

May 01, 2025 -- 10:24am T:\Projects\2024\24-141 - ACM Makers Space Dust Collection and Weld Fume Extraction Systems\WOOD SHOP\Drawings\24-141 - H1.dwg

### HVAC ABBREVIATIONS

\* BELOW IS A GENERAL ABBREVIATIONS LIST USED ON ALL PROJECTS. ABBREVIATIONS MAY OR MAY NOT BE USED ON THIS PROJECT.

⊙	AT	IBC	INTERNATIONAL BUILDING CODE
A	AMPS	ICC	INTERNATIONAL CODE COUNCIL
AABC	ASSOCIATED AIR BALANCE COUNCIL	IFC	INTERNATIONAL FIRE CODE
ABV	ABOVE	IMC	INTERNATIONAL MECHANICAL CODE
ACU	AIR CONDITIONING UNIT	IPC	INTERNATIONAL PLUMBING CODE
ACCU	AIR-COOLED COMPRESSOR CONDENSING UNIT	IN	INCHES
ACH	AIR CHANGE PER HOUR	INSUL	INSULATION/INSULATE
ADA	AMERICANS WITH DISABILITIES ACT	INV	INVERT
AFF	ABOVE FINISHED FLOOR	ISP	INTERNAL STATIC PRESSURE
AG	ABOVE GRADE	JB	JUNCTION BOX
AGA	AMERICAN GAS ASSOCIATION	KV	KILOVOLT
AHAP	AS HIGH AS POSSIBLE	KVA	KILOVOLT AMPS
AHU	AIR HANDLING UNIT	KW	KILOWATT
AIA	AMERICAN INSTITUTE OF ARCHITECTS	L&I	PA LABOR AND INDUSTRY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	L.A.T.	LEAVING AIR TEMPERATURE
ALUM	ALUMINUM	LAV	LAVATORY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	LOD	LIMIT OF DEMOLITION
APD	AIR PRESSURE DROP	LTG	LIGHTING
APPROX	APPROXIMATELY	LVG	LEAVING
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ARI	AMERICAN REFRIGERATION INSTITUTE	MBH	MILLION BTU'S PER HOUR
ASHRAE	AMERICAN SOCIETY OF HVAC&R ENGINEERS	M.C.	MECHANICAL (SUB)CONTRACTOR
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	M.C.A.	MINIMUM CIRCUIT AMPS
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	MECH	MECHANICAL
ATC	AUTOMATIC TEMPERATURE CONTROLS	MED	MEDIUM
ATS	AUTOMATIC TRANSFER SWITCH	MFR	MANUFACTURER
AWG	AMERICAN WIRE GAUGE	MIN	MINIMUM
BF	BELOW FLOOR	M.O.C.P.	MAXIMUM OVERCURRENT PROTECTION
BFG	BELOW FINISHED GRADE	MOD	MOTOR OPERATED DAMPER
BHP	BRAKE HORSEPOWER	MV	MEDIUM VOLTAGE
BKR	BREAKER	N	NORMAL
BLDG	BUILDING	N.G.	NATURAL GAS
BLW	BELOW	NBS	NATIONAL BUREAU OF STANDARDS
BTW	BETWEEN	NC	NEW CONNECTION
C	CELSIUS (DEGREES)	NEC	NATIONAL ELECTRIC CODE
CAP	CAPACITY	NEMA	NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
CATV	CABLE TELEVISION	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CB	CATCH BASIN	NICA	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	No.	NUMBER
