## THE SCHOOL DISTRICT OF PHILADLPHIA SCHOOL REFORM COMMISSION Office of Capital Programs 440 North Broad Street, 3<sup>rd</sup> Floor – Suite 371 Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

## Addendum No. 01

**Subject:** Edwin Forrest Elementary School – Fire Alarm System Replacement

SDP Contract No. B-008 (C) of 2017/18

**Location**: 7300 Cottage Street

Philadelphia, Pennsylvania 19136

This Addendum 01, dated January 30, 2018 shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents.

#### **Drawings**

Drawing ED100 - Removed Keynote #3 and #4. Removed scope of work for motor replacement.

Drawing E100 – Removed Keynote #14 and #15. Removed scope of work for motor replacement.

Drawing E601 – Revised the Fire Alarm System Riser, removed requirement for (2) copper telephone lines to FACP.

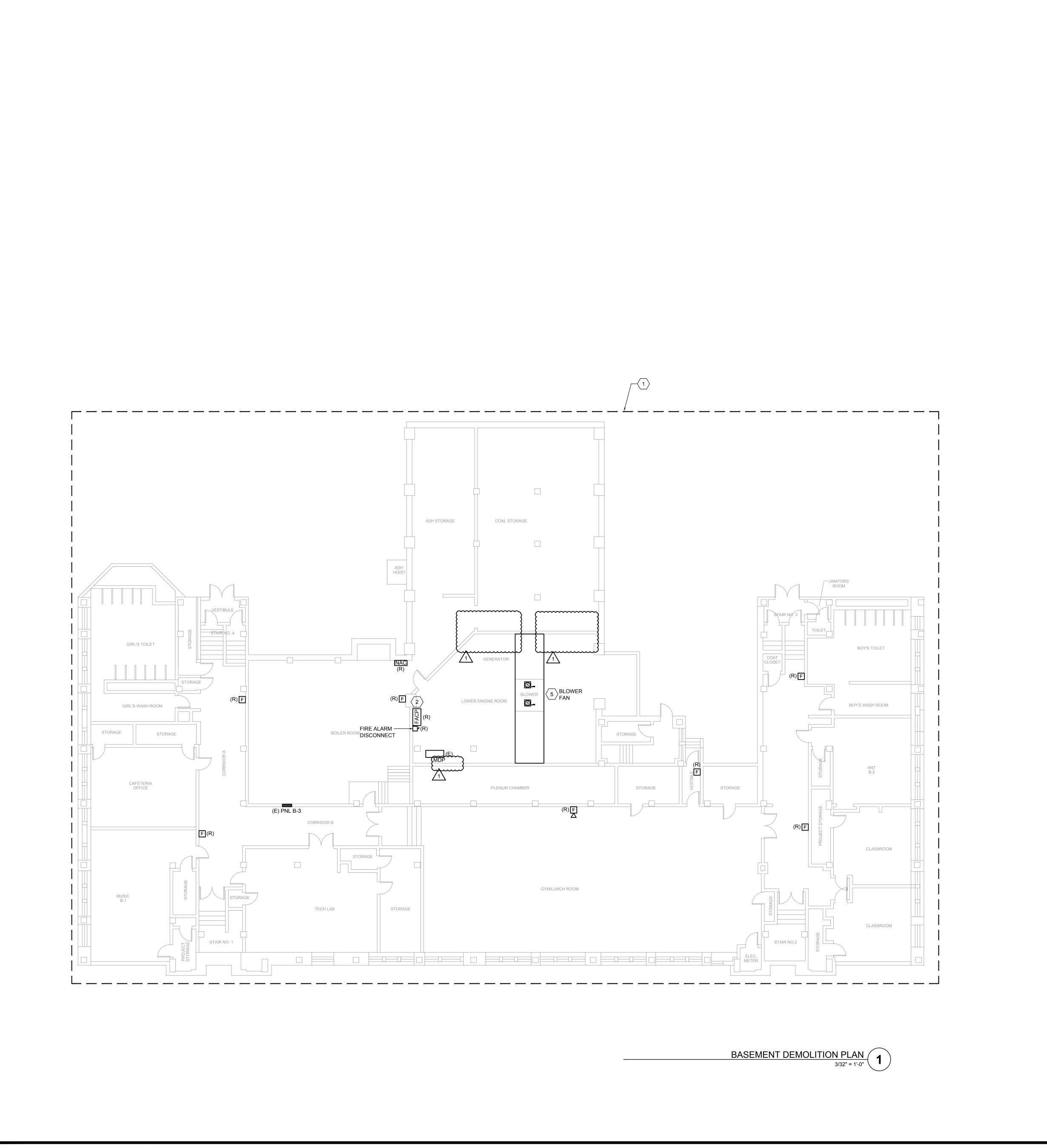
Drawing E602 – Removed Single Line Diagram and Motor Schedule

