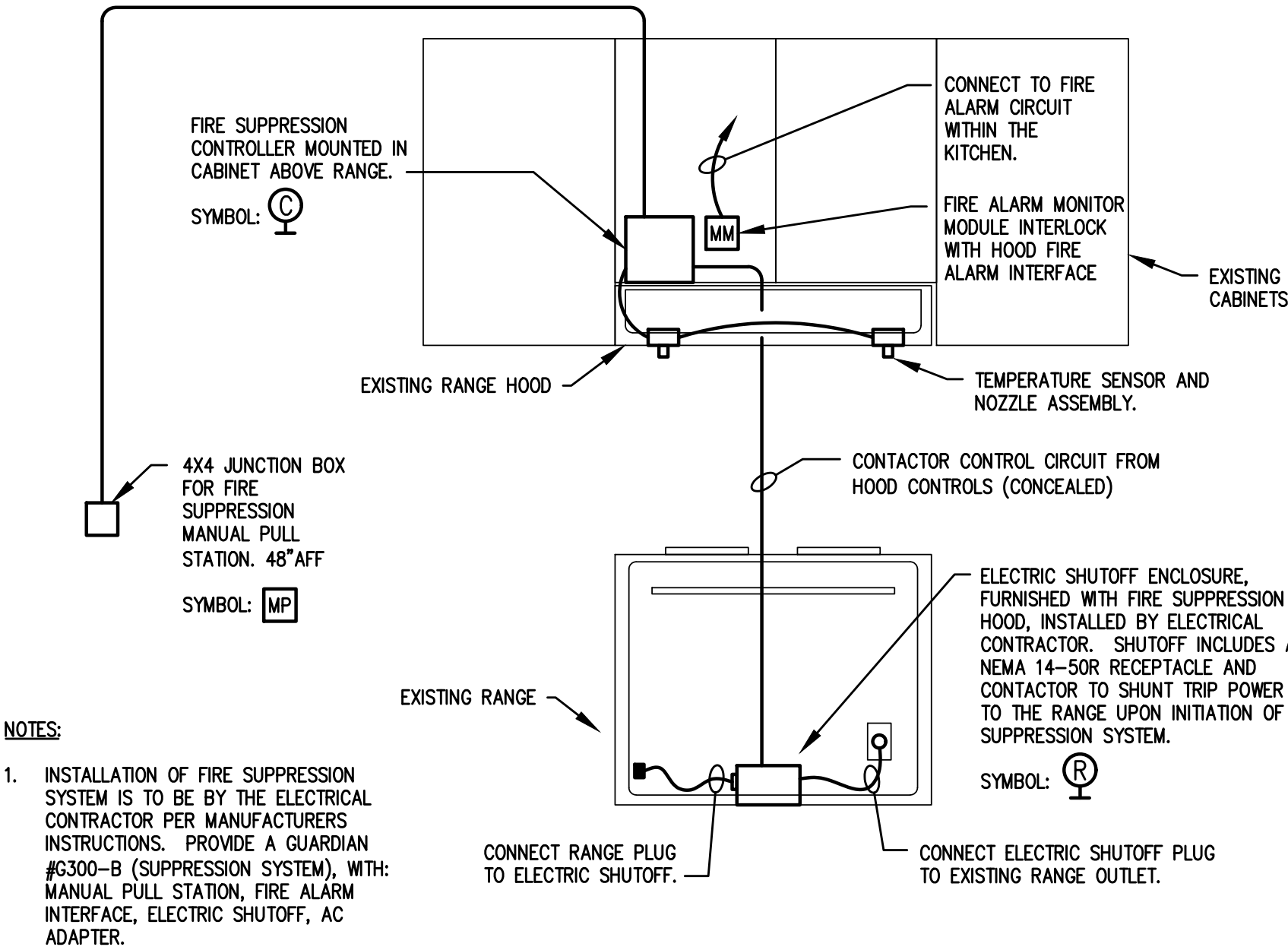
ELECTRICAL GENERAL NOTES:

- INSPECT SITE PRIOR TO SUBMITTING BID. DRAWINGS ARE INTENDED TO COVER THE REQUIRED ELECTRICAL SYSTEMS. DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE BUILDING OR SYSTEM IN EVERY RESPECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY ADDITIONAL INFORMATION AS REQUIRED.
- CONFORM TO THE NATIONAL ELECTRICAL CODE (2014), IBC (2015), IECC (2009), APPLICABLE NEMA, ANSI AND IEEE PUBLICATIONS, U.L. AND ADA STANDARDS AND OSHA REQUIREMENTS. COMPLY WITH LOCAL, COUNTY, STATE AND NATIONAL CODES HAVING JURISDICTION.
- FURNISH AND INSTALL ALL MATERIALS IN A NEAT AND WORKMANLIKE FASHION. ALL MATERIALS SHALL BE NEW, WITH FIRST QUALITY AND UL LABEL.
- VERIFY ALL DIMENSIONS AND CLEARANCES PRIOR TO INSTALLATION OF EQUIPMENT AND RACEWAYS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH THAT OF ALL OTHER TRADES AS REQUIRED.
- CONDUIT SHALL BE EMT FOR BRANCH CIRCUIT WIRING WHERE EXPOSED, AS ALLOWED BY NEC, EXCEPT THAT SET SCREW OR CRIMP FITTINGS ARE NOT ALLOWED. FIRE ALARM MC CABLE IS ACCEPTABLE WHEN CONCEALED IN WALLS OR ATTIC SPACE. WHERE EXPOSED TO PHYSICAL DAMAGE CONDUITS SHALL BE RIGID GALVANIZED STEEL. MINIMUM CONDUIT SIZE SHALL BE 3/4"C. ALL CONDUCTORS SHALL BE TYPE THHN/THWN, STRANDED 600V COPPER BUILDING WIRE. MINIMUM SIZE SHALL BE #12 AWG COPPER UNLESS NOTED. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 WITH TRANSITION TO RIGID GALVANIZED STEEL FOR EXPOSED CONDUITS.
- PROVIDE GROUNDING FOR ALL EQUIPMENT IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL ENCLOSURES SHALL BE OF THE NEMA TYPE WHICH IS SUITABLE FOR THE APPLICATION.
- SEAL ALL CONDUIT PENETRATIONS TO MATCH RATING OF WALL BEING PENETRATED.
- ALL WORK SHALL HAVE PROPER LABELING AND NAMEPLATES. ALL CIRCUITS SHALL BE LABELED AT PANELS AND BOXES AS INDICATED. ALL PANELS AND DISCONNECTS ARE TO BE PERMANENTLY MARKED WITH NAME OR EQUIPMENT SERVED. ALL PANELS ARE TO BE PROVIDED WITH TYPEDWRITTEN PANEL SCHEDULES.
- THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION. INSTRUCT THE OWNERS' PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS. FURNISH TO THE OWNER THREE SETS OF OPERATION AND MAINTENANCE MANUALS FOR EACH SYSTEM.
- GUARANTEE THE WORK INSTALLED FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.
- CONTRACTOR SHALL KEEP CURRENT A SET OF PLANS FOR THE DURATION OF CONSTRUCTION WITH ALL CHANGES TO WORK NEATLY AND ACCURATELY MARKED IN RED AND SHALL TURN OVER TO OWNER AT COMPLETION OF PROJECT.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED TO MEET SEISMIC REQUIREMENTS OF 2015 IBC.



- NOTES:
- ALL WIRING SHALL BE IN WIREMOLD 700 SERIES WHERE EXPOSED. CONCEALED CONDUITS WITHIN WALLS AND ATTIC SPACE MAY BE RED FIRE ALARM MC CABLE. PAINT ALL JUNCTION BOXES AND COVERS, AND MARK CONDUIT EVERY 10' WITH RED PAINT, WHERE ROUTED THRU ATTICS SPACES.
 - REFER TO FIRE ALARM SYSTEM PLANS FOR ACTUAL QUANTITY OF DEVICES REQUIRED FOR EACH BUILDING. DIAGRAM REPRESENTS DEVICE CIRCUITING, NOT CONDUIT ROUTING.
 - SUBMIT TO LOCAL AUTHORITY HAVING JURISDICTION FOR APPROVAL PRIOR TO INSTALLATION
 - PROVIDE A 20A/1P BREAKER IN EXISTING PANEL AVAILABLE SPACE TO POWER FACP OR FAPS. PAINT BREAKER RED AND INSTALL LOCKING CLIP.