CHW	CHILLED WATER	NTS	NOT TO SCALE
CKT	CIRCUIT	O.A.	OUTSIDE AIR
CLG	CEILING	OC	ON CENTER
CONC	CONCRETE	OSHA	OCCUPATIONAL SAFETY AND HEALTH
COND	CONDENSATE		ADMINISTRATION
CONN	CONNECT OR CONNECTION	P.C.	PLUMBING (SUB)CONTRACTOR
CONT	CONTINUATION	PD	PRESSURE DROP
CONTR.	CONTRACTOR	PH	PHASE
CUH	CABINET UNIT HEATER	PLB	PLUMBING
CW	COLD WATER	PNL	PANEL
DB	DRY BULB	PRESS	PRESSURE
DEMO	DEMOLITION	PS	POUNDS PER SQUARE FOOT (ABSOLUTE)
DISC	DISCONNECT	PSIG	POUNDS PER SQUARE FOOT (GAUGE)
DN	DOWN	R	RECESSED
DOM	DOMESTIC	R.A.	RETURN AIR
DS	DOWN SPOUT	RAR	RETURN AIR REGISTER
DTL	DETAIL	RCPT	RECEPTACLE
DWG(S)	DRAWING(S)	R	RECESSED
EAT	ENTERING AIR TEMPERATURE	REF.	REFRIGERANT/REFRIGERATION
EA	EXHAUST AIR	REQ'D	REQUIRED
EA/	EACH	REQ'DTS	REQUIREMENTS
E.C.	ELECTRICAL (SUB)CONTRACTOR	RH	RELATIVE HUMIDITY
EDH	ELECTRIC DUCT HEATER	RM	ROOM
EER	ENERGY EFFICIENCY RATIO	RPM	REVOLUTIONS PER MINUTE
EF	EXHAUST FAN	RWC	RAIN WATER CONDUCTOR
ELEC	ELECTRIC	S.A.	SUPPLY AIR
ENT	ENTERING	SAN	SANITARY
EP	EXPLOSION PROOF	SC	SCALE
ESP	EXTERNAL STATIC PRESSURE	SD	SLOT DIFFUSER
ETC	ETCETERA	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION
ETR	EXISTING TO REMAIN	S.P.	STATIC PRESSURE (IN. W.C.)
EXH	EXHAUST	SQ	SQUARE
EX.	EXISTING	SQ. FT.	SQUARE FEET
EXP	EXPANSION	STL	STEEL
F&T	FLOAT AND THERMOSTATIC	TEL	TELEPHONE
F.	FAHRENHEIT (DEGREES)	TEMP	TEMPERATURE
FA	FRESH AIR	THRU	THROUGH
FACP	FIRE ALARM CONTROL PANEL	TSP	TOTAL STATIC PRESSURE
F.A.T.	FINAL AIR TEMPERATURE	TYP	TYPICAL
F.C.	FLEXIBLE CONNECTION	UL	UNDERWRITERS LABORATORIES
FD	FIRE DAMPER	UST	UNDERGROUND STORAGE TANK
FG	FINISHED GRADE	V	VOLTS
FH	FIRE HYDRANT	VAV	VARIABLE AIR VOLUME
F.L.A.	FULL LOAD AMPS	VCD	VOLUME CONTROL DAMPER
FLR	FLOOR	VEL	VELOCITY
FPM	FEET PER MINUTE	VTR	VENT THROUGH ROOF
FR	FROM	W/	WITH
FT. HD.	FEET OF HEAD	WB	WET BULB
FU	FUSED	WC	WATER CLOSET
G.C.	GENERAL CONTRACTOR	WG	WATER GAUGE
GFI	GROUND FAULT INTERRUPTER	WP	WATER PROOF
GPM	GALLONS PER MINUTE	WTR	WATER
H.C.	HVAC (SUB) CONTRACTOR		
HB	HOSE BIBB		
HOA	HAND-OFF/AUTO		
HP	HORSEPOWER		
HPS	HIGH PRESSURE STEAM		
HTR	HEATER		
HUH	HORIZONTAL UNIT HEATER		
HVAC	HEATING, VENTILATING AND AIR CONDITIONING		
HWR	HOT WATER RETURN		
HWS	HOT WATER SUPPLY		

