

CIRCULATOR PUMP SCHEDULE

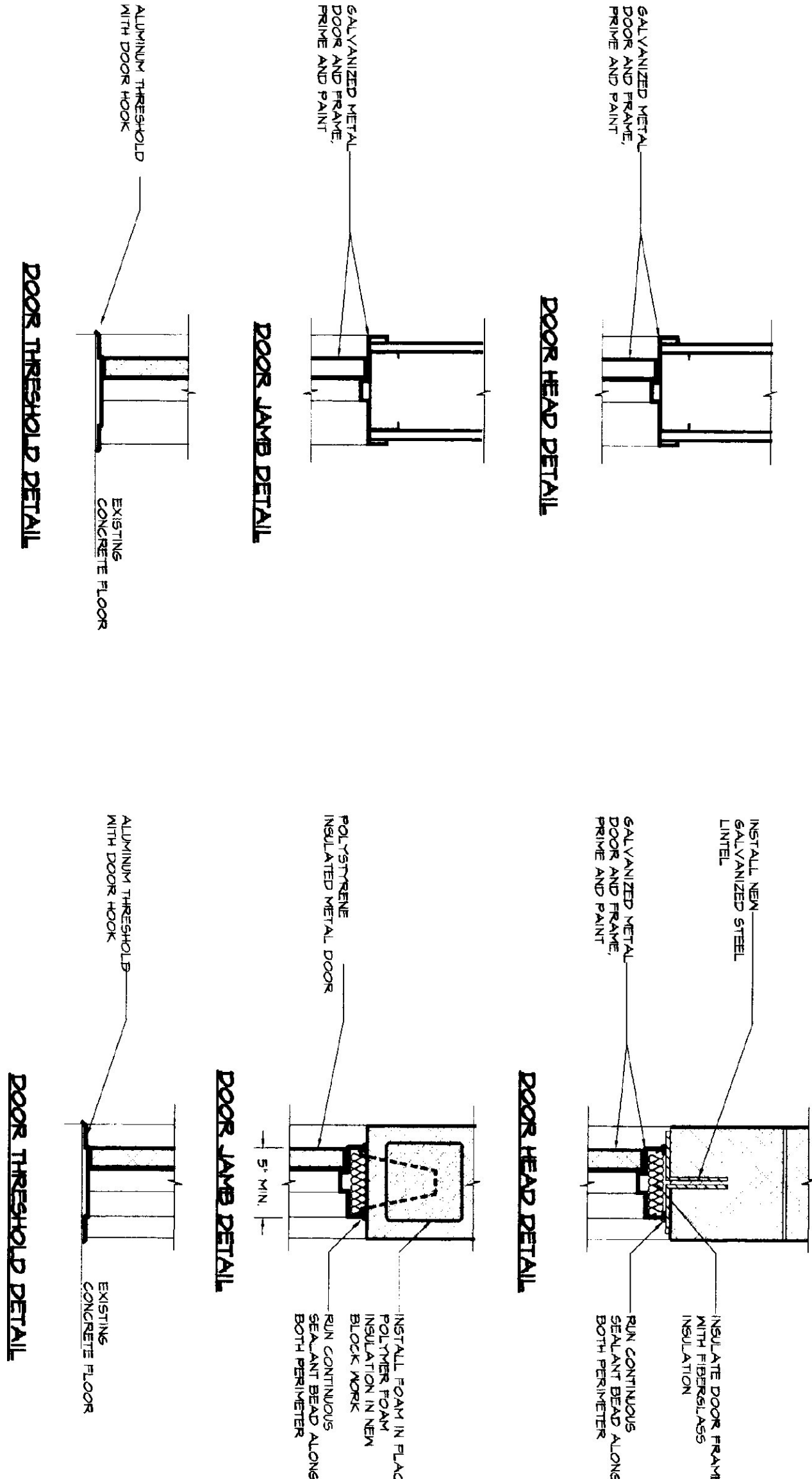
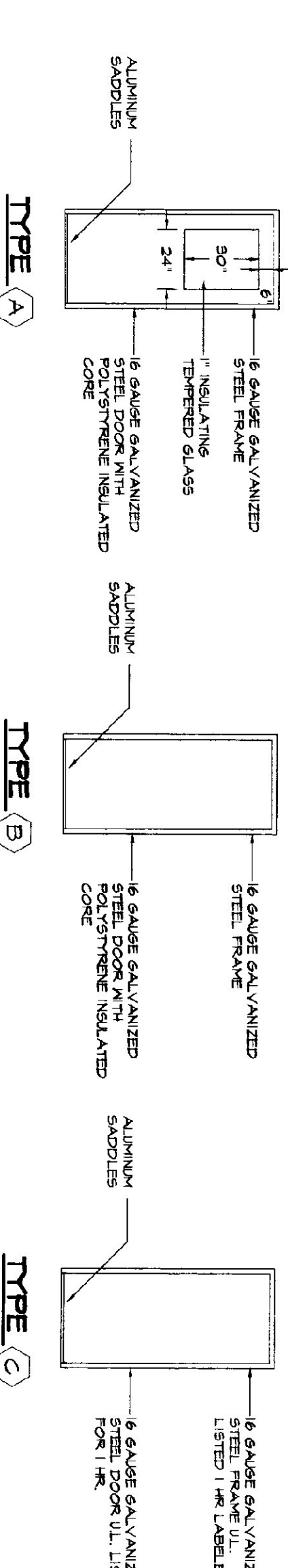
NO.	MANUFACTURER	SERIES	MODEL	MIN. GPM	HEAD (FT. HD.)	MOTOR				REMARKS
						HP	VOLT	PH	REMY	
P-1	BELL & GOSSETT	60	1X25 1/4	21	17	1/2	240	1	1750	PRIVATE - ZONE 1
P-1A	BELL & GOSSETT	60	1X25 1/4	21	17	1/2	240	1	1750	BACK-UP - ZONE 1
P-2	BELL & GOSSETT	60	2X25 1/4	66	25	1	240	1	1750	PRIVATE - ZONE 2
P-2A	BELL & GOSSETT	60	2X25 1/4	66	25	1	240	1	1750	BACK-UP - ZONE 2

