NOTES:

1. 8' - 0" HIGH TEMPORARY FENCING TO BE PROVIDED TO ENCLOSE TEMPORARY AHU LOCATED ON ZOOLOGICAL DRIVE.

2. CONTRACTOR TO FURNISH PORTABLE TOILET AND HANDWASHING FACILITIES FOR THE DURATION OF PROJECT FOR CONTRACTOR USE.

3. ALL DELIVERIES AND ACCESS TO COME THROUGH GATE H.

4. DUCTWORK TO BE STAGED ON ANIMAL HOSPITAL ROOF.

5. DUMPSTER LOCATION TO BE COORDINATED IN THE FIELD WITH THE OWNER.

6. NO STAGING OR TEMPORARY FACILITIES ARE TO BLOCK ANY DOORS TO ANY BUILDINGS OR ACCESS THROUGH ANY GATES.

7. PROTECT AND MAINTAIN ACCESS TO SIDEWALK AT ALL TIMES.

8. FURNISH AND INSTALL TEMPORARY RAMP OVER ALL TEMPORARY UTILITIES RUN BETWEEN TEMP AHU AND EXIST BLDG LOCATION FOR DUMPSTER AND TEMP TOILET FACILITIES.

CODE DATA

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PROJECT NO. 71-21-4896-01
Animal Hospital - AHU-1
Replacement

DEPARTMENT OF PUBLIC PROPERTY
CITY OF PHILADELPHIA

PROJECT COORDINATOR: SEALS

AS NOTED

11/23/2020 5:36:50 PM

1 TEMPORARY FACILITIES SITE PLAN
EXIST DUCTWORK TO REMAIN
- SEE MECH DWGS
ALTERNATE 1: REMOVE AND DISPOSE OF DUCTWORK - SEE MECH DWGS

EXIST EXHAUST FAN TO REMAIN
- SEE MECH DWGS
ALTERNATE 2: REMOVE AND DISPOSE OF EXISTING EXHAUST FAN - SEE MECH DWGS

ALTERNATE 1: FURNISH AND INSTALL NEW EXHAUST FAN IN EXIST LOCATION - SEE MECH DWGS

EXG AHU - 1 TO BE DEMOLISHED

EXIST EXHAUST FAN TO REMAIN
- SEE MECH DWGS
ALTERNATE 2: REMOVE AND DISPOSE OF EXISTING EXHAUST FAN - SEE MECH DWGS

1. ALTERNATE 1 ROOFING ASSOCIATED WITH ALL DUCTWORK PENETRATIONS WILL BE PERFORMED UNDER THIS CONTRACT.
2. ALTERNATE 3: ROOFING ASSOCIATED WITH ALL DUCTWORK PENETRATIONS WILL BE PREFORMED UNDER THIS CONTRACT.
3. SEE A1.3 FOR ROOF DETAILS FOR MECHANICAL DUCTWORK SUPPORTS, CURBS, AND DUCTWORK PENETRATIONS.
4. ALL MATERIALS SHALL REMAIN PROTECTED FROM THE PUBLIC AND FROM THE ZOO'S LIVE ANIMALS. CONTRACTORS SHALL TAKE EVERY PRECAUTION POSSIBLE TO PREVENT CONSTRUCTION MATERIALS OR FUMES FROM ENTERING OUTDOOR OR INDOOR ANIMAL LIVING SPACES.
5. ALL METAL FLASHING SHALL MATCH EXISTING COLOR.
6. VERIFY QUANTITY AND COORDINATE TYPE OF PENETRATIONS WITH MECHANICAL DRAWINGS AND FIELD OBSERVATION.

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.
**PHARMACY**

**LOCKERS**

**LOCKERS**

**TREATMENT CORRIDOR**

FURNISH AND INSTALL NEW GWB CLG IN HATCHED AREA - REINSTALL ANY CEILING MOUNTED DEVICES, GRILLES/REGISTERS/DIFFUSERS, AND LIGHT FIXTURES DISPLACED DURING CONSTRUCTION - PAINT TO MATCH EXISTING CEILING - CEILING HEIGHT TO MATCH EXISTING AND BE FLUSH

REINSTALL ALL CEILING TILES, GWB CLG, SPRINKLERS/SIRENS, LIGHT FIXTURES, FEED PIPES/VALVES, AND ELECTRICAL TRUNKING AND OTHER MACHINES TO THEIR PREVIOUS LOCATION.

