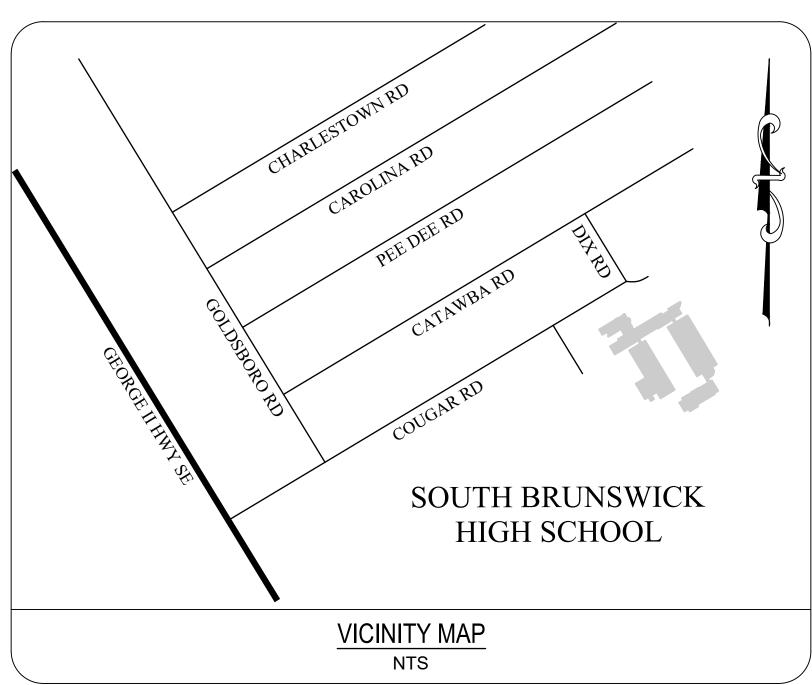
OWNER & BUILDER'S NOTES:

Know what's **below. Call** before you dig.

SOUTH BRUNSWICK HIGH SCHOOL FIRE ALARM REPLACEMENT BRUNSWICK COUNTY BOARD OF EDUCATION

280 COUGAR RD, SOUTH PORT, NC 28461



1. $\,$ 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 VERITY 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

2. 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. 3. 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.



| CougarRd | Cought Rd | |
|----------|---------------------------|--|
| | South Brunswithigh School | |
| SOUTH | | |

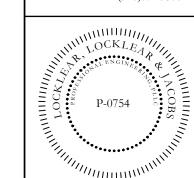


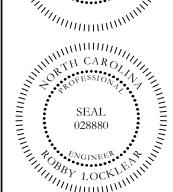
CIVIL | STRUCTURAL | MEP | ENVIRONMENTAL ENGINEERS 114 WEST 3RD. STREET - PEMBROKE, NORTH CAROLINA 28372 (910) 774-9306 WWW.LLANDJ.COM License No. P-0754

PREPARED BY:

| LOCKLEAR, LOCKLEAR & JACOBS | |
|-----------------------------|--|
| | |

PEMBROKE, NC 28372





Sheet List Table

FIRE ALARM GENERAL NOTES AND ABBREVIATIONS

FIRE ALARM PLAN - AREA

FIRE ALARM PLAN - AREA C

FIRE ALARM PLAN - AREA E FIRE ALARM PLAN - AREA I FIRE ALARM PLAN - AREA G FIRE ALARM PLAN - AREA H FIRE ALARM PLAN - AREA I FIRE ALARM PLAN - AREA FIRE ALARM PLAN - AREA K

| FIRE ALARM PLAN - AREA L FIRE ALARM PLAN - AREA M

FIRE ALARM DETAILS

FIRE ALARM PLAN - AREA N LOFT

REV# DATE

DRAWN BY: CKD CHECKED BY: RL SHEET TITLE

COVER SHEET

HEET NUMBER

BID SET - 3-25-2024

BELOW IS A LIST OF ITEMS THAT SHOULD BE REVIEWED AND/OR COMPLETED PRIOR TO THE ARRIVAL OF A FIRE ALARM TECHNICIAN. PLEASE KEEP IN MIND THAT IF SOME ASPECTS OF SYSTEM TESTING CANNOT BE COMPLETED DURING THE TECHNICIANS SCHEDULED ON SITE DATES (IE DEVICES NOT IN PLACE, WIRING PROBLEMS, OR OTHER TRADES NOT ON SITE AS NEEDED TO COMPLETE INTERCONNECTION AND TESTING) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY FIRE ALARM INSTALLER WHEN THE TECHNICIAN WILL BE REQUIRED BACK ON SITE. PLEASE PROVIDE FIRE ALARM INSTALLER A FIVE (5) BUSINESS DAY NOTIFICATION IN ORDER TO SCHEDULE/RESCHEDULE A TECHNICIAN.

PLEASE REVIEW THE FOLLOWING ITEMS:

- 1. ALL EQUIPMENT INSTALLED BY OTHER TRADES THAT NEED TO BE MONITORED OR CONTROLLED BY THE FIRE ALARM EQUIPMENT IS
- 2. CENTRAL STATION MONITORING INSTALLED AND A MONITORING ACCOUNT SETUP. (ALL ACCOUNT INFORMATION SHALL BE PROVIDED TO FIRE ALARM INSTALLER IF PROVIDED BY OTHERS).
- FIRE MARSHALL INSPECTION (REQUIRES A 5 BUSINESS DAY NOTICE TO FIRE ALARM INSTALLER FOR TECHNICIAN SCHEDULING). 4. CUSTOMER TRAINING (REQUIRES A 5 BUSINESS DAY NOTICE TO FIRE ALARM INSTALLER FOR TECHNICIAN SCHEDULING).

NFPA-72 (2013) SECTION A.10.4.4 OF THE NATIONAL FIRE ALARM CODE HANDBOOK STATES THAT SMOKE DETECTION SHALL BE PROVIDED AT THE LOCATION OF EACH FACP, NAC AND SUPERVISING STATION TRANSMITTING EQUIPMENT TO PROVIDE NOTIFICATION OF FIRE AT THAT LOCATION.

EXCEPTION #1: WHERE AMBIENT CONDITIONS PROHIBIT INSTALLATION OF AUTOMATIC SMOKE DETECTION, AUTOMATIC HEAT DETECTORS SHALL BE PERMITTED.

SMOKE DETECTOR INSTALLATION LOCATION:

NFPA-72 SECTION A.17.4.8 STIPULATES:

- WHERE THE CEILING IS 15FT IN HEIGHT OR LESS, THE SMOKE DETECTOR SHOULD BE LOCATED ON THE CEILING OR THE WALL
- WITHIN 21ft OF THE CENTERLINE OF THE FIRE ALARM CONTROL UNIT BEING PROTECTED BY THE DETECTOR. 2. WHERE THE CEILING EXCEEDS 15FT IN HEIGHT, THE AUTOMATIC SMOKE DETECTOR SHOULD BE INSTALLED ON THE WALL ABOVE AND WITHIN 60in FROM THE TOP OF THE CONTROL UNIT.

SEE DETAIL 2 ON THIS SHEET AND INSTALLATION REQUIREMENTS FOR SMOKE DETECTOR LOCATION REQUIREMENTS.

FIRE ALARM DRAWING NOTES

- ALL FIRE ALARM SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF NFPA, FIRE CODE, BUILDING CODE AND ANSI STANDARDS.
- ALL CONDUIT TO BE 3/4" EMT UNLESS NOTED OTHERWISE.
- FIRE ALARM VISUAL DEVICES SHALL BE SYNCHRONIZED.
- 4. PRIOR TO PROGRAMMING AND ROUGH-IN, COORDINATE ROOM NUMBERS WITH OWNER AND ENGINEER.
- 5. VOLTAGE DROP CALCULATIONS ARE BASED ON CONDUIT LOCATIONS SHOWN ON FIRE ALARM DRAWINGS. FINAL CONDUIT
- LOCATIONS TO BE PROVIDED BY ELECTRICAL CONTRACTOR. JUNCTION BOXES NOT SHOWN FOR CLARITY. JUNCTION BOX LOCATIONS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- FIRE ALARM SYSTEM TO BE CLASS 'B' SUPERVISED SYSTEM (STYLE 'B' INITIATING DEVICE CIRCUITS, STYLE 4 SIGNALING LINE CIRCUITS, CLASS 'B' NOTIFICATION APPLIANCE CIRCUITS). FURNISH & INSTALL END-OF-LINE (EOL) RESISTORS WHERE SHOWN ON
- 8. ALL VERTICAL WIRING AND STUB-UPS SHALL BE IN CONDUIT UP PAST DROP CEILING. ALL HORIZONTAL WIRING SHALL BE SECURED TO STRUCTURE BY ACCEPTABLE MEANS PER THE NFPA-70.

9. SMOKE DETECTORS SHALL BE LOCATED AS NEAR THE CENTER OF THE ROOM AS PRACTICAL. DO NOT LOCATE ANY DETECTOR WITHIN 3'-0" OF AN HVAC SUPPLY GRILLE. PROVIDE AUXILIARY CONTACT ON SMOKE DETECTORS LOCATED IN CORRIDORS AT SMOKE DOORS. WIRE MAGNETIC DOOR HOLDERS THRU AUXILIARY CONTACT TO RELEASE DOOR WHEN THOSE DETECTORS ARE ACTUATED.

- 10. FIRE ALARM SYSTEM WIRING WILL BE BY FIRE ALARM INSTALLER. CONTROL WIRING WILL BE BY THE FIRE ALARM CONTRACTOR. PROVIDE AUXILIARY CONTACT ON EACH DUCT DETECTOR FOR DIVISION 23 USE. A RELAY MODULE AND REMOTE TEST STATION MAY NOT BE DISPLAYED ON PLANS FOR CLARITY.
- 11. LOCATE MANUAL PULL STATIONS WITHIN 5'-0" OF THE EXIT DOOR PER NFPA AND IBC REQUIREMENTS. PROVIDE ANY SPECIAL ADAPTER PLATES OR COVER PLATES REQUIRED TO MOUNT PULL STATIONS IN DOOR MULLIONS WHERE APPLICABLE. 12. EACH SPEAKER / STROBE LOCATED AT THE END OF A CORRIDOR MUST BE WITHIN 15'-0" OF THE END WALL PER NFPA 72.

SPEAKER / STROBES IN CLASSROOMS AND OFFICES MUST BE ROUGHLY CENTERED ON WALL PER NFPA 72. DO NOT ADJUST THE

- LOCATIONS OF ANY SPEAKER / STROBES WITHOUT CONSULTING THE ENGINEER AND OBTAINING WRITTEN PERMISSION. 13. FIELD VERIFY LOCATION OF FIRE ALARM CONTROL PANEL "FACP" AND FIRE ALARM ANNUCIATOR PANELS "FAAP" WITH OWNER AND AUTHORITY HAVING JURISDICTION PRIOR TO ROUGH-IN.
- 14. LETTERS "I" AND "O" ARE NOT USED IN SCHEDULES DUE TO CONFLICTS WITH NUMBERS THAT LOOK SIMILAR.
- 15. PER NFPA 72 (2013), 17.4.4 STATES: INITIATING DEVICES SHALL BE INSTALLED IN A MANNER THAT PROVIDES ACCESSIBILITY FOR
- PERIODIC INSPECTION, TESTING, AND MAINTENANCE.
- 16. NO "T" TAPS ARE ALLOWED. 17. POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS
- 18. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE.
- 19. ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND ROOM, ETC. TO BE 2 WATTS. 20. CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.
- 21. 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. 22. 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.

