<u>ABE</u>	BREVIATIONS								DRAFTING SYMB	OLS			SHEET INDEX SHT NO SHEET NAME			SHEET INDEX SHT NO SHEET NAME		SHEET II	SHEET NAME
<u>A</u> A.F.F. A.F.L. ABV	Above Finish Floor Above Floor Level Above	CONT Continue (ous) (ation) FF CORR Corridor FF	(continued) PL Fireplace RP Fiberglass F RT Fire Retarda	Reinforced Plastic ant Treated	L (continued)P (continued)LONGLongitudinalPREFABLTGLightingPRELIMLVRLouverPRKG	Prefabricated			4 A101 2 MULTI - ELE	VATION REFE	ERENCE 1	REVISION	GENERAL G000 SHEET INDEX, MA G002 TYPES AND SYST G006 ZONING - ELEVAT	TEMS TION		S3.1 ROOFING FRAMING PLAN S4.1 FOUNDATION DETAILS S4.2 FOUNDATION DETAILS S5.1 FRAMING DETAILS		FIRE PROTECT FP001 PLUMBING	FIRE PROTECTION NOTES AND PLAN
AC ACT ADD ADDL	Acoustic (al) Acoustical (Ceiling) Ti Addendum (Addenda) Additional	CW Curtain Wall FT	T Foot or Feet TG Footing TR Fin Tube Ra UR Furring	t adiation / Radiator	M PSF M.O. Masonry Opening PT MAS Masonry PTN	Pound per Squar Pound per Squar Paint Partition	e Foot TAN e Inch TBD TBF TBM	I Tangent To Be Determined Thermally Broken Furring	3 SIM		1	KEYNOTE	G007 EXTERIOR RENDER G051 BUILDING CODE S		SSING	S5.2 FRAMING DETAILS ARCHITECTURAL DEMOLITION AD101N LEVEL 1 DEMOLITION PLAN AND RE	FLECTIVE CELLING	PI AN P004	PLUMBING LEGEND AND NOTES PLUMBING SCHEDULES PLUMBING EQUIPMENT DETAILS PLUMBING EQUIPMENT DETAILS
ADJ ADJC ADMII AL	IN Administration Aluminum	9	GA Gauge GALV Galvanized			Polyvinyl Chloride	TEM THK THR	Think (ness) Threshold	A101 ELEVATION	REFERENCE				N & TREE PRO	DTECTION PLAN (NORTH)	NORTH AD101S LEVEL 1 DEMOLITION PLAN SOUTH AD121S LEVEL 1 DEMOLITION REFLECTIVE C AD200 DEMO ELEVATIONS		P101 P102 P103	PLUMBING OVERALL DRAIN PLAN PLUMBING ENLARGED DRAIN PLAN PLUMBING WASTE AND VENT RISER
ALT ANC APC APPR ARCH	Alternate Anchor Precast Concrete - Ar ROX Approximately	DEPT Department GC chitectural DF Drinking Fountain GI DIA Diameter GI	GBD Gypsum Boa GC General Cor GEN General / Ge GL Glass / Glas	ntractor enerator zing	MECH Mechanical MEMB Membrane MEZZ Mezzanine R	Quantity Radius or Riser	TRT TYP TZ		SIM SECTION RE	EFERENCE	Elevation ROOM NAME	LEVEL MARKER ROOM NAME	C002 SITE DEMOLITION C100 SITE PLAN (NORT C101 SITE PLAN (SOUT C102 SITE LAYOUT PLA	ΓΗ) ΓΗ)	OTECTION PLAN (SOUTH)	ARCHITECTURAL A001 SITE PLAN		P201 P202 P203 P301	PLUMBING OVERALL SUPPLY PLAN PLUMBING ENLARGED SUPPY PLAN PLUMBING SUPPLY ROOF PLAN PLUMBING ROOF PLAN
AVG AVFL	O Automatic Audio Visual Average	DIAG Diagonal GI DIM Dimension DL Dead Load <u>H</u> DN Down H DR Door		t (Dimension)	MFR Manufacturer R.O. MIN Minimum RCP MIR Mirror (detail views) RD MISC Miscellaneous RECT MTD Mounted REF	Rough Opening Reflected Ceiling Roof Drain Rectangular	Plan UC UG UG UNF UNC	FIN Unfinished	SIM A101 DETAIL REF	FRENCE		ROOM NUMBER	C103 SITE LAYOUT PLA C200 SITE UTILITY PLAI C201 SITE UTILITY PLAI	N (NORTH) N (SOUTH)		A101N LEVEL ONE NORTH A101S LEVEL ONE SOUTH A102 ROOF PLAN NORTH A121N LEVEL ONE REFLECTED CEILING PLAN	AN NORTH	P302 MECHANICAL	ROOF DRAIN ISOMETRIC
	NL Access Panel Bottom of	DS Downspout H0 DTL Detail H1 DW Dishwasher H1	IB Hose Bibb IC Handicap IDR Header IDRL Handrail IDWR Hardware		MTD Mounted REF MTL Metal REG MUL Mullion REINF MW Millwork REQD REV	Refrigerator Register/Registra Reinforce (ment) Required	ation UPH	O Unless Noted Otherwise Upholstery Utility	A101) BETTIETE	LINEIVOL		NORTH SYMBOL	C210 16 INCH WATER N C300 SITE GRADING & C301 SITE GRADING & C310 STORMWATER PL	DRAINAGE PL DRAINAGE PL	_AN (NORTH) _AN (SOUTH)	A121N LEVEL ONE REFLECTED CEILING PL A121S LEVEL ONE REFLECTED CEILING PL A151 TOILET ROOM PLANS AND ELEVATIONS A191 ENLARGED PLANS AND ELEVATIONS	NS	M001 M101 M102 M103	MECHANICAL NOTES AND LEGENDS MECHANICAL OVERALL PLAN MECHANICAL PLAN - EXISTING WEST MECHANICAL PLAN - EXISTING EAST
B.O BD BIT BLDG BLKG	Board Bituminous Building	DWL Dowel Hi H0 <u>E</u> H1	IM Hollow Meta IORZ Horizontal ITR Heater	al entilation / Air Conditioning	N North RH NA Not Applicable RM NIC Not In Contract RND	Revision Right Hand Right Hand Reve Room Round	V.I.F VI.Se VAR VB VCT	R Varies Barrier - Vapor Barrier, Vapor Retarder	1	V	——— DRAWI	NG NUMBER NG TITLE	C400 EROSION CONTR C401 EROSION CONTR C410 ERODION CONTR	ROL PLAN (NO ROL PLAN (SO	ORTH) OUTH)	A201 BUILDING ELEVATIONS A251 BUILDING SECTIONS A252 BUILDING SECTIONS		M104 M105 M106	MECHANICAL PLAN - ADDITION MECHANICAL PLAN - ADDITION ENLARGED MECHANICAL PLAN - ADDITION ENLARGED
BM BOT BRG BRK	Beam or Benchmark Bottom		IYD Hydrant D. Inside Diame		NO Number ROW NOM Nominal NRC Noise Reduction Coefficient NSMF Non-Structural Metal Framing S	Right of Way	VES	RT Vertical ST Vestibule	A101 1/8" = 1'	<u>V NAME</u> - 0"			C500 SITE DETAILS C501 SITE DETAILS C502 SITE DETAILS CMISC SUPPLEMENTAL I	INFORMATION	V	A253 BUILDING SECTIONS A301 WALL SECTIONS A302 WALL SECTIONS A351 EXTERIOR DETAILS		M107 M108 M109 M110	MEHCHANICAL ROOF PLAN - EXISTING MECHANICAL ROOF PLAN - ADDITION MECHANICAL ROOF PLAN - BID ALT #3 MECHANICAL ROOF PLAN - ADDITION ADD 1
BSMT BTWN BUR	T Basement [*]	EJ Expansion Joint IN EL Elevation (Level/Height indication) IN ELEC Electric (al) IN	N Inch NCL Include (ing) NFO Information)	NTS Not To Scale SCHED SD O SECT O.A. Overall SF		w W W re Foot W/	West Wide/Width (Dimension) With	404 - DOOD NUM			NUMBER	LANDSCAPE L101 LAYOUT PLAN			A352 EXTERIOR DETAILS A353 EXTERIOR DETAILS A354 EXTERIOR DETAILS A371 EXTERIOR PLAN DETAILS	1	M111 M201 M202	MECHANICAL RCP - ADDITION MECHANICAL SCHEDULES MECHANICAL DETAILS
C C.O. C.T.C CAB	Cased Opening C. Center To Center Cabinet	EMER Emergency IN EMER Emergency ENT Entrance EO Electrical Outlet	NT Interior AN Janitor		O.C. On Center SHT O.D. Outside Diameter SHTG OFCI Owner Furnished - Contractor Installed SHWR OFOI Owner Furnished - Owner Installed SIM	Sheet Sheathing Shower Similar	W/O WC WD WD	Water Closet / Toilet Wood	101 DOOR NUME (1) GLAZED OP			MATERIAL / PRODUCT ID	L102 MATERIAL PLAN L103 PLANTING PLAN L104 IRRIGATION PLAN L301 SECTIONS	N		A371 EXTERIOR PLAN DETAILS A372 EXTERIOR PLAN DETAILS A381 EXTERIOR DETAILS - 3" SCALE A391 EXTERIOR PLAN DETAILS - 3" SCALE	ADD	M301 M302 ELECTRICAL	MECHANICAL CONTROLS MECHANICAL CONTROLS
CAT CF CFM CFMF	Cubic Feet Cubic Feet Per Minute F Cold Formed Metal Fr	EQUIP Equipment JS EXIST Existing JT Faming EXP Exposed	BOX Junction Box ST Joist T Joint)X	OH Overhead SLNT OPNG Opening SM OPP Opposite SMTL OPT Option(al) SOG	Sealant Surface Mount Sheet Metal Slab on Grade	WDF WD\ WGI WH	W Prefabricated Windows D Wall and Door Protection Water Heater					L301.1 SECTIONS - VERA L401 LAYOUT ENLARG L402 LAYOUT ENLARG L501 DETAILS - PAVEM	EMENTS EMENTS		A502 INTERIOR ELEVATIONS ADDITION A503 INTERIOR ELEVATIONS ADDITION A504 INTERIOR ELEVATION ADDITION A551 INTERIOR DETAILS		E001 E002 E101	ELECTRICAL LEGEND ELECTRICAL NOTES AND DETAILS POWER PLAN - EXISTING POWER PLAN - ADDITION
CHNL CIPC CIR CJ	Channel Cast-In-Place Concre Circle Control Joint Centerline	EXT Exterior te F.F.E. Finish Floor Elevation F.O Face of	KIT Kitchen KIO Knockout		OPTN Operable Partition SP ORD Overflow Roof Drain SPEC SS STC PA Dublic Address System	Space (ing) Specifications Stainless Steel Sound Transmiss	WP WT XJ sion Coefficient	Waterproofing Window Treatment Expansion Joints	ASSEMBLY TYP FLOOR ASS			SHEET) BASE ASSEMBLY	L502 DETAILS - VERAN L503 DETAILS - PLANTI L504 DETAIL - TREE PR	IDA ING ROTECTION		A552 INTERIOR DETAILS A601 DOOR SCHEDULE, TYPES AND DETA A651 GLAZING TYPES AND DETAILS	ILS	E103. E104 E105	MECHANICAL POWER PLAN - ADDITION MECHANICAL POWER PLAN - EXISTING MECHANICAL POWER PLAN - ROOF
CLNG CLO CLR CM	_	FA Fire Alarm LA FD Floor Drain LA FE Fire Extinguisher LA	Long (Dimer AB Laboratory AM Laminate, La		PA Public Address System STD PAR Parallel STL PC Precast Concrete STN PERIM Perimeter STOR PERP Perpendicular STRUCT	Standard Steel Stone Storage			CEILING AS: 10' - 0" CEILING H FLOOR LE	EIGHT ABOVE		TRANSITION ASSEMBLY	L505 DETAILS - FURNIT L506 DETAILS - FURNIT STRUCTURAL			A701N LEVEL ONE FINISH PLANS NORTH A701S LEVEL ONE FINISH PLANS SOUTH A801N MILLWORK PLANS NORTH A801S MILLWORK PLANS SOUTH		E106 E201 E202 E303	MECHANICAL POWER PLAN - EXISTING ROOF BID ALT #3 LIGHTING PLAN - EXISTING LIGHTING PLAN - ADDITION SITE ELECTRICAL PLAN
CMU CO COL COM	Concrete Masonry Un Clean Out Column Communication	it FFE Furnishings, Fixture and Equipment LE FHC Fire Hose Cabinets LE FIN Finish LF FIXT Fixture LF	B Pound DR Ladders F Linear Foot		PL Plate SUBFL PL Property Line SUSP PLAM Plastic Laminate SYM PLAS Plaster - Gypsum SYS	Subfloor(ing) Suspended Symmetry, Symn System	netrical		ROOF1 ROOF ASSE				S1.0 REQUIRED IBC SF S1.1 FOUNDATION GEI S1.2 FRAMING GENER	NERAL NOTES	S & TYP. DETAILS	A802 MILLWORK ENLARGED PLANS A803 MILLWORK ELEVATIONS A851 MILLWORK SECTIONS	ODTU.	E400 E401 E402	FIRE ALARM DETAILS AND NOTES FIRE ALARM PLAN - EXISTING FIRE ALARM PLAN - ADDITION
CONC CONE CONE CONN	D Condition F Conference N Connection	FL Floor (ing) LF FLASH Flashing LII FLEX Flexible LII FND Foundation III	HR Left Hand R IN Linear INO Linoleum L Live Load	Reverse	PLBG Plumbing PLF Pound per Linear Foot PLY Plywood PNL Panel	•			ACOUSTIC		BLY A3	PARTITION ASSEMBLY - ACOUSTICAL RATED	S1.3 TYP. FRAMING DE S2.1 FOUNDATION PLAS3.0 LINTEL PLAN			A901N LEVEL ONE FURNITURE / AV PLAN N A901S LEVEL ONE FURNITURE / AV PLAN S		E403 E404 E501 ED101	SYSTEM PLAN - EXISTING SYSTEMS PLAN - ADDITION ELECTRICAL SCHEDULES AND RISER ELECTRICAL DEMOLITION PLAN
MATERIA	ST Construction AL / PRODUCT ID	FP Fire Proofing	OC Location	L / PRODUCT ID I	PR Pair LIST	MATER	IAL / PRODUCT	ID LIST	FIRE RATII		AL / PRODUCT II	- FIRE RATING D LIST		MATER	IAL / PRODUCT II) LIST	MATERIA	AL / PRODUCT ID	
ID ACCL-1	ACOUSTICAL PANEL CEILING SYSTEM	Spec Data MFR: USG; PRODUCT: MARS HIGH-NRC LOGIX ACOUSTICAL PANEL;	ID CPT-1	CARPET TILE M	pec Data IFR: INTERFACE; TYLE: OBLIGATO; OLOR: TRAVERTINE;	ID IGU-2	DESCRIPTION SPANDREL GLASS, CLEAR W/	Spec Data MFR: VITRO; PRODUCT: SILICONE-COATED, LOW-E, CLEAR	R INSULATING	ID PTA		Spec Data MFR: BENJAMIN MOORE; COLOR: WHITE DOVE; NUMBER: OC-17:		ID TA-16	PURSE SHELF	Spec Data MFR: SHELFOLOGY; PRODUCT: AKSEL RADIUS ASH FLOATING SHELF;	ID WA-1	WALL ACCESSORY - ART RAIL	Spec Data MFR: AS HANGING DISPLAY SYSTEMS; STOLE: CLICK RAIL TRACK A1050;
		PANEL SIZE: 24" X 72" X 1"; PANEL SIZE: CORRESPONDING PANEL SIZES AT CEILING DEVICES; PANEL EDGE: FINELINE BEVEL; PANEL COLOR: WHITE; NRC: 0.90:	;	NI B <i>i</i> DI	OLOR: TRAVERTINE; IUMBER: 106714; ACKING: C-QUEST BIO X; IMENSIONS: 25CM X 1M; NSTALLATION: ASHLAR:		OPAQUE COATING	SPANDREL GLASS; UNIT THICKNESS: 1"; EXTERIOR LITE: 1/4" CLEAR; SPACER: 1/2" WARM EDGE, BLACK; FILL CONTENT: AIR:		PTB	PAINT COLOR, BEIGE	LRV: 85.38; MFR: BENJAMIN MOORE; COLOR: CLAY BEIGE;				FINISH: CLEAR SEALED ASH; DEPTH: 8"; LENGTH: 24"; RADIUS: 3", BOTH SIDES; MOUNT: DRYWALLL;	WA 0		COLOR: WARM WHITE; CAPACITY: 20LBS. / FT; NOTE: Includes eight (8x) each Click & Connect connectors, #6 x 1.25" screws and TripleGrip anchors;
		GRID MODEL: USG INDENTITEE DXI WITH STABILIZER BARS; GRID: 9/16"; GRID COLOR: FLAT WHITE 050; NOTE: LBC RED-LIST FREE;	CPT-2	CARPET TILE MS	IOTE: USE TAC-TILES FOR INSTALL PER MFR INSTRUCTIONS; IFR: INTERFACE; TYLE: DIMINUENDO; COLOR: TRAVERTINE;	INIQI II 1	INSULATION.	INTERIOR LITE: 1/4" CLEAR; COATING: SOLARBAN 70, #2 SURFACE; COLOR: 3-4051 (SPENCER), #4 SURFACE; PRODUCT: MINERAL-FIBER SOUND-ATTENUA		PTC	WHITE	NUMBER: OC-11; LRV; 62.87 MFR: BENJAMIN MOORE; COLOR: LAMBSKIN; NUMBER: OC-3:		TA-17A	MIRROR UNIT	MFR: RENWIL; PRODUCT:WEBSTER; SIZE: 26"W X 40"H X 0.5"D; FRAME FINISH: Iron - Black Powdercoated Finish;	WA-2	ACCESORY	MFR: ROPPE; PRODUCT: RUBBER ACCESSORY COVE CAP; STYLE: #46 COVE CAP 1/8"; COLOR: 131 BISQUE; NOTE: LBC REDLIST FREE AND USA MADE;
ACCL-2	ACOUSTICAL PANEL CEILING SYSTEM	MFR: USG; PRODUCT: MARS ACOUSTICAL PANEL; PANEL SIZE: 24" X 24 X 7/8" ; PANEL EDGE: TEGULAR;		NI BA DI IN	IUMBER: 106700; ACKING: C-QUEST BIO X; IIMENSIONS: 25CM X 1M; ISTALLATION: ASHLAR			ON ASTM/TYPE: C665, TYPE I; COMPRESSIVE: N/A; R-VALUE: N/A; FACER: UNFACED;		PTD		NUMBER: OC-3; LRV: 71; MFR: BENJAMIN MOORE; COLOR: PALE OAK; NUMBER: OC-20:		TA-17B		MODEL: MT2394; MFR: BOBRICK; PRODUCT: MIRROR WITHN STAINLESS STEEL CHANNEL FRAME; SIZE: 24" X 36"	WAVB-1	WATER, AIR, AND VAPOR BARRIER MEMBRANE	PRODUCT: FLUID-APPLIED AIR BARRIER; AIR: 0.004 CFM/SF AT 1.57 PSF MAX; /APOR: IMPERMEABLE (LESS THAN 0.1 PERMS); MFR: CARNEGIE:
		PANEL COLOR: WHITE; NRC: 0.80; GRID: USG DX; GRID COLOR: WHITE;	CPT-3	CARPET TILE M CO	IOTE: USE TAC TILES FOR INSTALL REP MER INSTRUCTIONS: IFR: INTERFACE; OLLECTION: MONOCHROME; OLOR: MIX OF PEACH 101823, PERSIMMON 101818, EARTH RUST	INSUL-2	INSULATION, EXTERIOR WALL	VAPOR: PERMEABLE (MORE THAN 10 PERMS) THICKNESS: SEE DRAWINGS; PRODUCT: EXPANDED POLYSTYRENE; ASTM/TYPE: C578, TYPE IX;);	PTE	PAINT COLOR, CORAL	LRV: 69; MFR: BENJAMIN MOORE; COLOR: POTTERS CLAY; NUMBER: 1221:		TA-19	НООК	MODEL: B-1658 2436; MFR: BOBRICK; PRODUCT: FINO COAT HOOK; FINISH: STAINLESS STEEL:			PRODUCT: XOREL; PATTERN: Meteor; COLOR: 717; CONTENT: 100% IFR Xorel®
ACCL-3	ACOUSTICAL PANEL CEILING SYSTEM	VERIFY WITH EXISTING MFR: USG; PRODUCT: ACOUSTIC SF ACOUSTICAL PANEL; PANEL SIZE: 24" X 24" X 1";	3	B/ DI IN	01817, SPUN GOLD 101814, MALT 101803; ACKINTERG: CQUEST BIOX; IMENSIONS: 50CM X 50CM W/ CUSTOM SHAPES; ISTALLATION: SEE ENLARGED PLAN FOR INSTALL PATTERN;	1	CAVITY	COMPRESSIVE: 25 PSI MIN.; R-VALUE: 4.2 PER INCH; FACER: UNFACED; VAPOR: SEMI-PERMEABLE (MORE THAN 1, UP	P TO 10 PERMS);	PTF	,	MFR: BENJAMIN MOORE; COLOR: BURGUNDY ROSE; NUMBER: 1280;		TA-20	SHOWER ROD AND CURTAIN	SKU: B-9542; MFR: BOBRICK; PRODUCT: HEAVY DUTY SHOWER ROD WITH CONCEALED MOUNTING:			FINISH: NONE; BACKING: X-Protect™ Wall; WIDTH: 56"; NSTALL: USE MFR RECOMMENDED WATER-BASED ADHESIVE;
		PANEL EDGE: SEMI CONCEALED GRID (SFAR); PANEL COLOR: FLAT WHITE; NRC: 0.70; GRID MODEL: USG DX SEMI CONCEALED WITH WALL SPRING CLIPS GRID: 15/16":	S; CPT4	CO CARPETILE N S	IOTE: USE LOKDOTS FOR INSTALL PER MFR INSTRUCTIONS; ONTACT: MAREN BILGRIEN, maren.bilgrien@interface.com; IFR-INTERFACE: TYLE: BROOME STREET;	INSUL-3		THICKNESS: SEE DRAWINGS; PRODUCT: POLYISO INSULATION, FLAT/TAPEI ASTM/TYPE: C1289, TYPE II, CLASS 2; COMPRESSIVE: 20 PSI;	,	PTH		MFR: BENJAMIN MOORE; COLOR: BAKED TERRA COTTA; NUMBER: 1202; MFR: BENJAMIN MOORE; COLOR: TO MATCH SMF-1/SMF-		TA-23 TA-24	HAND DRYER DIAPER-CHANGING	FINISH: STAINLESS STEEL; SKU: B-207; SEE PLUMBING SCHEDULE	WCVG-2A	WALLCOVERING	NOTE: LBC RED-LIST FREE AND C2C GOLD; MFR: DESIGNTEX; PRODUCT: BESPOKE SURFACE IMAGING; MATERIAL: DW11 DNA - WALLCOVERING;
ACP-1A	ACOUSTIC PANEL	GRID COLOR: WHITE; NOTE: LBC RED-LIST FREE; MFR: BAUX;		NI B <i>i</i> DI	OLOR: CORAL GLASS; IUMBER: 106210; ACKING: C-QUEST BIO X; IIMENSIONS: 50CM X 50CM; NSTALLATION: MONOLITHIC:			R-VALUE: 5.7 PER INCH; FACER: COATED GLASS; VAPOR: SEMI-IMPERMEABLE (MORE THAN 0.1 THICKNESS (FLAT): SEE DRAWINGS; SLOPE (FIELD): 1/4" PER FOOT, UNO.:	1, UP TO 1 PERM);	RB-1A	RUBBER BASE	MFR: JOHNSONITE; PRODUCT: BASEWORKS RUBBEF SHAPE: SEE FINISH GENERAL NO THICKNESS: 2.5MM:	R BASE;	1A-24	STATION	PRODUCT: CP0016HCS BabyMedi® Baby Changing Station; FINISH: Satin Stainless Steel & White; TYPE: Horizontal Surface-Mounted; SIZE: 33-7/8"W x 18-7/8"H x 3-7/8"D, 22-1/2"D WHEN OPEN;			PATTERN: ARCHITECT TO PROVIDE CUSTOM ART; WIDTH: 54 INCHES (52" MAX PRINTABLE); CONTENT: 50% VIRGIN WOOD PULP, 40% SYNTHETIC LATEX, 10% POLYESTER FIBER;
		PRODUCT: WOOD WOOL PANEL; STYLE: LINES; COLOR: HEAT RUST RED; SIZE: 1160mm x 580mm x 25mm thick; INSTALLATION: GLUE (WG1);	CPT-5	CARPET TILE MS	OTE: USE TAC-TILES FOR INSTALL PER MFR INSTRUCTIONS; IFR: INTERFACE; TYLE: MERCER STREET;	INSUL-4	INSULATION, EXTERIOR WALL	SLOPE (CRICKET): 1/2" PER FOOT, UNO.; PRODUCT: MINERAL WOOL BLANKET; ASTM/TYPE: C665, TYPE I;		DD 40	RUBBER BASE	SIZE: 4"; COLOR: STONE COTTAGE; NOTE: CRADLE TO CRADLE, SILV		TL-1A	CERAMIC WALL TILE		WCVG-2B	WALLCOVERING	NSTALL: USE MFR RECOMMENDED WATER-BASED ADHESIVE; MFR: DESIGNTEX; PRODUCT: BESPOKE SURFACE IMAGING; MATERIAL: DW11 DNA - WALLCOVERING;
ACP-1B	ACOUSTIC PANEL	HAYOUT: SEE ELEVATION FOR PATTERN; MFR: BAUX; PRODUCT: WOOD WOOL PANEL; STYLE: ARCH:		NI B <i>j</i> DI	OLOR: CONCRETE CIRCLE; IUMBER: 105762; ACKING: C-QUEST BIO X; IIMENSIONS: 50CM X 50CM; NSTALLATION: MONOLITHIC:		PARAPET	COMPRESSIVE: N/A; R-VALUE: 4.0/INCH; FACER: UNFACED; VAPOR: PERMEABLE (MORE THAN 10 PERMS) THICKNESS: SEE DRAWINGS:		RB-1B	RUBBER BASE	MFR: JOHNSONITE; PRODUCT: BASEWORKS RUBBEF SHAPE: SEE FINISH GENERAL NO THICKNESS: 2.5MM; SIZE: 4":	,			NUMBER: 4101 V 059029; DIMENSIONS: 12" X 24"; THICKNESS: .47"; GROUT: TBD;			PATTERN: ARCHITECT TO PROVIDE CUSTOM ART; WIDTH: 54 inches (52" MAX PRINTABLE); CONTENT: 50% VIRGIN WOOD PULP, 40% SYNTHETIC LATEX, 10% POLYESTER FIBER;
		STYLE: ARCH, COLOR: HEAT RUST RED; SIZE: 1160mm x 580mm x 25mm thick; INSTALLATION: GLUE (WG1); LAYOUT: SEE ELEVATION FOR PATTERN:	CPT-6	CARPET TILE M	INTELECTION MONOR THIS CONTROLL FOR MER INSTRUCTIONS; IFR: SHAW; RODUCT: BOTTLE FLOOR; TYLE: FELTED 5T455:	INSUL-5	INSULATION, EXTERIOR STOREFRONT SPANDREL	PRODUCT: FOIL-FACED MINERAL WOOL BOAF MFR: ROCKWOOL; STYLE: CURTAINROCK 40; ASTM/TYPE: C612. TYPE IVB:		RB-1C		COLOR: STORMCLOUD 71; NOTE: CRADLE TO CRADLE, SILV MFR: JOHNSONITE; PRODUCT: BASEWORKS RUBBEF	,	TL-1B	CERAMIC WALL TILE	COLLECTION: CORE COLLECTION SOLIDS; PRODUCT: SHAPES; COLOR: VIVID WHITE;	WCVG-3A	WALLCOVERING -	NSTALL-USE MER RECOMMENDED WATER-BASED ADHESIVE: MFR: DESIGNTEX; PRODUCT: WANNABE; CONTENT: 55% POLYESTER (PRECONSUMER RECYCLED, SOLUTION
ACP-1C		MFR: BAUX; PRODUCT: WOOD WOOL PANEL; STYLE: CURVE; COLOR: HEAT RUST RED:		CO B <i>j</i> DI	OLOR: VELVETEEN 665; ACKING: ECOWORX; IMENSIONS: 9" X 36" LOOR INSTALLATION: ASHLAR;	INSUL-6	LOW-EXPANDING	R-VALUE: 4.2/INCH; FACER: FOIL-FACED; THICKNESS: SEE DRAWINGS; PRODUCT: LOW-EXPANDING FOAM SEALANT;				SHAPE: SEE FINISH GENERAL NO THICKNESS: 2.5MM; SIZE: 4"; COLOR: SANDSTORM CB;	DTES;			NUMBER: 5102 V 059029; DIMENSIONS: 12" X 24"; THICKNESS: .47"; GROUT: TBD; INSTALL PATTERN: SEE ELEVATIONS. RANDOMIZE TL-1A AND TL-18			DYED), 95% POLYESTER (PÓSTCONSUMER RECYCLED, SOLUTION DYED); COLOR: HINT; WIDTH: 63"; SKU: 6646-702
ACP-2A		SIZE: 1160mm x 580mm x 25mm thick; INSTALLATION: GLUE (WG1); LAYOUT: SEE ELEVATION FOR PATTERN; MER: KINETICS:		B/NO FL	VALL INSTALLATION: USE FACTORY EDGE AS TOP OF CARPET TI ASE; IOTE: USE LOKDOTS FOR INSTALL PER MFR INSTRUCTIONS FOR LOORING APPLICATION, USE SHAW 3800 ADHESIVE PER MFR	LE NOVA 4	FOAM SEALANT MILLWORK ACCESSORY - CABINET PULL	MFR: IKEA; PRODUCT: BEGRIPA HANDLE; DESCRIPTION: HALF ROUND CABINET PULL;	,	RB-1D	RUBBER BASE	NOTE: CRADLE TO CRADLE, SILV MFR: JOHNSONITE; PRODUCT: BASEWORKS RUBBEF SHAPE: SEE FINISH GENERAL NO	R BASE;	TL-2A	CERAMIC WALL TILE	LOCATIONS; MFR: MOSA; COLLECTION: CORE COLLECTION SOLIDS;	WCVG-3B		NSTALLATION: STRAIGHT HANG, RANDOM MATCH, VERTICAL SEAMS; NOTE: USE MFR RECOMMENDED WATER-BASED ADHESIVE; MFR: DESIGNTEX:
7.01 27	PANEL	PRODUCT NAME: HARDSIDE; THICKNESS: 1"; EDGE: RADIUS; SIZE: 4' X 10' MAX PANEL SIZE, SEE ELEV FOR DIMENSIONS;	CPT-7	CARPET TILE MCC	NSTRUCTIONS FOR WALL APPLICATION; IFR: INTERFACE; OLLECTION: LOOK BOTH WAYS; TYLE: STEP THIS WAY;		CABINET FULL	Length: 5 1/8 "; Width: 2 9/16 "; Depth: 7/8 "; Drilled hole diameter: 1/4 ";				THICKNESS: 2.5MM; SIZE: 4"; COLOR: CANVAS WB; NOTE: CRADLE TO CRADLE, SILV	,			PRODUCT: SHAPES; COLOR: VIVID WHITE; NUMBER: 5102 V 049026; DIMENSIONS: 19" X 10"; THICKNESS: .47":	(WCVG-3B	FELT	PRODUCT: WANNABE; CONTENT: 5% POLYESTER (PRECONSUMER RECYCLED, SOLUTION DYED), 95% POLYESTER (POSTCONSUMER RECYCLED, SOLUTION DYED);
		MOUNTING: Z-CLIP; FABRIC SPEC:; TEXTILE BRAND: GUILFORD OF MAINE; TEXTILE NAME: FR701 2100; COLOR: QUARTZ 380;		PF FI B/	COLOR: ALBA 106323; RODUCT: 1417602500; IBER: 100% RECYCLED NYLON AQUAFIL; ACKING: C-QUEST BIO X; IMENSIONS: 50CM X 50CM:	MWA-2	MILLWORK ACCESSORY -	Hole spacing: 3 3/4 "; COLOR: WHITE; MFR: Hafele; PRODUCT: Centerline Brackets Series:		RFBD-1		PRODUCT: HIGH-DENSITY POLYIS ASTM/TYPE: C1289, TYPE II, CLAS COMPRESSIVE: 80 PSI, MIN.; R-VALUE: 2.5 TOTAL;		TL-2B	CERAMIC WALL TILE	GROUT: TBD; INSTALL PATTERN: SEE ELEVATIONS, RANDOMIZE TL-2A AND TL-2E LOCATIONS; MER: MOSA:			COLOŔ: HINT; WIDTH: 63"; SKU: 6646-702; NSTALLATION: STRAIGHT HANG, RANDOM MATCH, VERTICAL
ACP-2B	ACOUSTIC WRAPPED PANEL	MFR: KINETICS; PRODUCT NAME: HARDSIDE; THICKNESS: 1";	DMAT-1	BELOW GRADE PF	NSTALLATION: ASHLAR; NOTE: USE TAC-TILES FOR INSTALL PER MFR INSTRUCTIONS; RODUCT: NON-WOVEN, GEOTEXTILE FACE MOLDED SHEET		COUNTERTOP BRACKET	SIZE: 10" D to 14" D, 2-1/2" Wide, 3/8" Thick; TYPE: Front Mounting Countertop Bracket; MATERIAL: Hand Crafted Premium Steel, in Powo MOUNT: Surface Mount in Vertical Plate at Stud L		RFL-1A	RESILIENT FLOORING		,	TL-2D		COLLECTION: CORE COLLECTION SOLIDS; PRODUCT: SHAPES; COLOR: COOL PORCELAIN WHITE; NUMBER: 200 V 049026:	Wargan	MALLOOVERING - CORK	SEAMS; NOTE: USE MFR RECOMMENDED WATER-BASED ADHESIVE; MER: KOROSEAL; PRODUCT: WALLTALKERS;
		EDGE: RADIUS; SIZE: 4' X 10' MAX PANEL SIZE, SEE ELEV FOR DIMENSIONS; MOUNTING: Z-CLIP; FABRIC SPEC:; TEXTILE BRAND: MAHARAM;	DRPY-1	DRAINAGE MAT TH DRAPERY DI	RAINAGE MAT; HICKNESS: 1/2"; RAPERY FULLNESS: 100%; YPE: RIPPLEFOLD, 4";	MWA-3	MILLWORK ACCESSORY - TRASI BIN	MFR: RUBBERMAID; H PRODUCT: OFFICE TRASH CAN - 10 GAL.; MODEL: S-13527BE; FINISH: BEIGE;		RFL-1B	LINOLEUM RESILIENT FLOORING		,			DIMENSIONS: 19" X 10"; THICKNESS: .47"; GROUT: TBD; INSTALL PATTERN: SEE ELEVATIONS, RANDOMIZE TL-2A AND TL-2B	3		WIDTH: 48" COLOR: ACORN 86; NSTALL: VERTICAL SEAMS, STRAIGHT MATCH, REVERSE HANG; NSTALL: USE MFR RECOMMENDED WATER-BASED ADHESIVE;
400.0		TEXTILE NAME: METHOD; CODE: 466579; COLOR: 020 CATTAIL;		TE PF CO	INING: NONE; EXTILE MFR: CARNEGIE; RODUCT: BIJOUX 6868; OLOR: 2; VIDTH: 55";	MWA-4	MILLWORK ACCESSORY - LAZY SUSAN	DIMENSIONS: 15" L x 11" W x 20" H MFR: ROCKLER; PRODUCT: LAZY SUSAN, EXTRA LARGE; MATERIAL: Aluminum swivel with ball-bearing cor	nstruction;	RFMB-1	ROOFING MEMBRANE	PRODUCT NAME: CORQUES LIQUED COLOR: B343; THICKNESS: .08"; , MFR: ELEVATE (FIRESTONE BUIL		TL-3	CERAMIC TILE	LOCATIONS; MFR: MOSA; COLLECTION: CORE; PRODUCT: SOLIDS;	WD-1	CLEAR COAT	PRODUCT: SOLID WOOD TRIM AND VENEER PLYWOOD SPECIES: WHITE ASH; CUT: QUARTERED; VENEER MATCHING: REVERSE SLIP MATCH;
ACP-3		MFR: KINE HCS; PRODUCT NAME: TAD PANEL; THICKNESS: 1-1/8"; EDGE: RADIUS; SIZE: 4' X 8 MAX PANEL SIZE. SEE ELEV FOR DIMENSIONS:		C(FI)	ONDER 35; CONTENT: 100% FR POLYESTER; INISH: NONE; RACK MFR: SILENT GLISS; RODUCT: SG3840:	MWA-5	MILLWORK ACCESSORY -	SIZE: 23-5/8" dia. x 7/8" H (including rubber feet); CAPACITY: UP TO 660 LBS.; MFR: RICHELIEU; PRODUCT: INDUSTRIAL GREY THERMOPLAST	TIC RUBBER CASTER;		TPO	EQUAL ALTERNATE; PRODUCT: FIRESTONE ULTRAPL THICKNESS: 60-MILS; INSTALL: FULLY-ADHERED; COLOR: WHITE:	Y TPO;			COLOR: VIVID WHITE; NUMBER: 5102 V 060060; DIMENSIONS: 24" X 24"; THICKNESS: .47";	WD-2	WOOD, PLYWOOD	FINISH: CLEAR, WATERBASED SEALER; PRODUCT: ASH HARDWOOD PLYWOOD, CABINET GRADE; GRADE: A/A; CUT: ROTARY;
		MOUNTING: Z-CLIP; FABRIC SPEC:; TEXTILE BRAND: GUILFORD OF MAINE; TEXTILE NAME: FR701 2100;		FI	PERATION: CORD; ITTING: CEILING OR WALL; OLOR: WHITE RAL 9016; EE RCP FOR CURVED/STRAIGHT TRACK LOCATIONS/ DIMENSIOI	NS	CASTER	MATERIAL: TPR; SIZE: 5" WHEEL DIA. OVERALL 6 5/32" H, MOU! 5/8"; FASTENING TYPE: SWIVEL WITHOUT BREAK; CAPACITY: UP TO 298 LBS. EACH:	NTING PLATE 2 7/8" X 3			EXTERIOR FIRE TEST EXPOSURE REQUIREMENTS OF CLASS-A OR WARRANTY: 20 YEAR; NOTE: SFM-3 TO BE REFERENCE	CLASS-B FIRE RATING;	TL-4	CERAMIC TILE BASE	GROUT: TBD; MFR: MOSA; COLLECTION: CORE; PRODUCT: SOLIDS;			FHICKNESS: 3/4"; SHEET SIZE: 4' X 8'; PLY: 7-PLY; FINISH: CLEAR, MATTE WATERBASED SEALER, ZERO VOC; NOTE: SEAL ALL FACES AND EDGES:
ACP-4	ACOUSTIC PANEL	GOLOR: OHARTZ 366; A A A A A A A A A A A A A A A A A A	h IFAFL-1	COATING, CLEAR PF	IFR: COVERTEC; RODUCT: STRONGSEAL PLUS; OLOR: CLEAR; HEEN: MATTE;	MWA-6	MILLWORK ACCESSORY - GROMMET	MFR: DOUG MOCKETT; PRODUCT: OVAL DESK GROMMET KING KONG COLOR: DESERT SAND (93D);	0,	RFMB-2	ROOFING AIR/VAPOR BARRIER	"COATED METAL FLASHING"; MFR: ELEVATE (FIRESTONE BUIL EQUAL ALTERNATE; PRODUCT: V-FORCE AIR-VAPOR	, , , , , , , , , , , , , , , , , , , ,			COLOR: VIVID WHITE; NUMBER: 5102V 060060; DIMENSIONS: 4" X 24"; THICKNESS: .47"; GROUT: TBD:	WD-3	WOOD, WHITE MAPLE, MATCH EXISTING	PRODUCT: SOLID WOOD TRIM AND VENEER PLYWOOD; SPECIES: MAPLE TO MATCH EXISTING; CUT: TO MATCH EXISTING; VENEER MATCHING: TO MATCH EXISTING:
ALSE-AL JA		SIZE: 4' X 8 MAX PANEL SIZE, SEE ELEV FOR DIMENSIONS; MOUNTING: PIN CLIP AND ADHESIVE; COLOR: POLAR; MFR:KAMINER: PRODUCT: TRIFAB VERSA GLAZE FRAMING SYSTEM;		AI FC SI	OC: <50/GL; DDITIVE: COVERGRIP ULTRAFINE DCOF 0.68 SLIP RESISTANCE; OR ALL NEW CONCRETE IN RESTROOMS; EE FINISHED FLOOR PLANS FOR LOCATIONS OF TOPPING; ROVIDE 4'X4' MOCK UP FOR REVIEW:	MWA-7	MILLWORK ACCESSORY - TRIM ANGLE	SIZE: 6-1/2" X 3" X 3/8" THICK, 5-7/8" OVAL CUT MFR: FRY REGLET; PRODUCT: MILLWORK REVEAL L ANGLE; SKU: MWRL100; COLOR: WHITE:	,	SECDR-2	SIDE SECURITY COIL	THICKNESS: 30-MILS; INSTALL: SELF-ADHERING;	,	TL-5	CERAMIC TILE	TO MATCH EXISTING; MFR: DAL TILE; STYLE: GLAZED WALL TILE; SIZE: 6 x 6 x 1/4";	WD-4	WOOD, PAINT GRADE	FINISH: CLEAR, WATERBASED SEALER, RESULT TO MATCH EXISTING; PRODUCT: PAINT GRADE MDF; FHICKNESS: 3/4";
		MODEL: 451; GLAZING METHOD: FULLY CAPTURED; GLAZING PLANE: FRONT;	FEC-1	RECESSED FIRE MEXTINGUISHER CABINET WITH CO	ROVIDE 4'X4' MOCK UP FOR REVIEW; IFR: LARSEN; :TYLE: ARCHITECTURAL SERIES, SOLID; :OLOR: WHITE; RIM: FLAT TRIM FULLY RECESSED:	MWA-8	MILLWORK ACCESSORY - WIRE MANAGER	COLOR: WHITE; SIZE: 1" X 1"; MFR: DOUG MOCKETT; PRODUCT: J-SHAPE UNDER DESK WIRE CABL W/FLANGE:	LE MANAGER	SHTG-1		PATTERN: ALUMINUM CLÉAR AND MOTORIZED PRODUCT: GLASS-MAT GYPSUM THICKNESS: 5/8" TYPICAL, UNO.;	SHEATHING;	ΤΙ Δ_1		SIZE: 6 x 6 x 1/4"; COLOR: 0170, BOMBAY; GROUT: TO MATCH EXISTING; MAPAI - #00, WHITE OR EQUAL; MFR: SCHLUTER:	WDPNL-1	WOOD-TAMBOUR	FINISH: PT-3B ON ALL SURFACES, CUTOUTS AND EDGES; NOTE: FSC CERTIFIED WOOD; WFR: SURFACING SOLUTION; PRODUCT: SOLID WOOD FLEXIBLE TAMBOUR;
ALCE O		FRAMING SIZE: 2" X 4 1/2"; FRAMING TYPE: NONTHERMAL; FINISH/COLOR: POWDER COATED WHITE; GLAZING: GL-1/1T, 1/4" TYPICAL, UNO; MED: KAWNIEED:	FFCC	M. LE PF	IATERIAL: STEEL; ETTERING TYPE: TYPE A IN BLACK; ROVIDE CLASS A FIRE EXTINGUISHER WITH CABINET;	MWA-9	MILLWORK ACCESSORY -	W/FLANGE; SKU: WM22; COLOR: BLACK; MFR: DOUG MOCKETT; PRODUCT: DP128;		SHTG-2		NOTE: PROVIDE TYPE X WHERE PRODUCT: EXTERIOR-GRADE PL' TYPE: CDX TYPICAL, UNO.; THICKNESS: 3/4" TYPICAL, UNO.;			THE ACCESSORY	MFR: SCHLUTER; PRODUCT: DILEX-AHK; FINISH: SATIN NICKEL ANONDIZED ALUMINUM; NUMBER: AHK 1S 125 AT; DIMENSIONS: 1/2";			PROFILE: T493; SPECIES: ASH; PANEL SIZE: SEE DRAWINGS; SLAT WIDTH: 1";
ALSF-2	STOREFRONT	PRODUCT: TRIFAB VERSA GLAZE FRAMING SYSTEM; MODEL: 451T; GLAZING METHOD: 4-SIDE CAPTURE; GLAZING PLANE: FRONT;	reu-2	EXTINGUISHER CABINET WITH COEXTIGUISHER TF	IFR: LARSEN; TYLE: ARCHITECTURAL SERIES, SOLID; :OLOR: WHITE; RIM: FLAT TRIM SEMI RECESSED; IATERIAL: STEEL;	OFOI-1	CABINET PULL SECURITY GATE -	DESCRIPTION: ROUND TOP PULL; SIZE: 6-11/16"; FINISH: STAINLESS STEEL (SSS);		SLR-1	WATER REPELLANT BRICK COATING, CLEAR CONCRETE SEALER	MFR: PROSOCO; PRODUCT: SILOXANE WB CONCE	ENTRATE:	TLA-2		MFR: SCHLUTER; PRODUCT: DILEX-AHKA; FINISH: SATIN NICKEL ANODIZED ALUMINUM; NUMBER: AHKA 125 AT;	WGD-1	CHAIR RAIL	FHICKNESS: 1/2"; FINISH: CLEAR, WATERBASED SEALER; MFR: R.C. MUSSON RUBBER CO.; PRODUCT: FLAT WEIGHT MATCHES EXISTING
		FRAMING SIZE: 2" X 4 1/2"; FRAMING TYPE: THERMALLY BROKEN; FINISH: FLUROPON PURE BY SHERWIN WILLIAMS; COLOR: BLACK. EXTRUSION 398A1632 :	FILM-1	LE PF	IATERIAL: STEEL, ETTERING TYPE: TYPE A IN BLACK; ROVIDE CLASS A FIRE EXTINGUISHER WITH CABINET; IFR: SKYLINE DESIGN; RODUCT: FILM STUDIO;	OHDR-1	OWNER FURNISHED OWNER INSTALLED FIRE RATED	MFR: OVERHEAD DOOR; MODEL: FIRE KING 634;		SMF-1	ALUMINUM SHEET METAL FLASHING AND TRIM, BLACK	PRODUCT: CONSOLIDECK LS; PRODUCT: PREFINISHED FORME THICKNESS: 0.040" TYP, UNO. SE FINISH: FLUROPON PURE BY SHE	E SPEC:	TLA-3		DIMENSIONS: 1/2"; MFR: SHLUTER; PRODUCT: JOLLY EDGE TRIM; FINISH: SATIN NICKEL ANODIZED ALUMINUM;	\parallel		MODEL: WG-6 (VERIFY HEIGHT MATCHES EXISTING; NSTALL: CLIP ON MOUNTING SYSTEM; FINISH: MATCH EXISTING; PROVIDE BULL NOSE END CAP AT OPENINGS;
		GLAZING: IGU-1/1T TYPICAL, UNO; SYSTEM CRF: 62 FRAME 68 GLASS w/ IGU-1; SYSTEM STC:; SYSTEM R-VALUE: R-2.5 w/ IGU-1; SYSTEM LLVALUE: 0.40 w/ IGU-1;		Ri CC Pf	OLL SIZE: 58" W x 45' L; ONTENT: PVC-FREE POLYESTER FILM; RIVACY: SOLID ETCH; ATTERN: GRADIENT MID;	 PNI -1	MIN PANEL PRODUCT -	PROVIDE STEEL JAMB STRUCTURE; COLOR: WHITE; RATING: 120 MIN (PRODUCT COMES ONLY IN A	4 HR);	SMF-2	STAINLESS STEEL SHEET METAL	COLOR: BLACK. COIL: 438A852; NOTE: VERIFY & MATCH ALSF-2/A PRODUCT: PREFINISHED FORME THICKNESS: 0.025" TYP (24 GA.),	LSF-3; D STAINLESS STEEL FLASHING; UNO. SEE SPEC;	TPTN-1	TOILET PARTITION	NUMBER: A125ATGB; DIMENSIONS: 1/2"; MFR: HADRIAN INC; PRODUCT: STAINLESS STEEL PARTITION;	WGD-2	CORNER GUARD	nttps://mussonrubber.com/product/flat-wall-guards/ MFR: INPRO; PRODUCT: CORNER GUARD; MODEL: SAS-1824H-304;
		SYSTEM U-VALUE: 0.40 w/ IGU-1; NOTES: SEE DRAWINGS FOR ASSOCIATED ALUMINUM SHAPES PROVIDED BY INSTALLER. SEE DRAWINGS FOR REQ'D STRUCT. DEFLECTION BY LOCATION, PROVIDE RECEPTOR HEAD AS REQ'D	FLA-1	FLOORING MACCESORY PF	ACKING: WATER-BASED PRESSURE-SENSITIVE ADHESIVE; IZE: SEE ELEVATION; IFR: ROPPE; RODUCT: RUBBER ACCESSORY EDGE GUARD;		METAL PEGBOARD	PRODUCT: PEGBOARD MX; MATERIAL: STEEL; COLOR: BONE WHITE; SIZE: 4' X 8';		SMF-3	FLASHING AND TRIM, BLACK	FINISH: FLUROPON PURE BY SHE COLOR: BLACK. COIL: 438A852; NOTE: VERIFY & MATCH ALSF-2/A PRODUCT: RFMB-1 MFR'S TYPICA	RWIN WILLIAMS, COIL-COATED;			MOUNT: CEILING; FINISH: EMBOSSED STAINLESS STEEL; CONTENT: 91% (76% post-consumer and 15% pre-consumer) recycled content;			WINGS: 2"; HEIGHT: 48"; NSTALL: SCREW-ON; MATERIAL: 304 STAINLESS; FINISH: NO.4 SATIN;
ALSF-3		MFR: KAWNEER; PRODUCT: TRIFAB VERSA GLAZE FRAMING SYSTEM; MODEL: 601T; GLAZING METHOD: 4-SIDE CAPTURE; GLAZING PLANE: FRONT:		ST CO	TYLE: #34 UNDERLAP CARPET EDGE 3/16"; OLOR: 174 SMOKE; NSTALLATION: RADIUS 6'-0"; IOTE: LBC REDLIST FREE AND USA MADE;	PT-1_	INTERIOR LATEX, FLAT SHEEN	BACKING: BACKINGBOARD; PRODUCT: INTERIOR LATEX PAINT; SHEEN: FLAT; TYPE: INSTITUTIONAL LOW-ODOR/VOC;			METAL FLASHING AND	GALVANIZED STEEL SHEET META SHEET METAL: G-90 HOT-DIPPED SHEET METAL THICKNESS: 0.023 FINISH: TPO COATING;	AL FLASHING; GALVANIZED STEEL;	TWF-1		HARDWARE: CONTINUOUS HINGES AND CHANNELS; COAT HOOKS, ADA LEVERS, PRODUCT: YORK 304 SA FLASHING SYSTEM; WITH DRIP EDGE AND TERMINATION BAR;	WP-1 WT-1A	WATERPROOFING MEMBRANE WINDOW TREATMENT	PRODUCT: FLUID-APPLIED WATERPROOFING; /APOR: IMPERMEABLE (LESS THAN 0.1 PERMS); MFR: MECHOSHADE (DRAPER EQUIVOLENT IS ACCEPTABLE); PRODUCT: ECOVEIL SHEER (DRAPER: SHEERWEAVE - INFINITY 2);
		GLAZING PLANE: FRONT; FRAMING SIZE: 2" X 6"; FRAMING NOTE: MFR'S HEAVY DUTY VERTICAL PROFILES, AS DETERMINED BY MFR; FRAMING TYPE: THERMALLY BROKEN;	FS-1 GBD-1	TYPICAL	RODUCT: PAPER-FACED GYPSUM BOARD; HICKNESS: 5/8" TYPICAL, UNO.;			MPI SYSTEM: INT 9.2M-G1; MPI TOPCOAT: 143 X-GREEN; COLOR: SEE PT LETTER; NOTE: LBC DECLARE REDLIST FREE;				FINISH THICKNES: .032" COLOR: MATCH RFMB-1; SIZE: AS NOTED ON DRAWINGS; NOTE: CONFIGURATION AND INS REQ'TS FOR WARRANTY. SEE RF		T7.4		BASE: BUTYL-BASED; BASE THICKNESS: 18 MIL (.018"); FINISH: 304 STAINLESS STEEL SHEET; FINISH THICKNESS: 2 MIL (.002")			SYSTEM: URBANSHADE MOTORIZED SYSTEM; COLOR: EGGSHELL 1566 (DRAPER: COTTON); CONTENT: 100% TPO; WIDTH: 118";
		FINISH: FLUROPON PURE BY SHERWIN WILLIAMS; COLOR: BLACK. EXTRUSION 398A1632; GLAZING: IGU-1/1T TYPICAL, UNO; SYSTEM CRF: 69 FRAME, 70 GLASS w/ IGU-1;	GBD-2	GYPSUM BOARD, PF SHAFTLINER TH	OTE: PROVIDE TYPE X WHERE FIRE-RATED RODUCT: PAPER-FACED GYPSUM BOARD; HICKNESS: 1" TYPICAL; OTE: PROVIDE TYPE X WHERE FIRE-RATED	PT-2_	INTERIOR LATEX, EGGSHELL SHEEN	PRODUCT: INTERIOR LATEX PAINT; SHEEN: EGGSHELL; TYPE: INSTITUTIONAL LOW-ODOR VOC; MPI SYSTEM: INT 9.2M-G3; MPI TOPCOAT: 445 Y, GREEN:		SSF-1	SOLID SURFACE - QUARTZ	MFR: COSENTINO; PRODUCT: SILESTONE; COLOR: FARO WHITE; THICKNESS: 2CM:	51 25	12-1	PRECAST TERRAZZO	MFR: NASCO; PRODUCT: AGGLO MAFI; SLAB SIZE: 120" x 49"; THICKNESS: 3/4" PROFILE EDGE: BULLNOSE. SEE MW DRAWINGS:			OPENNESS: 3% NOTE: PVC-FREE, CRADLE TO CRADLE SILVER; SEE DETAILS FOR ENCLOSURE - POCKET STYLE HEAD BOX; STANDARD HEM BAR - SEALED END;
		SYSTEM STC:; SYSTEM R-VALUE: R-2.44 w/ IGU-1; SYSTEM U-VALUE: 0.41 w/ IGU-1; NOTES: SEE DRAWINGS FOR ASSOCIATED ALUMINUM SHAPES PROVIDED BY INSTALLER, SEE DRAWINGS FOR REO'D STRUCTURA	GL-1	CLEAR TH	RODUCT: MONOLITHIC GLASS; HICKNESS: 1/4" TYPICAL, UNO; HICKNESS AT GLSF-1: 1/2" TYPICAL, UNO; COLOR: CLEAR;	PT-3_	INTERIOR HIGH	MPI TOPCOAT: 145 X-GREEN; COLOR: SEE PT LETTER; NOTE: LBC DECLARE REDLIST FREE; PAINT FOR WOOD SUBSTRATE; PRODLICT: INTERIOR HIGH PERFORMANCE LA	ATEY DAINIT.	TA-1	TOILET TISSUE (ROLL)	EDGE: BULLNOSË; FINISH: SUEDE; MFR: BOBRICK;	Roll Tissue Disponer w/ St-16	LIDH 1	UPHOLSTERY	FROFILE EDGE: BULLNOSE, SEE MW DRAWINGS; FINISH: HONED; NOTE: PROVIDE MFR WITH DRAWINGS AND DIMENSIONS FOR PRE-CUT PRODUCT; MFR: CARNEGIE:	WT-1B	- BLACKOUT SHADE	MFR: MECHOSHADE (DRAPER EQUIVOLENT IS ACCEPTABLE); PRODUCT: CHELSEA BLACKOUT 0250 SERIES (DRAPER: MERMET FLOCKE); SYSTEM: URBANSHADE MOTORIZED SYSTEM;
AXPNL-1	MUD IN ACCESS PANEL 24x24	PROVIDED BY INSTALLER. SEE DRAWINGS FOR REQ'D STRUCTURA DEFLECTION BY LOCATION, PROVIDE RECEPTOR HEAD AS REQ'D MFR: BAUCO ACCESS PANEL SOLUTIONS; PRODUCT NAME: BAUCO PLUS II;	GLSF-1	ALL-GLASS PF STOREFRONT HI SI	T GL-1T, PROVIDE FULLY TEMPERED SAFETY GLAZING RODUCT: ALL-GLASS STOREFRONT; IEAD FITTING: 1" X 1-1/2" U-CHANNEL; ILL FITTING: 1" X 1" U-CHANNEL; ILL FITTING: 1" X 1" U-CHANNEL;		PERFORMANCE LATEX, SEMIGLOSS SHEEN, WOOD	PRODUCT: INTERIOR HIGH PERFORMANCE LA SHEEN: SEMIGLOSS; TYPE: HIGH PERFORMANCE ARCHITECTURAL MPI SYSTEM: INT 6.3A-G5; MPI TOPCOAT: 141 X-GREEN;		TA 2		PRODUCT: Surface-Mounted Multi I FINISH: STAINLESS STEEL; SKU: B2840; SIZE: 5" X 4" X 16";	יוטו וואסטיש טוspenser W/ Shelf;	orn-I		COLLECTION: XÓREL; PRODUCT: SNAP KNIT; COLOR: 6019-4; WIDTH: 55";			COLOR: SAND (DRAPER: SAHEL); CONTENT: 50% ACRYLIC, 50% POLYESTER; WIDTH: 126"; DPENNESS: OPAQUE;
BRK-1	BRICK MASONRY VENEER	SIZE: 2' X 2'; CONCEALED HARDWARE GYPSUM WALLBOARD ACCESS PANEL MFR: ACME BRICK; SIZE (ACTUAL): NORMAN (3-5/8"W X 2-1/4"H X 11-5/8"L);	IGU-1	GI M. INSULATING GLASS M	INISH: BRIGHT BRUSHED ANODIZED; SLAZING: GL-1/1T, 1/2" TYPICAL, UNO; IAX GAP: 1/8", FILL JOINTS WITH SILICONE IFR: VITRO;	PT-4_	INTERIOR HIGH PERFORMANCE	MPI TOPCOAT: 141 X-GREEN; COLOR: SEE PT LETTER; NOTE: LBC DECLARE REDLIST FREE; PAINT FOR METAL SUBSTRATE; SHEEN: SEMIGLOSS:		1A-Z	SINK TRAP COVER	MFR: LACAVA; PRODUCT: TRAP COVER; FINISH: #21 BRUSHED STAINLESS SKU: RA098; SIZE: W: 4 5/8" X D: 4 3/4" X H: 11 3	,			CONTENT: 100% IFR XOREL; FINISH: NONE; BACKING: X-PROTECT SIT; APPLICATION: UPHOLSTERY;	WT-2	WINDOW TREATMENT - SUN SHADE	NOTE: PVC-FREE; MFR: MECHOSHADE (DRAPER EQUIVOLENT IS ACCEPTABLE); PRODUCT: ECOVEIL SHEER (DRAPER: SHEERWEAVE - INFINITY 2); SYSTEM: MECHO/5 MANUAL SASER (OR SASER STORM)
		COLÒR: DOVÉ GRAY, PEPÒ30; TEXTURE: SMOOTH; MORTAR: N; NOTE: CAVITY SPACE AND BOND TYPE VARY BY WALL TYPE;		UI EX SF	RODUCT: LOW-E-COATED, CLEAR INSULATING GLASS; INIT THICKNESS: 1"; XTERIOR LITE: 1/4" CLEAR; PACER: 1/2" WARM EDGE, BLACK; ILL CONTENT: AIR:		LATEX, SEMIGLOSS SHEEN, METAL	TYPE: HIGH PERFORMANCE ARCHITECTURAL MPI SYSTEM: INT 5.3M-G5; MPI TOPCOAT: 141 X-GREEN; COLOR: SEE PT LETTER;	L LATEX;	TA-8	COMBINATION TOWEL (FOLDED) DISPENSER / WASTE RECEPTACLE		Dispenser/Waste Receptacle;	UPH-2	UPHOLSTERY	MFR: MAHARAM; PRODUCT: COMPOUND; COLOR: 002 MIRAGE; CONTENT: 100% POLYESTER;			COLOR: EGGSHELL 1566 (DRAPER: COTTON); CONTENT: 100% TPO; WIDTH: 118"; DPENNESS: 3% NOTE: PVC-FREE, CRADLE TO CRADLE SILVER;
CFIN-1	POLISHED CONCRETE FINISH	GRADE: FBX PRODUCT: RETRO PLATE POLISHED CONCRETE FLOORING SYSTEN CLASS: B; SHEEN: LEVEL 2, SATIN; GRIT: 400:	EM;	IN CO VI SH	NTERIOR LITE: 1/4" CLEAR; COATING: SOLARBAN 70, #2 SURFACE; 'LT: 64%; HGC: 0.27;	PT-5		NOTE: LBC DECLARE REDLIST FREE; PAINT FOR METAL SUBSTRATE; SHEEN: SEMIGLOSS; SS TYPE: WATER-BASED COATING OVER GALVAI		TA-11		SKU: B-3803 + 368-60 INTERCHAN SEE PLUMBING SCHEDULE MFR: BOBRICK:	·,	VB-1	MEMBRANE, UNDER	PRODUCT: SHEET VAPOR RETARDER; ASTM E1745: CLASS A; THICKNESS: 15-MIL; VAPOR: IMPERMEABLE (LESS THAN 0.1 PERMS);	WT-3	WINDOW TREATMENT - BLACKOUT SHADE	
		GRIT: 400; FOR ALL NEW CONCRETE USE ABOVE; FOR EXISTING FLOORS:; USE CTS RAPID SET TRU PC POLISHED CONCRETE TOPPING PRIOF TO POLISHING.	R L		I-FACTOR WINTER: 0.28;		SHEEN, METAL	MPI SYSTEM: EXT 5.3J-G5; MPI TOPCOAT: 163; COLOR: SEE PT LETTER;	,	10-14		MFR: BOBRICK; PRODUCT: STRAIGHT GRAB BAR FINISH: STAINLESS STEEL; TUBE SIZE: 1-1/2"; GAUGE: 14;							MOUNTING: VERTICAL MOUNT AT TOP DOOR RAIL ABOVE GLASS; HARDWARE: SMALL EXPOSED FLAT HEM BAR, INCLUDE HEM BAR HOLD DOWNS FOR DOOR INSTALL - WHITE; HARDWARE FINISH: WHITE; COLOR: SAHEL, FACING INTO ROOM;
		SEE FINISHED FLOOR PLANS FOR LOCATIONS OF TOPPING PROVIDE 4'X4' MOCK UP FOR REVIEW								TA-14	SANITARY-NAPKIN DISPOSAL UNIT	MFR: BOBRICK; PRODUCT: SURFACE-MOUNTED: FINISH: STAINLESS STEEL; SKU: B-35139;	SANITARY NAPKIN DISPOSAL;						SHADE FABRIC: WIDTH: 94.5"; ACTUAL WIDTH: SEE ELEV. DPENNESS: OPAQUE; NOTE: PVC-FREE;
										<u> </u>							L		

