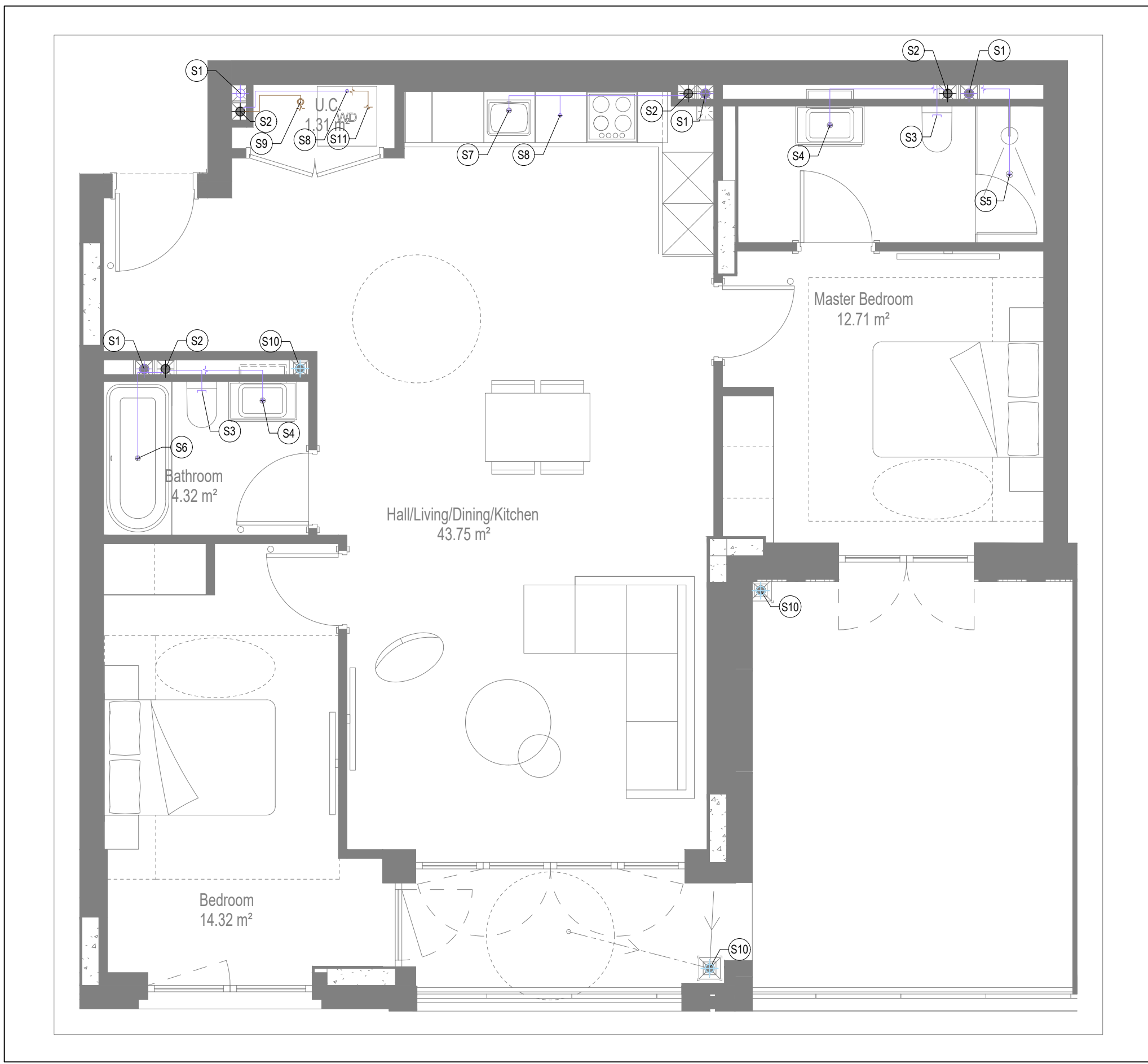
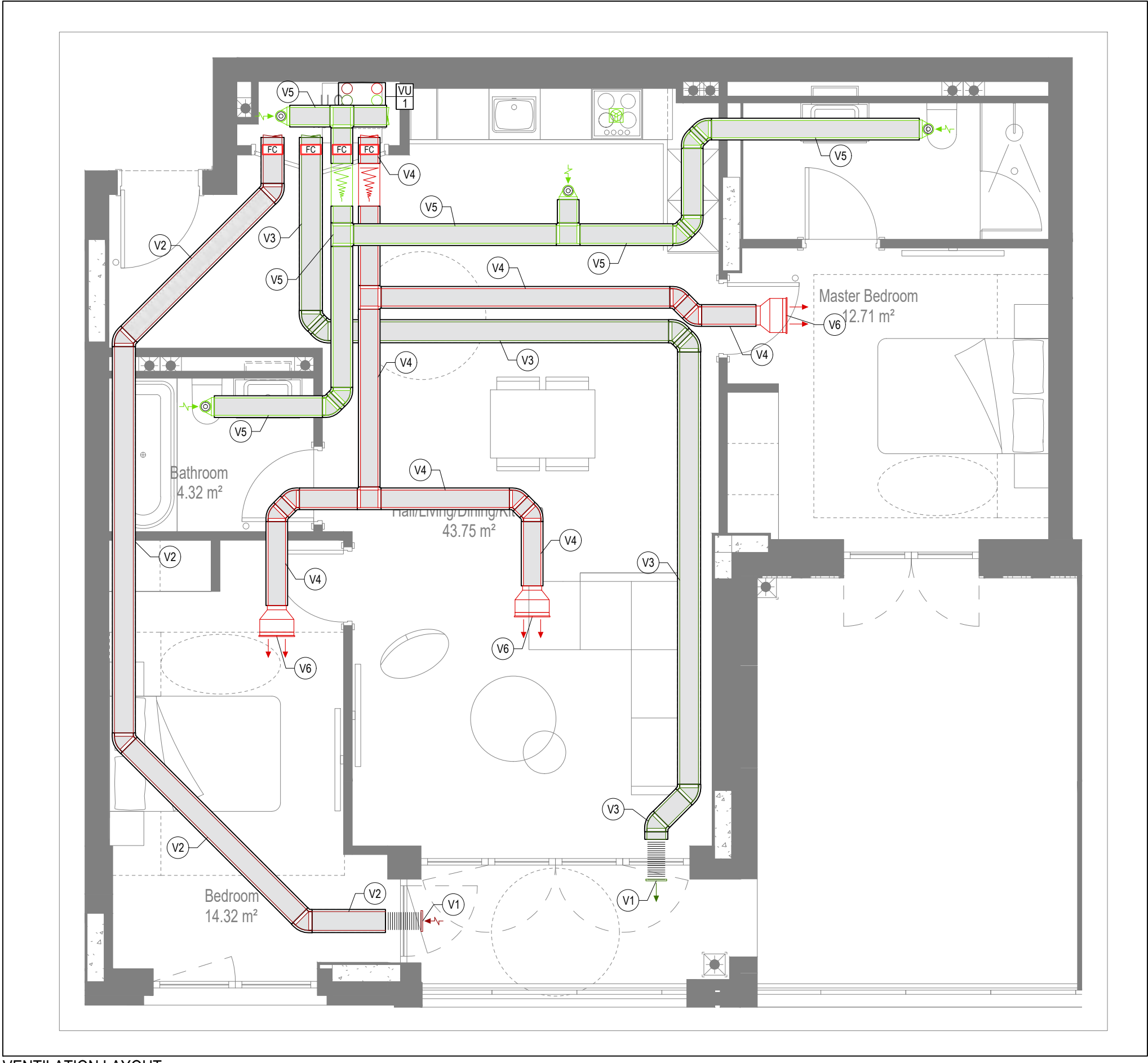




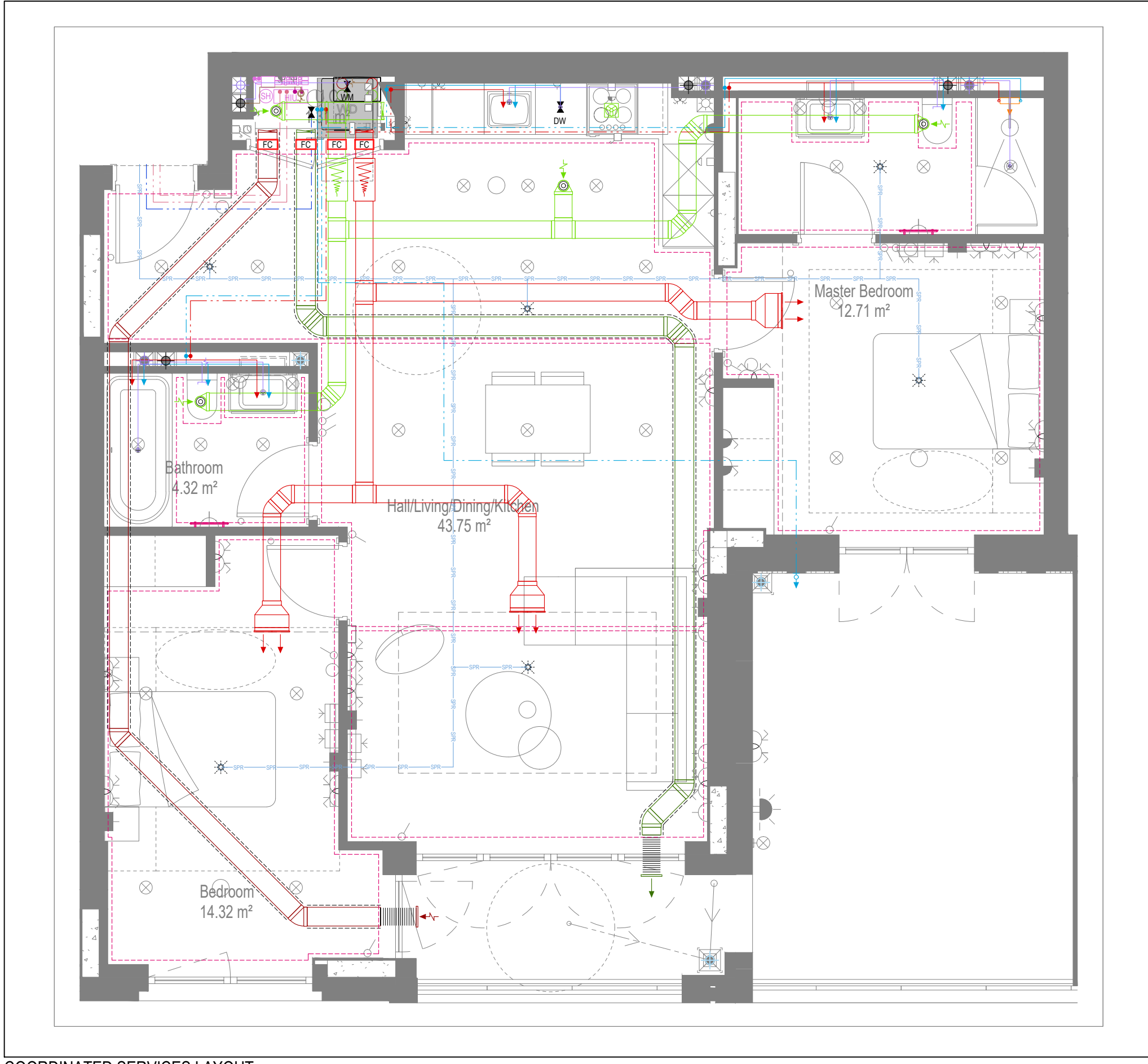
WATER AND HEATING LAYOUT



SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensions setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.

W2. 220 balanced CWS & HWS.

W3. 150 balanced CWS & HWS.

W4. 150 CWS.

W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.

W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.

W7. Heating tape to be added to hot water supply.

HEATING NOTES

H1. Insulated Heating Primary F&R. Refer to schematic for sizing.

H2. 220 Heating F&R.

H3. Under floor Heating.

SOILS NOTES

S1. 1000 SVP from above with rodding eye and access hatch.

S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.

S3. 1000 soil pipe from pan to SVP/ISS.

S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.

S5. 400 shower waste to run to SVP/ISS.

S6. 400 bath waste to run to SVP/ISS.

S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.

S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.

S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.

S10. RWP from above with access hatch & rodding eye.

S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.

V2. 220x50 Insulated Intake duct.

V3. 220x50 Insulated Exhaust duct.

V4. 204x60 Supply duct.

V5. 204x60 Extract duct.

V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-2012 for details.

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LEGEND

-----> Pipework at high level / within ceiling void or joist space

-----> Pipework at low level

-----> Pipework to droprise to low/high level or joist space

-----> Pipework beneath floor / within floor screed / hidden

Rectangular ductwork

Rectangular ductwork with insulation

Circular ductwork / SVP

Flexible ductwork

Intumescent Fire Collar

Supply diffuser

Extract diffuser

Kitchen manufacturers re-circulating cooker hood

Thermostatic Shower Mixer

15mm Cold Isolation Valve for Washing Machine

15mm Cold Isolation Valve for Dish Washer

Ceiling mounted Sprinkler Head

Hot Water Cylinder on stand (if above washing machine)

Hot Water Expansion Vessel

Sealed Heating Kit

Wall mounted Heat Interface unit

UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones

Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type

Ceiling mounted Sprinkler Head

Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.

Access Panel - Size varies

Titan Attenuator

BACKGROUND PLAN AS PER: KDS

DRAWING NO: 3556-KDS-BA-XX-DR-A-06-1137

REVISION: CS

DATE RECEIVED: 04.01.2021

AB	16.09.2022	AS BUILT	AS BUILT	JH	EJ
C2	19.08.2021	Updated to latest RCP, fire strategy and comments		IV/ZM	EJ
C1	11.09.2020	Construction Issue		CDS	MJ
P1	20.03.2020	Preliminary Issue		MJ	JC
Rev	Date	Description		Dwn	Chkd