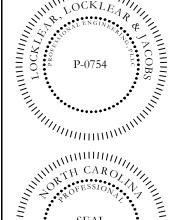
| | FIRE DETECTION LEGEND |
|--------|--|
| SYMBOL | DESCRIPTION |
| FACP | FIRE ALARM CONTROL PANEL |
| EAAP | FIRE ALARM ANNUCIATOR PANEL |
| NAC | FIRE ALARM REMOTE POWER SUPPLY PANEL |
| DAP | DISTRIBUTED AMPLIFIER PANEL |
| [XX] | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT |
| ₹ | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT |
| XXO | VISUAL ONLY INDICATING DEVICE - WALL MOUNT |
| Vxx | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT |
| F | PULL STATION |
| SD | SMOKE DETECTOR CEILING MOUNTED |
| HD | HEAT DETECTOR CEILING MOUNTED |
| MEXH | EXHAUST HOOD MONITOR MODULE |
| (0) | CARBON MONOXIDE DETECTOR |
| OS= | DUCT SMOKE DETECTOR |
| L | REMOTE INDICATOR LIGHT |
| R | DUCT DETECTOR RELAY |
| DM | EXISTING DOOR MAGNETS TO REMAIN |
| М | MONITOR MODULE |
| ANSUL | ANSUL ALARM PANEL |
| А | AUDIO ONLY CEILING MOUNT |
| ER | ELEVATOR RELAY |
| A | AUDIO ONLY CEILING MOUNT |

| & | AND |
|-------------|-------------------------------|
| ABBREV | ABBREVIATION |
| AC | ALTERNATING CURRENT |
| ANSI | AMERICAN NATIONAL STANDARD |
| | INSTITUTE |
| ASTM | AMERICAN SOCIETY FOR TESTING |
| A T.M | MATERIAL |
| ATM | ATMOSPHERE |
| BL BLDG | BRANCH LINE BUILDING |
| BOP | BOTTOM OF PIPE |
| °C | DEGREE CELSIUS |
| Cm | CENTIMETER |
| DC | DIRECT CURRENT |
| DN . | DROP NIPPLE |
| DOL | DIRECT ON-LINE STARTER |
| DR | DRAIN |
| DWGS | DRAWINGS |
| °F | DEGREE FAHRENHEIT |
| =D | FLOOR DRAIN |
| - -M | FACTORY MUTUAL |
| -P | FIRE PUMP |
| - PM | FEET PER MINUTE |
| -S | FLOW SWITCH |
| =T | FEET |
| GPM | GALLON PER MINUTE |
| HP | HORSE POWER |
| Ηz | HERTZ |
| JP | JOCKEY PUMP |
| K G | KILOGRAM |
| ≺W | KILOWATT |
| _B | POUND |
| М | METRE |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| MM | MILIMETRE |
| VC | NORMALLY CLOSED |
| NFPA | NATIONAL FIRE PROTECTION |
| VIO. | ASSOCIATION |
| NO NO | NORMALLY OPEN |
| VO VDT | NUMBER NATIONAL PIPE TREAD |
| NPT NRSV | NON RISING STEM VALVE |
| NKSV PIV | POST INDICATOR VALVE |
| PIV PS | PRESSURE SWITCH |
| PS RN | RISER NIPPLE |
| KIN TYP | TYPICAL |
| IIF | LITIOAL |

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

PO BOX 3119 PEMBROKE NC 28372

TELEPHONE: (910)774-9306



028880

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.

1. THIS DRAWING SHOWN FOR ILLUSTRATION ONLY, FIRE

ALARM CONTRACTOR SHALL INSTALL FIRE ALARM

SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND

KEY NOTE SCHEDULE SYMBOL DESCRIPTION #18 / 2 WIRE (SLC) IN 3/4" CONDUIT. (2) #18 / 2 WIRE IN 3/4" CONDUIT (TEST STATION), OR #18 / 2 WIRE IN 3/4" CONDUIT (REMOTE INDICATOR)

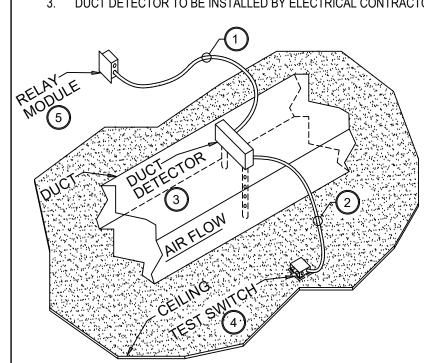
\ FINAL ALARM GENERAL NOTES

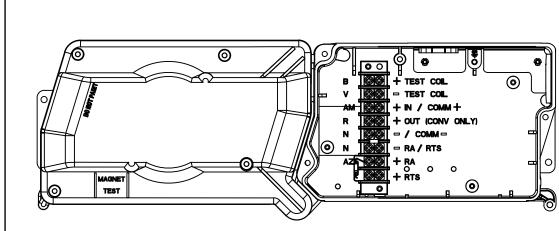
| 3 DUCT DETECTOR MOUNTED IN MECHANICAL DUCTWORK. | | | |
|---|-----|--|--|
| | 4 | TEST SWITCH WITH INDICATOR LIGHT. SEE PLANS FOR MOUNTING LOCATION (CEILING, WALL). | |
| | (5) | RELAY MODULE INSTALLED BY ELECT (TO BE WITHIN 3'-0" FROM DUCT DETECTOR) | |

REFER TO FIRE ALARM DRAWINGS FOR LOCATION AND QUANTITY OF DUCT DETECTORS.

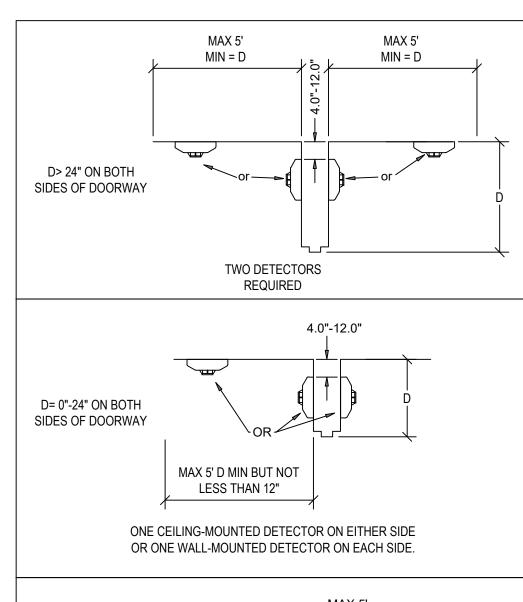
REFER TO PLANS FOR SPECIFIED COMBINATIONS (DUCT DETECTOR + TEST SWITCH, DUCT

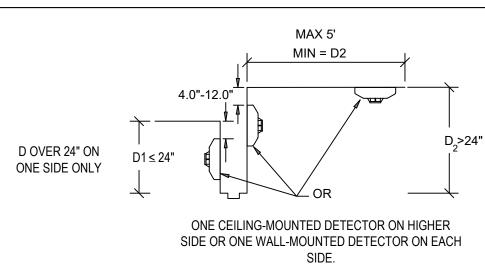
DETECTOR + TEST SWITCH + RELAY MODULE) 3. DUCT DETECTOR TO BE INSTALLED BY ELECTRICAL CONTRACTOR.



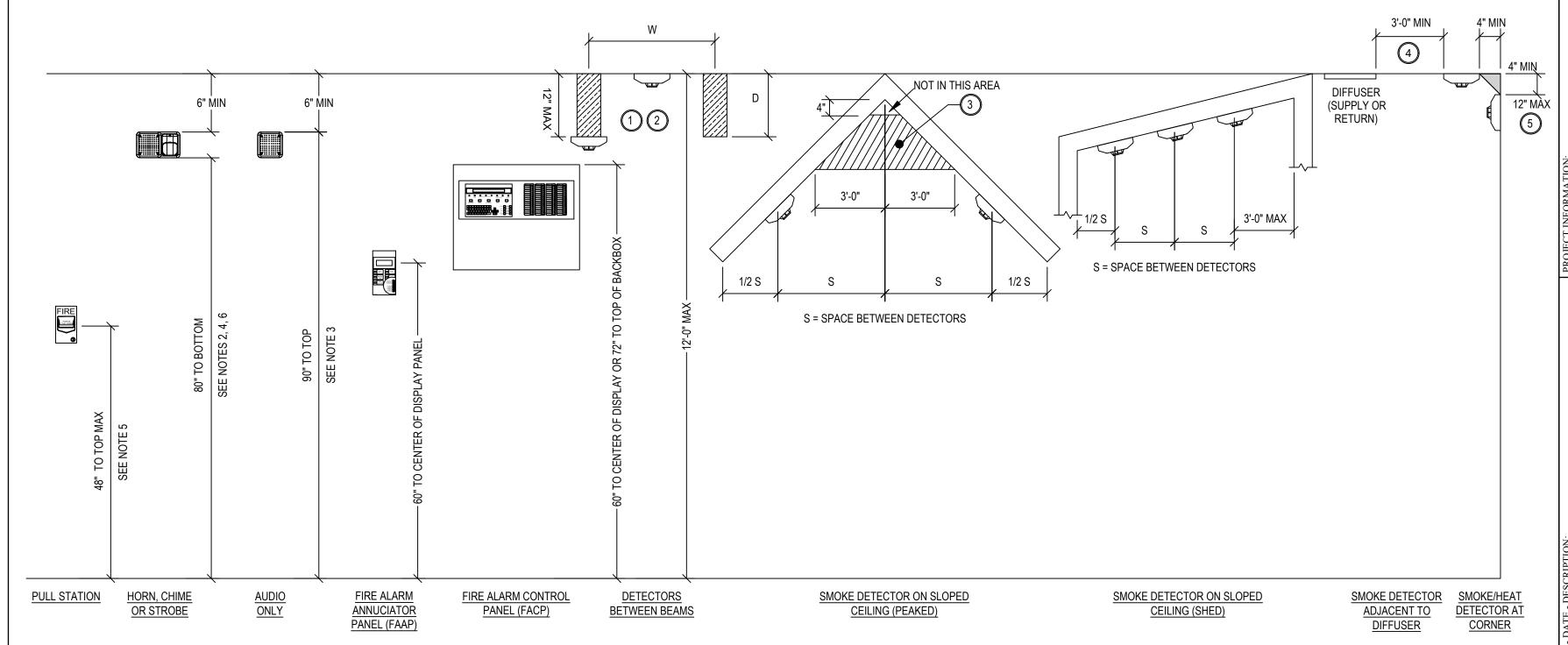


\ DUCT DETECTOR WIRING DETAIL





DETECTOR LOCATION REQUIREMENTS FOR WALL SECTIONS



FIRE ALARM DEVICE MOUNTING NOTES:

. ALL MOUNTING HEIGHTS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS. 2. VISUAL UNIT (NOTIFICATION): DEVICE 80" ABOVE HIGHEST FLOOR LEVEL OR 6" BELOW CEILING, WHICHEVER IS LOWER

(ADA STANDARD ICC A117.1_2009). BOTTOM OF DEVICE 80 AFF (NFPA). 3. AUDIO UNIT (NOTIFICATION): TOP OF UNIT AT LEAST 90" AFF OR 6" BELOW CEILING, WHICH EVER IS LOWER (NFPA).

