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FIRE ALARM LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	DOCUMENT CABINET
	DIGITAL ALARM COMMUNICATOR PANEL
	NOTIFICATION APPLIANCE CIRCUIT PANEL
	LOCAL OPERATING CONSOLE
	SURGE PROTECTION DEVICE
	CONTROL MODULE
	MONITOR MODULE
	MANUAL PULL STATION
	SMOKE DETECTOR / PHOTOELECTRIC
	SMOKE DETECTOR / IN DUCT
	CARBON MONOXIDE SENSOR
	AIR ASPIRATING SMOKE DETECTOR
	COMBINATION SPEAKER / VISIBLE CEILING MOUNTED. CD INDICATES CANDELA RATING. WP INDICATES WEATHER RESISTANT.
	SPEAKER WALL MOUNTED. WP INDICATES WEATHER RESISTANT.
	SPEAKER CEILING MOUNTED.
	FIRE ALARM WALL MOUNTED VISUAL ONLY STROBE. CD INDICATES CANDELA RATING.
	FIRE ALARM CEILING MOUNTED VISUAL ONLY STROBE. CD INDICATES CANDELA RATING.
	FLOW SWITCH
	TAMPER SWITCH
	BELL - VIBRATING
	KNOX BOX

**FIRE ALARM AND MASS NOTIFICATION GENERAL NOTES**

1. PROVIDE A COMPLETE, ADDRESSABLE, FIRE ALARM AND MASS NOTIFICATION SYSTEM IN THE FACILITY. FIRE ALARM AND MASS NOTIFICATION SYSTEM MUST BE DESIGNED AND INSTALLED TO MEET THE REQUIREMENTS OF UFC 3-600-01, FC 3-600-09N, UFC 4-021-01, NFPA 70, NFPA 72, AND NFPA 101. SYSTEM SHALL BE SIMPLEX, NOTIFIER, OR FIRE-LITE.
2. IT IS THE INTENT OF THESE DOCUMENTS TO PROVIDE DESIGN, MATERIALS, AND EQUIPMENT FOR A TOTALLY FUNCTIONING AND OPERATING FIRE ALARM AND MASS NOTIFICATION SYSTEMS, INCLUDING THE PROPER INTERFACING AND COORDINATION WITH OTHER BUILDING SYSTEMS.
3. THE GENERAL CHARACTER AND SCOPE OF THE WORK IS ILLUSTRATED IN THE SPECIFICATIONS AND THE DRAWINGS. THE SPECIFICATIONS AND DRAWINGS ARE DIVIDED INTO SEVERAL SECTIONS FOR CONVENIENCE ONLY AND THE CONTRACT DOCUMENTS MUST BE CONSIDERED AS A WHOLE. THE CONTRACTOR MUST BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND VENDORS ENGAGED IN THIS WORK.
4. THESE DRAWINGS DEPICT GENERAL LOCATIONS OF FIRE ALARM AND MASS NOTIFICATION SYSTEM EQUIPMENT AND FIELD DEVICES. FINAL LOCATIONS, QUANTITIES, APPLIANCE RATINGS, ETC. MUST BE PROVIDED BY THE INSTALLING CONTRACTOR IN ACCORDANCE WITH THE APPLICABLE CODES, STANDARDS, AND CONTRACT DOCUMENTS.
5. THE CONTRACTOR MUST OBTAIN REQUIRED PERMITS AND APPROVALS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR MUST PAY FOR AND SECURE PERMITS AND FEES FOR FIRE PROTECTION SYSTEMS WORK.
6. PROVIDE FINAL SYSTEM LAYOUT DRAWINGS INCLUDING BATTERY CALCULATIONS AND VOLTAGE DROP CALCULATIONS AND OBTAIN APPROVAL OF THE FIRE MARSHAL AND ALL AUTHORITIES HAVING JURISDICTION. BATTERY CALCULATIONS MUST INCLUDE 20 PERCENT SAFETY MARGIN TO THE CALCULATED AMP-HOUR RATING PER NFPA 72. A BILL OF MATERIAL AND CONTACT ID POINT DESCRIPTION TABLE MUST BE INCLUDED IN THE FIRE ALARM AS-BUILT DRAWINGS.
7. PROVIDE FIRE ALARM AND MASS NOTIFICATION SPEAKERS AND STROBES THROUGHOUT THE PROJECT AREAS. PROVIDE ADDITIONAL NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS AS REQUIRED. EACH NAC LOADING MUST NOT EXCEED 75% OF ITS RATED OUTPUT.
8. PROVIDE DUCT SMOKE DETECTORS IN ALL SUPPLY DUCTS OF AIR HANDLING UNITS GREATER THAN 2,000 CFM. PROVIDE RELAYS FOR SHUT DOWN OF ASSOCIATED AIR HANDLING UNITS.
9. PROVIDE MONITOR MODULES, TAMPER AND FLOW SWITCHES FOR THE SPRINKLER RISER AND CONTROL VALVES.
10. WIRING FOR DEVICES MUST BE CLASS B INSTALL ALL FIRE ALARM CIRCUITS IN ELECTRICAL METALLIC TUBING (EMT) OR INTERMEDIATE METAL CONDUIT (IMC).
11. ALL RACEWAYS MUST BE FACTORY PAINTED RED. FLEXIBLE METALLIC CONDUIT (FMC) SHALL NOT EXCEED 6 FEET AND IS ONLY BE PERMITTED FOR CONNECTIONS TO JUNCTION BOXES TO FIELD DEVICES. PROVIDE A RACEWAY LISTED FOR THE INSTALLATION IN WET LOCATIONS, SUCH AS RIGID METALLIC CONDUIT (RMC) AND LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC). WET LOCATIONS ARE CONSIDERED ANY LOCATION WITHIN A 5 FOOT RADIUS OF FIRE SUPPRESSION EQUIPMENT AS DEFINED BY NFPA 70.
12. APPLIANCES AND ALL DEVICES MUST BE FACTORY FINISHED WHITE, EXCEPT FOR PULL STATIONS WHICH MUST BE FACTORY FINISHED RED.
13. PROVIDE RECHARGEABLE SEALED LEAD ACID TYPE BATTERIES TO OPERATE THE FIRE ALARM SYSTEM UNDER SUPERVISORY CONDITIONS FOR 48 HOURS AND AUDIBLE AND ALARM DEVICES FOR AN ADDITIONAL 15 MINUTES OR 60 MINUTES FOR THE MASS NOTIFICATION SYSTEM IMMEDIATELY UPON LOSS OF POWER, WHICHEVER IS GREATER.
14. INSTALLING CONTRACTOR MUST COORDINATE WITH MECHANICAL, ELECTRICAL AND OTHER TRADES TO FACILITATE INSTALLATION THAT IS COORDINATED AND CONSISTENT WITH BUILDING DESIGN, USE AND INTENT.
15. COORDINATE FINAL SYSTEM TESTING WITH OTHER CONTRACTORS TO PROVIDE FULL SYSTEM OPERATION AT TIME OF TESTING.
16. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PERFORMING INSPECTIONS AND TESTS AS REQUIRED BY THE CONTRACTING OFFICER.
17. FLOOR AND WALL CONDUIT PENETRATIONS MUST BE SLEEVED AND SEALED AS REQUIRED.
18. PENETRATIONS OF THE BUILDING AIR BARRIER MUST BE SEALED TO MAINTAIN THE INTEGRITY OF THE AIR BARRIER.
19. CONDUIT SIZE AND PERCENTAGE OF FILL TO BE DETERMINED BY INSTALLING CONTRACTOR AND MUST COMPLY WITH APPLICABLE STANDARDS AND SYSTEM MANUFACTURER'S REQUIREMENTS.
20. CONDUIT AND WIRING MUST BE CONCEALED ABOVE CEILINGS IN FINISHED AREAS AND AREAS WITH DROPPED CEILINGS. CONDUIT AND WIRING INSTALLED ABOVE CEILINGS MUST NOT INTERFERE WITH THE REMOVAL OF THE CEILING TILES, AND HVAC UNIT AIR FILTERS. IN AREAS WITHOUT CEILING, CONDUIT AND WIRING MUST BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB, UNLESS OBSTRUCTIONS REQUIRE OTHERWISE.
20. FIRE ALARM WIRING MUST NOT BE INSTALLED IN THE SAME CONDUITS OR JUNCTION BOXES AS LIGHTING, POWER OR OTHER WIRING.
21. RUN WIRING TO CONTROL PANELS IN THE VERTICAL OR HORIZONTAL PLANE, MAKE TURNS AT 90 DEGREE ANGLES, AND TIGHTLY BUNDLE, WRAP, AND IDENTIFY CONDUCTORS INDIVIDUALLY WITH PERMANENT MARKINGS.
22. PULL CONDUCTORS SPLICE FREE. THE USE OF WIRE NUTS, CRIMPED CONNECTORS, OR TWISTING OF CONDUCTORS IS PROHIBITED.
23. TERMINATIONS MUST BE AT A TERMINAL STRIP. DEVICES MUST HAVE SCREW TERMINALS.
24. SIGNALING LINE AND INITIATING DEVICE CIRCUITS MUST BE MINIMUM 16 GAUGE WIRE.
25. WALL ADDRESSABLE CONTROL MODULES AND ADDRESSABLE MONITOR MODULES MUST BE LOCATED WITHIN 5 FEET OF THE DEVICES BEING MONITORED. DUCT SMOKE DETECTORS MUST BE WITHIN 3 FEET OF ADDRESSABLE RELAY.
26. CONTRACTOR MUST PROVIDE ADEQUATE AUDIBLE NOTIFICATION DEVICES TO MEET THE AUDIBILITY AND INTELLIGIBILITY REQUIREMENTS OF NFPA 72 AND UFC 4-021-01. THE MINIMUM REQUIRED COMMON INTELLIGIBILITY SCALE IS 0.7.
27. PROVIDE SPEAKERS MOUNTED ON THE EXTERIOR OF THE BUILDING. IN AREAS INCLUDING COURTYARDS, COVERED BREAK AREAS, DESIGNATED SMOKING AREAS, AND SIDEWALKS LEADING FROM THE BUILDING'S EXIT DOORS TO A PUBLIC STREET OR FROM PARKING AREAS FOR A DISTANCE UP TO 16 FEET FROM THE BUILDING.
28. PROVIDE VISIBLE NOTIFICATION APPLIANCES IN COMMON AND PUBLIC SPACES AS REQUIRED BY THE APPLICABLE CODES TO MEET VISIBLE SIGNALING INTENSITY REQUIREMENTS.
29. PROVIDE CLEAR STROBE MARKED "ALERT" FOR FIRE ALARM AND MASS NOTIFICATION SYSTEM NOTIFICATIONS.
30. COORDINATE DUCT SMOKE DETECTION WITH MECHANICAL DESIGN CONTRACTOR. DUCT SMOKE DETECTOR REMOTE LAMPS AND TEST STATION MUST BE WALL MOUNTED, ACCESSIBLE, VISIBLE, AND PERMANENTLY LABELED. THE DUCT DETECTORS MUST RECEIVE THEIR POWER AND RESET FROM THE FIRE ALARM CONTROL UNIT.
31. PROVIDE REMOTE TEST LAMPS FOR ANY INACCESSIBLE DEVICES.
32. PROVIDE SURGE PROTECTION FOR CIRCUITS THAT ENTER OR EXIT A BUILDING.
33. PROVIDE WEATHERPROOF DEVICES AS REQUIRED AND AS INDICATED.
34. DEVICES MOUNTED IN SUSPENDED CEILING MUST BE MOUNTED IN THE CENTER OF THE CEILING TILE.
35. PROVIDE A DOCUMENTATION CABINET ADJACENT TO FIRE ALARM CONTROL PANEL. CABINET MUST BE STEEL WITH LOCKING, HINGE MOUNTED DOOR PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS". CABINET MUST STORE LIFE SAFETY, FIRE ALARM, SPRINKLER AS-BUILT DRAWINGS AND NFPA 72 RECORD OF COMPLETION IN PAPER FORMAT. CD/DVD OF SITE-SPECIFIC SOFTWARE, FIRE ALARM AND SPRINKLER AS-BUILT DRAWINGS, NFPA 72 RECORD OF COMPLETION, AND OPERATIONS AND MAINTENANCE MANUALS MUST BE STORED IN A CD JEWEL CASE.
36. PROVIDE A PARTS BOX ADJACENT TO THE FMCP. CABINET MUST BE STEEL, LOCKING, WITH HINGE-MOUNTED DOOR, KEYPED THE SAME AS THE FMCP. CABINET MUST INCLUDE SPARE PARTS AS DEFINED IN THE PROJECT SPECIFICATIONS, PLUS FOUR (4) FUSES FOR EACH FUSED CONDUIT.
37. DUAL-ACTION, MANUAL PULL STATIONS MUST BE PROVIDED WITHIN 5 FEET OF EVERY EXIT OF THE BUILDING. MANUAL PULL STATIONS MUST BE RESET WITH THE USE OF A KEY ONLY. USE OF A WRENCH, HEX KEY, ALLEN KEY, OR ALLEN WRENCH TO OPEN A MANUAL PULL STATION IS NOT BE PERMITTED.
38. WATER FLOW ALARM AND VALVE TAMPER SWITCHES ATTACHED TO THE BUILDING WET-PIPE SPRINKLER SYSTEM TO PROVIDE REQUIRED SUPERVISION MUST BE CONNECTED TO THE FIRE ALARM SYSTEM.
39. INSTALL A POINT REPORTING DIGITAL ALARM COMMUNICATOR TRANSMITTER THAT IS COMPATIBLE WITH THE SUR-GARD SYSTEM III MULTI-PLATFORM DIGITAL TELEPHONE RECEIVER AND IS PROGRAMMED TO REPORT BY POINTS VIA CONTACT ID PROTOCOL. PROVIDE TWO (2) CAT 6 UTP CABLES INSIDE 1-INCH CONDUIT FROM THE FMCP TO THE TELEPHONE EQUIPMENT ROOM.
40. THE GOVERNMENT WILL PROVIDE AND INSTALL THE TRX-401 MASS NOTIFICATION TRANSCIEVER. THE CONTRACTOR MUST PROVIDE CONDUIT FOR MOUNTING THE MASS NOTIFICATION ANTENNA, CONDUIT FOR THE MASS NOTIFICATION ANTENNA CABLE, CONDUIT TO CONNECT THE TRANSCIEVER TO THE FIRE ALARM CONTROL PANEL, AND 120V POWER FOR THE TRANSCIEVER.
41. PROVIDE AND ATTACH A LEGIBLE, TYPED LABEL ON ALL ADDRESSABLE DEVICES TO INDICATE ITS ADDRESS. FOR ANY DEVICE LOCATED ABOVE A FALSE CEILING, CONTRACTOR MUST PROVIDE A LEGIBLE, TYPED LABEL ATTACHED TO THE CEILING GRID THE DEVICE NOMENCLATURE AND ADDRESS.
42. PROVIDE AN AIR ASPIRATING SMOKE DETECTOR FOR PROTECTION OF THE SERVER ROOMS 304A AND 304B.

