

#### **DEMOLITION NOTES:**

#### \*\* G.C. SHALL COORDINATE DEMOLITION WITH ALL CONTRACTORS \*\* \*\* ALL DEMOLITION INDICATED ON THIS SHEET SHALL

- BE PERFORMED BY THE G.C. UNLESS OTHERWISE NOTED \*\* 4A REMOVE EXISTING GLAZED MASONRY WALL
- 4B REMOVE PORTION OF EXISTING WALL FOR NEW DOOR AND LINTEL
- (5A) REMOVE EXISTING SHAFT WALL AND ALL ASSOCIATED COMPONENTS. (5B) REMOVE PORTION OF WALL FOR NEW LOUVER - COORD. WITH MECHANICAL FOR LOCATION AND ROUGH OPENING.
- 6A REMOVE ALL EXISTING SHELVING IN CLOSET
- (6B) REMOVE EXISTING WOOD SHELF AND STEEL BRACKET
- (8A) REMOVE EXISTING DOOR(S), FRAME(S) AND HARDWARE.
- $\langle 9A \rangle$  REMOVE PORTION OF EXISTING ACOUSTICAL TILE CEILING AS REQUIRED FOR NEW WALL PARTITIONS
- (9B) REMOVE EXISTING CEILING SYSTEM AND ALL ASSOCIATED COMPONENTS.
- (9C) REMOVE PORTION OF EXISTING CEILING AS REQUIRED FOR BULKHEAD.
- (10A) REMOVE EXISTING TOILET STALLS AND ALL ASSOCIATED COMPONENTS.
- (10B) REMOVE ALL EXISTING TOILET ACCESSORIES, COORDINATE WITH OWNER FOR SALVAGE ITEMS.
- (11A) REMOVE EXISTING TRASH CHUTES AND ALL ASSOCIATED COMPONENTS.
- 22 P.C. DEMO. (REFER TO MEP DEMO. DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFO.) (23) H.C. DEMO. (RREFER TO MEP DEMO. DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFO.)
- 26 E.C. DEMO. (REFER TO MEP DEMO. DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFO.)

#### GENERAL DEMOLITION NOTES:

\*\* G.C. SHALL COORDINATE DEMOLITION WITH ALL CONTRACTORS \*\* \*\* ALL DEMOLITION INDICATED ON THIS SHEET SHALL BE PERFORMED

BY THE G.C. UNLESS OTHERWISE NOTED \*\* A) DEMOLITION NOTED IS PROVIDED TO FURNISH AN UNDERSTANDING OF THE SCOPE OF WORK REQUIRED AND MAY NOT NECESSARILY BE INCLUSIVE OF ALL DEMOLITION REQUIRED FOR THE INCORPORATION OF NEW WORK. ALL DEMOLITION WORK REQUIRED TO ACCOMMODATE NEW CONSTRUCTION SHALL BE INCLUDED AS PART OF THE CONTRACT. CONTRACTOR SHALL REVIEW ALL CONSTRUCTION DOCUMENTS TO UNDERSTAND THE SCOPE OF DEMOLITION REQUIRED FOR NEW WORK. ALL DEMOLITION SHALL BE COORDINATED WITH ALL CONSTRUCTION DOCUMENTS. REFER TO MEP DRAWINGS FOR ADDITIONAL MEP

DEMOLITION REQUIREMENTS.

B) ALL REMAINING SURFACES TO BE EXPOSED AFTER DEMOLITION SHALL BE PATCHED, REPAIRED AND REFINISHED TO MATCH EXISTING ADJACENT FINISH OR NEW CONDITIONS. ALL REMAINING SURFACES TO BE CONCEALED BY NEW WORK SHALL BE PREPARED AS REQUIRED TO RECEIVE NEW WORK. REFER TO SPECIFICATIONS AND PRODUCT REQUIREMENTS FOR SPECIFIC CUTTING AND PATCHING METHODS REQUIRED FOR DEMOLITION WORK.

C) WHERE EQUIPMENT OR SYSTEMS ARE INDICATED FOR DEMOLITION, ALL PARTS AND ASSEMBLIES OF THE EQUIPMENT OR SYSTEMS SHALL BE REMOVED INCLUDING BLOCKING, SUPPORTS, HANGERS, ETC. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION FOR MEP DEMOLITION.

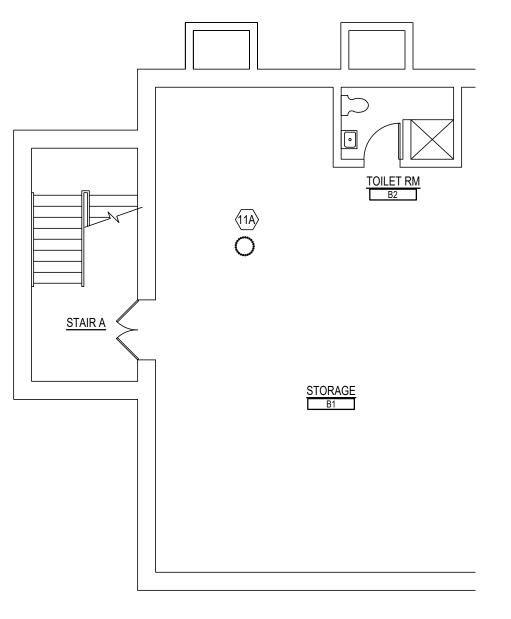
D) CONTRACTORS SHALL REVIEW ALL EXISTING CONDITIONS TO UNDERSTAND THE SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS.

E) ALL DEMOLITION SHALL BE COORDINATED WITH PROJECT PHASING AND SCHEDULE. THE PROGRESS OF THE WORK SHALL BE CAREFULLY COORDINATED

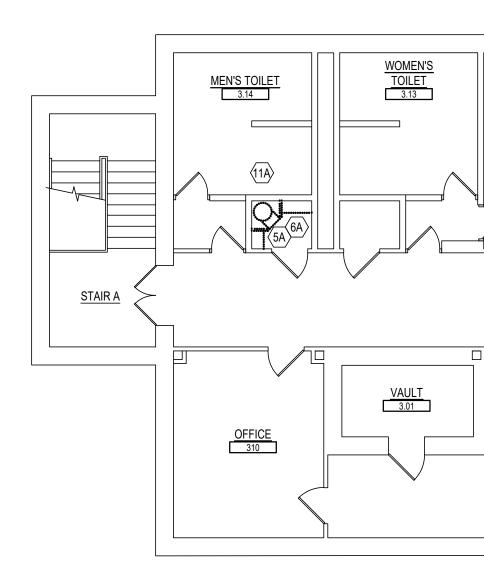
TO ENSURE ALL EXISTING SYSTEMS REMAIN OPERABLE DURING WORK.

F) LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS OFF-SITE.

G) CONTRACTOR SHALL PROTECT ALL EXISTING FINISHES, EQUIPMENT, ETC. TO REMAIN. ANY DAMAGE SHALL BE REPAIRED AND RESTORED AT NO COST TO THE



PARTIAL BASEMENT DEMO PLAN SCALE: 1/8" = 1'-0"



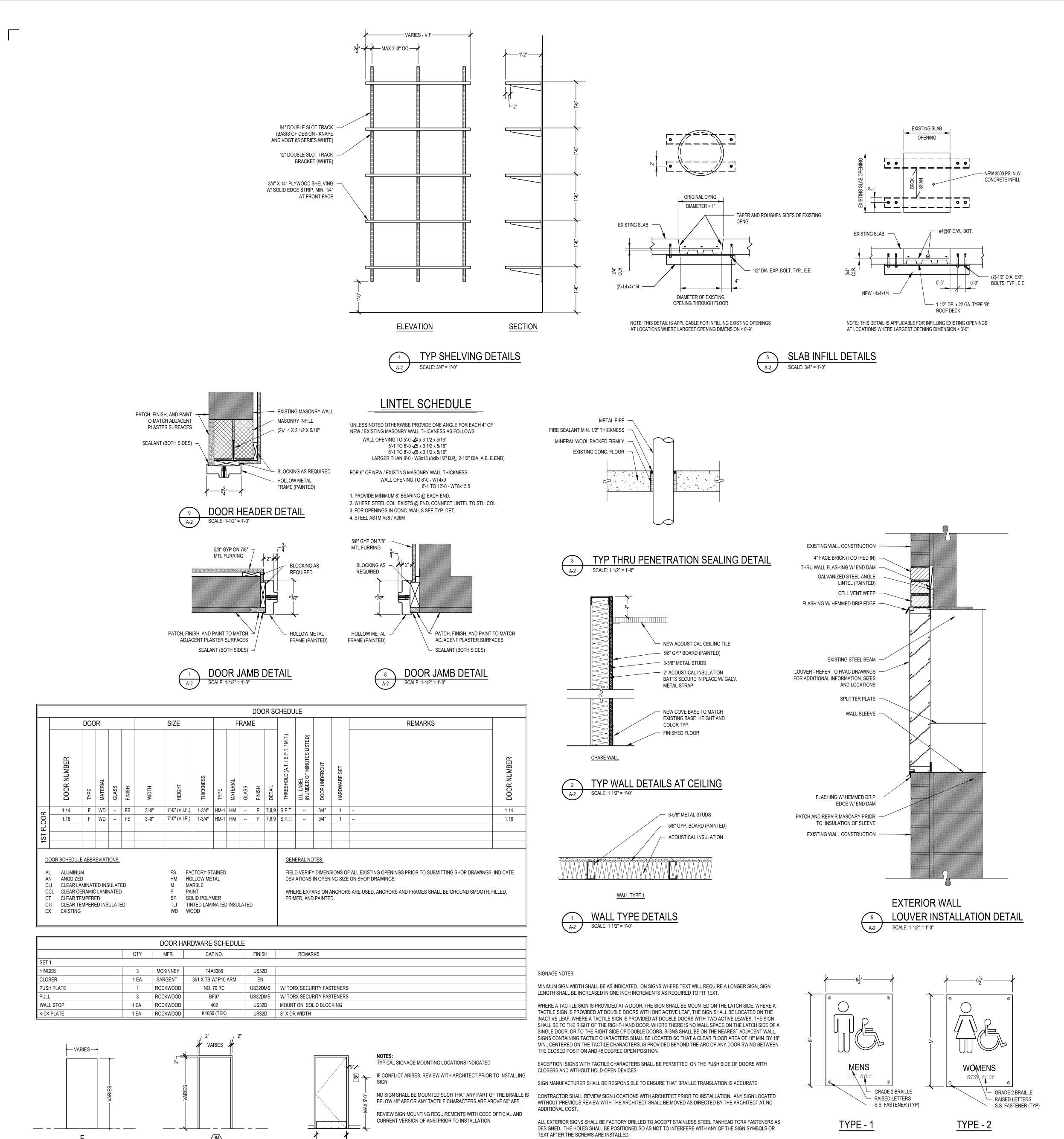
PARTIAL THIRD FLOOR DEMO PLAN

AEM #: 21003.00 ARCHITECTS INC. 3700 PERKIOMEN AVENUE, READING, PA 19606-2795 Phone: 610.779.3220 Fax: 610.779.9022 www.aem-arch.com

REVISIONS

All DIMENSIONS and EXISTING CONDITIONS shall be CHECKED and VERIFIED by the CONTRACTOR at the SITE.

KDN CHECKED PML 10-18-2021 AS NOTED JOB NO. 20-2767-2 SHEET



THE INSTALLER SHALL VERIFY THE SUBSTRATE TO WHICH THE SIGN SHALL BE INSTALLED, SHIELDS SHALL USED

ADDITIONAL 6" IN SIGN LENGTH, AN ADDITIONAL FASTENER SHALL BE INSTALLED AT EQUAL SPACING ALONG THE

SIGNS UP TO 11" IN LENGTH SHALL HAVE TWO FASTENERS INSTALLED ALONG ITS LENGTH AS SHOWN ABOVE.

SIGNS FROM 12" TO 17" LONG SHALL HAVE THREE FASTENERS INSTALLED AT EQUAL INTERVALS. FOR EACH

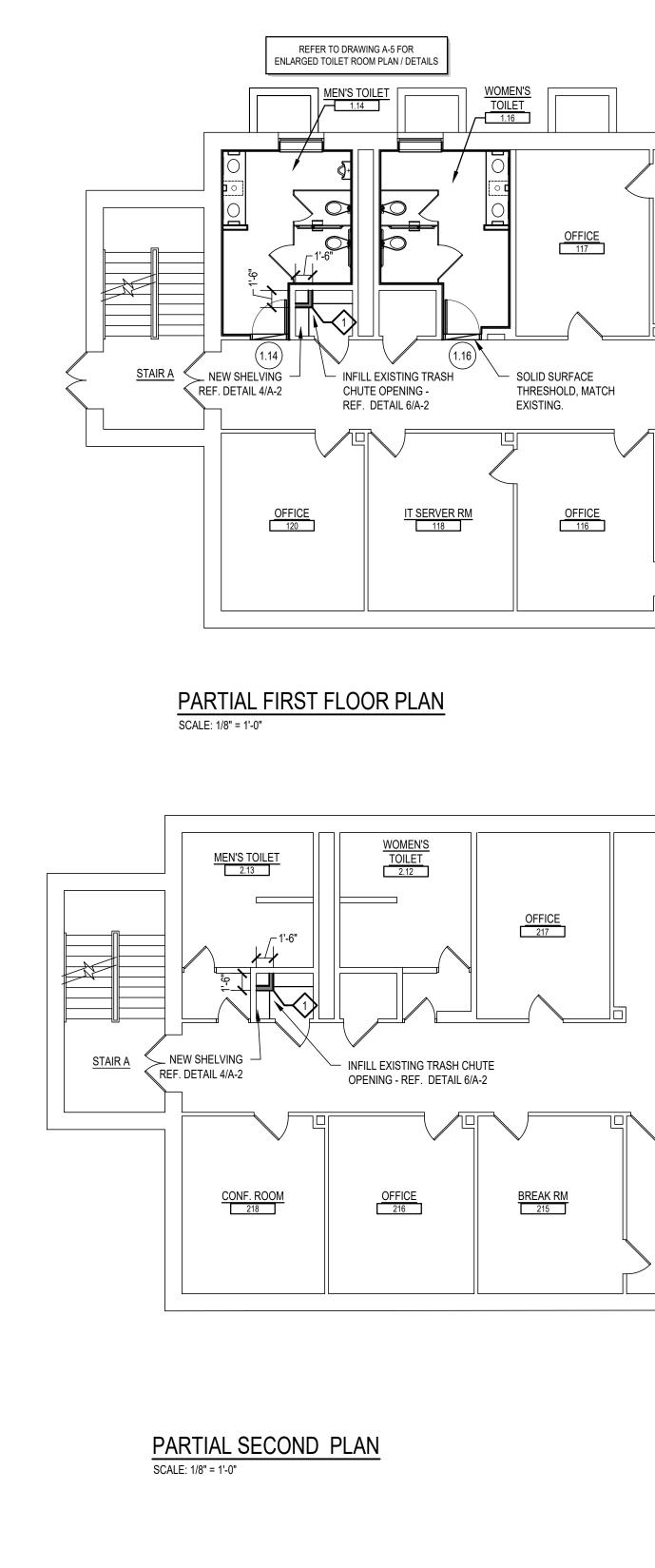
INTERIOR SIGN TYPES

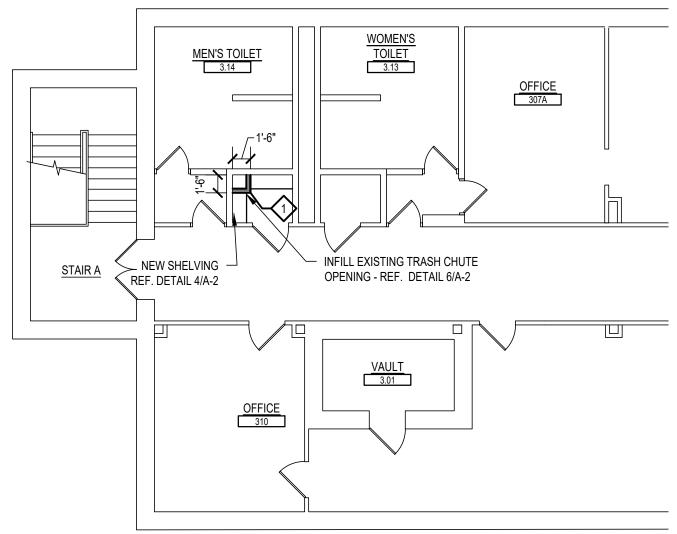
FOR MASONRY INSTALLATION, TOGGLES FOR GYPSUM BOARD INSTALLATION.

1/2" MAX. <sup>⅃</sup>

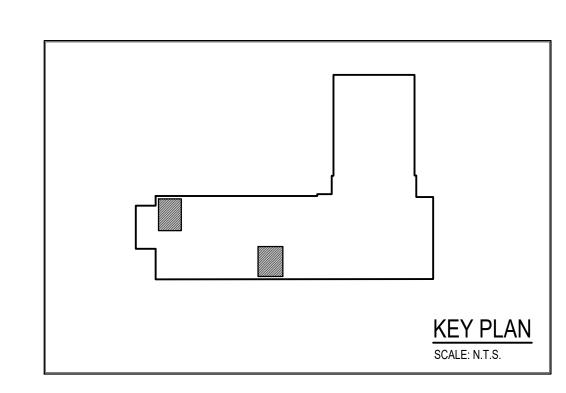
FRAME TYPES

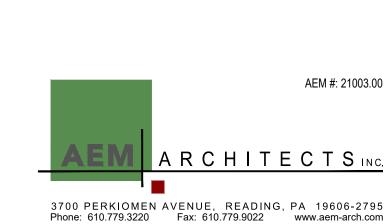
TACTILE SIGN LOCATION ELEVATION





### PARTIAL THIRD FLOOR PLAN SCALE: 1/8" = 1'-0"





MATCH ADJACENT

<u>OFFICE</u> 2.14

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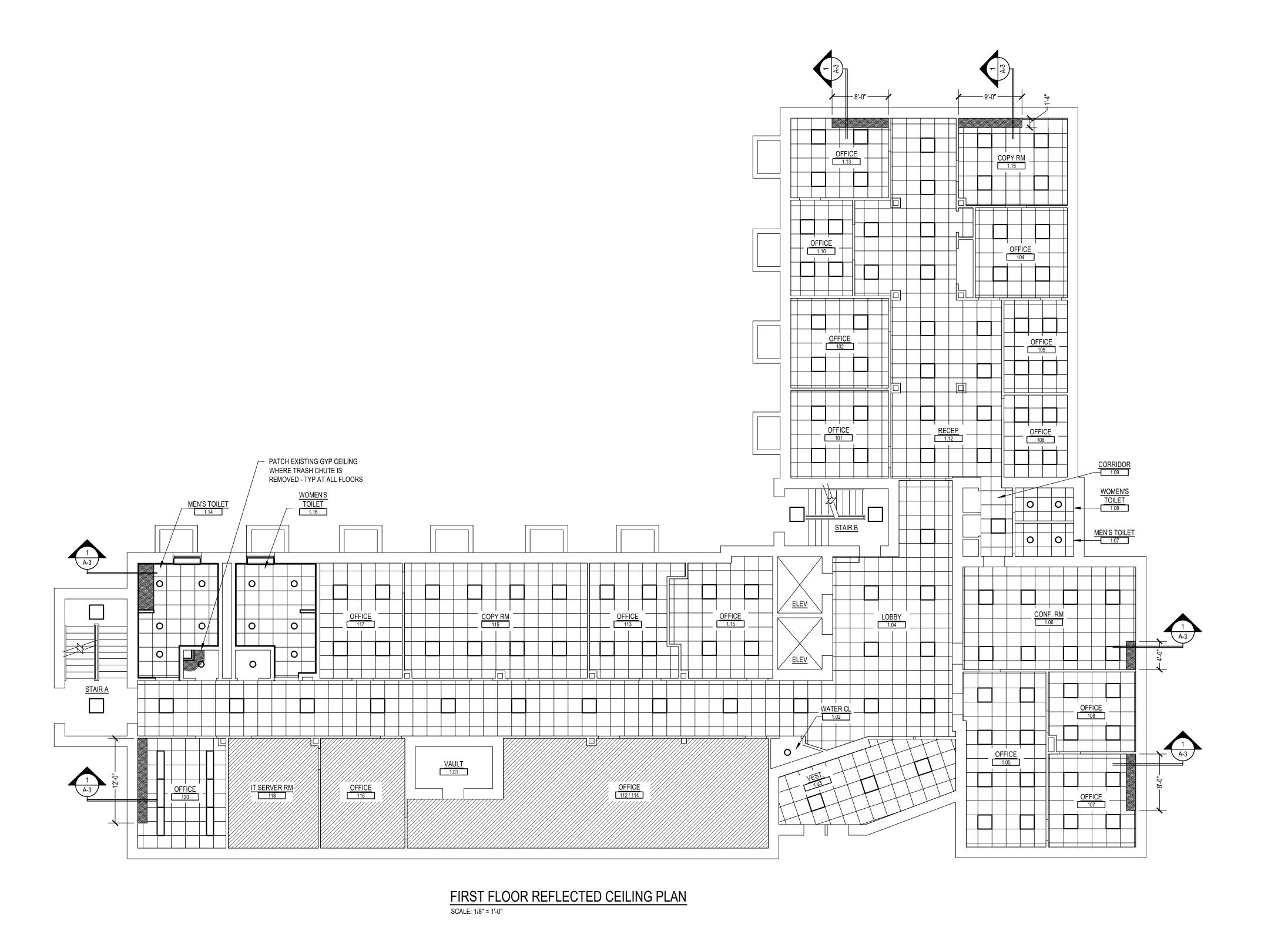
REVISIONS

JOB NO.

20-2767-2

SHEET

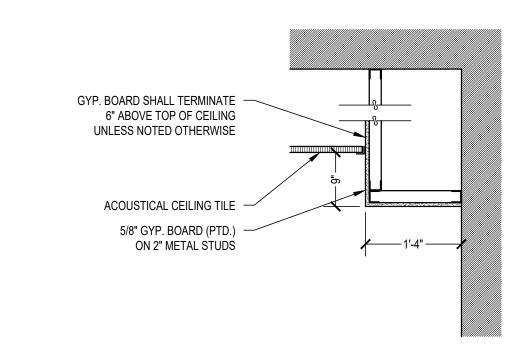
AEM #: 21003.00 ARCHITECTS INC.



CEILING TYPE LEGEND DESCRIPTION SYMBOL 2' X 2' ACOUSTICAL CEILING TILE GYP CEILING EXPOSED STRUCTURE (PTD.) EXISTING CEILING TO REMAIN (PTD.)

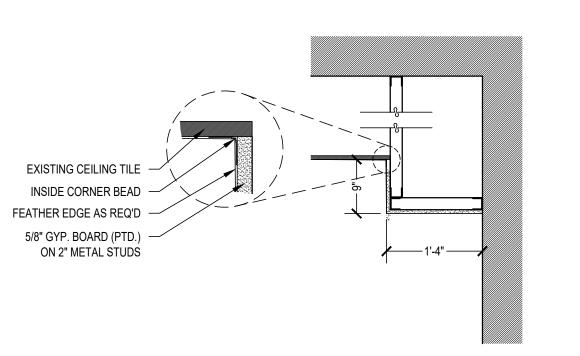
1. REPAIR (PROVIDE NEW CEILING TILE, GRID, SUPPORTS, ETC.) ALL EXISTING CEILINGS WHERE DEMOUNTABLE PARTITION IS REMOVED - REFER TO DEMO PLAN FOR LOCATION WHERE DEMOUNTABLE PARTITIONS ARE BEING DEMOLISHED

2.CEILING LAYOUT SHALL BE ADJUSTED TO ACCOMMODATE LIGHTING LAYOUT TO BE PROVIDED BY EC DURING CONSTRUCTION



TYPICAL BULKHEAD DETAIL - AT NEW A.C.T.

SCALE: 3/4" = 1'-0"



TYPICAL BULKHEAD DETAIL - AT EXISTING GYP

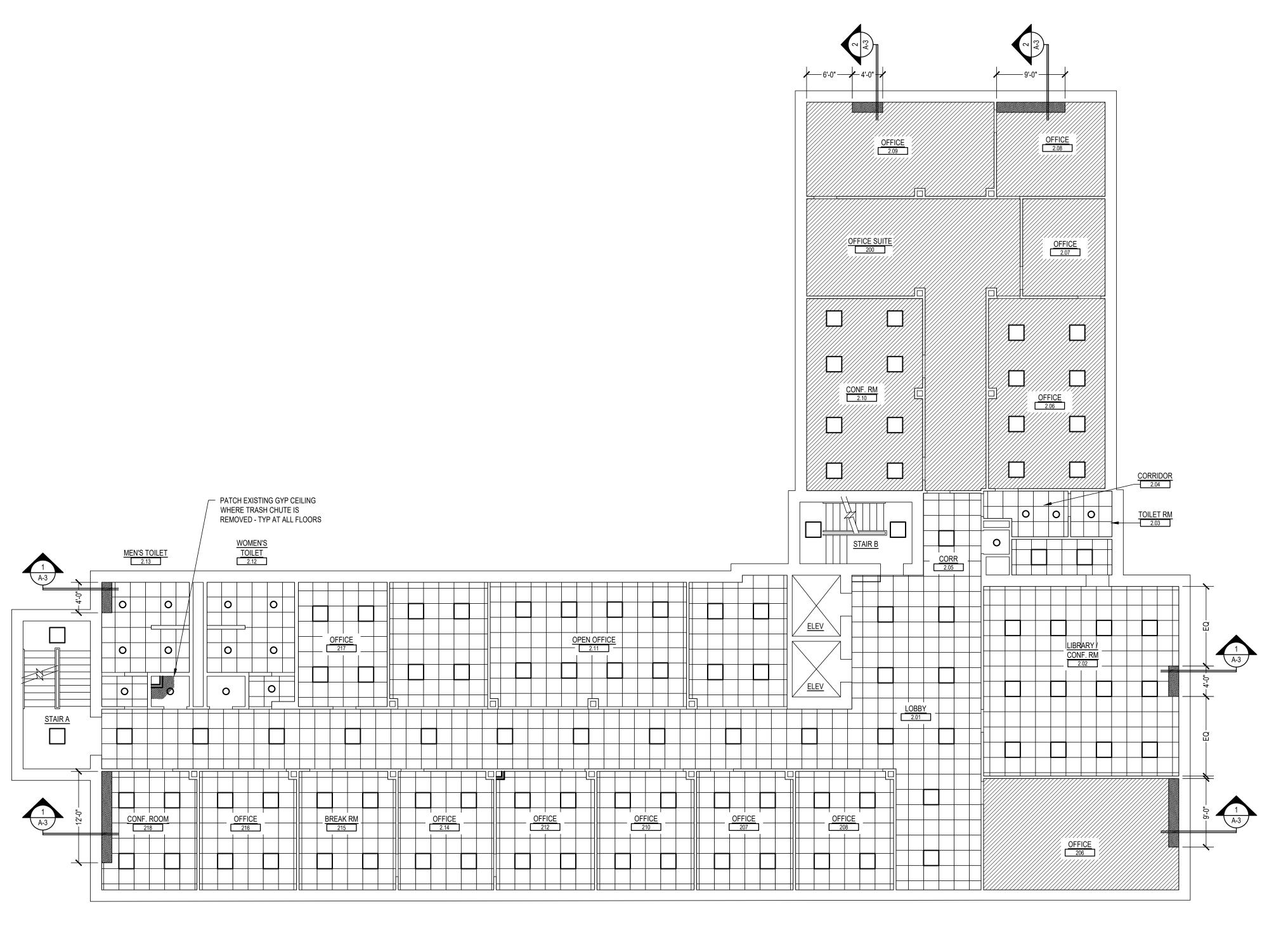
SCALE: 3/4" = 1'-0"

REVISIONS

All DIMENSIONS and EXISTING CONDITIONS shall be CHECKED and VERIFIED by the CONTRACTOR at the SITE. KDN CHECKED PML 10-18-2021

> AS NOTED JOB NO. 20-2767-2 SHEET

ARCHITECTS INC. 3700 PERKIOMEN AVENUE, READING, PA 19606-2795 Phone: 610.779.3220 Fax: 610.779.9022 www.aem-arch.com



SECOND FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

**CEILING TYPE LEGEND** SYMBOL DESCRIPTION 2' X 2' ACOUSTICAL CEILING TILE GYP CEILING EXPOSED STRUCTURE (PTD.) EXISTING CEILING TO REMAIN (PTD.)

1. REPAIR (PROVIDE NEW CEILING TILE, GRID, SUPPORTS, ETC.) ALL EXISTING CEILINGS WHERE DEMOUNTABLE PARTITION IS REMOVED - REFER TO DEMO PLAN FOR LOCATION WHERE DEMOUNTABLE PARTITIONS ARE BEING DEMOLISHED

2.CEILING LAYOUT SHALL BE ADJUSTED TO ACCOMMODATE LIGHTING LAYOUT TO BE PROVIDED BY EC DURING CONSTRUCTION

1ST & 2ND FLOOR HVAC AND ELECTRICAL UPGRADES AT THE ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT 800 WASHINGTON STREET READING PA. 1960

REVISIONS

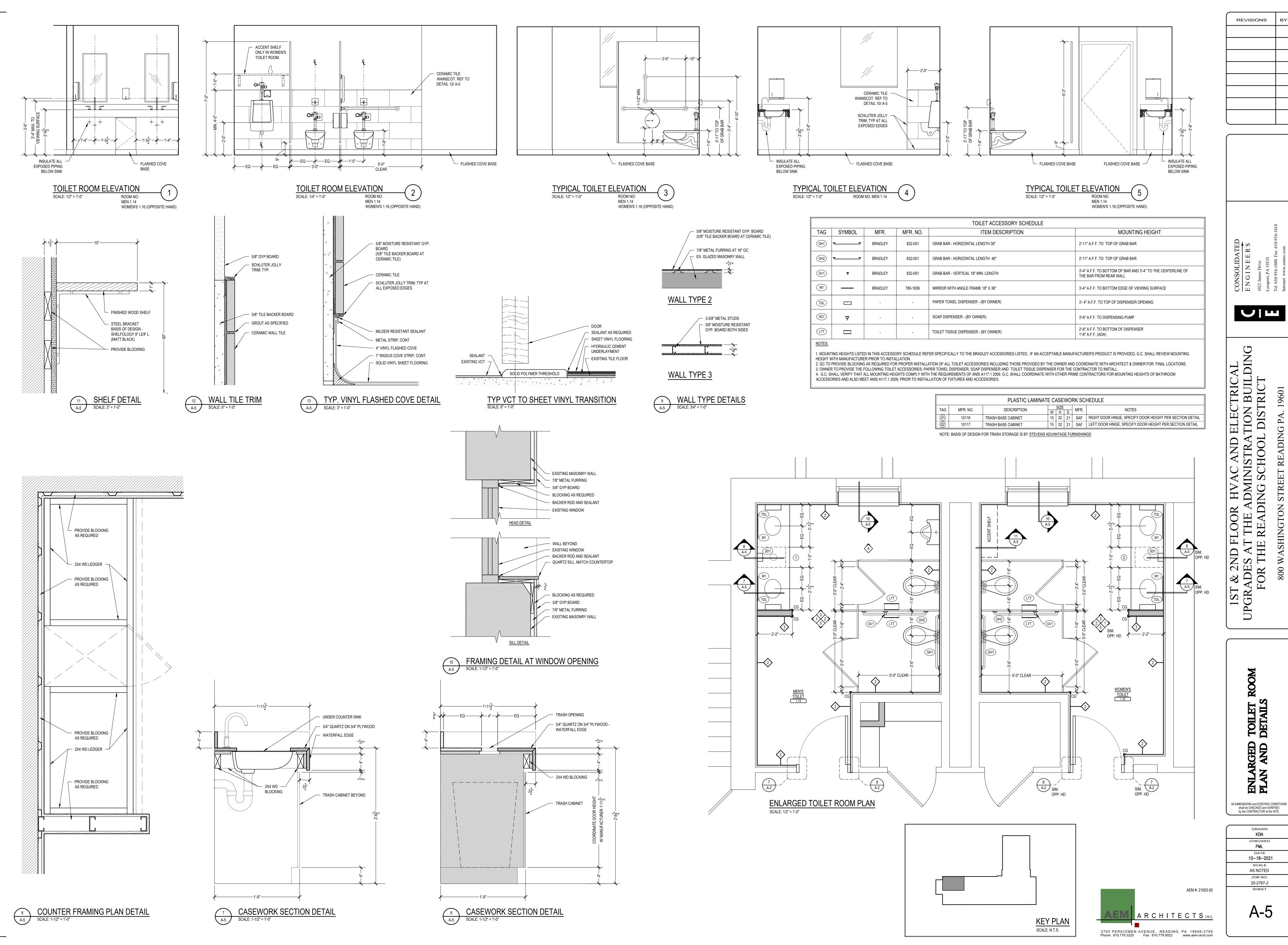
All DIMENSIONS and EXISTING CONDITIONS shall be CHECKED and VERIFIED by the CONTRACTOR at the SITE. DRAWN

KDN CHECKED

PML 10-18-2021 SCALE AS NOTED JOB NO. 20-2767-2 SHEET AEM #: 21003.00

ARCHITECTS INC.

