THE SCHOOL DISTRICT OF PHILADELPHIA Office of Capital Programs 440 North Broad Street, 3rd Floor – Suite 371 Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 02

Subject: John F. Hartranft School

SDP Contract No. B-056, B-057C, B-058C of 18/19

Location: John F. Hartranft School

720 West Cumberland Street Philadelphia, PA 19133

This Addendum, dated October 21st, 2020 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.

Bid RFIs:

Question #1:

As per addendum 1, the response to bid RFI question 1 is incomplete. Referencing Drawing M-001 "Bidding Instructions" Copper, steel & pex piping ranges in sizes ¼" up to?? In order to properly value the work per the Bidding Instructions on M-001, the pipe sizes must be provided by the professional/PSD.

Response:

Pipe size and material for bidding purposes shall be as follows:

- 6" steel
- 3" copper
- 3" pex

Question #2:

The response to bid RFI question number 2, your response directs us to drawing M1.1 section L note 4, that drawing does not exist. Kindly provide the correct information.

Response:

Refer to Bid Documents M-002, Section L, Note #4.

Question #3:

On E-101, there is a panel in the gym labeled "LPF" (N) with keynote 1. I believe this should be labeled as "LPE", because on E-101D the gym panel is labeled "LPE" (R) with keynote 1, and because another panel "LPF" is shown elsewhere. Panel LPE is not shown on the single line on E-600. Panel LPE is shown with keynote (1) on the demo single line on E-600D (the rectangle is labeled as "LPC" but the label underneath is shown as "LPE"). Please clarify if we are to replace panel "LPE" in kind. Please provide panel schedule. Please clarify where LPE is fed from and include the feeder size.

Response:

See Addendum #2 drawings, Sheets E-101D, E-600D, E-100, E-600, and E-601.

Question #4:

On E-401, the unit heaters, motor operated dampers, and BMS panel are each shown with a homerun labeled "DP2". These circuits are not shown in the single line on E-600, nor are they shown in the panel schedule on E-601. Please clarify circuitry, as this affects the number of breakers required in distribution panel DP2.

Response:

See Addendum #2 drawings, Sheet E-601 for panel schedule revision.

Question #5:

The response to Addendum 01 question #7 says to follow to the spec for raceway application. The spec says all panelboard feeders are to be in GRC conduit. The revised note 1 on E-001 says to provide EMT for feeder wiring where not subject to physical damage. Please clarify feeder conduit type for locations not subject to physical damage.

Response:

Specification will take precedence. See Addendum #2 drawings, Sheet E-001 for note revision.

Question #6:

Addendum 1 states there is a feeder schedule on E-001, I do not see a feeder schedule, please provide.

Response:

This should have been addressed in Addendum #1. See Addendum #2 drawings, Sheet E-001.

OFFICE OF CAPITAL PROGRAMS

DRAWING INDEX

UNI-VENT & TEMPERATURE CONTROL REPLACEMENT

FOR

JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET PHILADELPHIA, PA 19133

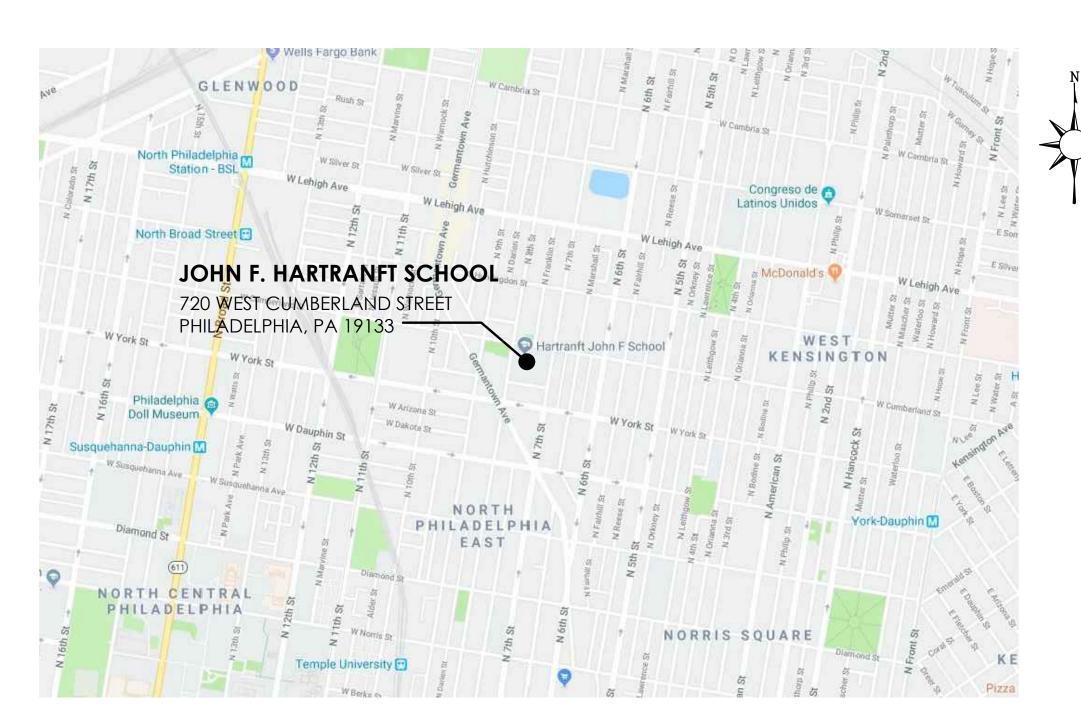
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REQUIREMENTS

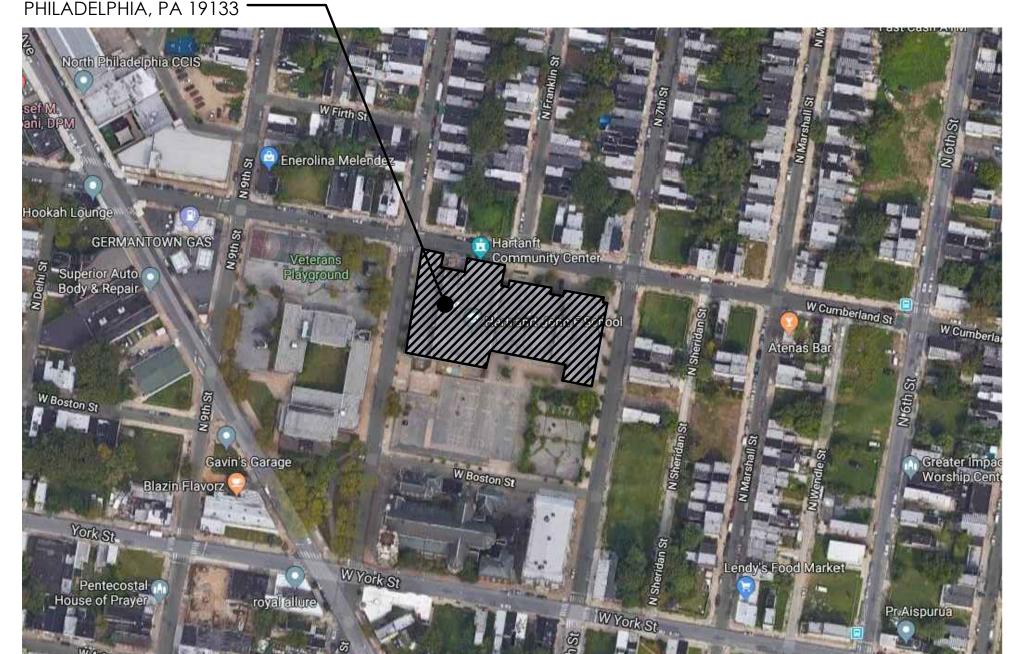
CONTRACT #:

GENERAL CONTRACTOR: #B-056 C OF 18/19 MECHANICAL CONTRACTOR: #B-057 C OF 18/19 **ELECTRICAL CONTRACTOR:** #B-058 C OF 18/19 LOCATION MAPS



JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET



ENLARGED PLAN

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET PHILADELPHIA, PA 19130 - 4015

THE SCHOOL DISTRICT OF PHILADELPHIA

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B-057C OF 18/19 (MECHANICAL CONTRACTOR)

B-058C OF 18/19 (ELECTRICAL CONTRACTOR)

2 | 10.21.20 | ISSUE FOR ADDENDUM #2 1 10.13.20 ISSUE FOR ADDENDUM #1 **0** 07.09.20 ISSUE FOR BID **D** 12.06.19 ISSUE FOR 100% REVIEW C 10.22.19 ISSUE FOR 90% REVIEW **B** 08.06.19 ISSUE FOR 60% REVIEW ▲ 06.07.19 ISSUE FOR 25% REVIEW NO. DATE REVISION SCHOOL & LOCATION JOHN F. HARTRANFT SCHOOL

