

SEALS



O₂ FITNESS

GROVE 98 PUD
NORTHEAST QUADRANT
COMMERCIAL LOT 4

11136 LIGON MILL ROAD
WAKE FOREST, NC 27587

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

SHEET INFO		
DRAWN BY:	BWM	
CHECKED BY:	WBT	
FOR CONSTRUCTION:	08/17/23	

SHEET NAME:
FIRE ALARM GENERAL

SHEET NUMBER:
FA001

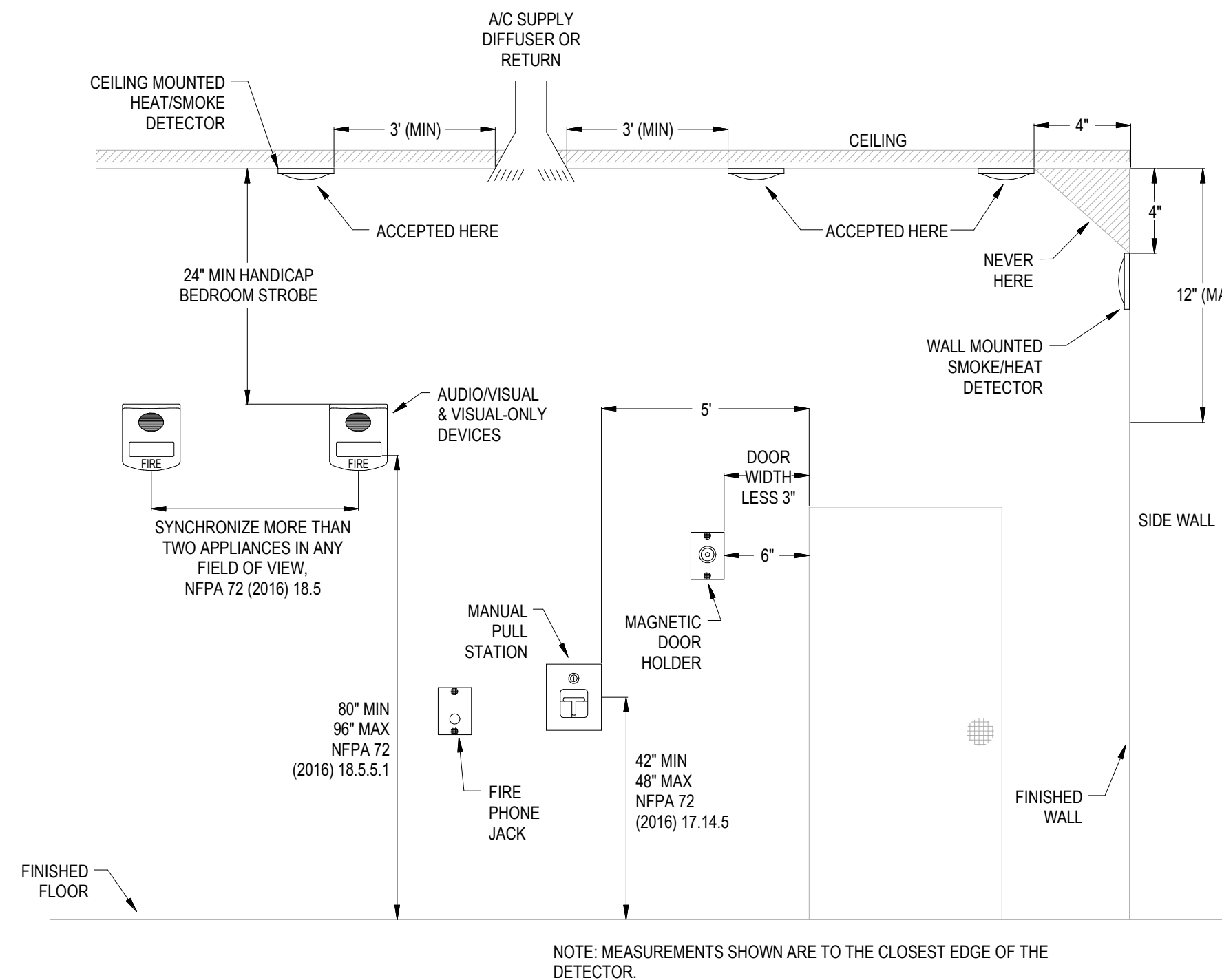
FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX		SYSTEM OUTPUTS																					
		FACP ANNUNCIATION										NOTIFICATION										REQUIRED FIRE SAFETY CONTROL	
SYSTEM INPUTS		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		
1	FIRE ALARM SYSTEM AC POWER FAILURE																					1	
2	FIRE ALARM SYSTEM LOW BATTERY																					2	
3	OPEN CIRCUIT																					3	
4	GROUND FAULT																					4	
5	NOTIFICATION APPLIANCE CIRCUIT SHORT																					5	
6	BUILDING MANUAL PULL STATIONS																					6	
7	AREA SMOKE DETECTORS																					7	
8	HVAC AIR DUCT SMOKE DETECTORS																					8	
9	SPRINKLER TAMPER SWITCH																					9	
10	SPRINKLER WATER FLOW IN BUILDING																					10	
11	-																					11	
12	-																					12	