3700 PERKIOMEN AVENUE, READING, PA 19606-2795 Phone: 610.779.3220 Fax: 610.779.9022 www.aem-arch.com

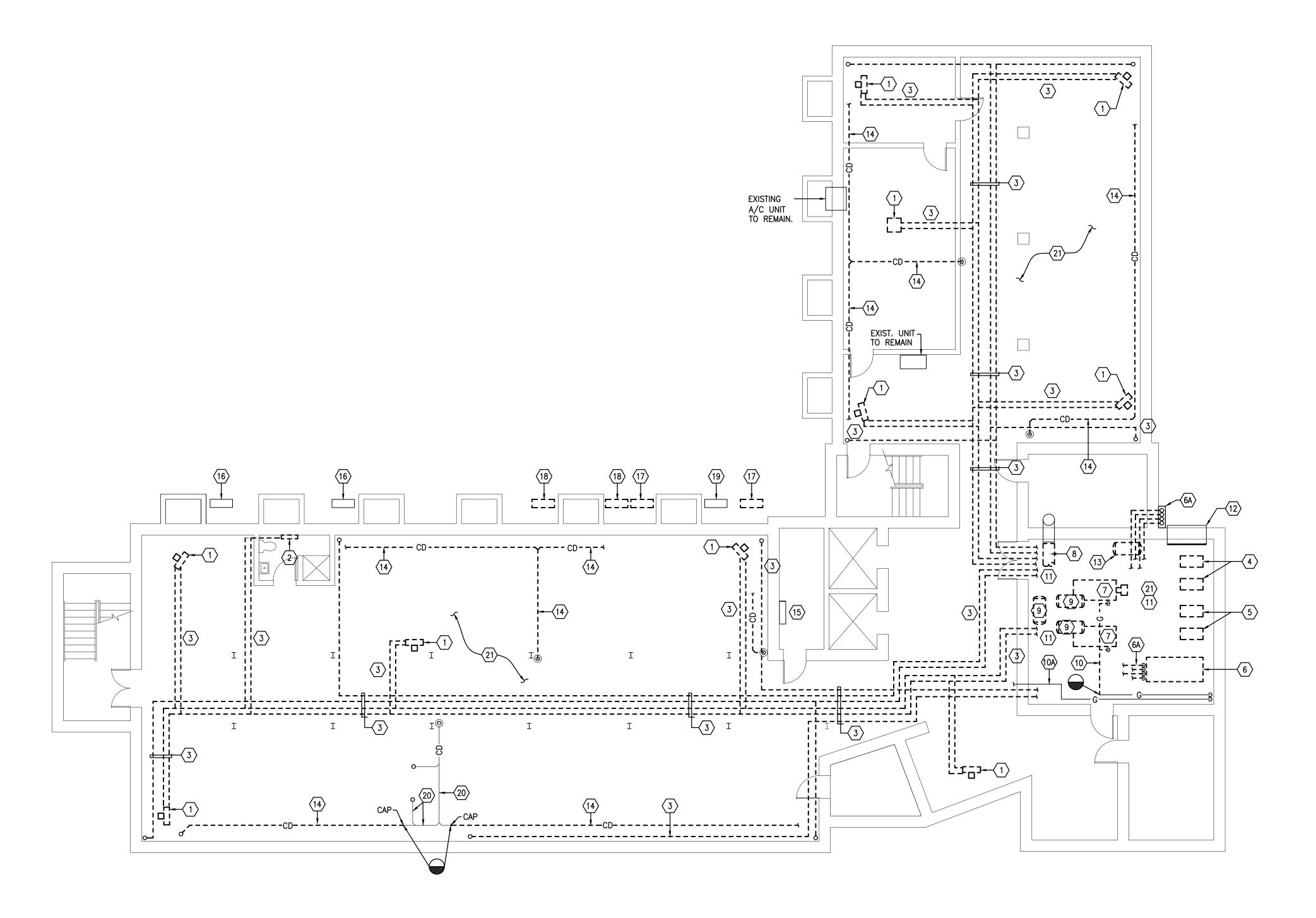


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KDN CHECKED PML 10-18-2021 AS NOTED JOB NO. 20-2767-2 SHEET

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BASEMENT FLOOR PLAN - HVAC DEMOLITION SCALE: 1/8"=1'-0"

## **GENERAL DEMOLITION NOTES:**

- 1. THE HVAC CONTRACTOR SHALL COORDINATE THE SALVAGE AND DISPOSAL OF ALL EQUIPMENT AND MATERIAL WITH THE OWNER. THE HVAC CONTRACTOR SHALL RETURN TO THE OWNER ANY ITEMS NOTED OR NOT NOTED, ON THE DRAWINGS, AT THE OWNERS REQUEST. ALL REMAINING EQUIPMENT AND MATERIAL SHALL BE DISPOSED OF BY THE HVAC CONTRACTOR.
- 2. THE HVAC CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL WORK IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AS REQUIRED TO ACCOMMODATE PROJECT PHASING.
- 3. REFER TO PROJECT PHASING DRAWING(S) AND SCHEDULE. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO ACCOMMODATE PROJECT PHASING.
- 4. ALL PATCHING & REPAIRING OF SURFACES AND HOLES LEFT OPEN DUE TO DEMOLITION OR REMOVAL OF EXISTING PIPING & EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR. PATCH EXISTING CONSTRUCTION AS REQUIRED TO MATCH ADJACENT SURFACES OR TO RECEIVE NEW FINISHES AS SCHEDULED UNLESS OTHERWISE INDICATED ON THE ARCHITECTURAL DRAWING.
- 5. THE HVAC CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING, EXCAVATION AND BACKFILLING REQUIRED TO COMPLETE ALL INDICATED WORK. UNLESS OTHERWISE NOTED.
- 6. ALL EXISTING PIPING AND EQUIPMENT SHOWN MUST BE VERIFIED IN THE FIELD. ANY HVAC EQUIPMENT NOT SHOWN SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO REMOVAL.
- 7. REMOVE ALL EXISTING CONCRETE EQUIPMENT PADS LOCATED BENEATH ALL DEMOLISHED EQUIPMENT, UNLESS OTHERWISE NOTED.
- 8. REMOVE ALL EXISTING ABANDON PNEUMATIC ATC PANELS, TUBING, FITTINGS AND SUPPORTS AS PHASING PERMITS. NO ABANDONED PNEUMATIC ATC TUBING OR COMPONENTS SHALL REMAIN AT PROJECT COMPLETION.
- 9. HVAC CONTRACTOR MUST COORDINATE ROOF MOUNTED EQUIPMENT REMOVAL WITH G.C. IF HVAC CONTRACTOR CHOOSES TO REMOVE ROOF MOUNTED EQUIPMENT PRIOR TO ROOFING CONTRACTOR BEING READY TO PATCH ROOF, HVAC CONTRACTOR MUST TEMPORARILY COVER REMAINING ROOF CURB WEATHER
- 10. PRIOR TO REMOVAL OF ANY EXISTING HVAC EQUIPMENT THAT CONTAINS REFRIGERANT THE HVAC CONTRACTOR SHALL REMOVE AND RECOVER THE ENTIRE CONTENT OF THE REFRIGERANT AND ALL ASSOCIATED OIL IN THE EXISTING EQUIPMENT. ALL REFRIGERANT/OIL RECOVERY EQUIPMENT IS REQUIRED TO BE CERTIFIED BY AN EPA-APPROVED TESTING ORGANIZATION TO ASSURE THAT THE EQUIPMENT MEETS EPA STANDARDS BASED ON THE TESTING METHOD ESTABLISHED BY AHRI STANDARD 740. REMOVAL OF ALL CFC AND HCFC REFRIGERANTS MUST CONFORM TO THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY. ALL WORK IS TO BE PERFORMED BY AN EPA CERTIFIED
- 11. HVAC CONTRACTOR WILL BE RESPONSIBLE TO REMOVE AND REPLACE ALL EXISTING CEILING SYSTEMS THAT ARE NOT NOTED TO BE REMOVED BY THE G.C. ON THE ARCHITECTURAL DRAWINGS AND ELECTRICAL DRAWINGS IN ALL AREAS WHERE REQUIRED HVAC WORK IS INDICATED. HVAC SHALL REMOVE AND REPLACE TILE AND GRID AS REQUIRED FOR NEW INSTALLATION.
- 12. THE H.C. IS RESPONSIBLE TO COMPLETELY DRAIN THE EXISTING HYDRONIC SYSTEM. THE H.C. MUST REMOVE AND REPLACE CEILING GRID AND TILE, CUT AND CAP PIPING, REMOVE AND REPLACE SHELVING AS NECESSARY TO DRAIN PIPING SYSTEM IN ACCORDANCE WITH THE PROJECT PHASES.

THE DEMOLITION WORK INDICATED IS INTENDED TO ASSIST TI CONTRACTOR AND GIVE GENERAL INFORMATION. THE CONTRACTOR SHALL BE REQUIRED TO VISIT THE PROJECT PRIOR TO BIDDING TO FULLY ACQUAINT HIMSELF WITH THE EXTENT OF ALL DEMOLITION WORK WHICH IS NECESSARY TO COMPLETE THE ALTERATIONS AND NEW CONSTRUCTION AS DESCRIBED IN THE CONTRACT DOCUMENTS. ALL DEMOLITION WORK REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE WHETHER INDICATED ON THE DRAWING OR NOT. THE CONTRACTOR WILL NOT BE ENTITLED TO ANY CLAIMS FOR ADDITIONAL COMPENSATION RELATED TO REQUIRED DEMOLITION.

## **KEYED DRAWING NOTES:**

- (1) REMOVE EXISTING HYDRONIC UNIT HEATER. REMOVE ASSOCIATED HANGERS AND APPURTENANCES. REMOVE ASSOCIATED THERMOSTAT, CONTROL DEVICES AND CONTROL
- (2) REMOVE EXISTING CONVECTOR. REMOVE ASSOCIATED HANGERS AND APPURTENANCES. REMOVE ASSOCIATED THERMOSTAT, CONTROL DEVICES AND CONTROL WIRING.
- (3) REMOVE EXISTING HYDRONIC PIPING IN ITS ENTIRETY. REMOVE ALL ASSOCIATED HANGERS AND SUPPORTS.
- 4 REMOVE EXISTING BASE MOUNTED HEATING PUMPS IN THEIR ENTIRETY. COMPLETELY REMOVE EXISTING CONCRETE PAD.
- $\langle$  5  $\rangle$  remove existing base mounted chilled water pumps in their entirety. COMPLETELY REMOVE CONCRETE PAD.
- (6) REMOVE EXISTING CHILLER IN ITS ENTIRETY. REMOVE ALL ASSOCIATED CHILLED WATER PIPING, REFRIGERANT PIPING, VALVES AND APPURTENANCES. PRIOR TO THE REMOVAL OF THE CHILLER THE CONTRACTOR SHALL EVACUATE AND DISPOSE OF REFRIGERANT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS, REMOVE EXISTING CHILLED WATER DOMESTIC FILL PIPING AND APPURTENANCES. CAP DOMESTIC PIPING AT THE MAIN. COMPLETELY REMOVE EXISTING CONCRETE PAD.
- (6A) REMOVE EXISTING REFRIGERANT PIPING FROM CHILLER CONNECTION TO OUTDOOR CONDENSERS LOCATED ON THE ROOF. COMPLETELY REMOVE ALL HANGERS AND SUPPORTS. EVACUATE AND DISPOSE OF REFRIGERANT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. REMOVE EXTERIOR STAINLESS STEEL
- (7) REMOVE EXISTING HEATING HOT WATER BOILER IN ITS ENTIRETY. REMOVE FLUE, HYDRONIC PIPING, GAS PIPING, ABANDONED FUEL OIL PIPING, AND ALL ASSOCIATED VALVES, HANGERS AND APPURTENANCES. SAW CUT ABANDONED FUEL OIL PIPING FLUSH WITH SLAB. REMOVE EXISTING HEATING WATER DOMESTIC FILL PIPING AND APPURTENANCES. CAP DOMESTIC PIPING AT THE MAIN. EXISTING CONCRETE PAD TO
- (8) REMOVE EXISTING BOILER FLUE UP TO PINTS INDICATED. CAP FLUE AT THE BOILER
- (9) REMOVE EXISTING EXPANSION TANKS, (4) FOUR. REMOVE ALL ASSOCIATED PIPING, HANGERS AND SUPPORTS.
- (10) REMOVE EXISTING NATURAL GAS PIPING FROM METER CONNECTION TO BOILERS. REMOVE ALL ASSOCIATED HANGERS AND SUPPORTS.
- (10A) EXISTING GAS PIPING TO THE EMERGENCY GENERATOR SHALL REMAIN.
- (11) REMOVE ALL EXISTING CHILLED WATER PIPING, HOT WATER PIPING, VALVES, FITTINGS, HANGERS, SUPPORTS, AND APPURTENANCES LOCATED IN THE BOILER ROOM.
- (12) EXISTING COMBUSTION AIR LOUVER AND DUCT SLEEVE TO REMAIN. PROVIDE 18 GAUGE INSULATED PANEL OVER OPENING. INSULATION TO BE 1" CLOSED CELL ELASTOMERIC.
- 13 REMOVE EXISTING AIR COMPRESSOR, DRYER, DEVICES AND AIR PIPING IN ITS
- (14) REMOVE EXISTING CONDENSATE DRAIN PIPING IN ITS ENTIRETY. COMPLETELY REMOVE ALL ASSOCIATED HANGERS AND SUPPORTS.
- $\langle 15 \rangle$  existing indoor evaporator serving elevator equipment room shall remain. (16) EXISTING CONDENSING UNIT SERVING IT 118 SHALL REMAIN.
- REMOVE EXISTING CONDENSING UNIT SERVING OFFICE 112/114. REMOVE ALL ASSOCIATED REFRIGERANT PIPING IN ITS ENTIRETY. EVACUATE AND DISPOSE OF
- (18) REMOVE EXISTING CONDENSING UNIT SERVING COPY ROOM 115. REMOVE ALL ASSOCIATED REFRIGERANT PIPING IN ITS ENTIRETY. EVACUATE AND DISPOSE OF

REFRIGERANT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

- REFRIGERANT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. (19) EXISTING CONDENSING UNIT SERVING ELEVATOR EQUIPMENT ROOM SHALL REMAIN.
- angle existing condensate drain from data room to remain.

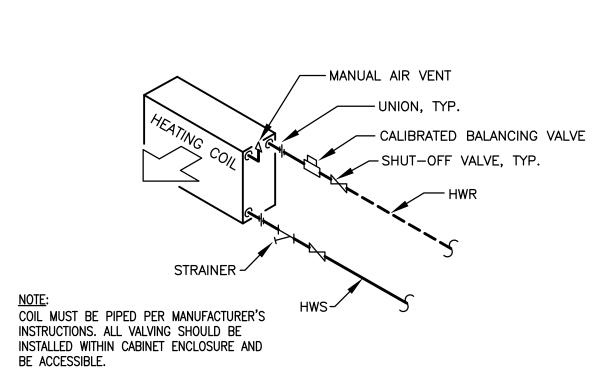
PROVIDE TEMPORARY HEAT FOR BASEMENT IF NEW HEATING SYSTEM IS NOT

INSTALLED AND OPERATIONAL BY OCTOBER 2021.

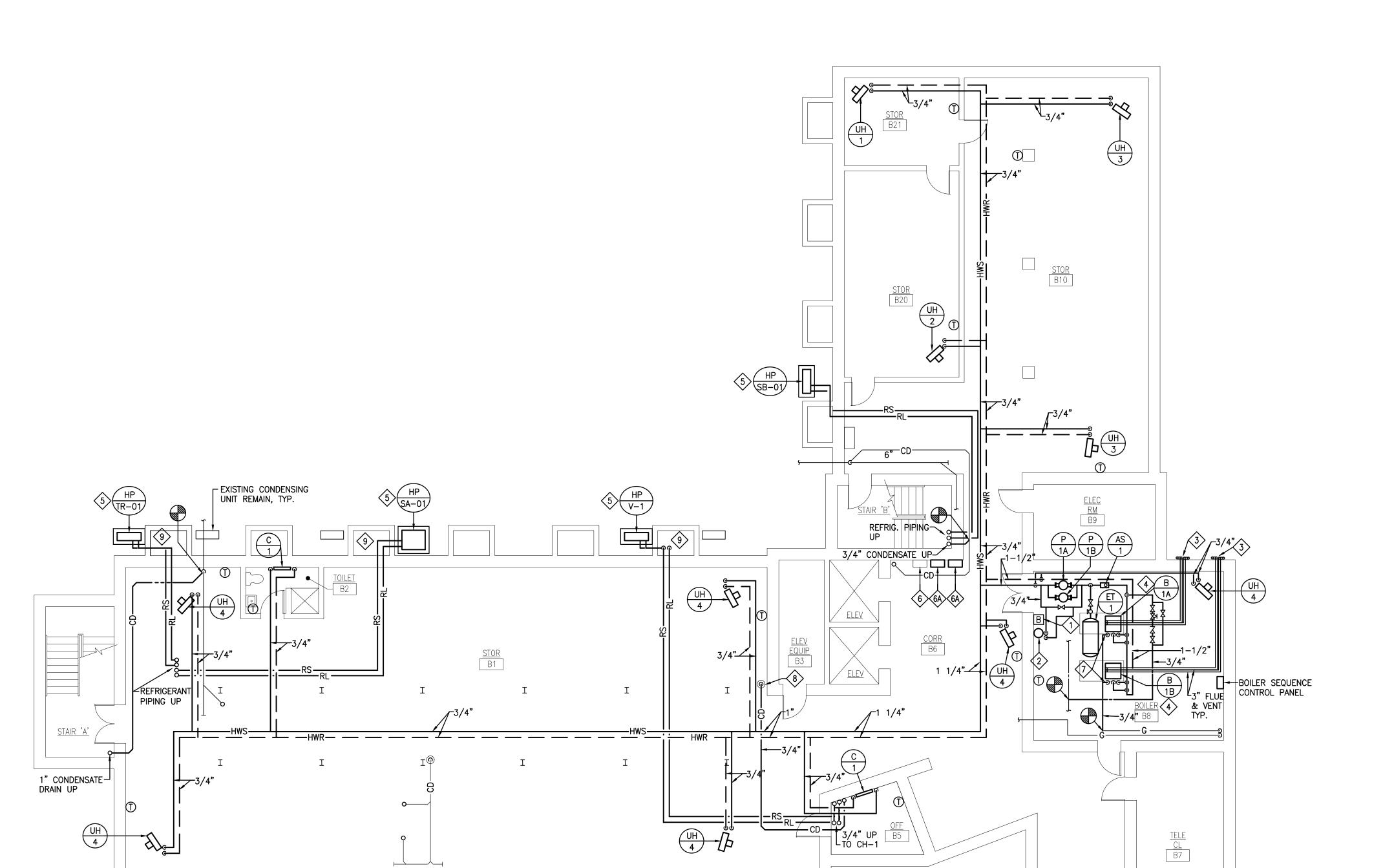
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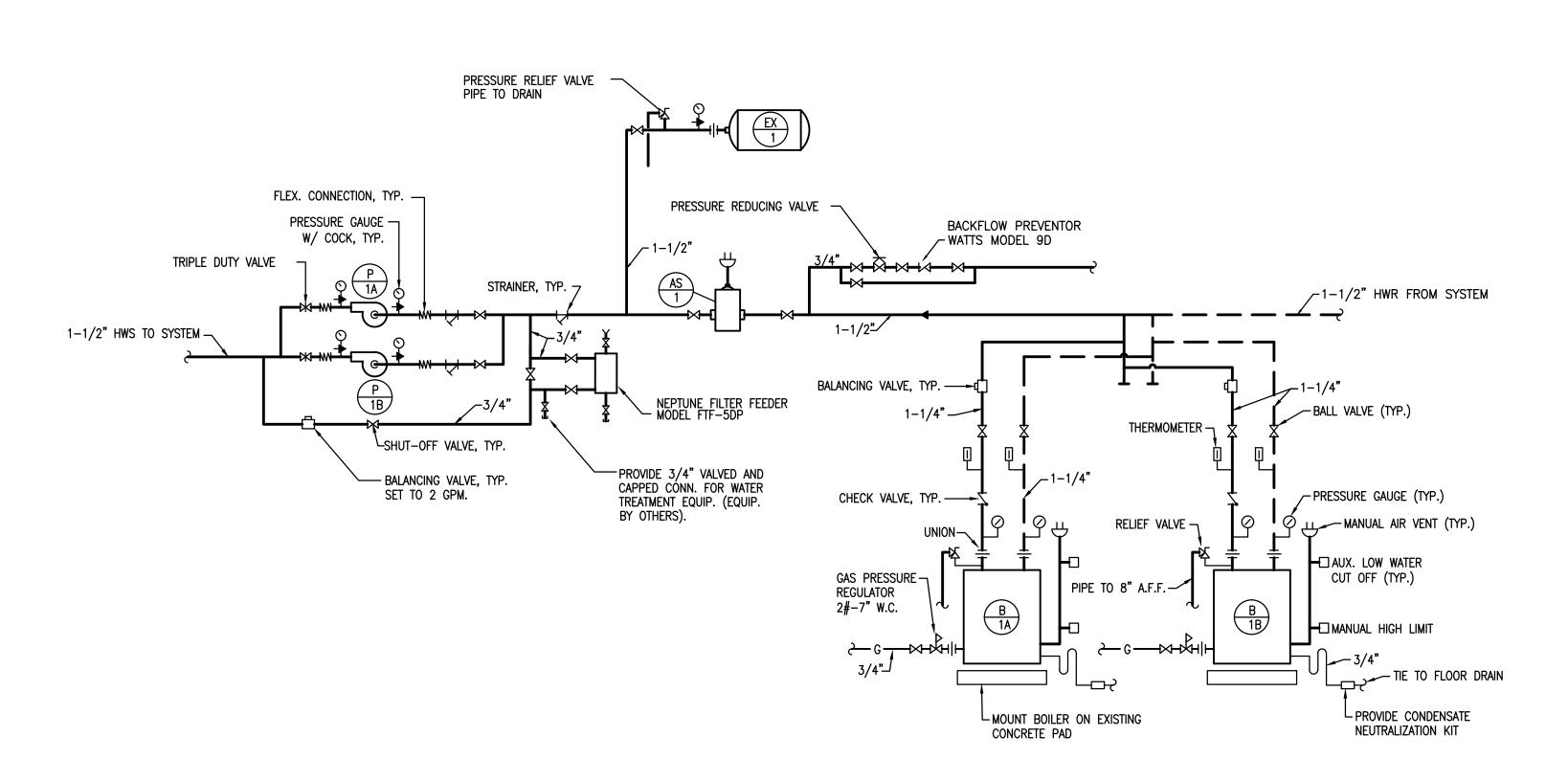
AS NOTED 2767-2



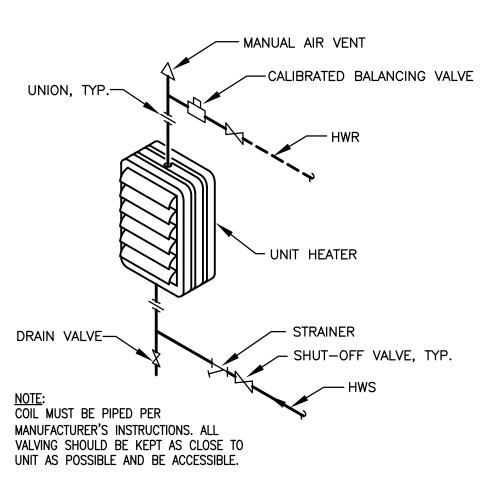
CABINET HEATER PIPING DETAIL
NO SCALE



### BASEMENT FLOOR PLAN - HVAC SCALE: 1/8"=1'-0"



<u>NOTE</u>: BOILER HAS INTERNAL PRIMARY PUMP. HEATING SYSTEM SCHEMATIC



UNIT HEATER PIPING DETAIL
NO SCALE

PROVIDE BOILER SAFETY SHUT OFF SWITCH. COMPLETE WIRING TO SHUT DOWN BOILERS WHEN SWITCHED OFF. PROVIDE RED LABELED SWITCH PLATE COVER. 2 PROVIDE FILTER FEEDER.

RUN 3" CPVC FLUE AND VENT THROUGH THE EXISTING COVER. RISE UP AND TERMINATE WITH DOUBLE 90'S. TERMINATE 33"+/- ABOVE EXTERIOR GRADE. PROVIDE 18 GAUGE PANEL, INSTALLED COMPLETELY OVER LOUVER OPENING. INSTALLATION TO BE 1" CLOSED CELL ELASTROMERIC. SEAL TO FLUE AND VENT PENETRATIONS.

**KEYED DRAWING NOTES:** 

4 MOUNT ON EXISTING BOILER PAD.

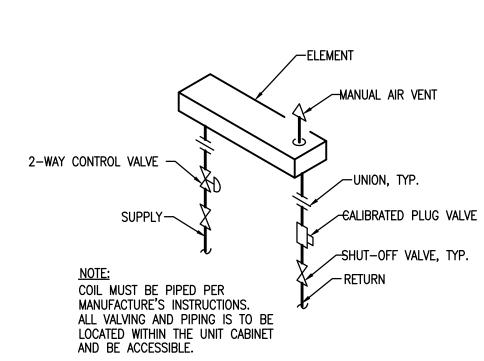
5> MOUNT UNIT ON PRE-MANUFACTURED EQUIPMENT PAD. 6 EXISTING VRF CONTROL PANEL TO REMAIN.

6A NEW VRF PANEL & NEW BAS PANEL.

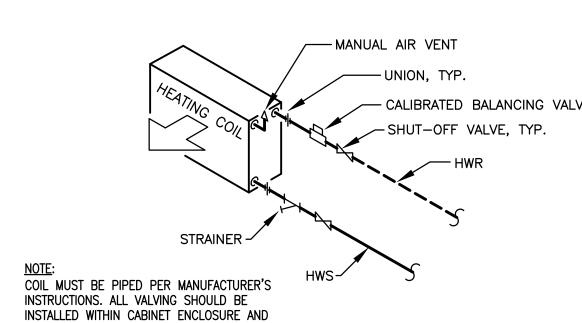
PROVIDE GAS CONNECTION TO BOILERS. PROVIDE DIRT LEG, UNION, SHUT-ODD VALVE AND GAS REGULATOR (2 P81G-7" W.C.)

(8) PIPE 3/4" CONDENSATE PIPING TO EXISTING WASTE RECEPTOR.

9 INSTALL REFRIGERATION PIPING THROUGH EXISTING WINDOW PANE. REMOVE SECTION OF GLASS AND INSTALL 1/2" PLYWOOD WITH ALUMINUM SHEET ON BOTH SIDES. SEAL THE PENETRATIONS.



CONVECTOR PIPING DETAIL NO SCALE



REVISIONS

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FB CHECKED AM 10-18-2021 SCALE AS NOTED 2767-2 SHEET

FIRST FLOOR PLAN - HVAC

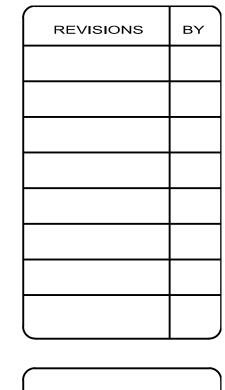
SCALE: 1/8"=1'-0"

# GENERAL DRAWING NOTES:

- PROVIDE FLEXIBLE DUCT CONNECTION AT EACH DUCT CONNECTIONS TO INDOOR (EVP) UNITS, AND ALL CONNECTIONS TO ERU'S.
- 2. H.C. RESPONSIBLE TO REMOVE ANY ACCESSIBLE HYDRONIC PIPING.