NOTE:

1. SPRINKLER AND FIRE ALARM SYSTEM DEVICES TO BE RETURNED TO ORIGINAL LOCATIONS AND POSITIONS.

CAREFULLY REMOVE CEILING TILE, FRAMING, DEVICES, GRILLES/REGISTERS/DIFFUSERS, AND LIGHT FIXTURES BELOW AREA OF VALVE REPLACEMENT, SALVAGE FOR REINSTALLATION.

ROOMS WHERE CEILINGS ARE REMOVED ARE TO BE PROTECTED WITH PLASTIC SHEETING PRIOR TO DEMOLITION. PROTECTION TO REMAIN IN PLACE UNTIL VALVE REPLACEMENT AND CEILING REPAIRS ARE COMPLETE.

SPRINKLER AND FIRE ALARM SYSTEMS TO REMAIN IN CONSTANT OPERATION. FOR ANY CLG WORK WHERE CLG REMAINS OPEN AT THE END OF THE DAY, SPRINKLER HEADS TO BE TEMPORARILY ROTATED UP UNTIL NEW CLG IS INSTALLED.

EXTENT OF CEILING REMOVAL MAY BE LARGER TO FACILITATE MEANS & METHODS OF WORK.
COUNTERFLASHING
FASTENERS 8" O.C.
EXG UNIT MOUNTING CURB
EXG WOOD NAILERS
SEALANT AT PERIMETER
EXG BLOCKING
FLANGE
ASSEMBLY
EXG ROOF
INFILL W/ RIGID INSULATION & COVERBOARD, AND MEMBRANE WHERE EXISTING DUCTWORK SUPPORTS WERE REMOVED. REFER TO SPEC FOR CUTTING AND PATCHING ADDITIONAL REQ'S.
STRUCTURAL SUPPORT VARIES, REFER TO STRUCTURAL DRAWINGS
ALTERNATE 1: NEW DUCT ROOF SUPPORT - SEE MECH DWGS
ALTERNATE 1: NEW DUCT - SEE MECH DWGS
EXG WD BLOCKING
DUCT ROOF SUPPORT PAD, TYP
NOTE: LOCATIONS ARE NOT SHOWN ON PLAN FOR CLARITY. CONTRACTOR MUST LOCATE, VIF, AND QUANTIFY
PROVIDE LOOSE SHEET MEMBRANE
UNDER SUPPORT PADS, TYP
ALTERNATE 2: NEW MTL.
EXHAUST FAN COVER
FLASHING FASTENED
AT 8" O.C.
EXG CANT STRIP 8" MIN
ALTERNATE 2: NEW EXHAUST FAN IN THE EXISTING LOCATION
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.
DEMOLITION REQUIREMENT NOTES:

1. COORDINATE WITH ARCHITECT AND GENERAL CONTRACTOR ON A DETAILED SITE PLAN AND ENCOURAGE THE CONTRACTOR TO INDICATE ANY CONSTRUCTION ACTIVITY THAT MIGHT AFFECT THE ROOF.
2. DISCONNECT ALL POWER CONNECTIONS FROM AHU TO PANELS.
3. REMOVE AND BYPASS EXISTING 3" 3-WAY WATER 3-WAY VALVE BELOW ROOF LINE.
4. PROVIDE A CONTRACT (AS PART OF THE MECHANICAL BID) WITH SIMPLEX. SIMPLEX CONTRACT IS TO PROVIDE A CONTRACT (AS PART OF THE MECHANICAL BID) WITH SIMPLEX.
5. COORDINATE PROVISION AND ARRIVAL OF TEMPORARY AIR HANDLING UNIT.
6. DECREASE A UNIT FOR RE-USE OR REPLACEMENT. WHEN THE SYSTEM ISOLATION AND DETECTION SYSTEM IS ISOLATED A FIRE WATCH MUST BE PROVIDED BY THE MECHANICAL CONTRACTOR IN ACCORDANCE WITH THE CITY OF PHILADELPHIA AND ZOO STANDARDS, NOTIFY JOHN OSIFCHOK (PROJECT MANAGER FOR THE PHILADELPHIA ZOO) FOR ALL FIRE WATCH REQUIREMENTS.
7. DISCONNECT AHU-1 SUPPLY DUCT AS SHOWN AND ISOLATE (SEAL) FOR RE-USE OR REPLACEMENT.
8. MOUNTED SMOKE DETECTOR FROM THE EXISTING AHU. THE AHU SMOKE ISOLATION AND DETECTION SYSTEM IS ISOLATED A FIRE WATCH MUST BE PROVIDED BY THE MECHANICAL CONTRACTOR IN ACCORDANCE WITH THE CITY OF PHILADELPHIA AND ZOO STANDARDS, NOTIFY JOHN OSIFCHOK (PROJECT MANAGER FOR THE PHILADELPHIA ZOO) FOR ALL FIRE WATCH REQUIREMENTS.
9. DISCONNECT THE RELIEF DUCT AS NOTED AND INSTALL TEMPORARY BACK TEMPORARY DUCT INSTALLATION ON OPPOSITE SIDE.
10. DISCONNECT DAMPER AS NOTED. DRAFT DAMPER AS NOTED.
11. DETACH THE CURB ANCHORS AND RUBBER SKIRT AND REMOVE UNIT FROM HEADER. THIS SYSTEM WILL NOT BE UTILIZED UNDER THE NEW CONTRACT.
12. INSPECT THE EXISTING CURB AND VERIFY DIMENSIONS TO ASSURE THE NEW ADAPTER CURB WILL FIT SECURELY.