#### **Specifications**

Section 230513 – Removed from project specifications.

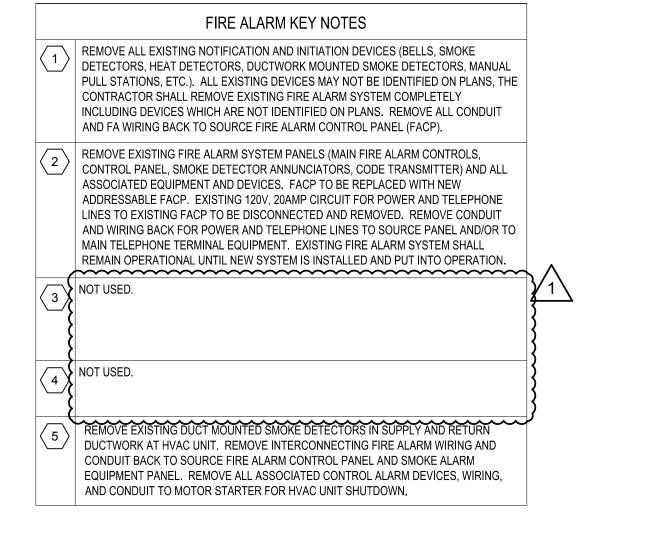
Section 262913 – Removed from project specifications.

**End of Addendum** 

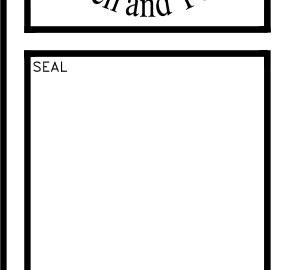


# FIRE ALARM GENERAL NOTES

- A. EXISTING FIRE ALARM SYSTEM SHALL BE REMOVED AND REPLACED WITH NEW. EXISTING FA SYSTEM SHALL REMAIN OPERABLE UNTIL NEW SYSTEM HAS BEEN INSTALLED, TESTED, APPROVED, AND UNDER OPERATION AS DIRECTED BY ENGINEER, FIRE MARSHALL, SDP, AND THE AUTHORITY HAVING JURISDICTION THAT THE NEW SYSTEM IS APPROVED AND THE EXISTING SYSTEM CAN BE REMOVED.
- B. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO START OF WORK TO SURVEY THE EXISTING CONDITIONS OF THE BUILDING AND THE EXISTING FIRE ALARM SYSTEM TO BE DEMOLISHED.
- C. FLOOR PLAN SHOWN IS FOR SCHEMATIC PURPOSES ONLY, UNLESS OTHERWISE NOTED, CONTRACTOR IS TO REMOVE ALL FIRE ALARM DEVICES, WIRING, JUNCTION BOXES, CONDUITS, AND ASSOCIATED APPURTENANCES WITHIN SCOPE OF DEMOLITION. CONTRACTOR SHALL REMOVE ALL FIRE ALARM CIRCUITRY BACK TO SOURCE, FOR ALL DEVICES TO BE REMOVED UNDER DEMOLITION. FIRE ALARM CIRCUITS DETERMINED TO BE ABANDONED SHALL BE REMOVED PER NEC 760.25. JUNCTION BOXES AND CONDUITS EMBEDDED IN CONCRETE OR WALL MAY REMAIN, CONDUIT MUST BE CUT AT WALL BOUNDARY AND SEALED. JUNCTION BOXES TO BE COVERED WITH METAL BLANK COVER PLATE. EXISTING RECESSED JUNCTION BOXES AND DEVICE BOXES SHALL BE COVERED WITH METAL COVER PLATES AND SHALL BE PAINTED TO MATCH ADJACENT FINISHED SURFACES.
- D. LEGALLY DISPOSE OF DEVICES INDICATED TO BE REMOVED. OFFER EQUIPMENT TO OWNER AND DISPOSE OF EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN.
- E. ALL EXISTING 120VOLT, 20AMP CIRCUITS CURRENTLY UTILIZED FOR THE EXISTING FIRE ALARM SYSTEM TO BE REMOVED. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE PANEL BOARD.
- PRIOR TO START OF THE FIRE ALARM SYSTEM SCOPE OF WORK, CONTRACTOR MUST REVIEW AND COMPLY WITH THE ASBESTOS INSPECTION REPORT (AIR) FOR ALL ASBESTOS CONTAINING AREAS AND BUILDING MATERIALS TO REMAIN AS IS. DEMOLITION OF EXISTING FIRE ALARM DEVICES & EQUIPMENT, AND CONDUITS SHALL BE COORDINATED WITH THE AIR TO AVOID ALL ASBESTOS CONTAINING WALLS, CEILINGS, AND FLOORS. THERE SHALL BE NO COST TO THE SCHOOL DISTRICT OF PHILADELPHIA FOR DEMOLITION OF DEVICES, EQUIPMENT, AND CONDUITS WHICH MUST BE COORDINATED TO AVOID ALL ASBESTOS CONTAINING WALLS, CEILINGS, AND FLOORS.