## **KEYED DRAWING NOTES:**

- EXISTING UNIT VENTILATOR AND SHELVING TO BE ABANDONED IN PLACE.
- EXISTING OUTDOOR INTAKE TO REMAIN. PROVIDE 18 GAUGE INSULATED PANEL OVER OPENING. INSULATION TO BE 1" CLOSED—CELL ELASTOMERIC. CAULK ALL EDGES.
- 3 LOUVER TO BE FURNISHED BY H.C. AND INSTALLED BY G.C. SEE DETAIL ON DWG A-2.
- REMOVE EXISTING AIR UNIT, RELATED DUCTWORK AND PIPING IN ITS ENTIRETY. CAP PIPING AT THE EXISTING RISER. REMOVE EXISTING THERMOSTAT AND CONTROL WIRING.
- REFRIGERANT BRANCH SELECTOR UNIT LOCATE ABOVE THE CEILING. SUPPORT FROM STRUCTURE AND PROVIDE ALL MANUFACTURES RECOMMENDED CLEARANCES. RUN REFRIGERANT PIPING (HG, LIQUID AND SUCTION) FROM CONDENSING UNIT ABOVE TO BRANCH SELECTOR UNIT, AND RUN LIQUID AND SUCTION FROM BRANCH SELECTOR UNIT TO THE INDIVIDUAL INDOOR EVAPORATOR UNITS. REFER TO PIPING DIAGRAM ON DRAWING H-9.
- 6 CONNECT CONDENSATE PIPING INTO THE EXISTING 3" CONDENSATE PIPE RISER.
- HC TO INSTALL ELECTRIC DUCT HEATER. DUCT HEATER TO BE FURNISHED BY UNIT MANUFACTURER.
- © CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CEILING TILE AND GRID AS NECESSARY TO COMPLETE INSTALLATION.
- REMOVE EXISTING DUCTLESS SPLIT SYSTEM EVAPORATOR, REFRIGERANT PIPING, CONDENSATE DRAIN CONTROLS AND ALL APPURTENANCES IN ITS ENTIRETY. RECLAIM REFRIGERANT AND PROPERLY DISPOSE.
- EXISTING CONVECTOR/CABINET HEATER TO BE ABANDONED.
- EXISTING SPLIT SYSTEM EVAPORATOR TO REMAIN.
- PROVIDE TEMPORARY HEAT IN TOILET ROOM IF NEW SYSTEM IS NOT UP AND OPERATIONAL AS OF OCTOBER 2021.
- REMOVE EXISTING CONVECTOR/CABINET HEATER. REMOVE ALL ASSOCIATED CONTROLS AND PIPING. PATCH WALL TO MATCH SURROUNDING FINISHES INCLUDING PAINTING.
- REMOVE ALL EXISTING EXHAUST DUCTWORK AND GRILLES IN THIER ENTIRETY UP TO ROOF.
- REMOVE EXISTING RECESSED CONVECTOR IN ITS ENTIRETY. REMOVE ALL RELATED PIPING.
- REMOVE EXISTING RECESSED PNEUMATIC CONTROL BOX AND ALL RELATED CONTROLLERS AND TUBING.



ENGINEERS

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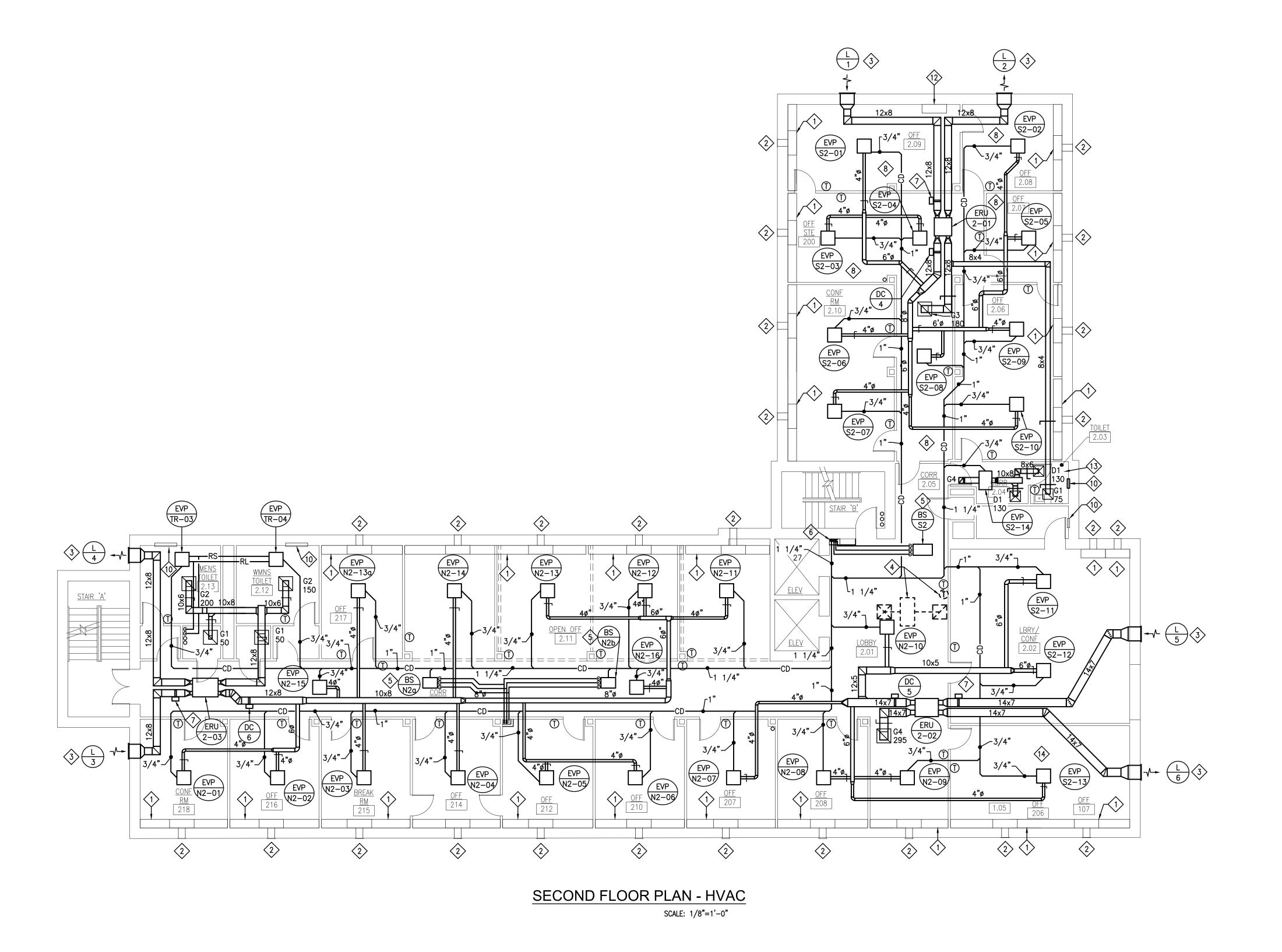
& 2nd FLOOR HVAC AND ELECTRICAL UPGI AT THE ADMINISTRATION BUILDING FOR T READING SCHOOL DISTRICT

ST FLOOR PLAN

DRAWN
FB
CHECKED
AM

DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2
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H-3



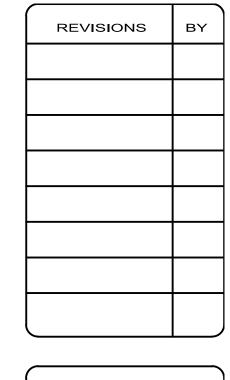
## **GENERAL DRAWING NOTES:**

- PROVIDE FLEXIBLE DUCT CONNECTION AT EACH DUCT CONNECTIONS TO INDOOR (EVP) UNITS, AND ALL CONNECTIONS TO ERU'S.
- 2. H.C. RESPONSIBLE TO REMOVE ANY ACCESSIBLE HYDRONIC PIPING.

## **KEYED DRAWING NOTES:**

- EXISTING UNIT VENTILATOR AND SHELVING TO BE ABANDONED IN PLACE.
- EXISTING OUTDOOR INTAKE TO REMAIN. PROVIDE 18 GAUGE INSULATED PANEL OVER OPENING. INSULATION TO BE 1" CLOSED-CELL ELASTOMERIC. CAULK ALL EDGES.
- LOUVER TO BE FURNISHED BY H.C. AND INSTALLED BY G.C. SEE DETAIL ON DWG A-2.
- REMOVE EXISTING AIR UNIT, RELATED DUCTWORK AND PIPING IN ITS ENTIRETY. CAP PIPING AT THE EXISTING RISER. REMOVE EXISTING THERMOSTAT AND CONTROL WIRING.
- REFRIGERANT BRANCH SELECTOR UNIT LOCATE ABOVE THE CEILING. SUPPORT FROM STRUCTURE AND PROVIDE ALL MANUFACTURES RECOMMENDED CLEARANCES. RUN REFRIGERANT PIPING (HG, LIQUID AND SUCTION) FROM CONDENSING UNIT ABOVE TO BRANCH SELECTOR UNIT, AND RUN LIQUID AND SUCTION FROM BRANCH SELECTOR UNIT TO THE INDIVIDUAL INDOOR EVAPORATOR UNITS. REFER TO PIPING DIAGRAM ON DRAWING H-8.
- 6 CONNECT CONDENSATE PIPING INTO THE EXISTING 3" CONDENSATE PIPE RISER.
- The to install electric duct heater. Duct heater to be furnished by unit manufacturer.
- © CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CEILING TILE AND GRID AS NECESSARY TO COMPLETE INSTALLATION.

  © NOT USED.
- EXISTING CONVECTOR/CABINET HEATER TO BE ABANDONED.
- 1 NOT USED.
- REMOVE EXISTING CONVECTOR/CABINET HEATER. REMOVE ALL ASSOCIATED CONTROLS AND PIPING. PATCH WALL TO MATCH SURROUNDING FINISHES INCLUDING PAINTING.
- REMOVE ALL EXISTING EXHAUST DUCTWORK AND GRILLES IN THIER ENTIRETY UP TO ROOF.
- EXISTING CEILING GRID TO REMAIN. COORDINATE INSTALLATION OF EVP-S2-13 WITH EXISTING CEILING GRID.



. N GINEERS 322 James Drive eesport, PA 19533 el 610-916-1600 Fax 610-916-1610 ww.consolidatedengineers.com

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1st & 2nd FLOOR HVAC AND ELECTRICAL UPGRA AT THE ADMINISTRATION BUILDING FOR TH READING SCHOOL DISTRICT

COND FLOOR PLAN - HVAC

DRAWN
FB
CHECKED
AM
DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2

H-4

THIRD FLOOR PLAN - HVAC

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

# **KEYED DRAWING NOTES:**

- CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CEILING TILE AND GRID AS NECESSARY TO COMPLETE INSTALLATION.
- 2 EXISTING CONVECTOR CABINET HEATER TO BE ABANDONED.
- REMOVE EXISTING CONVECTOR/CABINET HEATER. REMOVE ALL ASSOCIATED CONTROLS AND PIPING. PATCH WALL TO MATCH SURROUNDING FINISHES INCLUDING PAINTING.
- PROVIDE TEMPORARY HEAT IN TOILET ROOM IF NEW SYSTEM IS NOT UP AND OPERATIONAL AS OF OCTOBER 2021.
- REMOVE ALL EXISTING EXHAUST DUCTWORK IN ITS ENTIRETY UP TO ROOF.

## **GENERAL NOTES:**

THE BAS (JCI) SUBCONTRACTOR MUST PROVIDE CONTROL AND ALARM NOTIFICATION FOR (3) THREE ELECTRIC DUCT HEATERS FOR THE EXISTING ERU'S ON THIS FLOOR.

REVISIONS

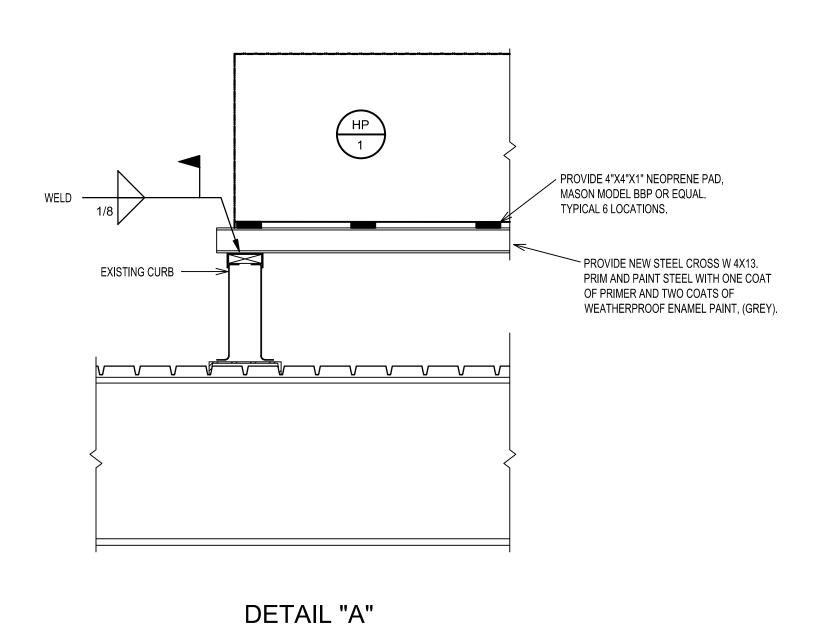
ОІШ

SCALE AS NOTED 2767-2 SHEET

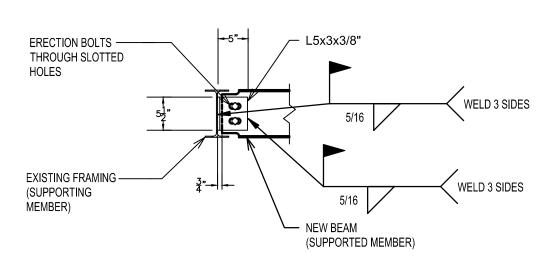


ROOF PLAN - HVAC

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



SCALE: 3/4"=1'-0"



CONNECTION DETAIL

NOT TO SCALE

### STEEL NOTES

#### A. STRUCTURAL STEEL

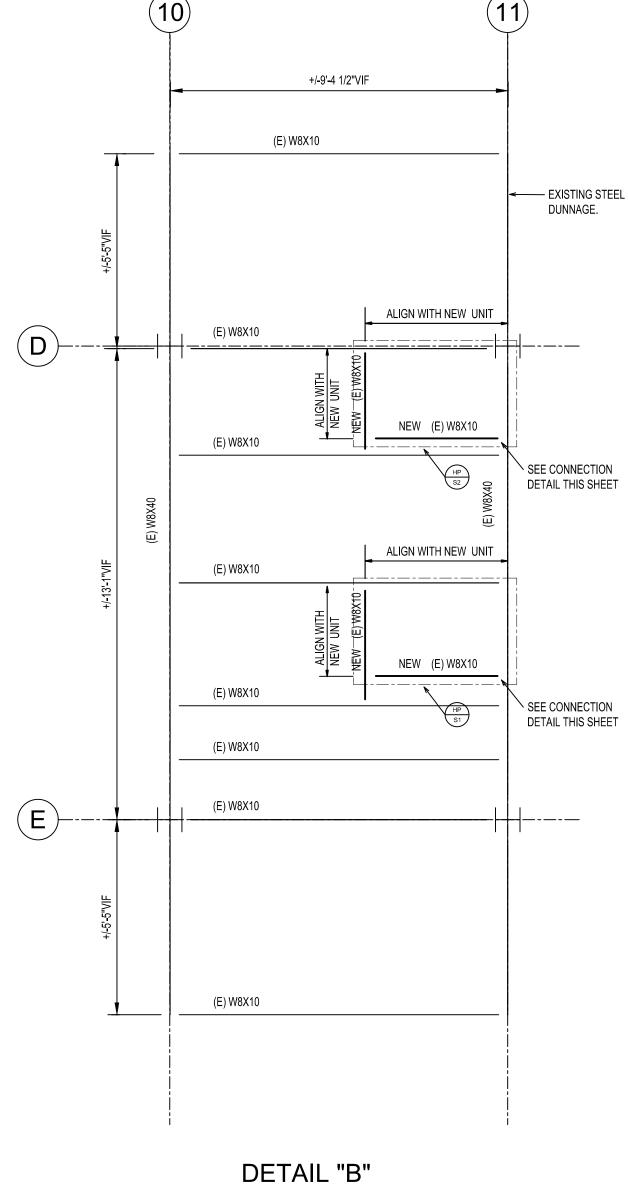
- 1. STRUCTURAL STEEL CONSTRUCTION HAS BEEN DESIGNED IN ACCORDANCE WITH A.I.S.C. 360-10, "STEEL CONSTRUCTION MANUAL."
- 2. STRUCTURAL STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS, U.N.O.
- CHANNELS, TEES, ANGLES, BARS, PLATES, ASTM A36 W8X10 AND SMALLER BEAMS
- 3. CONNECTION BOLTS SHALL CONFORM TO ASTM A325. USE BEARING TYPE BOLTS WITH THREAD ALLOWED ACROSS THE SHEAR PLANE (TYPE N) AT TYPICAL BEAM SHEAR CONNECTIONS, U.N.O. USE TYPE "SC" BOLTS WITH EITHER DIRECT TENSION INDICATOR OR LOAD INDICATOR WASHERS AT ALL BOLTED SLIP CRITICAL CONNECTIONS.
- 4. STEEL BEAM CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE DESIGNED BY THE STRUCTURAL STEEL FABRICATOR. BEAM CONNECTIONS SHALL DEVELOP THE END REACTIONS GIVEN ON THE DRAWINGS. WHERE END REACTIONS ARE NOT SPECIFIED, THE BEAM CONNECTION SHALL DEVELOP 50% OF THE BEAMS WEB ALLOWABLE SHEAR CAPACITY. A MINIMUM CONNECTION CAPACITY OF 12 KIPS SHALL BE PROVIDED FOR ALL BEAMS, UNLESS NOTED OTHERWISE BY SPECIFIED REACTION. THE STRUCTURAL STEEL FABRICATOR SHALL PROVIDE CERTIFICATION BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF THE PROJECT, THAT THE CONNECTION DESIGN IS IN ACCORDANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS.
- 5. FOR ALL HIGH STRENGTH BOLTS, HARDENED WASHERS SHALL BE PROVIDED.
- 6. GALVANIZING OF STEEL MEMBERS SHALL CONFORM TO ASTM A123. GALVANIZE ALL STEEL PERMANENTLY EXPOSED TO WEATHER.
- 7. STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.
- 8. STRUCTURAL STEEL MEMBERS SHALL NOT BE SPLICED OR HAVE PENETRATIONS UNLESS INDICATED ON THE STRUCTURAL CONTRACT DOCUMENTS OR AS REVIEWED BY THE STRUCTURAL ENGINEER.

#### A. WELDING

- WELDED CONSTRUCTION SHALL CONFORM TO THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE" D1.1; AWS D1.3-SHEET STEEL; AND AWS D1.4 "REINFORCING STEEL WELDING CODE".
- 2. ELECTRODES FOR FIELD AND SHOP WELDS OF STRUCTURAL STEEL SHALL BE E70XX, U.N.O.
- 3. WHEN WELDS ARE NOT CALLED-OUT ON DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH SHALL BE CONTINUOUS.
- 4. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL GROOVE WELDS SHALL BE FULL PENETRATION.
- 5. PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THE ALLOWABLE TENSILE STRENGTH OF THE SMALLER MEMBER AT THE JOINT UNLESS DETAILED OTHERWISE ON THE DRAWINGS.

## KEYED DRAWING NOTES:

- REMOVE EXISTING AIR COOLED CONDENSER IN ITS ENTIRETY. RECLAIM THE EXISTING REFRIGERANT AND PROPERLY DISPOSE OF IN ACCORDANCE WILL ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- REMOVE EXISTING REFRIGERANT PINING IN ITS ENTIRETY. REMOVE FROM EXISTING AIR COOLED CONDENSER ALONG ROOF AND DOWN THE BUILDING TO THE CHILLER LOCATED IN THE BASEMENT MECHANICAL ROOM. REMOVE ALL SUPPORTS, CLAMPS AND
- PROVIDE HP UNIT ON EXISTING STEEL DUNNAGE. PROVIDE STEEL BEAMS AND ATTACH TO EXISTING STEEL DUNNAGE. SEE DETAIL "B" ON THIS SHEET. PROVIDE 1" THICK NEOPRENE VIBRATION PAD, 6 LOCATIONS PER UNIT, PADS TO BE MASON INDUSTRIES MODEL BBP OR EQUAL.
- PROVIDE REFRIGERANT LINES FROM NEW HP UNIT THROUGH ROOF CURB (EXISTING). SEAL ALL PIPE PENETRATIONS. PROVIDE CURB CAP WITH PIPING & TABS PROVIDE ROOF PIPING SUPPORTS EVERY 4'-0". PIPE SUPPORTS TO BE CADY PYRAMID ST STUT-BASE SUPPORT RPS50H6HD, OR EQUAL.
- PROVIDE HP UNIT ON NEW STEEL BEAMS. PROVIDE 4" STEEL BEAMS AND INSTALL PERPENDICULAR TO EXISTING ROOF CURBS. MOUNT UNIT ON STEEL. PROVIDE 1" THICK NEOPRENE VIBRATION PAD, TYPICAL 6 LOCATIONS PER UNIT. SEE DETAIL "A" THIS SHEET.
- REMOVE EXISTING EXHAUST FAN. PROVIDE 16 GAUGE WEATHER TIGHT CAP OVER THE EXISTING CURB WITH 1" CLOSED—CELL ELASTOMERIC INSULATION. REMOVE ALL RELATED EXHAUST DUCTWORK DOWN THROUGH 3RD FLOOR.



SCALE: 3/8"=1'-0"

NOTE: PREP, PRIME AND PAINT ALL NEW STEEL AND EXISTING STEEL DUNNAGE IN ITS ENTIRETY. PAINT WITH ONE COAT OF PRIMER AND TWO COATS OF WEATHERPROOF ENAMEL PAINT, (GREY).

REVISIONS BY

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AT THE ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT

ROOF PLAN - HVAC

DRAWN
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CHECKED
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DATE
10-18-2021
SCALE
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2767-2

H-6

	AIR FLO	)W DATA	SUPF	PLY FAN	DATA	RETU	JRN FAN	DATA	ELEC. D	ATA			EN	NERGY REC	OVERY D	ATA		FLEC	. PRE-HEATER				
SYMBOL	MAX.											DESIGN O.	A. E.A.T.	DESIGN EX	XH. E.A.T.	L.A.T. AT	DESIGN		THE HEATEN	MODEL	NOMINAL SIZE	MAXIMUM OPERATING	REMARKS
	SUPPLY	EXH	E.S.P.	H.P.	RPM	E.S.P.	H.P.	RPM	VOLTAGE	MCA	MOP	SUMMER D.B./W.B.		SUMMER D.B./W.B.	WINTER D.B.	SUMMER D.B./W.B.	WINTER D.B.	KW	ELEC.		W" x L" x H"	WEIGHT	
ERU-1-01	270	270	.60"	_	_	.60"	_	_	208/230-1ø	1.6	15	95/78	10	74/62	70	81.1/71.9	51.2	1.0	208/230-1ø	VAM300GVJU	35" x 32" x 12"	71 LBS.	
ERU-1-02	390	330	.60"	_	_	.60"	_	_	208/230-1ø	3.9	15	95/78	10	74/62	70	81.6/71.4	49.8	1.0	208/230-1ø	VAM470GVJU	43" x 32" x 15"	121 LBS.	
ERU-1-03	390	450	.60"	_	_	.60"	_	_	208/230-1ø	3.9	15	95/78	10	74/62	70	79.7/70.7	57.8	2.0	208/230-1ø	VAM470GVJU	43" x 32" x 15"	121 LBS.	
ERU-2-01	255	255	.60"	_	_	.60"	_	_	208/230-1ø	1.6	15	95/78	10	74/62	70	80.9/71.6	51.6	1.0	208/230-1ø	VAM300GVJU	35" x 32" x 12"	71 LBS.	
ERU-2-02	355	295	.60"	-	_	.60"	-	_	208/230-1ø	3.9	15	95/78	10	74/62	70	81.5/71.2	50.1	1.0	208/230-1ø	VAM470GVJU	43" x 32" x 15"	121 LBS.	
ERU-2-03	390	450	.60"	_	_	.60"	-	_	208/230-1ø	3.9	15	95/78	10	74/62	70	79.7/70.7	55.6	1.0	208/230-1ø	VAM470GVJU	43" x 32" x 15"	121 LBS.	

NOTES: 1. MODEL NUMBERS ARE INDICATED FOR REFERENCE ONLY. THE DUTIES AND CAPACITIES ARE TO BE USED FOR FINAL UNIT SELECTION BY THE MANUFACTURER.

<sup>2.</sup> ELEC. PRE—HEATERS SHALL BE FURNISHED BY THE UNIT MANUFACTURE AND INSTALLED IN THE DUCT BY H.C., CONTRACTOR TO COMPLETE CONTROL WIRING.

	HYDRC	NIC C	ABINE	ET HEATE	ER SC	HEDUL	_E								<u>BASIS OF DESIGN:</u> RITTLING
SYMBOL	CFM	FAN RPM	H.P.	ELECTRICAL	GPM	МВН	EWT (°F)	WPD	MOUNTING	FRONT PANEL WIDTH x HEIGHT	WALL OPENING WIDTH x HEIGHT	RECESS DEPTH	CABINET FINISH	MODEL	REMARKS
CH-1	620	-	1/15	120V-1ø	2.2	32.4	140	1.7'	FLOOR	-	-	_	STANDARD COLOR	RW-280-06	_

-	BOILER SCHEDULE	- -								BASIS OF DESIGN: BOSCH
SYMBOL	TYPE	INPUT	OUTPUT	RELIEF	MAXIMUM WORKING		ELECTRICA	<b>AL</b>	MODEL	REMARKS
SIMBOL	TIPE	MBH	MBH	VALVES	PRESSURE	WATTS	VOLTS	PHASE	MODEL	REMARKS
B-1A	CONDENSING	151.6	137.5	20 LB.	30 LB.	250	120	1	GREENSTAR FS-151	_
B-1B	CONDENSING	151.6	137.5	20 LB.	30 LB.	250	120	1	GREENSTAR FS-151	-

NOTES: 1. MODEL NUMBERS ARE INDICATED FOR REFERENCE ONLY. THE DUTIES AND CAPACITIES ARE TO BE USED FOR FINAL UNIT SELECTION BY THE MANUFACTURER.

<sup>2,</sup> UNITS TO BE EQUIPPED WITH FLOOR STAND, LOW LOSS PIPING HEADERS, GAS PIPING HEADERS, INTERNAL PRIMARY PUMPS, CONDENSATE NEUTRALIZATION KIT, MANUAL RESET LOW WATER CUT-OFF. BOILER (1CM) SEQUENCE CONTROLLER.

	HYDRO	NIC L	JNIT H	IEATER S	SCHED	ULE					<u>BASIS OF DESIGN:</u> RITTLING
SYMBOL		FAI	N DATA		GPM	MBH	EWT	WPD	MOUNTING	MODEL	REMARKS
SIMBOL	CFM	RPM	H.P.	ELECTRICAL	GFM	MIDFI	(*F)	WFD	MOONTING	MODEL	REMARKS
UH-1	310	_	1/30	120V-1ø	0.4	5.5	140	0.1'	CEILING	RH-18	-
UH-2	350	_	1/30	120V-1ø	0.5	7.3	140	0.1'	CEILING	RH-24	-
UH-3	490	_	1/15	120V-1ø	0.7	10.3	140	0.1'	CEILING	RH-33	-
UH-4	565	_	1/15	120V-1ø	1	14.2	140	0.1'	CEILING	RH-47	_

NOTES: 1. MODEL NUMBERS ARE INDICATED FOR REFERENCE ONLY. THE DUTIES AND CAPACITIES ARE TO BE USED FOR FINAL UNIT SELECTION BY THE MANUFACTURER.

(	CONVE	CTOR	SCHE	DULE							<u>BASIS OF DESIGN:</u> RITTLING
SYMBOL	GPM	MBH	EWT (*F)	WPD		DIME	ENSIONS		CABINET FINISH	MODEL	REMARKS
			(1)		L"	Н"	D"	RECESSED	1 1141311		
C-1	0.6	1.7	140	0.1'	36"	20"	6"	_	STANDARD COLOR	SL-20-36-06	_

NOTES: 1.DIMENSIONS ARE FOR REFERENCE ONLY. REFER TO VENDOR'S SHOP DRAWINGS FOR ACTUAL CONTRCUTION DIMENSIONS.

EXF	PANSION	TANK SO	CHEDUL	_E		BASIS OF DESIGN: BELL & GOSSETT
SYMBOL	TAŅK VOLUŅE	ACCEPTANCE VOLUME	SI	ZE	MODEL	REMARKS
STMBOL	(GALLONS)	(GALLONS)	DIA. (IN.)	LENGTH (IN.)		KLWARKS
EX-1	8	2.4	12	19.25	D-15	_

DIF	FUSER	SCH	EDULE					
SYMBOL	NECK SIZE	FACE SIZE	BORDER TYPE	BLOW	MODEL	N. C.	MANUFACTURER	REMARKS
D1	6"ø	9x9	SURFACE	4 WAY	TDC	< 20	TITUS	

	LOUVER	SCHE	DULE					BASIS OF DESIGN: POTTOROFF
SYMBOL	FUNCTION	CFM	WIDTH x HEIGHT	MIN. FREE AREA (SQ. FT.)	STATIC PRESSURE	MODEL	REMARKS	
L-1	SUPPLY	270	24" x 12"	0.7	0.07"	ECD-635	-	
L-2	EXHAUST	270	24" x 12"	0.7	0.07"	ECD-635	_	

0.08"

0.08"

0.08"

0.08"

ECD-635

ECD-635

ECD-635

ECD-635

GRILLE AND REGISTER SCHEDULE

<20

<20

<20

SURFACE

SURFACE

SURFACE

<20 SURFACE

MANUFACTURER REMARKS

TITUS

TITUS

TITUS

TITUS

SYMBOL

G2

G3

G4

390

450

390

330

24" x 12"

24" x 12"

24" x 12"

SUPPLY

**EXHAUST** 

SUPPLY

**EXHAUST** 

L-5

L-6

SIZE

10x10

12x12

50F

50F

50F

50F

	ELE	CTRIC	C DUC	CT CC	OIL S	SCHE	DULE				BASIS OF DESIGN: MARKEL
SYMBOL	CFM	ΚW	ELEC.	STAGES	EAT	LAT	MAX. APD	SIZE	MODEL	LOCATION	
DC-1	270	3.0	208 – 3ø	SCR	40	76	.01	12 x 6	HF	ERU-1-01	
DC-2	390	4.5	208 – 3ø	SCR	40	75	.01	12 x 8	HF	ERU-1-02	
DC-3	390	4.5	208 – 3ø	SCR	40	75	.01	12 x 8	HF	ERU-1-03	
DC-4	255	3.0	208 – 3ø	SCR	40	78	.01	12 x 6	HF	ERU-2-01	
DC-5	355	4.0	208 – 3ø	SCR	40	75	.01	12 x 8	HF	ERU-2-02	
DC-6	390	4.5	208 – 3ø	SCR	40	75	.01	12 x 6	HF	ERU-2-03	

0.7

0.7

0.7

\* ALL ELECTRIC DUCT COILS MUST BE FURNISHED WITH AN INTEGRAL CONTROL PANEL, INTERGRAL SCR CONTROL, THERMAL CUTOFF, AIR FLOW SWITCH AND A NON FUSED DISCONNECT SWITCH. PROVIDE DISCHARGE AIR TEMPERATURE CONTROLLER. ALSO PROVIDE DISCHARGE AIR TEMPERATURE SENSOR TO COMMUNICATE WITH ERU CONTROLLER FOR ALARM NOTIFICATION.

