

ABBREVIATIONS	
AC	AIR CONDITIONER
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AF	AIR FILTER
AFF	ABOVE FINISHED FLOOR
AFMS	AIR FLOW MEASURING STATION
AHU	AIR HANDLING UNIT
ATC	AUTOMATIC TEMPERATURE CONTROLS
BG	BOTTOM GRILLE
BHP	BREAK HORSE POWER
BS	BRANCH SELECTOR BOX
BTU	BRITISH THERMAL UNIT
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
CO	CLEAN OUT
CP	CONDENSATE PUMP
CR	CEILING REGISTER
DB	DRY BULB
DN	DOWN
DX	DIRECT EXPANSION
E	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRICAL DUCT HEATER
EF	EXHAUST FAN
ENT	ENTERING
ESP	EXTERNAL STATIC PRESSURE
*F	DEGREE FARENHEIT
FC	FLEXIBLE CONNECTION
FD	FIRE DAMPER AND ACCESS DOOR
FF	FINISHED FLOOR
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FSD	FIRE SMOKE DAMPER WITH ACCESS DOOR AND DETECTOR
FEET	FEET
GC	GENERAL CONSTRUCTION CONTRACTOR
GPM	GALLONS PER MINUTE
GE	GENERAL EXHAUST
H	HEIGHT
HP	HORSE POWER
IN	INCH
IN WG	INCH OF WATER GAUGE
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LD	LINEAR DIFFUSER
LR	LINEAR RETURN
LVG	LEAVING
MAX	MAXIMUM
MBH	THOUSAND BTU'S PER HOUR
MERV	MINIMUM EFFICIENCY REPORTING VALUES
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MVP	MAXIMUM OVER CURRENT PROTECTION
MOV	MANUAL AIR VENT
NIC	NOT IN THIS CONTRACT
NK	NECK (AS RELATED TO DUCT AND DIFFUSER)
NTS	NO TO SCALE
OA	OUTDOOR AIR
OAD	OUTSIDE AIR DAMPER
OAI	OUTSIDE AIR INTAKE
OED	OPEN ENDED DUCT WITH WIRE MESH SCREEN
PD	PUMPED DISCHARGE
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RG	REFRIGERANT GAS LINE
RL	REFRIGERANT LIQUID LINE
RM	ROOM
RPD	ROOM PRESSURE DISPLAY
RPI	ROOM PRESSURE INDICATOR
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION LINE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SEN	SENSIBLE
SP	STATIC PRESSURE
SQ FT	SQUARE FEET (AS RELATED TO SIZES/AREAS)
ST	SOUND TRAP/SOUND ATTENUATOR
TD	TRANSFER DUCT
TG	TOP GRILLE
TO	TRANSFER OPENING
TR	TOP REGISTER
TRG	TRANSFER GRILLE
TRR	TRANSFER REGISTER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
TX	TOILET EXHAUST
VD	VOLUME DAMPER
VEL	VELOCITY
W	WIDTH
WB	WET BULB
WMS	WIRE MESH SCREEN
NOTE: NOT ALL SYMBOLS AND ABBREVIATION ARE USED IN THE DRAWINGS	

GENERAL HVAC SYSTEM CLEANING REQUIREMENTS:

1. COMPONENT CLEANING: CLEANING METHODS SHALL BE EMPLOYED SUCH THAT ALL HVAC SYSTEM COMPONENTS MUST BE VISIBLY CLEAN AS DEFINED IN APPLICABLE STANDARDS (SEE NATIONAL AIR DUCT CLEANING ASSOCIATION (NADCA) STANDARDS), UPON COMPLETION, ALL COMPONENTS MUST BE RETURNED TO THOSE SETTINGS RECORDED JUST PRIOR TO CLEANING OPERATIONS.

2. CONTAMINENT: DEBRIS REMOVED DURING CLEANING SHALL BE COLLECTED AND PRECAUTIONS MUST BE TAKEN TO ENSURE THAT DEBRIS IS NOT OTHERWISE DISPERSED OUTSIDE THE HVAC SYSTEM DURING THE CLEANING PROCESS.

3. AIR-VOLUME CONTROL DEVICES: DAMPERS ANY AIR-DIRECTIONAL MECHANICAL DEVICES INSIDE THE HVAC SYSTEM MUST HAVE THEIR POSITION MARKED PRIOR TO CLEANING AND, UPON COMPLETION, MUST BE RESTORED TO THEIR MARKED POSITION.

4. SERVICE OPENINGS: UTILIZE SERVICE OPENINGS, AS REQUIRED FOR PROPER CLEANING, AT VARIOUS POINTS OF THE HVAC SYSTEM FOR PHYSICAL AND MECHANICAL ENTRY, AND INSPECTION.

A. UTILIZE THE EXISTING SERVICE OPENINGS ALREADY INSTALLED IN THE HVAC SYSTEM WHERE POSSIBLE.

B. OTHER OPENINGS SHALL BE CREATED WHERE NEEDED AND THEY MUST BE CREATED SO THEY CAN BE SEALED IN ACCORDANCE WITH INDUSTRY CODES AND STANDARDS.

C. CLOSURES MUST NOT SIGNIFICANTLY HINDER, RESTRICT, OR ALTER THE AIRFLOW WITHIN THE SYSTEM.

D. CLOSURES MUST BE PROPERLY INSULATED TO PREVENT HEAT LOSS/GAIN OR CONDENSATION ON SURFACES WITHIN THE SYSTEM W/ NEOPRENE GASKETS.

E. OPENINGS MUST NOT COMPROMISE THE STRUCTURAL INTEGRITY OF THE SYSTEM.

F. CONSTRUCTION TECHNIQUES USED IN THE CREATION OF OPENINGS SHOULD CONFORM TO REQUIREMENTS OF APPLICABLE BUILDING AND FIRE CODES, AND APPLICABLE NFPA, SMACNA AND NADCA STANDARDS.

G. CUTTING SERVICE OPENINGS INTO FLEXIBLE DUCT IS NOT PERMITTED. FLEXIBLE DUCT SHALL BE DISCONNECTED AT THE ENDS AS NEEDED FOR PROPER CLEANING AND INSPECTION.

H. ALL SERVICE OPENINGS CAPABLE OF BEING RE-OPENED FOR FUTURE INSPECTION OR REGENERATION SHALL BE CLEARLY MARKED AND SHALL HAVE THEIR LOCATION REPORTED TO THE OWNER AND MOUNT SINAI REPORT DOCUMENTS.

MECHANICAL SYMBOL LIST			
PIPING		DUCTWORK	
	DRAIN LINE		DUCT SECTION UNDER POSITIVE PRESSURE
	COLD WATER MAKE UP LINE		DUCT SECTION UNDER NEGATIVE PRESSURE
	AIR LINE		SLOPING RISE IN DUCT IN DIRECTION OF ARROW
	VENT LINE		SLOPING DROP IN DUCT IN DIRECTION OF ARROW
	PIPE ANCHOR		DUCT SIZE - FIRST SIZE INDICATES PLAN SIZE (XXXX) - INDICATES SUPPLY VOLUMETRIC FLOW RATE (CFM) [XXXX] - INDICATES EXHAUST/RETURN VOLUMETRIC FLOW RATE (CFM)
	ARROW INDICATES DIRECTION OF FLOW		ACCESS DOOR IN DUCT
	PIPE PITCHED DOWN		DUCT FLEXIBLE CONNECTION
	PIPE GUIDE		VOLUME DAMPER
	UNION		MOTORIZED DAMPER WITH ACCESS DOOR IN DUCT
	ECCENTRIC REDUCER		ELBOW WITH TURNING VANES
	CONCENTRIC REDUCER		LOUVER DOOR
	RISER SUPPORT W/SPRING		UNDERCUT DOOR
	DOUBLE LINE PIPE SYMBOL		FUSED LINK FIRE DAMPER WITH ACCESS DOOR IN DUCT
	ARROW INDICATES DIRECTION OF FLOW		ELBOW TURNED UP
	UNION		ELBOW TURNED DOWN
	CAPPED PIPE		TEE DOWN CONNECTION
	7\"/>		TEE UP CONNECTION
	ELBOW WITH TURNING VANES		COMBINATION SMOKE AND FIRE DAMPER WITH ACCESS DOOR IN DUCT AND SMOKE DETECTOR INSTALLED IN DUCT WITHIN 5'-0\"/>
	LOUVER DOOR		AIR FLOW MEASURING STATION WITH ACCESS DOOR IN DUCT
	UNDERCUT DOOR		SUPPLY AIR OUTLET, 4 WAY
	FUSED LINK FIRE DAMPER WITH ACCESS DOOR IN DUCT		RETURN AIR REGISTER
	ELBOW TURNED UP		LINEAR SUPPLY (REFER TO PLANS FOR ACTIVE LENGTHS)
	ELBOW TURNED DOWN		LINEAR RETURN
	TEE DOWN CONNECTION		TRANSFER DUCT
	TEE UP CONNECTION		SUPPLY AIR OUTLET - 3, 2 & 1 WAY THROW
	COMBINATION BALANCING AND SHUT-OFF VALVE (CIRCUIT SETTER)		STATIC PRESSURE SENSOR
	RELIEF VALVE PER SPECIFICATIONS		EXISTING DUCT/PIPING/EQUIPMENT TO REMAIN
	THERMOMETER		EXISTING DUCT/PIPING/EQUIPMENT TO BE REMOVED
	P/T PLUG FOR PRESSURE GAUGE & THERMOMETER CONNECTION		NEW WORK
	MANUAL AIR VENT		DUCT SMOKE DETECTOR
	AUTOMATIC AIR VENT		VARIABLE AIR VOLUME BOX (XXX) - INDICATES SUPPLY VOLUMETRIC FLOW RATE (CFM) [XXX] - INDICATES EXHAUST VOLUMETRIC FLOW RATE (CFM)
	PRESSURE GAUGE/GAUGE COCK		VARIABLE AIR VOLUME BOX WITH REHEAT COIL (XXX) - INDICATES SUPPLY VOLUMETRIC FLOW RATE (CFM)
	THERMOSTAT		RECTANGULAR TO ROUND DUCTWORK TRANSITION
	CARBON DIOXIDE SENSOR, WALL MOUNTED (DEMAND CONTROLLED VENTILATION) - 0\"/>		CUT EXISTING DUCT/PIPING AND PATCH AIRTIGHT
	SPEED SWITCH		POINT OF DISCONNECTION
	HUMIDITY SENSOR		POINT OF CONNECTION NEW WORK TO EXISTING
	ELECTRIC CONTROL VALVE / SOLENOID VALVE		
	VENTURI FLOW METER		
	FREEZE STAT		
	EXISTING PIPE TO REMAIN		
	EXISTING PIPE TO BE REMOVED		
	NEW WORK		

NOTE: ALL SYMBOLS AND ABBREVIATIONS MAY NOT HAVE BEEN USED FOR THIS PROJECT.

REMOVAL NOTES:

1. THE CONTRACTOR SHALL BE HELD TO HAVE EXAMINED THE PREMISES AND COMPARED IT WITH THE DRAWINGS AND SPECIFICATIONS AND TO HAVE SATISFIED HIMSELF OF THE CONDITIONS EXISTING THERE AS TO THE PERFORMANCE OF THE WORK REQUIRED BEFORE SUBMISSION OF HIS BID.

2. CONTRACTOR SHALL ASSURE THAT DEMOLITION AND INSTALLATION WORK WILL NOT CAUSE ANY DAMAGE TO EQUIPMENT, DUCTWORK, PIPING, ELECTRICAL, PLUMBING OR ANY OTHER EXISTING SERVICES.

3. ALL EQUIPMENT SHOWN TO REMAIN SHALL BE PROTECTED FROM DAMAGE DURING THE CONSTRUCTION AND IF ANY DAMAGE OCCURS IT SHALL BE REPAIRED AT THE EXPENSE OF THIS CONTRACTOR.

4. ALL EXISTING SERVICES INCLUDING PIPING, ELECTRIC CONDUITS ETC. WHICH MAY INTERFERE WITH NEW INSTALLATION WORK AND NOT BEING REMOVED SHALL BE TEMPORARILY DISCONNECTED AND PROTECTED FROM DAMAGE PRIOR TO DEMOLITION WORK. THEY SHALL BE RECONNECTED OR RE-ROUTED AS NECESSARY UPON COMPLETION OF THE WORK. NO TUBING OR CONDUIT SHALL BE COVERED BY THERMAL INSULATION. ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH UL NEC CODE (NFPA 70).

CERTIFICATION  
TO THE BEST OF THE APPLICANT'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS ARE IN COMPLIANCE WITH THE 2020 NYSGCC.

GENERAL NOTES

1. MECHANICAL WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST CONSTRUCTION CODE AND LOCAL CODES RULES AND REGULATIONS, IT SHOULD ALSO CONFORM TO THE OWNER AND BUILDING MANAGEMENT COMPANY'S STANDARDS FOR DESIGN, ALTERATION, AND CONSTRUCTION.

2. PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENTS, AND SERVICES NECESSARY TO FURNISH AND SAFELY INSTALL THE COMPLETE AND PROPERLY OPERATING MECHANICAL SYSTEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER INDICATED ON THE CONTRACT DOCUMENT OR NOT.

3. CONTRACTOR SHALL SURVEY THE AREA OF THIS WORK BEFORE SUBMITTING THE BID AND BE RESPONSIBLE FOR NOTIFYING THE ARCHITECT OF ANY CONDITIONS WHICH WOULD PREVENT THE INSTALLATION OF THE WORK AS SHOWN ON DRAWINGS.

4. CONTRACTOR SHALL CHECK AND CORRECT ANY AND ALL DEFICIENCIES IN EXISTING DUCTS AND ASSOCIATED INSULATION. ALL NEW DUCTWORK SHALL COMPLY WITH THE LATEST SMACNA GUIDELINES AND CONFORM WITH REQUIREMENTS OF THE LATEST ASHRAE HANDBOOKS. ALL NEW DUCT INSULATION SHALL MEET OR EXCEED REQUIREMENTS OF THE LATEST ADOPTED ENERGY CODE.