FILE NAME: BIM\_360/IFB PACKAGE\_3P1338\_MEF\_SIM\_CTR-1590892.rvt

PLOTTED: 11/22/2021 11:24:45 PM

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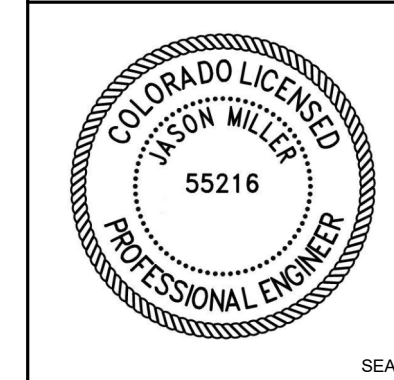
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UNCLASSIFIED

DATE	APPR



FOR COMMANDER NAVFAC  
ACTIVITY CONCURRED BY MCB-CL AMB VIA EMAIL  
SATISFACTORY TO DATE 12/16/21  
DES: JMB | DRW: JMB | CHK: JMB  
PM / OM: TOWLER / ROOT  
BRANCH HEAD: DPS  
DESIGN DIRECTOR: PAUL K. SHREM  
FIRE PROTECTION: DPS

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338F II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
FIRE ALARM - GENERAL NOTES, ABBREVIATIONS, & SYMBOLS

SCALE:	AS NOTED
EPROJECT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	14098451
SHEET	232 OF 456
<b>FA001</b>	
DRAWING REVISION: 26 AUGUST 2020	

ISSUED FOR CONSTRUCTION - 16 DEC-21

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PLOTTED: 11/22/2021 4:12:45 PM

FILE NAME: BIM360/IFB PACKAGE 3P11338.MEF SIM CTR-1590892.FW

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GENERAL NOTES





1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

	ALARM CONDITIONS		TROUBLE CONDITIONS		SUPERVISORY CONDITIONS															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R		
ACTIVATION OF A MANUAL FIRE ALARM PULL STATION	1	X																		
ACTIVATION OF AREA SMOKE DETECTOR	2	X		X	X															
ACTIVATION OF AIR SAMPLING DETECTION (LEVEL 3, ALARM)	3	X		X	X					X							X	X		
ACTIVATION OF WATERFLOW SWITCH	4	X		X	X						X						X			
ACTIVATION OF SERVER ROOM WATERFLOW SWITCH	5	X		X	X						X						X	X		
ACTIVATION OF A CARBON MONOXIDE DETECTOR	6	X		X				X					X		X	X				
COMMON TROUBLE	7	X				X														
FIELD WIRING OR SYSTEM COMPONENT FAULT	8	X				X														
LOSS OF PRIMARY AC POWER	9	X				X														
OPEN CIRCUIT	10	X				X														
NAC SHORT	11	X				X														
LOW BATTERY	12	X				X														
CIRCUIT DISCONNECT	13	X				X														
GROUND FAULT	14	X				X														
COMMON SUPERVISORY	15		X				X													
ACTIVATION OF DUCT SMOKE DETECTOR	16		X				X		X											
ACTIVATION OF AIR SAMPLING DETECTION (LEVEL 1, ALERT)*	17		X																	
ACTIVATION OF AIR SAMPLING DETECTION (LEVEL 2, ACTION)	18		X					X												
ACTIVATION OF SERVER ROOM EPO SWITCH	19		X					X												
TAMPER SWITCH	20		X					X												
ACTIVATION OF MASS NOTIFICATION SYSTEM**	21		X	X		X							X	X	X					
LOCAL MICROPHONE MNS OPERATION**	22		X	X		X						X		X	X					
LOC ACTIVATION OR PRE-RECORDED MNS MESSAGES**	23		X	X		X					X		X	X						
SIGNAL FROM WIDE AREA MASS NOTIFICATION SYSTEM**	24		X	X		X					X			X						

\* ACTIVATION OF LEVEL 1 AIR SAMPLING DETECTION MUST BE AT A CONSTANTLY ATTENDED LOCATION. PROVIDE CUSTOM MESSAGE "SERVER ROOM SMOKE DETECTION PRE-ALARM - INVESTIGATE IMMEDIATELY".

\*\*ACTIVATION OF THE MASS NOTIFICATION SYSTEM TO SEND A SUPERVISORY SIGNAL TO THE SUPERVISING STATION ONLY WHEN OVERRIDING AN ACTIVE FIRE ALARM CONDITION.

