


BOILER REPLACEMENT FOR
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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 12393, Expiration date: 04-02-2011.

Comm. No. 5806-09

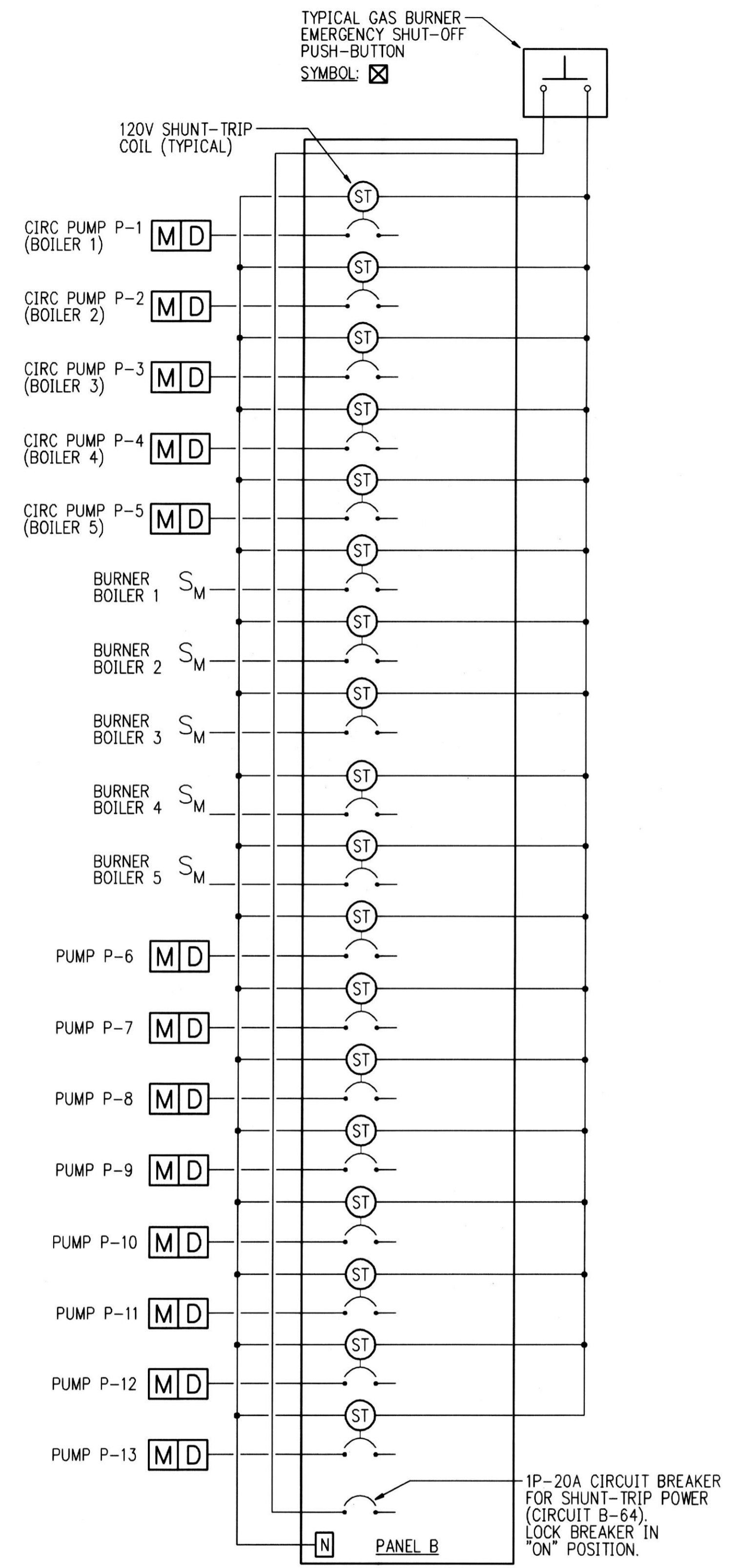
Sym.	REVISIONS	Date

Drawn	WCS
Designed	WCS
Checked	FJM
Approved	REL
Scale	NONE
Comm No	5806-09
Date	4/7/2010