CONTROL REPLACEMENT

720 WEST CUMBERLAND STREET

PHILADELPHIA, PA 19133

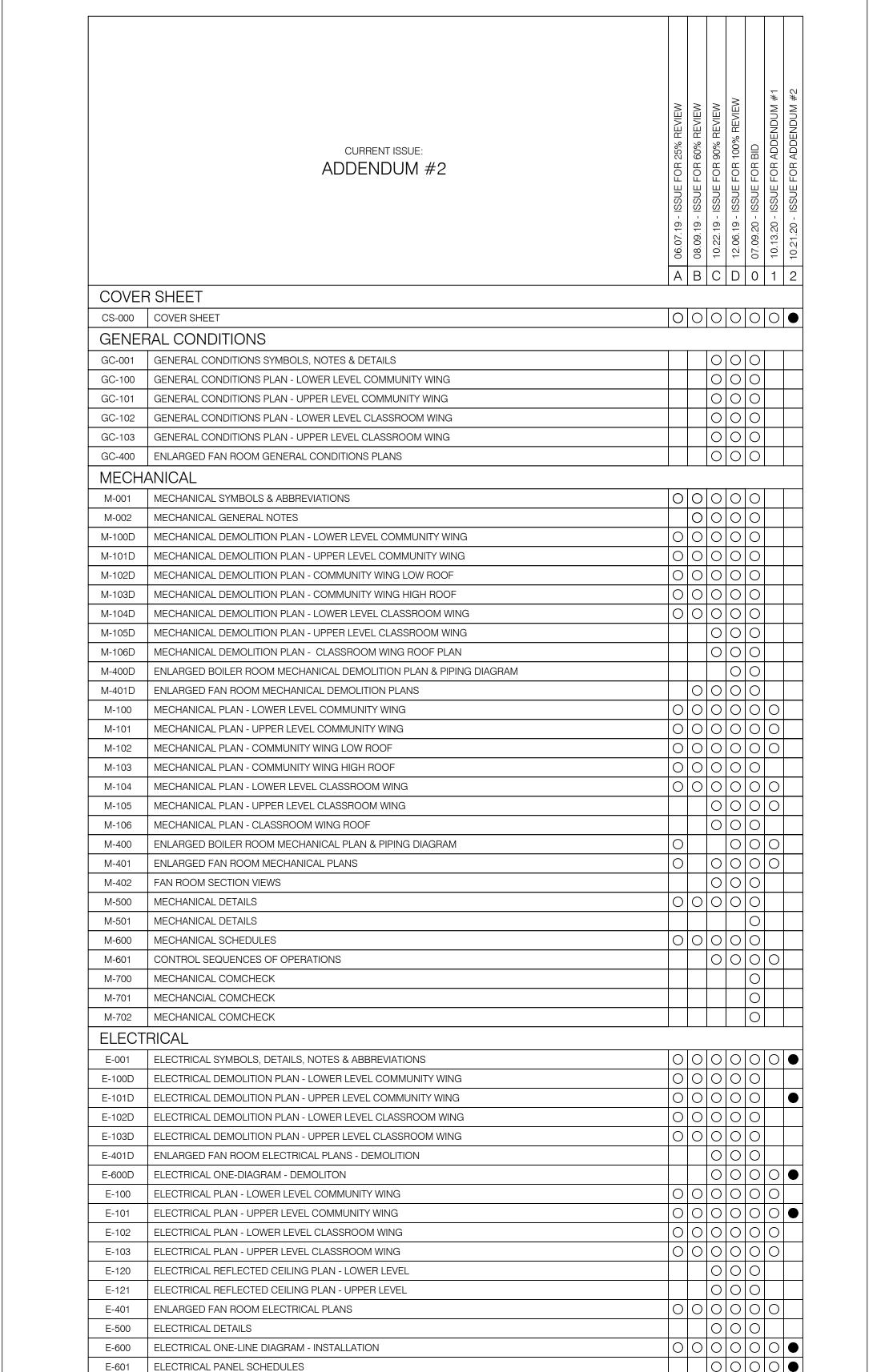
DRAWING TITLE

COVER SHEET

PROJECT TITLE

DRAWN BY CHECKED BY

DRAWING NO.



| CIRCUIT WIRING | | | |
|----------------|--|--|--|
| RP-1 | HOME RUN TO PANEL "RP" INDICATES PANEL NO. & 1 INDICATES CIRCUIT NO | | |
| | BRANCH CIRCUIT WIRING CONSISTING OF THHN COPPER CONDUCTORS RUN IN CONCEALED RACEWAY. IN AREAS WITH NO CEILING RUN OVERHEAD CONDUCTORS IN EXPOSED EMT. EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN ALL CONDUIT/CABLE RUNS %%UNOTE:%%U CONTRACTOR MAY RUN MC CABLE (WHERE APPROVED BY CODE AND BY OWNER) IN WALLS & ABOVE CEILINGS IN FINISHED AREAS ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING QUANTITY OF CONDUCTORS IN RACEWAY. | | |
| | BRANCH CIRCUIT WIRING CONSISTING OF THHN COPPER CONDUCTORS IN APPROPRIATE RACEWAY. RUN UNDERGROUND, IN FLOOR SLAB, OR UNDER FLOOR. | | |
| | LOW VOLTAGE OR CONTROL WIRING CONSISTING OF THHN COPPER CONDUCTORS RUN IN EMT CONDUIT. | | |
| | BRANCH CIRCUIT WIRING CONSISTING OF CONDUCTORS RUN IN FLEXIBLE METAL CONDUIT TO LIGHTING FIXTURE OR MOTORIZED EQUIPMENT. RUN IN "SEALTITE" FOR ALL PUMP CONNECTIONS. 6'-0" MAX. UNSUPPORTED LENGTH FOR LIGHTING FIXTURES AND 30" FOR OTHER EQUIPMENT. THIS SYMBOL COULD ALSO REPRESENT A FLEXIBLE CORD FINAL CONNECTION TO LIGHT FIXTURES. | | |

| | WIRING DEVICES |
|-----------------|---|
| φ | TAMPER RESISTANT SINGLE DUPLEX RECEPTACLE NEMA 5-20R (1); HUBBELL #RR151ITR (IVORY) IN TWO GANG BO |
| Ф | TAMPER RESISTANT DUPLEX RECEPTACLE NEMA 5-20R; HUBBELL #HBL5362ITR (IVORY) IN SINGLE GANG BOX |
| # | TAMPER RESISTANT DOUBLE DUPLEX RECEPTACLE NEMA 5-20R (2); HUBBELL #HBL5362ITR (IVORY) IN TWO GANG BOX |
| P | TAMPER RESISTANT GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, NEMA 5-20R; HUBBELL GFTRST15I (IVORY) IN SINGLE GANG BOX. |
| P GFI WP | TAMPER & WEATHER RESISTANT GFCI RECEPTACLE, NEMA 5-20R; HUBBELL #GFTWRST15GY (GRAY), WITH CARLON #E9UVCRN WEATHERPROOF COVER PLATE. (UL LISTED FOR "WET LOCATIONS" WHILE IN USE.) |
| • | SPECIAL PURPOSE RECEPTACLE, NEMA CONFIGURATION PER DRAWINGS OR AS REQUIRED TO MATCH EQUIPMENT NAMEPLATE REQUIREMENTS. |
| \$HV | SINGLE POLE TOGGLE SWITCH; HUBBELL #1221, 20A-120/277V IN SINGLE GANG BOX |
| \$3HV | THREE-WAY TOGGLE SWITCH; HUBBELL #1223, 20A-120/277V IN SINGLE GANG BOX |
| \$4HV | FOUR-WAY TOGGLE SWITCH; HUBBELL #HBL1224, 20A-120/277V IN SINGLE GANG BOX |
| \$M | SINGLE POLE MOTOR RATED TOGGLE SWITCH; HUBBELL #HBL7832D, 30A, IN SINGLE GANG BOX |
| \$M2 | TWO POLE MOTOR RATED SWITCH; #HBL1392D, 30A, W/ ENCLOSURE |
| \$M3 | THREE POLE MOTOR RATED SWITCH; HUBBELL #HBL1379D, 30A, W/ ENCLOSURE |
| \$WP | SINGLE POLE MOTOR RATED TOGGLE SWITCH; HUBBELL #HBL7832D, 30A IN SINGLE GANG WEATHERPROOF BOX WITH WEATHERPROOF COVER |
| \$рну | SINGLE POLE DIMMER SWITCH IN SINGLE GANG BOX; INCANDESCENT— LUTRON #NTF-600—IV (600W, 120V), #NTF-1000—IV (1000W, 120V) #NTF-1500—IV (1500W, 120V), #NTF-2000—IV (1950W, 120V) FLUORESCENT— LUTRON #NTF-10—IV (1920W, 120V), #NTF-10—277—IV (2200W, 277V) ELECTRONIC LOW VOLTAGE— LUTRON #NTELV-300—IV (300W, 120V), #NTELV-600—IV (600W, 120V) MAGNETIC LOW VOLTAGE— LUTRON #NTLV-600—IV (450W, 120V), #NTLV-1000—IV (800W, 120V) FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GANGING AND DERATING |
| \$D3HV | THREE-WAY DIMMER SWITCH IN SINGLE GANG BOX; INCANDESCENT- LUTRON #NT-603P-IV (600W, 120V), #NT-1003P-IV (1000W, 120V) #NT-1503P-IV (1500W, 120V) FLUORESCENT - LUTRON #NTF-103P-IV (1920W, 120V), #NTF-103P-277-IV (2200W, 277V) FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GANGING AND DERATING |

| POWER DISTRIBUTION | | | | |
|--------------------|---|--|--|--|
| | FUSED DISCONNECT SWITCH HEAVY DUTY TYPE. SEE DRAWINGS FOR SIZE, VOLTAGE AND FUSE SIZE. PROVIDE DUAL ELEMENT TIME DELAY TYPE RK5 FUSES | | | |
| | NON FUSED DISCONNECT SWITCH HEAVY DUTY TYPE. SEE DRAWINGS FOR SIZE AND VOLTAGE | | | |
| \bowtie | COMBINATION STARTER AND C/B DISCONNECT HEAVY DUTY TYPE. SEE DRAWINGS FOR SIZES, HP AND VOLTAGE. FURNISHED AND INSTALLED BY E.C. UNLESS NOTED. | | | |
| | PANEL BOARD SQUARE "D" # NQ FOR 208/120 VOLT 30 FOR BRANCH CIRCUIT PANEL BOARDS # NF FOR 480/277 VOLT 30 FOR BRANCH CIRCUIT PANEL BOARDS | | | |
| ① □ | JUNCTION BOX | | | |
| | | | | |