5. DESIGN DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC. OFFSETS MAY BE REQUIRED TO AVOID EXISTING SERVICES, OTHER TRADES, ETC. COORDINATE WORK WITH ALL TRADES AND FIELD CONDITIONS.

6. LOCATIONS OF NEW UTILITIES, INCLUDING PIPE RISERS, ARE GENERALLY SCHEMATIC. CONTRACTOR SHALL COORDINATE ALL NEW UTILITIES, SERVICES, ETC., WITH EXISTING STRUCTURAL AND ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL PROVIDE ALL OFFSETS AS REQUIRED.

7. PROVIDE FIRE STOPPING FOR ALL NEW AND EXISTING DUCT, PIPE, AND CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS, AND SLABS.

8. WHERE PENETRATIONS THROUGH FIRE RATED WALLS ARE NOT FIRE PROOFED, THIS CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE RATED INTEGRITY.

9. COORDINATE SCHEDULE FOR HOOK-UPS TO EXISTING SYSTEMS AND EQUIPMENTS. ALSO COORDINATE SCHEDULE FOR REMOVAL OR RELOCATIONS WITH THE OWNER AND PERFORM THIS WORK AT SUCH TIMES TO ENSURE THAT PERIODS OF SHUTDOWN WILL BE ACCEPTABLE TO THE OWNER. ALL SYSTEM SHUTDOWNS SHALL BE KEPT TO A MINIMUM.

10. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND RESTORING THE CONTINUITY OF ALL EXISTING SYSTEMS AFFECTED, INCLUDING BUT NOT LIMITED TO: INSULATION, VAPOR BARRIER, VALVES, CAPS, PUMPS, ETC.

11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK, INCLUDING ITS COMPLETION AND FINAL ACCEPTANCE. THE CONTRACTOR SHALL REPLACE ANY EQUIPMENT THAT MAY BE DAMAGED, LOST OR STOLEN WITHOUT ADDITIONAL COST TO OWNER.

12. PRIOR TO COMMENCEMENT OF ANY WORK, EXISTING SYSTEMS ASSOCIATED WITH THIS WORK SHALL BE TESTED IN THE PRESENCE OF BUILDING PERSONNEL. PRE-CONSTRUCTION/DEMOLITION BALANCING REPORTS SHALL BE SUBMITTED TO ENGINEER AND BUILDING MANAGEMENT FOR REVIEW.

13. DIFFUSERS, REGISTERS, AND GRILLES SHALL HAVE HARD DUCT CONNECTIONS.

14. ALL NEW DUCTWORK AND PIPING SHALL BE PRESSURE TESTED PER BUILDING, SMACNA, ASME, ANSI, AND ASHRAE STANDARDS AND SPECIFICATIONS.

15. ALL SYSTEMS AND SERVICES THAT SERVE ADJACENT SPACES SHALL BE MAINTAINED THROUGHOUT WORK.

16. SUBMIT SHOP DRAWINGS OF ALL WORK WHICH MUST BE APPROVED BY THE ARCHITECT AND ENGINEER BEFORE WORK COMMENCES OR ITEMS ARE ORDERED.

17. ALL DUCTWORK SHALL BE KEPT AS HIGH AS POSSIBLE TO MAINTAIN CEILING HEIGHTS SHOWN ON ARCHITECTURAL DRAWINGS. COORDINATE ALL DUCT AND PIPING SYSTEM ELEVATIONS WITH ALL OTHER TRADES AND PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS.

18. FOR EXACT LOCATIONS OF DIFFUSERS, REGISTERS, GRILLES, AND LINEAR DIFFUSERS REFER TO ARCHITECTURAL DRAWINGS AND COORDINATE FINAL LOCATIONS.

19. COORDINATE ALL EQUIPMENT REQUIREMENTS WITH APPROPRIATE TRADES (I.E. CONDENSATE PUMPS COORDINATED WITH ELECTRICAL, PLUMBING, ATC, ETC.)

20. VERIFY AND COORDINATE ALL EQUIPMENT ACCESS AND CLEARANCES WITH THE ARCHITECT, GENERAL CONTRACTOR AND/OR CONSTRUCTION MANAGER.

21. ALL DUCTWORK AND PIPING SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE. DO NOT SUPPORT DUCT FROM PIPE SUPPORT AND VICE VERSA.

22. PROVIDE 6\"/>

23. ALL DUCT BRANCHES, TAKE-OFFS, AND DIFFUSERS SHALL BE EQUIPPED WITH VOLUME DAMPERS.

24. LOCATE ALL DUCT VOLUME DAMPERS ABOVE ACCESSIBLE CEILINGS. PROVIDE REMOTE CABLE OPERATED VOLUME DAMPERS WITH THE OPERATOR ACCESSIBLE VIA THE AIR OUTLET WHEN BRANCH DUCTWORK IS LOCATED WITHIN AN INACCESSIBLE CEILING.

25. ALL CONNECTIONS FROM RETURN, EXHAUST, AND SUPPLY DUCTS, CEILING DIFFUSERS, AND REGISTERS SHALL BE AIR TIGHT AND SEALED WITH WATER BASED APPROVED SEALANT.

26. ALL DUCTWORK INSIDE BUILDING INCLUDING SUPPLY AND RETURN AIR DUCTS, PLENUMS SHALL BE PROVIDED WITH 2\"/>

27. THE MECHANICAL CONTRACTOR SHALL PROVIDE CONTROL WIRING AND TRANSFORMERS FOR ALL THERMOSTATS, ACTUATORS AND CONTROLLERS. TRANSFORMERS SHALL BE ADEQUATELY SIZED TO SUPPORT THE EQUIPMENT SERVED. COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATIONS OF DISCONNECT, JUNCTION BOX/SOURCE AND EXTEND WIRING TO DEVICES.

28. ALL THERMOSTATS SHALL BE PER THE BUILDING AND OWNER STANDARD.

29. PROVIDE TEMPORARY WORK, DUCT WITH DAMPERS, CAPS, EQUIPMENT, VALVES, CAPPED PIPE CONNECTIONS, SUPPORTS, AND ACCESSORIES TO KEEP EXISTING BUILDING, SYSTEM IN OPERATION AND MAINTAIN SERVICES, HEATING, AIR CONDITIONING, VENTILATION IN OPERATION AT ALL TIMES.

30. PROVIDE SUPPLEMENTAL STEEL TO SUPPORT EQUIPMENT, DUCTS, AND PIPING FROM BUILDING STRUCTURE.

31. PROTECT ALL EXISTING AND NEW WORK FROM DUST, DIRT, DEBRIS. SEAL AND PROTECT ALL OPEN ENDS OF WORK, DUCT, PIPES FROM DUST, AND DIRT DURING DEMOLITION AND INSTALLATIONS.

32. CONTRACTOR SHALL PERFORM ALL WORK IN SAFE MANNER, PROTECT WORK, PROPERTY, PERSONNEL AND SURROUNDINGS FROM DAMAGE, INJURY.

33. GUARANTEE ALL WORK AGAINST FAULTY AND IMPROPER MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER, EXCEPT THAT WHERE GUARANTEES OR WARRANTIES FOR LONGER TERMS ARE SPECIFIED HEREIN, SUCH LONGER TERM SHALL APPLY, AT NO ADDITIONAL COST TO OWNER, WITHIN 24 HOURS AFTER NOTIFICATION, CORRECT ANY DEFICIENCIES WHICH OCCUR DURING THE GUARANTEE PERIOD, ALL TO THE SATISFACTION OF THE OWNER AND ARCHITECT.
  - PROVIDE 5 YEAR EQUIPMENT MANUFACTURERS WARRANTY FOR COMPRESSOR FROM DATE OF SHIPMENT.
34. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL RIGGING, HOISTING TO BRING EQUIPMENT AND INSTALL IN LOCATIONS INDICATED.
  - CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIAL, LABOR, TOOLS ACCESSORIES TO RIG UNITS, WORK IN SPACE, PROVIDE PROTECTION FOR WALLS, ROOF, FLOOR AND EXTERIOR OF BUILDING, PROPERTY. CONTRACTOR SHALL PROVIDE ALL PREPARATION, TEMPORARY WORK.
  - SUBMIT RIGGING AND HOISTING PLAN FOR REVIEW COORDINATED WITH ALL EQUIPMENT, WORK TO BE BROUGHT IN AND RIGGED INTO SPACE.
  - CONTRACTOR SHALL PREPARE DOCUMENTS, FILE, PROCURE ALL PERMITS, APPROVALS FOR RIGGING HOISTING.
  - CONTRACTOR SHALL FIELD VERIFY EXISTING CONSTRAINTS AND DETERMINE LARGEST SECTION OF UNIT, WORK THAT CAN BE RIGGED INTO SPACE WITHOUT DAMAGE TO EXISTING SPACE OR WORK, CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL PARTITIONS, DOORS, FRAMES, AND OTHER ITEMS AS REQUIRED TO RIG UNITS, WORK INTO SPACE AND REINSTALL ALL ITEMS. ANY DAMAGED ITEMS SHALL BE REPLACED OR NEW ITEMS SHALL BE PROVIDED AS DIRECTED BY ARCHITECT. CONTRACTOR SHALL REMOVE, RELOCATE TEMPORARILY, RECONNECT ALL ITEMS IN APPROVED MANNER. CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF RIGGING FOR THIS PROJECT, PROVIDE ALL RELATED WORK TO KEEP EXISTING SYSTEMS IN OPERATION.
35. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, CONTRACTOR SHALL INCLUDE DRAWINGS OF SYSTEM OR SECTIONS OF PIPING, SHUTDOWNS, TEMPORARY VALVES, FLANGES, WET TAPS AND RELATED EQUIPMENT, SETUPS, VALVES, TEES, FITTINGS, AND LABOR IN BID PRICE. FLUSH, CLEAN PIPING SYSTEM, SECTIONS OF PIPING, PROVIDE ISOLATION VALVES, FLANGES, FITTINGS FOR TESTING, AND TEST PIPING, PROVIDE CHEMICAL TREATMENT AND INCLUDE ALL COSTS OF RELATED WORK, MATERIAL, EQUIPMENT, CHEMICALS, LABOR IN BID PRICE.
36. ANY ACTIVITIES, DEMOLITION, CONSTRUCTION WORK THAT GENERATES NOISE, FUME, ODOR SHALL BE PERFORMED DURING AFTER NORMAL WORK HOURS PRIOR APPROVAL BY OWNER DURING TIME PERIOD ALLOWED BY OWNER. PROVIDE ALL RELATED PREPARATIONS, WORK TO MINIMIZE INCONVENIENCE TO OCCUPANTS AND ANY DISRUPTION OF SPACE AND ADJACENT OCCUPANTS. PROVIDE FIRE WATCH AS REQUIRED BY BUILDING MANAGEMENT/OWNER, AND INCLUDE ALL RELATED WORK, EQUIPMENT, AND LABOR IN BID PRICE.
37. INTERIOR AND EXTERIOR MECHANICAL EQUIPMENT AND SYSTEMS SHALL COMPLY WITH THE PROVISION OF NOISE CONTROL REQUIREMENTS PER CODES, LOCAL RULES, AND REGULATIONS.
38. PROVIDE VOLUME DAMPERS IN ALL LOW-PRESSURE DUCTWORK BRANCH TAKE-OFFS, REFER TO HVAC DETAILS FOR REQUIREMENTS. VOLUME DAMPERS SHALL BE INSTALLED AS CLOSE TO DUCT TAKE OFF AS POSSIBLE UPSTREAM OF DIFFUSER/REGISTER.
39. ADEQUATELY BRACE AND PROTECT ALL WORK DURING CONSTRUCTION AGAINST DAMAGE BREAKAGE, COLLAPSE, DISTORTIONS, AND ALL ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.
40. WHERE MANUFACTURER'S NAMES AND PRODUCT NUMBERS ARE INDICATED ON THE DRAWINGS IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHING OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS.
41. WHERE DUCT SIZES TO INDIVIDUAL AIR OUTLETS ARE NOT INDICATED THE FOLLOWING DUCT SIZING TABLE SHALL BE USED AS A GUIDE:

CFM	DUCT SIZE
0-200	10\"/>
201-230	12\"/>
231-260	14\"/>
261-300	16\"/>
301-360	20\"/>

BUILDING DEPARTMENT NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW YORK STATE CONSTRUCTION CODE (CC), BUILDING CODE (BC), FIRE CODE (FC) AND MECHANICAL CODE (MC). WORK SHALL BE EXECUTED IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF ALL LOCAL LAWS, BY LAWS, STATUTES, ORDINANCES, CODES, RULES, REGULATIONS AND LAWFUL ORDERS OF PUBLIC AUTHORITIES BEARING ON THE PERFORMANCE AND EXECUTION OF THE WORK.

2. MATERIALS, OPERATIONS AND EQUIPMENT OF REQUIRED HVAC SYSTEM SHALL BE SUBJECT TO SPECIAL INSPECTION AS REQUIRED IN CC ADMINISTRATIVE PROVISION, ARTICLES 28-115, 28-116, 28-118, BC-105 AND NEW YORK STATE MECHANICAL CODES AS FOLLOWS:
  - SPECIAL INSPECTIONS AND TESTS THAT ARE REQUIRED:
    - MECHANICAL SYSTEMS AS REQUIRED IN SECTION MC-104 AND BC-105.
      - AIR CONDITIONING AND VENTILATION SYSTEMS
  - PROGRESS INSPECTIONS:
    - ENERGY CODE COMPLIANCE INSPECTIONS BC 105.3
  - THEY SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE BY THE BOARD OF STANDARDS AND APPEALS.
  - THEY SHALL HAVE BEEN ACCEPTED FOR USE UNDER THE PRESCRIBED TEST METHODS BY THE COMMISSIONER.

3. DUCTS SHALL BE SUBSTANTIALLY SUPPORTED ACCORDING TO CHAPTER 16 OF NEW YORK STATE BUILDING CODE, SEISMIC REQUIREMENTS.

4. DUCTS SHALL BE CONSTRUCTED OF APPROVED STANDARD AS SPECIFIED IN NEW YORK STATE MECHANICAL CODE MC-603.

5. WHERE DUCTS PASS THROUGH WALLS OR PARTITIONS, THE SPACE AROUND SHALL BE SEALED AS REQUIRED IN CHAPTER 7 OF THE NEW YORK STATE BUILDING CODE.

