FIRE SPRINKLER NEW SUGGESTED LAYOUT - FLOOR 1

NOTE: BAR SYSTEM SHOWN FOR EVALUATION PURPOSES ONLY

---

FIRE SPRINKLER REFERENCE PLAN - FLOOR 1

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

---

RENOVATION NOTES

1. SPRINKLERS:
   A. SPRINKLER HEADS MUST NOT BE LOCATED MORE THAN 18 INCHES FROM THE CEILING ORanine WALLS.
   B. SPRINKLER HEADS MUST BE LOCATED MORE THAN 24 INCHES FROM ANY INTERIOR CORNER.

2. HEIGHTS:
   A. ALL SPRINKLER HEADS MUST BE INSTALLED TO PROVIDE A THICKNESS OF WATER ROM DIESEL OIL 50 GALLONS OR LESS.
   B. SPRINKLER HEADS MUST BE LOCATED MORE THAN 24 INCHES FROM ANY INTERIOR CORNER.

3. PIPING:
   A. PIPING MATERIALS MUST BE CONFORM TO NFPA 13 STANDARD.
   B. PIPING MATERIALS MUST BE CONFORM TO NFPA 13 STANDARD.

4. MAINTENANCE:
   A. MAINTENANCE IS REQUIRED TO ENSURE PROPER FUNCTION.
   B. MAINTENANCE IS REQUIRED TO ENSURE PROPER FUNCTION.

5. DESIGN:
   A. DESIGN IS REQUIRED TO ENSURE PROPER FUNCTION.
   B. DESIGN IS REQUIRED TO ENSURE PROPER FUNCTION.

6. INSTALLATION:
   A. INSTALLATION IS REQUIRED TO ENSURE PROPER FUNCTION.
   B. INSTALLATION IS REQUIRED TO ENSURE PROPER FUNCTION.

---

FIRE SPRINKLER SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

---

HYDRAULIC DESIGN INFORMATION SHALL BE POSTED PER NFPA 13 REQUIREMENTS.

---

EQUIPMENT:
SPRINKLERS:
GENERAL:
MECHANICAL DEMOLITION NOTES

1. GENERAL:
   A. ALL PIPING SHALL BE TRIMMED PRIOR TO CONNECTING TO
      EXISTING/DISCONNECTED EXISTING PIPE (FILTER, CERAMIC, ETC.)
      THIS DRAWING DOES NOT SEEK TO ENSURE/DISPROVE LIVE
      CONNECTIONS.

2. EQUIPMENT:
   A. DISCONNECT AND REMOVE EXISTING UNIT HEATER.

3. PLUMBING:
   A. NOT USED

4. PIPING:
   A. DISCONNECT FROM EXISTING VAV AND RETURN PIPING AND
      TERMINATE DISCONNECTED PIPING IN ROOM WITH NEW BALL VALVES
      AND CAP

5. CONTROLS:
   A. DISCONNECT AND REMOVE EXISTING THERMOSTAT

6. MISCELLANEOUS:
   A. NOT USED

SYMBOLS

ABBRIVATIONS

MECHANICAL DEMOLITION PLAN - FLOOR 1
MECHANICAL RENOVATION NOTES

1. GENERAL
   A. FIELD VERIFY ALL DUCT AND PIPING CONNECTIONS AND LOCATIONS. VERIFY ALL DUCT AND PIPING CONNECTIONS AND LOCATIONS TO EXISTING. MISTAKE ERRORS OR MISSTATED LOCATION TO EXISTING AIR FLOWS.MISS CONNECT DUCT TO ELECTRICAL, Piping, AND PIPING COMPLETE.
   B. ALL DUCT AND PIPING SHALL BE INSULATED AND DUCTWORK CONNECTED TO EXISTING AIR FLOWS. MISS CONNECT DUCT TO ELECTRICAL, Piping, AND PIPING COMPLETE.
   C. COORDINATE INSTALLATION OF ELECTRIC, DUCT, AND PIPING WITH OTHER SUBJECTS, TO INCLUDE ELECTRICAL, Piping, AND PIPING COMPLETE.
   D. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   E. PROVIDE NEW EA PHOENIX VALve.
   F. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   G. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   H. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   I. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   J. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   K. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.
   L. PROVIDE NEW HEPA FILTERS AND HOUSING AND CONNECT TO NEW EA PHOENIX VALve.