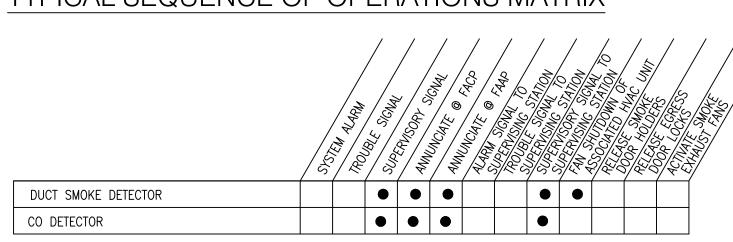
(ALL WIRING DEVICES SHALL BE AS SPECIFIED OR APPROVED EQUAL, SHOP DRAWINGS

ARE REQUIRED FOR ALL DEVICES; COLOR OF WIRING DEVICES AS PER ARCHITECT)

| FIRE ALARM DEVICES | | | | |
|--------------------|--|--|--|--|
| FACP | FIRE ALARM CONTROL PANEL. | | | |
| MM | ADDRESSABLE MONITOR MODULE | | | |
| © | CARBON MONOXIDE DETECTOR | | | |
| 2 | DUCT SMOKE DETECTOR HOUSING W/ RELAY MODULE & REMOTE TEST SWITCH; PROVIDE ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR; (LOCATE REMOTE TEST SWITCH IN PROXIMITY OF ASSOCIATED HVAC UNIT) | | | |

JUNCTION BOX FOR HARD WIRE CONNECTION TO EQUIPMENT

TYPICAL SEQUENCE OF OPERATIONS MATRIX



NOTE: CONTRACTOR SHALL PROVIDE MATRIX FOR PROPOSED INSTALL AS PART OF SHOP DRAWING SUBMITTAL

ELECTRICAL GENERAL NOTES

REFER TO SPECIFICATIONS FOR CONDUIT REQUIREMENTS. ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, PARALLEL & PERPENDICULAR TO BUILDING STRUCTURE.

ABBREVIATIONS

LSIG

MCCB

MEP

MFR

MISC

MTG

MTS

NEC

N.I.C

NFSS

OFCI

PDU

РΗ, φ

RUPS

SDP

SEC

SPD

STD

STP

STS

SYM

SYS

TVSS

UH, EUH

UON, UNO

VFD

MECH

DESCRIPTION

LONG TIME

LIGHTING

LIGHTING PANEL

GROUND FAULT.

MECHANICAL

MANHOLE

MOUNTED

MOUNTING

MANUFACTURER

MISCELLANEOUS

MAIN LUGS ONLY

MEDIUM VOLTAGE

NEUTRAL/NORMAL

NORMALLY CLOSED

NORMALLY OPEN

NOT IN CONTRACT

NIGHT LIGHT

PHOTOCELL

PHASE

POWER

PRIMARY

QUANTITY

ROOM

ROTARY UPS

SECONDARY

SPECIFICATION

SPEAKER

SHUNT TRIP

STANDARD

SWITCHBOARD

SYMMETRICAL

TELEPHONE

TERMINAL BLOCK

UNDER COUNTER

UNDERGROUND

UNDERWRITERS LABORATORY

UNLESS OTHERWISE NOTED

UNSHIELDED TWISTED PAIR

VARIABLE AIR VOLUME BOX

VARIABLE FREQUENCY DRIVE

UNINTERRUPTIBLE POWER SUPPLY

UNIT HEATER

VOLTMETER

WIRE/WATT WITH

WATTMETER

WATERTIGHT

DELTA

WEATHERPROOF

WITH WIREGUARD

TRANSFORMER

TRANSFORMER

GROUNDED WYE

VOLTMETER SWITCH

TRANSIENT VOLTAGE SURGE SUPPRESSOR

SWITCHGEAR

SYSTEM

TYPICAL

SWITCH

REC, RECEPT | RECEPTACLE

REQ, REQD REQUIRED

POWER SUPPLY

POWER FACTOR

NOT TO SCALE

OCCUPANCY SENSOR

PUSHBUTTON/PULLBOX

POWER DISTRIBUTION UNIT

POWER MONITORING SYSTEM

PANEL OR PANELBOARD

POTENTIAL TRANSFORMER

EXISTING TO BE REMOVED

SHORT CIRCUIT AMPERES

SURGE PROTECTIVE DEVICE

SHIELDED TWISTED PAIR

STATIC TRANSFER SWITCH

SHORT CIRCUIT CURRENT RATING

SCHOOL DISTRICT OF PHILADELPHIA

POLYVINYL CHLORIDE

MANUAL TRANSFER SWITCH

NATIONAL ELECTRICAL CODE

NON-FUSED SAFETY SWITCH

OWNER FURNISHED, CONTRACTOR INSTALLED

MINERAL INSULATED

MECHANICAL CONTRACTOR

MAIN CIRCUIT BREAKER

MOTOR CONTROL CENTER

MOTOR CIRCUIT PROTECTOR

MOLDED CASE CIRCUIT BREAKER

MECHANICAL, ELECTRICAL, PLUMBING

METER

LOCAL AREA NETWORK

LONG TIME. SHORT TIME. INSTANTANEOUS.

LONG TIME. SHORT TIME. INSTANTANEOUS.

SYMBOL DESCRIPTION

AMBIENT AIR

ALTERNATING CURRENT

ABOVE FINISH FLOOR

ABOVE FINISH GRADE

AIR HANDLING UNIT

AMPERE FUSE

ALUMINUM

ARCHITECT

AUXILIARY

BREAKER

BUILDING

BYPASS

CIRCUIT

AUDIO VISUAL

AMERICAN WIRE GAUGE

CONDUIT - RACEWAY

CLOSED CIRCUIT TELEVISON

CABLE TELEVISION

CIRCUIT BREAKER

COAXIAL CABLE

COMMUNICATIONS

CARD READER

COPPER

DEDICATED

DIAMETER

DRAWING

DOWN

DISTRIBUTION

EXHAUST FAN

ELEVATOR

EQUIPMENT

FIRE ALARM

FORCED AIR

FEEDER

FUTURE

GND, GRD | GROUND OR GROUNDING

GENERATOR

GROUND FAULT

HAND HOLE

HORSEPOWER

INSTANTANEOUS

JUNCTION BOX

KILOAMPERES

KILOWATTS

KILOVOLTS

KVA REACTIVE

LOCKING TYPE/LOAD

LIGHTNING SURGE ARRESTOR

KILOVOLT AMPERES

KILOWATT HOUR

ISOLATED GROUND

EMERGENCY

END OF LINE DEVICE

EMERGENCY POWER OFF

ELECTRIC WATER COOLER

FIRE ALARM ANNUNCIATOR PANEL

FIRE ALARM CONTROL PANEL

FIRE COMMAND CENTER

FULL LOAD AMPERES

FAN POWERED BOX

FULL VOLTAGE REVERSIBLE

GROUND OR GROUNDING

HIGH INTENSITY DISCHARGE

HAND-OFF-AUTOMATIC SWITCH

INTERMEDIATE METAL CONDUIT

THOUSAND CIRCULAR MILS

KEY LOCK (KEY INTERLOCK SCHEME)

FULL VOLTAGE NON-REVERSIBLE

GROUND FAULT CIRCUIT INTERRUPTER

GENERATOR PARALLELING SWITCHGEAR GALVANIZED RIGID STEEL CONDUIT

FUSED SWITCH

CONTROL SWITCH

DIRECT CURRENT

CABINET UNIT HEATER

CURRENT TRANSFORMER

DIRECT DIGITAL CONTROL

DIRECT DIGITAL CONTROL

EXISTING TO REMAIN

ELECTRICAL CONTRACTOR

ELECTRICAL METALLIC TUBING

ENERGY REDUCTION MAINTENANCE SWITCH | SCCR

CONTROL POWER TRANSFORMER

CENTRAL PROCESSING UNIT

CENTERLINE

COLUMN

ABOVE COUNTER RECEPTACLES

AMPERE FRAME (CIRCUIT BREAKER)

AMPERE INTERRUPTING CAPACITY

AMPERE TRIP (CIRCUIT BREAKER)

