CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM 7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF 8. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 MECHANICAL

10. ALL PIPING SHALL BE PITCHED SUCH THAT AIR IN THE SYSTEM CAN BE VENTED THROUGH MANUAL AIR VENTS. 11. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS TO TWICE THE SYSTEM WORKING PRESSURE. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS

2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF

3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.

4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR

5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN

6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE

ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE

EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE

CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF

PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND

INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR

ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL

9. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR

CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.

APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.

ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER

OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI,

WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR

HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL

COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF

Mechanical Notes:

OR OTHER ACCEPTABLE STANDARDS.

AND ARE REFLECTED ON HIS SUBMITTALS.

NEW YORK STATE.

PROPER INSTALLATION OF WORK.

FINAL APPROVAL OF SYSTEM IS OBTAINED.

12. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S REQUIREMENTS.

13. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.

14. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING SYSTEM. INSTALL MANUAL AIR VENT VALVE FACILITIES AT THE TOP OF ALL RISERS AND AT HIGH POINTS OF THE PIPING SYSTEM.

15. INSTALL ALL HYDRONIC PIPING AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.

16. THE ENTIRE HYDRONIC SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED WATER FLOWRATE REQUIREMENTS. A CERTIFIED BALANCING REPORT AND VERIFICATION IS TO BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE.

17. ALL DUCTWORK IS TO BE CONSTRUCTED OF GALVANIZED SHEET STEEL (EXCEPT WHERE OTHERWISE SPECIFIED) WITH GAUGES, BRACING AND CONSTRUCTION IN ACCORDANCE WITH THE LATEST SMACNA DUCT MANUAL STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION.

18. PROVIDE MANUAL DAMPERS AT EACH SPLIT OR TAP CONNECTION TO TRUNK DUCTS FOR BALANCING PURPOSES WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS. EACH DAMPER SHALL BE OF THE OPPOSED BLADE DAMPER TYPE INSTALLED WITH AN OPERATOR AND LOCKING DEVICE. ALL DAMPERS LOCATED ABOVE HARD OR INACCESSIBLE CEILINGS SHALL BE INSTALLED WITH REMOTE GEAR OPERATORS.

19. FURNISH & INSTALL FUSIBLE LINK FIRE DAMPERS AT ALL LOCATIONS WHERE DUCT PENETRATES FIRE-RATED FLOOR OR CEILING ASSEMBLY WHETHER OR NOT SPECIFICALLY SHOWN. INSTALL DUCTWORK CASING ACCESS DOORS AND FRAMES AHEAD OF EACH FIRE DAMPER FOR INSPECTION AND MAINTENANCE. DOORS SHALL BE A MINIMUM OF 20 GA. DOUBLE PANEL INSULATED TYPE.

20. INSTALL TURNING VANES ON ALL RECTANGULAR TURNS. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE CONSTRUCTED IN ACCORDANCE WITH SMACNA MANUAL.

21. ROUND SHEET STEEL ELBOWS ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL SUPPLY AIR DIFFUSERS. SHEET STEEL PLENUM BOXES ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL RETURN AND EXHAUST AIR GRILLES. THE CONTRACTOR IS TO PAINT THE INSIDE OF THE SHEET STEEL PLENUM BOXES FLAT

22. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.

23. THE ENTIRE AIR DISTRIBUTION SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED AIRFLOW REQUIREMENTS.

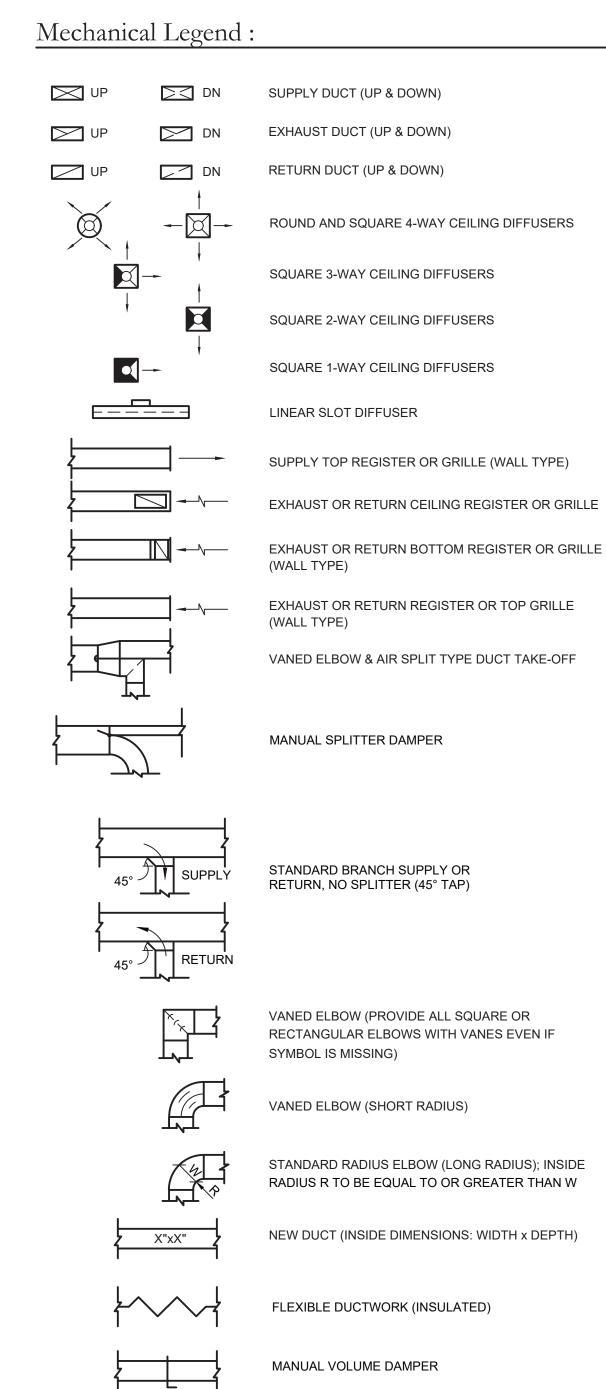
24. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.

25. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

26. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

Mechanical Equipment

THERMOSTAT PROVIDED BY OWNER, INSTALLED BY CONTRACTOR; MOUNT 5'-0" A.F.F. IN LOCATIONS SHOWN ON PLANS



FIRE DAMPER

X TERMINAL UNIT TAG

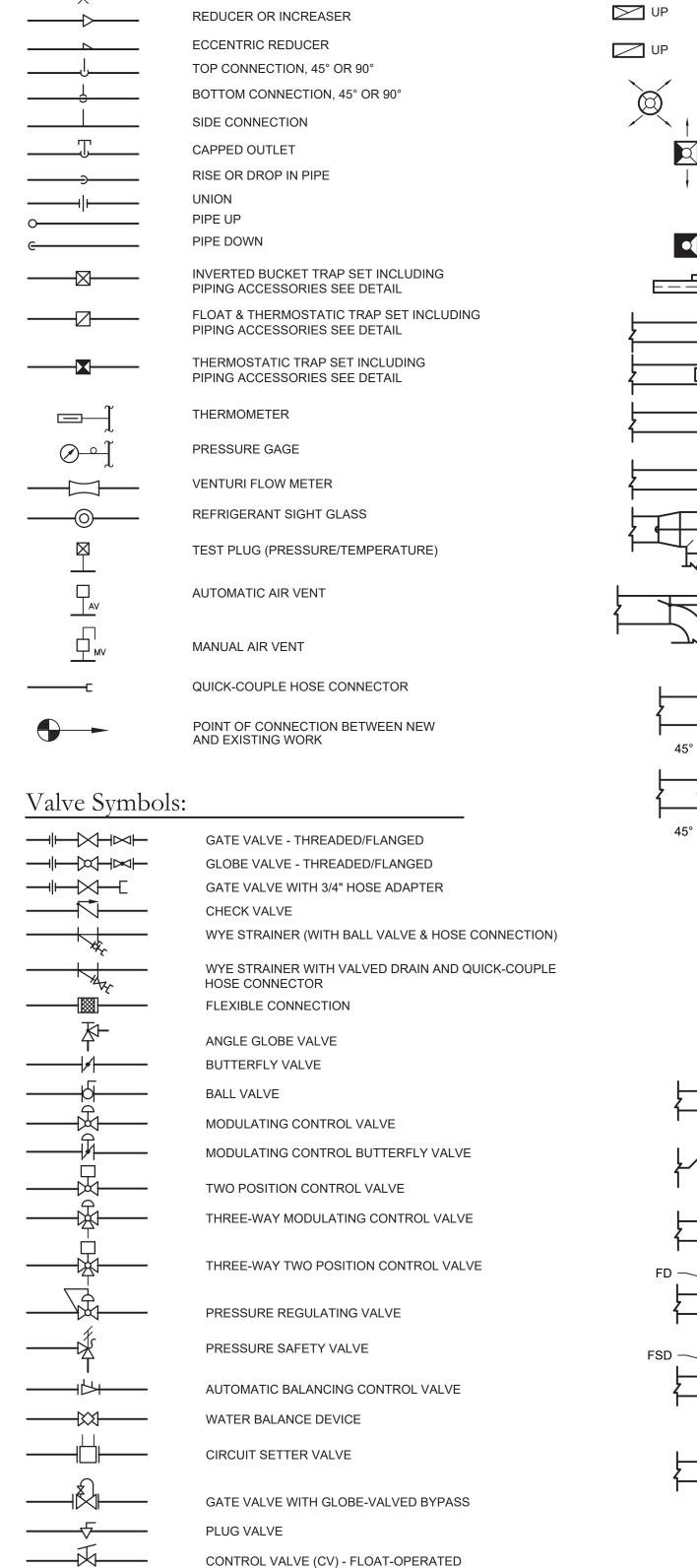
COMBINATION FIRE SMOKE DAMPER

SIZE

(IN.)