RE ALARIM SYSTEM REPLACEMENT
WING TITLE
SEMENT FIRE ALARIM SYSTEM
DEMOLITION PLAN

THE SCHOOL REFORM COMMISSION

DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES

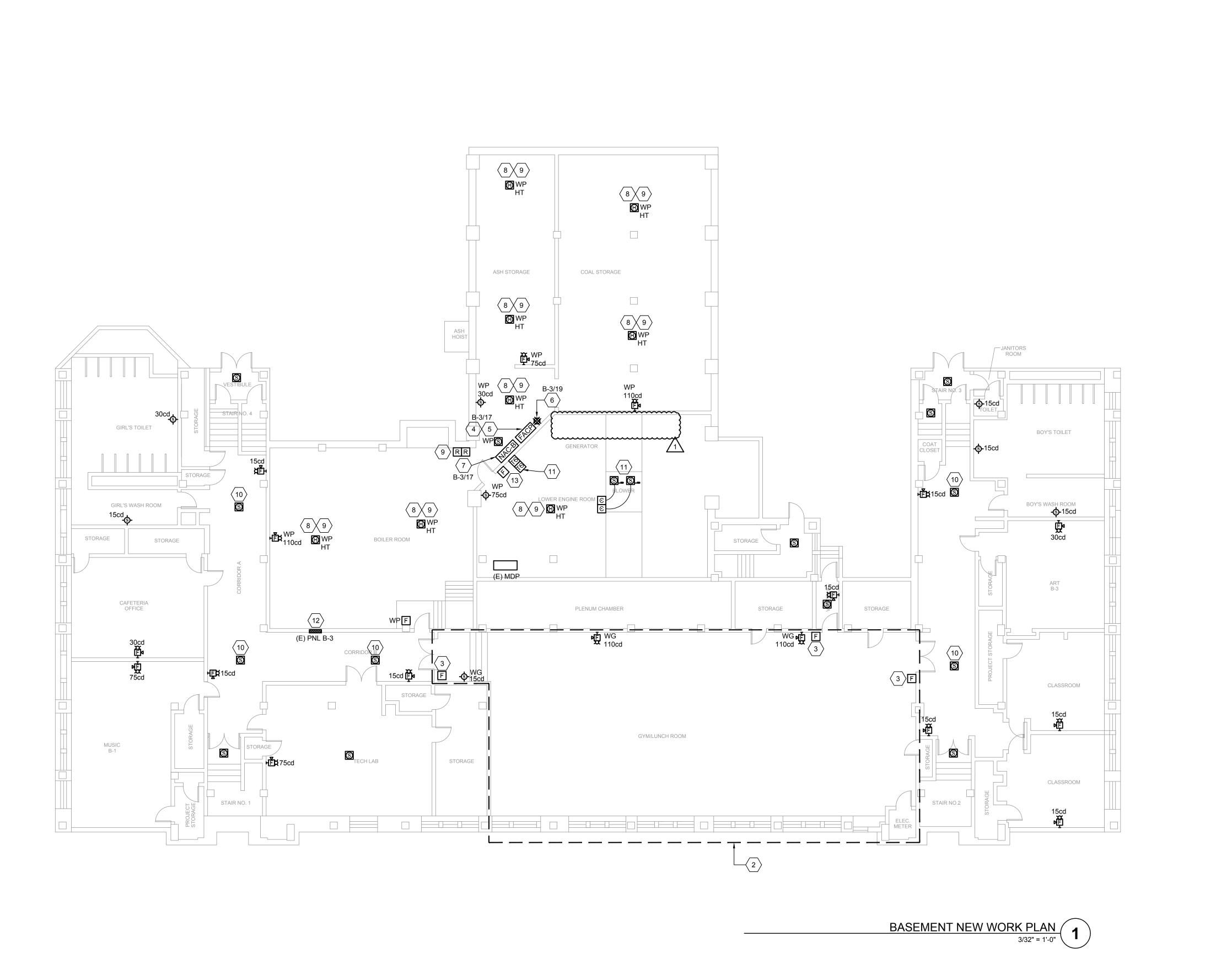
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SPEC NO.	DATE
B-008C OF 2017/18	12.21.17
SCALE	LOCATION NO.
NONE	8250
DRAWN BY	TYPE NO.
BAS	144
CHECKED BY	FILE NO.
NVP	127



