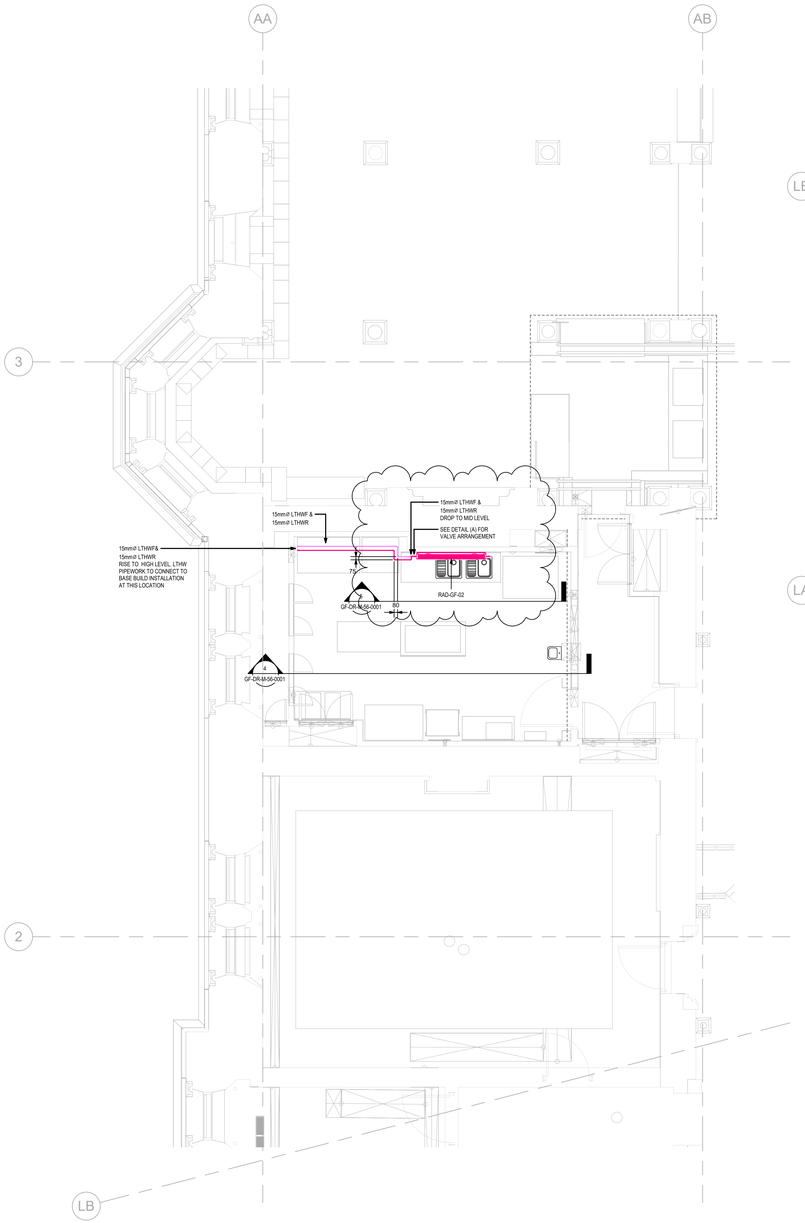
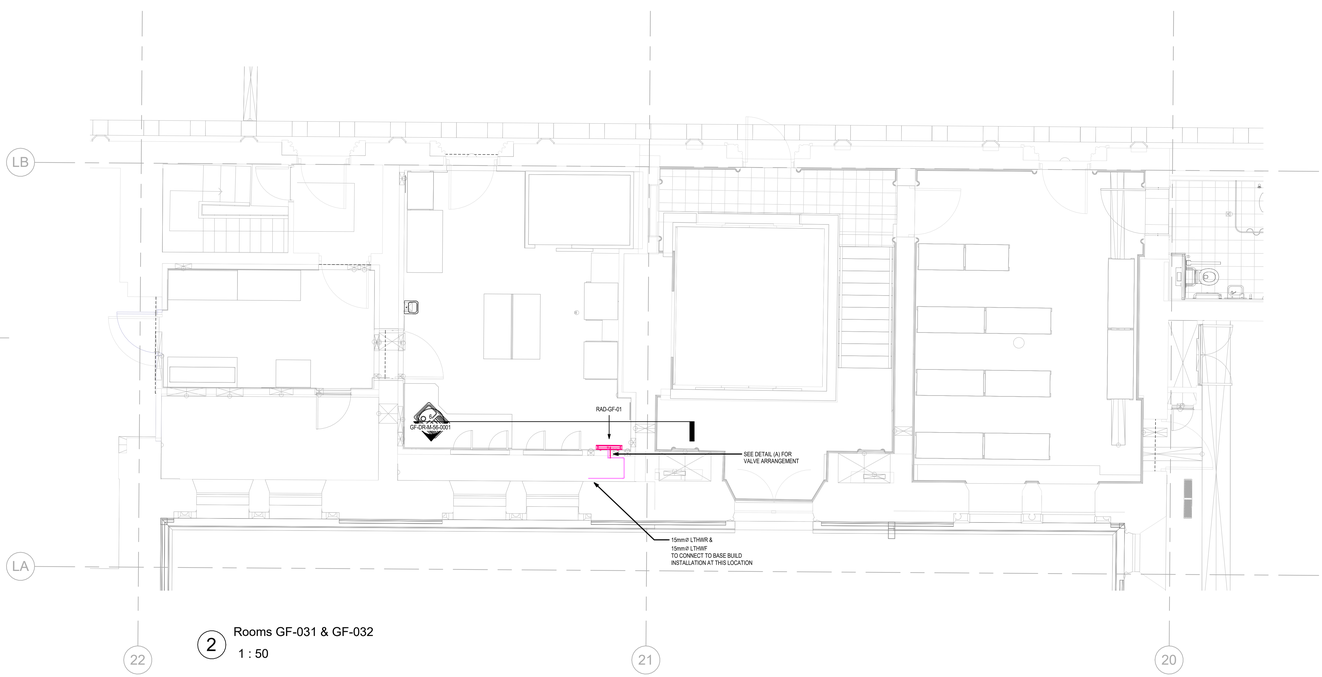
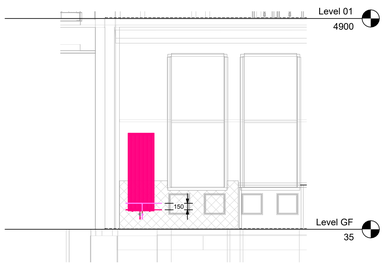