AUTOMATIC TRANSFER SWITCH

BUILDING AUTOMATION SYSTEM

A, AMP

ACR

ARCH

AUX

A/V

BAS

BKR

BLDG

BYP, BP

CATV, TV

C/B, CB

CCTV

CKT

CLG

COAX

C/L

COL

COMM

CUH

DDC

DIST

DWG

ELEV

EOL

EQUIP

ERMS

EWC

FACP

FCU

FDR

FLA

FPB

F/S

FUT

FVR

FVNR

GEN

GRC

I/INST

JB, JBOX

KVA

KVAR

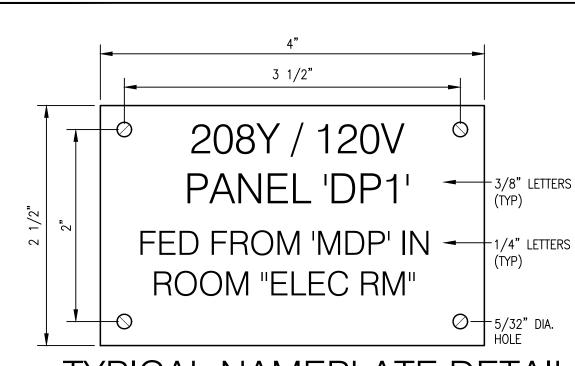
GFCI, GFI

DEMO

- MINIMUM CONDUIT SIZE SHALL BE 3/4". UNLESS NOTED OTHERWISE. MINIMUM WIRE SIZE SHALL BE #12 AWG TYPE THHN/THWN FOR POWER AND #14 THHN/THWN FOR CONTROL. ALL WIRING TO BE COPPER
- 4. ALL RACEWAYS RUNNING THROUGH BUILDING EXPANSION JOINTS SHALL BE EQUIPPED WITH EXPANSION FITTINGS.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE PHILADELPHIA FIRE CODE, IBC 2018, IECC 2018, IFC 2018, THE LATEST STATE CODES, AND ALL LOCAL CODES.
- 6. ALL ELECTRICAL EQUIPMENT, INCLUDING, BUT NOT LIMITED TO CONDUIT, WIRE, BOXES, AND FITTINGS, SHALL BE NEW AND FREE OF DEFECTS, SHALL BEAR THE THE UL LABEL, AND SHALL MEET NEMA AND ANSI STANDARDS.
- 7. ALL WORK AND MATERIALS SHALL BE GUARANTEED FREE FROM DEFECTS FOR A MINIMUM PERIOD OF ONE YEAR UNLESS NOTED OTHERWISE. THE WARRANTY PERIOD SHALL BEGIN AT THE DATE OF BENEFICIAL OCCUPANCY OF THE SPACE UNLESS NOTED OTHERWISE IN THE PROJECT SPECIFICATIONS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR FILING AND PAYING ALL FEES AND OBTAINING NECESSARY PERMITS, CERTIFICATES OF INSPECTION AND SHALL DELIVER ALL CERTIFICATES OF INSPECTION TO OWNER/ CONSTRUCTION MANAGER OR GENERAL CONTRACTOR INCLUDING COPIES WITH MAINTENANCE MANUALS.
- 9. ALL NEW BRANCH CIRCUITS SHALL CONTAIN DEDICATED NEUTRAL CONDUCTORS. DO NOT SHARE NEUTRAL CONDUCTORS.
- 10. CONTRACTOR IS RESPONSIBLE FOR CREATING AND TURNING OVER COMPLETE RED LINED AS BUILT DRAWINGS TO INDICATE ANY DEVIATIONS IN DESIGN DOCUMENTS. CONTRACTOR SHALL SUBMIT BOTH HARD COPIES AND DIGITAL COPIES OF "AS-BUILT" DRAWINGS UPON ACCEPTANCE OF COMPLETION OF CONSTRUCTION.
- 11. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND CONFIRM ALL EXISTING SITE CONDITIONS WHICH DEVIATE FROM DRAWINGS WITH THIS ENGINEER.
- 12. CONTRACTOR SHALL PROVIDE BACK BOX & 1/2" EMT TO NEAREST ACCESSIBLE CEILING FOR ALL THERMOSTATS/SENSORS. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS.

ELECTRICAL DEMOLITION NOTES

- REFER TO MECHANICAL/PLUMBING DRAWINGS & SPECIFICATIONS FOR THE DEMOLITION SCOPE OF WORK THAT WILL AFFECT DIVISION 26. THE CONTRACTOR SHALL REMOVE ALL DISCONNECTS, WIRING, CONDUIT, & CONNECTIONS TO HVAC & PLUMBING EQUIPMENT THAT IS BEING REMOVED OR ABANDONED. REMOVE ALL WIRING & CONDUIT BACK TO SOURCE.
- REFER TO SPECIFICATIONS FOR THE DEMOLITION SCOPE OF WORK THAT WILL AFFECT DIVISION 26. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT, WIRING & CONDUIT IN CEILINGS, PARTITIONS, OR FLOORS THAT ARE TO BE REMOVED.
- THE CONTRACTOR SHALL DISCONNECT, REMOVE AND MAKE SAFE ALL ELECTRICAL WIRING FOR EQUIPMENT TO BE REMOVED WITHIN DEMOLITION SPACE BACK TO THE POINT OF CONNECTION.
- 4. CONTRACTOR SHALL VERIFY ALL EXISTING SOURCES OF POWER TO EQUIPMENT PRIOR TO FINAL
- 5. THE CONTRACTOR SHALL COORDINATE ALL SHUTDOWN PROCEDURES WITH THE OWNER PRIOR TO DISCONNECTING ANY CIRCUITS.
- 6. ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED SHALL BE TURNED OVER TO OWNER OR
- DISPOSED OF AT CONTRACTOR'S EXPENSE AS DIRECTED BY OWNER.
- EXTEND AND/OR REWORK ALL EXISTING WIRING & CONDUIT AS NECESSARY TO MAINTAIN CONTINUITY OF ANY EXISTING ELECTRICAL EQUIPMENT THAT SHALL REMAIN.



TYPICAL NAMEPLATE DETAIL SCALE: NONE

- 1. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE REQUIREMENTS.
- 2. NAMEPLATE TO BE 1/16" THICK WHITE PLASTIC WITH BLACK CENTER LAMINATION. FACE SHALL BE BLACK, ENGRAVED LETTERS SHALL BE WHITE.
- 3. SECURE NAMEPLATE TO SURFACES WITH (4) FLAT HEAD BRASS SCREWS. ADHESIVE CEMENT SHALL NOT BE ALLOWED.
- 4. THIS NAMEPLATE DETAIL IS FOR FACILITIES THAT DO NOT ALREADY HAVE EXISTING PANEL NAMEPLATE NOMENCLATURE & CONTENT REQUIREMENTS; VERIFY NOMENCLATURE REQUIREMENTS WITH AUTHORIZED OWNER REPRESENTATIVE PRIOR TO PURCHASE & CONSTRUCTION.

BIDDING INSTRUCTIONS - BASE BID

- CONTRACTOR SHALL PROVIDE ALL MATERIAL INDICATED ON THESE DRAWINGS INCLUDING REQUIRED APPURTENANCES FOR A COMPLETE AND WORKING SYSTEM. REFER TO BOOK SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL VISIT THE SITE AND CAREFULLY EXAMINE EXISTING CONDITIONS AFFECTING THEIR WORK. ADDITIONAL LABOR/MATERIAL/EQUIPMENT REQUIRED THROUGH FAILURE TO FOLLOW THESE INSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER. ANY QUESTIONS REGARDING SCOPE CLARIFICATION SHALL BE PRESENTED PRIOR TO FORMAL SUBMITTAL OF BID.
- CONTRACTOR SHALL INCLUDE IN BID PRICE TO PROVIDE AN ADDITIONAL 10 (TEN) BRANCH CIRCUITS IN ADDITION TO WHAT IS SHOWN ON THESE DRAWINGS. EACH BRANCH CIRCUIT SHALL BE PRICED AT 100'-0" IN LENGTH AND CONSIST OF 2 #12 & 1 #12 GRD. IN 3/4" EMT, EACH SERVED BY A 20A/2P CIRCUIT BREAKER. THIS SHALL INCLUDE ALL NECESSARY CONDUIT HARDWARE AND ALL NECESSARY MISCELLANEOUS APPURTENANCES REQUIRED FOR A FULL AND FUNCTIONAL INSTALLATION. THESE BRANCH CIRCUITS SHALL BE FOR INSTANCES IN WHICH EXISTING CIRCUITS HAVE NOT BEEN ACCOUNTED FOR DUE TO NON-INVASIVE SURVEYS. CONTRACTOR MUST CONFIRM INSTALLATION OF THESE ADDITIONAL CIRCUITS WITH THIS ENGINEER IF THEY ARE REQUIRED PRIOR TO INSTALLATION.
- CONTRACTOR SHALL INCLUDE IN BID PRICE TO REMOVE AND KEEP SAFE EXISTING CEILING TILES. CONTRACTOR IS RESPONSIBLE TO REPLACE ANY TILES DAMAGED DURING CONSTRUCTION.
- CONTRACTOR SHALL INCLUDE IN BID PRICE FOR WALL PENETRATIONS FOR ALL NEW BRANCH CIRCUITS AND EQUIPMENT FEEDERS. THIS SHALL INCLUDE ALL NECESSARY FIRESTOPPING.
- UNLESS OTHERWISE DIRECTED BY THE PHILADELPHIA SCHOOL DISTRICT CONSTRUCTION MANAGEMENT DEPARTMENT, CONTRACTOR IS RESPONSIBLE FOR COVERING AND PROTECTING ALL SCHOOL PROPERTY FROM DUST AND DEBRIS DURING ALL PHASES OF CONSTRUCTION. CONTRACTOR SHALL COVER ALL ITEMS INCLUDING BUT NOT LIMITED TO COMPUTERS, FURNITURE, FIRE ALARM DEVICES, SECURITY DEVICES ETC. CONTRACTOR SHALL INCLUDE ALL WORK REQUIRED IN BID PRICE.
- CONTRACTOR SHALL INCLUDE IN BID PRICE FOR ALL PATCHING, PAINTING, AND REPAIR WORK.
- 8. CONTRACTOR SHALL INCLUDE IN BID PRICE TO CONFIRM ALL EXISTING BUILDING CONDITIONS. THIS SHALL INCLUDE TRACING ALL EXISTING CIRCUITS AND FEEDERS OF PANELS SLATED TO BE REMOVED AND CONFIRMING ALL POWER SOURCES AND MISCELLANEOUS APPURTENANCES FED BY PANELS AND CONFIRMING ALL POWER REQUIREMENTS OF ALL SAID EQUIPMENT. BID PRICE SHALL ALSO INCLUDE IDENTIFYING ANY AND ALL EXISTING CONDITIONS WHICH MAY AFFECT ALL SCOPE OF WORK INDICATED ON THESE DRAWINGS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO IDENTIFYING ALL EXISTING FOREIGN SYSTEMS SUCH AS DUCTWORK, PIPING, STRUCTURAL COMPONENTS, FIRE ALARM COMPONENTS, AND ANY OTHER MISCELLANEOUS APPURTENANCES. CONTRACTOR MUST INCLUDE IN BID PRICE TO WORK AROUND ALL FOREIGN SYSTEMS AND, IF NECESSARY, CONTRACTOR MUST INCLUDE IN BID PRICE TO ROUTE ALL CONDUIT, CIRCUITS, FEEDERS, AND ALL MISCELLANEOUS APPURTENANCES AROUND ANY FOREIGN SYSTEMS AS REQUIRED.
- ALL NEW BRANCH CIRCUITS, FEEDERS, RECEPTACLES, LIGHTING SWITCHES, JUNCTION BOXES ETC. ARE TO BE SURFACE MOUNTED. CONTRACTOR MUST INCLUDE IN BID PRICE FOR ALL NECESSARY MOUNTING HARDWARE, FACEPLATES, BACKBOXES, AND ALL OTHER MISCELLANEOUS APPURTENANCES REQUIRED FOR A FULL INSTALLATION OF ALL EQUIPMENT INDICATED IN THIS SCOPE OF WORK.
- . CONTRACTOR SHALL INCLUDE IN BASE BID PRICE TO RE-CONFIGURE THE EXISTING SMOKE DETECTION SYSTEM FOR THE (5) HVAC SYSTEMS IN FAN ROOM BEING REMOVED AND REPLACED. CONTRACTOR SHALL WRAP EXISTING DUCT SMOKE DETECTORS AND KEEP SAFE FROM ANY DEBRIS/DIRT. CONTRACTOR SHALL RE-WIRE SMOKE DETECTION SYSTEM DIRECTLY TO NEW UNITS FOR SHUTDOWN UPON SMOKE DETECTION. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND WIRING NECESSARY FOR A COMPLETE AND FUNCTIONAL INSTALLATION. CONTRACTOR SHALL RETAIN THE SERVICES OF A FIRE ALARM CONTRACTOR/VENDOR TO PROVIDE RE-PROGRAMMING AND RE-CERTIFICATION OF FIRE ALARM SYSTEM AS REQUIRED. CONTRACTOR SHALL ALSO RETAIN THE SERVICES OF A FIRE ALARM CONTRACTOR/VENDOR TO DISCONNECT DUCT SMOKE DETECTORS DURING DEMOLITION AND TO RE-INSTALL DUCT SMOKE DETECTORS DURING CONSTRUCTION TO ENSURE PROPER DISCONNECT AND RE-CONNECT PROCEDURES ARE MET. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL MATERIALS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION. ALL DEVICES MUST BE COMPATIBLE WITH BASE BUILDING FIRE ALARM SYSTEM.
- CONTRACTOR SHALL INCLUDE IN BASE BID PRICE TO REMOVE AND RE-INSTALL LIGHTING FIXTURES AND OTHER ELECTRICAL, LIGHTING, FIRE ALARM, AND SECURITY DEVICE FROM CEILING WITHIN 5'-0" OF PIPING ABOVE CEILING TO ALLOW FOR PIPING REPLACEMENT. FIXTURES AND DEVICES REMOVED SHALL BE WRAPPED AND KEPT SAFE DURING CONSTRUCTION AND RE-INSTALLED AFTER NEW PIPING WORK IS COMPLETED.
- ALL UNIT VENTILATORS ARE PROVIDED WITH A BIPOLAR IONIZER TO BE FIELD INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INCLUDE IN BASE BID PRICE TO WIRE IONIZER TO BE POWERED BY THE UNIT VENTILATOR AND SHALL COORDINATE REQUIREMENTS WITH UV MANUFACTURER.
- 13. ALL AIR HANDLERS ARE PROVIDED WITH A BIPOLAR IONIZER TO BE FIELD INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INCLUDE IN BASE BID PRICE TO INSTALL AND WIRE IONIZER TO BE POWERED BY THE UNIT VENTILATOR AND SHALL COORDINATE REQUIREMENTS WITH AIR HANDLER MANUFACTURER.
- 14. CONTRACTOR BIDS SHALL ACCOUNT FOR ALL REQUIREMENTS OF THE SCHOOL DISTRICT OF PHILADELPHIA'S COVID 19 RESPONSE PLAN.