NOTE:
- 1-2/16" FOUNDATION HOLE
- EPDM PATCH KIT.
- BASE BID REQUIRES MAINTENANCE OF RELIEF DUCT CONNECTION IN THIS LOCATION. PROVIDE AND INSTALL A RUSKIN MNS2 48"x30" NON METALLIC BACK DRAFT DAMPER TEMPORARILY ON THE RELIEF OPENING ONCE THE DUCT IS REMOVED.

SCALE

4"=1'-0"
1. Supply and Relief duct removal shall be part of Bid Alternate #1.

2. Coordinate with Architect and Owner on system removal in a 3-week look-ahead schedule. For supply side duct removal, the supply duct is to be removed and replaced in sections such that system down time for section under replacement does not exceed 2 hours. The system must remain continuously active during the evening hours between 4:00 PM and 8:30 AM.

3. Review ductwork as there are sections that are run one above the other.

4. Removed ductwork may be staged on the roof for weekly removal. Ductwork removal must occur weekly.

5. Removal shall include all ductwork, insulation (where it exists).

6. Note that Removed ductwork shall include a series of smoke dampers and associated communication cables. Refer to contact information for exact configuration and CADD file information for contract bidding.

7. Refer to specification section 230000 for more details on duct removal.
MECHANICAL ROOF PLAN - AHU NEW WORK

MECHANICAL AHU COIL CONNECTION REQUIREMENTS

NOT TO SCALE

MECHANICAL DUCTWORK NEW WORK

ROOFTOP UNIT (AHU) SCHEDULE

NOTE: WORK TO BE COMPLETED IN COMPLIANCE WITH CONTRACT REQUIREMENT DETAIL AND THE BUDGET.

PHILADELPHIA ZOO
AMERICA'S FIRST ZOO

MECHANICAL ROOF PLAN - DUCTWORK NEW WORK

MECHANICAL GLYCOL PUMP CONNECTION DETAIL

NOT TO SCALE

REMARKS

LOCATION: CITY HALL - ROOM 701

DEPARTMENT OF PUBLIC PROPERTY

911-21-4869-01

11/23/20

MECHANICAL ROOF NEW WORK

AHU-1

PHILADELPHIA, PA  19106

100 N. INDEPENDENCE MALL WEST

SUITE 5 SE.

Wick Fisher White

MP Engineer

T: 215-627-0200

M: 877-244-7356

M.WAGNER@AGREKKO.COM

F: MATT.WAGNER@AGREKKO.COM

PROVIDE AND INSTALL A NEW 2" HOT WATER FULL MODULATION 3-WAY VALVE IN SUPPLY/RETURN PIPING FROM CHASE HOUSING "DOG HOUSE" WITH A GLYCOL CIRCULATION PUMP IN THE "DOG HOUSE" AND BETWEEN ENERGIZING AND CONNECTING THE TEMPORARY UNIT AND REMOVING THE EXISTING AND THEN FROM REMOVING THE TEMPORARY AND CONNECTING THE NEW UNIT.