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the Laws of the State of Arkansas.



Print Name Matthew Kruntorad Date <u>1/18/2023</u> License No <u>10100</u>

BID SET - ADDENDUM 3

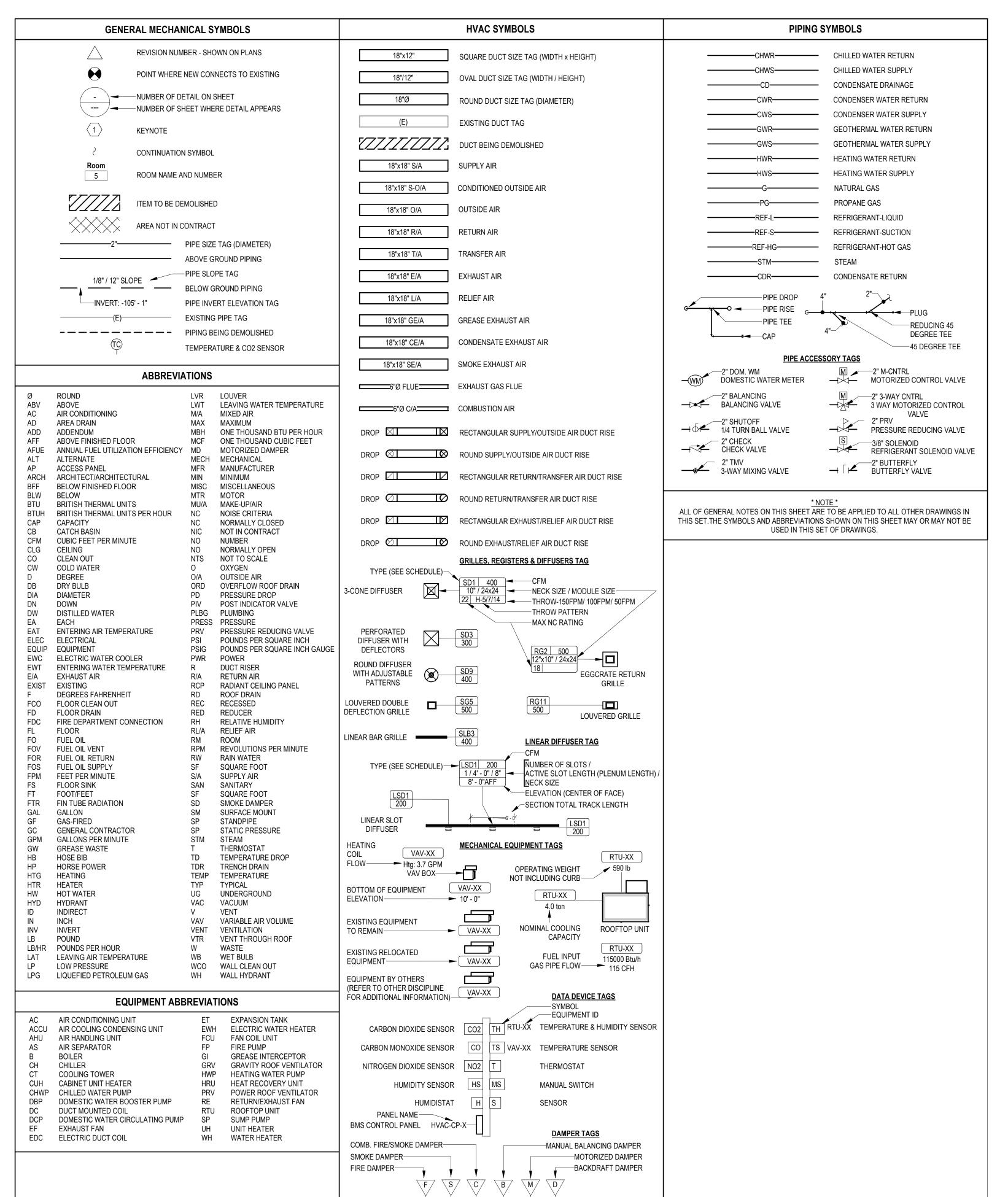
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SHEET INDEX, MATERIAL IDS AND SYMBOLS





M001 MECHANICAL NOTES & LEGENDS
M101 MECHANICAL OVERALL PLAN
M102 MECHANICAL PLAN - EXISTING WEST
M103 MECHANICAL PLAN - EXISTING EAST
M104 MECHANICAL PLAN - ADDITION
M105 MECHANICAL PLAN - ADDITION ENLARGED
M106 MECHANICAL PLAN - ADDITION ENLARGED
M107 MECHANICAL PLAN - ADDITION ENLARGED
M108 MECHANICAL ROOF PLAN - EXISTING
M108 MECHANICAL ROOF PLAN - ADDITION
M109 MECHANICAL ROOF PLAN - ADDITION
M201 MECHANICAL SCHEDULES
M202 MECHANICAL DETAILS
M301 MECHANICAL CONTROLS
M302 MECHANICAL CONTROLS

GENERAL MECHANICAL NOTES

SUBMISSION OF PROPOSAL IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH HE WILL BE OBLIGATED TO OPERATE SHOULD HE BE AWARDED THE WORK UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.

DUCT DIMENSIONS LISTED ON DRAWINGS REPRESENT THE AIRFLOW FREE AREAS AND DO NOT HAVE ALLOWANCES FOR INSULATION LINER, WHERE APPLICABLE, INSIDE THE DUCTS, OR DUAL WALL DIMENSIONS. DUCTS SHALL BE CONSTRUCTED TO INCLUDE INSULATION REQUIREMENTS AND MAINTAIN

AIRFLOW DIMENSIONS INDICATED ON PLANS. FOR CLASH COORDINATION INCLUDE INSULATION THICKNESS PER SCHEDULE.

ALL WORK SHALL CONFORM TO STATE AND LOCAL CODES, RULES, REGULATIONS, AND ORDINANCES WHICH SHALL TAKE PRECEDENCE OVER THE PLANS IF CONFLICTS EXIST BETWEEN THEM.

THE DRAWINGS INDICATE THE GENERAL LAYOUT REQUIREMENTS FOR EQUIPMENT, FIXTURES, PIPING, DUCTWORK, ETC. FINAL LAYOUT SHALL BE MODIFIED TO FIT ACTUAL SITE CONDITIONS. ALL REQUIRED REVISIONS SHALL BE RECORDED ON A DESIGNATED HARD COPY SET OF REDLINE PLANS TO BE KEPT CURRENT TO JOBSITE PROGRESS. AT MINIMUM, THIS DOCUMENT SHALL BE UPDATED WEEKLY AND REDILY

AVAILABLE FOR REVIEW AND REFERENCE.

COORDINATE ALL WORK WITH THE OWNER AND ALL OTHER CONTRACTORS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RIGGING, HANDLING, AND PROTECTION OF MATERIALS. PROVIDE LABOR TO RECEIVE UNLOAD, STORE, PROTECT, AND TRANSFER TO POINT OF INSTALLATION OF ANY OWNER-FURNISHED ITEMS.

IN CASES OF EQUIPMENT SUBSTITUTION, CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL SYSTEMS AND COMPONENTS WILL FIT PROPERLY PRIOR TO FABRICATION OR ORDERING. INSTALLED DUCTS MAY BE RESIZED BY THE CONTRACTOR TO FIT FIELD CONDITIONS AS LONG AS THE INSTALLED DUCTS SHALL HAVE EQUAL FRICTION LOSS TO THOSE SHOWN. RECTANGULAR DUCTS SHALL NOT BE CHANGED TO ROUND DUCTS. PROVIDE COMPLETE SHEET METAL SHOP DRAWINGS TO ENGINEER SHOWING ACTUAL DUCT SIZES, ARRANGEMENTS, AND UNIT LOCATIONS TO BE INSTALLED. THIS SHALL BE DONE PRIOR TO FABRICATION OR INSTALLATION.

INSTALL ACOUSTIC TURNING VANES IN ELBOWS IN RECTANGULAR DUCTS 20" AND LARGER. INSTALL RADIUS TYPE ELBOWS IN RECTANGULAR DUCTS SMALLER THAN 20".

USE 45 DEGREE TAKE-OFF FITTINGS AT ALL ROUND SUPPLY BRANCH TAKEOFFS. PROVIDE BALANCE DAMPERS AT ALL SUPPLY DUCT RUNOUTS TO GRILLES. LOCATE AS FAR AS POSSIBLE FROM GRILLES IN AN ACCESSIBLE LOCATION. PROVIDE ACCESS PANELS IN SOLID WALLS AND CEILINGS FOR BALANCING

USE FLEX DUCTS FOR FINAL CONNECTION TO ALL CEILING DIFFUSERS, AND WHERE NECESSARY, SIDEWALL DIFFUSERS, AND LIMIT TO 6' MAX. LENGTHS.

