

ADDENDUM #1

Project No.:	16-0023	Date:	January 4, 2019
Project:	Renovations for Community Education Center Portage Public Schools Kalamazoo County, Michigan	A/E Firm:	C2AE
Owner:	Portage Public Schools 8135 South Westnedge Ave. Portage, MI 49002	Project Manager:	Thomas McKercher
		Project Architect:	Gregg Jones
		Const. Manager:	Owen-Ames-Kimball

The following changes, revisions, modifications, etc. shall be incorporated into the contract documents, specifications, and plans.

BID FORM

A1.1 The Bidder shall acknowledge receipt of Addenda #1 by indicating so in the spaces provided on the Bid Form.

DRAWINGS

A1.2 Refer to Sheet A-601 (reissued):

Door Schedule Revisions; Pre-Bid RFI 001 and 003 Responses

- All door types previously noted "FG" REVISE to be "FL".
- All door types previously noted "1" REVISE to be "HL".
- REVISE Openings 120.1, 120.2, 122A.1, 122B.1, and 137.1 to WD doors in HM frames.
- REVISE Opening 150.1 to FRP door (type HL) in AL frame.

A1.3 Refer to Sheet P-101 (reissued):

REVISED plumbing fixture schedule to include eyewash station in sink LS-1.

A1.4 Refer to Sheet M-401 (reissued):

Revisions per Pre-Bid RFI 002 – Plumbing Fixture

- REVISE Mechanical Keynotes 1 and 4.
- ADD elevation value for L-1.

A1.5 Refer to Sheet M-501 (reissued):

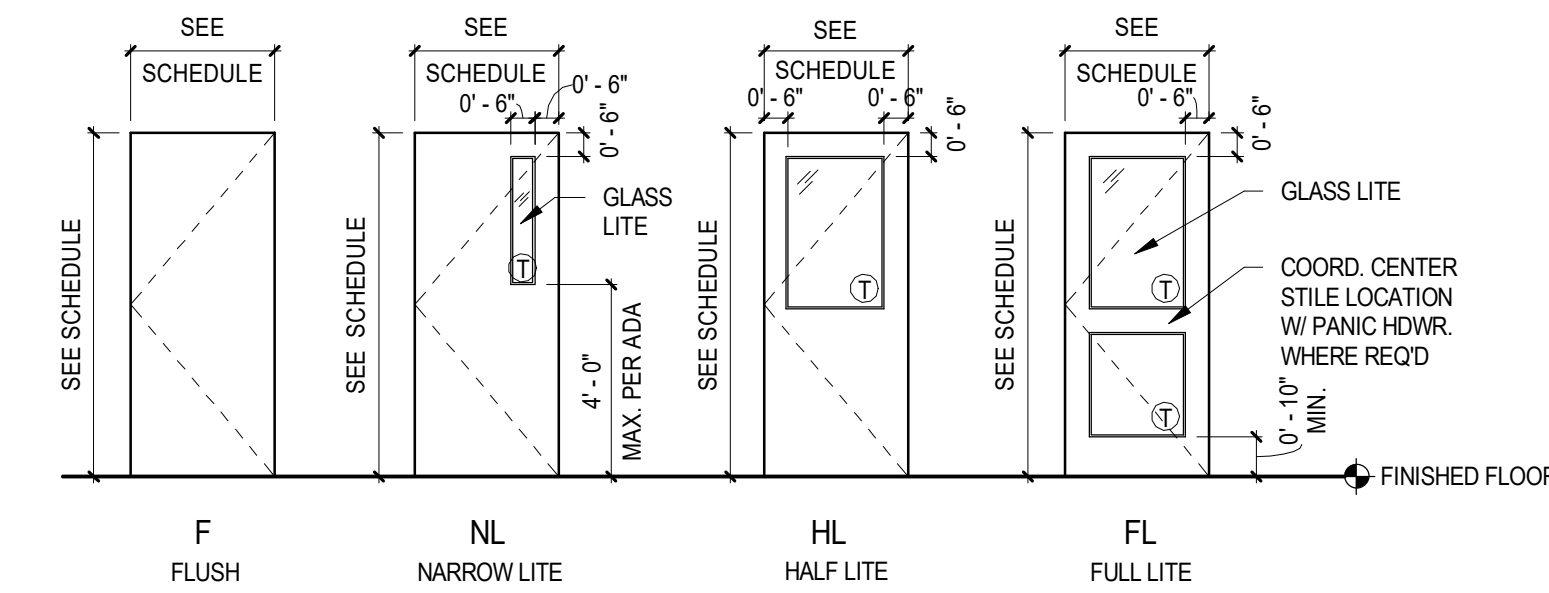
ADD Steam Coil Piping Detail.

Prebid Meeting Minutes

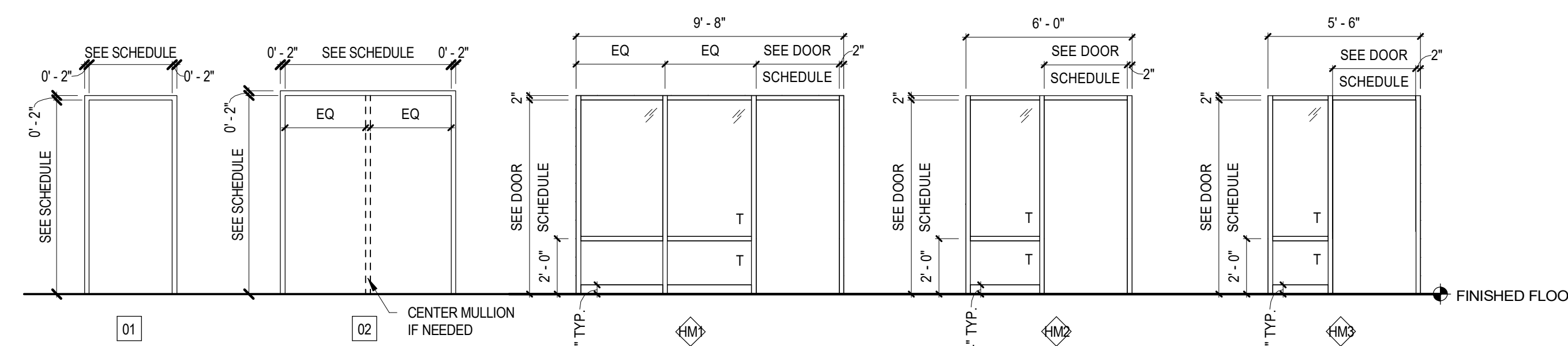
RFI Responses and Substitution Requests



ROOM NO.	ROOM NAME	DOOR NO.	DOOR SIZE		MATERIAL	TYPE	MATERIAL	FRAME			FIRE RATING	HARDWARE SET NO.	NOTES	
			WD	HGT				HEAD	JAMB	SILL				
111	CLASSROOM	111.1	3'-0"	7'-0"	WD	HL	HM	01	11/A201	17/A601	---	NONE	08	
120	RECEPTION	120.1	3'-0"	7'-0"	WD	FL	HM	HM3	10/A201	17/A601 SIM	---	NONE	05	ACCESS CONTROL, DOOR OPERATOR
120	RECEPTION	120.2	3'-0"	7'-0"	WD	FL	HM	HM1	11/A201	17/A601	---	NONE	09	
120	RECEPTION	120.3	3'-0"	7'-0"	EX WD	F	EX WD	---	---	---	---	NONE	01	REPLACE HARDWARE ONLY
122A	PRINCIPAL OFFICE	122A.1	3'-0"	7'-0"	WD	HL	HM	01	14/A601	15/A601	---	NONE	03	
122B	OFFICE	122B.1	3'-0"	7'-0"	WD	FL	HM	01	14/A601	15/A601	---	NONE	03	
137	GYM	137.1	3'-0"	7'-0"	WD	F	HM	01	10/A201 SIM	17/A601	---	NONE	23	
141	VESTIBULE	141.1	3'-0"	6'-11"	EX AL	FL	EX AL	---	---	---	---	NONE	26	ACCESS CONTROL, DOOR OPERATOR
141	VESTIBULE	141.2	3'-0"	6'-11"	EX AL	FL	EX AL	---	---	---	---	NONE	26	ACCESS CONTROL
141	VESTIBULE	141.3	3'-0"	7'-0"	AL	FL	AL	SF1	13/A601	11 & 12/A601	---	NONE	27	ACCESS CONTROL, DOOR OPERATOR
141	VESTIBULE	141.4	3'-2"	7'-0"	AL	FL	AL	SF1	13/A601	11 & 12/A601	---	NONE	27	ACCESS CONTROL
150	CORRIDOR	150.1	6'-0"	7'-0"	FRP	HL	AL	02	---	---	---	NONE	28	

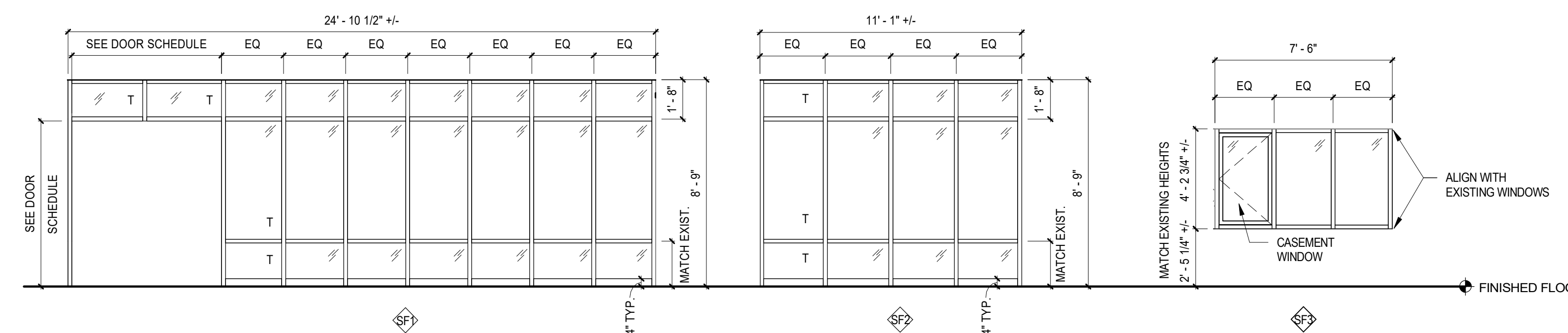


DOOR TYPES
1/4" = 1'-0"

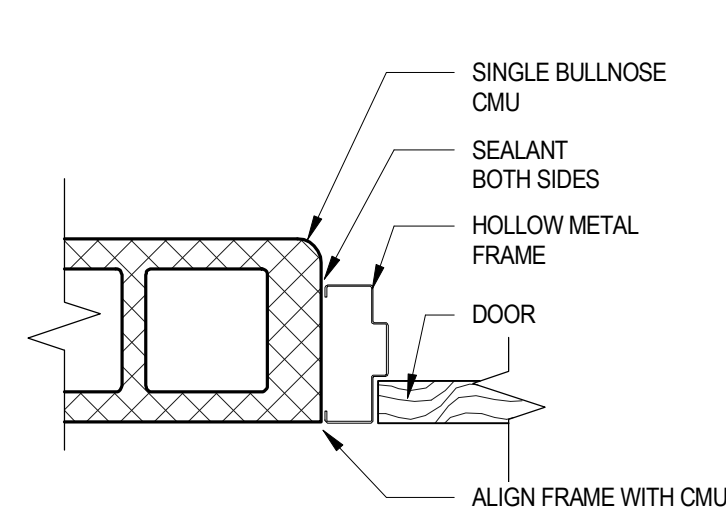


GENERAL FRAME TYPES
1/4" = 1'-0"

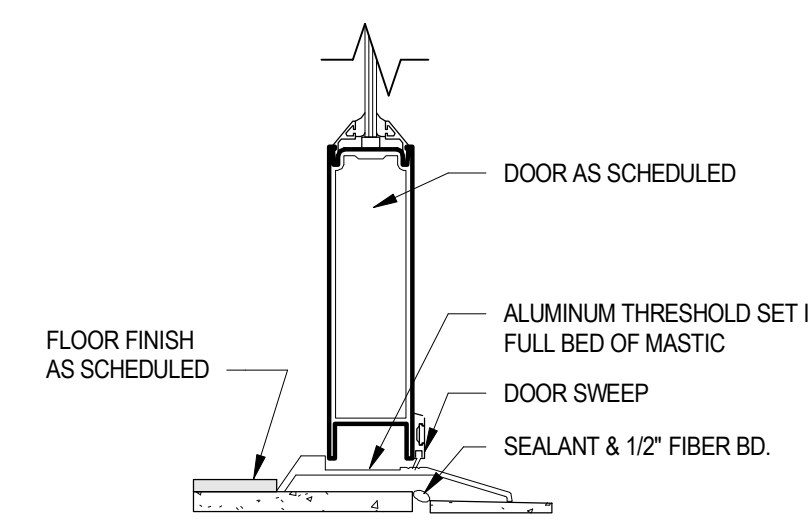
HOLLOW METAL FRAME TYPES
1/4" = 1'-0"



