

NHS Property Services Hawthorn Medical Centre

Ventilation Statement

September 2025
Rev P01

**SILCOCK
LEEDHAM**

Consulting Engineers

Upperbank House,
Stoneythorpe,
Leeds,
LS18 4BN
United Kingdom
W: silcockleedham.co.uk
T: +44 (0)113 393 3310



Low
Carbon
Consultant



an **RSK** company

Revision	Description	Date	Approved
P01	Stage 4 Issue	26/09/2025	DM

Contents

0.	Introduction.....	3
0.1	Project Overview	3
1.0	Ventilation Strategy.....	3
1.1	Natural Ventilation	3
1.2	Mechanical Ventilation.....	3
1.3	Position and Design of Ventilation & Extraction Equipment.....	4
1.4	Odour Abatement.....	4
1.5	Acoustic Characteristics.....	4
2.0	Conclusion	4
3.0	Appendices.....	5
	Appendix A – Building Elevations	5
	Appendix B – Ventilation Layout	6

0. Introduction

0.1 Project Overview

The project is the Hawthorn Primary Care Health Centre, located at Moseley Road, Fallowfield, Manchester. It comprises a single-storey primary healthcare facility with a Gross Internal Area (GIA) of approximately 838 m². The facility includes consulting/examination rooms, administration offices, welfare areas, and patient waiting areas.

This statement has been prepared to support the planning application for the proposed Primary Healthcare Facility in Greater Manchester.

It outlines the proposed ventilation strategy for the building in accordance with NHS HTM requirements, Building Regulations (Part F) and CIBSE guidance.

The report provides details of the ventilation and extraction equipment, including positions of louvres and ductwork terminations, odour abatement measures, and acoustic mitigation proposals.

Elevational drawings showing the louver locations are appended as Appendix A. Ventilation Layouts are appended as Appendix B.

1.0 Ventilation Strategy

The ventilation systems have been designed to ensure a safe, comfortable, and compliant internal environment. The design approach balances energy efficiency, infection control, occupant comfort, and planning considerations.

1.1 Natural Ventilation

The building, where suitable shall be naturally ventilated. This is generally to the consult rooms with lower occupancies and with openable windows generally as indicated on the drawings and detailed in this specification.

The free area to the windows has been assessed to provide sufficient levels of fresh air ventilation to the spaces. The outcome of this assessment has been provided to enable the architect to develop the window specification.

It is acknowledged that the NHS PS Standard makes reference to the difficulty to ensure a minimum level of ventilation to a naturally ventilated space. However, to ensure that adequate ventilation is provided to the spaces for the majority of the occupiable hours, we have based our free area (m²) assessment on:

- the provision of 4ACH >90% of occupiable hours
- the provision of 10L/s/person >95% of occupiable hours

1.2 Mechanical Ventilation

Mechanical ventilation systems are proposed to areas of the building which did not suit natural ventilation – Either due to acoustic restrictions, HTM requirements, occupancy levels or availability of openable windows.

The systems proposed are summarised below

- Ceiling void mounted air to air plate heat exchanger energy recovery supply and extract ventilation units to serve areas with higher occupancy, without openable
-

windows or otherwise unsuited to natural ventilation (i.e. directly adjacent to the B5093 Moseley Road) including waiting areas, offices & meeting rooms.

- Ceiling void mounted air to air plate heat exchanger energy recovery supply and extract ventilation units to serve Treatment Areas.
- Local WC ducted extract systems

Control of the ventilation systems is to be demand controlled by PIR, CO2 or Humidity.

Fire dampers are to be provided where ductwork penetrates fire-rated compartments.

1.3 Position and Design of Ventilation & Extraction Equipment

The main Air Handling Plant and all ductwork as described above is all internal to the building (with no external ventilation plant or ductwork).

External Louvres are located local to the South East plant area and on the south and west elevations of the building.