B-008C OF 2017/18



FIRE ALARM GENERAL NOTES:

- A. PRIOR TO START OF THE FIRE ALARM SYSTEM SCOPE OF WORK, CONTRACTOR MUST REVIEW AND COMPLY WITH THE ASBESTOS INSPECTION REPORT (AIR) FOR ALL ASBESTOS CONTAINING AREAS AND BUILDING MATERIALS TO REMAIN AS IS. ALL FINAL DEVICE & EQUIPMENT LOCATIONS AND CONDUIT ROUTES SHALL BE COORDINATED WITH THE AIR AND EH DRAWINGS TO AVOID ALL ASBESTOS CONTAINING WALLS, CEILINGS, AND FLOORS. THERE SHALL BE NO COST TO THE SCHOOL DISTRICT OF PHILADELPHIA FOR DEVICES, EQUIPMENT AND CONDUIT WHICH MUST BE RELOCATED TO AVOID ALL ASBESTOS CONTAINING WALLS, CEILINGS, AND FLOORS.
- B. SEE DRAWING E601, FIRE ALARM SYSTEM RISER NOTES #13 FOR SPARE PARTS EQUIPMENT/DEVICES REQUIREMENTS.
- C. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.
- D. ALL NEW FIRE ALARM DETECTION AND SUPPRESSION DEVICES SHALL BE INSTALLED, TESTED AND ACCEPTED PRIOR TO OCCUPANCY. THE LOCAL AUTHORITY HAVING JURISDICTION SHALL PERFORM ALL FINAL ACCEPTANCES.
- E. ALL FIRE ALARM POINTS MUST BE TRANSMITTED TO THE CENTRAL MONITORING STATION. EACH FIRE ALARM POINT MUST SEND THE CENTRAL MONITORING STATION A RESTORE CODE FOR EACH POINT.
- F. ALL DEVICES CONTAINING END OF LINE RESISTORS SHALL BE LABELED 'EOL'.
- G. PROVIDE SIGNAGE AT EACH MANUAL PULL STATION, SIGN MUST BE MOUNTED IMMEDIATELY ADJACENT TO THE MANUAL PULL STATION. THE SIGN SHALL READ "INCASE OF FIRE: SOUND ALARM AND CALL THE FIRE DEPARTMENT".
- H. ALL FIRE ALARM WIRING SHALL BE IN METAL CONDUIT. PROVIDE GALVANIZED RIGID STEEL CONDUIT FOR ALL RISER CONDUITS AND ALL CONDUITS IN MECHANICAL, ELECTRICAL AND BOILER ROOMS. PAINT ALL JUNCTION BOXES WITH RED COLOR PAINT AND LABEL AS "FIRE ALARM".
- I. THE VENDOR/CONTRACTOR/MANUFACTURER TO RECOMMEND FOR APPROVAL THE QUANTITY AND LOCATION OF ALL NETWORK EXTENDER/DATA GATHERING PANELS WITHIN SHOP DRAWING SUBMITTALS, LOCATIONS SHOWN ON PLAN ARE BASED ON OWNER/ENGINER PREFERRED LOCATIONS.