PLAN SYMBOL: P#

DOOR SCHEDULE

DOOR NO.	DOOR SIZE	TYPE	GLASS	FRAME		UL LABEL	HANDWARE	REMARKS
				MATERIAL	DETAILS			
D-1	3'-6" x 7'-0"	1-3/4" A	INS. TEMP.	6AL. STL.	A-M4	-	EXT. KEYS	PROVIDE NEW HANDWARE TO MATCH EXISTING
D-2	3'-0" x 7'-0"	1-3/4" B	-	6AL. STL.	A-M4	-	EXT. KEYS	PROVIDE NEW HANDWARE TO MATCH EXISTING
D-3	3'-0" x 7'-0"	1-3/4" C	-	6AL. STL.	B-M4	1 HR.	INT. KEYS	PROVIDE NEW HANDWARE TO MATCH EXISTING

PLAN SYMBOL: D#



NEW INTERIOR DOOR DETAILS
SCALE: 1/2"=1'-0"

NEW EXTERIOR DOOR DETAILS
SCALE: 1/2"=1'-0"

MECHANICAL SPECIFICATIONS

CODES AND STANDARDS:
ALL WORK SHALL BE INSTALLED TO COMPLY WITH LATEST APPLICABLE EDITIONS OF THE BOCA CODE, STATE OF VERMONT, NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES, AND FEDERAL, STATE AND LOCAL CODES WHICH HAVE JURISDICTION IN EACH CASE. CODES ARE MINIMUM REQUIREMENTS. PAY FOR ALL PERMITS REQUIRED FOR THE WORK.