FIRE ALARM NOTES

- ALL VISIBLE NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED PER NFPA 72, SECTION 18.5.
- EC SHALL VERIFY THAT DECIBEL LEVELS THROUGHOUT ENTIRE AREA OF WORK IS TO DBA MINIMUM AND 120 DBA MAXIMUM PRIOR TO CALLING FOR INSPECTION (100 DBA IN MACHINE AND MECH ROOMS). ADJUST OUTPUT LEVEL OF ALL AUDIBLE NOTIFICATION APPLIANCES AS NEEDED TO MINIMIZE SOUND-PRESSURE LEVELS THROUGHOUT WHILE MEETING THE REQUIRED MINIMUM.
- PROVIDE DEVICES U/L LISTED FOR USE WITH NEW SYSTEM AS INDICATED AND CONNECT. PROVIDE BATTERY CALCULATIONS FOR SYSTEM WITH ALL DEVICES INSTALLED. PROVIDE BATTERIES AS REQUIRED TO MAINTAIN SYSTEM IN FULL COMPLIANCE WITH NFPA 72, ADA AND ALL APPLICABLE STATE AND LOCAL CODES. PROVIDE ZONE MODULES AS REQUIRED IN FACP SPACE FOR ALL DEVICES.
- E.C. SHALL PROVIDE BATTERY CALCULATIONS AND CUT SHEETS FOR FIRE ALARM SYSTEM.
- FIRE ALARM PROVIDER SHALL PROVIDE SHOP DRAWINGS WITH BATTERY & VOLTAGE DROP CALCULATIONS TO AHJ PRIOR TO ROUGH-IN INSPECTION BY AHJ.
- DUCT SMOKE DETECTORS SHALL BE FURNISHED BY EC, INSTALLED BY MC, & CONNECTED TO FIRE ALARM SYSTEM BY EC. COORDINATE WITH MC ALL INSTANCES. PROVIDE REMOTE INDICATOR TEST SWITCH EACH INSTANCE - COORDINATE EXACT LOCATION WITH OWNER AND APPROVAL FROM FIRE MARSHAL.
- PROVIDE ALL FIRE ALARM DEVICES WITH WHITE FINISH WHERE OPTION IS AVAILABLE.