PROVIDE A COMPLETE AND OPERATING MECHANICAL SYSTEM, INCLUDING ALL INCIDENTAL ITEMS AND

CONNECTIONS NECESSARY FOR PROPER OPERATION OR CUSTOMARILY INCLUDED, EVEN THOUGH EACH AND EVERY ITEM MAY NOT BE INDICATED.

THE MECHANICAL INSTALLATION SHALL BE SAFE, RELIABLE, ENERGY EFFICIENT AND EASILY MAINTAINED WITH ADEQUATE PROVISIONS ALLOWED FOR ACCESS TO EQUIPMENT.

THE MECHANICAL SYSTEM SHALL OPERATE QUIETLY WITH NOISE LEVELS BELOW THE CRITERIA RECOMMENDED FOR THE APPLICATION BY ASHRAE. PROVIDE CORRECTIVE ACTION AS REQUIRED TO

REDUCE OBJECTIONABLE NOISE OR VIBRATION.

REFER TO ARCH. PLANS AND DETAILS FOR EXACT LOCATION OF ALL WALL AND CEILING MOUNTED DEVICES. ADJUST LOCATION OF SIDEWALL DEVICES AS NECESSARY TO AVOID INTERFERENCE WITH MOLDING OR OTHER ELECTRICAL DEVICES.

WHERE CONDUIT, CABLES, DUCTWORK OR PIPING PASSES THROUGH FIRE-RATED FLOORS OR WALLS, THE SLEEVES SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS UL LISTED AND ACCEPTED BY LOCAL AUTHORITIES HAVING JURISDICTION (AHJ) AS BEING SUITABLE FOR THIS SERVICE SUCH AS DOWN CORNING CORP "SILICONE ELASTOMER, RTV FOAM, OR SIMILAR MATERIAL TO MAINTAIN FIRE RATING OF THE WALL OR FLOOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING AND BEAM PENETRATIONS AS IT RELATES TO HIS

WORK.

CONTRACTOR SHALL NOT INSTALL ANY MAINTENANCE ITEMS ABOVE HARD CEILINGS. THIS SHALL INCLUDE VALVES, DAMPERS, OR ANY OTHER ITEMS THAT REQUIRE ACCESS AFTER CONSTRUCTION IS COMPLETED. IF INSTALLATION ABOVE A HARD CEILING OF THESE ITEMS CANNOT BE AVOIDED, THEN PROVIDE CEILING ACCESS DOORS EQUAL TO ACUDOR MODEL FW-505 WHERE REQUIRED. AT FIRE-RATED WALLS, USE EQUIVALENT OF ACUDOR MODEL FB-5060. MINIMUM SIZE SHALL BE 12"x12". USE 18"x18" WHEN PERSONNEL ACCESS IS REQUIRED.

PERSONNEL ACCESS IS REQUIRED.

PROVIDE AN INSULATED BACK ON ALL THERMOSTATS AND TEMPERATURE SENSORS THAT ARE MOUNTED ON CMU OR HOLLOW WALLS. PROVIDE SHALLOW DEVICE EXTENSION BOX BEHIND T-STATS AND SENSORS ON MASONRY WALLS IN COMMERCIAL / RETAIL SPACES.

PROVIDE FIRE DAMPERS AT ALL FIRE-RATED WALLS AND FLOOR PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE BARRIER WALLS AND CEILINGS.

IF A CENTRAL FIRE ALARM SYSTEM IS REQUIRED FOR THIS PROJECT, MECHANICAL CONTRACTOR SI

IF A CENTRAL FIRE ALARM SYSTEM IS REQUIRED FOR THIS PROJECT, MECHANICAL CONTRACTOR SHALL INSTALL DUCT MOUNTED SMOKE DETECTORS PROVIDED BY FIRE ALARM CONTRACTOR. REFER TO ELECTRICAL NOTES FOR EXACT REQUIREMENTS. MECHANICAL CONTRACTOR SHALL IDENTIFY A SET OF TERMINALS FOR EQUIPMENT SHUTDOWN ON ALL FAN POWERED EQUIPMENT REQUIRING SHUTDOWN CONTROLS. FIRE ALARM CONTRACTOR SHALL WIRE FROM DUCT MOUNTED SMOKE DETECTOR TO SHUTDOWN TERMINALS TO SHUT DOWN FAN OPERATION WHEN SMOKE IS DETECTED.

AT PENETRATIONS THROUGH FIRE WALLS: ANY NON-METALLIC PIPE OR DUCT SHOULD BE EXTERNALLY

SLEEVED WITH STEEL, FERROUS, OR COPPER MATERIALS, SECURELY FASTENED TO THE FIRE RATED ASSEMBLY, AND ANY SPACE BETWEEN THE SLEEVE AND THE ASSEMBLY PENETRATED SHALL BE PROTECTED USING MATERIAL THAT CONFORMS TO ASTM E 814 OR UL 1479, SUCH AS FIRE STOP FS-1900, OR FLAME STOPPER 5000.

REFER TO ELECTRICAL DRAWINGS FOR SMOKE DAMPER AND FIRE/SMOKE DAMPER DETAIL. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL DAMPERS WITH MOTORIZED ACTUATORS AND INSTALL SMOKE DETECTORS AND PROVIDE WIRING FOR FAN SHUTDOWN CONTROLS. COORDINATE WITH ELECTRICAL CONTRACTOR AND PROVIDE DAMPER ACTUATOR COMPATIBLE WITH ELECTRICAL WIRING PROVIDED. PROVIDE ANY WIRING OR COMPONENTS NOT PROVIDED BY THE ELECTRICAL CONTRACTOR THAT ARE REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.

AHEAD OF ALL VAV BOX INLETS, INSTALL STRAIGHT DUCT EQUIVALENT TO AT LEAST 2 DIAMETERS IN

LENGTH WHETHER SHOWN ON PLANS OR NOT.

SEISMIC PROTECTION FOR CONCERNS OF ALL BUILDING SYSTEMS INCLUDING BUT NOT LIMITED TO MECHANICAL, PLUMBING, AND ELECTRICAL MUST MEET MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES FOR BUILDINGS' CLASSIFIED SEISMIC PROTECTION MEASURES TO BE APPLIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND/OR FEDERAL CODES AND WITH MANUFACTURERS'S REQUIREMENTS, THE MOST STRINGENT SHALL APPLY

NO RECTANGULAR DUCT SMALLER THAN 10"X10"

ANY LINE VOLTAGE WIRING THAT IS RUN BY THE MECHANICAL CONTRACTOR SHALL BE INSTALLED IN ACCORDANCE WITH THE ELECTRICAL PLANS, NOTES, AND SPECIFICATIONS.

WHERE DUCTS PASS THROUGH FIRE RATED WALLS AND NO FIRE DAMPER IS REQUIRED, PROVIDE A STEEL

SLEEVE (MIN. 12" LONG BY 0.60" THICK) IN EACH DUCT OPENING PER IBC 714.

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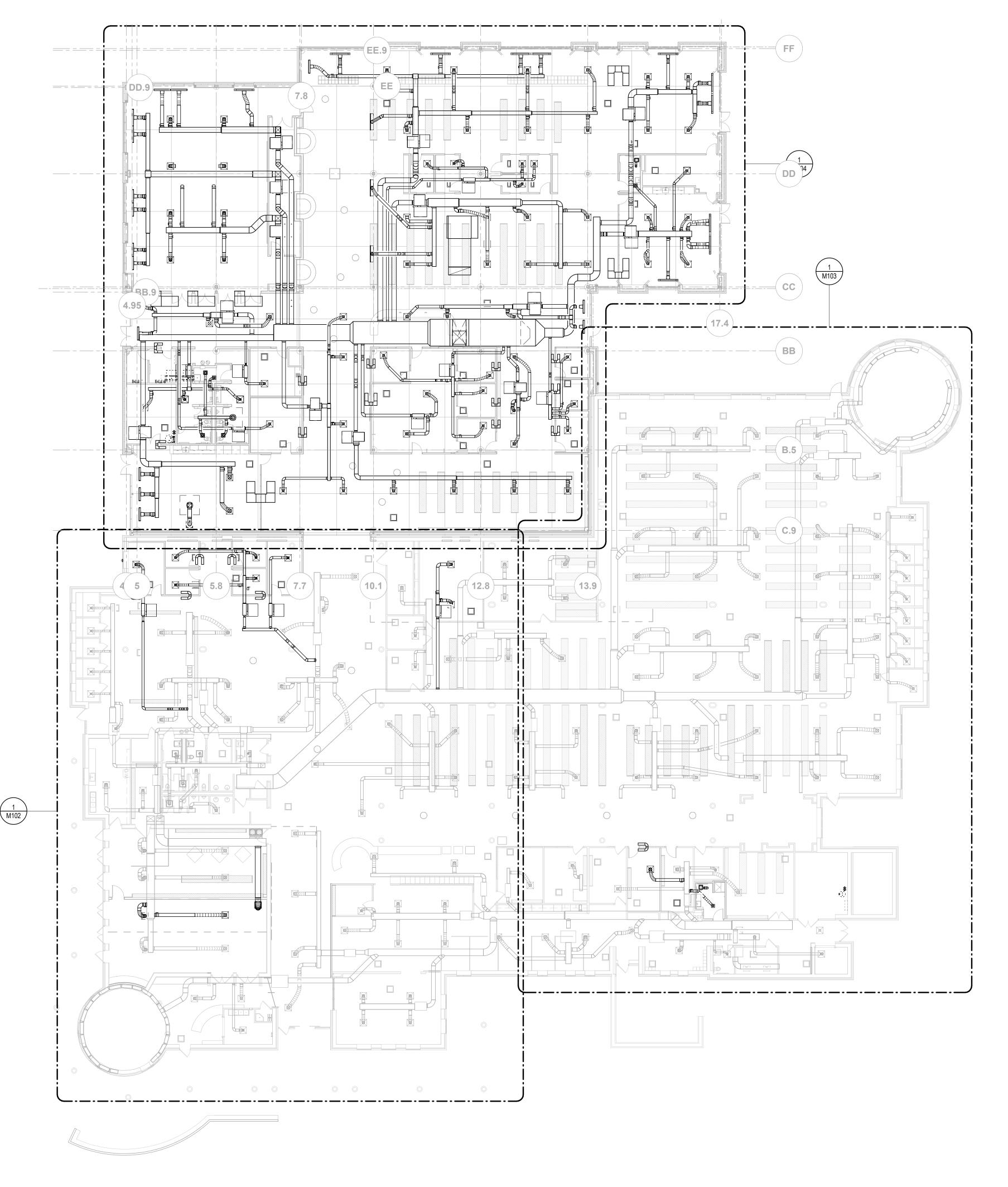
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11/28/2022 THIRD LSD SUBMITTAL

MECHANICAL NOTES & LEGENDS



NOTE: ALL DUCTWORK AND AIR DEVICES SHOWN HALF TONE IS EXISTING TO REMAIN.



1 OVERALL MECHANICAL PLAN
M101 1/16" = 1'-0"

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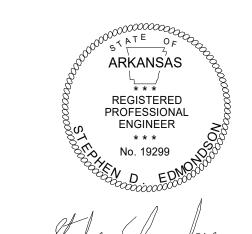
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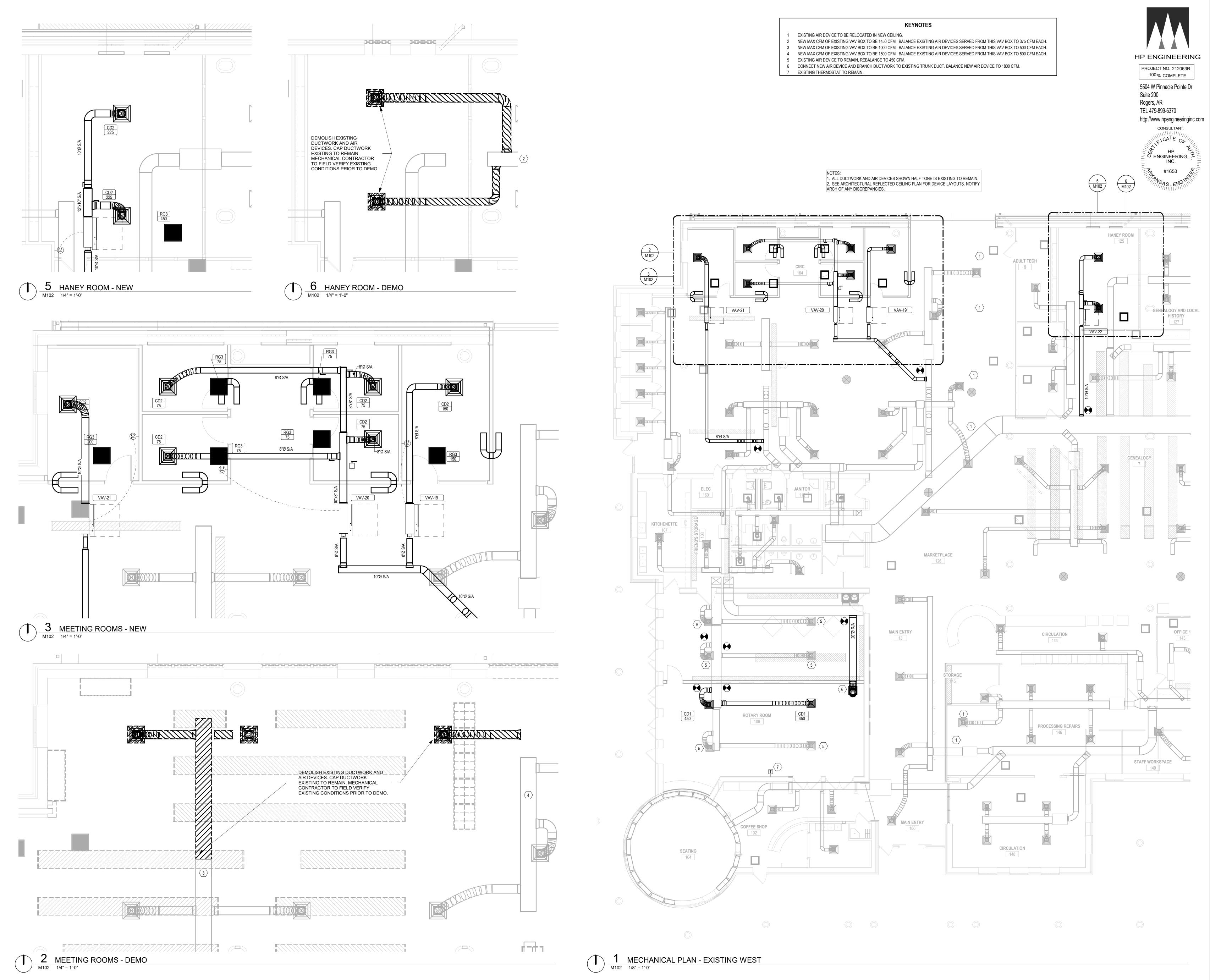
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MECHANICAL OVERALL PLAN



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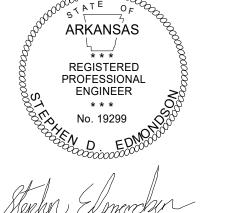
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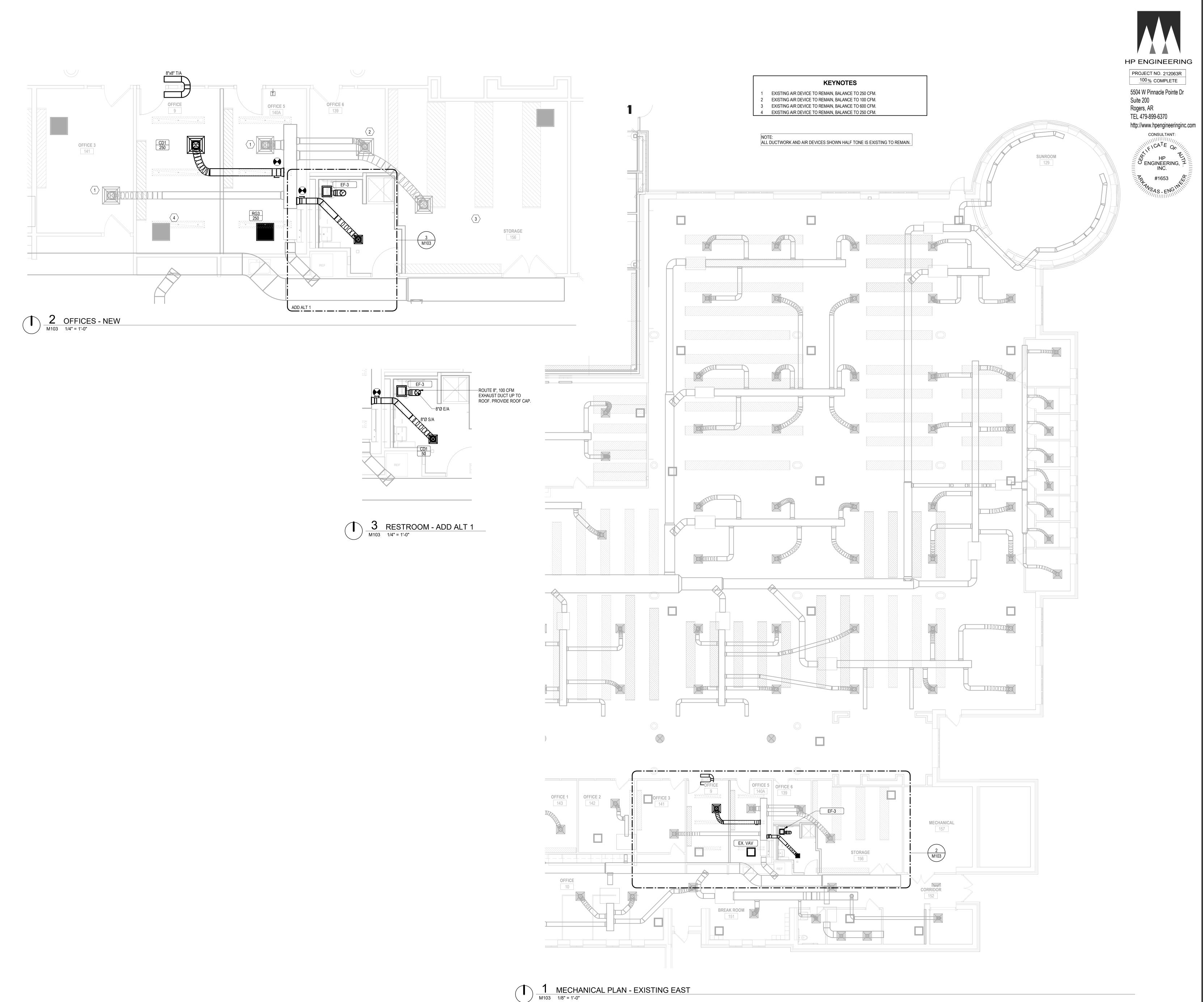
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MECHANICAL PLAN -EXISTING WEST



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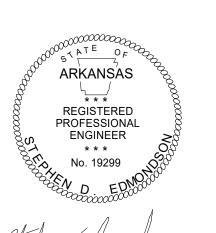
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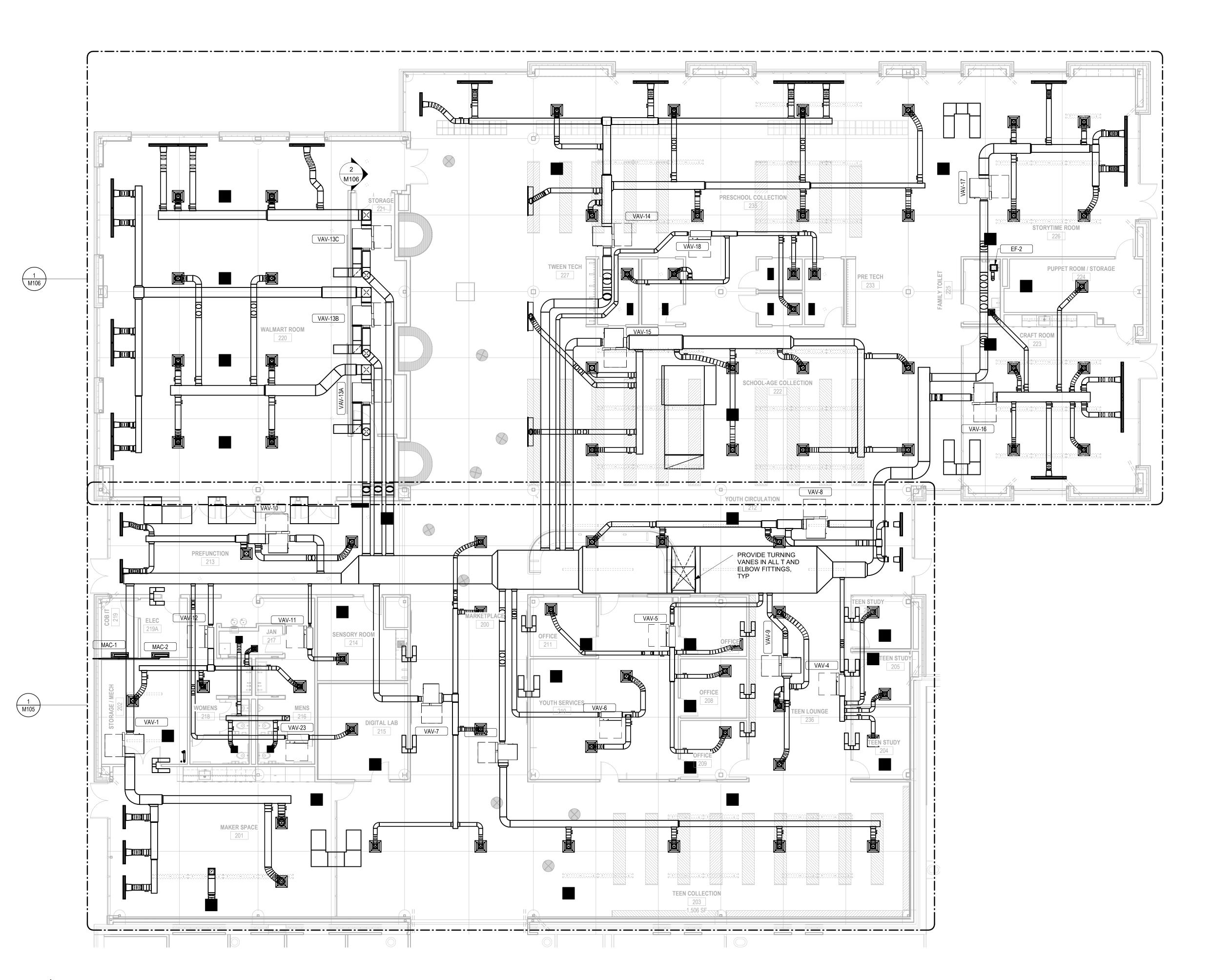
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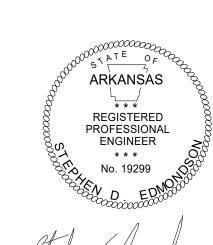
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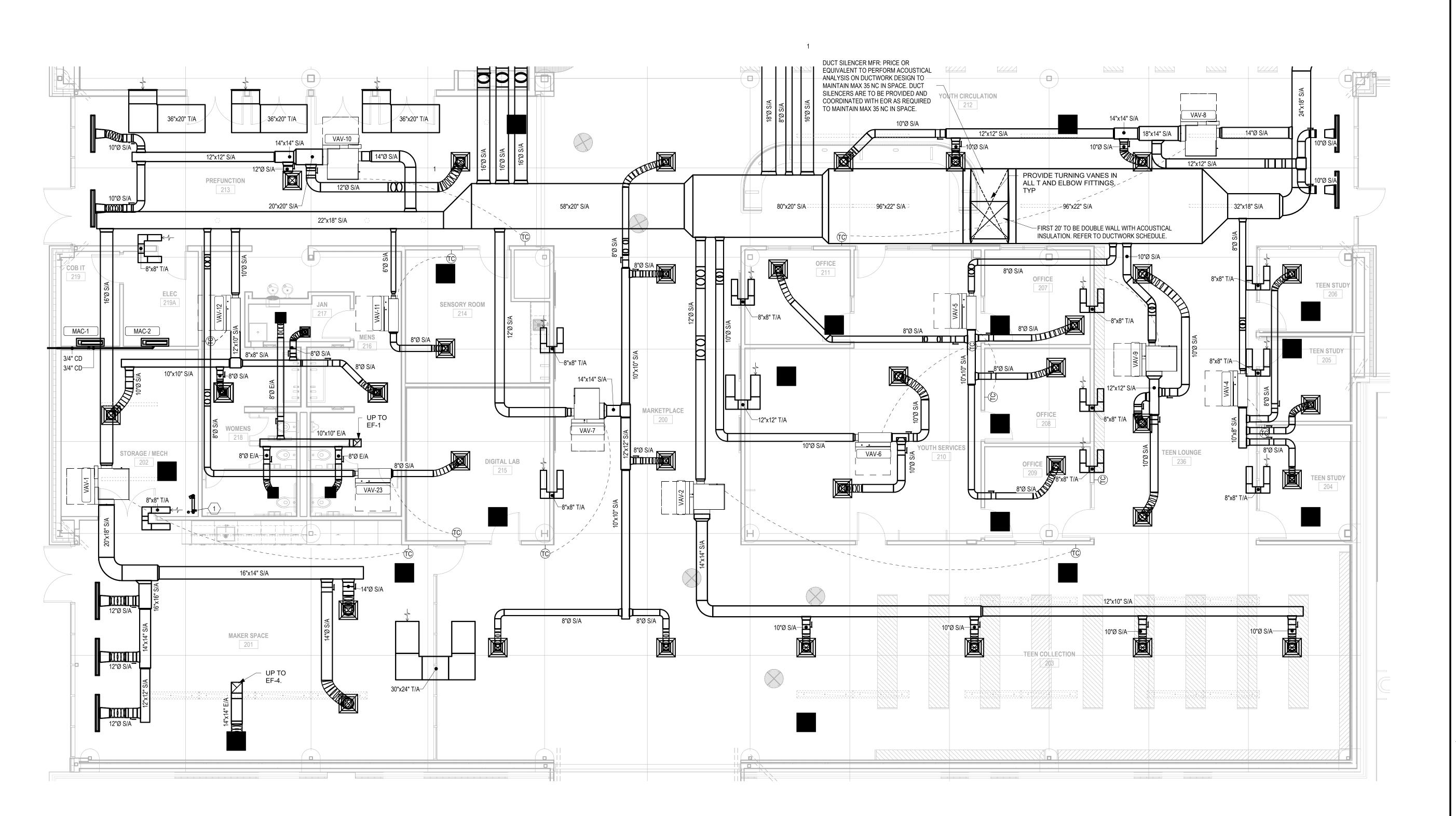
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MECHANICAL PLAN ADDITION



KEYNOTES

1 FUME EXHAUST AND COMBUSTION AIR DUCT UP TO ROOF TO MANUFACTURER'S CONCENTRIC VENT KIT. SIZE AND INSTALL PER MANUFACTURER'S INSTRUCTION.