Louvres have been carefully positioned to:

- Avoid recirculation between supply and exhaust air streams (in line with HTM requirements).
- Be sited away from openable windows to minimise cross-contamination risk.
- Minimise impact on building aesthetics, with positions agreed in consultation with the project architect.

Full details of louvre positions are provided on the architectural elevations in **Appendix A**.

1.4 Odour Abatement

There is minimal odour risk associated with the proposed ventilation systems.

Extract systems primarily serve sanitary facilities and general spaces, with no processes requiring additional filtration or grease/odour control.

All extracts discharge at high level to atmosphere.

System design ensures dilution and dispersion, with no anticipated adverse impact on neighbouring properties.

1.5 Acoustic Characteristics

An acoustician has reviewed the MEP plant proposals and confirmed the ventilation strategy as acceptable for planning purposes.

- Attenuators are provided on the atmosphere side of all fans and air handling plant to reduce breakout and discharge noise.
- Air handling plant is located internally to further mitigate external noise.

2.0 Conclusion

The proposed ventilation systems for the Hawthorn Primary Healthcare Facility are suitable for the intended healthcare use and are designed to meet NHS, regulatory, and planning requirements.

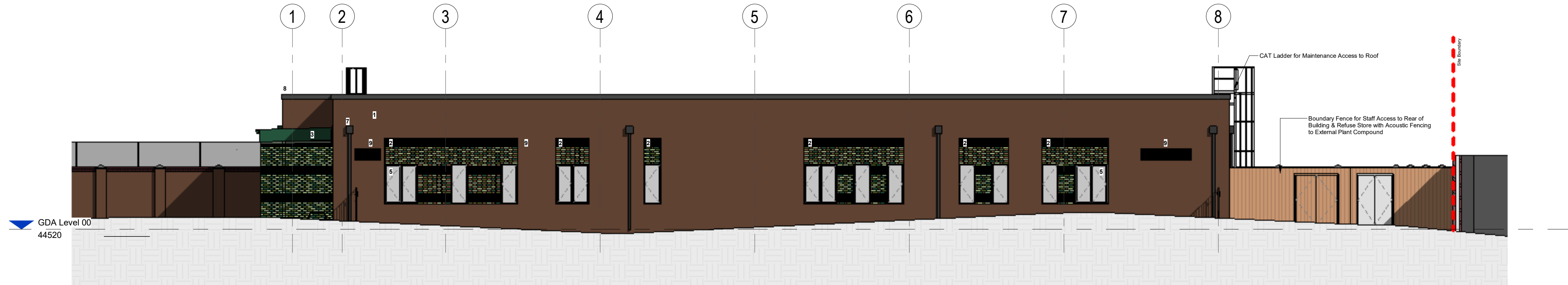
- Ventilation and extract louvres have been carefully located and designed to prevent recirculation, avoid openable windows, and minimise visual impact.
 - No significant odour risks are anticipated.
 - Acoustic mitigation measures ensure compliance with planning standards.
-