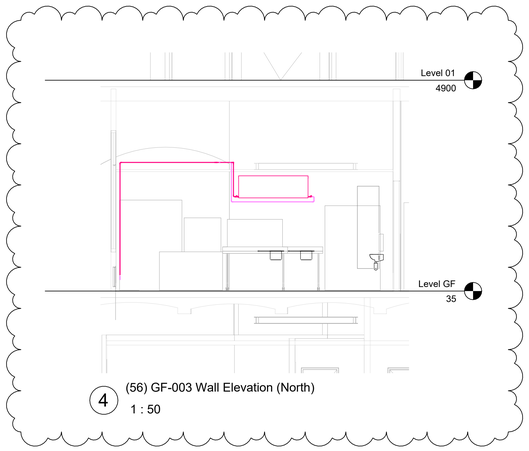

1 Rooms GF-003 & SH.FoH
1 : 50



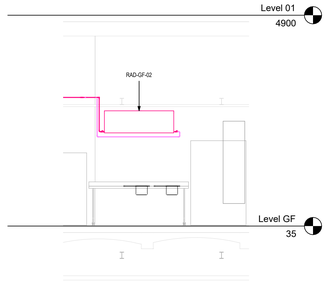

2 Rooms GF-031 & GF-032
1 : 50




6 (55) GF-032 Wall Elevation (South)
1 : 50




4 (56) GF-003 Wall Elevation (North)
1 : 50




5 (55) GF-007 Wall Elevation (East)
1 : 50

HK-N-50-General Notes

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT PROJECT DRAWINGS AND INFORMATION FROM THE WHOLE PROJECT TEAM AS AVAILABLE ON ACONEX. THIS IS INCLUSIVE OF, BUT NOT LIMITED TO, ALL AVAILABLE 3D REVIT MODEL INFORMATION FROM HULLEY & KIRKWOOD, TAYLOR DESIGN, PURCELL, RAMBOLL AND ARUP.
2. ALL ELECTRICAL INSTALLATION WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH BS 7671 INCORPORATING AMENDMENTS.
3. THE CONTRACTOR SHALL ALLOW FOR DISJOINTED WORKS INVOLVED WITH THE PROJECT IN REGARD TO COORDINATION WITH ALL OTHER TRADES.
4. ALL MECHANICAL INSTALLATIONS TO BE UNDERTAKEN IN ACCORDANCE WITH THE PRINCIPAL CONTRACTORS PROGRAMME OF WORKS.
5. FINAL POSITIONS OF ALL EQUIPMENT SHALL BE AS PER THE SETTING OUT IN ACCORDANCE WITH THE ARCHITECTURAL INFORMATION.
6. ALL BMS CONTROLS, MECHANICAL CONTROL PANELS AND TESTING AND COMMISSIONING OF THE AUTOMATIC CONTROLS BY OTHERS. THE CONTRACTOR SHALL ALLOW FOR ALL REQUIRED LIAISON/COORDINATION WITH THE AUTOMATIC CONTROLS SPECIALIST AS PART OF THEIR WORKS TO ACCOMMODATE THE SETTING TO WORK OF ALL RESPECTIVE EQUIPMENT AND PLANT. FINAL INSTALLATIONS TO BE IN ACCORDANCE WITH THE ARUP PROJECT SPECIFICATION(S).
7. THE CONTRACTOR SHALL UNDERTAKE ALL WORKS IN ACCORDANCE WITH THE ARUP PROJECT SPECIFICATION(S). IF NOT PROVIDED AT THE TIME OF TENDER, THE CONTRACTOR SHALL REQUEST SAID DOCUMENT(S) AND ENSURE THEIR TENDER COMPLIES FULLY WITH THE OUTLINED REQUIREMENTS.
8. ALL INSTALLATIONS SHALL BE IN FULL ACCORDANCE WITH THE PROJECT ACOUSTIC REPORT.
9. ALL INSTALLATIONS SHALL BE IN FULL ACCORDANCE WITH THE PROJECT FIRE ENGINEERING REPORT.
10. THIS DRAWING IS DIAGRAMATIC ONLY AND SHOWS DESIGN INTENT. THE MECHANICAL SERVICES CONTRACTOR SHALL PROVIDE WORKING DRAWINGS FOR FINAL APPROVAL BY THE ARCHITECT PRIOR TO INSTALLATION, ALLOWING SUFFICIENT TIME FOR REVIEW AND COMMENT, AS NECESSARY, SUCH THAT IT DOES NOT IMPACT UPON THE PRINCIPAL CONTRACTORS PROGRAMME OF WORKS.
11. THE CONTRACTOR SHALL CONFIRM THEIR BUILDERSWORK REQUIREMENTS TO THE PRINCIPAL CONTRACTOR, ALLOWING SUFFICIENT TIME FOR THE WORKS TO BE UNDERTAKEN SUCH THAT IT DOES NOT IMPACT UPON THE PRINCIPAL CONTRACTORS PROGRAMME OF WORKS.

