

Drawing Name: S:\Projects\Ossining UFSD\OHS 3rd Fl Connector\Design\06 CAD\AutoCAD\MECH\H001.dwg  
Date last accessed: 11/15/2021 2:57 PM  
Date last plotted: 11/15/2021 3:16 PM  
Plotted By: Brandon Mazza

HVAC SYMBOLS LIST											
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AAD	AUTOMATIC AIR DAMPER		CONNECTION - TOP		DOUBLE WALL LINED DUCT		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		ELECTRIC/PNEUMATIC SWITCH OR RELAY		
ACC	AIR-COOLED CONDENSING UNIT		CONNECTION - BOTTOM		DUCT SECTION - SUPPLY		DUCT SECTION - RETURN/EXHAUST		PNEUMATIC/ELECTRIC SWITCH OR RELAY		
AD	ACCESS DOOR		DIRECTION OF FLOW		DUCT SECTION - ROUND DUCT IN INCHES		OPEN/CLOSED		START/STOP		
AFF	ABOVE FINISHED FLOOR		REDUCER		ACOUSTIC THERMAL LINING		ENABLE/DISABLE		TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)		
AHU	AIR HANDLING UNIT		CAP OR PLUG		FLEXIBLE DUCTWORK		HUMIDITY SENSOR (DUCT MOUNTED)		FLOW TRANSMITTER		
BBD	BOILER BLOW DOWN		TEE OUTLET - UP		FLEXIBLE CONNECTION		PRESSURE TRANSMITTER		DIFFERENTIAL PRESSURE TRANSMITTER		
BD	BACKDRAFT DAMPER		TEE OUTLET - DOWN		FIRE DAMPER		ELECTRIC/PNEUMATIC TRANSDUCER		ELECTRIC/ELECTRONIC TRANSDUCER		
CA	COMPRESSED AIR		GATE VALVE		SMOKE DAMPER		DUCT SMOKE DETECTOR		SPACE THERMOSTAT		
CD	COOLING COIL CONDENSATE DRAIN		BALL VALVE		COMBINATION FIRE AND SMOKE DAMPER		SPACE TEMPERATURE SENSOR		SPACE CARBON DIOXIDE SENSOR		
CFM	CUBIC FEET PER MINUTE		BALANCING VALVE		VOLUME DAMPER		SPACE NATURAL GAS SENSOR		SPACE CARBON MONOXIDE SENSOR		
CHWR	CHILLED WATER RETURN		STRAINER		DAMPER CONTROL PARALLEL BLADE		SPACE SENSOR WITH GUARD		SPACE HUMIDISTAT		
CHWS	CHILLED WATER SUPPLY		BUTTERFLY VALVE		DAMPER CONTROL OPPOSED BLADE		WATER FLOW SENSOR		PNEUMATIC ACTUATOR		
CR	CONDENSER WATER RETURN		UNION		AUTOMATIC AIR DAMPER		ELECTRIC ACTUATOR		VARIABLE SPEED / FREQUENCY DRIVE		
CS	CONDENSER WATER SUPPLY		GATE VALVE		BACK DRAFT DAMPER		COOLING COIL		HEATING COIL		
CW	DOMESTIC COLD WATER		BALL VALVE		BLAST GATE		GAS FURNACE		HUMIDIFIER		
D	DRAIN		BALANCING VALVE		AIR DUCT (FIRST FIGURE IS DUCT WIDTH/TOP, SECOND FIGURE IS DUCT DEPTH)		ALARM		STATUS		
(E)	EXISTING		STRAINER		MULTI-BLADE AIR EXTRACTOR		FLOW SWITCH		DIFFERENTIAL STATIC PRESSURE SWITCH		
EA	EXHAUST AIR		BUTTERFLY VALVE		TURNING VANES		RELAY		PRESSURE GAUGE		
EC	ELECTRICAL CONTRACTOR		BUTTERFLY VALVE		EXISTING WORK TO BE REMOVED (HATCHED)		FREEZE-STAT		DIGITAL INPUT (TO BUILDING MANAGEMENT SYSTEM)		
EF	EXHAUST FAN		BUTTERFLY VALVE		POINT OF CONNECTION		DIGITAL OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)		ANALOG OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)		
ERHC	ELECTRIC REHEAT COIL		BUTTERFLY VALVE		POINT OF DISCONNECTION		ANALOG INPUT (TO BUILDING MANAGEMENT SYSTEM)		ELECTRICAL INTERFACE		
ETR	EXISTING TO REMAIN		BUTTERFLY VALVE		AIR FLOW SENSOR		SPEED FEED BACK		END SWITCH		
EUH	ELECTRIC UNIT HEATER		BUTTERFLY VALVE		FILTER		POSITION FEEDBACK		TRAVERSE AVERAGING SENSOR		
F&T	FLOAT AND THERMOSTATIC TRAP		BUTTERFLY VALVE		TRANSITION SQUARE TO ROUND		PROBE SENSOR		FREEZE STAT SENSOR		
FCU	FAN-COIL UNIT		BUTTERFLY VALVE		HUMIDIFIER DISPERSION TUBE						
FFM	FEET PER MINUTE		BUTTERFLY VALVE		RISE IN DUCT						
FT	FIN-TUBE		BUTTERFLY VALVE		DROP IN DUCT						
GC	GENERAL CONTRACTOR		BUTTERFLY VALVE		SQUARE CEILING DIFFUSER (4 WAY)						
GR	GLYCOL RETURN		BUTTERFLY VALVE		ROUND CEILING DIFFUSER						
GS	GLYCOL SUPPLY		BUTTERFLY VALVE		SQUARE OR RECTANGULAR CEILING GRILLE						
HC	HVAC CONTRACTOR		BUTTERFLY VALVE		SUPPLY REGISTER, RETURN OR EXHAUST GRILLE						
HHWR	HEATING HOT WATER RETURN		BUTTERFLY VALVE		SUPPLY DIFFUSER, 1-WAY, 2-WAY, 3-WAY						
HHWS	HEATING HOT WATER SUPPLY		BUTTERFLY VALVE		CEILING DIFFUSER WITH NECK SIZE, TYPE, & CFM						
HP	HEAT PUMP		BUTTERFLY VALVE		CEILING RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM						
HPC	HIGH PRESSURE CONDENSATE		BUTTERFLY VALVE		SUPPLY REGISTER WITH SIZE, TYPE, & CFM						
HPS	HIGH PRESSURE STEAM		BUTTERFLY VALVE		RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM						
LF	LINEAR FOOTAGE OF FIN-TUBE RADIATION		BUTTERFLY VALVE		AIR FLOW						
LPC	LOW PRESSURE CONDENSATE		BUTTERFLY VALVE		ACOUSTIC/THERMAL DUCTWORK LINING - 1 INCH THICK						
LPG	LIQUEFIED PROPANE GAS		BUTTERFLY VALVE		ACOUSTIC/THERMAL DUCTWORK LINING - 2 INCH THICK						
LPS	LOW PRESSURE STEAM		BUTTERFLY VALVE		ACOUSTIC/THERMAL DUCTWORK PLENUM LINING - 1 INCH THICK						
MBH	1,000 BTU/HR		BUTTERFLY VALVE		ACOUSTIC/THERMAL DUCTWORK PLENUM LINING - 2 INCH THICK						
MC	MECHANICAL CONTRACTOR		BUTTERFLY VALVE		WALL TO WALL FIN TUBE ENCLOSURE						
MPC	MEDIUM PRESSURE CONDENSATE		BUTTERFLY VALVE								
MPS	MEDIUM PRESSURE STEAM		BUTTERFLY VALVE								
MRD	MONOFLO FITTING DOWN - HHWR		BUTTERFLY VALVE								
MSD	MONOFLO FITTING DOWN - HHWS		BUTTERFLY VALVE								
MUW	MAKE-UP WATER		BUTTERFLY VALVE								
NC	NORMALLY CLOSED		BUTTERFLY VALVE								
NG	NATURAL GAS		BUTTERFLY VALVE								
NO	NORMALLY OPEN		BUTTERFLY VALVE								
NTS	NOT TO SCALE		BUTTERFLY VALVE								
OA	OUTSIDE AIR		BUTTERFLY VALVE								
PC	PLUMBING CONTRACTOR		BUTTERFLY VALVE								
PD	PUMP DISCHARGE		BUTTERFLY VALVE								
PHWR	PRIMARY HEATING HOT WATER RETURN		BUTTERFLY VALVE								
PHWS	PRIMARY HEATING HOT WATER SUPPLY		BUTTERFLY VALVE								
RA	RETURN AIR		BUTTERFLY VALVE								
RD	REFRIGERANT DISCHARGE		BUTTERFLY VALVE								
RHC	HOT WATER REHEAT COIL		BUTTERFLY VALVE								
RLL	REFRIGERANT LIQUID PIPE		BUTTERFLY VALVE								
RSL	REFRIGERANT SUCTION PIPE		BUTTERFLY VALVE								
RTU	ROOFTOP UNIT		BUTTERFLY VALVE								
RV	ROOF VENT		BUTTERFLY VALVE								
SA	SUPPLY AIR		BUTTERFLY VALVE								
SHWR	SECONDARY HEATING HOT WATER RETURN		BUTTERFLY VALVE								
SHWS	SECONDARY HEATING HOT WATER SUPPLY		BUTTERFLY VALVE								
SSI	SPLIT SYSTEM INDOOR SECTION (EVAPORATOR SECTION)		BUTTERFLY VALVE								
SSO	SPLIT SYSTEM OUTDOOR SECTION (CONDENSING UNIT)		BUTTERFLY VALVE								
TC	TEMPERATURE CONTROLS CONTRACTOR		BUTTERFLY VALVE								
UH	UNIT HEATER		BUTTERFLY VALVE								
UV	UNIT VENTILATOR		BUTTERFLY VALVE								
V	VENT		BUTTERFLY VALVE								
WAHP	WATER-TO-AIR HEAT PUMP		BUTTERFLY VALVE								
WWHP	WATER-TO-WATER HEAT PUMP		BUTTERFLY VALVE								
			AIR TERMINAL UNIT WITH REHEAT COIL AND SOUND ATTENUATOR								
			AIR TERMINAL UNIT WITH REHEAT COIL								
			AIR TERMINAL UNIT								
			WALL TO WALL FIN TUBE ENCLOSURE								

## SYMBOLS GENERAL NOTES:

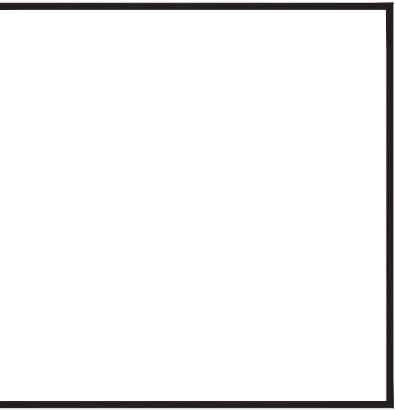
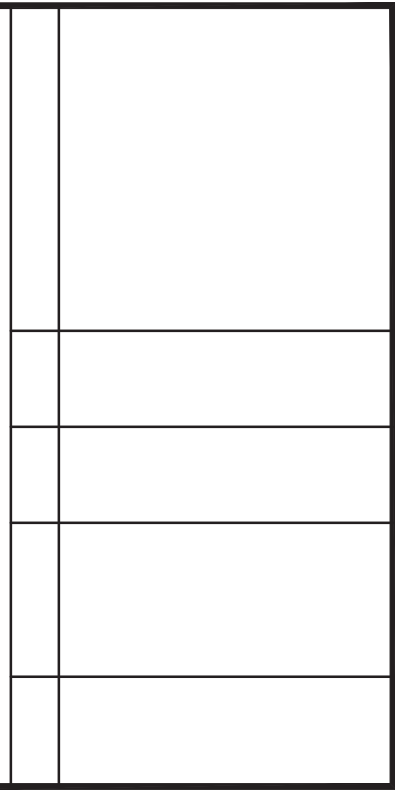
1) VALVE AND DAMPER ACTUATOR TYPES (ELECTRIC OR PNEUMATIC) WHICH ARE INDICATED IN HVAC TEMPERATURE CONTROL DRAWINGS SHALL SUPERSEDE TYPE INDICATED ON ALL OTHER HVAC DRAWINGS.

## HVAC CONTRACTOR GENERAL NOTES:

- A. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS WITHIN THE BUILDING PRIOR TO COMMENCEMENT OF ALL DEMOLITION AND NEW WORK.
- B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND REPLACE EXISTING CEILINGS, UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS, FOR PERFORMING DEMOLITION OR NEW WORK WITHIN THE BUILDING. THE EXISTING CEILINGS SHALL BE REMOVED IN A MANNER TO AVOID DAMAGE TO THE CEILING SYSTEMS. STORAGE OF CEILING SYSTEM COMPONENTS FOR REINSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE STORAGE OF ALL MATERIAL SHALL BE IN AREAS OR LOCATIONS APPROVED BY THE OWNER. THE OWNER WILL NOT COMPENSATE FOR ANY DAMAGED OR LOST MATERIAL WHILE IN STORAGE. AFTER COMPLETION OF ALL DEMOLITION OR NEW WORK, THE CONTRACTOR SHALL REINSTALL THE CEILING SYSTEMS TO MATCH THE ORIGINAL INSTALLATION.
- C. DEMOLITION DRAWINGS SHOW MAJOR EQUIPMENT, PIPING, AND DUCTWORK REMOVALS. THE INTENT IS NOT TO IDENTIFY ALL MISCELLANEOUS PIPING, PIPING ACCESSORIES, DUCTWORK, DUCTWORK ACCESSORIES, SUPPORTS, CONTROLS, CONTROL ACCESSORIES, CONTROL WIRING, CONDUIT, AND PNEUMATIC CONTROL TUBING TO BE DISCONNECTED AND REMOVED, BUT IS THE REQUIREMENT UNDER THIS CONTRACT. NO EQUIPMENT, PIPING, OR DUCTWORK SHALL BE ABANDONED IN PLACE, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- D. ALL EQUIPMENT INDICATED TO BE TURNED OVER TO THE OWNER SHALL BE DISCONNECTED AND REMOVED FROM THE EXISTING SYSTEMS AND DELIVERED (INCLUDING LOADING AND UNLOADING) TO A STORAGE AREA WITHIN THE BUILDING AS SELECTED BY THE OWNER. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY EQUIPMENT DAMAGED DURING REMOVAL AND DELIVERY. ANY DAMAGE TO EQUIPMENT PRIOR TO DISCONNECTING SHOULD BE REPORTED TO THE OWNER'S REPRESENTATIVE. IF NOT REPORTED, THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR REPAIRS TO THE EQUIPMENT.
- E. BEFORE DISCONNECTING, REMOVING, OR SERVICING ANY AIR CONDITIONING EQUIPMENT OR SYSTEMS CONTAINING REFRIGERANTS, THE EQUIPMENT OR SYSTEMS SHALL BE EVACUATED OF ALL REFRIGERANT PER THE LATEST ADOPTED RULES AND REGULATIONS BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA). THE CONTRACTOR OR TECHNICIAN PERFORMING THE WORK SHALL BE CERTIFIED BY AN EPA APPROVED CERTIFYING AGENCY OR ORGANIZATION.
- F. ALL DUCTWORK, PIPING, AND CONDUIT PENETRATIONS THROUGH RATED WALLS OR FLOORS SHALL BE PROVIDED WITH FIRE/SMOKE STOPPINGS PER SPECIFICATION. REFER TO CODE ANALYSIS DRAWING FOR ALL RATED WALL LOCATIONS. ALL FLOORS SHALL BE CONSIDERED RATED.
- G. UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS, IT IS THE RESPONSIBILITY OF THIS CONTRACT TO PATCH AND FINISH ALL EXISTING DUCTWORK OR PIPE PENETRATIONS THROUGH FLOORS, ROOFS, INTERIOR WALLS, AND EXTERIOR WALLS AFTER DEMOLITION WORK. IN ADDITION, ALL NEW PENETRATIONS SHALL BE PROVIDED FOR INSTALLATION OF MECHANICAL SYSTEMS INCLUDING, BUT NOT LIMITED TO, EQUIPMENT, CURBING, DUCTWORK, PIPING, CONTROLS, ETC. PATCHING AND FINISHING SHALL MATCH EXISTING CONSTRUCTION INCLUDING FIRE RATINGS. PROVIDE LINTELS PER LINTEL SCHEDULE.
- H. IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL AIR VENTS AND DRAINS IN THE PIPING SYSTEMS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AIR VENTS AT ALL SYSTEM HIGH POINTS AND AT AREAS WITHIN THE PIPING SYSTEMS THAT COULD ACCUMULATE OR TRAP AIR WHICH WOULD PREVENT PROPER VENTING OR OPERATION OF THE SYSTEMS. DRAINS SHALL BE PROVIDED AT ALL LOW POINTS WITHIN THE PIPING SYSTEM TO FACILITATE COMPLETE DRAINING OF THE SYSTEM.
- I. PROVIDE THERMAL EXPANSION COMPENSATORS AND THERMAL EXPANSION LOOPS IN PIPING SYSTEM PER INDUSTRY STANDARDS.



