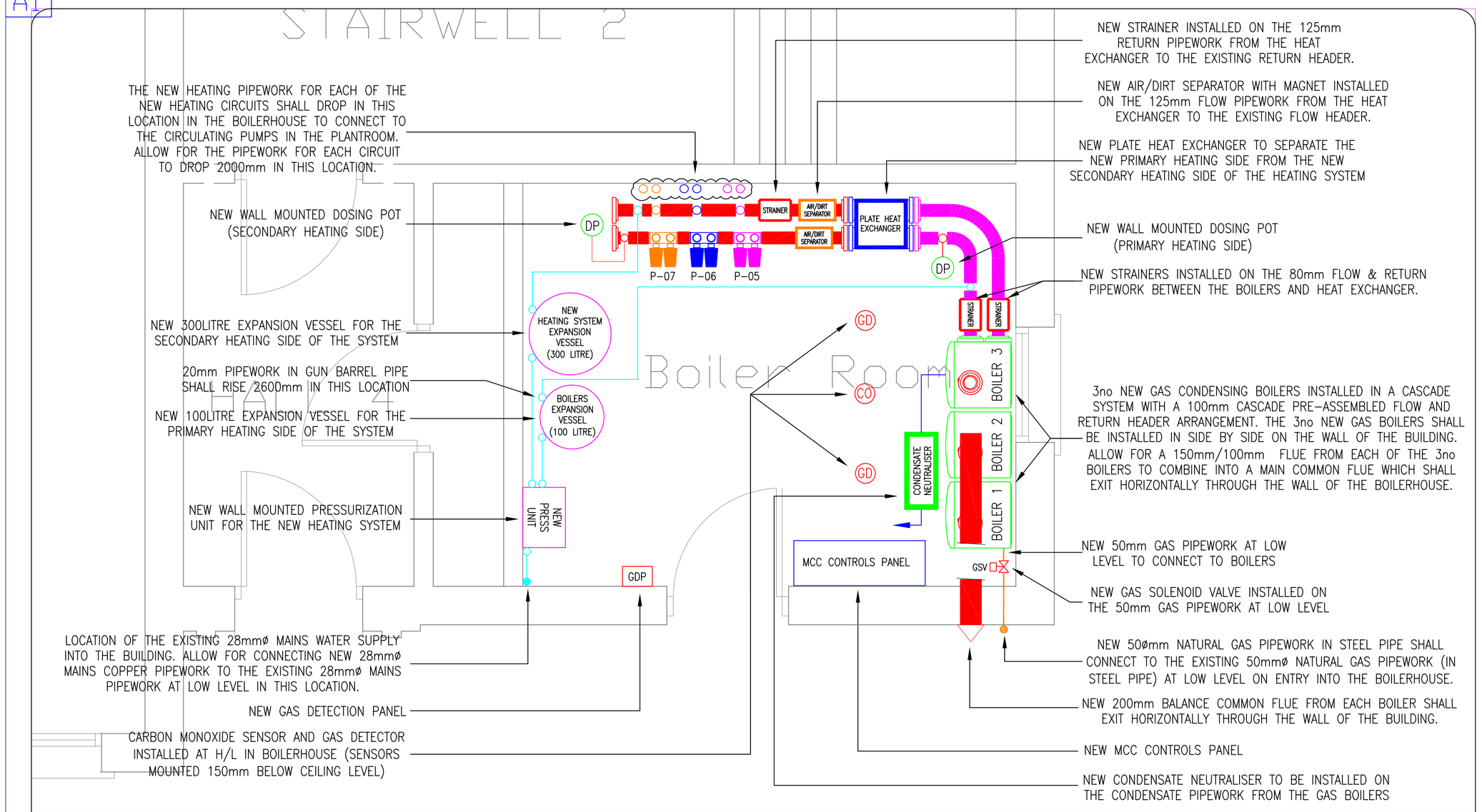