FIRE ALARM SYSTEM MATRIX		BUILDING SYSTEM OUTPUTS										CENTRAL COMM.						
		ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE AUDIBLE SUPERVISORY SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMON TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	ACTIVATE LOCAL ALARM SIGNAL	ACTIVATE GENERAL EVACUATION SIGNAL	DISPLAY CHANGE OF STATUS	ACTIVATE EXTERIOR HORN/STROBE	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	SHOW CHANGE OF STATUS ON CENTRAL PANEL	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION
LIVING ROOM, HALL OR LAUNDRY SMOKE DETECTOR			X	X			X	X	X			X	X		X	X		
SLEEPING AREA SMOKE DETECTOR				X	X			X	X			X	X		X	X		
ANY TWO SMOKE DETECTORS SIMULTANEOUSLY		X	X					X	X	X	X	X			X			
FIRE SUPPRESSION MONITOR MODULE				X	X			X	X			X		X		X		
HEAT DETECTOR		X	X					X	X	X	X	X			X			
FIRE ALARM A.C. POWER FAILURE					X	X		X				X	X			X		
FIRE ALARM SYSTEM LOW BATTERY					X	X		X				X	X			X		
OPEN CIRCUIT					X	X		X				X	X			X		
GROUND FAULT					X	X		X				X	X			X		
NOTIFICATION APPLIANCE CIRCUIT SHORT					X	X		X				X	X				X	



FIRE ALARM SYSTEM MATRIX

A FIRE SUPPRESSION RANGE HOOD DETAIL

B TYPICAL CONDUIT SLEEVE DETAIL

C TYPICAL DEVICE MOUNTING HEIGHT

D

LANDER UNIVERSITY

FIRE ALARM SYSTEM FOR UNIVERSITY PLACE

GREENWOOD, SC

STATE IDC PROJECT NO. H21-D093-ID

BURDETTE ENGINEERING

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102 Pilgrim Road
Greenville, SC 29607
BEI JOB NO. 19600A