GENERAL:

1. PROVIDE AND INSTALL A NEW GLYCOL CIRCULATION PUMP IN THE "DOG HOUSE" AND BETWEEN ENERGIZING AND CONNECTING THE TEMPORARY UNIT AND REMOVING THE EXISTING AND THEN FROM REMOVING THE TEMPORARY AND CONNECTING THE NEW UNIT.

2. PROVIDE AND INSTALL ADAPTER CURB TO ADAPT OLD CURB TO NEW UNIT TO BE ANCHORED TO A MASON BARRIER. UTILIZE AN INSULATED DUCT FLEX JACKET. PROVIDE AN INSULATED 12"X12" PRESSURE INDICATOR OVER FLOW GAUGES ACROSS THE COIL AND ISOLATION VALVES.


4. PROVIDE AND INSTALL A NEW 2" HOT WATER FULL MODULATION 3-WAY VALVE IN SUPPLY/RETURN PIPING FROM CHASE HOUSING "DOG HOUSE" WITH A GLYCOL CIRCULATION PUMP IN THE "DOG HOUSE" AND BETWEEN ENERGIZING AND CONNECTING THE TEMPORARY UNIT AND REMOVING THE EXISTING AND THEN FROM REMOVING THE TEMPORARY AND CONNECTING THE NEW UNIT.

5. PROVIDE AND INSTALL A NEW MASON INDUSTRIES RSC SPECIFICATION NO. VIBRATION CURB FOR MOUNTING NEW AHU AND SUPPORT THE NEW EQUIPMENT CURB. PROVIDE AND INSTALL A THYBAR ADAPTER CURB ON EXISTING, ANCHOR SEALS AND INSULATE RELIEF DUCTWORK CONNECTION. PROVIDE AND INSTALL A GLYCOL CIRCULATION PUMP IN THE "DOG HOUSE" AND BETWEEN ENERGIZING AND CONNECTING THE TEMPORARY UNIT AND REMOVING THE EXISTING AND THEN FROM REMOVING THE TEMPORARY AND CONNECTING THE NEW UNIT. PROVIDE A CONTRACT (AS PART OF THE MECHANICAL BID) WITH SIMPLEX. PROVIDE AND INSTALL A NEW CHILLED WATER 3 WAY FULL MODULATING VALVE ISOLATION VALVES Inline E&B.

MECHANICAL ROOF PLAN - DUCT NEW WORK

Note: All work related to the mechanical system shall be installed as noted on this drawing.

NEW WORK GENERAL NOTES:
1. All work shall be performed by contractors designated by the City of Philadelphia Public Property Department as new.
2. The mechanical system shall be designed, fabricated, and installed by the contractor.
3. All work shall be in accordance with the International Mechanical Code, 2018.

MECHANICAL DUCT PENETRATION DETAIL

MECHANICAL DUCT ROOF SUPPORT DETAIL

MECHANICAL FIRE/SMOKE DAMPER DETAIL

NOT TO SCALE
EXISTING ELECTRICAL GEAR.

CHASE RUN MS/TP TRUNK THROUGH CHASE TO TOWER ABOVE. TWISTED PAIR MUST BE RUN IN CONDUIT.

FX-80 CONTROLLER ENCLOSURE

MS/TP TRUNK

NEW AHU-1 PROVIDE AND INSTALL A JOHNSON CONTROLS FX-PCG IN THE UNIT CONTROL ENCLOSURE. PROVIDE ALL REQUIRED SENSORS AND VALVE CONTROLS FROM THIS UNIT AS WELL AS PROVIDE POWER THROUGH THE UNIT PROVIDED CONTROLS LOW VOLTAGE TRANSFORMER.

PROVIDE AND INSTALL 2 NEW 3-WAY VALVES. (1) 3" FOR THE CHILLED WATER AND (1) 2" FOR HOT WATER. PROVIDE 120V ACTUATORS FOR EACH AND POWER THROUGH UNIT. VALVE ACTUATORS SHALL BE FULL MODULATION VALVES WITH FAIL CLOSED TO THE COIL.

PROVIDE START STOP CONTROL TO THE GLYCOL COIL PUMP AS WELL AS LINE TEMPERATURE AND RUN PROOF.