**FIRE ALARM - SEQUENCE OF OPERATIONS**

APPR	
DATE	
DESCRIPTION	
SYM	
    APPROVED FOR COMMANDER NAVFAC ACTIVITY CONCURRED BY MCB-CL AMB VIA EMAIL SATISFACTORY TO DATE 12/16/21 DES: JMB   DRW: JMB   CHK: JMB PM / DM TOWLER / ROOT BRANCH HEAD DPS DESIGN DIRECTOR PAUL K. SHREM FIRE PROTECTION DPS	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC P1338F II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE ALARM - SEQUENCE OF OPERATIONS	
SCALE:	AS NOTED
EPROJCT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	14098452
SHEET	233 OF 456
<b>FA002</b>	
DRAWING REVISION: 25 AUGUST 2020	

ISSUED FOR CONSTRUCTION - 16 DEC 21

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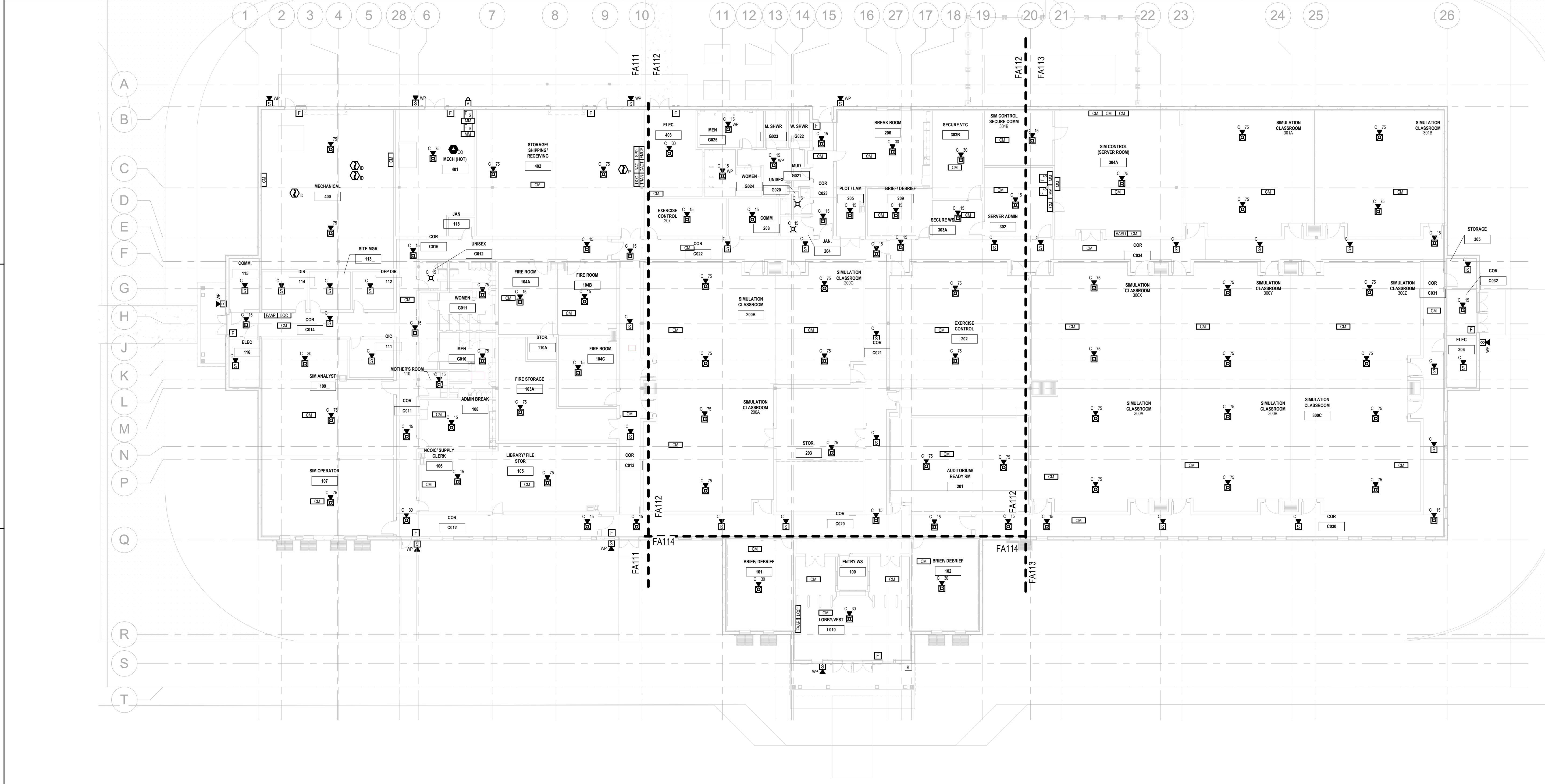
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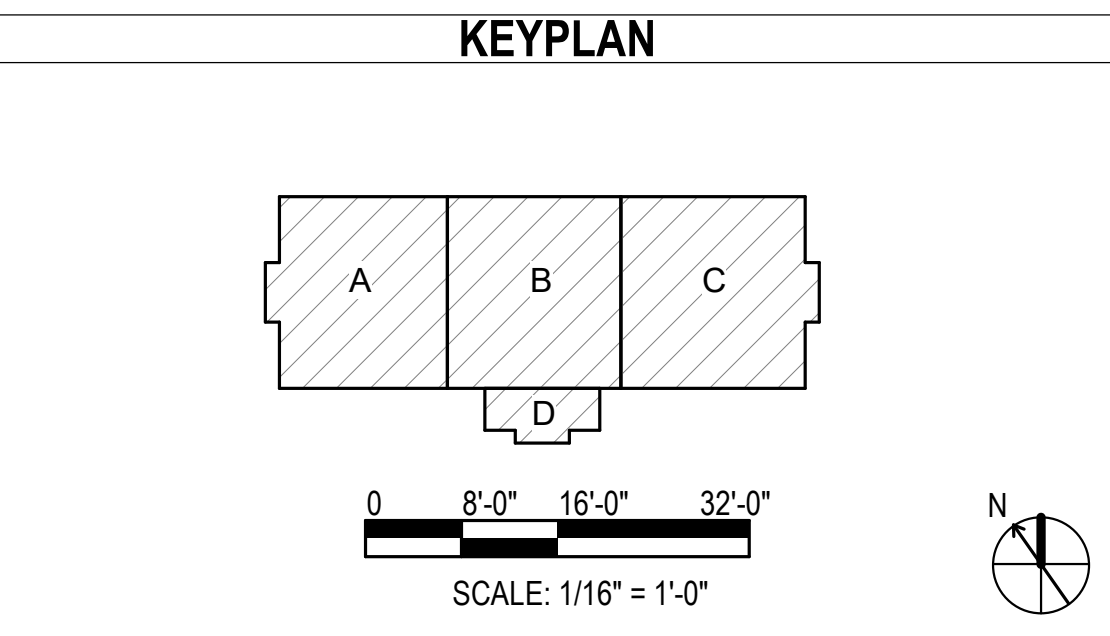
UNCLASSIFIED



**A1** FIRE ALARM - OVERALL - FIRST FLOOR PLAN  
 SCALE: 1/16" = 1'-0"

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-159082-F.V4  
 PLOTTED: 11/22/2021 4:12:49 PM

**GENERAL NOTES**  
 1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.



APPR	DATE
SYM	DESCRIPTION
<b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	CONCURRED BY
	MCB-CL AMB
	VIA EMAIL
SATISFACTORY TO DATE	12/16/21
DES. JMB	DRW. JMB
	CHK. DM
PM / DM	TOWLER / ROOT
BRANCH HEAD	DPS
DESIGN DIRECTOR	PAUL K. SHREM
FIRE PROTECTION	DPS
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC P1338F II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE ALARM - OVERALL - FIRST FLOOR PLAN	
SCALE:	AS NOTED
EPROJCT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	14098453
SHEET	234 OF 456
<b>FA110</b>	
<small>DRAWING REVISION: 25 AUGUST 2020</small>	

ISSUED FOR CONSTRUCTION - 16 DEC 21

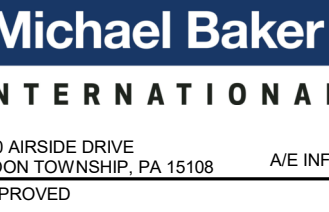


GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

KEYNOTES

- 1 FIELD COORDINATE LOCATION OF CONTROL MODULE WITH LOCATION OF AIR HANDLING UNIT.
- 2 FIELD COORDINATE LOCATION OF DUCT SMOKE DETECTOR WITH AIR HANDLING UNIT.
- 3 PROVIDE CONTROL MODULE FOR THE INTERFACE TO LIGHTING CONTROLLER. FIELD COORDINATE FINAL LOCATION WITH ELECTRICAL.