6. ALL WORK SHALL COMPLY WITH ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

7. THE HEATING AND AIR CONDITIONING SYSTEMS HAVE BEEN DESIGNED TO MAINTAIN A MAXIMUM TEMPERATURE OF 78°F (SUMMER) AND A MINIMUM TEMPERATURE OF 70°F (WINTER).

8. ALL MATERIALS AND EQUIPMENT DELIVERED TO THE SITE SHALL BE RECOGNIZED BY THE OFFICE OF TECHNICAL CERTIFICATION AND RESEARCH (OTCR).

9. PRODUCTS THAT ARE NOT CODE-PRESCRIBED OR APPROVED ALTERNATIVE SHALL BE REJECTED UNTIL SUCH CERTIFICATES ARE OBTAINED.

10. ALL EQUIPMENT USE PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AS REQUIRED IN NEW YORK STATE CONSTRUCTION CODES, ARTICLE 28-118.

11. ALL NEW AC UNITS AND EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE NEW YORK STATE MECHANICAL CODE.

GENERAL NOTES

KEY NOTES

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Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

INTERVENTIONAL RADIOLOGY - TARRYTOWN

Project Number

12491.000

Description

MECHANICAL SYMBOL LIST, NOTES, AND ABBREVIATIONS

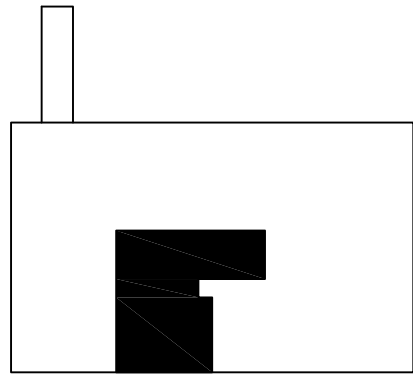
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AS NOTED

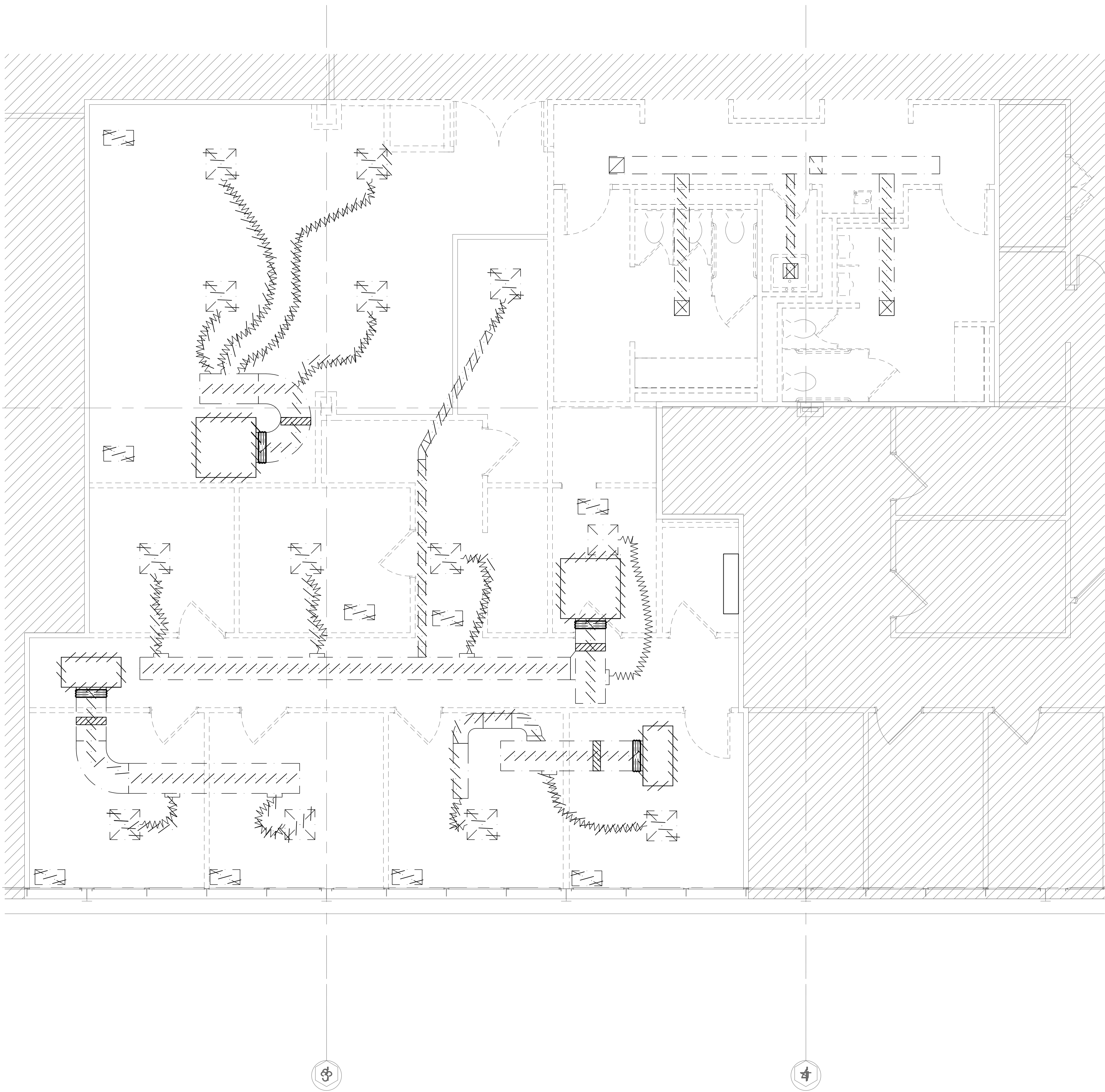
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THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB-NOW-JOB#







**DRAWING NOTES:**

EXISTING WALL MOUNTED AIR COOLED SPLIT UNIT AND CONDENSATE PUMP TO BE REMOVED AND STORED. PURGE, CAP, AND SEAL THE REFRIGERANT PIPING. UNIT AND CONDENSATE PUMP TO BE REINSTALLED IN A NEW LOCATION. REFER TO NEW WORK PLANS.

EXISTING CEILING HUNG HEAT-PUMP UNIT TO BE REMOVED. TURN OVER TO BUILDING MGT OR RE-CLAIM REFRIGERANT AND DISCARD UNIT AS PER BUILDING MANAGEMENT DIRECTION.

GENERAL NOTES

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KEY NOTES

Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name
INTERVENTIONAL RADIOLOGY - TARRYTOWN

Project Number
12491.000

Description
MECHANICAL LEVEL 01 DUCTWORK DEMOLITION PLAN

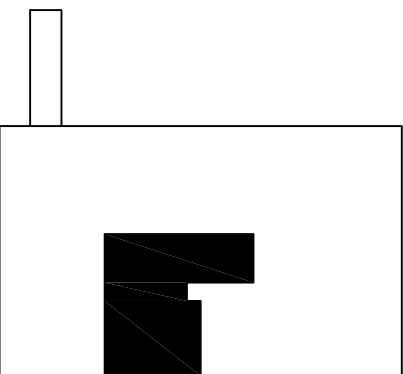
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AS NOTED

M-102.00

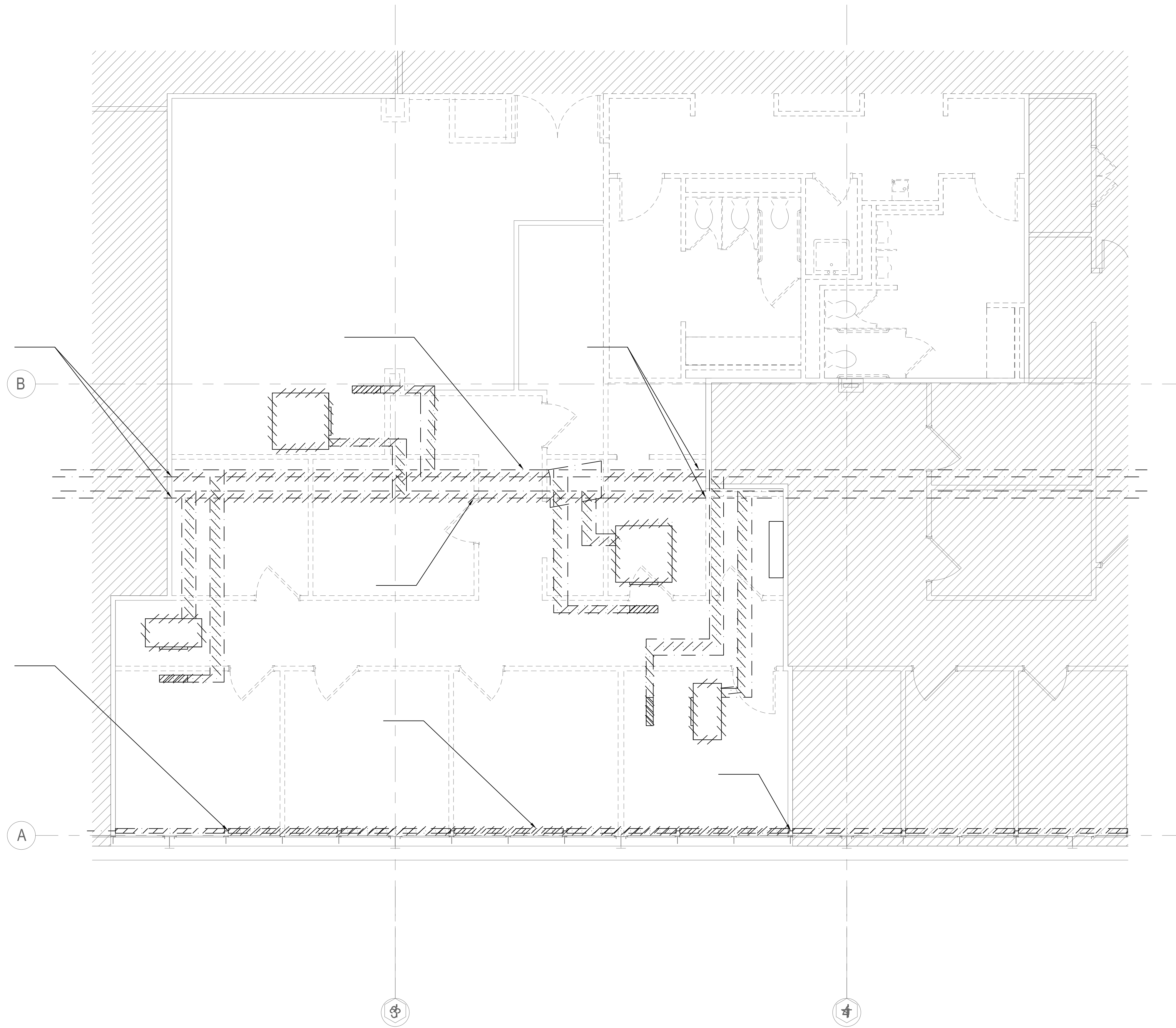
1 LEVEL 01 DEMOLITION PLAN  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

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1 LEVEL 01 DEMOLITION PLAN  
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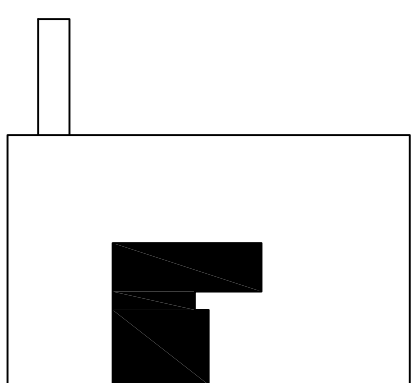
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GENERAL NOTES

KEY NOTES

KEY PLAN



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Date	Description
10.04.21	ISSUE FOR BID

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Project Name
INTERVENTIONAL RADIOLOGY - TARRYTOWN
Project Number
12491.000
Description
MECHANICAL LEVEL 01 PIPING DEMOLITION PLAN
Scale
AS NOTED