PHASING INSTRUCTIONS

. DUE TO SDP RESTRICTIONS CONSTRUCTION ACTIVITIES ARE LIMITED TO (2) CLASSROOMS AT A TIME. BIDS AND SCHEDULES SHALL BE ARRANGED ACCORDINGLY

FEEDER SCHEDULE

| | ı | 1 | |
|------------------|----------|---------------------------------------|---|
| FEEDER | NUMBER | SIZE | QUANTITY AND SIZE |
| TAG | OF | OF | OF CU CONDUCTORS |
| <##-#W | CONDUITS | CONDUITS | PER CONDUIT |
| 20-3W | 1 | 3/4" | 3 #12 AWG & 1 #12 GND |
| | | <u> </u> | " " |
| 20-4W | 1 | 3/4" | 4 #12 AWG & 1 #12 GND |
| 25-3W | 1 | 3/4" | 3 #10 AWG & 1 #10 GND |
| 25-4W | 1 | 3/4" | 4 #10 AWG & 1 #10 GND |
| 30-3W | 1 | 3/4" | 3 #10 AWG & 1 #10 GND |
| | | · | |
| 30-4W | 1 | 3/4" | 4 #10 AWG & 1 #10 GND |
| 35-3W | 1 | 3/4" | 3 #8 AWG & 1 #10 GND |
| 35-4W | 1 | 3/4" | 4 #8 AWG & 1 #10 GND |
| 40-3W | 1 | 3/4" | 3 #8 AWG & 1 #10 GND |
| | | · · | " " |
| 40-4W | 1 | 3/4" | 4 #8 AWG & 1 #10 GND |
| 45-3W | 1 | 1" | 3 #6 AWG & 1 #10 GND |
| 45-4W | 1 | 1" | 4 #6 AWG & 1 #10 GND |
| 50-3W | 1 | 1" | 3 #6 AWG & 1 #10 GND |
| 50-4W | 1 | 1" | 4 #6 AWG & 1 #10 GND |
| | | | |
| 60-3W | 1 | 1" | 3 #6 AWG & 1 #10 GND |
| 60-4W | 1 | 1" | 4 #6 AWG & 1 #10 GND |
| 70-3W | 1 | 1" | 3 #4 AWG & 1 #8 GND |
| | | 1" | |
| 70-4W | 1 | | 4 #4 AWG & 1 #8 GND |
| 80-3W | 1 | 1 1/4" | 3 #3 AWG & 1 #8 GND |
| 80-4W | 1 | 1 1/4" | 4 #3 AWG & 1 #8 GND |
| 90-3W | 1 | 1 1/4" | 3 #3 AWG & 1 #8 GND |
| | | | " " |
| 90-4W | 1 | 1 1/4" | 4 #3 AWG & 1 #8 GND |
| 100-3W | 1 | 1 1/2" | 3 #2 AWG & 1 #8 GND |
| 100-4W | 1 | 1 1/2" | 4 #2 AWG & 1 #8 GND |
| 110-3W | 1 | 1 1/2" | 3 #1 AWG & 1 #6 GND |
| | | | ï ï |
| 110-4W | 1 | 1 1/2" | 4 #1 AWG & 1 #6 GND |
| 125-3W | 1 | 2" | 3 #1/0 AWG & 1 #6 GND |
| 125-4W | 1 | 2" | 4 #1/0 AWG & 1 #6 GND |
| 150-3W | 1 | 2" | 3 #1/0 AWG & 1 #6 GND |
| 150-4W | 1 | 2" | 4 #1/0 AWG & 1 #6 GND |
| | | | |
| 175-3W | 1 | 2" | 3 #2/0 AWG & 1 #6 GND |
| 175-4W | 1 | 2" | 4 #2/0 AWG & 1 #6 GND |
| 200-3W | 1 | 2" | 3 #3/0 AWG & 1 #6 GND |
| 200-4W | 1 | 2" | 4 #3/0 AWG & 1 #6 GND |
| | | | |
| 225-3W | 1 | 2 1/2" | 3 #4/0 AWG & 1 #4 GND |
| 225-4W | 1 | 2 1/2" | 4 #4/0 AWG & 1 #4 GND |
| 250-3W | 1 | 2 1/2" | 3 #250 kCMIL & 1 #4 GND |
| 250-4W | 1 | 2 1/2" | 4 #250 kCMIL & 1 #4 GND |
| | | · · · · · · · · · · · · · · · · · · · | |
| 300-3W | 1 | 3" | 3 #350 kCMIL & 1 #4 GND |
| 300-4W | 1 | 3" | 4 #350 kCMIL & 1 #4 GND |
| 350-3W | 1 | 3" | 3 #400 kCMIL & 1 #3 GND |
| 350-4W | 1 | 3" | 4 #400 kCMIL & 1 #3 GND |
| | | | |
| 400-3W | 1 | 3" | 3 #500 kCMIL & 1 #3 GND |
| 400-4W | 1 | 3" | 4 #500 kCMIL & 1 #3 GND |
| 400-3W | 2 | 2" | 3 #3/0 & 1 #3 GND (ALTERNATE CONFIGURATION) |
| 400-4W | 2 | 2" | 4 #3/0 & 1 #3 GND (ALTERNATE CONFIGURATION) |
| | | | |
| 450-3W | 2 | 2 1/2" | 3 #4/0 AWG & 1 #2 GND |
| 450-4W | 2 | 2 1/2" | 4 #4/0 AWG & 1 #2 GND |
| 500-3W | 2 | 2 1/2" | 3 #250 kCMIL & 1 #2 GND |
| 500-4W | 2 | 2 1/2" | 4 #250 kCMIL & 1 #2 GND |
| | | 3" | " " |
| 600-3W | 2 | | 3 #350 kCMIL & 1 #1 GND |
| 600-4W | 2 | 3" | 4 #350 kCMIL & 1 #1 GND |
| 700-3W | 2 | 3" | 3 #400 kCMIL & 1 #1/0 GND |
| 700-4W | 2 | 3" | 4 #400 kCMIL & 1 #1/0 GND |
| 800-3W | 2 | 3" | 3 #500 kCMIL & 1 #1/0 GND |
| | | | |
| 800-4W | 2 | 3" | 4 #500 kCMIL & 1 #1/0 GND |
| 800-3W | 2 | 3 1/2" | 3 #600 kCMIL & 1 #1/0 GND (ALTERNATE CONFIGURATION) |
| 800-4W | 2 | 3 1/2" | 4 #600 kCMIL & 1 #1/0 GND (ALTERNATE CONFIGURATION) |
| 1000-3W | 3 | 3" | 3 #400 kCMIL & 1 #2/0 GND |
| | | | <u>" '</u> |
| 1000-4W | 3 | 3" | 4 #400 kCMIL & 1 #2/0 GND |
| 1200-3W | 4 | 3" | 3 #350 kCMIL & 1 #3/0 GND |
| 1200-4W | 4 | 3" | 4 #350 kCMIL & 1 #3/0 GND |
| 1200-3W | 3 | 4" | 3 #600 kCMIL & 1 #3/0 GND (ALTERNATE CONFIGURATION) |
| | | | |
| 1200-4W | 3 | 4" | 4 #600 kCMIL & 1 #3/0 GND (ALTERNATE CONFIGURATION) |
| 1600-3W | 4 | 4" | 3 #600 kCMIL & 1 #4/0 GND |
| 1600-4W | 4 | 4" | 4 #600 kCMIL & 1 #4/0 GND |
| 2000-3W | 5 | 4" | 3 #600 kCMIL & 1 #250 kCMIL GND |
| | | | |
| 2000-4W | 5 | 4" | 4 #600 kCMIL & 1 #250 kCMIL GND |
| 2500-3W | 6 | 4" | 3 #600 kCMIL & 1 #400 kCMIL GND |
| 2500-4W | 6 | 4" | 4 #600 kCMIL & 1 #400 kCMIL GND |
| 3000-3W | 8 | 4" | 3 #600 kCMIL & 1 #500 kCMIL GND |
| 3000-3W | 8 | 4" | |
| 3000 -4 W | . X | . 4 | 1 4 #600 kCMII & 1 #500 kCMII GND |