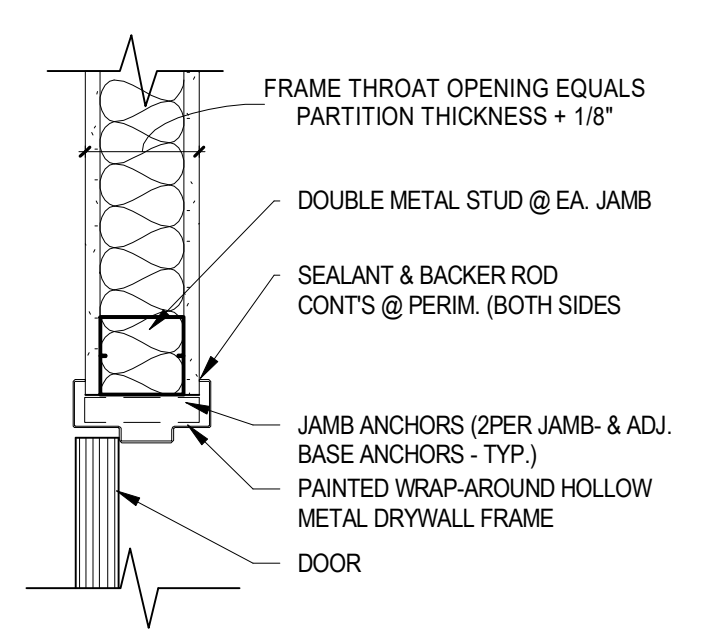
STOREFRONT FRAME TYPES
1/4" = 1'-0"



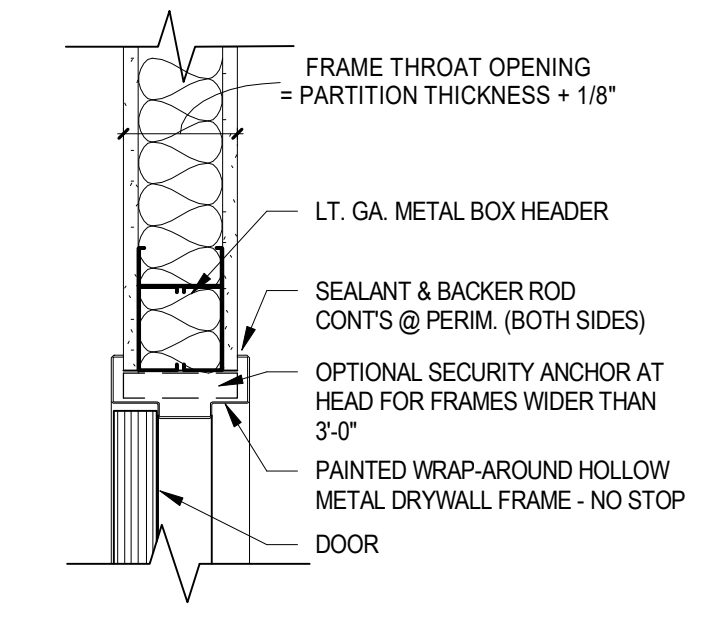
17 MASONRY PARTITION JAMB DETAIL
1 1/2" = 1'-0"



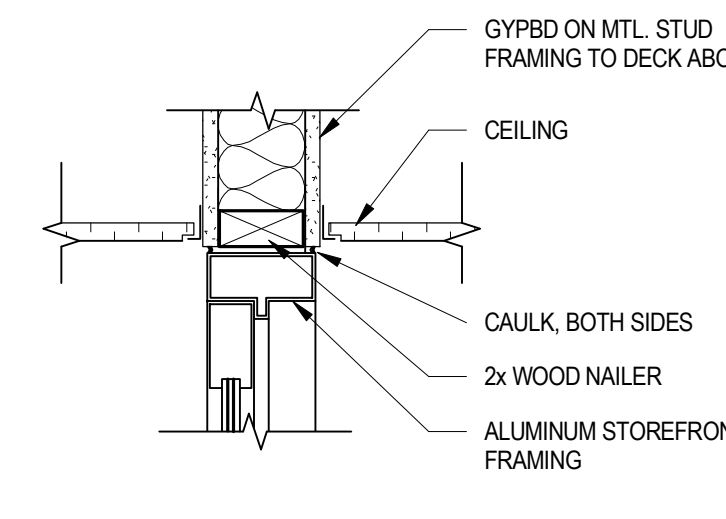
16 EXTERIOR THRESHOLD DETAIL
3" = 1'-0"



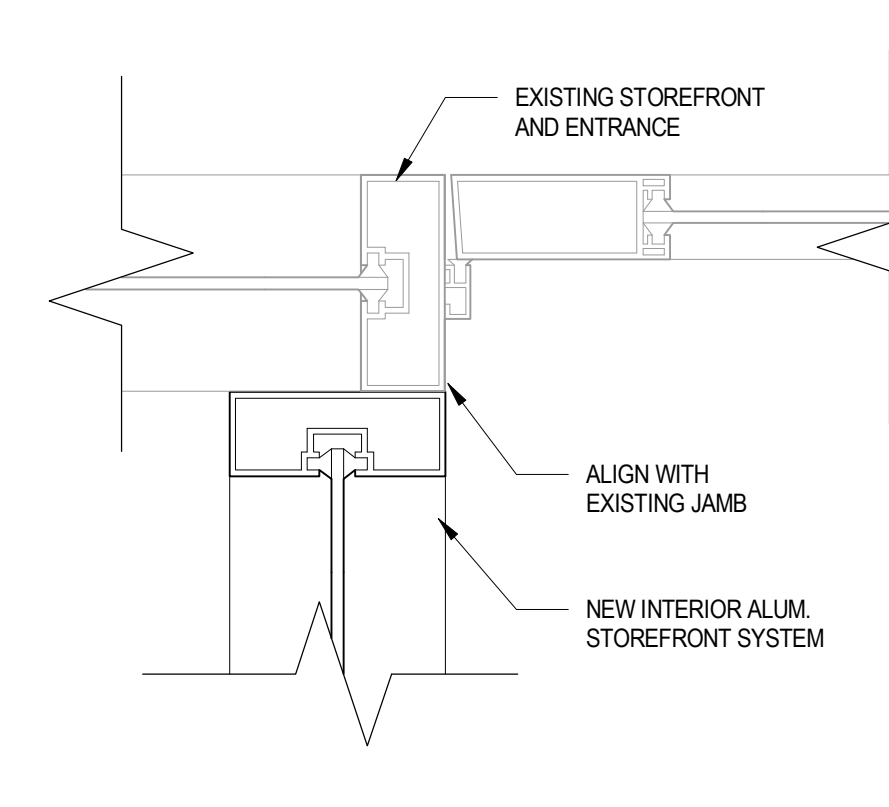
15 STUD PARTITION JAMB DETAIL
1 1/2" = 1'-0"



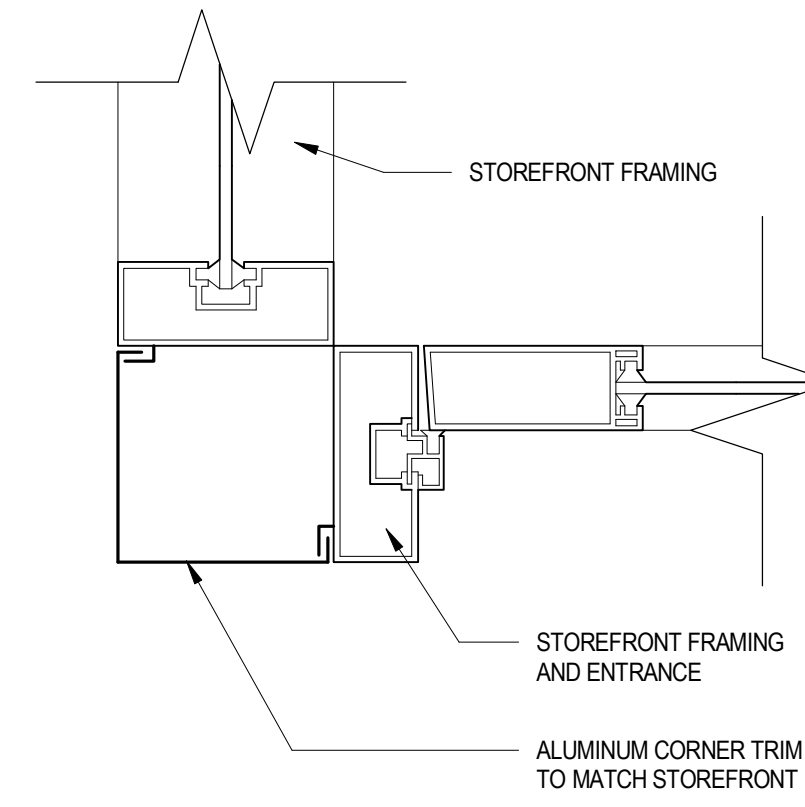
14 STUD PARTITION HEAD DETAIL
1 1/2" = 1'-0"



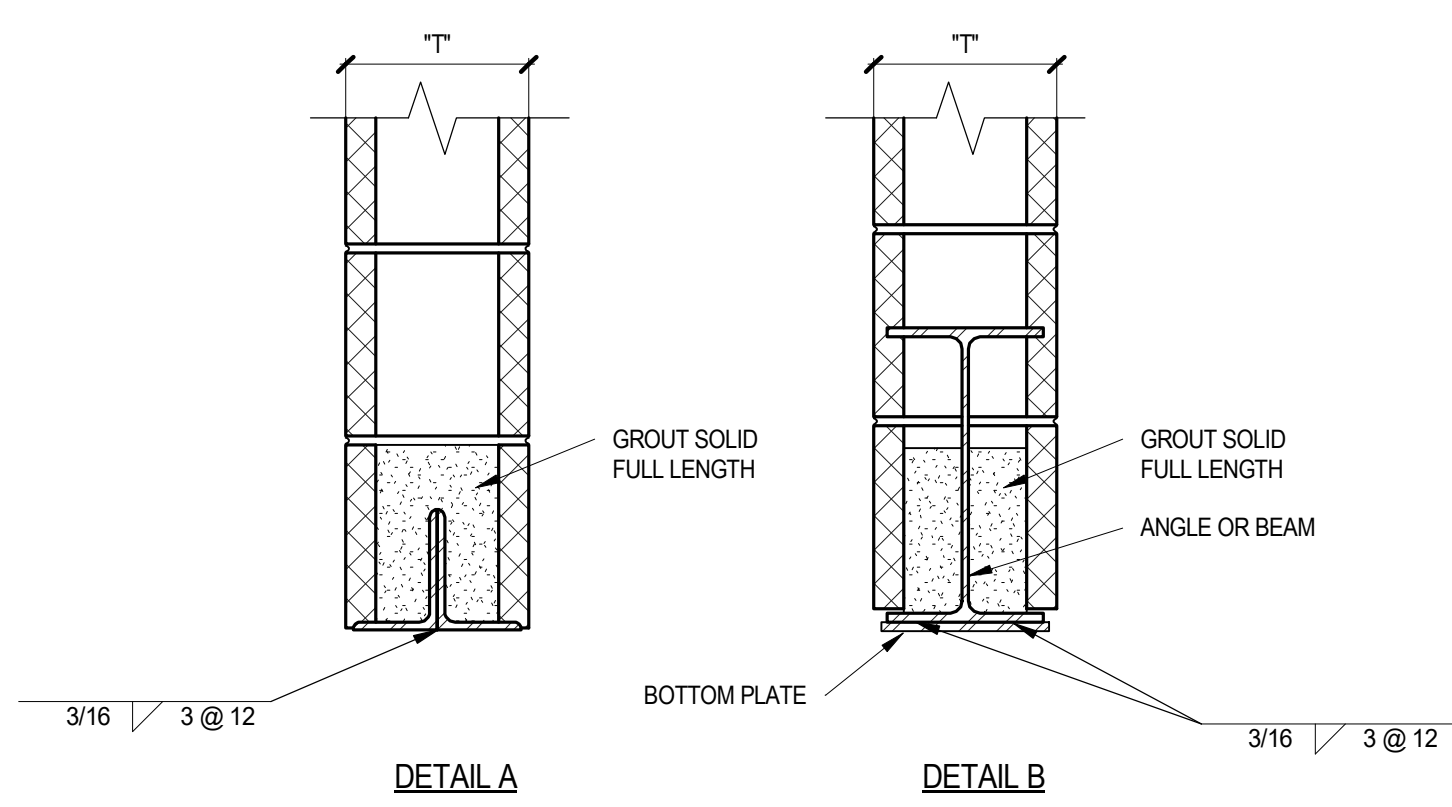
13 STOREFRONT / STUD PARTITION HEAD DETAIL
1 1/2" = 1'-0"



