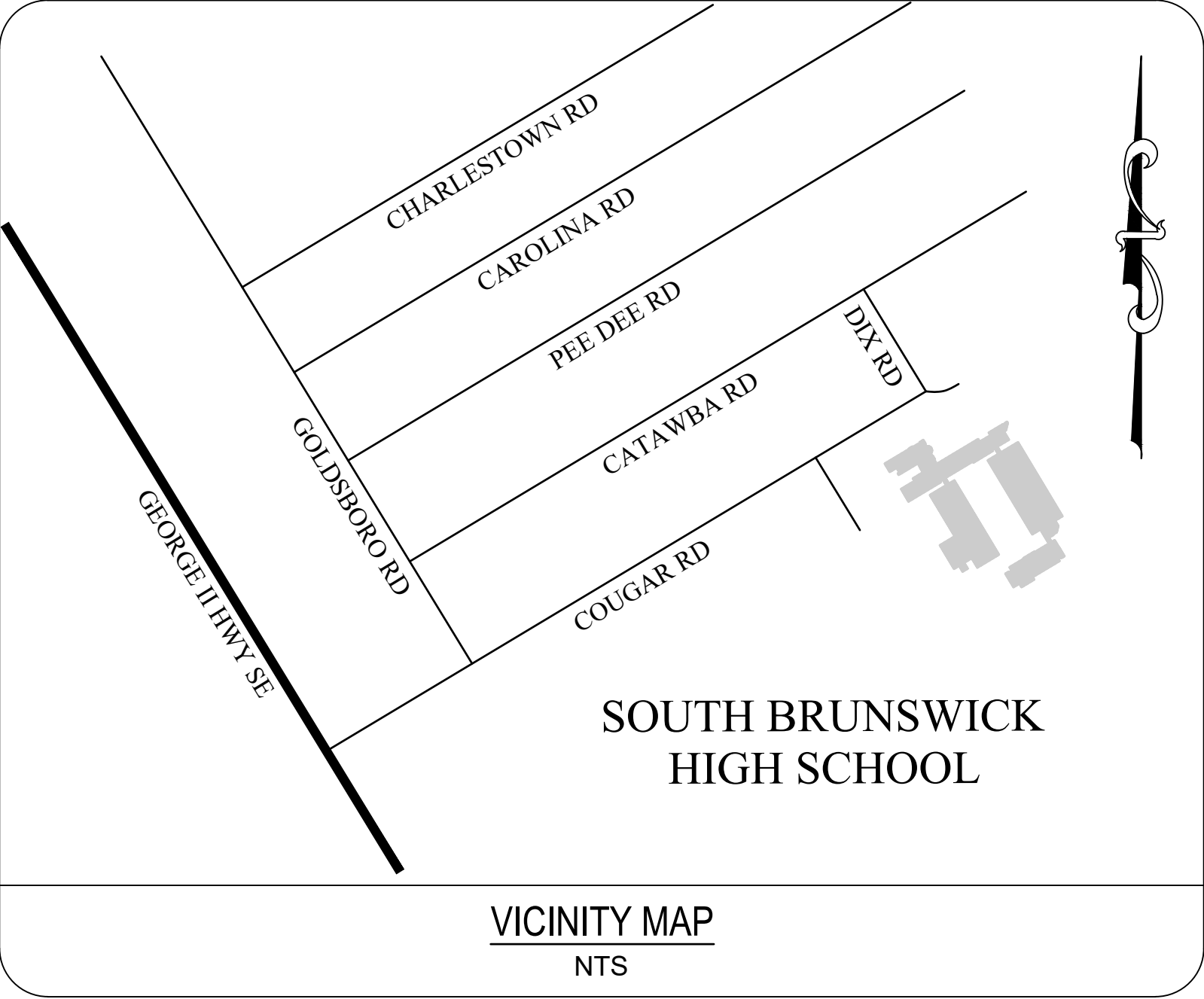


SOUTH BRUNSWICK HIGH SCHOOL FIRE ALARM REPLACEMENT BRUNSWICK COUNTY BOARD OF EDUCATION 280 COUGAR RD, SOUTH PORT, NC 28461



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Sheet Number	Sheet Title	REV #	DATE
CS	COVER SHEET		
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FA102	FIRE ALARM PLAN - AREA B		
FA103	FIRE ALARM PLAN - AREA C		
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FA113	FIRE ALARM PLAN - AREA M		
FA114	FIRE ALARM PLAN - AREA N LOFT		
FA501	FIRE ALARM DETAILS		

OWNER & BUILDER'S NOTES:

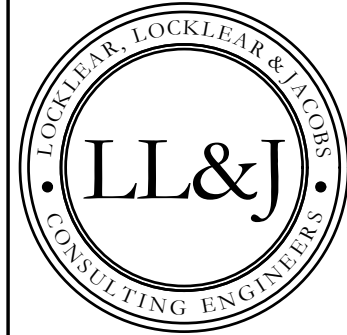
- PLANS SHALL NOT BE USED FOR CONSTRUCTION UNTIL STAMPED AND SIGNED BY AN ENGINEER AND APPROVED BY THE LOCAL INSPECTION DEPARTMENT. THE CONTRACTOR IS EXPECTED TO FOLLOW THESE PLANS, APPLICABLE BUILDING CODES AND LOCAL ORDINANCES. CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH PLANS BEFORE STARTING WORK. WHILE PLANS ARE DRAWN TO SHOW THE PROPOSED WORK AS ACCURATELY AS POSSIBLE, SCHEMATIC DETAILS MAY BE USED IN SOME CASES FOR CLARITY. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR DETAILED WORK.
- WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. THE ENGINEER SHALL BE CONSULTED FOR CLARIFICATION IF SITE CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS / NOTES.
- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SCHEDULING, FABRICATION, CONSTRUCTION TECHNIQUES OR MATERIALS, OR QUANTITIES USED IN THE WORK. THE ENGINEER/ DESIGNER ASSUMES NO RESPONSIBILITY FOR FIELD CHANGES, SITE VARIANCES OR DISCREPANCIES NOT BROUGHT TO ENGINEER'S ATTENTION FOR CLARIFICATION.



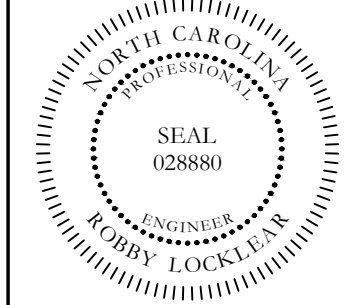
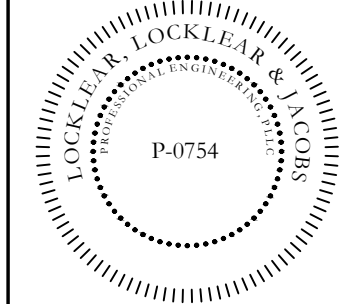
Know what's below.
Call before you dig.



PREPARED BY:
LOCKLEAR, LOCKLEAR & JACOBS
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114 WEST 3RD. STREET - PEMBROKE, NORTH CAROLINA 28372
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SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD, SOUTH PORT, NC 28461

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DATE: 3/25/2024
DRAWN BY: CKD
CHECKED BY: RL
SHEET TITLE
COVER SHEET
SHEET NUMBER
CS
PROJECT# 24-01233

1 FINAL ALARM GENERAL NOTES


- | FIRE DETECTION LEGEND | |
|-----------------------|--|
| SYMBOL | DESCRIPTION |
| | FIRE ALARM CONTROL PANEL |
| | FIRE ALARM ANNUCIATOR PANEL |
| | FIRE ALARM REMOTE POWER SUPPLY PANEL |
| | DISTRIBUTED AMPLIFIER PANEL |
| | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT |
| | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT |
| | VISUAL ONLY INDICATING DEVICE - WALL MOUNT |
| | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT |
| | PULL STATION |
| | SMOKE DETECTOR CEILING MOUNTED |
| | HEAT DETECTOR CEILING MOUNTED |
| | EXHAUST HOOD MONITOR MODULE |
| | CARBON MONOXIDE DETECTOR |
| | DUCT SMOKE DETECTOR |
| | REMOTE INDICATOR LIGHT |
| | DUCT DETECTOR RELAY |
| | EXISTING DOOR MAGNETS TO REMAIN |
| | MONITOR MODULE |
| | ANSUL ALARM PANEL |
| | AUDIO ONLY CEILING MOUNT |
| | ELEVATOR RELAY |

NOTES:

1. THIS DRAWING SHOWN FOR ILLUSTRATION ONLY, FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND AUTHORITY HAVING JURISDICTION.
2. CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.
3. FIRE ALARM CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.



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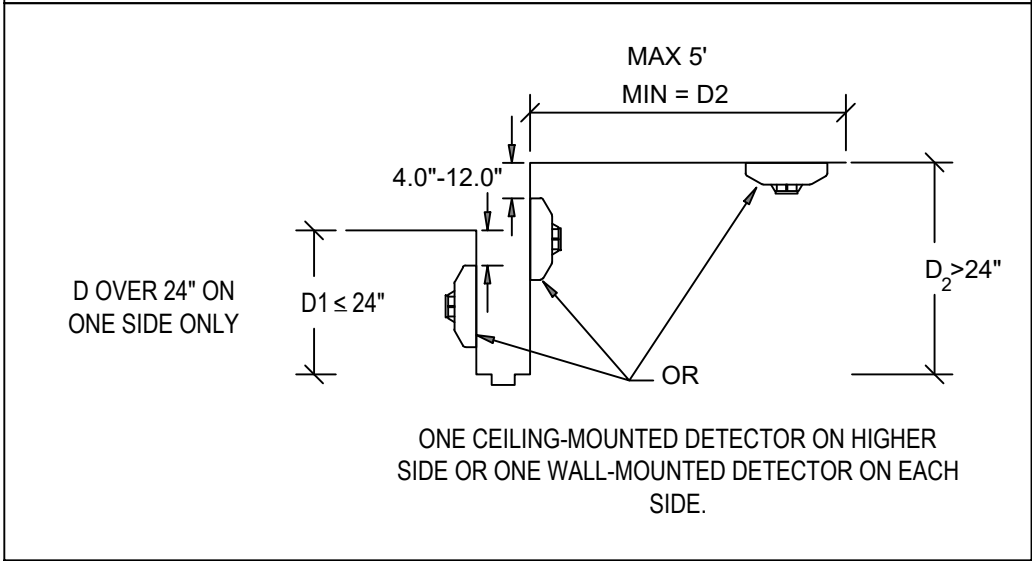
LOCKLEAR, LOCKLEAR & JACOBS
PROFESSIONAL ENGINEERING, INC.
P-0754

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "ROBBY LOCKLEAR" at the bottom. Inside this is a smaller circle with "PROFESSIONAL" at the top and "ENGINEER" at the bottom. The center of the seal contains the word "SEAL" above the license number "028880".

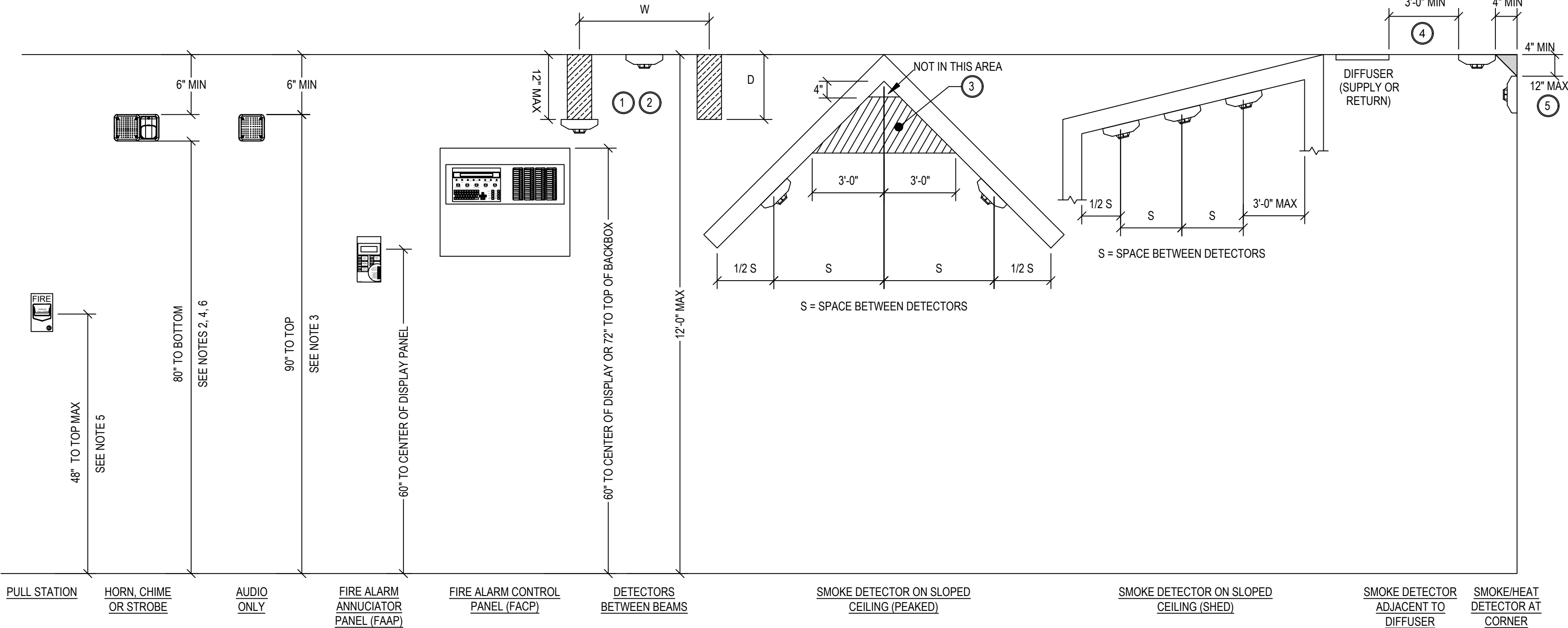
BRUNSWICK HIGH SCHOOL
E ALARM REPLACEMENT
COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

Diagram of the rear of the chassis showing the location of the magnet test point. The diagram includes a top view of the chassis with a "MAGNET TEST" label pointing to a specific location. An inset shows a detailed view of the rear panel with various test points labeled: B, V, S, R, N, and A. The test points are connected to a common terminal (COM) and a common terminal (COMN). The test points are labeled: + TEST COIL, - TEST COIL, + RA / COMB+, - OUT / COMN (ONLY), - RA / RTS, + RA, and + RTS.