DUCT SMOKE DETECTOR

X AIRFLOW (CUBIC FEET PER MINUTE)



PRESSURE REDUCING VALVE (PRV)

General Symbols:

DIRECTION OF PIPE PITCH (DOWN)

DIRECTION OF FLOW



THICKNESS & REINFORCING SCHEDULE - * LOW PRESSURE DUCTWORK

TRANSVERSE JOINT

PLAIN "S" SLIP

OR BAR SLIP

PLAIN "S" SLIP

OR BAR SLIP

1" POCKET LOCK

BAR SLIP OR REIN-

POCKET LOCK

FORCED BAR SLIP OR

1/4" BAR SLIP, OR RE-

OR 1 1/2" POCKET LOCK

1/4" BAR SLIP. OR RE-

OR 1 1/2" POCKET LOCK

REINFORCED BAR SLIP,

OR ANGLE SLIP, ALTER-

NATE BAR SLIP, OR AN-

1 1/2" COMPANOIN AN-

LOCK, OR 1 1/2" ANGLE

SLIP OR REINFORCED

2" COMPANION ANGLE

OR 2"X2"X1/4" ANGLE

ANGLE REINFORCED

REINFORCED BAR SLIP

BAR SLIP

ANGLES TO BE

THE SAME SIZE

REINFORCING

AS REQUIRED

ANGLES

SLIP, OR 2"X2"X1/4"

POCKET LOCK OR

BAR SLIP

GLES, OR ANGLE RE-

INFORCED POCKET

GLE REINFORCED

POCKET LOCK

INFORCED BAR SLIP,

INFORCED BAR SLIP,

BAR SLIP OR

OR POCKET LOCK

OR POCKET LOCK

HEMMED "S" SLIP OR

GREATEST DIMENSION

* NOTE: LOW PRESSURE DUCTWORK SHALL BE DUCTWORK IN WHICH THE PRESSURE DOES NOT EXCEED 2" WATER GAUGE

TRANSVERSE JOINT

POCKET LOCK

OR BAR SLIP

DRIVE SLIP OF

POCKET LOCK

OR BAR SLIP

HEMMED "S" SLIP OR

OR 1" POCKET LOCK

DRIVE SLIP 18" OR

POCKET LOCK

LESS BAR SLIP REIN-

FORCED BAR SLIP OR

1/4" BAR SLIP, OR RE-

OR 1 1/2" POCKET LOCK

1/4" BAR SLIP, OR RE-

NFORCED BAR SLIP,

OR 1 1/2" POCKET LOCK

REINFORCED BAR SLIP.

OR ANGLE SLIP, ALTER-

NATE BAR SLIP, OR AN-

1/2" COMPANOIN AN-

GLES, OR ANGLE RE-

LOCK, OR 1 1/2" ANGLE

2" COMPANOIN ANGLE,

OR 2"X2"X1/4" ANGLE

SLIP, OR 2"X2"X1/4"

POCKET LOCK OR

ANGLE REINFORCED

REINFORCED BAR SLIP

POCKET LOCK

GASKET - FIRE

COMPANION ANGLES

SLIP OR REINFORCED

INFORCED POCKET

BAR SLIP

GLE REINFORCED

POCKET LOCK

INFORCED BAR SLIP,

BAR SLIP OR DRIVE SLIP

SMALLEST DIMENSION

LONGITUDINAL

SEAM

ACME LOCK

ACME LOCK

ACME LOCK

ACME LOCK

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH OR

PITTSBURGH

PITTSBURGH

PITTSBURGH

PITTSBURGH

PITTSBURGH

LOCK

ANGLE REINFORCED POCKET LOCK

LOCK

LOCK

LOCK

ALUMINUM DUCTS

B & S GAUGE

24(0.020°)

22(0.025°)

22(0.025°)

20(0.032°)

20(0.032°)

18(0.040°)

18(0.040°)

16(0.051°)

LONGITUDINAL

STANDING SEAM)

16(0.051°)

LONGITUDINAL

STANDING SEAM)

SEAM MAY BE

ACME LOCK

ANGLES TO BE

AS REQUIRED

REINFORCING

ANGLES

THE SAME SIZE

4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE

Ductwork Squared Elbow Detail

SEAM MAY BE

GREATEST DUCT

DIMENSION

12" OR LESS

13" THRU 18"

19" THRU 30"

31" THRU 42"

43" THRU 54"

55" THRU 60"

61" THRU 84"

85" THRU 96"

OVER 96"

PITTSBURGH LOCK

ALTERNATE BAR SLIP

OF W DIMENSION.

∖M001 / N.T.S.

STEEL DUCTS U.S.

STANDARD GAUGE

2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

REINFORCING (ALL DUCTS 18" THRU 54" SHALL BE CROSSBROKEN)

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C.

REINFORCE ALL SIDES OVER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0"

4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X

REINFORCE ALL SIDES OVER 84" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0"

CENTERS. SIDES 61" THRU 84" REINFORCE WITH 1 1/2"X1 1/2"X1/8" ANGLES ON

2'-0" CENTERS. SIDES 60" OR LESS NEED NO REINFORCING IF JOINTS ARE ON

4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X

REINFORCE ALL SIDES OVER 96" WITH 2"X2"X1/4" ANGLES ON 2'-0" CENTERS

REINFORCE ALL SIDES 85" THRU 96" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0"

2'-0" CENTERS. REINFORCE ALL SIDES UNDER 60" WITH 1 1/2"X1 1/2"X1/8" AN-

GLES IF JOINTS ARE 8'-0" ON CENTER. NO REINFORCING IF JOINTS ARE 4'-0"

CENTERS. REINFORCE ALL SIDES 61" THRU 84" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON

REINFORCED BAR SLIP

STANDING SEAM

CENTERS. SIDES UNDER 60" NEED NO REINFORCING IF JOINTS ARE ON

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

FASTENED ON 8" CENTERS

1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.