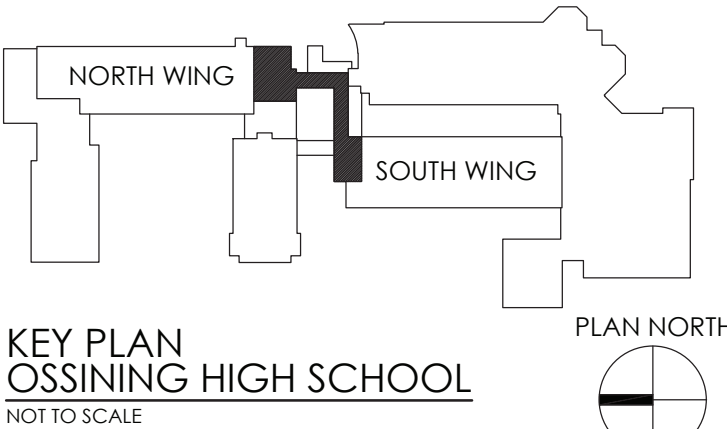
50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614



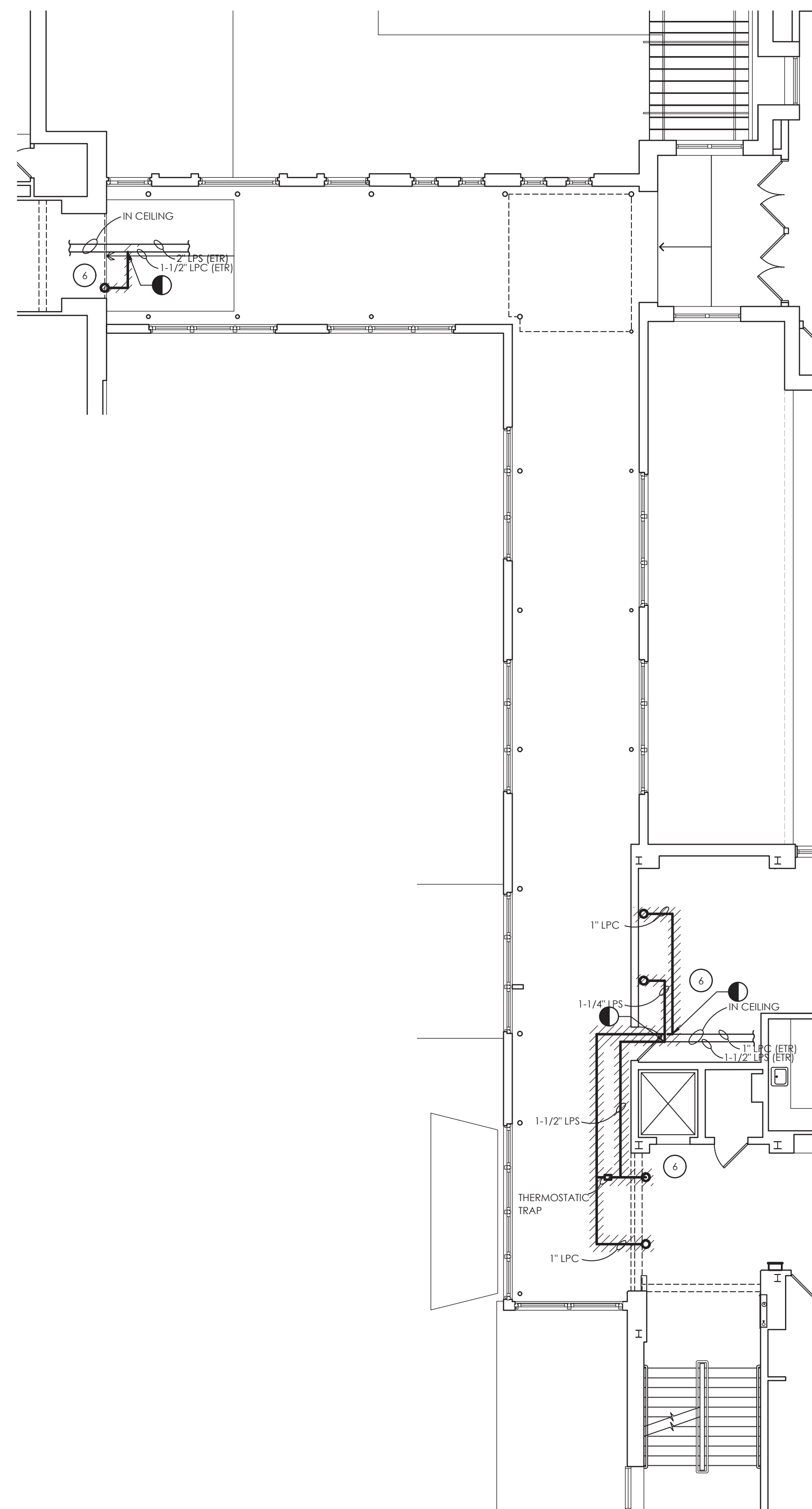
OSSINING UFSD  
OSSINING HIGH SCHOOL  
THIRD FLOOR CONNECTOR  
29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
SED #: 66-14-01-03-0-003-040

DATE 3/12/2021  
DRAWN NRH  
CHECKED  
SCALE AS NOTED  
SHEET TITLE  
MECHANICAL LEGENDS  
AND ABBREVIATION

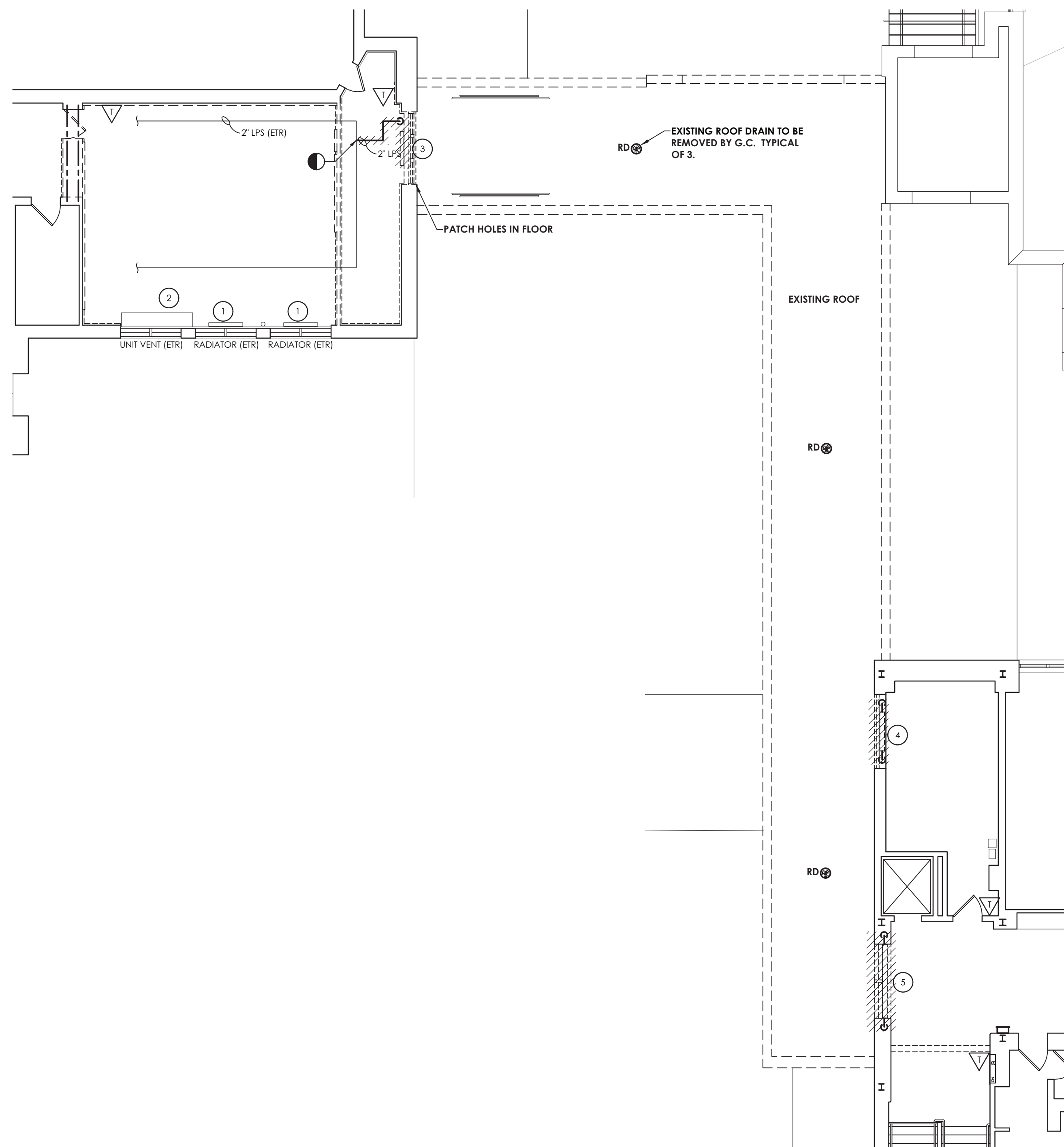
PROJECT NUMBER  
14428.13  
OHS  
H001  
DRAWING NUMBER



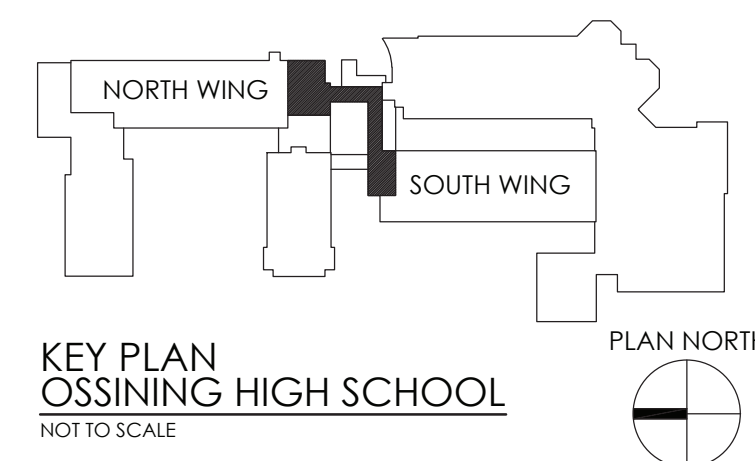




2 **2ND FLOOR DEMOLITION WORK PLAN**  
H103 SCALE: 1/8" = 1'-0"



# 3RD FLOOR DEMOLITION WORK PLAN



**KEY NOTES:**

- 1 EXISTING RADIATOR TO REMAIN.
- 2 EXISTING UNIT VENTILATOR TO REMAIN. UNIT SHALL BE CLEANED AND CONTROL SEQUENCE UPDATED.
- 3 SALVAGE EXISTING RADIATOR, AND DELIVER TO OWNER. ALL ASSOCIATED STEAM AND CONDENSATE PIPING BACK TO MAIN AND CAP. LPC IN CEILING BELOW. REMOVE EXISTING CONTROLS.
- 4 REMOVE EXISTING CABINET UNIT HEATER. REMOVE ALL ASSOCIATED STEAM AND CONDENSATE PIPING BACK TO MAIN AND CAP. LPC IN CEILING BELOW. REMOVE ALL ASSOCIATED BRACKET AND W/TS TO BE PATCHED AND PAINTED. SEE ARCHITECTURE DRAWINGS.
- 5 REMOVE EXISTING CABINET UNIT HEATER. REMOVE ALL ASSOCIATED STEAM AND CONDENSATE PIPING BACK TO MAIN AND CAP. LPC IN CEILING BELOW. REMOVE ALL ASSOCIATED BRACKETS AND SUPPORTS.
- 6 REMOVE CEILING AS NEEDED TO COMPLETE WORK. REPLACE CEILING AFTER WORK IN COMPLETED.