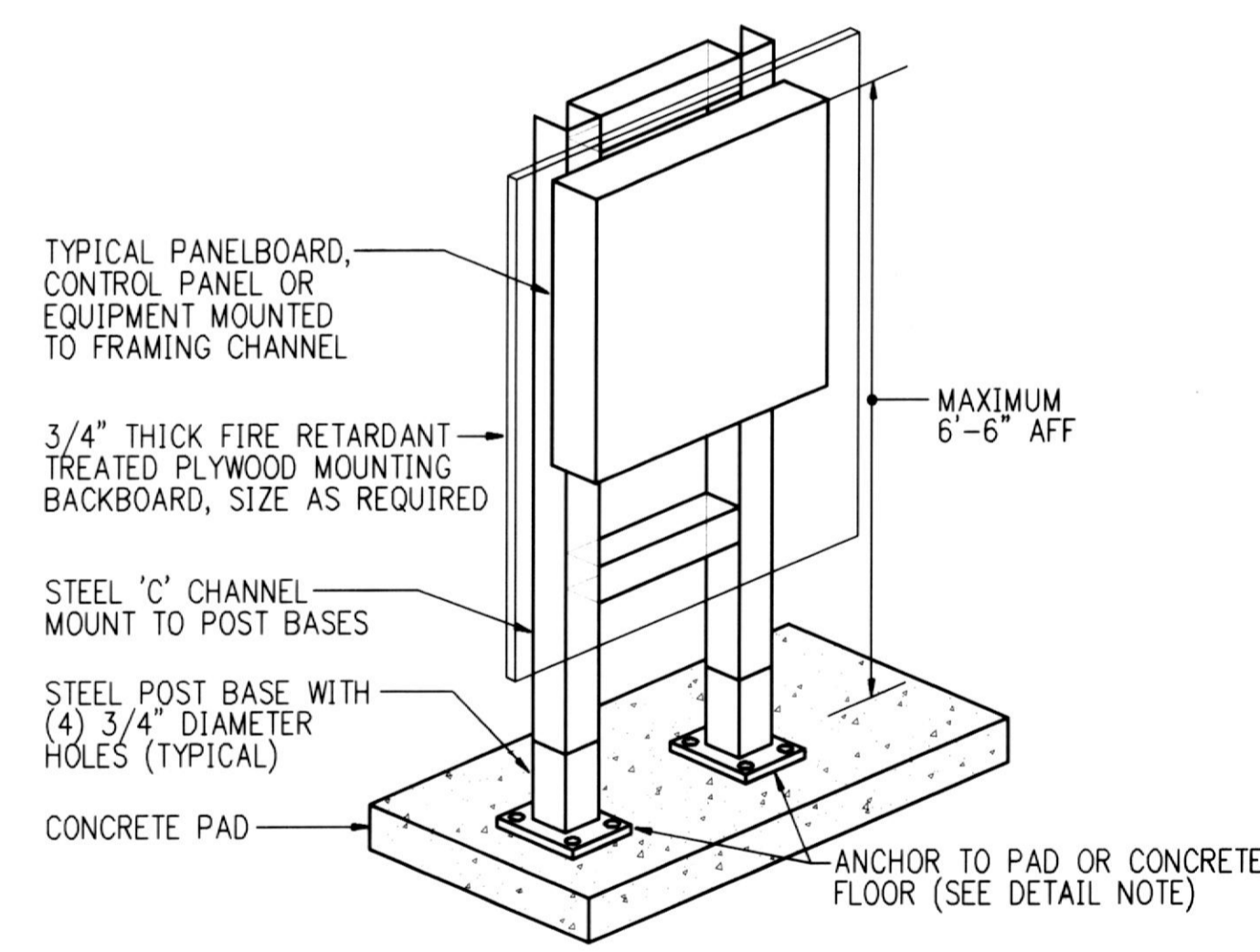
Drawing Title
SYMBOLS, ABBREVIATIONS, AND DETAILS
 Sheet No:
E0.1