HK-N-56-Heating Notes

1. THE CONTRACTOR SHALL ALLOW FOR FINAL CONNECTION OF THE KITCHEN SUPPLY AIR HANDLING UNIT FROST AND RE-HEAT COILS TO THE BASE BUILD LTHW INSTALLATIONS.
2. SECONDARY DISTRIBUTION PIPEWORK FOR LTHW SERVING THE KITCHEN SUPPLY AIR HANDLING UNIT FROST AND RE-HEAT COILS BY OTHERS. TO BE TERMINATED WITHIN 500MM OF UNIT CONNECTION POSITIONS.
3. AUTOMATIC CONTROLS AND VALVE ARRANGEMENTS FOR THE KITCHEN SUPPLY AIR HANDLING UNIT FROST AND RE-HEAT COILS BY OTHERS.
4. AIR BOTTLES/AUTOMATIC AIR VENTS TO BE INSTALLED AT ALL HIGH POINTS IN THE SYSTEM.
5. DRAIN COCKS TO BE INSTALLED AT ALL LOW POINTS IN THE SYSTEM.
6. THE CONTRACTOR SHALL ALLOW FOR EXTENDING LTHW PIPEWORK TO SERVE RADIATORS WITHIN SPACES FROM THE BASE BUILD LTHW PIPEWORK DISTRIBUTION INSTALLATIONS.
7. ZONE CONTROL VALVES AND ROOM THERMOSTATS TO BE PROVIDED BY OTHERS AS PART OF THE BASE BUILD INSTALLATIONS.
8. FOR FINAL LOCATIONS OF WALL MOUNTED THERMOSTATS PLEASE REFER TO THE ARCHITECTURAL COORDINATED SETTING OUT INFORMATION.
9. RADIATORS INSTALLED WITHIN CATERING AREAS, AS INDICATED WITHIN HULLEY AND KIRKWOOD PROJECT INFORMATION, TO BE INSTALLED, AS A MINIMUM, WITH BALL VALVE ISOLATION, A DYNAMIC THERMOSTATIC RADIATOR VALVE ON THE FLOW AND A LOCK SHIELD VALVE ON THE RETURN. FINAL SPECIFICATION OF VALVES TO BE AS PER THE ARUP PROJECT SPECIFICATION(S).
10. ALL PIPEWORK EXPANSION EQUIPMENT TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, INCLUDING PROVISION FOR PIPEWORK GUIDANCE WHERE EXPANSION BELLOWS ARE USED. THE MECHANICAL SERVICES CONTRACTOR SHALL ALLOW FOR THE SPECIALIST SUB-CONTRACTOR DESIGN OF THESE WORKS WITHIN THEIR PACKAGE.
11. ALL LTHW PIPEWORK TO BE INSULATED IN ACCORDANCE WITH THE ARUP PROJECT SPECIFICATIONS(S).
12. ALL RADIATORS TO BE COMPLETE WITH DRAIN POINT.
13. THE MECHANICAL CONTRACTOR SHALL SITE MEASURE AND CONFIRM ALL RADIATOR SIZES AND FINISHES WITH THE M&E CONSULTANT AND ARCHITECT PRIOR TO PROCUREMENT.
14. LTHW PIPEWORK MATERIAL AND INSTALLATION TO BE IN FULL ACCORDANCE WITH THE ARUP PROJECT SPECIFICATION(S).
15. ALL SERVICES SHOWN ON THIS DRAWING INCLUDING PIPEWORK SUPPORT BRACKETS AND SECONDARY STEELWORK SHALL BE PROVIDED BY THE MECHANICAL SERVICES CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. INSTALLATIONS TO BE IN FULL ACCORDANCE WITH THE ARUP PROJECT SPECIFICATION(S).