**CPLteam.com**  
ARCHITECTURE ■ ENGINEERING ■ PLANNING

50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614

OSSINING UFSD  
 OSSINING HIGH SCHOOL  
 THIRD FLOOR CONNECTOR  
 29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
 SED #: 66-14-01-03-0-003-040

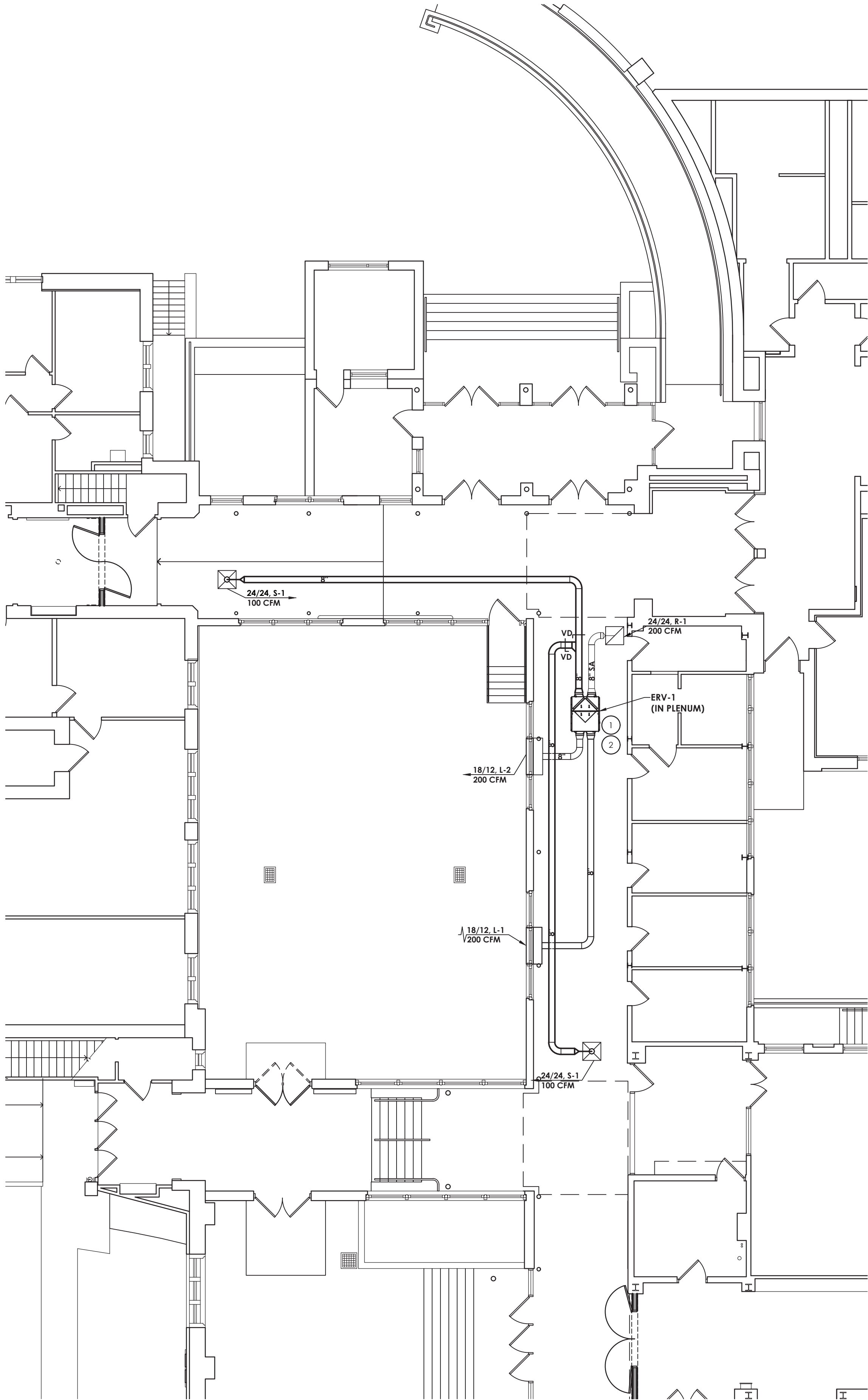
DATE 3/12/2021	DRAWN NRH	CHECKED AJS
SCALE AS NOTED		
SHEET TITLE MECHANICAL DEMO		

PROJECT NUMBER  
14428.13

OHS  
H103

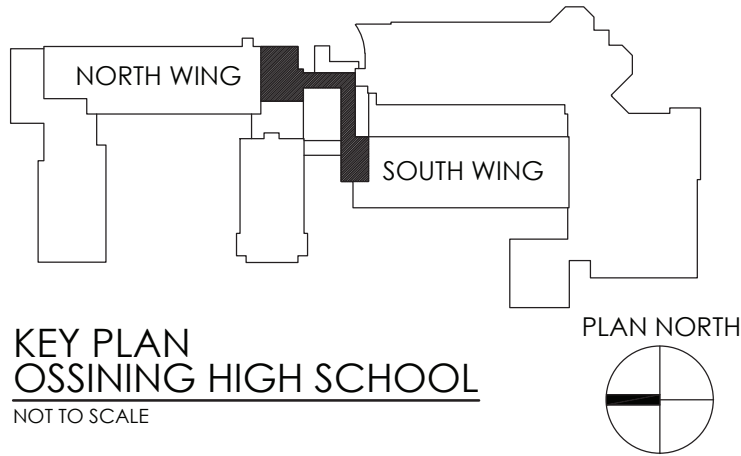
DRAWING NUMBER

Drawing Name: S:\Projects\Ossining UFSD\OHS 3rd Flr Connector\0 Design\06 CAD\AutoCAD\MECH\H201.dwg  
Date last accessed: 11/15/2021 2:39 PM  
Date last plotted: 11/15/2021 2:53 PM  
Plotted By: Brendon Mazza



1  
H201  
1ST FLOOR HALLWAY NEW WORK PLAN  
SCALE: 1/8" = 1'-0"

- KEY NOTES:**
- 1 PROVIDE NEW ENERGY RECOVERY VENTILATOR. ENERGY RECOVERY VENTILATOR SHALL BE MOUNTED TIGHT TO STRUCTURE TO ALLOW CLEARANCE FOR MAINTENANCE FROM BELOW. DUCT OA/EA TO NEW LOUVERS. COORDINATE ACCESS DOORS WITH CEILING GRID TO ALLOW ACCESS DOORS TO FULLY OPEN.
  - 2 RE-INSULATE APPROXIMATELY 75LF EXISTING PIPING PER ASBESTOS ABATEMENT PLANS.



**CPL**  
CPLteam.com  
ARCHITECTURE • ENGINEERING • PLANNING

50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614



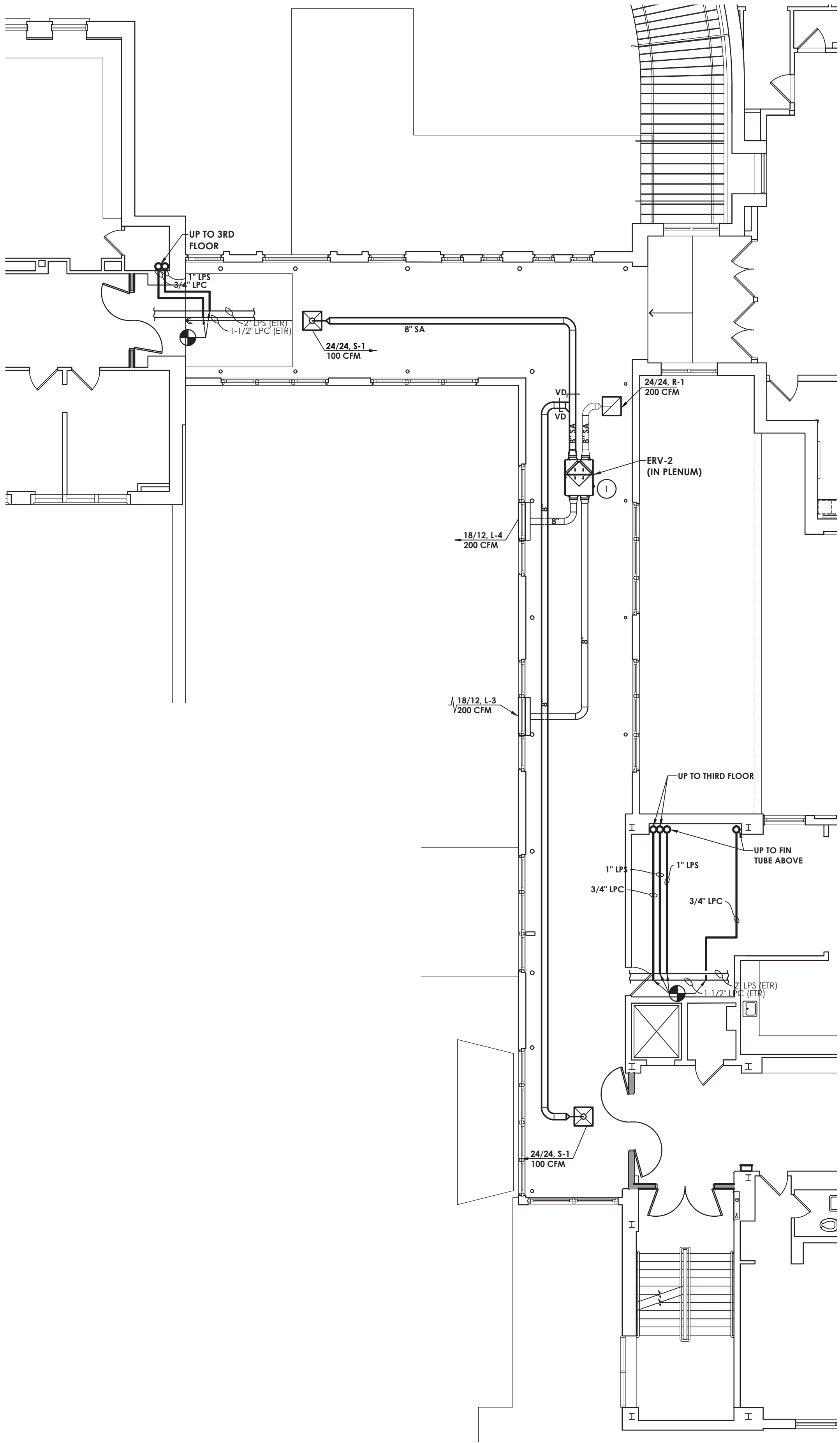

OSSINING UFSD  
OSSINING HIGH SCHOOL  
THIRD FLOOR CONNECTOR  
29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
SED #: 66-14-01-03-0-003-040

DATE 3/12/2021	DRAWN NRH	CHECKED AJS
SCALE AS NOTED		
SHEET TITLE MECHANICAL NEW WORK PLAN FIRST FLOOR		

PROJECT NUMBER  
14428.13

OHS  
H201  
DRAWING NUMBER

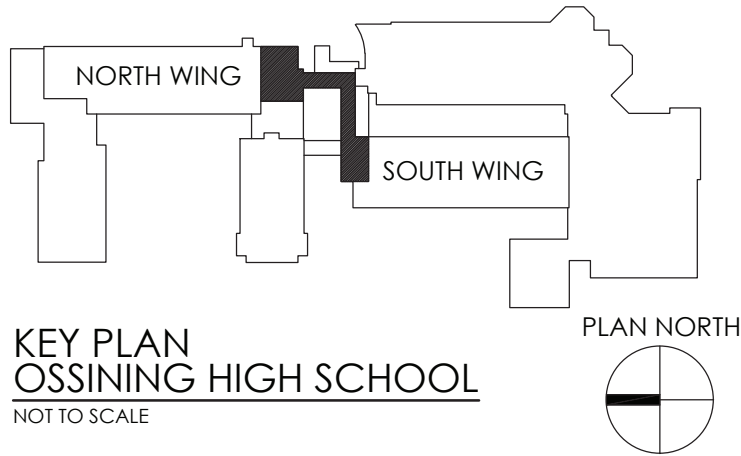
Drawing Name: S:\Projects\Ossining UFSD\OHS 3rd Flr Connector\06 CAD\AutoCAD\MECH\H2\H202.dwg      Date last accessed: 11/15/2021 2:41 PM      Date last plotted: 11/15/2021 2:53 PM      Plotted By: Brendon Mazza



**KEY NOTES:**

① PROVIDE NEW ENERGY RECOVERY VENTILATOR. ENERGY RECOVERY VENTILATOR SHALL BE MOUNTED TIGHT TO STRUCTURE TO ALLOW CLEARANCE FOR MAINTENANCE FROM BELOW. DUCT OA/EA TO NEW LOUVERS. COORDINATE ACCESS DOORS WITH CEILING GRID TO ALLOW ACCESS DOORS TO FULLY OPEN.

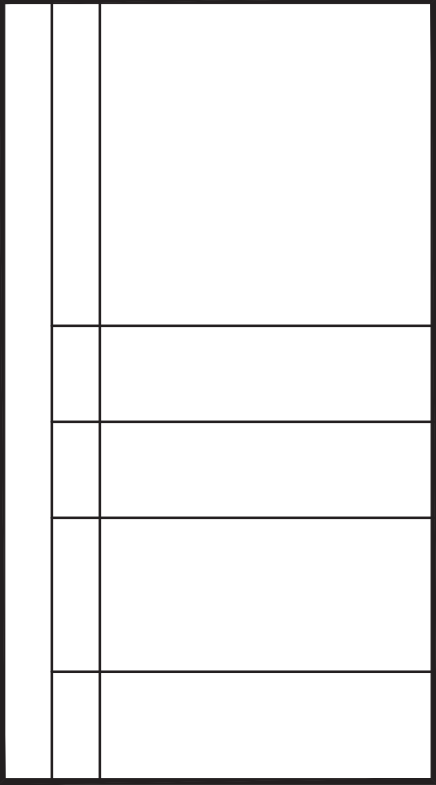
1  
H202      **2ND FLOOR HALLWAY NEW WORK PLAN**  
SCALE: 1/8" = 1'-0"





**CPLteam.com**  
ARCHITECTURE • ENGINEERING • PLANNING

50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614



OSSINING UFSD  
OSSINING HIGH SCHOOL

THIRD FLOOR CONNECTOR  
29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
SED #: 66-14-01-03-0-003-040