	AIR S	EPARA	TOR SC	HEDUL	E BASIS OF DESIGN: BELL & GOSETT				
SYMBOL	GPM	WPD	INLET/OUTLET SIZE	MODEL	REMARKS				
AS-1	15	PROVIDE HIGH CAPACITY AIR VENT							

	PUMP	SCHE	DULE					BASIS OF DESIGN: BELL & GOSSETT
SYMBOL	GPM	HEAD		PUMP MOT	OR	EFFICIENCY	MODEL	REMARKS
SIMBOL	GFWI	HEAD	H.P.	RPM	ELECTRICAL	EFFICIENCI	MODEL	REMARKS
P-1A	15	30'	2/5	3250	115V-1ø	55%	PL-55	HAND-OFF-AUTO
P-1B	15	30'	2/5	3250	115V-1ø	55%	PL-55	HAND-OFF-AUTO

## GENERAL PROJECT NOTES:

- 1. REFRIGERANT PIPING RUNS BETWEEN DX EVAPORATOR COILS AND THEIR ASSOCIATED AIR—COOLED CONDENSING UNITS SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. RUN LENGTHS SHALL BE CALCULATED FROM PLANS, BUILDING SECTIONS AND FIELD CONDITIONS. ALL REFRIGERANT PIPING SHALL BE CONCEALED. PROVIDE ALL REQUIRED TRAPS IN VERTICAL REFRIGERANT RISERS AND ALL MISCELLANEOUS REFRIGERANT COMPONENTS THAT ARE INDICATED IN THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- THE CONTRACTOR SHALL COORDINATE ALL WORK ABOVE THE CEILING WITH THE EXISTING CONDITIONS TO INSURE THE SCHEDULED CEILING HEIGHTS CAN BE MAINTAINED.
- 3. CONTRACTOR SHALL COMPLETE ALL CONTROL WIRING IN ACCORDING WITH THE MANUFACTURES RECOMMENDATIONS.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING AND SURFACE RESTORATION AS REQUIRED TO COMPLETE INSTALLATION.
- 5. CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE ANY EXISTING CEILING TILE AND GRID THAT IS REMAINING, AS NECESSARY TO COMPLETE INSTALLATION.

# **HVAC LEGEND**

(ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT)

1			
<b>-</b> ₩-	2-WAY CONTROL VALVE	—— HWS ——	HEATING WATER SUPPLY
	3-WAY CONTROL VALVE	— — HWR — —	HEATING WATER RETURN
	BACKFLOW PREVENTER	—— DTS ——	DUAL TEMPERATURE WATER SUPPLY
	- SAFETY RELIEF VALVE	— — DTR — —	DUAL TEMPERATURE WATER RETURN
<b>-</b> ⋈-	WATER PRESSURE REDUCING VALVE	CWS	CHILLED WATER SUPPLY
- >> -	- BALL OR BUTTERFLY VALVE	— — CWR — —	CHILLED WATER RETURN
-🖰-	CALIBRATED BALANCING VALVE	— cs —	CONDENSER WATER SUPPLY
1	- CHECK VALVE	—— CR ——	CONDENSER WATER RETURN
++	STRAINER	—— HPWS ——	HEAT PUMP WATER SUPPLY
— <del>  </del>	- TRIPLE DUTY VALVE	— —HPWR — —	HEAT PUMP WATER RETURN
The state of the	HIGH CAPACITY AUTOMATIC AIR VENT	—— PWS ——	POOL WATER SUPPLY
·	MANUAL AIR VENT	—— PWR ——	POOL WATER RETURN
<b>⊣</b>  ⊢	UNION OR FLANGED CONNECTION	—— RL ——	REFRIGERANT LIQUID
-W-	FLEXIBLE PIPE CONNECTION	—— RS ——	REFRIGERANT SUCTION
	FLOW METER	—— RHG ——	REFRIGERANT HOT GAS
_ —=	- ELECTROMAGNETIC FLOW METER	—— FOR ——	FUEL OIL RETURN
	SOLENOID VALVE	—— FOG ——	FUEL OIL GAGE
T	TEMPERATURE SENSOR	— — FOV — —	FUEL OIL VENT
$\overline{\mathbb{T}}_{R}$	THERMOSTAT REVERSE ACTING		CONDENSATE DRAIN
· ·	CO2 SENSOR	<b>)</b>	VERTICAL FIRE DAMPER - 1 1/2 HR.
$\bigoplus$	HUMIDITY SENSOR	<b>_</b>	HORIZONTAL FIRE DAMPER - 1 1/2 HR.
Q	PRESSURE GAUGE	3	VERTICAL FIRE DAMPER - 3 HR.
Ū <u></u>	THERMOMETER	<b>_</b>	HORIZONTAL FIRE DAMPER - 3 HR.
' <u></u>	P/T PLUG	<b>→</b> 3	VERTICAL SMOKE DAMPER
E	ELECTRIC OPERATOR	$\diamond$ <sub>3</sub>	HORIZONTAL SMOKE DAMPER.
Р	PNEUMATIC OPERATOR	$\Diamond$	KEYED DRAWING NOTE
<u>—</u> A)—	AQUASTAT		KEYED DEMOLITION DRAWING NOTE
S	SMOKE DETECTOR FURNISHED BY OTHERS INSTALLED BY HC		CONNECT TO EXISTING
$\stackrel{1}{\checkmark}$	NEEDLE VALVE		EXTENT OF DEMOLITION
M ++	MOTOR OPERATED DAMPER	<del>  </del>	INDICATES LINED DUCTWORK
TS	DISCHARGE AIR TEMPERATURE SENSOR	<u> </u>	(SEE SPECS FOR MATERIAL)
			INDICATES MANUAL BALANCING DAMPER

INDICATES DUCT RISE OR DROP

└HIGH POINT

# **ABBREVIATIONS**

ABV ALUM BDD BEL CLG DN ABOVE ALUMINUM BACKDRAFT DAMPER BELOW CEILING ELECTRICAL CONTRACTOR EA EXH EXIST FLR EACH EXHAUST EXISTING FLOOR GENERAL CONTRACTOR GENERAL TRADES CONTRACTOR HVAC CONTRACTOR MOTOR OPERATED DAMPER OUTSIDE AIR PLUMBING CONTRACTOR RETURN AIR ROOFING CONTRACTOR REQ'D SA REQUIRED SUPPLY AIR

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1st & 2nd FLOOR HVAC AND ELECTRICAL UPGRA AT THE ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT

C SCHEDULES, DETAIL LEGEND & NOTES

DRAWN
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2767-2

**⊔**\_7

VRF INDOOR UNIT SCHEDULE  BASIS OF DESIGN: DAIKIN																		
SYMBOL	DESCRIPTION	CFM	MIN. OA	ESP	COOLING		HEATING		HEATING		UNIT WIR		MOD	_	MENSION	S WEIGHT	MODEL	REMARKS
N1-01	CEILING CASSETTE	511	30	.05"	MBH 17.1	AMBIENT 95*	MBH 20.81	AMBIENT 47*	MBH 9.9	AMBIENT 10°	ELEC 208/230V- 1	MCA ø 0.6		H 10"	W D		FXZQ18TAVJU	SERVING NORTH ZONE (HP-N1)
N1-02	CEILING CASSETTE	511	30	.05"	14.1	95*	20.81	47*	7.8	10°	208/230V- 1		15A				FXZQ18TAVJU	SERVING NORTH ZONE (HP-N1)
N1-03	CEILING CASSETTE	511	30	.05"	14.1	95*	20.81	47°	7.8	10°	208/230V- 1		15A				FXZQ18TAVJU	SERVING NORTH ZONE (HP-N1)
N1-03	CEILING CASSETTE			.05"	9.6	95°	13.99	47*	7.7	10°	208/230V- 1		15A				FXZQ12TAVJU	SERVING NORTH ZONE (HP-N1)
		353	30		<del>                                     </del>						<u> </u>							, ,
N1-05	CEILING CASSETTE	405	30	.05"	12.7	95*	17.74	47*	10.0	10°	208/230V- 1		15A				FXZQ15TAVJU	SERVING NORTH ZONE (HP-N1)
N1-06	CEILING CASSETTE	317	30	.05"	7.5	95*	10.92	47*	9.5	10°	208/230V- 1		15A				FXZQ09TAVJU	SERVING NORTH ZONE (HP-N1)
N1-07	CEILING CASSETTE	317	30	.05"	7.5	95*	10.92	47*	9.5	10°	208/230V- 1	ø 0.3	15A	10"	23" 2		FXZQ09TAVJU	SERVING NORTH ZONE (HP-N1)
N1-08	CEILING CASSETTE	1,112	50	.05"	25.3	95 <b>°</b>	35.30	47*	15.7	10°	208/230V- 1	ø 1.3	15A	11"	33" 3	57#	FXZQ30TAVJU	SERVING NORTH ZONE (HP-N1)
N1-09	CEILING CASSETTE	1,112	50	.05"	25.3	95 <b>°</b>	35.30	47 <b>°</b>	15.7	10 <b>°</b>	208/230V- 1	ø 1.3	15A	11"	<b>33</b> " 3	5 <b>"</b> 57#	FXZQ30TAVJU	SERVING NORTH ZONE (HP-N1)
N1-10	CEILING CASSETTE	300	40	.05"	4.9	95 <b>°</b>	6.82	47 <b>°</b>	4.3	10 <b>°</b>	208/230V- 1	ø 0.3	15A	10"	23" 2	35#	FXZQ05TAVJU	SERVING NORTH ZONE (HP-N1)
N1-11	CEILING CASSETTE	300	40	.05"	4.9	95 <b>°</b>	6.82	47°	4.3	10°	208/230V- 1	ø 0.3	15A	10"	23" 2	35#	FXZQ05TAVJU	SERVING NORTH ZONE (HP-N1)
N1-12	CEILING CASSETTE	353	50	.05"	8.3	95*	14.0	47°	8.0	10 <b>°</b>	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N1)
N1-13	CEILING CASSETTE	353	50	.05"	8.3	95*	14.0	47 <b>°</b>	8.0	10°	208/230V- 1	ø 0.4	15A	10"	23" 2	38#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N1)
S1-01	CEILING CASSETTE	405	20	.05"	12.80	95 <b>°</b>	17.74	47°	9.16	10°	208/230V- 1	ø 0.4	15A	10"	23" 2	3" 36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-02	CEILING CASSETTE	777	65	.05"	20.23	95 <b>°</b>	28.01	47°	10.89	10°	208/230V- 1	ø 0.7	15A	10"	33" 3	5" 51#	FXZQ24TAVJU	SERVING SOUTH ZONE (HP-S1)
1-03	CEILING CASSETTE	405	20.	.05"	12.80	95 <b>°</b>	17.74	47°	7.20	10°	208/230V- 1	ø 0.4	15A	10"	23" 2	3" 36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-04	CEILING CASSETTE	405	15	.05"	12.80	95*	17.74	47*	7.20	10°	208/230V- 1						FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
					-						,							
1-05	CEILING CASSETTE	405	15	.05"	12.80	95*	17.74	47*	7.20	10°	208/230V- 1						FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-06	CEILING CASSETTE	405	20	.05"	12.80	95*	17.74	47*	7.40	10°	208/230V- 1	Ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-07	CEILING CASSETTE	405	20	.05"	12.80	95*	17.74	47*	7.40	10 <b>°</b>	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-08	CEILING CASSETTE	405	15	.05"	12.80	95*	17.74	47*	7.20	10°	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-09	CEILING CASSETTE	436	40	.05"	10.12	95*	13.99	47 <b>*</b>	4.70	10°	208/230V- 1	ø 0.3	15A	10"	33" 3	3" 42#	FXZQ12TAVJU	SERVING SOUTH ZONE (HP-S1)
1-10	CEILING CASSETTE	353	40	.05"	10.24	95*	13.99	47°	4.70	10°	208/230V- 1		15A				FXZQ12TAVJU	SERVING SOUTH ZONE (HP-S1)
1-11	CEILING CASSETTE	777	140	.05"	20.23	95*	28.01	47*	15.20	10°	208/230V 1				33" 3		FXZQ24TAVJU	SERVING SOUTH ZONE (HP-S1)
											,							<u> </u>
1-12	CEILING CASSETTE	405	25	.05"	12.80	95*	17.74	47*	7.50	10°	208/230V- 1						FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1–13	CEILING CASSETTE	307	25	.05"	6.48	95*	8.87	47*	7.50	10°	208/230V- 1						FXZQ07TAVJU	SERVING SOUTH ZONE (HP-S1)
1-14	CEILING CASSETTE	405	100	.05"	12.80	95 <b>°</b>	17.74	47*	12.40	10 <b>°</b>	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S1)
1-15	RECESSED	280	_	.25"	5.13	95 <b>°</b>	6.79	42°	6.79	10 <b>°</b>	208/230V- 1	ø 0.8	15A	10"	32" 2	" 55#	FXQ05AVJU	SERVING SOUTH ZONE (HP-S1)
2-01	CEILING CASSETTE	353	45	.05"	10.24	95 <b>°</b>	13.99	47*	9.90	10°	208/230V- 1	d 0.4	15A	10"	23" 2	3" 36#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N2)
				-	-						,						<u> </u>	
2-02	CEILING CASSETTE	307	20	.05"	6.48	95*	8.87	47*	7.54	10°	208/230V- 1		15A				FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2-03	CEILING CASSETTE	353	45	.05"	10.24	95*	13.99	47*	940	10°	208/230V- 1	Ø 0.4	15A	10"	23" 2	36#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N2)
2-04	CEILING CASSETTE	307	20	.05"	6.48	95 <b>°</b>	8.87	47 <b>°</b>	7.54	10 <b>°</b>	208/230V- 1	ø 0.3	15A	10"	23" 2	35#	FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2-05	CEILING CASSETTE	307	20	.05"	6.48	95 <b>°</b>	8.87	47°	7.54	10°	208/230V- 1	ø 0.3	15A	10"	23" 2	37 35#	FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2-06	CEILING CASSETTE	307	20	.05"	6.48	95 <b>°</b>	8.87	47°	7.54	10°	208/230V- 1	ø 0.3	15A	10"	23" 2	3" 35#	FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2-07	CEILING CASSETTE	307	20	.05"	6.48	95 <b>°</b>	8.87	47°	7.54	10°	208/230V- 1	ø 0.3	15A	10"	23" 2	3" 35#	FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2-08	CEILING CASSETTE	307	20	.05"	6.48	95*	8.87	47°	7.54	10°	208/230V- 1						FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
					-						,							<u> </u>
2-09	CEILING CASSETTE	307	20	.05"	6.48	95*	8.87	47*	7.54	10°	208/230V- 1				33" 3		FXZQ07TAVJU	SERVING NORTH ZONE (HP-N2)
2–10	CEILING CASSETTE	353	85	.05"	10.24	95*	13.99	47*	6.45	10°	208/230V- 1	Ø 0.4				36#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N2)
2–11	CEILING CASSETTE	405	30	.05"	12.80	95 <b>°</b>	17.74	47°	8.25	10°	208/230V- 1	Ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING NORTH ZONE (HP-N2)
2-12	CEILING CASSETTE	405	30	.05"	12.80	95 <b>°</b>	17.74	47 <b>°</b>	8.25	10 <b>°</b>	208/230V- 1	Ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING NORTH ZONE (HP-N2)
2-13	CEILING CASSETTE	405	30	.05"	12.80	95 <b>°</b>	17.74	47°	8.25	10 <b>°</b>	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING NORTH ZONE (HP-N2)
2-13A	CEILING CASSETTE	405	20	.05"	12.80	95 <b>°</b>	17.74	47°	8.25	10°	208/230V- 1	ø 0.4	15A	10"	23" 2	36#	FXZQ15TAVJU	SERVING NORTH ZONE (HP-N2)
12-14	CEILING CASSETTE	353	30	.05"	10.24	95 <b>°</b>	13.99	47°	7.30	10°	208/230V- 1	ø 04	15A	10"	23" 2	3" 36#	FXZQ12TAVJU	SERVING NORTH ZONE (HP-N2)
2-15	CEILING CASSETTE	300	40	.05"	4.95	95*	6.82	47*	2.28	10°	208/230V- 1						FXZQ05TAVJU	SERVING NORTH ZONE (HP-N2)
					-						•							
2–16	CEILING CASSETTE	300	40	.05"	4.95	95*	6.82	47*	2.28	10°	208/230V- 1	Ø 0.3	15A	10	23" 2	35#	FXZQ05TAVJU	SERVING NORTH ZONE (HP-N2)
2-01	CEILING CASSETTE	511	35	.05"	16.04	95 <b>°</b>	20.81	47*	13.30	10 <b>°</b>	208/230V- 1	ø 0.6	15A	10"	23" 2	42#	FXZQ18TAVJU	SERVING SOUTH ZONE (HP-S2)
2-02	CEILING CASSETTE	405	20	.05"	12.80	95 <b>°</b>	17.74	47*	9.30	10 <b>°</b>	208/230V- 1	ø 0.4	15A	10"	33" 3	36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)
2-03	CEILING CASSETTE	317	20	.05"	8.02	95 <b>°</b>	10.92	47°	6.60	10 <b>°</b>	208/230V- 1	ø 0.3	15A	10"	23" 2	35#	FXZQ09TAVJU	SERVING SOUTH ZONE (HP-S2)
2-04	CEILING CASSETTE	307	20	.05"	6.48	95*	8.87	47*	4.50	10°	208/230V- 1						FXZQ07TAVJU	SERVING SOUTH ZONE (HP-S2)
2-05	CEILING CASSETTE	405	20	.05"	12.80	95*	17.74	47*	7.60	10°	208/230V 1		15A				FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)
2-05				-	-	95°		47*			•							SERVING SOUTH ZONE (HP-S2)
vo	CEILING CASSETTE	AOF	30	.05"	12.80	ອບ	17.74		7.92	10°	208/230V- 1	۷.4					FXZQ15TAVJU	
	OFFI INC. COMP.	405			40.00		4	47°	7.92	10°	000 /0====	ا ہا	المنصنا	- n"l		36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)
2-07	CEILING CASSETTE	405	30	.05"	12.80	95*	17.74				208/230V- 1							
2-07	CEILING CASSETTE CEILING CASSETTE		30 20	.05"	12.80 4.95	95*	17.74 6.82	47*	1.90	10°	208/230V- 1	ø 0.3	15A	10"	23" 2		FXZQ05TAVJU	<u> </u>
2–07 2–08		405									•	ø 0.3	15A	10"	23" 2		FXZQ05TAVJU FXZQ15TAVJU	
2-07 2-08 2-09	CEILING CASSETTE	405 300	20	.05"	4.95	95*	6.82	47*	1.90	10°	208/230V- 1	ø 0.3 ø 0.4	15A 15A	10"	23" 2 33" 3	36#		SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10	CEILING CASSETTE CEILING CASSETTE	405 300 405	20 30	.05"	4.95 12.80	95°	6.82 17.74	47°	1.90 8.40	10°	208/230V- 1 208/230V- 1	ø 0.3 ø 0.4 ø 0.4	15A 15A	10" 10" 10"	23" 2 33" 3 23" 2	36# 36#	FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE	405 300 405 405 777	20 30 30 85	.05" .05" .05"	4.95 12.80 12.80	95° 95°	6.82 17.74 17.74	47° 47° 47°	1.90 8.40 8.40	10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul><li>Ø 0.3</li><li>Ø 0.4</li><li>Ø 0.4</li><li>Ø 0.7</li></ul>	15A 15A 15A 15A	10" 10" 10"	23" 2 33" 3 23" 2 33" 3	36# 36" 36# 3" 51#	FXZQ15TAVJU FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE	405 300 405 405 777 777	20 30 30 85 85	.05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23	95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01	47° 47° 47° 47°	1.90 8.40 8.40 12.13	10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul><li>Ø 0.3</li><li>Ø 0.4</li><li>Ø 0.4</li><li>Ø 0.7</li><li>Ø 0.7</li></ul>	15A 15A 15A 15A 15A	10" 10" 10" 10"	23" 2 33" 3 23" 2 33" 3 33" 3	36# 36" 36# 5" 51#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)  SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE	405 300 405 405 777 777 405	20 30 30 85 85 40	.05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74	47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65	10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul><li>Ø 0.3</li><li>Ø 0.4</li><li>Ø 0.4</li><li>Ø 0.7</li><li>Ø 0.7</li><li>Ø 0.4</li></ul>	15A 15A 15A 15A 15A	10" 10" 10" 10" 10"	23" 2 33" 3 23" 3 33" 3 23" 2	36# 36# 36# 5" 51# 5" 51# 5" 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU  FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE	405 300 405 405 777 777	20 30 30 85 85	.05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23	95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01	47° 47° 47° 47°	1.90 8.40 8.40 12.13	10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul><li>Ø 0.3</li><li>Ø 0.4</li><li>Ø 0.4</li><li>Ø 0.7</li><li>Ø 0.7</li><li>Ø 0.4</li></ul>	15A 15A 15A 15A 15A	10" 10" 10" 10" 10"	23" 2 33" 3 23" 3 33" 3 23" 2	36# 36# 36# 5" 51# 5" 51# 5" 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED	405 300 405 405 777 777 405 280	20 30 30 85 85 40	.05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79	47° 47° 47° 47° 47° 42°	1.90 8.40 8.40 12.13 12.13 16.65 6.79	10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> </ul>	15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10"	23" 2 33" 3 23" 3 33" 3 23" 2 32" 2	36# 36# 37 36# 38 37 36# 38 37 36# 37 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU  FXZQ15TAVJU  FXQ05AVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE	405 300 405 405 777 777 405	20 30 30 85 85 40	.05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74	47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65	10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> </ul>	15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10"	23" 2 33" 3 23" 3 33" 3 23" 2 32" 2	36# 36# 37 36# 38 37 36# 38 37 36# 37 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU  FXZQ15TAVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED	405 300 405 405 777 777 405 280	20 30 30 85 85 40 -	.05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79	47° 47° 47° 47° 47° 42°	1.90 8.40 8.40 12.13 12.13 16.65 6.79	10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> </ul>	15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10"	23" 2 33" 3 23" 3 33" 3 23" 2 32" 2	36# 36# 37 36# 38 37 36# 38 37 36# 37 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU  FXZQ15TAVJU  FXQ05AVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED	405 300 405 405 777 777 405 280	20 30 30 85 85 40 -	.05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79	47° 47° 47° 47° 47° 42°	1.90 8.40 8.40 12.13 12.13 16.65 6.79	10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> </ul>	15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2	36# 36# 37 36# 38 37 36# 37 36# 37 36# 37 36# 37 36# 37 36#	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ24TAVJU  FXZQ15TAVJU  FXQ05AVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED	405 300 405 405 777 777 405 280	20 30 30 85 85 40 -	.05" .05" .05" .05" .05" .25"	4.95 12.80 12.80 20.23 20.23 12.80 5.13	95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79	47° 47° 47° 47° 47° 42°	1.90 8.40 8.40 12.13 12.13 16.65 6.79	10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2	36# 36# 36# 37 36# 38 31 31 31 31 32 33 35 33 35 33 35	FXZQ15TAVJU  FXZQ15TAVJU  FXZQ24TAVJU  FXZQ15TAVJU  FXQ05AVJU  FXQ05AVJU	SERVING SOUTH ZONE (HP-S2)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300	20 30 30 85 85 40 -	.05" .05" .05" .05" .05" .05" .25"  .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13	95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79	47° 47° 47° 47° 47° 42°  42°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0	10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2	36# 36# 36# 37 36# 38 37 36# 37 36# 37 35# 37 35#	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300	20 30 30 85 85 40 - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82	47° 47° 47° 47° 42°  42°  47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0	10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2	36# 36# 36# 37 36# 38 37 36# 37 36# 37 35# 37 35# 37 35#	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING BATHROOMS (HP-TR-C)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300 300	20 30 30 85 85 40 - - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82	47° 47° 47° 47° 42°  42°  47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 23" 2 32" 2 32" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35#	FXZQ15TAVJU FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300	20 30 30 85 85 40 - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82	47° 47° 47° 47° 42°  42°  47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0	10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 23" 2 32" 2 32" 2 23" 2 23" 2 23" 2	36# 36# 36# 37 36# 38 37 36# 37 36# 37 35# 37 35# 37 35# 37 35#	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300 300	20 30 30 85 85 40 - - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82	47° 47° 47° 47° 42°  42°  47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35#	FXZQ15TAVJU FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300 300 300	20 30 30 85 85 40 - - - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82 6.82	47° 47° 47° 47° 47° 42°  42°  42°  47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0 6.30	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35#	FXZQ15TAVJU FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 280 300 300 300 300 300	20 30 30 85 85 40 - - - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82 6.82	47° 47° 47° 47° 47° 42°  42°  42°  47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0 6.30	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.4</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35#	FXZQ15TAVJU FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300	20 30 30 85 85 40 - - - - - -	.05" .05" .05" .05" .05" .05" .25"  .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82 6.82 6.82 6.82	47° 47° 47° 47° 47° 42°  42°  42°  47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0 6.30 6.30	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	<ul> <li>Ø 0.3</li> <li>Ø 0.4</li> <li>Ø 0.7</li> <li>Ø 0.7</li> <li>Ø 0.8</li> <li>Ø 0.8</li> <li>Ø 0.3</li> </ul>	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 10"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 35	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300 300 3	20 30 30 85 85 40 - - - - - -	.05" .05" .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95 30.30	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82 6.82 6.82 6.82	47° 47° 47° 47° 47° 42°  42°  47° 47° 47° 47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.79 6.0 6.0 6.0 6.0 6.30 6.30 31.20	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	Ø       0.3         Ø       0.4         Ø       0.7         Ø       0.7         Ø       0.4         Ø       0.8         Ø       0.8         Ø       0.3         Ø       1.4	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 8"	23" 2 33" 3 33" 3 33" 3 23" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 35	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06 A-01 B-01	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300 300 3	20 30 30 85 85 40 - - - - - -	.05" .05" .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95 30.30 20.20	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82 6.82 6.82 6.82 42.0 28.0	47° 47° 47° 47° 47° 42°  42°  47° 47° 47° 47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.79 6.0 6.0 6.0 6.30 6.30 31.20 18.0	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	Ø       0.3         Ø       0.4         Ø       0.7         Ø       0.7         Ø       0.8         Ø       0.8         Ø       0.3         Ø       1.4         Ø       1.0	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 8" 8"	23" 2 33" 3 33" 3 33" 3 23" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 37 35# 37 37 37 37 37 37 37 37 37 37 37 37 37	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING STAIRS-A (HP-SA-01)  SERVING STAIRS-B (HP-SB-01)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14  3-13  R-01 R-02 R-03 R-04 R-05 R-06  A-01 B-01 A-02	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300 300 3	20 30 30 85 85 40 - - - - - -	.05" .05" .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95 30.30 20.20 30.30	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82 6.82 6.82 6.82 42.0 28.0	47° 47° 47° 47° 42°  42°  42°  47° 47° 47° 47° 47° 47° 47° 47° 47° 4	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0 6.30 6.30 31.20 18.0 31.20	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	Ø       0.3         Ø       0.4         Ø       0.7         Ø       0.7         Ø       0.4         Ø       0.8         Ø       0.8         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       1.4         Ø       1.4         Ø       1.4	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 8" 8" 8"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 35	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING STAIRS-A (HP-SA-01)  SERVING STAIRS-B (HP-SB-01)  SERVING STAIRS-A (HP-SA-01)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06 A-01 B-01	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300 300 3	20 30 30 85 85 40 - - - - - -	.05" .05" .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95 30.30 20.20	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.79 6.82 6.82 6.82 6.82 6.82 6.82 42.0 28.0	47° 47° 47° 47° 47° 42°  42°  47° 47° 47° 47° 47° 47° 47° 47° 47°	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.79 6.0 6.0 6.0 6.30 6.30 31.20 18.0	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	Ø       0.3         Ø       0.4         Ø       0.7         Ø       0.7         Ø       0.4         Ø       0.8         Ø       0.8         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       1.4         Ø       1.4         Ø       1.4	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 8" 8" 8"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 35	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING STAIRS-A (HP-SA-01)  SERVING STAIRS-B (HP-SB-01)  SERVING STAIRS-A (HP-SA-01)
2-07 2-08 2-09 2-10 2-11 2-12 2-13 2-14 3-13 R-01 R-02 R-03 R-04 R-05 R-06 A-01 3-01 A-02	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE RECESSED  RECESSED  CEILING CASSETTE	405 300 405 405 777 777 405 280 300 300 300 300 300 300 300 3	20 30 30 85 85 40 - - - - - - -	.05" .05" .05" .05" .05" .05" .05" .05"	4.95 12.80 12.80 20.23 20.23 12.80 5.13 5.13 4.95 4.95 4.95 4.95 4.95 30.30 20.20 30.30	95° 95° 95° 95° 95° 95° 95° 95° 95° 95°	6.82 17.74 17.74 28.01 28.01 17.74 6.79 6.82 6.82 6.82 6.82 6.82 6.82 6.82 42.0 28.0	47° 47° 47° 47° 42°  42°  42°  47° 47° 47° 47° 47° 47° 47° 47° 47° 4	1.90 8.40 8.40 12.13 12.13 16.65 6.79 6.0 6.0 6.0 6.0 6.30 6.30 31.20 18.0 31.20	10° 10° 10° 10° 10° 10° 10° 10° 10° 10°	208/230V- 1 208/230V- 1	Ø       0.3         Ø       0.4         Ø       0.7         Ø       0.7         Ø       0.4         Ø       0.8         Ø       0.8         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       0.3         Ø       1.4         Ø       1.4         Ø       1.4	15A 15A 15A 15A 15A 15A 15A 15A 15A 15A	10" 10" 10" 10" 10" 10" 10" 10" 10" 8" 8" 8"	23" 2 33" 3 33" 3 33" 2 32" 2 32" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2 23" 2	36# 36# 36# 36# 36# 36# 36# 36# 35# 35# 35# 35# 35# 35# 35# 35# 35# 35	FXZQ15TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ24TAVJU FXZQ15TAVJU FXQ05AVJU FXQ05AVJU FXZQ05TAVJU	SERVING SOUTH ZONE (HP-S2)  SERVING BATHROOMS (HP-TR-C)  SERVING STAIRS-A (HP-SA-O1)  SERVING STAIRS-B (HP-SB-O1)  SERVING STAIRS-B (HP-SB-O1)  SERVING STAIRS-B (HP-SB-O1)

SYMBOL	COOLING	CAPACITY	HEATING	CAPACITY	HEATING	CAPACITY	SUCTION	COMPRESSER	UNIT WIRIN	١G		DIM	1ENSI	ISIONS WEIGHT MODEL		MODEL	REMARKS	
SIMBUL	MBH	AMBIENT	MBH	AMBIENT	MBH	AMBIENT	TEMP.	STAGES	ELEC	MCA	MOP	Н	W	D	WEIGHT	MODEL	REMARKS	
HP-N1	159.4	95 <b>°</b>	180	47*	118.2	10°	_	VARIABLE SPEED	208/230-3ø	61.9	70.0	67	49	30	793#	REYQ168XATJA	NORTH FIRST FLOOR ZONE	
HP-S1	158.9	95 <b>°</b>	180	47*	115.7	10°	_	VARIABLE SPEED	208/230-3ø	61.9	70.0	67	49	30	793#	REYQ168XATJA	SOUTH FIRST FLOOR ZONE	
HP-N2	125.0	95 <b>°</b>	180	47°	123.4	10°	-	VARIABLE SPEED	208/230-3ø	61.9	70.0	67	49	30	793#	REYQ168XATJA	NORTH SECOND FLOOR ZONE	
HP-S2	141.3	95 <b>°</b>	180	47*	116.8	10 <b>°</b>	_	VARIABLE SPEED	208/230-3ø	61.9	70.0	67	49	30	793#	REYQ168XATJA	SOUTH SECOND FLOOR ZONE	
HP-TR-01	42	95 <b>°</b>	50	47°	40	10°	-	VARIABLE SPEED	208/230-1ø	29.1	35.0	39	37	13	176#	RXTQ48TAVJUA	BATHROOMS	
HP-SA-01	58	95 <b>°</b>	73	47°	65	10 <b>°</b>	_	VARIABLE SPEED	208/230-3ø	27.6	35.0	67	37	30	437#	RXYQ72XATJA	STAIRS-A	
HP-SB-01	42	95 <b>°</b>	50	47*	40	10°	_	VARIABLE SPEED	208/230-1ø	29.1	35.0	39	37	13	176#	RXTQ48TAVJUA	STAIRS-B	
HP-V-1	42	95°	50	47*	40	10°	-	VARIABLE SPEED	208/230-1ø	16.4	20.0	28	37	14	106#	RX24AXVJU	ENTRY	

NOTES: 1. MODEL NUMBERS ARE INDICATED FOR REFERENCE ONLY. THE DUTIES AND CAPACITIES ARE TO TO BE USED FOR FINAL UNIT SELECTION BY THE MANUFACTURER.