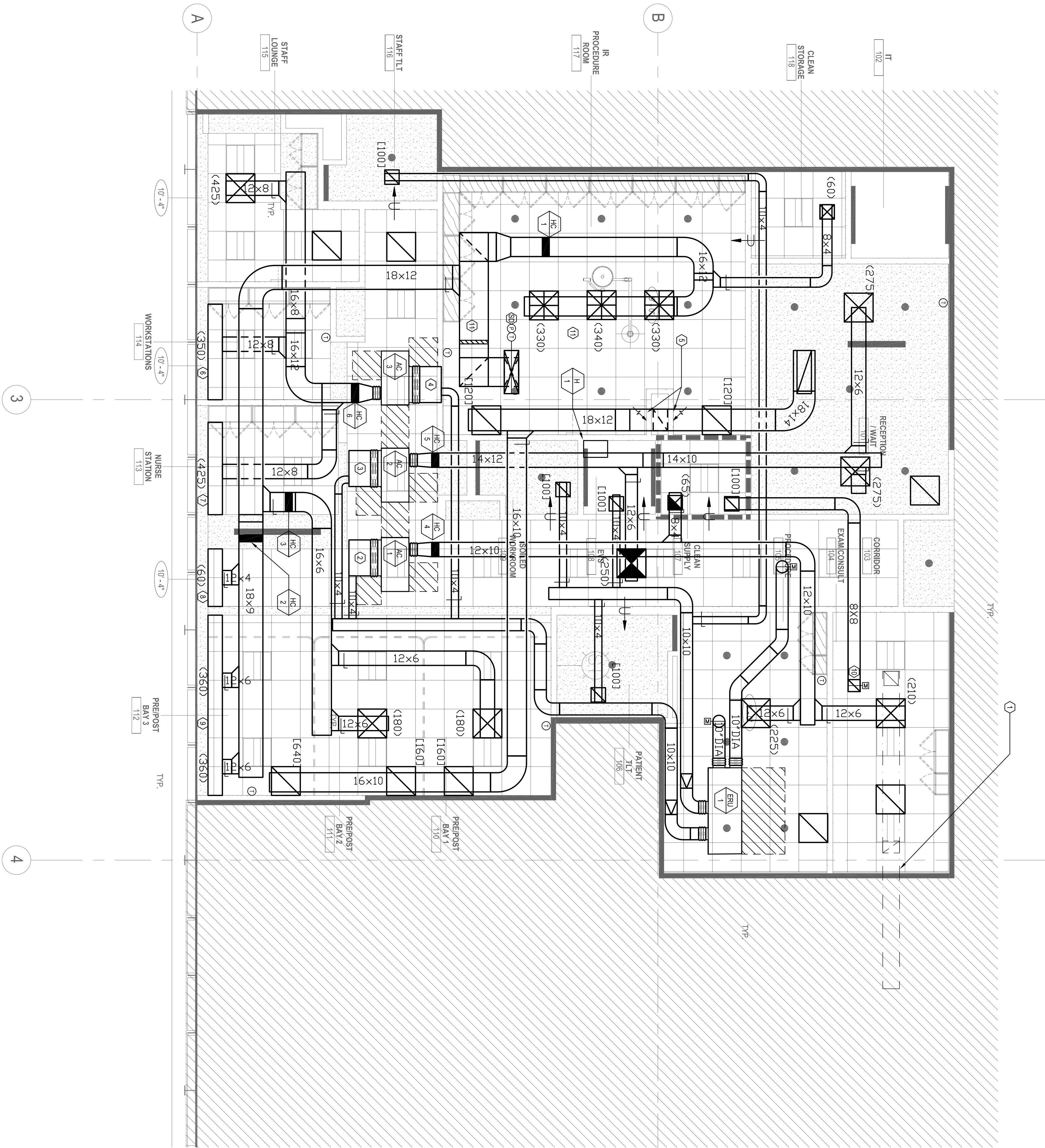
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GENERAL NOTES

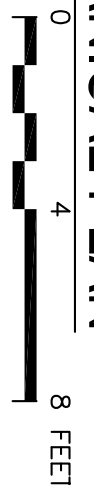
KEY NOTES

- DRAWING NOTES:**
- EXISTING BUILDING TOILET EXHAUST DUCT TO REMAIN. PROVIDE NEW BRANCH DUCTS TO THE NEW TOILETS AS INDICATED.
  - MIXED AIR PLENUM, 30x18x45 WITH TWO OPENINGS ON THE SIDES AT 14X14 WITH WMS IN FACE. PROVIDE ACCESS DOOR FOR FILTER RACK AT UNIT. BALANCE OUTSIDE AIR SUPPLY BRANCH TO 150 CFM.
  - MIXED AIR PLENUM, 30x18x45 WITH TWO OPENINGS ON THE SIDES AT 14X14 WITH WMS IN FACE. PROVIDE ACCESS DOOR FOR FILTER RACK AT UNIT. BALANCE OUTSIDE AIR SUPPLY BRANCH TO 100 CFM.
  - MIXED AIR PLENUM, 30x18x47 WITH TWO OPENINGS ON THE SIDES AT 14X16 WITH WMS IN FACE. PROVIDE ACCESS DOOR FOR FILTER RACK AT UNIT. BALANCE OUTSIDE AIR SUPPLY BRANCH TO 100 CFM.
  - 18X12 DUCT DROP DOWN TO FLOOR. PROVIDE TWO WALL GRILLES WITH CORD OPERATED DAMPERS AT 9-INCHES (MINIMUM) ABOVE THE FLOOR. GRILLES TO BE 14X12. BALANCE BOTH TO 320 CFM.
  - LINEAR DIFFUSER - TITUS MODEL FL-10-JT, JET THROW, 1-1/2 INCH SLOT. TOTAL LENGTH 6'8", ACTIVE LENGTH 6'0". PROVIDE 7'0"x12"xW12" HIGH SUPPLY AIR PLENUM. BALANCE SUPPLY BRANCH TO CFM INDICATED.
  - LINEAR DIFFUSER - TITUS MODEL FL-10-JT, JET THROW, 1-1/2 INCH SLOT. TOTAL LENGTH 6'4", ACTIVE LENGTH 6'0". PROVIDE 7'0"x12"xW12" HIGH SUPPLY AIR PLENUM. BALANCE SUPPLY BRANCH TO CFM INDICATED.
  - LINEAR DIFFUSER - TITUS MODEL FL-10-JT, JET THROW, 1-1/2 INCH SLOT. TOTAL LENGTH 4'0", ACTIVE LENGTH 1'0". PROVIDE 4'0"x12"xW12" HIGH SUPPLY AIR PLENUM. BALANCE SUPPLY BRANCH TO CFM INDICATED.
  - LINEAR DIFFUSER - TITUS MODEL FL-10-JT, JET THROW, 1-1/2 INCH SLOT. TOTAL LENGTH 12'6", PROVIDE TWO ACTIVE SECTIONS OF 6'0". PROVIDE 13'0"x12"xW12" HIGH SUPPLY AIR PLENUM. BALANCE SUPPLY BRANCHES TO CFM INDICATED.
  - GAS STORAGE EXHAUST DUCT WITH MOTORIZED DAMPER UP TO ROOF EXHAUST FAN.
  - STAINLESS STEEL DUCT WITH STEAM DISPERSION TUBE AND BOTTOM DRAIN. MINIMUM LENGTH 48 INCHES. SEE DETAIL.



1 LEVEL 01 MECHANICAL PLAN

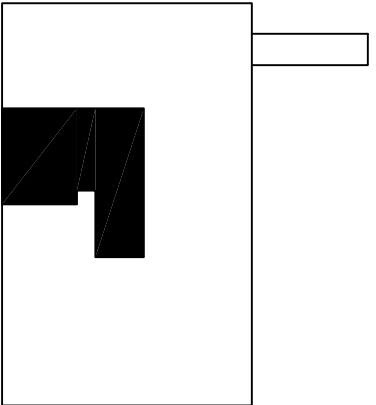
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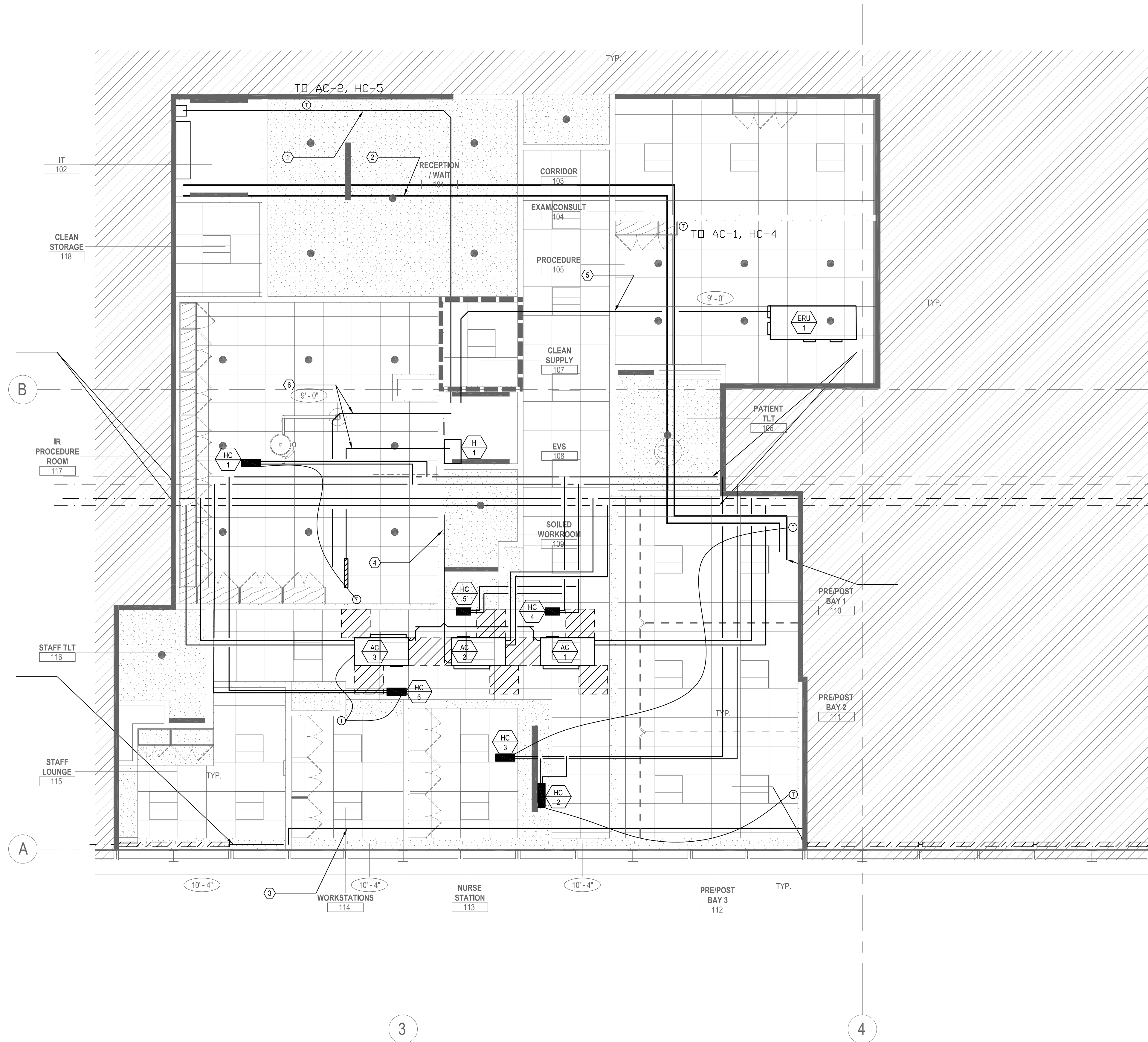
KEY PLAN



Project Name	
INTERVENTIONAL RADIOLOGY - TARRYTOWN	
Project Number	12491.000
Description	MECHANICAL LEVEL 01 NEW DUCTWORK PLAN
Scale	AS NOTED

M-201.00





DRAWING NOTES:

- 1 RUN NEW 3/4-INCH PUMPED CONDENSATE FROM RELOCATED CONDENSATE PUMP TO NEW SLOP SINK.
- 2 RUN NEW REFRIGERANT PIPING FROM EXISTING UNIT LOCATION TO NEW LOCATION. CHARGE CIRCUIT WITH REFRIGERANT AND OIL AS PER MANUFACTURER'S REQUIREMENTS.
- 3 EXTEND NEW 1-1/2-INCH PERIMETER HOT WATER RADIATION PIPING FROM EXISTING FIN TUBE TO NEW WALL. RETAIN EXISTING PIPING ENCLOSURE TO WALL. EXTEND NEW PIPING UP TO CEILING AND ACROSS TO EXISTING PIPING-RADIATION AT THE FLOOR LEVEL.
- 4 RUN 3/4-INCH CONDENSATE DRAIN FROM AC-1, AC-2 AND AC-3 AND SPILL TO SLOP SINK.
- 5 RUN 3/4-INCH CONDENSATE DRAIN FROM ERU-1 AND SPILL TO SLOP SINK.
- 6 RUN 2-INCH INSULATED LOW PRESSURE STEAM PIPE AND 3/4-INCH DRAIN FROM DUCT DISPERSION TUBE AND DUCT DRAIN. CONNECT STEAM TO HUMIDIFIER H-1. SPILL DRAIN TO SLOP SINK

GENERAL NOTES

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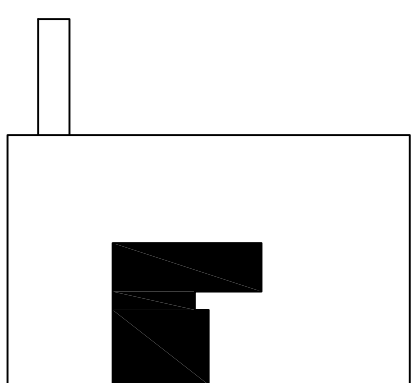
Date	Description
10.04.21	ISSUE FOR BID
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Project Name	
INTERVENTIONAL RADIOLOGY - TARRYTOWN	
Project Number	
12491.000	
Description	
MECHANICAL LEVEL 01 NEW PIPING PLAN	
Scale	
AS NOTED	