4. AUDIO / VISUAL UNIT (NOTIFICATION): LOCATION DETERMINED BY VISUAL UNIT REQUIREMENTS (NFPA).

5. PULL STATION (ACTIVATION): HIGHEST OPERABLE PART SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR (FRONT

APPROACH) ADA STANDARD ICC A117.1_2009. OPERABLE PART (T-HANDLE) SHALL BE NOT LESS THAN 42" AFF (NFPA).

6. WHERE LOW CEILING HEIGHTS DO NOT PERMIT WALL MOUNTING AT A MINIMUM OF 80", WALL MOUNTED VISIBLE

APPLIANCES SHALL BE MOUNTED WITHIN 6" OF THE CEILING (2013 NFPA 72 18.5.5.2).

\ TYPICAL FIRE ALARM MOUNTING DETAILS

MARK DESCRIPTION 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 LOCATE HEAT DETECTORS AT BOTTOM OF BEAMS IF EITHER D/H < .1 OR W/H < .4: OTHERWISE LOCATE IN BEAM LOCATE SMOKE DETECTOR ANYWHERE IN SHADED AREA. PER NFPA 72-2013 17.6.3.4

KEYED NOTE SCHEDULE

PER NFPA 72-2013 A.17.7.4.1

PER NFPA 72-2013 17.7.3.2.1

ABBREVIATIONS SHEET NUMBER FA001

FIRE ALARM

GENERAL NOTES AND

DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE

A_V 15

WINDOW CONTRACTOR TO

INSTALL A 6"X6" ALUMINUM

WINDOW CONTRACTOR TO

INSTALL A 6"X6" ALUMINUM MULLION PLATE FOR FIRE ALARM PULL STATION TO BE MTD. TO

MULLION PLATE FOR FIRE ALARM

PULL STATION TO BE MTD. TO

028880

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.
- 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 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.
- 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.

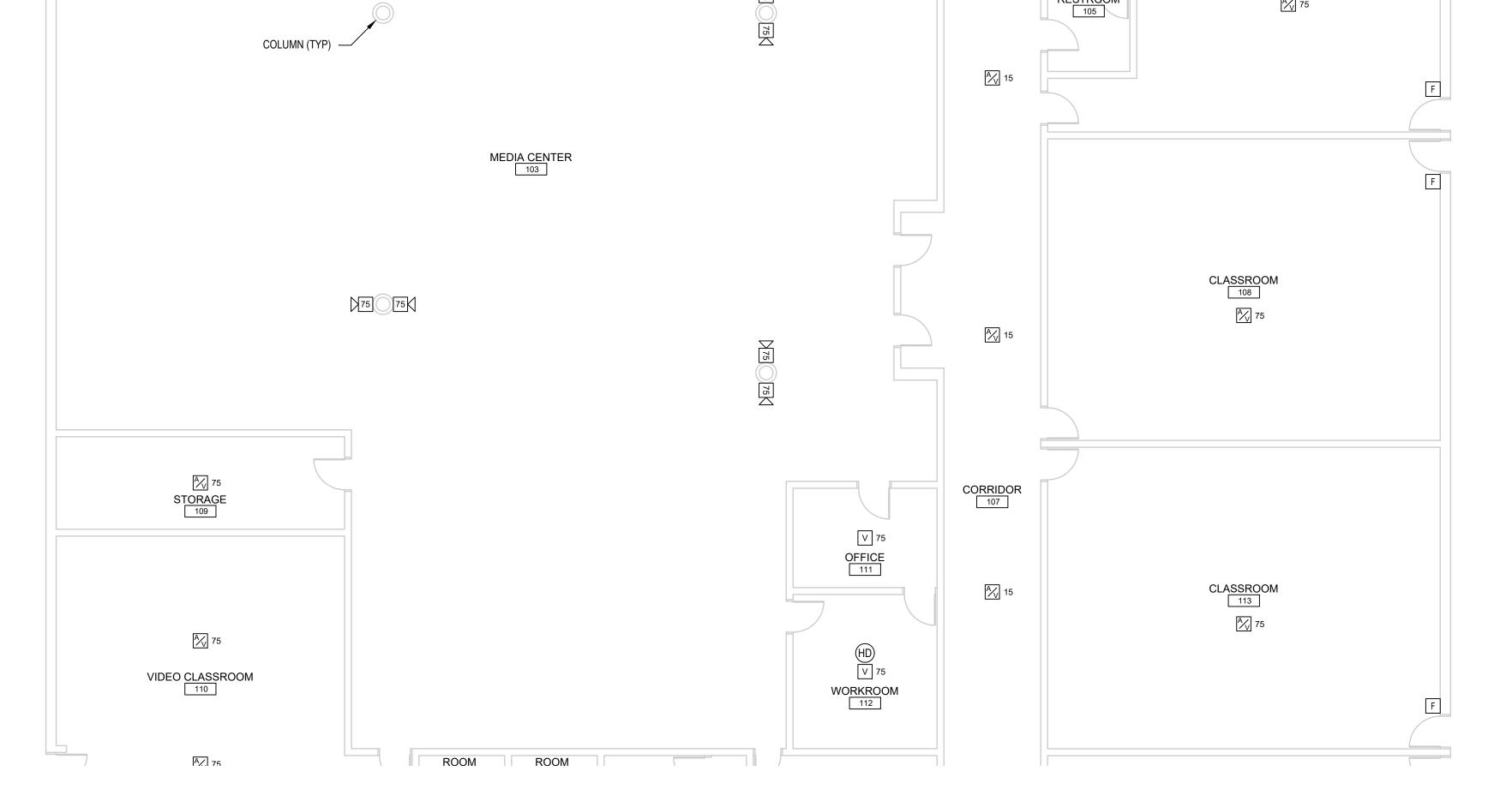
FIRE ALARM DEMOLITION NOTES:

- . 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 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

FIRE ALARM NOTES:

BEFORE STARTING WORK.

- I. 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.
- . INSTALL WIREGUARDS 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
- 8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR. 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO
- INSTALL SHUTDOWN CIRCUITS IN ALL UNITS. 10. 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.
- 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 AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
- 14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT 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
- 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.



WINDOW CONTRACTOR TO INSTALL A 6"X6" ALUMINUM

MULLION PLATE FOR FIRE ALARM

MEDIA CENTER ADDITION

HIGH CEILING

BULK HEAD

PULL STATION TO BE MTD. TO

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 ^A√xx AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT VISUAL ONLY INDICATING DEVICE - WALL MOUNT VISUAL ONLY INDICATING DEVICE - CEILING MOUNT F 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

1 | 7 | % | 4 | % |

FIRE ALARM

PLAN - AREA A

FA101

PROJECT# 24-01233

DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET NUMBER

SHEET TITLE

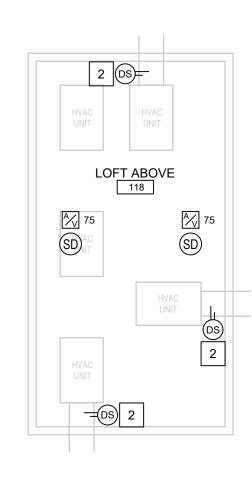
BID SET - 3-25-2024

∖ FIRE ALARM PLAN - AREA A



∖ FIRE ALARM PLAN - AREA B

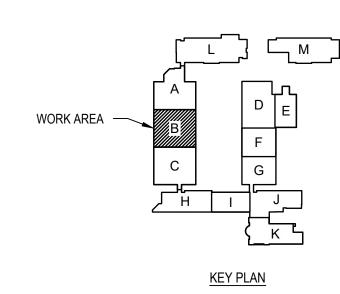




FIRE ALARM PLAN - LOFT

FIRE DETECTION LEGEND SYMBOL DESCRIPTION FIRE ALARM CONTROL PANEL FIRE ALARM ANNUCIATOR PANEL FIRE ALARM REMOTE POWER SUPPLY PANEL DISTRIBUTED AMPLIFIER PANEL xxAUDIO / VISUAL INDICATING DEVICE - WALL MOUNT A/V XX AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT XX VISUAL ONLY INDICATING DEVICE - WALL MOUNT VISUAL ONLY INDICATING DEVICE - CEILING MOUNT F 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



- 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
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- 3. 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.
- 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.

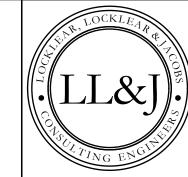
FIRE ALARM ELECTRICAL KEYNOTES

- (1) 120V CIRCUIT FOR BOTH DAP AND NAC PANELS. MUST BE IDENTIFIED AND INCLUDE BREAKER LOCKS (FED FROM AVAILABLE 120V CKT IN PANEL PB1 OR PB2).
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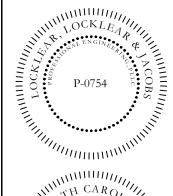
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 - PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".
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- EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.
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PEMBROKE, NC 28372 TELEPHONE: (910)774-9306





2 | -1 | 2 | 8 | 4 | 8 | DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET TITLE FIRE ALARM

SHEET NUMBER

PLAN - AREA B

FA102 PROJECT# 24-01233

A/V 15

A/V 15

A/_V 15

CLASSROOM

V 15

RESTROOM

OFFICE 166

V 15

(SD)

(SD)

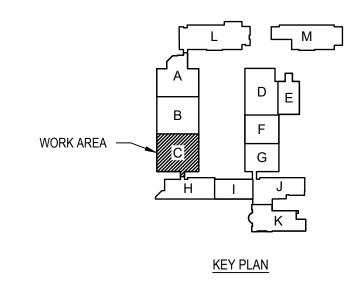
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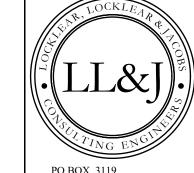
A/_V 75

A_V 75

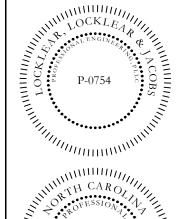
A/ 15

A/_V 75





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



028880

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BELOW: PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX

LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".

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5. BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE

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GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.