1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.

ON CENTER.

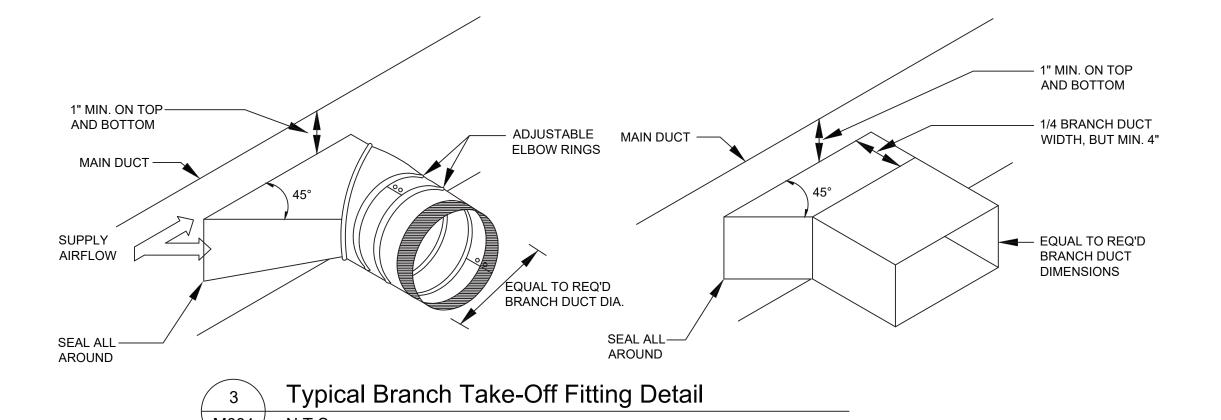
HEMMED "S" SLIP

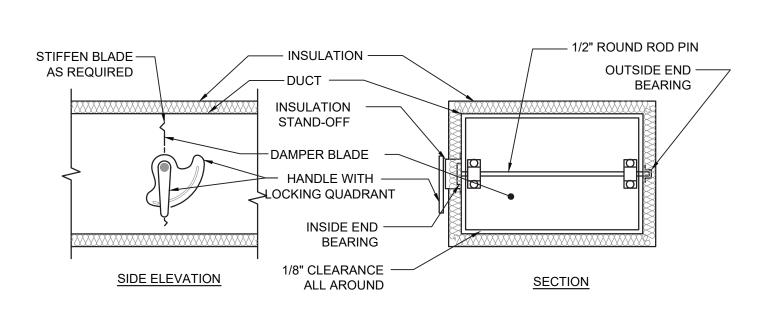
PLAIN "S" SLIP

NONE REQUIRED

NONE REQUIRED

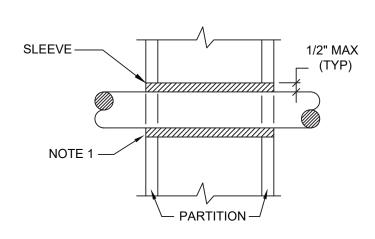






1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION. 2. DETAIL SHOWS SINGLE-BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

Ductwork Volume Damper Detail



WITH TWO VANES

ANGLES TO BE

THE SAME SIZE

AS REQUIRED

REINFORCING

ANGLE SLIP

- ANGLES TO BE

THE SAME SIZE

AS REQUIRED

REINFORCING

ANGLES

ANGLES

ANGLE REINFORCED

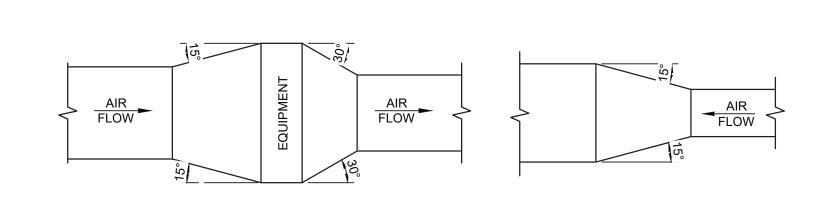
GREATER

THAN 1/3W

STANDING SEAM

1. AT FIRE RATED PARTITIONS, ADD ADDITIONAL LAYER OF FIRE SAFING INSULATION AROUND PENETRATION SO AS TO FILL CAVITY. 2. DUCT AND PIPE PENETRATIONS THRU CORRIDOR WALLS ABOVE THE CEILING ARE TO BE FIRE STOPPED AROUND THE PENETRATION.

Pipe Penetrations Detail



TYPICAL DUCTWORK TRANSITION

PLAN OR SIDE VIEW

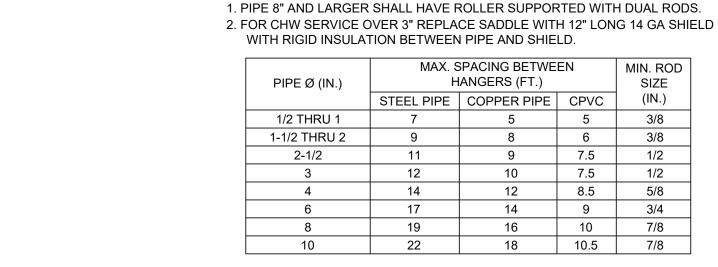
NOTE: UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY

Ductwork Transition Detail \backslash M001/ N.T.S.

TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT

PLAN OR SIDE VIEW

∖M001 / N.T.S.



CLEVIS HANGER

SUPPORT NUT -

(FOR 1/2" UP TO

& INCL. 3" PIPE)

GALVANIZED -INSULATION SHIELD 12"LONG

MIN.9 lb/cft

SHIELD

DENSITY RIGID

INSULATION AT

WITH ROLLER

LOCKING NUT

INSULATION -

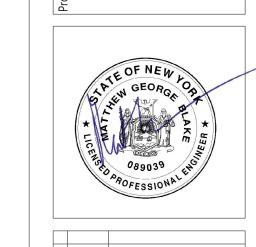
PIPE COVERING

PROTECTION 16 GA SADDLE

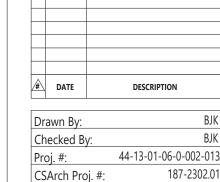
PIPE -

(FOR 4" TO 6" PIPE)

Pipe Hanger Support \M001/ N.T.S.



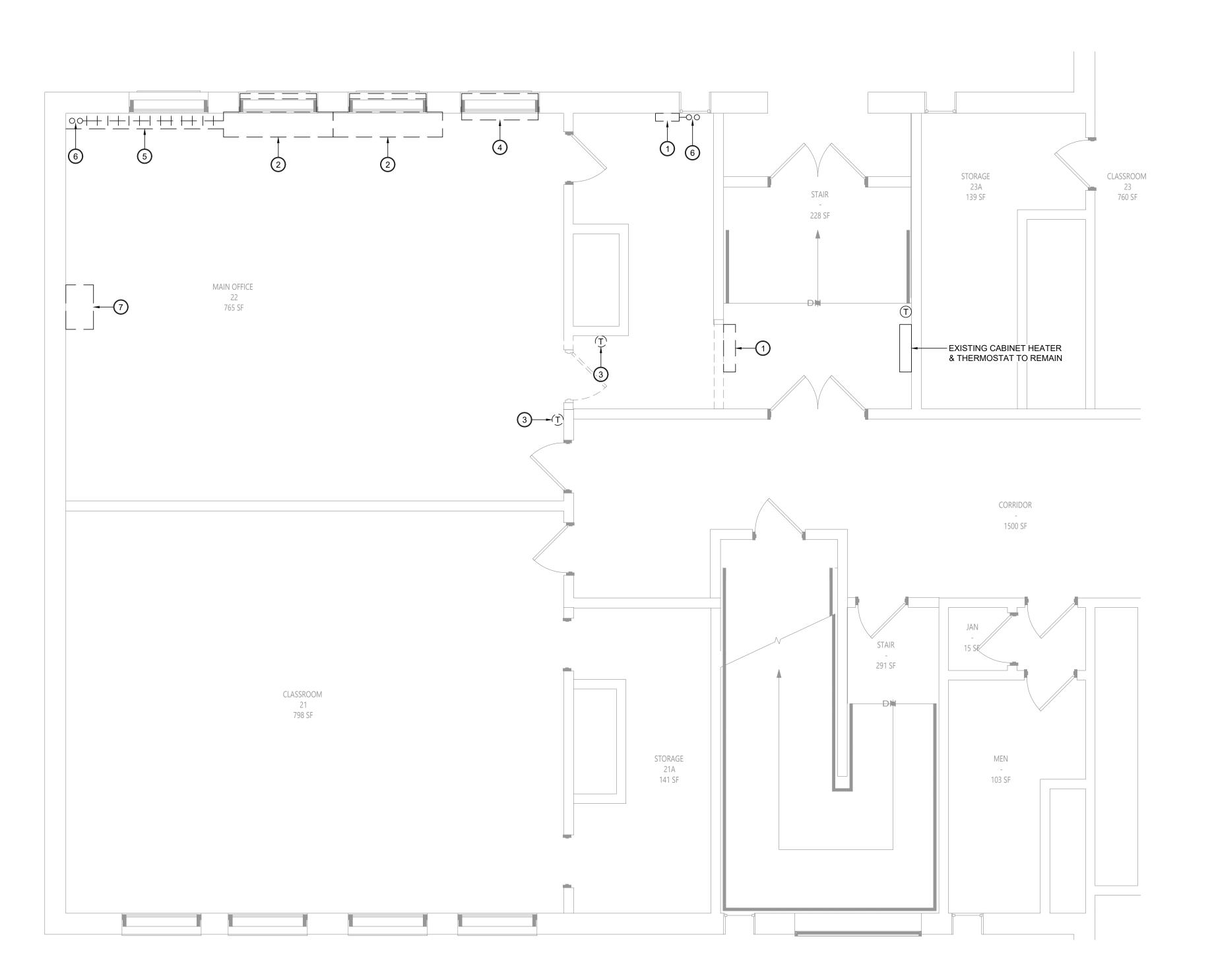
D



CSArch Proj. #: Issued for Bid: Sheet Title **MECHANICAL** NOTES, LEGENDS,

SCHEDULES & DETAILS

CONSTRUCTION DOCUMENTS

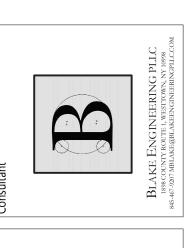


1 Mechanical Demolition Plan
MD111 Scale: 1/4" = 1'-0"

Key Notes:

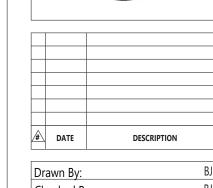
- EXISTING CABINET UNIT HEATER TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY PIPING, CONTROLS, HANGERS, SUPPORTS, ACCESSORIES, ETC.; REMOVE PIPING BACK TO MAINS & CAP
- EXISTING UNIT VENTILATOR TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY PIPING, CONTROLS, LOUVERS, HANGERS, SUPPORTS, ACCESSORIES, ETC.; REMOVE PIPING BACK TO MAINS & CAP; SEAL EXTERIOR LOUVER WEATHER TIGHT W/ RIGID INSULATION ON INSIDE FACE
- EXISTING THERMOSTAT TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY ASSOCIATED WIRING, TUBING, CONDUIT, ACCESSORIES, ETC.;
- EXISTING WINDOW AIR CONDITIONING UNIT TO BE DISCONNECTED, REMOVED & TURNED OVER TO OWNER
- EXISTING FINNED TUBE RADIATION TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY PIPING, CONTROLS, HANGERS, SUPPORTS, ACCESSORIES, ETC.; REMOVE PIPING BACK TO MAINS & CAP
- EXISTING HOT WATER PIPING RISING UP ALONG WALL TO ABOVE CEILING TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY ASSOCIATED VALVES, STRAINERS, HANGERS, SUPPORTS, INSULATION, ACCESSORIES, ETC. REMOVE TO MAINS ABOVE CEILING & CAP
- EXISTING SINK TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY ASSOCIATED VALVES, HANGERS, SUPPORTS, INSULATION, ACCESSORIES, ETC. REMOVE PIPING DN. THRU FLOOR & CAP IN BASEMENT





VALLEY CENTRAL SCHOOL DISTRICT MAYBROOK ALTERNATIVE LEARNING CENTER 2023 CAPITAL PROJECT - PHASE 1





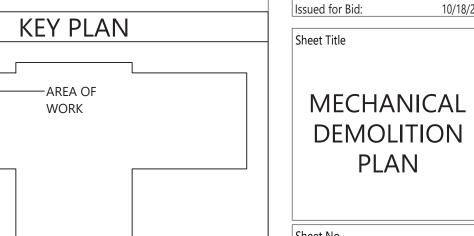
 Drawn By:
 BJK

 Checked By:
 BJK

 Proj. #:
 44-13-01-06-0-002-013

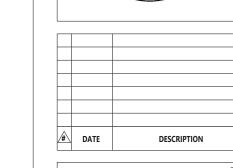
 CSArch Proj. #:
 187-2302.01

 Issued for Bid:
 10/18/24





COPYRIGHT © ALL RIGHTS RESERVED



Drawn By: BJK
Checked By: BJK
Proj. #: 44-13-01-06-0-002-013
CSArch Proj. #: 187-2302.01
Issued for Bid: 10/18/24