M-202.00

1 LEVEL 01 MECHANICAL PLAN - ALTERNATE  
SCALE: 1/4" = 1'-0"  
0 4 8 FEET

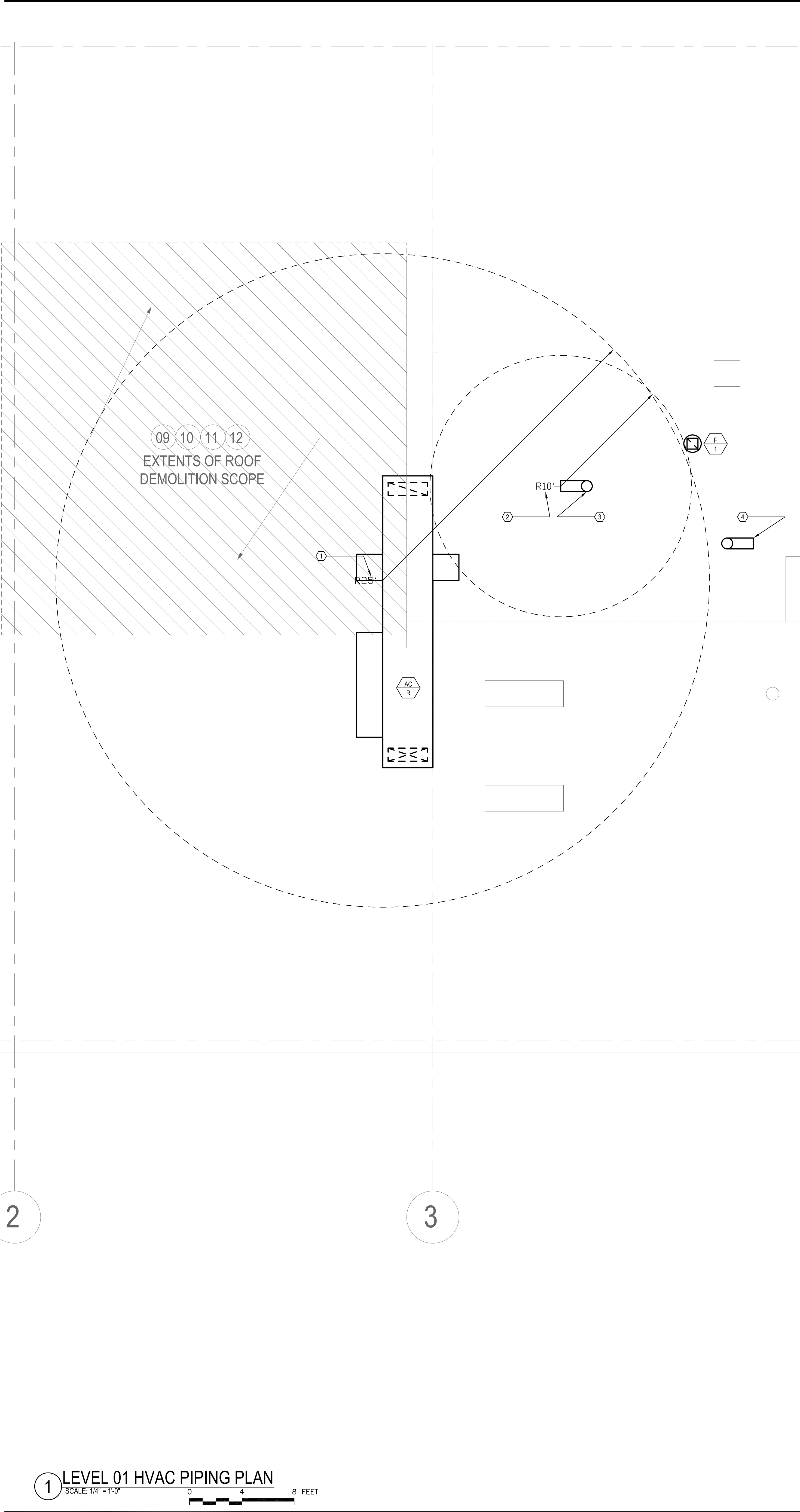
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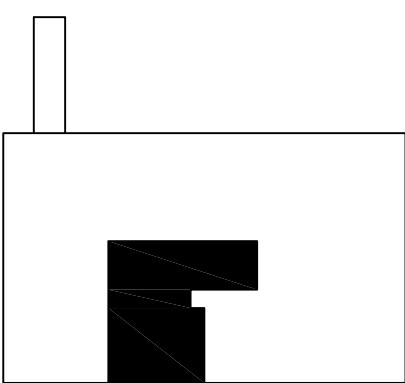
DRAWING NOTES:

- ①
- MINIMUM 25-FOOT CLEARANCE FROM OUTSIDE AIR INTAKE OF AC-R TO ANY EXHAUST AIR SOURCE.
- ②
- MINIMUM OF 10-FOOT CLEARANCE BETWEEN OUTSIDE AIR INTAKE TO ERU-1 AND THE DISCHARGE FROM ERU-1
- ③
- OUTSIDE AIR INTAKE GOOSENECK WITH WMS IN FACE, 10-INCH DIAMETER TO ERU-1
- ④
- SPILL AIR DISCHARGE GOOSENECK WITH WMS IN FACE, 10-INCH DIAMETER FROM ERU-1

GENERAL NOTES

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Project Name  
INTERVENTIONAL RADIOLOGY - TARRYTOWN

Project Number  
12491.000

Description  
MECHANICAL ROOF PLAN

Scale  
AS NOTED

M-203.00



SC			SELF CONTAINED AIR CONDITIONING UNIT SCHEDULE (AIR COOLED)																							BASIS OF DESIGN: AIR WISE								
UNIT NO.	LOCATION	AREA SERVED	COMPRESSOR DATA		SUPPLY FAN DATA						EVAPORATOR COIL DATA						CONDENSER DATA						FILTER DATA			ELECTRICAL DATA					MODEL No.	MEA No.	REMARKS	
			NO. OF COMP.	HP (EA.)	TOTAL CFM	MIN. O.A. CFM	OUTLET VEL. (FPM)	TOTAL S.P. (N.W.G.)	MIN. EXT. S.P. (N.W.G.)	FAN RPM	MOTOR HP	ENT. DB (°F)	ENT. WB (°F)	LVG. DB (°F)	LVG. WB (°F)	MAX. FACE VEL. (FPM)	MIN. ROWS DEEP	OUT-DOOR DESIGN DB (°F)	No. OF FAN	MAX. COND. TEMP. (°F)	TOTAL CFM	FAN RPM	EXT. S.P. (N.W.G.)	MOTOR HP (EACH)	TYPE	IN. THICK	FACE VEL. (FPM)	VOLT/ PH	FLA	MCA				MFS
AC-R	ROOF	IR – RECOV.	1	–	2200	400	1100	4.88	2.0	3105	5	80	67	50.0	49.6	406	6	95	–	120	–	–	–	–	MERV	2	400	208-3	70.1	70.1	80	–	–	SEE NOTES
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

- NOTES:
1. PROVIDE UNIT WITH ECM SUPPLY AND RETURN FAN MOTORS, RETURN FAN TO BE 1800 CFM, 1.0 ESP, 1.9 TSP, 1.5 HP, 1770 RPM
  2. UNITS TO HAVE BACNET COMPATIBLE DDC CONTROLS, MIXED AIR AND SUPPLY AIR THERMOSTATS DISCHARGE AIR SP SENSOR FOR THE SUPPLY AIR FAN CONTROL, AND AIR FLOW SWITCH.
  3. UNIT INLET AND DISCHARGE ARRANGEMENTS ARE TO BE COORDINATED AND CONFIRMED WITH APPROVED SHEETMETAL SHOP DRAWINGS.
  4. UNIT TO HAVE MERV8 PREFILTERS, MERV14 POST FILTERS.
  5. UNIT IS TO HAVE 2-INCH INSULATION AND DOUBLE WALL CONSTRUCTION. UNIT IS TO BE MOUNTED ON A SINGLE SKID AND IS TO BE WEATHERPROOF FOR ROOF MOUNTING.
  6. UNIT IS TO HAVE SINGLE POINT ELECTRICAL CONNECTION AND A 120V OUTLET FOR SERVICING.

SC			SELF CONTAINED AIR CONDITIONING UNIT (WATER COOLED)																							BASIS OF DESIGN: WATER FURNACE						
UNIT NO.	LOCATION	AREA SERVED	COMPRESSOR DATA		SUPPLY FAN DATA						EVAPORATOR COIL DATA						CONDENSER DATA				FILTER DATA			ELECTRICAL DATA				MODEL No.	EER COOLING	REMARKS		
			NO. OF COMP.	HP (EA.)	TOTAL CFM	MIN. O.A. CFM	OUTLET VEL. (FPM)	TOTAL S.P. (N.W.G.)	MIN. EXT. S.P. (N.W.G.)	FAN RPM	MOTOR HP	ENT. DB (°F)	ENT. WB (°F)	LVG. DB (°F)	MBH SENS. (MBH)	MBH TOTAL (MBH)	MIN. ROWS DEEP	GPM	TEMP °F		MAX. P.D. (FT.)	FOULING FACTOR	TYPE	IN. THICK	FACE VEL. (FPM)	VOLT/ PH	FLA				MCA	MOCP
																			ENT.	LVG.												
AC-1	CORR. CLG	RM 104 - 109	1	—	500	150	720	—	1.0	—	0.5	81	66	55.4	13.81	21.62	—	5.0	85	95.72	6.7	—	MERV8	2	180	208-3	17.5	20.9	30	VERSA-023	15.0	—
AC-2	CORR. CLG	RM 101 - 103	1	—	800	100	1150	—	1.0	—	0.5	77	64	58.3	16.14	22.78	—	5.5	85	95.29	7.6	—	MERV8	2	288	208-3	17.5	20.9	30	VERSA-023	15.0	—
AC-3	CORR CLG.	RM 113 - 116	1	—	1200	100	1450	—	1.0	—	0.5	76.7	64	5.4	28.25	34.99	—	8.5	85	95.16	9.4	—	MERV8	2	675	208-3	21.3	20.9	40	VERSA-036	15.0	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

- NOTES:
1. PROVIDE UNIT WITH ECM SUPPLY FAN MOTOR.
  2. UNITS TO HAVE BACNET COMPATIBLE DDC CONTROLS, MIXED AIR AND SUPPLY AIR THERMOSTATS AND AIR FLOW SWITCH.
  3. UNIT INLET AND DISCHARGE ARRANGEMENTS ARE TO BE COORDINATED AND CONFIRMED WITH APPROVED SHEETMETAL SHOP DRAWINGS.

RHC/HC/HRC/PHC			HEATING COIL SCHEDULE (HOT WATER)													MFG: GREENHECK		
COIL NO.	EQUIPMENT OR SYSTEM SERVED	AIR DATA					FLUID DATA					COIL DATA		ARRANGEMENT		REMARKS		
		CFM	FACE VELOC. (FPM)	D.B. TEMP. (°F)		P.D. (N.W.G.)	FLUID TYPE	GPM	TEMP. (°F)		P.D. (FT)	MIN. ROWS DEEP	NOMINAL SIZE (IN.) F.W. X F.L.	TOTAL NO. OF COILS	NO. OF COILS HI X WIDE			
				ENT.	LVG.				ENT.	LVG.								
HC-1	AC-R, IR RM	1060	763	55	79.7	0.10	WTR	2.9	180	160	6.8	1	12.5 X 16	1	1	—		
HC-2	AC-R, REC. #3	780	624	55	94.3	0.12	WTR	3.4	180	160	8.4	1	10 X 18	1	1	—		
HC-3	AC-R, REC. #1,2	360	648	55	88.6	0.15	WTR	1.3	180	160	0.3	1	5 X 16	1	1	—		
HC-4	AC-1	500	600	55	90.6	0.10	WTR	2.0	180	160	3.0	1	10 X 12	1	1	—		
HC-5	AC-2	800	658	55	84.6	0.14	WTR	2.6	180	160	0.2	1	12.5 X 14	1	1	—		
HC-6	AC-3	1200	864	55	88.4	0.21	WTR	4.4	180	160	4.4	2	12.5 X 16	1	1	—		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

- ERV-1 SCHEDULE:
1. UNIT TO BE AN ALPHA-AIR MODEL AAH100G1ASTA6.
  2. UNIT TO GE 208V-3PH, 9.3 MCA, 15 MOCP, WITH 1 COMPRESSOR, 1 SUPPLY FAN AND 1 RETURN FAN.
  3. UNIT SHALL BE 350 CFM OUTSIDE AIR AT 1.0 ESP, 400 CFM RETURN AIR AT 1.0 ESP.
  4. UNIT IS TO BE 1.8 MBH(3) / 26.4 MBH(T) WITH AN ISMER OF 11:1.
  5. UNIT IS TO HAVE 2-INCH MERV 13 FILTERS ON THE OUTSIDE AIR, MERV 8 FILTERS ON THE RETURN AIR.
  6. UNIT IS TO HAVE SINGLE POINT ELECTRICAL CONNECTION, NON-FUSED DISCONNECT AND SHALL HAVE DDC CONTROLS WITH BACNET CAPABILITY.
  7. UNIT SHALL HAVE SEALED INTERNAL INSULATION.

SH			STEAM HUMIDIFIER SCHEDULE							BASIS OF DESIGN: NEPTRONIC		
UNIT NO.	LOCATION	AREA OR SYSTEM SERVED	AIR DATA				STEAM DATA		DUCT SIZE W x H (IN.)	NO. OF MANIF.	MODEL No.	REMARKS
			TOTAL CFM	MOISTURE CONTENT GR/LB DRY AIR		TOTAL LBS/HR	INLET PRESS. (PSIG)					
				ENT.	LVG.							
H-1	JAN. CL.	IR, RECOV.	2200	26	38	17	5	24X12	11	SKE4-N06M	SEE NOTES	
-	-	-	-	-	-	-	-	-	-	-	-	

- NOTES:
1. PROVIDE UNIT WITH STEAM GENERATING, MODULATING HUMIDIFIER - 208V, 3PH, 16.5 FLA.
  2. UNIT TO HAVE BACNET COMPATIBLE DDC CONTROLS, DUCT MOUNTED HIGH AND LOW LIMIT HUMIDISTAT, ROOM MOUNTED HUMIDISTAT, AND AIR FLOW SWITCH.
  3. PROVIDE UNIT WITH LO-HOSE 1-3/8 NF, SCH80, NF SHS80, AND SW APS ACCESSORIES.
  4. PROVIDE UNIT WITH MF SAM-AE2 STEAM DISPERSION MANIFOLD.
  5. UNIT TO BE INTERLOCKED WITH ROOFTOP AIR CONDITIONING UNIT AC-R.

SF - SUPPLY FAN EF - EXHAUST FAN			FAN SCHEDULE										BASIS OF DESIGN: GREENHECK			
UNIT NO.	LOCATION	AREA OR SYSTEM SERVED	FAN TYPE	CFM	TSP	FAN RPM	DRIVE	MOTOR DATA			WEIGHT (LBS)	MODEL NO.	REMARKS			
								BHP	HP	V/PH						
F-1	ROOF	MED-GAS / CLEAN STORAGE	MUSHROOM	100	0.375	999	BELT	0.04	0.167	120-1	100	GB-097	SEE NOTE			

- NOTES: PROVIDE UNIT WITH SPARK-PROOF CONSTRUCTION, EXPLOSION PROOF MOTOR, ROOF CURB, MANUAL MOTOR STARTER WITH OVERLOADS, INTERLOCK FAN WITH MOTORIZED DAMPERS, FAN TO RUN CONTINUOUSLY.