INTERNAL 14x7 SUPPLY FROM 14x7 RISER FOR LOCATION OF NEW DIFFERENTIAL PRESSURE SENSOR ANALOG OUTPUT TO FX-PCG CONTROLLER IN FX-80 ENCLOSURE

INTERNAL 18x8 SUPPLY FROM 22x12 RISER FOR LOCATION OF NEW DIFFERENTIAL PRESSURE SENSOR ANALOG OUTPUT TO FXPCG

4" 3-WAY CHILLED WATER AND 1-1/4" HOT WATER VALVE TO BE REMOVED ABOVE THE CEILING. REMOVE SECTION OF CEILING AND REMOVE THE NOTED 3-WAY CONTROL VALVES REPLACE WITH BYPASS AND CAP RETURN LEG. INSULATE ALL PIPING WITH A VAPOR BARRIER ON THE CHILLED WATER LINE.

IT IS A CONTRACT REQUIREMENT TO REMOVE ALL EXISTING CONTROLS ASSOCIATED WITH THE ORIGINAL AHU. THIS TO INCLUDE ALL SENSORS, VALVES, CONTROLLERS, ETC. TRANSFORMERS CAN BE RE-USED IN EXISTING ENCLOSURE.

NOTE:
ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

PROJECT NO.
DATE
SCALE
AS NOTED
DRAWING NO.
PHILADELPHIA PENNSYLVANIA
CITY HALL - ROOM 701
1400 JFK BOULEVARD
DEPARTMENT OF PUBLIC PROPERTY
CITY OF PHILADELPHIA
DRAWING TITLE
PROJECT TITLE
PROJECT COORDINATOR:
SEALS
REVISIONS
ISSUE
DATE
REVISIONS
11/23/20
1
FOR BID
MECHANICAL ROOF PLAN - FIRE DAMPERS AND FIRE ALARM LOW VOLTAGE REQUIREMENTS

FIRE ALARM REQUIREMENT NOTES:

1. FIRE ALARM AND SMOKE DAMPER POWER LOW VOLTAGE CIRCUITS SHOWN IN RED SHALL BE REPLACE AND ADDED WITH NEW FIRE CONTROL SYSTEM.
2. FIRE ALARM CIRCUITS SHOWN IN BLACK SHALL REMAIN EXISTING AND SHALL BE ADDED TO CONTROL SYSTEM.
3. FIRE DAMPERS AND SMOKE DETECTORS SHALL BE ADDED TO SYSTEM AS SHOWN.
4. SIMPLEX FIRE CONTROL SYSTEM WILL BE INTEGRATED WITH NEW FIRE CONTROL SYSTEM.

1. PROVIDE AND INSTALL A NEW SUPPLY DUCT SMOKE DETECTOR.
2. REFER TO SPECIFICATION SECTION 230993 FOR DETAILS.

1/8" = 1'-0"

NEW 24v FIRE COMM IN RED NEMA 3R CONDUIT. FIRE ALARM CONTRACTOR MUST REPLACE AND RE-ENERGIZE LINE FROM EXISTING POWER AND COMMUNICATION CIRCUITS AND CONTACT.

ROOF MOUNTED PVC CONDUIT SUPPORT

DUCT MOUNTED FIRE DAMPER DETAIL

SCALE: NONE

PHILADELPHIA
PENNSYLVANIA
CITY HALL - ROOM 701
1400 JFK BOULEVARD
DEPARTMENT OF PUBLIC PROPERTY
CITY OF PHILADELPHIA

DRAWING TITLE

PROJECT COORDINATOR:

REVISIONS

ISSUE

DATE

MECHANICAL NEW WORK
Animal Hospital - AHU-1
Replacement

M4.0
ONCE THE SYSTEM IS OPERATIONAL, THE BALANCER SHALL GO IN TO BALANCE BOTH THE AIR SIDE AND THE WATER SIDE.

1. THE AIR SIDE SHALL BE BALANCED FROM THE ROOF DUCTWORK AT ALL THE NOTED PENETRATIONS. AIR FLOWS SHALL BE BALANCED TO THE VALUES AS NOTED AND BOTH THE VFD AND (2) ZONE PRESSURE SENSORS SHALL BE SET TO ACHIEVE THE NOTED FLOWS.

2. THE RELIEF FAN SHALL BE BALANCED AS WELL AND SHALL BE SET TO TRACK THE SUPPLY FAN ON SPEED IN A LINEAR RELATIONSHIP WITH AN OFFSET AS CALCULATED AND PROVIDED BY THE BALANCER.