ELECTRICAL SYMBOLS AND ABBREVIATIONS

GENERAL	ABBREVIATIONS
<p>① DENOTES REFERENCE TO SPECIFIC NOTE ON DRAWING.</p> <p> -DETAIL OR PLAN NUMBER</p> <p> -DRAWING NUMBER WHERE DETAIL OR PLAN IS LOCATED.</p> <p>#/E## DETAIL REFERENCE: DETAIL NUMBER/DRAWING NUMBER</p>	<p>A, AMP AMPERE</p> <p>AIC AMPERES INTERRUPTING CAPACITY</p> <p>ATC AUTOMATIC TEMPERATURE CONTROL</p> <p>ATS AUTOMATIC TRANSFER SWITCH</p> <p>AWG AMERICAN WIRE GAUGE</p> <p>BAS BUILDING AUTOMATION SYSTEM</p> <p>BMS BUILDING MANAGEMENT SYSTEM</p> <p>C CONDUIT</p> <p>CB CIRCUIT BREAKER</p> <p>CIRC CIRCULATION</p> <p>CKT CIRCUIT</p> <p>DISC DISCONNECT</p> <p>DWC DRAWING</p> <p>DX DISCONNECT EXISTING</p> <p>EC EMPTY CONDUIT WITH PULL STRING</p> <p>ECB ENCLOSED CIRCUIT BREAKER</p> <p>EF EXHAUST FAN</p> <p>EQUIP EQUIPMENT</p> <p>ETR EXISTING TO REMAIN</p> <p>EX EXISTING</p> <p>EXIST EXISTING</p> <p>FLA FULL LOAD AMPERES</p> <p>FSS FUSED SAFETY SWITCH</p> <p>G, GND GROUND</p> <p>HOA HAND-OFF-AUTOMATIC</p> <p>HP HORSEPOWER</p> <p>JB JUNCTION BOX</p> <p>KVA KILOVOLT-AMPERES</p> <p>KW KILOWATT</p> <p>LRA LOCKED ROTOR AMPERES</p> <p>MAX MAXIMUM</p> <p>MCA MINIMUM CIRCUIT AMPACITY</p> <p>MCB MAIN CIRCUIT BREAKER</p> <p>MDP MAIN DISTRIBUTION PANEL</p> <p>MFS MAXIMUM FUSE SIZE</p> <p>MH MOUNTING HEIGHT</p> <p>MIN MINIMUM</p> <p>MLO MAIN LUGS ONLY</p> <p>MOCPP MAXIMUM OVERCURRENT PROTECTION</p> <p>N NEUTRAL CONDUCTOR</p> <p>N.C. NORMALLY CLOSED</p> <p>NDP NOTRE DAME PREP</p> <p>NEC NATIONAL ELECTRICAL CODE</p> <p>NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION</p> <p>NFSS NON-FUSED SAFETY SWITCH</p> <p>NIC NOT IN CONTRACT</p> <p>N.O. NORMALLY OPEN OR NUMBER</p> <p>NTS NOT TO SCALE</p> <p>P POLE, POLES OR PUMP</p> <p>PNL PANEL</p> <p>PUH PROPELLER UNIT HEATER</p> <p>RL RELOCATED</p> <p>RR REMOVE AND RELOCATE</p> <p>RX REMOVE EXISTING</p> <p>SF SUPPLY FAN</p> <p>SWBD SWITCHBOARD</p> <p>TYP TYPICAL</p> <p>UON UNLESS OTHERWISE NOTED</p> <p>V VOLT, VOLTS</p> <p>W WATTS/WIRE, WIRES</p>
<p style="text-align: center;">DEMOLITION</p> <p> REMOVE CONDUIT AND WIRING BACK TO PANELBOARD.</p> <p> DISCONNECT EXISTING EQUIPMENT CONNECTION.</p> <p> DISCONNECT EXISTING ELECTRIC MOTOR.</p> <p> REMOVE COMBINATION MOTOR STARTER/DISCONNECT.</p> <p> REMOVE SAFETY DISCONNECTING SWITCH.</p>	
<p style="text-align: center;">WIRING</p> <p> HOMERUN TO PANELBOARD. NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS. NUMBER OF HASH MARKS INDICATES NUMBER OF CONDUCTORS. WHERE NO HASH MARKS APPEAR, PROVIDE TWO (2) CONDUCTORS PLUS GROUND. REFER TO PANEL SCHEDULES FOR CONDUCTOR SIZES. PROVIDE GROUND WIRES IN CONDUITS.</p> <p> CONDUIT AND WIRING RUN EXPOSED IN OPEN CEILINGS, UON. PROVIDE GROUND WIRES IN CONDUITS.</p>	