DRAWINGS WILL BE UPDATED TO REFLECT THIS.

TO BE ARMSTRONG CORTEGA 770.

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FIRE ALARM NOTES:

CONTRACTOR NOTES:

PLATES, ETC.

BY THE CONTRACTOR.

FIRE ALARM DEMOLITION NOTES:

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4. INSTALL WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.

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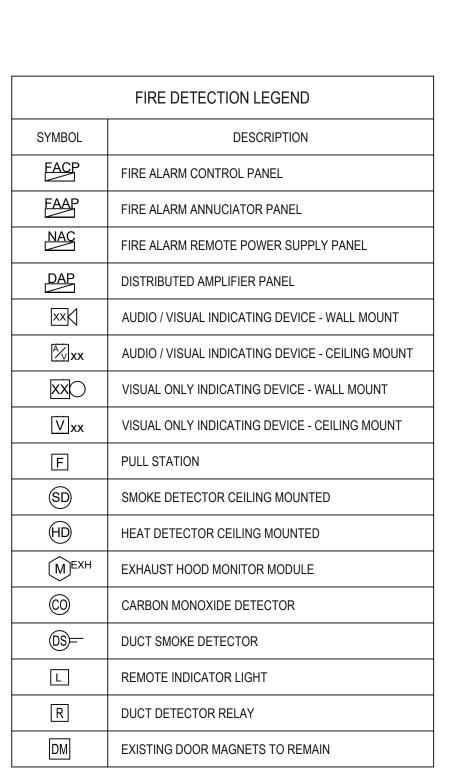
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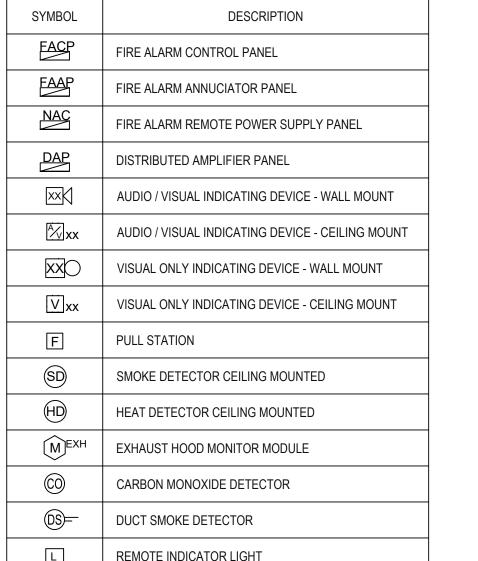
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NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE. * WP = WEATHER PROOF DEVICE



<u> FIRE ALARM PLAN - AREA C</u>

2 | -1 | 2 | 8 | 4 | 8 |

FIRE ALARM

PLAN - AREA C

FA103

PROJECT# 24-01233

DATE: 3/25/2024

DRAWN BY: CKD

CHECKED BY: RL

SHEET NUMBER

SHEET TITLE

LOCKER ROOM

A/_V 15

A/_V 15

A/_V 15

A/_V 15

MTD. ABOVE BLEACHERS

BESIDE EXISTING CAMERA

TRAINING ROOM

__ M

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

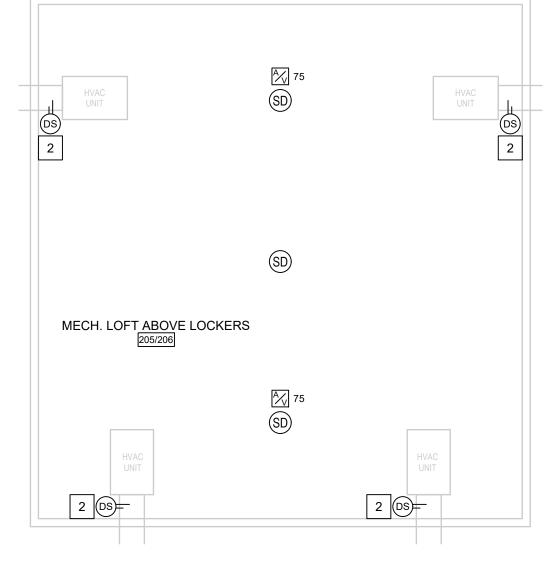
DATE: 3/25/2024 DRAWN BY: CKD

CHECKED BY: RL SHEET TITLE

> FIRE ALARM PLAN - AREA D

SHEET NUMBER FA104

PROJECT# 24-01233



FIRE ALARM PLAN - LOFT

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 A/V XX AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT XX VISUAL ONLY INDICATING DEVICE - WALL MOUNT VISUAL ONLY INDICATING DEVICE - CEILING MOUNT F 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

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- 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.

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 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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BID SET - 3-25-2024

MTD. ABOVE BLEACHERS

BESIDE EXISTING CAMERA

LOCKER ROOM

25 Mb

GIRLS LOCKER ROOM

LOFT ACCESS

(NOTE: POWER TO BE REMOVED UPON

ACTIVATION OF FIRE ALARM SYSTEM)

NOTE:

1. WIRE GUARDS TO BE INSTALLED ON ALL FIRE ALARM DEVICES IN GYM.

SOUND SYSTEM

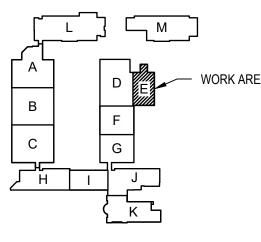
MTD. AT BOTTOM OF BEAM

NOTE:

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/— MTD. AT BOTTOM OF BEAM

LOFT ABOVE ROOM 217



SEAL 028880

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

BY AHJ OF NEW FIRE ALARM SYSTEM, EXISTING FIRE ALARM SYSTEM TO REMAIN OPERATIONAL UNTIL THIS TIME. DEMOLITION EXCEPTIONS OF THE ITEMS LISTED

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DRAWINGS WILL BE UPDATED TO REFLECT THIS.

TO BE ARMSTRONG CORTEGA 770.

PLATES, ETC.

BY THE CONTRACTOR.

FIRE ALARM ELECTRICAL KEYNOTES:

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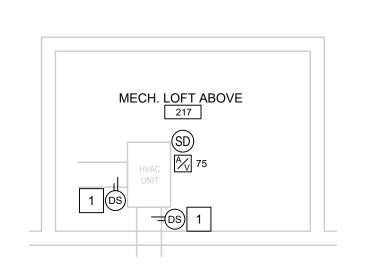
13. POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.

14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT UNLESS NOTED OTHERWISE. 15. ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND

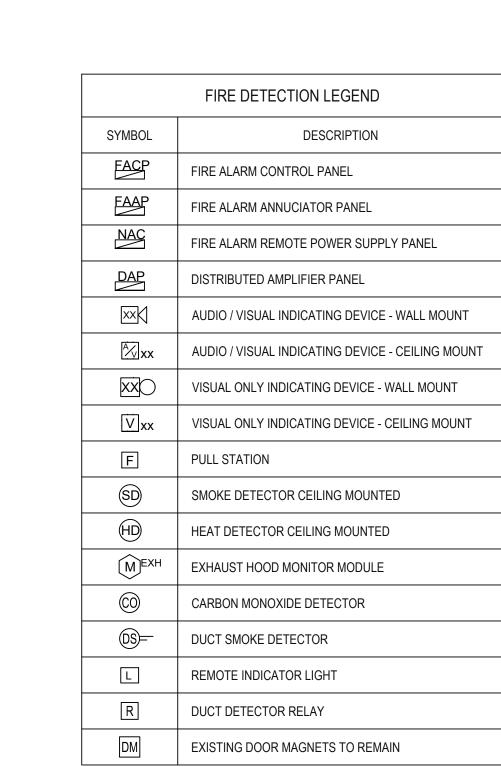
ROOM, ETC. TO BE 2 WATTS. 16. CONTRACTOR TO SUPPLY RELAY FOR FIRE RATED ROLL UP DOOR CLOSURE.

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.



FIRE ALARM PLAN - LOFT



110

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

FIRE ALARM PLAN - AREA E

BID SET - 3-25-2024

SHEET TITLE

SHEET NUMBER

FIRE ALARM

PLAN - AREA E

FA105 PROJECT# 24-01233

CONTRACTOR NOTES:

PLATES, ETC.

BELOW:

FIRE ALARM NOTES:

NOISE LEVELS.

CONTROLS TO AHU.

BEFORE STARTING WORK.

OLD DEVICES.

CEILING GRID.

INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.

AND SECONDARY COMMUNICATIONS ARE REQUIRED.

VERIFY/MODIFY SYSTEM AS REQUIRED.

INSTALLATION REQUIREMENTS.

ROOM, ETC. TO BE 2 WATTS.

WATT UNLESS NOTED OTHERWISE.

AUTHORITY HAVING JURISDICTION.

BY THE CONTRACTOR.

FIRE ALARM DEMOLITION 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.

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.

3. THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN

4. BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER

5. BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE

KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS

FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED

. 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

PULL ALL FIRE ALARM CIRCUITRY BACK TO NEAREST JUNCTION BOX

 4"X4" BLANK COVERS TO BE INSTALLED OVER DEMOED WALL DEVICES. EXISTING DOOR HOLDERS/MAGNETS TO BE RE-USED. FIRE ALARM

LABEL JUNCTION BOX AS "OLD FIRE ALARM DEVICE".

CONTRACTOR TO INSTALL NEW 24V DC CIRCUITRY.

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

1. THIS DRAWING SHOWN FOR ILLUSTRATION ONLY, FIRE ALARM CONTRACTOR SHALL INSTALL FIRE ALARM SYSTEM PER NFPA, ALL LOCAL/STATE CODES, AND

2. CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO

3. SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC

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

4. INSTALL WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM. 5. ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND

7. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS.

8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR. 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO

10. CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL

11. FIRE ALARM CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR ON

12. ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF

14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1

15. ALL FIRE ALARM DEVICES LOCATED IN DANCE ROOMS, CAFETERIA, GYM, BAND

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

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.

13. POWER SUPPLIES AND AMPLIFIER QUANTITIES TO BE DETERMINED BY

FIRE ALARM COMMUNICATION TYPE. IF USING HARD COPPER WIRING, PRIMARY

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

WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.

6. FIRE ALARM CONTRACTOR TO INSTALL ALL SHUTDOWN CIRCUITS.

GRILLES.ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION

DEMO DUCT DETECTORS, CONTRACTOR TO RE-SEAL DUCT

GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.

DRAWINGS WILL BE UPDATED TO REFLECT THIS.

TO BE ARMSTRONG CORTEGA 770.