3. WATER SIDE BALANCING SHALL OCCUR IN THE AHU ENCLOSURE THROUGH THE INDIVIDUAL CIRCUIT SETTERS. THE CHILLED WATER PUMP VFD SHALL BE SET TO 60HZ DURING THIS PROCESS.

NOTE:
ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

MECHANICAL ROOF PLAN - RISER FLOWS FOR BALANCING

1/8" = 1'-0"
MECHANICAL ROOF PLAN - EXHAUST FAN REPLACEMENT

EXHAUST FAN/VENT REPLACEMENT SCHEDULE

PROVIDE DISCONNECT SWITCH FOR ALL EXHAUST FANS.

1. PROVIDE MANUFACTURER'S ROOF CURB FOR ALL EXHAUST FANS. ALL CURBS SHALL BE RATED TO WITHSTAND WIND LOADS UP TO 90MPH FOR 3 SECOND GUST.

NOTE:
1. ROOF CONSTRUCTION MAY VARY (V.I.F.)

Animal Hospital - AHU-1
Replacement

MECHANICAL NEW WORK
ALTERNATE #2

© M. P. Engineer
Wick Fisher White
Federal Reserve Bank Building
100 N. Independence Mall West
Suite 5 SE
Philadelphia, PA 19106

NOTES:

1. PROVIDE DISCONNECT SWITCH FOR ALL EXHAUST FANS.

1. PROVIDE MANUFACTURER'S ROOF CURB FOR ALL EXHAUST FANS. ALL CURBS SHALL BE RATED TO WITHSTAND WIND LOADS UP TO 90MPH FOR 3 SECOND GUST.

NOTE:
1. ROOF CONSTRUCTION MAY VARY (V.I.F.)

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Wick Fisher White
Federal Reserve Bank Building
100 N. Independence Mall West
Suite 5 SE
Philadelphia, PA 19106
MECHANICAL NEW WORK-TEMPORARY COOLING

1. REFER TO CONTRACT SPECIFICATION SECTION 230000 FOR TEMPORARY CONNECTION AND CONTRACT RESPONSIBILITIES.

- ZOOLOGICAL DRIVE CURB
- TEMPORARY FENCED ENCLOSURE
- TEMPORARY AGGREKO 75 TON CHILLED WATER AIR HANDLING UNIT
- 4" CHILLED WATER SUPPLY AND RETURN FROM BASEMENT CONNECTIONS
- PROVIDE PEDESTRIAN PLYWOOD RAMP ABOVE CHILLED WATER PIPING TO KEEP SIDEWALK ACTIVE.
- PROVIDE 208 3 PHASE POWER FROM AHU BREAKER IN BASEMENT.
- PROVIDE 208-460 TRANSFORMER FROM AGREKKO
- PROVIDE SCAFFOLDING ABOVE WALKWAY AND EXTEND SUPPLY DUCT ABOVE TO CONNECT TO DUCTWORK FOR TEMPORARY HVAC TO SPACE.

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

MP Engineer
Wick Fisher White
Federal Reserve Bank Building
100 N. Independence Mall West
Suite 5 SE
Philadelphia, PA  19106

Tele: 215-627-0200

WFW PROJECT # - 190019

REQUIREMENT NOTES:

1. REFER TO CONTRACT SPECIFICATION SECTION 230000 FOR TEMPORARY CONNECTION AND CONTRACT RESPONSIBILITIES.

- PROVIDE PEDESTRIAN PLYWOOD RAMP ABOVE CHILLED WATER PIPING TO KEEP SIDEWALK ACTIVE.
- PROVIDE 208 3 PHASE POWER FROM AHU BREAKER IN BASEMENT.
- PROVIDE 208-460 TRANSFORMER FROM AGREKKO
- PROVIDE SCAFFOLDING ABOVE WALKWAY AND EXTEND SUPPLY DUCT ABOVE TO CONNECT TO DUCTWORK FOR TEMPORARY HVAC TO SPACE.