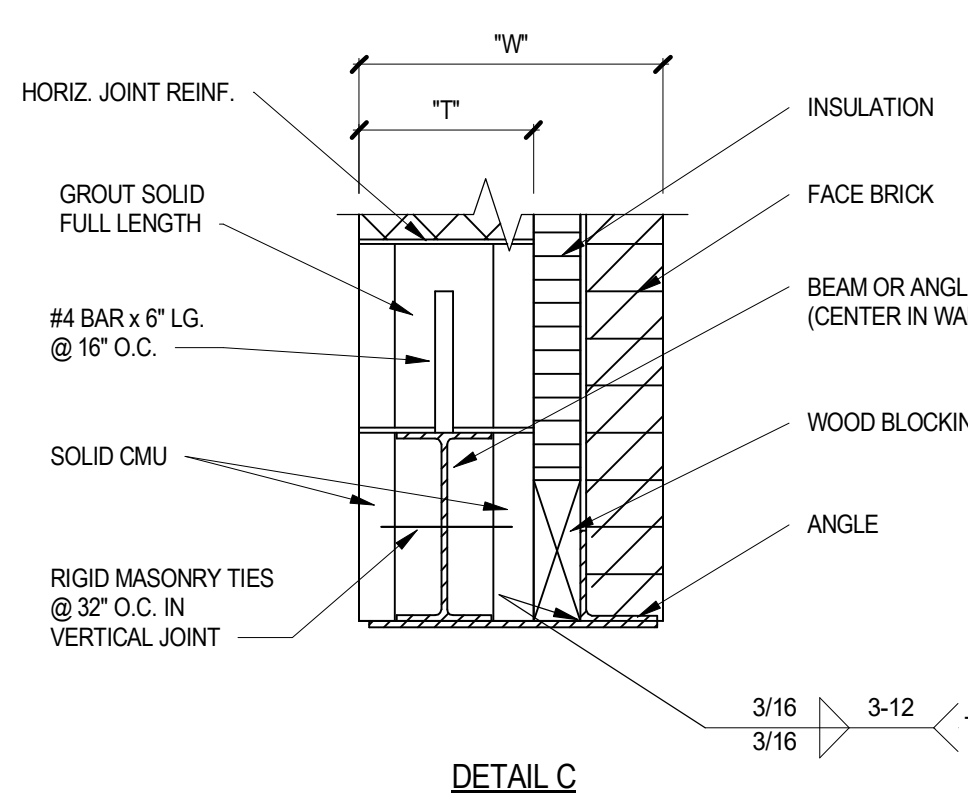
12 STOREFRONT TO EXISTING
3" = 1'-0"



11 STOREFRONT CORNER
3" = 1'-0"



LINTEL DETAILS
1 1/2" = 1'-0"



DETAIL C

SPAN	WITHOUT FACE BRICK			WITH FACE BRICK		
	T	DESCRIPTION	DETAIL	T	DESCRIPTION	DETAIL
0 TO 6'-0"	6"	(2) L3 1/2 x 2 1/2 x 5/16 (LLV)	A	6"	(1) WT7x13 & L4 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	8"	(2) L3 1/2 x 3 1/2 x 5/16	A	8"	(3) L3 1/2 x 3 1/2 x 5/16 W PL 3/8" x (W-1)	C
	10"	L4 x 3 x 5/16 & L5 x 3 x 5/16 (SLV)	A	10"	(3) L4 x 4 x 5/16 W PL 3/8" x (W-1)	C
6'-1" TO 8'-0"	12"	(2) L4 x 4 x 5/16 W PL 3/8" x 11"	B	12"	(3) L4 x 4 x 5/16 W PL 3/8" x (W-1)	C
	6"	(1) WT7x13 (CENTERED)	A	6"	(1) WT7x13 & L4 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	8"	(2) L5 x 3 1/2 x 5/16	A	8"	(3) L5 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
8'-1" TO 10'-0"	10"	L4 x 4 x 5/16 & L4 x 5 x 5/16	A	10"	WB8x10 & L4 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	12"	WB8x10 W PL 3/8" x 11"	B	12"	WB8x10 & L4 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	6"	WT8x15 (CENTERED)	A	6"	WT8x15 (CENTERED)	C
8'-1" TO 10'-0"	8"	WB8x15 W PL 3/8" x 7"	B	8"	WB8x15 & L5 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	10"	WB8x15 W PL 3/8" x 9"	B	10"	WB8x15 & L5 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C
	12"	WB8x15 W PL 3/8" x 11"	B	12"	WB8x15 & L5 x 3 1/2 x 5/16 (LLV) W PL 3/8" x (W-1)	C

- NOTES:
- DETAIL A & B LINTELS SHALL BEAR A MINIMUM OF 8" ON FULLY GROUTED COURSES OF SOLID MASONRY. LINTELS SPANNING 8'-0" OR MORE SHALL BEAR ON FULLY GROUTED CORES FULL HEIGHT OF JAMB.
 - ALL LINTELS AT EXTERIOR LOCATIONS OR OTHERWISE SUBJECT TO WEATHER OR CORROSIVE ATMOSPHERE SHALL BE GALVANIZED. LINTELS CONSISTING OF A PLATE AND ROLLED BEAM W/8 AND SMALLER SHALL HAVE BOTH PLATE AND BEAM GALVANIZED AFTER WELDING. LINTELS CONSISTING OF A PLATE AND ROLLED BEAM LARGER THAN W8 SHALL HAVE PLATE GALVANIZED AND BEAM PAINTED WITH SHOP PRIMER. ALL ANGLES SHALL BE GALVANIZED.
 - LINTELS UTILIZING BOTTOM PLATES SHALL HAVE PLATE EXTEND FULL LENGTH OF MASONRY OPENING ONLY. BOTTOM PLATES SHALL NOT EXTEND INTO JAMBS OF WALL OPENINGS.
 - FOR OPENINGS 16 INCHES AND SMALLER, PROVIDE SOLID GROUTED BOND BEAM WITH (2) #5 BARS WITH 8" MIN. BEARING EACH SIDE OF OPENING.
 - LINTELS AT MULTI WYTHE BRICK WALLS SHALL UTILIZE ONE ANGLE EACH WYTHE (PER SCHEDULE ABOVE) WITH 3/8" BOTTOM PLATE (W-1)

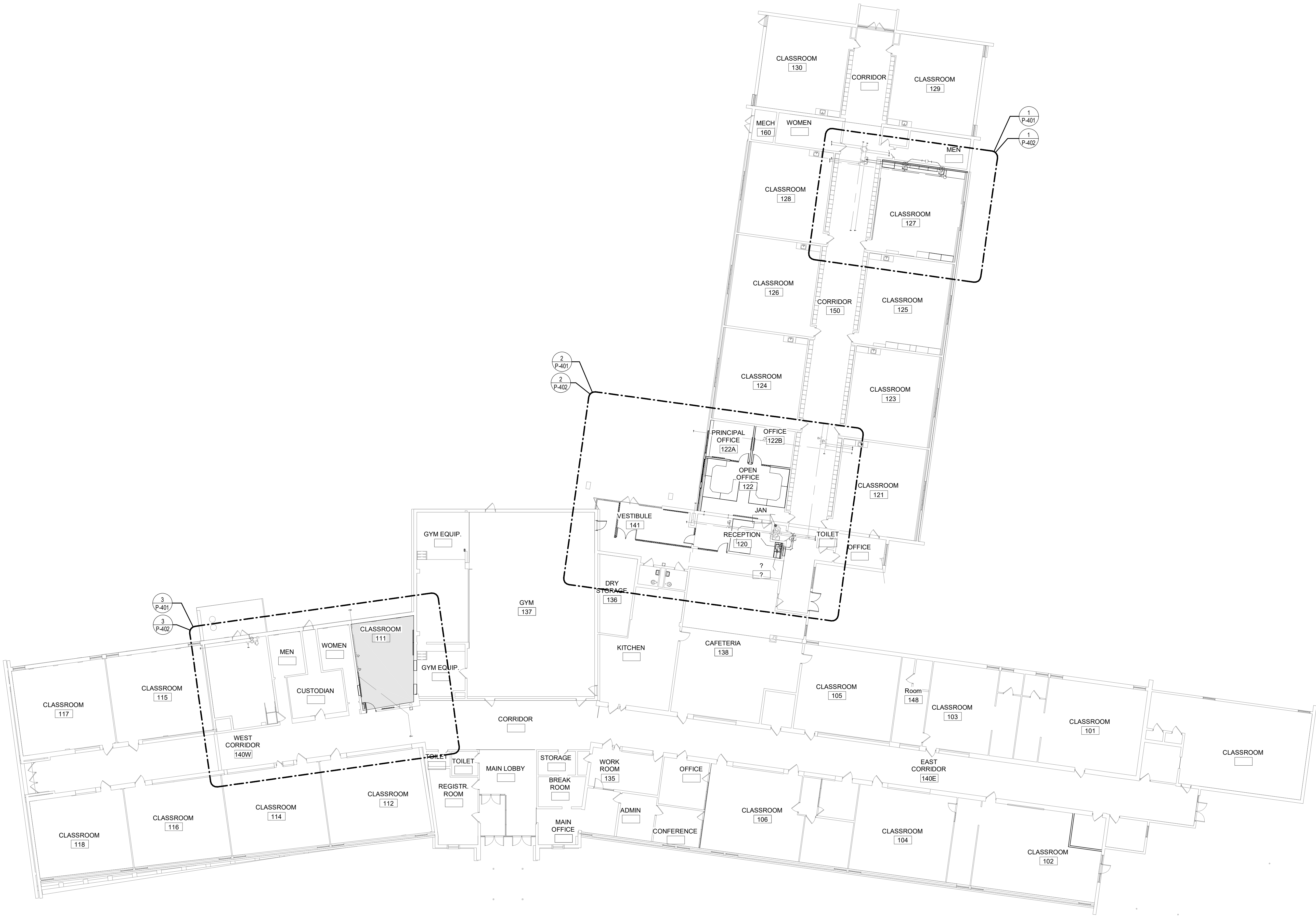
REV.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	10/20/18

SCALE: As Indicated
PROJ. # 160003
DATE 12/10/2018
SHEET

PLUMBING PIPING SYSTEM APPLICATION SCHEDULE					PIPING MATERIAL					JOINING METHOD					CONSTRUCTION		INSULATION										
SYSTEM	ABBREVIATION	AREA OR SYSTEM SERVED	PIPE LOCATION	PIPE SIZE (IN)	COPPER DWV TUBE	COPPER TYPE L	SCH 40 STEEL	CAST IRON, HUBLESS	PVC, SOLID WALL	CPVC (CHEMICAL PIPING)	POLYPROPYLENE	MECHANICAL (COUPLING)	GROOVED (VICTAULIC)	FLANGED	SOLDERED (LOW TEMP)	BRAZED (HIGH TEMP)	HEAT FUSION	SOLVENT CEMENT	THREADED	WELDED	OPERATING TEMPERATURE (°F)	MINIMUM WORKING PRESSURE (PSI)	MINERAL FIBER PREFORMED	FLEXIBLE ELASTOMERIC	THICKNESS (IN)	ASJ (ALL-SERVICE JACKET)	PVC FITTINGS
DOMESTIC WATER	CW / HW / HWR	DOMESTIC WATER	ABOVE GROUND	NPS 1-1/2 AND SMALLER		X									X	X					40-140	100	X	X	1	X	X
DOMESTIC WATER	CW / HW / HWR	DOMESTIC WATER	ABOVE GROUND	NPS 2 TO NPS 4		X	X								X	X					40-140	100	X	X	1.5	X	X
NATURAL GAS	NG	BUILDING NATURAL GAS	ABOVE GROUND	ALL SIZES	X										X						40-140	100					
INDIRECT WASTE	IW	EQUIPMENT WASTE	ABOVE GROUND	ALL SIZES					X						X						40-140	100					
SANITARY & VENT	SAN / V	TOILET ROOMS / SINKS / MISC. FLOOR DRAINS	ABOVE GROUND	ALL SIZES				X			X							X			30-140	.5					
SANITARY & VENT	SAN / V	TOILET ROOMS / SINKS / MISC. FLOOR DRAINS	UNDER GROUND	ALL SIZES				X	X			X						X			30-140	.5					