BUILDING AMBIENT DESIGN CONDITIONS						
ACTUAL (CUMBERLAND, MD)	LATITUDE/LONGITUDE		ELEVATION			
	39.61N / 78.77W		775 FT			
REFERENCE (CUMBERLAND, MD)	LATITUDE/LONGITUDE		ELEVATION			
	39.61N / 78.77W		775 FT			
SUMMER (ASHRAE 0.4%)			WINTER (ASHRAE 99.6%)			
DB (DESIGN)	WB (MEAN COINCIDENT)	DB (HEATING)	DEHUMIDIFICATION			HUMIDITY
96.8°F	75.1°F	0.6°F	78.9°F DB / 75°F WB	115 G/LB		
2021 ASHRAE FUNDAMENTALS WEATHER DATA SOURCE # 720355 - GREATER CUMBERLAND, MD						

### LEGEND & SYMBOLS

\* BELOW IS A GENERAL LEGEND AND SYMBOLS LIST USED ON ALL PROJECTS. SYMBOLS MAY OR MAY NOT BE USED ON THIS PROJECT.

	SPECIFIC NOTES (ON DRAWING)
	POINT OF NEW CONNECTION
	POINT OF DEMOLITION
	MOTORIZED DAMPER
	THERMOSTAT
	SMOKE DETECTOR
	AIR FLOW ARROW
	SUPPLY AIR DIFFUSER TAG S-# (TAG)-X"ø (NECK SIZE)
	CEILING MOUNTED RETURN OR EXHAUST GRILLE / REGISTER
	RETURN AIR DIFFUSER TAG R-# (TAG)-X"ø x X" (NECK SIZE)
	INTERIOR CLEAR DUCTWORK DIMENSIONS; WIDTHxHEIGHT
	SUPPLY DUCT TOWARD VIEWER
	SUPPLY DUCT AWAY FROM VIEWER
	RETURN OR EXHAUST DUCT TOWARD VIEWER
	RETURN OR EXHAUST DUCT AWAY FROM VIEWER
	OUTSIDE AIR DUCT AWAY FROM VIEWER
	FLEXIBLE DUCT
	MANUAL VOLUME CONTROL DAMPER
	MOTORIZED CONTROL DAMPER
	TRANSITION; SYMMETRIC TRANSITION; ASYMMETRIC
	TRANSITION; RECTANGULAR TO ROUND
	90 DEG RADIUS ELBOW (R/W = 1.5)
	MITERED ELBOW WITH TURNING VANES
	TEE, BOOT ENTRY BRANCH
	TEE, ROUND BRANCH
	TEE, CONICAL ROUND BRANCH
	TEE, ROUND TO ROUND BRANCH

### EQUIPMENT MANUFACTURER

BASIS OF DESIGN:  
EQUIPMENT INDICATED ON THIS SET OF PLANS IS REPRESENTED LOCALLY BY WARD-BOLAND ASSOCIATES. CONTACT LOGAN SIEG: 301-378-2853