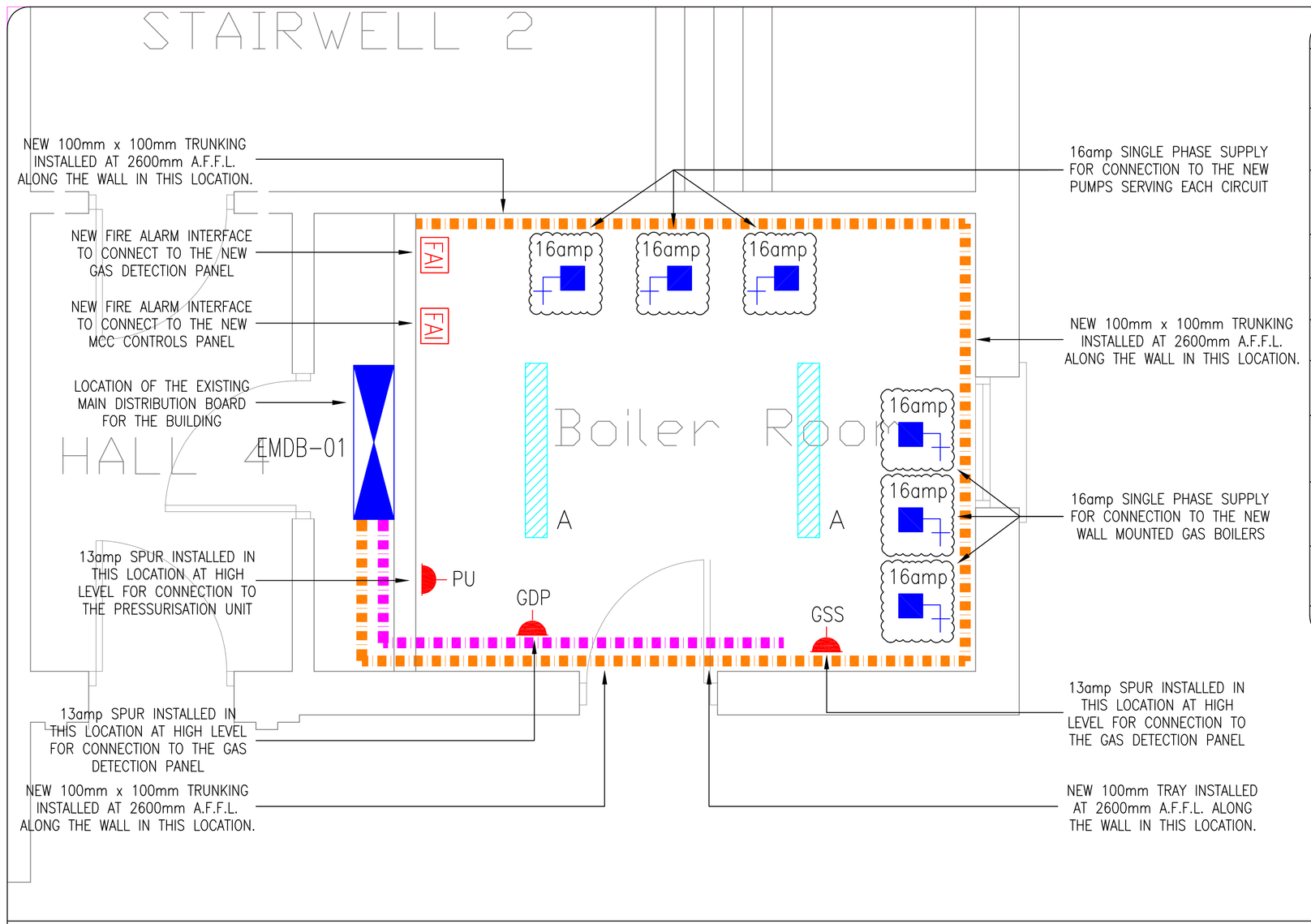
A1