DATE	DRAWN	CHECKED
3/12/2021	NRH	AJS
SCALE AS NOTED		
SHEET TITLE		
MECHANICAL NEW WORK PLAN SECOND FLOOR		

PROJECT NUMBER

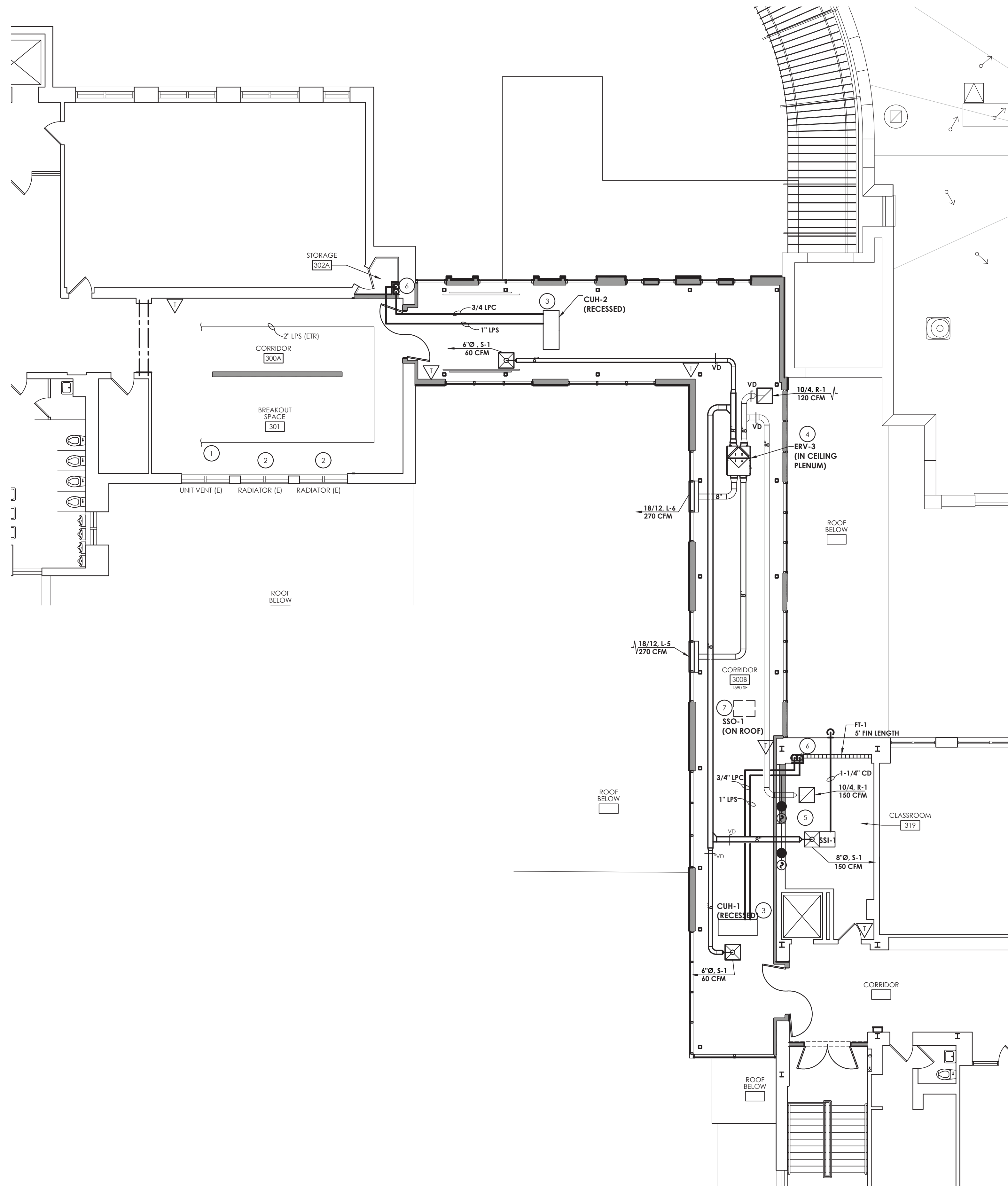
14428.13

OHS

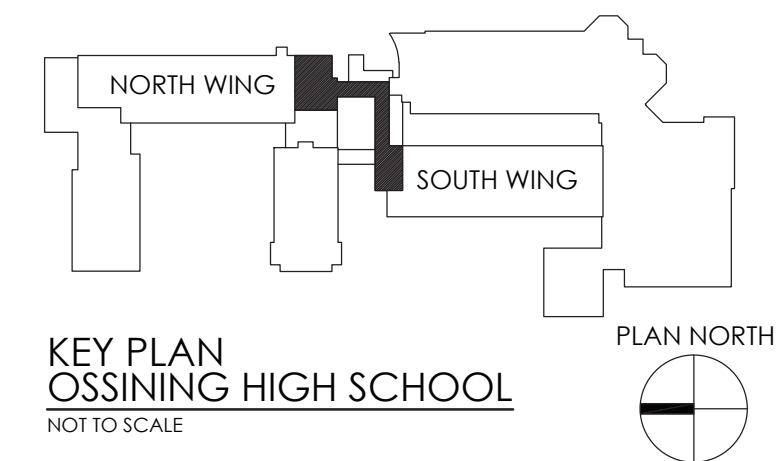
H202

DRAWING NUMBER





# 1 H203 3RD FLOOR HALLWAY NEW WORK PLAN SCALE: 1/8" = 1'-0"



- 1 RE-BALANCE EXISTING UNIT VENTILATOR TO NEW FLOW. REUSE EXISTING RETURN DUCTWORK.
- 2 PROVIDE A NEW THERMOSTATIC AND TEMPERATURE SENSOR VALVE FOR EXISTING RADIATOR AND INTEGRATE IT INTO EXISTING BMS.
- 3 PROVIDE NEW RECESSED CABINET UNIT HEATER. ROUTE STEAM/ CONDENSATE TO NEW CABINET UNIT HEATER. PROVIDE WITH WALL MOUNTED TEMPERATURE SENSOR AND INTEGRATE INTO EXISTING BMS.
- 4 PROVIDE NEW ENERGY RECOVERY VENTILATOR. ENERGY RECOVERY VENTILATOR SHALL BE MOUNTED TIGHT TO STRUCTURE TO ALLOW CLEARANCE FOR MAINTENANCE. DUCT GO/EA TO NEW LOUVERS. COORDINATE ACCESS DOOR LOCATION WITH CEILING GRID.
- 5 PROVIDE ROOM 319 WITH NEW UNIT FAN COIL. EXIST STEAM AND CONDENSATE PIPING TO NEW UNIT. EXISTING RELIEF DUCTWORK SHALL BE RE-USED. PROVIDE WITH NEW WALL MOUNTED TEMPERATURE SENSOR AND INTEGRATE INTO EXISTING BMS.
- 6 EXTEND LPC TO CLOSEST EXISTING CONDENSATE ON FLOOR BELOW.
- 7 PROVIDE PIPE PORTAL AND MOUNT ON 12" RAILS. SEE REFRIGERANT PIPING SCHEMATIC.




10

10

OSSINING UFSD  
 OSSINING HIGH SCHOOL  
 THIRD FLOOR CONNECTOR  
 29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
 SED #: 66-14-01-03-0-003-040

DATE	DRAWN	CHECKED
12/12/2021	NRH	AJS
SCALE AS NOTED		

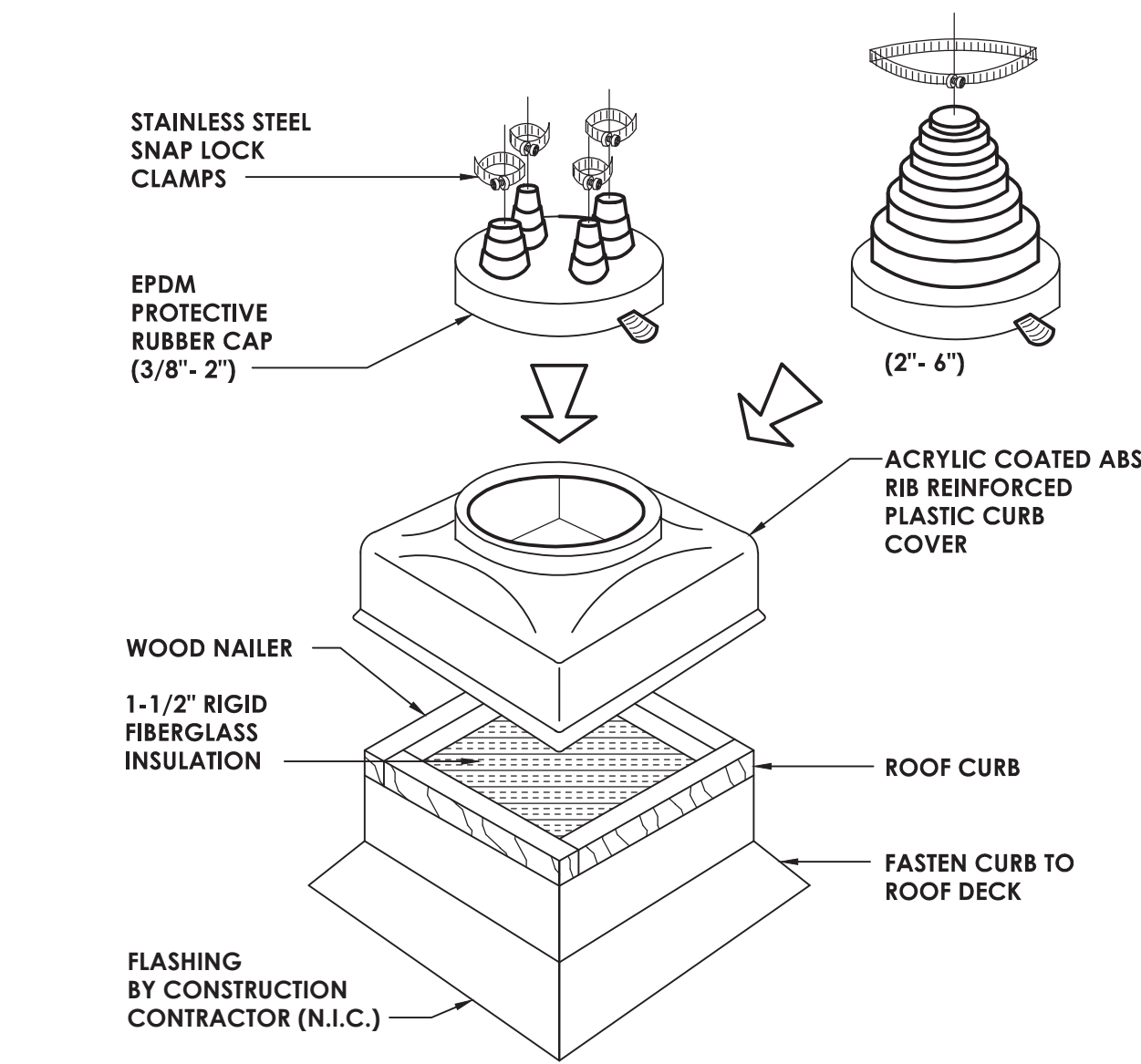
MECHANICAL NEW  
WORK PLAN  
THIRD FLOOR

PROJECT NUMBER  
14428.13

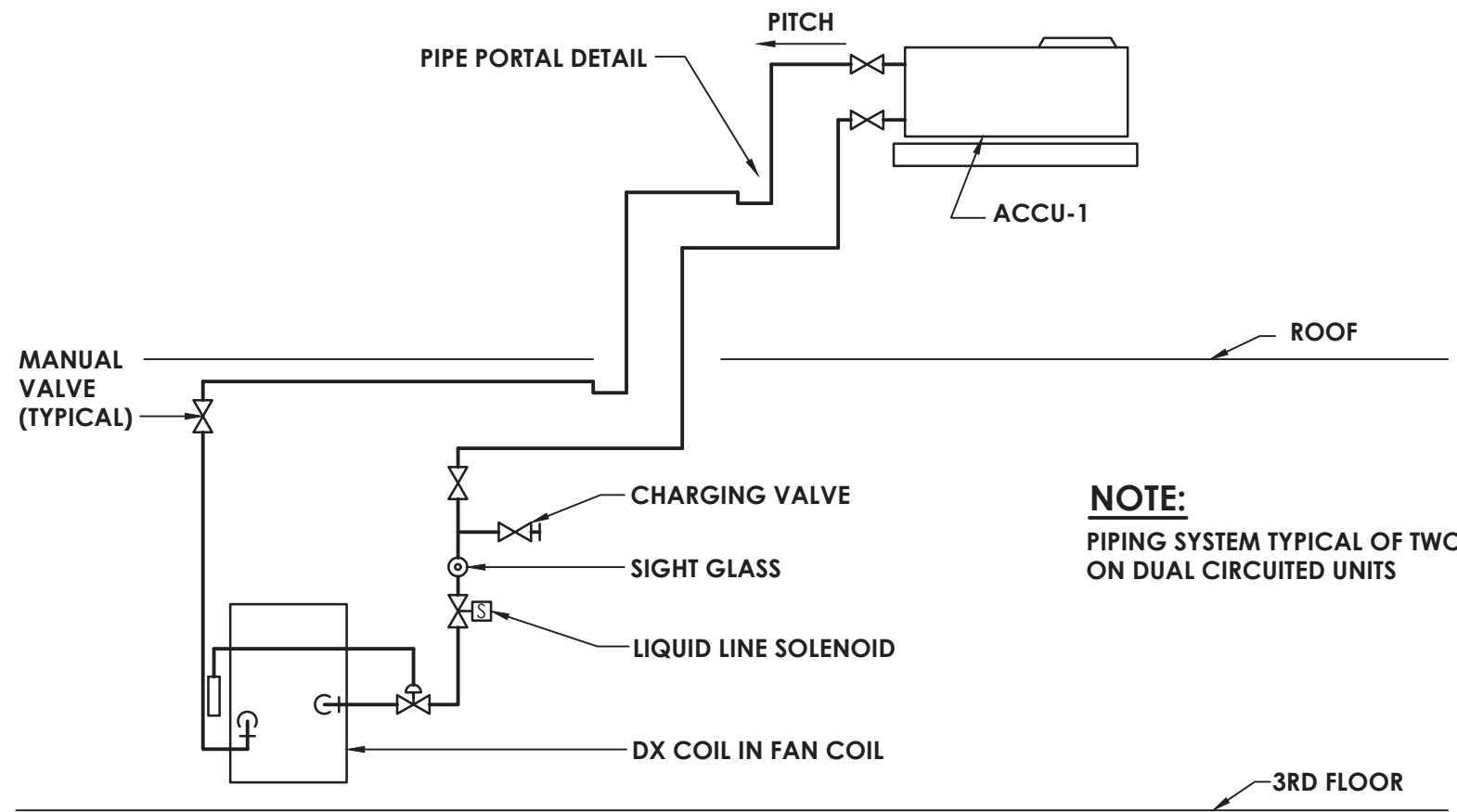
OHS  
H203

DRAWING NUMBER

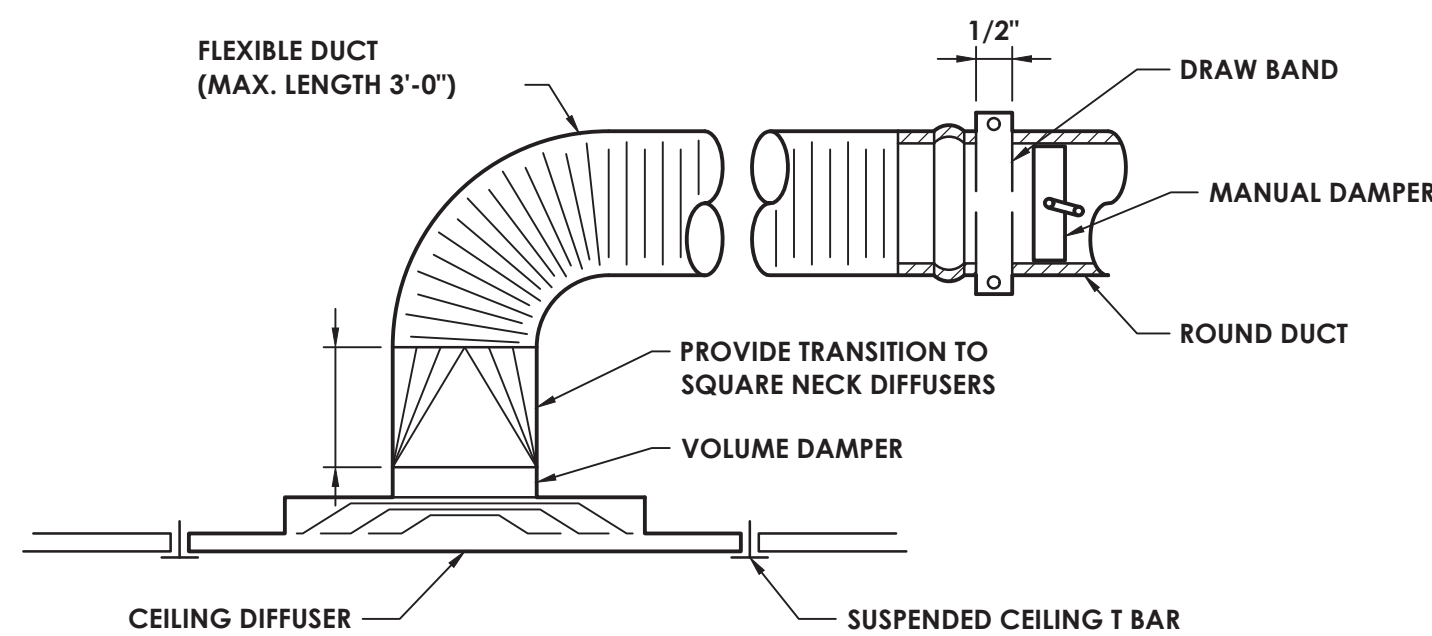
Drawing Name: S:\Projects\Ossining UFSD\OHS 3rd Flr Connector\06 CAD\AutoCAD\MECH\H801.dwg  
Date last accessed: 11/15/2021 2:57 PM  
Date last plotted: 11/15/2021 3:17 PM  
Plotted By: Brendon Mazza