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KEY NOTES

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Project Name  
INTERVENTIONAL  
RADIOLOGY - TARRYTOWN

Project Number

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Description

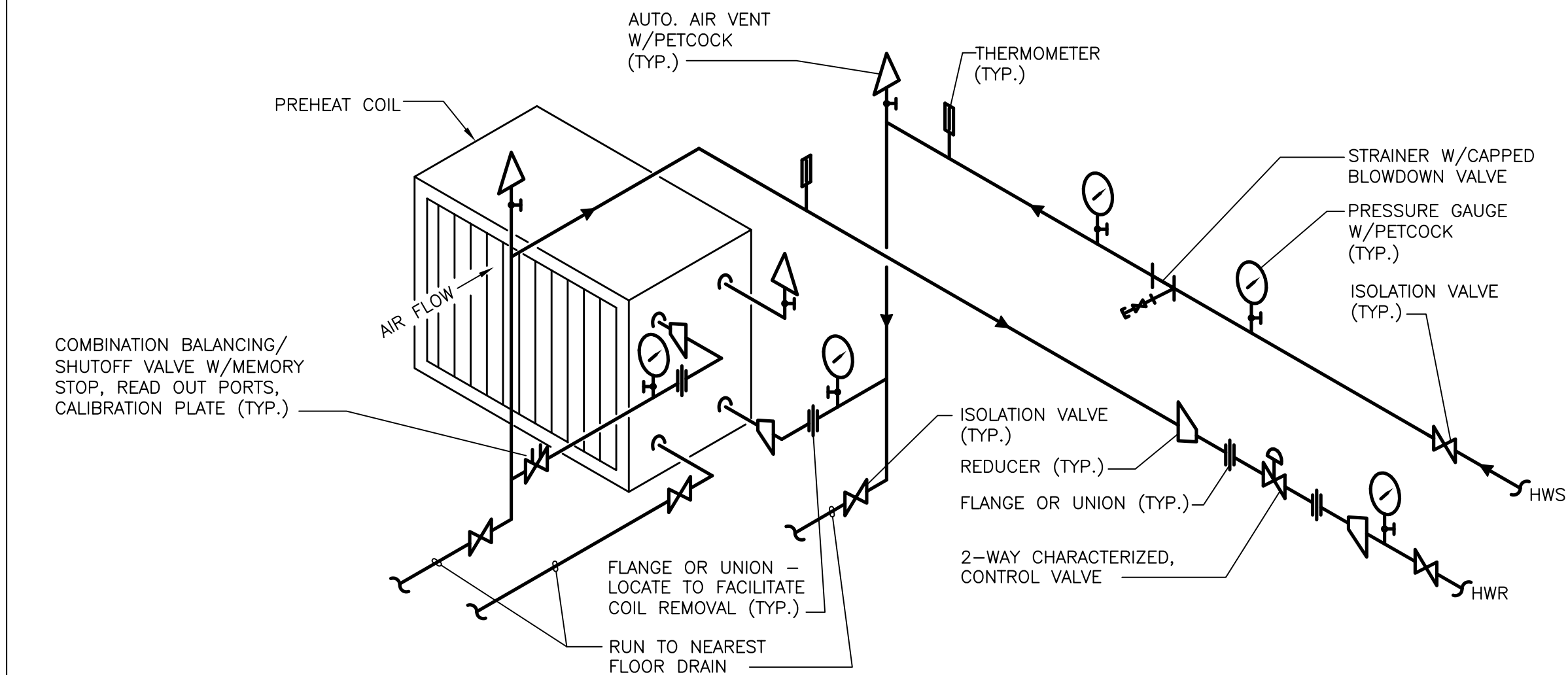
MECHANICAL  
SCHEDULES

Scale

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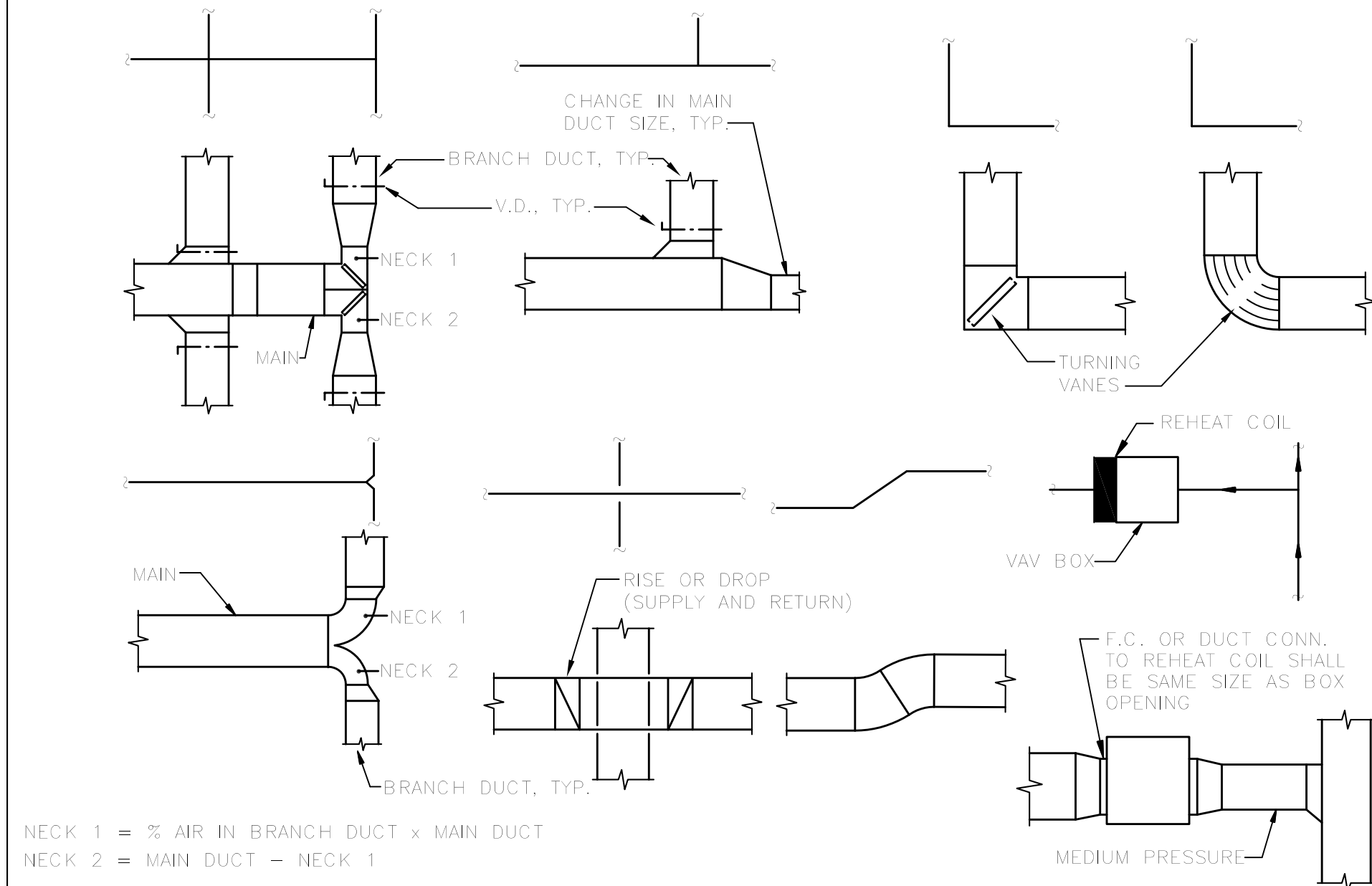


SINGLE COIL

NOTES:  
1. PIPING SHALL NOT INTERFERE WITH COIL PULL SPACE.  
2. REFER TO SPECIFICATIONS FOR VALVE TYPES.

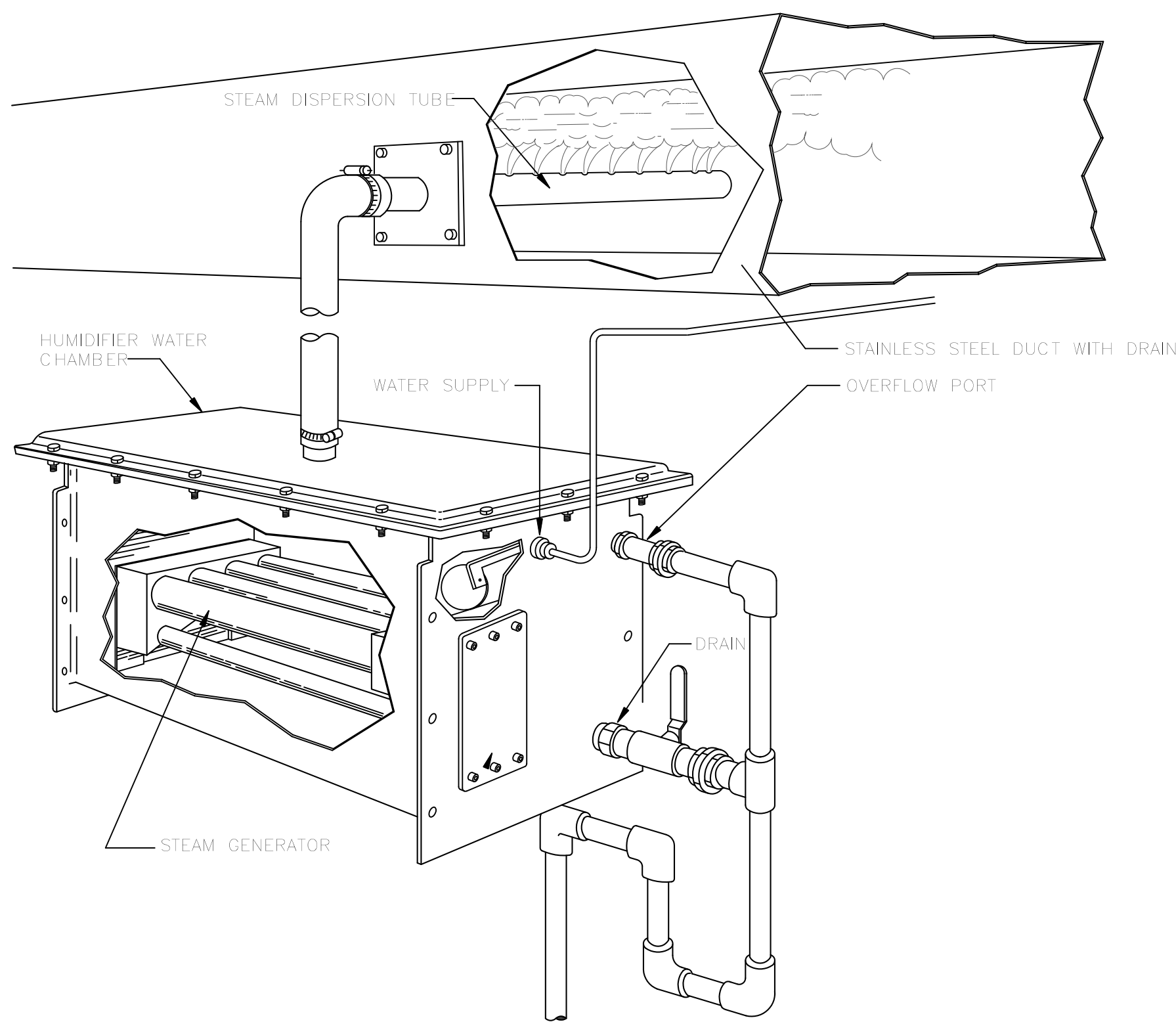
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(NOT TO SCALE)