SUBMITTALS:
SUBMIT SHOP DRAWINGS FOR ALL BOILERS, PIPING, VALVES, EQUIPMENT AND ACCESSORIES FOR APPROVAL PRIOR TO CONSTRUCTION.

BOILER/EXHAUSTER UNITS:
THIS CONTRACTOR SHALL FURNISH AND INSTALL AS SPECIFIED HEREIN TWO NEW 1500-GPM CAPACITY PRESSURIZED BOILER/EXHAUSTER UNITS FOR ZONE 1 AND ZONE 2. UNITS SHALL BE MANUFACTURED BY BELL & GOSSETT OR EQUIVALENT. UNITS SHALL BE PROVIDED WITH GAUGE GLASS, WATER CUT-OFF WITH TEST LEVER AND MANUAL RESET SWITCH, PROVIDE ASSE 40 PSIG RELIEF VALVE, CAST IRON BURNER MOUNTING PLATE WITH INSULATING BLOCK AND REFRACTORY. THE BOILER SHALL BE ASSE LABELED.

THE OIL BURNERS SHALL BE FURNISHED WITH A FLAME RETENTION AUTOMATIC TYPE OIL BURNER. BURNER SHALL BE APPROVED AND LISTED BY UL. AND SHALL UTILIZE ELECTRONIC IGNITION. BURNER FLAME SAFETY CONTROLS SHALL BE PROVIDED. BURNER SHALL BE FACTORY SET TO OPERATE AT 150 PSIG. BURNER SHALL BE PROVIDED WITH 1/2" NPT WATER CUT-OFF WITH TEST LEVER AND MANUAL RESET SWITCH. PROVIDE ASSE 40 PSIG RELIEF VALVE. CAST IRON BURNER MOUNTING PLATE WITH INSULATING BLOCK AND REFRACTORY. THE BOILER SHALL BE ASSE LABELED.

HEATING SYSTEM PIPING: 2" AND LARGER SHALL BE BLACK STEEL PIPE, ASTM A106 GRADE A OR B. SCHEDULE 40 PIPE ENDS SHALL BE ROLL GROOVED FOR MECHANICAL GROOVED FITTING ASSEMBLY.

HYDRONIC HEATING SYSTEM PIPING: 2" AND SMALLER SHALL BE TYPE "L" COPPER TUBING WITH MEDIUM COPPER FITTINGS FOR SOLIDER ASSEMBLY.

PIPE OIL PIPING: SHALL BE SCHEDULE 40 STEEL PIPE WITH WALLEABLE IRON SCREWED FITTINGS, CAST IRON FITTINGS AND FITTINGS.

STEL PIPING: SCREWED MECHANICAL FITTINGS SHALL BE ASTM A-53B, DOUBLE ROLL FABRICATED STEEL FITTINGS WITH GROOVED OR SPOUGED DESIGNED TO ACCEPT GROOVED END CONNECTIONS AND APPROVED FOR 50 LBS. AND CLASS B PIPING SYSTEMS. WELDS SHALL BE WELDED BY EIGHT ASME D-2000 WELDERS.

COPPER PIPING: SHALL BE MEDIUM COPPER SOLIDER JOINTS, ANSI B16.22 STEAM/HEATED WATER JOINTS AND MADE WITH SILVERWELD LEAD FREE SOLDER WITH NON-CORROSIVE FLUX.

WALLEABLE IRON THREADED FITTINGS: SHALL BE ANSI B16.3 CLASS 300 STANDARD PATTERN FOR THREADED JOINTS.

D-ELECTRIC UNITS: TO PREVENT CORROSION CAUSED BY DISSIMILAR MATERIALS PROVIDE DI-ELECTRIC UNITS EQUAL TO WATTS SERIES 3000 WITH VALVE TO MATCH PIPING SYSTEMS. FLANGED DI-ELECTRIC FITTINGS SHALL BE EQUAL TO WATTS SERIES 3000 WITH VALVE TO MATCH PIPING SYSTEMS.