REVISION	DATE	BY

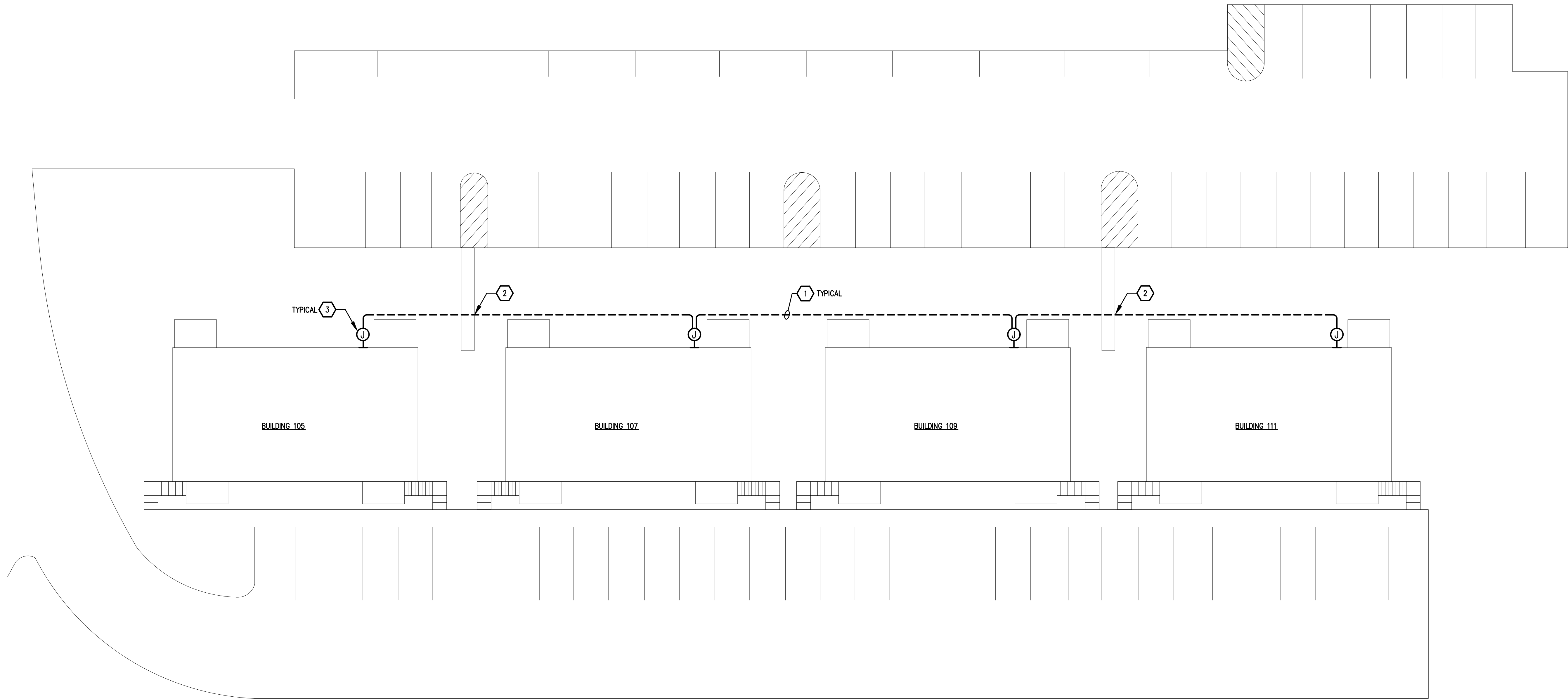
LANDER UNIVERSITY

FIRE ALARM SYSTEM FOR UNIVERSITY PLACE

STATE IDC PROJECT NO. H21-D093-ID
GREENWOOD, SOUTH CAROLINA

SHEET NUMBER

E.01



A
E1.1

ELECTRICAL FIRE ALARM PLAN – SITE PLAN

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

NOTES:

- 1 PROVIDE 1-1/2" C WITH PULL STRING BETWEEN BUILDINGS VIA TRENCH METHOD. TAMP, BACKFILL AND SOW GRASS OVER TRENCH.
- 2 SAW CUT EXISTING CONCRETE SIDEWALK AND PATCH.
- 3 PROVIDE 12" X 12" NEMA 3R PULL BOX ENCLOSURE AT EACH BUILDING, 18" ABOVE GRADE. PAINT ENCLOSURE TO MATCH BUILDING FINISH. LABEL ENCLOSURE WITH ENGRAVED NAMEPLATE, "FIRE ALARM JUNCTION BOX" RED BACKGROUND, WHITE LETTERING, FASTENED TO ENCLOSURE WITH STAINLESS STEEL SCREWS.

