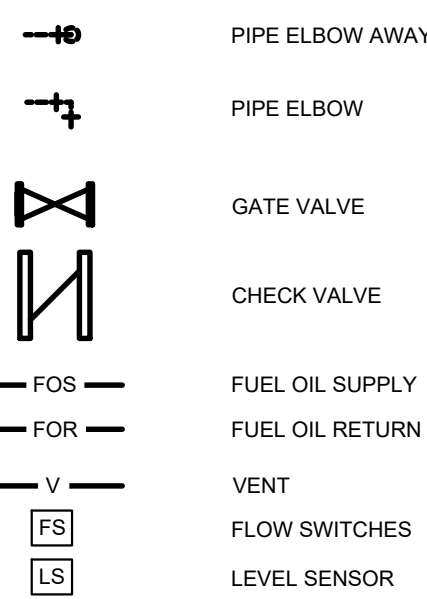


MECHANICAL LEGEND

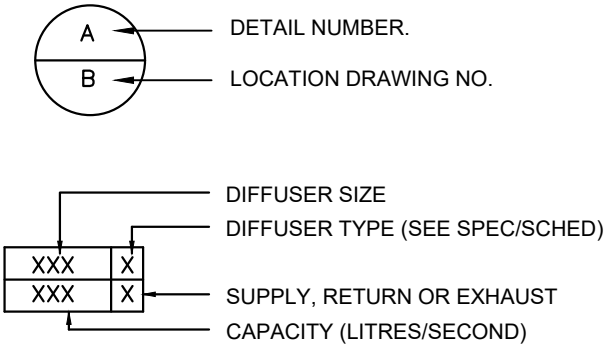
PLUMBING



VENTILATION



DETAIL NUMBERING SYSTEM



CONSTRUCTION NOTES

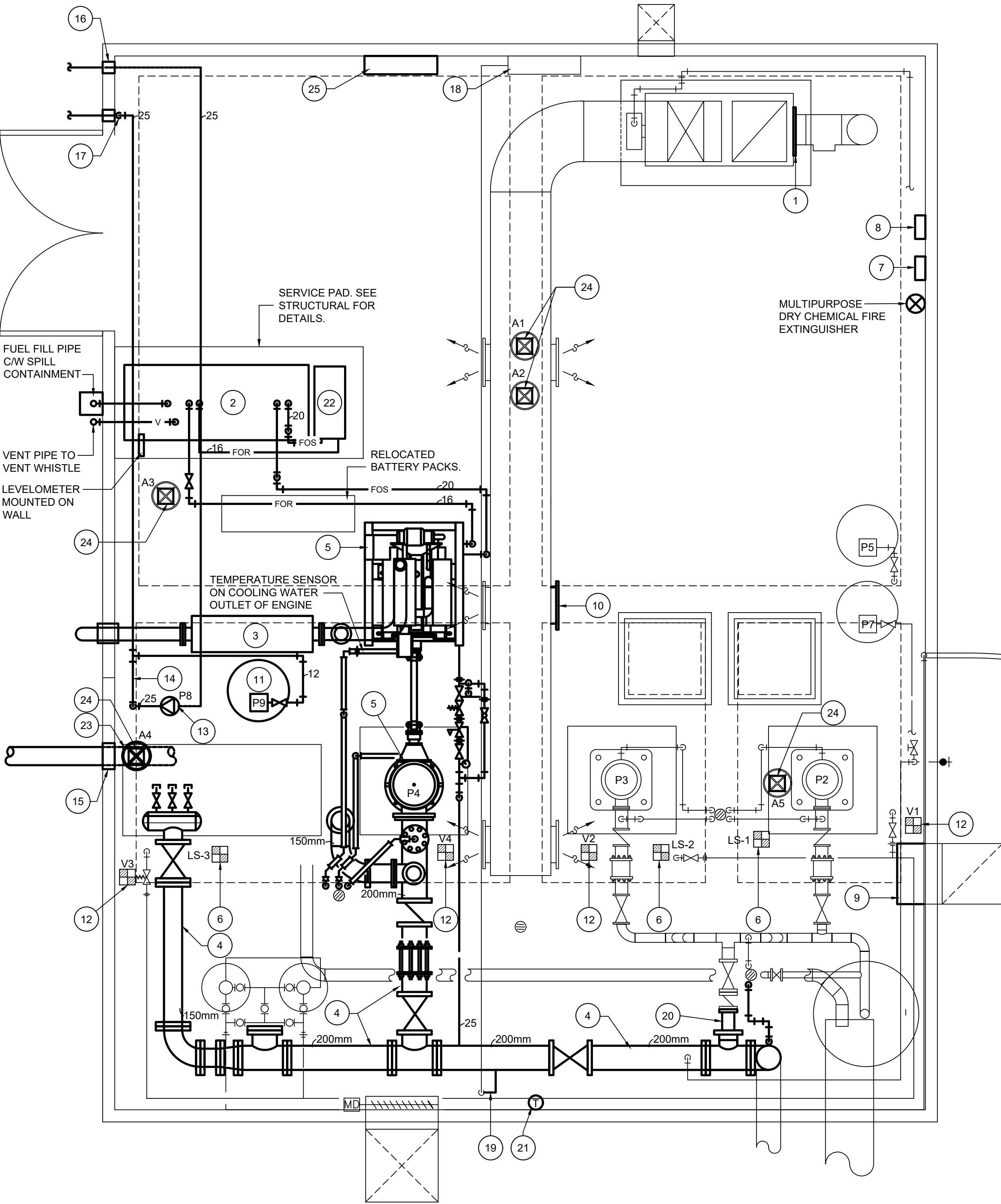
1. THESE DRAWINGS REASONABLY REPRESENT EXISTING CONDITIONS. ACTUAL CONDITIONS MAY DEVIATE FROM THAT SHOWN/IDENTIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS, CHECK ALL DIMENSIONS, AND VERIFY MATERIALS REQUIRED TO COMPLETE THIS WORK. CONTRACTOR SHALL INFORM THE ENGINEER/PROJECT MANAGER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
2. REMOVE FROM SITE DEMOLISHED MATERIALS, DEBRIS, AND RUBBISH. DISPOSE DEMOLISHED MATERIALS AS PER THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
3. COMPLETE ALL WORK IN ACCORDANCE WITH NFPA 13 (2019), NFPA 20 (2019), NATIONAL PLUMBING CODE(2015), CSA B139 (2019) AND THE NATIONAL BUILDING CODE OF CANADA (2015).
4. THIS DEMOLITION PLAN IS MEANT TO BE A CONVENIENCE TO THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION & REINSTATEMENT NECESSARY FOR THE INSTALLATION OF THE NEW WORK WHETHER SHOWN HERE OR NOT.
5. BUILDING IS TO REMAIN OPERATIONAL DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR TO MAINTAIN OPERATIONAL, SECURITY AND WEATHER TIGHT.
6. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY REMOVAL/RELOCATION OF MECHANICAL SYSTEMS WHICH INTERFERE WITH COMPLETING THE REPAIR WORK INDICATED ON THE DRAWINGS. MECHANICAL SYSTEMS TO BE REINSTATED ONCE REPAIR WORK IS COMPLETE. ALL WORK MUST BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES, BY LICENSED TRADES PEOPLE.
7. ALL ITEMS WILL BE COORDINATED WITH STRUCTURAL, ELECTRICAL AND CIVIL DURING CONSTRUCTION STAGE.
8. UNDER GROUND FOUNDATION WALL PENETRATIONS TO BE MADE WATER TIGHT. SEE CIVIL SPECIFICATION FOR LEAK SEAL REQUIREMENTS.