2 DUCT DETECTOR WIRING DETAIL
NTS



3 DETECTOR LOCATION REQUIREMENTS FOR WALL SECTIONS

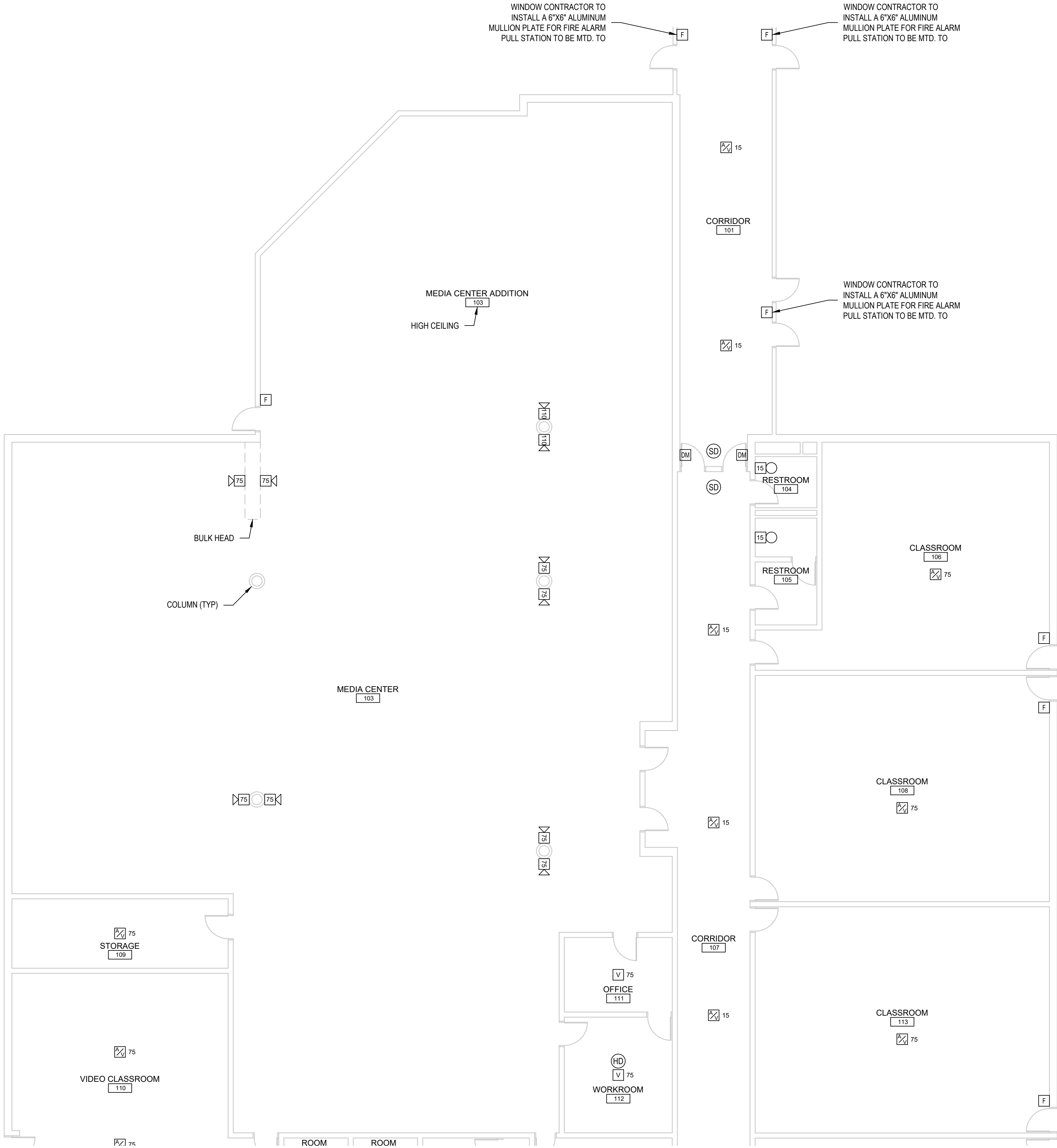


KEYED NOTE SCHEDULE	
MARK	DESCRIPTION
①	LOCATE SMOKE DETECTORS AT BOTTOM OF BEAMS (OR JOISTS) OR AT CEILING. (REDUCE SPACING BY .5 PERPENDICULAR TO BEAM OR JOIST DIRECTION). PER NFPA 72-2013 17.6.3.3.2
②	LOCATE HEAT DETECTORS AT BOTTOM OF BEAMS IF EITHER D/H < .1 OR W/H < .4; OTHERWISE LOCATE IN BEAM POCKET.
③	LOCATE SMOKE DETECTOR ANYWHERE IN SHADED AREA. PER NFPA 72-2013 17.6.3.4
④	PER NFPA 72-2013 A.17.7.4.1
⑤	PER NFPA 72-2013 17.7.3.2.1

4 TYPICAL FIRE ALARM MOUNTING DETAILS

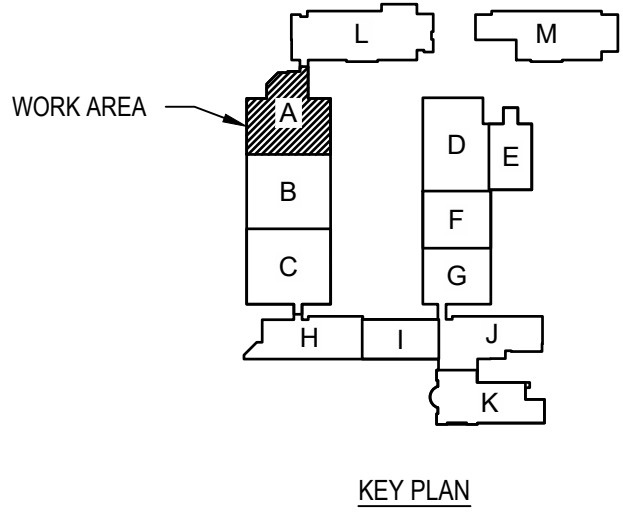
PROJECT INFORMATION		SO	
REV#	DATE	DESCRIPTION	
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2			
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4			
5			
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SHEET TITLE			
FIRE ALARM GENERAL NOTES AND ABBREVIATIONS			
SHEET NUMBER			
FA001			
PROJECT# 24-01233			

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



FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM REMOTE POWER SUPPLY PANEL
	DISTRIBUTED AMPLIFIER PANEL
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT
	PULL STATION
	SMOKE DETECTOR CEILING MOUNTED
	HEAT DETECTOR CEILING MOUNTED
	EXHAUST HOOD MONITOR MODULE
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR
	REMOTE INDICATOR LIGHT
	DUCT DETECTOR RELAY
	EXISTING DOOR MAGNETS TO REMAIN

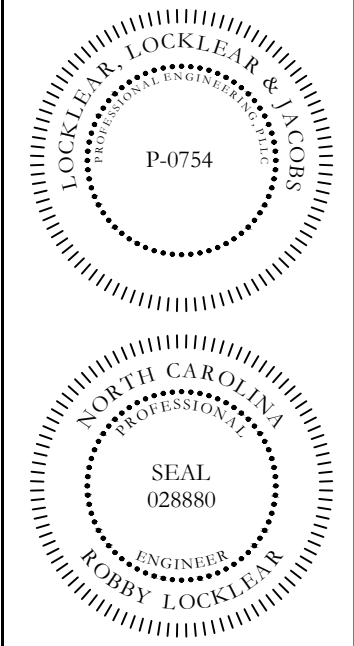
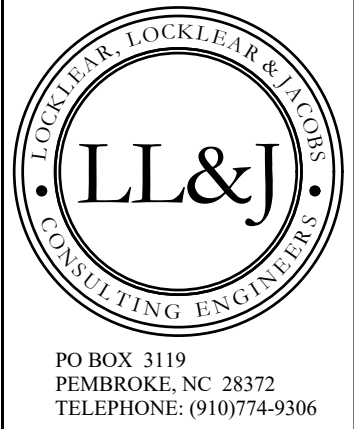
NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE



- CONTRACTOR NOTES:
- ALL AIR HANDLING UNITS WILL REQUIRE NEW DUCT DETECTORS. INSTALL NEW DUCT DETECTORS NEAR EXISTING. DUCT DETECTORS LOCATED ABOVE CEILINGS OR IN HIDDEN LOCATIONS WILL REQUIRE VISUAL NOTIFICATION. GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.
 - NEW DUCT DETECTORS WILL HAVE TO BE INSTALLED NEAR EXISTING ONES AND EXISTING ONES LEFT IN PLACE UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED. DRAWINGS WILL BE UPDATED TO REFLECT THIS.
 - THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
 - BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
 - BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

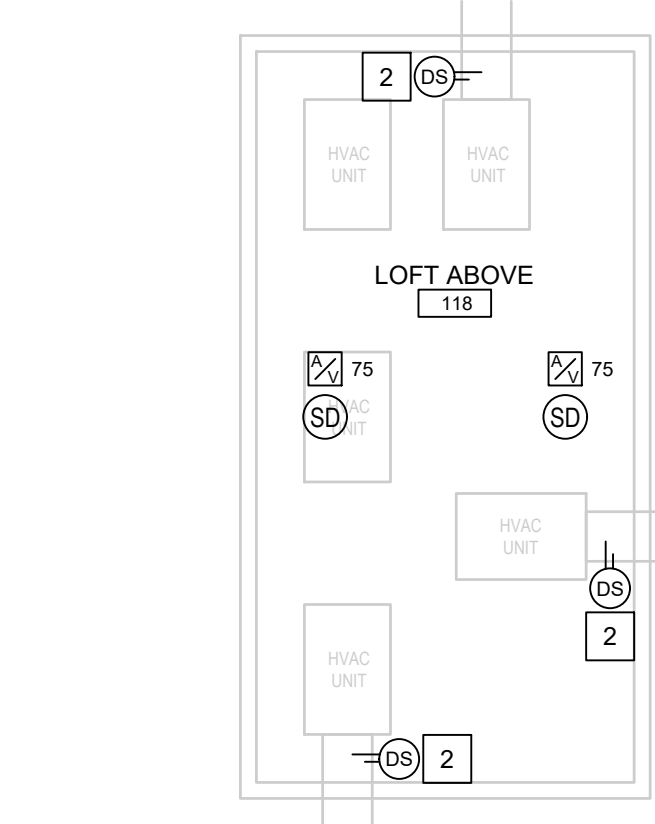
- FIRE ALARM DEMOLITION NOTES:
- ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX. LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE"
 - 4"X4" BLANK COVERS TO BE INSTALLED OVER DEMOED WALL DEVICES.
 - EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
 - DEMO DUCT DETECTORS, CONTRACTOR TO RE-SEAL DUCT.
 - DEMO DUCT DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DUCT DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DUCT DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR LIGHT.)

- FIRE ALARM NOTES:
- THIS DRAWING SHOWN FOR ILLUSTRATION ONLY, FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND AUTHORITY HAVING JURISDICTION.
 - CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
 - SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION ASSOCIATION. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED. FIRE ALARM CONTRACTOR TO VERIFY AUDIBLE DEVICES ARE 15 DECIBELS OVER AMBIENT NOISE LEVELS.
 - INSTALL WIRE GUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
 - ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHJ.
 - FIRE ALARM CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.
 - FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION. VERIFICATION OF DIMENSIONS AT THE SITE, AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK.
 - GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
 - MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
 - CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.
 - FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
 - ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
 - POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
 - ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE.
 - ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2 WATTS.
 - CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
 - INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
 - IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.



SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

REV#	DATE	DESCRIPTION	DATE	DESCRIPTION
1	3/25/2024	DRAWN BY: CKD		
		CHECKED BY: RL		
		SHEET TITLE		
		FIRE ALARM PLAN - AREA A		
		SHEET NUMBER		
		FA101		
		PROJECT# 24-01233		




A key plan diagram of a building layout. The building is represented by a series of connected rectangular shapes. Rooms are labeled with letters: L and M are at the top; A, B, and C are in a vertical column on the left; D, E, F, and G are in a vertical column on the right; H, I, J, and K are at the bottom. Room B, located between rooms A and C, is shaded with diagonal lines. A line points from the text 'WORK AREA' to room B. Below the diagram is the text 'KEY PLAN'.

1. ALL AIR HANDLING UNITS WILL REQUIRE NEW DUCT DETECTORS. INSTALL NEW DUCT DETECTORS NEAR EXISTING. DUCT DETECTORS LOCATED ABOVE CEILINGS OR IN HIDDEN LOCATIONS WILL REQUIRE VISUAL NOTIFICATION. GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.
2. NEW DUCT DETECTORS WILL HAVE TO BE INSTALLED NEAR EXISTING ONES AND EXISTING ONES LEFT IN PLACE UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED. DRAWINGS WILL BE UPDATED TO REFLECT THIS.
3. THE CEILING TILE WALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
4. BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
5. BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

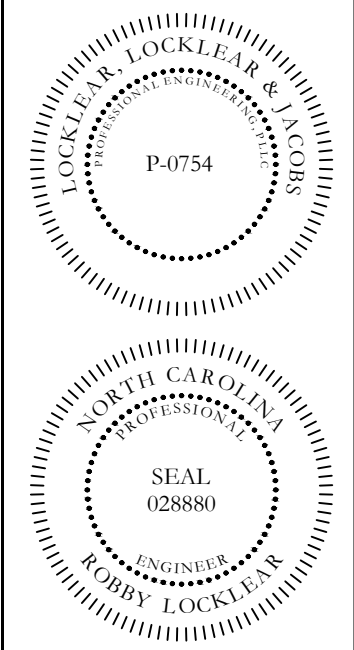
1	(1) 120V CIRCUIT FOR BOTH PAD AND NAC PANELS. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL PB1 OR PB2).
2	INSTALL NEW DUCT DETECTOR, DEMO EXISTING DUCT DETECTOR AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. CONTRACTOR TO RELOCATE DUCT DETECTOR TO NEW LOCATION. EXISTING SMOKE DETECTORS, SHUTDOWN CIRCUIT TO BE INSTALLED ON ALL UNITS (INCLUDING THOSE THAT DO NOT REQUIRE A DUCT DETECTOR). FIRE ALARM RELAY TO BE PROVIDED BY FIRE ALARM CONTRACTOR. CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.

1. ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX.
 - LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
 - 4"X4" BLANK COVERS THAT INSTALLED OVER DEMOED WALL DEVICES.
 - EXISTING DUCT HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
2. DEMO DUCT DETECTORS. CONTRACTOR TO RE-SEAL DUCT.
3. DEMO DUCT DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DUCT DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DUCT DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR (LIGHT).