- PLUMBING GENERAL NOTES:**
- IF COMPLIANCE WITH TWO OR MORE DIFFERING STANDARDS, REQUIREMENTS, DRAWINGS OR SPECIFICATIONS, AND FROM END DOCUMENTS, IS SPECIFIED AND THESE ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENT. THE MOST STRINGENT REQUIREMENT WILL BE THE BETTER QUALITY OR GREATER QUANTITY OF WORK AND WILL TYPICALLY BE THE MORE EXPENSIVE OPTION. REFER UNCERTAINTIES AND REQUIREMENTS THAT ARE DIFFERENT, BUT APPARENTLY EQUAL, TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
 - THE QUANTITY OR QUALITY LEVEL SHOWN OR SPECIFIED SHALL BE THE MINIMUM PROVIDED OR PERFORMED. THE ACTUAL INSTALLATION MAY COMPLY EXACTLY WITH THE MINIMUM QUANTITY OR QUALITY SPECIFIED, OR IT MAY EXCEED THE MINIMUM WITHIN REASONABLE LIMITS. TO COMPLY WITH THESE REQUIREMENTS, INDICATED NUMERIC VALUES ARE MINIMUM OR MAXIMUM, AS APPROPRIATE. FOR THE CONTEXT OF REQUIREMENTS, REFER UNCERTAINTIES TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
 - DESIGN DOCUMENTS MUST BE REPRODUCED IN THEIR ENTIRETY, INCLUDING ALL PLANS, SPECIFICATIONS, AND FROM END DOCUMENTS.
 - ONLY COMPLETE DOCUMENT SETS ARE TO BE DISTRIBUTED TO SUBCONTRACTORS AND SUPPLIERS OF THE CONTRACTOR DURING BIDDING OR CONSTRUCTION.
 - FAILURE TO REVIEW AND COMPLY WITH A FULL SET OF CONTRACT DOCUMENTS WILL NOT BE ACCEPTED AS A VALID REASON FOR FAILURE TO MEET THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
 - ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, ORDINANCES, AND LAWS AND SHALL BE OF SIMILAR QUALITY MATERIAL AND INSTALLATION METHODOLOGY AS SIMILAR WORK IN EXISTING FACILITY.
 - ALL INSULATION SHALL BE PRESUMED ASBESTOS CONTAMINATED MATERIAL (PACM) UNLESS OTHERWISE INDICATED OR LABELED. THE CONTRACTOR SHALL ABATE ALL ASBESTOS BY APPROVED METHODS. CONSULT WITH THE OWNER'S REPRESENTATIVE REGARDING LOCATION AND EXTENT OF PACM PRIOR TO WORK.
 - HAZARDOUS MATERIALS ARE PRESUMED TO BE PRESENT IN CONSTRUCTION TO BE SELECTIVELY DEMOLISHED. A REPORT ON THE PRESENCE OF HAZARDOUS MATERIALS IS ON FILE FOR REVIEW AND USE. EXAMINE REPORT TO BECOME AWARE OF LOCATIONS WHERE HAZARDOUS MATERIALS ARE PRESENT.
 - ALL ABOVE CEILING SYSTEMS AND COMPONENTS (INCLUDING BUT NOT LIMITED TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, ETC.) SHALL BE COORDINATED SUCH THAT THE SYSTEMS ARE PROPERLY INTEGRATED IN THE SPACE PROVIDED ABOVE CEILING AT THE CEILING HEIGHTS NOTED. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO COORDINATE PATHWAYS WITHIN THE SPACE PROVIDED. CEILING HEIGHTS WILL NOT BE MODIFIED.
 - COORDINATE LOCATIONS OF ALL FIXTURES WITH ARCHITECTURAL AND ELECTRICAL PRIOR TO ROUGH-IN. ALL CONFLICTS WITH FINISHES, ADJACENT CONSTRUCTION, AND CONSTRUCTION DOCUMENTS ARE TO BE GENERATE AN RFI FROM THE MECHANICAL CONTRACTOR TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING AND COMPLETION OF WORK.
 - CEILING CONTRACTOR SHALL FURNISH AND INSTALL HINGED STEEL ACCESS PANELS FOR ALL ABOVE CEILING DAMPERS, VAV BOXES, FILTERS, BALANCING VALVES, AND ISOLATION VALVES IN GYPSUM CEILINGS. PANELS SHALL BE KEPT FOR ACCESS BY MAINTENANCE STAFF ONLY AND FINISHED WITH WHITE BAKED ON ENAMEL. PLUMBING CONTRACTOR SHALL CONSOLIDATE ABOVE CEILING ACCESS REQUIREMENTS TO LIMIT PANELS TO NO MORE THAN 25". PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY ACCESS PANELS AS A RESULT FROM PLAN DEVIATION ALTERATION. COORDINATE QUANTITY AND LOCATION OF ADDITIONAL ACCESS PANELS WITH CEILING CONTRACTOR.
 - ALL SANITARY AND STORM PIPING SHALL BE INSTALLED TO MAINTAIN 1/8" SLOPE FOR 3' OR LARGER AND 1/4" PER FOOT FOR 2' OR SMALLER, TYPICAL UNLESS OTHERWISE NOTED.
 - ALL SANITARY AND STORM RISERS SHALL BE FITTED WITH ACCESSIBLE CLEANOUT AT BASE. PROVIDE CLEANOUT COVER/WALL PLATE IN FINISHED AREAS. PROVIDE BOLLARDS IN EXPOSED AREAS. COORDINATE EXACT LOCATION WITH STEEL AND CONCRETE CONTRACTORS TO ENSURE BOLLARDS ARE PROVIDED.
 - PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR FIRESTOPPING ALL NEW PLUMBING PENETRATIONS THROUGH RATED ASSEMBLIES.
 - PLUMBING CONTRACTOR SHALL PROVIDE WATER PROOF SHEET METAL CAP, INSULATED (EQUIVALENT TO ROOF) FOR ALL DEMOLISHED ROOF PENETRATIONS.
 - PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ISOLATION VALVES AT ALL WATER CONSUMING FIXTURES, AND LOCATE VALVES TO ALLOW FOR ACCESS WITHIN 3' AFTER CONSTRUCTION IS COMPLETE.

PLUMBING FIXTURE SCHEDULE									
MARK	FITTURE	MANUFACTURER	MODEL	CONNECTIONS					DESCRIPTION
				SAN	VENT	GW	HW	GAS	
S-1	SINK	ELKAY	LRAD29265	2"	1-1/2"	1/2"	1/2"	-	25" x 22" x 6 1/2" SINGLE BOWL, TOP MOUNT, REAR OFFSET DRAIN, 18 GAUGE 304 STAINLESS STEEL.
	TRIM	CHICAGO FAUCETS	1100-QNBAE35-S17AB	-	-	-	-	-	8" SWING GOOSENECK SPOUT, 1.5 GPM AERATOR AND 4" WRIST BLADE HANDLES.
	DRAIN	ELKAY	LK899	-	-	-	-	-	3 1/2" STAINLESS STEEL CONICAL BASKET STRAINER WITH RUBBER STOPPER AND LOCKING STEM, 4" LONG 1 1/2" Ø TAILPIECE.
	SUPPLIES	MCQUIRE	LF2165CCLK	-	-	-	-	-	1/2" LOOSE KEY ANGLE STOP WITH BRASS STEMS AND 1/2" Ø D. RISER.
	TRAP	MCQUIRE	8912	-	-	-	-	-	CAST BRASS P-TRAP WITH CLEANOUT PLUG AND BRASS NUTS.
	MIXING VALVE	BRADLEY	S59-4000A	-	-	-	-	-	ASSE 1070 FOR SINGLE FIXTURE USE.
LS-1	LAB SINK	CHICAGO FAUCETS	294-LK229FETZ47	2"	1-1/2"	-	-	-	PROVIDED BY ARCHITECTURAL TRADES. INSTALLED BY PG SEE ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.
	ACID NEUTRALIZATION TRAP	ZURN	29A-PH3	1-1/2"	-	-	-	-	ENAMEL REINFORCED POLYPROPYLENE, VAVN, 1/2" NPT FEMALE, 1/2" NPT FEMALE, 1/2" NPT FEMALE, 1/2" NPT FEMALE.
	EYEWASH / SHOWER	HAWS	7611	-	-	1-1/4"	1-1/4"	-	GLASS FILLED POLYPROPYLENE CONSTRUCTION, HOUBS OUTLET, PHX MEDIA.
	EMERGENCY MIXING VALVE	HAWS	9201EW	-	-	1/2"	1/2"	-	COUNTER MOUNTED CHROME PLATED BRASS SWING OUT EYE WASH, DUST CAP, ANSI/ISEA 2388.1 APPROVED, EMERGENCY THERMOSTATIC MIXING VALVE.



PLUMBING PIPING SYMBOLS LEGEND	
Symbol	DESCRIPTION
CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
V	SANITARY VENT (ABOVE GRADE)
SAN	SANITARY (ABOVE GRADE)
— SAN —	SANITARY (BELOW GRADE)
→	DIRECTION OF FLOW
⊥	ANCHOR
↕	REDUCER OR INCREASER
⊂	TOP CONNECTION, 45 OR 90
⊃	SIDE CONNECTION
⊄	BOTTOM CONNECTION, 45 OR 90
⊥	CAPPED OUTLET
↕	RISE OR DROP IN PIPE
⊞	UNION
↕	PIPE UP
↕	PIPE DOWN
⊞	INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES
⊞	FLOAT AND THERMOSTATIC TRAP SET
⊞	FLOW ELEMENT
⊞	THERMOMETER
⊞	PRESSURE GAUGE
⊞	DEMOLITION END POINT
⊞	POINT OF CONNECTION BETWEEN PROPOSED AND EXISTING SYSTEMS
CO	END OF LINE CLEANOUT
FCO	FLOOR CLEANOUT
WCO	WALL CLEANOUT
⊞	PUMP
⊞	HOSE BIBB

PLUMBING VALVE SYMBOLS LEGEND	
Symbol	DESCRIPTION
⊞	GATE VALVE
⊞	GLOBE VALVE
⊞	CHECK VALVE
⊞	STRAINER
⊞	FLEXIBLE CONNECTION
⊞	BUTTERFLY VALVE
⊞	BALL VALVE
⊞	TWO-WAY CONTROL VALVE
⊞	THREE-WAY CONTROL VALVE
⊞	TRIPLE DUTY VALVE
⊞	PRESSURE REGULATING VALVE
⊞	BALANCE VALVE
⊞	PRESSURE RELIEF VALVE
⊞	PLUG VALVE
⊞	MANUAL AIR VENT
⊞	TEST PLUG
⊞	AUTOMATIC AIR VENT
⊞	PIPE CAP
⊞	CIRCUIT SETTER
⊞	FLOW METER
⊞	PETE'S PLUG

PLUMBING PLAN - OVERALL
1/16" = 1'-0"

REV#	DESCRIPTION	DATE

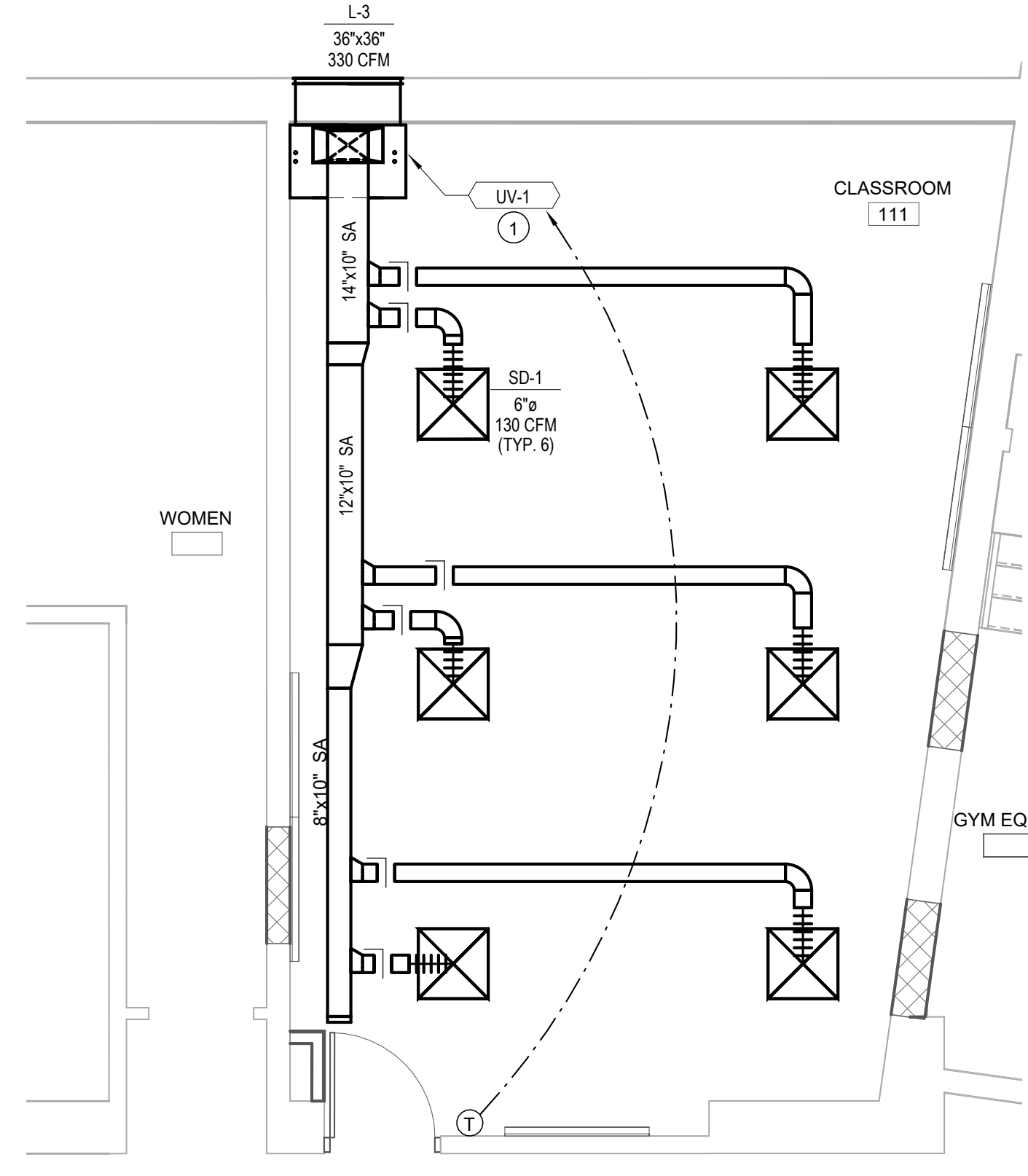
SCALE: As Indicated
PROJ. # 140073
DATE 12/02/2018
SHEET