3.0 Appendices

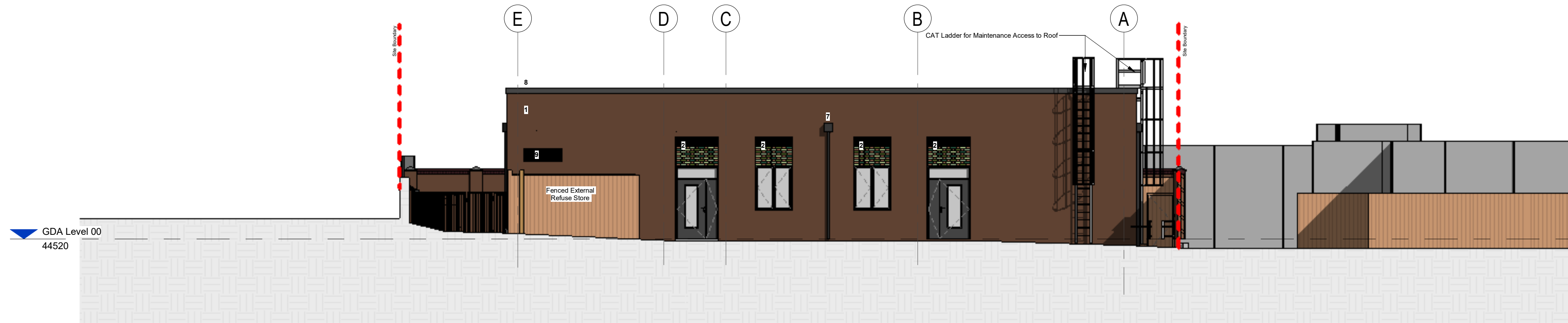
Appendix A – Building Elevations



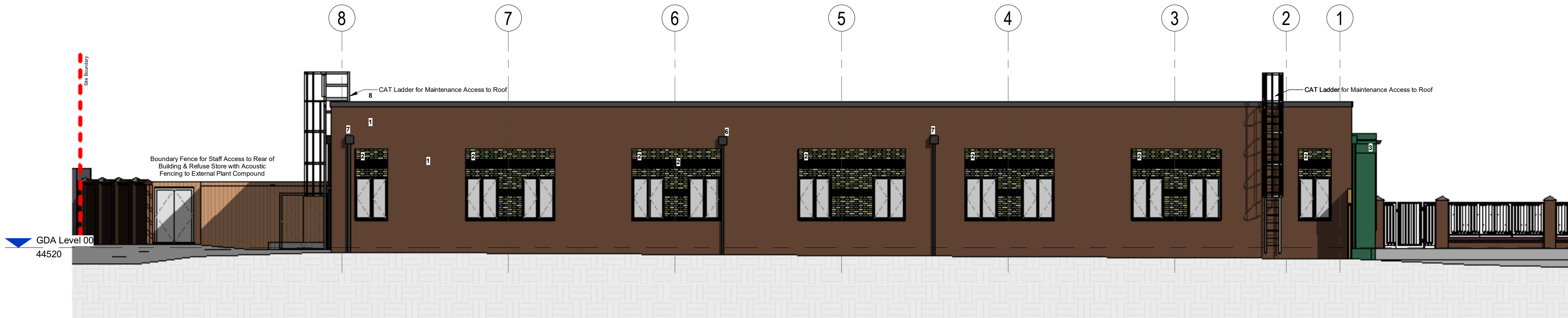
1 West Elevation
1 : 100



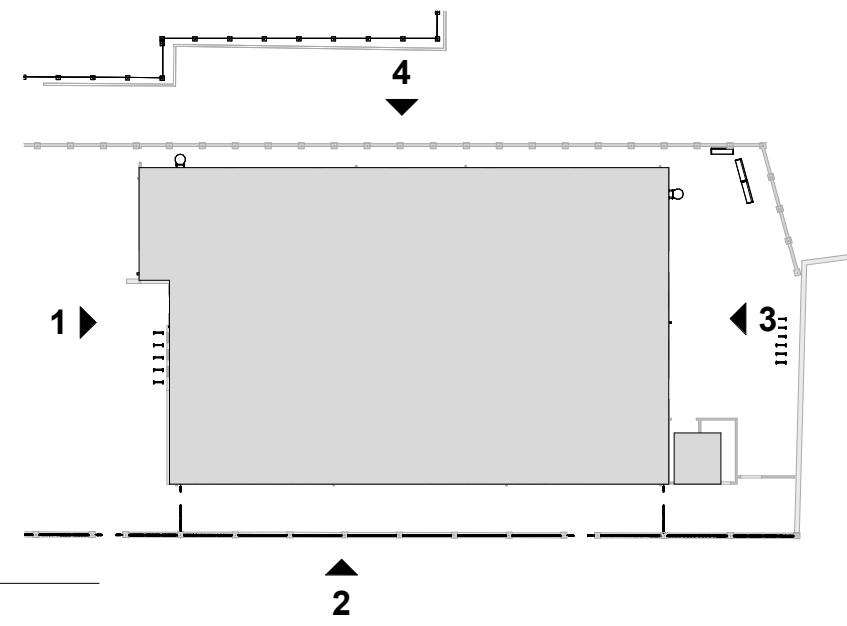
2 South Elevation
1 : 100



3 East Elevation
1 : 100



4 North Elevation
1 : 100



THIS DRAWING (OR ANY PART THEREOF) MAY NOT BE COPIED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY OR UNAUTHORISED PERSON WITHOUT THE PRIOR WRITTEN PERMISSION OF GILLING DOD.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS PREPARED BY CONSULTANTS AND SUB-CONTRACTORS.

REPORT ANY DISCREPANCIES TO THE ARCHITECT OR REPRESENTATIVES THEREOF.

© ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSIONS OF THE COPYRIGHT HOLDER.

ONCE PRINTED AND DISTRIBUTED THIS DOCUMENT IS ASSUMED UNCONTROLLED.

THIS DRAWING IS INTENDED TO BE PRINTED AT THE PAPER SIZE INDICATED IN THE INFORMATION BELOW.

DO NOT SCALE FROM THIS DRAWING. WORK ONLY TO PRINTED DIMENSIONS.

NOTES:

All relevant specialist details & reports to be referred to where relevant.

Drawing to be read in conjunction with Planning drawing pack & details.