BS REFRIGERANT BRANCH SELECTOR BOX FOR HP-N1, DAIKIN MODEL BS10Q54TVJ.

BS REFRIGERANT BRANCH SELECTOR BOX FOR HP-S1, DAIKIN MODEL BS10Q54TVJ.

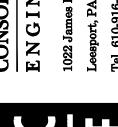
BS REFRIGERANT BRANCH SELECTOR BOX FOR HP-S1, DAIKIN MODEL BSF6Q54TVJ.

REFRIGERANT BRANCH SELECTOR BOX FOR HP-N2, DAIKIN MODEL BSF8Q54TVJ.

BS REFRIGERANT BRANCH SELECTOR BOX FOR HP-N2, DAIKIN MODEL BSF8Q54TVJ.

BS REFRIGERANT BRANCH SELECTOR BOX FOR HP-S2, DAIKIN MODEL BS12Q54TVJ.

REVISIONS





10-18-2021 AS NOTED

5/8 x KHRP25M72TU9

BS-S1b

BSF6Q54TVJ

3/4" BS10Q54TVJ

1/2" EVP-S1-01

5/8" EVP-S1-02

1/2" EVP-S1-03

1/2" EVP-S1-04

1/2" EVP-S1-05

1/2" EVP-S1-06 FXZQ15TAVJU

FXZQ15TAVJU

1/2" EVP-S1-08

1/2" EVP-S1-09

1/2" EVP-S1-10

5/8" EVP-S1-11

1/2" EVP-S1-12

1/4 x 1/2" EVP-S1-13

1/2" EVP-S1-14

FXZQ15TAVJU

EVP-S1-15 FXSQ05TAVJU

FXZQ07TAVJU

FXZQ15TAVJU

FXFQ24TVJU

FXZQ12TAVJU

FXFQ12TVJU

3/8 x KHRP26A22T9

FXZQ15TAVJU

FXZQ15TAVJU

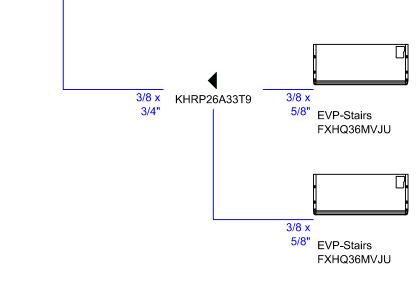
FXZQ15TAVJU

FXZQ15TAVJU

FXFQ24TVJU

FXZQ15TAVJU

1 1/8 x 7/8"



STAIRS A - REFRIGERANT PIPING SCHEMATIC NOT TO SCALE

NOTE: MANUFACTURE SHALL PROVIDE AN INSTALLATION PIPING DIAGRAM WITH FINAL REFRIGERANT PIPE SIZES, CONTRACTOR SHALL SUBMIT PIPING DIAGRAM FOR ENGINEERS APPROVAL. EACH MANUFACTURES PIPING METHODS MAY DIFFER THE CONTRACTOR MUST INCLUDE IN THE BID ANY PIPING MODIFICATION REQUIRED BETWEEN ALTERNATE MANUFACTURES. PROVIDE REFRIGERANT ISOLATION VALSE AT ALL PIPE CONNECTION IN AND OUT OF DISTRIBUTION

HP-SB-01 RXTQ48TAVJUA 3/8 x KHRP26A22T9 5/8" FXHQ24MVJU 5/8" EVP-Stairs FXHQ24MVJU

STAIRS B - REFRIGERANT PIPING SCHEMATIC NOT TO SCALE

NOTE: MANUFACTURE SHALL PROVIDE AN INSTALLATION PIPING DIAGRAM WITH FINAL REFRIGERANT PIPE SIZES, CONTRACTOR SHALL SUBMIT PIPING DIAGRAM FOR ENGINEERS APPROVAL. EACH MANUFACTURES PIPING METHODS MAY DIFFER THE CONTRACTOR MUST INCLUDE IN THE BID ANY PIPING MODIFICATION REQUIRED BETWEEN ALTERNATE MANUFACTURES. PROVIDE REFRIGERANT ISOLATION VALSE AT ALL PIPE CONNECTION IN AND OUT OF DISTRIBUTION BOX.

1/2" EVP-N1-01 BS10Q54TVJ FXZQ18TAVJU 3/8 x KHRP26A22T9 1/2" EVP-N1-02 FXZQ18TAVJU 1/2" EVP-N1-03 FXZQ18TAVJU 1/2" EVP-N1-04 FXZQ12TAVJU 1/2" EVP-N1-05 FXZQ15TAVJU 1/2" EVP-N1-06 FXZQ09TAVJU 1/4 x 1/2" EVP-N1-07 FXZQ09TAVJU 5/8" EVP-N1-08 FXFQ30TVJU 5/8" EVP-N1-09 FXFQ30TVJU 3/8 x KHRP26A22T9 1/2" EVP-N1-10 FXZQ05TAVJU 1/2" EVP-N1-11 FXZQ05TAVJU 3/8 x KHRP26A22T9 1/2" EVP-N1-12 FXZQ12TAVJU

1ST FLOOR - NORTH REFRIGERANT PIPING SCHEMATIC NOT TO SCALE

1/2" EVP-N1-13

FXZQ12TAVJU

NOTE: MANUFACTURE SHALL PROVIDE AN INSTALLATION PIPING DIAGRAM WITH FINAL REFRIGERANT PIPE SIZES, CONTRACTOR SHALL SUBMIT PIPING DIAGRAM FOR ENGINEERS APPROVAL. EACH MANUFACTURES PIPING METHODS MAY DIFFER THE CONTRACTOR MUST INCLUDE IN THE BID ANY PIPING MODIFICATION REQUIRED BETWEEN ALTERNATE MANUFACTURES.

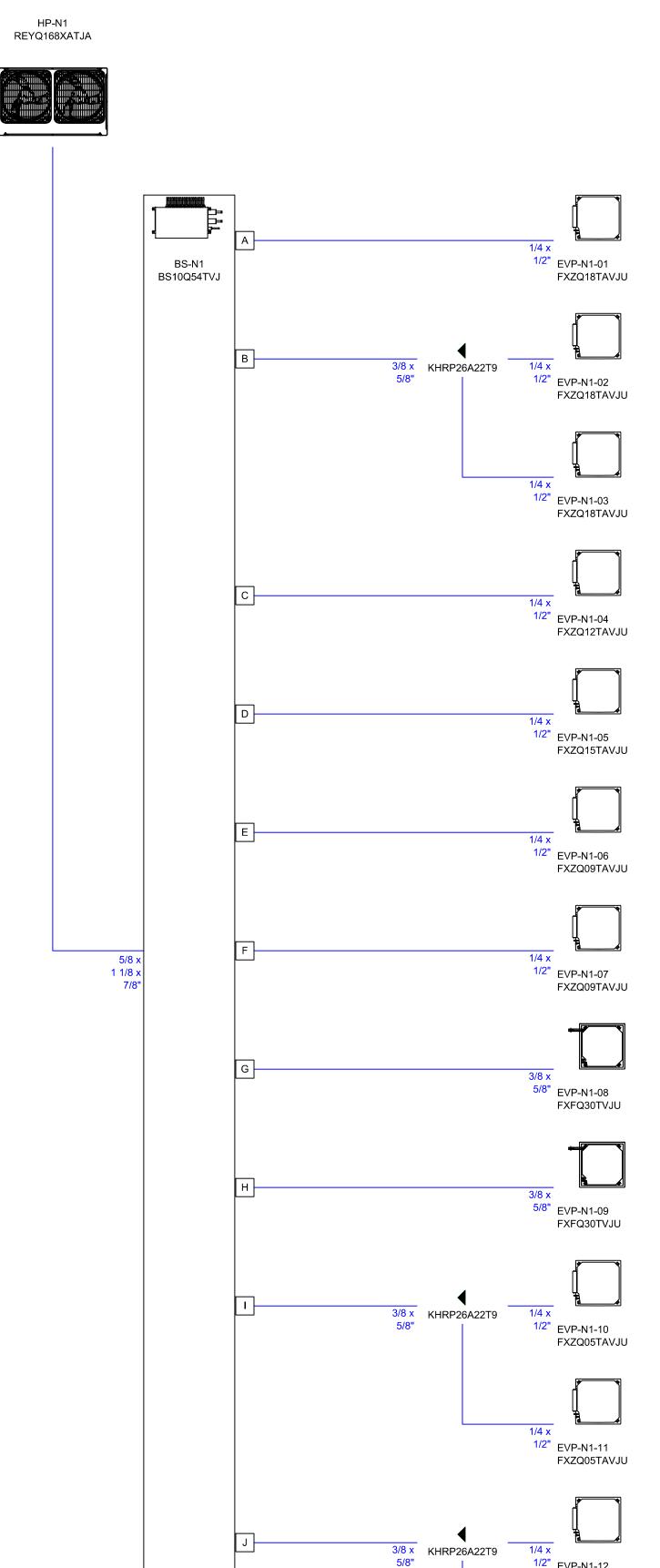
PROVIDE REFRIGERANT ISOLATION VALSE AT ALL PIPE CONNECTION IN AND OUT OF DISTRIBUTION BOX.

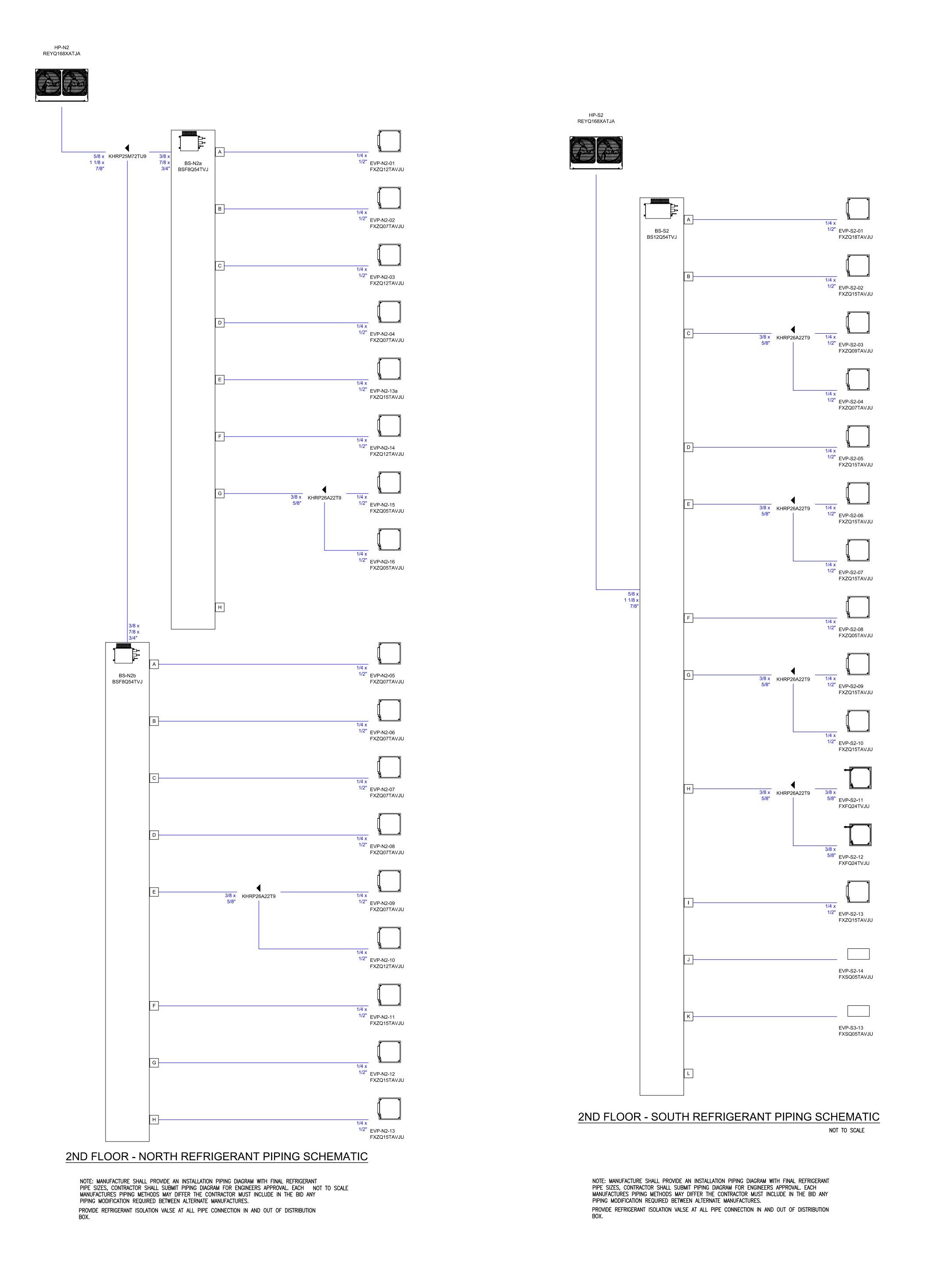
1ST FLOOR - SOUTH REFRIGERANT PIPING SCHEMATIC NOT TO SCALE

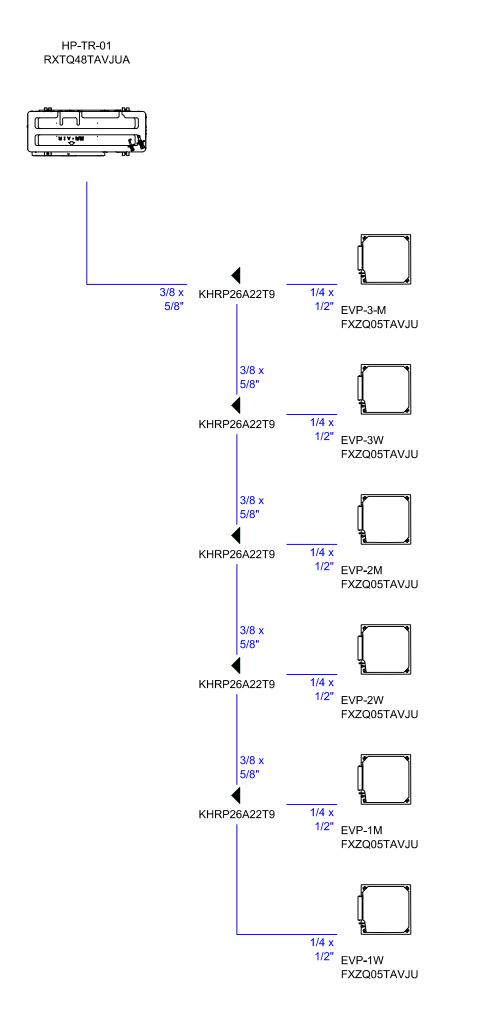
NOTE: MANUFACTURE SHALL PROVIDE AN INSTALLATION PIPING DIAGRAM WITH FINAL REFRIGERANT PIPE SIZES, CONTRACTOR SHALL SUBMIT PIPING DIAGRAM FOR ENGINEERS APPROVAL. EACH MANUFACTURES PIPING METHODS MAY DIFFER THE CONTRACTOR MUST INCLUDE IN THE BID ANY PIPING MODIFICATION REQUIRED BETWEEN ALTERNATE MANUFACTURES. PROVIDE REFRIGERANT ISOLATION VALSE AT ALL PIPE CONNECTION IN AND OUT OF DISTRIBUTION

REVISIONS

CHECKED 10-18-2021 AS NOTED 2767-2 SHEET







BATHROOMS - REFRIGERANT PIPING SCHEMATIC

NOT TO SCALE

NOTE: MANUFACTURE SHALL PROVIDE AN INSTALLATION PIPING DIAGRAM WITH FINAL REFRIGERANT PIPE SIZES, CONTRACTOR SHALL SUBMIT PIPING DIAGRAM FOR ENGINEERS APPROVAL. EACH MANUFACTURES PIPING METHODS MAY DIFFER THE CONTRACTOR MUST INCLUDE IN THE BID ANY PIPING MODIFICATION REQUIRED BETWEEN ALTERNATE MANUFACTURES.

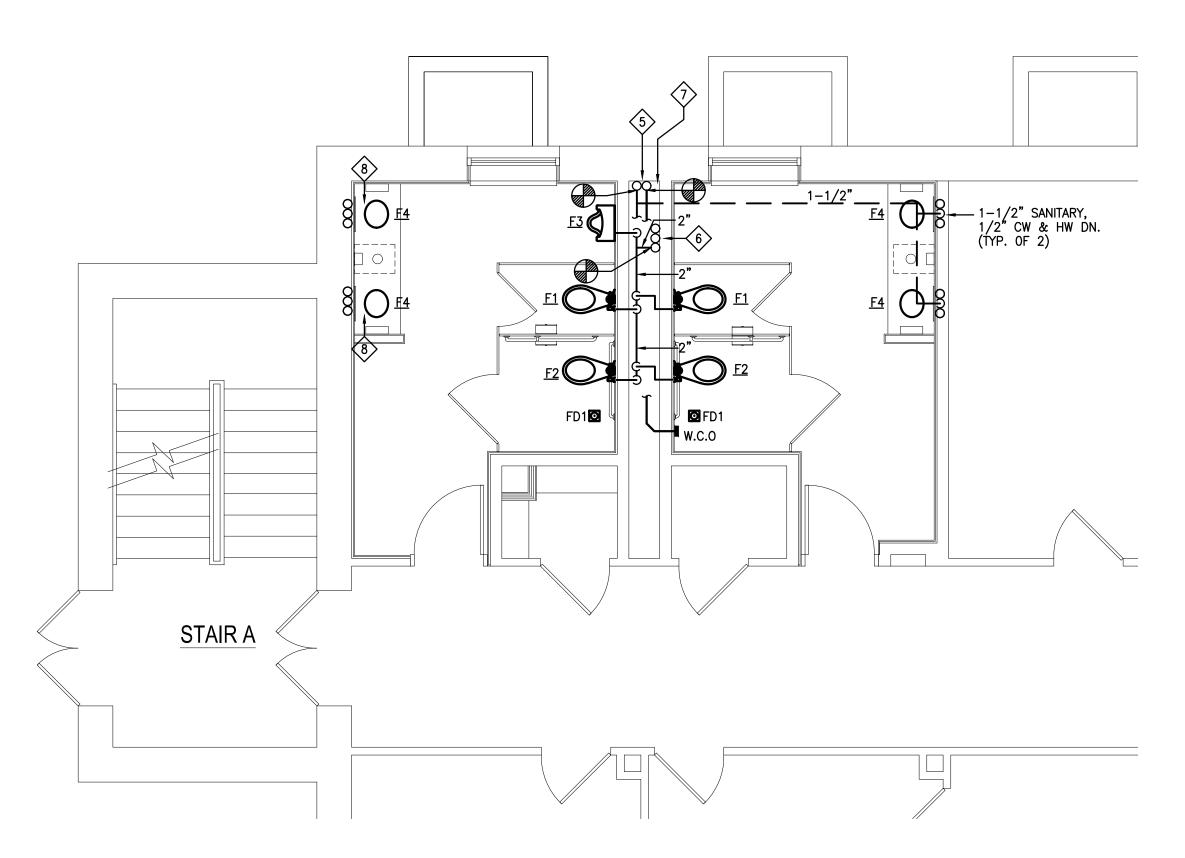
PROVIDE REFRIGERANT ISOLATION VALSE AT ALL PIPE CONNECTION IN AND OUT OF DISTRIBUTION BOX.

AT THE ADMINISTRATION BUILDING FOR THE
READING SCHOOL DISTRICT

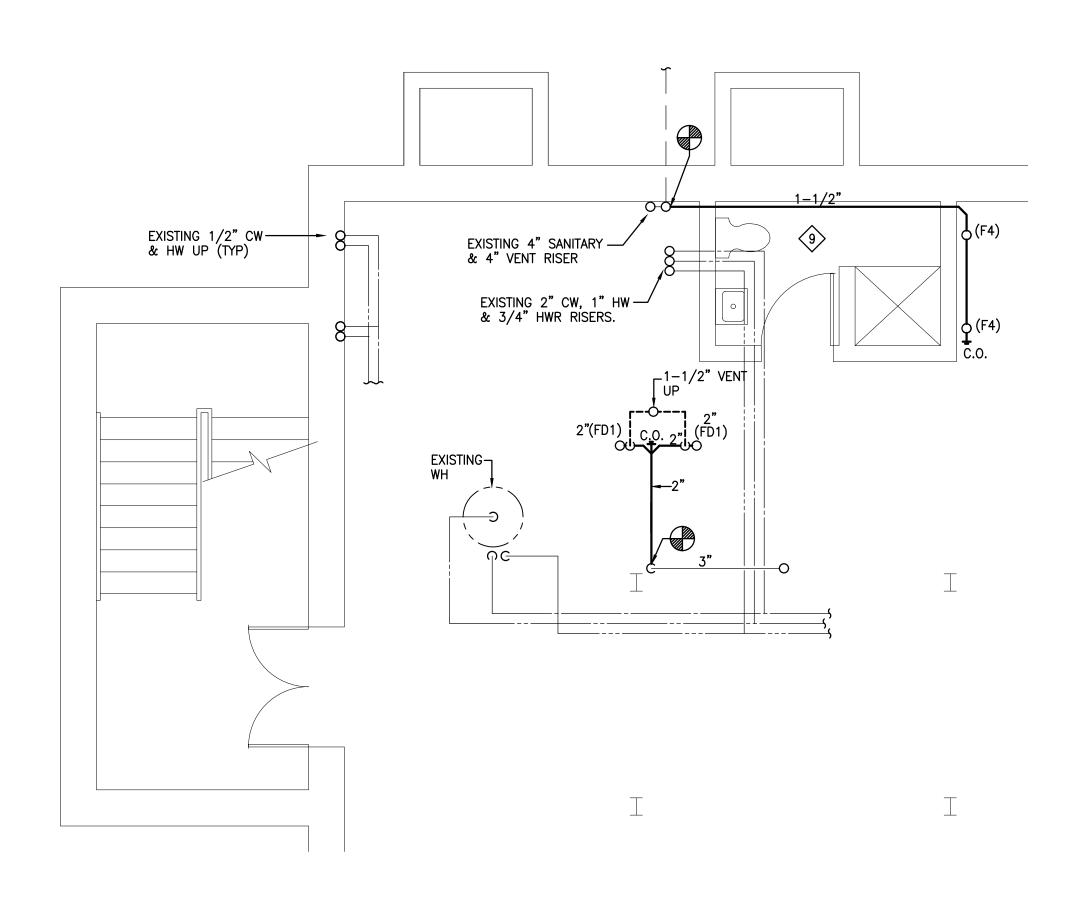
HVAC PIPING RISER DIAGRAMS

DRAWN
FB
CHECKED
AM
DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2
SHEET

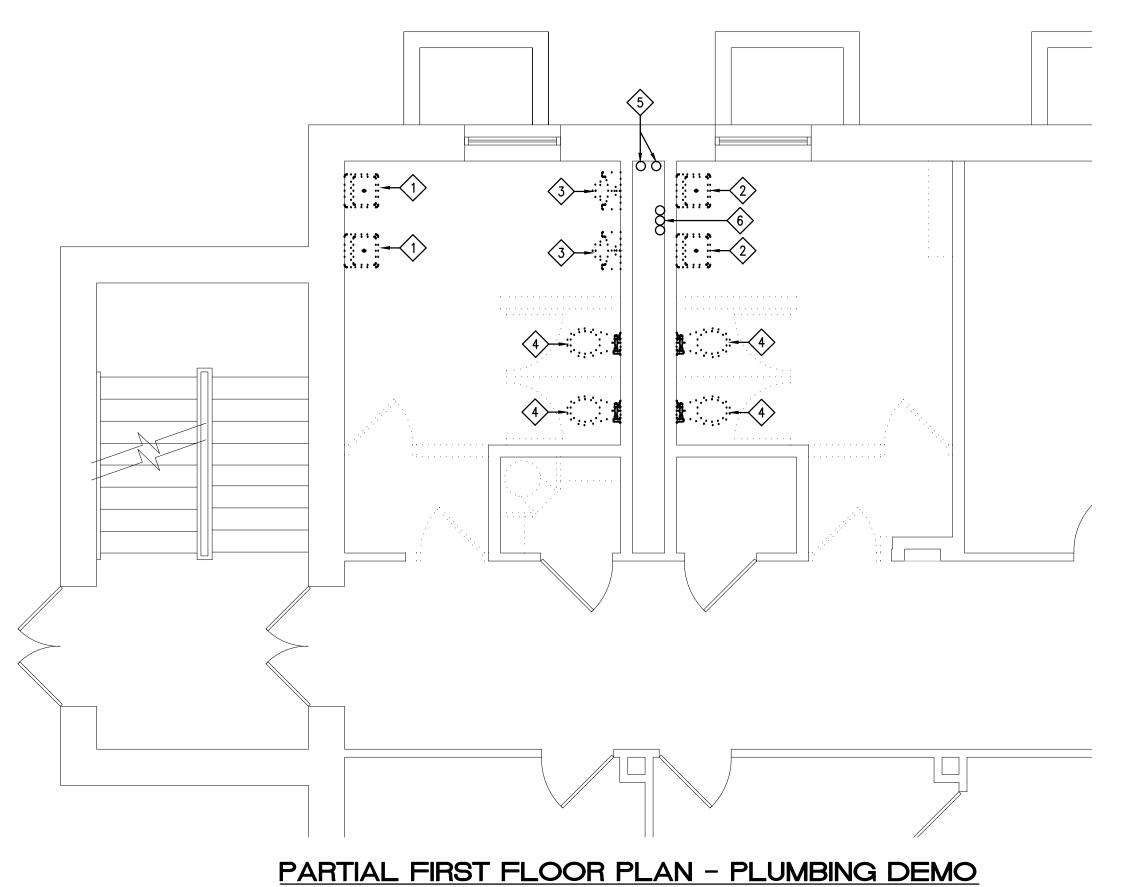
H-10



PARTIAL FIRST FLOOR PLAN - PLUMBING
SCALE: 1/4"=1'-0"



PARTIAL BASEMENT FLOOR PLAN - PLUMBING
SCALE: 1/4"=1'-0"



## **KEYED DRAWING NOTES:**

SCALE: 1/4"=1'-0"

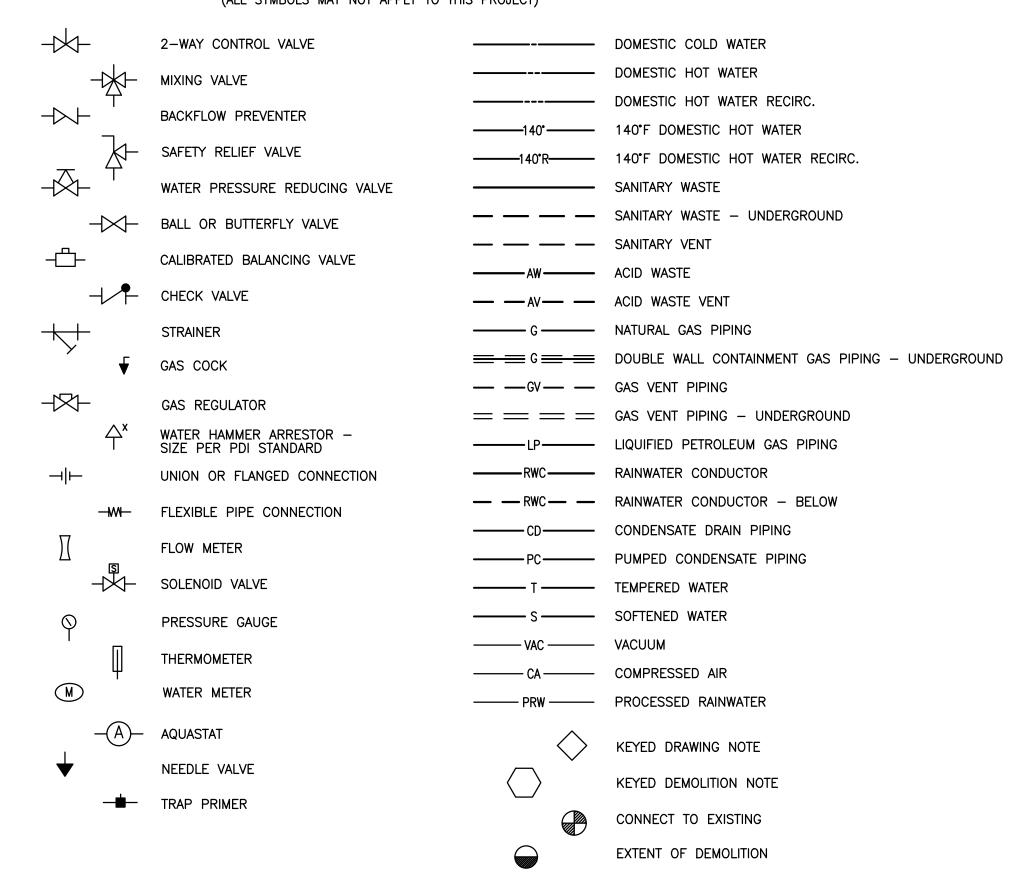
- REMOVE THE EXISTING WALL MOUNTED LAVATORY AND WALL HANGER. REMOVE THE EXISTING SANITARY AND WATER PIPING INTO THE EXISTING WALL.
- REMOVE THE EXISTING WALL MOUNTED LAVATORY AND WALL CARRIER. REMOVE THE EXISTING SANITARY, VENT AND WATER PIPING TO THE EXISTING PIPE RISERS IN THE CHASE.
- REMOVE THE EXISTING WALL URINAL AND WALL CARRIER. REMOVE THE EXISTING SANITARY, VENT AND WATER PIPING TO THE EXISTING PIPE RISERS IN THE CHASE.
- REMOVE THE EXISTING WALL MOUNTED WATER CLOSET AND WALL CARRIER. REMOVE THE EXISTING SANITARY, VENT AND WATER PIPING TO THE EXISTING PIPE RISERS IN THE CHASE.
- \$\sqrt{5}\$ EXISTING SANITARY AND VENT RISERS TO REMAIN.
- 6 EXISTING DOMESTIC WATER RISERS TO REMAIN.
- EXTEND NEW SANITARY AND VENT FROM EXISTING RISERS. SEE RISER DIAGRAM THIS SHEET.
- EXTEND EXISTING DOMESTIC CW, HW AND SANITARY FROM INSIDE EXISTING WALL TO NEW FIXTURE.
- © CUT AND PATCH CEILING AS REQUIRED FOR NEW INSTALLATION. PROVIDE SURFACE RESTORATION.