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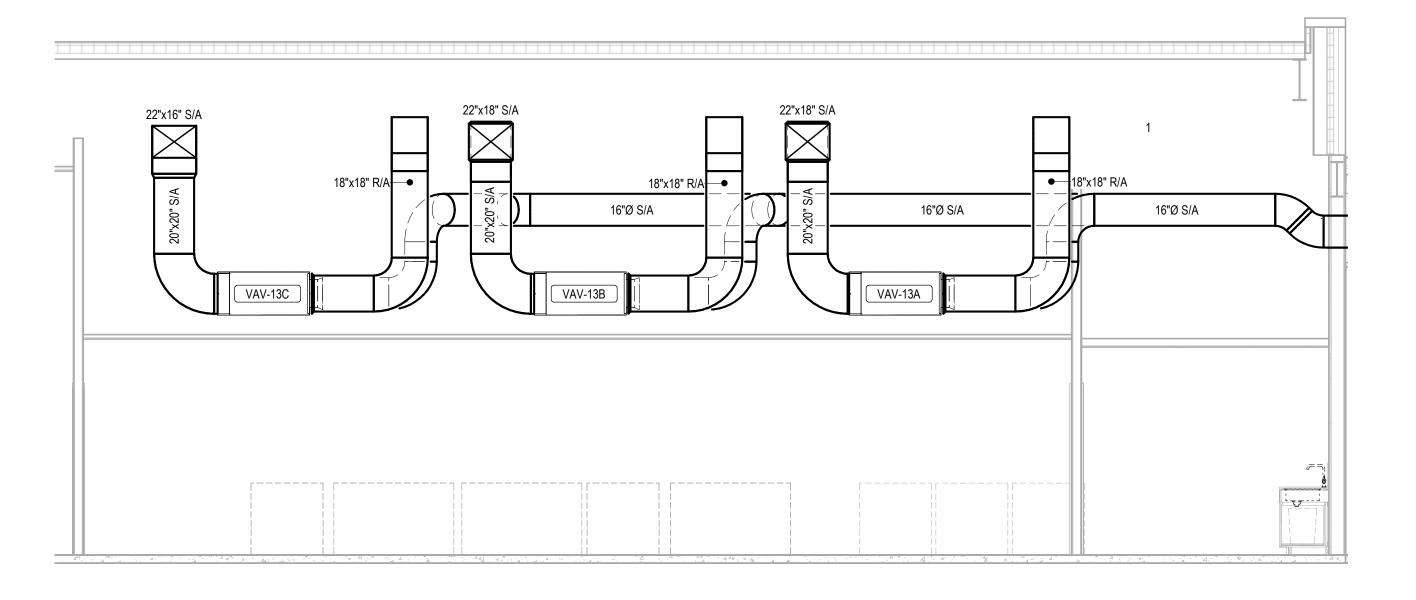
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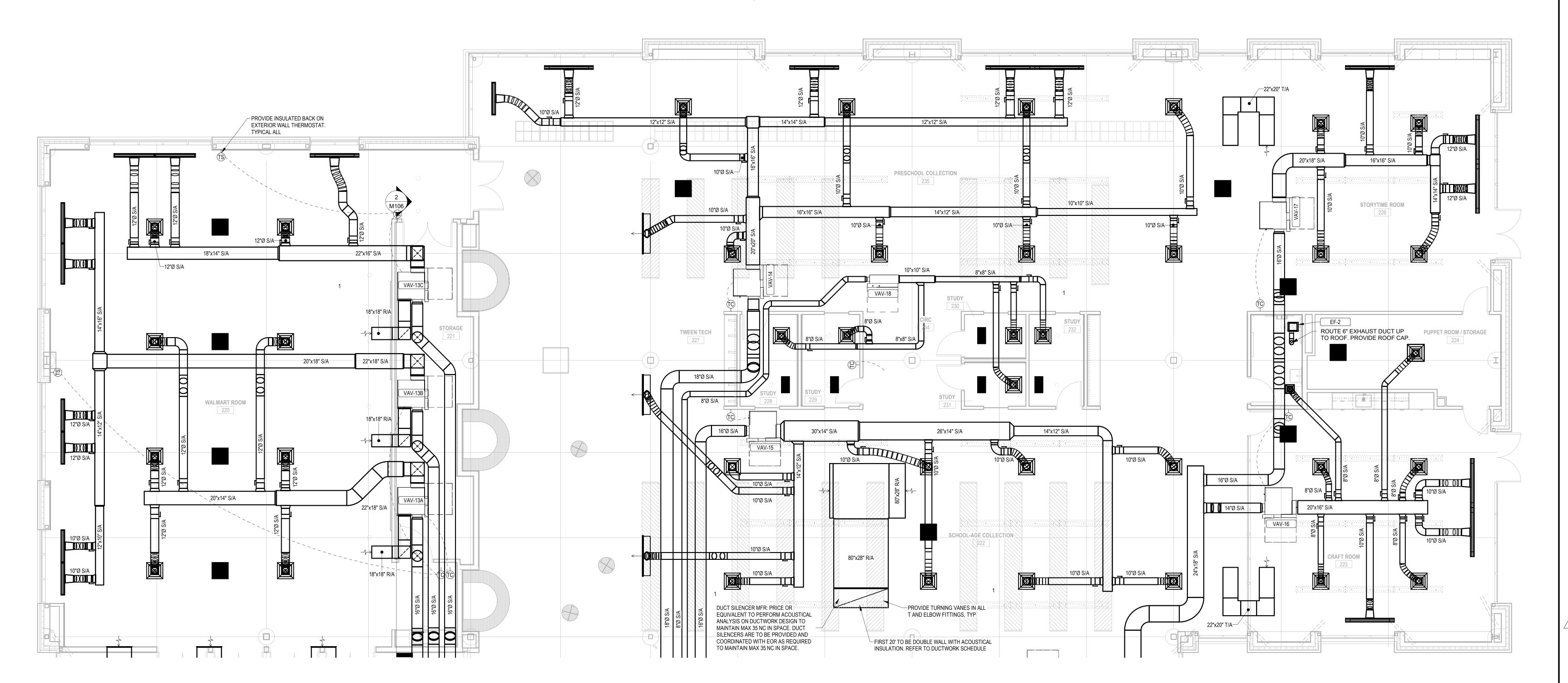
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MECHANICAL PLAN - ADDITION ENLARGED





2 WALMART ROOM VAV DUCTWORK
M106 1/4" = 1'-0"



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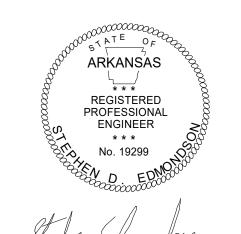
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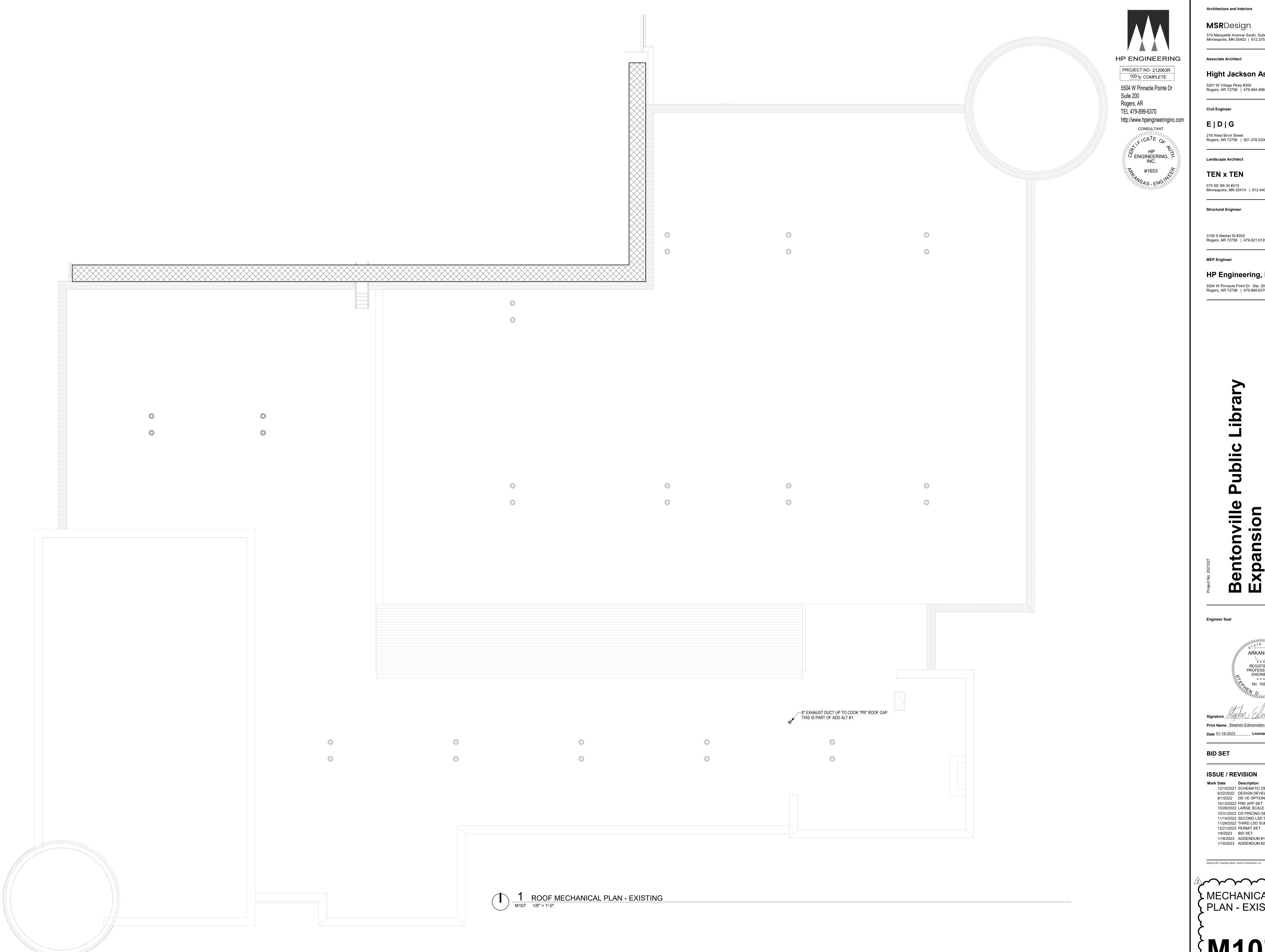
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MECHANICAL PLAN -ADDITION ENLARGED



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Associate Architect

Hight Jackson Associates PA

5201 W Village Pkwy #300 Rogers, AR 72758 | 479.464.4965

Civil Engineer

E|D|G 216 West Birch Street Rogers, AR 72756 | 501.378.0200

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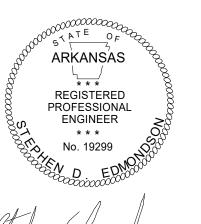
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MEP Engineer

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Print Name Stephen Edmonsdon

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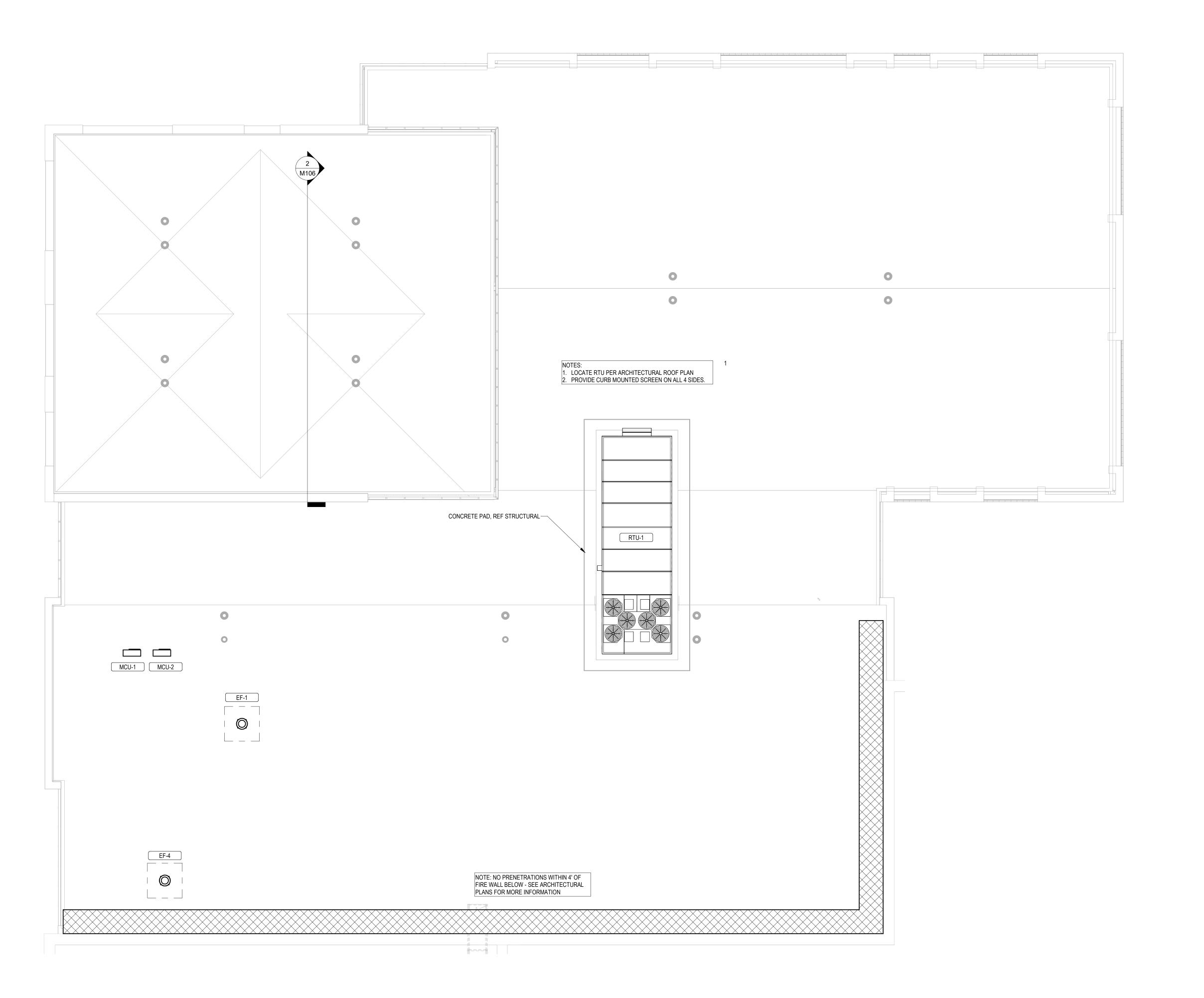
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MECHANICAL ROOF PLAN - EXISTING





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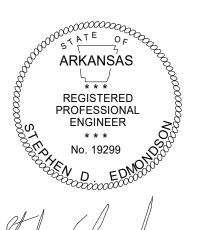
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Engineer Co.



Signature My (Mmer Print Name Stephen Edmonsdon

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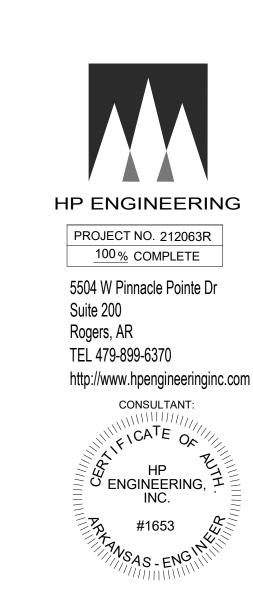
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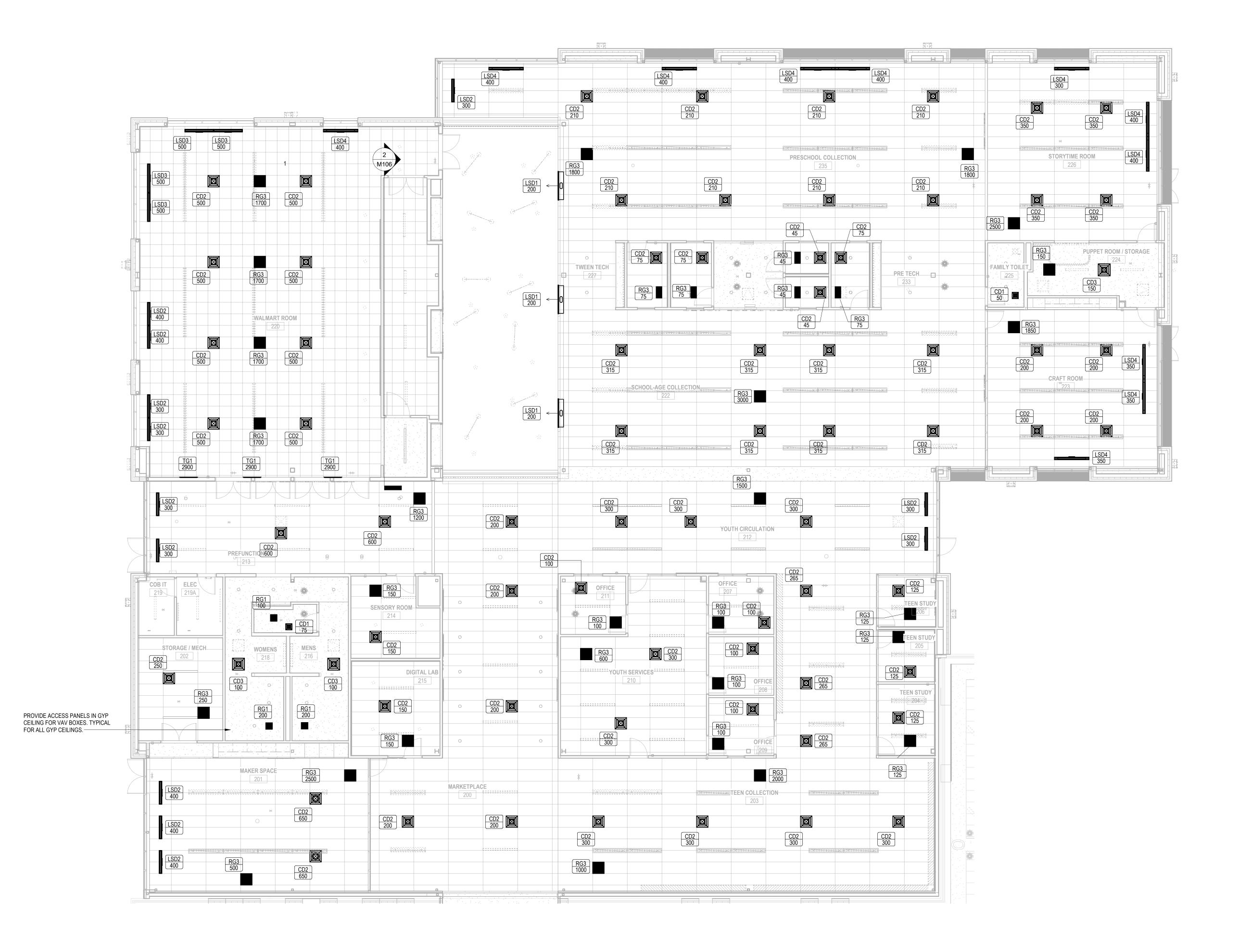
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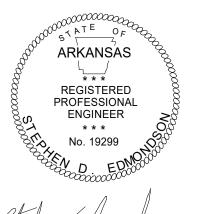
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MECHANICAL RCP ADDITION

M109

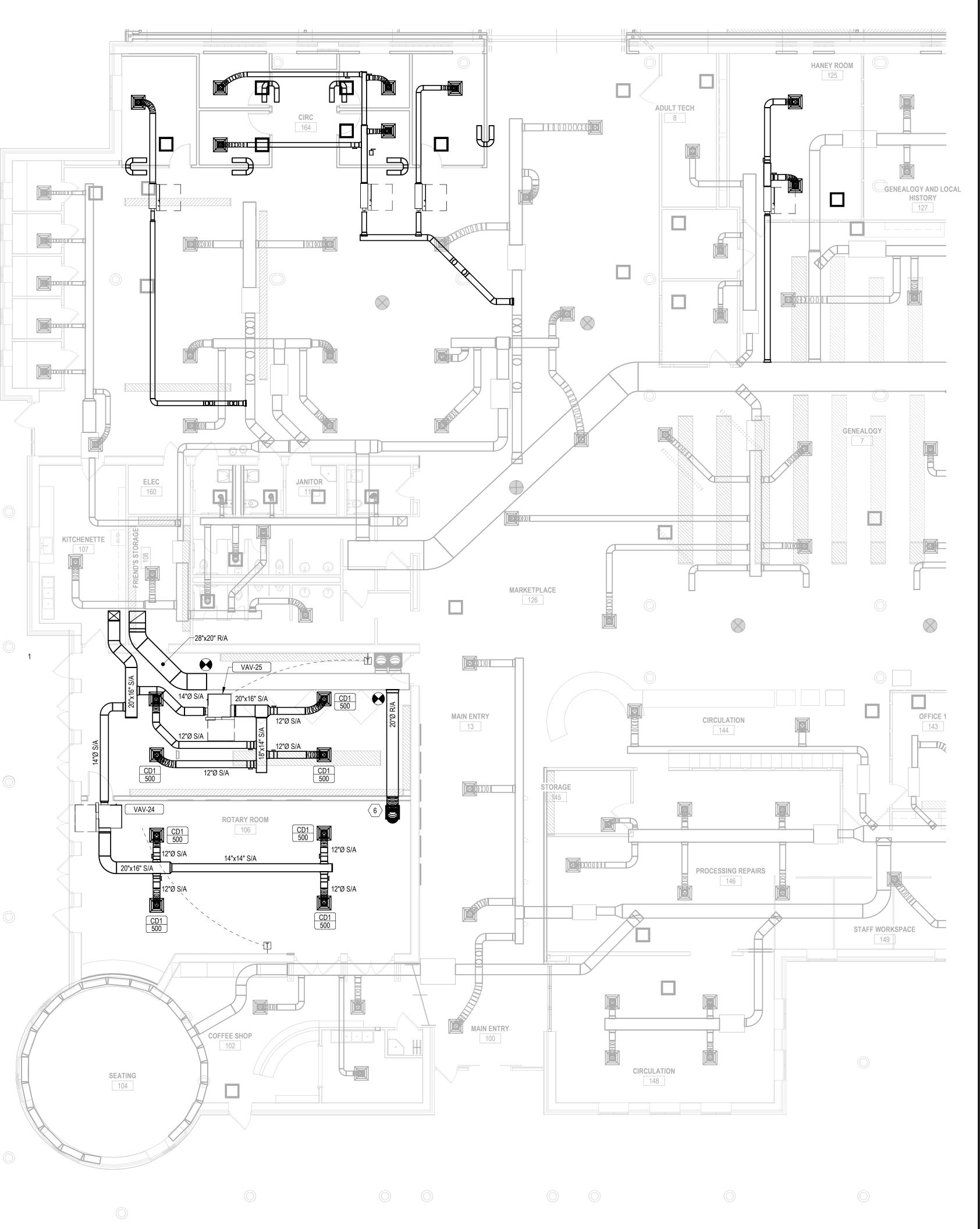
1 ADDITION RCP
M109 1/8" = 1'-0"

KEYNOTES

- EXISTING AIR DEVICE TO BE RELOCATED IN NEW CEILING.
- NEW MAX CFM OF EXISTING VAV BOX TO BE 1450 CFM. BALANCE EXISTING AIR DEVICES SERVED FROM THIS VAV BOX TO 375 CFM EACH. NEW MAX CFM OF EXISTING VAV BOX TO BE 1000 CFM. BALANCE EXISTING AIR DEVICES SERVED FROM THIS VAV BOX TO 500 CFM EACH.
- 4 NEW MAX CFM OF EXISTING VAV BOX TO BE 1500 CFM. BALANCE EXISTING AIR DEVICES SERVED FROM THIS VAV BOX TO 500 CFM EACH. 5 EXISTING AIR DEVICE TO REMAIN, REBALANCE TO 450 CFM.
- 6 CONNECT NEW AIR DEVICE AND BRANCH DUCTWORK TO EXISTING TRUNK DUCT. BALANCE NEW AIR DEVICE TO 1800 CFM. 7 EXISTING THERMOSTAT TO REMAIN.