FOR COMMANDER NAVFAC

ACTIVITY CONCURRED BY MCB-CL AMB VIA EMAIL

SATISFACTORY TO DATE 12/16/21

BRANCH HEAD TOWLER / ROOT

DESIGN DIRECTOR PAUL K. SHREM

FIRE PROTECTION DPS

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC

ATLANTIC DESIGN AND CONSTRUCTION

MCB CAMP LEJEUNE

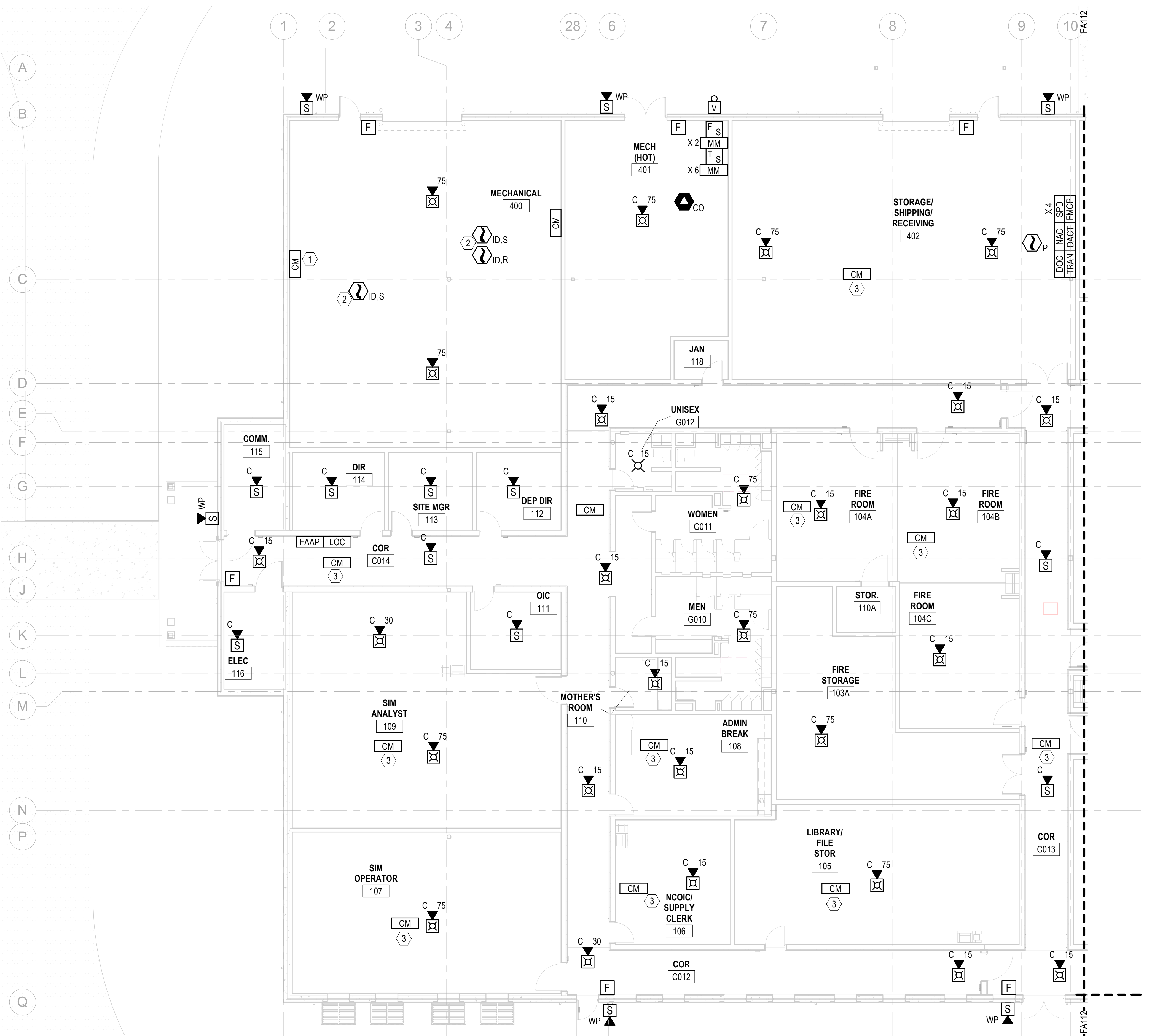
JACKSONVILLE, NC

P1338F II MEF SIMULATION/TRAINING CENTER

REPLACEMENT

FIRE ALARM - FIRST FLOOR PLAN - AREA A

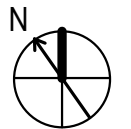
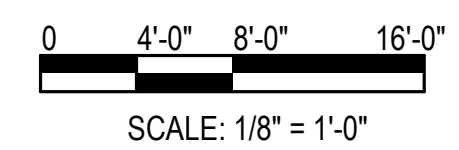
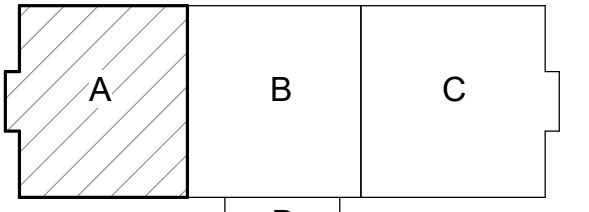
FA111



FIRE ALARM - FIRST FLOOR PLAN - AREA A

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

KEYPLAN

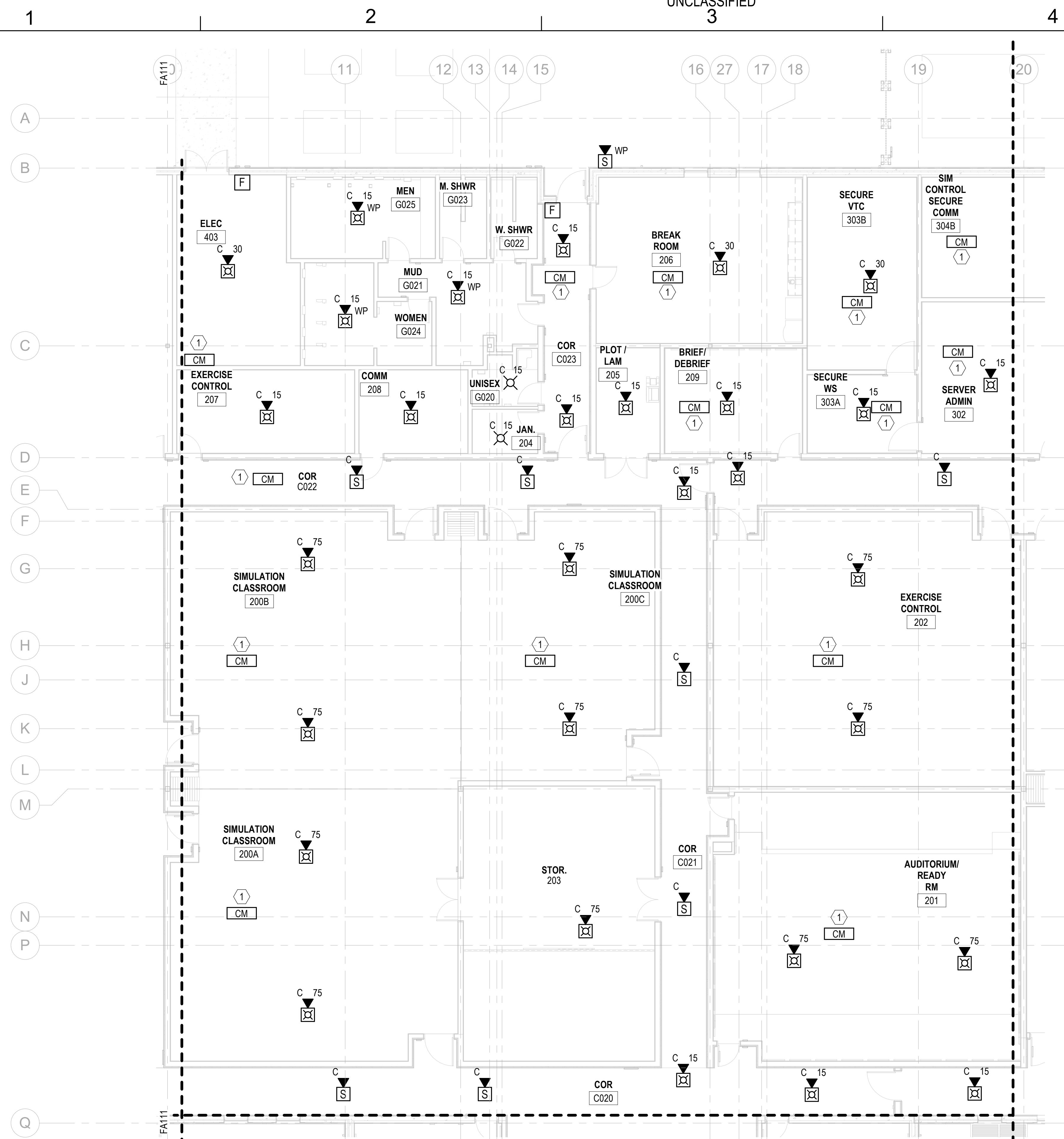


FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF SIM CTR-150982.FW

PLOTTED: 11/22/2021 4:12:51 PM

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ISSUED FOR CONSTRUCTION - 16 DEC 21



**FIRE ALARM - FIRST FLOOR PLAN - AREA B**  
 SCALE: 1/8" = 1'-0"

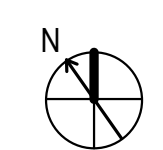
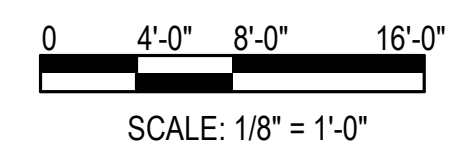
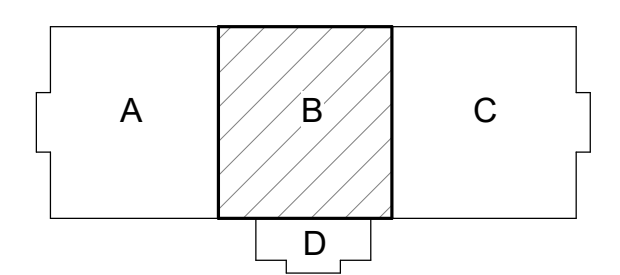
**GENERAL NOTES**

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.


**KEYNOTES**


1. PROVIDE CONTROL MODULE FOR THE INTERFACE TO LIGHTING CONTROLLER. FIELD COORDINATE FINAL LOCATION WITH ELECTRICAL.


**KEYPLAN**



APR	DATE	DESCRIPTION	SYMBOL







**Michael Baker International**

100 AIRSIDE DRIVE  
 MOON TOWNSHIP, PA 15108 A/E/IN/P/O  
 APPROVED

FOR COMMANDER NAVFAC	
ACTIVITY	CONCURRED BY
	MCB-CL AMB
	VIA EMAIL
SATISFACTORY TO DATE	12/16/21
DES. JMB	DRW. JMB
CHK. JMB	CHK. JMB
PM / DM	TOWLER / ROOT
BRANCH HEAD	DPS
DESIGN DIRECTOR	PAUL K. SHREM
FIRE PROTECTION	DPS

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
 ATLANTIC DESIGN AND CONSTRUCTION  
 JACKSONVILLE, NC  
 JACKSONVILLE, NC  
 P1338F II MEF SIMULATION/TRAINING CENTER  
 REPLACEMENT  
 FIRE ALARM - FIRST FLOOR PLAN - AREA B

SCALE:	AS NOTED
EPROJCT NO.:	1509892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	14098455
SHEET	236 OF 456