## FLOOR DRAINS

FLOOR DRAIN TYPE DESIGNATIONS AND SIZES ARE INDICATED ON DRAWINGS.

FD1: CAST-IRON BODY, FLASHING COLLAR, NICKEL BRONZE ADJUSTABLE STRAINER WITH SECURED GRATE AND BOTTOM OUTLET. J.R. SMITH MODEL 2005—A OR 2005—B. VERIFY GRATE TYPE WITH FLOOR TYPES FOR EACH LOCATION. USE TYPE A FOR SEAMLESS AREAS AND TYPE B FOR TILED AREAS. PROVIDE MECHANICAL QUAD TRAP SEAL, J.R. SMITH MODEL 2692—02.

# PLUMBING LEGEND (ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT)

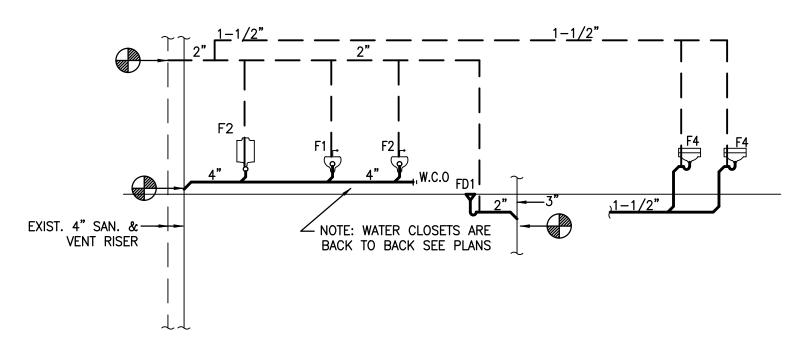


## **ABBREVIATIONS**

	ADDITEVIA	110113	
ABV APPROX ARCH AVTR BLW BLDG CD CLG COND CONN CW DN DWG EC EL EQUIP EXIST EXP	ABOVE APPROXIMATELY ARCHITECTURAL ACID VENT THRU ROOF BELOW BUILDING CONDENSATE DRAIN CEILING CLEAN OUT CONDENSATE CONNECT COLD WATER DOWN DRAWING ELECTRICAL CONTRACTOR ELEVATION EQUIPMENT EXISTING EXPANSION	FCO FD FLR GC HW HC INV LAV MH PC, D RWC SAN SH TYP UR VTR WCO	FLOOR CLEAN OUT FLOOR DRAIN FLOOR GENERAL CONTRACTOR HOT WATER HEATING CONTRACTOR INVERT LAVATORY MAN HOLE PLUMBING CONTRACTOR REQUIRED RAIN WATER CONDUCTOR SANITARY SHOWER TYPICAL URINAL VENT VENT THRU ROOF WATER CLOSET WALL CLEAN OUT

	PLUMBING FIXTURE SCHEDULE												
SYMBOL	FIXTURE	C.W.	H.W.	SAN.	VENT	TRAP	MOUNTING	RIM HEIGHT	REMARKS				
F1	WATER CLOSET	1"	-	4"	2"	-	WALL	15"	-				
F2	WATER CLOSET - (ADA)	1"	-	4"	2"	-	WALL	17"	-				
F3	URINAL-(ADA)	1"	-	2"	1-1/2"	2"	WALL	17"	-				
F4	LAVATORY – (ADA)	1/2"	1/2"	1-1/2"	1-1/4"	1-1/4" X 1-1/2"	WALL	SEE ARCH	-				

NOTE : ALL SANITARY PIPING LOCATED BELOW GRADE SHALL BE MINIMUM 2" DIAMETER



WASTE & VENT PIPING RISER DIAGRAM
NO SCALE

REVISIONS

ENGINEERS
1022 James Drive
Leesport, PA 19533
Tel 610-916-1600 Fax 610-916

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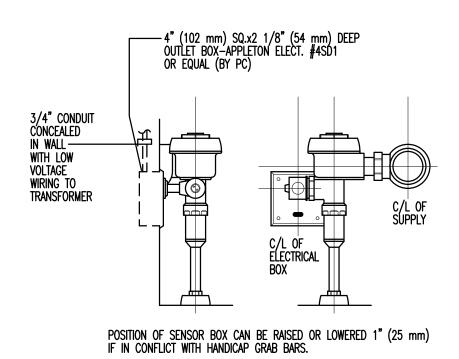
AT THE ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT

1ST FLOOR & BASEMENT PLUMBING FLOOR PLANS, SCHEDULES AND DETAILS

DRAWN
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DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2
SHEET

P-1

ONE TRANSFORMER SERVES UP TO TEN (10) WATER CLOSET/URINAL FLUSHOMETERS. PROVIDE NUMBER OF TRANSFORMERS REQUIRED ACCORDINGLY. THIS DETAIL IS BASED ON SLOAN VALVE COMPANY. OTHER MANUFACTURERS MAY VARY. VERIFY ALL REQUIREMENTS WITH MANUFACTURER BEFORE ROUGH—IN.



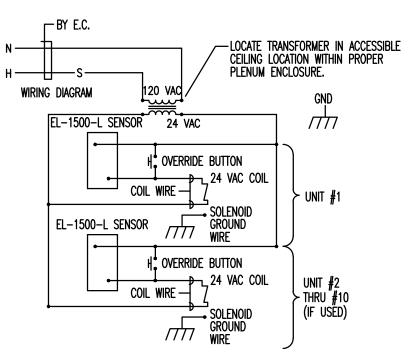
PROVIDE A TRANSFORMER FOR EACH URINAL LOCATED IN ALL TOILET ROOMS WHERE ONLY ONE URINAL IS PROVIDED.

2. IN TOILET ROOMS WITH MORE THAN ONE URINAL PROVIDE THE REQUIRED NUMBER OF TRANSFORMERS. REFER TO PLANS FOR THIS INFORMATION.

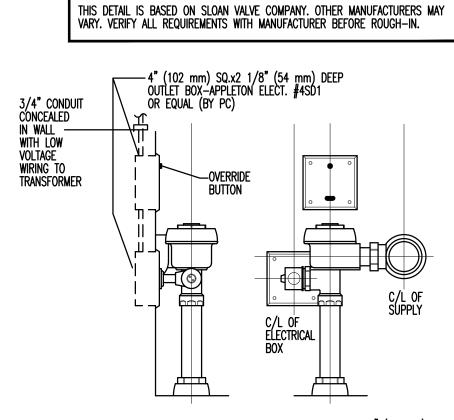
ALL WORK INDICATED ABOVE SHALL BE PROVIDED BY P.C. EXCLUDING 120V POWER CONNECTION TO TRANSFORMER.

## SENSOR OPERATED URINAL FLUSH METER DETAIL

NO SCALE:



ONE TRANSFORMER SERVES UP TO TEN (10) WATER CLOSET/URINAL FLUSHOMETERS. PROVIDE NUMBER OF TRANSFORMERS REQUIRED.



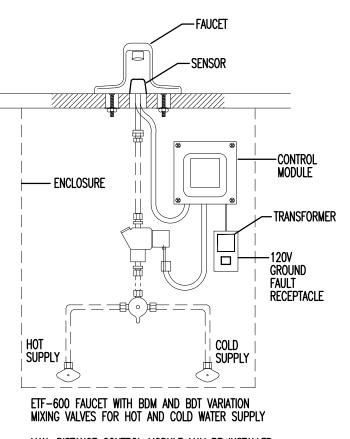
\* POSITION OF SENSOR BOX CAN BE RAISED OR LOWERED 1" (25 mm) IF IN CONFLICT WITH HANDICAP GRAB BARS.

1. PROVIDE A TRANSFORMER FOR EACH WATER CLOSET LOCATED IN ALL TOILET ROOMS WHERE ONLY ONE WATER CLOSET IS PROVIDED. IN TOILET ROOMS WITH MORE THAN ONE WATER CLOSET PROVIDE THE REQUIRED OF TRANSFORMERS. REFER TO PLANS FOR THIS INFORMATION.

ALL WORK INDICATED ABOVE SHALL BE PROVIDED BY P.C. EXCLUDING 120V POWER CONNECTION TO TRANSFORMER.

## SENSOR OPERATED WATER CLOSET FLUSH METER DETAIL

NO SCALE:



MAX. DISTANCE CONTROL MODULE MAY BE INSTALLED FROM SPOUT WITH STANDARD CABLE: 12" (305 mm) PROVIDE SLOAN OPTISHIELD LAVATORY PROTECTIVE ENCLOSURE TO CONCEAL VALVES, PIPING AND WIRING. SLOAN MODEL NO. ETF-529.

THIS DETAIL IS BASED ON SLOAN VALVE COMPANY. OTHER MANUFACTURERS MAY VARY. VERIFY ALL REQUIREMENTS WITH MANUFACTURER BEFORE ROUGH—IN. ALL WORK INDICATED ABOVE SHALL BE PROVIDED BY P.C. EXCLUDING 120V GROUND FAULT RECEPTACLE..

REFER TO PIPING SCHEMATIC DIAGRAMS FOR CHECK VALVE LOCATIONS.

## SENSOR OPERATED LAVATORY FAUCET DETAIL

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- 1. DISCONNECT AND REMOVE EXISTING LIGHTS AND ASSOCIATED CONTROLS / SWITCHING. EXISTING WIRING TO BE REMOVED. SEE NEW WORK PLAN FOR NEW LIGHTS, CONTROLS / SWITCHING AND WIRING.
- 2. EXISTING CEILING TO REMAIN. EXISTING ROOM LIGHT FIXTURES TO REMAIN. REMOVE EXISTING SWITCHES / CONTROLS. EXISTING WIRING TO BE REMOVED, SEE NEW WORK PLAN FOR NEW CONTROLS / SWITCHES AND WIRING
- 3. DISCONNECT AND REMOVE EXISTING EXIT SIGN. REMOVE EXISTING RECESSED BOX AND PATCH EXISTING OPENING. PAINT WALL TO MATCH EXISTING WALL SURFACE. 4. DISCONNECT EXISTING UNIT VENTILATOR (WHEN PHASING PERMITS) AND REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT / DEVICES, REMOVE WIRING BACK TO SOURCE.

ABANDONING WIRING IN PLACE IS NOT ACCEPTABLE. REMOVE EXIST. WIRING.

- 5. EXISTING CEILING TO REMAIN AND MODIFIED TO INSTALL NEW BULKHEAD FOR EXTERIOR WALL LOUVER. EXISTING LIGHT FIXTURES TO REMAIN. EXISTING LUTRON SWITCHES. POWER PACK ABOVE CEILING AND FIXTURE WIRING TO REMAIN.
- 6. DISCONNECT AND REMOVE EXISTING ABOVE MIRROR LIGHT FIXTURE. REMOVE WIRING. PATCH OPENINGS IN WALL AND PAINT TO MATCH ADJACENT SURFACES. 7. TEMPORARY SUPPORT EXISTING FIRE ALARM DEVICE TO REMOVE EXISTING CEILING. REINSTALL IN NEW CEILING.
- 8. TEMPORARY SUPPORT EXISTING WIFI DEVICE TO REMOVE EXISTING CEILING. REINSTALL IN NEW CEILING.
- 9. TEMPORARY SUPPORT EXISTING CCTV CAMERA TO REMOVE EXISTING CEILING. REINSTALL IN NEW CEILING. CONTRACTOR SHALL BE RESPONSIBLE TO RE-AIM CAMERA AND HAVE OWNER SIGN OFF THAT CAMERA IS LOCATED AND AIMED TO
- 10. EXISTING CEILING MOUNTED PROJECTOR AND DEVICES TO BE TEMPORARY SUPPORTED TO ALLOW EXISTING CEILING TO BE REMOVED. REINSTALL IN NEW

11. DISCONNECT AND REMOVE RECESSED STAIR LIGHT FIXTURES. EXISTING STAIR

- LANDING CEILING TO REMAIN. PROVIDE NEW SURFACE LIGHT FIXTURE. PATCH / PAINT CEILING TO MATCH EXISTING. REMOVE WIRING AND PROVIDE NEW NORMAL EMERGENCY LIGHT FIXTURE AND WIRING AS SHOWN ON NEW WORK PLAN. 12. DISCONNECT AND REMOVE EXISTING EMERGENCY ONLY LIGHT AND ALL ASSOCIATED
- WIRING. PROVIDE NEW CEILING TILE.
- 13. REFER TO NEW WORK PLAN FOR WORK IN VAULT. 14. ELECTRICAL DEMOLITION ITEMS ARE SHOWN TO HELP THE E.C. WITH PRICING OF ELECTRICAL DEMOLITION REQUIRED FOR THE PROJECT. THE E.C. IS RESPONSIBLE TO VISIT THE PROJECT SITE AND REVIEW ALL THE 'A' AND 'H' SERIES DRAWINGS FOR
- DEMOLITION REQUIRED FOR THE PROJECT. 15. EXISTING FIRE ALARM SYSTEM MUST REMAIN ACTIVE THROUGHOUT PROJECT TO MEET CITY OF READING FIRE MARSHAL REQUIREMENTS. FIRE ALARM SYSTEM MUST BE TESTED AND REPROGRAMMED AT PROJECTS COMPLETION. INCLUDE ALL COST IN BID TO REPROGRAM F.A. SYSTEM.
- 16. RELOCATE ALL EXISTING WIRING DEVICES TO ALLOW SECTION OF WALL TO BE
- 17. EXISTING CEILING AND LIGHTS TO REMAIN. EXISTING WIRING TO REMAIN. EXISTING SWITCHING/CONTROLS TO BE REPLACED WITH LUTRON SWITCHES OCC. SENSOR POWER PACK. PROVIDE LOW VOLTAGE WIRING REQU, RGS. EXISTING FIRE ALARM DEVICES TO REMAIN.
- 18. DISCONNECT EXISTING SPLIT SYSTEM INSIDE EVAPORATOR AND ASSOCIATED OUTSIDE CONDENSING UNIT. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE.
- 19. EXISTING OUTDOOR CONDENSING UNIT TO REMAIN.
- 20. DISCONNECT AND REMOVE EXISTING ELECTRIC HEATER. REMOVE CONDUIT AND WIRING BACK TO SOURCE.

### PROJECT GENERAL DEMOLITION NOTES:

(APPLY TO ALL SHEETS)

- THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE EXISTING FACILITY AND ALL CONTRACT DRAWINGS TO DETERMINE THE EXTENT OF THE ELECTRICAL DEMOLITION WORK. THE CONTRACTOR SHALL COORDINATE THE DEMOLITION WITH ALL TRADES. ELECTRICAL DEMOLITION SHALL INCLUDE ALL WORK AS OUTLINED BELOW. COORDINATE ALL DEMOLITION WITH CONSTRUCTION SCHEDULE. THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO BIDDING THE PROJECT TO FULLY UNDERSTAND THE EXTENT OF ELECTRICAL DEMOLITION REQUIRED. THERE WILL BE NO CHANGE ORDERS FOR ELECTRICAL DEMOLITION WORK. AFTER RECEIPT OF BIDS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL OF THE HVAC DRAWINGS FOR THE EQUIPMENT BEING REMOVED. ALL EXISTING HVAC, EQUIPMENT ON THOSE DRAWINGS INDICATED TO BE REMOVED, SHALL BE ELECTRICALLY DISCONNECTED BY THE ELECTRICAL CONTRACTOR. ALL EXISTING HVAC EQUIPMENT SHOWN ON THOSE DRAWINGS TO REMAIN, SHALL REMAIN ELECTRICALLY CONNECTED UNLESS NOTED OTHERWISE ON THE ELECTRICAL DRAWINGS.
- 3. REMOVE ALL EXISTING CONDUIT AND WIRING BEING ABANDONED.
- 4. RELOCATE OR EXTEND EXISTING CIRCUITS NOT BEING ABANDONED, AS REQUIRED ON A PERMANENT BASIS TO ACCOMMODATE NEW WORK AND MAINTAIN CIRCUIT INTEGRITY.
- CONTRACTOR SHALL PATCH WALLS, FLOORS, CEILINGS, ETC. TO MATCH ADJACENT SURFACES WHERE EXISTING EQUIPMENT IS BEING REMOVED. PATCHING SHALL BE PROVIDED FOR ALL OPENINGS, INCLUDING, BUT NOT LIMITED TO OPENINGS FOR CONDUITS, BOXES, ANCHORS, ETC. PATCHING SHALL INCLUDE FINAL FINISH/ PAINTING. IN LIEU OF PATCHING, CONTRACTOR MAY USE BLANK WALL PLATES FOR STANDARD SIZE SINGLE AND MULTI-GANG DEVICE BOXES (I.E., SWITCH AND RECEPTACLE BOXES). COVER PLATES SHALL MATCH OTHER DEVICE PLATES IN THE AREA IN BOTH MATERIAL AND FINISH. CONTRACTOR SHALL REMOVE ALL RECESSED BOXES FOR LARGER NON-STANDARD SIZE BOXES AND PATCH SURFACES.
- 6. THE OWNER SHALL HAVE FIRST CHOICE OF ANY EXISTING EQUIPMENT OR MATERIALS BEING REMOVED. THE CONTRACTOR SHALL DELIVER ITEMS TO BE SALVAGED BY THE OWNER TO DESIGNATED STORAGE AREA ON THE JOB SITE. ALL EQUIPMENT AND MATERIALS REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR. CONTRACTOR SHALL REMOVE THESE ITEMS FROM THE SITE AND PROPERLY DISPOSE OF THEM.
- 7. THE CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES AND ASSOCIATED WIRING IN AREAS WHERE NEW FIXTURES ARE SHOWN OR OTHERWISE NOTED.
- WHERE DEMOLISHED ITEMS REVEAL UNEVEN CONSTRUCTION, INTERRUPTED FINISHES, ATTACHMENT HOLES AND OTHER CONDITIONS THAT DO NOT MATCH EXISTING ADJACENT FINISH CONSTRUCTION, PATCH TO MATCH EXISTING ADJACENT FINISHES.



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CHECKED JS 10-18-2021 SCALE AS NOTED JOB NO. 2767-2

SHEET

LIGHTS, CONTROLS / SWITCHING AND WIRING.

- DISCONNECT AND REMOVE EXISTING LIGHTS AND ASSOCIATED CONTROLS / SWITCHING. EXISTING WIRING TO BE REMOVED. SEE NEW WORK PLAN FOR NEW
- 2. EXISTING CEILING TO REMAIN. EXISTING ROOM LIGHT FIXTURES TO REMAIN. EXISTING LUTRON DEVICES TO REMAIN. WIRING TO REMAIN.
- 3. DISCONNECT AND REMOVE EXISTING EXIT SIGN. REMOVE EXISTING RECESSED BOX AND PATCH EXISTING OPENING. PAINT WALL TO MATCH EXISTING WALL SURFACE.
- 4. DISCONNECT EXISTING UNIT VENTILATOR (WHEN PHASING PERMITS) AND REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT / DEVICES. REMOVE WIRING BACK TO SOURCE.
- 5. EXISTING CEILING TO REMAIN AND MODIFIED TO INSTALL NEW BULKHEAD FOR EXTERIOR WALL LOUVER. EXISTING LIGHT FIXTURES TO REMAIN. EXISTING LUTRON DEVICES, WIRING AND CONTROLS/SWITCHES TO REMAIN. CONNECT LTG. TO NEW CIRCUIT.
- 6. DISCONNECT AND REMOVE EXISTING ABOVE MIRROR LIGHT FIXTURE. REMOVE WIRING. PATCH OPENINGS IN WALL AND PAINT TO MATCH ADJACENT SURFACES.
- 7. TEMPORARY SUPPORT EXISTING FIRE ALARM DEVICE TO REMOVE EXISTING CEILING. REINSTALL IN NEW CEILING.
- REINSTALL IN NEW CEILING.

  8. TEMPORARY SUPPORT EXISTING WIFI DEVICE TO REMOVE EXISTING CEILING.
- REINSTALL IN NEW CEILING.

  9. TEMPORARY SUPPORT EXISTING CCTV CAMERA TO REMOVE EXISTING CEILING. REINSTALL IN NEW CEILING. CONTRACTOR SHALL BE RESPONSIBLE TO RE—AIM

CAMERA AND HAVE OWNER SIGN OFF THAT CAMERA IS LOCATED AND AIMED TO

- 10. EXISTING CEILING MOUNTED PROJECTOR AND DEVICES TO BE TEMPORARY SUPPORTED TO ALLOW EXISTING CEILING TO BE REMOVED. REINSTALL IN NEW CEILING
- 11. DISCONNECT AND REMOVE RECESSED STAIR LIGHT FIXTURES. EXISTING STAIR LANDING CEILING TO REMAIN. PROVIDE NEW SURFACE LIGHT FIXTURE. PATCH / PAINT CEILING TO MATCH EXISTING. REMOVE WIRING AND PROVIDE NEW NORMAL EMERGENCY LIGHT FIXTURE AND WIRING AS SHOWN ON NEW WORK PLAN.
- DISCONNECT AND REMOVE EXISTING EMERGENCY ONLY LIGHT AND ALL ASSOCIATED WIRING. PROVIDE NEW CEILING TILE.
   RELOCATE EXISTING DATA OUTLET TO ADJACENT WALL TO ALLOW NEW CHASE TO BE
- INSTALLED.

  14. ELECTRICAL DEMOLITION ITEMS ARE SHOWN TO HELP THE E.C. WITH PRICING OF ELECTRICAL DEMOLITION REQUIRED FOR THE PROJECT. THE E.C. IS RESPONSIBLE TO VISIT THE PROJECT SITE AND REVIEW ALL THE 'A' AND 'H' SERIES DRAWINGS FOR DEMOLITION REQUIRED FOR THE PROJECT.
- 15. EXISTING FIRE ALARM SYSTEM MUST REMAIN ACTIVE THROUGHOUT PROJECT TO MEET CITY OF READING FIRE MARSHAL REQUIREMENTS. FIRE ALARM SYSTEM MUST BE TESTED AND REPROGRAMMED AT PROJECTS COMPLETION. INCLUDE ALL COST IN BID TO REPROGRAM F.A. SYSTEM.
- 16. RELOCATE ALL EXISTING WIRING DEVICES TO ALLOW SECTION OF WALL TO BE REMOVED.
- 17. EXISTING CEILING AND LIGHTS TO REMAIN. EXISTING WIRING TO REMAIN. EXISTING SWITCHING/CONTROLS TO REMAIN. EXISTING FIRE ALARM DEVICES TO REMAIN.
- 18. EXISTING CEILING TO REMAIN. LIGHT FIXTURES TO REMAIN. EXISTING LUTRON DEVICES, WIRING AND CONTROLS/SWITCHES TO REMAIN. MODIFY EXCISING POWER WIRING TO CONNECT TO NELO LTG. CIRCUIT.
- WIRING TO CONNECT TO NELO LTG. CIRCUIT.

  19. EXISTING CEILING TO REMAIN. RELOCATE LIGHT FIXTURES AS SHOWN ON DWG E-2. MODIFY WIRING AS REQUIRED.

REVISIONS

CONSOLIDATED

E N G I N E E R S

1022 James Drive
Leesport, PA 19533
Tel 610-916-1600 Fax 610-916-1610

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1st & 2nd FLOOR HVAC AND ELECTRICAL UF
AT THE ADMINISTRATION BUILDING FOF
READING SCHOOL DISTRICT

SECOND FLOOR PLAN
ECTRICAL DEMOLITION

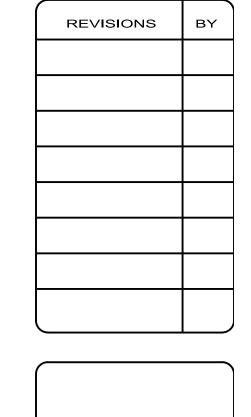
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RK
CHECKED
JS
DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2

FD-2

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

# **# DRAWING NOTES:**

- DISCONNECT EXISTING HEATER FOR REMOVAL. REMOVE ALL ELECTRICAL EQUIPMENT AND ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
- 2. DISCONNECT EXISTING PUMP FOR REMOVAL. REMOVE ALL ASSOCIATED ELECTRIDCAL EQUIPMENT AND CONDUIT AND WIRING BACK TO SOURCE.
- DISCONNECT AND REMOVE EXISITING CHILLER FOR REMOVAL REMOVE ASSOCIATED ELECTRICAL EQUIPMENT. REMOVE CONDUIT AND WIRING BACK TO MAIN SWITCH BOARD. LABEL CIRCUIT BREAKER "SPARE"
- 4. DISCONNECT EXISTING BOILER FOR REMOVAL. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE.
- 5. DISCONNECT EXISTING AIR COMPRESSOR AND DRYER FOR REMOVAL. REMOVE ALL ELECTRICAL EQUIPMENT AND CONDUIT AND WIRING BACK TO SOURCE.



FLOOR PLAN L DEMOLITION

SCALE AS NOTED

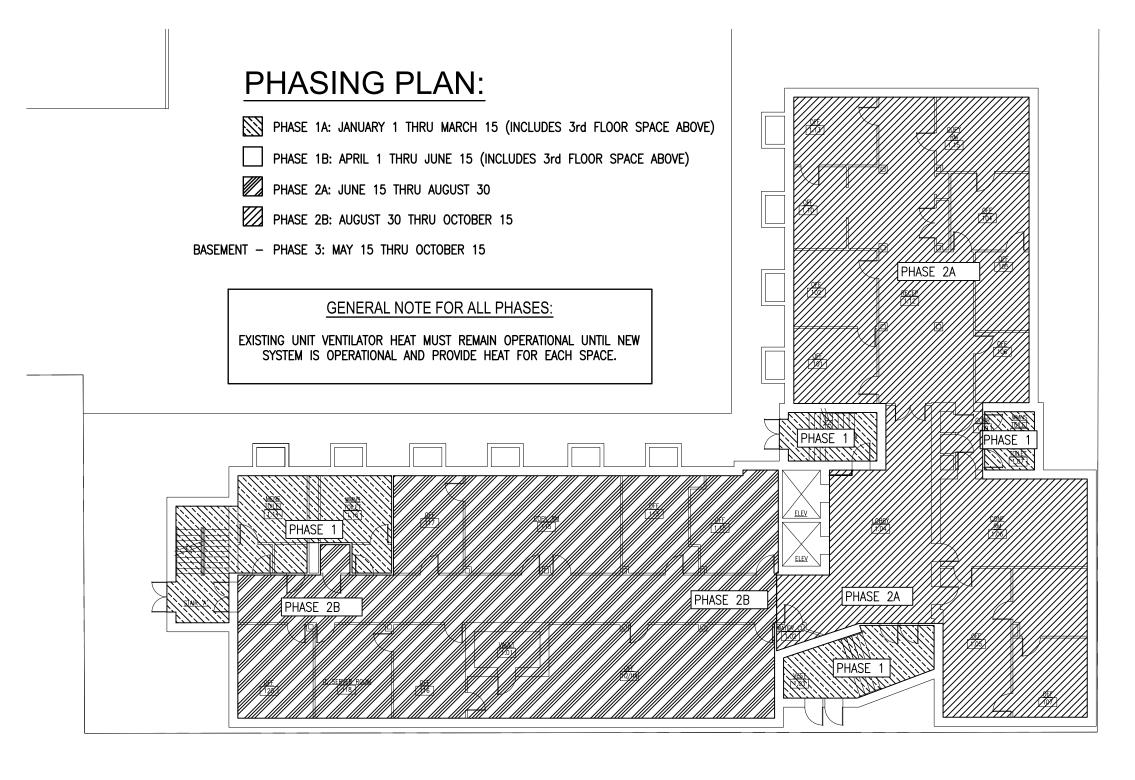


- REFER TO PROJECT GENERAL NOTE #3 FOR SPARE CONDUITS FROM PANEL. SEE DWG. E-4 FOR GENERAL NOTES.
- 2. REFER TO ALL PROJECT GENERAL ELECTRICAL NOTES ON DRAWING E-4 FOR
- ADDITIONAL INFO./REQUIREMENTS. 3. STAIR TOWER, DESIGNATED CORRIDOR LIGHTS AND EXIT SIGNS SHALL BE CIRCUITED TOGETHER ON 24/7 CIRCUIT. RUN 2 #10 & #10G TO EXISTING N/E PANEL IN BASEMENT MAIN ELECTRICAL ROOM. CONNECT TO SPARE 1P-20A FUSED/CB. LABEL "1st FLOOR" CORRIDOR / STAIR LTS.
- 4. LIGHT FIXTURE CONNECTED TO CORRIDOR N/E CIRCUIT CONTROLLED BY OCCUPANCY
- 5. EXISTING LIGHTING TO REMAIN. PROVIDE NEW WIRELESS OCCUPANCY SENSOR, POWER PACK, POWER AND LOW VOLTAGE WIRING AND PICO REMOTE AT DOOR(S) SHOWN. 6. ALL SWITCHES TO BE MOUNTED 46" AFF.
- 7. SURFACE MOUNTED LIGHT FIXTURE COORDINATE EXACT LOCATION OF FIXTURE WITH HVAC EQUIPMENT IN STAIR PRIOR TO ROUGH—IN. PATCH AND PAINT DRYWALL TO
- MATCH EXISTING. 8. EXISTING VAULT LTG TO REMAIN. CONNECT EXISTING LTG. TO NEW ADJACENT ROOM
- PROVIDE LUTRON WIRELESS POWER PACK ABOVE CEILING AS REQUIRED. PROVIDE ALL POWER AND LOW VOLTAGE WIRING.
- 10. EXISTING LIGHT FIXTURE SALVAGE FROM PHASE 1 (SECOND FLOOR) PROVIDE NEW OCCUPANCY SENSOR. NO SWITCH REQUIRED.