All details are to be referred to for Planning Approval purposes only and should at no point be considered as construction information.

MATERIAL KEY:

- 1 Red Facing Brick
- Michelmersh Clayburn Reversed
- 2 Feature Brick Panel
- Weinberger Glazed Bricks Amsterdam Green, Tahiti Green & Malaysia Green
- RAL to match green bricks
- 3 PPC Aluminium Feature Cladding to Canopy
- RAL 7005
- 4 PPC Aluminium Framed Glazed Curtain Walling
- RAL 7005
- 5 PPC Aluminium Framed Double Glazed Window
- RAL 7005
- 6 PPC Metal External Doorset
- RAL 7005
- 7 Rainwater Pipes
- Black PVC
- 8 PPC Aluminium Roof Capping
- RAL 7005
- 9 PPC Aluminium Louvre (size to MEP design)
- RAL to match red brick

P02	MB	Updated to reflect comments received	23/09/2025
P01	SM	First Issue - Planning	16/09/2025
Rev	By	Description	Date



Client Name:
NHS Property Services

Site Name:
Moseley Road, Fallowfield,
Manchester, M14 6PD

Project Name:
Hawthorn Medical Centre

Drawing Title:
Proposed Elevations

Project No: HMCNMC	Sheet Size: A1	Scale: As indicated
Drawn by: SM	Checked by: MB	Approved by: CLS
		Revision: P02

Drawing Number:
Project Code / Originator / Volume / Level / Type / Discipline / System-Number
HMCNMC-GDA-V1-ZZ-DR-A-9904