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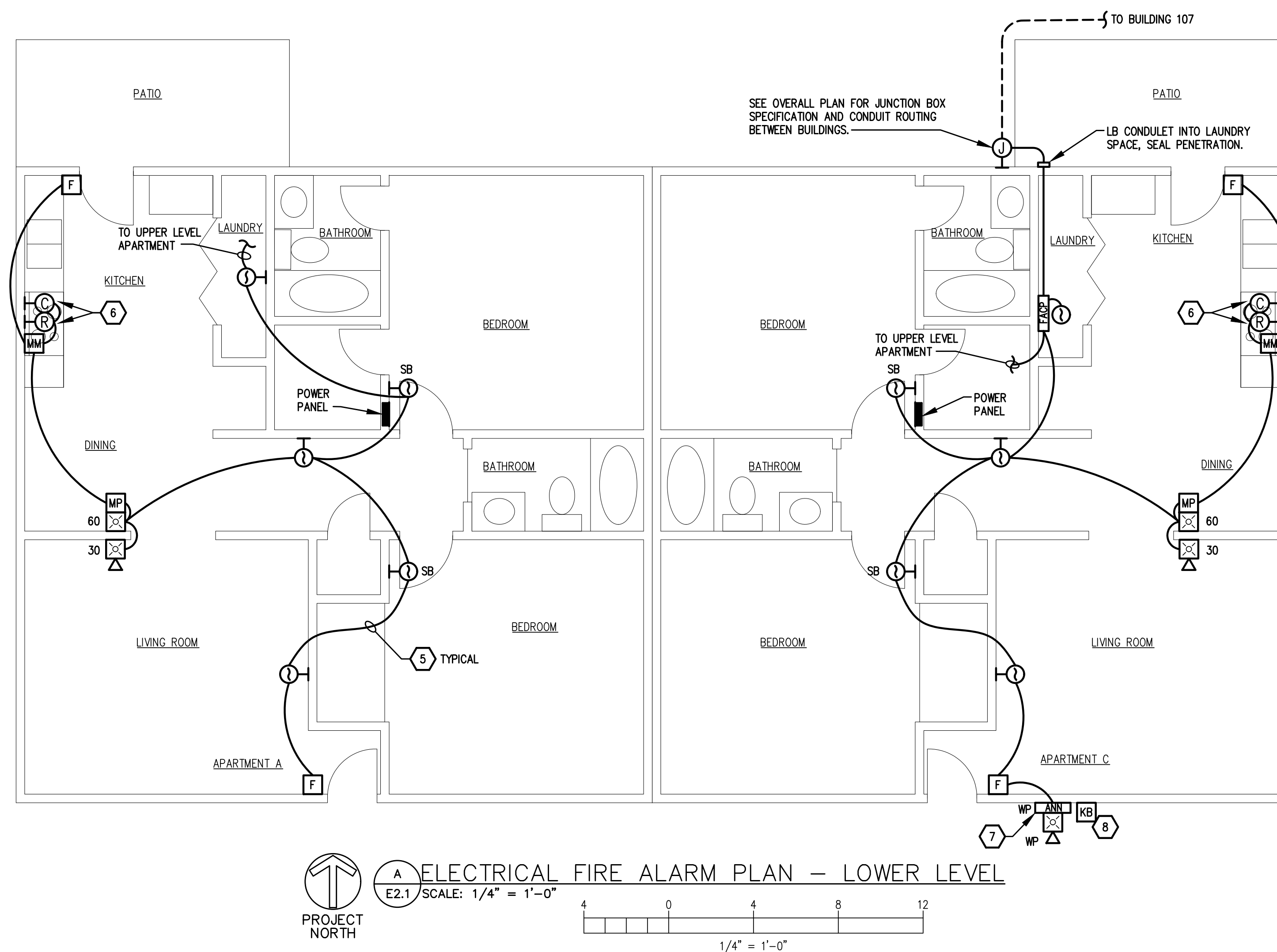
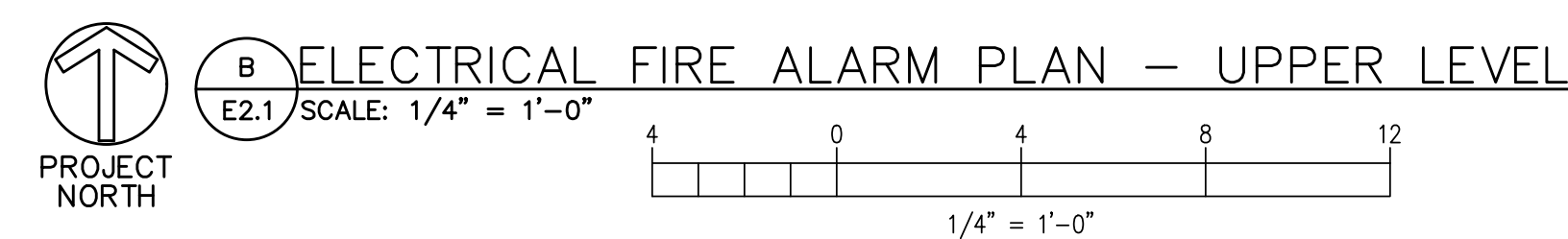
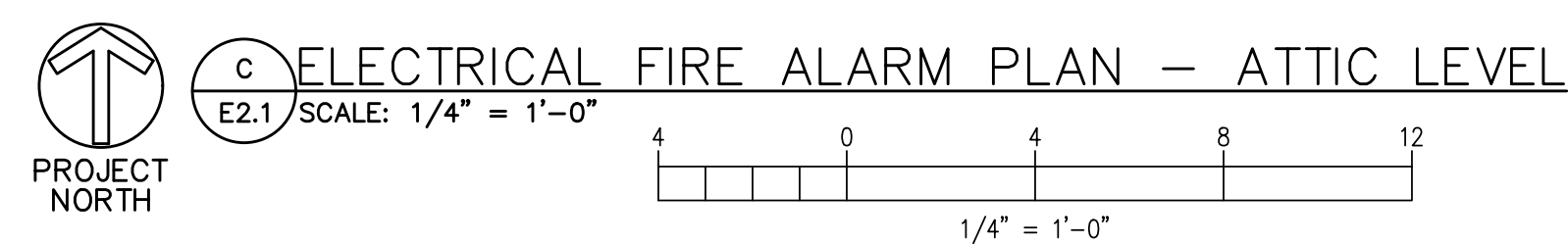
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2 OF 3 SHEETS