**FA112**

DRAWING REVISION: 25 AUGUST 2020

PLOTTED: 11/22/2021 4:12:53 PM

FILE NAME: BIM\_360/HF PACKAGE 3P1338F.MEF SIM CTR-1509892-F.V4

UNCLASSIFIED

ISSUED FOR CONSTRUCTION - 16 DEC 21



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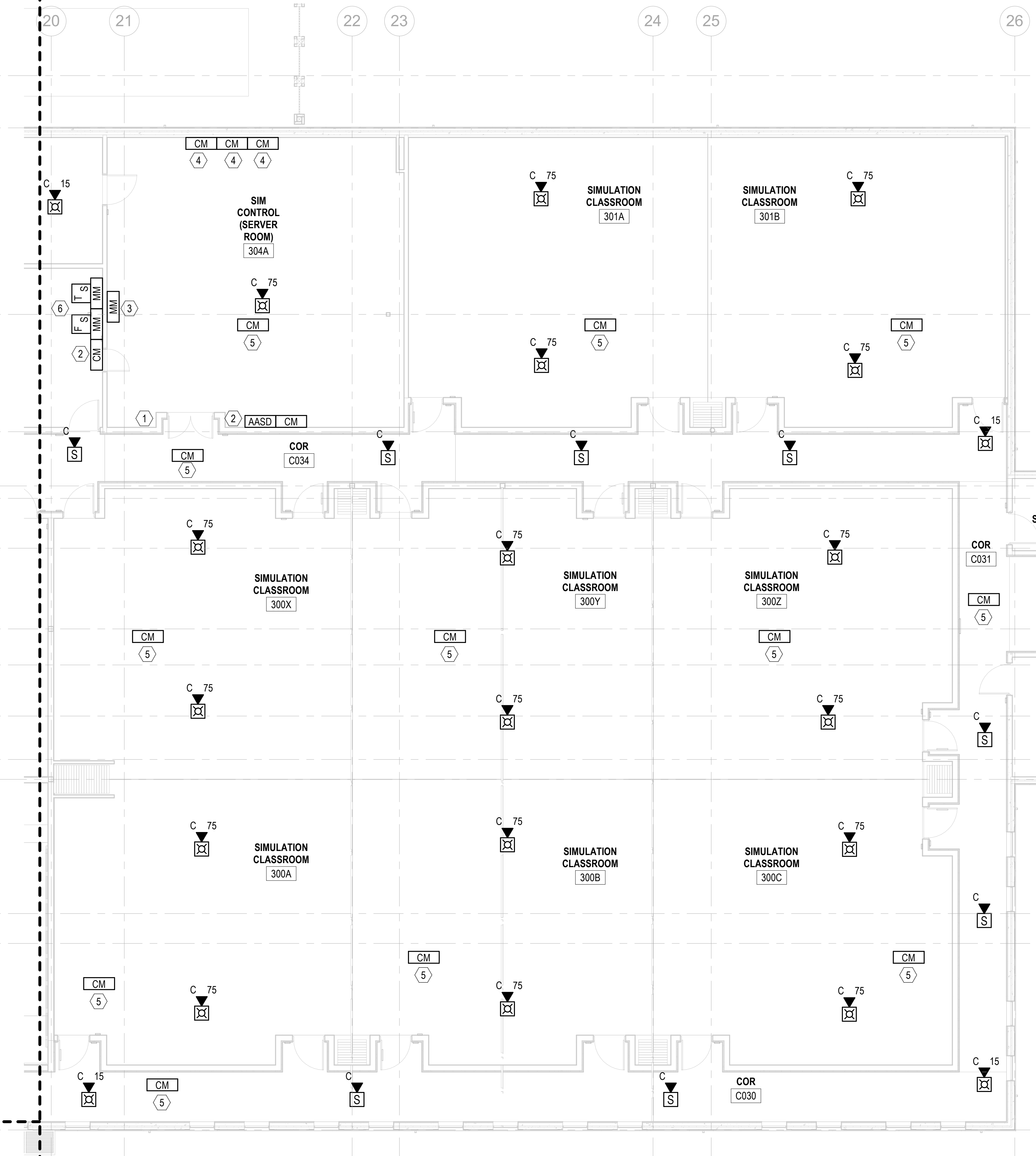
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**GENERAL NOTES**

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

**KEYNOTES**

- 1 PROVIDE ASPIRATING SMOKE DETECTION SYSTEM IN ROOMS 304A AND 304B IN ACCORDANCE WITH SECTION 4-11.3 OF UFC 3-600-01.
- 2 PROVIDE CONTROL MODULE FOR SHUTDOWN OF POWER. FIELD COORDINATE FINAL LOCATION WITH SPRINKLER CONTRACTOR.
- 3 PROVIDE MONITOR MODULE FOR SUPERVISION OF EMERGENCY POWER SHUTOFF. FIELD COORDINATION LOCATION WITH ELECTRICAL.
- 4 PROVIDE CONTROL MODULE FOR SHUTDOWN OF SERVER ROOM CRAC UNITS. FIELD COORDINATE FINAL LOCATION WITH ELECTRICAL.
- 5 PROVIDE CONTROL MODULE FOR THE INTERFACE TO LIGHTING CONTROLLER. FIELD COORDINATE FINAL LOCATION WITH ELECTRICAL.
- 6 PROVIDE MONITORING OF THE ZONE CONTROL ASSEMBLY FOR THE SPRINKLER SYSTEM SERVING THE SERVER ROOM.

SYMBOL	DESCRIPTION	DATE	APPROVED



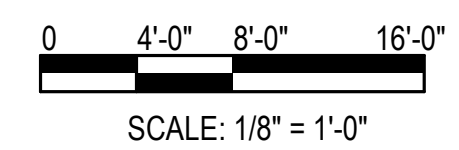
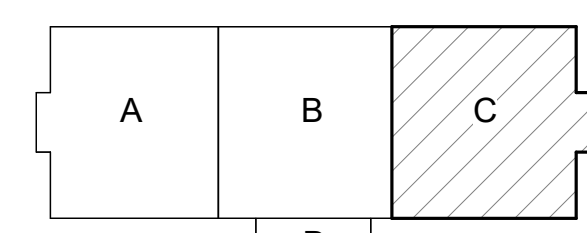
FOR COMMANDER NAVFAC	
ACTIVITY	CONCURRED BY
DESIGN	MCB-CL AMB
SATISFACTORY TO DATE	VIA EMAIL
12/16/21	
DESIGN	DRW
CHK	DATE
PM / DM	TOWLER / ROOT
BRANCH HEAD	DPS
DESIGN DIRECTOR	PAUL K. SHREM
FIRE PROTECTION	DPS

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
 ATLANTIC DESIGN AND CONSTRUCTION  
 JACKSONVILLE, NC  
 MCB CAMP LEJEUNE  
 JACKSONVILLE, NC  
 P1338F II MEF SIMULATION/TRAINING CENTER  
 REPLACEMENT  
 FIRE ALARM - FIRST FLOOR PLAN - AREA C

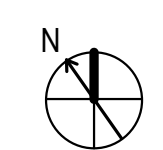
SCALE:	AS NOTED
PROJECT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	14098456
SHEET	237 OF 456

**FA113**

**KEYPLAN**



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



**FIRE ALARM - FIRST FLOOR PLAN - AREA C**

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

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FILE NAME: BIM\_360/HF PACKAGE 3P1338\_MEF\_SIM\_CTR-1590892-F-01

PLOTTED: 11/22/2021 11:12:55 PM

UNCLASSIFIED

ISSUED FOR CONSTRUCTION - 16 DEC 21

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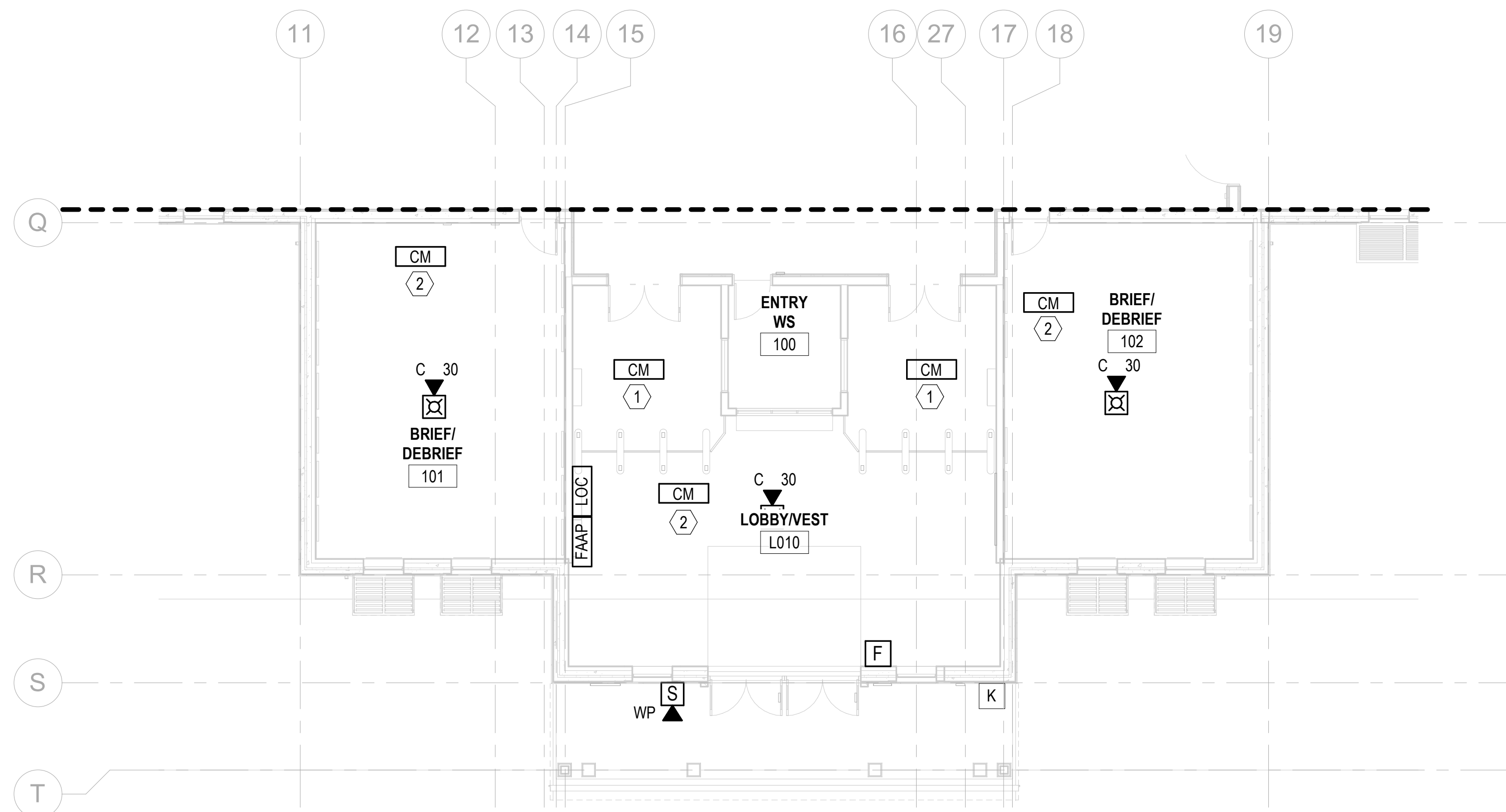
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FILE NAME: BIM\_360/HF PACKAGE\_3P11338\_MEF\_SIM\_CTR-1590892.FVT  
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NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MBC CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338F II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
FIRE ALARM - FIRST FLOOR PLAN - AREA D