VALVES:
VALVES SHALL BE APPROVED WATTS OR JAMESBORO EQUAL TO THE WATTS MODELS SPECIFIED BELOW.

SHUT VALVES: BALL VALVES FOR HEATING SERVICES SHALL BE EQUAL TO WATTS B-6000 BRONZE BODY, 600 LB. PRESS. CHROME PLATED BALL AND STEEL EXTENDED HANDLE FOR INSULATION THICKNESS. FIVE SEEN AND SEALED WITH 200 PSIG OSEAT GATE VALVES. WATTS SERIES F-502 CAST IRON BONNET, SOLID DISC, BRONZE TRIM, IRON BODY, 125 PSIG 6547 300 PSIG NOS. COMPLY WITH 1985 99-10.

CHECK VALVES: WATTS SERIES C-15 SOLIDER ENDS, SERIES C-1 SCREWED ENDS, BRONZE BODY, 200 LBS. NOS. 547 NOS.

BRAN VALVES: WATTS NO. B-6000 SCREWED ENDS, NO. B-6000 SWEAT ENDS, PROVIDE CAP AND CHAIN WITH 1/2" NPT 1/2" TO 3/4" NOS.

BALANCING VALVES: TORX AND ANDERSON MODEL 57A SIZES 1/2" TO 2" WITH KEYWAY STOP, BRONZE BODY, 300 PSIG.

MANUAL AND INSTANT STRAINERS: DESIGNED FOR 125 PSIG WORKING AND SHALL BE CAST IRON FOR SIZES 3" AND LARGER. STRAINERS SHALL BE INSTALLED ON EACH MAIN LINE AND BRANCH LINE. STRAINERS SHALL BE INSTALLED ON EACH MAIN LINE AND BRANCH LINE. STRAINERS SHALL BE INSTALLED ON EACH MAIN LINE AND BRANCH LINE. STRAINERS SHALL BE INSTALLED ON EACH MAIN LINE AND BRANCH LINE.

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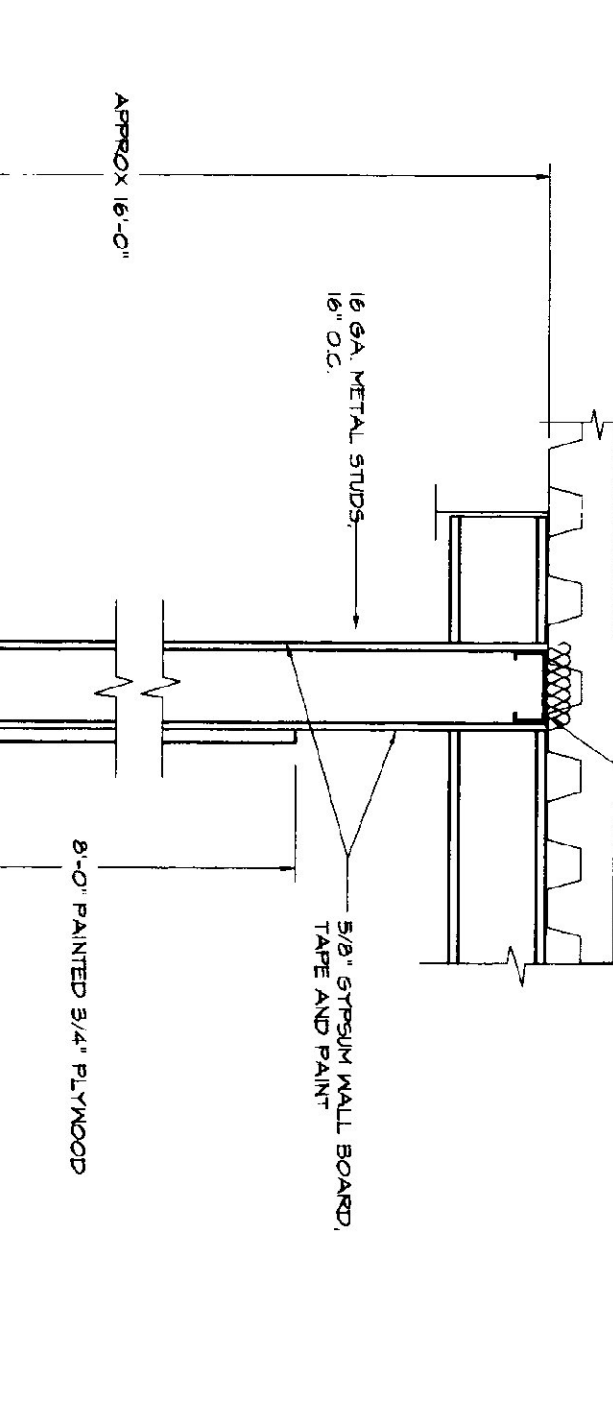
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NEW BOILER ROOM WALL SECTION
SCALE: 1/4"=1'-0"