Current purpose: AS BUILT

Scale: 1:50

Size: A1

Original Issue Date: 20.03.2020

Dwn: MJ

Chkd: JC

BUILDING SERVICES DESIGN CONSULTANTS

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MECHANICAL SERVICES LAYOUT

FLAT TYPE 31

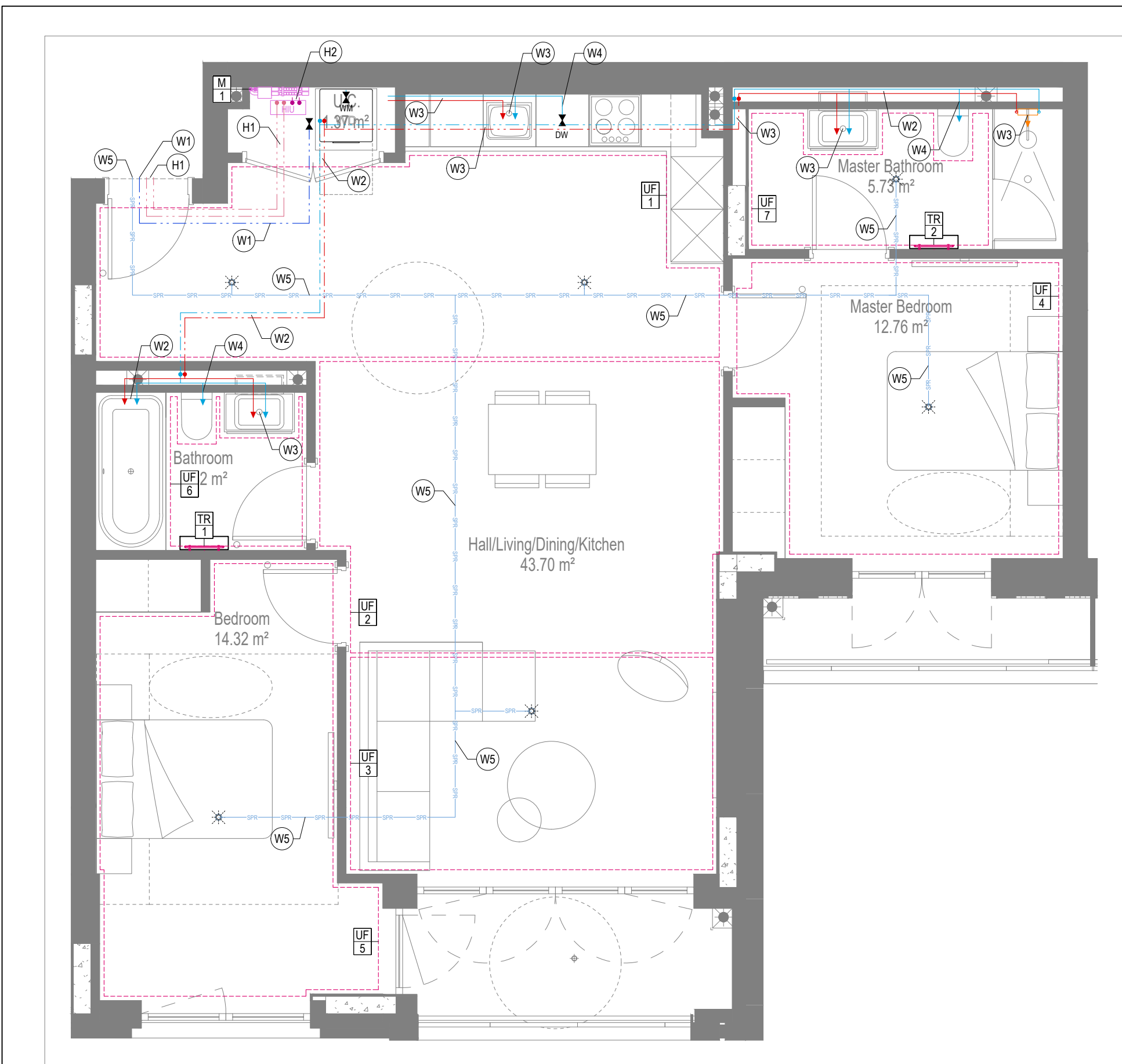
AN07

HORNSEY TOWN HALL

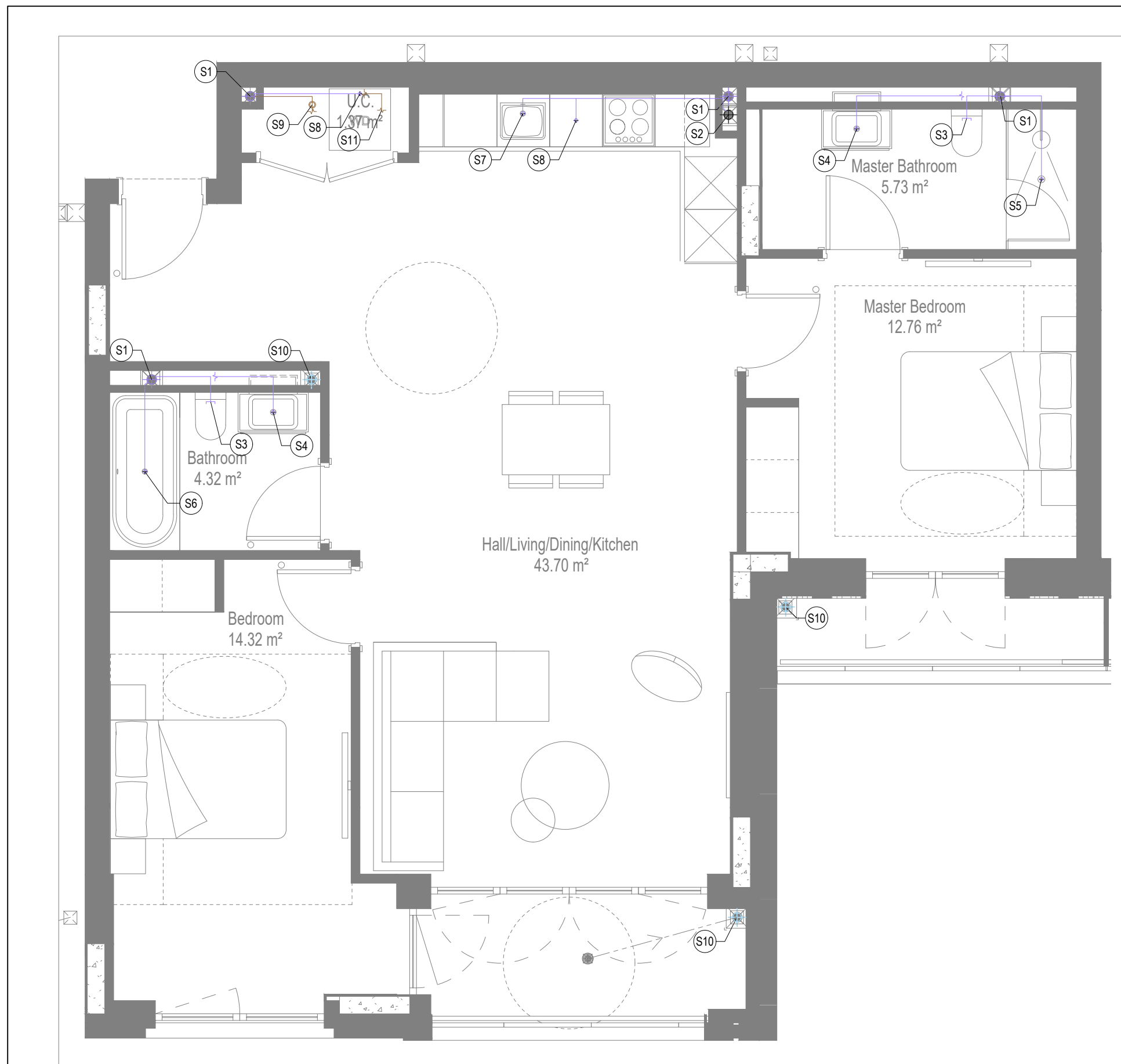
Client: ARDMORE

Dwg Number: 10687-M-03-A-0031

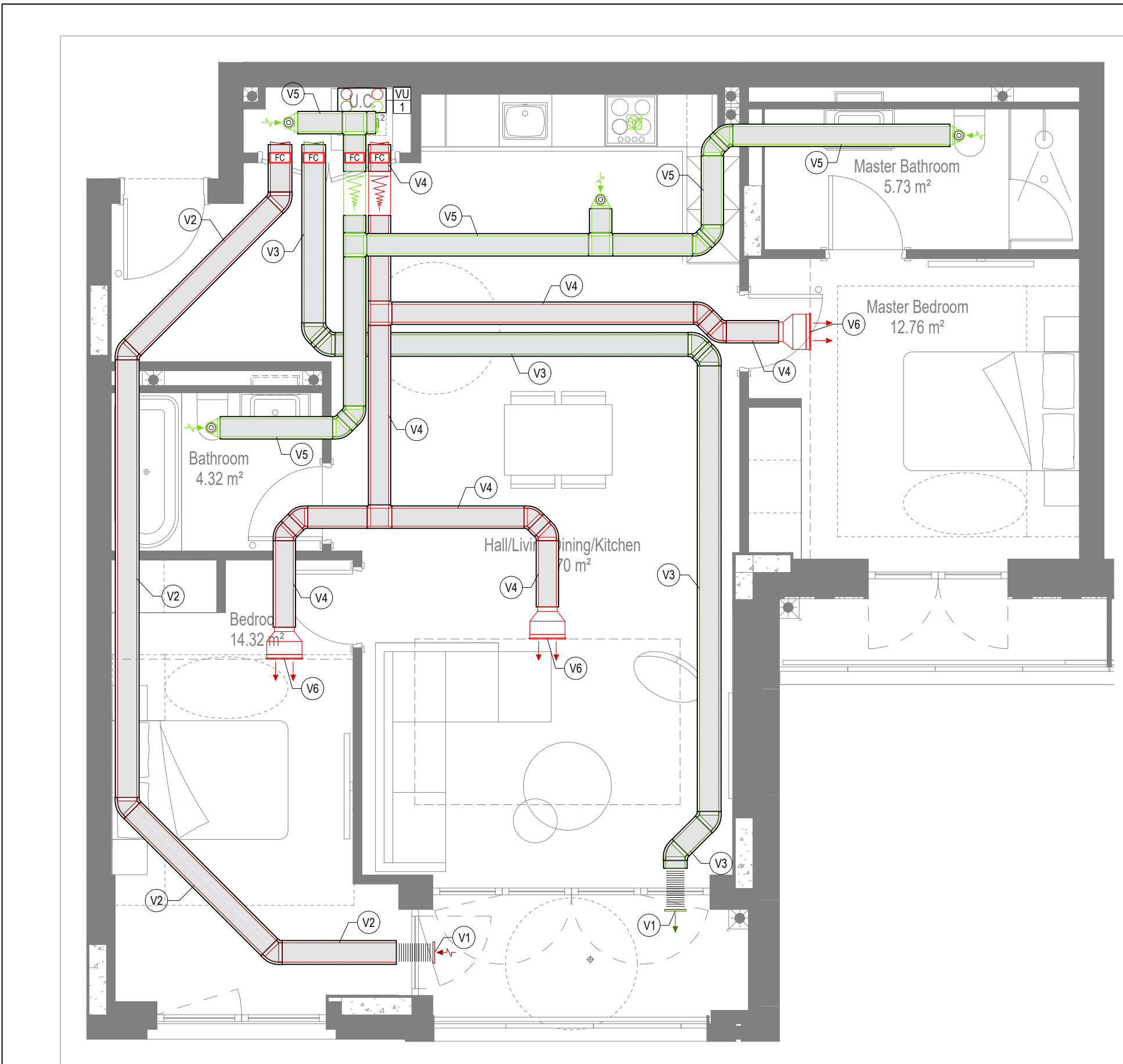
Rev: AB



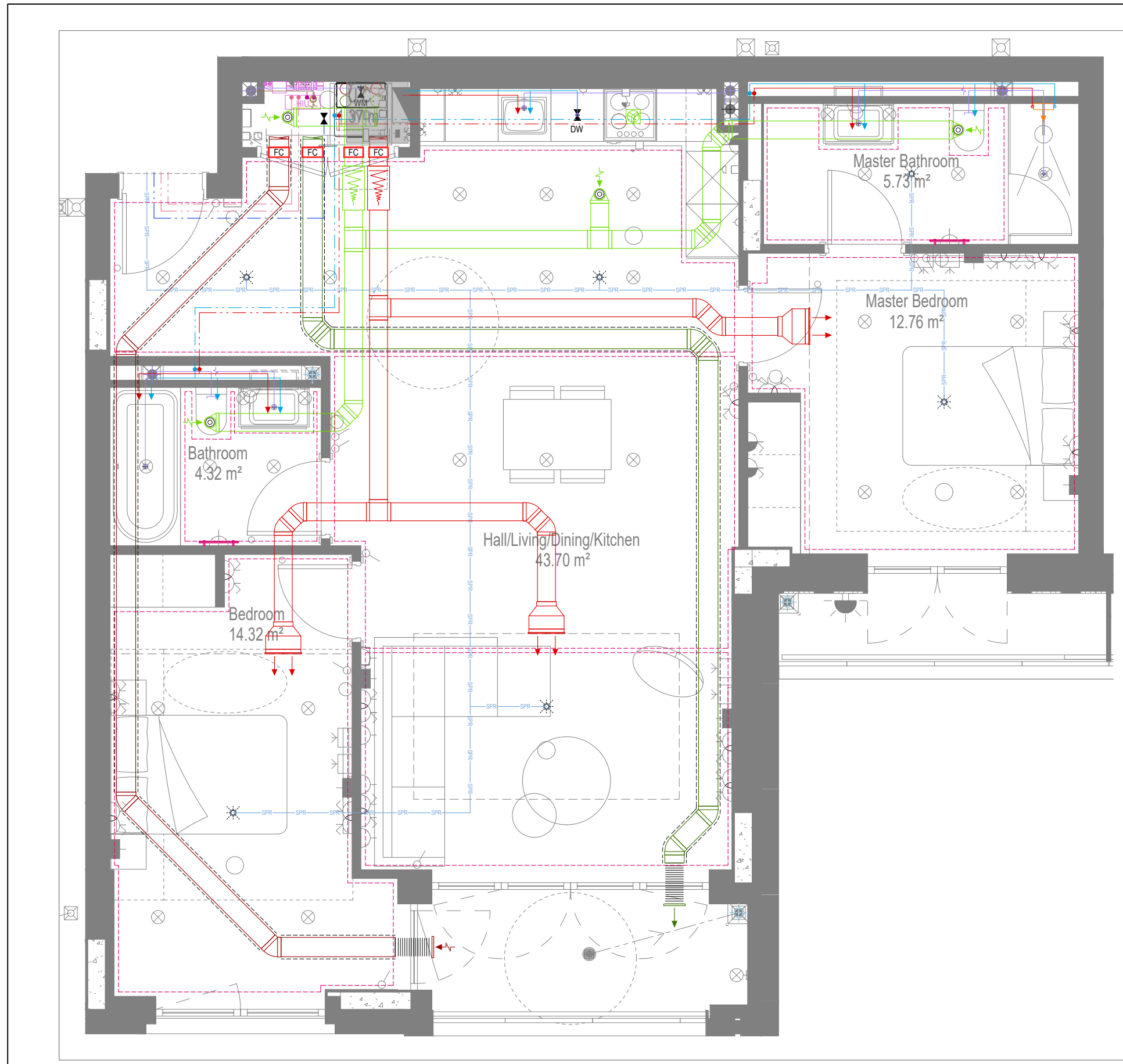
WATER AND HEATING LAYOUT



SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
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- Dimensions setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAVs), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to drop within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/SS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x60 Insulated Intake duct.
- V3. 220x60 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SH-0012 for details.

U/F HEATING SCHEDULE

MANUFACTURER:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	LIVING ROOM/KITCHEN
UF2	Z1	M1	LIVING ROOM/KITCHEN
UF3	Z1	M1	LIVING ROOM/KITCHEN
UF4	Z2	M1	BEDROOM 1
UF5	Z3	M1	BEDROOM 2
UF6	Z4	M1	BATHROOM
UF7	Z5	M1	ENSUITE

TOWEL RAIL SCHEDULE

MANUFACTURER:	TOWEL RAILS
TR REF:	STAT ZONE: MODEL (SIZE): ROOM:
TR1	Z1 PISA WHITE STRAIGHT 500 x 800 BATHROOM
TR2	Z1 PISA WHITE STRAIGHT 500 x 800 ENSUITE

VENTILATION UNIT SCHEDULE

UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

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LEGEND

- Pipework at high level / within ceiling void or joist space
- Pipework at low level
- Pipework to drop/rise to low/high level or joist space
- Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titan Attenuator

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARMORE ON 12.06.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS

DRAWING NO: 3556-KDS-BA-XX-DR-A-06-1144	REVISION: C2	DATE RECEIVED: 04.01.2021
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AB	16.09.2022	AS BUILT	AS BUILT	JH	EJ
C2	19.08.2021	Updated to latest RCP and fire strategy and comments		IV/SP	EJ
C1	01.10.2020	Construction Issue		TN	EJ
P1	20.03.2020	Preliminary Issue		MJ	JC
Rev	Date	Description		Dwn	Chkd
Current purpose:	AS BUILT	Scale: 1:50	Size: A1		
Original issue Date:	20.03.2020	Dwn: MJ	Chkd: JC		

	BUILDING SERVICES DESIGN CONSULTANTS 26-27 The Hill, Northfleet, Gravesend Kent, DA11 9EU www.whitecode.co.uk T: 01322 289977 E: design@whitecode.co.uk
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MECHANICAL SERVICES LAYOUT FLAT TYPE 31B

Plots: AN17, AN27, AN35

Project: HORNSEY TOWN HALL

Client: ARMORE

Dwg Number: 10687-M-03-A-0031B

Rev: AB

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-protected ductwork passes through a fire compartment element (such as a fire-rated hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, no longer than 3000mm in each instance and follow a slow radius bend.
- Where ducts need to drop/incline within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.4W/mK or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Duct work must be supported by at least two tough PVC coated glass cloth fabric (or 1/2" flexible duct) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted.
Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
H2. 220 Heating F&R.
H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with ridding eye and access hatch.
- S2. 1000 SS with drainage access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/SS.
- S4. 200 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. Copper Saddle Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 300 polypropylene waste system/SVP via a h-e-p-r-o tap.
- S10. See detail A on Internal water schematic.
- S11. R/W in from above with access hatch & ridding eye.
- 22 plastic concrete from Pan Collection or Heat Recovery Unit to run to SVP/SS h-e-p-r-o tap. To fall by gravity towards flow. Can be, is not pumped in, not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
V2. 220x90 Insulated Intake duct.
V3. 220x90 Insulated Exhaust duct.
V4. 204x60 Supply duct.
V5. 204x60 Extract duct.
V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-0012 for details.

U/F HEATING SCHEDULE			
MANUFACTURER:		POLYPIPE	
CIRCUIT REF:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	KITCHEN/LIVING ROOM
UF2	Z1	M1	KITCHEN/LIVING ROOM
UF3	Z2	M1	KITCHEN/HALLWAY
UF4	Z2	M1	BEDROOM 1
UF5	Z3	M1	BEDROOM 2
UF6	Z4	M1	BATHROOM

TOWEL RAIL SCHEDULE			
MANUFACTURER:		TOWEL RADS	
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 600 - 900	BATHROOM

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

FCU SCHEDULE			
MANUFACTURER / RANGE:		MITSUBISHI	
REF:	MODEL:	DUCT SIZE:	SERVING ROOM:
FCU1	PEFY-15VMS1-E	2000	BEDROOM 1
FCU2	PEFY-15VMS1-E	2000	BEDROOM 2

FCU GRILLE SCHEDULE				
MANUFACTURER / RANGE:		BROOKROAR FLOWLINE		
GRILLE REF:	ROOM	FLOW RATE L/S	GRILLE LENGTH	GRILLE TYPE
GR1	BEDROOM 1	120	1400	2F
GR2	BEDROOM 1	100	1400	2F
GR3	BEDROOM 2	100	1000	2F
GR4	BEDROOM 2	100	1000	2F

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LEGEND

-  Pipework at high level / within ceiling void or joist space
 Pipework at low level
 Pipework to drop/rise to low/high level or joist space
 Pipework beneath floor / within floor screed / hidden

-  Rectangular ductwork
-  Rectangular ductwork with insulation
-  Circular ductwork / SVP
-  Flexible ductwork

- | | |
|---|--|
|  | Intumescent Fire Collar |
|  | Supply diffuser |
|  | Extract diffuser |
|  | Kitchen manufacturers re-circulating cooker hood |
|  | Thermostatic Shower Mixer |
|  | 15mm Cold Isolation Valve for Washing Machine |
|  | 15mm Cold Isolation Valve for Dish Washer |
|  | Ceiling mounted Sprinkler Head |
|  | Hot Water Cylinder on stand (if above washing machine) |
|  | Hot Water Expansion Vessel |
|  | Sealed Heating Kit |
|  | Wall mounted Heat Interface unit |
|  | UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones |
|  | Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type |
|  | Ceiling mounted Sprinkler Head |
|  | Sprinkler pipework within ceiling void/joist space.
Refer to schematic for indicative details and sizing of system. |
|  | Access Panel - Size varies |
|  | Titon Attenuator |
|  | Titon Trimbox NOX Filter |
|  | Leak Detector |
|  | Fan Coil Unit |
|  | Grille for Fan Coil Unit |

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARDMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING No: 3596-KDS-BA-XX-DR-A-06-1139	REVISION: C2	DATE RECEIVED: 04.01.2021

C4	15.09.2022	AS BUILT	JH	EJ
C3	19.08.2021	Updated to fire strategy, RCP's and comments	DALS/ SP	EJ
C2	05.05.2021	Added cooling	IV	EJ
C1	02.10.2020	Construction Issue	TN	EJ
P1	20.03.2020	Preliminary Issue	MJ	JC
Rev	Date	Description	Drawn	Checked

Rev	Date	Description	Drwn	Chkd
Current purpose:	AS BUILT	Scale: 1:50	Size: A1	
Original Issue Date:	20.03.2020	Drwn: MJ	Chkd: JC	

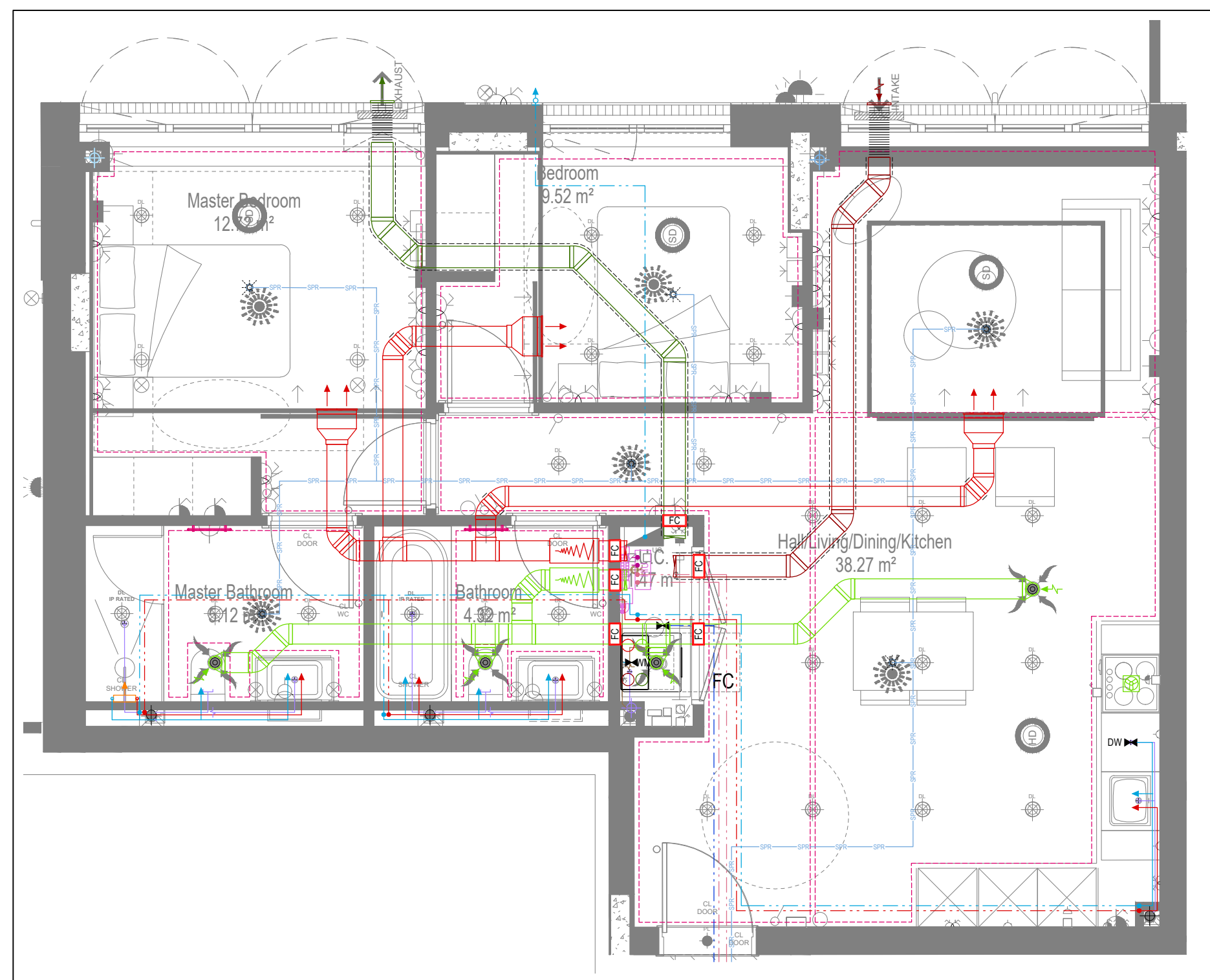
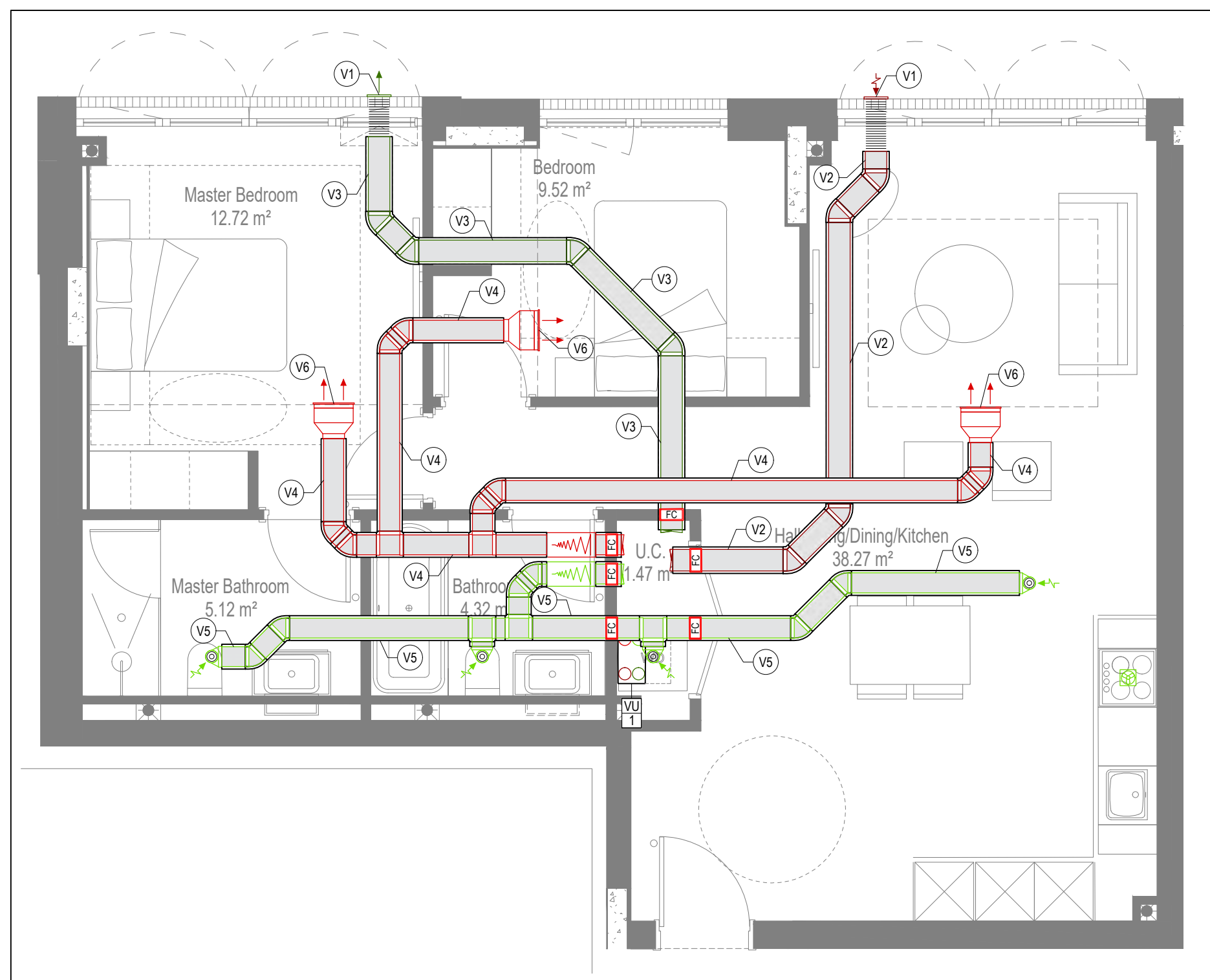
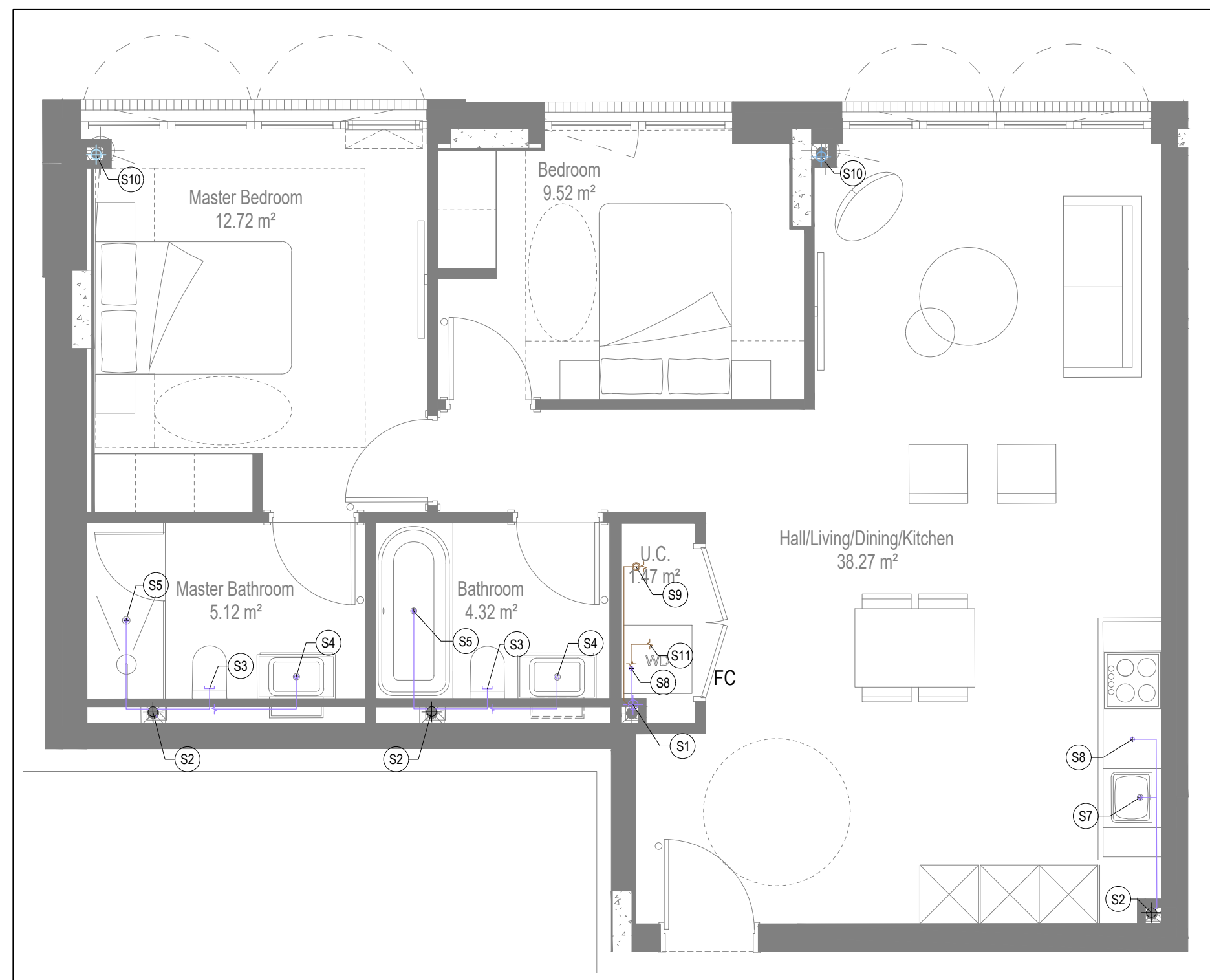
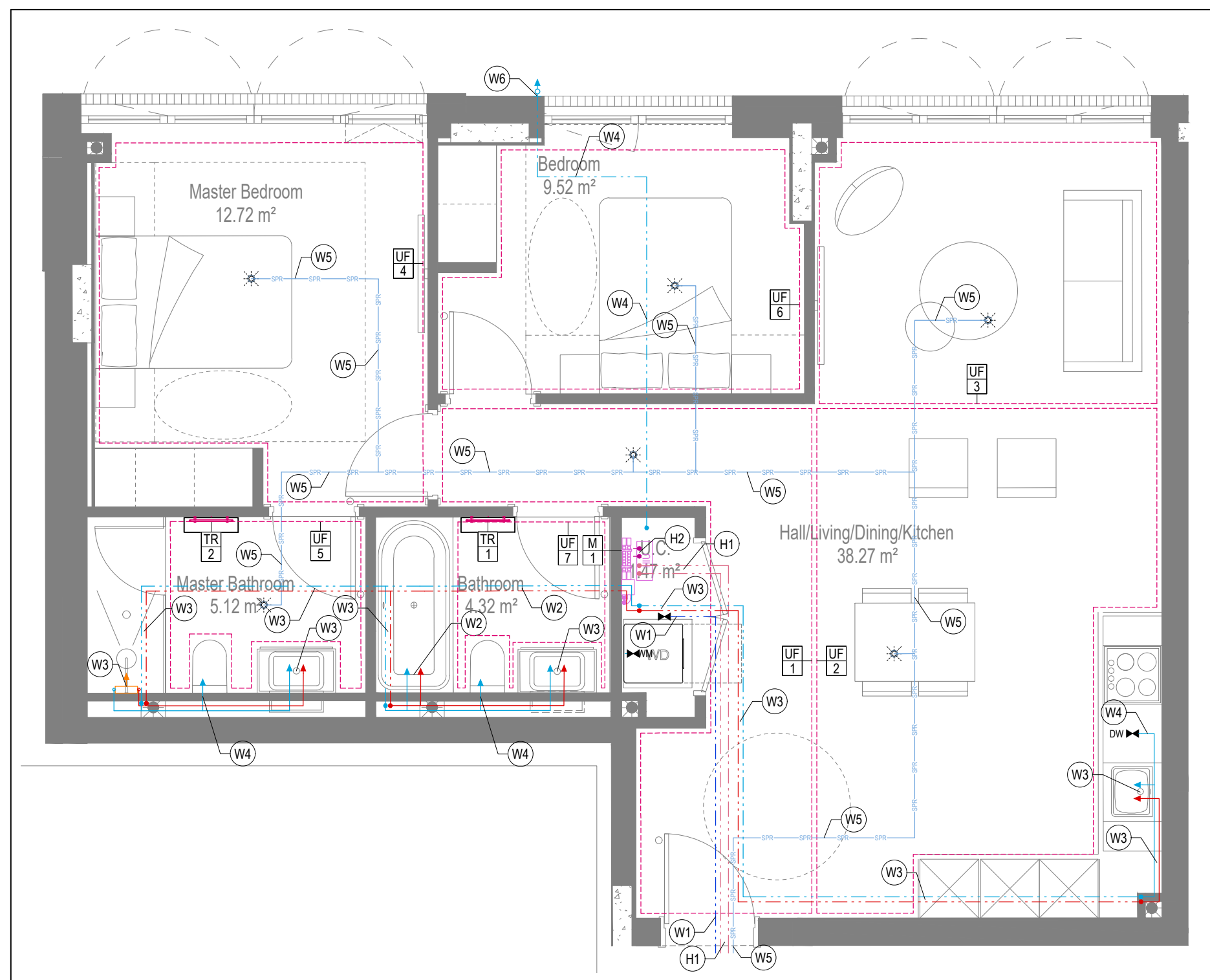
 **WHITECODE**
CONSULTING