 $\begin{bmatrix} 5 & 1 & 2 & 8 & 4 & 4 & 6 \\ 2 & 2 & 2 & 2 & 4 & 4 & 6 \end{bmatrix}$ DATE: 3/25/2024

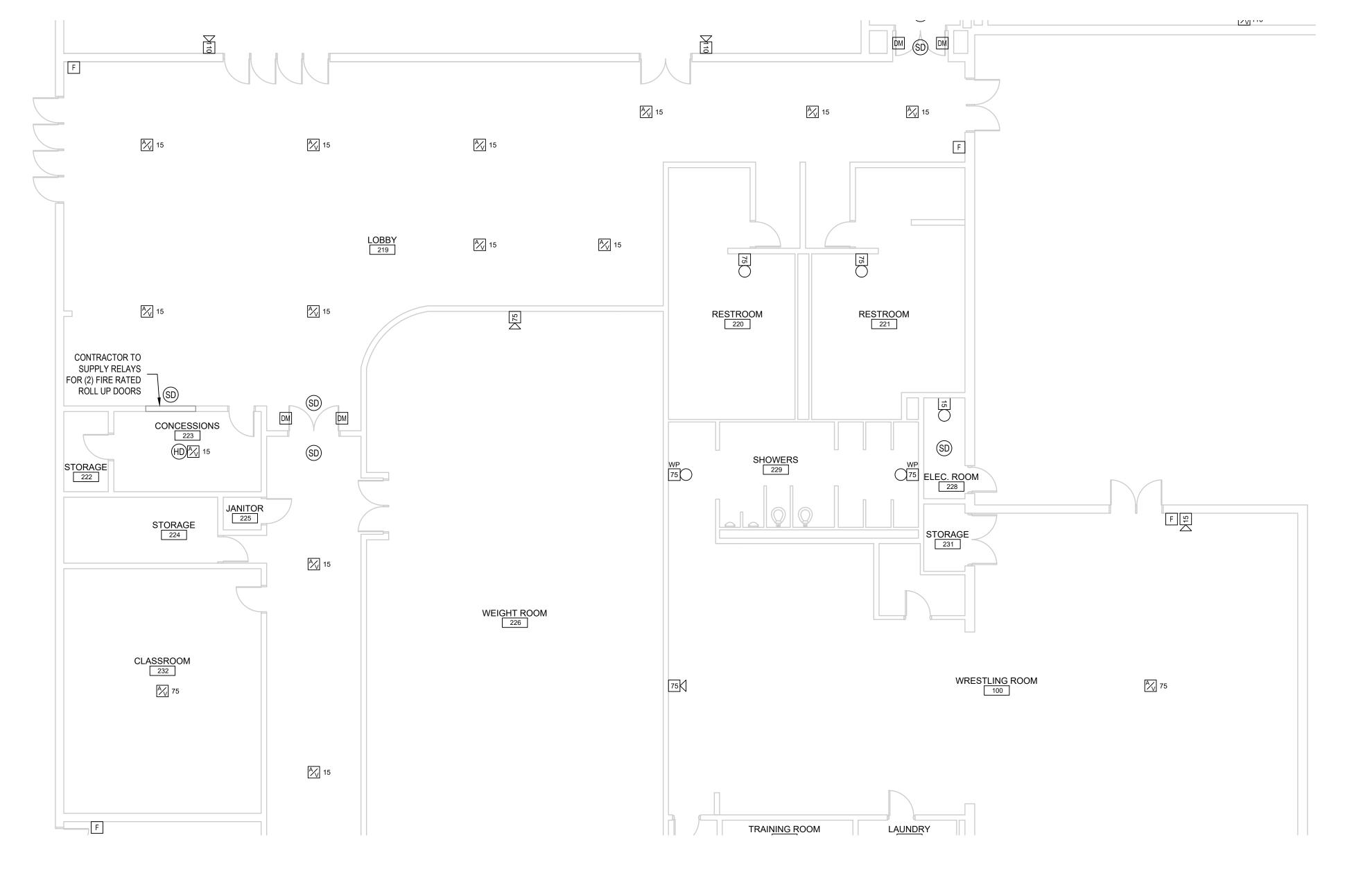
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SHEET TITLE

FIRE ALARM PLAN - AREA F

SHEET NUMBER FA106

PROJECT# 24-01233



| FIRE DETECTION LEGEND | | | | |
|-----------------------|--|--------|---------------------------------|--|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | |
| FACP | FIRE ALARM CONTROL PANEL | SD | SMOKE DETECTOR CEILING MOUNTED | |
| FAAP | FIRE ALARM ANNUCIATOR PANEL | HD | HEAT DETECTOR CEILING MOUNTED | |
| NAC | FIRE ALARM REMOTE POWER SUPPLY PANEL | MEXH | EXHAUST HOOD MONITOR MODULE | |
| DAP | DISTRIBUTED AMPLIFIER PANEL | © | CARBON MONOXIDE DETECTOR | |
| [XX] | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT | (DS)= | DUCT SMOKE DETECTOR | |
| ⅓xx | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT | L | REMOTE INDICATOR LIGHT | |
| | VISUAL ONLY INDICATING DEVICE - WALL MOUNT | R | DUCT DETECTOR RELAY | |
| V _{xx} | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT | DM | EXISTING DOOR MAGNETS TO REMAIN | |
| F | PULL STATION | | | |

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.

* WP = WEATHER PROOF DEVICE

\ FIRE ALARM PLAN - AREA F

BID SET - 3-25-2024

TRAINING ROOM

^A∕√ 75

^A∕√ 75

SD V 15

LOFT ABOVE ROOM 248

LOFT ACCESS

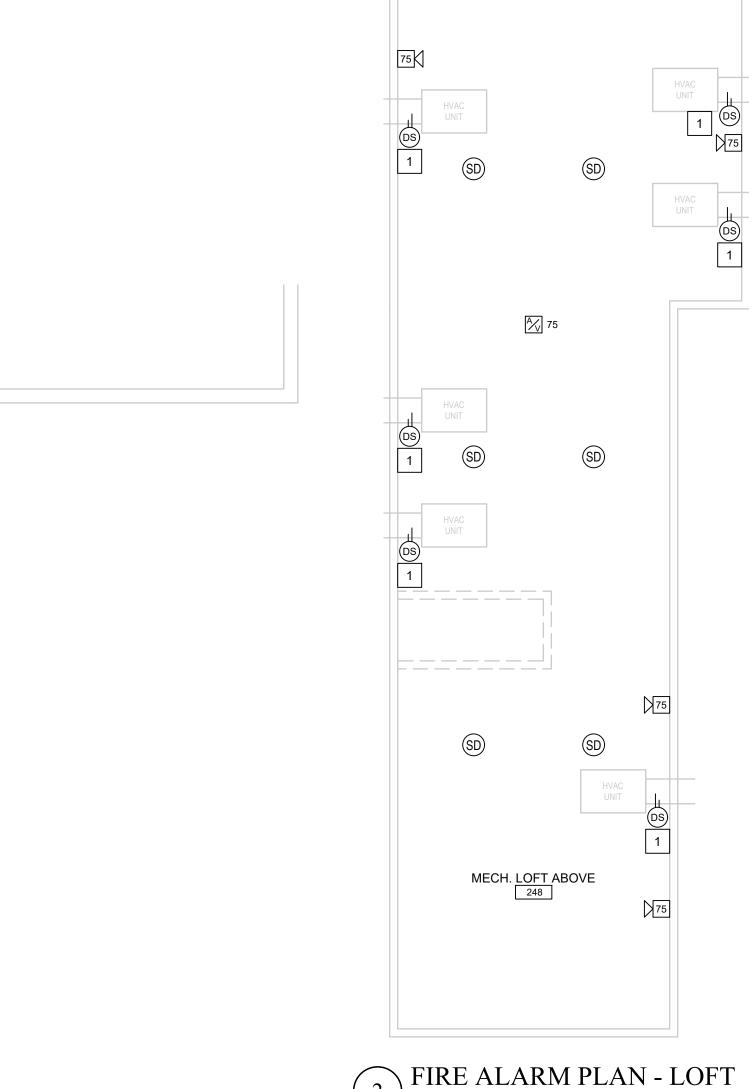
INSTRUCTION 256

CORRIDOR

A/_V 15

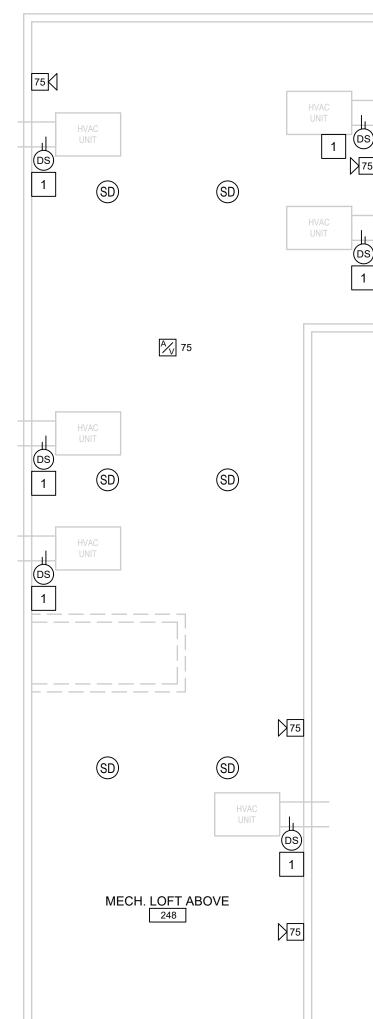
A/V 15

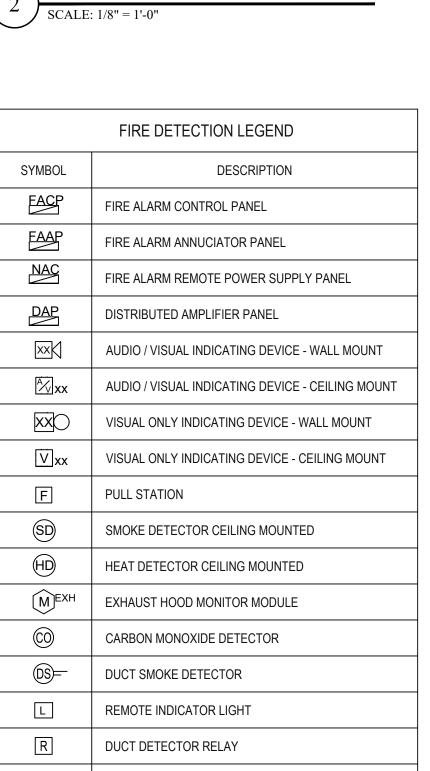
A/V 15

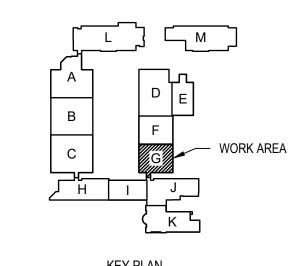


| | FIRE DETECTION LEGEND |
|-----------------|--|
| SYMBOL | DESCRIPTION |
| FACP | FIRE ALARM CONTROL PANEL |
| FAAP | FIRE ALARM ANNUCIATOR PANEL |
| NAC | FIRE ALARM REMOTE POWER SUPPLY PANEL |
| DAP | DISTRIBUTED AMPLIFIER PANEL |
| XX | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT |
| ∞xx | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT |
| XX) | VISUAL ONLY INDICATING DEVICE - WALL MOUNT |
| V _{xx} | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT |
| F | PULL STATION |
| (SD) | SMOKE DETECTOR CEILING MOUNTED |
| HD | HEAT DETECTOR CEILING MOUNTED |
| MEXH | EXHAUST HOOD MONITOR MODULE |
| © | CARBON MONOXIDE DETECTOR |
| (DS)=- | DUCT SMOKE DETECTOR |
| L | REMOTE INDICATOR LIGHT |
| R | DUCT DETECTOR RELAY |
| ГрМ | EXISTING DOOR MAGNETS TO REMAIN |

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









- I. 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 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.
- 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.