- J. ELECTRICAL CONTRACTOR SHALL USE CONDUIT SEALING FITTING WITH APPROVED SEALING COMPOUND ON ALL CONDUITS PASSING FROM INTERIOR TO EXTERIOR OF A BUILDING AND BETWEEN AREAS OF DIFFERENT TEMPERATURES. SEAL ALL CONDUIT PENETRATIONS THOUGH RATED WALLS AND FLOORS TO MAINTAIN FIRE RATING INTEGRITY.
- K. WIRING TO BE RUN IN EMT CONDUIT AND COMPLY WITH NEC ARTICLE 760. CONDUIT TO BE CONCEALED WHERE POSSIBLE. MINIMUM CONDUIT SIZE TO BE 3/4"C. ALL WIRING TO BE COPPER. ALL RISER CONDUIT AND CONDUIT IN MECHANICAL, ELECTRICAL, AND BOILER ROOM SHALL BE RIGID STEEL GALVANIZED CONDUIT. ALL CONDUIT AND WIRING ROUTING BETWEEN FLOORS TO BE ROUTED IN RIGID CONDUIT WITH SEAL FITTING BELOW THE CEILING BEFORE PENETRATING THE FLOOR SLAB. TYPE 'MC' CABLE IS NOT ACCEPTABLE.
- L. HVAC UNIT/AIR HANDILING EQUIPMENT ITEMS: PROVIDE ADDRESSABLE DUCT DETECTORS AND PERFORM HVAC UNIT SHUT DOWN
- PROVIDE HVAC UNIT SHUTDOWN UPON FIRE ALARM SYSTEM ALARM CONDITIONS VIA CONTROL MODULES. WIRE OUTPUTS ON CONTROL MODULE TO HVAC UNIT STARTER CIRCUIT.
- 3. FIRE ALARM CONTROL PANEL IS TO HAVE A FIREMANS "SHUTOFF" SWITCH FOR EACH HVAC UNIT IN THE BUILDING AND A SINGLE SWITCH TO TURN OFF ALL HVAC UNITS. SWITCHES TO BE CONNECTED TO FIRE ALARM CONTROL PANEL. CONTROL PANEL TO PERFORM HVAC UNIT SHUTDOWN VIA ADDRESSABLE CONTROL MODULE OUTPUT RELAYS LOCATED AT EACH HVAC UNIT.
- M. THE QUANTITY OF FIRE ALARM NAC EXTENDER POWER SUPPLY PANELS SHOWN ON THESE DRAWINGS AND THE RISER DIAGRAM ARE FOR SCHEMATIC PURPOSES ONLY. THE CONTRACTOR AND FIRE ALARM VENDOR SHALL DETERMINE THE EXACT QUANTITY OF NAC PANELS REQUIRED BASED ON THE MANUFACTURER'S NAC PANEL FUNCTION AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE QUANTITY OF NAC PANELS REQUIRED TO SUPPORT THE ENTIRE FIRE ALARM SYSTEM BASED ON THE QUANTITY OF DEVICES SHOWN ON PLAN, TOTAL POWER NEEDED TO SUPPORT THE DEVICES, VOLTAGE DROP CALCULATIONS FOR EACH CIRCUIT, BATTERY CALCULATIONS, SIZE OF BUILDING, ETC. THE CONTRACTOR SHALL PROVIDE 120V, 20AMP CIRCUITS (EMERGENCY POWER IS AVAILABLE IN BLDG.) FOR ALL NAC PANELS THAT ARE INSTALLED BASED ON THE FIRE ALARM VENDOR'S CALCULATIONS AT NO ADDITIONAL COST TO SDP.