MECHANICAL LAYOUT FOR THE BOILERHOUSE OF THE BUILDING (SCALE 1:50)



ELECTRICAL LAYOUT FOR THE BOILERHOUSE OF THE BUILDING (SCALE 1:50)

ELECTRICAL SCHEMATIC LEGENDS AND SYMBOLS

PU	NEW 13amp FUSED ELECTRICAL SPUR (SWITCHED) TO BE INSTALLED AT LOW LEVEL FOR THE NEW PRESSURISATION UNIT IN THE BOILERHOUSE.
GIV	NEW 13amp FUSED ELECTRICAL SPUR (UNSWITCHED) TO BE INSTALLED AT HIGH LEVEL FOR THE GAS ISOLATION VALVE IN THE BOILERHOUSE.
GDP	NEW 13amp FUSED ELECTRICAL SPUR (SWITCHED) TO BE INSTALLED AT LOW LEVEL FOR THE NEW GAS DETECTION PANEL IN THE BOILERHOUSE.
* AMP	SINGLE PHASE ISOLATOR (* DENOTES RATING OF ISOLATOR)
EMDB	EXISTING MAIN DISTRIBUTION ELECTRICAL BOARD FOR THE BUILDING.
MCC CONTROL PANEL	NEW MCC CONTROLS PANEL LOCATED IN THE BOILERHOUSE
450	NEW TWIN 13A SWITCHED SOCKET OUTLET SURFACE MOUNTED ON THE WALL AT 450mm A.F.F.L. (TO THE BOTTOM)
	NEW GALVINISED STEEL TRAY TO BE INSTALLED AT HIGH LEVEL EXPOSED FOR POWER CABLE (SEE DRAWING FOR PROPOSED SIZE)
	NEW GALVINISED STEEL TRAY TO BE INSTALLED AT HIGH LEVEL EXPOSED FOR SUB-MAINS CABLE (SEE DRAWING FOR PROPOSED SIZE)
A	NEW IP66 RATED 30watt LED LUMINAIRE. LIGHT FITTING SHALL BE SURFACE MOUNTED ON THE CEILING. SEE SPECIFICATION FOR FURTHER DETAILS.
FAI	GENERAL FIRE ALARM INTERFACE

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL DRAWINGS & SPECIFICATIONS.

2. THE CONTRACTOR SHALL CO-ORDINATE FULLY WITH ALL OTHER TRADES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY RESOURCES FOR THE SUCCESSFUL CO-ORDINATION OF THE WORKS. THE CONTRACTOR SHALL ALLOW FOR CO-ORDINATING THE MECHANICAL INSTALLATION WITH THE ELECTRICAL CONTRACTOR ON SITE. EXTRA COSTS INCURRED DUE TO THE CO-ORDINATION EXERCISE NOT BEING COMPLETED WILL NOT BE ACCEPTED BY THE ENGINEER.

3. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS TO BE TAKEN ON SITE.

4. EXACT LOCATIONS OF ALL SERVICES TO BE AGREED ON SITE. FINAL LOCATIONS OF ALL SERVICES TO BE CO-ORDINATED ON SITE WITH FIXED FURNITURE LAYOUTS.

5. THE CONTRACTOR SHALL ALLOW FOR ALL DECOMMISSIONING WORKS AS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY SUITABLE FINAL ROUTES FOR PIPEWORK ROUTES. ROUTES THAT ARE INDICATED ON THE DRAWING ARE ONLY INDICATIVE.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MECHANICAL WORKS, ELECTRICAL WORKS, BUILDERS WORKS, BUILDING FINISHES, ETC. AS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORKS AND SHALL EMPLOY A SUITABLY QUALIFIED ELECTRICAL TO CARRY OUT ALL THE ASSOCIATED ELECTRICAL WORKS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BUILDERS WORKS AND SHALL EMPLOY A SUITABLY QUALIFIED BUILDING CONTRACTOR TO CARRY OUT ALL THE ASSOCIATED BUILDERS WORKS.

12. REFER TO ALL OTHER DRAWINGS FOR SPECIFIC LAYOUT OF REQUIRED SERVICES THROUGHOUT THE BUILDING.

13. THE CONTRACTOR SHALL ALLOW FOR DECOMMISSIONING THE EXISTING SPACE HEATING INSTALLATION THROUGHOUT THE MAIN BUILDING INCLUDING ALL RADIATORS, ASSOCIATED HEATING SERVICES PIPEWORK, ETC.

14. THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND INSTALLATION OF A NEW SPACE HEATING INSTALLATION THROUGHOUT THE MAIN BUILDING INCLUDING ALL NEW RADIATORS, LPHW FLOW AND RETURN PIPEWORK, CONTROLS, ELECTRICAL WORKS, ETC. AS INDICATED ON THE DRAWINGS.

15. THE EXISTING HEATING CENTRE, BOILERS, CONTROLS, PUMPS, ETC. IN THE EXISTING MAIN BOILERHOUSE SHALL BE DECOMMISSIONED AND REMOVED FROM SITE AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION.

16. LOCATION OF ALL ITEMS OF PLANT/EQUIPMENT/PIPEWORK ROUTES, ETC. SHALL BE AGREED ON SITE WITH THE EMPLOYERS REPRESENTATIVE AND THE CLIENT.

17. ALL PIPEWORK IS SIZED BASED ON A FLOW TEMPERATURE OF 80 DEGREES CELSIUS AND A RETURN TEMPERATURE OF 60 DEGREES CELSIUS.