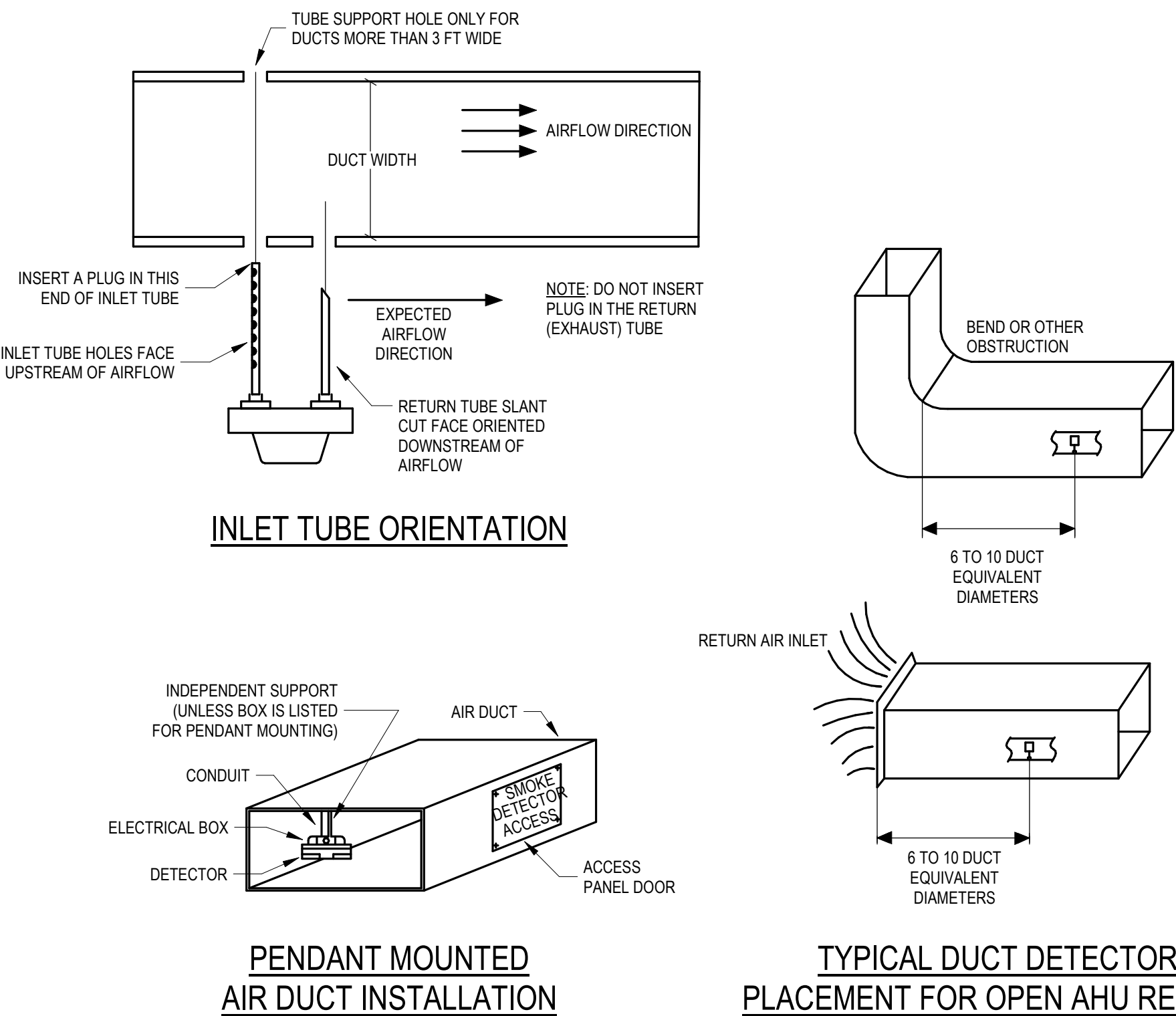
EMERGENCY RESPONDER RADIO COVERAGE

- IN ACCORDANCE WITH 2018 NORTH CAROLINA FIRE CODE SECTION 510 APPROVED EMERGENCY RESPONDER RADIO COVERAGE SHALL BE PROVIDED WITHIN THE BUILDING.
- PROVIDE A SHOP DRAWING DESIGN FOR A DISTRIBUTED ANTENNA SYSTEM WITH AMPLIFIER TO COVER THE ENTIRE STRUCTURE IN A MANNER COMPLIANT WITH 510.4. THE SYSTEM SHALL INCLUDE BATTERY CAPACITY FOR A MINIMUM OF 24 HOURS OF OPERATION AND THE SHOP DRAWINGS SHALL INCLUDE BATTERY SIZING CALCULATIONS. RACEWAY, WITH PULL STRINGS, FOR THE SYSTEM SHALL BE INSTALLED AS PART OF THE BASE BID.
- FIELD TESTING SHALL BE PERFORMED BY THE OWNER AT (OR NEAR) SUBSTANTIAL COMPLETION OF THE BUILDING PER 510.5.3, AND TEST RECORDS SHALL BE PROVIDED TO THE FIRE MARSHAL FOR ACCEPTANCE.
- IF COVERAGE IS NOT DEEMED TO BE ACCEPTABLE BY THE FIRE MARSHAL THEN THE AMPLIFIER, CONDUCTORS AND ALL ADDITIONAL REQUIRED SYSTEM PARTS SHALL BE PROVIDED IN ACCORDANCE WITH THE SHOP DRAWINGS AND SECTION 510.5, INCLUDING OBTAINING A PERMIT PER SECTION 510.3. THE SYSTEM SHALL BE RETESTED BY THE OWNER PER 510.5.3, AND TEST RECORDS SHALL BE PROVIDED TO THE FIRE MARSHAL FOR ACCEPTANCE IN ACCORDANCE WITH 2018 NORTH CAROLINA FIRE CODE SECTION 510 APPROVED EMERGENCY RESPONDER RADIO COVERAGE SHALL BE PROVIDED WITHIN THE BUILDING.
- EC SHALL PROVIDE AND INSTALL 2" CONDUIT WITH 12X12 JUNCTION BOX ON EACH FLOOR FOR BDA SYSTEM RISER CABLE. 2" CONDUIT SHALL BE RUN IN 2 HOUR RATED MECHANICAL CHASE OR STAIRWELL. PROVIDE 24X24 RATED ACCESS PANELS IN RATED WALLS FOR ACCESS AS REQUIRED.