MECHANICAL NEW WORK-TEMPORARY COOLING

Animal Hospital - AHU-1 Replacement

71-21-4869-01

MECHANICAL NEW WORK TEMPORARY COOLING

71-21-4869-01

MECHANICAL NEW WORK TEMPORARY COOLING

MECHANICAL NEW WORK TEMPORARY COOLING

MECHANICAL NEW WORK TEMPORARY COOLING
ELECTRICAL SPECIFICATION

1. USE OF FULL SIZE A Framing and other dimensional references shall be for Fig. 2.
2. ALL ELECTRICAL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE LAWS, CODES AND REGULATIONS OF LOCAL AND STATE GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
3. ALL WORK IN EXCAVATED AREAS, CRAWL SPACES, TUNNELS OR DUCTS, SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE LAWS, CODES AND REGULATIONS OF LOCAL AND STATE GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
4. ALL ELECTRICAL CONTRACTOR PROVIDED DEVICES SHALL BE NEW AND UL CERTIFIED.
5. ALL INTERIOR FEEDERS SHALL BE INSTALLED IN RIGID CONDUIT OR EMT.
6. ALL ELECTRICAL MATERIALS SHALL BE MARKED SCHEDULED, AND THE PRODUCT MEETS OR EXCEEDS THE SPECIFIED DUTIES AND PERFORMANCE SCHEDULED, AND THE PRODUCT MEETS OR EXCEEDS THE SPECIFIED DUTIES AND PERFORMANCE.
7. ELECTRICAL WORK SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE ELECTRICAL CODES AND STANDARDS OF THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE LAWS, CODES AND REGULATIONS OF LOCAL AND STATE GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
8. ALL WORK IN EXCAVATED AREAS, CRAWL SPACES, TUNNELS OR DUCTS, SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE LAWS, CODES AND REGULATIONS OF LOCAL AND STATE GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
9. ALL 600 VOLT WIRE SHALL BE SOFT DRAWN COPPER OF 98% CONDUCTIVITY AS INDICATED ON DRAWINGS.
10. E.C. SHALL COORDINATE WITH EACH TRADE CONTRACTOR FOR THE ELECTRICAL WORK OF THE ELECTRICAL CONTRACTOR, PRIOR TO SHOP DRAWING APPROVAL IS PROHIBITED.
11. ELECTRICAL CONTRACTOR SHALL RUN ALL CONDUIT AS HIGH AS POSSIBLE.
12. CONTRACTOR SHALL UPON COMPLETION OF THE WORK SUBMIT A SET OF SHOP DRAWINGS OF ALL NEW LIGHT FIXTURES AND LIGHTING DEVICES TO MATCH THE WORK OF OTHER TRADES OF CONTRACT SHALL BE COORDINATED AND INTERFERENCE AMONG MECHANICAL, ELECTRICAL, AND PLUMBING WORKS.
13. ELECTRICAL CONTRACTOR SHALL COORDINATE CEILING MOUNTED EQUIPMENT INSTALLATION.
14. CONTRACTOR SHALL PROVIDE ALL REQUIRED CONSTRUCTION MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF THE ELECTRICAL WORK AS INDICATED ON DRAWINGS. IT IS INTENTION TO INDICATE CAPACITY, SIZE, APPROXIMATE LOCATION AND OTHER ELECTRICAL EQUIPMENT, EVEN THOUGH THE MOTORS AND THEIR CONNECTIONS, LIGHTING, AND OTHER ELECTRICAL EQUIPMENT, LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED. LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED.
15. ALL WIRES SHALL BE COLOR CODED AND POLARIZED. ALL WIRES SHALL BE OF THE ELECTRICAL WORK AS INDICATED ON DRAWINGS. IT IS INTENTION TO INDICATE CAPACITY, SIZE, APPROXIMATE LOCATION AND OTHER ELECTRICAL EQUIPMENT, LIGHTING, AND OTHER ELECTRICAL EQUIPMENT, EVEN THOUGH THE MOTORS AND THEIR CONNECTIONS, LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED. LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED.
16. ALL ELECTRICAL CONTRACTOR SHALL UPON COMPLETION OF THE WORK SUBMIT A SET OF SHOP DRAWINGS OF ALL NEW LIGHT FIXTURES AND LIGHTING DEVICES TO MATCH THE WORK OF OTHER TRADES OF CONTRACT SHALL BE COORDINATED AND INTERFERENCE AMONG MECHANICAL, ELECTRICAL, AND PLUMBING WORKS.
17. CONTRACTOR SHALL PROVIDE ALL REQUIRED CONSTRUCTION MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF THE ELECTRICAL WORK AS INDICATED ON DRAWINGS. IT IS INTENTION TO INDICATE CAPACITY, SIZE, APPROXIMATE LOCATION AND OTHER ELECTRICAL EQUIPMENT, LIGHTING, AND OTHER ELECTRICAL EQUIPMENT, EVEN THOUGH THE MOTORS AND THEIR CONNECTIONS, LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED. LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED.
18. UPON COMPLETION OF THE CONTRACT THE CONTRACTOR SHALL PROVIDE ALL REQUIRED CONSTRUCTION MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF THE ELECTRICAL WORK AS INDICATED ON DRAWINGS. IT IS INTENTION TO INDICATE CAPACITY, SIZE, APPROXIMATE LOCATION AND OTHER ELECTRICAL EQUIPMENT, LIGHTING, AND OTHER ELECTRICAL EQUIPMENT, EVEN THOUGH THE MOTORS AND THEIR CONNECTIONS, LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED. LIGHTING CIRCUITS AND CIRCUITS FOR RECEPTACLES SHALL BE SIZED NOT ONLY FOR LOAD CARRIED BUT ALSO FOR DISTANCE TRAVELED.
19. THE ELECTRICAL CONSTRUCTION SHALL BE SEPARATE FROM THE MECHANICAL CONSTRUCTION AND THEIR CONNECTIONS.
20. LIGHTING SELECTIONS AND FIXTURES SHALL BE SEPARATE FROM THE MECHANICAL CONSTRUCTION AND THEIR CONNECTIONS.
21. ALL LIGHTING FIXTURES AND HARDWARE SHALL BE SEPARATE FROM THE MECHANICAL CONSTRUCTION AND THEIR CONNECTIONS.
22. ALL LIGHTING FIXTURES AND HARDWARE SHALL BE SEPARATE FROM THE MECHANICAL CONSTRUCTION AND THEIR CONNECTIONS.
23. ALL LIGHTING FIXTURES AND HARDWARE SHALL BE SEPARATE FROM THE MECHANICAL CONSTRUCTION AND THEIR CONNECTIONS.
EXISTING AHU-1 TO BE REMOVED
(208V-3PH, 25HP, 20HP)