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.

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
 - 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 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

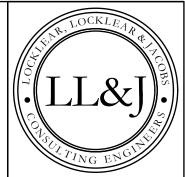
FIRE ALARM NOTES:

LIGHT.)

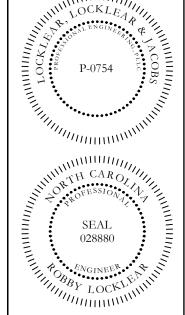
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- 2. CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
- 3. SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES.ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION 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
- 4. INSTALL WIREGUARDS 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.
- 8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
- 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.

VERIFY/MODIFY SYSTEM AS REQUIRED.

- 10. CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE ALARM INSTALLER IS RESPONSIBLE FOR CANDELA CALCULATIONS AND SHALL
- 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 AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
- 14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT 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.



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



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

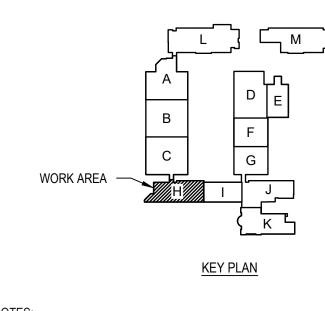
SHEET TITLE

SHEET NUMBER FA107

PROJECT# 24-01233

FIRE ALARM

PLAN - AREA G



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

- 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 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.
- 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.

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
 - 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.

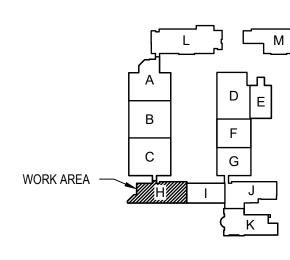
FIRE ALARM DEMOLITION NOTES:

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

- 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.
- 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

FIRE ALARM NOTES:

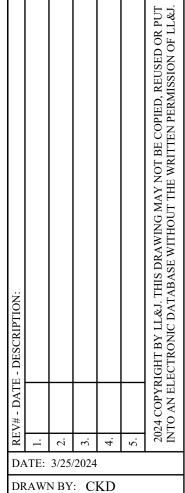
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- 2. CONTRACTOR TO INSTALL A NAPCO STARLINK SLE-LTEA-FIRE CELLULAR RADIO WITH (1) MONITOR MODULE FOR SUPERVISION OF THE RADIO.
- 3. SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 3FT AWAY FROM HVAC GRILLES.ALL CANDELA RATINGS PER NATIONAL FIRE PROTECTION 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 WIREGUARDS 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.
- 8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
- 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
- 10. 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.
- 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 AMPLIFIER QUANTITIES TO BE DETERMINED BY
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- WATT 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
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P-0754 H CARO 028880

PEMBROKE, NC 28372

TELEPHONE: (910)774-9306

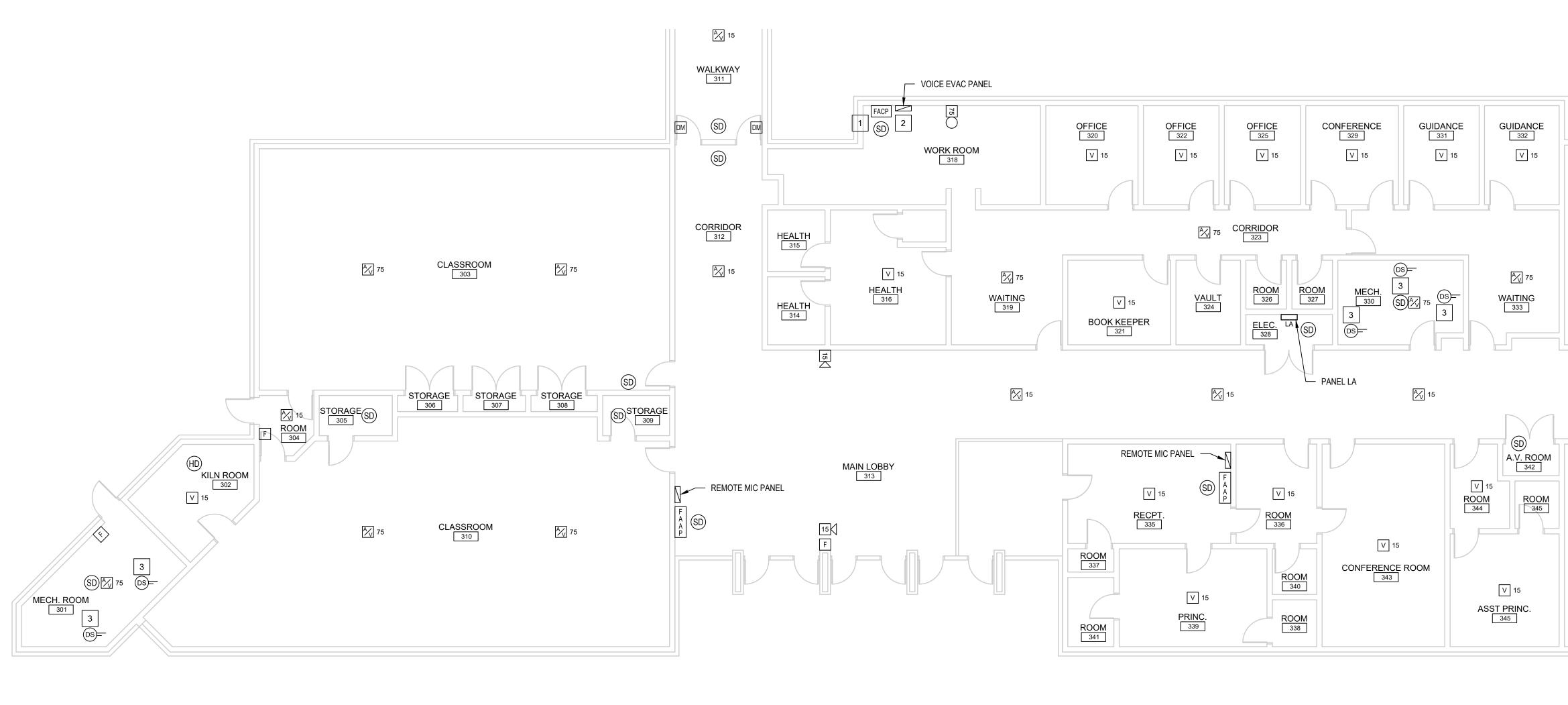


CHECKED BY: RL SHEET TITLE

FIRE ALARM PLAN - AREA H

SHEET NUMBER FA108

PROJECT# 24-01233



| FIRE DETECTION LEGEND | | |
|-----------------------|--|--|
| SYMBOL | DESCRIPTION | |
| FACP | FIRE ALARM CONTROL PANEL | |
| FAAP | FIRE ALARM ANNUCIATOR PANEL | |
| NAC | FIRE ALARM REMOTE POWER SUPPLY PANEL | |
| DAP | DISTRIBUTED AMPLIFIER PANEL | |
| [XX] | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT | |
| ⅓xx | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT | |
| XX | VISUAL ONLY INDICATING DEVICE - WALL MOUNT | |
| Vxx | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT | |
| F | PULL STATION | |
| (SD) | SMOKE DETECTOR CEILING MOUNTED | |
| HD | HEAT DETECTOR CEILING MOUNTED | |
| MEXH | EXHAUST HOOD MONITOR MODULE | |
| © | CARBON MONOXIDE DETECTOR | |
| DS- | DUCT SMOKE DETECTOR | |
| L | REMOTE INDICATOR LIGHT | |
| R | DUCT DETECTOR RELAY | |
| DM | EXISTING DOOR MAGNETS TO REMAIN | |

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.

* WP = WEATHER PROOF DEVICE

↑ FIRE ALARM PLAN - AREA H

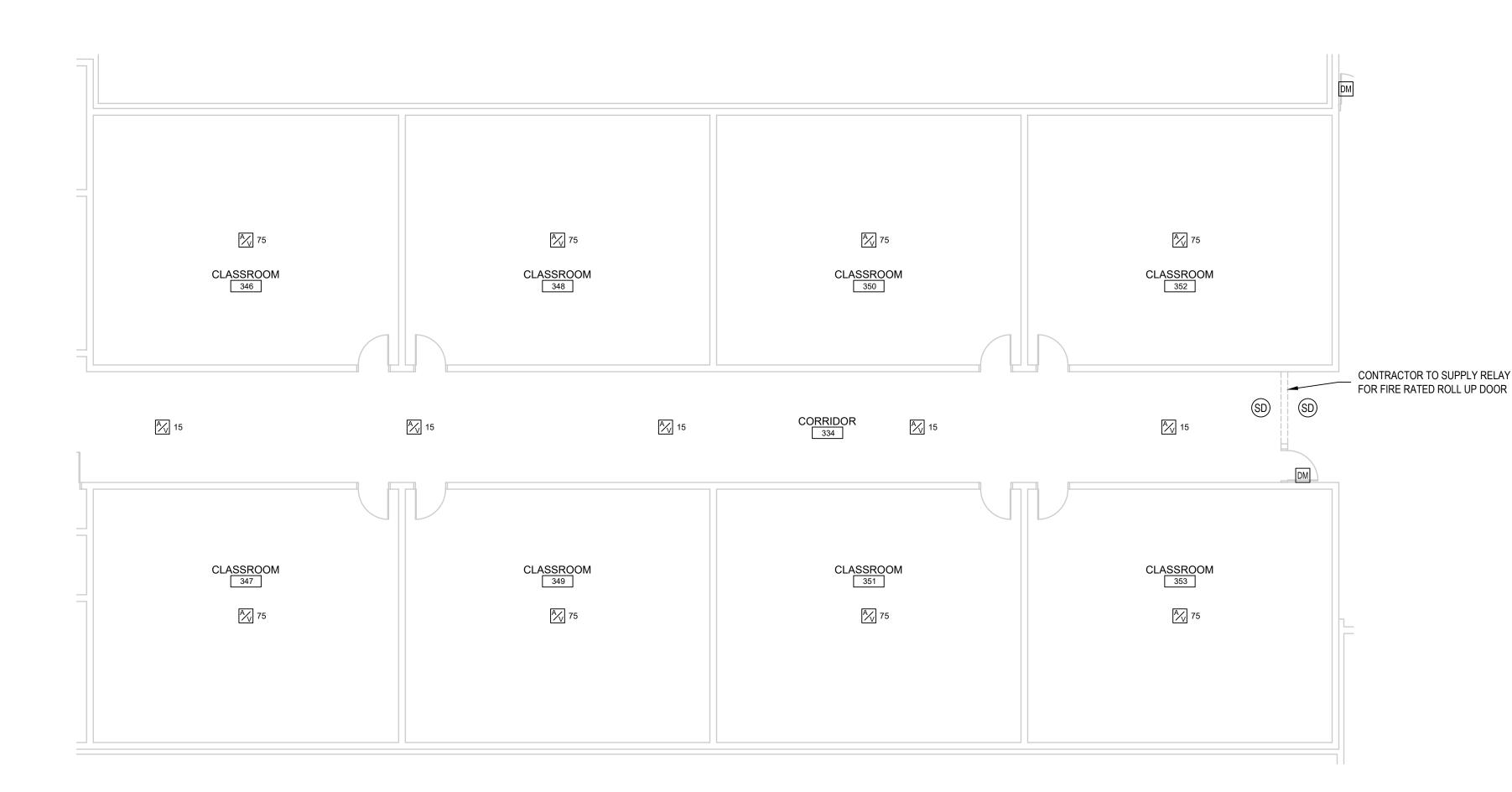
2 | 1 | 2 | 8 | 4 | 8 | DATE: 3/25/2024

DRAWN BY: CKD CHECKED BY: RL

SHEET TITLE

FIRE ALARM PLAN - AREA I

SHEET NUMBER FA109 PROJECT# 24-01233



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 F 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

PLATES, ETC.