1 FIRE ALARM DEVICE MOUNTING HEIGHTS

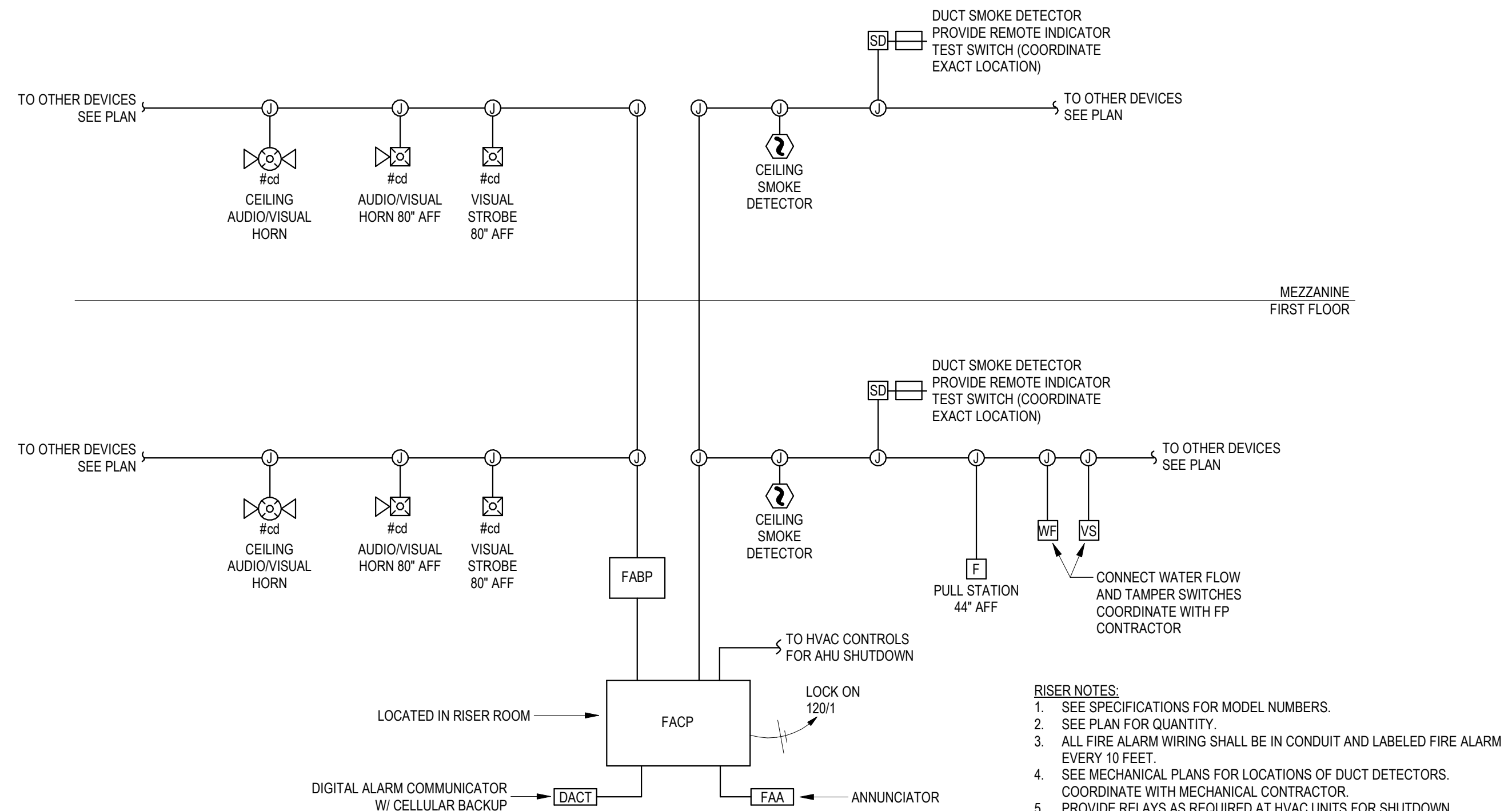
SCALE: NONE



2 TYPICAL DUCT DETECTOR INSTALLATION DETAILS

SCALE: NONE

NOTE:
COORDINATE DUCT DETECTOR INSTALLATION & REQUIREMENTS WITH MECHANICAL CONTRACTOR.



3 FIRE ALARM RISER DIAGRAM

SCALE: NONE

- RISER NOTES:**
- SEE SPECIFICATIONS FOR MODEL NUMBERS.
 - SEE PLAN FOR QUANTITY.
 - ALL FIRE ALARM WIRING SHALL BE IN CONDUIT AND LABELED FIRE ALARM EVERY 10 FEET.
 - SEE MECHANICAL PLANS FOR LOCATIONS OF DUCT DETECTORS. COORDINATE WITH MECHANICAL CONTRACTOR.
 - PROVIDE RELAYS AS REQUIRED AT HVAC UNITS FOR SHUTDOWN. COORDINATE WITH MECHANICAL CONTRACTOR.
 - PROVIDE FIRE ALARM PLAN AT FACP.
 - PROVIDE NOTIFICATION ALARM BOOSTERS AS REQUIRED AND MINIMUM OF ONE PER FLOOR. BOOSTERS SHALL HAVE 25% SPARE CAPACITY.
 - THIS DETAIL IS DIAGRAMMATIC AND NOT INDICATIVE OF EXACT NUMBER OF DEVICES/EQUIPMENT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS REFLECTIVE OF EXACT QUANTITY/LOCATION OF DEVICES AND EQUIPMENT.
 - EC SHALL PROVIDE AUXILIARY CONTACTS TO USE WITH MECHANICAL DDC SYSTEM TO SHUT DOWN FAN POWERED BOXES UPON ACTIVATION OF FIRE ALARM SYSTEM. COORDINATE WITH MECHANICAL CONTRACTOR.