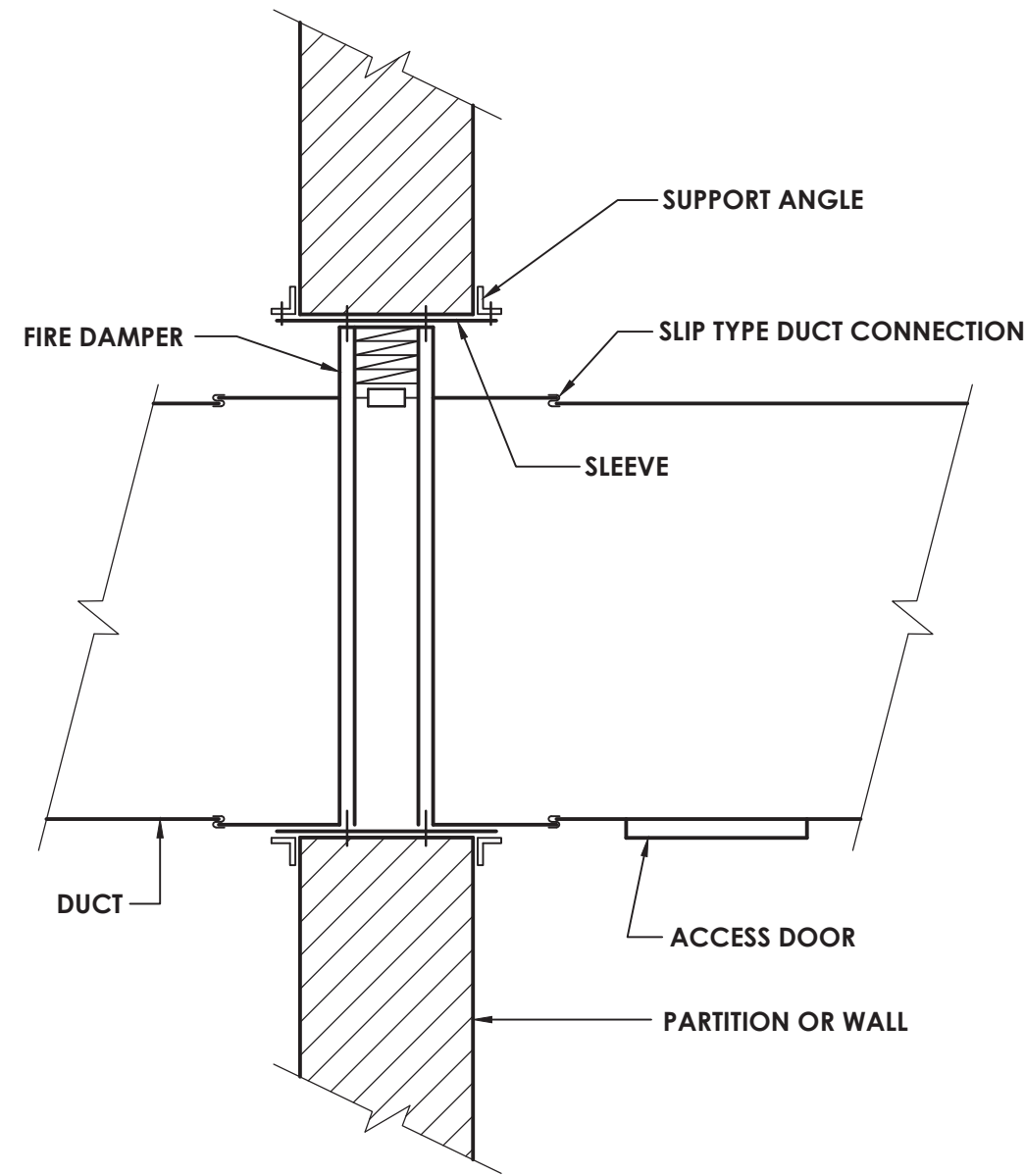
9  
H801  
NOT TO SCALE  
**PIPE PORTAL DETAIL**



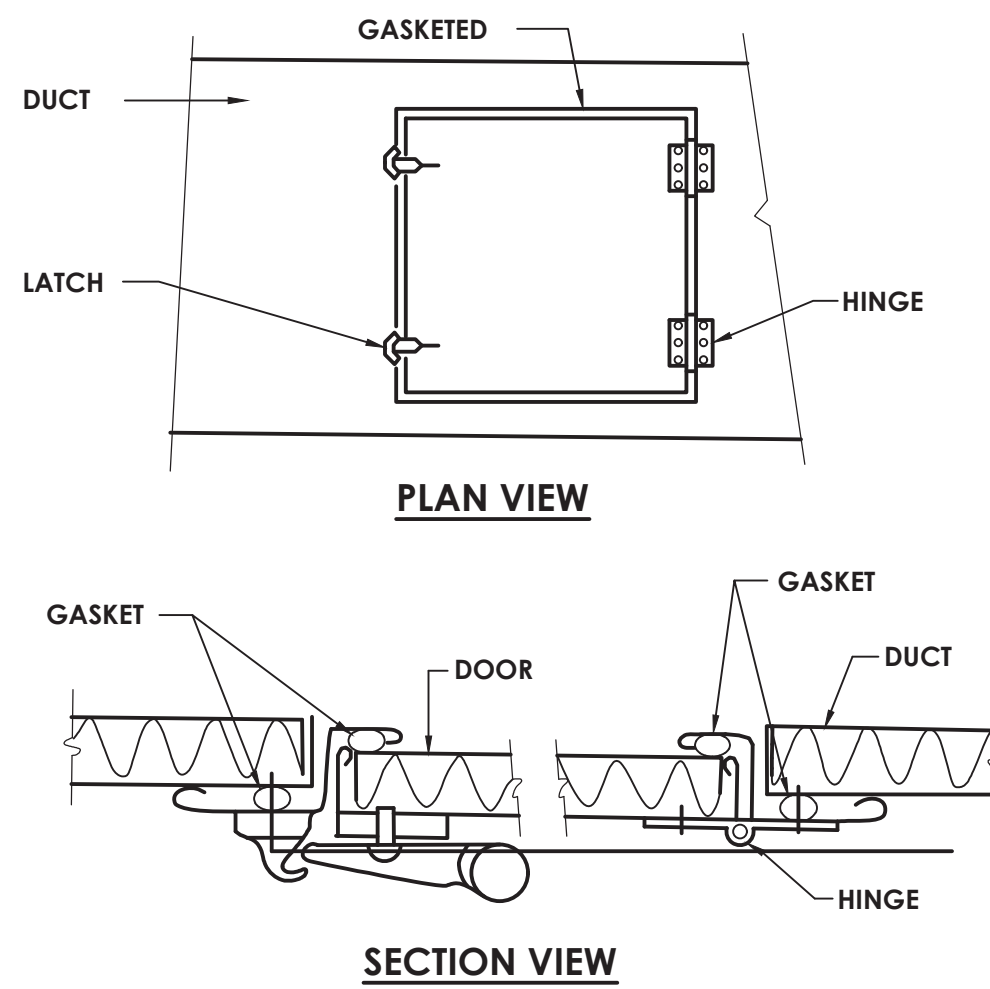
8  
H801  
NOT TO SCALE  
**REFRIGERANT PIPING SCHEMATIC**



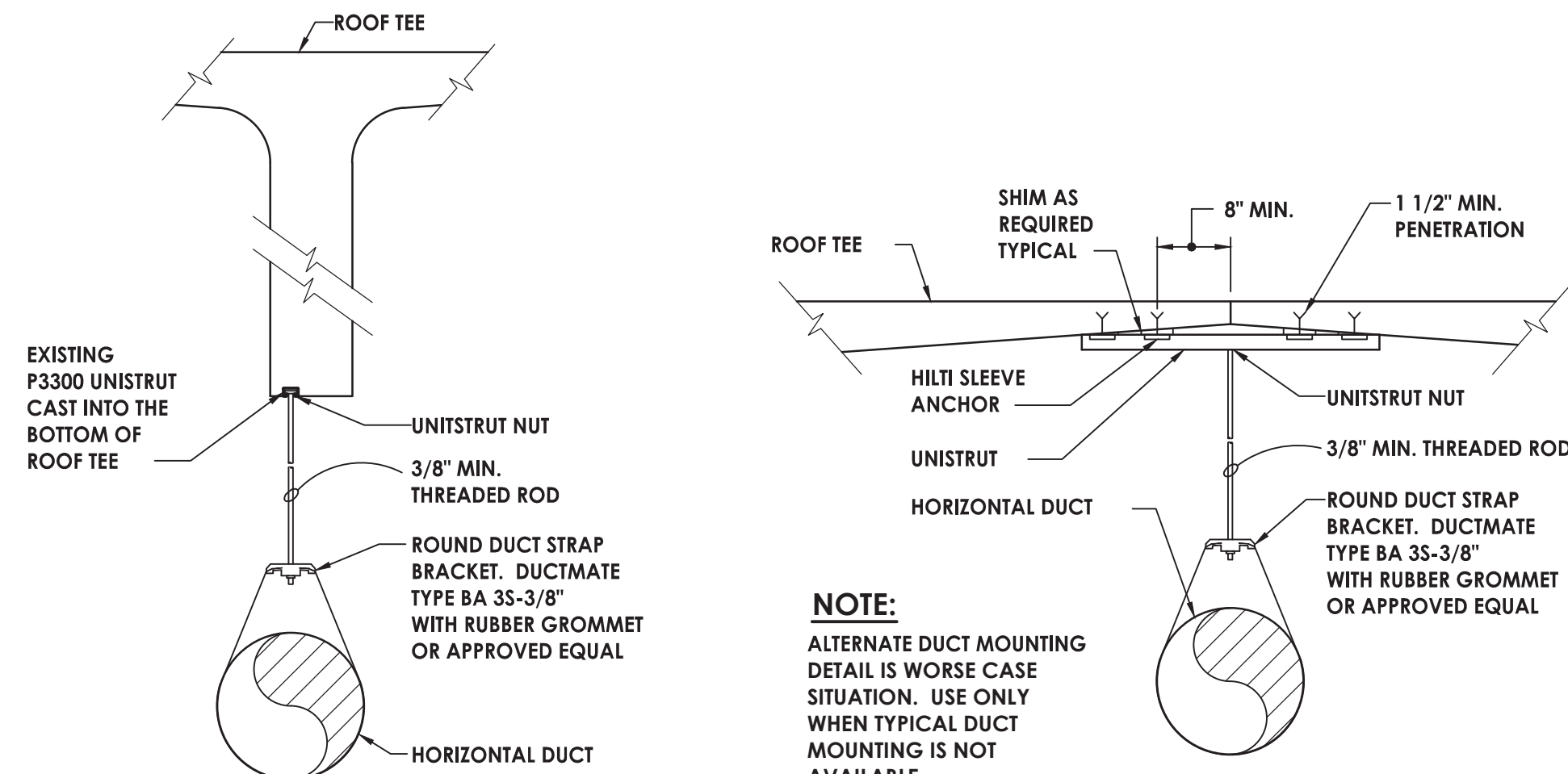
6  
H801  
NOT TO SCALE  
**DIFFUSER DETAIL**



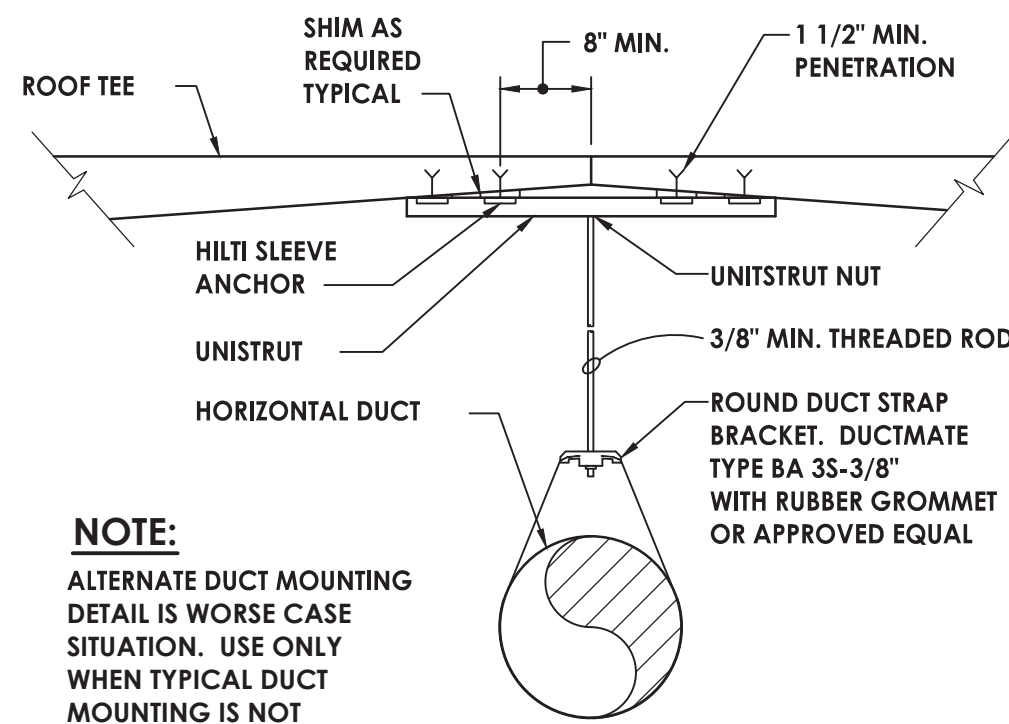
10  
H801  
NOT TO SCALE  
**VERTICAL FIRE DAMPER DETAIL**