	LIGHTING FIXTURE SCHEDULE  THE APPROVED SUBSTITUTES ARE APPROVED SUBSTITUTES APPROVED SUBSTITUTES ARE APPROVED SUBSTITUTES ARE APPROVED SUBSTITUTES ARE APPROVED SUBSTITUTES ARE APPROVED SUBSTITUTES APPROVED SUBSTIT												
TYPE	MANUFACTURER	CATALOG NUMBER	WATTS	VOLTS	MOUNTING	APPROVED	SUBSTITUTES	REMARKS					
Α	ATLAS LIGHTING	FAELP-22-40-LED-U-NOTE 1	40	UNV.	RECESSED	NOTE 4	NOTE 4	FIELD ADJUST LUMEN / COLOR (NOTE 3)					
В	NOT USED	-	-	_	_	-	-	-					
D	ELITE	HH4-1500L-DIM10-35K-90-WD	20	MVOLT	RECESSED	LIGHTOLIER	GOTHAM	PROVIDE CTLG.# HH44-501-CLWH TRIM					
E	LITHONIA	TLE1R	1	MVOLT	UNIVERSAL	DAYBRITE	NOTE 2						
E1	LITHONIA	TLE2R	1	MVOLT	UNIVERSAL	DAYBRITE	NOTE 2						
F	KENALL	H69FL-PP-MW-12L35K	12	MVOLT	UNIVERSAL	LITHONIA	PROGRESS						

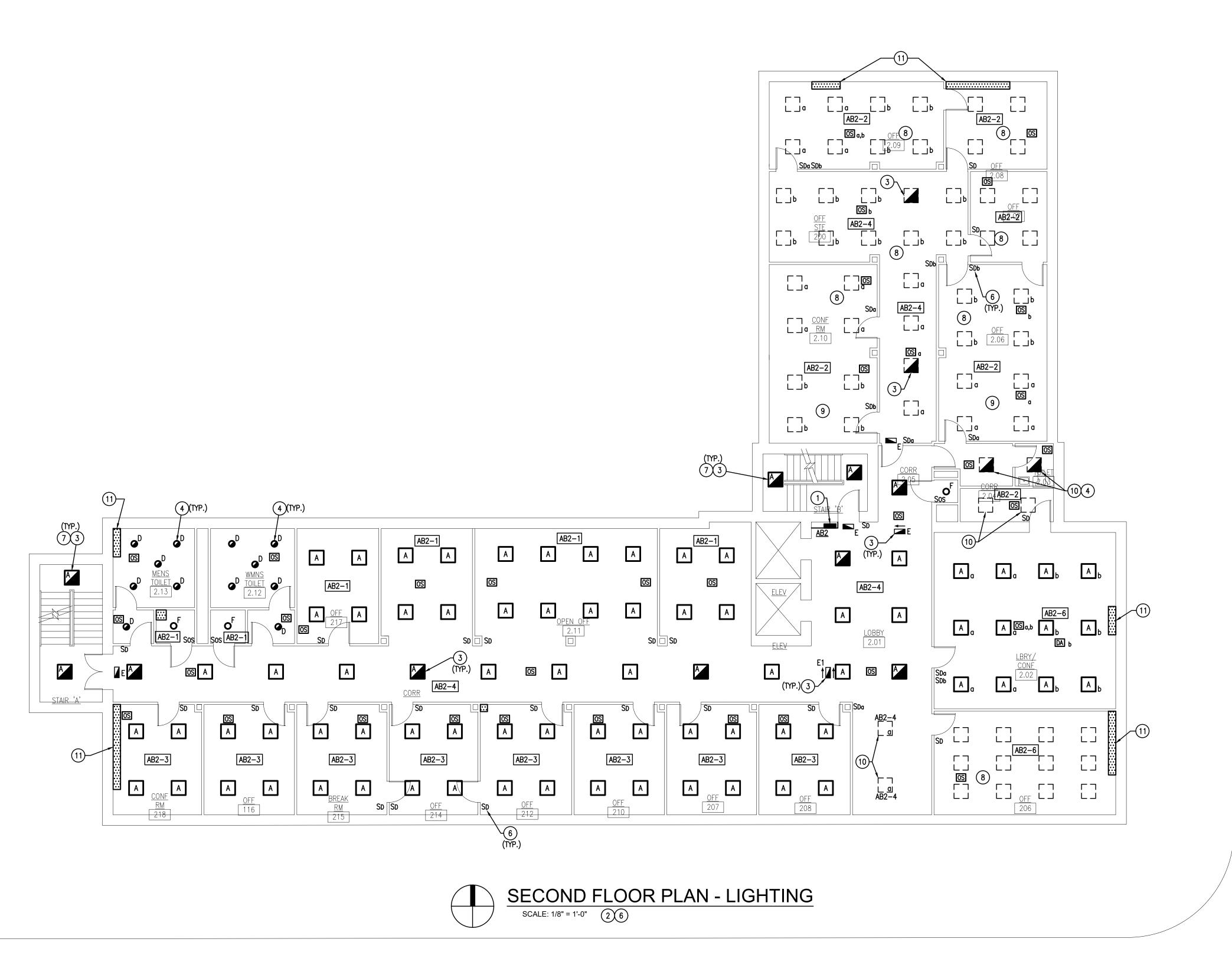
# LIGHTING FIXTURE SCHEDULE NOTES:

- PROVIDE SURFACE MOUNT KIT FOR STAIR TOWER LIGHT FIXTURES. SUBMIT 10-DAY PRIOR SUBMITTAL BEFORE BIDDING FOR APPROVAL SET FIELD ADJUSTABLE LUMENS TO 4000, COLOR TO 3500K
- OWNERS PREFERRED FIXTURE TO MATCH EXISTING LIGHT FIXTURES. NOT TO BE SUBSTITUTED. 5. SET FIELD ADJUSTABLE LUMENS TO 4500, COLOR TO 3500K

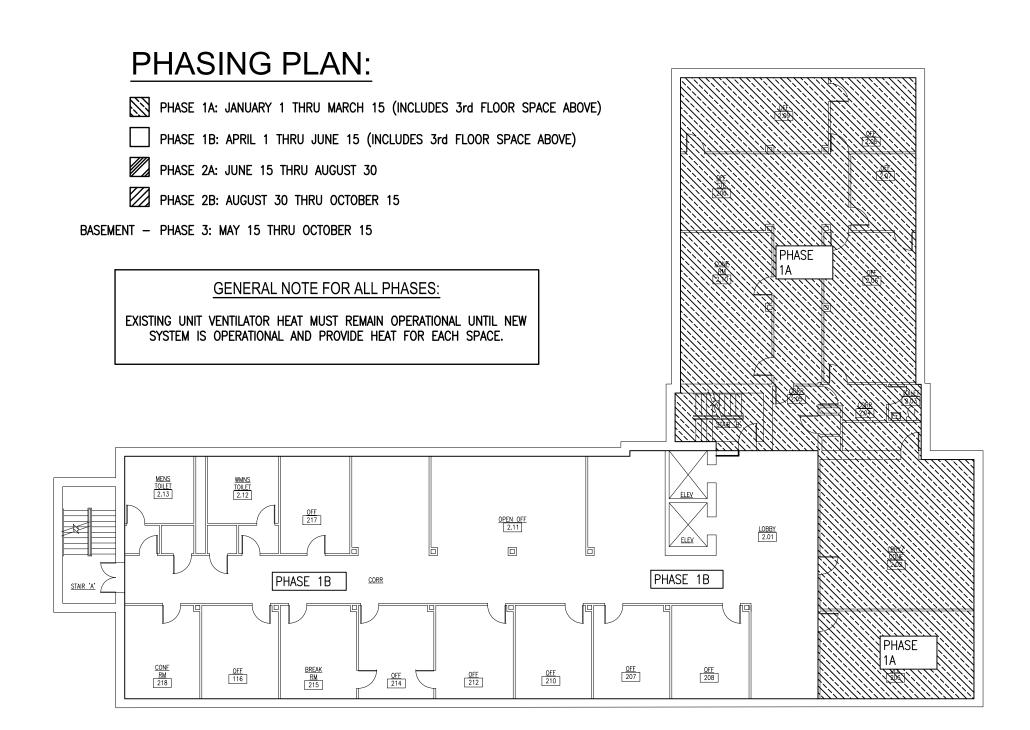


FLOOR JGHTIN

CHECKED JS 10-18-2021 SCALE AS NOTED JOB NO. 2767-2 SHEET



- REFER TO PROJECT GENERAL NOTE #3 FOR SPARE CONDUITS FROM PANEL. SEE DWG. E-4 FOR GENERAL NOTES.
- 2. REFER TO ALL PROJECT GENERAL ELECTRICAL NOTES ON DRAWING E-4 FOR
- ADDITIONAL INFO./REQUIREMENTS.
- 3. STAIR TOWER, DESIGNATED CORRIDOR LIGHTS AND EXIT SIGNS SHALL BE CIRCUITED TOGETHER ON 24/7 CIRCUIT. RUN 2 #10 & #10G TO EXISTING N/E PANEL IN BASEMENT MAIN ELECTRICAL ROOM. CONNECT TO SPACE 1P-20A FUSED/CB. LABEL "3RD FLOOR" CORRIDOR / STAIR LTS.
- 4. LIGHT FIXTURE CONNECTED TO CORRIDOR N/E CIRCUIT CONTROLLED BY OCCUPANCY SENSOR.
- 5. EXISTING LIGHTING TO REMAIN. PROVIDE NEW WIRELESS OCCUPANCY SENSOR, POWER PACK. POWER AND LOW VOLTAGE WIRING AND PICO REMOTE AT DOOR.
- 6. ALL SWITCHES TO BE MOUNTED 46" AFF.
- 7. SURFACE MOUNTED LIGHT FIXTURE COORDINATE EXACT LOCATION OF FIXTURE WITH HVAC EQUIPMENT IN STAIR PRIOR TO ROUGH—IN. PATCH AND PAINT DRYWALL TO
- 8. EXISTING CEILING GRID TO REMAIN AND LIGHT FIXTURES TO REMAIN. EXISTING LUTRON DEVICES TO REMAIN. MODIFY POWER AND LOW VOLTAGE WIRING AS REQUIRED. PROVIDE NEW WIRELESS OCCUPANCY SENSOR. CONNECT TO NEW LTG
- 9. EXISTING CEILING TO REMAIN. RELOCATE LIGHT FIXTURES AS SHOWN. EXISTING LUTRON WIRELESS DEVICES TO REMAIN. MODIFY POWER AND LOW VOLTAGE WIRING AS REQUIRED. PROVIDE NEW LUTRON WIRELESS OCC. SENSOR. CONNECT TO NEW LTG CIRCUIT.
- 10. EXISTING LIGHT FIXTURE SALVAGED AND REUSED. PROVIDE NEW OCCUPANCY SENSOR. PROVIDE NEW PICO REMOTE DIMMER WHERE SHOWN.
- 11. MODIFY EXISTING CEILING TO INSTALL NEW SOFFIT.

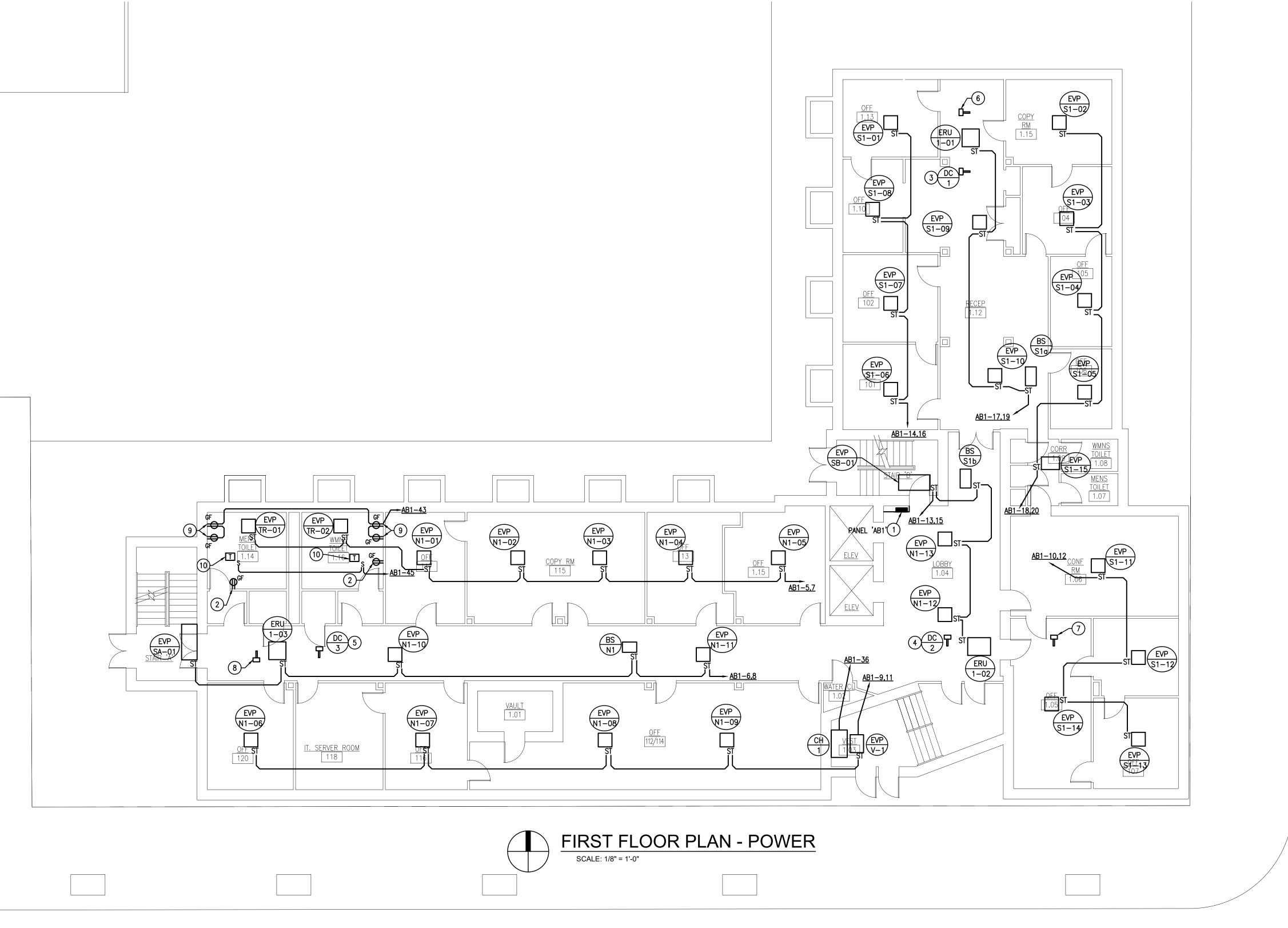


E ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT

COND FLOOR PLAN LIGHTING

DRAWN
RK
CHECKED
JS
DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2
SHEET

F-2



- NEW PANEL 'AB1'. COORDINATE LOCATION IN NEW WALL WITH EXISTING 4" FEEDER CONDUIT TO AB3 AND CONDENSATE PIPING.
- DISCONNECT AND REMOVE EXISTING RECPT. PROVIDE BOX EXTENDER TO ALLOW NEW WALL FINISH. PROVIDE NEW GF RECPT. AND CONNECT TO EXIST. CIRCUIT.
- 3. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE REQUIREMENTS. CIRCUIT AB1-21,23,25 3#12/#12GRD.
- 4. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- REQUIREMENTS. CIRCUIT AB1-22,24,26 3#12/#12GRD.

  5. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE

REQUIREMENTS. CIRCUIT AB1-27,29,31 3#12/#12GRD.

- 6. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE REQUIREMENTS. CIRCUIT AB1-28,30 2#12/#12GRD.
- 7. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- 7. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE REQUIREMENTS. CIRCUIT AB1-32,34 2#12/#12GRD.

  8. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- REQUIREMENTS. CIRCUIT AB1-33,35 2#12/#12GRD.
- RECEPTACLE MOUNTED INSIDE SINK ENCLOSURE FOR AUTOMATIC FAUCET REFER TO DETAIL ON DWG P-2. (ALTERNATE BIO E1 ONLY.)
   LOW VOLTAGE TRANSFORMER FOR FLUSH VALVES LOCATED ABOVE CEILING. TRANSFORMER BY P.C. REFER TO DETAIL ON DWG P-2 FOR ADDITIONAL INFO. (ALT. BIO E1 ONLY.)

WITH GRD. BAR & 100% RATED N PANEL AB1 MAINS		- O MLO		ý	ø _	3	<u>.                                    </u>	,	AIC RA	ATING <u>22,000</u> <u>4</u> Poles
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REMARKS AND LOCATION	LOAD	BKR	СКТ				СКТ	BKR	LOAD	REMARKS AND LOCATION
1ST FLOOR LTS. NORTHWEST	800	20	1	+	$\mp$	F	2	20	1280	1ST FLOOR LTS NOR
1ST FLOOR LTS. SOUTH	1040	<b> </b>	3	1+	$\downarrow$	F	4	<b> </b>	1120	1ST FLOOR CORRIDOR
EVP-TR:01,02 N1:01,02,03,04,05	666	15/ 2	5 7	-	+		6 8	15/ 2	1435	EVP-N1:10,11 SA:01. ER BS-N:1.
EVP-N1:06,07,08,09 V:1	874	15/ 2	9 11	+	+		10 12	15/ 2	374	EVP-S1:11,12,13,1
ERU-1:02. EVP-N1:12,13 SB:01 BS-S1b	1394	15/ 2	13 15	+	+		14 16	15/ 2	333	EVP-S1:01,06,07,0
ERU-1:01. EVP-S1:09,10 BS-S1a	686	15/ 2	17 19	<del> </del>	+		18 20	15/ 2	562	EVP-S1:02,03,04,05,
DUCT HTR. DC-1	3000	20/ 3	21 23 25		<b>+</b>		22 24 26	20/	4500	DUCT HTR. DC-2
DUCT HTR. DC-3	4500	l /	27 29		+-		28 30	15/ 2	1000	DUCT HTR. DC (ERU 1-01)
DUCT HTR. DC	2000	/ 3 15/	31 33	<del> </del>   <del> </del>	+		32 34	15/ 2	1000	DUCT HTR. DC (ERU 1–02)
(ERU 1-03)		/ 2	35	+	+		36	20	66	CH-1
SPARE	_	20/	37 39		+		38 40	15/ 2	1000	SPARE
TOIL. RM. SINKS	600	/ 3 20	41		廿		42 44	15/2	1000	SPARE
TOIL. RM. FLUSH VALVES	400	20	45			L	46	20	_	SPARE
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- GF PROVIDE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER

   REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH NEW. SIZE AND TYPE INDICATED
- REMOVE AND REPLACE EXISTING CIRCUIT
   EXISTING CIRCUIT/BREAKER TO REMAIN.

REVISIONS	BY

CONSOLIDATED
E N G I N E E R S

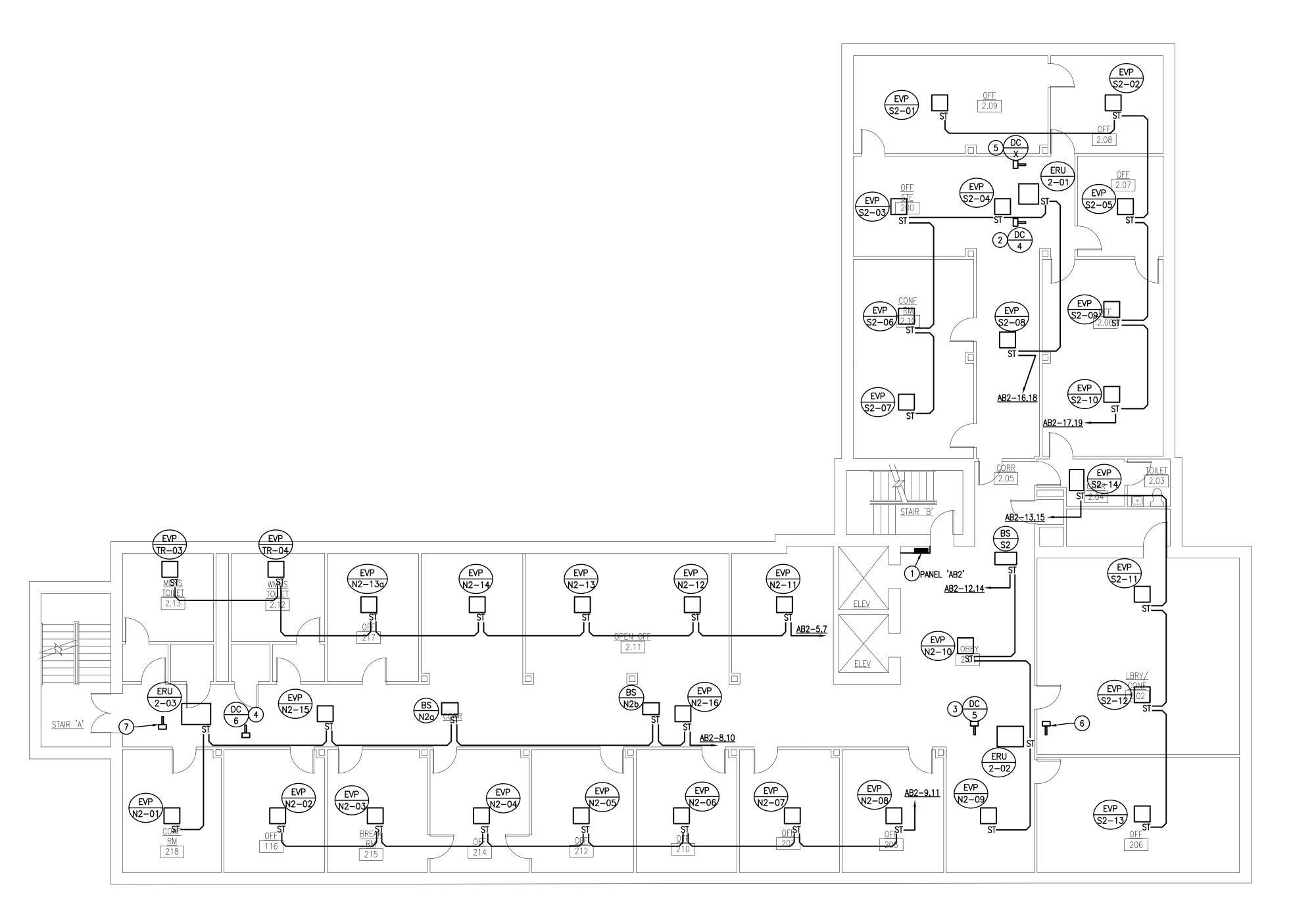
1022 James Drive
Leesport, PA 19533
Tel 610-916-1600 Fax 610-916-161

at & 2nd FLOOR HVAC AND ELECTRICAL UP( AT THE ADMINISTRATION BUILDING FOR READING SCHOOL DISTRICT

> RST FLOOR PLAN -POWER

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10-18-2021	
SCALE	
AS NOTED	
JOB NO.	_
2767–2	
 SHEET	

E-3



# SECOND FLOOR PLAN - POWER SCALE: 1/8" = 1'-0"

## **#** DRAWING NOTES:

- 1. NEW PANEL AB2 COORDINATE LOCATION OF EXISTING FEEDER TO PANEL AB3, CONDENSATE PIPING AND REFRIGERANT PIPING.
- 2. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- REQUIREMENTS. CIRCUIT AB2-20,22,24 3#12/#12GRD. 3. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- REQUIREMENTS. CIRCUIT AB2-21,23,25 3#12/#12GRD. 4. PROVIDE 3P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE
- REQUIREMENTS. CIRCUIT AB2-26,28,30 3#12/#12GRD.
- 5. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE REQUIREMENTS. CIRCUIT AB2-27,29 2#12/#12GRD.
- 6. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE REQUIREMENTS. CIRCUIT AB2-31,33 2#12/#12GRD.
- 7. PROVIDE 2P-30A NEMA 1 NFDS. LOCATE TO MEET N.E.C. CLEARANCE

REQUIREMENTS. CIRCUIT AB1-32,34 2#12/#12GRD.

PROJECT GENERAL ELECTRICAL NOTES:

- (APPLY TO ALL SHEETS)
- 1. THE CONTRACTOR SHALL PROVIDE ALL CIRCUITS (FEEDER AND BRANCH) WITH AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH N.E.C. TABLE 250-122. 2. CONDUIT SLEEVES MUST BE PROVIDED FOR ALL LOW VOLTAGE WIRING RUN IN OR

THROUGH WALLS. IN ROOMS WITHOUT CEILINGS, LOW VOLTAGE WIRING MUST BE RUN IN

- CONDUIT. NO EXPOSED LOW VOLTAGE WIRING WILL BE PERMITTED. 3. THE CONTRACTOR SHALL PROVIDE SPARE CONDUITS FROM RECESSED PANELBOARDS TO ACCESSIBLE CEILING SPACES. PROVIDE ONE, ONE-INCH CONDUIT FOR EVERY TWO SPARE
  - POLES IN PANEL.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY MISCELLANEOUS STEEL REQUIRED FOR MOUNTING ELECTRICAL EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE TO SIZE STEEL AND INSTALL PROPERLY FOR THE LOAD INTENDED.
- 5. EACH TRADE CONTRACTOR MUST FAMILIARIZE HIMSELF WITH THE AVAILABLE SPACE IN THE CONCEALED AREAS OF THE STRUCTURE. HE MUST COORDINATE ALL THE WORK TO BE DONE AND EQUIPMENT TO BE INSTALLED IN ADVANCE AND PRIOR TO INSTALLING ANY SYSTEM OR PORTION THEREOF. ANY CONTRACTOR WHO FAILS TO COMPLY SHALL BEAR ALL COSTS OF EACH TRADE FOR DISCONNECTING, REMOVING AND REINSTALLING SYSTEM, EQUIPMENT OR PORTIONS THEREOF.
- 6. THE SPACE ABOVE ALL CEILINGS WILL BE USED AS A RELIEF AIR PLENUM. LOW VOLTAGE WIRING FOR OTHER SYSTEMS MUST BE AN APPROVED AIR PLENUM CABLE, OR RUN IN
- 7. ALL LOW VOLTAGE WIRING, NOT INSTALLED IN CONDUIT, ABOVE CEILINGS MUST BE RUN PERPENDICULAR AND/OR PARALLEL TO BUILDING STEEL. ALL CABLES MUST BE NEATLY TRAINED AND WIRE TIED TO THE BUILDING STEEL OR INSTALLED ON J-HOOKS, BRIDLE RINGS OR IN CABLE TRAY WITH 25% SPARE CAPACITY. CABLES THAT ARE SIMPLY DRAPED THROUGH STEEL OR RUN AT ODD ANGLES WILL HAVE TO BE REMOVED AND REINSTALLED.
- 8. IN EXISTING CONSTRUCTION, ALL CONDUIT AND WIRING RUN TO FINISHED SPACES (I.E., CORRIDORS, OFFICES, STORAGE ROOMS, TOILET ROOMS, ETC.) MUST BE CONCEALED. CONDUIT MAY BE RUN EXPOSED IN UNFINISHED AREAS (I.E., CRAWL SPACES, MECHANICAL EQUIPMENT ROOMS, ETC.). NO SURFACE RACEWAY MAY BE USED UNLESS SHOWN ON DRAWINGS OR APPROVED BY ENGINEER IN WRITING. WHERE WALLS ARE SOLIDLY FILLED (I.E. WITH GROUT) THE CONTRACTOR SHALL PROVIDE SIMILAR TO WIREMOLD V700 SERIES METALLIC RACEWAY AT NO ADDITIONAL COST TO THE OWNER. FINAL ROUTING SHALL BE APPROVED BY ENGINEER. FINISH SELECTED BY ENGINEER FROM COMPLETE LIST OF STANDARD FINISHES. REFER TO SPECIFICATIONS TO DETERMINE WHERE MC CABLE MAY BE
- 9. THE CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING OF EXISTING SURFACES THAT IS REQUIRED FOR HIS WORK. PATCHING SHALL INCLUDE FINAL FINISH /
- 10. THE CONTRACTOR SHALL COORDINATE ALL DEVICES ASSOCIATED WITH MECHANICAL, EQUIPMENT INDICATED TO HAVE POWER CONNECTIONS WITH CONTRACTOR PROVIDING EQUIPMENT PRIOR TO ORDERING DEVICES AND ROUGH-INS. THE CONTRACTOR SHALL REQUEST SHOP DRAWINGS FOR ALL EQUIPMENT REQUIRING POWER BEFORE ROUGH-IN
- 11. FOR WORK REQUIRED WITHIN AREAS OF THE BUILDING WHERE NO GENERAL TRADES WORK IS REQUIRED, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL CEILING TILES, INCLUDING INSULATION FOUND ABOVE THE CEILING TO PERFORM HIS WORK. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO NOTIFY THE OWNER/ENGINEER IN WRITING WITH DATED PHOTOGRAPHIC EVIDENCE OF ANY DAMAGED CEILING TILES PRIOR TO REMOVAL. OTHERWISE, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGED CEILING TILES WITHIN THE AREA OF WORK.
- 12. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL PROVIDE FINAL POWER CONNECTIONS TO ALL POWERED EQUIPMENT FURNISHED BY OTHER CONTRACTORS AND THE OWNER, INCLUDING, BUT NOT LIMITED TO AIR HANDLING EQUIPMENT, HEATING EQUIPMENT, COOLING EQUIPMENT, PUMPS.
- 13. UNLESS NOTED OTHERWISE, LIGHT SWITCHES INDICATED IN ROOMS SHALL CONTROL THE LIGHTING WITHIN THAT ROOM. WHERE MULTIPLE SWITCHES ARE INDICATED, REFER TO THE ASSOCIATED DRAWING NOTES AND/OR SUB-LETTER DESIGNATION FOR THE LIGHTING TO BE CONTROLLED BY EACH SWITCH.
- 14. CONTRACTOR SHALL PROVIDE ALL CITY OF READING PERMITS REQUIRED. CONTRACTOR SHALL COST IN BID.
- 15. ALL ROOFING WORK (CUTTING, PATCHING, SEALING) SHALL BE PREFORMED BY READING SCHOOL DISTRICT CONTRACTOR TO MAINTAIN EXISTING ROOF WARRANTY, ANY COST SHALL BE INCLUDED IN BID.
- 16. THE GENRAL, ELECTRICAL AND HVAC CONTRACTOR SHALL PROVIDE AN ONSITE MEETING WITH THE ENGINEER TO COORDINATE ALL CHASE SIZES AND LOCATIONS. COORDINATION OF CONDUIT AND PIPING WITHIN CHASE SHALL BE SIGNED OFF ON. FUTURE CONDUIT AND PIPE WITHIN CHASE MUST BE CONSIDERED PRIOR TO BUILDING CHASES.