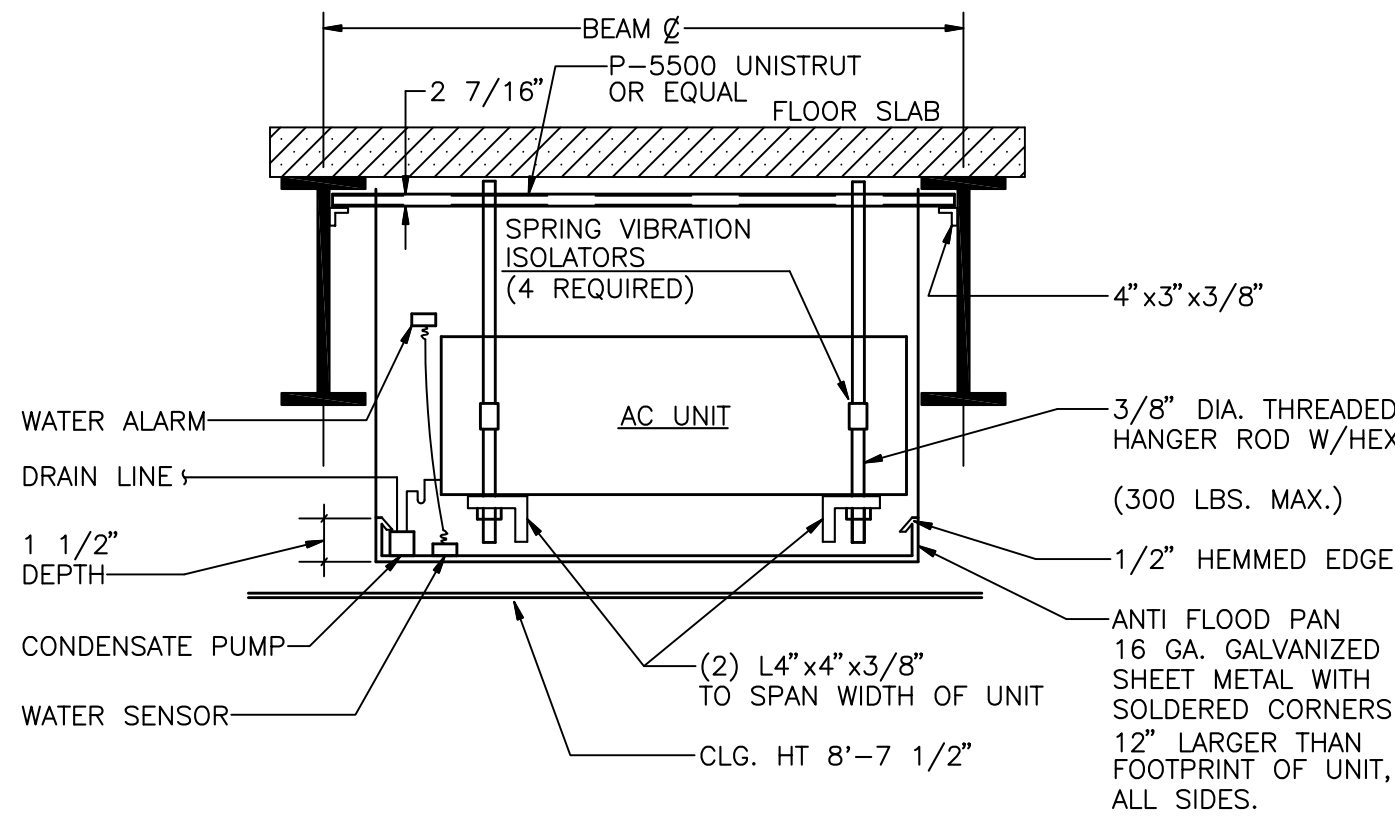


TYPICAL SINGLE LINE DUCT STANDARDS

NO SCALE



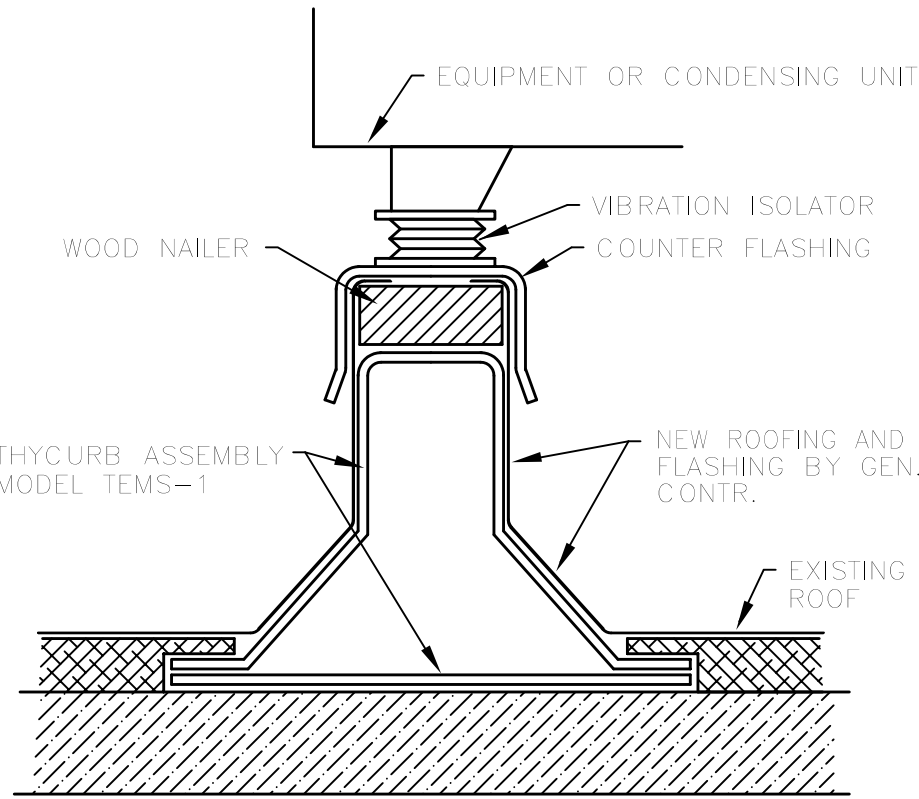
HUMIDIFER - DETAIL



NOTE:  
THERMOSTAT LOCATION SHALL BE IN A.C. UNIT R.A. DUCT.

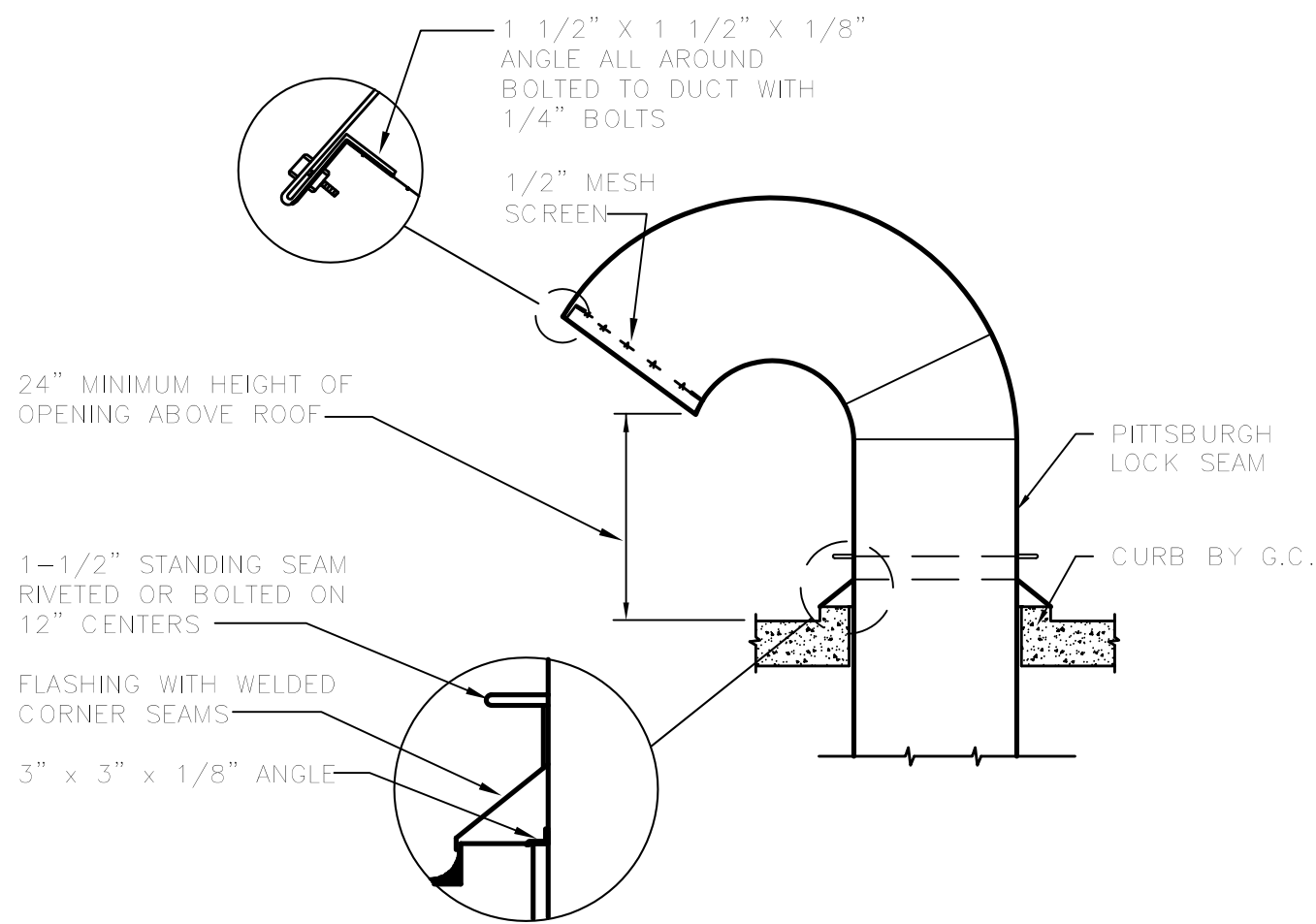
### HANGING SUPPORT DETAIL AIR CONDITIONING UNIT

NO SCALE



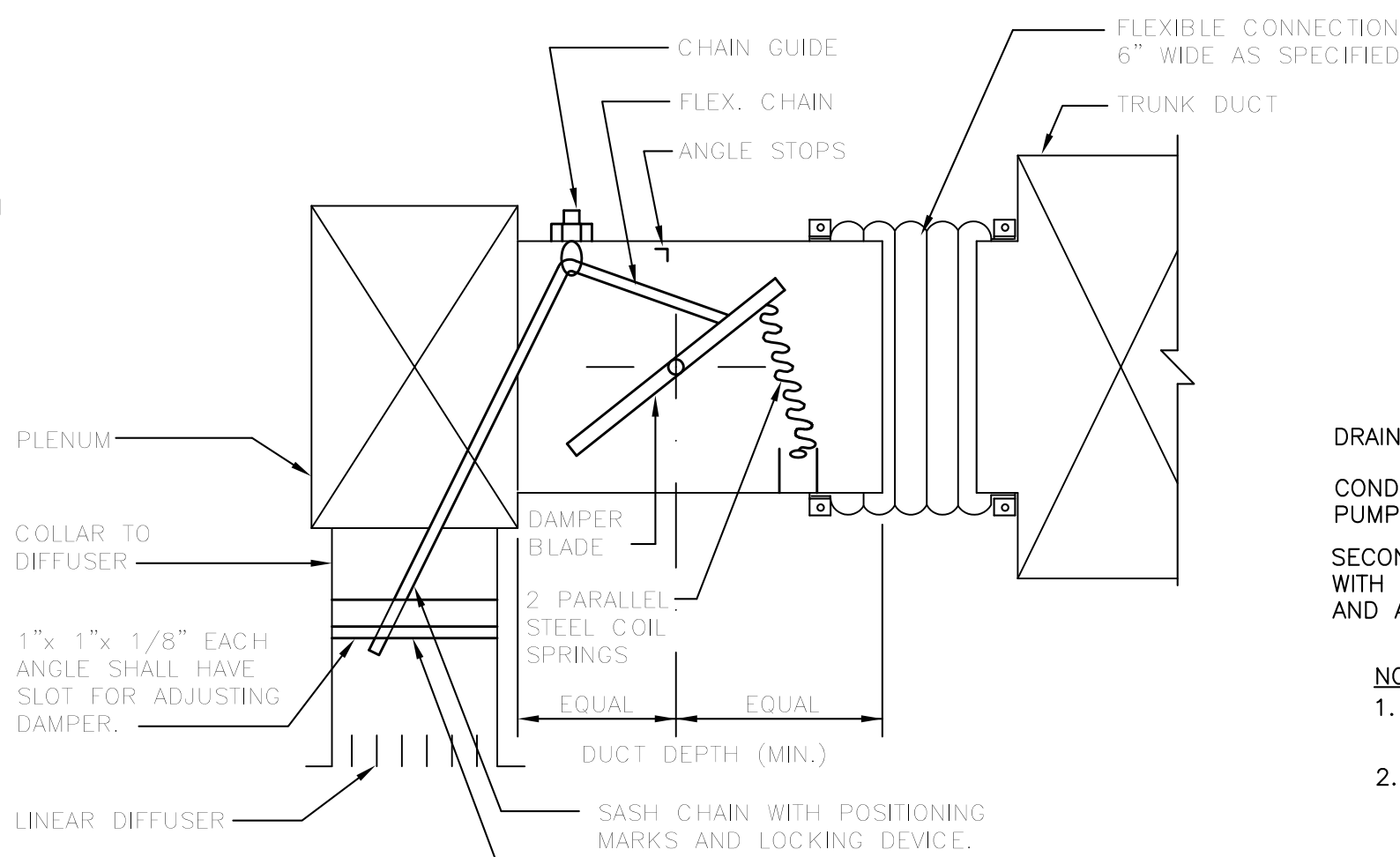
### EQUIPMENT SUPPORT CURB DETAIL

NOT TO SCALE



GOOSENECK DETAILS

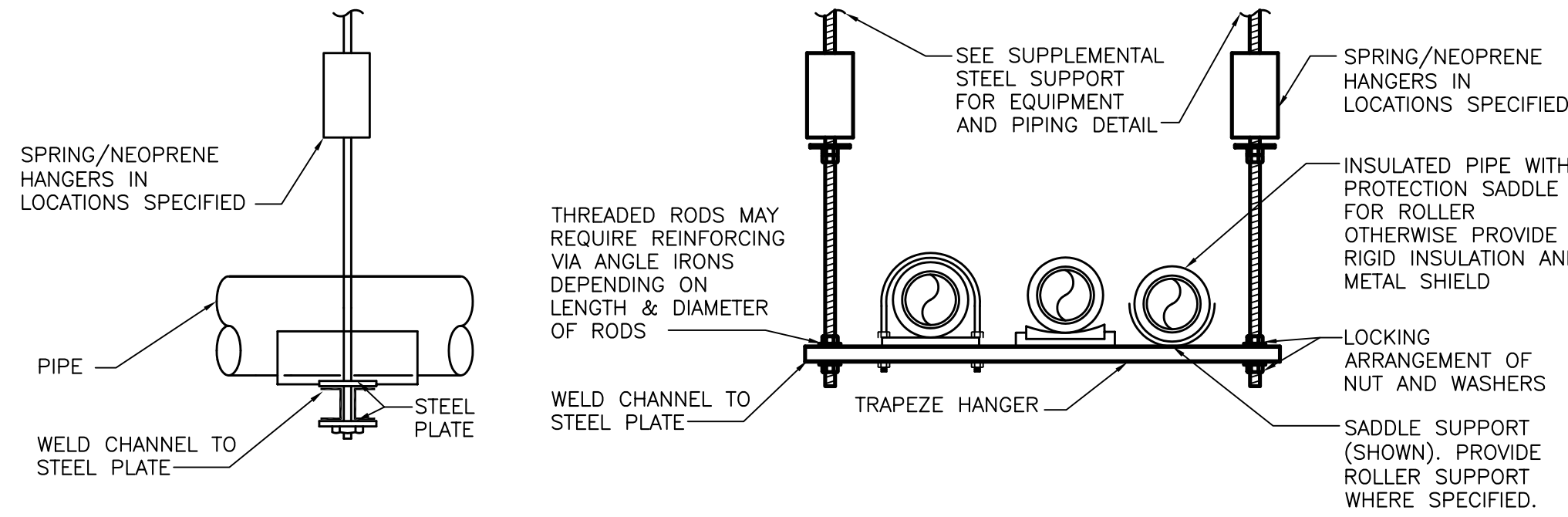
NOT TO SCALE



NOTE:  
FOR ACCESSIBLE CEILINGS, STANDARD VOLUME DAMPER (ROUND OR SQUARE WITH POSITION INDICATING QUADRANT) MAY BE PROVIDED.