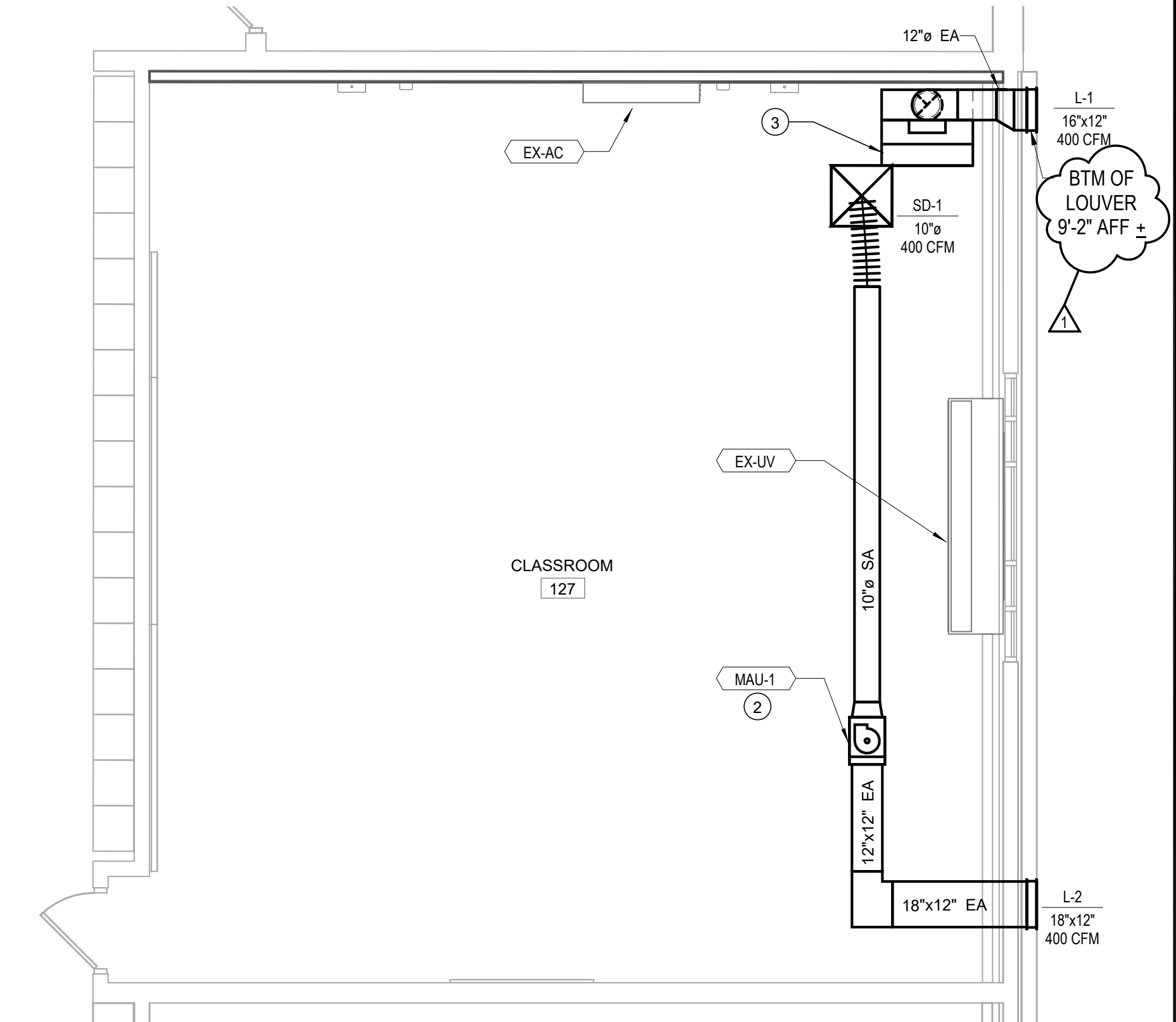
REVISIONS		
REV#	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	12/02/2018

SCALE:	As Indicated
PROJ. #	160023
DATE	12/02/2018
SHEET	

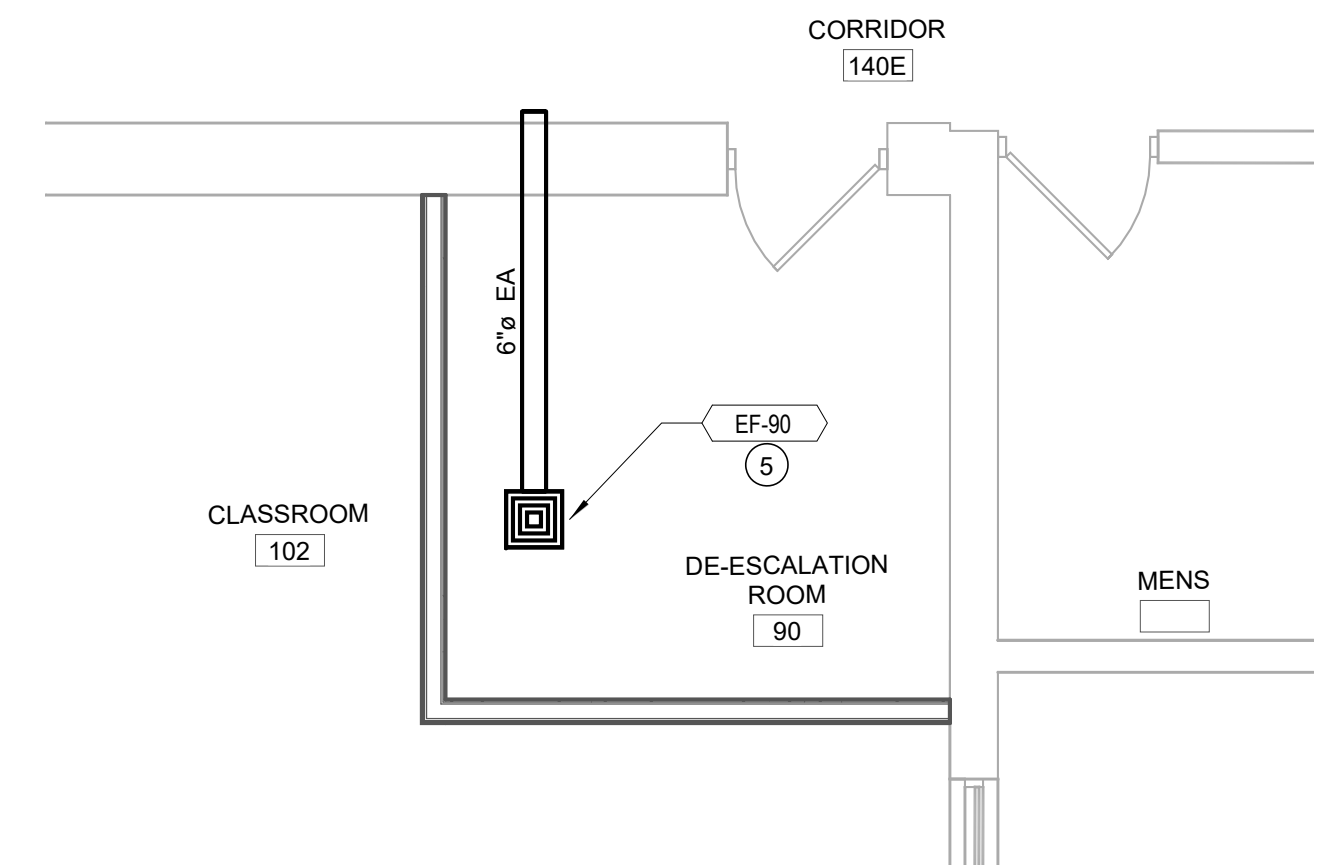
- MECHANICAL KEYNOTES:**
- UNIT VENTILATOR MOUNTED ON FLOOR. BASED ON AREDALE MANUFACTURER FURNISHED LOUVER AND WALL SLEEVE. CONCEAL DUCTWORK FROM UNIT TO CEILING WITH MANUFACTURER FURNISHED SHEET METAL COVER. PROVIDE WITH LOW PRESSURE STEAM COIL AND BYPASS VALVE. CONNECT TO EXISTING STEAM AND CONDENSATE PIPING ABOVE CEILING.
 - WALL EQUALIZER MOUNTED WITH WALL IN TAKE WOOD SMOKE DAMPER, FILTER CASSETTE, AND 10 KW DUCT HEATER - Z08601
 - LAB HOOD EQUAL TO LABCONCO FULLY ASSEMBLED BASIC 47 UNIT, 4 FEET WIDE WITH INTEGRAL BLOWER MOTOR - 115V/1PH/60HZ
 - NOT USED.
 - EXHAUST FAN MOUNTED IN CEILING. ROUTE 6" DUCT, 50 CFM, FROM ROOM INTO SPACE ABOVE CEILING IN THE CORRIDOR. THE AIR IS NOT REQUIRED TO BE EXHAUSTED TO THE OUTDOORS.



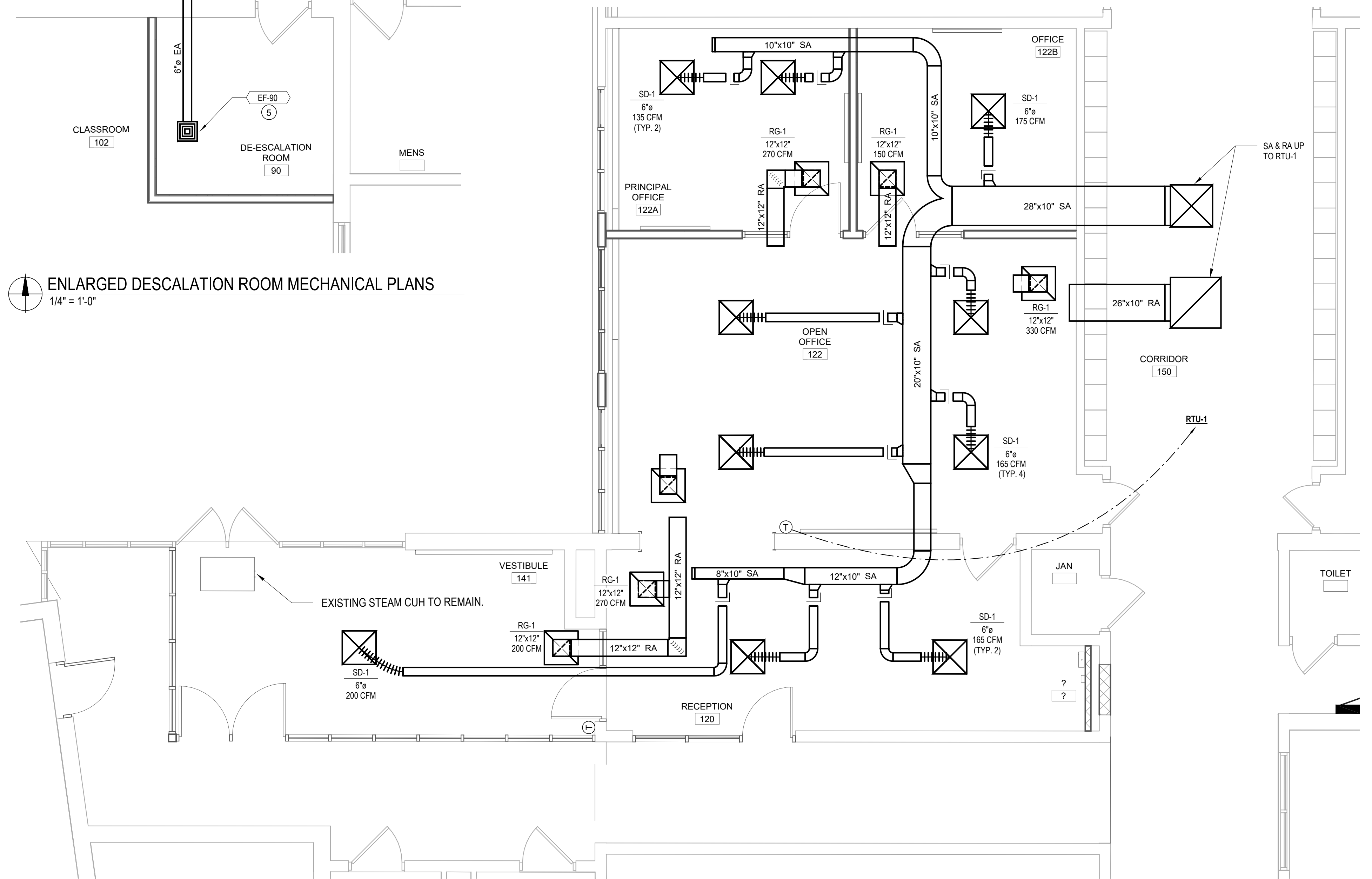
ENLARGED CLASSROOM 111 MECHANICAL PLAN
1/4" = 1'-0"