PROJECT NO.
19600A
DATE
02// /19
DRAWN BY
TMP/JMB
CHECKED BY
DJB

REVISION
DATE
BY

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1. THE FLOOR PLAN SHOWN IS NOT TO BE CONSIDERED AN AS-BUILT DRAWING. DIMENSIONS AND SPACES SHOWN ARE APPROXIMATE AND WILL VARY IN THE FIELD. THIS DRAWING IS FOR DIAGRAMMATIC PURPOSES ONLY AND WAS DRAWN FROM THE ORIGINAL DOCUMENTS. CONTRACTOR TO FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION.
2. CONCEAL RACEWAYS AND BOXES WHERE POSSIBLE. SURFACE MOUNTED CONDUIT IS PERMITTED WHERE WALL CONSTRUCTION WILL NOT PERMIT CONCEALING. ROUTE EXPOSED CONDUITS WITHIN CLOSETS AND LIMIT EXPOSED CONDUITS IN COMMON AREAS. EXPOSED CONDUITS OUTSIDE OF CLOSETS ARE TO BE PAINTED TO MATCH SURROUND WALLS. CONDUITS WITHIN CLOSETS ARE TO BE PAINTED RED. PROVIDE WIRING DIAGRAMS AND FIELD COORDINATED CONDUIT LAYOUTS FOR REVIEW PRIOR TO INSTALLING ANY RACEWAYS.
3. ROUTE FIRE ALARM MC CABLE IN ATTIC SPACE. MC CABLE IS TO BE RUN PARALLEL OR PERPENDICULAR TO STRUCTURE AND STRAPPED EVERY 6'.
4. UPON COMPLETION, FIRE ALARM SYSTEM IS TO BE TESTED IN THE PRESENCE OF THE OWNER AND AHJ. PROVIDE NFPA 72 RECORD OF COLLECTION DOCUMENT FOR EACH BUILDING AT THE TIME OF TESTING. CONFIRM ALL ROOM NUMBERS AND DEVICE DESCRIPTIONS WITH THE OWNER PRIOR TO FINAL TESTING.
5. FLOOR PLAN LAYOUT IS TYPICAL FOR BUILDINGS 105, 107, 109, 111.
6. SEE HOOD SUPPRESSION DETAIL B/E001 FOR FURTHER INFORMATION.
7. INSTALL REMOTE ANNUNCIATOR ON BUILDING 105 ONLY. PROVIDE WITH HINGED, LOCKABLE, NEMA 3R, RED FINISH, ENCLOSURE. PROVIDE ENGRAVED NAMEPLATE INDICATING:
FIRE ALARM REMOTE ANNUNCIATOR
KEY IN KNOX BOX
8. INSTALL KNOX BOX ADJACENT TO REMOTE ANNUNCIATOR AND PLACE ANNUNCIATOR ENCLOSURE KEY IN BOX. COORDINATE WITH LOCAL FIRE MARSHAL FOR KEYING OF KNOX BOX.

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E2.1

3 OF 3 SHEETS