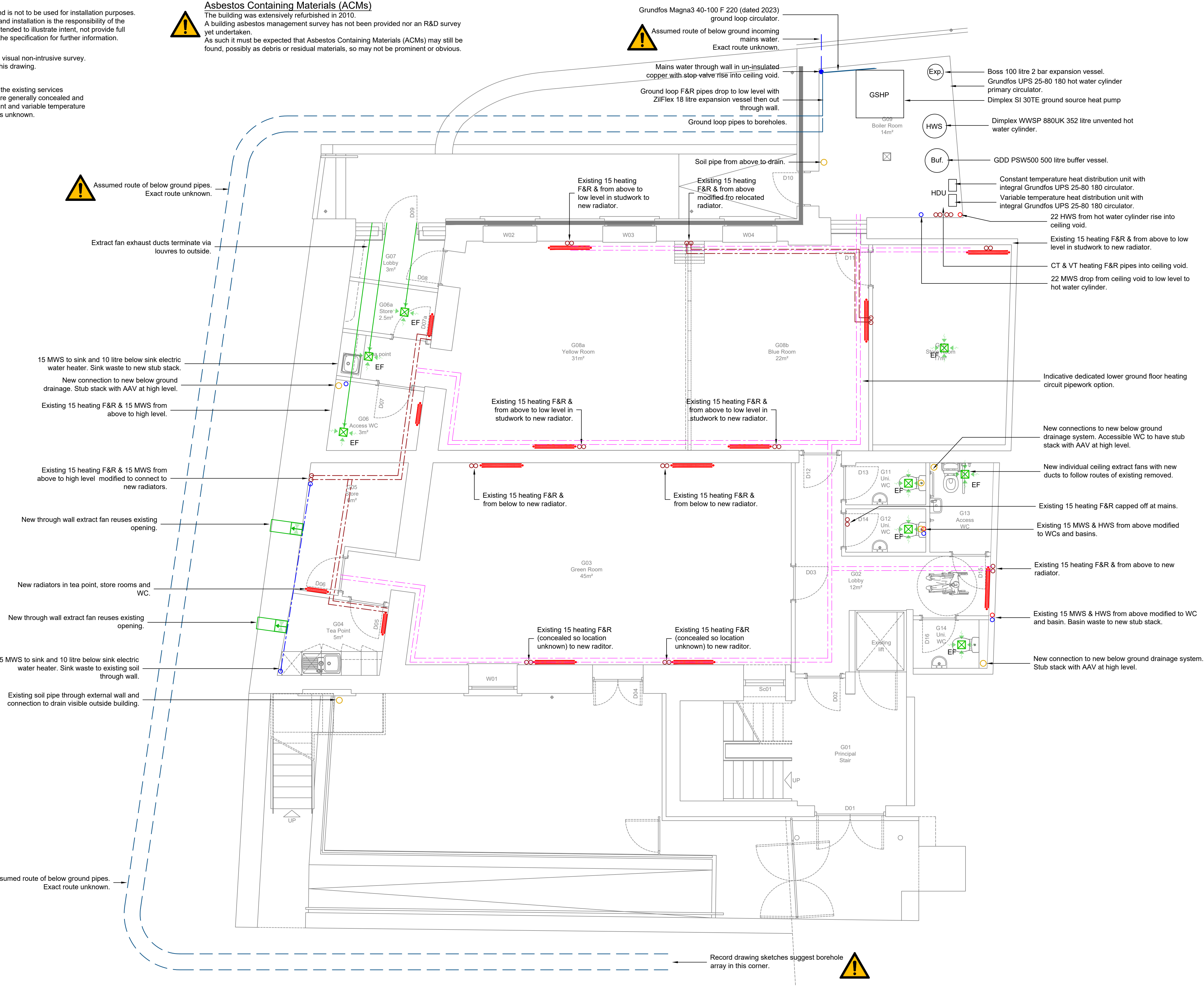


The building was extensively refurbished in 2010. A building asbestos management survey has not been provided nor an R&D survey yet undertaken.

As such it must be expected that Asbestos Containing Materials (ACMs) may still be found, possibly as debris or residual materials, so may not be prominent or obvious.



While the existing pipe distribution arrangement is unknown, it appears that lower ground floor radiators are fed from above, implying that the lower ground and ground floors are on the same heating distribution pipe circuit.