# FIRE ALARM KEY NOTES

- CONVENTIONAL TYPE FIRE ALARM DEVICES WITHIN SPACE. PROVIDE PROTECTIVE WIREGUARD FOR ALL FIRE ALARM DEVICES WITHIN GYM.
- PROVIDE PULL STATION WITH PROTECTIVE COVER AND ALARM.
- NEW FACP. PROVIDE 120V, 20AMP CIRCUIT FROM PANELBOARD IDENTIFIED FOR FACP.
- PROVIDE CIRCUIT WITH (2) #12 + (1) #12 GND. IN 3/4" CONDUIT. PROVIDE FACP WITH DIGITAL ALARM COMMUNICATOR TRANSMITTER (DACT) FOR 5 OFF-PREMISES MONITORING OF THE FACP ALARM POINTS. PROVIDE (2) CAT 6 CABLES
- SYSTEM WITH SDP IT DEPARTMENT. Note: New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified for New 1200, 20amp power circuit from panelboard identified from the New 1200, 20amp power circuit from the FACP SYSTEM PRINTER RECEPTACLE. PROVIDE CIRCUIT WITH (2) #12 + (1) #12 GND. IN 3/4" CONDUIT.

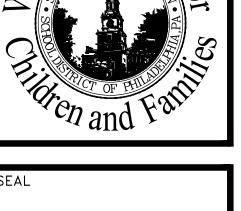
FROM THE FACP TO THE SCHOOL'S MAIN IT RACK. COORDINATE CONNECTION TO PHONE

- NEW FIRE ALARM REMOTE BOOSTER POWER SUPPLY (NAC). PROVIDE 120V, 20AMP POWER CIRCUIT FROM PANELBOARD IDENTIFIED FOR FIRE ALARM REMOTE BOOSTER POWER SUPPLIES (NAC). PROVIDE CIRCUIT WITH (2) #12 + (1) #12 GND. IN 3/4" CONDUIT.
- FIELD COORDINATE EXACT LOCATIONS OF HEAT DETECTORS. DEVICES TO BE MOUNTED BELOW ALL DUCTWORK, PIPING, AND CONDUIT. DEVICES SHALL BE CLEAR OF ANY OBSTRUCTIONS. DEVICES SHALL BE MOUNTED TO UNISTRUT FRAMING,
- MECHANICAL/BOILER ROOM. PROVIDE A REMOTE RELAY MODULE FOR ALL CONVENTIONAL TYPE NOTIFICATION AND INITIATION DEVICES WITHIN THE MECHANICAL/BOILER ROOM.
- MOUNT SMOKE DETECTOR TO BOTTOM OF DUCTWORK.