 - COORDINATE EXACT LOCATION OF REMOTE INDICATORS FOR DUCT MOUNTED DETECTORS WITH INSPECTOR PRIOR TO ROUGH-IN.

FIRE ALARM SHEET INDEX

SHEET NO.	REV#	SHEET NAME
FA001		FIRE ALARM GENERAL
FA101		FIRST FLOOR FIRE ALARM PLAN
FA201		MEZZANINE FIRE ALARM PLAN

SEALS



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SHEET INFO

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FOR CONSTRUCTION: 08/17/23

SHEET NAME:

FIRST FLOOR FIRE ALARM PLAN

SHEET NUMBER:

FA101



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

FIRE ALARM KEYNOTE LEGEND	
FA1	PROVIDE FACP WITH WEATHERPROOF COVER/ENCLOSURE LOCATED INSIDE SPRINKLER RISER ROOM.
FA2	COORDINATE FP SYSTEM CONNECTIONS WITH SPRINKLER CONTRACTOR
FA3	DUCT MOUNTED SMOKE DETECTOR - CONNECT TO FIRE ALARM SYSTEM AND PROVIDE REMOTE INDICATOR TEST SWITCH - COORDINATE WITH MC
FA4	FIRE SERVICE HOT BOX BY OTHERS ON SITE - PROVIDE TAMPER SWITCHES & LOW TEMPERATURE SENSOR AT ABOVE GROUND VAULT AND CONNECT TO FIRE ALARM SYSTEM - REFER TO CIVIL SITE UTILITY PLAN
FA5	POST INDICATOR VALVE BY OTHERS ON SITE - PROVIDE TAMPER SWITCH AND CONNECT TO FIRE ALARM SYSTEM - REFER TO CIVIL SITE UTILITY PLAN.