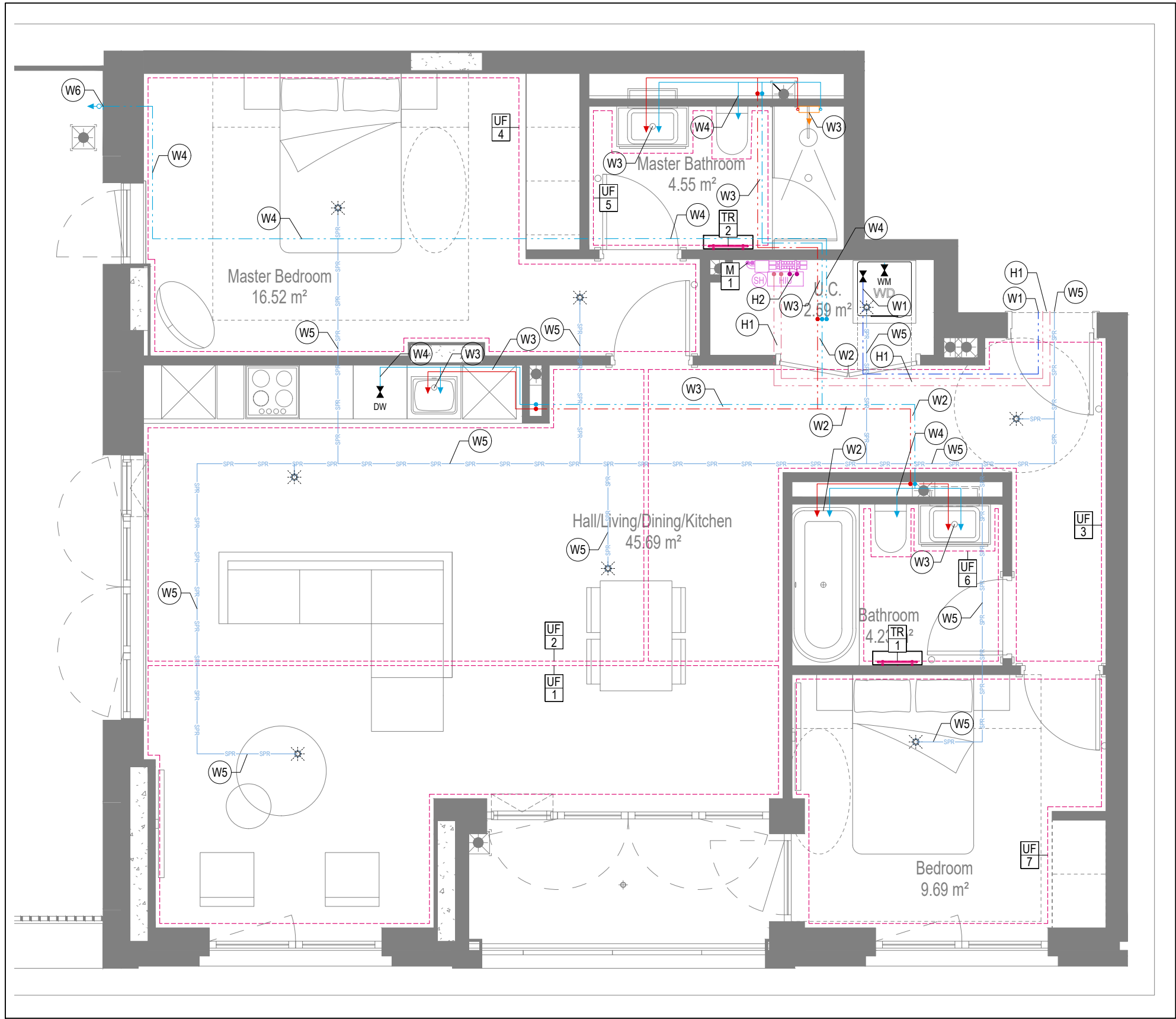
**BUILDING SERVICES DESIGN
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T: 01322 289977 E: design@whitecode.co.uk

Title: MECHANICAL SERVICES LAYOUT
FLAT TYPE 33
Plots: AN09

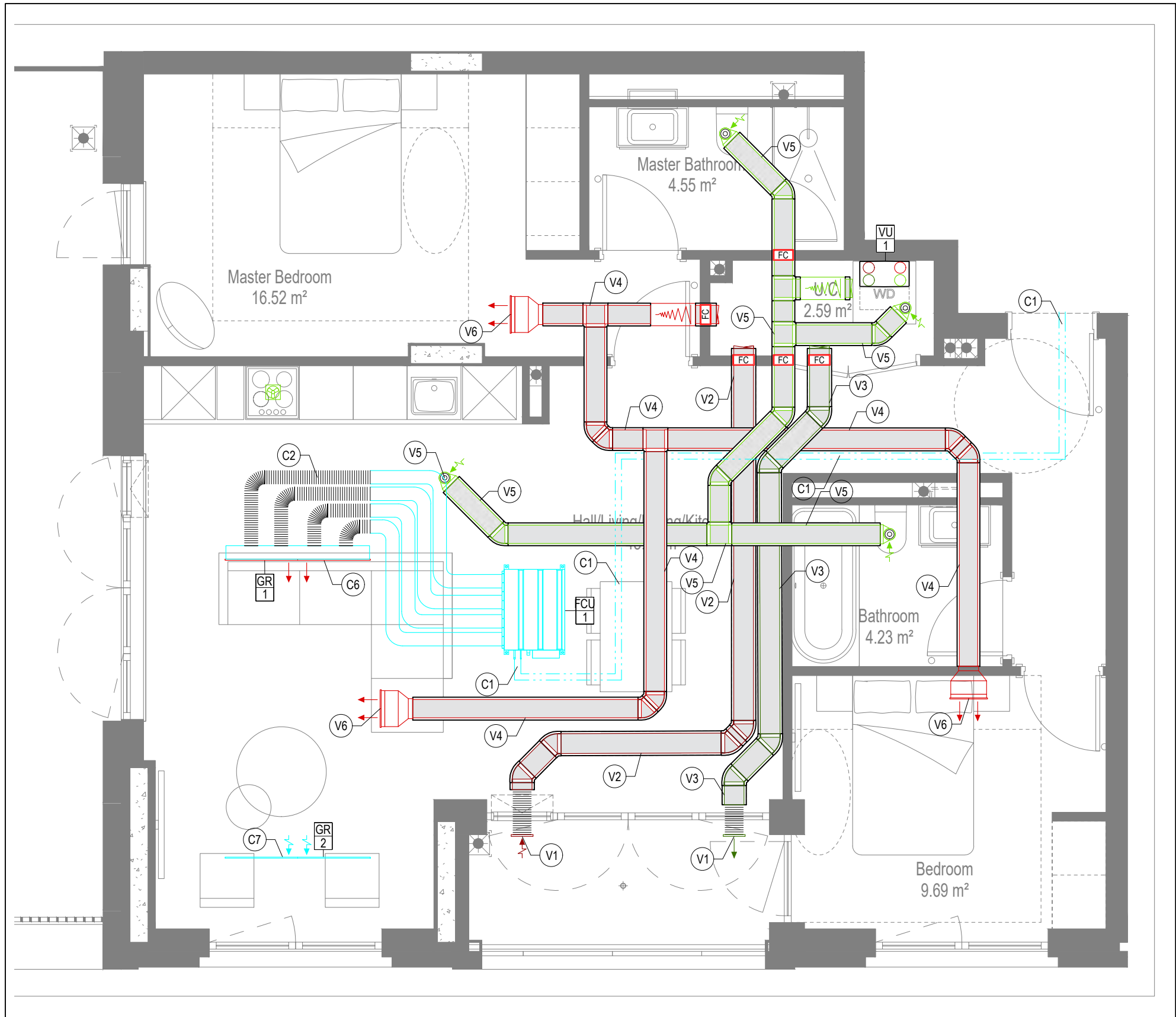
Project: HORNSEY TOWN HALL

Client:	ARDMORE	Rev:	C4
Dwg Number:	10687-M-03-A-0033		

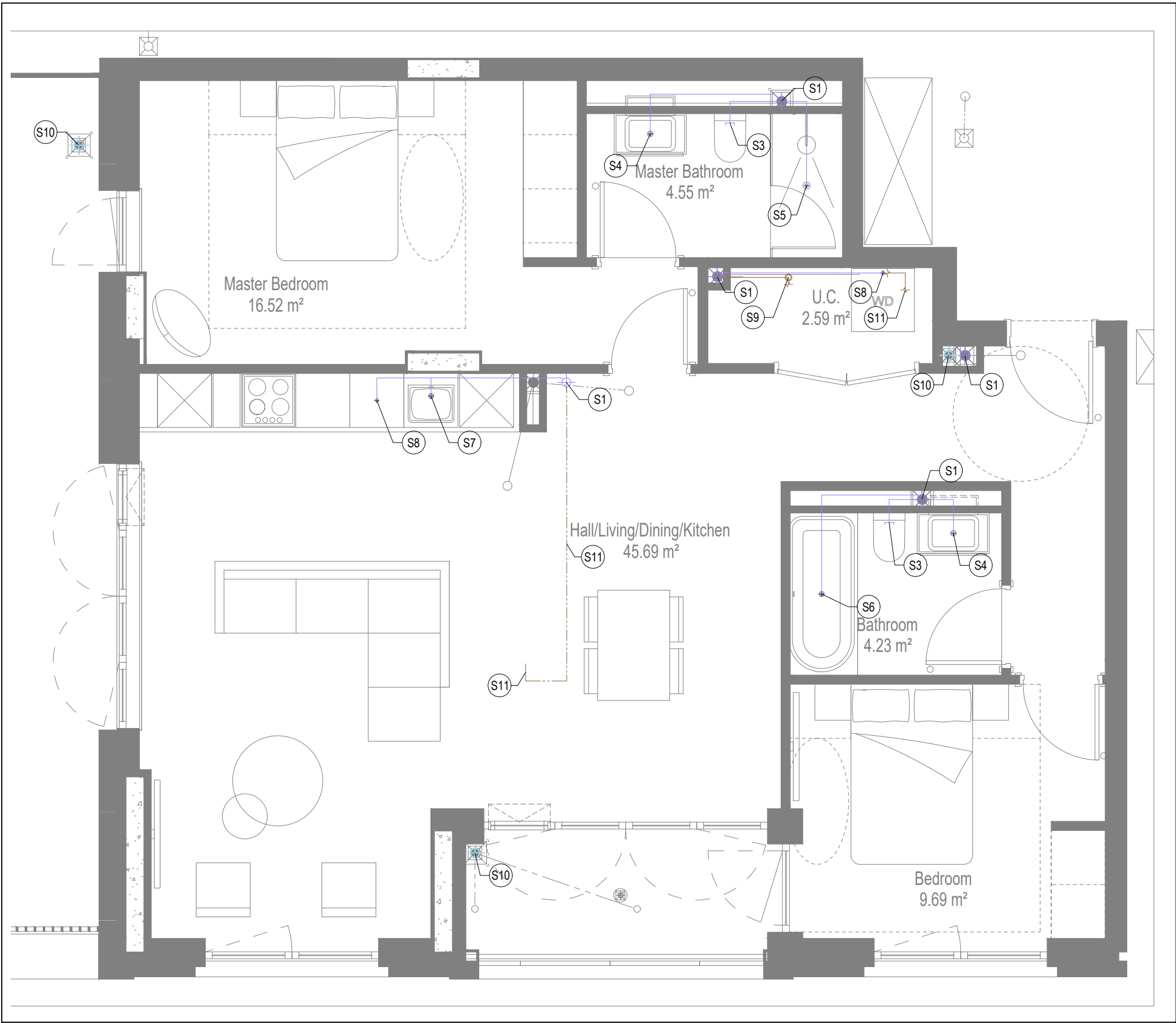




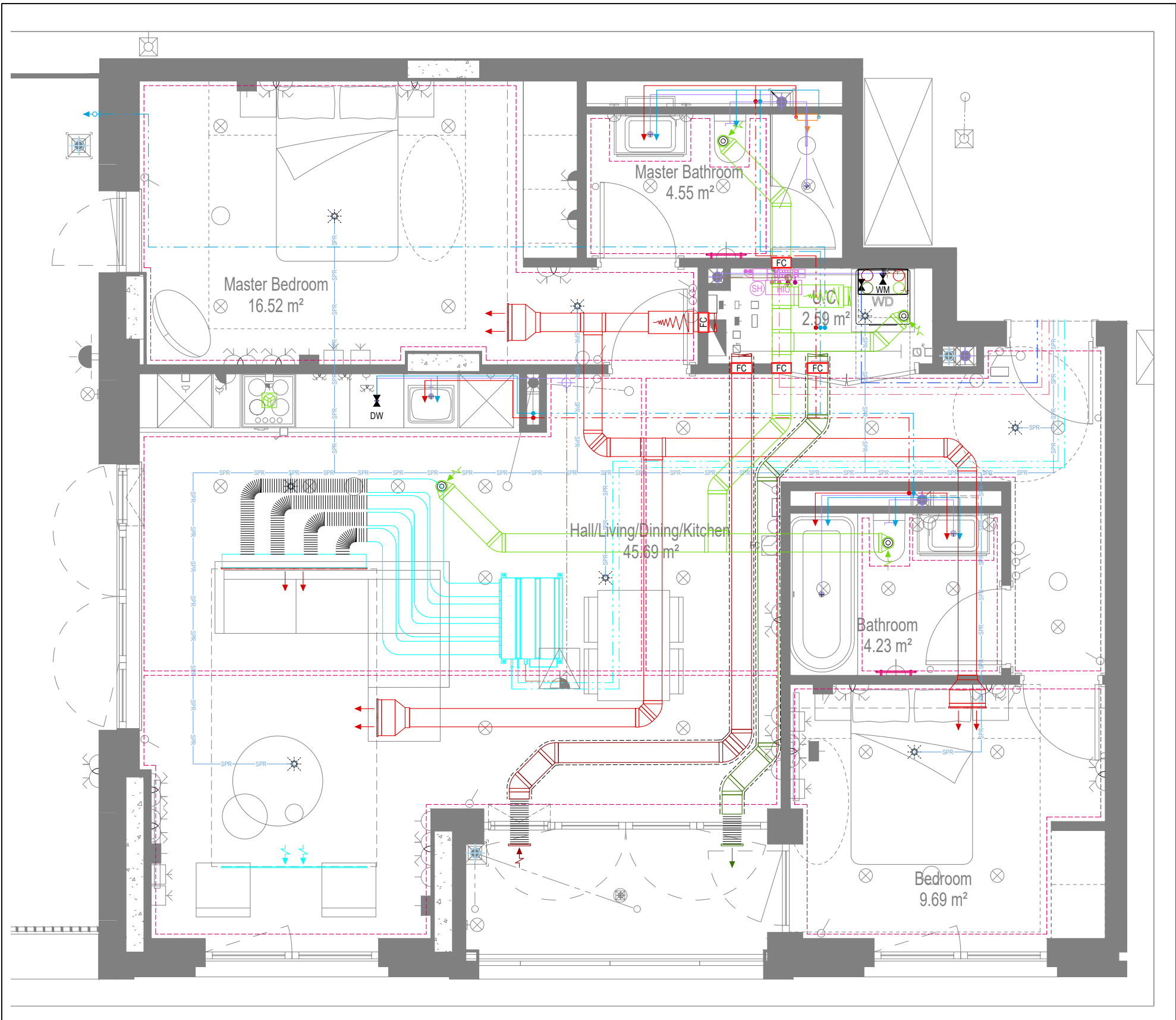
WATER AND HEATING LAYOUT



VENTILATION AND COOLING LAYOUT



SOILS AND WASTE LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensions setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating Kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x50 Insulated Intake duct.
- V3. 220x50 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Brookeair flowline linear grille.

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Bording to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

U/F HEATING SCHEDULE			
MANUFACTURER:		POLYPIPE	
CIRCUIT REF.	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	KITCHEN/LIVING ROOM
UF2	Z1	M1	KITCHEN/LIVING ROOM
UF3	Z2	M1	KITCHEN/HALLWAY
UF4	Z3	M1	BEDROOM 1
UF5	Z3	M1	ENSUITE
UF6	Z4	M1	BATHROOM
UF7	Z4	M1	BEDROOM 2

TOWEL RAIL SCHEDULE			
MANUFACTURER:		TOWEL RADIS	
TR REF.	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 800 x 800	BATHROOM
TR2	Z1	PISA WHITE STRAIGHT 500 x 800	ENSUITE

VENTILATION UNIT SCHEDULE			
UNIT REF:		SYSTEM:	
VU1	4	VENT AXIA	SENTINEL KINETIC BH

FCU SCHEDULE			
MANUFACTURER / RANGE:		MITSUBISHI	
REF:	MODEL:	DUCT SIZE:	SERVING ROOM:
FCU1	PEFY-PS0VMS1-E	1500	LIVING/KITCHEN/DINING

FCU GRILLE SCHEDULE					
MANUFACTURER / RANGE: BROCKEIR FLOWLINE					
GRILLE REF:	ROOM	FLOW RATE L/S	GRILLE LENGTH	GRILLE TYPE	DUTY
GR1	LIVING/DINING/KITCHEN	188	1600	2F	FCU SUPPLY
GR2	LIVING/DINING/KITCHEN	188	1600	2F	FCU EXTRACT

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Whitecode Ltd. remains the responsibility of the Installer/Contractor to ensure that there are no conflicts with information provided by ourselves & that of any manufacturers information or relevant requirements of statutory Bodies or Client specification's. If any conflicts do exist it is the responsibility of the Installer/Contractor to inform The Consultant/Client immediately verbally & in writing.

WARNING TO HOUSE PURCHASERS - Property Misdescriptions Act 1991

Buyers are warned that this is a working drawing and is not intended to be treated as a descriptive material describing, in relation to any descriptive material describing, in relation to any descriptive particular property or development, any of the Specific Matters prescribed by an Order made under the above Act. The contents of this drawing may be subject to change at any time & alterations and variations can occur during the progress of the works without revision of the drawing. Consequently the layout, form, contents & dimensions of the finished construction may differ materially from those shown. Nor do the contents of this drawing constitute a contract, part of any contract or a warranty.

LEGEND

- - - - -> 1 Pipework at high level / within ceiling void or joist space
- - - - -> 2 Pipework at low level
- - - - -> 3 Pipework to droprise to low/high level or joist space
- - - - -> 4 Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers rec-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Tilted Attenuator
- Tilted Trimbox NOX Filter
- Leak Detector
- Fan Coil Unit
- Grille for Fan Coil Unit

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARMORE ON 12.09.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION/DRAWING

BACKGROUND PLAN AS PER: KDS			
DRAWING NO:	REVISION:	DATE RECEIVED:	
3596-KDS-BA-XX-DR-A-06-1145	C2	04.01.2021	

AB	16.09.2022	AS BUILT	Updated cooling and updated to fire strategy, RCP's and comments	JH	DALS	EJ
C2	19.08.2021	Updated cooling and updated to fire strategy, RCP's and comments		SP	TN	EJ
C1	01.10.2020	Construction Issue		SP	JC	Chkd
P1	20.03.2020	Preliminary Issue		SP	JC	Chkd
Rev	Date	Description		SP	JC	Chkd
Current purpose: AS BUILT				Scale: 1:50	Size: A1	
Original Issue Date: 20.03.2020				Drawn: SP	Chkd: JC	

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T: 01322 289977		E: design@whitecode.co.uk	

Title: MECHANICAL SERVICES LAYOUT
Plots: AN 31

Project: HORNSEY TOWN HALL

Client: ARMORE
Dwg Number: 10687-M-03-A-0035
Rev: AB



- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

- This drawing must be read in conjunction with approved sanitaryware schedule tables and others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

- Heating pipe work high points are to be vented with automatic air vents (AAV's), shall be manually vented where this is not possible.