18. AUTOMATIC AIR VENTS SHALL BE PROVIDED AT ALL HIGH POINTS THROUGHOUT THE SYSTEM.

19. DRAIN VALVES SHALL BE PROVIDED AT ALL LOW POINTS THROUGHOUT THE SYSTEM.

20. ALL NEW PIPEWORK FOR THE HEATING SYSTEM IN THE BOILERHOUSE SHALL BE MEDIUM GRADE BLACK MILD STEEL TUBE AND ALL JOINTS IN THE PIPEWORK SHALL BE WELDED.

21. THE CONTRACTOR SHALL ALLOW FOR THOROUGHLY INSULATING ALL NEW HEATING SERVICES PIPEWORK THAT IS TO BE INSTALLED IN THE MAIN BOILERHOUSE.

22. ALL NEW HEATING PUMPS SHALL BE OPERATED THROUGH VARIABLE SPEED DRIVES.

23. UNLESS INDICATED, THE SIZE OF ISOLATION VALVES, DRAIN VALVES, COMMISSIONING VALVES, ETC. SHALL MATCH THE INDICATED LINE SIZE OF THE PIPEWORK, WHERE THE EQUIPMENT IS INDICATED.

24. THE CONTRACTOR SHALL ALLOW FOR ALL BENDS, ELBOWS AND NECESSARY PIPEWORK IN ORDER TO INSTALL THE COMPLETE HEATING SYSTEM.

25. THE CONTRACTOR SHALL ALLOW FOR ALL NECESSARY BUILDERS WORKS FOR THE MECHANICAL AND ELECTRICAL INSTALLATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORING OF THE WALL AND FOR ENSURING THAT THE OPES THROUGH THE WALL FOR THE FLUE ARE SEALED PROPERLY TO ELIMINATE ANY WATER INGRESS INTO THE BOILERHOUSE.

26. THE CONTRACTOR SHALL ALLOW FOR ALL WORKS FOR THE COLLECTING OF THE CONDENSATE FROM THE BOILERS IN EACH BOILERHOUSE BEFORE IT IT IS BROUGHT TO THE NEAREST GULLY. REFER TO DRAWING AND SPECIFICATION FOR FURTHER INFORMATION.

27. THE CONTRACTOR SHALL ALLOW FOR THOROUGHLY INSULATING ALL NEW HEATING SERVICES PIPEWORK THAT IS TO BE INSTALLED IN THE BOILERHOUSE.

28. THE CONTRACTOR SHALL ALLOW FOR THE DECOMMISSIONING AND REMOVAL OF THE EXISTING MCC CONTROLS PANEL IN THE BOILERHOUSE. THE EXISTING MCC CONTROLS PANEL SHALL BE REPLACED WITH A NEW MCC CONTROLS PANEL. THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND COMMISSIONING OF THE NEW MCC/BMS CONTROLS PANEL AND SUBSEQUENT CONTROL SYSTEMS FOR THE BOILERHOUSE.

29. ALL ELECTRICAL WIRING SHALL BE COMPLETED BY THE CONTRACTOR AS PART OF THIS CONTRACT AS THE CONTRACTOR IS RESPONSIBLE FOR ALL WORKS INCLUDING ELECTRICAL WORKS. THE CONTRACTOR SHALL ALLOW FOR THE INSTALLATION AND WIRING OF THE MCC/BMS CONTROLS PANEL AND SUBSEQUENT CONTROL SYSTEMS FOR THE BUILDING.

30. THE NEW MCC CONTROLS PANEL SHALL BE INTERFACED TO THE EXISTING FIRE ALARM SYSTEM FOR THE MAIN BUILDING.

31. SEE SCHEMATIC FOR DETAILS ON THE MCC/BMS CONTROLS PANEL AND WIRING DETAILS. WIRING DETAILS TO BE CONFIRMED BY THE MCC/BMS CONTROLS SPECIALIST AND DISCUSSED WITH THE ELECTRICAL CONTRACTOR PRIOR TO ANY CONTROLS WIRING.

32. REFER TO THE SPECIFICATION FOR THE SPECIFIC CONTROL OF THE SYSTEMS.

REV	DATE	PREPARED BY/PROJECT ENGINEER	QUALITY CHECK BY:
T1	17.08.26	J. O'SULLIVAN	G. BENNDORF

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Job Title
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Y14 YN98.

Drawing Title
ELECTRICAL & MECHANICAL PLANTROOM LAYOUTS AND RADIATOR SCHEDULE FOR THE BUILDING.

Architect

Drawing No:
51(M002)

Job No.	Drawn by:	Scale:	Rev.
26-052	J.O'S	1:50 on A1	T1