3000-4W 8 4" 4 #600 kCMIL & 1 #500 kCMIL GND

THE SCHOOL DISTRICT OF PHILADELPHIA **OFFICE OF CAPITAL PROGRAMS**

440 NORTH BROAD STREET PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)

www.philasd.org

SEAL:

NAME (LICENSED PROFESSIONAL): PETE BONNES STATE AND LICENSE NO: PA 046114E



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Engineering Excellence Since 1968

B-056C OF 18/19 (GENERAL CONTRACTOR) B-057C OF 18/19 (MECHANICAL CONTRACTOR)

B-058C OF 18/19 (ELECTRICAL CONTRACTOR)

2 | 10.21.20 | ISSUE FOR ADDENDUM #2 1 10.13.20 ISSUE FOR ADDENDUM #1 **0** 07.09.20 ISSUE FOR BID **D** 12.06.19 ISSUE FOR 100% REVIEW C | 10.22.19 | ISSUE FOR 90% REVIEW **B** 08.06.19 ISSUE FOR 60% REVIEW ▲ 06.07.19 ISSUE FOR 25% REVIEW

SCHOOL & LOCATION

NO. DATE REVISION

JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET PHILADELPHIA, PA 19133 PROJECT TITLE

UNI-VENT & TEMPERATURE

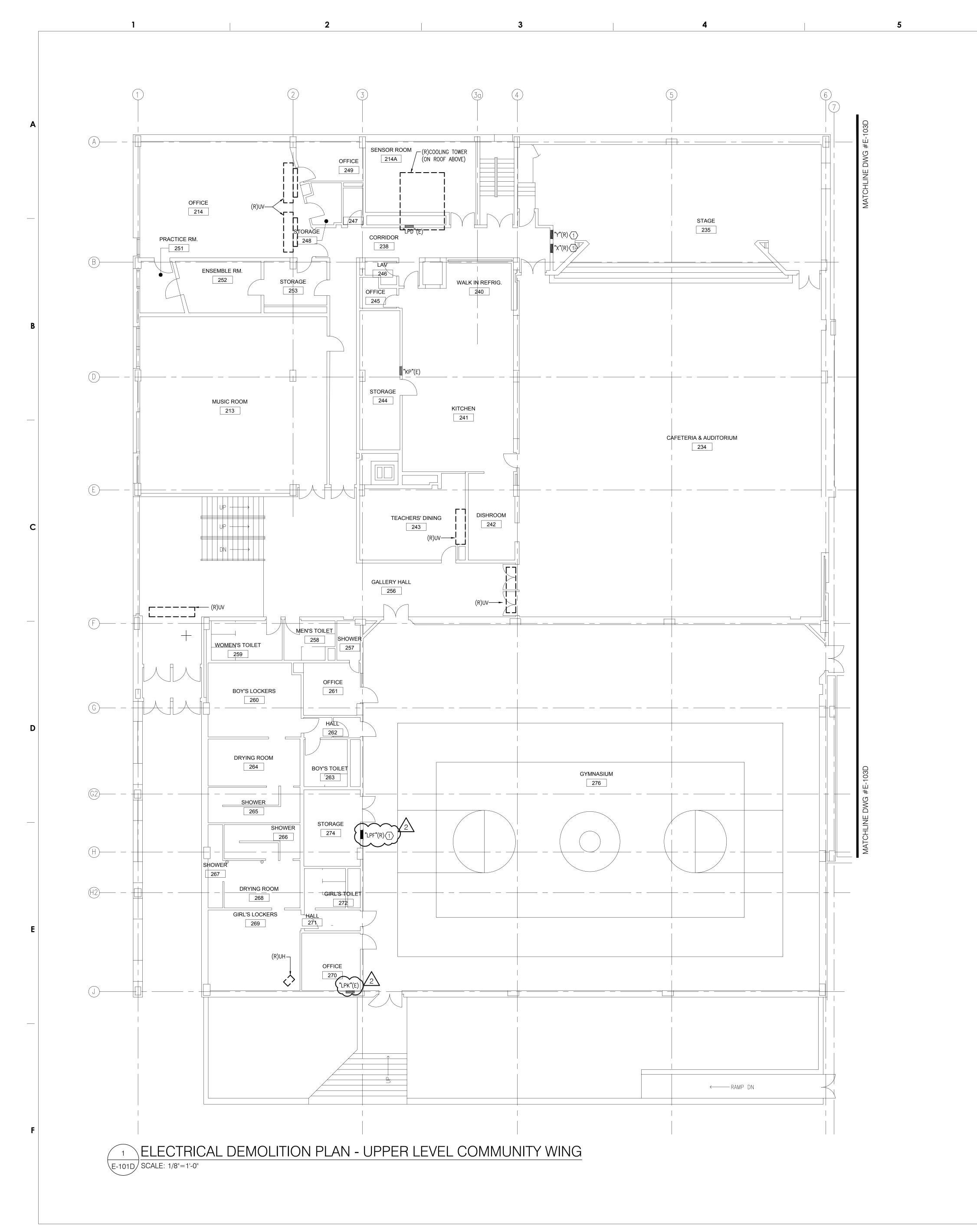
CONTROL REPLACEMENT

DRAWING TITLE

ELECTRICAL SYMBOLS, NOTES AND ABBREVIATIONS

DRAWN BY CHECKED BY DRAWING NO.

SHEET 36 OF 52



DEMOLITION GENERAL NOTES

- 1. ALL SHOWN IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL VERIFY ALL EXISTING SOURCES OF POWER TO EQUIPMENT PRIOR TO FINAL REMOVAL.
- 3. THE CONTRACTOR SHALL COORDINATE ALL SHUTDOWN PROCEDURES WITH THE OWNER PRIOR TO DISCONNECTING ANY CIRCUITS.
 - 4. EXTEND AND/OR REWORK ALL EXISTING WIRING & CONDUIT AS NECESSARY TO MAINTAIN CONTINUITY OF ANY EXISTING ELECTRICAL EQUIPMENT THAT SHALL REMAIN.
- EXISTING MECHANICAL / PLUMBING EQUIPMENT SLATED FOR DEMOLITION IS TO BE REMOVED BY M.C. E.C. SHALL DISCONNECT EXISTING CIRCUIT AND REMOVE EXISTING CONDUIT, WIRING, AND ALL MISCELLANEOUS APPURTENANCES REQUIRED TO PROVIDE A COMPLETE REMOVAL OF EXISTING BRANCH CIRCUITING. E.C. SHALL COORDINATE WITH M.C. DURING DEMOLITION. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EQUIPMENT BEING DEMOLISHED.

DEMOLITION KEYED NOTES

PHASING INSTRUCTIONS

KEY PLAN

SCALE: NONE

COMMUNITY WING —

DUE TO SDP RESTRICTIONS CONSTRUCTION ACTIVITIES

ARE LIMITED TO (2) CLASSROOMS AT A TIME. BIDS AND

SCHEDULES SHALL BE ARRANGED ACCORDINGLY.

1. PANEL SHALL BE REPLACED. CONTRACTOR SHALL DISCONNECT AND KEEP SAFE ALL BRANCH CIRCUITS FOR REUSE (UNLESS OTHERWISE NOTED). CONTRACTOR SHALL TURN OVER ALL MATERIAL REMÒVED TO SCHOOL DISTRICT OF PHILADELPHIA, OR CONTRACTOR SHALL DISPOSE OF ANY EQUIPMENT AS DIRECTED BY THE SCHOOL DISTRICT OF PHILADELPHIA. CONTRACTOR SHALL DISCONNECT FEEDER FROM PANEL AND REMOVE CONDUIT AND WIRING TO SOURCE. CONTRACTOR MAY MAINTAIN AND REUSE PANEL BACKBOX IF IN GOOD CONDITION.