MECHANICAL SPECIFICATIONS

PIPE SPECIFICATIONS:
FINISH AND INSTALL PIPE LINE THERMO-SETTING WERE SPECIFIED OR SHOWN ON THE DRAWINGS. UNITS SHALL BE EQUAL TO WATTS SERIES 3000 WITH VALVE TO MATCH PIPING SYSTEMS. FLANGED DI-ELECTRIC FITTINGS SHALL BE EQUAL TO WATTS SERIES 3000 WITH VALVE TO MATCH PIPING SYSTEMS.

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THE OIL BURNERS SHALL BE FURNISHED WITH A FLAME RETENTION AUTOMATIC TYPE OIL BURNER. BURNER SHALL BE APPROVED AND LISTED BY UL. AND SHALL UTILIZE ELECTRONIC IGNITION. BURNER FLAME SAFETY CONTROLS SHALL BE PROVIDED. BURNER SHALL BE FACTORY SET TO OPERATE AT 150 PSIG. BURNER SHALL BE PROVIDED WITH 1/2" NPT WATER CUT-OFF WITH TEST LEVER AND MANUAL RESET SWITCH. PROVIDE ASSE 40 PSIG RELIEF VALVE. CAST IRON BURNER MOUNTING PLATE WITH INSULATING BLOCK AND REFRACTORY. THE BOILER SHALL BE ASSE LABELED.

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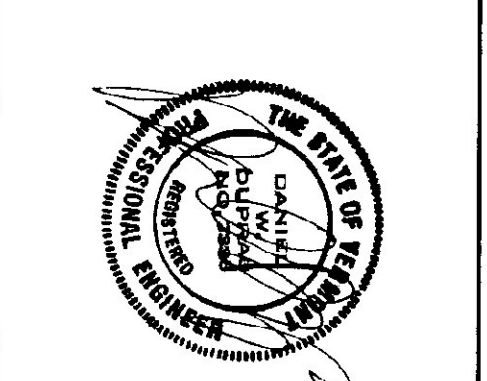
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NEW BOILER ROOM WALL SECTION
SCALE: 1/4"=1'-0"



NO.	ISSUED FOR	DATE
1	STATE PRELIMINARY REVIEW	10/20/01
2	BIDDING	11/01/01

LANE ASSOCIATES CONSULTING ENGINEERS, P.C.

HEATING, VENTILATION, & AIR CONDITIONING, PLUMBING, FIRE PROTECTION, & ELECTRICAL.

CHARLES F. LANE, P.E.
DANIEL W. DURBIN, P.E.
WILLIAM C. LANE, P.E.
51 KILLINGTON AVENUE
RUTLAND, VERMONT 05701
TELEPHONE: (802)747-3346
FAX/MODERN: (802)747-3346

MECHANICAL SPECIFICATIONS SCHEDULES AND DETAILS

BENNINGTON DISTRICT NO. 1 AOT MAINTENANCE GARAGE PHASE I - HEATING SYSTEM RENOVATION

APPR. DWD DRW. TD/BNW SCALE AS NOTED PROJ. NO. 0032-01

M 4