1. THIS DRAWING SHOWN FOR ILLUSTRATION ONLY. FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
3. SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES. ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION ASSOCIATION. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED. FIRE ALARM CONTRACTOR TO VERIFY AUDIBLE DEVICES ARE 15 DECIBELS OVER AMBIENT NOISE LEVELS.
4. INSTALL WALL SMOKE DETECTORS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM. ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHU.
5. FIRE ALARM CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.
6. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION. VERIFICATION OF DIMENSIONS AT THE SITE AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK.
7. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HARD DETECTOR OR DUCT DETECTOR.
8. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
9. CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.
10. FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
11. ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
12. POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
13. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1' VERT UNLESS NOTED OTHERWISE.
14. ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2' WATTS.
15. CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
16. INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
17. IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.



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PEMBROKE, NC 28372
TELEPHONE: (910)774-9306



FOR INFORMATION:
SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

REV#	DATE	DESCRIPTION
1.		
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DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE

FIRE ALARM
PLAN - AREA B

SHEET NUMBER

FA102

PROJECT# 24-01233

Printed: Mon 25-Mar-2024 - 12:37PM

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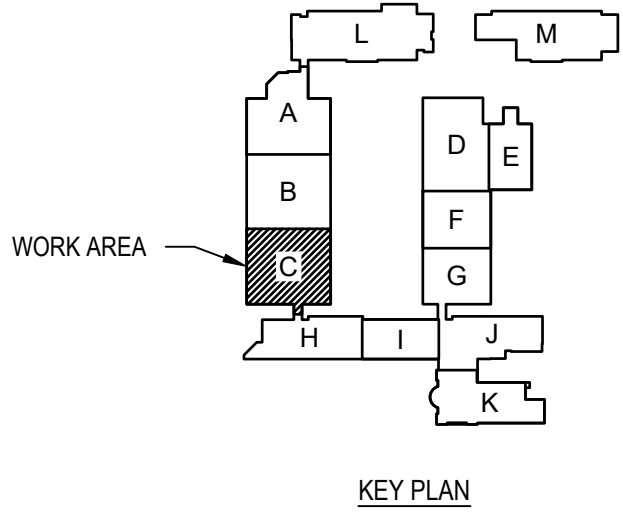
FIRE ALARM PLAN - AREA C

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



FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM REMOTE POWER SUPPLY PANEL
	DISTRIBUTED AMPLIFIER PANEL
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT
	PULL STATION
	SMOKE DETECTOR CEILING MOUNTED
	HEAT DETECTOR CEILING MOUNTED
	EXHAUST HOOD MONITOR MODULE
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR
	REMOTE INDICATOR LIGHT
	DUCT DETECTOR RELAY
	EXISTING DOOR MAGNETS TO REMAIN

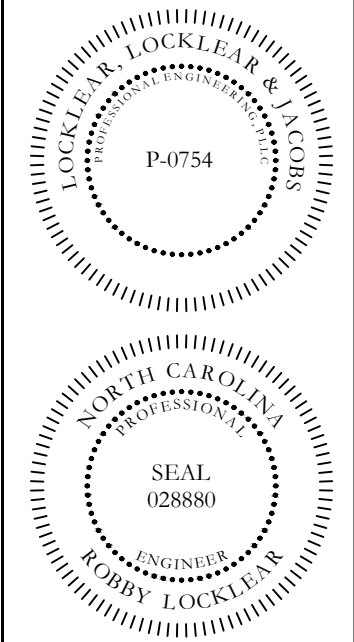
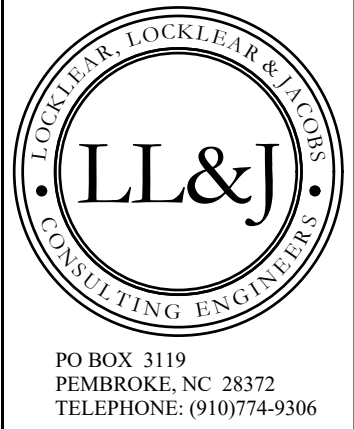
NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE



- CONTRACTOR NOTES:
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PROJECT INFORMATION

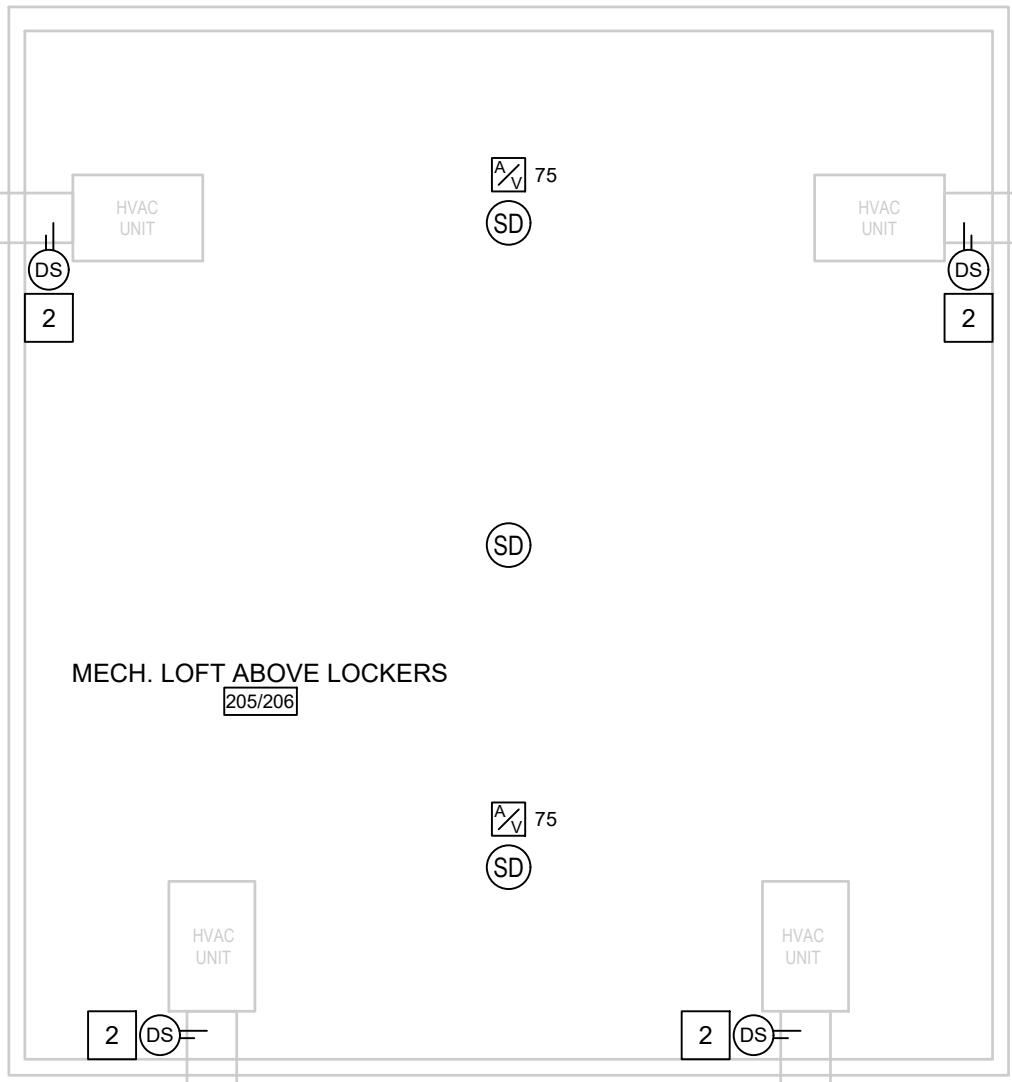
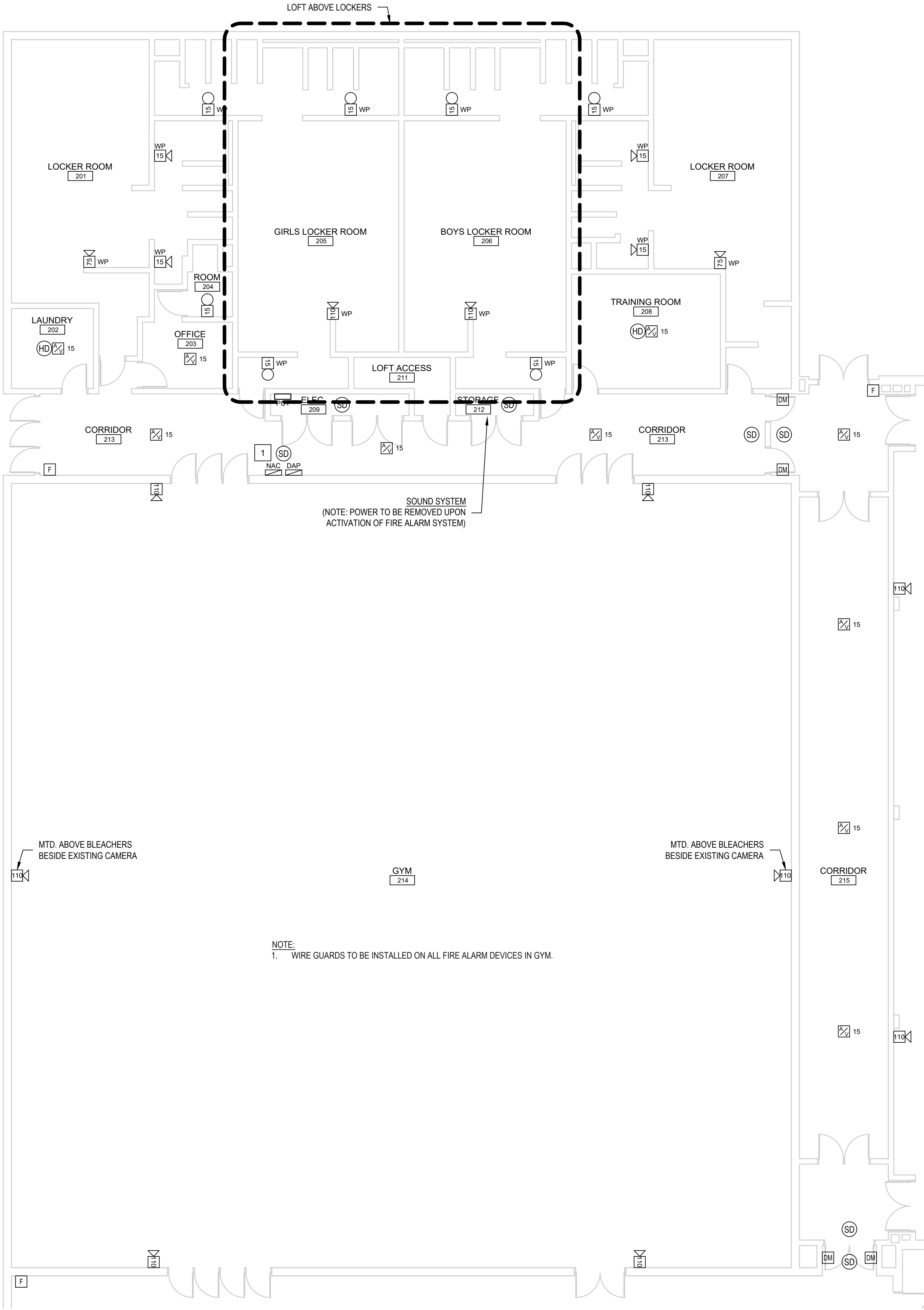
SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

REV#	DATE	DESCRIPTION
1	03/25/2024	DATE: 3/25/2024
2		DRAWN BY: CKD
3		CHECKED BY: RL
4		SHEET TITLE
5		SHEET NUMBER
6		PROJECT# 24-01233

FIRE ALARM
PLAN - AREA C

SHEET NUMBER
FA103
PROJECT# 24-01233

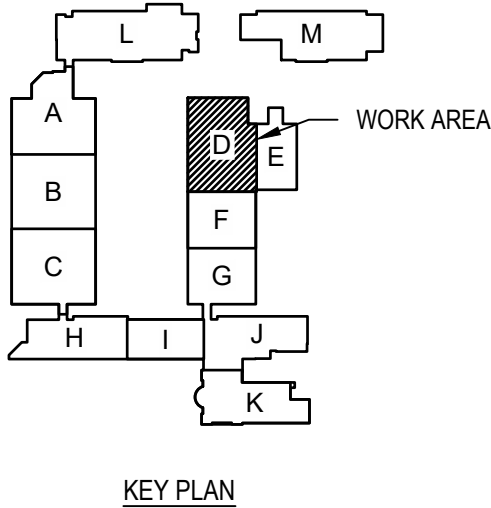
1 FIRE ALARM PLAN - AREA D
SCALE: 1/8" = 1'-0"



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

FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
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	FIRE ALARM ANNUNCIATOR PANEL
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	DISTRIBUTED AMPLIFIER PANEL
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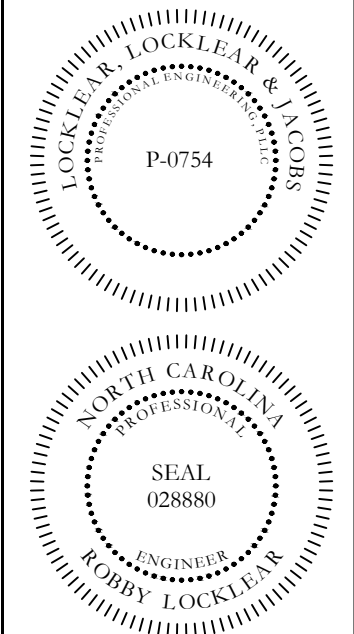
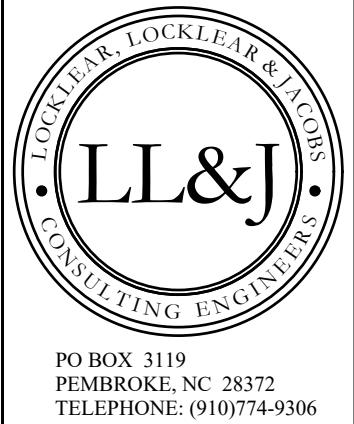
- (1) 120V CIRCUIT FOR BOTH DAP AND NAC PANELS. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL PC1 LOCATED IN MECHANICAL LOFT ABOVE.
- INSTALL NEW DUCT DETECTOR, DEMO EXISTING DUCT DETECTOR AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. CONTRACTOR TO RE-SEAL DUCT. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SMOKE DETECTORS. SHUTDOWN CIRCUIT TO BE INSTALLED ON ALL UNITS (INCLUDING THOSE THAT DO NOT REQUIRE A DUCT DETECTOR). FIRE ALARM RELAY TO BE PROVIDED BY FIRE ALARM CONTRACTOR. CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.