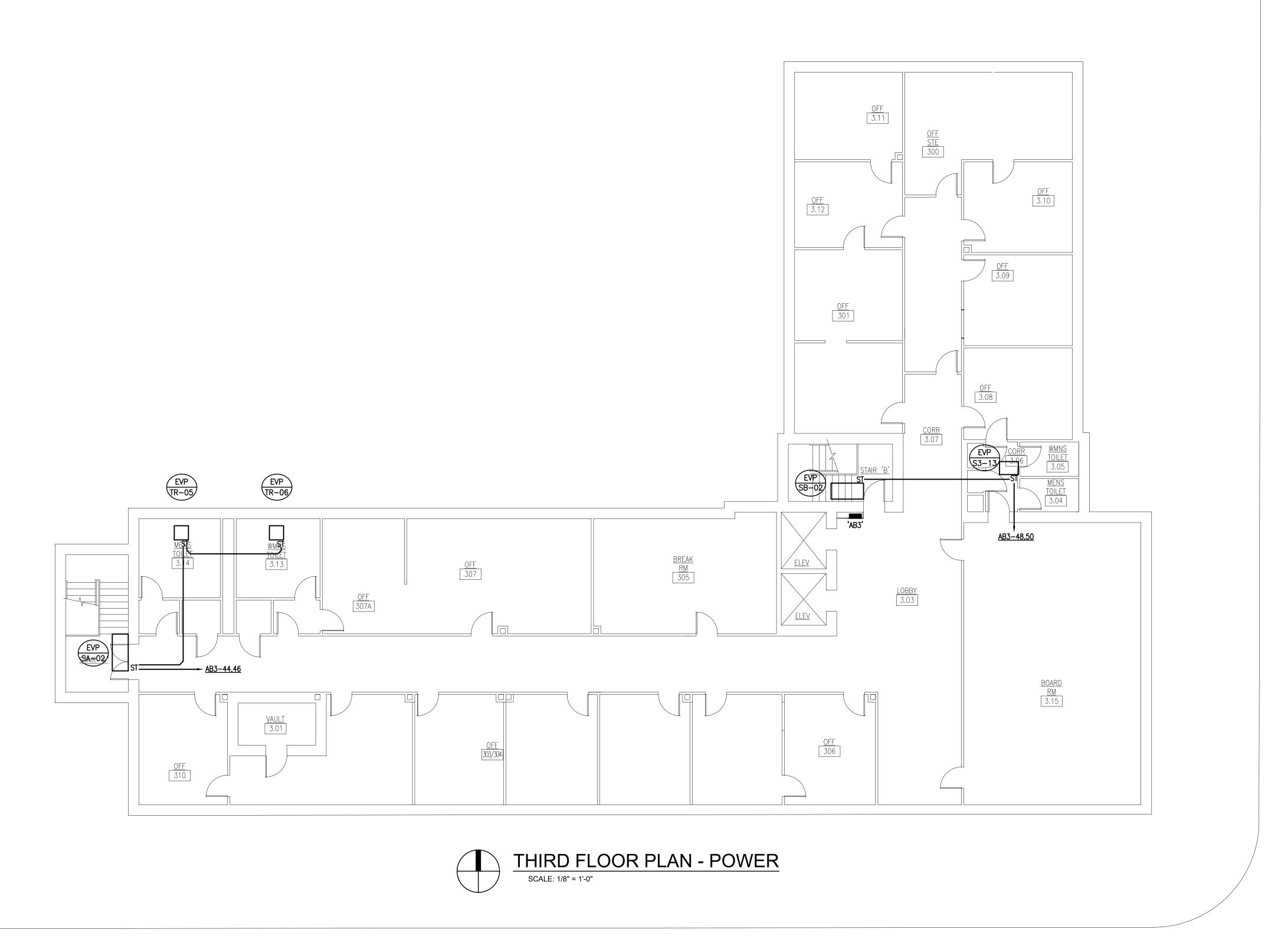
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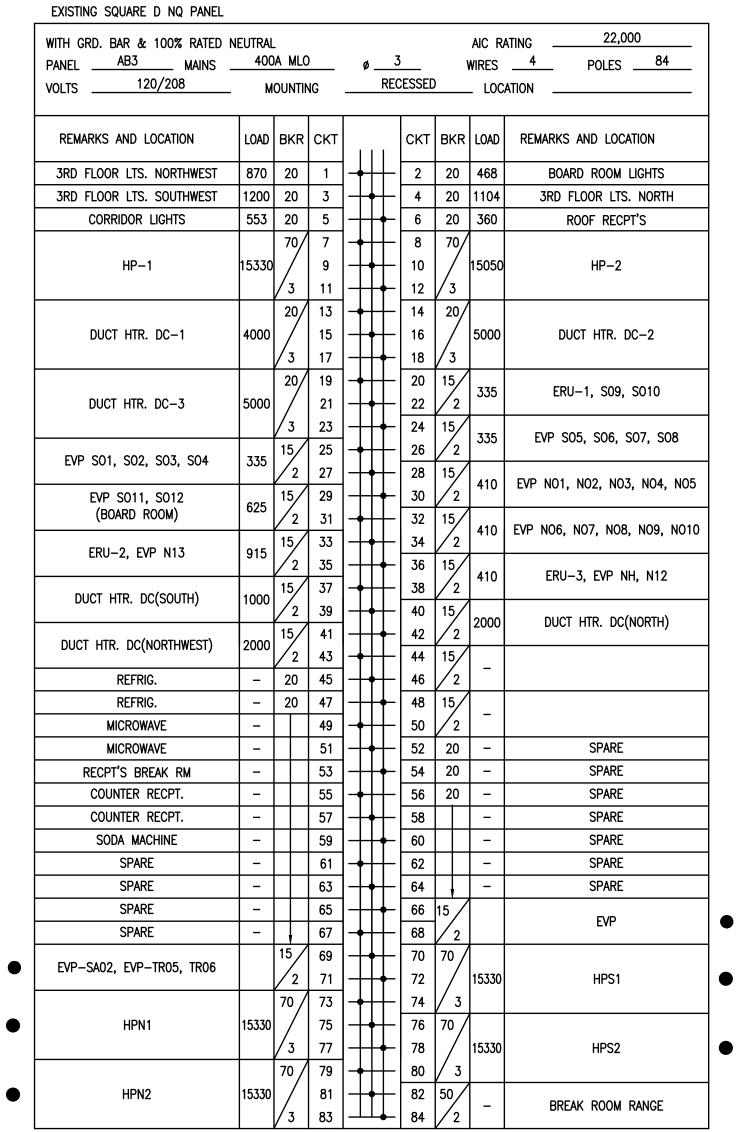
GF - PROVIDE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER

REVISIONS

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AS NOTED

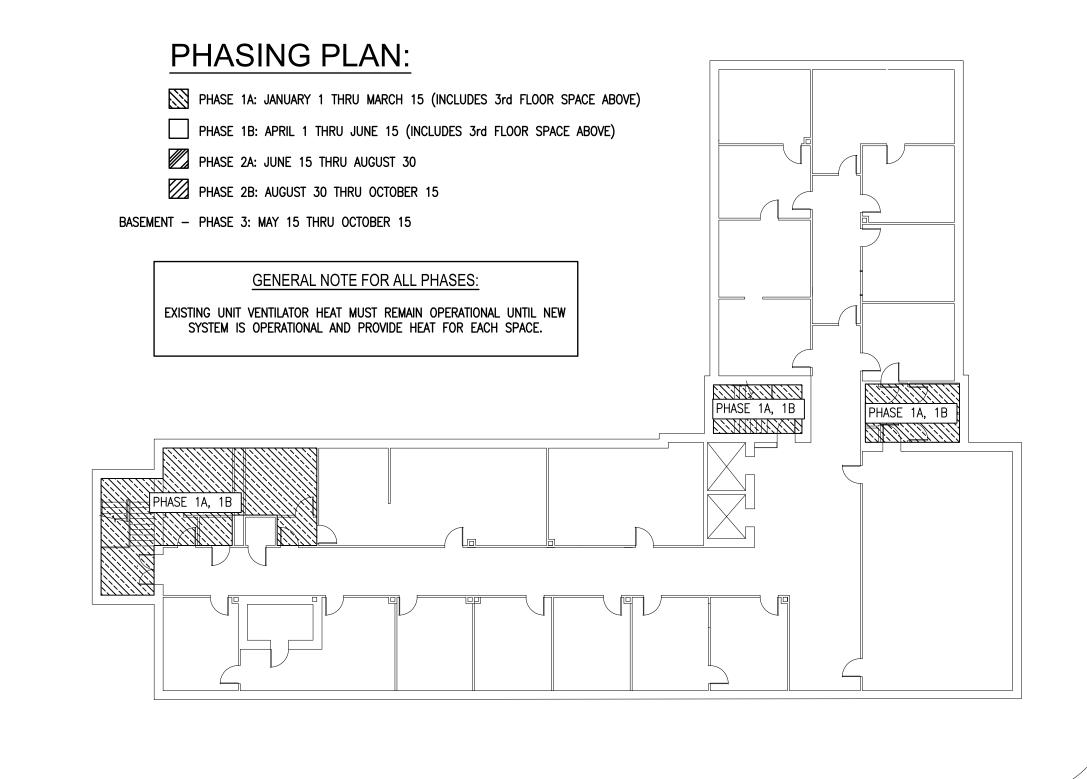




GF — PROVIDE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER

REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH NEW. SIZE AND TYPE INDICATED

PROVIDE NEW CIRCUIT BREAKER

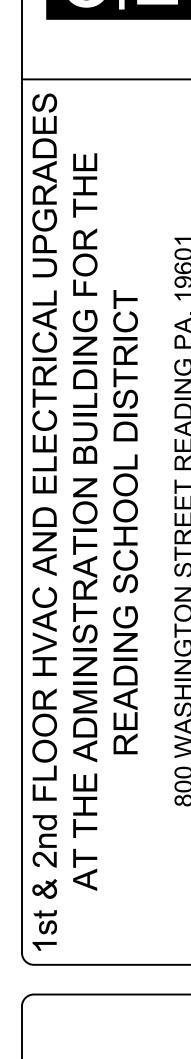


AT THE ADMINISTRATION BUILDING FOR THE READING SCHOOL DISTRICT

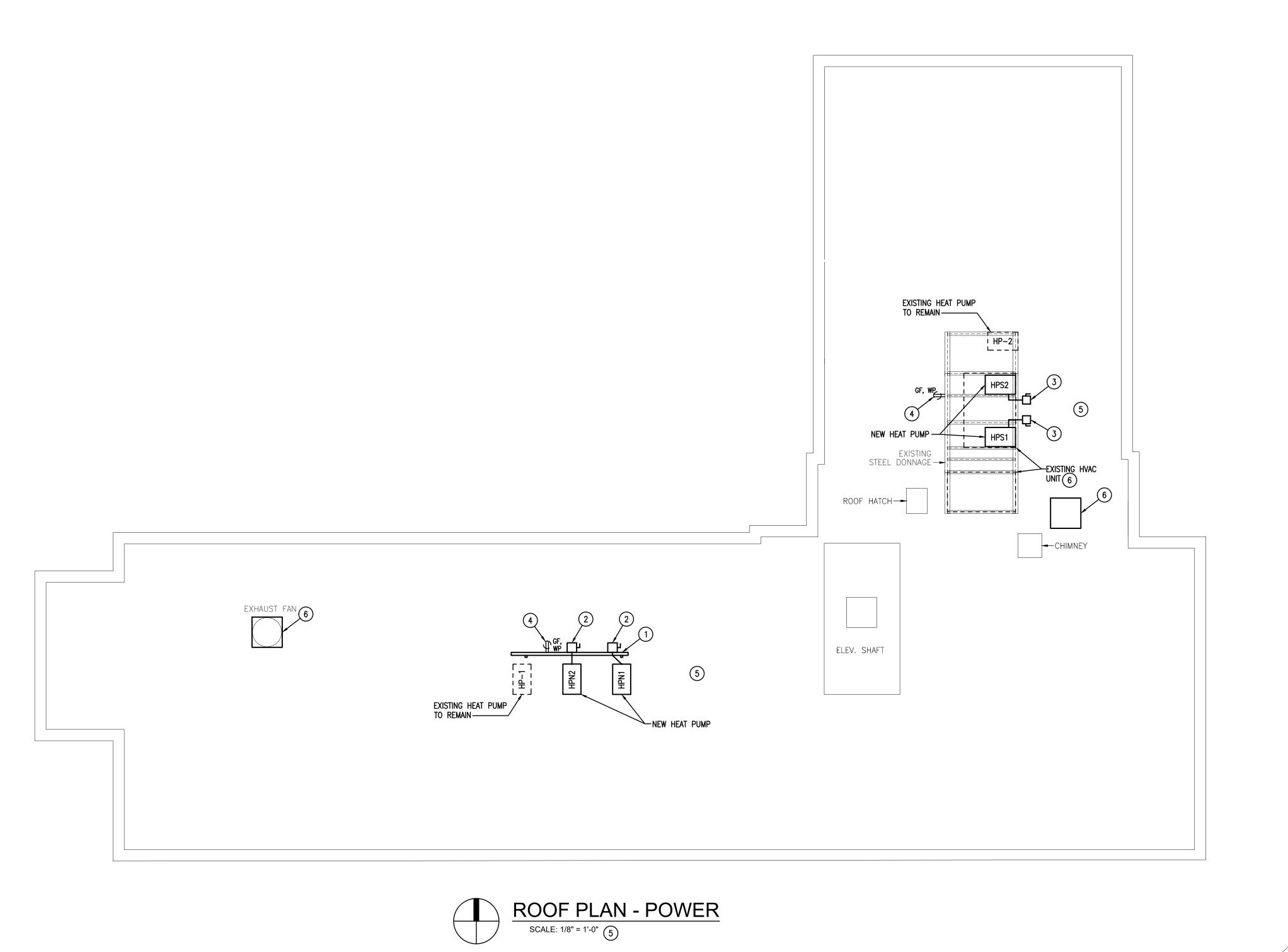
THIRD FLOOR PLAN -POWER

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CHECKED
JS
DATE
10-18-2021
SCALE
AS NOTED
JOB NO.
2767-2
SHEET

E-5



SCALE AS NOTED



# **DRAWING NOTES:**

- PROVIDE MISCELLANEOUS STEEL TO MOUNT HEAT PUMP DISCONNECT SWITCHES ON.
   PROVIDE 3P-100A NEMA 3R NFDS MOUNTED TO MISCELLANEOUS STEEL. RUN CIRCUIT VIA ROOF PITCH POCKET AND ABOVE THIRD FLOOR CEILING TO PANEL 'AB3'. CIRCUIT AB3-73,75,77 & AB3-79,81,83 3#4W/#8GRD. 1"C EACH. LABEL
- PANEL SCHEDULE HPN1 & HPN2 RESPECTIVELY. " "

  3. PROVIDE 3P-100A NEMA 3R NFDS MOUNTED TO MISCELLANEOUS STEEL. RUN CIRCUIT VIA ROOF PITCH POCKET AND ABOVE THIRD FLOOR CEILING TO PANEL 'AB3'. CIRCUIT AB3-70,72,74 & AB3-76,78,80 3#4W/#8GRD. 1"C EACH. LABEL PANEL SCHEDULE HPS1 & HPS2 RESPECTIVELY.
- EXISTING GROUND FAULT, WEATHERPROOF (WHILE IN USE) RECEPTACLE TO REMAIN.
   ALL ROOF WORK (CUTTING, PATCHING, SEALING) SHALL BE PREFORMED BY READING SCHOOL DISTRICT ROOFING CONTRACTORS TO MAINTAIN EXISTING ROOF WARRANTY. ANY COST SHALL BE INCLUDED IN BID.
- 6. DISCONNECT EXISTING HVAC UNIT. REMOVE EXISTING CONDUIT & WIRING BACK TO SOURCE. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT.

## **GENERAL NOTES:**

- ALL EXTERIOR CONDUIT SHALL BE RIGID GALVANIZED STEEL WITH LIQUID TIGHT CONDUIT CONNECTIONS FINAL 2'-0".
- 2. ALL INTERIOR CONDUIT SHALL BE EMT.

## **ELECTRICAL LEGEND**

(REFER TO SPECIFICATIONS FOR MORE INFORMATION) NOTE: DIMENSIONS ARE TO CENTER OF DEVICE, UNO.

### **LIGHTING FIXTURES**

(REFER TO LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION AND TYPE)

#### SYMBOL DESCRIPTION

LED LIGHTING FIXTURE.

### LIGHTING FIXTURE — NORMAL AND EMERGENCY POWER.

- EXIT LIGHTING FIXTURE - NORMAL AND EMERGENCY POWER - ARROW(S) INDICATE DIRECTIONAL MARKERS.

EX PHANTOM SYMBOL INDICATES EXISTING ITEM OR AS NOTED ON DRAWINGS.

- THREE WAY LIGHT SWITCH 20 AMP MOUNT 46" AFF.
- KEY OPERATED LIGHT SWITCH 20 AMP MOUNT 46" AFF.
- SUB-LETTERS INDICATE INDIVIDUAL BALLAST WIRING MOUNT 46" AFF.
- LIGHT SWITCH WITH PILOT LIGHT 20 AMP SIMILAR TO P&S PS20AC2-RPL SERIES MOUNT 46" AFF.
- WIRELESS DIMMER LIGHT SWITCH LUTRON PICO REMOTE CAT NO. PJZ-3BRL-GWH-LO1 PROVIDE WITH POWER PACK ABOVE CEILING TO COMUNICATE WITH WIRELESS OCCUPANCY SENSORS. PROVIDE REQUIRE POWER AND LOW VOLTAGE WIRING - POWERPACK SHALL BE LUTRON CAT NO. RMJS-8T-DV-B.
- Sos OCCUPANCY SENSING WALL SWITCH SEE SPECIFICATIONS MOUNT 46" AFF.
- CEILING OCCUPANCY SENSOR LUTRON WIRELESS OCCUPANCY SENSOR CAT NO. LRF2-OCR2B-P-WH

### **RECEPTACLES**

- DUPLEX RECEPTACLE 20 AMP 120 VOLT 18" AFF.
- GROUND FAULT RECEPTACLE INDIVIDUAL TYPE 18" ABOVE FINISHED FLOOR.
- DUPLEX RECEPTACLE (WITH 'WR' LABEL) WITH WEATHER PROOF COVER FLUSH 18" AFF.

#### SYMBOL DESCRIPTION

- JUNCTION BOX PROVIDE FINAL CONNECTION TO EQUIPMENT.
  - MOTOR SIZE AND TYPE AS INDICATED BY OTHERS. PROVIDE FINAL CONNECTIONS. - MOTOR CONTROLLER - BY OTHERS. PROVIDE FINAL CONNECTIONS.
- EXISTING PANELBOARD.
- THERMAL SWITCH MANUAL STARTER WITH THERMAL PROTECTION AND HAND/AUTO SWITCH TO ALLOW STARTER CONTROL FROM REMOTE SOURCE. HAND/AUTO SWITCH ONLY REQUIRED FOR RE-CIRCULATING PUMPS. SQUARE D CLASS 2510 SERIES WITH HANDLE GUARD/LOCK OFF ATTACHMENT MOUNT ON OR ADJACENT TO EQUIPMENT.
- NON-FUSED DISCONNECT SWITCH SIZE AND TYPE INDICATED.
- FUSED DISCONNECT SWITCH SIZE AND TYPE INDICATED (PROVIDE FUSES AS PER EQUIPMENT MANUFACTURERS REQUIREMENTS).
- COMBINATION STARTER/DISCONNECT SWITCH SIZE 1 U.N.O. PROVIDED BY E.C. 60" TO HANDLE. - VARIABLE FREQUENCY DRIVE - FURNISHED BY OTHERS. INSTALL DRIVE AND PROVIDE FINAL CONNECTIONS.
- EXHAUST FAN ROOF MOUNTED PROVIDED BY OTHERS. PROVIDE FINAL CONNECTIONS.

## COMMUNICATION SYSTEMS

SYMBOL DESCRIPTION

SOUND SYSTEM SPEAKER – CEILING MOUNTED (PAGING SYSTEM).

## FIRE ALARM SYSTEM

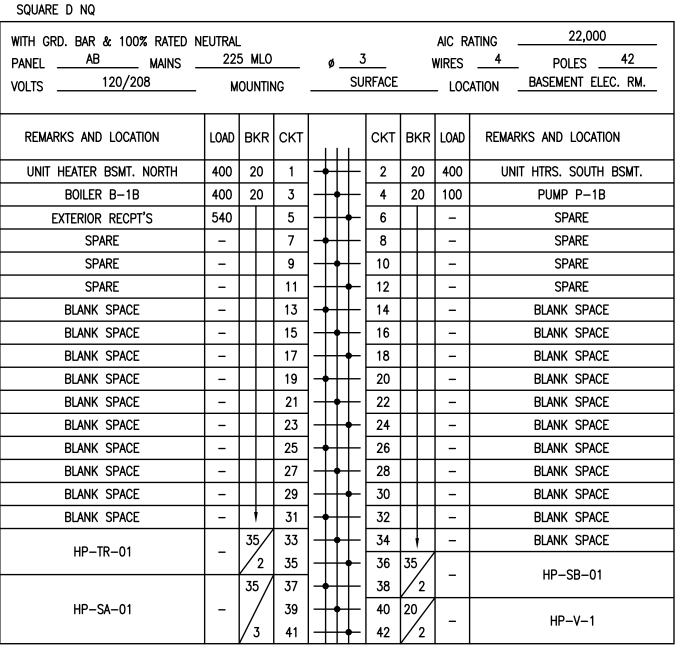
### SYMBOL DESCRIPTION

- FIRE ALARM AUDIO UNIT (FLUSH CEILING).
- FIRE ALARM VISUAL UNIT (FLUSH CEILING)
- COMBINATION FIRE ALARM AUDIO/ VISUAL UNIT CEILING MOUNT. SMOKE DETECTOR.

- HOMERUN TO APPLICABLE PANEL WIRING SHALL BE 2#12 AWG WITH SEPARATE GROUND WIRE IN 3/4" CONDUIT UNLESS OTHERWISE NOTED.
- —NE— NORMAL/ EMERGENCY LIGHTING CIRCUIT.
- 1) INDICATES DRAWING NOTE NUMBER.

# **ABBREVIATIONS**

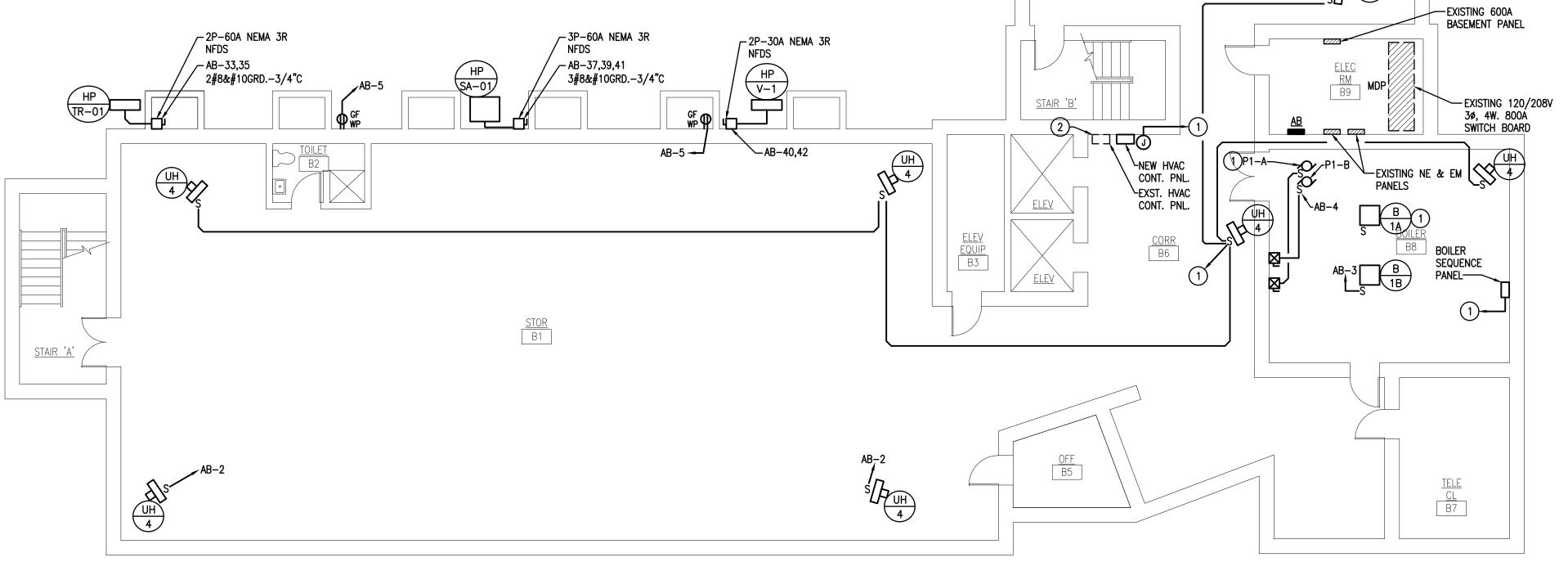
- CONDENSING UNIT BY OTHERS. PROVIDE FINAL CONNECTIONS. EXHAUST FAN - BY OTHERS. PROVIDE FINAL CONNECTIONS.
- NON FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH



GF - PROVIDE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER

- REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH NEW. SIZE AND TYPE INDICATED

EXISTING CIRCUIT/BREAKER TO REMAIN.



## **BASEMENT FLOOR PLAN - POWER** SCALE: 1/8" = 1'-0"

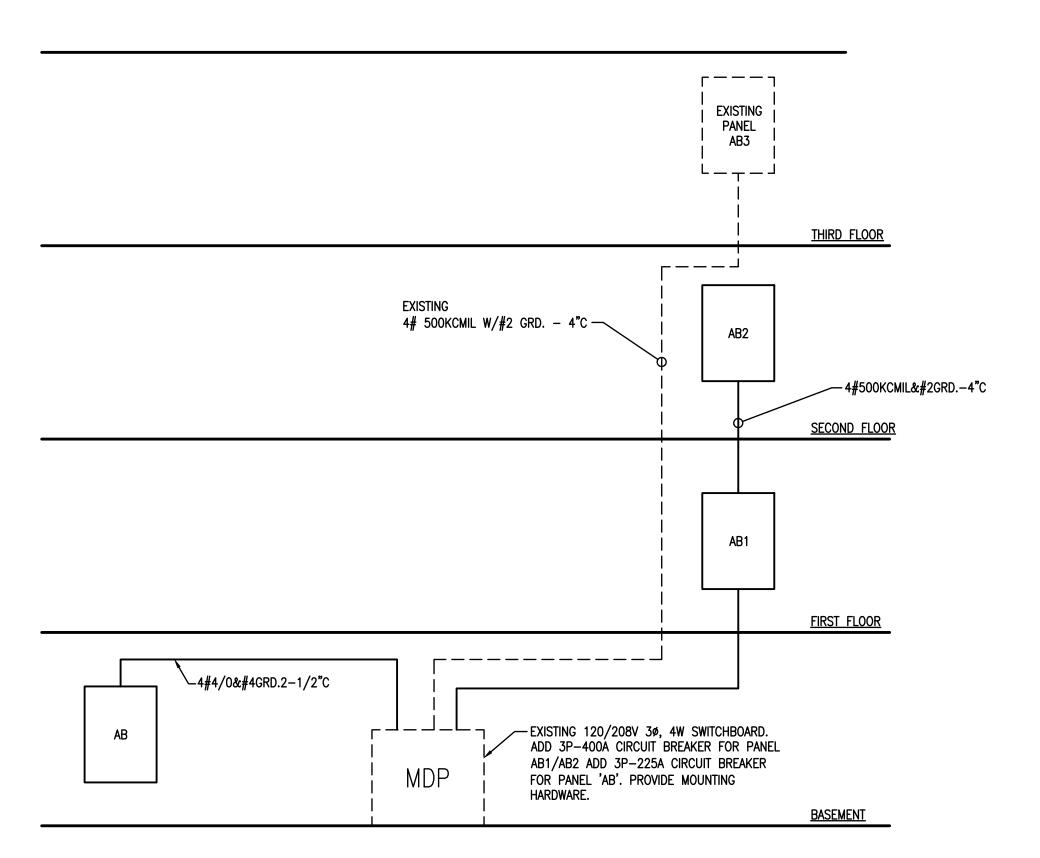
2P-60A NEMA 3R

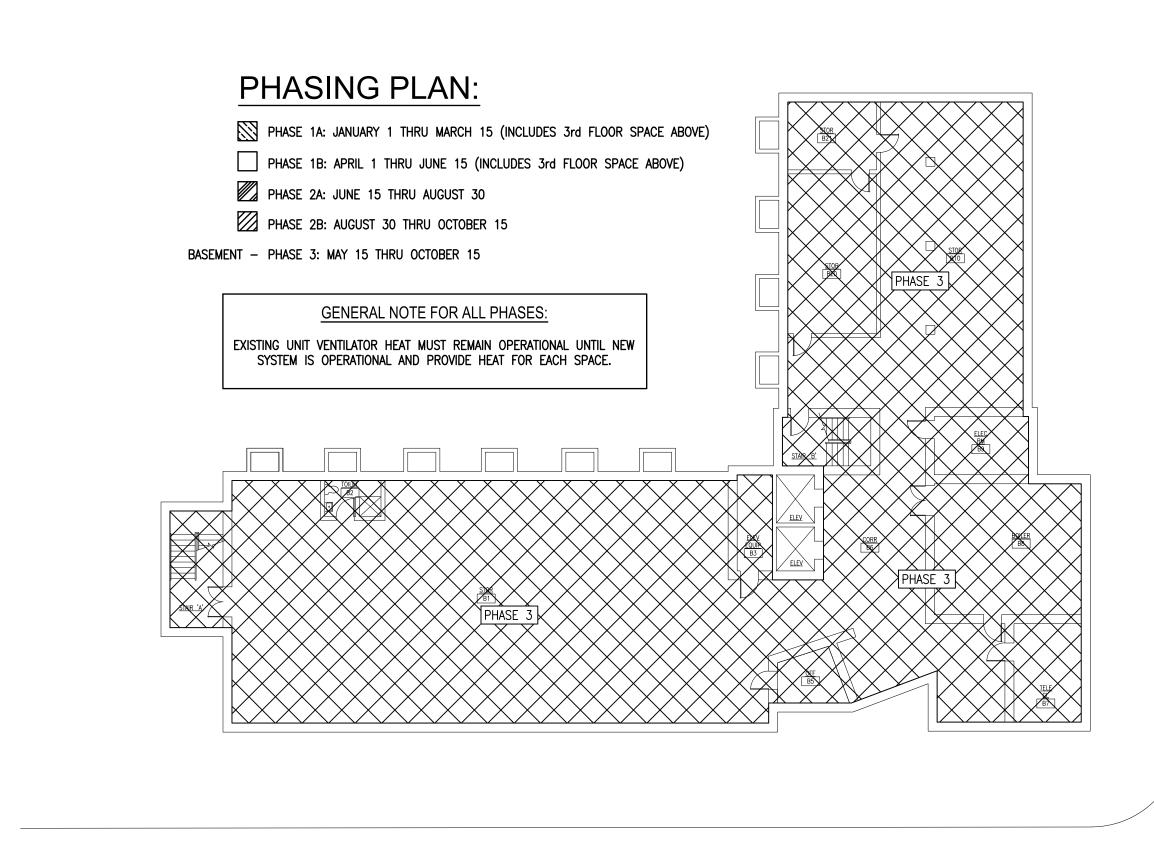
2#8&#10GRD.-3/4"C-

AB-36,38

## **# DRAWING NOTES:**

- 1. RUN 2#12&#12GRD.-3/4"C TO EXISTING PANEL 'LS' CONNECT TO SPARE 20A-1P
- 2. CONNECT EXISTING HVAC PANEL TO NEW N/E ADJUSTMENT CIRCUIT.







CHECKED JS 10-18-2021 AS NOTED 2767-2 SHEET

REVISIONS