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

- Where non-protected hallway ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with the manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F of the Building Regulations.
- Where flexible duct work must be used, it should be installed at 90% of its maximum length, be no longer than 3000mm in each section and follow a slow radius bend.
- Where ducts need to drop/incline within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
 - Where duct work is insulated, it shall be with 25mm of 0.4W/mK or equivalent.
 - Where duct work is not insulated, it should be insulated with 25mm of mineral wool.
- Where flexible duct work is used it is to be fitted with PVC coated glass cloth (or equivalent vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted.
Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

H1. Insulated Heating Primary F&R. Refer to schematic for sizing
H2. 220 Heating F&R.
H3. Under floor Heating.

S1. 1000 SVP from above with rodding eye and access hatch.

S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.

S3. 1000 soil pipe from pan to SVP/SS.

S4. 320 basin waste with anti-siphon to run in 400 to SVP/SS.

S5. 400 shower waste to run to SVP/SS.

S6. 400 bath waste to run to SVP/SS.

S7. 400 sink waste to run in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.

S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.

S9. Copper Saddle Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a h-e-p-o run.

S10. See detail A1 on Internal water schematic.

S11. RWT from above with rodding eye and access hatch.

S12. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS h-e-p-o run. To fall by gravity where possible, or to be pumped if not.

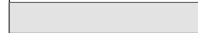
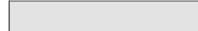
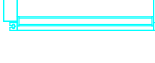
- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum
- V2. 220x90 Insulated Intake duct.
- V3. 220x90 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct
- V6. Brookeair flowline linear grille

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Boarding to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

FCU SCHEDULE			
MANUFACTURER / RANGE:		MITSUBISHI	
REF:	MODEL:	DUCT SIZE:	SERVING ROOM:
FCU1	PEFY-P50VMS1-E	1500	LIVING/KITCHEN/DINING
FCU 2	PEFY-P20VMS1-E	1500	BEDROOM

FCU GRILLE SCHEDULE					
MANUFACTURER / RANGE:		BROOKFAIR FLOWLINE			
GRILLE REF:	ROOM	FLOW RATE L/S	GRILLE LENGTH	GRILLE TYPE	DUTY
GR1	LIVING/DINING/KITCHEN	209	2000	2F	FCU + VEN SUPPLY
GR2	LIVING/DINING/KITCHEN	188	1600	2F	FCU RETUR
GR3	BEDROOM	113	1000	2F	FCU SUPPL
GR4	BEDROOM	113	1000	2F	FCU RETUR

 Pipework at high level / within ceiling void or joist space
 Pipework at low level
 Pipework to droprise to low/high level or joist space
 Pipework beneath floor / within floor screed / hidden

- | | |
|---|---|
|  | Rectangular ductwork |
|  | Rectangular ductwork with insulation |
|  | Circular ductwork / SVP |
|  | Flexible ductwork |
|  | Intumescent Fire Collar |
|  | Supply diffuser |
|  | Extract diffuser |
|  | Kitchen manufacturers re-circulating cooker hood |
|  | Thermostatic Shower Mixer |
|  | 15mm Cold Isolation Valve for Washing Machine |
|  | 15mm Cold Isolation Valve for Dish Washer |
|  | Ceiling mounted Sprinkler Head |
|  | Hot Water Cylinder on stand (if above washing machine) |
|  | Hot Water Expansion Vessel |
|  | Sealed Heating Kit |
|  | Wall mounted Heat Interface unit |
|  | UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones |
|  | Wall mounted Towel Rail - Refer to Internal Drying schematic for size and type |
|  | Ceiling mounted Sprinkler Head |
|  | Sprinkler pipework within ceiling void/jist space.
Refer to schematic for indicative details and sizing of system. |
|  | Access Panel - Size varies |
|  | Titan Attenuator |
|  | Titan Trimbox NOX Filter |
|  | Leak Detector |
|  | Fan Coil Unit |
|  | Grille for Fan Coil Unit |

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARDMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING No: 3596-KDS-BA-XX-DR-A-06-1147	REVISION: C1	DATE RECEIVED: 04.01.2021

AB C2	16.09.2022 19.08.2021	AS BUILT Updated cooling, updated to fire strategy and comments	JH IV/SP	EJ EJ
C1 P1	02.10.2020 20.03.2020	Construction Issue Preliminary Issue	TN MJ	EJ JC
Rev	Date	Description	Drwn	Chkd
Current purpose:	AS BUILT	Scale: 1:50	Size: A1	
Original issue Date:	20.03.2020	Drwn: MJ	Chkd: JC	

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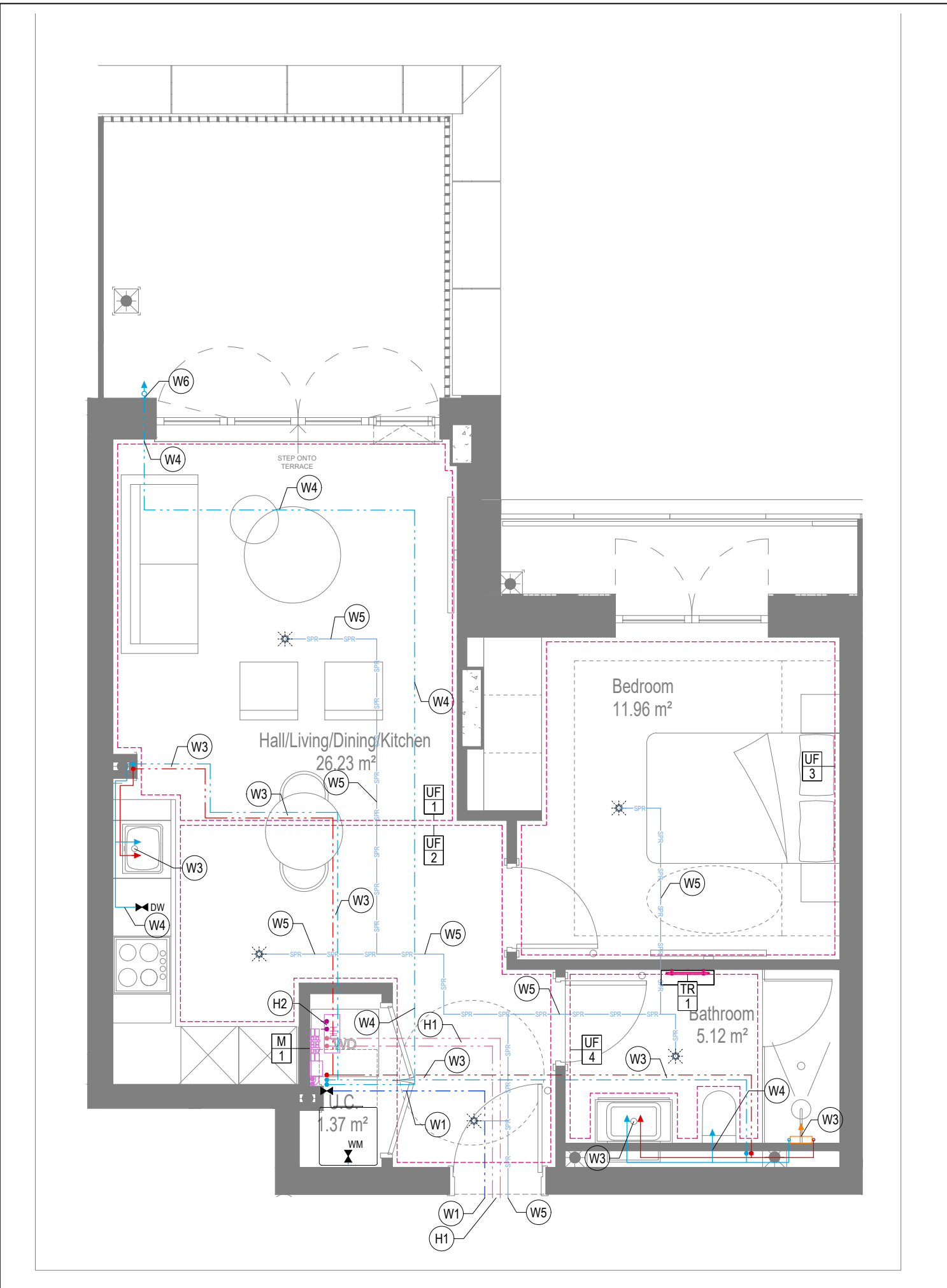
Title: MECHANICAL SERVICES LAYOUT
FLAT TYPE 37
Plots: AN41

Project: HORNSEY
TOWN HALL

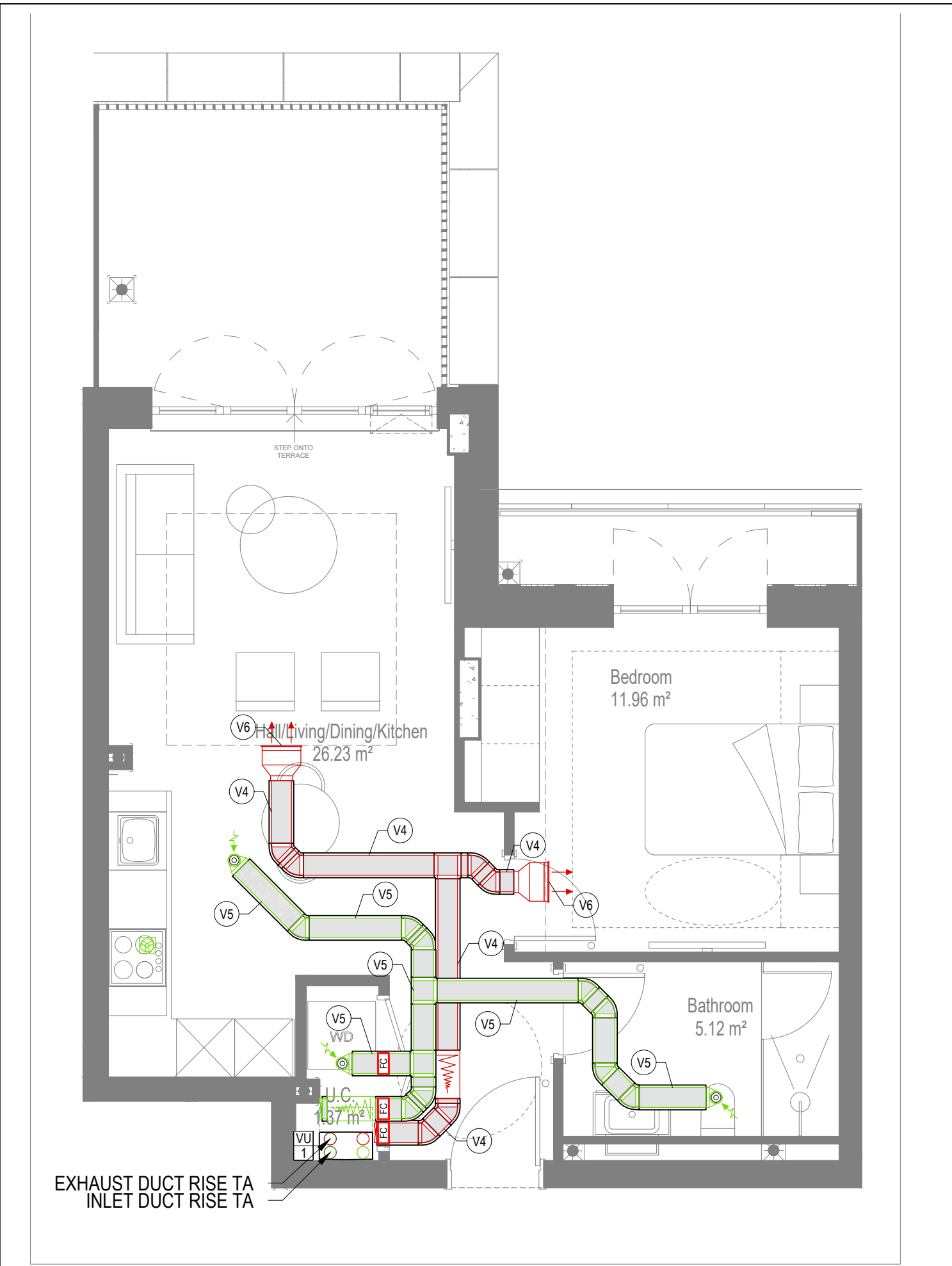
Client: ARDMORE

Dwg Number: 10687-M-03-A-0037

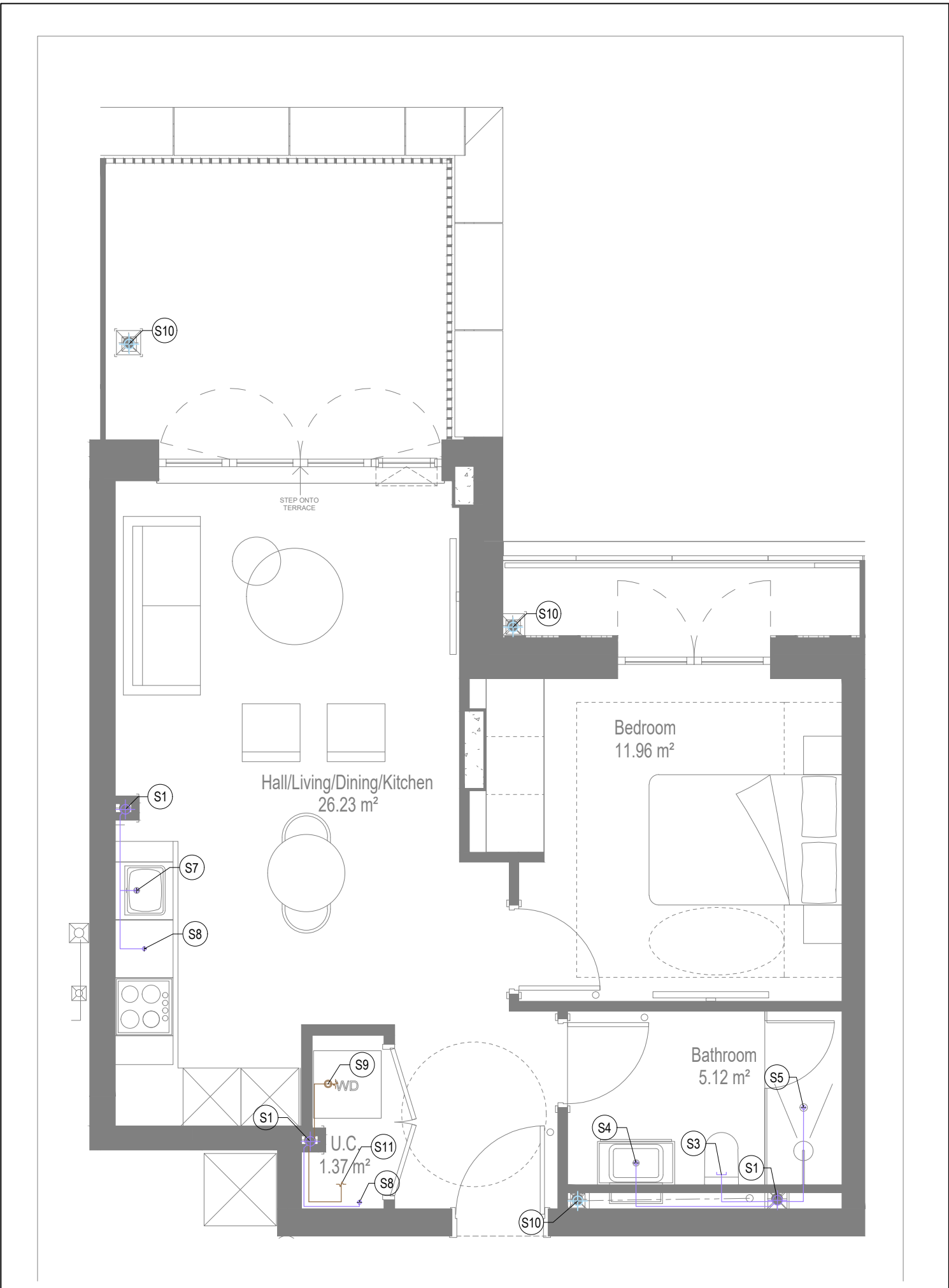
Rev:
AB



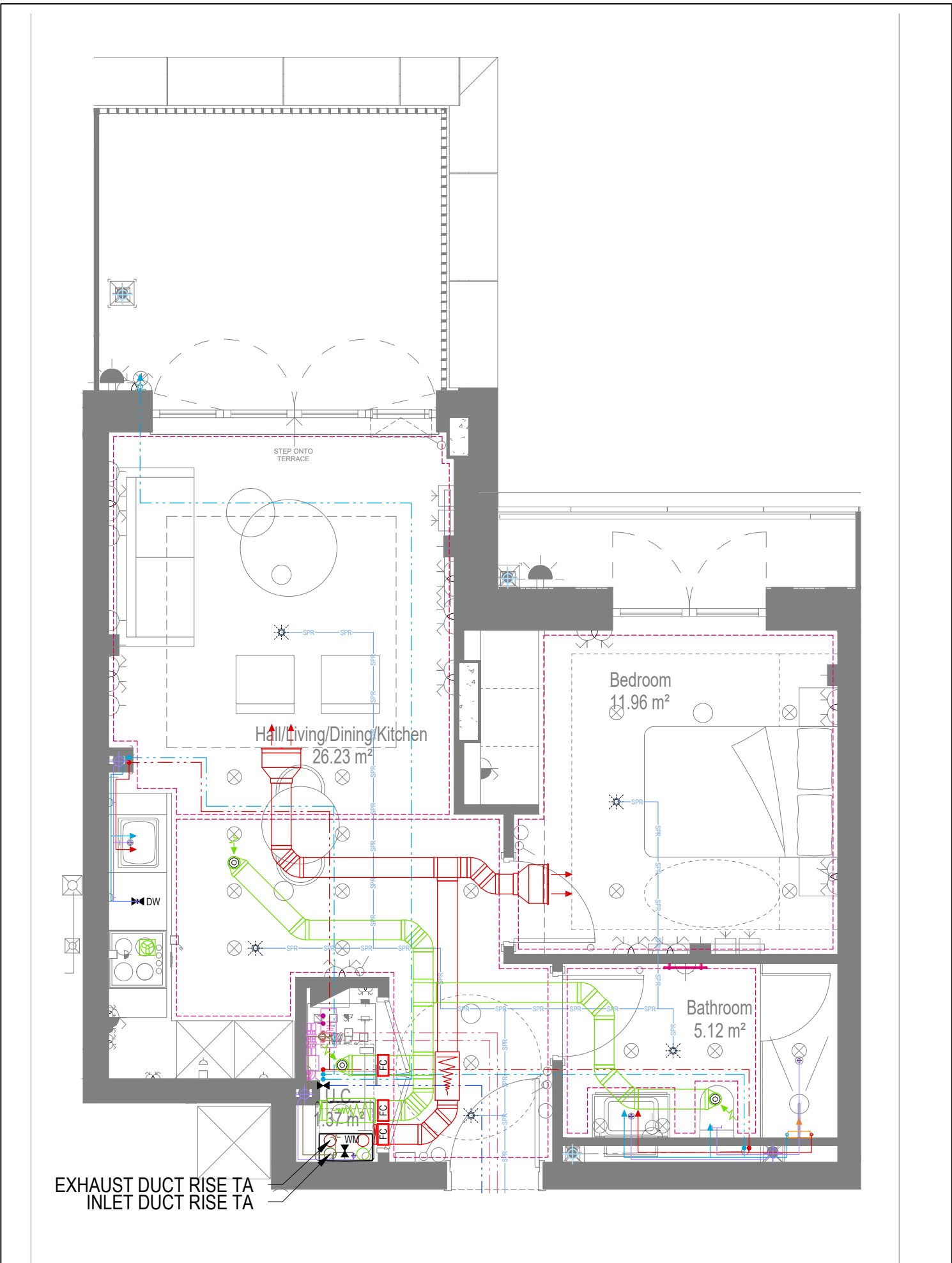
WATER AND HEATING LAYOUT



VENTILATION LAYOUT



SOILS AND WASTE LAYOUT



COORDINATED SERVICES LAYOUT

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- Dimensioned setting out details to be confirmed by architect.
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- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-vo trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-vo trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x60 Insulated Intake duct.
- V3. 220x90 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Exhaust duct.
- V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-0012 for details.