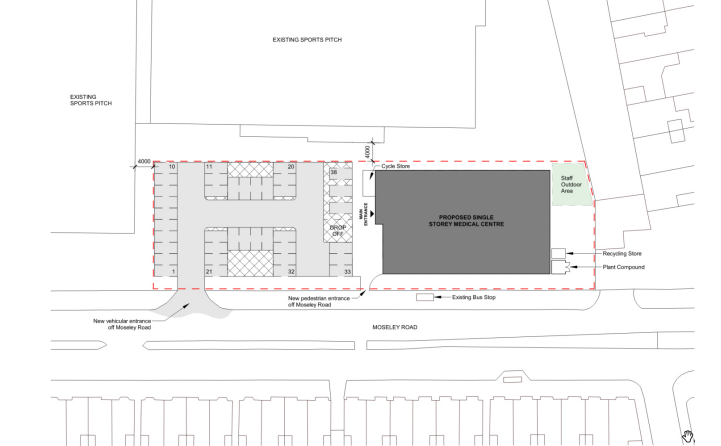
Appendix B – Ventilation Layout

NOTES:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN mm UNLESS INDICATED OTHERWISE.
3. ALL SUPPLY & EXTRACT AIR DUCTWORK SYSTEMS SHALL BE MANUFACTURED FROM GALVANISED SHEET METAL IN ACCORDANCE WITH DW144.
4. SUPPORT FOR ALL DUCTWORK TO BE IN ACCORDANCE WITH DW144.
5. ALL SUPPLY & EXTRACT DUCTWORK SHALL BE THERMALLY INSULATED.
6. FLEXIBLE DUCTWORK SHALL BE USED TO MAKE THE FINAL CONNECTIONS TO SUPPLY AND EXTRACT GRILLES AND DIFFUSERS, AND MUST NOT EXCEED A MAXIMUM LENGTH OF 500MM WHERE PRACTICALLY POSSIBLE. FLEXIBLE DUCTWORK SHALL NOT BE USED TO FORM BENDS.
7. ACCESS PANELS TO BE PROVIDED ADJACENT TO ALL FIRE DAMPERS.
8. ALL ACCESS / INSPECTION HATCHES SHALL BE PROPRIETARY MANUFACTURED WITH QUICK RELEASE CATCHES AND SELF SEALING GASKETS.
9. TURNING VANES SHALL BE INSTALLED ON ALL SQUARE AND RECTANGULAR DUCTWORK SECTIONS AT EVERY CHANGE IN DIRECTION.
10. ALL SUPPLY AND EXTRACT GRILLES AND DIFFUSERS ARE TO BE PROVIDED WITH PROPRIETARY LINED PLENUM BOXES WITH MATCHED TOP OR SIDE ENTRY SPOGOTS AS REQUIRED, SUPPORTED INDEPENDENT OF THE CEILING.
11. FLEXIBLE DUCTWORK CONNECTIONS SHALL BE INCORPORATED IN THE DUCTWORK SYSTEM TO ISOLATE THE DUCTWORK FROM VIBRATION PRODUCING EQUIPMENT.
12. BALANCING AND CONTROL DAMPERS SHALL BE DOUBLE SKIN MULTI BLADE AEROPOL TYPE WITH EDGE SEALS AND OPPOSED BLADE ACTION AND SHALL HAVE HAND ADJUSTER WITH POSITION INDICATOR AND LOCKING MECHANISM. DAMPER LEAKAGE SHALL NOT EXCEED 2% OF THE FULL AIR VOLUME.
13. FIRE/SMOKE DAMPERS DESIGN, MANUFACTURE, SELECTION, INSTALLATION, COMMISSIONING AND TESTING SHALL BE CE MARKED AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT BUILDING REGULATION APPROVED DOCUMENT 9 AND INSTALLED TO A CERTIFIED CE INSTALLATION METHOD AS ADVISED BY THE MANUFACTURER TO SUIT THE WALL CONSTRUCTION DETAIL INTO WHICH IT IS INSTALLED.
14. ALL DUCTWORK PASSING THROUGH FIRE RATED STRUCTURE FORMING FIRE BARRIERS AND COMPARTMENTS SHALL BE PROVIDED WITH FIRE DAMPERS EQUAL TO THE FIRE RATING OF THE ELEMENT / COMPARTMENT. FIRE DAMPERS SHALL BE OF THE FOLDING CURTAIN TYPE WITH THE BLADES OUT SIDE OF THE AIR STREAM TO PROVIDE MAXIMUM FREE AREA IN THE AIRWAY.
 - ONE SIDE OF ALL MAJOR DAMPERS, REGULATING OR ISOLATING
 - AT ALL FIRE/SMOKE DAMPERS POSITIONS
 - AT THE BASE OF ALL VERTICAL DUCTS TO GIVE ACCESS FOR CLEANING.
15. INSPECTION, SERVICING & CLEANING ACCESS DOORS SHALL BE FITTED IN THE DUCTWORK TO HVCA DW144 RECOMMENDATIONS.
 - ONE SIDE OF ALL MAJOR DAMPERS, REGULATING OR ISOLATING
 - AT ALL FIRE/SMOKE DAMPERS POSITIONS
 - AT THE BASE OF ALL VERTICAL DUCTS TO GIVE ACCESS FOR CLEANING.
16. NOISE LEVELS SHOULD NOT EXCEED THE LEVELS SET OUT IN THE ACOUSTIC ENGINEERS REPORT & EQUIPMENT SCHEDULES & SPECIFICATION.
17. THE CONTRACTOR IS TO ENSURE THAT ALL RISERS ARE COORDINATED, SET-OUT AND ACCESSIBLE.
18. SPECIFIED ROOM NOISE RATINGS (NR LEVELS) SHALL BE ACHIEVED WHEN UNIT IS RUNNING UNDER MAXIMUM SPECIFIED AIR VOLUMES.