HP ENGINEERING PROJECT NO. 212063R 100% COMPLETE 5504 W Pinnacle Pointe Dr Suite 200 Rogers, AR TEL 479-899-6370 http://www.hpengineeringinc.com CONSULTANT: CATE OF HP ENGINEERING,

ALL DUCTWORK AND AIR DEVICES SHOWN HALF TONE IS EXISTING TO REMAIN.
 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR DEVICE LAYOUTS. NOTIFY ARCH OF ANY DISCREPANCIES.



1 MECHANICAL PLAN - EXISTING WEST - BID ALT. #3

Architecture and Interiors

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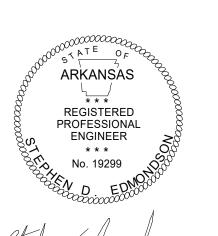
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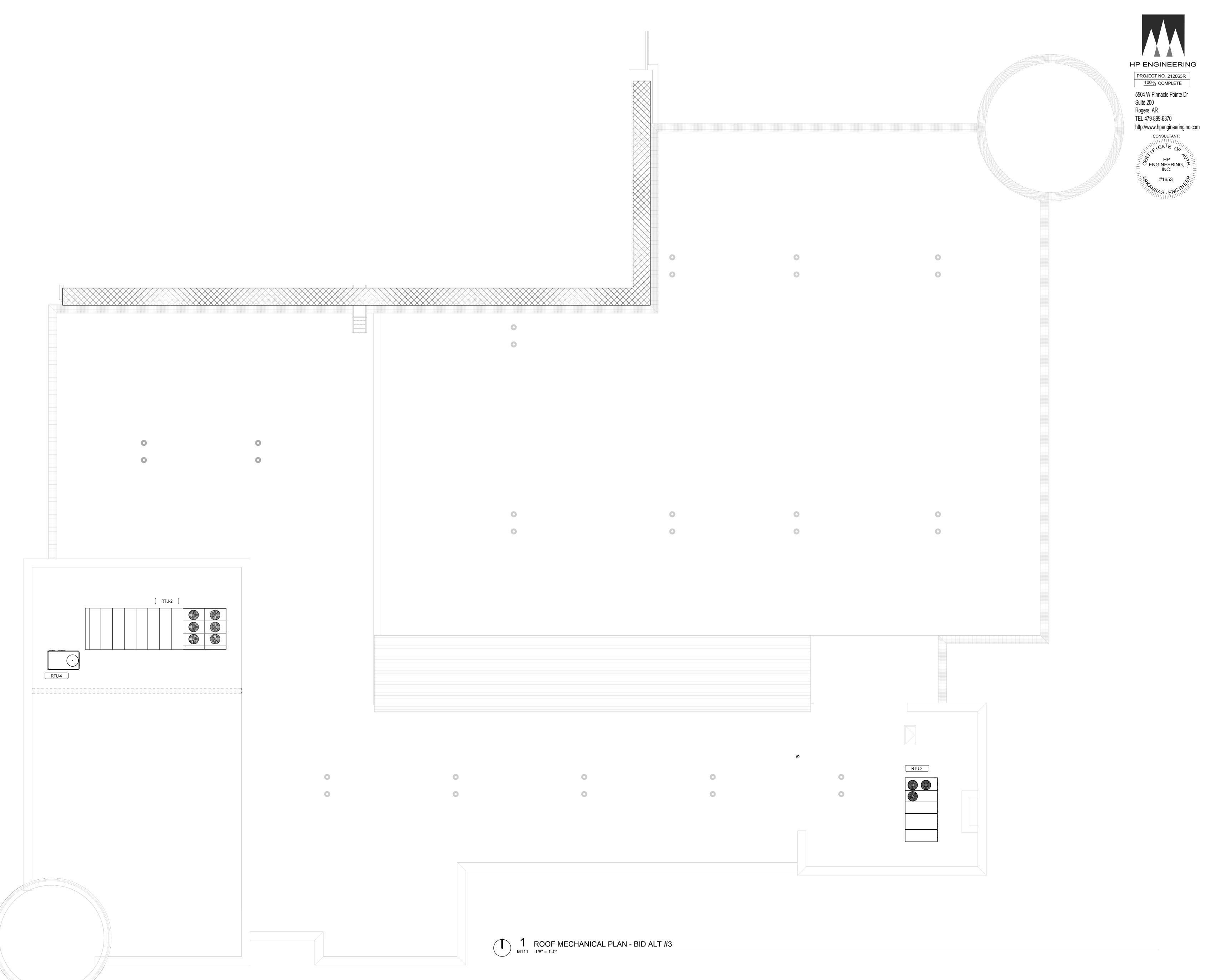
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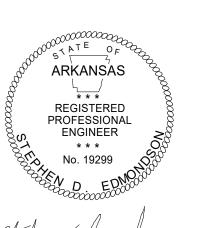
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MECHANICAL ROOF PLAN - BID ALT #3

													RID A	\I T #3	- ROO	FTOP	I INIT S	CHEDULE													
															- 1100		01411 0	OHLDOLL	_												
						OUTSIDI	E AIR		FAN				COOL	ING COIL						GAS	-FIRED I	HX									
								PRESS	M	OTOR		C	AP		AIR	SIDE		1	GASI	BURNER		AIR	SIDE								
					SUPPLY						NOMINAL							INCLUDE			FUEL			NUMBER OF	SUMMER		UNIT				
	ID N	MANUFACTURER	MODEL NO.	ARRANGEMENT	AIRFLOW	AIRFLOW	DCV	ESP	QTY	POWER	CAP	TOTAL	SENSIBLE	EAT(db)	EAT(wb)	LAT(db)	LAT(wb)	ECONOMIZER	INPUT	EFF	TYPE	EAT(db)	LAT(db)	COMPRESSORS	AMBIENT DBT	EER	WEIGHT	VOLT	PH M	CA MC	OCP NOTES
R	ΓU-2	TRANE	SFHMF754T	VERTICAL	27000 CFM	2700 CFM	Yes	2.00 in-wg	2	40.00 hp	75.0 ton	835440 Btu/h	n 652520 Btu/h	1 80.0 °F	66.0 °F	58.9 °F	56.4 °F	Yes	850000 Btu/h	81.0%	NG	60.0 °F	87.9 °F	4	97.0 °F	9.8	11448 lb	480 V	3 2	16 2	250 1, 2, 3, 5, 6
R	ΓU-3	TRANE	YCD360C4L	VERTICAL	12000 CFM	900 CFM	Yes	2.00 in-wg	0	15.00 hp	30.0 ton	334110 Btu/h	1 259460 Btu/h	1 80.0 °F	66.0 °F	59.0 °F	55.0 °F	Yes	350000 Btu/h	81.0%	NG	60.0 °F	82.3 °F	3	97.0 °F	11	5140 lb	480 V	3 9	0 1	3, 5, 7, 8, 9
R	ΓU-4	TRANE	YSJ120A4S0M	VERTICAL	4000 CFM	800 CFM	Yes	1.50 in-wg	1	3.10 hp	10.0 ton	133490 Btu/h	92240 Btu/h	80.0 °F	66.0 °F	59.3 °F	57.0 °F	Yes	200000 Btu/h	81.0%	NG	60.0 °F	97.5 °F		97.0 °F	11	1150 lb	480 V	3 2	9 4	40 4, 8

GENERAL NOTES APPLICABLE TO ALL UNITS: 1. UNIT MOUNTED NON-FUSED DISCONNECT W/ CONVENIENCE OUTLET

1. DOWNFLOW SUPPLY, UPFLOW RETURN 2. VARIABLE SPEED COMPRESSORS

3. COMPARATIVE ENTHALPY ECONOMIZER

4. COMPARATIVE ENTHALPY ECONOMIZER W/ BAROMETRIC RELIEF . FACTORY INSTALLED OUTSIDE AIR MONITORING STATION

6. FACTORY STARTUP

. HIGH EFFICIENCY STAGED COMPRESSORS B. HINGED ACCESS PANELS WITH MERV 8 FILTERS

A. TRANE | TRANE ARKANSAS; SPRINGDALE, AR B. LENNOX/DAIKIN NORTH AMERICA | HARRISON ENERGY PARTNERS; SPRINGDALE, AR

C. YORK-A JOHNSON CONTROL COMPANY | AIRETECH; SPRINGDALE, AR D. AAON I POWERS OF ARKANSAS: SPRINGDALE. AR

							BID	ALT #3 - F	AN PO	OWERED	VARIA	ABLE AIR VO	LUME TERMI	NAL UNIT S	CHEDULE											
					PRIMARY	AIRFLOW		F/	AN					HEATING CO	OIL		HE	ATING ELEM	ENT							
							AIRFLOW	PRESS		MOTOR					AIRSIDE					1						1
			NECK									EXTERIOR		DESIGN							UNIT					1
ID	MANUFACTURER	MODEL NO.	SIZE	TYPE	MAX	MIN	DESIGN	ESP	QTY	POWER	ECM	ZONE	CAP	FLOW	EAT(db)	LAT(db)	QTY	POWER	SCR	NC	WEIGHT	FLA	MCA	MOCP	VOLT	PH
VAV-24	TRANE	VPEF	12"	FAN POWERED VAV BOX	2000 CFM	1500 CFM	500 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	58060 Btu/h	2000 CFM	55.0 °F	85.5 °F	1	17.0 kW	Yes	35	145 lb	25.9 A	32.3 A	35.0 A	480 V	3
VAV-25	TRANE	VPEF	12"	FAN POWERED VAV BOX	2000 CFM	1500 CFM	500 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	58060 Btu/h	2000 CFM	55.0 °F	85.5 °F	1	17.0 kW	Yes	35	145 lb	25.9 A	32.3 A	35.0 A	480 V	3

GENERAL NOTES APPLICABLE TO ALL UNITS: I. VAV BOX INLET STATIC PRESSURE TO BE 0.75" W.C.

PROVIDE ALL FAN POWERED VAV BOXES WITH DDC CONTROLS, 3-SPEED SWITCH, ELECTRICAL DISCONNECT SWITCH, CONTROL TRANSFORMER AND FUSES FOR CONTROL WIRING, AND SINGLE POINT CONNECTION WITH FUSING FOR POWER WIRING TO FAN. FEEDER TO UNIT BY ELECTRICAL CONTRACTOR. LOW VOLTAGE

WIRING BY MECHANICAL CONTROLS CONTRACTOR. 3. UNIT INSULATION SHAL BE MATTE FACED WITH 1" INSULATION. TYPICAL FOR ALL.

4. ALL FAN POWERED BOXES TO BE SUSPENDED WITH VIBRATION ISOLATION, REFERENCE SPECS. PROVIDE ALL FAN POWERED BOXES WITH 1" PLEATED MEDIE FILTER

. PROVIDE WITH WIRELESS ZONE TEMPERATURE SENSOR PROVIDE WITH FACTORY WIRED DISCHARGE AIR TEMPERATURE SENSOR

8. PROVIDE WITH UNIT-MOUNTED DISCONNECT AND POWER FUSE

9. PROVIDE WITH FIRST YEAR LABOR WARRANTY 10. PROVIDE WITH INTEGRAL SOUND ATTENUATOR AND BOTTOM ACCESS

			***	ALL MOONTE	DILAIFON	IP SCHEDULE	_					
ID	MANUFACTURER	MODEL NO.	TYPE	DESIGN AIRFLOW	TONNAGE	COOLING CAPACITY	HEATING CAPACITY	UNIT WEIGHT	MCA	МОСР	VOLT	
MAC-1	MITSUBISHI	TPKA0A0361KA70A	DUCTLESS AC UNIT	920 CFM	3 ton	36000 Btu/h	40000 Btu/h	46 lb	-	-	208 V	
MAC-2	MITSUBISHI	TPKA0A0361KA70A	DUCTLESS AC UNIT	920 CFM	3 ton	36000 Btu/h	40000 Btu/h	46 lb	-	-	208 V	
MCU-1	MITSUBISHI	TRUZA0361KA70NA	OUTDOOR HEAT PUMP	-	3 ton	36000 Btu/h	40000 Btu/h	214 lb	25 A	30 A	208 V	
MCU-2	MITSUBISHI	TRUZA0361KA70NA	OUTDOOR HEAT PUMP	-	3 ton	36000 Btu/h	40000 Btu/h	214 lb	25 A	30 A	208 V	

GENERAL NOTES APPLICABLE TO ALL UNITS: . 100% COOLING CAPACITY DOWN TO 5F

2. ALL REFRIGERANT LINES SHALL BE INSULATED 3. WIRED REMOTE CONTROLLER - PROGRAMMABLE

ACCEPTABLE MANUFACTURERS AND REPRESENTATION:

A. MITSUBISHI | TRANE ARKANSAS; SPRINGDALE, AR B. LENNOX/DAIKIN NORTH AMERICA | HARRISON ENERGY PARTNERS; SPRINGDALE, ARKANSAS

				FACE		NECK		INSTALLATION	
ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	SIZE	WIDTH	HEIGHT	BORDER TYPE	SPECIFICATION
CD1	3-CONE DIFFUSER	Titus	TMS-AA	12x12	8"			<varies></varies>	HIGH PERFORMANCE 3-CONE DIFFUSER
CD1	3-CONE DIFFUSER	Titus	TMS-AA	24x24	12"			TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER
CD2	3-CONE DIFFUSER	Titus	TMS-AA	24x24	8"			TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER
CD2	3-CONE DIFFUSER	Titus	TMS-AA	24x24	10"			TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER
CD2	3-CONE DIFFUSER	Titus	TMS-AA	24x24	12"			TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER
CD2	3-CONE DIFFUSER	Titus	TMS-AA	24x24	14"			TYPE 3 (LAY-IN)	HIGH PERFORMANCE 3-CONE DIFFUSER
CD3	3-CONE DIFFUSER	Titus	TMS-AA	24x24	8"			TYPE 1 (SURFACE)	HIGH PERFORMANCE 3-CONE DIFFUSER
RG1	EGGCRATE RETURN GRILLE	Titus	50F			12"	12"	TYPE 3 (LAY-IN)	1/2"x1/2"x1/2" EGGCRATE GRID.
RG3	EGGCRATE RETURN GRILLE	Titus	50F	24x12		22"	10"	TYPE 3 (LAY-IN)	1/2"x1/2"x1/2" EGGCRATE GRID.
RG3	EGGCRATE RETURN GRILLE	Titus	50F	24x24		22"	22"	TYPE 3 (LAY-IN)	1/2"x1/2"x1/2" EGGCRATE GRID.
TG1	LOUVERED GRILLE	Titus	8F			36"	20"	TYPE 1 (SURFACE)	PERFORATED TRANSFER GRILLE, FINISH 20 COORDINAT CUSTOM COLOR MATCH WITH ARCHITECT

COORDINATE AIR DEVICE DELFECTION ADJUSTMENTS WITH THE MACHANICAL ENGINEER DURING AIR BALANCE PROVIDE 2" FACTORY FIBERGLASS WRAP ON ALL SUPPLY DUFFUSERS WITH BACKSIDE NOT EXPOSED TO SPACE

FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR

NOTE: NO LINED DUCT IN KITCHEN

4. ALL AIR DEVICES ARE 4-WAY THROW UNLESS OTHERWISE NOTED IN SCHEDULES OR WITH FLOW ARROWS ON DRAWINGS 5. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATES

BRANCH DUCT SHALL BE SAME AS NOTED DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE. PROVIDE TRANSITION WHERE DUCT SIZE DIFFERS FROM NECK SIZE WHERE FINISH AND COLOR ARE NOTED TO BE SELECTED BY ARCHITECT/OWNER, THE CONTRACTOR SHALL PROVIDE A COLOR PALETTE SAMPLE FOR FINAL APPROVAL WITH THE

B. COORDINATE WITH ARCHITECT'S REFLECTED CEILING PLAN TO PROVIDE APPROPRIATE FRAME TYPE AND MOUNTING ACCESSORIES 9. EQUALS PER SPECIFICATIONS

	MECHANICAL	PIPING & INSULATION	ON SCHE	DULE			
NOTE: ALL EXTERIOR INSULATED PI	PING TO BE PROVIDED WITH ALUM	MINUM JACKET.			SULATION THICKNE NOMINAL PIPE SIZE		
SERVICE	PIPING TYPE	INSULATION TYPE	<1	1 TO <1-1/2	1-1/2 TO <4	4 TO <8	≥8
EQUIPMENT DRAINS, COOLING CONDENSATE LINES, AND OVERFLOWS	TYPE "L" HARD COPPER	ELASTOMERIC	0.5	0.5	1.0	1.0	1.0
REFRIGERANT PIPING	COPPER REFRIGERANT PIPING	ELASTOMERIC	0.5	1.0	1.0	1.0	1.5
ALL OUTDOOR INSULATED PIPING	PROVIDE WITH EMBOSSED ALUMINUM JACKET OVER SCHEDULED INSULATION	PER SCHEDULE					

SERVICE	DUCT TYPE	INSULATION TYPE	INSULATION THICKNESS
ALL LOW PRESSURE CONSTANT VOLUME SUPPLY AIR DUCT FROM AIR HANDLER OR PACKAGED UNIT	ROUND OR RECTANGULAR, AS INDICATED ON PLANS.	FIBERGLASS WRAP	2" WRAP, R VALUE=6.0
ALL LOW PRESSURE RETURN AIR DUCT FROM AIR HANDLER OR PACKAGED UNIT	ROUND OR RECTANGULAR, AS INDICATED ON PLANS.	FIBERGLASS WRAP	2" WRAP, R VALUE=6.0
ALL MEDIUM PRESSURE CONSTANT VOLUME AND VAV SUPPLY AIR DUCT BEYOND 20' FROM AIR HANDLER OR PACKAGED UNIT	ROUND OR RECTANGULAR, AS INDICATED ON PLANS.	FIBERGLASS WRAP OR MATTE FACED FIBERGLASS LINER, AS INDICATED ON PLANS	2" WRAP OR 1-1/2" LINER, R VALUE=6.0
ALL MEDIUM PRESSURE CONSTANT VOLUME AND VAV SUPPLY AIR DUCT FOR FIRST 20' FROM AIR HANDLER OR PACKAGED UNIT	DOUBLE WALL SPIRAL WITH PERFORATED METAL LINER	FIBERGLASS EQUAL TO UNITED MCGILL ACOUSTIC - K27	1-1/2", R VALUE=6.0
ALL RUNOUTS TO SUPPLY DIFFUSERS AND RETURN GRILLES CONCEALED ABOVE CEILINGS	ROUND OR RECTANGULAR, AS INDICATED ON PLANS.	FIBERGLASS WRAP	2" WRAP, R VALUE=6.0
ALL RUNOUTS TO SUPPLY DIFFUSERS AND RETURN GRILLES VISIBLE TO OCCUPIED SPACE	DOUBLE WALL SPIRAL WITH PERFORATED METAL LINER	FIBERGLASS EQUAL TO UNITED MCGILL ACOUSTIC - K27	1-1/2", R VALUE=6.0
ALL SUPPLY AIR DIFFUSERS (BACKSIDE, NOT EXPOSED TO SPACE)	N/A	FIBERGLASS WRAP	2" WRAP, R VALUE=6.0
ALL SUPPLY AND RETURN DUCT SERVING SOUND SENSITIVE ROOMS	DOUBLE WALL SPIRAL WITH PERFORATED METAL LINER	FIBERGLASS EQUAL TO UNITED MCGILL ACOUSTIC - K27	1-1/2", R VALUE=6.0
RESTROOM EXHAUST DUCT	ROUND OR RECTANGULAR, AS INDICATED ON PLANS.	FIBERGLASS WRAP OR MATTE FACED FIBERGLASS LINER, AS	2" WRAP OR 1-1/2" LINER, R VALUE=6.0

ן טו	WANDFACTURER	WODEL NO.	AKKANGEMENT	AIRFLOW	AIRFLOW	DCV	FAN DE	AII
RTU-1	TRANE	SFHN0904E	VERTICAL	26000 CFM	7300 CFM	Yes	15	260
1. PROV 2. PROV 3. PROV 4. POW 5. PROV 6. PROV 7. VERI 8. PROV 9. PROV 10. ECOI 11. STAII 12. DOUI 13. HING 14. STAII 15. FACT 16. SPRI	AL NOTES APPLICABI VIDE 5" CONCRETE F VIDE THERMAL EXPA VIDE HAIL GUARD ERED EXHAUST WIT VIDE UNIT MOUNTED VIDE FACTORY MOU CAL DISCHARGE VIDE COMPRESSOR VIDE WITH BACNET I NOMIZER W/. FRESH NLESS STEEL DRAIN BLE WALL CONSTRU FED ACCESS DOORS NLESS STEEL HEAT TORY MOUNTED RET NG ISOLATORS FOR	PAD TO EXTEN ANSION VALVE TH BUILDING PF O CONVENIENC NTED DISCON SOUND BLANK NTERFACE AIR MEASURE I PAN CTION EXCHANGER TURN AIR SMOI FANS	D 1' AROUND UNI' RESSURE SENSOI CE OUTLET NECT KETS E AND DCV					
ACCEPT.	ABLE MANUFACTUR	ER AND REPRI	ESENTATION					
B. LENNO	E TRANE ARKANSA OX/DAIKIN NORTH AI -A JOHNSON CONTE	MERICA HARF	RISON ENERGY PA			, AR		