U/F HEATING SCHEDULE			
MANUFACTURER:	POLYPIPE		
CIRCUIT REF:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	LIVING ROOM
UF2	Z1	M1	HALLWAY/KITCHEN
UF3	Z2	M1	BEDROOM 1
UF4	Z3	M1	BATHROOM

TOWEL RAIL SCHEDULE			
MANUFACTURER:	TOWEL RADS		
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

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WARNING TO HOUSE PURCHASERS - Property Misdescriptions Act 1991
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LEGEND

- > Pipework at high level / within ceiling void or joist space
- > Pipework at low level
- > Pipework to droprise to low/high level or joist space
- > Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuits/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Tilt Attenuator

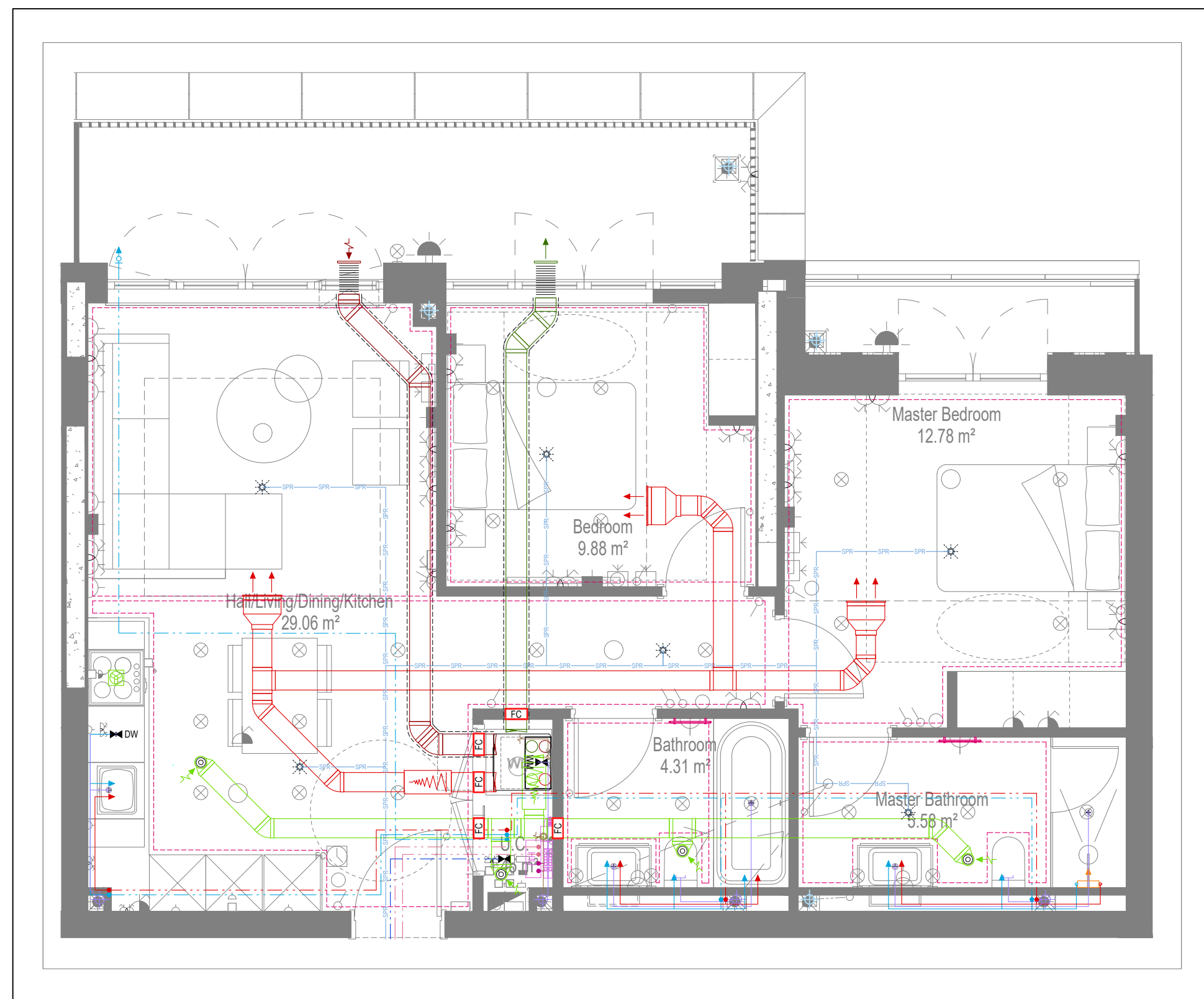
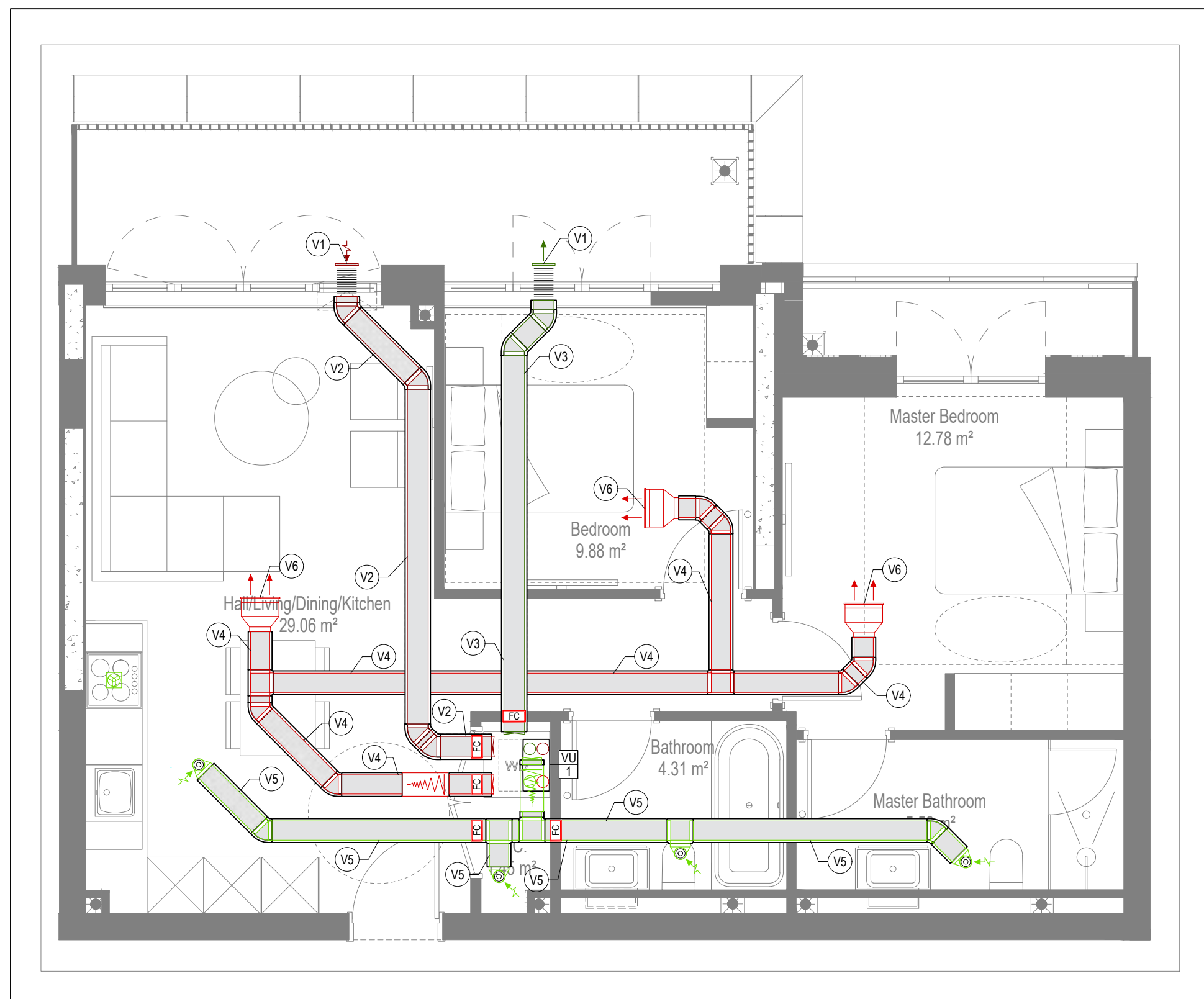
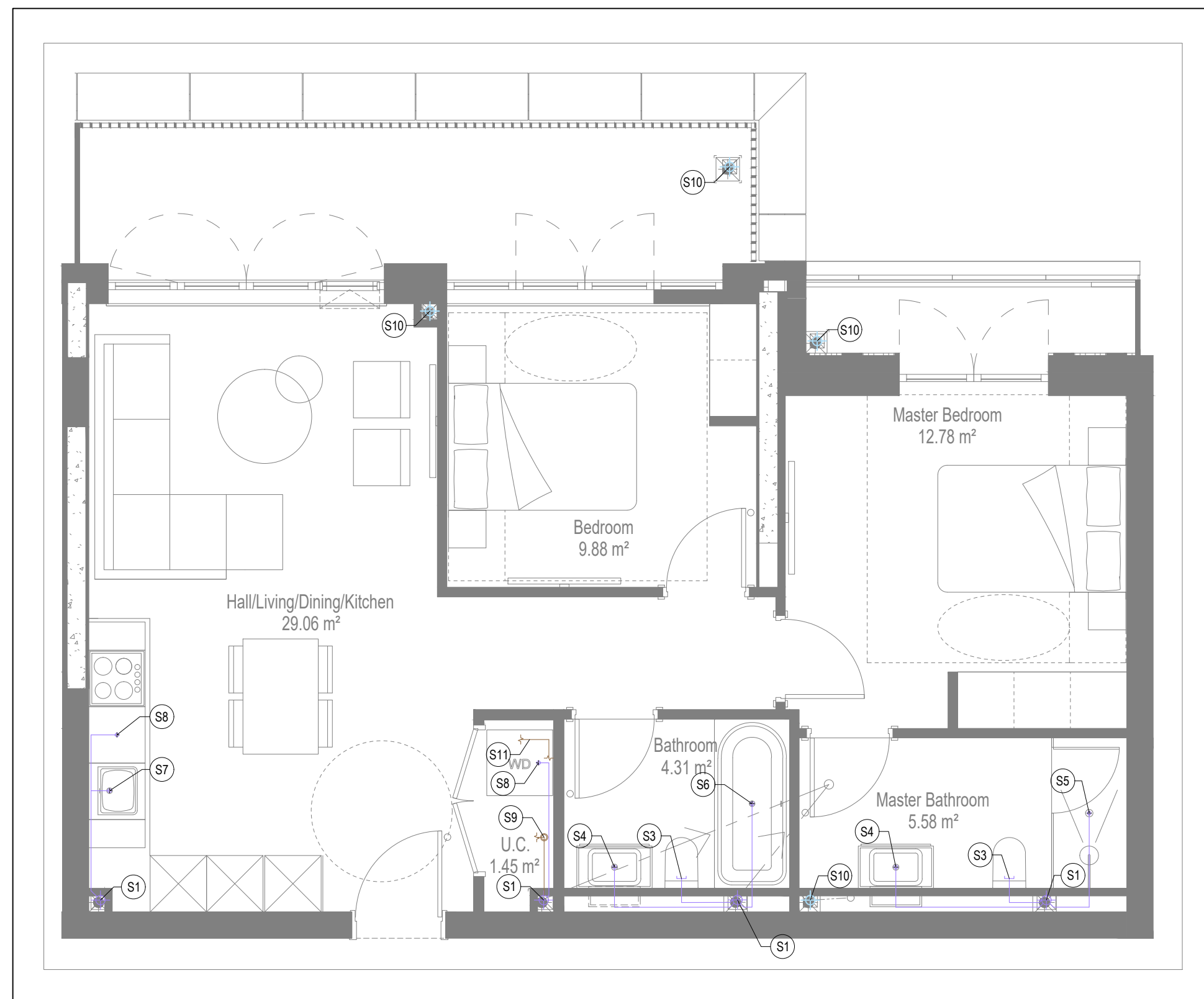
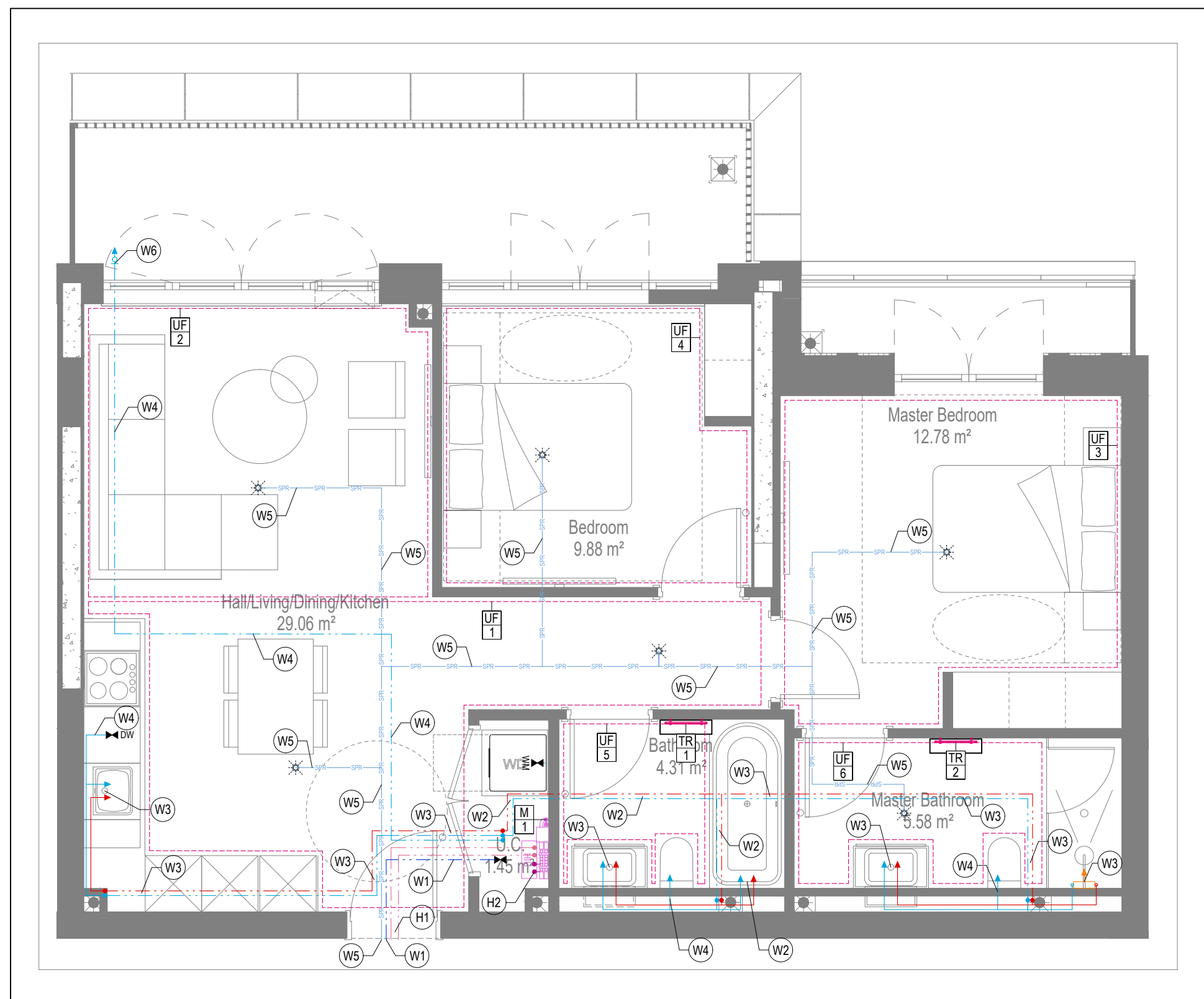
DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARMORE ON 12.09.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION/ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING NO: 3506-KDS-BA-XX-DR-A-06-1149	REVISION: C1	DATE RECEIVED: 05.01.2021

AB	15.09.2022	AS BUILT	JH	EJ
C2	19.08.2021	Updated to latest RCP, fire strategy and comments	IV/SP	EJ
C1	01.10.2020	Construction issue	TN	EJ
P1	20.03.2020	Preliminary issue	CDS	JC
Rev	Date	Description	Drawn	Chkd
Current purpose:		AS BUILT	Scale: 1:50	Size: A1
Original issue Date:		20.03.2020	Drawn: CDS	Chkd: JC

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Title:		MECHANICAL SERVICES LAYOUT	
Plots:		FLAT TYPE 39	
Project:		AN43	
Client:		HORNSEY TOWN HALL	
Dwg Number:		10687-M-03-A-0039	
Rev:		AB	



GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Hesting pipe work high points is to be vented with automatic air vents (AAVs), or caps shall be manually vented where this is not possible.
- GENERAL SOILS NOTES
- Where waste pipe passes behind corner, it shall be suitably protected against damage by being lagged in 100mm backed brick firebricks or to be run in copper.
 - Where a waste run line exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.
- GENERAL VENTILATION NOTES
- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) ducts have to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturers's requirements.
 - Ducts within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
 - Where flexible duct work is installed it should be installed at 90% of its maximum length, be no longer than 300mm in each direction and follow a straight radius bend. Ducts does not need to disperse within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
 - Where flexible duct work is insulated wherever there is a risk of condensation forming. Where duct work is insulated, it shall be with 25mm of 0.04mw/e or equivalent.
 - Ventilation unit to be installed with anti-vibration mounts.
 - Where flexible duct work is used it should be to tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted.
Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- ### HI. Insulated Heating Primary F&R. Refer to schematic for sizing.
- ### S2. 2200 Heating F&R.
- ### S3. Under floor heating.
- ## SOL'S NOTES
- S1. 1000 SVP from above with ridding eye and access hatch.
- S2. 1000 SSV with ridding access. Positions generally on ground or lower ground floor. Check drainage drawings for details.
- S3. 2200 solid pipe from gan to SVP.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 connection for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. 1000 SVP from above with access hatch & ridding eye. To be fitted with discharge via a tundish to 320 polypropylene waste system/SVP via a hevo-r tap. See Detail A on internal water heating.
- S10. RWP from above with access hatch & ridding eye.
- S11. 2200 plastic dense conduit from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS hevo-r tap. To fail by gravity where possible, or to be pumped if not.
- ## VENTILATION NOTES
- V1. Int&Ext/Loustr. Loustr. Refer to detail drawing for dimensions of plenum.
- V2. 2200/2200 Insulated Intake duct.
- V3. 2200/2200 Insulated Exhaust duct.
- V4. 2046/260 Supply duct.
- V5. 2046/260 Exhaust duct.
- V6. Breakover flowline linear grille

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Boarding to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

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	Pipework at high level / within ceiling void or joist space
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	Rectangular ductwork
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	Flexible ductwork
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	Supply diffuser
	Extract diffuser
	Kitchen manufacturers re-circulating cooker hood
	Thermostatic Shower Mixer
	15mm Cold Isolation Valve for Washing Machine
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	Hot Water Expansion Vessel
	Sealed Heating Kit
	Wall mounted Heat Interface unit
	UFOH manifold - Refer to typical UFOH drawings for details for Circuits/Zones
	Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
	Ceiling mounted Sprinkler Head
	Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
	Access Panel - Size varies
	Titon Attenuator

BACKGROUND PLAN AS PER: KDS				REVISION:	DATE RECEIVED:
DRAWING NO: 3596-KDS-BA-XX-DR-A-06-1151				C1	04.01.2021

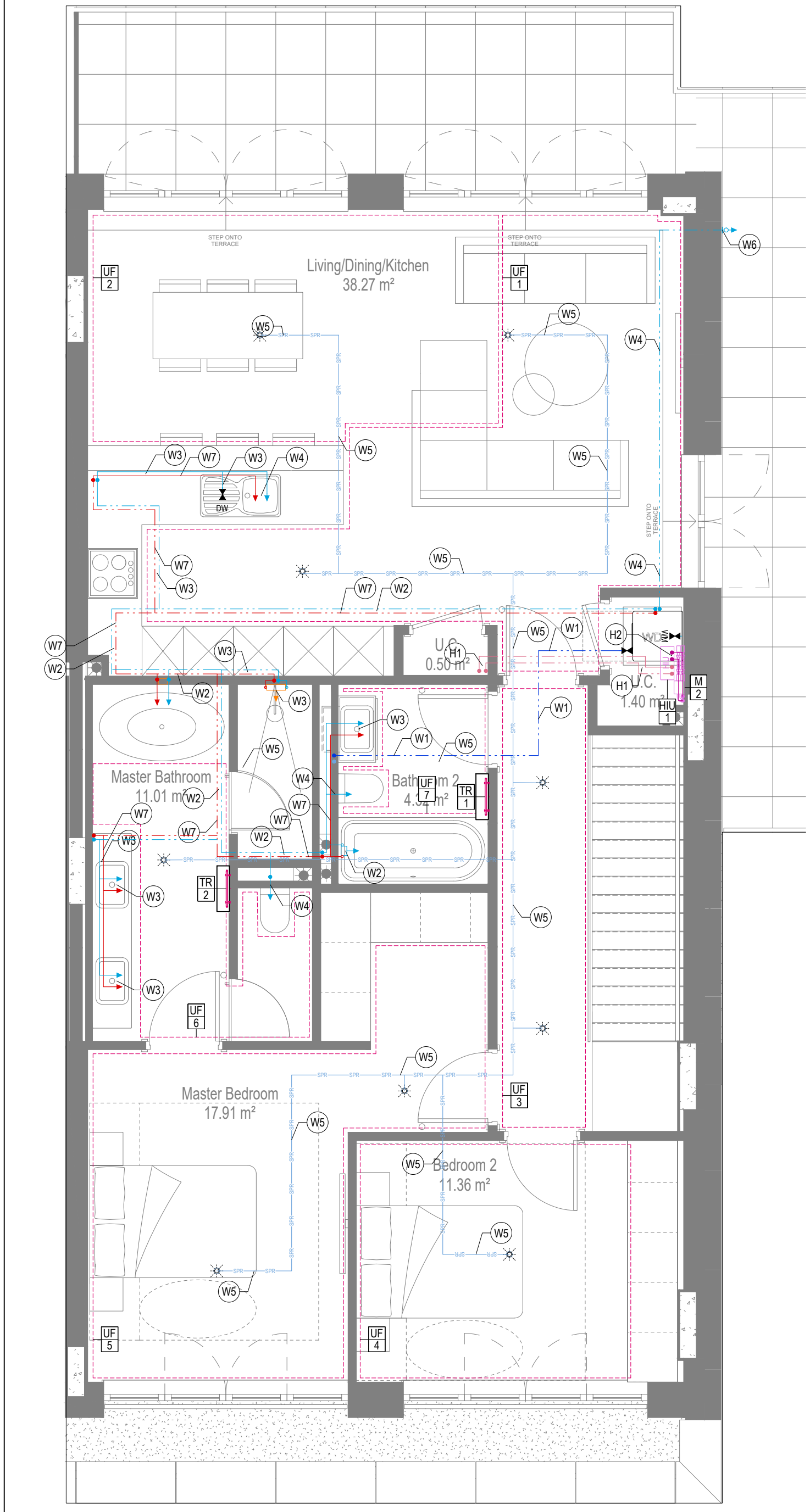
AC	16.09.2021	AS BUILT	JH	JA	EJ
C2	19.08.2021	Rebuilt cooling, updated to fire strategy and comments	SN	JA	EJ
C1	01.10.2020	Construction Issue	TN	SN	EJ
P1	20.03.2020	Preliminary Issue	SN	JA	EJ
Rev	Date	Description	Drawn	Chkd	
Current purpose: AS BUILT		Scale: 1:50	Size: A1		
Original Issue Date: 20.03.2020		Drawn: SP	Chkd: JC		



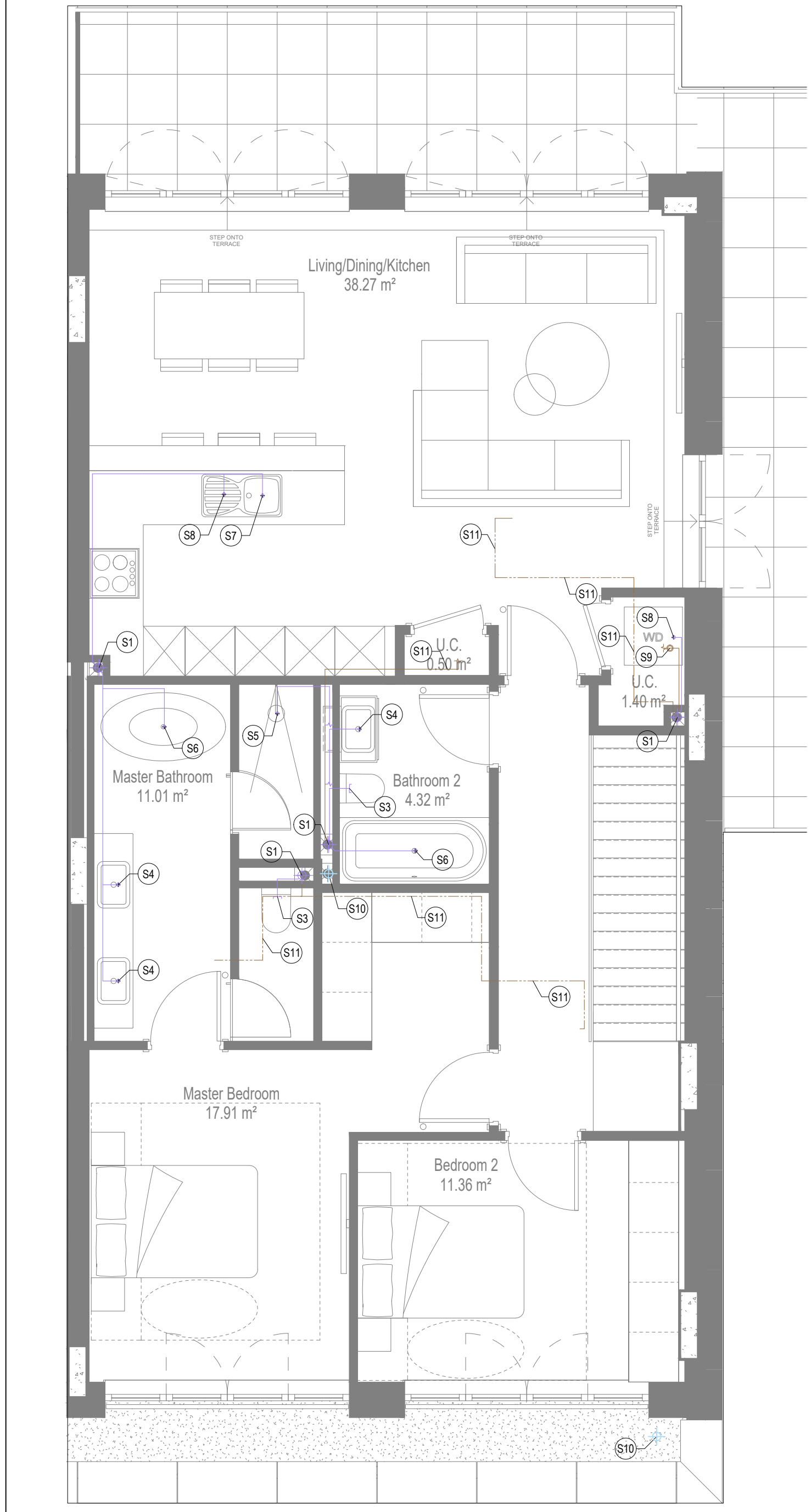
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26-27 The Hill, Northleaf, Gravesend
Kent, DA11 9EU
www.whitecore.co.uk
T: 01322 289977 E: design@whitecore.co.uk