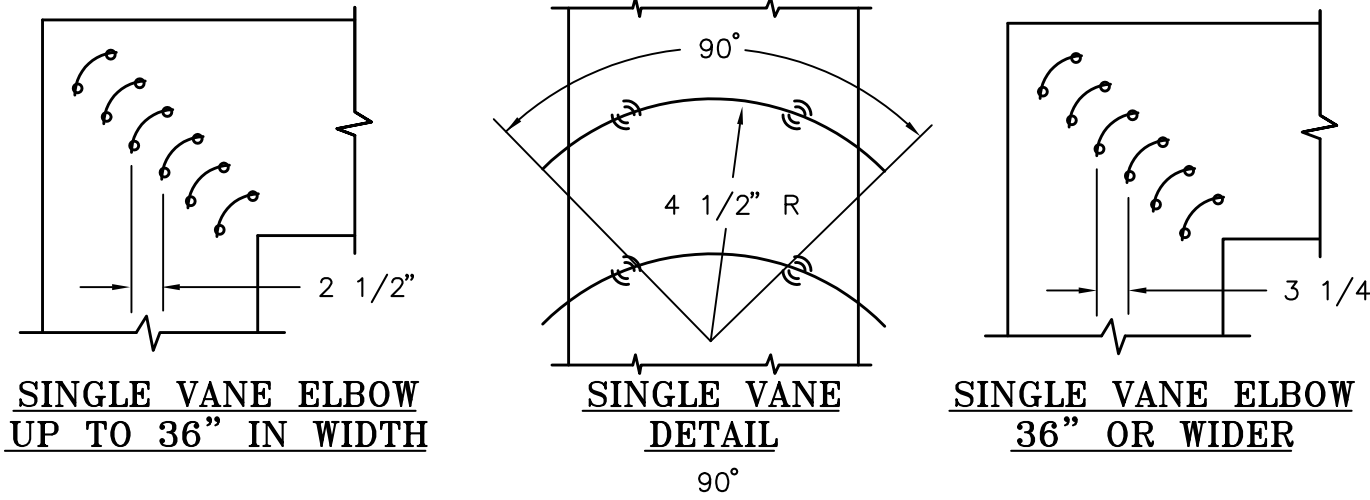
### REMOTE CONTROL VOLUME DAMPER FOR LINEAR DIFFUSERS

NOT TO SCALE



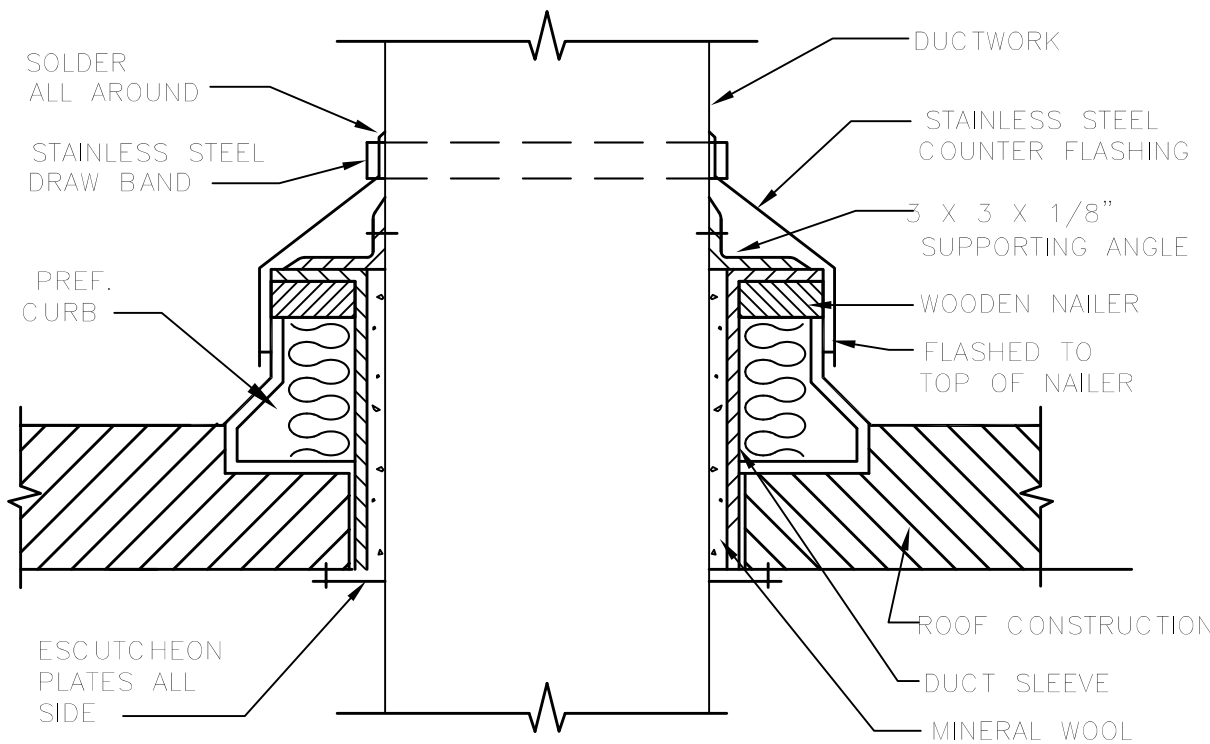
### PIPING SUPPORTED ON TRAPEZE HANGER

(NOT TO SCALE)



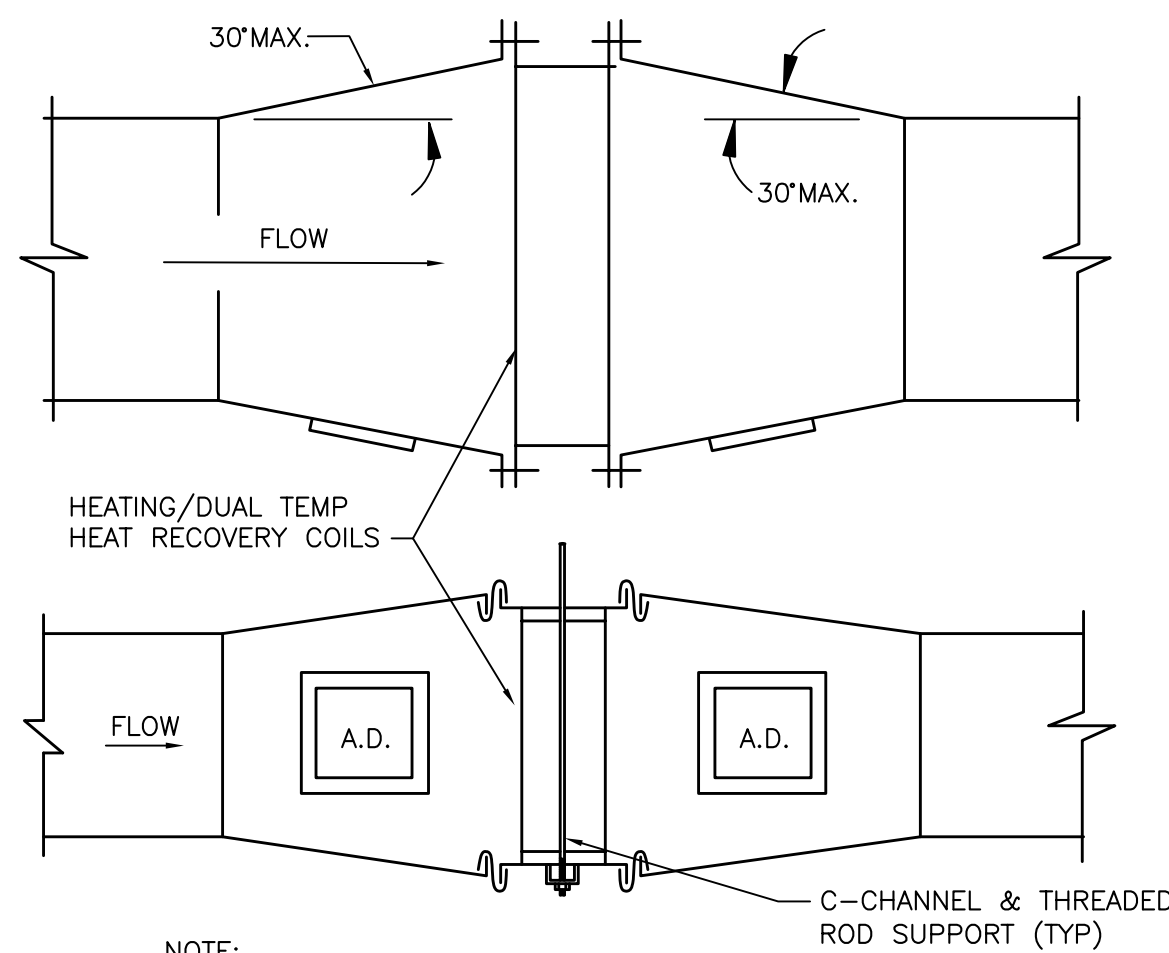
### LOW VELOCITY DUCTWORK ELBOWS

NOT TO SCALE



### DUCT PENETRATION DETAIL THROUGH ROOF

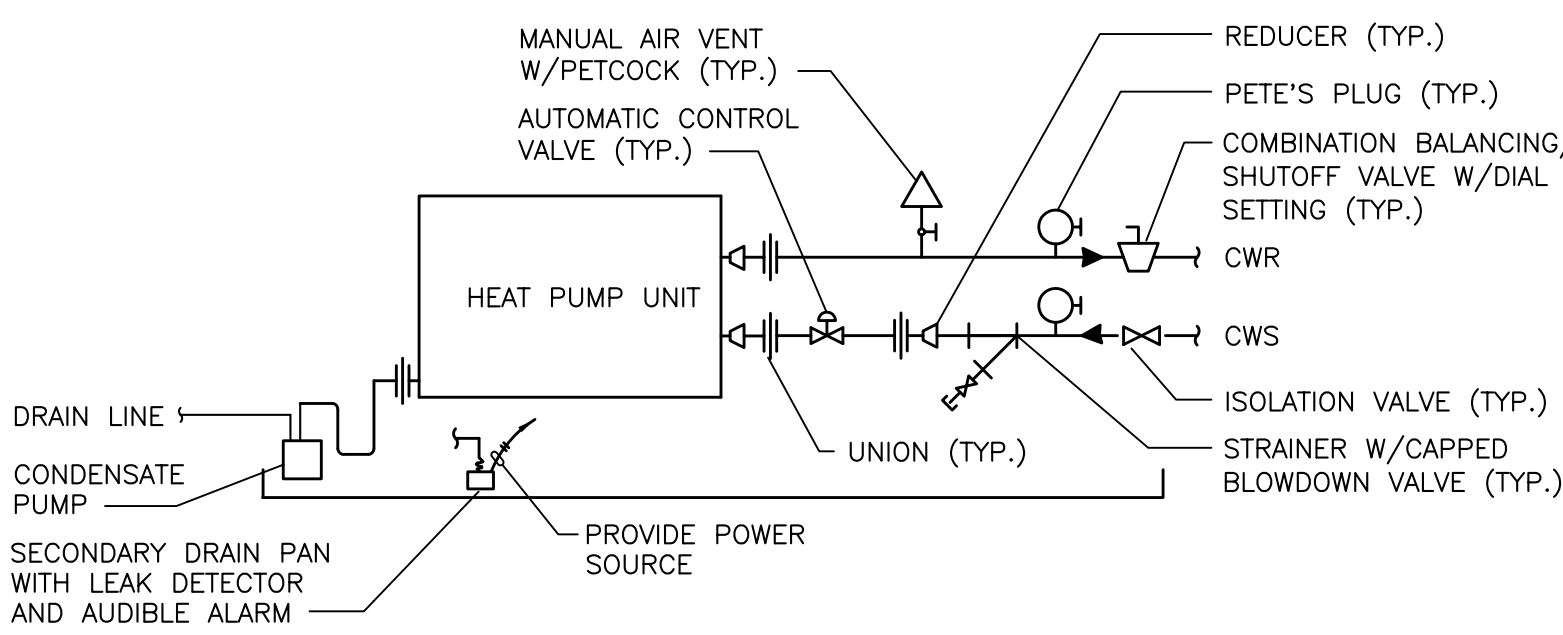
(NOT TO SCALE)



### DUCT MOUNTED COIL DETAIL

(NOT TO SCALE)

NOTE:  
1. COILS SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE  
2. DUCTWORK CONSTRUCTION PER SPECIFICATIONS



NOTES:  
1. SEE AIR CONDITIONING UNIT SUPPORT DETAIL & SUPPLEMENTAL STEEL SUPPORT EQUIPMENT DETAIL FOR ADDITIONAL INFORMATION.  
2. PROVIDE CONDENSATE PUMP FOR EACH. PIPING A/C CONDENSATE DRAIN LINE TO CONDENSATE PUMP. PIPE CONDENSATE PUMP TO DRAIN. REFER TO PLANS FOR ADDITIONAL INFORMATION.

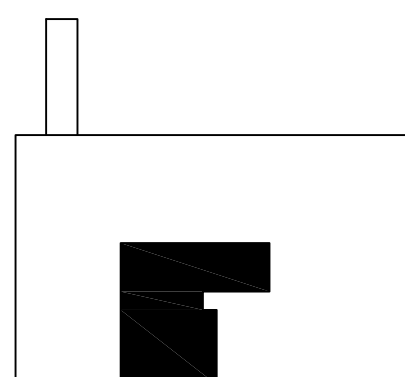
### CEILING MOUNTED HEATPUMP PIPING DETAIL

(NOT TO SCALE)

## GENERAL NOTES

## KEY NOTES

## KEY PLAN



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Date	Description
10.04.21	ISSUE FOR BID

Seal / Signature

Project Name  
**INTERVENTIONAL RADIOLOGY - TARRYTOWN**

Project Number

12491.000

Description

MECHANICAL

DETAILS

Scale

AS NOTED

**M-400.00**

THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB NOW JOB#