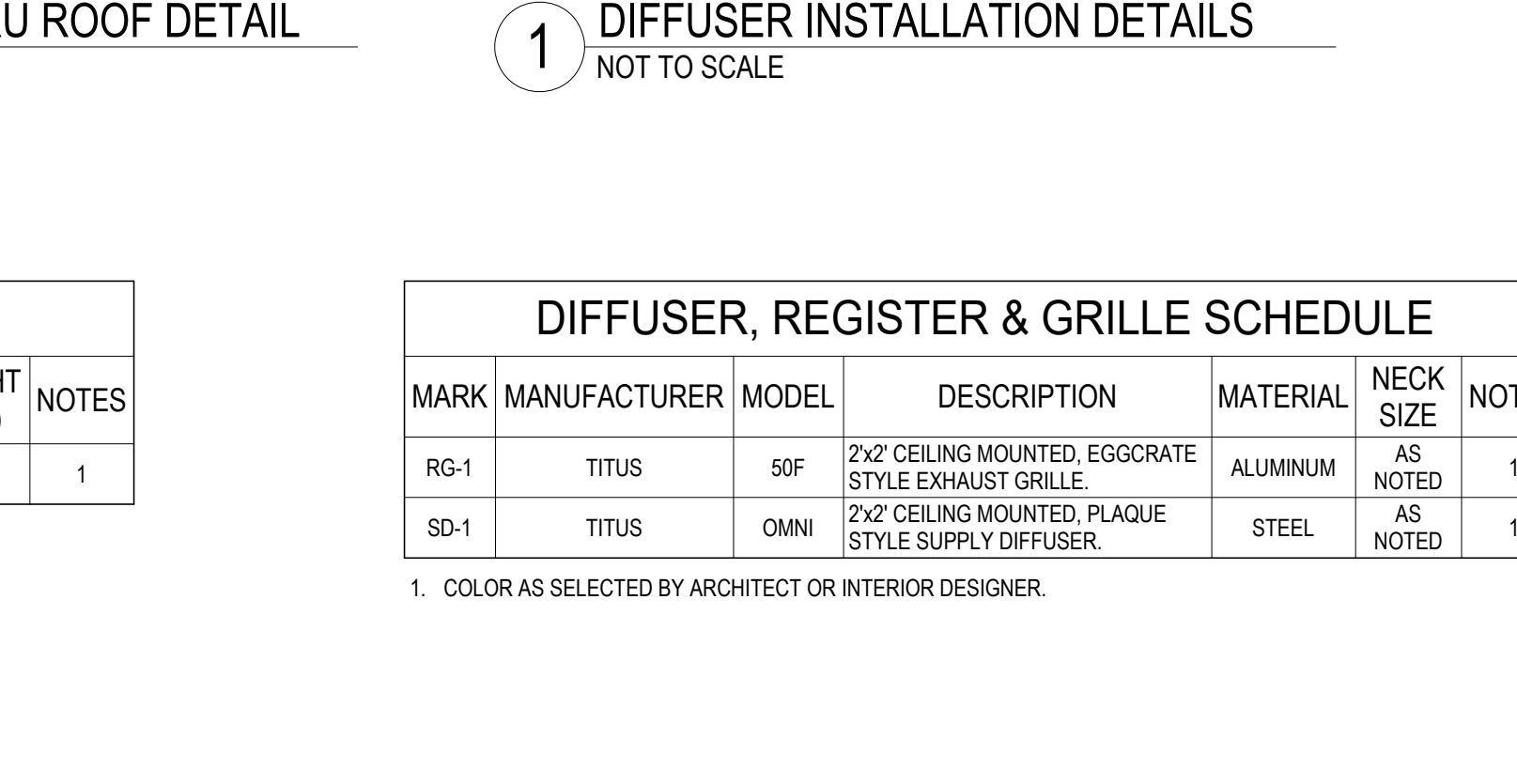
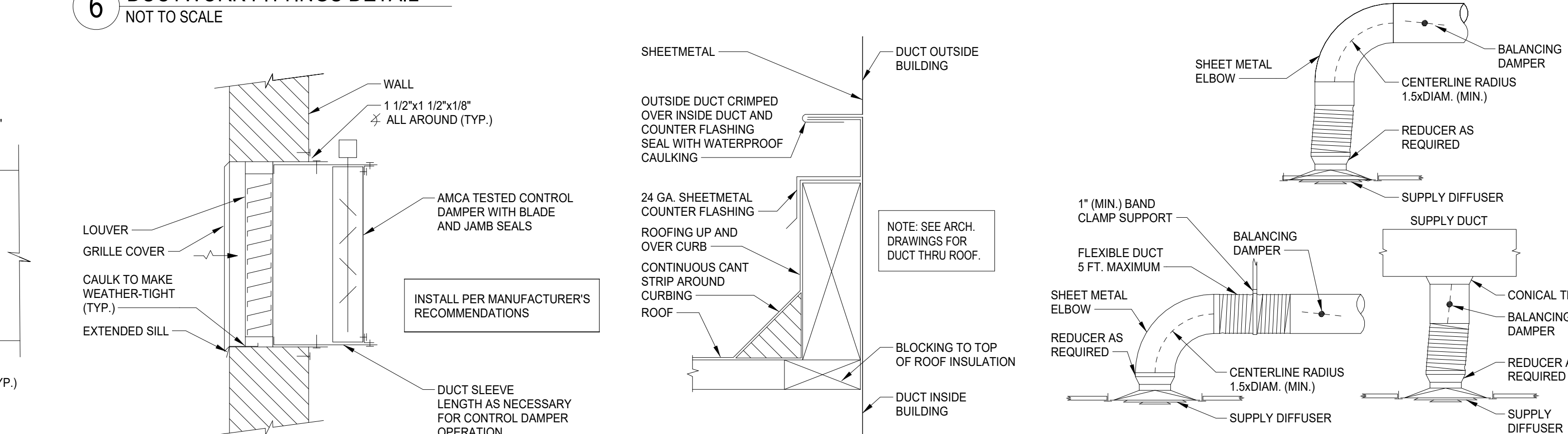
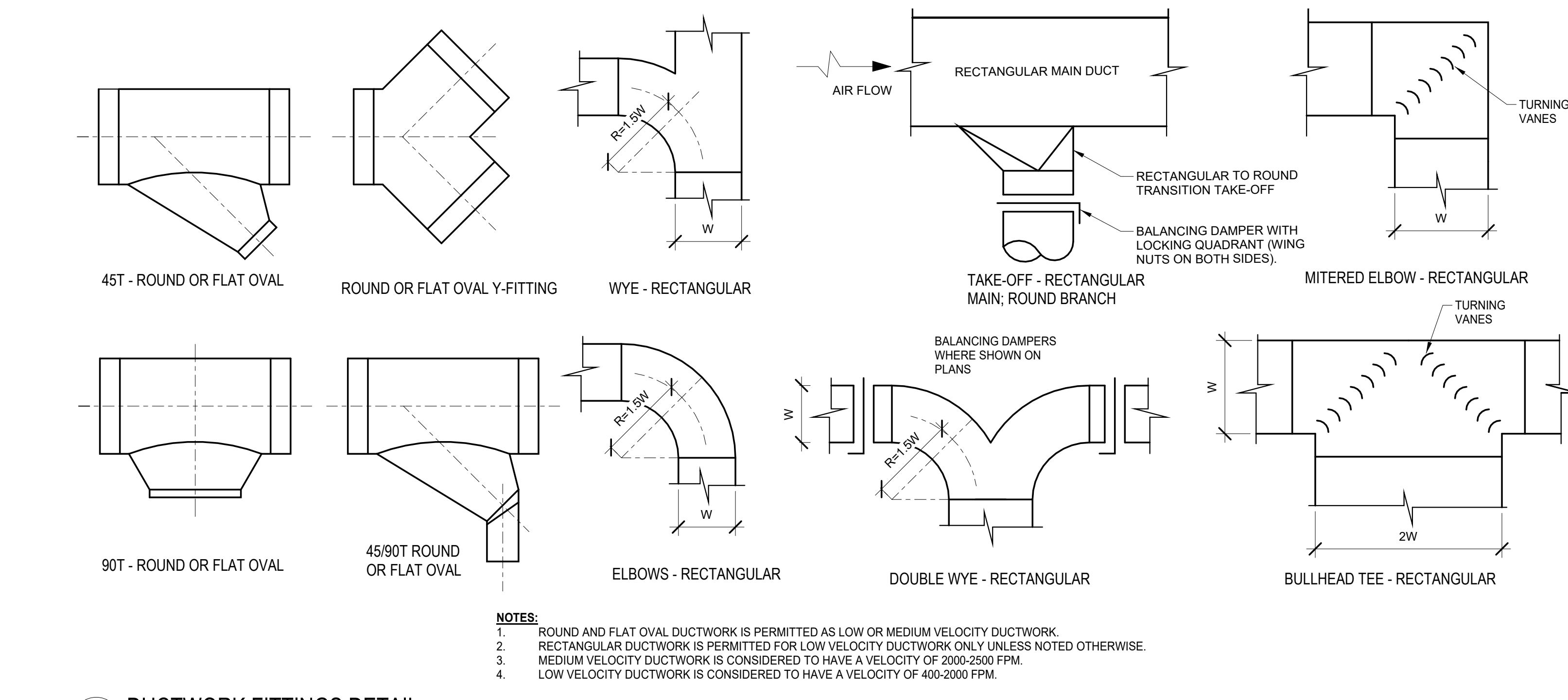
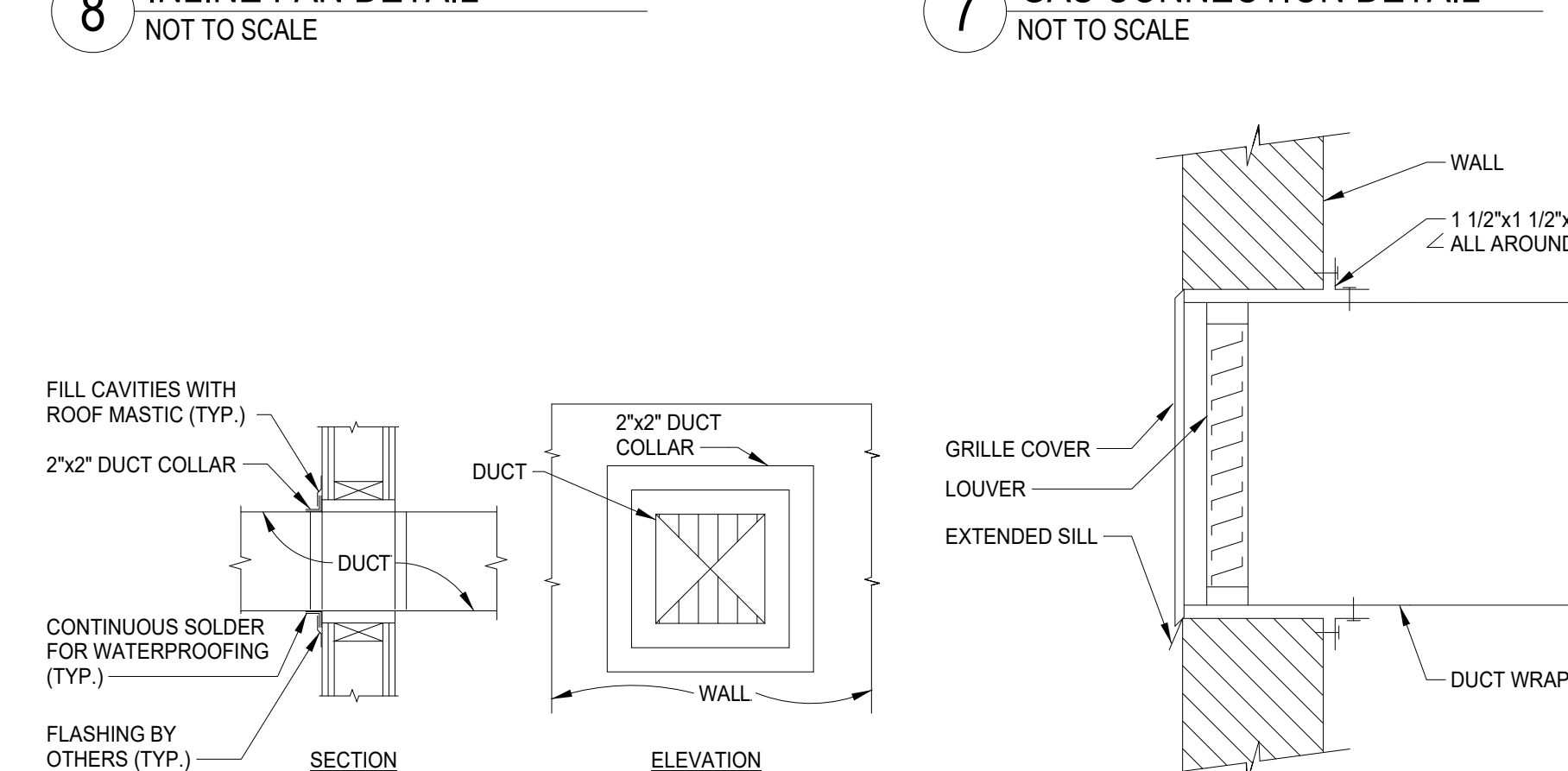
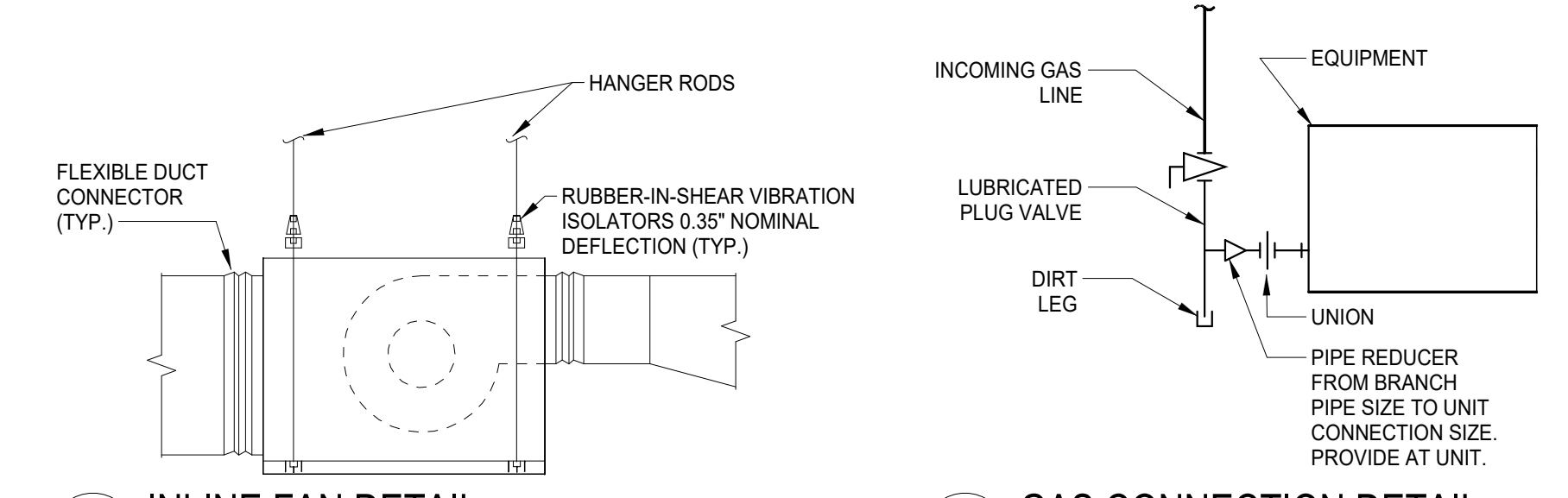
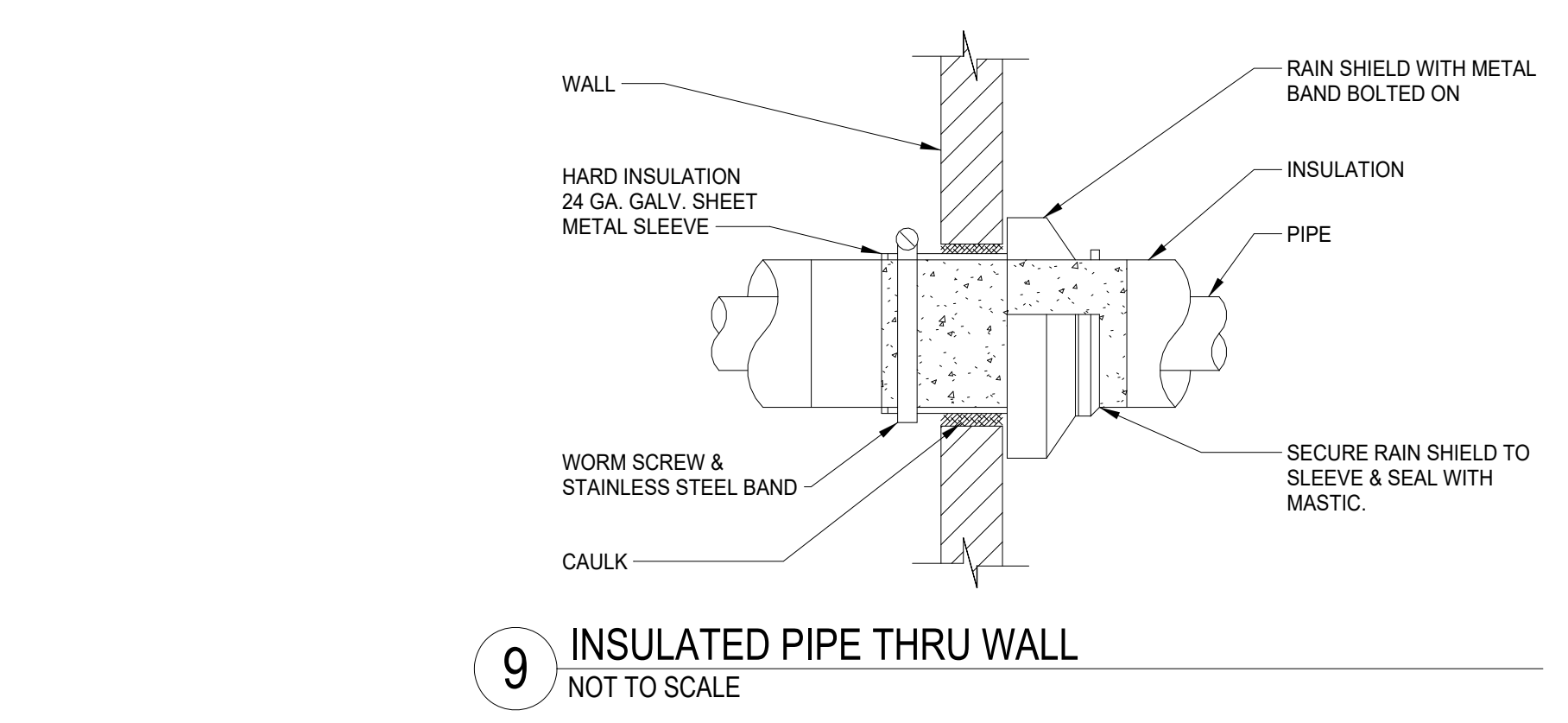
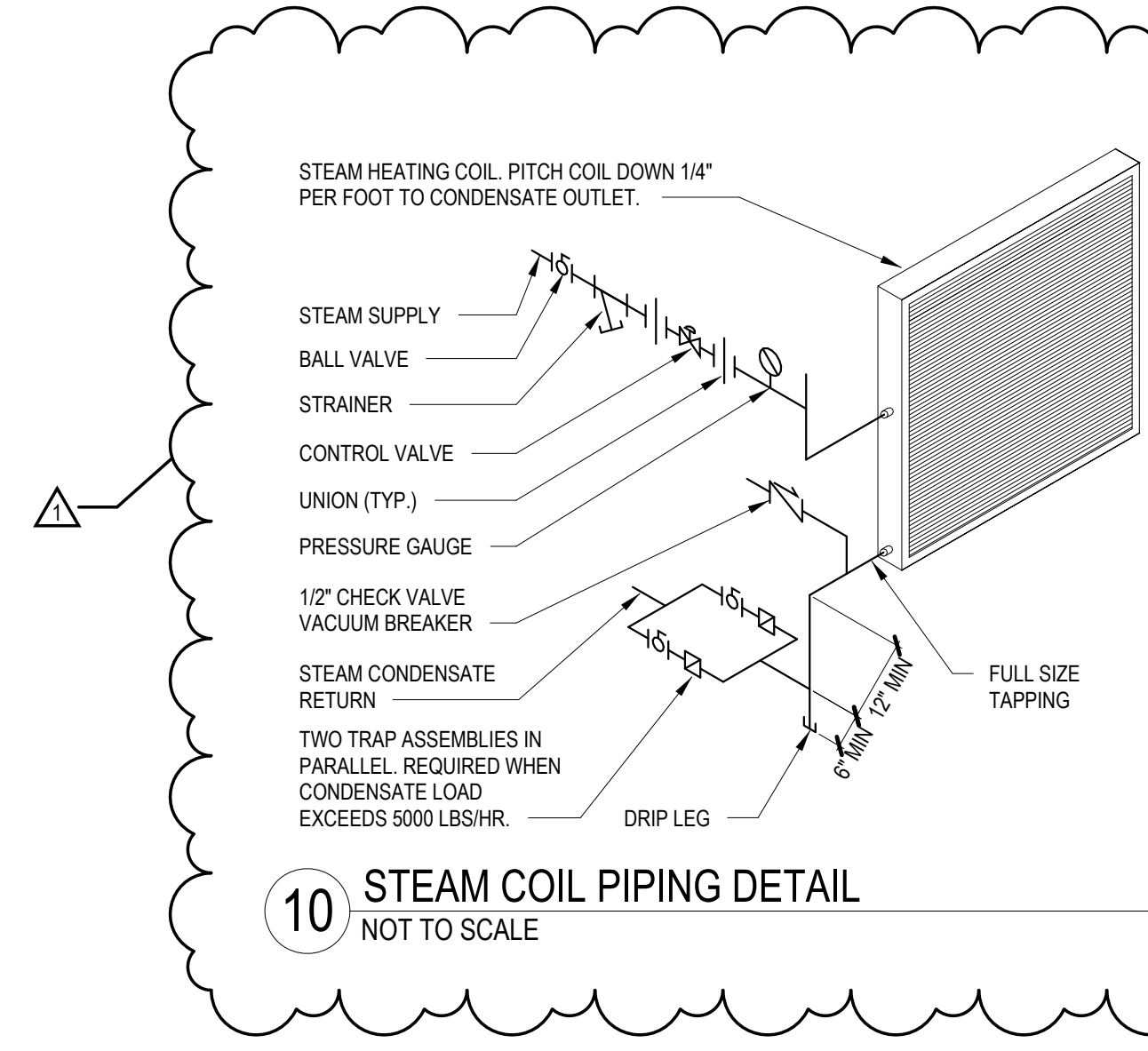
ENLARGED CLASSROOM 127 MECHANICAL PLAN
1/4" = 1'-0"