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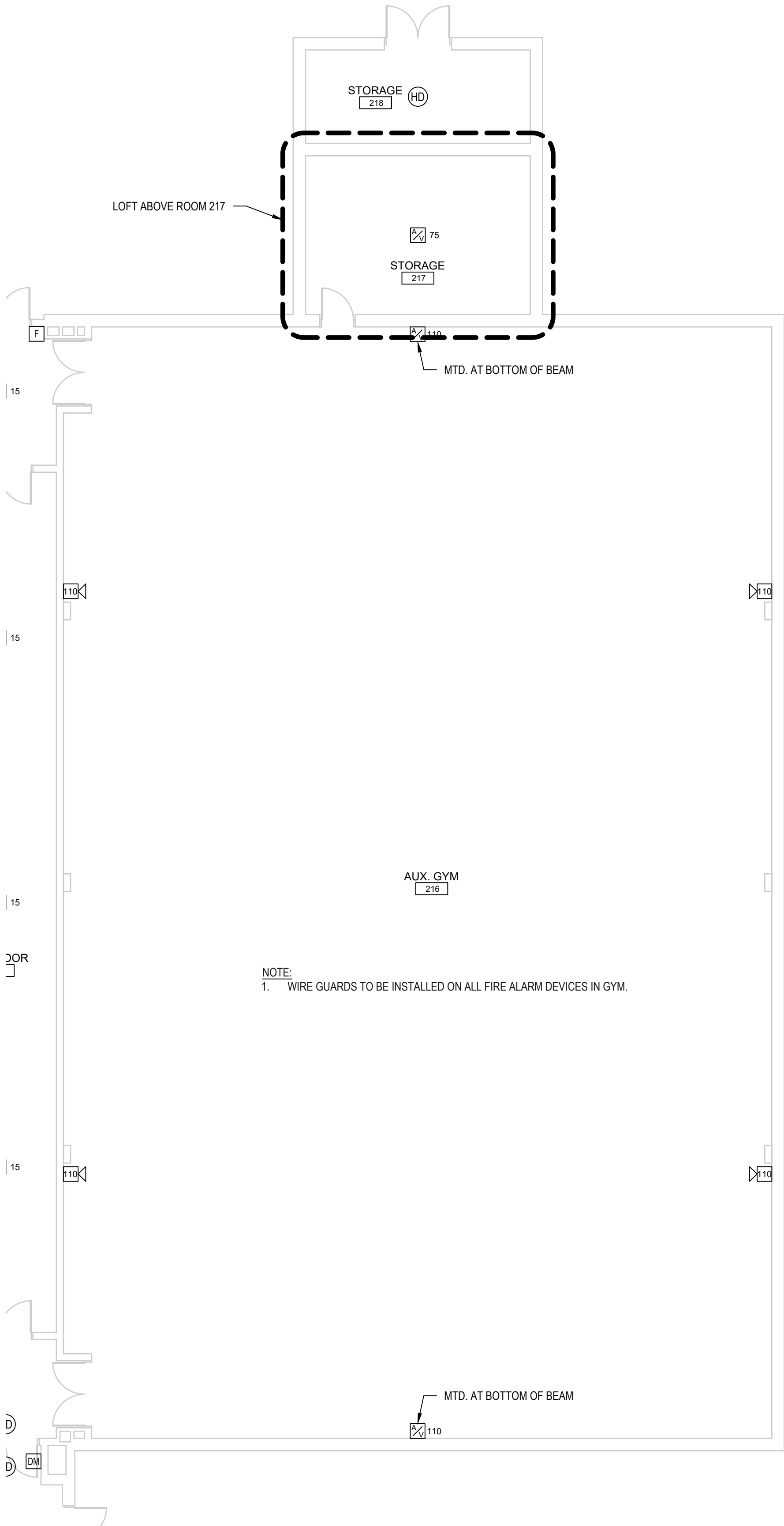
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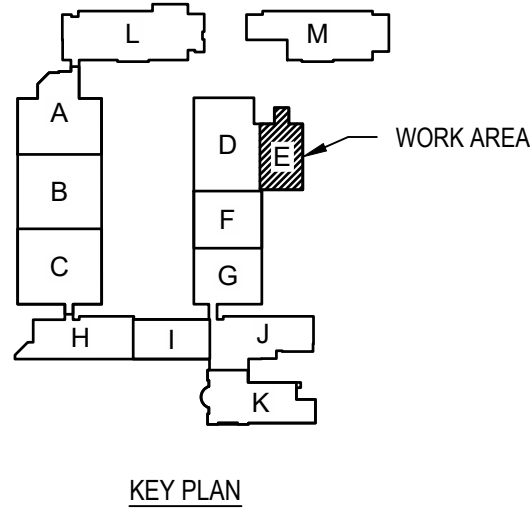
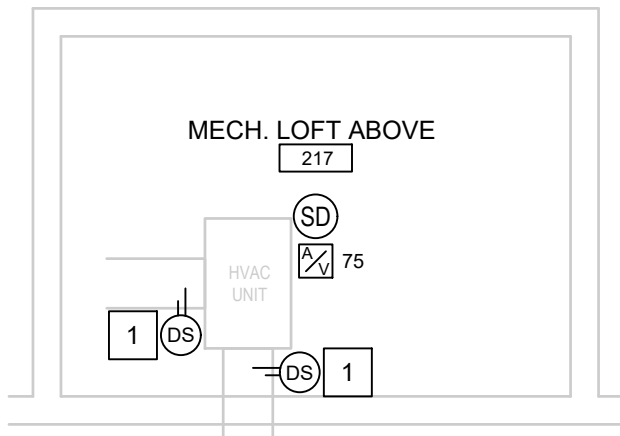
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FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
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SOUTH PORT, NC 28461

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1.					
2.					
3.					
4.					
5.					
DATE: 3/25/2024					DRAWN BY: CKD CHECKED BY: RL SHEET TITLE
FIRE ALARM PLAN - AREA D					SHEET NUMBER FA104 PROJECT# 24-01233

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



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



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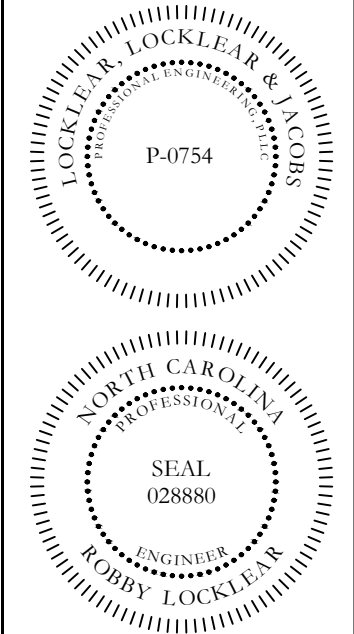
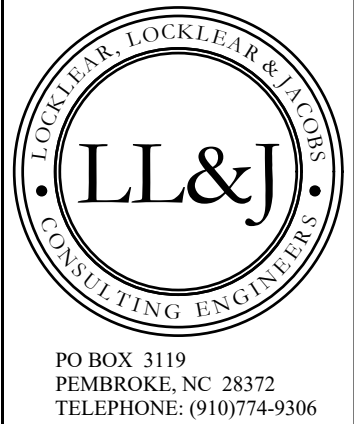
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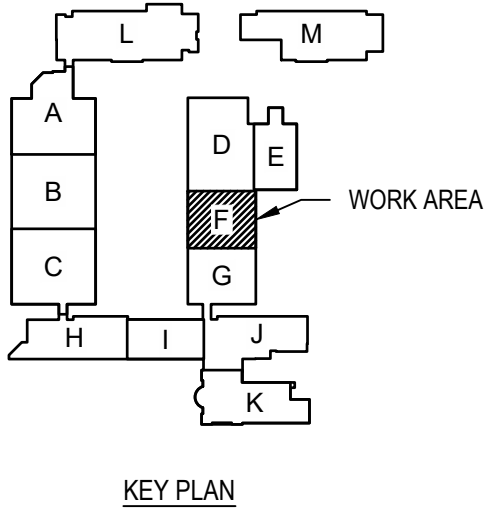
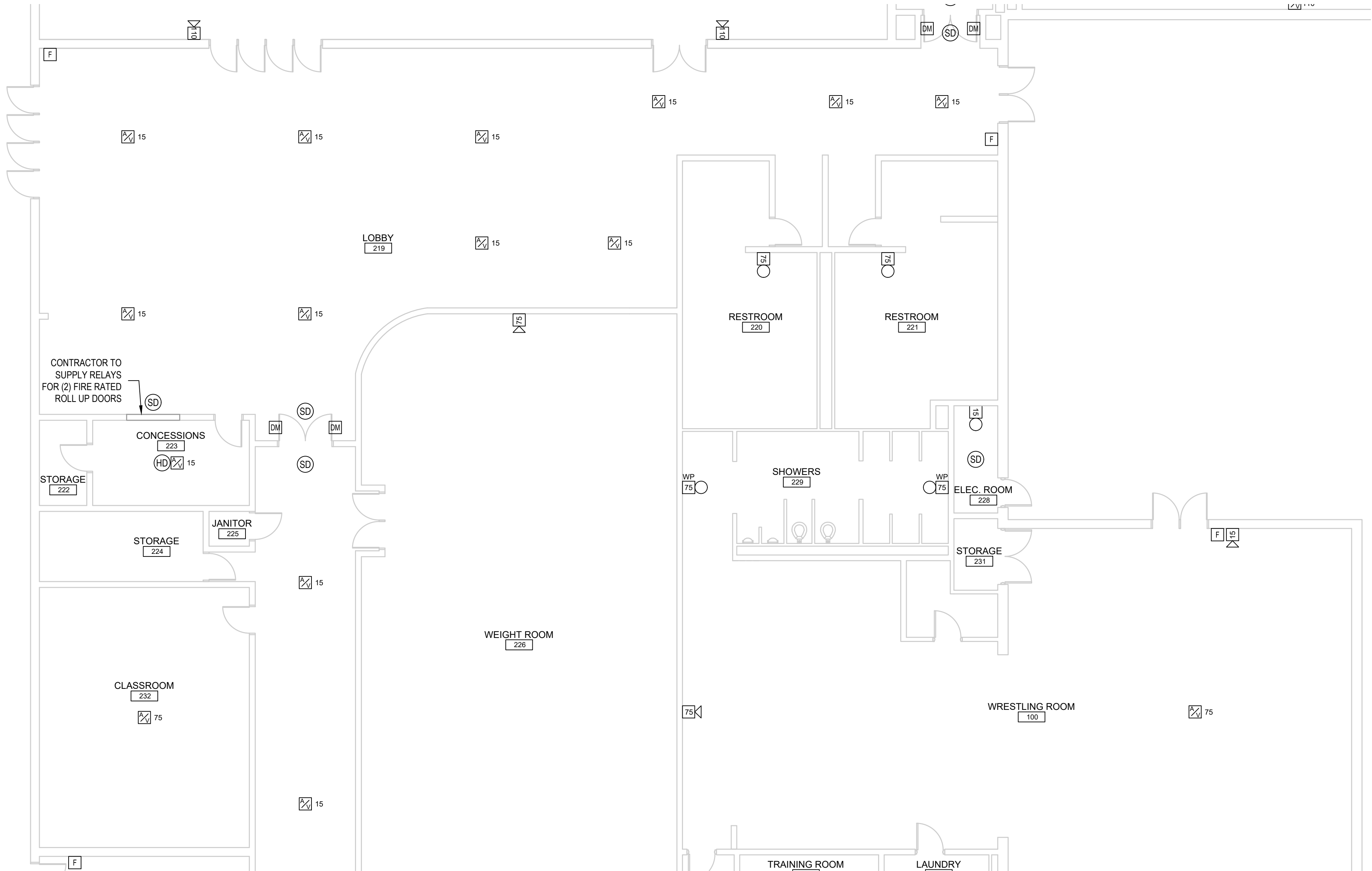
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PROJECT INFORMATION:

SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

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DATE:	3/25/2024							
DRAWN BY:	CKD							
CHECKED BY:	RL							
SHEET TITLE	FIRE ALARM PLAN - AREA E							
SHEET NUMBER	FA105							
PROJECT#	24-01233							



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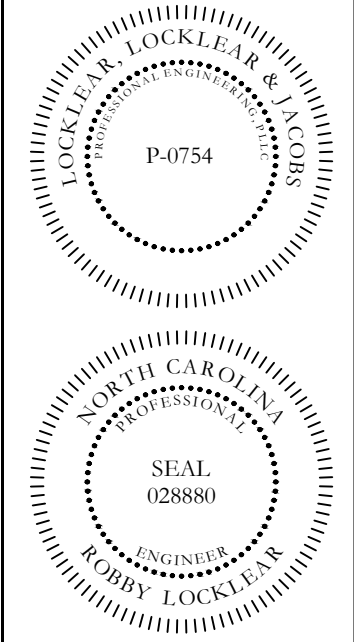
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 - GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
 - MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
 - CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.
 - FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
 - ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
 - POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
 - ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE.
 - ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2 WATTS.
 - CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
 - INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
 - IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.