2. EQUIPMENT
   A. PROVIDE NEW SA PHOENIX CONTROL VALve WITH REHEAT COIL.
   B. PROVIDE NEW EA PHOENIX VALve.
   C. PROVIDE NEW EA PHOENIX VALve.
   D. PROVIDE NEW EA PHOENIX VALve.
   E. PROVIDE NEW EA PHOENIX VALve.
   F. PROVIDE NEW EA PHOENIX VALve.
   G. PROVIDE NEW EA PHOENIX VALve.
   H. PROVIDE NEW EA PHOENIX VALve.
   I. PROVIDE NEW EA PHOENIX VALve.
   J. PROVIDE NEW EA PHOENIX VALve.

3. OUTDOOR
   A. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   B. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   C. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   D. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   E. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   F. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   G. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   H. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   I. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   J. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.

4. PIPING
   A. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   B. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   C. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   D. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   E. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   F. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   G. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   H. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   I. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.
   J. CONNECT TO EXISTING DUCT AND ROUTE NEW DUCT TO NEW AIR VALve AND PIPING.

5. MISCELLANEOUS
   A. TEST AND BALANCE PERFORMED BY UNIVERSITY.
   B. TERM IN OUTSIDE AIR FLOWS. MISS CONNECT DUCT TO ELECTRICAL, Piping, AND PIPING COMPLETE.
   C. INSTAN NEW THERMOSTAT AT 48" A.F.F. CONTRACTOR TO PROVIDE THERMOSTATS CONTROL, AND DUCT AND FABRIC TEMPERATURES AND PROGRAMMING BY UNIVERSITY PERFORMED.
VMA TERMINAL. INCLUDES CONSTANT VOLUME (CV) UNITS & VARIABLE AIR VOLUME (VAV) UNITS. UNLESS OTHERWISE NOTED, ALL CONTROL WORK SHALL BE BY CONTRACTOR.

1. IF VAV HAS TEST PORTS AND RUBBER CAPS, CAPS MUST BE REPLACED WITH 1/4" BRASS PLUGS.

KEYED NOTES:

1. CONTROLLER WILL BE PURCHASED AND INSTALLED BY OWNER. CONTROLLER WILL BE JCI MODEL AS-VMA-1690 SERIES. PROGRAMMING AND COMMISSIONING WILL BE DONE BY CONTRACTOR.
2. NETWORK BUS WIRE WILL BE PURCHASED AND INSTALLED BY CONTRACTOR. NETWORK BUS WIRE WILL BE JCI SERIES.
3. NO COMMUNICATION BUS WIRE SHALL BE 18 AWG, PLENUM RATED, TWISTED SHIELDED, 3 CONDUCTOR, WITH BLUE OUTER CASING, DESCRIBED AS 18-03 OAS STR PLMN NEON BLU JK DISTRIBUTED BY WINDY CITY WIRE CONSTRUCTED BY CABLE-TEK, OR APPROVED EQUIVALENT.
4. IN BLUE WIRE SHALL BE 22 AWG, PURPLE/WHITE, TWISTED SHIELDED, 4 CONDUCTOR.
5. 18 AWG, PLENUM RATED, TWISTED SHIELDED, 6 CONDUCTOR.
6. CONTROLLER MUST HAVE MINIMUM OF 18 INCHES OF ACCESSIBLE CLEARANCE.
7. VAV SUPPLY TEMP SENSOR. VAV SUPPLY TEMP SENSOR LOCATED APPROX. 8 FT. FROM VAV BOX DISCHARGE. PROVIDED, INSTALLED, & WIRED TO CONTROLLER BY EM.
8. SERVICE DISCONNECT/SWITCH LOCATED WITHIN 6 FT. OF VMA CONTROLLER.
9. TRANSFORMER AND POWER TO TRANSFORMER PROVIDED BY DIV. 26. ALL OTHER WORK PROVIDED BY DIV. 23.
10. RESETABLE 50 VA TRANSFORMER MUST BE PROVIDED FOR EACH VAV AND LOCATED WITHIN 6 FT. OF VMA CONTROLLER.