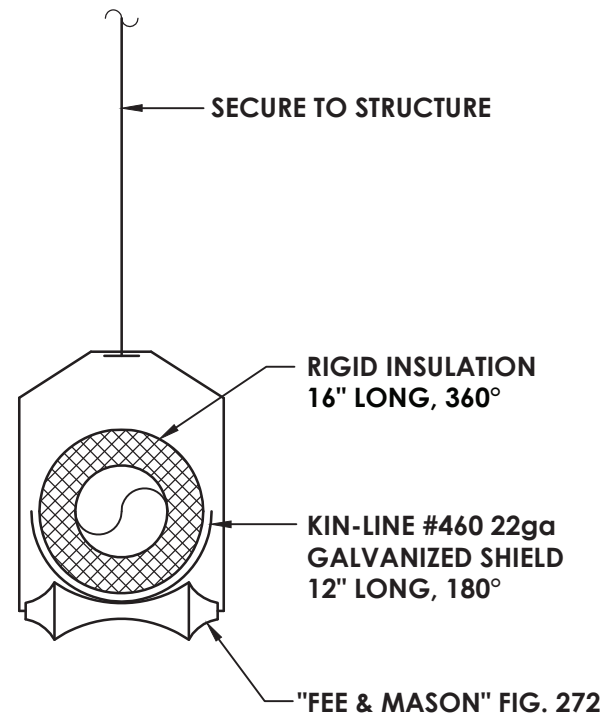
7  
H801  
NOT TO SCALE  
**ACCESS DOOR DETAIL**



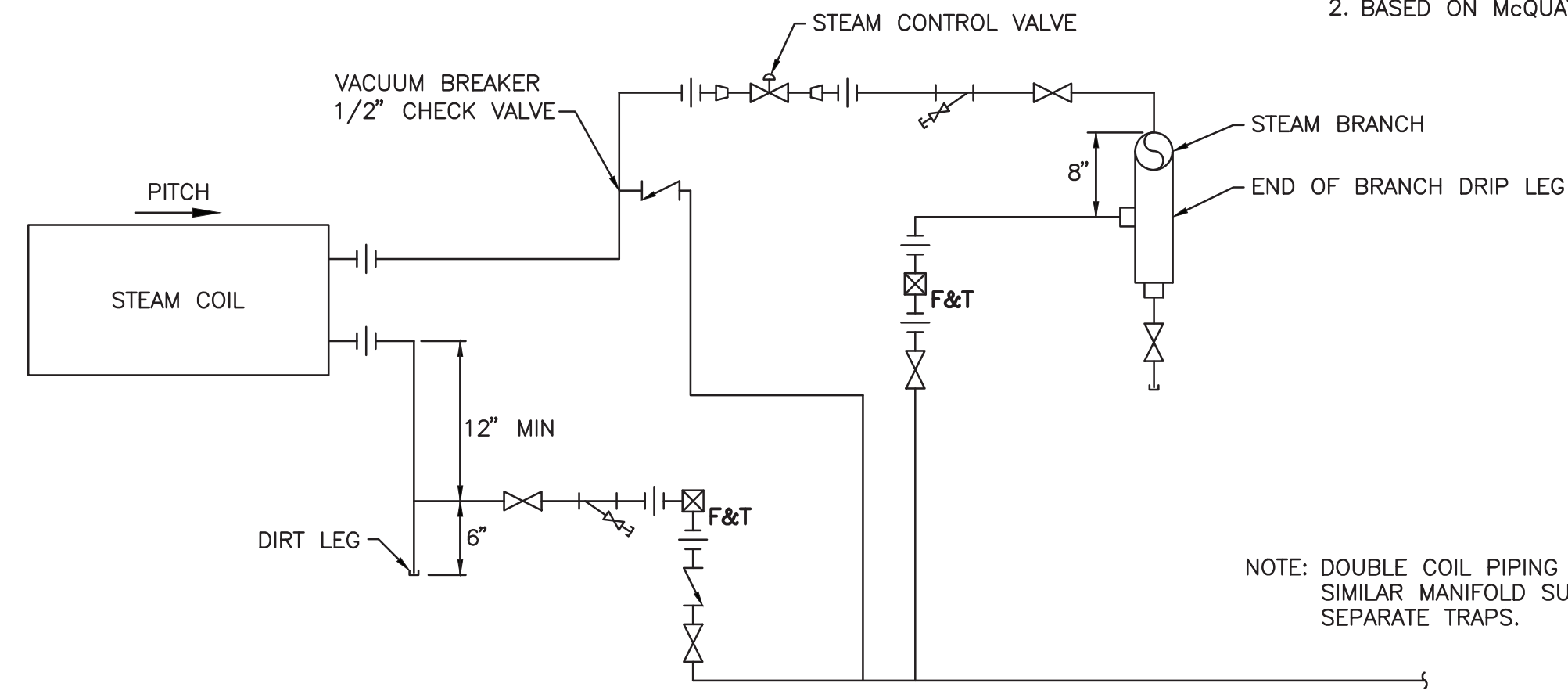
**TYPICAL DUCT MOUNTING BRACKET**



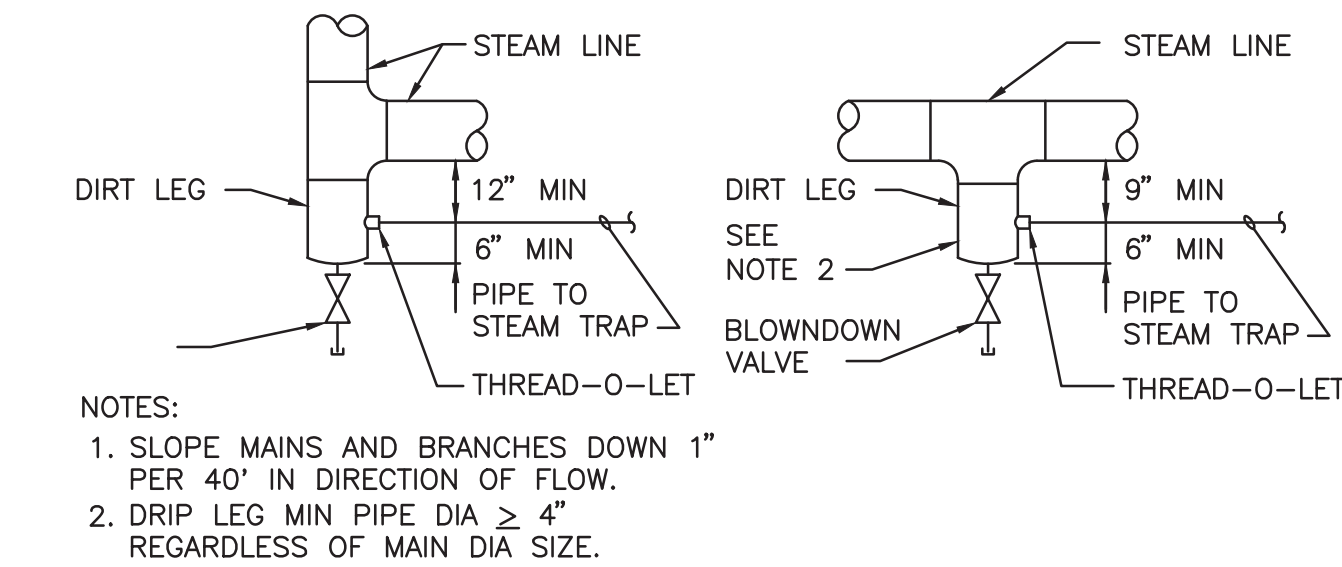
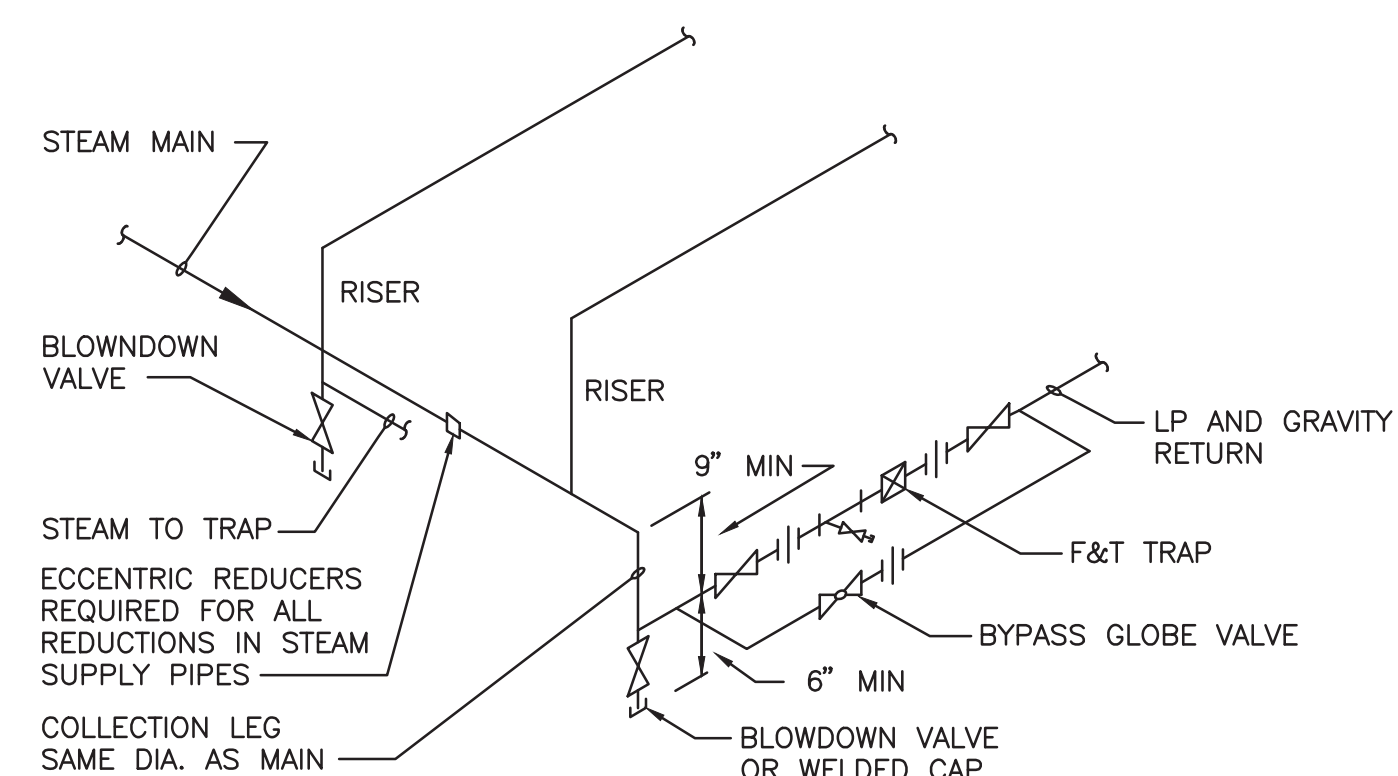
**ALTERNATE DUCT MOUNTING**



4  
H801  
NOT TO SCALE  
**PIPE HANGER DETAIL**

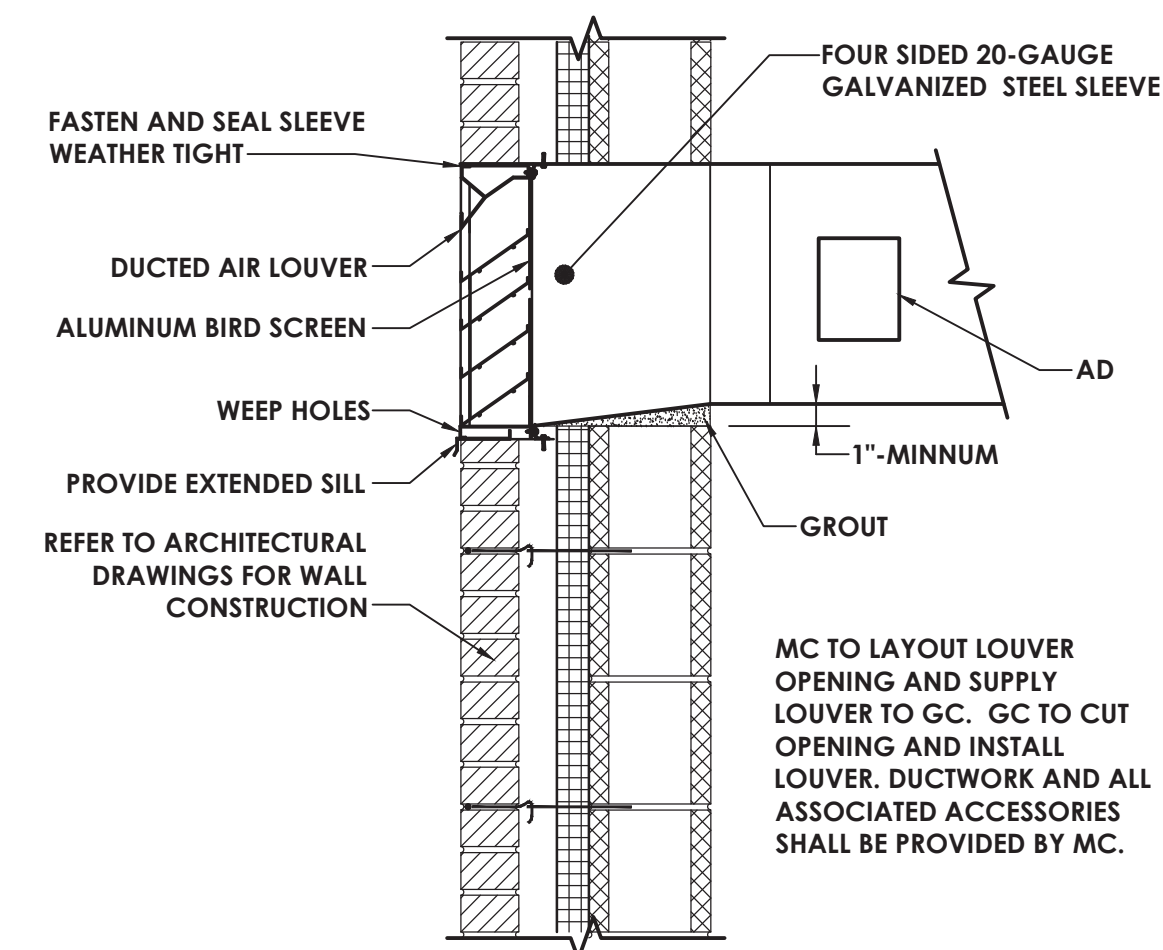


1  
H801  
SCALE: N.T.S.  
**STEAM COIL PIPING DETAIL**



NOTES:  
1. SLOPE MAINS AND BRANCHES DOWN 1" PER 40' IN DIRECTION OF FLOW.  
2. DRIP LEG MIN PIPE DIA ≥ 4" REGARDLESS OF MAIN DIA SIZE.