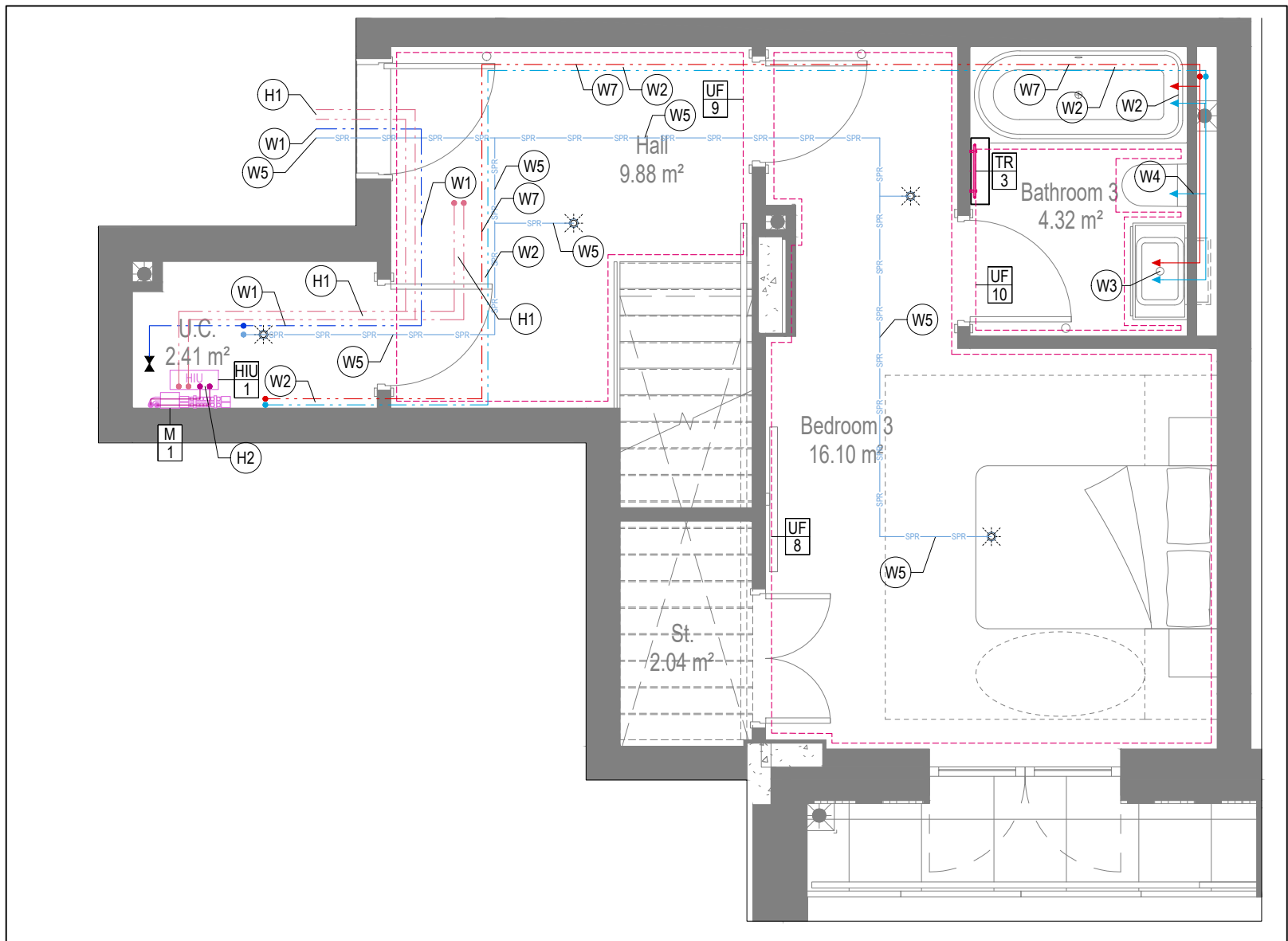
Title:		MECHANICAL SERVICES LAYOUT FLAT TYPE 41	
Plots:		AN 45	
Project:		HORNSEY TOWN HALL	
Client:		ARDMORE	Rev. AB
Dwg Number:		10687-M-03-A-0041	



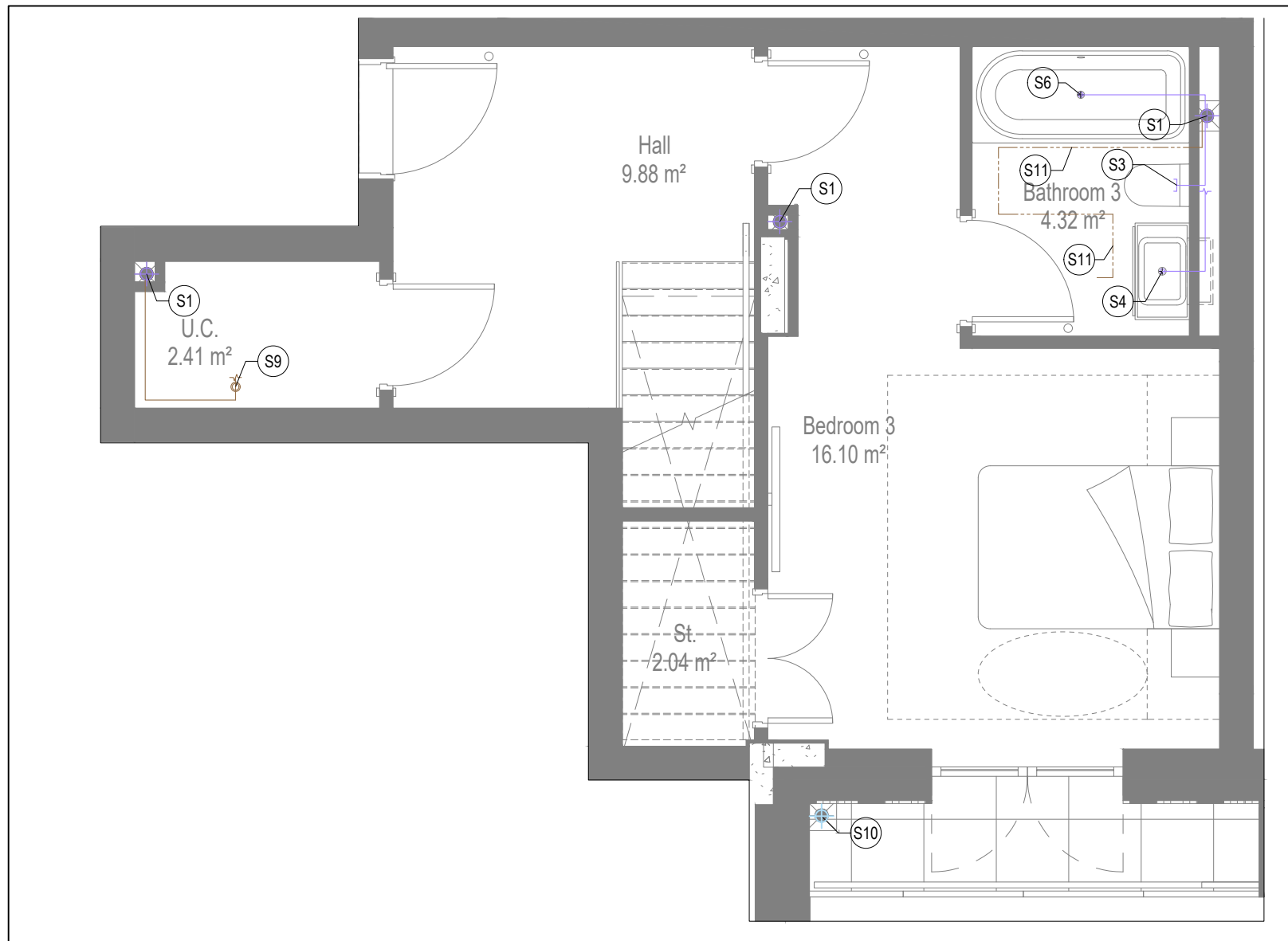
WATER AND HEATING LAYOUT
UPPER FLOOR



SOILS AND WASTE LAYOUT
UPPER FLOOR



WATER AND HEATING LAYOUT
LOWER FLOOR



SOILS AND WASTE LAYOUT
LOWER FLOOR

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- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all hot water pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAVs), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-vo trap. See detail A on internal water schematic.
- S10. RVP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-vo trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x50 insulated intake duct.
- V3. 220x50 insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Brookeair flowline linear grille.

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Bording to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

TOWEL RAIL SCHEDULE			
MANUFACTURER:		TOWEL RAILS	
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM 1
TR2	Z2	PISA WHITE STRAIGHT 500 x 800	BATHROOM 2
TR3	Z2	PISA WHITE STRAIGHT 500 x 800	ENSUITE

HEAT INTERFACE UNIT SCHEDULE		
MANUFACTURER:		YGHF
REF:	LOCATION:	MODEL:
HIU 1	LOWER FLOOR	CAPACITY 1
HIU 2	UPPER FLOOR	CAPACITY 2

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC ADVANCED S

UF HEATING SCHEDULE			
MANUFACTURER:		POLYPIPE	
CIRCUIT REF	STAT ZONE	MANIFOLD	ROOM
UF1	Z1	M2	KITCHEN/LIVING
UF2	Z1	M2	KITCHEN/LIVING
UF3	Z2	M2	HALLWAY UPPER
UF4	Z3	M2	BED 2
UF5	Z4	M2	MASTER BEDROOM
UF6	Z4	M2	MASTER BATHROOM
UF7	Z5	M2	BATHROOM 2
UF8	Z6	M1	BEDROOM 3
UF9	Z7	M1	BATHROOM 1
UF10	Z8	M1	HALLWAY LOWER

FAN COIL UNIT SCHEDULE		MITSUBISHI				
REF	AREA SERVED	MODEL	DIMENSIONS WxDxH [mm]	HEATING DUTY [kW]	COOLING DUTY [kW]	AIRFLOW [l/s]
FCU1	LIVING ROOM	PEFY-P25VMS1-E	900X700X200	2.30	4.60	188
FCU2	MASTER BEDROOM	PEFY-P25VMS1-E	900X700X200	1.08	2.16	117
FCU3	BEDROOM 2	PEFY-P25VMS1-E	900X700X200	0.67	1.35	117
FCU4	BEDROOM 3	PEFY-P25VMS1-E	900X700X200	0.98	1.95	117

FCU GRILLE SCHEDULE										
MANUFACTURER		BROOKE AIR								
REF	AREA SERVED	MODEL	SUPPLY/RETURN	VOLUME [l/s]	LENGTH [mm]	NOISE [NR]	PRESSURE DROP [Pa]	NO. SPIGOTS	SPIGOT DIAMETER [mm]	PLENUM ORIENTATION
GR1	LIVING ROOM	FLOWLINE 2F	SUPPLY	188	1600	27	11	4	150	SIDE ENTRY
GR2	MASTER BEDROOM	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY
GR3	BEDROOM 2	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY
GR4	BEDROOM 3	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY
GR5	LIVING ROOM	FLOWLINE 2F	RETURN	188	1600	N/A	N/A	N/A	N/A	N/A
GR6	MASTER BEDROOM	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A
GR7	BEDROOM 2	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A
GR8	BEDROOM 3	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A

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LEGEND

- 4 Pipework at high level / within ceiling void or joist space
- 4 Pipework at low level
- 4 Pipework to droprise to low/high level or joist space
- 4 Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titan Attenuator
- Titan Trimbox NOX Filter
- Leak Detector
- Fan Coil Unit
- Grille for Fan Coil Unit

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION/ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS			
DRAWING No:	3596-KDS-BA-XX-DR-A-06-1152	REVISION:	C3
DATE RECEIVED:	28.01.2022		

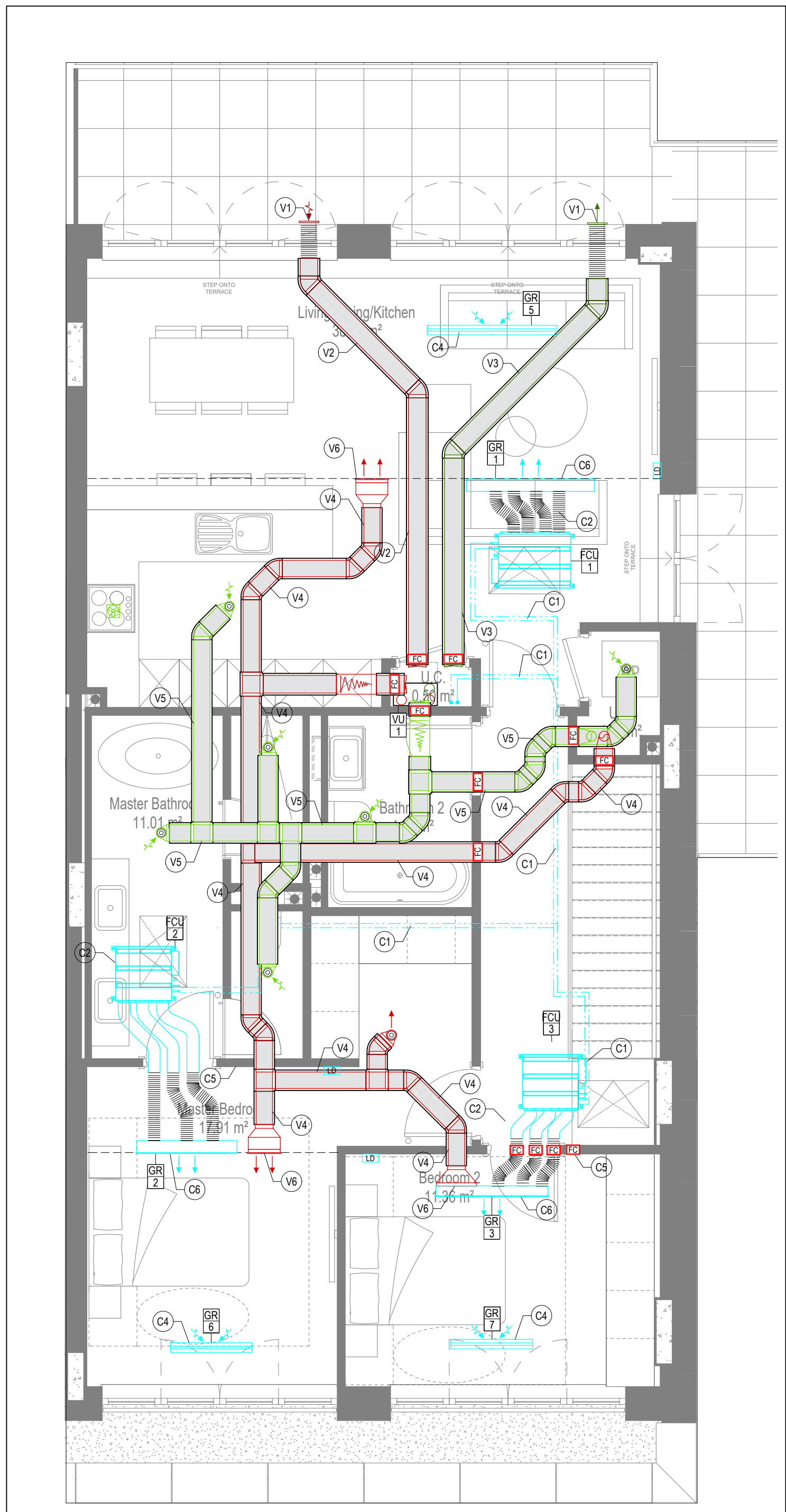
AB	16.09.2022	AS BUILT	JH	EJ
C4	27.06.2022	Updated to new background	JH	EJ
C3	11.01.2022	Updated bath tap locations.	JH	EJ
C2	19.08.2021	Updated to match new cooling, to RCP's and comments	DALS/	EJ
			SP	
C1	02.10.2020	Construction Issue	CDS	EJ
P1	20.03.2020	Preliminary Issue	AJH	JC
Rev	Date	Description	Dwn	Chkd

Current purpose: AS BUILT Scale: 1:50 Size: A1

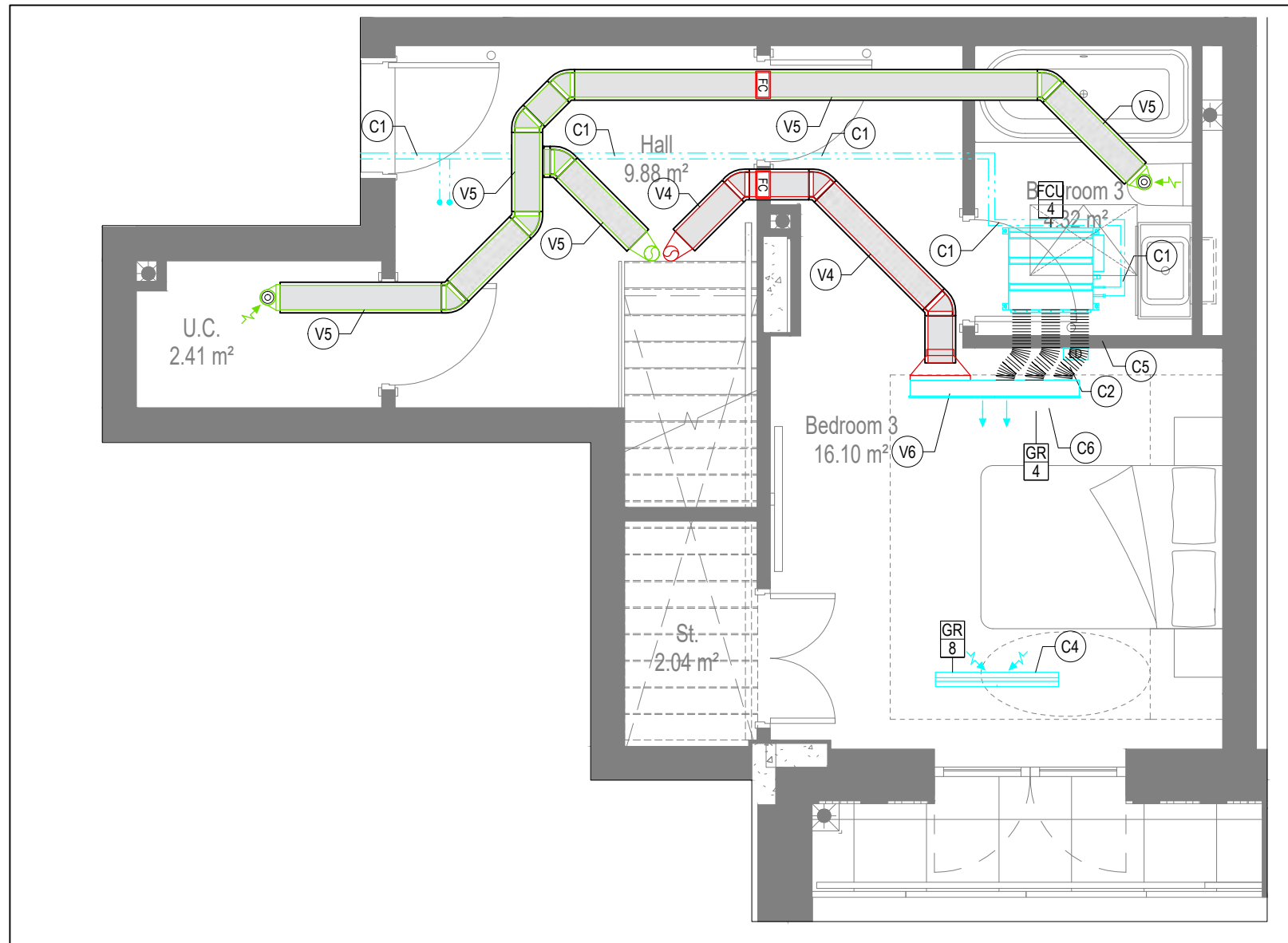
Original issue Date: 20.03.2020 Dwn: AJH Chkd: JC

		BUILDING SERVICES DESIGN CONSULTANTS 26-27 The Hill, Northfleet, Gravesend Kent, DA11 9EU www.whitecode.co.uk T: 01322 289977 E: design@whitecode.co.uk
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Title:	MECHANICAL SERVICES LAYOUT FLAT TYPE 42 (SHEET 1 OF 2)
Plots:	AN46
Project:	HORNSEY TOWN HALL
Client:	ARMORE
Dwg Number:	10687-M-03-A-0042(1)
Rev:	AB