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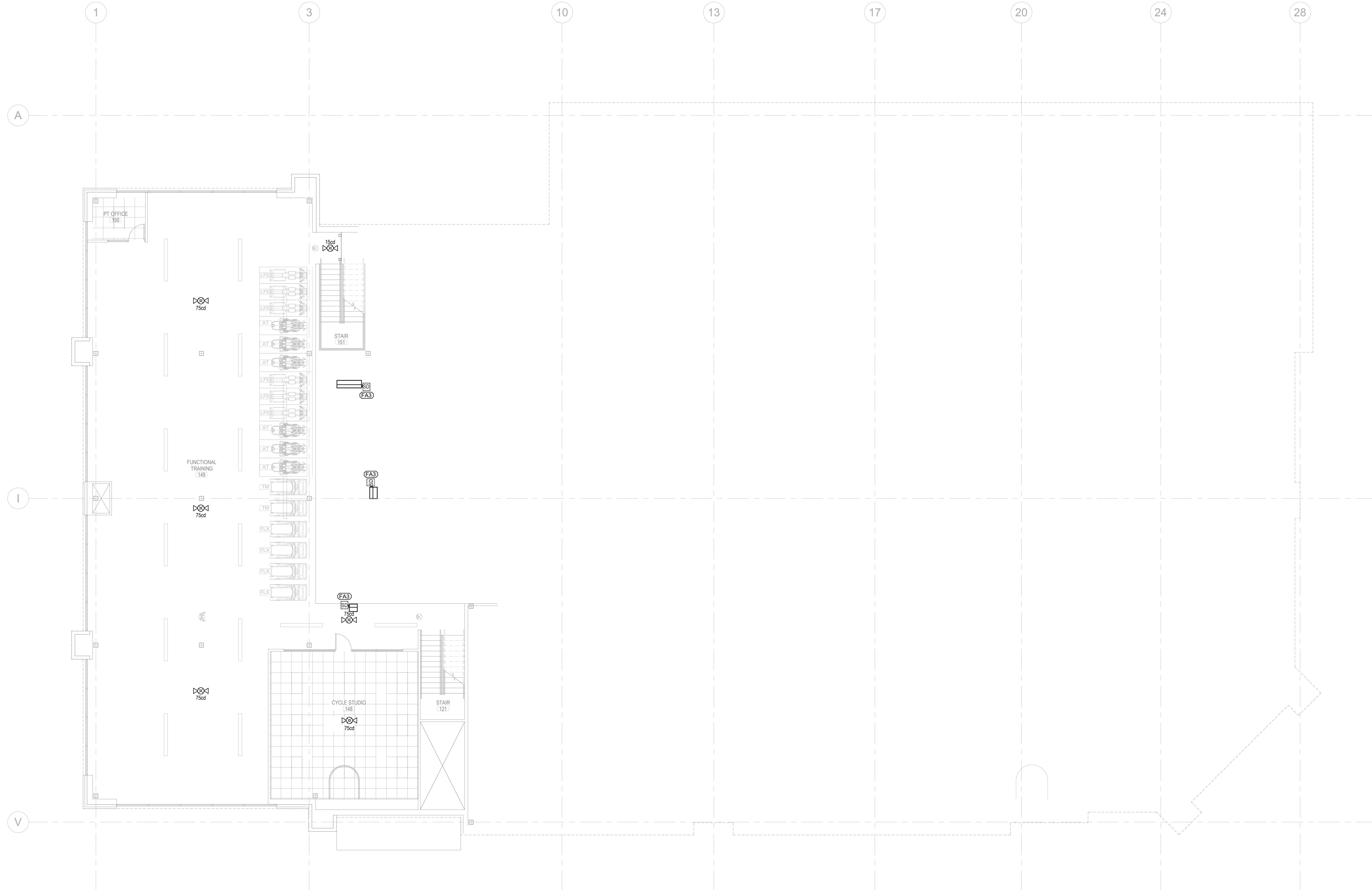
FOR CONSTRUCTION: 08/17/23

SHEET NAME:

**MEZZANINE
FIRE ALARM
PLAN**

SHEET NUMBER:

FA201



1 MEZZANINE FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

FIRE ALARM KEYNOTE LEGEND

FA3 DUCT MOUNTED SMOKE DETECTOR - CONNECT TO FIRE ALARM SYSTEM AND PROVIDE
REMOTE INDICATOR TEST SWITCH - COORDINATE WITH MC