To improve zone control of the heating system, it is proposed to investigate creating a dedicated lower ground floor heating circuit originating from the main plantroom.

It is envisaged this will require creating a new set of flow and return connections from the heat pump primary with new heat distribution unit, similar to the two existing.

All existing heating pipes to lower ground floor radiators are to be removed and cut back to the flow and return pipe mains.

The heat load from the lower ground floor radiators is then removed from the existing pipe circuit to be transferred to the new dedicated lower ground floor heating pipe circuit.

The heat pump and heating controls will need to be modified to include this new additional zone.

This is to be considered as a costed option when ceiling opening up works are undertaken and the existing pipework distribution system is exposed for investigation and assessment of installation practicality.

Indicative dedicated lower ground floor heating circuit pipework.

All windows are being replaced with new including integrated trickle vents which are to remain open.

Doors to mechanically ventilated rooms are to be undercut to provide an air movement path.

The mechanical extract fans are to operate continuously to encourage air movement through the spaces.

Ventilation strategy to be evaluated to suit building drying out and subject to monitoring of water ingress.

The ongoing presence of moisture ingress may require a change to the ventilation strategy with additional mechanical ventilation needing to be provided.

Plantroom

Employ a ground source heat pump specialist to service and maintain the heat pump unit in accordance with the manufacturers instructions and recommendations.

The heat pump specialist is also to advise on current best practice for correct installation in terms of water quality, efficient operation and controls.

Subject to specialist advice, the following work is envisaged:

- Ground loop pipework strainer, filter and water treatment dosing pot.
- Replace the expansion vessel with new as a preventive maintenance measure.
- Replacement of all ground loop pipe insulation with purpose designed vapour sealed insulation to prevent condensation. All fittings, including new strainer and filters to be insulated with fitted vapour sealed boxes or jackets.
- Primary heating pipework strainer, filter and water treatment dosing pot.
- Primary heating system vacuum degasser unit.
- Replace the expansion vessel with new as a preventive maintenance measure.
- Replacement of all primary heating pipe insulation with purpose designed insulation to prevent condensation. All fittings, including new strainer and filters to be insulated with fitted boxes or jackets.

- Employ a water treatment specialist to test the ground loop and heating system water quality.
- Flush and clean the systems as required.
- Refill and provide appropriate water treatment.

New above ground drainage to new below ground drainage connections.
Existing hot and cold water pipe drops from above modified for new appliances.
New individual ceiling extract fans ducted to outside following existing duct routes.

All existing radiators and high level heaters are to be removed for replacement with new. Pipe drops can be retained except for one radiator in the Blue/Yellow rooms which will clash with the proposed folding partition.

New above ground drainage to new & existing below ground drainage connections.
Existing cold water pipe drops from above modified for new appliances.
New undersink and underbasin electric water heaters.
New individual ceiling extract fans ducted to outside.
New through wall extract fans reusing existing openings.

All works indicated on this drawing are to be carried out by a Contractor competent to undertake the works.
Specific hazards relating to the works are indicated on this drawing.
These are in addition to the normal hazards and risks faced by a competent person or contractor when dealing with the types of works indicated on this drawing.

1. Do not scale from this drawing.
2. All dimensions are in millimetres unless stated otherwise.
3. Prior to commencing any works all relevant dimensions & site features are to be verified against contractual information.
4. All proprietary components are to be installed in accordance with the Manufacturer's current written instructions.

P1	24/02/26	Updated following team feedback.	KP
P0	17/02/26	Issued for review and comment.	KP
Rev	Date	Description	By

WIP
S0 - Work in Progress *

Shared
S1 - Fit for co-ordination **
S2 - Fit for information
S3 - Fit for internal review
S4 - Fit for construction approval

Documentation

- D1 - Fit for costing
- D2 - Fit for tender
- D3 - Fit for Contractor design
- D4 - Fit for manufacture / procurement

Documentation Sign-off

- A - Fit for construction
- B - Fit for construction with comments
- C - Comprehensive revisions needed

Archive

- AB - As Built
- FC - Final construction

* For internal pre-issue usage only
** For model file usage only

Drawing Title
Proposed new mechanical services



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Holloway
Partnership

Scale @ A1	1:50	Drawn KP	Checked PB
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Project - Origin - Zone - Level - Type - Role - Number
2552-HP-XX-LG-DR-M-820