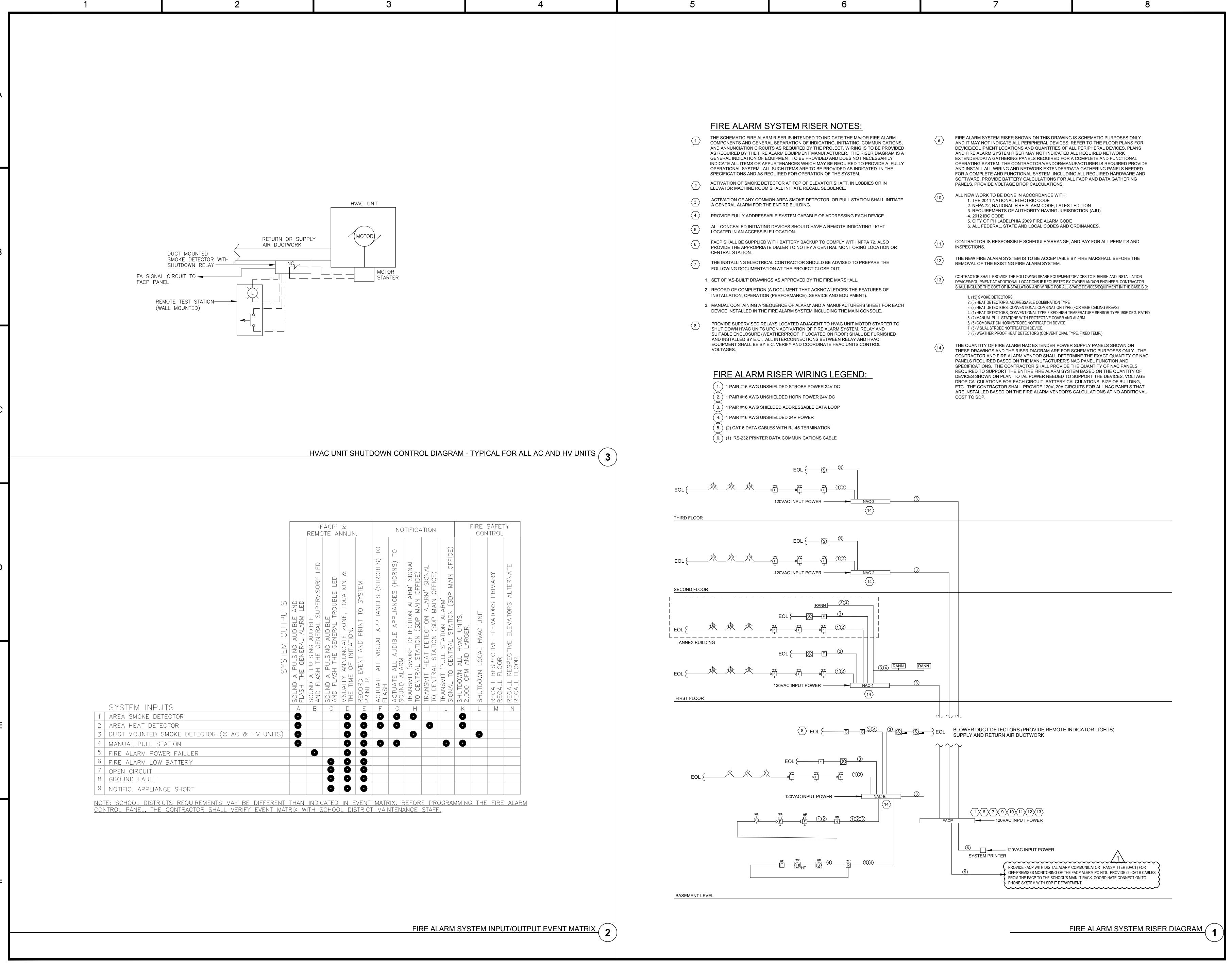
SECURELY FASTENED TO CEILING.

- PROVIDE A DUCT MOUNTED SMOKE DETECTOR IN RETURN DUCT AND SUPPLY DUCT / OF HVAC UNIT. EACH DUCT MOUNTED SMOKE DETECTOR SHALL HAVE REMOTE TEST SWITCH AND LED ALARM INDICATORS. REMOTE TEST SWITCH AND LED ALARM INDICATORS SHALL BE WALL MOUNTED AT 5FT A.F.F. ADJACENT TO HVAC UNIT. PROVIDE AND CONNECT A CONTROL MODULE AT EACH HVAC UNIT'S EXISTING MOTOR STARTER TO SHUTDOWN HVAC UNIT; FIELD VERIFY LOCATION. DEVICES TO BE LOCATED WHERE ACCESSIBLE BY QUALIFIED PERSONNEL ONLY. SEE DRAWING E601, DETAIL #3 FOR CONTROL DIAGRAM.
- EXISTING PANEL BOARD 'B-3', 225AMP, 120/240V, 1-PH, 3-W. PANEL BOARD MANUFACTURER IS B-K ELECTRICAL PRODUCTS, TYPE NQB SERIAL NO. 10859. PROVIDE NEW 120V, 20AMP BRANCH CIRCUIT BREAKERS FOR NEW FIRE ALARM CIRCUITS. PROVIDE (2)#12 + (1)#12 GND. IN 3/4" CONDUIT FOR EACH NEW CIRCUIT IDENTIFIED ON PLAN.
- → PROVIDE A PULL STATION WITH PROVIDE COVER WITHIN BUILDING ENGINEER'S  $\langle 13 \rangle$  OFFICE. FIELD COORDINATE EXACT LOCATION WITH ROOM WITH SDP AND BUILDING