Issued for Bid: 10/18

Sheet Title

KEY PLAN

——AREA OF

COPYRIGHT © ALL RIGHTS RESERVED

MECHANICAL PLAN

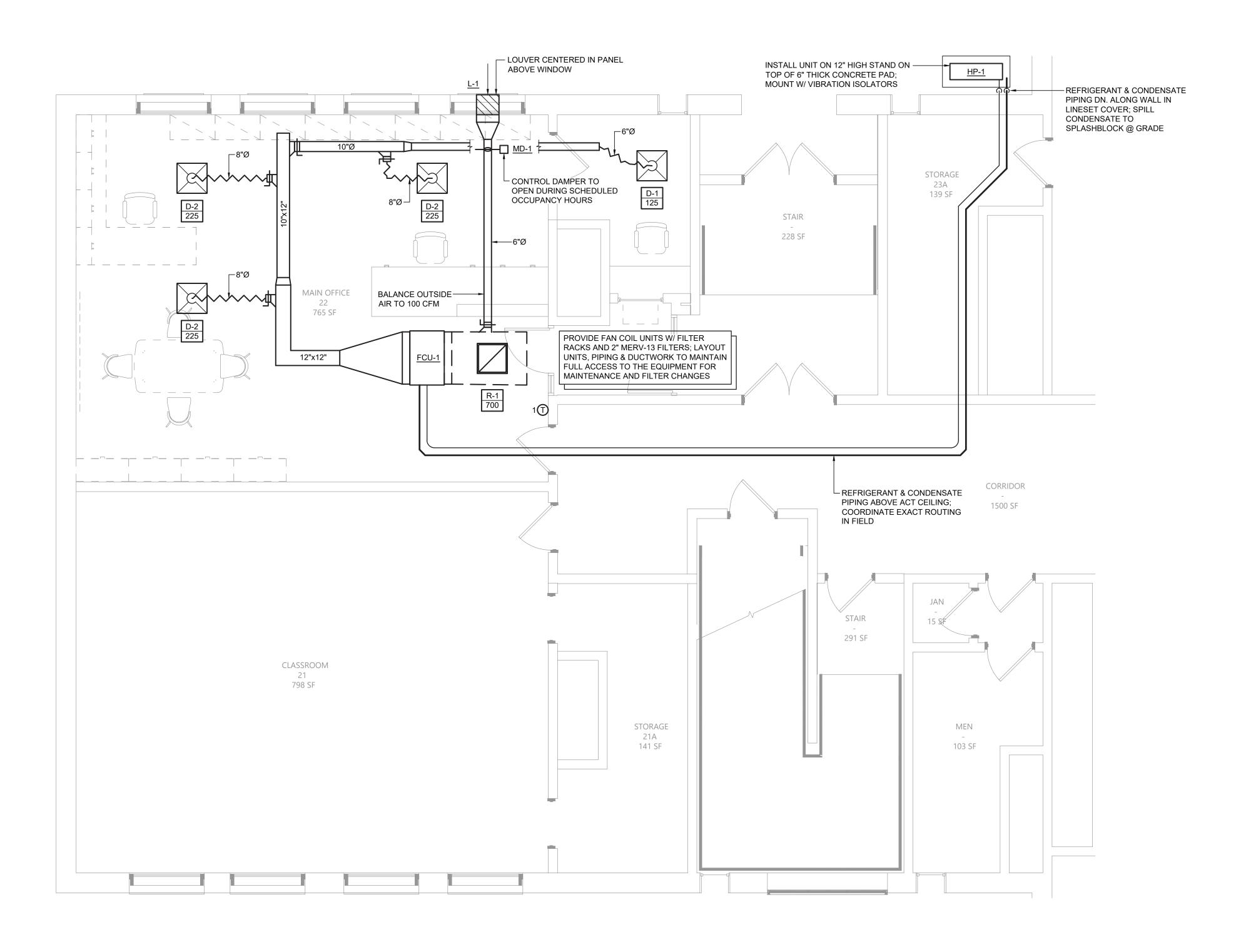
Sheet No.

Sheet No.

MAY

M111

CONSTRUCTION DOCUMENTS



SPLIT SYSTEMS WITH DUCT FAN COIL & HEAT PUMP FURNISHED BY —

OWNER, INSTALLED BY CONTRACTOR; CONTRACTOR IS RESPONSIBLE

TO RECEIVE THE EQUIPMENT DELIVERY AT THE PROJECT SITE, MOVE EQUIPMENT FROM TRUCK(S) TO A DESIGNATED STORAGE LOCATION

ON THE SITE & RIG THE UNIT INTO THE FINAL INSTALLATION LOCATION;

CONTRACTOR IS TO PROVIDE ALL ASSOCIATED COMPONENTS, I.E.,

OTHERWISE NOTED IN THE PROJECT DOCUMENTS; REFER TO FRONT

DUCTWORK, PIPING, CONTROLS, ACCESSORIES, ETC. UNLESS

END DOCUMENTS FOR ADDITIONAL INFORMATION

| INDOOR MINI-SPLIT UNIT SCHEDULE | | | | | | | | | | | | | | | | | | |
|---------------------------------|---------------------------------------|-------------|-------------------------|-------------------------------|------------------|----------------|-----------------------|------------------------|------|-------|---------------------------|----------|-------|---|---------------|-----|----------------|------------------------------------------|
| EQUIPMENT TAG | MANUFACTURER (OR ACCEPT. EQUAL) | MODEL | MINI-SPLIT UNIT TYPE | AREA OF BUILDING SERVED | AIRFLOW (CFM) | CAPACITY (MBH) | OOLING EDB (°F) | EWB CAPACIT (%F) (MBH) | | B EWB | PAIRED OUTDOOR UNIT | PRESSURE | VOLT. | | VER EMENTS | W | WEIGHT (LB) | NOTES |
| FCU-1 | MITSUBISHI | PEAD-A30AA8 | DUCTED MEDIUM STATIC | MAIN OFFICE | 800 | 30.0 | 80.0 | 67.0 32.0 | 70.0 | 60.0 | HP-1 | 0.50 | 208 | 1 | 60 | 121 | 67 | HYPER HEATING UNIT; SEE VRF SYSTEM NOTES |

| | AIR-COOLED HEAT PUMP SCHEDULE | | | | | | | | | | | | | | | |
|------------------|---------------------------------------|--------------|------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------------------------------------|----------------------------|-------------|------------------------------------------------------------|-------|--------------------------------------------------------|------|----------------|-------|----------------------------------------|
| EQUIPMENT TAG | MANUFACTURER (OR ACCEPT. EQUAL) | MODEL | INDOOR UNITS SERVED | COMPRESSOR TYPE | NOM. COOL CAPACITY (MBH) | NOM. HEAT CAPACITY (MBH) | OUTDOOR OPERATING TEMP. RANGE (°F) COOLING HEATING | AHRI EFFICIENCY RATINGS | REFRIGERANT | SOUND PRESSURE LEVEL COOLING/ HEATING (dBA) | VOLT. | ELECTRICAL POWER REQUIREMENTS VOLT. PHASE Hz. MCA MOCP | | WEIGHT (LB) | NOTES | |
| HP-1 | MITSUBISHI | SUZ-KA30NAHZ | FCU-1 | INVERTER SCROLL HERMETIC | 30.0 | 32.0 | 0 TO 115 -13 TO 75 | 12.5 15.0 3.4 | R410A | 52/53 | 208 | 1 6 |) 24 | 40 | 261 | FURNISH W/ REQUIRED PIPING ACCESSORIES |