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

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SCHOOL & LOCATION

TRUE NORTH

BUILDING NORTH

JOHN F. HARTRANFT SCHOOL 720 WEST CUMBERLAND STREET PHILADELPHIA, PA 19133

PROJECT TITLE

UNI-VENT & TEMPERATURE CONTROL REPLACEMENT

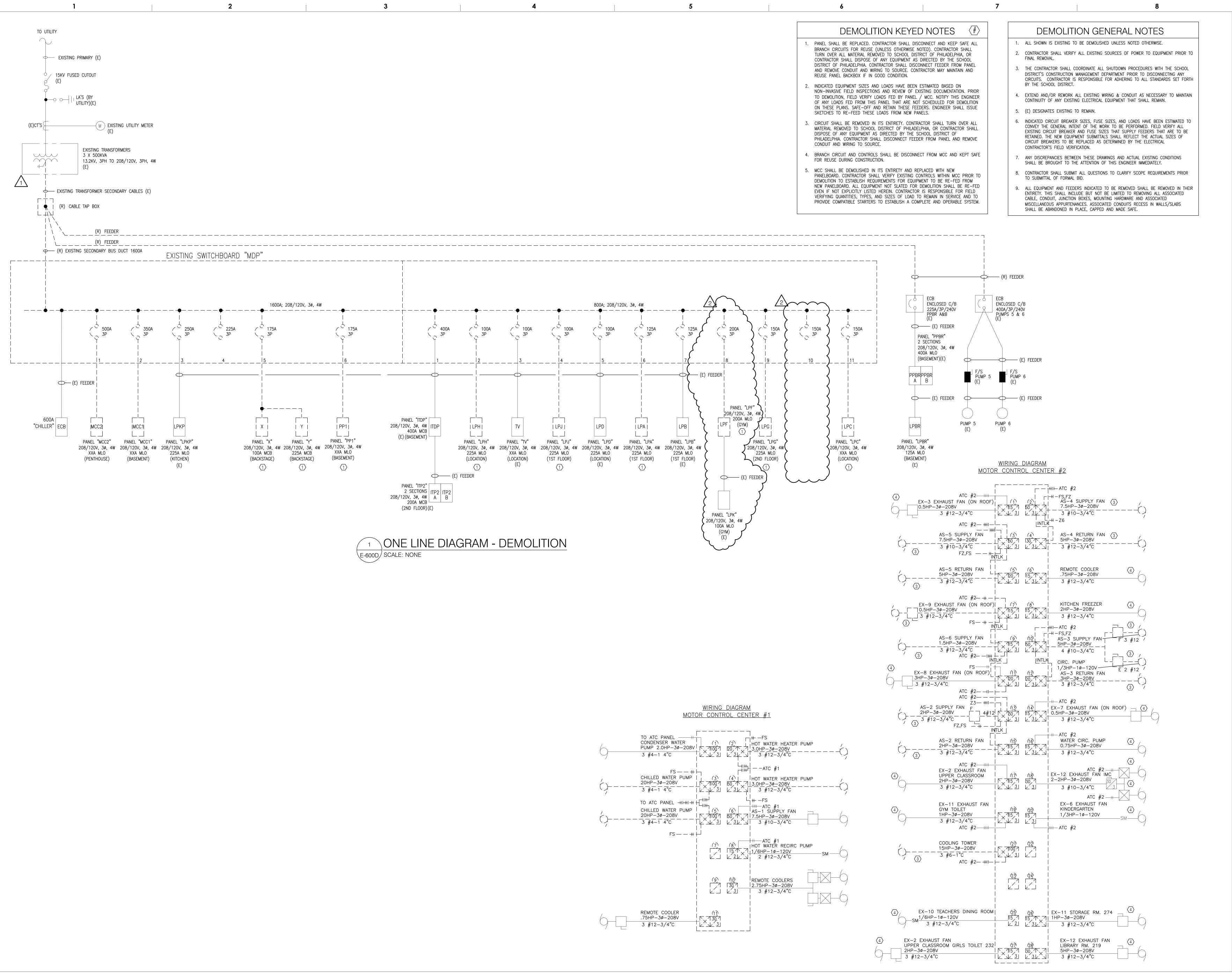
DRAWING TITLE

ELECTRICAL DEMOLITION PLAN - UPPER LEVEL COMMUNITY

DRAWN BY CHECKED BY

DRAWING NO. E-101D

SHEET 38 OF 52



THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

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CONTRACT #'S

B-056C OF 18/19 (GENERAL CONTRACTOR)
B-057C OF 18/19 (MECHANICAL CONTRACTOR)

B-058C OF 18/19 (ELECTRICAL CONTRACTOR)

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| NO. | DATE | REVISION |

JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET
PHILADELPHIA, PA 19133
PROJECT TITLE

SCHOOL & LOCATION

UNI-VENT & TEMPERATURE CONTROL REPLACEMENT

DRAWING TITLE

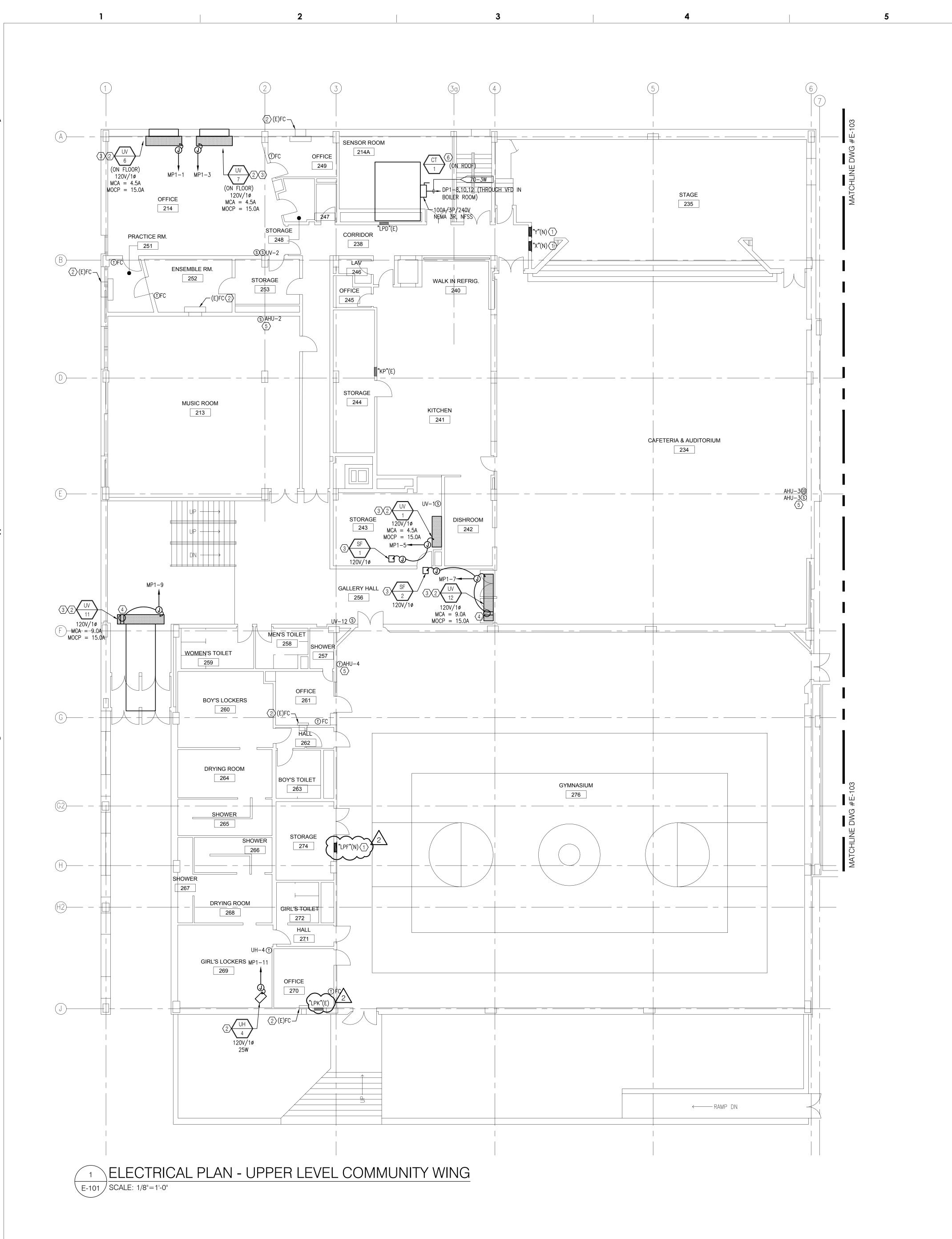
ONE-LINE DIAGRAM DEMOLITION

DRAWN BY CHECKED BY PJB

DRAWING NO.

E-600D

SHEET 42 OF 52



- CONTRACTOR SHALL VERIFY ALL EXISTING SOURCES OF POWER TO EQUIPMENT PRIOR TO
- 2. THE CONTRACTOR SHALL COORDINATE ALL SHUTDOWN PROCEDURES WITH THE SCHOOL DISTRICT'S CONSTRUCTION MANAGEMENT DEPARTMENT PRIOR TO DISCONNECTING ANY CIRCUITS. CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL STANDARDS SET FORTH
- 3. EXTEND AND/OR REWORK ALL EXISTING WIRING & CONDUIT AS NECESSARY TO MAINTAIN
- 5. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL EXISTING CONDITIONS
- 6. CONTRACTOR SHALL SUBMIT ALL QUESTIONS TO CLARIFY SCOPE REQUIREMENTS PRIOR
- ALL UNIT VENTILATORS ARE PROVIDED WITH A BIPOLAR IONIZER TO BE FIELD INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE IONIZER TO BE



- RECONNECT ALL EXISTING CIRCUITS MAINTAINED DURING DEMOLTION. EXTEND/REWORK CIRCUITS AS REQUIRED.
- CONDUIT AND CONTROL WIRING TO THERMOSTAT/SENSOR BY CONTROLS/MECHANICAL CONTRACTOR.
- 4. E.C. SHALL PROVIDE RECEPTACLE MOUNTED WITHIN UNIT VENTILATOR ENCLOSURE
- FOR CONDENSATE PUMP. CONNECT RECEPTACLE TO UNIT VENTILATOR POWER CIRCUIT. COORDINATE FINAL LOCATION WITH M.C.
- CONTRACTOR.