HP ENGINEERING PROJECT NO. 212063R 100% COMPLETE 5504 W Pinnacle Pointe Dr Suite 200 Rogers, AR TEL 479-899-6370 http://www.hpengineeringinc.com CONSULTANT: CATE OF C ENGINEERING, 7

#1653

EXHAUST FAN SCHEDULE SOUND PRESS UNIT MANUFACTURER MODEL NO. TYPE DESIGN OUTLET ESP RPM TYPE QTY POWER LEVEL (dBA) WEIGHT VOLT PH GREENHECK G-095-VG ROOF 500 CFM 714 FPM 0.50 in-wg 1346 DIRECT 1 0.10 hp 50 29 lb 277 V 1 CONTINUOUS W/ BAS 1, 2, 3, 4, 5, 8 GREENHECK SP-110-VG CEILING 75 CFM 241 FPM 0.25 in-wg 950 DIRECT 1 0.01 hp 32 17 lb 277 V 1 SWITCHED W/ LIGHTS 1, 2, 3, 5, 6, 7, 8

GREENHECK SP-110-VG CEILING 75 CFM 241 FPM 0.25 in-wg 950 DIRECT 1 0.01 hp 32 17 lb 277 V 1 SWITCHED W/ LIGHTS 1, 2, 3, 5, 6, 7, 8

GREENHECK G-095-VG ROOF 700 CFM 603 FPM 0.35 in-wg 1668 DIRECT 1 0.14 hp 59 29 lb 277 V 1 CONTINUOUS W/ BAS 1, 2, 3, 4, 5, 8

1. PROVIDE PRE-WIRED FACTORY MOUNTED INTEGRAL DISCONNECT DEVICE (NEMA 3R FOR EXTEROIR) PROVIDE VARIABLE SPEED CONTROLLER (FACTORY INSTALLED IF AVAILABLE) ON ALL DIRECT DRIVE FANS FOR FAN BALANCING

3. MOUNT FAN SPEED CONTROLLER IN ACCESSIBLE LOCATION ABOVE CEILING UNLESS OTHERWISE NOTED 4. PROVIDE ROOF CURB TO MATCH ROOF TYPE AND SLOPE AT ALL ROOF MOUNTED FANS

5. PROVIDE BACKDRAFT DAMPER

6. PROVIDE SPUN ALUMINUM VENT CAP, COOK MODEL "PR" WITH ROOF CURB 7. PROVIDE MANUFACTURER'S WHITE ALUMINUM GRILLE

	TROVIDE MANOLACTORERS WHITE ALUMINOM
8.	PROVIDE ISOLATOR KIT

					PRIMARY	AIRFLOW		HE	EATING COIL		HE	ATING ELEM	IENT							
									AIRSIDE											
ID	MANUFACTURER	MODEL NO.	NECK SIZE	TYPE	MAX	MIN	EXTERIOR ZONE	DESIGN FLOW	EAT(db)	LAT(db)	QTY	POWER	SCR	NC	UNIT WEIGHT	FLA	MCA	МОСР	VOLT	PH
VAV-4	TRANE	VCEF	6"	SINGLE DUCT	375 CFM	200 CFM	No	375 CFM	55.0 °F	88.6 °F	1	4.0 kW	No	21	38 lb	4.8 A	6.0 A	15.0 A	480 V	3
VAV-5	TRANE	VCEF	6"	SINGLE DUCT	400 CFM	125 CFM	No	200 CFM	55.0 °F	94.3 °F	1	2.5 kW	No	21	38 lb	3.0 A	3.8 A	15.0 A	480 V	3
VAV-6	TRANE	VCEF	8"	SINGLE DUCT	600 CFM	200 CFM	No	350 CFM	55.0 °F	91.0 °F	1	4.0 kW	No	22	38 lb	4.8 A	6.0 A	15.0 A	480 V	3
VAV-11	TRANE	VCEF	6"	SINGLE DUCT	150 CFM	50 CFM	No	100 CFM	55.0 °F	86.5 °F	1	1.5 kW	No	21	38 lb	1.8 A	2.3 A	15.0 A	480 V	3
VAV-12	TRANE	VCEF	8"	SINGLE DUCT	600 CFM	200 CFM	No	400 CFM	55.0 °F	90.4 °F	1	4.5 kW	No	22	38 lb	5.4 A	6.8 A	15.0 A	480 V	3
VAV-18	TRANE	VCEF	6"	SINGLE DUCT	300 CFM	100 CFM	No	300 CFM	55.0 °F	91.7 °F	1	3.5 kW	No	18	38 lb	4.2 A	5.3 A	15.0 A	480 V	3
VAV-19	TRANE	VCEF	6"	SINGLE DUCT	150 CFM	100 CFM	No	150 CFM	55.0 °F	86.5 °F	1	1.5 kW	No	15	38 lb	1.8 A	2.3 A	15.0 A	480 V	3
VAV-20	TRANE	VCEF	6"	SINGLE DUCT	200 CFM	150 CFM	No	200 CFM	55.0 °F	94.3 °F	1	2.5 kW	No	15	38 lb	3.0 A	3.8 A	15.0 A	480 V	3
VAV-21	TRANE	VCEF	6"	SINGLE DUCT	200 CFM	120 CFM	No	200 CFM	55.0 °F	94.3 °F	1	2.5 kW	No	15	38 lb	3.0 A	3.8 A	15.0 A	480 V	3
VAV-22	TRANE	VCEF	8"	SINGLE DUCT	450 CFM	350 CFM	No	450 CFM	55.0 °F	90.0 °F	1	5.0 kW	No	17	38 lb	6.0 A	7.5 A	15.0 A	480 V	3
VAV-23	TRANE	VCEF	6"	SINGLE DUCT	150 CFM	75 CFM	No	150 CFM	55.0 °F	86.5 °F	1	1.5 kW	No	15	38 lb	1.8 A	2.3 A	15.0 A	480 V	3

GENERAL NOTES APPLICABLE TO ALL UNITS:

1. VAV BOX INLET STATIC PRESSURE TO BE 0.75" W.C.

2. PROVIDE ALL FAN POWERED VAV BOXES WITH DDC CONTROLS, 3-SPEED SWITCH, ELECTRICAL DISCONNECT SWITCH, CONTROL TRANSFORMER AND FUSES FOR CONTROL WIRING, AND SINGLE POINT CONNECTION WITH FUSING FOR POWER WIRING TO FAN. FEEDER TO UNIT BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING BY MECHANICAL CONTROLS CONTRACTOR.

3. UNIT INSULATION SHAL BE MATTE FACED WITH 1" INSULATION. TYPICAL FOR ALL. 4. PROVIDE WITH WIRELESS ZONE TEMPERATURE SENSOR

5. PROVIDE WITH FACTORY WIRED DISCHARGE AIR TEMPERATURE SENSOR 6. PROVIDE WITH UNIT-MOUNTED DISCONNECT AND POWER FUSE

7. PROVIDE WITH FIRST YEAR LABOR WARRANTY 8. PROVIDE WITH INTEGRAL SOUND ATTENUATOR AND BOTTOM ACCESS

						I	LINEA	R SLC	T DIFF	USER SC	HEDULE	•						
									LINEAR DI	FFUSER			NECK			INSTALLATION	OPTIONS	
							SLO	TC		PLENUM			Т	YPE				
									NOM.		LOW				THROW		DAMPER	
ID	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	FINISH	SYSTEM	WIDTH	QTY	LENGTH	INSULATED	PROFILE	SIZE	Oval	Round	SYMBOL	BORDER TYPE	DESCRIPTION	SPECIFICATION
LSD1	LINEAR SLOT DIFFUSER	Titus	FL-10	ALUMINUM	WHITE ENAMEL	S/A	1"	1	5' - 0"	Yes	No	10"	Yes	No	Н	22		ARCHITECTURAL LINEAR SLOT DIFFUSER
LSD2	LINEAR SLOT DIFFUSER	Titus	FL-20	ALUMINUM	WHITE ENAMEL	S/A	2"	1	4' - 0"	Yes	No	10"	Yes	No	Н	11		ARCHITECTURAL LINEAR SLOT DIFFUSER
LSD2	LINEAR SLOT DIFFUSER	Titus	FL-20	ALUMINUM	WHITE ENAMEL	S/A	2"	1	4' - 0"	Yes	No	12"	Yes	No	Н	11		ARCHITECTURAL LINEAR SLOT DIFFUSER
LSD3	LINEAR SLOT DIFFUSER	Titus	FL-20	ALUMINUM	WHITE ENAMEL	S/A	2"	1	5' - 0"	Yes	No	12"	Yes	No	Н	11		ARCHITECTURAL LINEAR SLOT DIFFUSER
LSD4	LINEAR SLOT DIFFUSER	Titus	FL-20	ALUMINUM	WHITE ENAMEL	S/A	2"	1	6' - 0"	Yes	No	10"	Yes	No	Н	11		ARCHITECTURAL LINEAR SLOT DIFFUSER
LSD4	LINEAR SLOT DIFFUSER	Titus	FL-20	ALUMINUM	WHITE ENAMEL	S/A	2"	1	6' - 0"	Yes	No	12"	Yes	No	Н	11		ARCHITECTURAL LINEAR SLOT DIFFUSER

	MANUFACTURER		NECK SIZE	TYPE	PRIMARY AIRFLOW		FAN						HEATING COIL			HEATING ELEMENT								Ī	$\overline{}$	
					MAX	MIN	AIRFLOW		MOTOR				AIRSIDE					-						1		
ID		MODEL NO.					DESIGN	ESP	QTY	POWER	ECM	EXTERIOR ZONE	CAP	DESIGN FLOW	EAT(db)	LAT(db)	QTY	POWER	SCR	NC	UNIT WEIGHT	FLA	MCA	MOCP	VOLT	PH
VAV-1	TRANE	VPEF	14"	FAN POWERED VAV BOX	2500 CFM	1000 CFM	1500 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	61470 Btu/h	2500 CFM	55.0 °F	89.2 °F	1	20.0 kW	Yes	27	175 lb	28.8 A	36.0 A	40.0 A	480 V	3
VAV-2	TRANE	VPEF	10"	FAN POWERED VAV BOX	1200 CFM	600 CFM	600 CFM	0.25 in-wg	1	0.33 hp	Yes	Yes	34150 Btu/h	1200 CFM	55.0 °F	91.4 °F	1	11.0 kW	Yes	20	130 lb	15.6 A	19.6 A	20.0 A	480 V	3
VAV-7	TRANE	VPEF	10"	FAN POWERED VAV BOX	1000 CFM	500 CFM	500 CFM	0.25 in-wg	1	0.33 hp	Yes	Yes	30740 Btu/h	1000 CFM	55.0 °F	90.8 °F	1	9.0 kW	Yes	17	130 lb	13.2 A	16.5 A	20.0 A	480 V	3
VAV-8	TRANE	VPEF	12"	FAN POWERED VAV BOX	1500 CFM	500 CFM	1000 CFM	0.25 in-wg	1	0.50 hp	Yes	Yes	34150 Btu/h	1500 CFM	55.0 °F	90.2 °F	1	12.0 kW	Yes	32	132 lb	17.9 A	22.4 A	25.0 A	480 V	3
VAV-9	TRANE	VPEF	8"	FAN POWERED VAV BOX	800 CFM	400 CFM	400 CFM	0.25 in-wg	1	0.33 hp	Yes	Yes	22200 Btu/h	800 CFM	55.0 °F	90.0 °F	1	7.0 kW	Yes	26	129 lb	10.8 A	13.5 A	15.0 A	480 V	3
VAV-10	TRANE	VPEF	12"	FAN POWERED VAV BOX	1800 CFM	550 CFM	1250 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	44400 Btu/h	1800 CFM	55.0 °F	91.7 °F	1	15.0 kW	Yes	34	145 lb	23.4 A	29.3 A	30.0 A	480 V	3
VAV-13A	TRANE	VPEF	14"	FAN POWERED VAV BOX	3000 CFM	1300 CFM	1700 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	68300 Btu/h	3000 CFM	55.0 °F	84.5 °F	1	20.0 kW	Yes	39	175 lb	28.8 A	36.0 A	40.0 A	480 V	3
VAV-13B	TRANE	VPEF	14"	FAN POWERED VAV BOX	3000 CFM	1300 CFM	1700 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	68300 Btu/h	3000 CFM	55.0 °F	84.5 °F	1	20.0 kW	Yes	39	175 lb	28.8 A	36.0 A	40.0 A	480 V	3
VAV-13C	TRANE	VPEF	14"	FAN POWERED VAV BOX	2500 CFM	1000 CFM	1500 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	61470 Btu/h	2500 CFM	55.0 °F	89.2 °F	1	20.0 kW	Yes	35	175 lb	28.8 A	36.0 A	40.0 A	480 V	3
VAV-14	TRANE	VPEF	16"	FAN POWERED VAV BOX	3200 CFM	1500 CFM	1700 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	68300 Btu/h	3200 CFM	55.0 °F	82.6 °F	1	20.0 kW	Yes	39	176 lb	28.8 A	36.0 A	40.0 A	480 V	3
VAV-15	TRANE	VPEF	14"	FAN POWERED VAV BOX	3000 CFM	1300 CFM	1700 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	68300 Btu/h	3000 CFM	55.0 °F	84.5 °F	1	20.0 kW	Yes	39	175 lb	28.8 A	36.0 A	40.0 A	480 V	,
VAV-16	TRANE	VPEF	12"	FAN POWERED VAV BOX	2000 CFM	1300 CFM	700 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	58060 Btu/h	2000 CFM	55.0 °F	88.6 °F	1	18.0 kW	Yes	35	145 lb	27.0 A	33.8 A	35.0 A	480 V	3
VAV-17	TRANE	VPEF	14"	FAN POWERED VAV BOX	2500 CFM	1500 CFM	1000 CFM	0.25 in-wg	1	1.00 hp	Yes	Yes	68300 Btu/h	2500 CFM	55.0 °F	86.2 °F	1	20.0 kW	Yes	35	175 lb	28.8 A	36.0 A	40.0 A	480 V	3

GENERAL NOTES APPLICABLE TO ALL UNITS:

1. VAV BOX INLET STATIC PRESSURE TO BE 0.75" W.C. PROVIDE ALL FAN POWERED VAV BOXES WITH DDC CONTROLS, 3-SPEED SWITCH, ELECTRICAL DISCONNECT SWITCH, CONTROL WIRING, AND SINGLE POINT CONNECTION WITH FUSING FOR POWER WIRING TO FAN. FEEDER TO UNIT BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING

3. UNIT INSULATION SHAL BE MATTE FACED WITH 1" INSULATION. TYPICAL FOR ALL. 4. ALL FAN POWERED BOXES TO BE SUSPENDED WITH VIBRATION ISOLATION, REFERENCE SPECS.

GENERAL NOTES APPLICABLE TO ALL UNITS:

1. VERIFY INSTALLATION BORDER PRIOR TO ORDERING

5. PROVIDE ALL FAN POWERED BOXES WITH 1" PLEATED MEDIE FILTER 6. PROVIDE WITH WIRELESS ZONE TEMPERATURE SENSOR

'. PROVIDE WITH FACTORY WIRED DISCHARGE AIR TEMPERATURE SENSOR

8. PROVIDE WITH UNIT-MOUNTED DISCONNECT AND POWER FUSE 9. PROVIDE WITH FIRST YEAR LABOR WARRANTY 10. PROVIDE WITH INTEGRAL SOUND ATTENUATOR AND BOTTOM ACCESS

	ROOFTOP UNIT SCHEDULE																					
OLING	OLING COIL					GAS-FIRED HX				COMPRESSOR												
AIRSIDE					GAS B	AIRSID		IDE REFRIGERAN		GERANT										ļ		
					INCLUDE			FUEL					NUMBER OF	MODULATING	SUMMER	WINTER		UNIT				ļ
LE E	AT(db)	EAT(wb)	LAT(db)	LAT(wb)	ECONOMIZER	INPUT	EFF	TYPE	EAT(db)	LAT(db)	TYPE	CHARGE	COMPRESSORS	GAS HEAT	AMBIENT DBT	AMBIENT DBT	EER	WEIGHT	VOLT	PH	MCA	MOCP
tu/h 8	80.0 °F	67.0 °F	55.5 °F	54.0 °F	Yes	1100000 Btu/h	81.0%	NG	52.0 °F	83.6 °F	R410A	55 lb	5	20:1	100.0 °F	0.0 °F	10.6	17505 lb	480 V	3	230.5 A	250 A

ID MANUFACTURER MODEL NO. ARRANGEMENT AIRFLOW AIRFLOW DCV FAN HP AIRFLOW ESP QTY POWER CAP

C. YORK-A JOHNSON CONTROL COMPANY | AIRETECH; SPRINGDALE, AR D. AAON | POWERS OF ARKANSAS; SPRINGDALE, AR

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Landscape Architect

TEN x TEN

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Structural Engineer

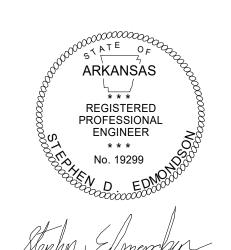
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Print Name Stephen Edmonsdon

ISSUE / REVISION

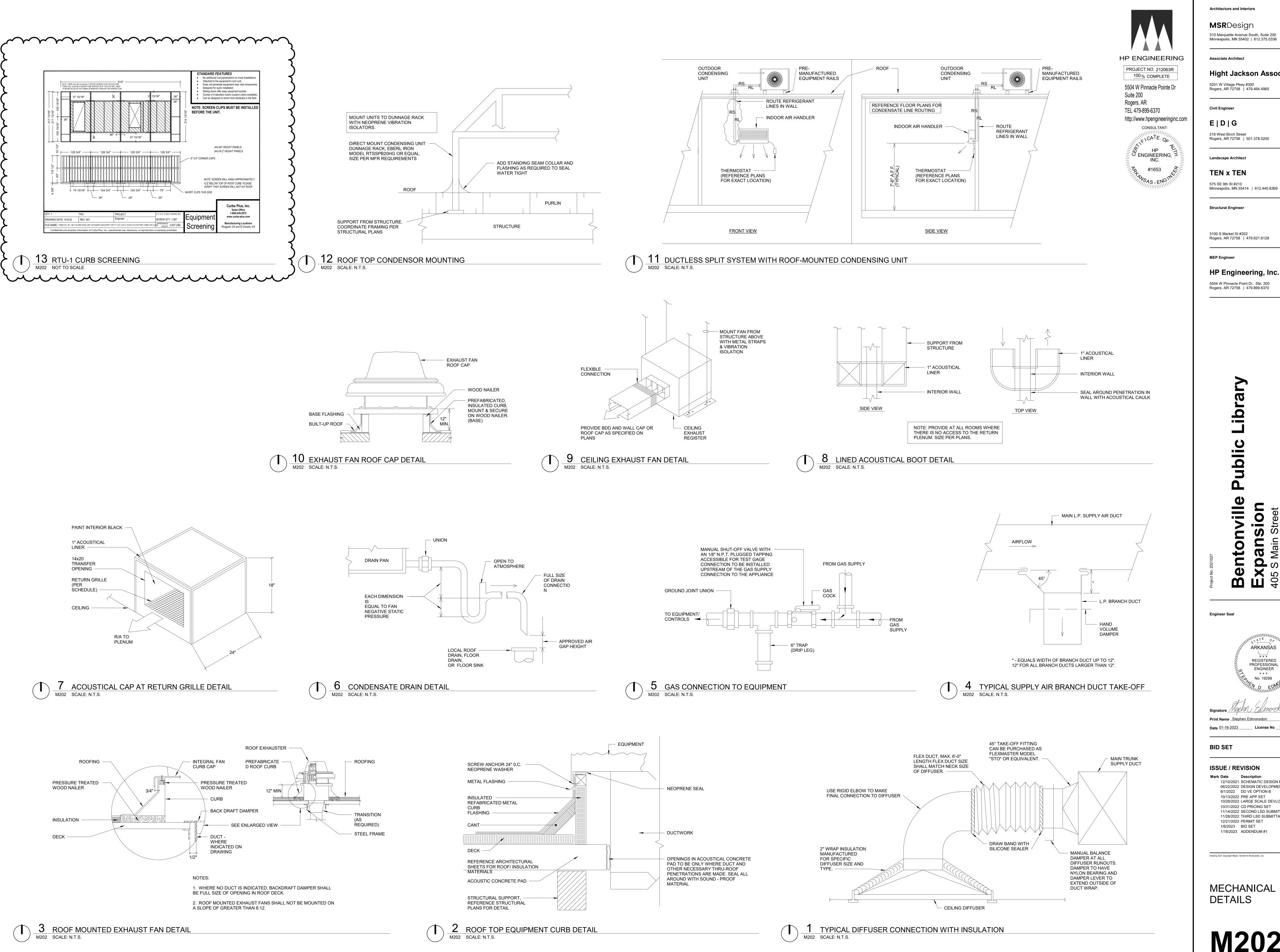
12/10/2021 SCHEMATIC DESIGN PRICING 6/22/2022 DESIGN DEVELOPMENT PRICING

8/1/2022 DD VE OPTION B 10/13/2022 PRE APP SET 10/28/2022 LARGE SCALE DEVLOPMENT SUBMITTAL 10/31/2022 CD PRICING SET 11/14/2022 SECOND LSD SUBMITTAL 11/28/2022 THIRD LSD SUBMITTAL 12/21/2022 PERMIT SET 1/6/2023 BID SET 1/18/2023 ADDENDUM #1 1/19/2023 ADDENDUM #2

Drawing 2021 Copyright Meyer, Scherer & Rockcastle, Ltd.

3/22/2023 ASI-01

MECHANICAL SCHEDULES



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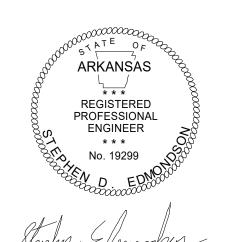
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MECHANICAL DETAILS

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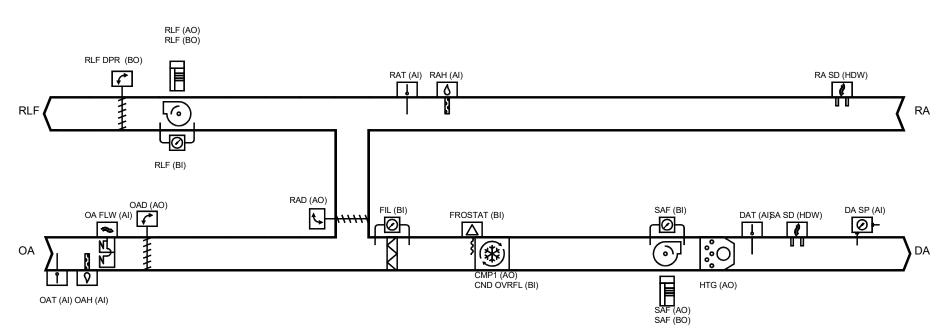
Hight Jackson Associates PA

NOTE: CONTROLS CONTRACTOR SHALL REFERENCE MECHANICAL DRAWINGS FOR LOCATION OF ALL CONTROLS RELATED ITEMS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL CONTROLS RELATED ITEMS, INCLUDING ROUGHINS, CONDUIT, WIRING, MOUNTING HARDWARE AS NEEDED FOR A COMPLETE INSTALLATION.