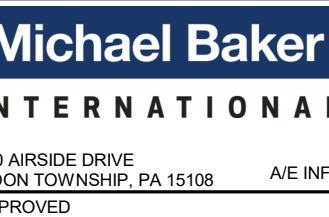
**FIRE ALARM - FIRST FLOOR PLAN - AREA D**  
SCALE: 1/8" = 1'-0"

**GENERAL NOTES**

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

**KEYNOTES**

1. INTERFACE PEDESTRIAN BARRIERS TO RELEASE ON ALARM.  
 2. PROVIDE CONTROL MODULE FOR THE INTERFACE TO LIGHTING CONTROLLER. FIELD COORDINATE FINAL LOCATION WITH ELECTRICAL.



FOR COMMANDER NAVFAC  
 ACTIVITY CONCURRED BY MCB-CL AMB VIA EMAIL

SATISFACTORY TO DATE 12/16/21

DES. JMB DRW. JMB CHK. JMB

PM / DM TOWLER / ROOT

BRANCH HEAD DPS

DESIGN DIRECTOR PAUL K. SHREM

FIRE PROTECTION DPS

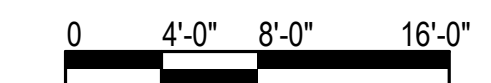
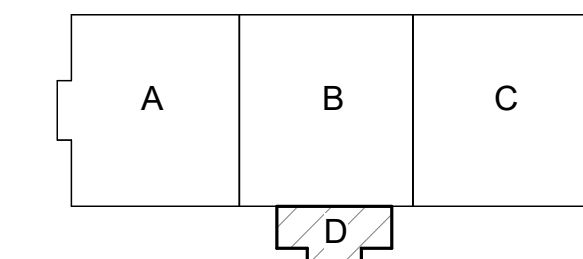
DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
 ATLANTIC DESIGN AND CONSTRUCTION  
 MCB CAMP LEJEUNE  
 JACKSONVILLE, NC  
 P1338F II MEF SIMULATION/TRAINING CENTER  
 REPLACEMENT  
 FIRE ALARM - FIRST FLOOR PLAN - AREA D

SCALE: AS NOTED  
 EPROJECT NO.: 1590892  
 CONSTR. CONTR. NO. N40085-20-C-0059  
 NAVFAC DRAWING NO. 14098457  
 SHEET 238 OF 456

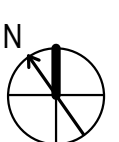
**FA114**

DRAWING REVISION: 25 AUGUST 2020

**KEYPLAN**



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



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GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

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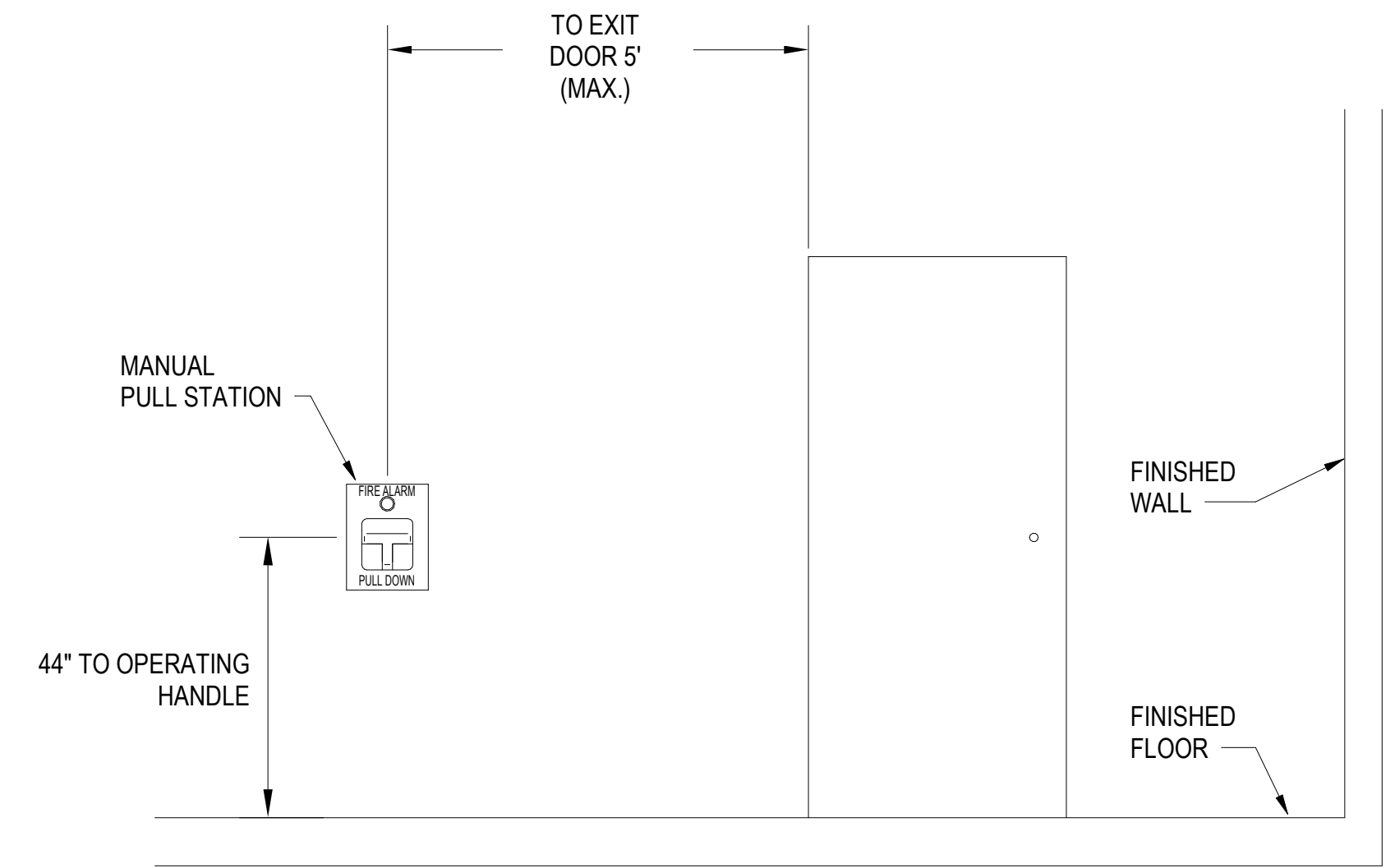
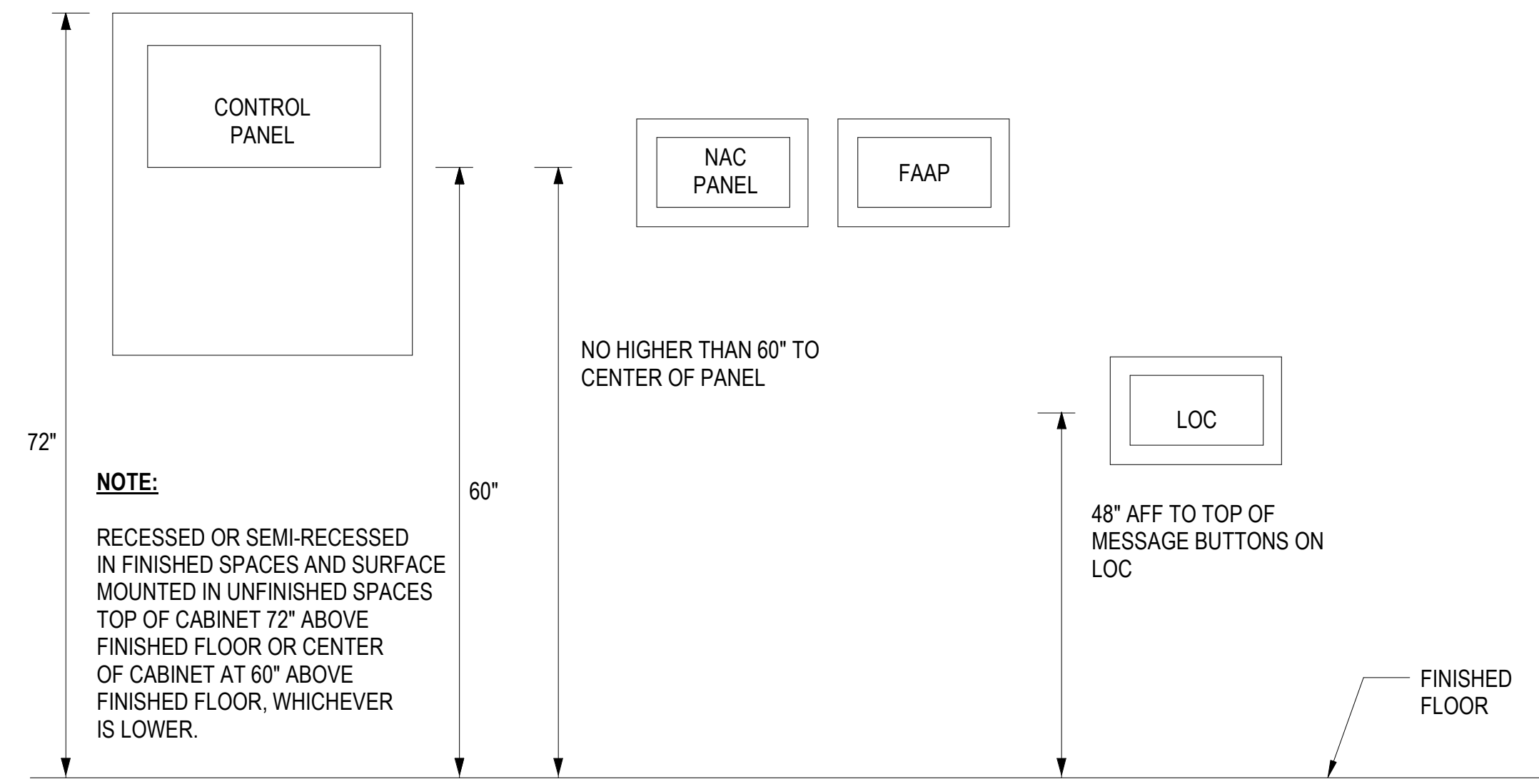
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UNCLASSIFIED