<p style="text-align: center;">POWER</p> <p> ELECTRIC PANELBOARD (120/208V), SURFACE MOUNTED.</p> <p> PLYWOOD MOUNTING BOARD, 4' W x 8' H x 3/4" THICK, UON.</p> <p> COMBINATION TYPE MOTOR STARTER, WITH STARTER AND NON-FUSED SAFETY DISCONNECTING SWITCH, HOA SWITCH, "PUSH-TO-TEST" RED "STOPPED" AND GREEN "RUNNING" INDICATING PILOT LIGHTS, AND TWO SETS OF N.O. AND N.C. AUXILIARY CONTACTS IN NEMA TYPE 1 ENCLOSURE, UON. MOUNT 5'-6" AFF TO TOP OF ENCLOSURE, UON. STARTER AND SWITCH SIZE AS NOTED ON PLANS.</p> <p> SAFETY DISCONNECTING SWITCH IN NEMA TYPE 12 ENCLOSURE, UON. MOUNT ADJACENT TO BOILER BURNER, UON. PROVIDE 2P-30A NFSS, CAPABLE OF BEING LOCKED IN THE OPEN POSITION, UON.</p> <p> MANUAL MOTOR STARTER/THERMAL OVERLOAD SWITCH, WITH OVERLOAD PROTECTION, IN NEMA TYPE 1 ENCLOSURE, UON. MOUNT ADJACENT TO EQUIPMENT BEING SERVED, UON.</p> <p> MANUAL MOTOR STARTER/THERMAL OVERLOAD SWITCH WITH HOA SWITCH, CONTROL RELAY, "PUSH-TO-TEST" RED "STOPPED" AND GREEN "RUNNING" INDICATING PILOT LIGHTS AND NEMA TYPE 1 CABINET ENCLOSURE. REFER TO DIAGRAM 2/E6.1 FOR CONNECTIONS AND ADDITIONAL INFORMATION.</p> <p> ELECTRIC MOTOR CONNECTION.</p> <p> HARD WIRING ELECTRICAL CONNECTION. CONNECT TO EQUIPMENT AS NOTED.</p> <p> HEAVY DUTY OIL TIGHT EMERGENCY PUSH BUTTON STATION WITH FULL GUARD, MOUNTED 48" AFF, FOR SHUT-DOWN OF BOILERS AND ASSOCIATED EQUIPMENT. CONNECT TO SHUNT-TRIP CIRCUIT BREAKERS IN PANEL B. PROVIDE RED SWITCH COVER AND IDENTIFY AS "BOILER EMERGENCY SHUT-DOWN". COORDINATE EXACT LOCATION WITH STATE BOILER INSPECTOR. REFER TO DETAIL 1/E0.1 FOR CONNECTIONS.</p> <p> DUPLEX GROUNDING-TYPE, GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLE (NEMA 5-20R), SURFACE WALL MOUNTED 18" AFF, UON.</p>	
<p style="text-align: center;">LIGHTING</p> <p> CAREFULLY REMOVE EXISTING LIGHTING FIXTURE TO BE RELOCATED. EXISTING LIGHTING CIRCUIT SHALL REMAIN. REMOVE WIRE AND CONDUIT BACK TO POINT WHERE EXISTING LIGHTING CIRCUIT CAN BE INTERCEPTED FOR RECONNECTION.</p> <p> RELOCATED LIGHTING FIXTURE. PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT RELOCATED LIGHTING FIXTURE TO EXISTING LIGHTING CIRCUIT IN MECHANICAL ROOM.</p>	



DETAIL 1 E0.1
 GAS BURNER EMERGENCY SHUT-OFF DIAGRAM
 NOT TO SCALE



DETAIL NOTE: 1/2" DIAMETER GALVANIZED STEEL ALL-THREAD ADHESIVE ANCHOR WITH GALVANIZED STEEL FLAT WASHER, LOCK WASHER AND HEXAGON NUT; EMBEDMENT TO BE 4" MINIMUM (TYPICAL OF 4 PER BASE). CHANNEL, POST BASES, AND HARDWARE SHALL BE CORROSION-RESISTANT.