ELECTRICAL DEMOLITION NOTES
1. ALL ELECTRICAL DEVICES AND WIRING/CONDUIT ASSOCIATED WITH DEMOLISHED MECHANICAL EQUIPMENT SHALL BE REMOVED. REFER TO MECHANICAL DRAWINGS FOR EXTENT OF DEMOLITION AND ADDITIONAL NOTES.
2. E.C. SHALL VERIFY THE PANEL DESIGNATION AND CIRCUIT NUMBER FOR EACH DEVICE TO BE REMOVED.
3. ALL SYMBOLS SHOWN LIGHTLY SOLID ARE EXISTING ELECTRICAL DEVICES/EQUIPMENT TO REMAIN.
4. ALL WIRING/CONDUIT LEFT UNUSED SHALL BE REMOVED TO ITS POINT OF ORIGIN AND CIRCUIT BREAKER TO BECOME SPARE.
5. PANELBOARDS WHICH ARE AFFECTED BY THE DEMOLITION AND NEW WORK SHALL HAVE THE PANEL SCHEDULES REVISED.
6. COORDINATE ALL WORK WITH OTHER TRADES.
7. ELECTRICAL CONTRACTOR SHALL NOT DISCONNECT ANY EQUIPMENT, OR ELECTRICAL CIRCUITS IN THE RENOVATED AREA WITHOUT PRIOR NOTIFICATION AND PERMISSION FROM MAINTENANCE AND ENGINEERING DEPARTMENT. EXTREME CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE TO SURROUNDING AREAS.
8. VERIFY ALL CONDITIONS AT JOB SITE.

Sheet Notes:
1. All work shall be coordinated and approved by the Call Contractor.
2. No work shall be started until the Call Contractor has approved the drawings. Any changes made by the Call Contractor shall be shown on the corresponding drawing.
3. All electrical work shall be coordinated to minimize disruption of existing systems.

ELECTRICAL ROOF PLANS

BASEMENT PLAN - EXISTING

ELECTRICAL ROOF PLAN - DEMOLITION

ELECTRICAL ROOF PLAN - NEW WORK