ENLARGED DESCALATION ROOM MECHANICAL PLANS
1/4" = 1'-0"



ENLARGED LOBBY MECHANICAL PLAN
1/4" = 1'-0"



EXHAUST FAN SCHEDULE											
MARK	SERVING	MANUFACTURER	MODEL	TYPE	AIRFLOW (CFM)	ESP (IN-WG)	ELECTRICAL HP	VOLTAGE/PHASE	WEIGHT (LBS)	NOTES	
EF-90	DE-ESCALATION ROOM 90	GREENHECK	SPA	CEILING MOUNTED EXHAUST FAN	50	0.25	1/6	120	1	20	1

1. INTERLOCK WITH LIGHTSWITCH.

DIFFUSER, REGISTER & GRILLE SCHEDULE									
MARK	MANUFACTURER	MODEL	DESCRIPTION	MATERIAL	NECK SIZE	NOTES			
RG-1	TITUS	50F	2\"/>						

1. COLOR AS SELECTED BY ARCHITECT OR INTERIOR DESIGNER.

MAKE-UP AIR UNIT SCHEDULE														
MARK	MANUFACTURER	MODEL	SERVING	SUPPLY FAN			ELECTRIC HEATING			WEIGHT (LBS)	NOTES			
				AIRFLOW (CFM)	ESP (IN-WG)	CAPACITY (MBH)	CAPACITY (KW)	EAT (°F)	LAT (°F)					
MAU-1	FANTECH	MUAS-1200	LAB HOOD	400	0.05	34.1	10	0	79	230	1	41.7	75	1, 2, 3, 4

1. INSTALL COMPLETE WITH ENTIRE KIT FROM MANUFACTURER. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. INTERFACE WITH EXISTING BUILDING MANAGEMENT SYSTEM.
3. INTERLOCK WITH FUME HOOD ON/OFF CONTROL.
4. CONTROL DISCHARGE AIR TEMPERATURE OF 70°F (ADJ).