2  
H801  
SCALE: N.T.S.  
**TYPICAL STEAM LINE AND DRIP ARRANGEMENT**



3  
H801  
NOT TO SCALE  
**DUCTED LOUVER THROUGH WALL SECTION**



CPLteam.com  
ARCHITECTURE • ENGINEERING • PLANNING

50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614

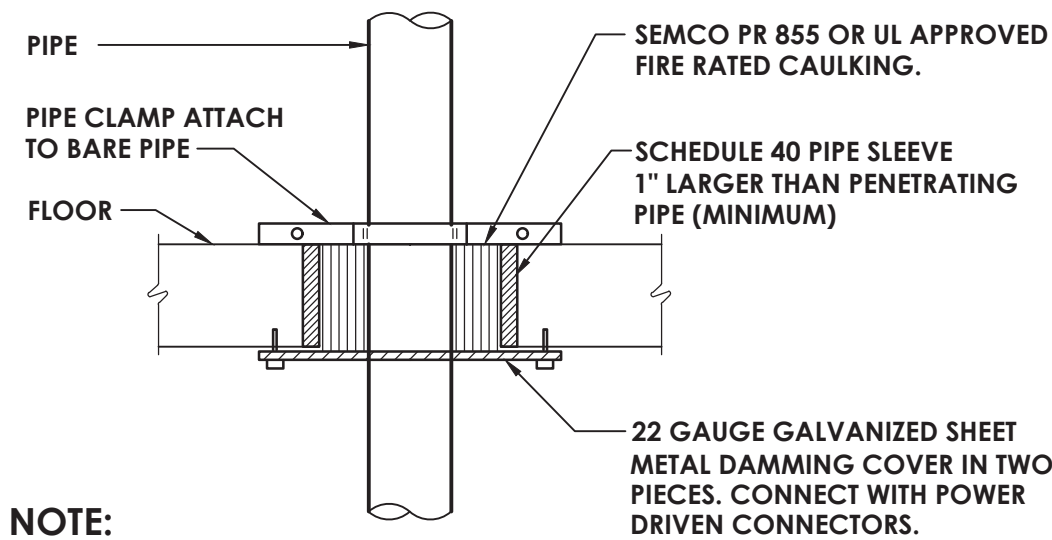
OSSINING UFSD  
OSSINING HIGH SCHOOL  
THIRD FLOOR CONNECTOR  
29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
SED #: 66-14-01-03-0-003-040

DATE	DRAWN	CHECKED
3/12/2021	NRH	AJS
SCALE	AS NOTED	
SHEET TITLE		
MECHANICAL DETAILS		

PROJECT NUMBER
14428.13
OHS H801
DRAWING NUMBER

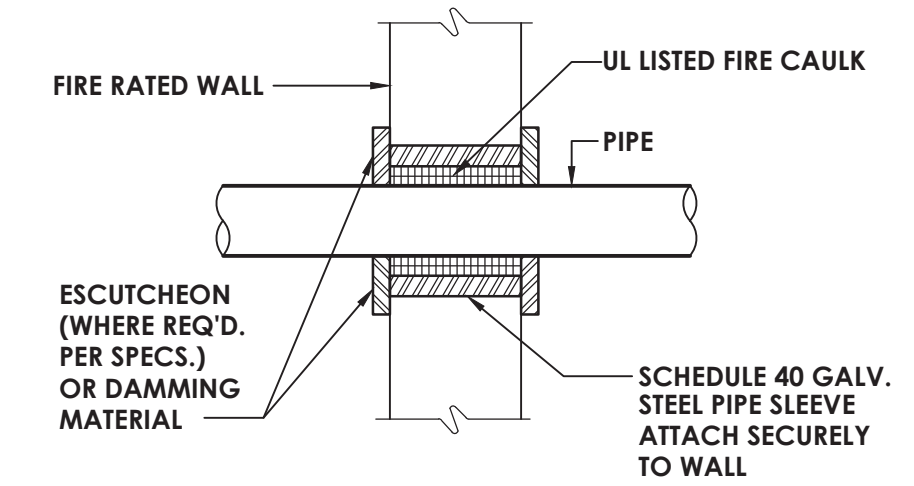


Drawing Name: S:\Projects\Ossining UFSD\OHS 3rd Fr Connector\06 CAD\AutoCAD\MECH\H901.dwg Date last accessed: 11/15/2021 2:57 PM Date last plotted: 11/15/2021 3:18 PM Plotted By: Brendon Mazza

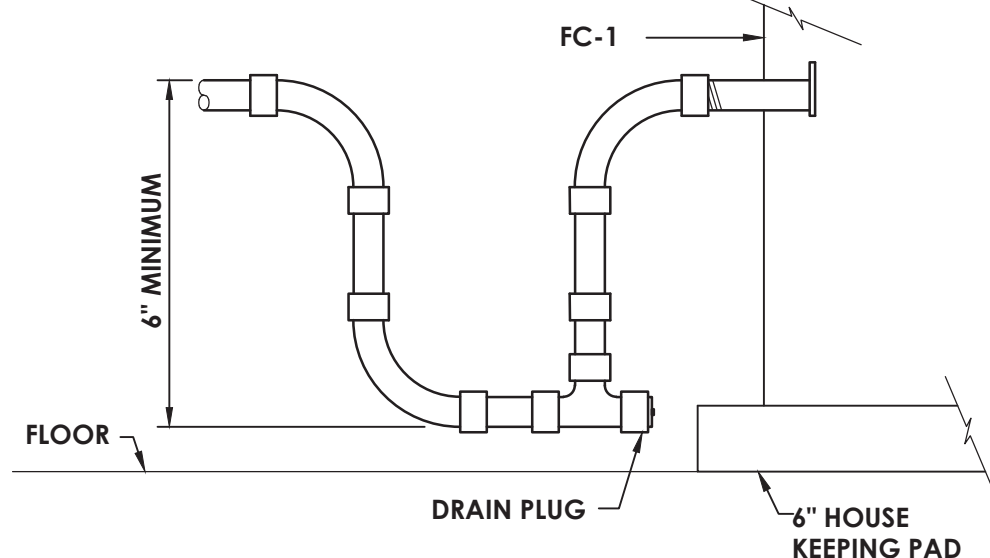


**NOTE:**  
ALL MATERIALS MUST HAVE A MINIMUM MELTING POINT OF 1700° F

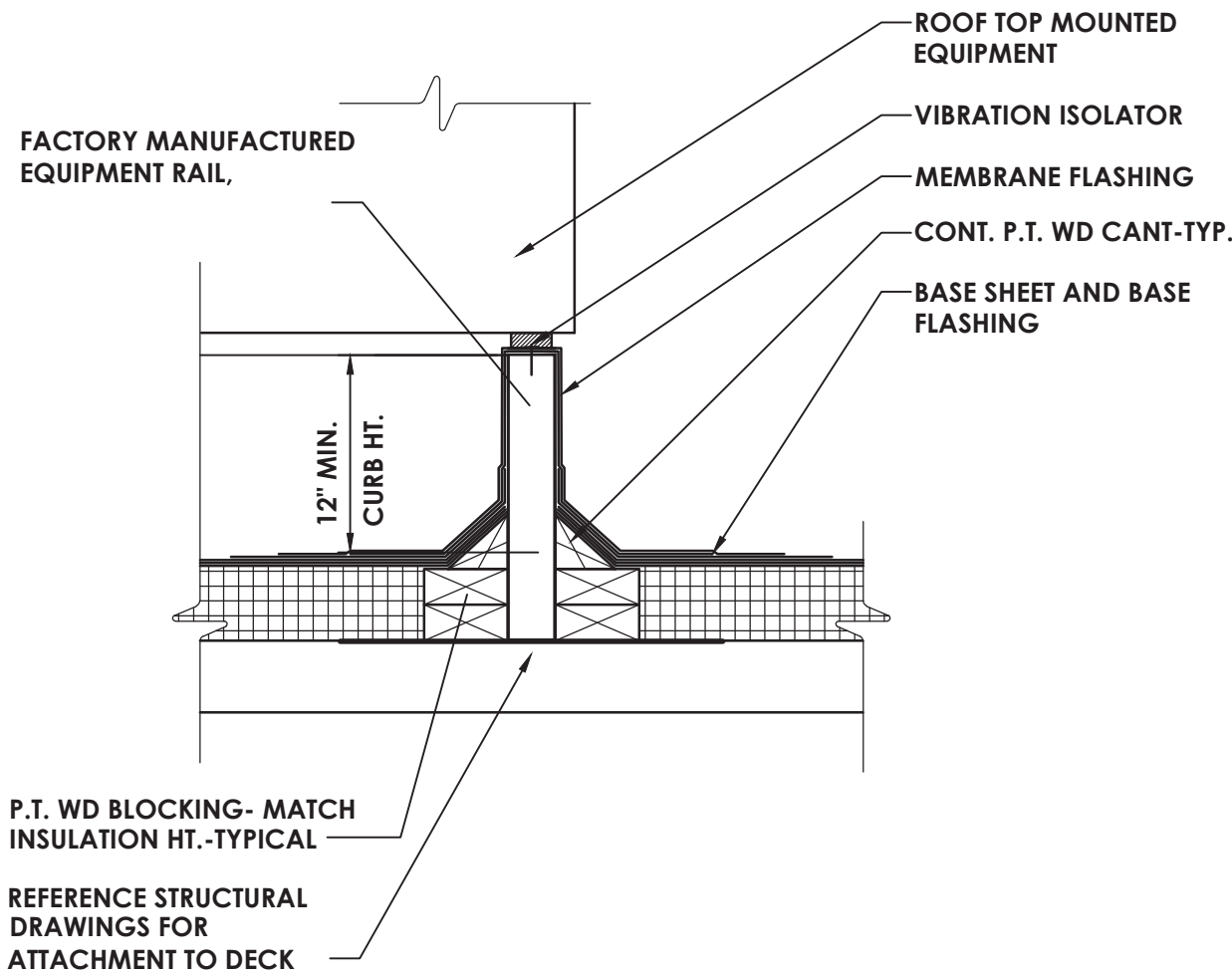
**1 PIPE THROUGH RATED FLOOR**  
H901 NOT TO SCALE



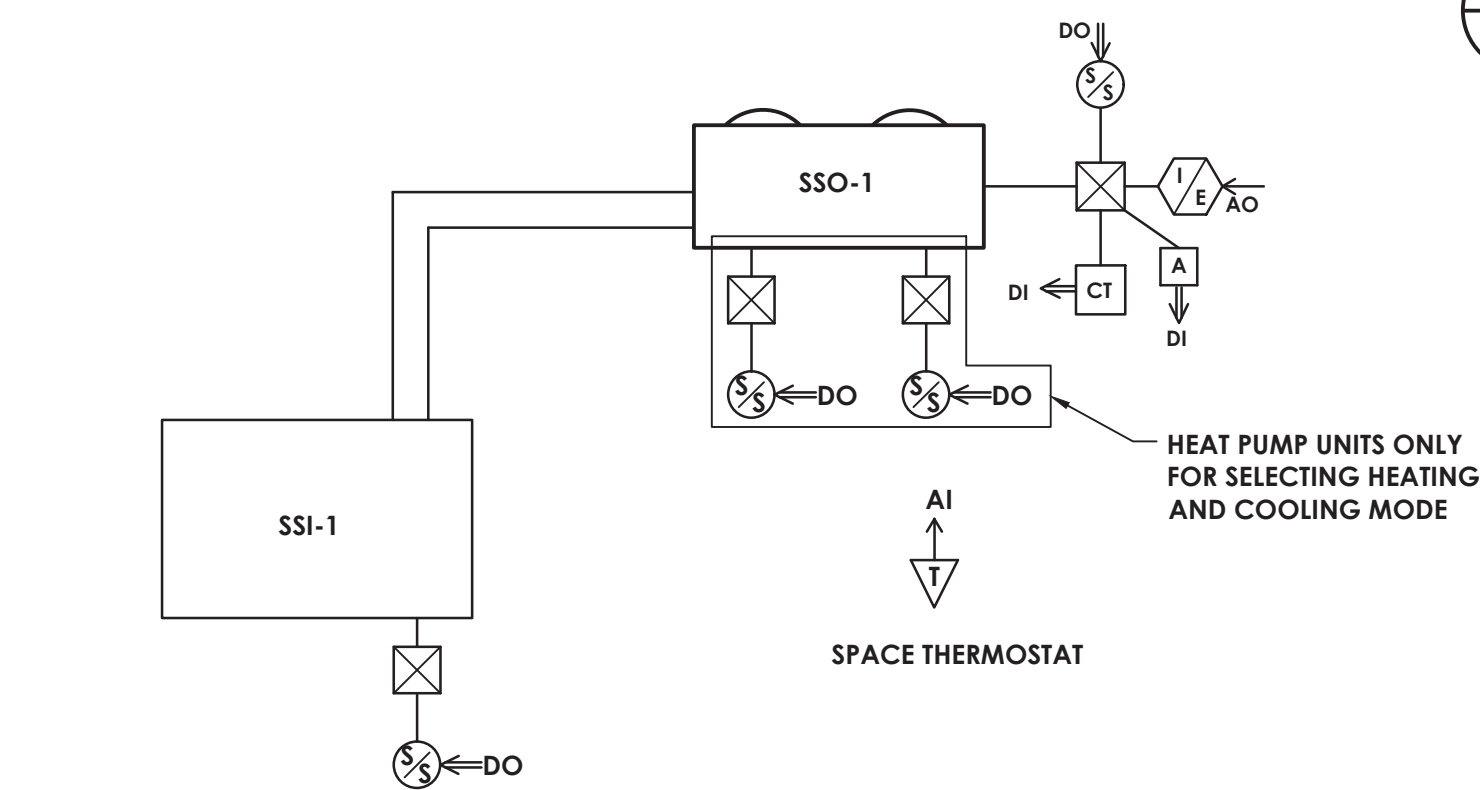
**2 PIPE THROUGH RATED WALL**  
H901 NOT TO SCALE