FIRE DETECTION LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL		SMOKE DETECTOR CEILING MOUNTED
	FIRE ALARM ANNUNCIATOR PANEL		HEAT DETECTOR CEILING MOUNTED
	FIRE ALARM REMOTE POWER SUPPLY PANEL		EXHAUST HOOD MONITOR MODULE
	DISTRIBUTED AMPLIFIER PANEL		CARBON MONOXIDE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT		DUCT SMOKE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT		REMOTE INDICATOR LIGHT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT		DUCT DETECTOR RELAY
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT		EXISTING DOOR MAGNETS TO REMAIN
	PULL STATION		

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE

1 FIRE ALARM PLAN - AREA F

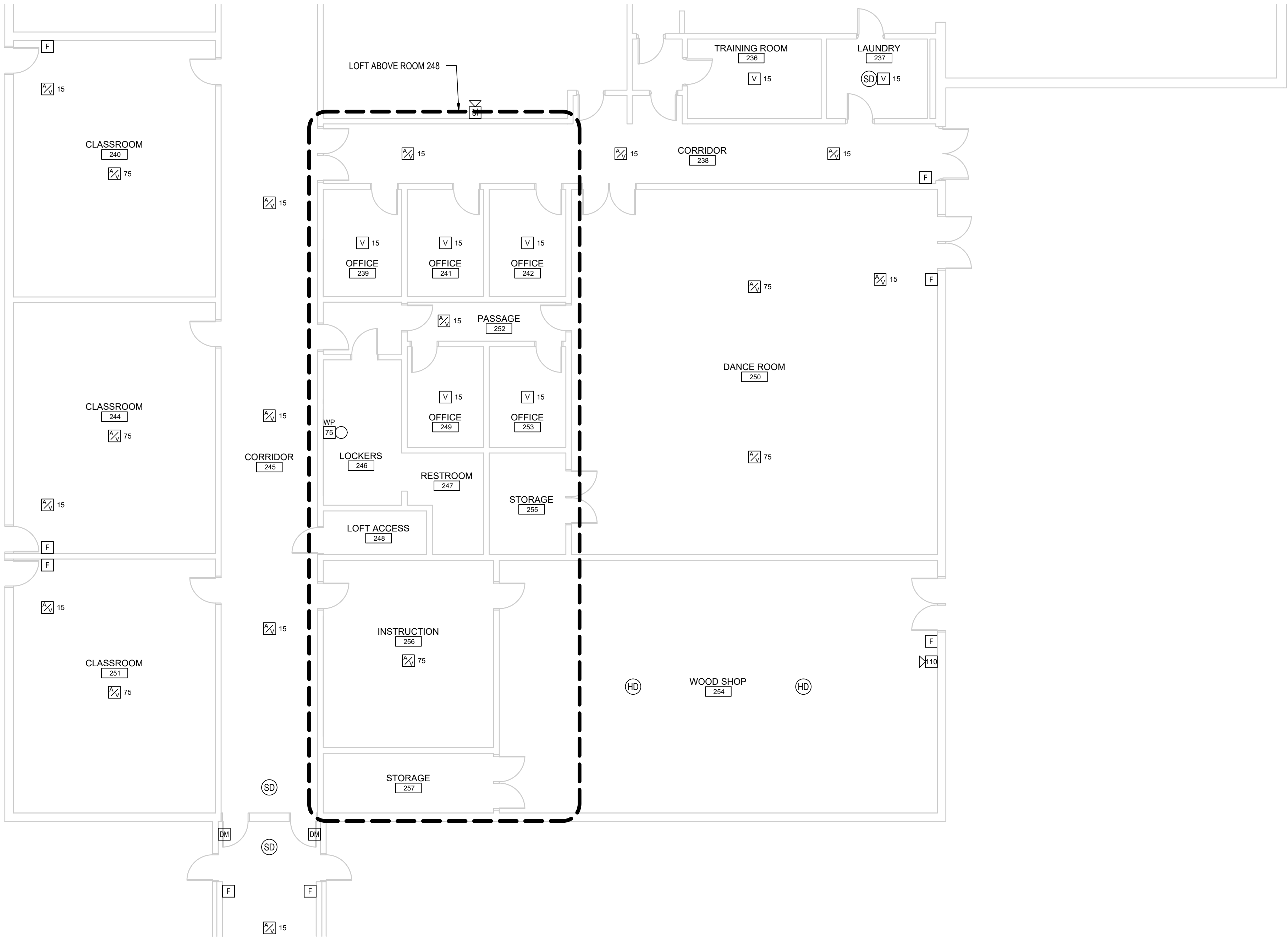
SCALE: 1/8" = 1'-0"



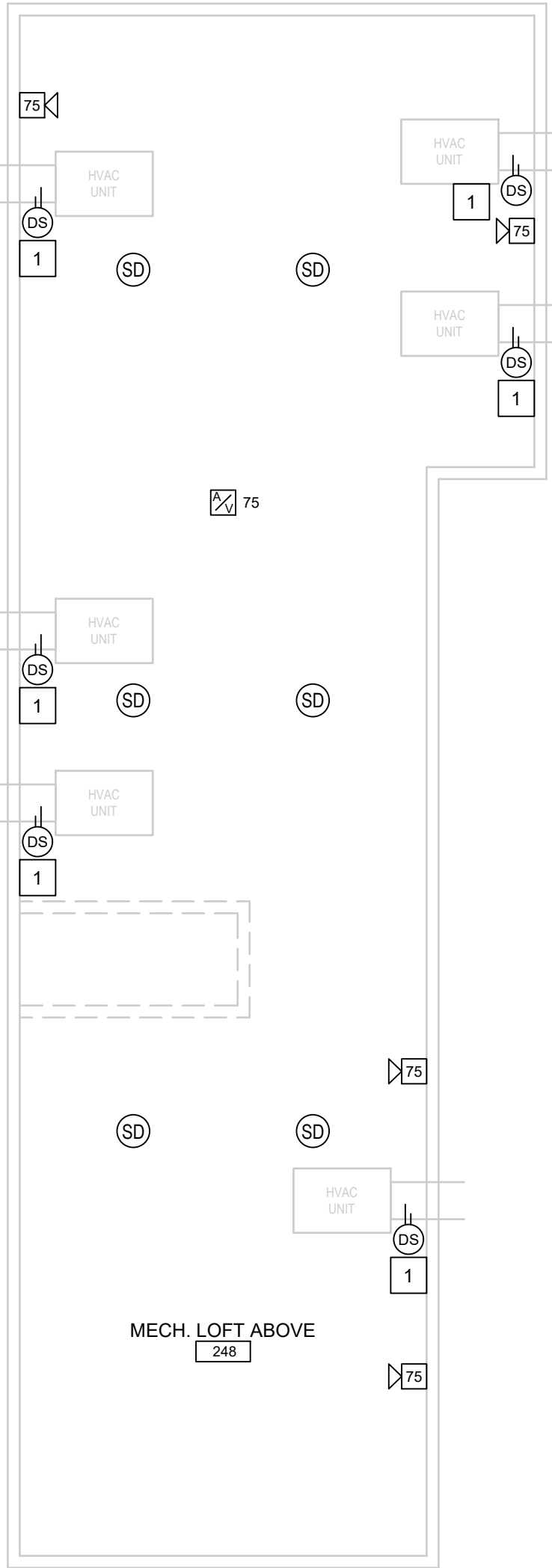
SOUTH BRUNSWICK HIGH SCHOOL FIRE ALARM REPLACEMENT BRUNSWICK COUNTY BOARD OF EDUCATION 280 COUGAR RD SOUTH PORT, NC 28461

REV#	DATE	DESCRIPTION
1	03/25/2024	DATE: 3/25/2024
2		DRAWN BY: CKD
3		CHECKED BY: RL
4		SHEET TITLE
5		FIRE ALARM PLAN - AREA F
6		SHEET NUMBER
7		FA106
8		PROJECT# 24-01233

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

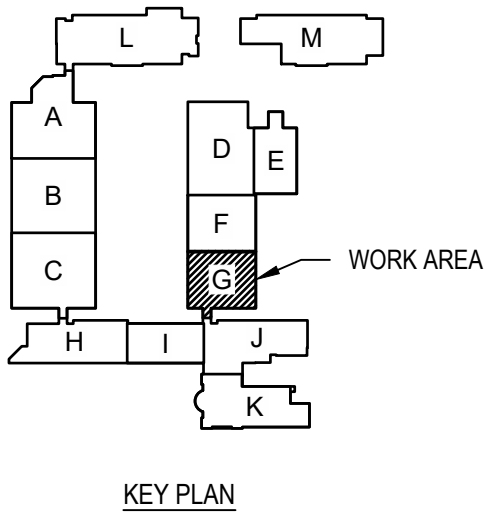


2 FIRE ALARM PLAN - LOFT
SCALE: 1/8" = 1'-0"



FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM REMOTE POWER SUPPLY PANEL
	DISTRIBUTED AMPLIFIER PANEL
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT
	PULL STATION
	SMOKE DETECTOR CEILING MOUNTED
	HEAT DETECTOR CEILING MOUNTED
	EXHAUST HOOD MONITOR MODULE
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR
	REMOTE INDICATOR LIGHT
	DUCT DETECTOR RELAY
	EXISTING DOOR MAGNETS TO REMAIN

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
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- CONTRACTOR NOTES:
- ALL AIR HANDLING UNITS WILL REQUIRE NEW DUCT DETECTORS. INSTALL NEW DUCT DETECTORS NEAR EXISTING. DUCT DETECTORS LOCATED ABOVE CEILINGS OR IN HIDDEN LOCATIONS WILL REQUIRE VISUAL NOTIFICATION. GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.
 - NEW DUCT DETECTORS WILL HAVE TO BE INSTALLED NEAR EXISTING ONES AND EXISTING ONES LEFT IN PLACE UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED. DRAWINGS WILL BE UPDATED TO REFLECT THIS.
 - THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
 - BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
 - BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

FIRE ALARM ELECTRICAL KEYNOTES:

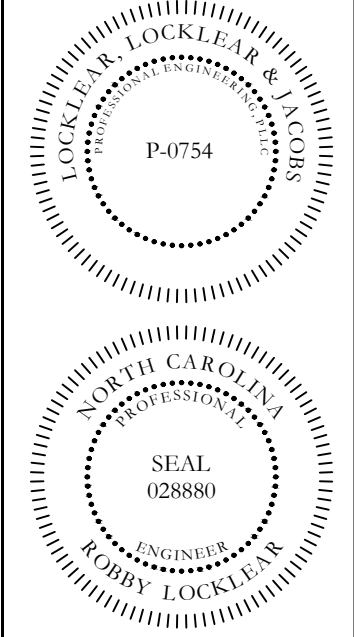
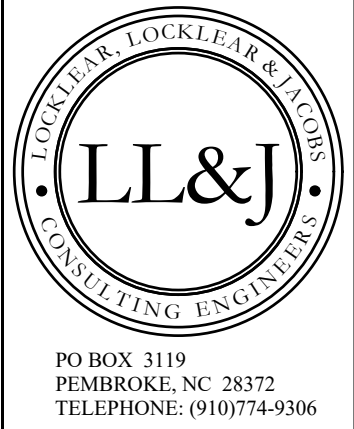
- 1 INSTALL NEW DUCT DETECTOR, DEMO EXISTING DUCT DETECTOR AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. CONTRACTOR TO RE-SEAL DUCT. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SMOKE DETECTORS. SHUTDOWN CIRCUIT TO BE INSTALLED ON ALL UNITS (INCLUDING THOSE THAT DO NOT REQUIRE A DUCT DETECTOR). FIRE ALARM RELAY TO BE PROVIDED BY FIRE ALARM CONTRACTOR. CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.

FIRE ALARM DEMOLITION NOTES:

- ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX. LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
 - 4"x4" BLANK COVERS TO BE INSTALLED OVER DEMOED WALL DEVICES.
 - EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
- DEMO DUCT DETECTORS, CONTRACTOR TO RE-SEAL DUCT.
- DEMO DUCT DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DUCT DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DUCT DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR LIGHT.)

FIRE ALARM NOTES:

- THIS DRAWING SHOWN FOR ILLUSTRATION ONLY, FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND AUTHORITY HAVING JURISDICTION.
- CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-1TEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
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- INSTALL WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
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PROJECT INFORMATION:
SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

REV#	DATE	DESCRIPTION
1		
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DATE: 3/25/2024
DRAWN BY: CKD
CHECKED BY: RL

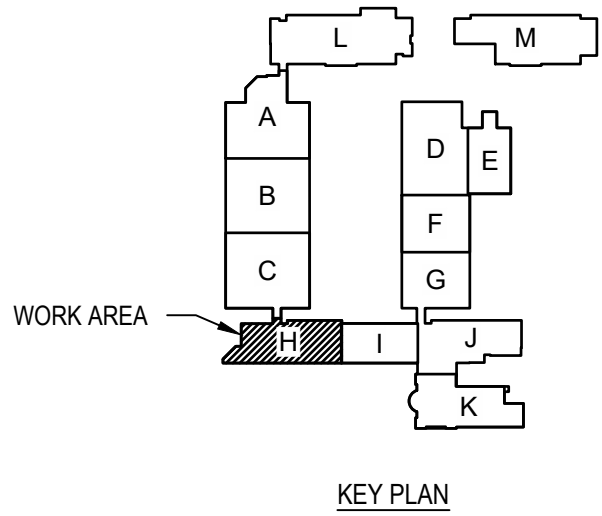
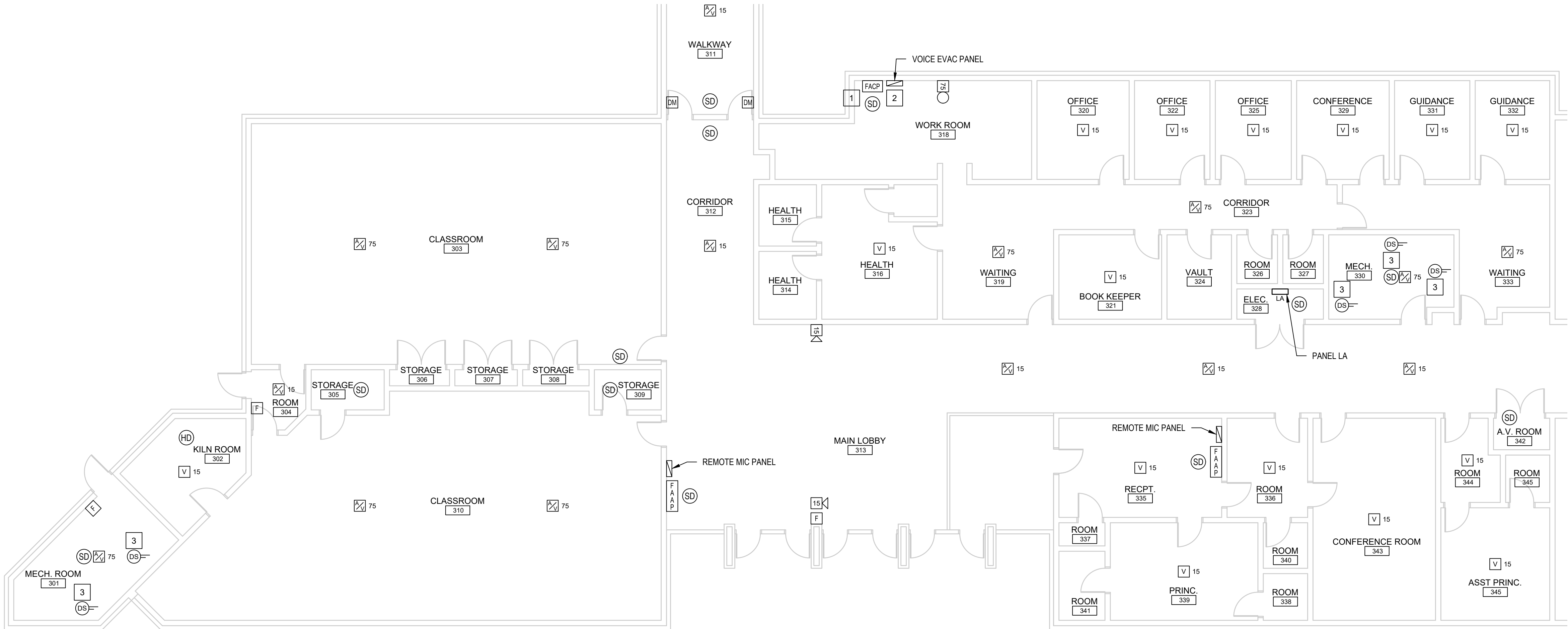
SHEET TITLE

FIRE ALARM
PLAN - AREA G

SHEET NUMBER

FA107

PROJECT# 24-01233



- CONTRACTOR NOTES:
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 - BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

- FIRE ALARM ELECTRICAL KEYNOTES:
- 120V DEDICATED CIRCUIT FOR NEW FACP PANEL. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL LA).
 - 120V DEDICATED CIRCUIT FOR VOICE EVAC PANEL. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL LA).
 - INSTALL NEW DUCT DETECTOR, DEMO EXISTING DUCT DETECTOR AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. CONTRACTOR TO RE-SEAL DUCT. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SMOKE DETECTORS. SHUTDOWN CIRCUIT TO BE INSTALLED ON ALL UNITS (INCLUDING THOSE THAT DO NOT REQUIRE A DUCT DETECTOR). FIRE ALARM RELAY TO BE PROVIDED BY FIRE ALARM CONTRACTOR. CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.