AND

BY DONALDSON FILTRATION SOLUTIONS AND SUPPLIED BY JOOS EQUIPMENT COMPANY  
CONTACT THOMAS LAMARE: 610-513-1235

### GENERAL NOTES

- THIS SET OF DRAWINGS IS PART OF A COMPLETE SET OF MECHANICAL AND ELECTRICAL DRAWINGS PREPARED FOR THE PURPOSES OF CONSTRUCTING THIS PROJECT. NO CONTRACTOR, FOR THE PURPOSES OF BIDDING, CONSTRUCTION, ETC. IS TO BE GIVEN A PARTIAL SET OF DRAWINGS WITHOUT HAVING BEEN GIVEN THE CHANCE TO REVIEW THE ENTIRE SET FIRST TO DETERMINE IF THEIR SCOPE OF WORK EXTENDS BEYOND THE CONTENTS WITH IN THIS SET.
- THIS CONTRACTOR IS TO BE FAMILIAR WITH THE SPECIFICATIONS AND THE REQUIREMENTS OF THE SPECIFICATIONS AND APPLY THOSE REQUIREMENTS TO THE CONSTRUCTION OF THIS PROJECT. A COPY OF THE SPECIFICATION ON DRAWINGS IS TO BE PRESENT AT THE JOBSITE AT ALL TIMES.
- INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND ALL LOCAL APPLICABLE CODES.
- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- THE DRAWINGS ARE INTENDED TO COVER SYSTEMS WHICH WILL FIT THE AVAILABLE SPACE AND WHICH WILL NOT INTERFERE WITH THE GENERAL STRUCTURAL DESIGN. THE CONTRACTOR IS TO CAREFULLY EXAMINE THE DRAWINGS FOR ALL BRANCHES OF WORK AND SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIAL AND APPARATUS INTO THE BUILDING. COORDINATE THE EXACT LOCATION OF EQUIPMENT AND EQUIPMENT CONNECTIONS WITH THE ENGINEER AND EQUIPMENT SUPPLIERS.
- DRAWINGS ARE DIAGRAMMATIC FOR PIPING, CONDUITS AND DUCTWORK THAT IS NOT SHOWN IN DETAIL. SIZES OF PIPING, CONDUITS AND DUCTWORK AND THEIR LOCATIONS ARE INDICATED, BUT IT IS NOT INTENDED TO SHOW EVERY OFFSET, FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. THE ALIGNMENT OF PIPING, CONDUIT, OR DUCTWORK SHALL BE VERIFIED FROM THAT INDICATED ON THE DRAWINGS WITHOUT EXTRA EXPENSE TO THE OWNER WHERE NECESSARY TO AVOID STRUCTURAL OR MECHANICAL INTERFERENCES, OR TO AVOID THE WORK OF ANY OTHER TRADES.
- CHECK AND VERIFY ALL DIMENSIONS, SITE CONDITIONS, DRAWINGS AND SPECIFICATIONS. REPORT ANY AND ALL DISCREPANCIES OR DEFICIENCIES TO THE ARCHITECT AT ONCE.
- PERFORM LABOR IN A THOROUGH AND COMPLETE WORKMAN LIKE MANNER AND WITH ALL REASONABLE RAPIDITY TO THE SATISFACTION OF THE ENGINEER & OWNER.
- ALL MECHANICAL EQUIPMENT SHALL BEAR THE LABEL OF AN APPROVED TESTING AGENCY.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. SHOULD ANY VARIANCE BETWEEN PLANS AND SPECIFICATIONS OCCUR WITH THESE INSTRUCTIONS, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY SO THAT ANY VARIATIONS IN INSTALLATION CAN BE KNOWN BY ALL PARTIES CONCERNED.
- COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL DUCT AND PIPING TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION.
- MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EACH MECHANICAL APPLIANCE SHALL BE MADE AVAILABLE TO THE LOCAL FIELD INSPECTOR ON THE JOB SITE AT THE TIME OF INSPECTION.
- COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH THE EXISTING BUILDING, SYSTEMS AND ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.
- THESE DRAWINGS DO NOT INDICATE EVERY CHANGE OF DUCT OR PIPE SIZE (I.E. WHERE A DUCT OR PIPE IS TO CONNECT TO A PIECE OF EQUIPMENT, ETC.), WHERE DUCT OR A PIPE OF A DIFFERENT SIZE THAN THAT OF THE INLET OF SUCH EQUIPMENT CONNECTIONS, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AN APPROPRIATE TRANSITION AS REQUIRED.
- ALL TRADES ARE RESPONSIBLE FOR THEIR OWN CUTTING AND PATCHING TO INSTALL WORK INDICATED. M.C. IS TO COORDINATE WITH THE G.C. OPENINGS REQUIRED IN WALLS AND FLOORS SO THAT THEY CAN BE PROPERLY FRAMED IN PRIOR TO CONSTRUCTION. NO CUTTING IS TO BE DONE WHICH WILL EFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING. ALL ROUND MASONRY OPENINGS THROUGH MASONRY ARE TO BE SAW CUT CORED. PROVIDE APPROPRIATE STEEL LINTELS WHERE REQUIRED - CONSULT WITH A STRUCTURAL ENGINEER FOR REQUIREMENTS.
- ALL OPENINGS IN FIRE WALLS DUE TO PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED WITH A PRODUCT SIMILAR TO 3M OR APPROVED EQUAL.
- WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
- PROVIDE VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.
- ALL EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED, SPECIFIED, AND REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
- ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- ALL DUCTWORK, PIPING AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE AS NOTED OR DETAILED ON THE DRAWINGS. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS.
- WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED. THE USE OF C-CLAMPS SHALL NOT BE PERMITTED.
- ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- FURNISH AND INSTALL ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE DAMPERS, VALVES, SMOKE DETECTORS, STRAINERS, UNIONS, TRAPS, FLANGES, OTHER APPURTENANCES REQUIRING ACCESS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. ACCESS DOORS ARE NOT TO REDUCE THE FIRE RATING OF THE WALL IN WHICH THEY ARE INSTALLED.
- LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UP AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR GOOD ACCURACY.
- INSTALL THE TOP OF ALL THERMOSTAT BOXES APPROXIMATELY 48" A.F.F., PER THE OWNER'S REQUEST, AND TO CONFORM WITH ANY AND ALL APPLICABLE CODES AND REQUIREMENTS (I.E. ADA, ETC.)
- CONTRACTOR IS TO MAINTAIN A COMPLETE SET OF AS-BUILT DRAWINGS, UPDATED DAILY WHICH INDICATE AS-BUILT (TO INCLUDE BUT NOT LIMITED TO REVISED ROUTING CONFIGURATIONS, EQUIPMENT LAYOUTS, ETC. - SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION) CONDITIONS. AT A MINIMUM THE CONTRACTOR IS TO UPDATE THE G.C.'S AS BUILT SET EACH WEEK. A COMPLETE SET OF AS-BUILT DRAWINGS IS TO BE PROVIDED PRIOR TO ISSUING OF SUBSTANTIAL COMPLETION.