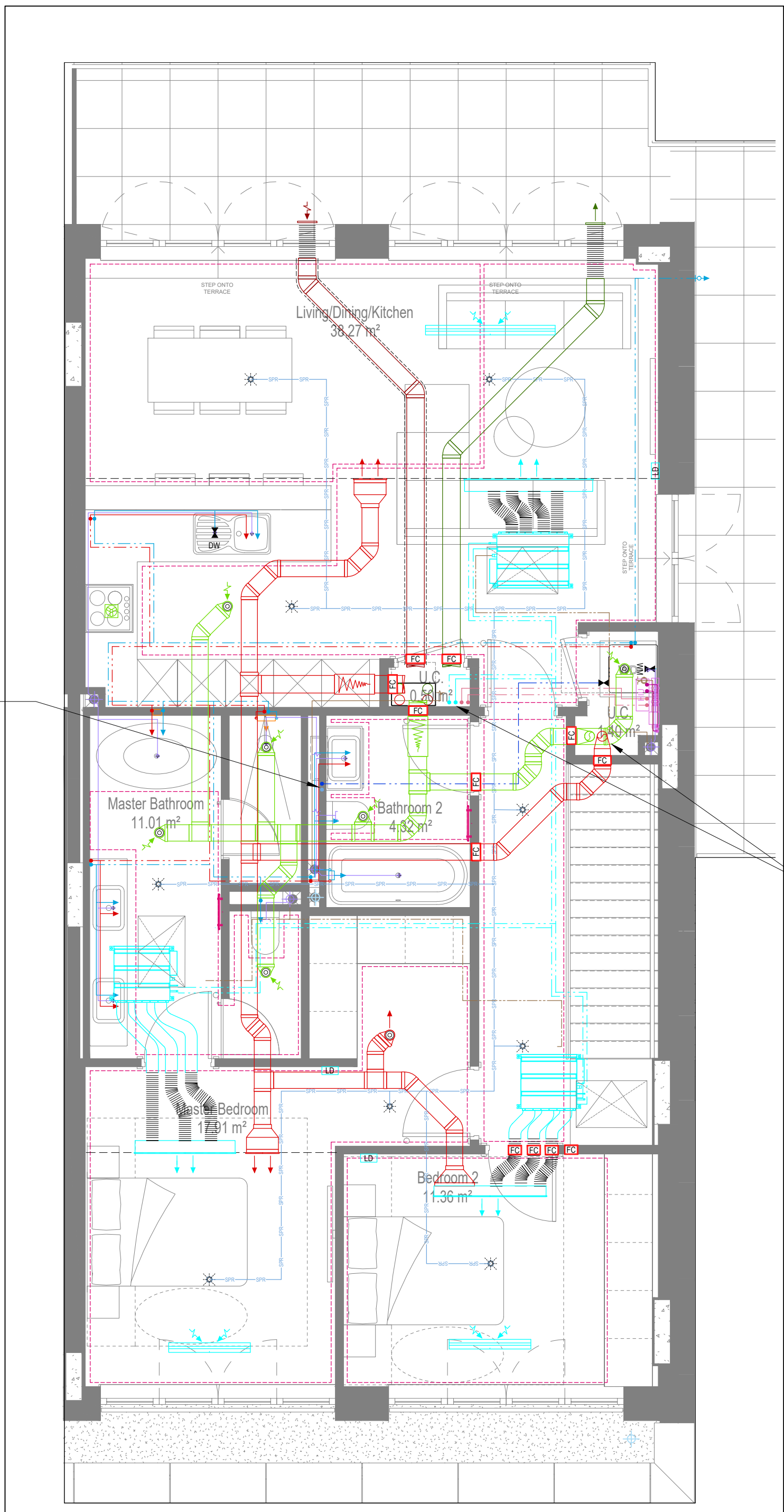
VENTILATION AND COOLING LAYOUT



VENTILATION AND COOLING LAYOUT

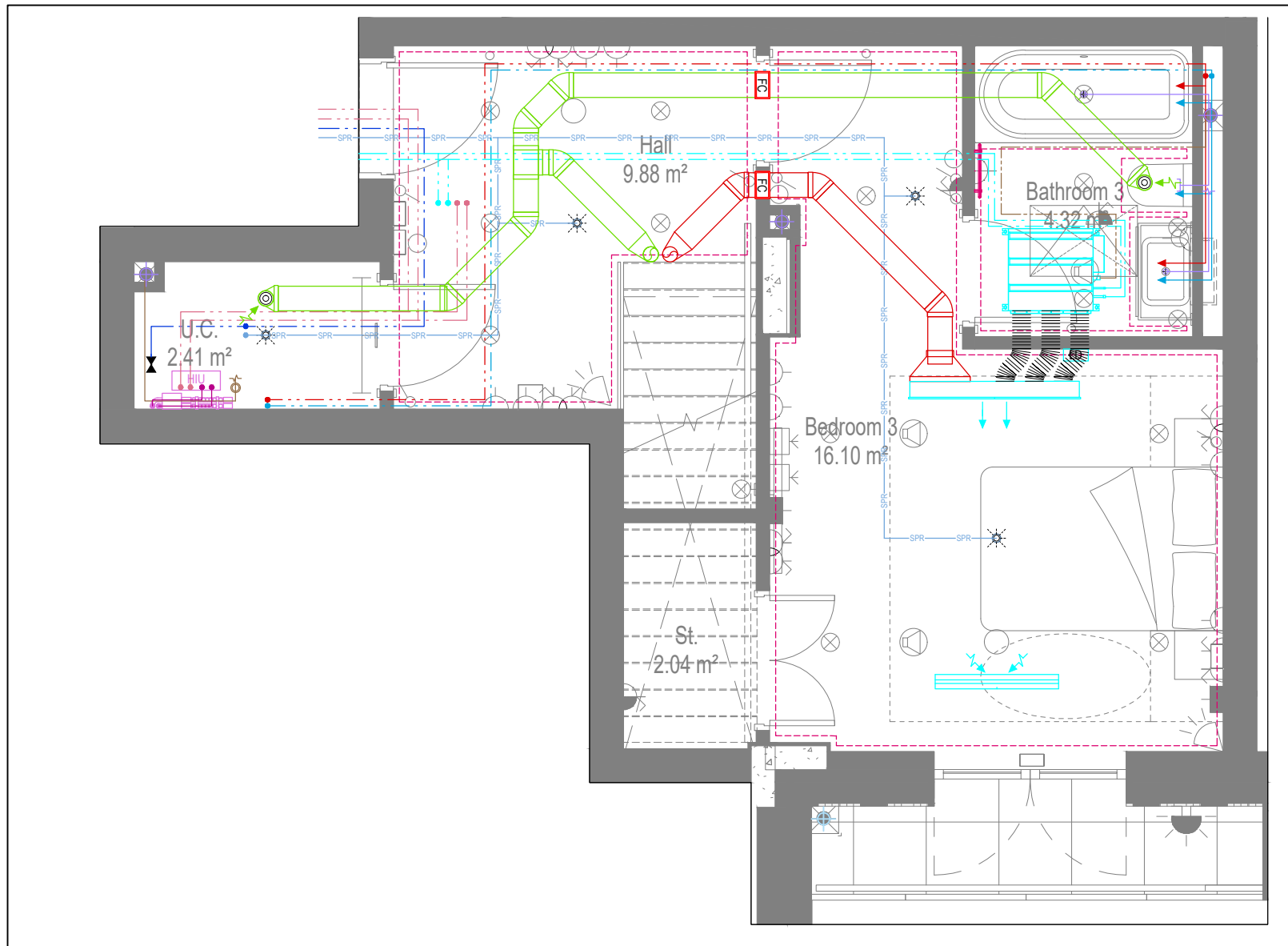
LOWER FLOOR

SERVICES IN RISER:
WATER &
SPRINKLER FB



COORDINATED SERVICES LAYOUT

UPPER FLOOR



COORDINATED SERVICES LAYOUT

LOWER FLOOR

SERVICES IN RISER:
VRF PIPEWORK FB/TA
SECONDARY HEATING
PIPES FOR MANIFOLD
SPRINKLER TA
SUPPLY & EXTRACT
DUCTS FA

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensions setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAVs), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-vo trap. See detail A on internal water schematic.
- S10. RVP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-vo trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x50 Insulated Intake duct.
- V3. 220x50 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Brookeair flowline linear grille.

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Bording to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

TOWEL RAIL SCHEDULE				
MANUFACTURER:		TOWEL RADS		
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:	
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM 1	
TR2	Z2	PISA WHITE STRAIGHT 500 x 800	BATHROOM 2	
TR3	Z2	PISA WHITE STRAIGHT 500 x 800	ENSUITE	

HEAT INTERFACE UNIT SCHEDULE		
MANUFACTURER: YGHP		
REF:	LOCATION:	MODEL:
HU1	LOWER FLOOR	CAPACITY 1
HU2	UPPER FLOOR	CAPACITY 2

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC ADVANCED S

U/F HEATING SCHEDULE			
MANUFACTURER: POLYPIPE			
CIRCUIT REF	STAT ZONE	MANIFOLD	ROOM
UF1	Z1	M2	KITCHEN/DINING
UF2	Z1	M2	KITCHEN/DINING
UF3	Z2	M2	HALLWAY UPPER
UF4	Z3	M2	BED 2
UF5	Z4	M2	MASTER BEDROOM
UF6	Z4	M2	MASTER BEDROOM
UF7	Z5	M2	BATHROOM 2
UF8	Z6	M1	BEDROOM 3
UF9	Z7	M1	BATHROOM 1
UF10	Z8	M1	HALLWAY LOWER

FAN COIL UNIT SCHEDULE						
MANUFACTURER		MITSUBISHI				
REF	AREA SERVED	MODEL	DIMENSIONS WxDxH	HEATING DUTY [kW]	COOLING DUTY [kW]	AIRFLOW [l/s]
FCU1	LIVING ROOM	PEFY-P50VMS1-E	900X700X200	2.30	4.60	188
FCU2	MASTER BEDROOM	PEFY-P25VMS1-E	900X700X200	1.08	2.16	117
FCU3	BEDROOM 2	PEFY-P25VMS1-E	900X700X200	0.67	1.35	117
FCU4	BEDROOM 3	PEFY-P25VMS1-E	900X700X200	0.98	1.95	117

FCU GRILLE SCHEDULE		BROOKE AIR									
MANUFACTURER											
REF	AREA SERVED	MODEL	SUPPLY/RETURN	VOLUME [l/s]	LENGTH [mm]	NOISE [NR]	PRESSURE DROP [Pa]	NO. SPIGOTS	SPIGOT DIAMETER [mm]	PLENUM ORIENTATION	
GR1	LIVING ROOM	FLOWLINE 2F	SUPPLY	188	1600	27	11	4	150	SIDE ENTRY	
GR2	MASTER BEDROOM	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY	
GR3	BEDROOM 2	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY	
GR4	BEDROOM 3	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY	
GR5	LIVING ROOM	FLOWLINE 2F	RETURN	188	1600	N/A	N/A	N/A	N/A	N/A	
GR6	MASTER BEDROOM	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	
GR7	BEDROOM 2	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	
GR8	BEDROOM 3	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	

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WARNING TO HOUSE PURCHASERS - Property Misdescriptions Act 1991
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LEGEND

- > Pipework at high level / within ceiling void or joist space
- > Pipework at low level
- > Pipework to droprise to low/high level or joist space
- > Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titan Attenuator
- Titan Trimbox NOX Filter
- Leak Detector
- Fan Coil Unit
- Grille for Fan Coil Unit

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION ISSUE DRAWING

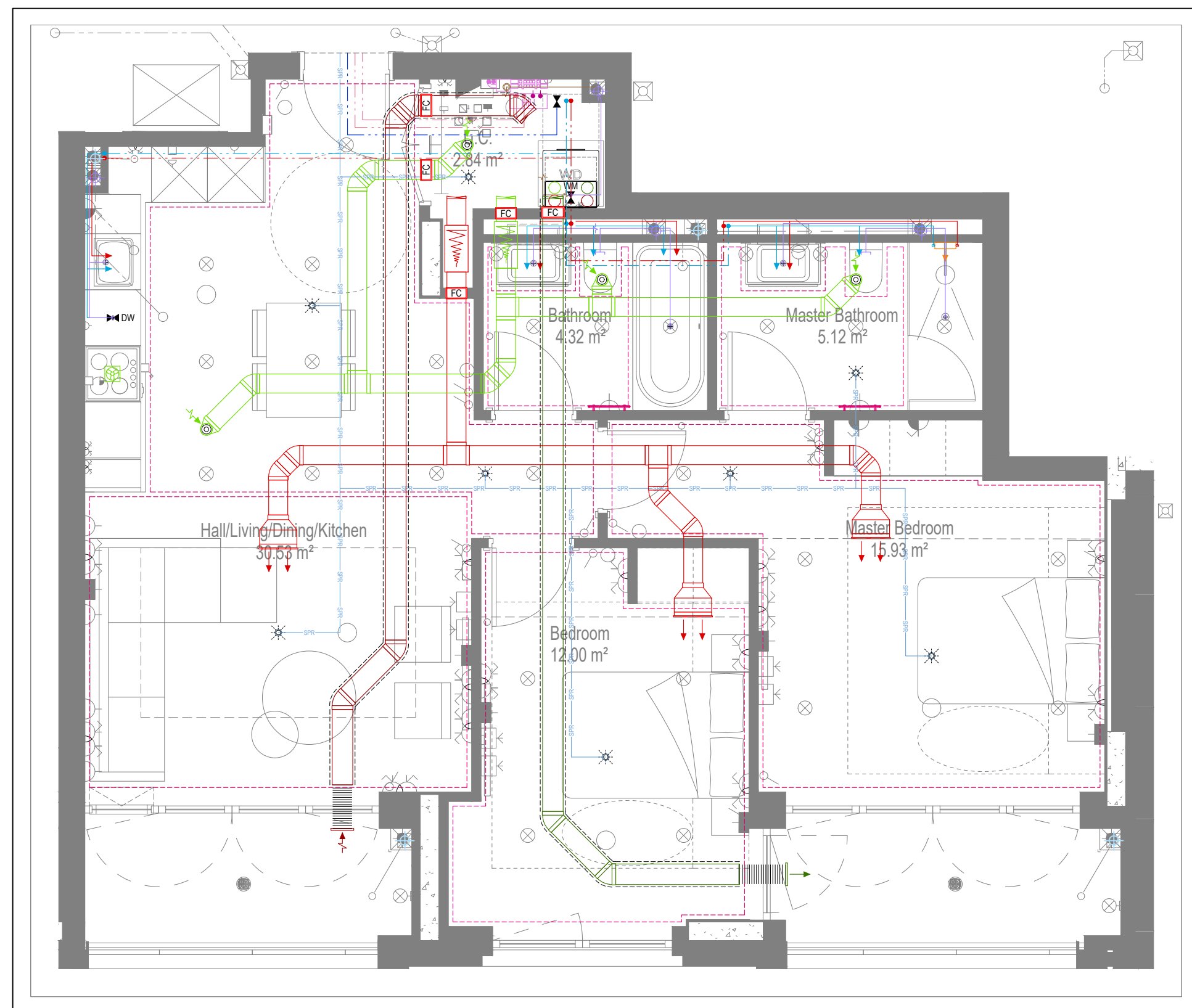
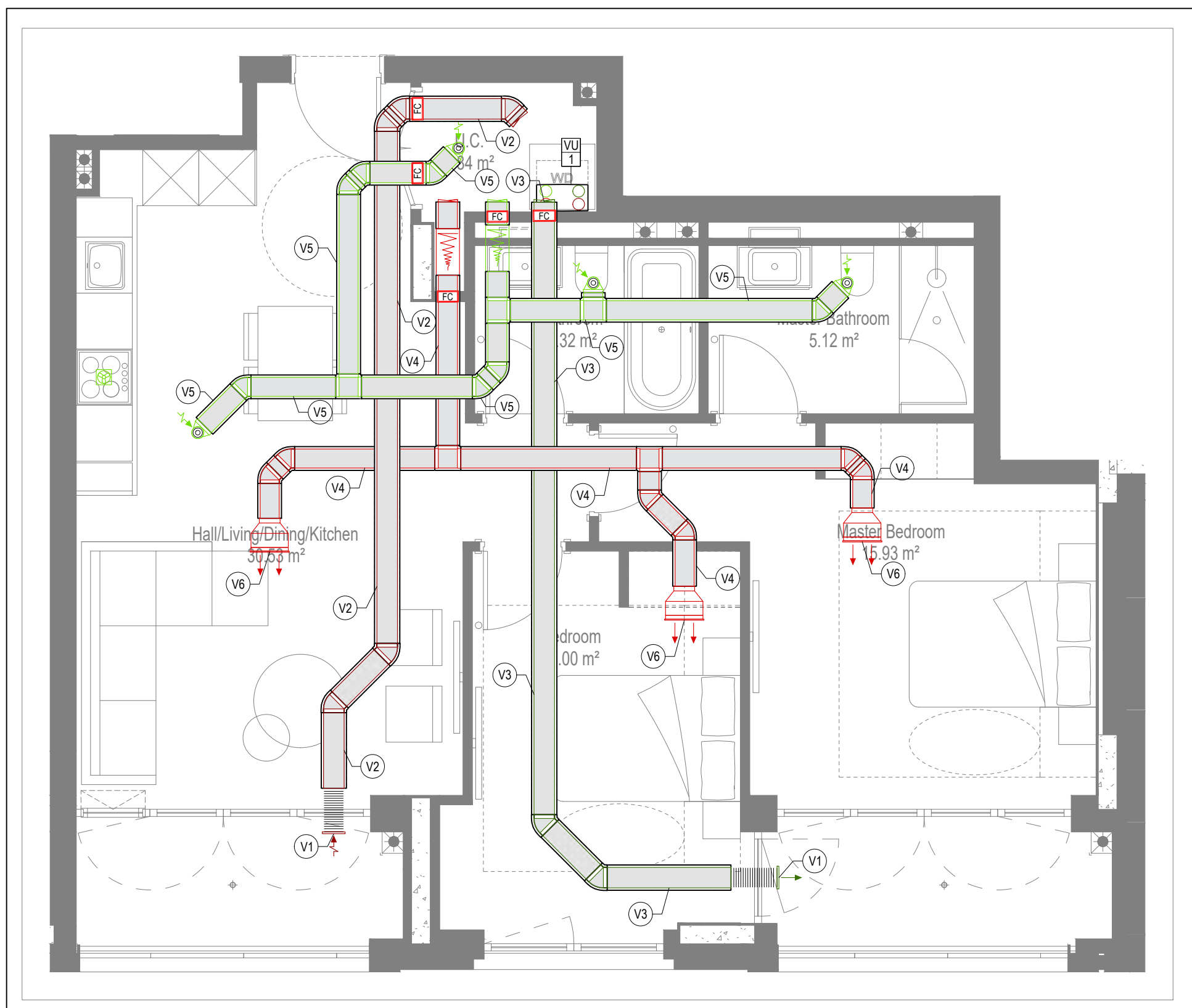
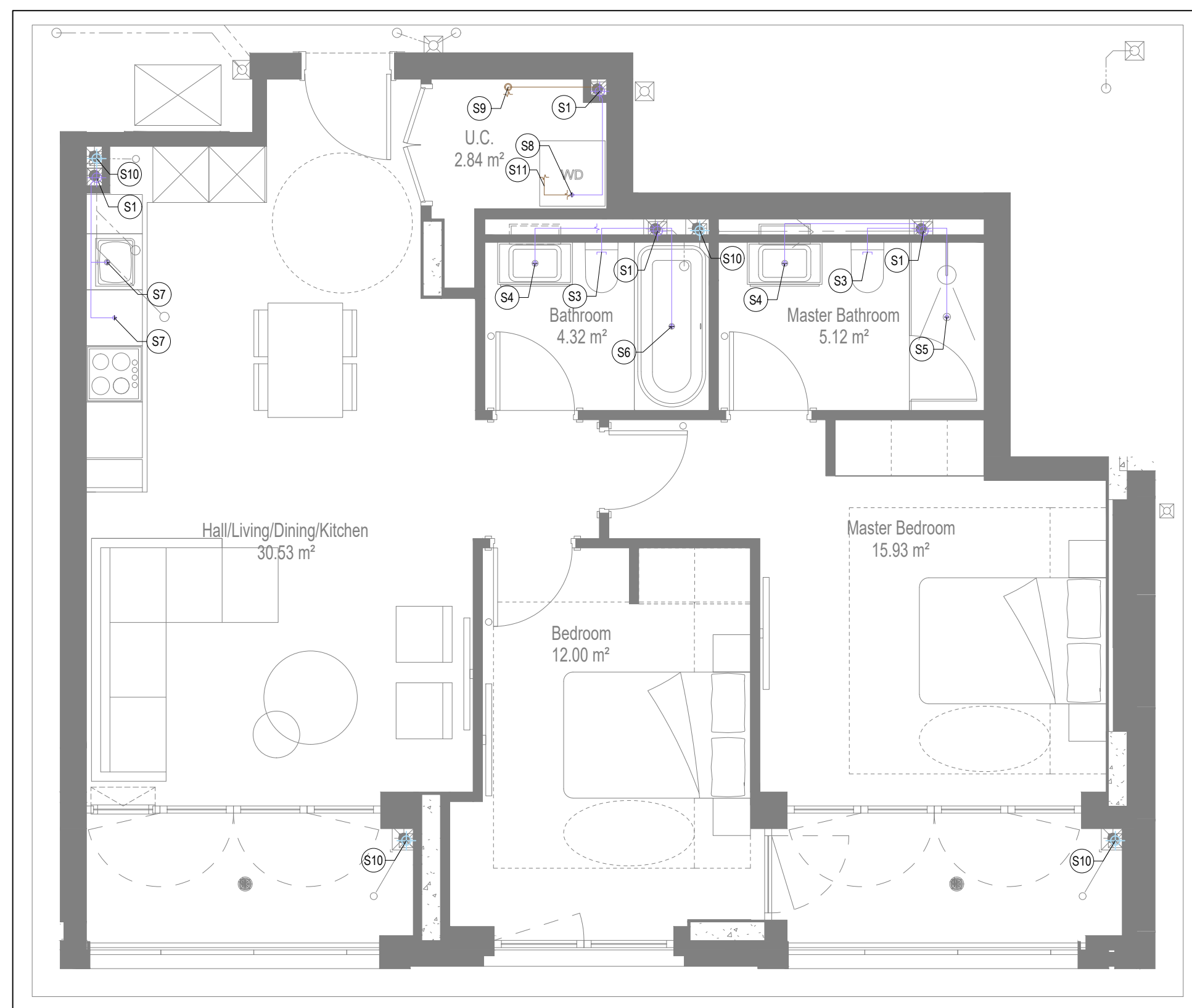
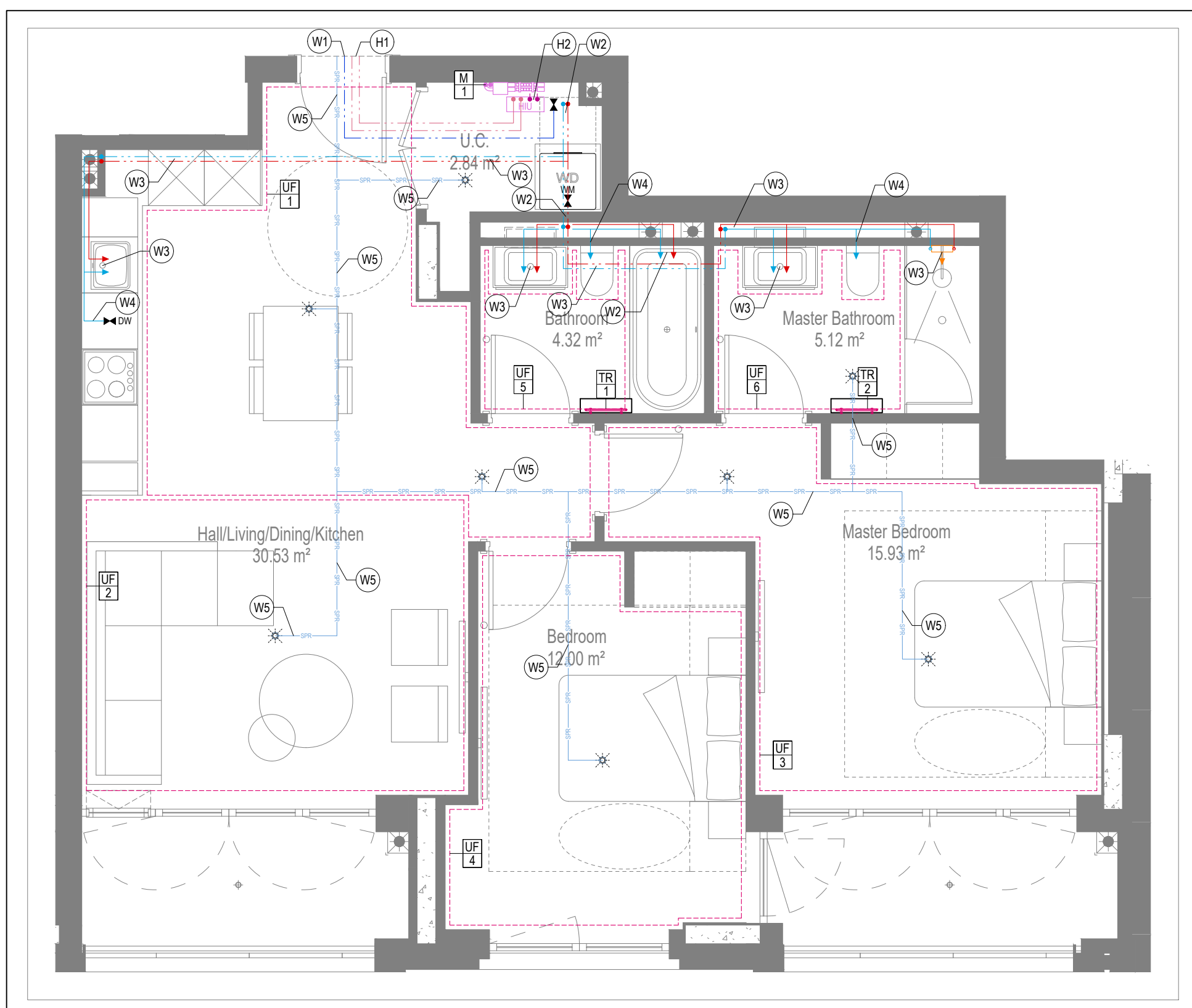
BACKGROUND PLAN AS PER - KDS			
DRAWING NO:	3596-KDS-BA-XX-DR-A-06-1152	REVISION:	C3
DATE RECEIVED:	28.01.2022		