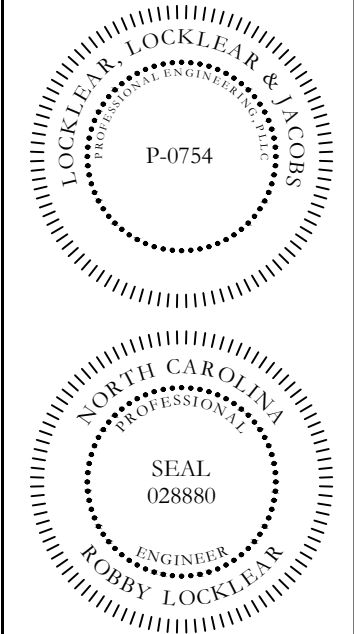
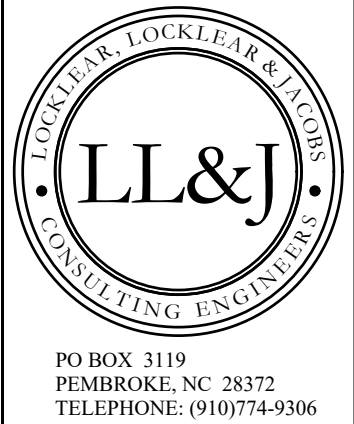
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- FIRE ALARM NOTES:
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 - CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
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FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUCIATOR PANEL
	FIRE ALARM REMOTE POWER SUPPLY PANEL
	DISTRIBUTED AMPLIFIER PANEL
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT
	PULL STATION
	SMOKE DETECTOR CEILING MOUNTED
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	EXHAUST HOOD MONITOR MODULE
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR
	REMOTE INDICATOR LIGHT
	DUCT DETECTOR RELAY
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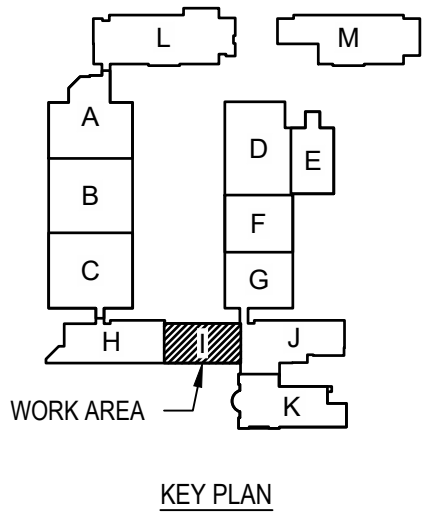
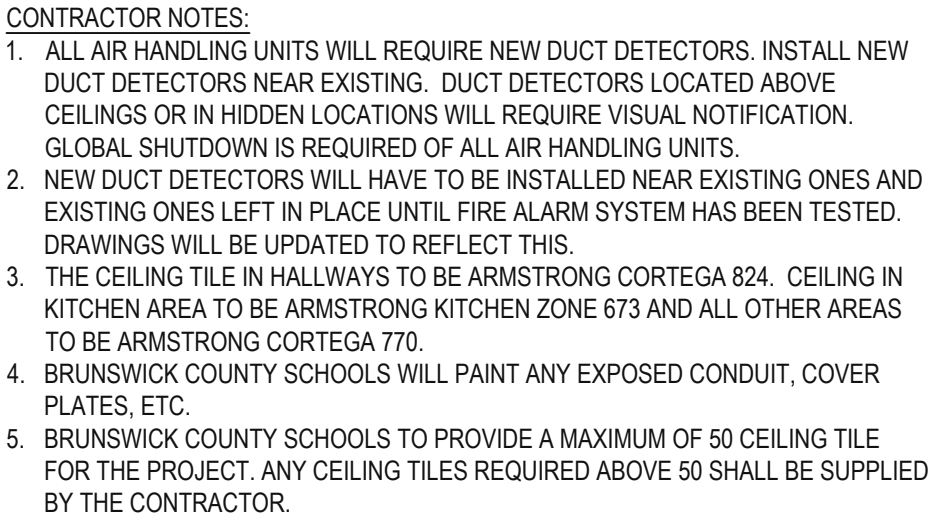
NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE

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



SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

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1.					
2.					
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DATE: 3/25/2024					
DRAWN BY: CKD					
CHECKED BY: RL					
SHEET TITLE					
FIRE ALARM PLAN - AREA H					
SHEET NUMBER					
FA108					
PROJECT# 24-01233					



FIRE ALARM DEMOLITION NOTES:

1. ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:

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2. DEMO DET DETECTORS, CONTRACTOR TO RE-SEAL DUCT.

3. DEMO DET DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DET DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DET DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR (LIGHT.)

FIRE ALARM NOTES:

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1

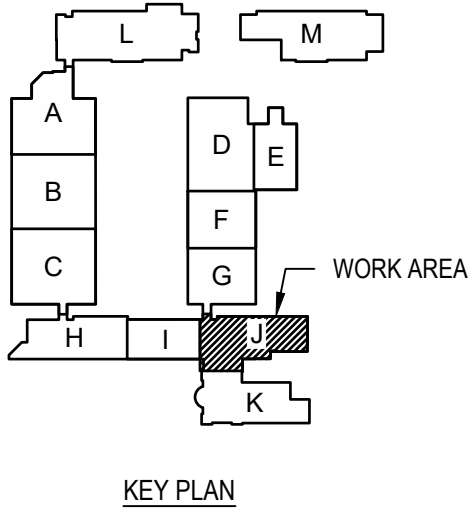
FIRE ALARM PLAN - AREA J

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



FIRE DETECTION LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
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 - THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
 - BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
 - BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

FIRE ALARM ELECTRICAL KEYNOTES:

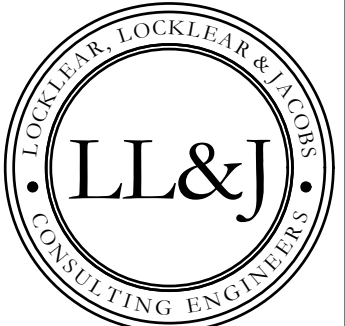
- INSTALL NEW DUCT DETECTOR, DEMO EXISTING DUCT DETECTOR AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. CONTRACTOR TO RE-SEAL DUCT. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SMOKE DETECTORS. SHUTDOWN CIRCUIT TO BE INSTALLED ON ALL UNITS (INCLUDING THOSE THAT DO NOT REQUIRE A DUCT DETECTOR). FIRE ALARM RELAY TO BE PROVIDED BY FIRE ALARM CONTRACTOR. CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.
- 120V CIRCUIT FOR BOTH DAP AND NAC PANELS. MUST BE IDENTIFIED AND INCLUDE BREAKER LOOKS (FED FROM AVAILABLE 120V CKT IN PANEL LA). SEE SHEET FA108 FOR PANEL LA LOCATION.

FIRE ALARM DEMOLITION NOTES:

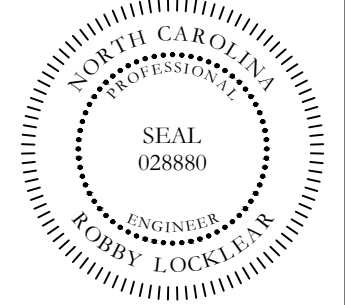
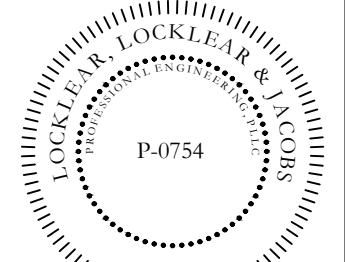
- ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX. LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
 - 4"x4" BLANK COVERS TO BE INSTALLED OVER DEMOED WALL DEVICES.
 - EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
- DEMO DUCT DETECTORS, CONTRACTOR TO RE-SEAL DUCT.
- DEMO DUCT DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DUCT DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DUCT DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR LIGHT.)

FIRE ALARM NOTES:

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- SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES. ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION ASSOCIATION. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED. FIRE ALARM CONTRACTOR TO VERIFY AUDIBLE DEVICES ARE 15 DECIBELS OVER AMBIENT NOISE LEVELS.
- INSTALL WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
- ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHJ.
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- FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION. VERIFICATION OF DIMENSIONS AT THE SITE, AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK.
- GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
- MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
- CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.
- FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
- ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
- POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
- ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE.
- ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2 WATTS.
- CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
- INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
- IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.



PO BOX 3119
PEMBROKE, NC 28372
TELEPHONE: (910) 774-9306



SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

PROJECT INFORMATION:

REV#	DATE	DESCRIPTION
1	01	1
2	01	2
3	01	3
4	01	4
5	01	5

DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

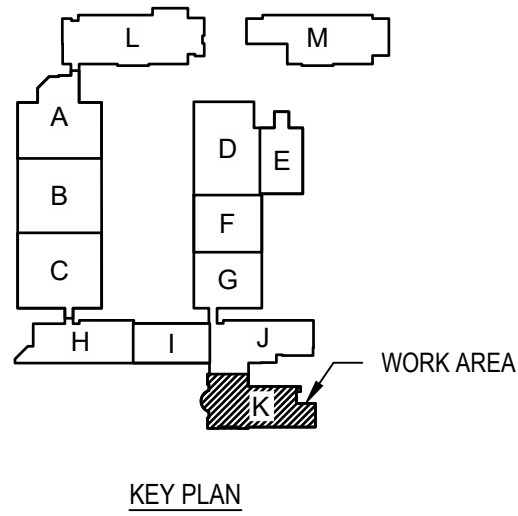
SHEET TITLE

FIRE ALARM
PLAN - AREA J

SHEET NUMBER

FA110

PROJECT# 24-01233



1. ALL AIR HANDLING UNITS WILL REQUIRE NEW DUCT DETECTORS. INSTALL NEW DUCT DETECTORS NEAR EXISTING. DUCT DETECTORS LOCATED ABOVE CEILINGS OR IN HIDDEN LOCATIONS WILL REQUIRE VISUAL NOTIFICATION. GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.
2. NEW DUCT DETECTORS WILL HAVE TO BE INSTALLED NEAR EXISTING ONES AND EXISTING ONES LEFT IN PLACE UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED. DRAWINGS WILL BE UPDATED TO REFLECT THIS.
3. THE CEILING TILES WILL HAVE TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
4. BRUNSWICK COUNTY SCHOOLS WILL PATCH ANY EXPOSED CONDUIT, COVER PLATES, ETC.
5. BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

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1. ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX.
 - LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
 - 4"x4" BLANK COVERS TO BE INSTALLED OVER EXPOSED WALL DEVICES.
 - EXISTING DOOR HOLOGRAMS WILL BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
2. DEMO DUCT DETECTORS, CONTRACTOR TO RE-SEAL DUCT.
3. DEMO DUCT DETECTORS AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM, CONTRACTOR TO RE-SEAL DUCT. EXISTING DUCT DETECTORS MAY BE LOCATED ABOVE CEILING OUTSIDE OF MECHANICAL ROOM. DUCT DETECTORS LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR (LIGHT).

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2. CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
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4. INSTALL FIRE GUARDIANS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
5. ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHU.
6. FIRE ALARM CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.
7. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION, VERIFICATION OF DIMENSIONS AT THE SITE AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK.
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11. FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
12. ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
13. POWER SUPPLIES AND APPLIANCE QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1' W/IN UNLESS NOTED OTHERWISE.
15. ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2' WATTS.
16. CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
17. INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
18. IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM

*** WP = WEATHER PROOF DEVICE**

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "ROBBY LOCKLEAR" at the bottom. Inside this is a dotted circle containing the word "ENGINEER" at the bottom. The center of the seal contains the word "SEAL" above the number "028880".

SOUTH BRUNSWICK HIGH SCHOOL
 FIRE ALARM REPLACEMENT
 BRUNSWICK COUNTY BOARD OF EDUCATION
 280 COUGAR RD
 SOUTH PORT, NC 28461

PROJECT INFORMATION:

REV# - DATE - DESCRIPTION:
1.
2.
3.
4.
5.

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DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE

FIRE ALARM
PLAN - AREA K








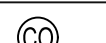
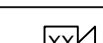
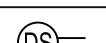
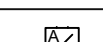
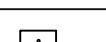
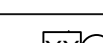
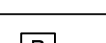
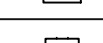
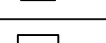
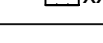
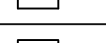
SHEET NUMBER

FA111

PROJECT# 24-01233

Printed: Mon 25-Mar-2024 - 12:37PM

C:\Users\LLJ\OneDrive\Local\Temp\p4\p4bldm_11076264\24-01233_SouthBrunswick_High_Fire_Alarm_Replacement.dwg, P1112 FIRE ALARM PLAN, LLJ-Chester

FIRE DETECTION LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL		SMOKE DETECTOR CEILING MOUNTED
	FIRE ALARM ANNUCIATOR PANEL		HEAT DETECTOR CEILING MOUNTED
	FIRE ALARM REMOTE POWER SUPPLY PANEL		EXHAUST HOOD MONITOR MODULE
	DISTRIBUTED AMPLIFIER PANEL		CARBON MONOXIDE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT		DUCT SMOKE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT		AUDIO ONLY CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT		DUCT DETECTOR RELAY
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT		EXISTING DOOR MAGNETS TO REMAIN
	PULL STATION		ELEVATOR RELAY

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE



CONTRACTOR NOTES:

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FIRE ALARM ELECTRICAL KEYNOTES:

- (1) 120V CIRCUIT FOR BOTH DAP AND NAC PANELS. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL PG2).