29. PROVIDE ONE SET OF BAG FILTERS INSTALLED IN THE DUST COLLECTOR AT TIME OF START UP AND ONE SET OF SPARE BAG FILTERS FOR OWNERS FUTURE USE.

30. A COMPLETE SET OF DRAWINGS OUTLINING THE EXISTING HVAC SYSTEMS WERE NOT AVAILABLE FOR USE DURING DESIGN. EXISTING CONDITIONS ARE SHOWN USING INACCURATE ORIGINAL DESIGN DRAWINGS AND LIMITED SITE SURVEY. THE CONTRACTOR IS TO VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS, CONSTRAINTS, LIMITATIONS AND AVAILABLE SPACE AND INCLUDE ALL REQUIRED TRANSITIONS, OFFSETS AND RELOCATIONS OF EXISTING EQUIPMENT, PIPING OR DUCTWORK AS IS NECESSARY FOR A COMPLETE INSTALLATION AS SHOWN ON THE DRAWINGS.

31. BIDDERS ARE REQUIRED TO VISIT THE SITE TO DETERMINE THE SCOPE OF WORK AND EXTENT OF DEMOLITION AND NEW WORK, EXISTING CONSTRUCTION TO REMAIN, POTENTIAL CONFLICTS, OBSTRUCTIONS AND SITE RELATED CHALLENGES PRIOR TO SUBMITTING BIDS.

32. THE LOCATION OF EXISTING DUCTWORK, PIPING, ETC IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING SYSTEMS BEFORE COMMENCING WORK.

33. NO DUCTWORK, PIPING OR EQUIPMENT IS TO BE ABANDONED IN PLACE. ALL EXISTING DUCTWORK, PIPING AND EQUIPMENT NOT BEING REUSED IS TO BE REMOVED AND PROPERLY DISPOSED OF BELOW NOTES.

34. THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE TO DETERMINE EXACTLY HOW THE EQUIPMENT IS TO BE BROUGHT INTO THE BUILDING. I.E. LIMITATIONS DUE TO PATHWAYS TO MECHANICAL ROOMS, RIGGING REQUIREMENTS, OR DUE TO EXISTING SITE CONDITIONS, UTILITY LOCATIONS, ETC. EQUIPMENT MAY NEED TO BE SHIPPED TO THE SITE KNOCKED DOWN OR DISASSEMBLED TO MINIMIZE REQUIRED ENTRANCE OPENING SIZE. COORDINATE ALL LOGISTICS WITH OWNER.

35. AT LOCATIONS WHERE NEW PIPING/DUCTWORK CONNECTS TO EXISTING, DETERMINE EXACT LOCATION, SIZE AND ELEVATION OF EXISTING EQUIPMENT AT SITE BEFORE INSTALLING NEW PIPING/DUCTWORK.

36. EXISTING EQUIPMENT, PIPING AND DUCTWORK BEING REMOVED AND NOT BEING REUSED IS TO BE PROPERLY DISPOSED OF IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, INCLUDING RECLAIM OF REFRIGERANT.

37. VERIFY EXACT BUILDING STRUCTURE CONSTRUCTION IN FIELD AND ADJUST DUCT SIZE OR LOCATIONS TO AVOID TRUSS LOCATIONS AND CROSS MEMBERS. DUCT DIMENSIONS INDICATED MAY BE ADJUSTED PROVIDING THAT THE TOTAL FREE AREA OF THE NEW DUCT BE NO LESS THAN THE FREE AREA OF THE DUCT INDICATED ON THIS DRAWING.

38. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR, INSIDE DIMENSIONS.