## LEGEND

LOW TEMPERATURE HOT WATER FLOW

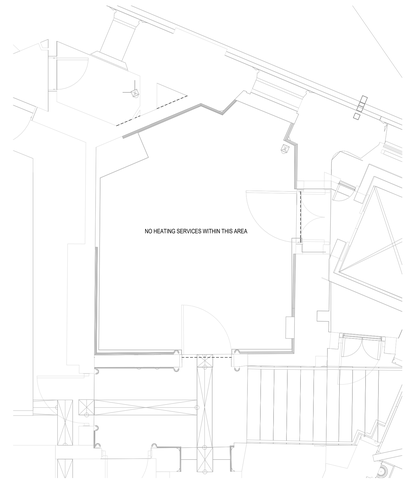
LOW TEMPERATURE HOT WATER RETURN

| | |
|---|---|
| DTLL | DROP TO LOW LEVEL |
| IV | ISOLATION VALVE |
| PICV | PRESSURE INDEPENDANT CONTROL VALVE |
| DC | DRAIN COCK |
| OP | ORIFICE PLATE |

## DETAIL (A) - TYPICAL RADIATOR CONNECTION




NO FLUSHING BYPASS REQUIREMENT FOR FLUSHING




| Date | Revision Description | Rev. | By |
|---|---|---|---|
| 02/07/2024 | RADIATOR POSITION MOVED | C02 | S Miah |
| 08/11/2023 | ISSUED FOR CONSTRUCTION | C01 | S Miah |
| 02/08/2021 | UPDATED IN LINE WITH CLASH REPORTS & COMMENTS | P06 | J Staley |
| 18/05/2021 | UPDATED IN LINE WITH COMMENTS | P05 | J Staley |
| 23/04/2021 | ISSUED FOR TENDER | P04 | J Staley |
| 05/11/2020 | ISSUED FOR WORK STAGE 5 | P03 | D Piercy |
| 30/08/2019 | ISSUE FOR TENDER | P02 | S Lu |
| 23/08/2019 | ISSUE FOR COMMENT | P01 | S Lu |

**Revision Description**


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**Project:**
Manchester Town Hall Catering Works

**Drawing Title:**
HEATING LAYOUT LEVEL GF

**Drawing Number:**
OTH-HAK-TH-GF-DWG-V-5601

| | | | |
|---|---|---|---|
| **Revision:** | C02 | **Rev Date:** | 02/07/2024 |
| **Scale:** | 1 : 50 | | |
| **Drawn By:** | S Lu | **Checked By:** | R Beagan |
| | | **Approved By:** | R Beagan |
| **Arch Rev:** | - | | |
| **Struct Rev:** | - | | |

**Issue Status:**
CONSTRUCTION

A0