FIRE ALARM DEMOLITION NOTES:

- ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED BELOW:
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FIRE ALARM NOTES:

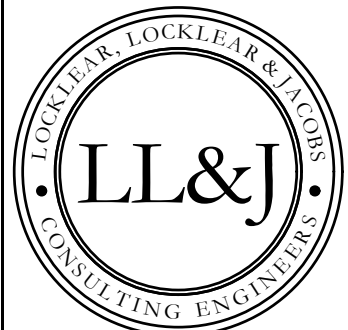
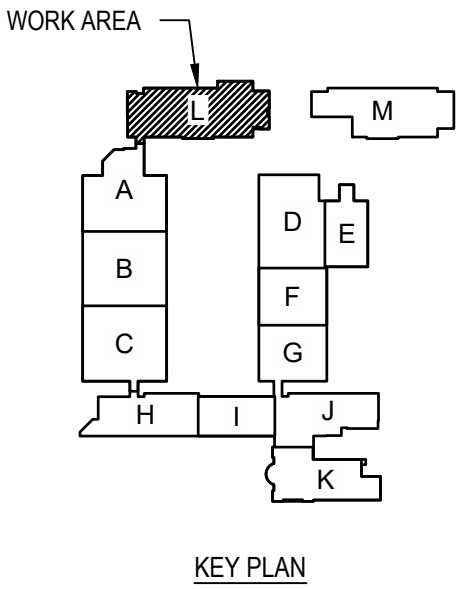
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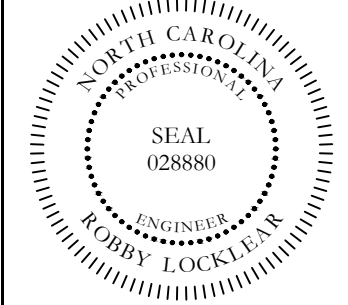
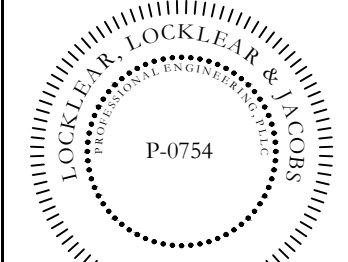
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SOUTH PORT, NC 28461

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DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE

**FIRE ALARM
PLAN - AREA L**



















SHEET NUMBER

FA112

PROJECT# 24-01233

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FIRE DETECTION LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL		SMOKE DETECTOR CEILING MOUNTED
	FIRE ALARM ANNUCIATOR PANEL		HEAT DETECTOR CEILING MOUNTED
	FIRE ALARM REMOTE POWER SUPPLY PANEL		EXHAUST HOOD MONITOR MODULE
	DISTRIBUTED AMPLIFIER PANEL		CARBON MONOXIDE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT		DUCT SMOKE DETECTOR
	AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT		AUDIO ONLY CEILING MOUNT
	VISUAL ONLY INDICATING DEVICE - WALL MOUNT		DUCT DETECTOR RELAY
	VISUAL ONLY INDICATING DEVICE - CEILING MOUNT		EXISTING DOOR MAGNETS TO REMAIN
	PULL STATION		ELEVATOR RELAY

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.
* WP = WEATHER PROOF DEVICE



CONTRACTOR NOTES:

- ALL AIR HANDLING UNITS WILL REQUIRE NEW DUCT DETECTORS. INSTALL NEW DUCT DETECTORS NEAR EXISTING. DUCT DETECTORS LOCATED ABOVE CEILINGS OR IN HIDDEN LOCATIONS WILL REQUIRE VISUAL NOTIFICATION. GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.
- NEW DUCT DETECTORS WILL HAVE TO BE INSTALLED NEAR EXISTING ONES AND EXISTING ONES LEFT IN PLACE UNTIL FIRE ALARM SYSTEM HAS BEEN TESTED. DRAWINGS WILL BE UPDATED TO REFLECT THIS.
- THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS TO BE ARMSTRONG CORTEGA 770.
- BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
- BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED BY THE CONTRACTOR.

FIRE ALARM DEMOLITION NOTES:

- ENTIRE EXISTING FIRE ALARM SYSTEM TO BE DEMOED AFTER CERTIFICATION BY AHJ OF NEW FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED

BELOW:

- PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX. LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
- 4"x4" BLANK COVERS TO BE INSTALLED OVER DEMOED WALL DEVICES.
- EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.

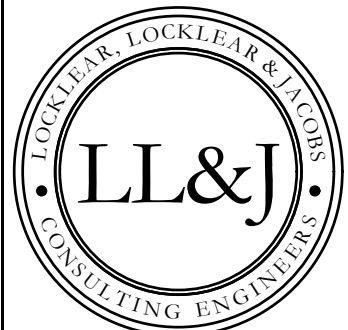
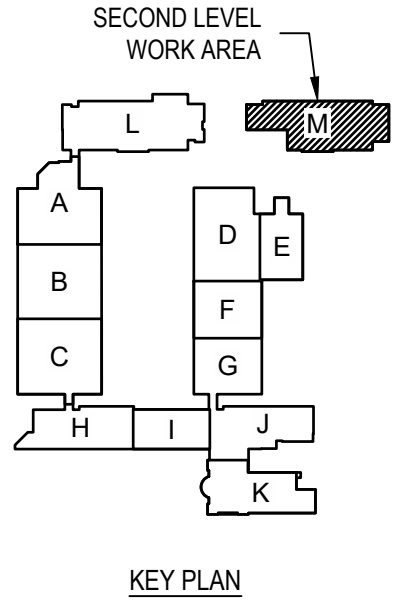
FIRE ALARM NOTES:

- THIS DRAWING SHOWN FOR ILLUSTRATION ONLY. FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND AUTHORITY HAVING JURISDICTION.
- CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
- SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES. ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION

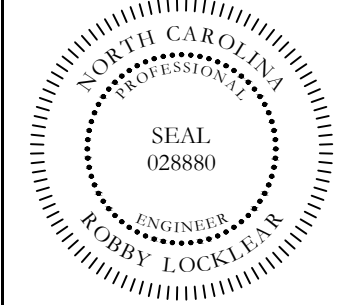
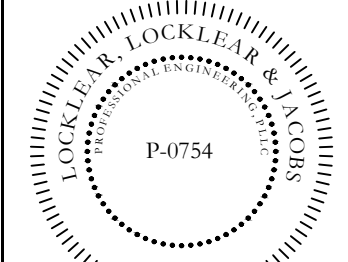
ASSOCIATION. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED. FIRE ALARM CONTRACTOR TO VERIFY AUDIBLE DEVICES ARE 15 DECIBELS OVER AMBIENT NOISE LEVELS.

- INSTALL WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
- ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHU.
- FIRE ALARM CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.
- FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION, VERIFICATION OF DIMENSIONS AT THE SITE, AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK.
- GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
- MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
- CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL VERIFY/MODIFY SYSTEM AS REQUIRED.

- FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY AND SECONDARY COMMUNICATIONS ARE REQUIRED.
- ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF OLD DEVICES.
- POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
- ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE.
- ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2 WATTS.
- CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
- INSTALLATION HAS TO BE PER NEC REQUIREMENTS. CABLING CAN NOT BE SUPPORTED BY CEILING GRID. HAS TO BE INSTALLED A MINIMUM 2" ABOVE CEILING GRID.
- IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.



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PEMBROKE, NC 28372
TELEPHONE: (910) 774-9306



SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

PROJECT INFORMATION:

REV#	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE

FIRE ALARM
PLAN - AREA M

SHEET NUMBER

FA113

PROJECT# 24-01233

Printed: Mon 25-Mar-2024 - 12:37PM

GENERAL:

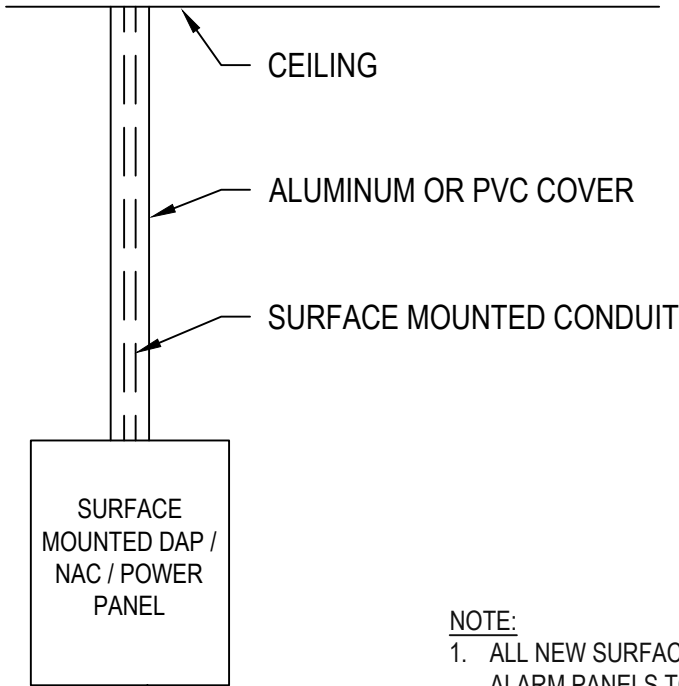
- THE WORK COVERED BY THESE CONSTRUCTION DOCUMENTS INCLUDES THE FURNISHING OF ALL LABOR, EQUIPMENT, MATERIALS AND PERFORMANCE OF ALL OPERATIONS IN CONNECTION WITH THE INSTALLATION OF THE FIRE ALARM SYSTEM AS SHOWN ON THE DRAWINGS AND AS HEREIN SPECIFIED.
- THE COMPLETE INSTALLATION SHALL CONFORM TO THE APPLICABLE SECTIONS OF NFPA 72 (2013 EDITION), LOCAL CODE REQUIREMENTS, AND NATIONAL ELECTRICAL CODE (NFPA 70).
- EACH AND ALL ITEMS OF THE FIRE ALARM SYSTEM SHALL BE LISTED AS A PRODUCT OF A SINGLE FIRE ALARM SYSTEM MANUFACTURER UNDER THE APPROPRIATE CATEGORY BY UNDERWRITERS' LABORATORIES, INC. (UL), AND SHALL BEAR THE "U.L." LABEL. ALL CONTROL EQUIPMENT SHALL BE LISTED UNDER UL CATEGORY UOJZ AS A SINGLE CONTROL UNIT. PARTIAL LISTING SHALL NOT BE ACCEPTABLE.
- ALL PANELS AND PERIPHERAL DEVICES SHALL BE THE STANDARD PRODUCT OF A SINGLE MANUFACTURER AND SHALL DISPLAY THE MANUFACTURER'S NAME ON EACH COMPONENT.
- WARRANTY ALL MATERIALS, INSTALLATION AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE, UNLESS OTHERWISE SPECIFIED.
- SEAL AND FIREPROOF ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS PER U.L. DETAILS THIS SHEET.
- ALL MOUNTING HEIGHTS ARE GIVEN TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.
- MOUNTING HEIGHTS FOR ALL WALL MOUNTED ELECTRICAL DEVICES SHALL BE AS INDICATED IN THE 'DEVICE MOUNTING HEIGHT' SCHEDULE SHOWN ON THIS SHEET, UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF NEC (NFPA 70) AND LOCAL CODES.
- ALL CONDUCTORS, EQUIPMENT AND TERMINATION PROVISIONS SHALL BE U.L. LISTED.
- OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE WORK.
- FOR THE PURPOSES OF THE CONSTRUCTION DOCUMENTS THE WORD 'PROVIDE' SHALL MEAN TO 'FURNISH AND INSTALL'.
- PROVIDE NEW FIRE ALARM DEVICES AS SHOWN. PROVIDE ALL HARDWARE, WIRING, CONDUIT & PROGRAMMING AS REQUIRED FOR A COMPLETE FIRE ALARM SYSTEM.

EXECUTION

- THE ENTIRE SYSTEM SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH APPROVED MANUFACTURERS MANUALS AND WIRING DIAGRAMS. THE CONTRACTOR SHALL FURNISH ALL CONDUIT, WIRING, OUTLET BOXES, JUNCTION BOXES, CABINETS AND SIMILAR DEVICES NECESSARY FOR THE COMPLETE INSTALLATION.
- ALL JUNCTION BOXES AND CONDUITS SHALL BE PAINTED RED. WIRING COLOR CODE SHALL BE MAINTAINED THROUGHOUT THE INSTALLATION.
- THE CONTRACTOR SHALL CLEAN ALL DIRT AND DEBRIS FROM THE INSIDE AND THE OUTSIDE OF THE FIRE ALARM EQUIPMENT AFTER COMPLETION OF THE INSTALLATION.
- THE MANUFACTURER'S AUTHORIZED REPRESENTATIVE SHALL PROVIDE ON-SITE SUPERVISION OF INSTALLATION, AND SHALL INSTRUCT THE OWNER IN MAINTENANCE AND OPERATION PROCEDURES.
- THE COMPLETED FIRE ALARM SYSTEM SHALL BE FULLY TESTED IN ACCORDANCE WITH NFPA-72 CHAPTER 14 BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE LOCAL AUTHORITIES HAVING JURISDICTION. UPON COMPLETION OF A SUCCESSFUL TEST, THE CONTRACTOR SHALL SO CERTIFY IN WRITING TO THE OWNER AND GENERAL CONTRACTOR, BY COMPLETING A NFPA 72 RECORD OF COMPLETION SIGNED BY THE FIRE ALARM NICET LEVEL III INSTALLER.
- CONTRACTOR SHALL PROVIDE A FRAMED ZONE MAP POSTED AT ANNUNCIATOR LOCATION TO INDICATE BUILDING ZONE AND FIRE ALARM DEVICE LOCATIONS PER THE LOCAL FIRE DEPARTMENTS REQUIREMENTS.
- ALL STROBES SHALL BE SYNCHRONIZED PER N.F.P.A. 72.
- THE CONTRACTOR SHALL SEAL ALL EXISTING AND/OR NEW WALL PENETRATIONS PER UL DETAILS SHOWN ON THIS SHEET.
- ALL FIRE ALARM WIRING SHALL BE INSTALLED IN 3/4" CONDUIT MINIMUM.
- RECORD OF COMPLETION SHALL BE SENT TO THE ENGINEER OF RECORD AND TO LOCAL AHJ.
- THE FACP SHALL BE PROGRAMMED AS REQUIRED PER THE FIRE ALARM MATRIX.