39. ALL PRESSURE TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT, DUCTWORK OR PIPING INSULATION IS APPLIED.

40. TESTING, ADJUSTING, AND BALANCING AGENCY SHALL BE A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). TESTING, ADJUSTING, AND BALANCING SHALL BE PERFORMED IN ACCORDANCE WITH THE AABC STANDARDS.

41. THE CONTRACTOR IS TO PERFORM ALL TESTS (INCLUDING ALL TESTING AND FORMS REQUIRED FOR THE INSTALLATION OF THE NEW EQUIPMENT) AND INSPECTIONS. SUBMIT ALL REPORTS, AND WHERE REQUIRED BY STATE LAW, ARRANGE FOR AND PAY ALL ASSOCIATED FEES FOR AN ON-SITE INSPECTION BY CERTIFIED INSPECTORS. ALL NECESSARY REPORTS ARE TO BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION WITH COPIES FORWARDED TO THE ENGINEER. DISPLAY OF REQUIRED CERTIFICATES IS TO BE IN GLASS ENCLOSED FRAMES TO BE HUNG IN THE MECHANICAL ROOM WHERE THE EQUIPMENT IS INSTALLED BY THE CONTRACTOR.

42. CONTRACTOR IS TO SUBMIT FINAL BALANCE REPORT TO CODE OFFICIAL, G.C., ENGINEER, ARCHITECT AND OWNER FOR REVIEW PRIOR TO RECEIVING BUILDING OCCUPANCY PERMIT. CONTRACTOR TO FOLLOW REQUIREMENTS OF SPECIFICATION PERTAINING TO BALANCE REPORTS.

43. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING DRAWINGS, SPECIFICATIONS AND FORMS REQUIRED TO INSTALL NEW EQUIPMENT (AS REQUIRED) TO THE AUTHORITIES HAVING JURISDICTION, INCLUDING ALL REQUIRED FEES. THE CONTRACTOR MAY SUBMIT COPIES OF CONTRACT DRAWINGS AND SPECIFICATIONS, IF THE INSTALLATION IS REFLECTED ACCURATELY BY THESE DOCUMENTS.

44. CONTRACTOR SHALL, IN THE PRESENCE OF THE ENGINEER OF RECORD, DEMONSTRATE EQUIPMENT OPERATIONS, SYSTEM TO SYSTEM INTERFACING RELATIONSHIPS, AND DEMONSTRATE CONTROL OPERATIONS.

45. PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO THE G.C. AND OWNER AT THE TIME OF SYSTEM INSTALLATION COMPLETION. REFER TO SPECIFICATION FOR MORE REQUIREMENTS.

46. ALL DUCTWORK IS TO BE CLASS II (MEDIUM DUTY) CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS FOR - 15" WATER GAGE. NOTE: DUCTWORK IS TO BE WELDED, GASKETED FLANGE TYPE OR QUICK DISCONNECT WITH CLAMPS - SPIRAL DUCTWORK IS NOT PERMITTED. SUPPORT PER SMACNA GUIDELINES AND AT EVERY JOINT/TRANSITION.

47. PRIOR TO CONSTRUCTION OF THE DUCT SYSTEM, THE CONTRACTOR IS TO SUBMIT A DETAILED SHOP DRAWING ILLUSTRATING ENTIRE DUCT SYSTEM INCLUDING DIMENSIONS, FITTINGS, SIZES, HANGER LOCATIONS, ETC. ALL FIELD VERIFIED.

48. GROUND DUST COLLECTION SYSTEM PER NFPA 91 AND THE MANUFACTURERS INSTALLATION REQUIREMENTS TO PREVENT ACCUMULATION OF STATIC ELECTRICITY IN THE SYSTEM.



NOTES, LEGEND & ABBREVIATIONS – HVAC

DUST COLLECTION & WELD FUME EXTRACTION  
WOOD SHOP & WELDING AREA

FOR  
ALLEGANY COLLEGE, LAVALLE BUILDING  
37 LANE AVENUE, LAVALLE, MARYLAND 211502

East Hills  
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#### REVISIONS

MARK	BY	DATE

DATE:  
5/01/2025

DRAWING NO.

DRAWN BY:  
S.M.M.

CHECKED BY:  
C.G.A.

PROJECT NO.  
24-141

H-1