UNIT VENTILATOR SCHEDULE																		
GENERAL				SUPPLY FAN			RELIEF FAN		STEAM HEATING				ELECTRICAL					
MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	OUTDOOR AIRFLOW (CFM)	HP	AIRFLOW (CFM)	HP	CAPACITY (MBH)	EAT (°F)	LAT (°F)	STEAM PRESSURE (PSI)	CONDENSATE (LB/HR)	FLUID	VOLTAGE	PHASE	MCA	WEIGHT (LBS)	NOTES
UV-1	AIREDALE	UVV30AA	750	330	1/2	600	1/2	88.9	39.2	142.3	2	89	STEAM	120	1	13.95	600	1, 2, 3, 4, 5, 6

1. TIE TO BUILDING MANAGEMENT SYSTEM. SEE SEQUENCE OF OPERATION.
2. CONTROL BY REMOTE WALL MOUNTED THERMOSTAT.
3. FURNISHED WITH LOUVER.
4. POWERED RELIEF.
5. DEMAND CONTROLLED VENTILATION.
6. STEAM COIL WITH FACE & BYPASS CONTROL.

LOUVER SCHEDULE						
MARK	MANUFACTURER	MODEL	DESCRIPTION	MATERIAL	SIZE	NOTES
L-1	RUSKIN	ELF-15J	1-1/2\"/>			

1. PROVIDE LOUVER WITH MANUFACTURER'S STANDARD MILL FINISH.
2. COMPARABLE PRODUCTS AS MANUFACTURED BY GREENHECK OR NCA ARE ACCEPTABLE.

ROOFTOP UNIT SCHEDULE																								
GENERAL			SUPPLY FAN			RELIEF FAN		GAS HEATING			DX COOLING				ELECTRICAL			WEIGHT (LBS)	NOTES					
MARK	MANUFACTURER	MODEL	EFFICIENCY (SEER)	AIRFLOW (CFM)	OUTDOOR AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	AIRFLOW (CFM)	CAPACITY (MBH)	EAT (°F)	LAT (°F)	FUEL	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EDB (°F)	EWB (°F)	LWB (°F)			REFRIGERANT	VOLTAGE	PHASE	MCA	
RTU-1	TRANE	YHCA41	12	1610	220	1.00	1.15	0	96	60	110	NATURAL GAS	50	35	80	67	60	57	R-410A	208	3	27	1000	1, 2, 3, 4, 5, 6, 7, 8, 9, 10

1. INTERFACE WITH EXISTING BUILDING MANAGEMENT SYSTEM. SEE SEQUENCE OF OPERATIONS.
2. MANUFACTURER PROVIDED ROOF CURB. CONFIRM CURB THAT ALLOWS FOR PIPING PENETRATIONS.
3. FULLY MODULATING DX COOLING.
4. POWERED RELIEF AIR THRU UNIT.
5. ENTHALPY ECONOMIZER WITH CO₂ OVERRIDE.
6. VARIABLE FREQUENCY DRIVE FOR SUPPLY AND RELIEF FAN MOTOR.
7. 30% EFFICIENT 2\"/>



**PORTAGE PUBLIC SCHOOLS
PPS COMMUNITY EDUCATION CENTER
PRE-BID MEETING MINUTES
January 2nd, 2019 – 3:30pm**

1. Introductions:

- a. Portage Public Schools – Owner - Ron Herron - Assistant Superintendent of Operations
- b. Walbridge – Owner’s Representative - David Skinner
- c. C2AE/Stantec – Design Team - Gregg Jones
- d. Owen-Ames-Kimball Co. – Construction Manager: Fidel Salas, Jeff Weber & Dan Rathburn

2. Project Descriptions:

- a. Renovations to Portage Community Education Center Renovations to Science classroom, office/lobby and Preschool classroom.

3. Schedule / Key Topics:

- a. PPS Community Education Center
 - i. MEP Disconnects June 2019
 - ii. Ceilings starts July 2019
 - iii. Casework/ Finishes start August 2019
 - iv. Owner move in August 28, 2019

4. Safety:

- a. The safety of Portage Public School students and staff is our first priority.
- b. Clean-up. A clean site is a safe site. Subcontractors are responsible for cleaning up their work areas on a daily basis. Participation in weekly jobsite cleanups are mandatory for each subcontractor.
- c. Contractors must follow proper safety procedures, and keep their safety manuals on site.
- d. Start-up Meetings will be held with each contractor prior to beginning work. Safety is a large portion of these meetings.
- e. Contractors must provide their own first aid, and fire protection equipment.
- f. Contractors are responsible for providing the necessary barricades for their work.
- g. Contractors must comply with the “Right to Know” law.
- h. Contractors are responsible for their own security.
- i. Contractors must comply with O-A-K’s substance abuse policy.
- j. MiOSHA’s CET division will be invited to walk the site multiple times throughout the project.

5. Site Constraints:

- a. Maintaining a clean site is mandatory. All roads & lots must be kept clean.
- b. All roads & entrances must remain open.
- c. School day is 7:45AM-3:00PM. Deliveries and construction traffic will be coordinated to avoid bus and parent drop off and pickup times.
- d. Construction trailers, staging, & contractor parking will be coordinated with our Superintendent.
- e. No radios or iPods allowed on site.
- f. **NO SMOKING ON SCHOOL PROPERTY**



6. Testing, Permits, Inspections:

- a. Testing will be paid for by the Owner.
- b. All necessary permits and inspections are the responsibility of the affected trade.
- c. Copies of all test reports and permits must be e-mailed to danr@oakmi.com and fidels@oankmi.com.

7. Temporary Services:

- a. Temporary toilet facilities will be provided. Use of the buildings toilets is prohibited!
- b. Electrician to provide temporary power and lighting on site. Contractors to provide their own GFI protection.

8. Layout:

- a. OAK will provide control points & benchmark.
- b. Contractors are responsible for their own layout and surveying costs.

9. Bidding:

- a. Bid Documents
 - i. Can be downloaded from these websites:
 - 1. www.Owen-Ames-Kimball.com – click on SUBCONTRACTORS (located on the lower right of the page) and select the project from the list of projects bidding.
 - 2. <https://ppsbp4bcec.blogspot.com/>
 - ii. Hard copies are available from ARC and KalBlue with \$100 deposit.
 - iii. Questions and Substitution Requests are to be sent to Fidel Salas, fsalas@oakmi.com.
- b. Addendum 1 will include the Pre-Bid Meeting Minutes and RFI responses. It will be issued on Monday, January 7th.
- c. RFIs will **not** be accepted after Friday January 4th at 1:00pm.
- d. Bid Opening
 - i. The Little Theater, Portage West Middle School, 7145 Moorsbridge Rd, Portage, MI 49024
 - ii. The **Bid Opening** will be Thursday, January 10th at **3:30pm**. Bids may be hand delivered to an Owen-Ames-Kimball Co. representative starting about 15 minutes before the opening.
 - iii. Bids may be dropped off at **Owen-Ames-Kimball Co. – Kalamazoo**, 161 E Michigan Ave., Kalamazoo, MI 49007 on Thursday, January 10th until **2:30pm** local time.
 - iv. We will also take bids at **Owen-Ames-Kimball Co.**, 300 Ionia NW, Grand Rapids, MI 40503 on Thursday, January 10th until **1:30pm** local time.
- e. Bid Form and Other Required Documents
 - i. Your bid must be in a sealed envelope clearly marked as to your respective bid category and must include the following (in triplicate):
 - 1. Bid Form
 - 2. Bid security/Bid Bond.
 - 3. Affidavit of Compliance – Iran Economics Sanctions Act
 - 4. Familial Disclosure Statement must be signed and notarized.
 - 5. Debarment Certificate
 - ii. Remember to fill in all required items on the bid forms.
 - iii. Voluntary Alternates are encouraged - list accordingly on the bid form.
- f. Prevailing Wages – Do **NOT** apply to this project.

10. Post Bid Reviews:

- a. Post Bid Interviews will take place January 16th and 17th.



11. Policies and Procedures:

- a. Monthly invoices must be submitted to O-A-K by the 20th of each month. Contractors must invoice on AIA forms G702 & G703.
- b. There will be a 10% retainage on invoices.
- c. If contractors invoice for stored material not on site, the invoice must be accompanied with pictures & an insurance certificate for that material.
- d. Any additional work requires an O-A-K CCD issued by the O-A-K Field Superintendent. Extras will not be paid for without a CDD.

12. Insurance:

- a. Contractors must provide insurance certificates as per specifications.
- b. Bonds & Insurance certificates are required before payment is approved and contracts are issued. Each contractor must have the insurance form approved prior to mobilization.

13. Shop Drawings & Submittals:

- a. Submittals are required electronically.
- b. Submittals can be viewed directly through Owen-Ames-Kimball Co.'s Project Management Website.

14. Site Visits

- a. A site visit for PPS Community Education Center will immediately follow today's pre-bid. Let us know if there are any areas of the existing building that you would like to see.
- b. Schedule any other site visits with Fidel Salas, fidels@oakmi.com, 269-370-9419.

15. General Notes:

- a. Each bidder must submit their bid per the plans, and specifications.
- b. If your bid varies from these documents, you must submit the variance as a voluntary alternate with your base bid matching the bid document.
- c. Each contractor must supply sufficient manpower.
- d. Storage will be allowed on site for each phase of construction only while in construction.

16. Time Line Bidding:

- a. RFIs will not be accepted after January 4th at 1:00pm.
- b. Addendum 1 will be issued on January 7th.
- c. Bid Opening – January 10th at 3:30pm.
- d. Post Bid Interviews will take place January 16th and 17th.
- e. Board Approval February 25th.

17. Questions and Answers:

- a. See attached Clarifications/Prebid RFIs/Substitution Requests.

Thank you and good luck with your bid!

Sign-In Sheet

Meeting Subject: Pre-Bid
 Job: PCFC Job #: _____ Date: 1/2/19
 Meeting Location Room 127 - PCFC

Name	Company	Phone
Norm Overhiser	Kitson ASSCO.	269-217-9668
Adam Hartung	Byler Electric INC.	269-506-2349
DOUG CLINE	PRICWAY ELE + Comm	616-820-1284
Chris Moore	Shouldice	269 962-5579
Ron Mielzicki	ELECTROMEDIA	616-844-4444
Jim Hall	Hall Builders	269-855-8866
RYAN LEASEL	MHS Custom Builders	269-720-4583
PETE CARLSON	WINDEMULLER	616-443-8436
Dave Taylor	Moss	616-292-1591
Dennis Kohler	Kalamazoo Contractors	269-383-8342
Tony McDonald	Commercial Interiors	616-794-6294
DAVID COLEMAN	S.A. Morrison CO.	269-383-0500x1510.
Ken Pluta	A-1 Refrigeration	269-375-9003
Brian Lemmer	RW LaPine	269-388-2045
Mark Cochran	Hi-tech Electric	269-491-1581
Chris Fayer	Circuit Elec	616-889-1020
Scott Johnson	Kellewell Group	269-372-7300
Kevin Tucker	C.L. Mahony	269-349-2676
JOE SIKKEMA	MICALTA CARPET	269-217-5725
Jim Aho	DHE Plumbing & Mech	616 350 8085
Ron Carter	CCSB	574-299-0020
Tyler Wakley	Cable Tech Communications	917-526-7745
TOM WEISSERT	MKE-SVT	269-998-2431
EREGG JONES	CZAE	517-862-0067



Owen-Ames-Kimball Co. - Kalamazoo

Prebid RFI Responses

#	Question	Official Response
Pre Bid 001	Per door schedule please provide clarification on types. On Sheet A-601 (Door Schedule and Details), there are some doors listed as door type FG. There is not a Door Type FG. Should this be HL or FL? For Doors 122A.1 and 122B.1 they are listed as door type 1. There is not a door type 1. Can you let me know which door type these will be?	All doors types noted "FG" should be "FL". All doors types noted "1" should be "HL". Schedule to be revised with addendum.
Pre Bid 002	There is an Emergency Eyewash listed on the plumbing fixture schedule but not found on the drawings. Is this part of the bid scope? On M-401, item 1, it mentions a steam coil in the UV. Where are we connecting to existing? What size? Please provide a piping detail for the UV On M-401, item 4 calls for a Trane cabinet unit heater. I didn't find this key note on the drawings. Is the CUH part of the bid package?	The eyewash station is to be mounted on or next to sink LS-1. Mechanical keynotes #1 and #4 on M401 will be addressed in the addendum.
Pre Bid 003	Door 150.1 calls for aluminum doors in hollow metal frame. Should it be hollow metal door in hollow metal frame? Alanna Fellner - Midwest Glass & Mirror - alanna@midwestglass.com	Door 150.1 will be a FRP (type HL) door in aluminum frame.
Pre Bid 004	Does the fume hood need any special duct? Please provide elevation where the louver to be located? Which bid package is responsible for the (3) louver openings and associated lintels? Ken Pluta - A-1 Refrigeration - kpluta@a1refrig.com	No special material required for fume hood discharge duct. We will add note to M-401 noting bottom of louver elevation in the Addendum.
Substitution Request 01	OpenLight provides an equivalent quality product with equivalent fabric.	OpenLight is an acceptable substitution for roller shades.