© 2021 Silcock Leedham Group Ltd.
This document is no longer controlled once downloaded.
Dimensions to be confirmed before scaling from this drawing.

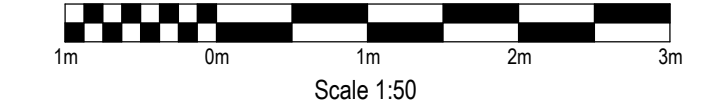
Key Plan



Lined Water Schedule

Item	RYT Link Name	RYT Link Revision	RYT Link Rev Date
HMCNC-GDA-V1-02-DR-M-5700	Architectural Model	P03	22.08.2025
HMCNC-GDA-V1-02-DR-M-5701	FF&E Model	P12	22.08.2025
DRF&E-DR-03-V1-02-DR-M-5701	Structural Model	P02	15.08.2025

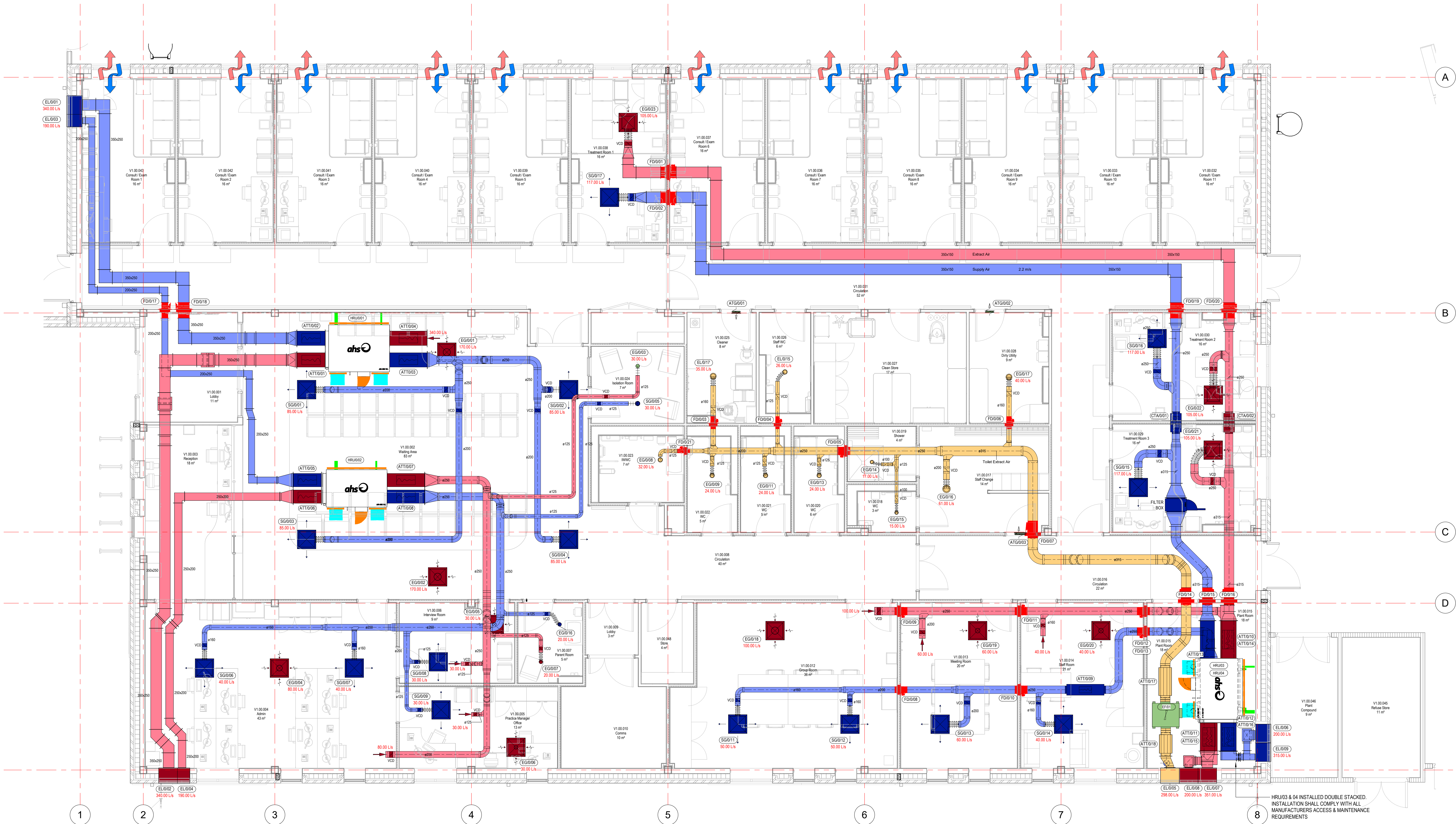
Scale bar



LEGEND	
	CIRCULAR VALVE
	EXTRACT GRILLE
	SUPPLY GRILLE
	NATURAL VENTILATION
	FIRE DAMPER
	EXTRACT FAN
	HEAT RECOVERY UNIT

ABBREVIATIONS:

ATT	ATTENUATOR
CTA	CROSS TALK ATTENUATOR
DTG	DOOR TRANSFER GRILLE
FD	FIRE DAMPER
VCD	VOLUME CONTROL DAMPER



HRU03 & 04 INSTALLED DOUBLE STACKED.
INSTALLATION SHALL COMPLY WITH ALL
MANUFACTURERS ACCESS & MAINTENANCE
REQUIREMENTS

P03	STAGE 4 ISSUE	JM	DJM	18.08.2025
P02	STAGE 4 PRELIMINARY ISSUE	JM	DJM	20.08.2025
P01	PRELIMINARY ISSUE	JM	DJM	08.05.2025
Rev	Description	DRN	CHK	Date

SILCOCK LEEDHAM
Building Services Consulting Engineers
MEP design | Building services | Commissioning management | Building information modelling



Client/Plan Contractor
NHS PROPERTY SERVICES

Author
GILLING DOO

Project
HAWTHORN MEDICAL CENTRE

Drawing Title
**MECHANICAL SERVICES
PROPOSED GROUND FLOOR
VENTILATION LAYOUT**

Scale @ Paper Size
1:50 @ A0

Project Number
3220231

Drawn by
AD

Date Created
MAY 2025

For Tender
S4 - FOR STAGE APPROVAL

Drawing Number
HMCNC-SLCE-V1-00-DR-M-5700

P03

STAGE 4 ISSUE