CONTRACTOR NOTES:

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

I. 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.

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.

3. THE CEILING TILE IN HALLWAYS TO BE ARMSTRONG CORTEGA 824. CEILING IN KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS

4. BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER

GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.

DRAWINGS WILL BE UPDATED TO REFLECT THIS.

TO BE ARMSTRONG CORTEGA 770.

- 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.

LOCATED OUTSIDE OF MECHANICAL ROOM WILL REQUIRE A REMOTE INDICATOR

- . 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
- FIRE ALARM NOTES:
- I. 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 WIREGUARDS 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.
- 8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR. 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO
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- AND SECONDARY COMMUNICATIONS ARE REQUIRED. 12. ALL EXTERIOR FIRE ALARM DEVICES TO BE BLANKED OFF AFTER REMOVAL OF
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- INSTALLATION REQUIREMENTS. 14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1 WATT 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
- 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.

- 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
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3. 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. 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.

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 LOCKS (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
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FIRE ALARM NOTES:

BEFORE STARTING WORK.

SMOKE DETECTOR CEILING MOUNTED

HEAT DETECTOR CEILING MOUNTED

EXHAUST HOOD MONITOR MODULE

CARBON MONOXIDE DETECTOR

DUCT SMOKE DETECTOR

REMOTE INDICATOR LIGHT

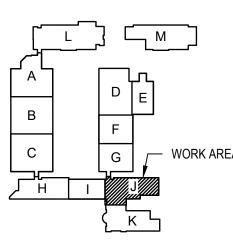
DUCT DETECTOR RELAY

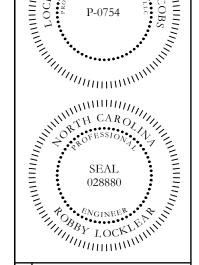
NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.

* WP = WEATHER PROOF DEVICE

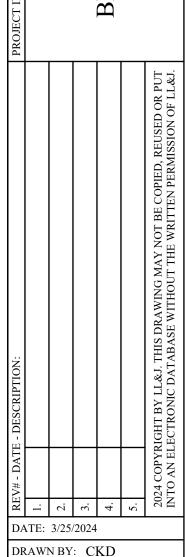
EXISTING DOOR MAGNETS TO REMAIN

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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.
- 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 WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM. 5. ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND CONTROLS TO AHU.
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- 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
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PEMBROKE, NC 28372 TELEPHONE: (910)774-9306



DRAWN BY: CKD

CHECKED BY: RL SHEET TITLE

FIRE ALARM PLAN - AREA J

SHEET NUMBER FA110



028880

BY THE CONTRACTOR. FIRE ALARM ELECTRICAL KEYNOTES:

PLATES, ETC.

TO BE ARMSTRONG CORTEGA 770.

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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4. BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER

5. BRUNSWICK COUNTY SCHOOLS TO PROVIDE A MAXIMUM OF 50 CEILING TILE

KITCHEN AREA TO BE ARMSTRONG KITCHEN ZONE 673 AND ALL OTHER AREAS

FOR THE PROJECT. ANY CEILING TILES REQUIRED ABOVE 50 SHALL BE SUPPLIED

GLOBAL SHUTDOWN IS REQUIRED OF ALL AIR HANDLING UNITS.

DRAWINGS WILL BE UPDATED TO REFLECT THIS.

FIRE ALARM DEMOLITION NOTES:

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- 18. IF DUCT DETECTOR CAN NOT BE INSTALLED IN DUCT WORK LOCATED IN MECHANICAL ROOM DUE TO SPACE CONSTRAINTS, CONTRACTOR IS REQUIRED



DESCRIPTION SYMBOL FIRE ALARM CONTROL PANEL FIRE ALARM ANNUCIATOR PANEL FIRE ALARM REMOTE POWER SUPPLY PANEL DISTRIBUTED AMPLIFIER PANEL AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT A/V XX 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 MONITOR MODULE DUCT DETECTOR RELAY EXISTING DOOR MAGNETS TO REMAIN ANSUL ALARM PANEL

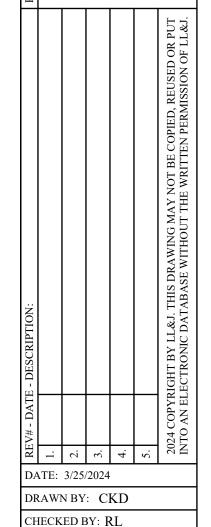
NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE. * WP = WEATHER PROOF DEVICE

CONTROLS TO AHU. 10. CANDELA RATING FOR DEVICES SHALL BE 15 UNLESS NOTED OTHERWISE. FIRE

ROOM, ETC. TO BE 2 WATTS.

CEILING GRID.

TO INSTALL REMOTE INDICATOR IN HALLWAY CEILING NEAR MECHANICAL ROOM.



FA111 PROJECT# 24-01233

SHEET NUMBER

FIRE ALARM

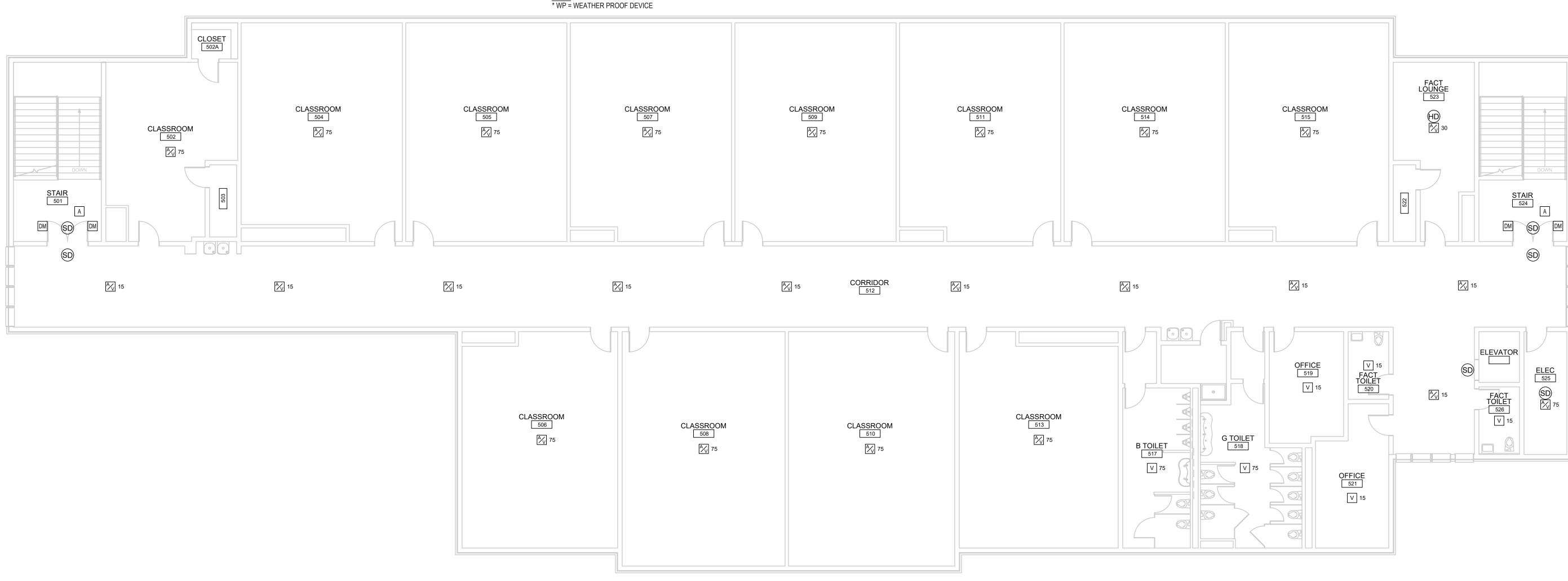
PLAN - AREA K

SHEET TITLE

FIRE ALARM PLAN - AREA K

| | FIRE DETECTION LEGEND | | | | |
|-----------------|--|--------|---------------------------------|--|--|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | | |
| FACP | FIRE ALARM CONTROL PANEL | SD | SMOKE DETECTOR CEILING MOUNTED | | |
| FAAP | FIRE ALARM ANNUCIATOR PANEL | HD | HEAT DETECTOR CEILING MOUNTED | | |
| NAC | FIRE ALARM REMOTE POWER SUPPLY PANEL | MEXH | EXHAUST HOOD MONITOR MODULE | | |
| DAP | DISTRIBUTED AMPLIFIER PANEL | © | CARBON MONOXIDE DETECTOR | | |
| XX | AUDIO / VISUAL INDICATING DEVICE - WALL MOUNT | (DS)= | DUCT SMOKE DETECTOR | | |
| ⅓xx | AUDIO / VISUAL INDICATING DEVICE - CEILING MOUNT | А | AUDIO ONLY CEILING MOUNT | | |
| XXO | VISUAL ONLY INDICATING DEVICE - WALL MOUNT | R | DUCT DETECTOR RELAY | | |
| V _{xx} | VISUAL ONLY INDICATING DEVICE - CEILING MOUNT | DM | EXISTING DOOR MAGNETS TO REMAIN | | |
| F | PULL STATION | ER | ELEVATOR RELAY | | |

NOTE: ALL AUDIO DEVICES TO BE SPEAKER TYPE.