KEYED NOTES:

1. N2 BUS TO BE CONTINUOUS DAISY CHAIN.
2. OWNER WILL MAKE TERMINATION CONNECTIONS AT PANELS.
3. NO COMMUNICATION BUS WIRE SHALL BE 18 AWG, PLENUM RATED, TWISTED SHIELDED, 3 CONDUCTOR, WITH BLUE OUTER CASING, DESCRIBED AS 18-03 OAS STR PLMN NEON BLU JK DISTRIBUTED BY WINDY CITY WIRE CONSTRUCTED BY CABLE-TEK, OR APPROVED EQUIVALENT.

NOTES:

1. CONTROLLER WILL BE FURNISHED AND INSTALLED BY OWNER. CONTROLLER WILL BE JCI MODEL AS-VMA-1630 SERIES. PROGRAMMING AND COMMISSIONING WILL BE DONE BY OWNER. OWNER WILL MAKE TERMINATION CONNECTIONS AT PANELS.
2. NETWORK BUS WIRE SHALL BE PURCHASED AND INSTALLED BY CONTRACTOR. NETWORK BUS WIRE WILL BE JCI SERIES.
3. NO COMMUNICATION BUS WIRE SHALL BE 18 AWG, PLENUM RATED, TWISTED SHIELDED, 3 CONDUCTOR, WITH BLUE OUTER CASING, DESCRIBED AS 18-03 OAS STR PLMN NEON BLU JK DISTRIBUTED BY WINDY CITY WIRE CONSTRUCTED BY CABLE-TEK, OR APPROVED EQUIVALENT.
4. IN BLUE WIRE SHALL BE 22 AWG, PURPLE/WHITE, TWISTED SHIELDED, 4 CONDUCTOR.
5. 18 AWG, PLENUM RATED, TWISTED SHIELDED, 6 CONDUCTOR.
6. CONTROLLER MUST HAVE MINIMUM OF 18 INCHES OF ACCESSIBLE CLEARANCE.
7. VAV SUPPLY TEMP SENSOR. VAV SUPPLY TEMP SENSOR LOCATED APPROX. 8 FT. FROM VAV BOX DISCHARGE. PROVIDED, INSTALLED, & WIRED TO CONTROLLER BY EM.
8. SERVICE DISCONNECT/SWITCH LOCATED WITHIN 6 FT. OF VMA CONTROLLER.
9. TRANSFORMER AND POWER TO TRANSFORMER PROVIDED BY DIV. 26. ALL OTHER WORK PROVIDED BY DIV. 23.
10. RESETABLE 50 VA TRANSFORMER MUST BE PROVIDED FOR EACH VAV AND LOCATED WITHIN 6 FT. OF VMA CONTROLLER.
SECONDARY LINE CAN BE RAN IN SAME CONDUIT AS N2

ENCLOSED POWER SUPPLY MUST BE LOCATED IN ELECTRICAL ROOM, MECHANICAL ROOM, OR JANITOR'S CLOSET AND BE ACCESSIBLE. ANY OTHER LOCATION MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE

NOTES:

1. EACH SECONDARY OUTPUT LINE CAN POWER 5 VAV CONTROLLERS MAXIMUM. (100 VA)

2. PRIMARY LINE INFO: 480/277/240/120 Vac, #12 AWG MINIMUM

3. SECONDARY LINE INFO: 24 Vac, #12-26 AWG, 100 VA. MAX LENGTH 175 FEET USING #14 AWG

4. DISCONNECT SWITCH REQUIRED, EXTERNALLY MOUNTED WITHIN 12 INCHES OF RIB POWER SUPPLY

5. 500VA POWER SUPPLY - RIB MODEL# PSMN500A OR APPROVED EQUIVALENT

6. ALL SECONDARY LINES MUST BE LABELED IN ENCLOSURE AS TO WHICH VAV'S THEY POWER PRIOR TO ENERGIZING POWER SUPPLY

7. A SEPARATE 3 AMP FUSE IS REQUIRED WITHIN 3 FEET OF EACH VAV