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NVP	131



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CONSULTANTS

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 01.30.18

 ADDENDUM 01

 3
 12.21.17

 BID SUBMISSION

 2
 12.15.17
 90% DESIGN DEVELOPMENT

 1
 11.14.17
 60% DESIGN DEVELOPMENT

 NO. DATE
 REVISION

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B-008C OF 2017/18 12.21.17

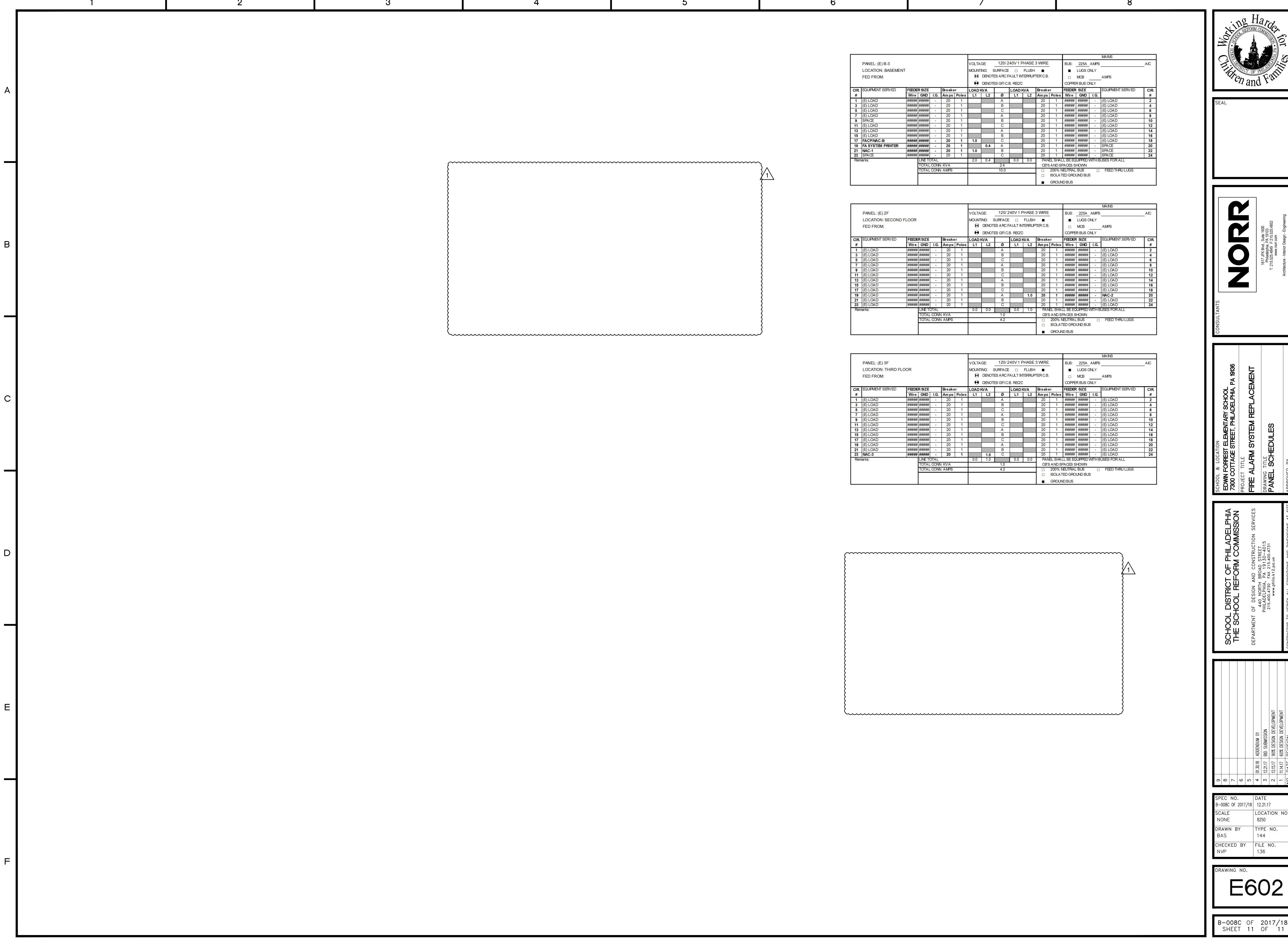
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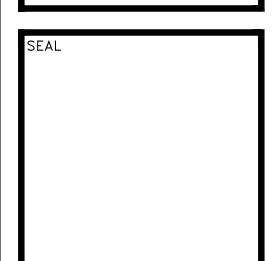
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NVP 135

E601

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SCALE NONE  BAS  CHECKED BY NVP  LOCATION NO. 8250  TYPE NO. 144  FILE NO. 136	SPEC NO. B-008C OF 2017/18	DATE 12.21.17
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