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- 3. 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.
- 4. BRUNSWICK COUNTY SCHOOLS WILL PAINT ANY EXPOSED CONDUIT, COVER PLATES, ETC.
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FIRE ALARM DEMOLITION NOTES:

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FIRE ALARM NOTES

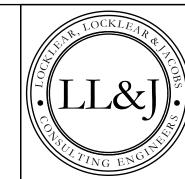
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SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS

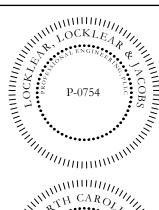
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SECOND LEVEL **WORK AREA**

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





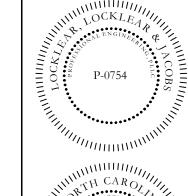
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FIRE ALARM PLAN - AREA M SHEET NUMBER

SHEET TITLE

FA113 PROJECT# 24-01233

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





| IATION: | SOUTH BRUNSWICK HIGH SCHOOL | FIRE ALARM REPLACEMENT | NSWICK COUNTY BOARD OF EDUCATIC | 280 COUGAR RD |
|---------|-----------------------------|------------------------|---------------------------------|---------------|
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SOUTH PORT, NC

CHECKED BY: RL

SHEET NUMBER

FIRE ALARM

PLAN - AREA N

LOFT

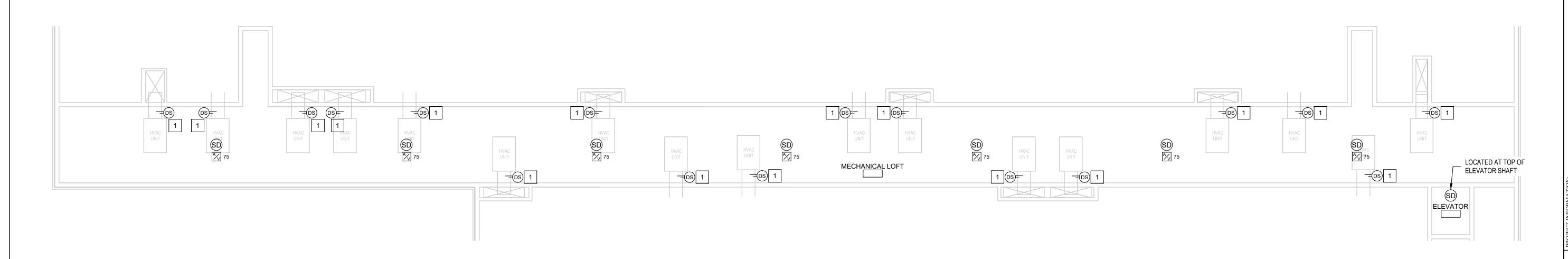
FA114

PROJECT# 24-01233

SHEET TITLE

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

* WP = WEATHER PROOF DEVICE



CONTRACTOR NOTES:

- 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 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.
- 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.

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.

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
- 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.
- 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.)

- 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.
- 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 WIREGUARDS OVER FIRE ALARM DEVICES INSTALLED IN GYMNASIUM.
- 5. ELECTRICAL CONTRACTOR IS REQUIRED TO INSTALL DUCT DETECTORS AND

AND THE VERIFICATION OF QUANTITIES BEFORE BIDDING. THE CONTRACTOR

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,

CONTROLS TO AHU.

- SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. 8. GLOBAL SHUTDOWN OF ALL AIR HANDLING UNITS WHEN INPUT IS RECEIVED FROM A PULL STATION, SMOKE/HEAT DETECTOR OR DUCT DETECTOR.
- 9. MECHANICAL CONTRACTOR TO RE-SEAL DUCT. FIRE ALARM CONTRACTOR TO INSTALL SHUTDOWN CIRCUITS IN ALL UNITS.
- 10. 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.
- 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 AMPLIFIER QUANTITIES TO BE DETERMINED BY INSTALLATION REQUIREMENTS.
- 14. ALL FIRE ALARM DEVICES LOCATED IN HALLWAYS AND CLASSROOMS TO BE 1

- WATT 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
- 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.

- 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. 2. 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
- WARRANTY ALL MATERIALS, INSTALLATION AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE, UNLESS OTHERWISE SPECIFIED.
- 6. SEAL AND FIREPROOF ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS PER U.L. DETAILS THIS SHEET. 7. ALL MOUNTING HEIGHTS ARE GIVEN TO THE CENTERLINE OF THE DEVICE UNLESS
- NOTED OTHERWISE. 8. 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. 9. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF
- NEC (NFPA 70) AND LOCAL CODES. 10. ALL CONDUCTORS, EQUIPMENT AND TERMINATION PROVISIONS SHALL BE U.L.
- OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE WORK.
- 12. FOR THE PURPOSES OF THE CONSTRUCTION DOCUMENTS THE WORD 'PROVIDE' SHALL MEAN TO 'FURNISH AND INSTALL'
- 13. PROVIDE NEW FIRE ALARM DEVICES AS SHOWN. PROVIDE ALL HARDWARE, WIRING, CONDUIT & PROGRAMMING AS REQUIRED FOR A COMPLETE FIRE ALARM SYSTEM.

- 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. 2. 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. 4. 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 ANNUCIATOR LOCATION TO INDICATE BUILDING ZONE AND FIRE ALARM DEVICE LOCATIONS PER

10. RECORD OF COMPLETION SHALL BE SENT TO THE ENGINEER OF RECORD AND TO

- THE LOCAL FIRE DEPARTMENTS REQUIREMENTS. 7. ALL STROBES SHALL BE SYNCHRONIZED PER N.F.P.A. 72.
- 8. THE CONTRACTOR SHALL SEAL ALL EXISTING AND/OR NEW WALL PENETRATIONS PER UL DETAILS SHOWN ON THIS SHEET. 9. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN 3/4" CONDUIT MINIMUM.
- 11. THE FACP SHALL BE PROGRAMMED AS REQUIRED PER THE FIRE ALARM MATRIX.

IŇŠŤÄĽĽ PER NATIONAL **ELECTRIC CODE** MOUNT ON A MOUNT AUDIBLE & APPROVED BOX VISUAL DEVICES ON AIR SUPPLY DIFFUSER SMOKE/HEAT APPROVED BOXES. DETECTOR OR RETURN AIR OPENING 0'-6" MINIMUM 4" MINIMUM - 0" MAXIMUM MINIMUM EXIT 3' - 0" MINIMUM HORN/ STROBE ANNUCIATOR CONTROL | SMOKE/ HEAT PANEL STROBE DETECTOR 96" MAXIMUM TOP OF DEVICE 80" MINIMUM PULL STATION BOTTOM OF DEVICE HINGED SIDE (3' - 6" MINIMUM, 4' - 0" MAXIMUM) **FINISHED FLOOR**

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

FIRE ALARM DEVICE MOUNTING HEIGHTS

- CEILING ALUMINUM OR PVC COVER SURFACE MOUNTED CONDUIT SURFACE MOUNTED DAP / NAC / POWER PANEL

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.

FIRE ALARM SYSTEM MATRIX SYSTEM INPUTS MANUAL FIRE ALARM PULL STATION AREA SMOKE/HEAT DETECTOR X DUCT DETECTOR X Χ FIRE ALARM POWER FAILURE (AFTER 2 HRS) | X | X | Χ FIRE ALARM LOW BATTERY $X \mid X \mid$ Χ OPEN CIRCUIT $X \mid X \mid$ Χ GROUND FAULT NOTIFICATION APPLIANCE SHORT CIRCUIT ALARM SILENCE AT FACP CARBON MONOXIDE DETECTOR | X | SYSTEM TROUBLE

4 FIRE ALARM SYSTEM MATRIX

FIRE ALARM SYSTEM PANEL CONDUITS NTS **BATTERY CALCULATION** AMP/HRS STANDBY TIME IN HOURS STANDBY LOAD REQUIRED CURRENT (AMPS) (24 OR 60 HOURS) REQUIRED ALARM TIME IN HOURS ALARMS LOAD CURRENT (AMPS) (I.E. 5 MINUTES = 0.084)() () ADD STANDBY AND ALARM LOAD FOR REQUIRED AMPERE HOUR BATTERY MULTIPLY BY THE DERATING FACTOR OR 1.2 X 1.2

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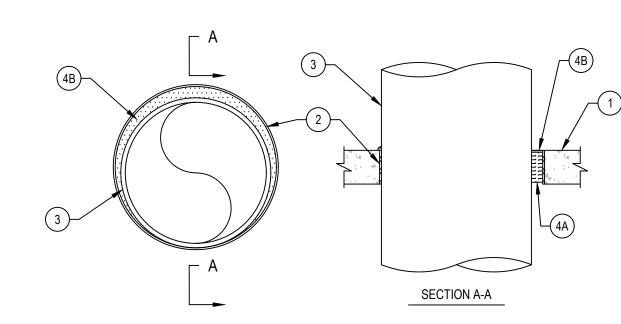
TYPICAL DEVICES MOUNTING HEIGHT (UNLESS OTHERWISE NOTED) FIRE ALARM PULL STATION 48" AFF TO TOP OF DEVICE 80" AFF TO BOTTOM OF DEVICE FIRE ALARM AUDIO/VISUAL ALARM (WALL) FIRE ALARM VISUAL ALARM ONLY (WALL) 80" AFF TO BOTTOM OF DEVICE DIMENSIONS ARE TO DEVICE CENTERLINE UNLESS OTHERWISE NOTED.

ED CONDUIT / JUNCTION BOX NOTE

JUNCTION BOXES FOR FIRE ALARM CONDUIT / WIRING SHALL BE PROVIDED WITH RED VERS. ALL CONDUIT ASSOCIATED WITH THE FIRE ALARM SYSTEM SHALL BE FACTORY NTED RED UNLESS RUN EXPOSED WITHIN FINISHED SPACES SHALL BE PAINTED TO MATCH JACENT 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



1. 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.

2. 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. 3. 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

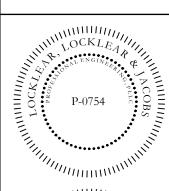
B. FILL, VOID OR CAVITY MATERIAL* — SEALANT — MIN 1/4 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR SLEEVE OR WITH BOTH SURFACES OF WALL OR SLEEVE. AT THE POINT OR CONTINUOUS CONTACT LOCATIONS BETWEEN PENETRANT AND CONCRETE OR SLEEVE, A MIN 1/4 IN. DIAMETER 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.

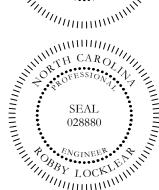
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE SEALANT

*Bearing the UL Classification Mark

5 FIRE RATED PENETRATION DETAIL

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





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FIRE ALARM **DETAILS** HEET NUMBER FA501

PROJECT# 24-01233

BID SET - 3-25-2024

. BATTERY CALCULATIONS TO BE COMPLETED BY FIRE ALARM CONTRACTOR.

2. FIRE ALARM CONTRACTOR SHALL VERIFY ALL BATTERY AND VOLTAGE DROP REQUIREMENTS OF

TOTAL AMPERE HOURS (AH) REQUIRED

EXISTING SYSTEM ARE ADEQUATE FOR ADDITIONAL DEVICES.