NOTE: CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SYSTEM OF CONTROLS INCLUDING CONTROLLERS, VALVES, DAMPERS, SENSORS, SWITCHES ACTUATORS, WIRING, RELAYS, PROGRAMMING, AND COMMISSIONING AS REQUIRED TO PROVIDE THE DESIRED SEQUENCE OF OPERATION. PROVIDE INTEGRATED WIRING DIAGRAMS SHOWING INTERACTIONS BETWEEN FIELD INSTALLED EQUIPMENT AND WIRING PROVIDED WITH THE HVAC EQUIPMENT. PROVIDE SUPERVISION AND JOB CHECKOUT SERVICE AS REQUIRED TO ENSURE THAT THE INSTALLATION MEETS REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THE SYSTEM SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING THE ACCEPTANCE OF THE SYSTEM BY THE ARCHITECT/ENGINEERING, CORRECT DEFECTS OCCIRIING DURING THAT PERIOD AT NO COST TO THE OWNER. CONTRACTOR SHALL PROVIDE REMOTE "READ ONLY" ACCESS OF THE CONTROLS TO THE ENGINEER FOR A MINIMUM PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION. ACCESS SHALL INCLUDE ABILITY TO SEE AND SET UP TRENDS OF ALL ASSIGNED POINTS. PROVIDE MINIMUM ALLOWANCE OF 16 HOURS ON SITE OR REMOTE TO ASSIST THE ENGINEER WITH FUNCTIONAL TESTING OF PROPER OPERATION OF EQUIPMENT.

Flow Diagram: EXPANSION PACKAGED RTU





Sequence of Operation: EXPANSION PACKAGED RTU

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied Bypass, Morning Warm-up/Pre-Cool, Occupied/Unoccupied and Heat/Cool modes. The BAS shall also send the discharge air temperature setpoint and the duct static pressure setpoint. If a BAS is not present, or communication is lost with the BAS the controller shall operate using default modes and setpoints.

Occupied:

During occupied periods, the supply fan shall run continuously and the mixed air dampers shall open to maintain minimum ventilation requirements. The unit controller shall control the supply fan speed to maintain the current supply duct static pressure setpoint (adj.). The gas heat shall be enabled and controlled to maintain the active discharge air temperature setpoint. If economizing is enabled, the outdoor air or mixed air dampers shall modulate to maintain the discharge air temperature setpoint and the relief air damper shall track the mixed air dampers. If the discharge air temperature sensor fails, the DX cooling shall be disabled, the gas heat shall be disabled, and an alarm shall annunciate at the BAS.

Unoccupied:

When the space temperature is below the unoccupied heating setpoint of 60.0 deg. F (adj.) the supply fan shall be commanded on, the outside air damper shall remain closed and the gas heat shall be enabled. When the space temperature rises above the unoccupied heating setpoint of 60.0 deg. F (adj.) plus the unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop and the gas heat shall be disabled. When the space temperature is above the unoccupied cooling setpoint of 85.0 deg. F (adj.) the supply fan shall be commanded on, the outside air damper shall open if economizing is enabled and remain closed if economizing is disabled and the DX cooling shall be enabled. When the space temperature falls below the unoccupied cooling setpoint of 85.0 deg. F minus the Unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop, the DX cooling shall be disabled and the outside air damper shall close.

Optimal Start:

The BAS shall monitor the scheduled occupied time, occupied space setpoints and space temperature to calculate when the optimal start occurs.

Morning Warm-Up Mode:

During optimal start, if the average space temperature is below the occupied heating setpoint a morning warm-up mode shall be activated. When morning warm-up is initiated the unit shall enable the heating and fan(s). The outside air damper shall remain closed. When the space temperature reaches the occupied heating setpoint (adj.), the unit shall transition to the occupied mode.

Pre-Cool Mode:

During optimal start, if the average space temperature is above the occupied cooling setpoint, pre-cool mode shall be activated. When pre-cool is initiated the unit shall enable the fan and cooling or economizer. The outside air damper shall remain closed, unless economizing. When the space temperature reaches occupied cooling setpoint (adj.), the unit shall transition to the occupied mode.

Optimal Stop:

The BAS shall monitor the scheduled unoccupied time, occupied setpoints and space temperature to calculate when the optimal stop occurs. When the optimal stop mode is active the unit controller shall maintain the space temperature to the space temperature offset setpoint. Outside air damper shall remain enabled to provide minimum ventilation.

Occupied Bypass:

The BAS shall monitor the status of the ON and CANCEL buttons of the space temperature sensors. When an occupied bypass request is received from a space sensor, the unit shall transition from its current occupancy mode to occupied bypass mode and the unit shall maintain the space temperature to the occupied setpoints

Heat/Cool Mode:

COOLING: The unit controller shall use the discharge air temperature sensor and discharge air temperature cooling setpoint to determine when to initiate requests for cooling. Discharge air setpoint shall be maintained by controlling the cooling as required.

HEATING: The unit controller shall use the discharge air temperature sensor and discharge air temperature heating setpoint to determine when to initiate requests for heating. Discharge air setpoint shall be maintained by controlling the heating as required. During Unoccupied Heating or Morning Warm-Up Mode, the unit heat request shall be communicated to the system VAVs prior to commencing heating operation to allow VAV units to open. The variable speed drive shall be commanded to 100% and the heat shall be staged on and off to satisfy the zone temperature setpoint.

Discharge Air Temperature Reset Control:

The discharge air temperature setpoint shall be reset to the optimal setpoint communicated by the BAS. The BAS shall reset the discharge air temperature setpoint based on the current outside air temperature, but shall override this reset function and return the discharge air temperature setpoint to 55.0 deg. F (adj.) if more than two (adj.) zones begin to overheat. Also, the BAS shall override this reset function whenever outdoor dew point is higher than 60.0 deg. F (adj.) or indoor humidity is higher than 60% RH (adj.). If the discharge air temperature drops below the minimum limit, a low temperature alarm shall annunciate and the unit shall shut down. If the discharge air temperature rises above the maximum limit, a high temperature alarm shall annunciate.

Economizer:

ENABLE (Comparative Enthalpy): Outside air (OA) enthalpy shall be compared with Return air (RA) enthalpy point. The economizer shall enable when OA enthalpy is less than RA enthalpy - 2.0 BTU/LB. The economizer shall disable when OA enthalpy is greater than RA enthalpy.

OPERATION: The supply air sensor shall measure the dry bulb temperature of the air leaving the evaporator coil while economizing. When economizing is enabled and the unit is operating in the cooling mode, the economizer damper shall be modulated between its minimum position and 100% to maintain the discharge air temperature setpoint. The economizer damper shall modulate toward minimum position in the event the discharge air temperature falls below the discharge low limit temperature setpoint. Compressors shall be delayed from operating until the economizer has opened to 100%.

Ventilation Control:

When in the occupied mode, the flow-measuring outdoor-air and damper shall modulate to maintain the current ventilation airflow setpoint. The ventilation airflow setpoint shall be reset to the optimal ventilation setpoint communicated by the BAS. The BAS shall reset the ventilation setpoint based on the current ventilation needs of the VAV terminals.

Supply Fan:

The supply fan shall be enabled while in the occupied mode and cycled on during

Supply Duct Static Pressure Control:

During the occupied mode the unit controller shall modulate the output to the variable speed drive as required to maintain the supply duct static pressure setpoint of 1.5 inches of W.C. (adj.). If the supply duct static pressure falls below 1.3 inches of W.C. (adj.) the unit controller shall increase the output to the variable speed drive to maintain setpoint. If the supply duct static pressure rises above 1.7 inches of W.C. (adj.) the unit controller shall decrease the output to the variable speed drive to maintain setpoint. Upon a call for heating or cooling in the unoccupied mode the

Static Pressure High Limit:

Relief Air and Building Pressure Control:

A differential pressure transducer shall actively monitor the difference in pressure between the building (indoors) and outdoors. If the building pressure increases above the differential pressure setpoint, the unit controller shall open the relief air damper, turn on the relief air fan and modulate the relief air fan variable speed drive to control building pressure to the differential pressure setpoint. If the building pressure decreases below the differential pressure setpoint, the associated controller shall deactivate the relief air fan variable speed drive.

A differential pressure switch shall monitor the differential pressure across the relief air fan. If the switch is detected to be open for 40 consecutive seconds after a request for relief fan operation a fan failure alarm shall annunciate at the BAS and the relief fan shall stop. A manual reset shall be required.

The unit shall shut down in response to a signal from the smoke detector indicating the presence of smoke. The smoke detector shall be interlocked to the unit through the dry contacts of the smoke detector. A manual reset of the smoke detector shall be required to restart the unit.

Condensate Overflow Shutdown:

The unit shall shut down in response to a signal from the condensate overflow sensor. The sensor shall be interlocked to the unit cooling controller for immediate

the unoccupied mode.

unit controller shall modulate the speed of the variable speed drive to 100%.

If for any reason the supply air pressure exceeds the supply air pressure high limit, the supply fan shall shut down. The unit shall be allowed to restart three times after a 15 minute off period. If the overpressurization condition occurs on the fourth restart, the unit shall shut down and a manual reset diagnostic is displayed at the remote panel and/or the BAS system.

Filter Status:

A differential pressure switch shall monitor the differential pressure across the filter(s) when the fan is running. If the switch closes during normal operation a dirty filter alarm shall annunciate at the BAS.

Smoke Detector Shutdown:

shutdown of cooling.

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Print Name Stephen Edmonsdon

ISSUE / REVISION

Mark Date Description

8/1/2022 DD VE OPTION B

10/31/2022 CD PRICING SET

10/13/2022 PRE APP SET

12/21/2022 PERMIT SET

1/6/2023 BID SET

BID SET

Date <u>01-06-2023</u> License No <u>19299</u>

12/10/2021 SCHEMATIC DESIGN PRICING

1/14/2022 SECOND LSD SUBMITTAL

11/28/2022 THIRD LSD SUBMITTAL

06/22/2022 DESIGN DEVELOPMENT PRICING

10/28/2022 LARGE SCALE DEVLOPMENT SUBMITTAL

MECHANICAL CONTROLS

Project Design Bentonville Library Expansion

WIRELESS WIRELESS WIRELESS **WIRELESS** COORDINATOR COORDINATOR COORDINATOR COORDINATOR **EXPANSION** PACKAGED RTU TERMINAL UNIT **EXPANSION** VARIABLE AIR EXPANSION VARIABLE EXPANSION VARIABLE VOLUME AIR VOLUME SYSTEM AIR VOLUME SYSTEM SYSTEM Expansion EXISTING **EXISTING EXISTING** PACKAGED VAV **FPVAV** SYSTEM RTU TERMINAL **TERMINAL** CONTROLLER **EXSISTING EXSISTING EXSISTING** VARIABLE AIR VARIABLE AIR VARIABLE AIR

VOLUME SYSTEM

VOLUME SYSTEM

VOLUME SYSTEM

Existing Building

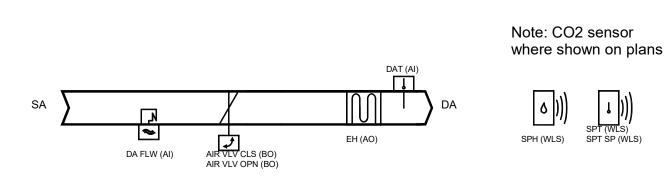
M301 SCALE: N.T.S.

#1653

NOTE: CONTROLS CONTRACTOR SHALL REFERENCE MECHANICAL DRAWINGS FOR LOCATION OF ALL CONTROLS RELATED ITEMS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL CONTROLS RELATED ITEMS, INCLUDING ROUGHINS, CONDUIT, WIRING, MOUNTING HARDWARE AS NEEDED FOR A COMPLETE INSTALLATION.

NOTE: CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SYSTEM OF CONTROLS INCLUDING CONTROLLERS, VALVES, DAMPERS, SENSORS, SWITCHES ACTUATORS, WIRING, RELAYS, PROGRAMMING, AND COMMISSIONING AS REQUIRED TO PROVIDE THE DESIRED SEQUENCE OF OPERATION. PROVIDE INTEGRATED WIRING DIAGRAMS SHOWING INTERACTIONS BETWEEN FIELD INSTALLED EQUIPMENT AND WIRING PROVIDED WITH THE HVAC EQUIPMENT. PROVIDE SUPERVISION AND JOB CHECKOUT SERVICE AS REQUIRED TO ENSURE THAT THE INSTALLATION MEETS REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THE SYSTEM SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING THE ACCEPTANCE OF THE SYSTEM BY THE ARCHITECT/ENGINEERING. CORRECT DEFECTS OCCIRIING DURING THAT PERIOD AT NO COST TO THE OWNER. CONTRACTOR SHALL PROVIDE REMOTE "READ ONLY" ACCESS OF THE CONTROLS TO THE ENGINEER FOR A MINIMUM PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION. ACCESS SHALL INCLUDE ABILITY TO SEE AND SET UP TRENDS OF ALL ASSIGNED POINTS. PROVIDE MINIMUM ALLOWANCE OF 16 HOURS ON SITE OR REMOTE TO ASSIST THE ENGINEER WITH FUNCTIONAL TESTING OF PROPER OPERATION OF EQUIPMENT.

Flow Diagram: EXPANSION VAV TERMINAL UNIT [QTY: 7]



Sequence of Operation: EXPANSION VAV TERMINAL UNIT [QTY: 7]

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied, and Unoccupied commands. The BAS may also send a Heat/Cool mode, priority shutdown commands, space temperature and/or space temperature setpoint. If communication is lost with the BAS, the controller shall operate using its local setpoints.

Occupied:

Normal operating mode for occupied spaces or daytime operation. When the unit is in the occupied mode the VAV shall maintain the space temperature at the active occupied heating or cooling setpoint. Applicable ventilation and airflow setpoints shall be enforced. The occupied mode shall be the default mode of the VAV.

Unoccupied:

Normal operating mode for unoccupied spaces or nighttime operation. When the unit is in unoccupied mode the VAV controller shall maintain the space temperature at the stored unoccupied heating or cooling setpoint regardless of the presence of a hardwired or communicated setpoint. When the space temperature exceeds the active unoccupied setpoint the VAV shall modulate fully closed.

Occupied Bypass:

Mode used to temporarily place the unit into the occupied operation. Tenants shall be able to override the unoccupied mode from the space sensor. The override shall last for a maximum of 4 hours (adj.). The tenants shall be able to cancel the override from the space sensor at any time. During the override the unit shall operate in occupied mode.

Heat/Cool Mode:

The Heat/Cool mode shall be set by a communicated value or automatically by the VAV. In standalone or auto mode the VAV shall compare the primary air temperature with the configured auto changeover setpoint to determine if the air is "hot"" or ""cold"". Heating mode implies the primary air temperature is hot. Cooling mode implies the primary air temperature is cold."

Heat/Cool Setpoint:

The space temperature setpoint shall be determined either by a local (e.g., thumbwheel) setpoint, the VAV default setpoint or a communicated value. The VAV shall use the locally stored default setpoints when neither a local setpoint nor communicated setpoint is present. If both a local setpoint and communicated setpoint exist, the VAV shall use the communicated value.

Cooling Mode:

When the unit is in cooling mode, the VAV controller shall maintain the space temperature at the active cooling setpoint by modulating the airflow between the active cooling minimum airflow setpoint to the maximum cooling airflow setpoint. The VAV shall use the measured space temperature and the active cooling setpoint to determine the requested cooling capacity of the unit. The outputs will be controlled based on the unit configuration and the requested cooling capacity. When in the Occupied Mode, the controller shall use the measured space temperature and the active cooling setpoint to determine the requested cooling capacity of the unit. The outputs shall be controlled based on the unit configuration and the requested cooling capacity.

Heating Mode:

When the unit is in heating mode, the VAV controller shall maintain the space temperature at the active heating setpoint by modulating the airflow between the active heating minimum airflow setpoint to the maximum heating airflow setpoint. The VAV controller shall use the measured space temperature and the active heating setpoint to determine the requested heating capacity of the unit. The outputs will be controlled based on the unit configuration and the requested heating capacity.

Local Reheat Control:

Reheat will only be allowed when the primary air temperature is 5.0 deg. F below the configured reheat enable setpoint of 70.0 deg. F (adj.). The reheat shall be enabled when the space temperature drops below the active heating setpoint and the minimum airflow requirements are met. During reheat the VAV shall operate at its minimum heating airflow setpoint and energize the heat as follows:

Electric Silicon Controlled Rectifier Reheat (SCR):

If the space temperature is at the heating setpoint, the electric heater shall modulate as required to maintain space temperature at the active heating setpoint while the VAV operates at its minimum heating airflow setpoint. If the discharge air temperature reaches the design heating discharge air temperature setpoint (adj.), the VAV shall modulate airflow between the minimum heating airflow setpoint and the maximum heating airflow setpoint as required to maintain space temperature at the active heating setpoint, while the electric heater modulates to maintain discharge air temperature at the design heating discharge air temperature setpoint. If the airflow reaches the maximum heating airflow setpoint, the VAV shall modulate the electric heater as required to maintain space temperature at the active heating setpoint, while the VAV operates at its maximum heating airflow setpoint

Demand Control Ventilation:

When the unit is in unoccupied mode, the ventilation airflow setpoint will be zero. When the unit is in occupied mode, the ventilation airflow setpoint shall equal the design outdoor airflow (see VAV schedule).

The current ventilation airflow setpoint shall be communicated to the BAS for control of the system outdoor-air intake.

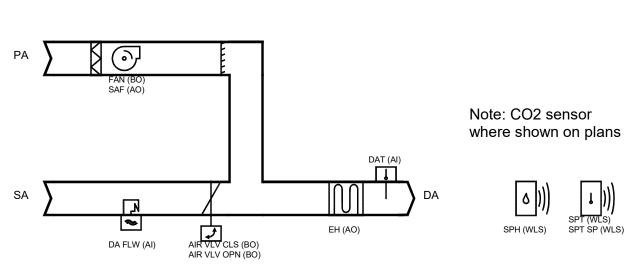
Space Sensor Failure:

If there is a fault with the operation of the zone sensor an alarm shall be annunciated at the BAS. Space sensor failure shall cause the VAV to drive the damper to minimum air flow if the VAV is in the occupied mode, or drive it closed if the VAV is in the unoccupied mode.

Space Humidity Monitoring:

The VAV Box will monitor the space humidity.

Flow Diagram: EXPANSION FPVAV TERMINAL UNIT [QTY: 13]



Sequence of Operation: EXPANSION FPVAV TERMINAL UNIT [QTY: 13]

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied, and Unoccupied commands. The BAS may also send a Heat/Cool mode, priority shutdown commands, space temperature and/or space temperature setpoint. If communication is lost with the BAS, the controller shall operate using its local setpoints.

Occupied:

Normal operating mode for occupied spaces or daytime operation. When the unit is in the occupied mode the VAV shall maintain the space temperature at the active occupied heating or cooling setpoint. Applicable ventilation and airflow setpoints shall be enforced. The occupied mode shall be the default mode of the VAV.

Unoccupied:

Normal operating mode for unoccupied spaces or nighttime operation. When the unit is in unoccupied mode the VAV controller shall maintain the space temperature at the stored unoccupied heating or cooling setpoint regardless of the presence of a hardwired or communicated setpoint. When the space temperature exceeds the active unoccupied setpoint the VAV shall modulate fully closed.

Occupied Bypass:

Mode used to temporarily place the unit into the occupied operation. Tenants shall be able to override the unoccupied mode from the space sensor. The override shall last for a maximum of 4 hours (adj.). The tenants shall be able to cancel the override from the space sensor at any time. During the override the unit shall operate in occupied mode.

Heat/Cool Mode:

The Heat/Cool mode shall be set by a communicated value or automatically by the VAV. In standalone or auto mode the VAV shall compare the primary air temperature with the configured auto changeover setpoint to determine if the air is "hot"" or ""cold"". Heating mode implies the primary air temperature is hot. Cooling mode implies the primary air temperature is cold."

Heat/Cool Setpoint:

The space temperature setpoint shall be determined either by a local (e.g., thumbwheel) setpoint, the VAV default setpoint or a communicated value. The VAV shall use the locally stored default setpoints when neither a local setpoint nor communicated setpoint is present. If both a local setpoint and communicated setpoint exist, the VAV shall use the communicated value.

Cooling Mode:

When the unit is in cooling mode, the VAV controller shall maintain the space temperature at the active cooling setpoint by modulating the airflow between the active cooling minimum airflow setpoint to the maximum cooling airflow setpoint. The VAV shall use the measured space temperature and the active cooling setpoint to determine the requested cooling capacity of the unit. The outputs will be controlled based on the unit configuration and the requested cooling capacity. When in the Occupied Mode, the controller shall use the measured space temperature and the active cooling setpoint to determine the requested cooling capacity of the unit. The outputs shall be controlled based on the unit configuration and the requested cooling capacity.

Heating Mode:

When the unit is in heating mode, the VAV controller shall maintain the space temperature at the active heating setpoint by modulating the airflow between the active heating minimum airflow setpoint to the maximum heating airflow setpoint. The VAV controller shall use the measured space temperature and the active heating setpoint to determine the requested heating capacity of the unit. The outputs will be controlled based on the unit configuration and the requested heating capacity.

Intermittent Fan Control:

During all occupied modes, when the unit is in cooling mode, as the space temperature falls below the active cooling setpoint, the fan will work in conjunction with Reheat Sequence, and the VAV damper shall modulate to its minimum cooling airflow setpoint. Upon a continued drop in temperature, the terminal fan shall be energized and modulates between the minimum and maximum fan airflow setpoints to maintain space temperature at the active heating setpoint. If the fan reaches its maximum fan airflow setpoint, the VAV controller shall initiate Reheat (as described below) to maintain space temperature at the active heating setpoint, while the fan continues to operate at the maximum fan airflow setpoint. During the unoccupied mode, the VAV damper shall modulate fully closed. The terminal fan and heat (as described below) shall cycle as needed to maintain space temperature above the unoccupied heating setpoint.

Local Reheat Control:

Reheat will only be allowed when the primary air temperature is 5.0 deg. F below the configured reheat enable setpoint of 70.0 deg. F (adj.). The reheat shall be enabled when the space temperature drops below the active heating setpoint and the minimum airflow requirements are met. During reheat the VAV shall operate at its minimum heating airflow setpoint and energize the heat as follows:

Electric Silicon Controlled Rectifier Reheat (SCR):

If the space temperature is at the heating setpoint, the electric heater shall modulate as required to maintain space temperature at the active heating setpoint while the VAV operates at its minimum heating airflow setpoint. If the discharge air temperature reaches the design heating discharge air temperature setpoint (adj.), the VAV shall modulate airflow between the minimum heating airflow setpoint and the maximum heating airflow setpoint as required to maintain space temperature at the active heating setpoint, while the electric heater modulates to maintain discharge air temperature at the design heating discharge air temperature setpoint. If the airflow reaches the maximum heating airflow setpoint, the VAV shall modulate the electric heater as required to maintain space temperature at the active heating setpoint, while the VAV operates at its maximum heating airflow setpoint

Demand Control Ventilation:

When the unit is in unoccupied mode, the ventilation airflow setpoint will be zero. When the unit is in occupied mode, the ventilation airflow setpoint shall equal the design outdoor airflow (see VAV schedule).

The current ventilation airflow setpoint shall be communicated to the BAS for control of the system outdoor-air intake.

Space Sensor Failure:

If there is a fault with the operation of the zone sensor an alarm shall be annunciated at the BAS. Space sensor failure shall cause the VAV to drive the damper to minimum air flow if the VAV is in the occupied mode, or drive it closed if the VAV is in the unoccupied mode. The parallel fan shall be disabled along with the

Space Humidity Monitoring:

The VAV Box will monitor the space humidity.

nville

C

Q

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Civil Engineer

216 West Birch Street

Landscape Architect

TEN x TEN

575 SE 9th St #210

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Hight Jackson Associates PA

Senton Expans

Engineer Seal



Signature MyMM (Mmcro)

Print Name Stephen Edmonsdon

Date 01-06-2023 License No 19299

BID SET

ISSUE / REVISION

 Mark
 Date
 Description

 12/10/2021
 SCHEMATIC DESIGN PRICING

 06/22/2022
 DESIGN DEVELOPMENT PRICING

 8/1/2022
 DD VE OPTION B

 10/13/2022
 PRE APP SET

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 LARGE SCALE DEVLOPMENT SUBMITTAL

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 THIRD LSD SUBMITTAL

 12/21/2022
 PERMIT SET

 1/6/2023
 BID SET

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MECHANICAL CONTROLS

M302

2 VAV TERMINAL U

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