1 GENERAL NOTES

NTS



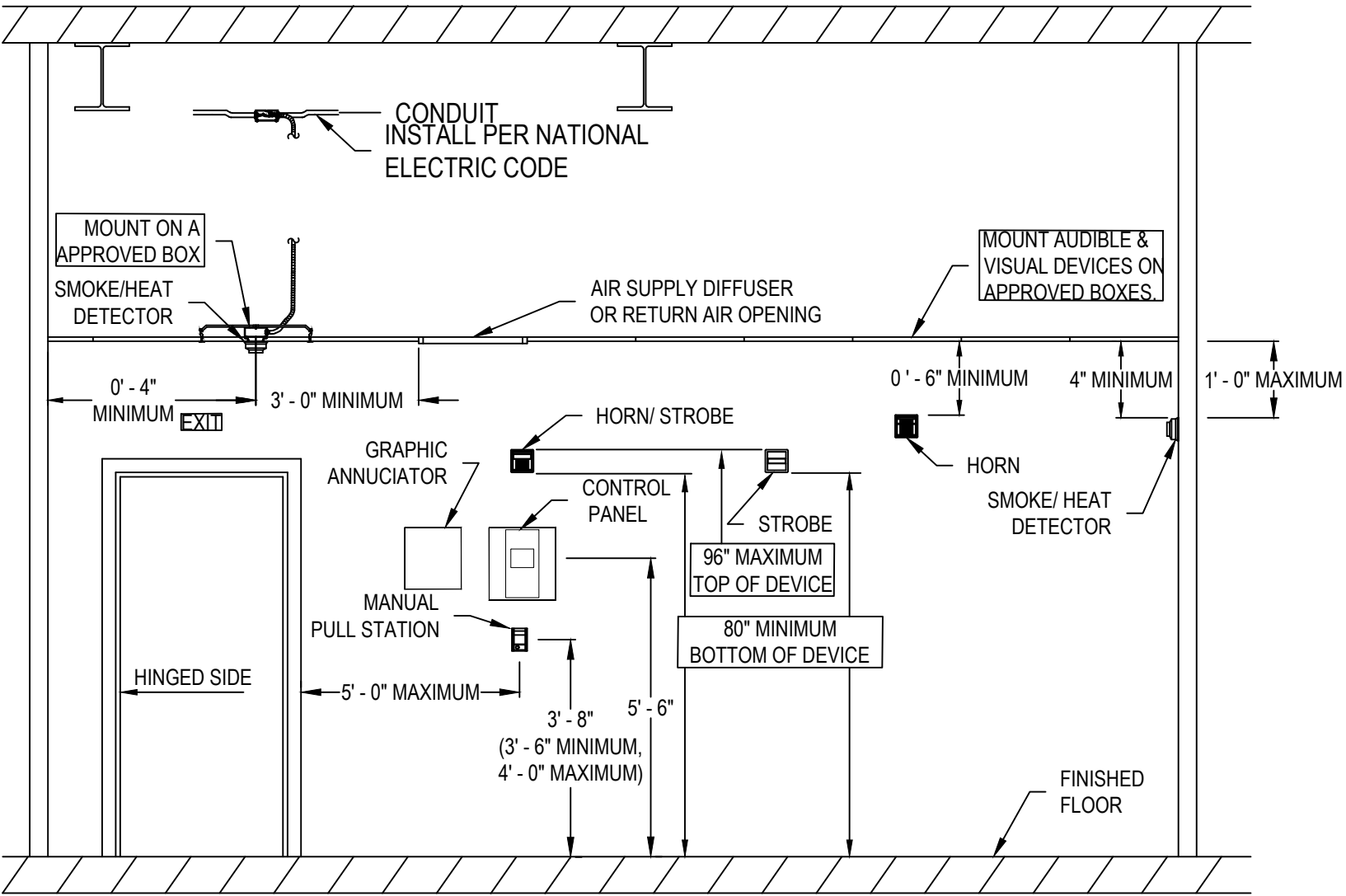
NOTE:
1. ALL NEW SURFACE MOUNTED CONDUITS FROM BOTH POWER AND FIRE ALARM PANELS TO HAVE AN PAINTED ALUMINUM OR PVC COVER, OWNER TO CHOOSE COVER COLOR.

3 FIRE ALARM SYSTEM PANEL CONDUITS

NTS

BATTERY CALCULATION			AMPHRS
STANDBY LOAD REQUIRED CURRENT (AMPS)	X	STANDBY TIME IN HOURS (24 OR 60 HOURS)	
()		()	
ALARMS LOAD CURRENT (AMPS)	X	REQUIRED ALARM TIME IN HOURS (I.E. 5 MINUTES = 0.084)	
()		()	
ADD STANDBY AND ALARM LOAD FOR REQUIRED AMPERE HOUR BATTERY			
MULTIPLY BY THE DERATING FACTOR OR 1.2			
TOTAL AMPERE HOURS (AH) REQUIRED			

NOTES:
1. BATTERY CALCULATIONS TO BE COMPLETED BY FIRE ALARM CONTRACTOR.
2. FIRE ALARM CONTRACTOR SHALL VERIFY ALL BATTERY AND VOLTAGE DROP REQUIREMENTS OF EXISTING SYSTEM ARE ADEQUATE FOR ADDITIONAL DEVICES.



NFPA 72 AND ADA STANDARD ICC A117.1_2009 DEVICE INSTALLATION REQUIREMENTS.

2 FIRE ALARM DEVICE MOUNTING HEIGHTS

NTS

FIRE ALARM SYSTEM MATRIX																
SYSTEM INPUTS	A	B	C	D	E	F	G	I	J	K	L	M	N	O	Q	
MANUAL FIRE ALARM PULL STATION	X	X					X		X					X		
AREA SMOKE/HEAT DETECTOR	X	X					X		X					X		
DUCT DETECTOR					X							X		X		
FIRE ALARM POWER FAILURE (AFTER 2 HRS)			X	X						X						
FIRE ALARM LOW BATTERY			X	X						X						
OPEN CIRCUIT			X	X						X						
GROUND FAULT			X	X						X						
NOTIFICATION APPLIANCE SHORT CIRCUIT			X	X						X						
ALARM SILENCE AT FACP													X			
CARBON MONOXIDE DETECTOR						X		X				X				
SYSTEM TROUBLE				X												
ACTIVATE COMMON ALARM SIGNAL INDICATOR																
ACTIVATE AUDIBLE ALARM SIGNAL																
ACTIVATE AUDIBLE TROUBLE SIGNAL																
ACTIVATE SILENCE TROUBLE SIGNAL																
ACTIVATE SUPERVISORY SIGNAL INDICATOR																
TRANSMIT BUILDING FIRE ALARM SIGNAL																
TRANSMIT LOCAL FIRE ALARM SIGNAL																
TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION																
TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION																
TRANSMIT SILENCE SIGNAL TO SUPERVISING STATION																
DEACTIVATE SUPERVISORY SIGNAL TO SUPERVISING STATION																
SHUTDOWN HVAC UNIT																
CLOSE FIRE RATED DOORS																
ACTIVATE SPEAKERS TROBES & STROBES																

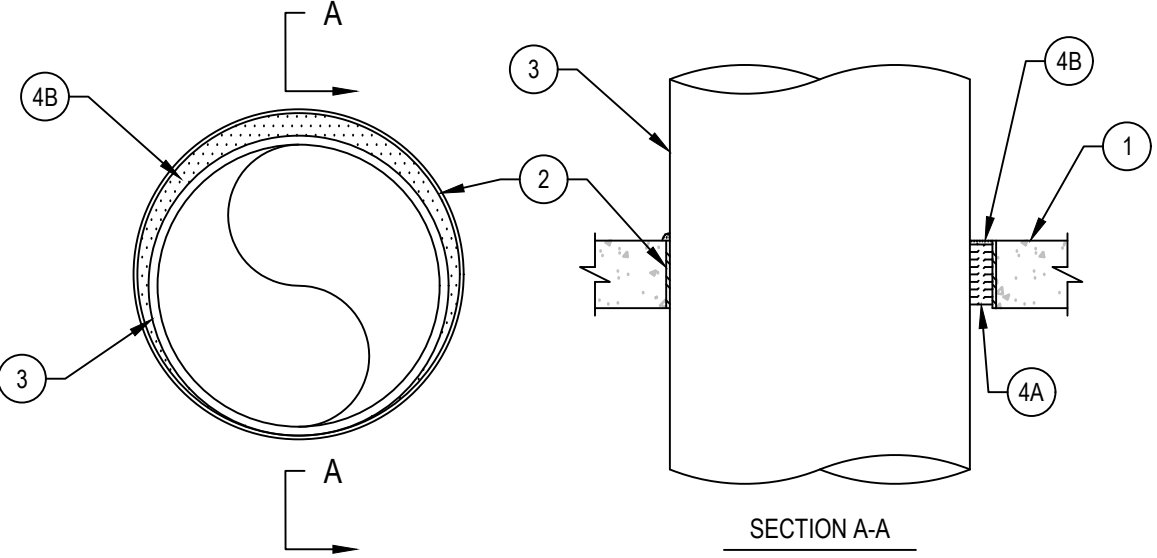
4 FIRE ALARM SYSTEM MATRIX

NTS

TYPICAL DEVICES MOUNTING HEIGHT (UNLESS OTHERWISE NOTED)	
FIRE ALARM PULL STATION	48" AFF TO TOP OF DEVICE
FIRE ALARM AUDIO/VISUAL ALARM (WALL)	80" AFF TO BOTTOM OF DEVICE
FIRE ALARM VISUAL ALARM ONLY (WALL)	80" AFF TO BOTTOM OF DEVICE
NOTE: 1. DIMENSIONS ARE TO DEVICE CENTERLINE UNLESS OTHERWISE NOTED.	

RED CONDUIT / JUNCTION BOX NOTE
ALL JUNCTION BOXES FOR FIRE ALARM CONDUIT / WIRING SHALL BE PROVIDED WITH RED COVERS. ALL CONDUIT ASSOCIATED WITH THE FIRE ALARM SYSTEM SHALL BE FACTORY PAINTED RED UNLESS RUN EXPOSED WITHIN FINISHED SPACES SHALL BE PAINTED TO MATCH ADJACENT WALL/CEILING FINISH AS REQUIRED.

SYSTEM NO. C-AJ-1226
F RATING --- 3HR
T RATING --- 0 HR
L RATING AT AMBIENT --- LESS THAN 1 CFM/SQFT
L RATING AT 400 F --- 4 CFM/SQFT



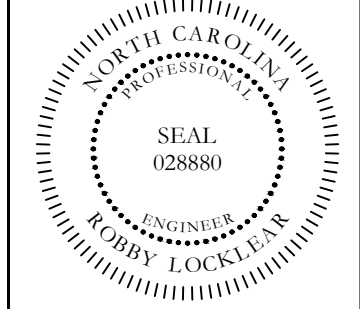
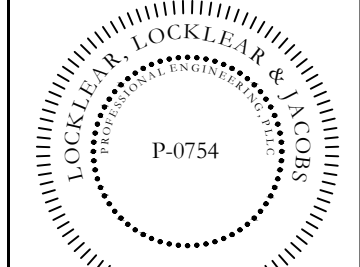
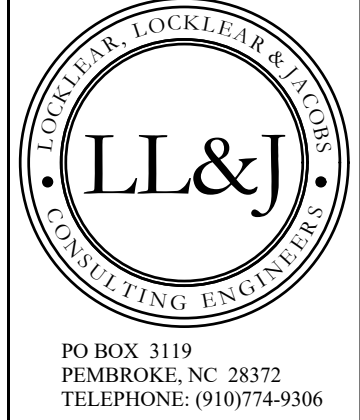
- FLOOR OR WALL ASSEMBLY --- MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 32 IN.
- METALLIC SLEEVE --- (OPTIONAL) NOM 32 IN. DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY, FLUSH WITH FLOOR OR WALL SURFACES OR EXTENDING A MAX OF 3 IN. ABOVE FLOOR OR BEYOND BOTH SURFACES OF WALL. 2A. SHEET METAL SLEEVE --- (OPTIONAL) MAX 6 IN. DIAM, MIN 26 GA GALV STEEL, PROVIDED WITH A 26 GA GALV STEEL SQUARE FLANGE SPOT WELDED TO THE SLEEVE AT APPROX MID-HEIGHT, OR FLUSH WITH BOTTOM OF SLEEVE IN FLOORS, AND SIZED TO BE A MIN OF 2 IN. LARGER THAN THE SLEEVE DIAM. THE SLEEVE IS TO BE CAST IN PLACE AND MAY EXTEND A MAX OF 4 IN. BELOW THE BOTTOM OF THE DECK AND A MAX OF 1 IN. ABOVE THE TOP SURFACE OF THE CONCRETE FLOOR. 2B. SHEET METAL SLEEVE --- (OPTIONAL) -MAX 12 IN. DIAM, MIN 24 GA GALV STEEL PROVIDED WITH A 24 GA GALV STEEL SQUARE FLANGE SPOT WELDED TO THE SLEEVE AT APPROX MID-HEIGHT, OR FLUSH WITH BOTTOM OF SLEEVE IN FLOORS, AND SIZED TO BE A MIN OF 2 IN. LARGER THAN THE SLEEVE DIAM. THE SLEEVE IS TO BE CAST IN PLACE AND MAY EXTEND A MAX OF 4 IN. BELOW THE BOTTOM OF THE DECK AND A MAX OF 1 IN. ABOVE THE TOP SURFACE OF THE CONCRETE FLOOR.
- THROUGH-PENETRANT --- ONE METALLIC PIPE, TUBE OR CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PENETRANT AND PERIPHERY OF OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 1-7/8 IN. PENETRANT MAY BE INSTALLED WITH CONTINUOUS POINT CONTACT. PENETRANT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PENETRANTS MAY BE USED:
A. STEEL PIPE --- NOM 30 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE --- NOM 30 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. COPPER PIPE --- NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
D. COPPER TUBING --- NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
E. CONDUIT --- NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT.
F. CONDUIT --- NOM 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING (EMT).
- FIRESTOP SYSTEM --- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. PACKING MATERIAL --- MIN 4 IN. THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR SLEEVE OR FROM BOTH SURFACES OF WALL OR SLEEVE AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
B. FILL VOID OR CAVITY MATERIAL* --- SEALANT --- MIN 1/4 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR SLEEVE OR WITH BOTH SURFACES OF WALL OR SLEEVE. AT THE POINT OR CONTINUOUS CONTACT LOCATIONS BETWEEN PENETRANT AND CONCRETE OR SLEEVE, A MIN 1/4 IN. DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE OR SLEEVE/ PIPE PENETRANT INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC --- FS-ONE SEALANT

*Bearing the UL Classification Mark

5 FIRE RATED PENETRATION DETAIL

NTS



SOUTH BRUNSWICK HIGH SCHOOL
FIRE ALARM REPLACEMENT
BRUNSWICK COUNTY BOARD OF EDUCATION
280 COUGAR RD
SOUTH PORT, NC 28461

PROJECT INFORMATION:

REV#	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: 3/25/2024
DRAWN BY: CKD
CHECKED BY: RL
SHEET TITLE

FIRE ALARM
DETAILS
SHEET NUMBER
FA501
PROJECT# 24-01233