B-056C OF 18/19 (GENERAL CONTRACTOR)
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| | | |

SCHOOL & LOCATION

TRUE NORTH

BUILDING NORTH

JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET PHILADELPHIA, PA 19133 PROJECT TITLE

UNI-VENT & TEMPERATURE CONTROL REPLACEMENT

DRAWING TITLE

ELECTRICAL PLAN - UPPER LEVEL COMMUNITY WING

DRAWN BY CHECKED BY

DRAWING NO. E-101 SHEET 44 OF 52

GENERAL NOTES

FINAL REMOVAL.

BY THE SCHOOL DISTRICT.

CONTINUITY OF ANY EXISTING ELECTRICAL EQUIPMENT THAT SHALL REMAIN.

4. (E) DESIGNATES EXISTING TO REMAIN.

SHALL BE BROUGHT TO THE ATTENTION OF THIS ENGINEER IMMEDIATELY.

TO SUBMITTAL OF FORMAL BID.

POWERED BY THE UNIT VENTILATOR. ELECTRICAL CONTRACTOR SHALL COORDINATE REQUIREMENTS WITH UV MANUFACTURER.

KEYED NOTES

NEW PANELBOARD. CONTRACTOR MAY REUSE BACKBOX IF IN GOOD CONDITION.

- 3. CONDUIT AND CONTROL WIRING TO BMS BY MECHANICAL/CONTROLS CONTRACTOR.
- . CONDUIT AND CONTROL WIRING TO AHU CONTROLLER BY MECHANICAL/CONTROLS
- 6. CONDUIT AND CONTROL WIRING TO CT-1 CONTROL PANEL IN BOILER ROOM FROM SUPPLY AND RETURN TEMPERATURE SENSORS AT TOWER BY MECHANICAL/CONTROLS

PHASING INSTRUCTIONS

KEY PLAN

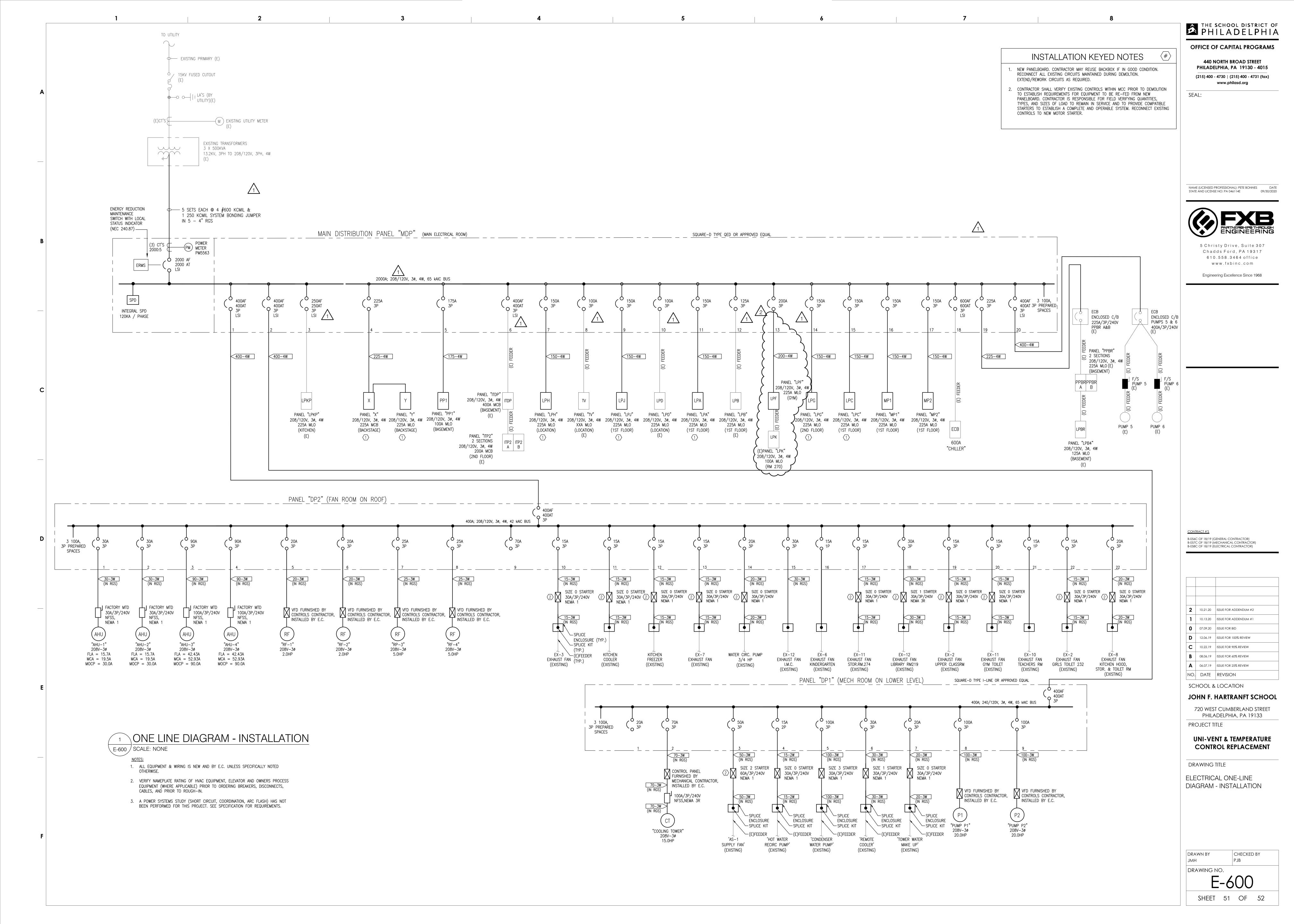
SCALE: NONE

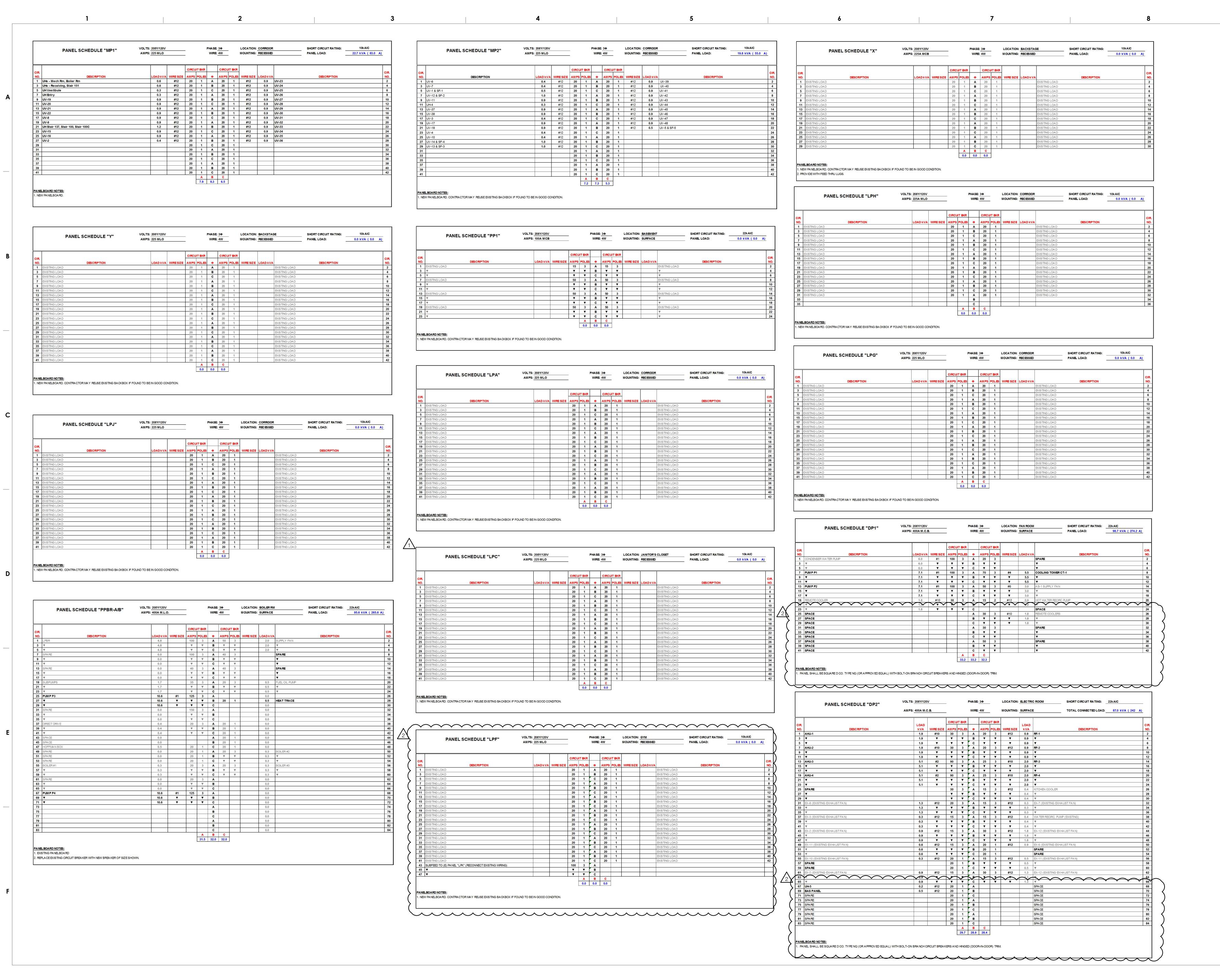
COMMUNITY WING —

DUE TO SDP RESTRICTIONS CONSTRUCTION ACTIVITIES

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SCHOOL & LOCATION

JOHN F. HARTRANFT SCHOOL

720 WEST CUMBERLAND STREET PHILADELPHIA, PA 19133

UNI-VENT & TEMPERATURE CONTROL REPLACEMENT

DRAWING TITLE

PROJECT TITLE

ELECTRICAL PANEL SCHEDULES

DRAWN BY
JMH
DRAWING NO.

E-601