**3 CONDENSATE TRAP DETAIL**  
H901 NOT TO SCALE

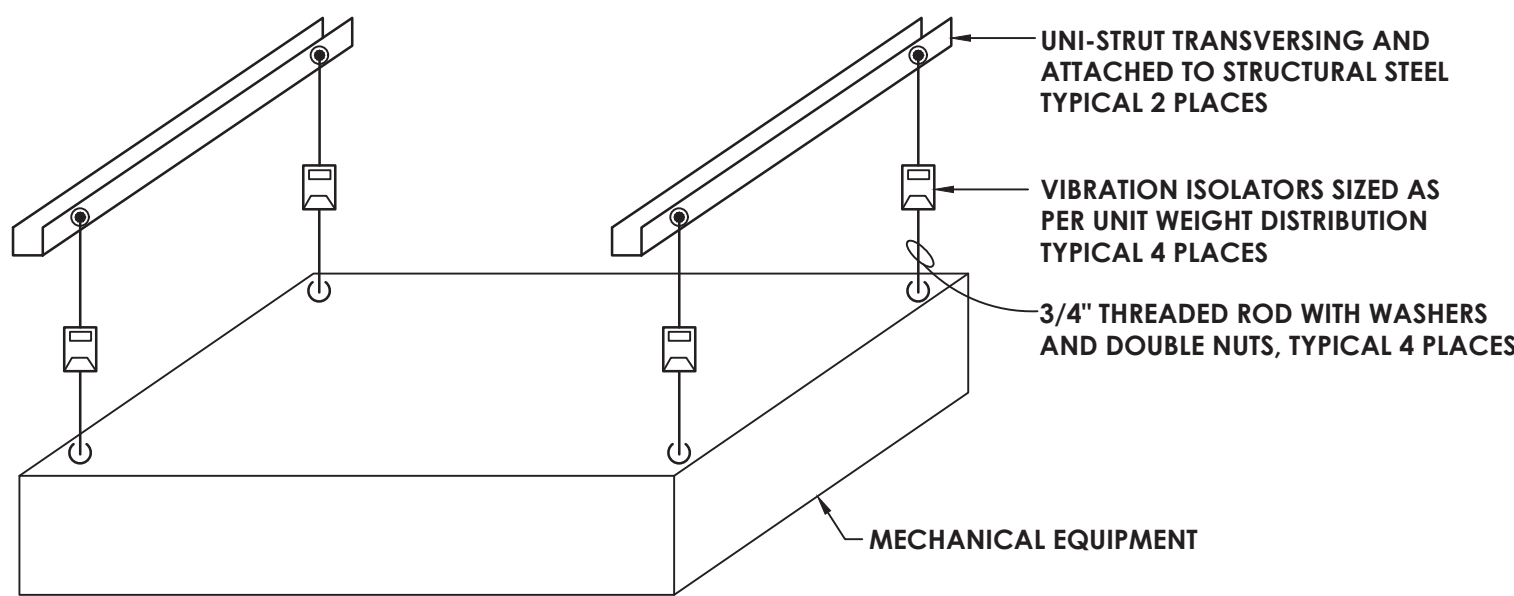


**4 EQUIPMENT RAIL DETAIL**  
H901 SCALE: 1 1/2" = 1'-0"



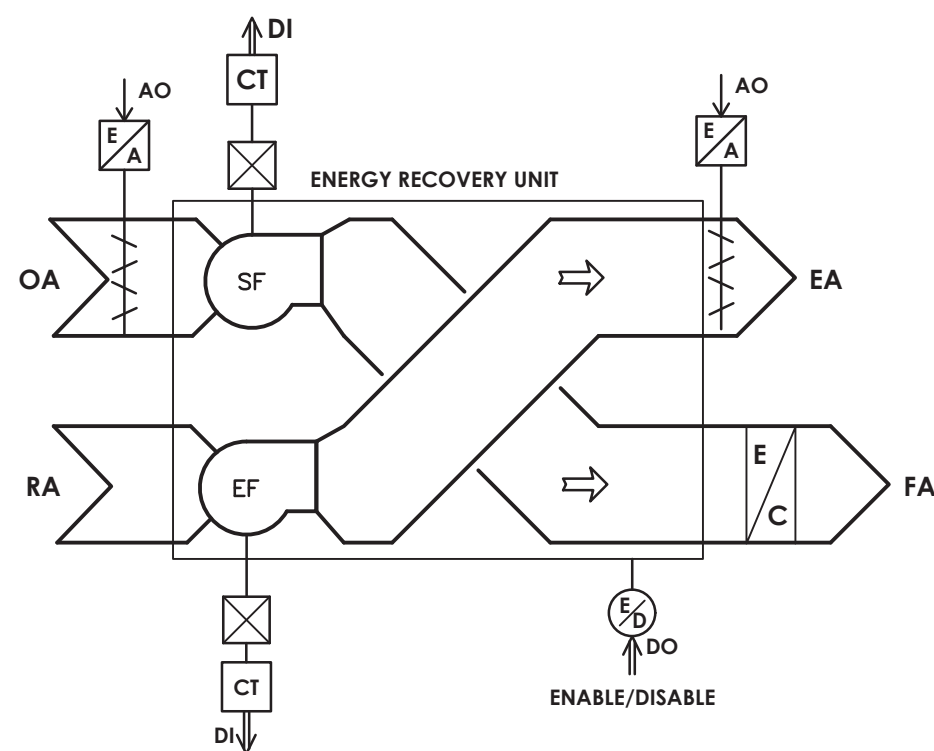
VRF MANUFACTURER TO PROVIDE CONTROL OF SPACE TEMPERATURE SET POINTS, OCCUPIED/UNOCCUPIED MODES, HEATING, COOLING MODES AND LOAD DEMAND.

**5 VRF SPLIT SYSTEM CONTROLS**  
H901 SCALE: NOT TO SCALE

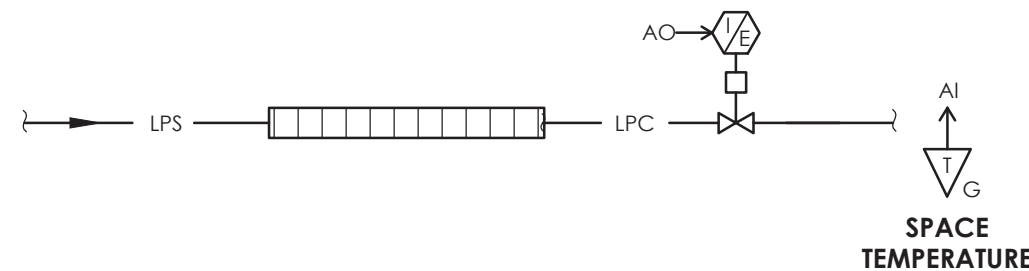


**6 INDOOR UNIT SUPPORT INSTALLATION DETAIL**  
H901 NOT TO SCALE

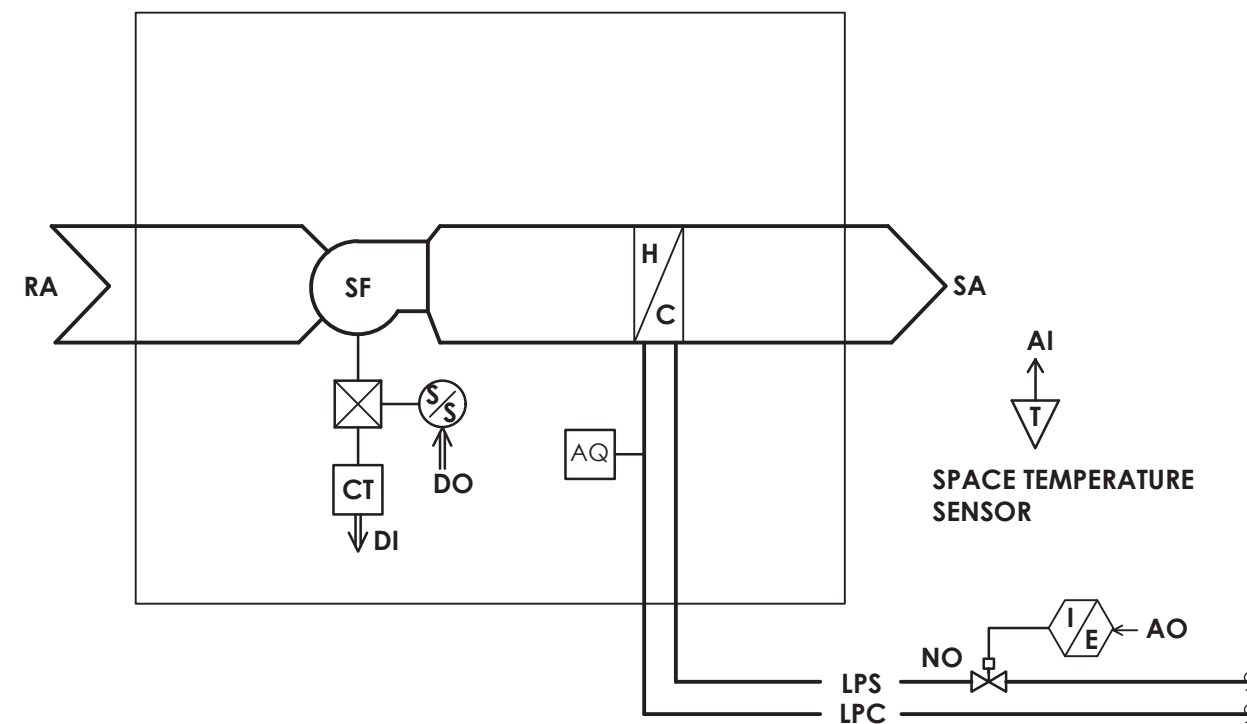
NAME	NUMBER	SQFT	PEOPLE/1000SQFT	CFM/PERSON	CFM/SQFT	People	TOTAL	EZ	ADJUSTED TOTAL
FIRST FLOOR CORRIDOR	100	1300	-	-	0.06	78	0.8	98	
SECOND FLOOR CORRIDOR	200	1350	-	-	0.06	81	0.8	101	
THIRD FLOOR CORRIDOR	300	1600	-	-	0.06	96	0.8	120	
CLASSROOM	319	235	35	10	0.12	9	118	0.8	148
BREAKOUT SPACE	301	415	35	10	0.12	15	200	0.8	250



**7 ENERGY RECOVERY UNIT CONTROLS**  
H901 SCALE: NOT TO SCALE



**8 FIN TUBE CONTROLS SCHEMATIC**  
H901 SCALE: NOT TO SCALE



**9 UNIT HEATER TYPICAL CONTROLS DIAGRAM**  
H901 SCALE: NOT TO SCALE

HEAT PUMP SCHEDULE																
MARK	LOCATION	SERVES	NOMINAL TONS	MBH COOLING	MBH HEATING	ELECTRICAL DATA							WT (LB)	EER/SEER	TYPICAL UNIT MFG & MODEL NO.	REMARKS:
						FAN DATA		COMPRESSOR		REF	Ø / V	MCA				
						NO.	MOTOR OUTPUT KW	QTY	RLA							
SSO-1	ROOF	SSI-1	1	12	12	1	0.046	1	12	410A	1/208	11	93	16.4/27	MITSUBISHI TPLA0A0121EA70A	1
REMARKS: 1. PROVIDE FACTORY MOUNTED DISCONNECT																

ENERGY RECOVERY UNITS (INDOORS)													
MARK	LOCATION	AREA SERVED	SA (CFM)	EA (CFM)	RA (CFM)	WINTER ENERGY RECOVERY %	SUMMER ENERGY RECOVERY %	OPERATING WEIGHT (LBS)	FILTERS	ELECTRICAL		TYPICAL UNIT MFG & MODEL NO.	REMARKS:
										V/Ø/HZ	MCA		
ERV-1	1ST FLOOR HALLWAY	1ST FLOOR HALLWAY	200	200	200	70	50	250 LBS	MERV 13, 2"	120/1/60	10.1	RENEWAIRE EV-450IN	1
ERV-2	2ND FLOOR HALLWAY	2ND FLOOR HALLWAY	200	200	200	70	50	250 LBS	MERV 13, 2"	120/1/60	10.1	RENEWAIRE EV-450IN	1
ERV-3	3RD FLOOR HALLWAY	3RD FLOOR HALLWAY	270	270	270	70	50	250 LBS	MERV 13, 2"	120/1/60	10.1	RENEWAIRE EV-450IN	1
REMARKS: 1. PROVIDE WITH 1.5 KW ELECTRIC HEATING COIL SHIPPED LOOSE BY MANUFACTURER.													

CEILING CASSETTE UNITS											
MARK	TOTAL AIRFLOW CFM	NOM. HEATING CAPACITY BTU/HR	HEATING CAPACITY BTU/HR	NOM. COOLING CAPACITY BTU/HR	COOLING CAPACITY BTU/HR	DIMENSIONS (W" X H" X D")	WEIGHT (LBS)	POWER (Ø/V/HZ)	AMPS	TYPICAL UNIT MFG & MODEL NO.	REMARKS:
SSI-1	530	20000	14000	12000	12000	33-1/16 X 10-5/32 X 33-1/16	46	1 / 208 / 60	1	mitsubishi TPLA0A0121EA70A	1
REMARKS: 1. FURNISH DISCONNECT SWITCHES FOR ALL UNITS.											

STEAM CABINATE UNIT HEATER SCHEDULE												
MARK	LOCATION	TYPE	CFM	STEAM PRESSURE	LBS/HR	OUTPUT MBH	EAT	LAT	V/PH/Hz	AMPS	TYPICAL UNIT MFG & MODEL NO.	REMARKS:
CUH-1	HALLWAY	CEILING RECESSED	860	2PSI	-	56000	60	120	115/1/60	2.2	STERLING RC008	1
CUH-2	HALLWAY	CEILING RECESSED	860	2PSI	-	56000	60	120	115/1/60	2.2	STERLING RC008	1
REMARKS: 1. COLOR BY ARCHITECT. ACCESS DOORS SHALL BE COORDINATED WITH CEILING AND STRUCTURE.												

LOUVER SCHEDULE								
MARK	LOCATION	SERVICE	FREE AREA (SQ. FT.)	CFM	SP (IN. WG)	SIZE W&H (IN.)	TYPICAL UNIT MFG. & MODEL NO.	REMARKS:
L-1	1ST FLOOR HALLWAY	SUPPLY AIR	0.75	200	0.05	18X12	RUSKIN ELF6375	1.2
L-2	1ST FLOOR HALLWAY	EXHAUST AIR	0.75	200	0.05	18X12	RUSKIN ELF6375	1.2
L-3	2ND FLOOR HALLWAY	SUPPLY AIR	0.75	200	0.05	18X12	RUSKIN ELF6375	1.2
L-4	2ND FLOOR HALLWAY	EXHAUST AIR	0.75	200	0.05	18X12	RUSKIN ELF6375	1.2
L-5	3RD FLOOR HALLWAY	SUPPLY AIR	0.75	270	0.05	18X12	RUSKIN ELF6375	1.2
L-6	3RD FLOOR HALLWAY	EXHAUST AIR	0.75	270	0.05	18X12	RUSKIN ELF6375	1.2
<u>REMARKS:</u> 1. COLOR MATCH WALL PANELS. 2. PROVIDE WITH BIRDSCREEN AND DRAINABLE BLADES.								

STEAM FIN TUBE SCHEDULE									
MARK	BTU/FT.	TUBE SIZE (IN.)	FINS / FT.	STEAM PSI	ENCLOSURE			TYPICAL UNIT MFG & MODEL NO.	REMARKS:
					L (IN.)	H (IN.)	D (IN.)		
FT-1	1520	3-5/8"X4-1/4"	32	2	100	14	6	STERLING JVB-S	1.2
REMARKS: 1. COLOR BY ARCHITECT. 2. ELEMENT LENGTH LISTED ON PLANS. CAT - 66289C RETURN									

REGISTERS, GRILLES, AND DIFFUSERS						
MARK	APPLICATION	MATERIAL	TYPE	FINISH	DESIGN EQUIP.	REMARKS
S-1	SUPPLY	STEEL	LAY-IN	WHITE	PRICE SCD	1.2
R-1	RETURN/EA	STEEL	LAY-IN	WHITE	PRICE 510	1.2
REMARKS: 1. PROVIDE WITH 24" x 24" CEILING MODULE FRAME LAY IN STYLE 2. COLOR BY ARCHITECT BASED ON MANUFACTURES STANDARD COLORS						



CPLteam.com  
ARCHITECTURE • ENGINEERING • PLANNING

50 FRONT STREET, SUITE 202  
NEWBURGH, NEW YORK 12550  
TEL (800) 274-9000  
FAX (845) 567-9614

OSSINING UFSD  
OSSINING HIGH SCHOOL  
THIRD FLOOR CONNECTOR  
29 SOUTH HIGHLAND AVENUE, OSSINING, NY 10562  
SED #: 66-14-01-03-0-003-040

DATE 3/12/2021  
DRAWN NRH  
CHECKED AJS

SCALE AS NOTED

SHEET TITLE  
MECHANICAL DETAILS  
CONTROLS AND  
SCHEDULES

PROJECT NUMBER  
14428.13  
OHS  
H901  
DRAWING NUMBER