DEMOLITION NOTES:

1. REMOVE EXISTING LEVEL SWITCHES
2. REMOVE EXISTING FUEL TANK, AND ASSOCIATED SUPPLY AND RETURN FUEL PIPING
3. REMOVE EXISTING EXHAUST PIPE FOR DIESEL ENGINE
4. REMOVE EXISTING DOMESTIC WATER PIPING BACK TO EXISTING CHECK VALVE
5. REMOVE EXISTING FIRE PUMP, ASSOCIATED DIESEL ENGINE AND EQUIPMENT.
6. EXISTING 12mm DOMESTIC WATER FROM EXISTING WELL.
7. REMOVE EXISTING EXHAUST FAN.

MECHANICAL NOTES:

1. NEW GUARD FOR FURNACE RETURN.
2. NEW 380L FUEL TANK DOUBLE WALL ULC S601, VACUUM IN INTERSTITIAL SPACE WITH VACUUM GAUGE, FILL VENT, SUPPLY AND RETURN, VENT AND EMERGENCY VENT, LEVELOMETER. RE-CONNECT INTO EXISTING FILL AND VENTING LINES.
3. NEW 100mm EXHAUST SILENCER AND PIPE. REFER TO DETAIL 9/M3.
4. NEW FIRE PROTECTION PIPING. SEE SPEC FOR MATERIAL TYPE.
5. NEW FIRE PUMP AND DIESEL ENGINE SEE SPEC.
6. NEW LEVEL TRANSMITTER, TO TIE INTO EXISTING FIRE ALARM PANEL. SEE SPEC.
7. NEW COMBINATION HORN AND STROBE, BY ELECTRICAL.
8. NEW COMBINATION CO GAS DETECTION SENSOR AND CONTROLLER. REFER TO DETAIL 10/M3.
9. NEW EXHAUST FAN SEE M4 FOR FAN SCHEDULE.
10. SUPPLY AND INSTALL NEW S/A GRILLE TO MATCH EXISTING.
11. NEW CHLORINATION TREATMENT SYSTEM. 0.5 L/HR SODIUM HYPOCHLORITE INJECTION PUMP, TANK, INJECTION NOZZLE, PVC PIPING.
12. NEW SOLENOID VALVE SUPPLIED BUY MECHANICAL WIRED BY ELECTRICAL.
13. NEW RE-CIRCULATION PUMP P-8. SEE M4 FOR PUMP SCHEDULE.
14. 25mm SUPPLY PIPE FOR NEW WATER STORAGE TANK.
15. 300mm FIRE WATER SUPPLY PIPE FROM NEW WATER STORAGE TANK. PROVIDE LEAK SEAL AT BUILDING WALL PENETRATION. INVERT OF PIPE -2680 mm. REFER TO CIVIL DWG. C1 FOR ROUTING.
16. 25mm RETURN PIPING. PROVIDE LEAK SEAL AT BUILDING WALL PENETRATION. INVERT OF PIPE -2680mm. REFER TO CIVIL DWG. C1 FOR ROUTING.
17. 25mm SUPPLY PIPE DOWN THROUGH FLOOR AT THIS APPROX. LOCATION. PROVIDE LEAK SEAL AT BUILDING WALL PENETRATION. INVERT OF PIPE -2800mm. REFER TO CIVIL DWG. C1 FOR ROUTING.
18. CONNECT NEW FIRE PUMP CONTROL CONTACTS INTO EXISTING CONTROLLER. CONTRACTOR TO PROVIDE DRY CONTACT INPUT FROM THE FIRE ALARM TO SHOW ACTIVE FLOW. EXISTING CONTROLLER SHALL BE RE-PROGRAMMED TO SUIT NEW FIRE PUMP CONTROL REQUIREMENTS.
19. RECONNECT EXISTING 12mm PIPE TO NEW PIPING PROVIDE DIELECTRIC UNION STAINLESS STEEL TO COPPER.
20. NEW DOMESTIC WATER PIPING. SEE SPEC FOR MATERIAL TYPE.
21. REPLACE EXISTING REVERSE ACTING THERMOSTAT WITH NEW.
22. NEW FUEL POLISHING SYSTEM. POLISHER TO BE WITH ASME PRESSURE VESSEL, COALESCING ELEMENT, LIQUID FILLED PRESSURE GAUGES, CONTROL PANEL 120V, 15 A MOTOR, CONTINUOUS DUTY GEAR PUMP, WATER DRAIN VALVE, DRIP TRAY, WATER SENSOR, FUEL INLET ISOLATION VALVE, STAINLESS STEEL BRAIDED FLEXIBLE CONNECTIONS, "Y" STRAINER, CHECK VALVE, DRIP TRAY FLOAT SWITCH, STAINLESS STEEL ENCLOSURE.
23. NEW SLIDE GATE, BODY SHALL BE STAINLESS STEEL, ALL IRON PARTS OF THE VALVE SHALL BE COATED IN AN NSF-61 2-PART EPOXY. VALVE BODY MUST BE SELF-CONTAINED AND SHALL MOUNT BY MEANS OF A 125 LB ANSI FLANGE. 300mm VALVE GATE SHALL SEAL OVER AN O-RING. SEATING AND UNSEATING PRESSURE SHALL BE RATED AT 345KPA. LEAKAGE SHALL BE LESS THAN .008 L/s PER FOOT OF SEATED PERIMETER, REGARDLESS OF THE DIRECTION OF HEAD. VALVE STEM SHALL BE STAINLESS STEEL, AND VALVE NUT SHALL BE BRONZE. VALVE SHALL BE OPERATED BY A 50mm CAST NUT. WHERE REQUIRED MANUFACTURER SHALL PROVIDE VALVE OPERATING STEMS, FLOOR STANDS AND STEM GUIDES. THE MANUFACTURER SHALL SHOW PROOF OF ISO 9001 CERTIFICATION.
24. ELECTRONIC ACTUATOR SHALL BE 120 V, 60 HZ, SIZE 20, SPEED 43 OR 57 RPM, STARTING A 22, RATED TORQUE 14 A, MINIMUM TORQUE 92 FT.LB LOW INERTIA MOTOR, SQUIRREL CAGE CONSTRUCTION, INDUCTION WINDINGS, TENV ENCLOSURE, CLASS F INSULATION, CLASS B TEMPERATURE RISE, DUAL EMBEDDED THERMOSTAT, SEALED/LUBRICATED FOR LIFE BEARINGS, COMPLIES WITH EN15714-2, IEC 60034 AND NEMA MG1.
25. PUMPS P2 & P3 CONTROL PANEL C/W DISCONNECT SWITCH ACROSS-THE-LINE STARTERS, 600V/3/60, HOA SWITCHES ALTERNATOR, CONTROL FROM EXISTING PRESSURE SWITCHES. PS-2 & PS-3. SEE 5/M5 FOR DETAILS.



MECHANICAL FLOOR PLAN - PLAN VIEW

MECHANICAL DEMOLITION PLAN - PLAN VIEW

SCALE: 1:25
0mm 500mm 1000mm 1500mm 2000mm 2500mm

01
M1

02
M1