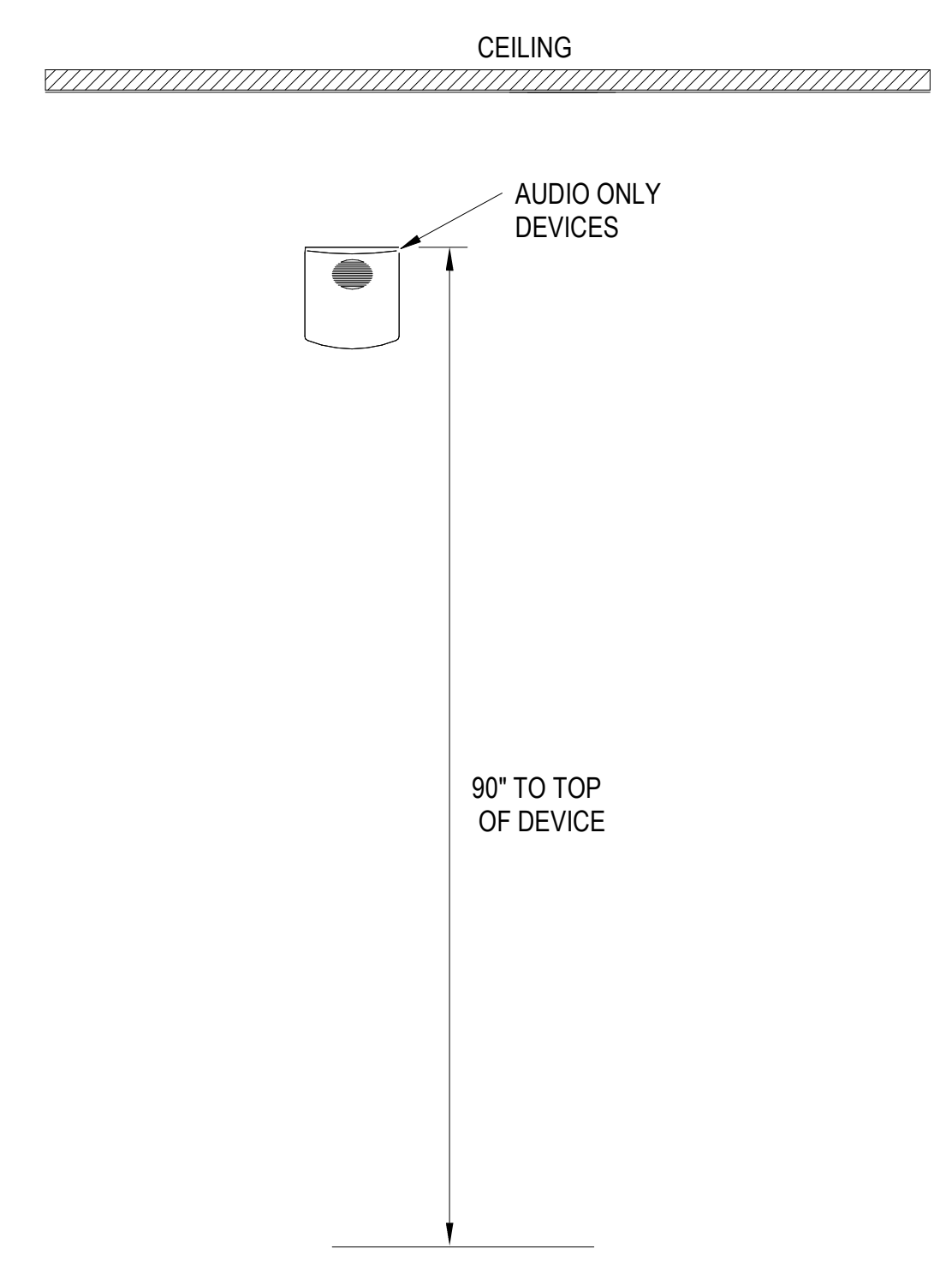
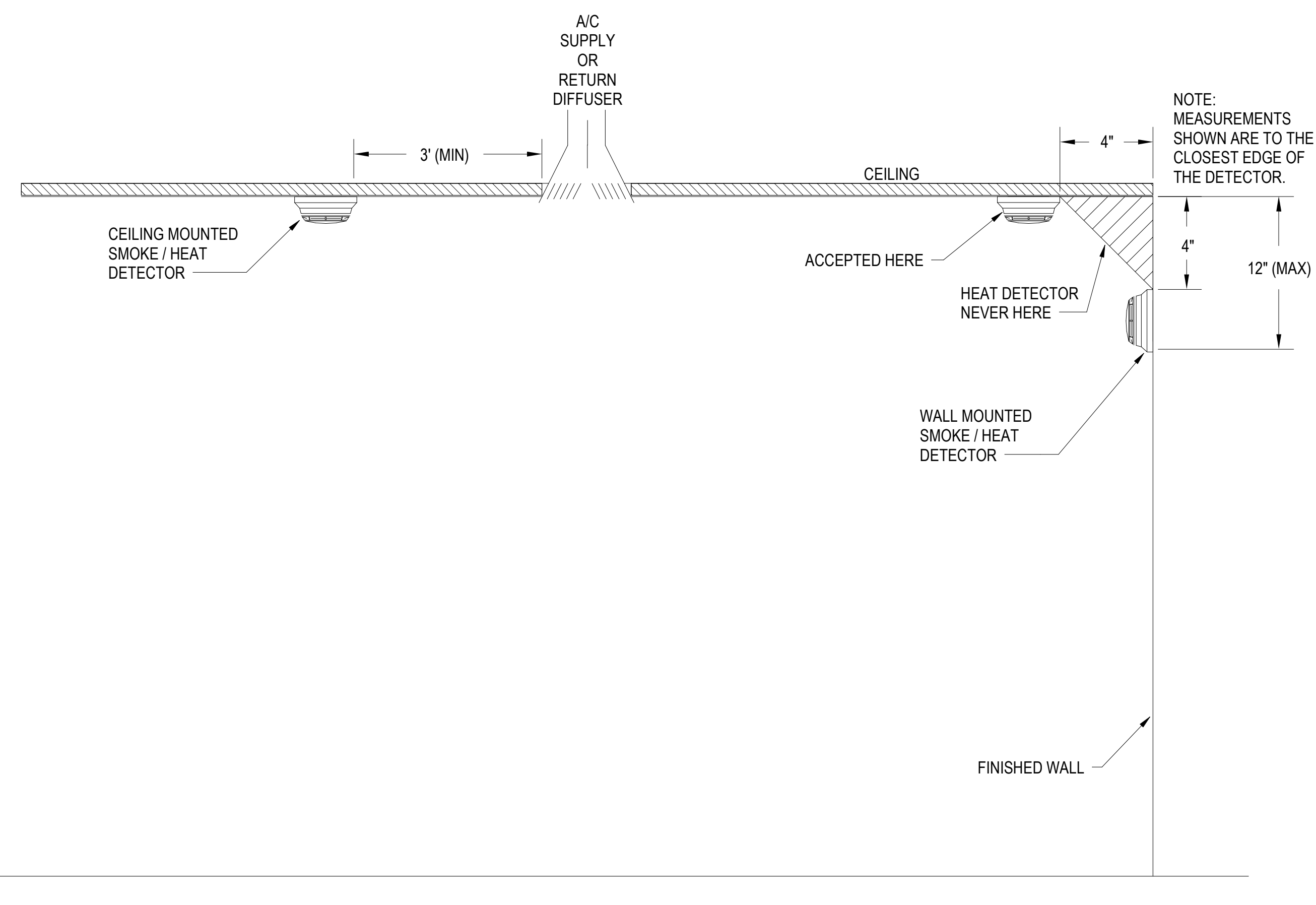
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C1 FMCP, FAAP, NAC, AND LOC MOUNTING HEIGHTS  
SCALE: NTS

C3 PULL STATION INSTALLATION DETAIL  
SCALE: NTS



A1 SMOKE / HEAT DETECTOR INSTALLATION REQUIREMENTS  
SCALE: NTS

A3 AUDIBLE APPLIANCE DEVICE INSTALLATION DETAIL  
SCALE: NTS

APPR	
DATE	
SYMBOL	
DESCRIPTION	
SEAL	
<b>Michael Baker INTERNATIONAL</b>	
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E/INFC APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	CONCURRED BY MCB-CL AMB VIA EMAIL
SATISFACTORY TO DATE	12/16/21
DES. DRW. CHK. DWM.	
PM / DM	TOWLER / ROOT
BRANCH HEAD	DPS
DESIGN DIRECTOR	PAUL K. SHREM
FIRE PROTECTION	DPS
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION NAVFAC DRAWING NO. 14098458	
NAVFAC ENGINEERING SYSTEMS COMMAND JACKSONVILLE, NC MCB CAMP LEJEUNE JACKSONVILLE, NC P1338F II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE ALARM - DETAILS	
SCALE	AS NOTED
EPROJCT NO.	1509892
CONSTR. CONTR. NO.	N40085-20-C-0059
SHEET	239 OF 456
<b>FA501</b>	
DRAWING REVISION: 25 AUGUST 2020	