| AIR GRILLE/DIFFUSER SCHEDULE | | | | | | | | | | | | | | |
|------------------------------|---------------|----------------------------------|----------------------------------|------|-------|-----------------------------------|----------|------------------|--------------------|-----------|--------|--------|-----------------------------------------------------------------------------------------------|--|
| EQUIPMENT | (311710021 1. | MODEL | AIR DEVICE | | | MAX AIR PRESS. DROP (IN. W.C.) | MOUNTING | PANEL/FRAME SIZE | NECK SIZE (IN.) | MAX NC | DAMPER | FINISH | NOTES | |
| TAG | EQUAL) | | TYPE | MIN. | MAX. | Brtor (iit. w.o.) | | (114.) | (114.) | INC | | | | |
| D-1 | KRUEGER | PLQ-6-F23-24x24-PR10-IB-44 | SQUARE PLAQUE FACE DIFFUSER | 50 | 175 | 0.10 | LAY-IN | 24"x24" | 6"Ø | 20 | OBD | WHITE | PROVIDE W/ INSULATED BLANKET ON BACKPAN | |
| D-2 | KRUEGER | PLQ-8-F23-24x24-PR10-IB-44 | SQUARE PLAQUE FACE DIFFUSER | 176 | 300 | 0.10 | LAY-IN | 24"x24" | 8"Ø | 20 | OBD | WHITE | PROVIDE W/ INSULATED BLANKET ON BACKPAN | |
| R-1 | KRUEGER | S80P-20x20-F23-24x24-00-00-00-44 | PERFORATED FACE RETURN GRILLE | 0 | 1,600 | 0.10 | LAY-IN | 24"x24" | 20"x20" | 25 | - | WHITE | FURNISH & INSTALL FULL-SIZE SHEET METAL PLENUM BOX ON REAR OF GRILLE, PAINT INSIDE FLAT BLACK | |

| | LOUVER SCHEDULE | | | | | | | | | | | | | |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------|-----------------|------|------------|-------|------------------------|------------------|------------------------|----------|--------|--------|----------|
| EQUIPMENT TAG | QTY. | MANUFACTURER (OR ACCEPT. | MODEL | AIR DEVICE TYPE | | DUVER SIZE | | FREE AREA (SQ. FT.) | AIRFLOW (CFM) | VELOCITY (FT./MIN.) | MOUNTING | SCREEN | FINISH | NOTES |
| 17.0 | | EQUAL) | | STATIONARY | WIDE | HIGH | DEPTH | , , | | , , | EXTERIOR | | | |
| L-1 | 1 | RUSKIN | ELF6375DX | LOUVER | 18" | 12" | 6" | 0.63 | 100 | 158.7 | WALL | YES | TBD | 1, 2 & 3 |
| | COLOR TO BE COORDINATED WITH OWNER/ARCHITECT BEFORE ORDERING FURNISH WITH INSECT-SCREEN OPTION. | | | | | | | | | | | | | |
| 3. FURNISH W/ PROPER MOUNTING HARDWARE. | | | | | | | | | | | | | | |

VRF System Notes:

THE ELECTRICAL CONTRACTOR.

- WIRED 7 DAY PROGRAMMABLE THERMOSTAT SHALL BE FURNISHED BY OWNER FOR EACH INDOOR UNIT. THERMOSTATS SHIP LOOSE FOR FIELD INSTALLATION AND WIRING BY THE MECHANICAL CONTRACTOR.
- OWNER TO FURNISH CENTRAL CONTROLLER FOR LOCAL SET POINT CONTROL AND SYSTEM VIEWING. CONTROLLER TO BE INSTALLED AND WIRING BY MECHANICAL CONTRACTOR. 24V POWER BY ELECTRICAL CONTRACTOR.
- 3. DISCONNECT SWITCHES FOR CONDENSING UNITS AND INDOOR UNITS SHALL BE FURNISHED BY THE OWNER AND INSTALLED BY
- 4. EXTERNAL SUPPORTS FOR INDOOR AND CONDENSING UNITS SHALL BE FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- 5. FILTER RACK AND 2" PLEATED MERV-13 FILTERS FOR DUCTED UNITS SHALL FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR. FILTER RACK SHALL BE GALVANIZED STEEL, FULLY INSULATED & FACTORY ASSEMBLED. TYPICAL OF FLT-H SERIES OR EQUAL
- 6. CONDENSATE PUMPS SHIP FOR FIELD INSTALLATION BY MECHANICAL CONTRACTOR FOR WALL MOUNTED UNITS. DUCTED UNITS FURNISHED WITH FACTORY MOUNTED CONDENSATE PUMP. MECHANICAL CONTRACTOR TO PROVIDE CONDENSATE PIPING FROM ALL UNITS TO SANITARY DRAIN. FIELD VERIFY EXACT ROUTING AND TERMINATION POINT IN BUILDING.
- 7. PROVIDE REFRIGERANT ISOLATION VALVES ON LIQUID AND GAS LINES AT EVERY FAN COIL UNIT.