ISSUED FOR CONSTRUCTION - 16 DEC 21

FILE NAME: BIM\_360/IFB PACKAGE 3P1338\_MEF\_SIM\_CTR-150982-F.V4 PLOTTED: 11/22/2021 4:12:57 PM



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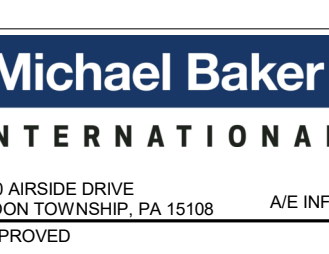
GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

KEYNOTES

- 1 PROVIDE AUDIO INPUT AND CONTACT CLOSURE IN THE FMCP PANEL TO ACCEPT EXTERNAL SIGNAL FROM THE MNS TRANSCEIVER.
- 2 PROVIDE 3/4" RIGID METAL CONDUIT (RMC) BETWEEN THE FMCP PANEL AND MNS TRANSCEIVER PANEL.
- 3 PROVIDE DEDICATED WALL SPACE FOR 24"x24"x1" MOUNTING BOARD ADJACENT TO THE FMCP PANEL (WITHIN 15 FT MAX). ENSURE THE MOUNTING BOARD IS CLEARLY MARKED "FOR BASE-WIDE MNS USE".
- 4 PROVIDE 1-1/2" RIGID METAL CONDUIT.
- 5 PROVIDE 8"x8"x8" PULL BOX.
- 6 PROVIDE (2) 3/4-INCH ELECTRICAL METAL CONDUIT (EMT) WITH 18 AWG SHIELD AUDIO WIRE FROM THE NEMA-4 ENCLOSURE TO 2 DIFFERENT CENTRAL FACILITY LOCATIONS (DUTY ROOM, ADMINISTRATION AREA, CENTRAL HALLWAY -COORDINATE WITH THE BASE SECURITY FOR LOCATION). AT THESE LOCATIONS TERMINATE RMC IN A FLUSH MOUNTED 4"x4"x2" EMT BOX. ENSURE 2 CONDUIT RUNS AND THE EXIT FLUSH MOUNTED ENCLOSURES ARE LABELED "FOR MNS USE".
- 7 1-1/2" RMC FROM PULL BOX TO THE ROOF. MAXIMUM CONDUIT LENGTH TO THE ROOF TERMINATION IS 115 FT. TERMINATE THE TOP OF THE EXTERIOR RMC WITH UL LISTED WEATHERHEAD. PROVIDE 50 OHM, UMR-400 RF CABLE IN THE RMC. PROVIDE 3-FT CABLE LENGTH MAINTENANCE LOOP AT BOTH ENDS OF THE CABLE ROUTE AND TERMINATE ROOF CABLE WITH A STRAIGHT MALE N-TYPE CONNECTOR. DO NOT TERMINATE THE RF CABLE AT THE MNS MOUNTING AREA AND CLEARLY LABEL THE RF CABLE "FOR MNS". TEST RF CABLE FOR PROPER CONNECTIVITY. PROVIDE ONE 90DBI OMNI-DIRECTIONAL ANTENNA, COOPER ANT-109-OM OR, MOBILE MARK OD9-2400 OR EQUAL, ON TOP OF ROOFTOP ANTENNA MASS. DIRECTIONAL ANTENNA MAY BE MOUNTED ON FACILITY BELOW ROOFLINE IF PLACEMENT OF ANTENNA LOCATION IS PRE-APPROVED BY SPAWAR OR PHYSICAL SECURITY PERSONNEL.
- 8 PROVIDE A NON-METALLIC 18" HEIGHT X 16" WIDTH X 10" DEPTH NEMA 4X ENCLOSURE WITH RAISED COVER AND PAD LOCKABLE LATCHES W/INTERIOR MOUNTING BOARD. PROVIDE 3/4" RMC WITH 3 CONDUCTORS, 12 AWG ELECTRICAL WIRE FROM THE ENCLOSURE TO A DEDICATED 120VAC/15A ELECTRICAL CIRCUIT. PROVIDE A DEDICATED LOCKABLE BREAKER FROM THE SAME POWER PANEL FOR FIRE ALARM CONTROL PANEL. PROVIDE AC POWER SURGE SUPPRESSOR DEVICE INLINE WITH POWER CIRCUIT INSIDE THE LOWER RIGHT CORNER OF THE ENCLOSURE. PROVIDE A DUAL ELECTRICAL OUTLET MOUNTED INSIDE THE MNS ENCLOSURE ABOVE THE SURE SUPPRESSOR ON THE BOTTOM RIGHT OF THE MNS ENCLOSURE WIRE SURGE SUPPRESSOR IN SERIES WITH DUAL ELECTRICAL OUTLET. WIRING MUST BE IN ACCORDANCE WITH NFPA 70.

SYMBOL	DESCRIPTION	DATE	APPROVED



FOR COMMANDER NAVFAC  
ACTIVITY CONCURRED BY MCB-CL AMB VIA EMAIL

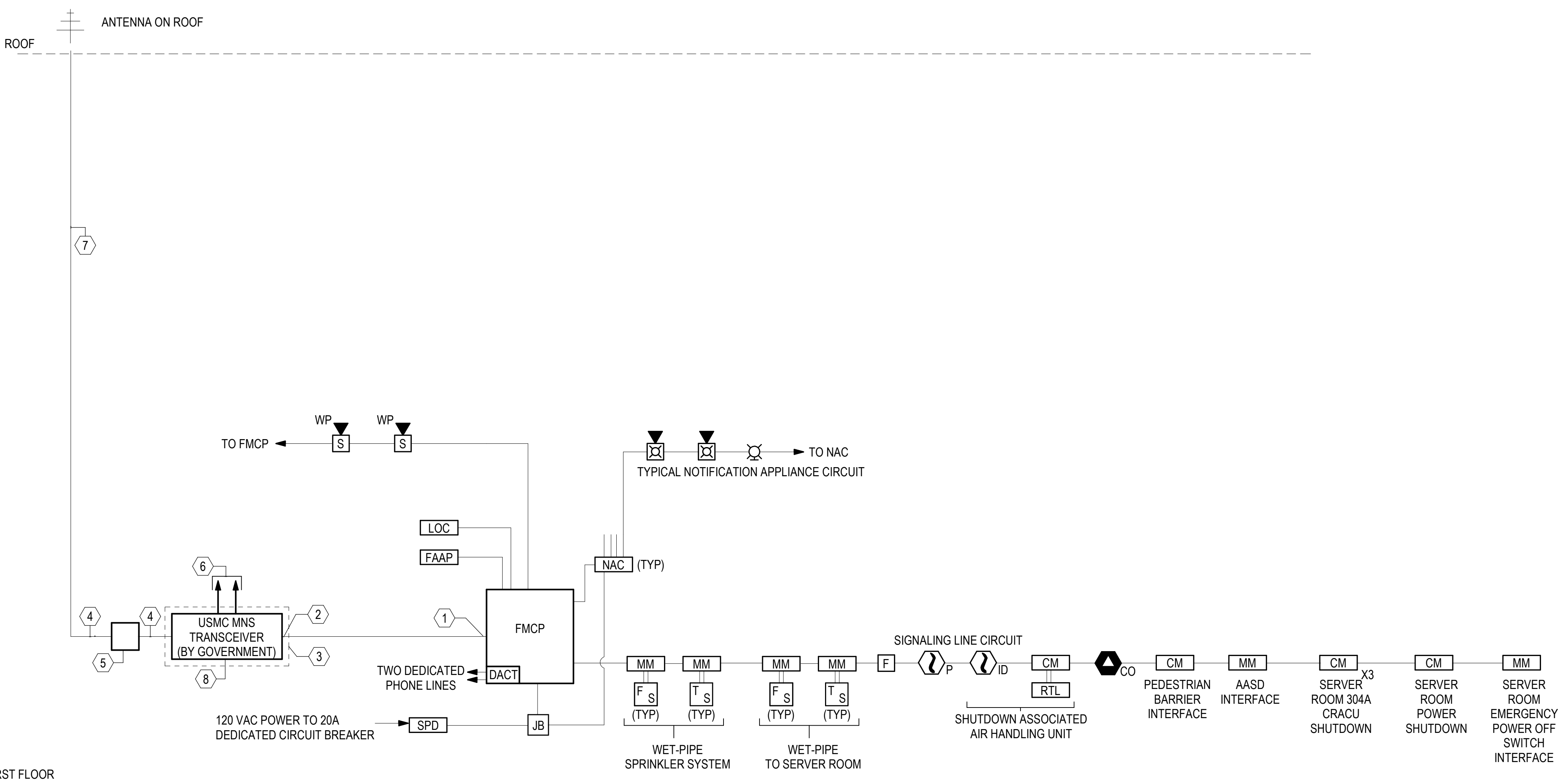
SATISFACTORY TO DATE 12/16/21

DESIGN: [ ] DRAWING: [ ] CHECK: [ ]  
PM / DM: TOWLER / ROOT

BRANCH HEAD: DPS  
DESIGN DIRECTOR: PAUL K. SHREM  
FIRE PROTECTION: DPS

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338F II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
FIRE ALARM - RISER DIAGRAM

SCALE: AS NOTED  
EPROJCT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.: 14098459  
SHEET 240 OF 456  
**FA701**  
DRAWING REVISION: 25 AUGUST 2020



FIRE ALARM RISER DIAGRAM

SCALE: NTS

FILE NAME: BIM\_360/IFB PACKAGE 3P1338\_MEF\_SIM\_CTR-1500892-F-04

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