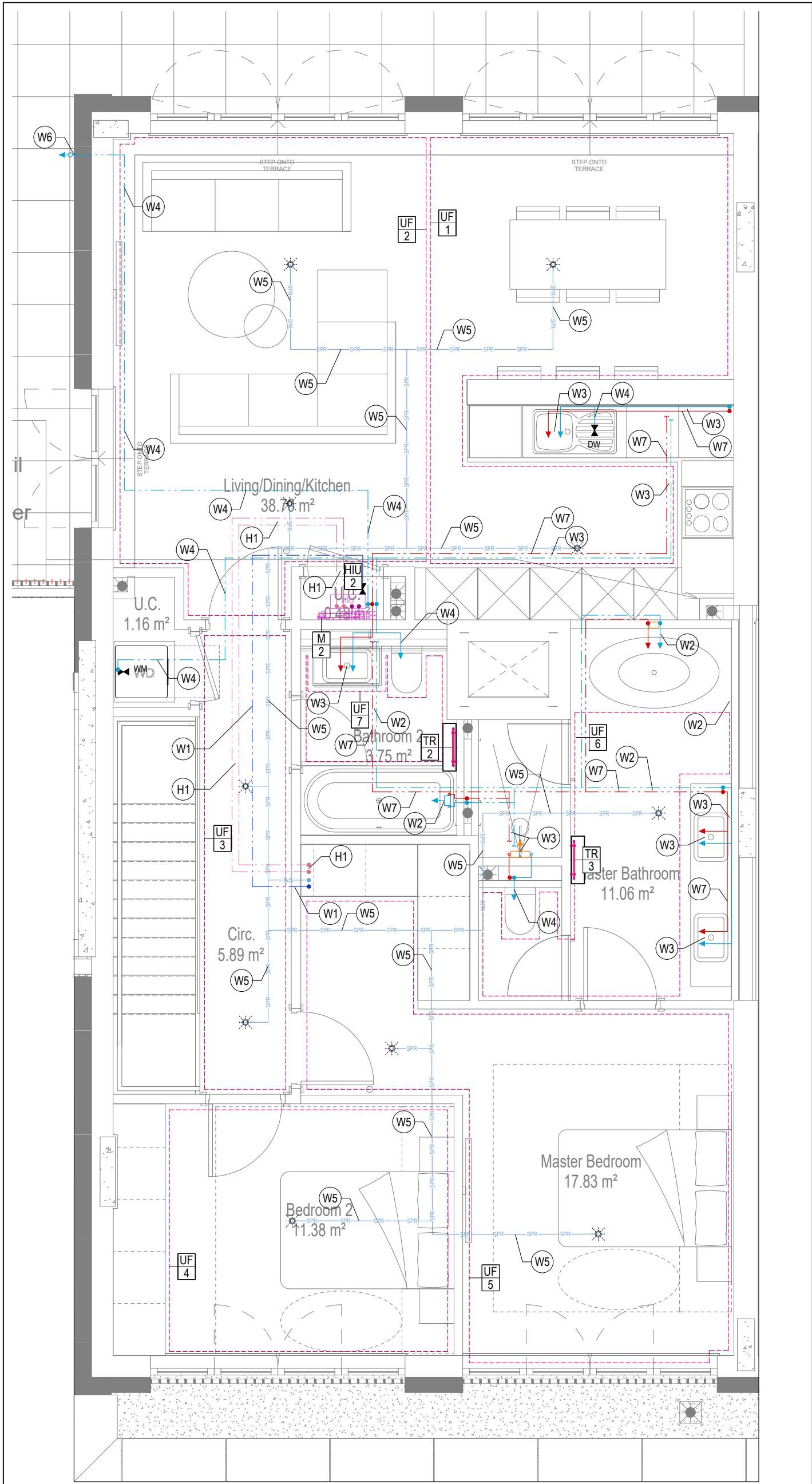
AB	16.09.2022	AS BUILT	JH	EJ
C3	27.06.2022	Updated to new background	JH	EJ
C4	11.01.2022	Added shower room, utility room, and wc extract	JH	EJ
C2	19.08.2021	Updated cooling, updated to fire strategy and comments	DALS/ SP	EJ
C1	02.10.2020	Construction Issue	CDS	EJ
P1	20.03.2020	Preliminary Issue	AJH	JC
Rev	Date	Description	Drawn	Chkd

Current purpose: AS BUILT Scale: 1:50 Size: A1
Original issue Date: 20.03.2020 Dwn: AJH Chkd: JC

BUILDING SERVICES DESIGN CONSULTANTS	
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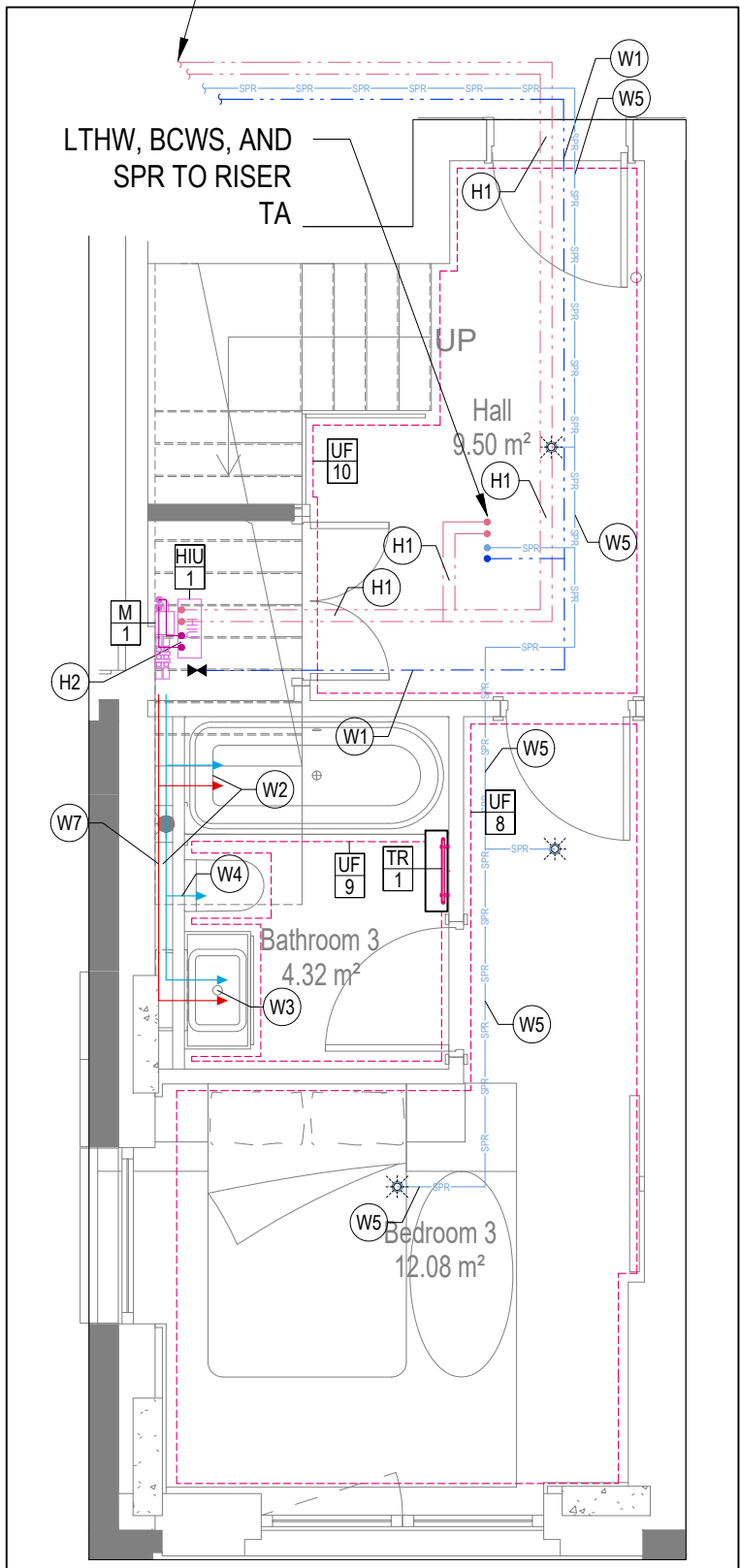
Title:		MECHANICAL SERVICES LAYOUT	
Plots:		FLAT TYPE 42 (SHEET 2 OF 2)	
Project:		HORNSEY TOWN HALL	
Client:		ARMORE	
Dwg Number:		10687-M-03-A-0042(2)	
		Rev: AB	





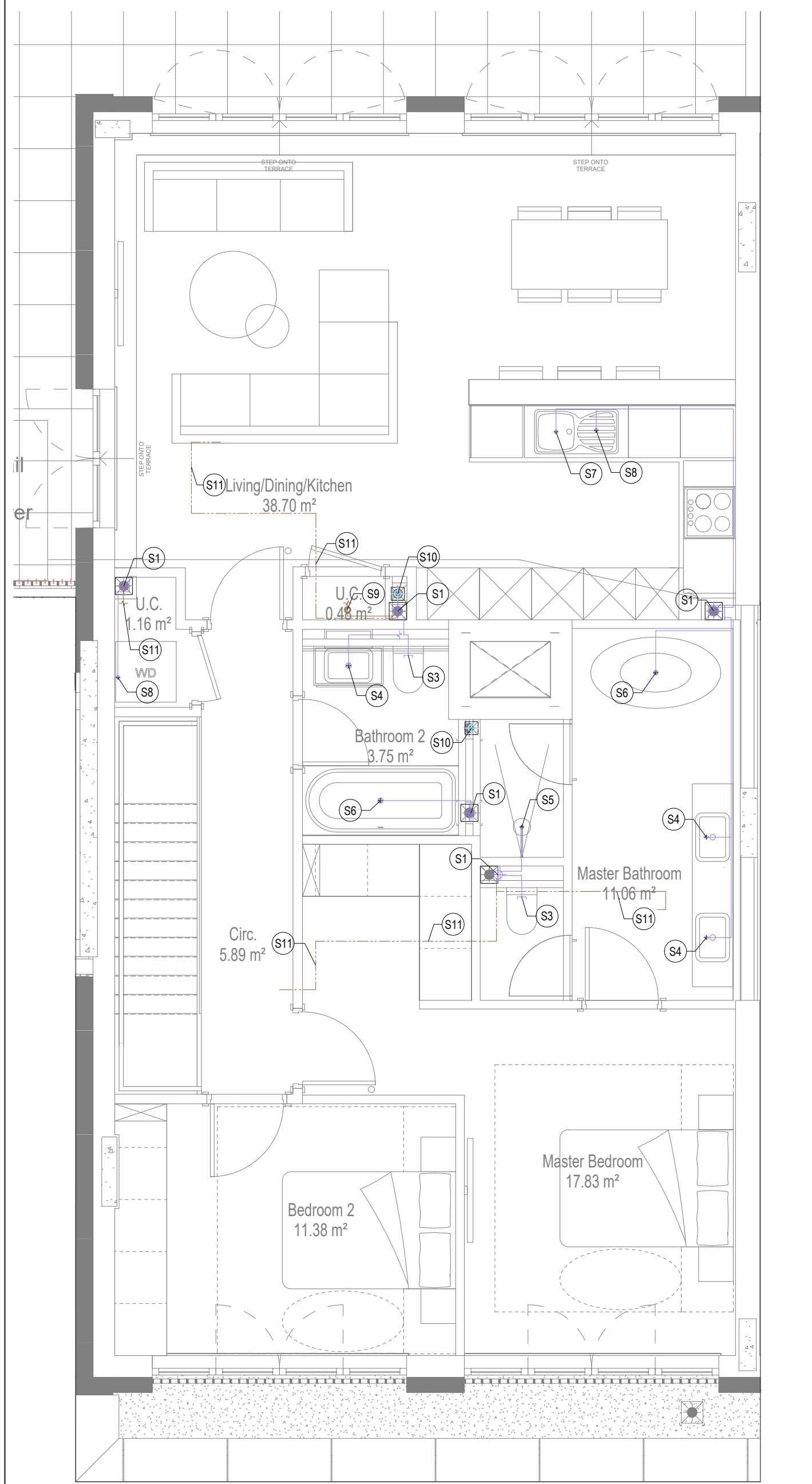
WATER AND HEATING LAYOUT

UPPER FLOOR



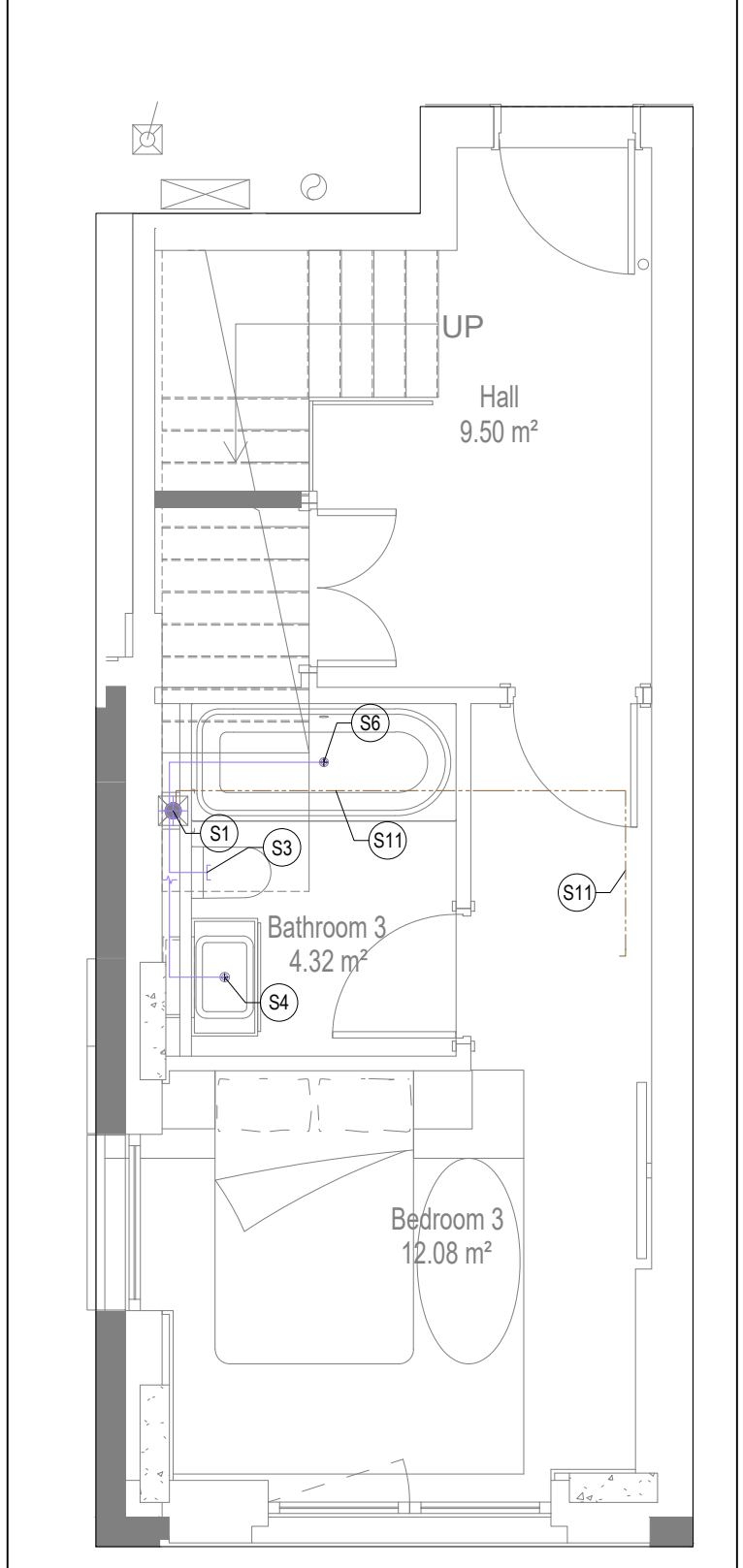
WATER AND HEATING LAYOUT

LOWER FLOOR



SOILS AND WASTE LAYOUT

UPPER FLOOR



SOILS AND WASTE LAYOUT

LOWER FLOOR

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
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- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAVs), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to drop within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x50 Insulated Intake duct.
- V3. 220x50 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Brookeair flowline linear grille.

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Bording to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

U/F HEATING SCHEDULE			
MANUFACTURER:		POLYPIPE	
CIRCUIT REF	STAT ZONE	MANIFOLD	ROOM
UF1	Z1	M2	KITCHEN/INING
UF2	Z1	M2	KITCHEN/INING
UF3	Z2	M2	HALLWAY UPPER
UF4	Z3	M2	BED 2
UF5	Z4	M2	MASTER BEDROOM
UF6	Z4	M2	MASTER BATHROOM
UF7	Z5	M2	BATHROOM 2
UF8	Z5	M1	BEDROOM 3
UF9	Z7	M1	BATHROOM 1
UF10	Z8	M1	HALLWAY LOWER

HIU SCHEDULE		
MANUFACTURER		YGHP
REF	LOCATION	MODEL
HIU 1	LOWER FLOOR	CAPACITY 1
HIU 2	UPPER FLOOR	CAPACITY 2

FAN COIL UNIT SCHEDULE					
MANUFACTURER		MITSUBISHI			
REF	AREA SERVED	MODEL	DIMENSIONS WXHXH	HEATING DUTY [kW]	COOLING DUTY [kW]
FCU1	LIVING ROOM	PEFY-P50VMS1-E	900X700X200	2.33	4.66
FCU2	MASTER BEDROOM	PEFY-P25VMS1-E	900X700X200	1.09	2.18
FCU3	BEDROOM 2	PEFY-P25VMS1-E	900X700X200	1.67	1.34
FCU4	BEDROOM 3	PEFY-P25VMS1-E	900X700X200	0.73	1.46

FCU GRILLE SCHEDULE									
MANUFACTURER		BROOKE AIR							
REF	AREA SERVED	MODEL	SUPPLY/RETURN	VOLUME [l/s]	LENGTH [mm]	NOISE [NR]	PRESSURE DROP [Pa]	NO. SPIGOTS	SPIGOT DIAMETER [mm]
GR1	LIVING ROOM	FLOWLINE 2F	VENT + FCU SUPPLY	201	2000	27	11	4	150
GR2	MASTER BEDROOM	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150
GR3	BEDROOM 2	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150
GR4	BEDROOM 3	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150
GR5	LIVING ROOM	FLOWLINE 2F	RETURN	188	1600	N/A	N/A	N/A	N/A
GR6	MASTER BEDROOM	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A
GR7	BEDROOM 2	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A
GR8	BEDROOM 3	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A

TOWEL RAIL SCHEDULE			
MANUFACTURER:		TOWEL RADS	
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM 1
TR2	Z2	PISA WHITE STRAIGHT 500 x 800	BATHROOM 2
TR3	Z2	PISA WHITE STRAIGHT 500 x 800	ENSUITE

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC ADVANCED S

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LEGEND

---> Pipework at high level / within ceiling void or joist space

---> Pipework at low level

---> Pipework to droprise to low/high level or joist space

---> Pipework beneath floor / within floor screed / hidden

Rectangular ductwork

Rectangular ductwork with insulation

Circular ductwork / SVP

Flexible ductwork

Intumescent Fire Collar

Supply diffuser

Extract diffuser

Kitchen manufacturers re-circulating cooker hood

Thermostatic Shower Mixer

15mm Cold Isolation Valve for Washing Machine

15mm Cold Isolation Valve for Dish Washer

Ceiling mounted Sprinkler Head

Hot Water Cylinder on stand (if above washing machine)

Hot Water Expansion Vessel

Sealed Heating Kit

Wall mounted Heat Interface unit

UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones

Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type

Ceiling mounted Sprinkler Head

Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.

Access Panel - Size varies

Titan Attenuator

Titan Trimbox NOX Filter

Leak Detector

Fan Coil Unit

Grille for Fan Coil Unit

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARMORE ON 12.09.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION ISSUE DRAWING

AB	16.09.2022	AS BUILT	JH	EJ
C4	27.06.2022	Updated to new background	JH	EJ
C3	11.01.2022	Updated bath tap locations	JH	EJ
C2	19.08.2021	Updated to match new cooling, to RCP's and comments	DALS/ SP	EJ
C1	02.10.2020	Construction Issue	CDS	EJ
P1	20.03.2020	Preliminary Issue	AJH	JC
Rev	Date	Description	Dwn	Chkd
Current purpose:		AS BUILT	Scale: 1:50	Size: A1
Original Issue Date:		20.03.2020	Dwn: AJH	Chkd: JC

BACKGROUND PLAN AS PER: KDS

DRAWING No:	3596-KDS-BA-XX-DR-A-06-1154	REVISION:	C2	DATE RECEIVED:	20.01.2022
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Title: MECHANICAL SERVICES LAYOUT

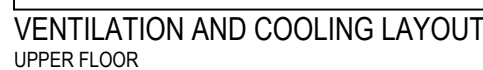
Plots: FLAT TYPE 44 (SHEET 1 OF 2)

Project: HORNSEY TOWN HALL

Client: ARMORE

Dwg Number: 10687-M-03-A-0044(1)

Rev: AB



- GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected from distortion by being lagged in foil backed 25mm thick fibreglass or to be copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6), trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating that the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut out by 10mm to allow air to pass under the door to satisfy Part F of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each section and follow a slow radius bend.
- Where ducts need to drop/incline within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation to residential buildings must be by mechanical extraction route.
- Where flexible duct work is used it is to be PVC coated cloth glass fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted.
Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing
H2. 22Ø Heating F&R.
H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with ridding eye and access hatch.
- S2. 1000 S/S with ridding access. Positions generally on ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/SS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder or via a tundish to a 320 polypropylene waste system/SVP via See detail A on Internal water schematic.
- S10. RWP from above with access hatch & ridding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery/pep-to-trap. To fall by gravity where possible, or to be pumped

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum
V2. 220x90 Insulated Intake duct.
V3. 220x90 Insulated Exhaust duct.
V4. 204x60 Supply duct.
V5. 204x60 Extract duct
V6. Brookeair flowline linear grille

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Boarding to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

LUF HEATING SCHEDULE			
MANUFACTURER:		POLYPIPE	
CIRCUIT REF	STAT ZONE	MANIFOLD	ROOM
UF1	Z1	M2	KITCHEN/IVING
UF2	Z1	M2	KITCHEN/IVING
UF3	Z2	M2	HALLWAY UPPER
UF4	Z3	M2	BED 2
UF5	Z4	M2	MASTER BEDROOM
UF6	Z4	M2	MASTER BATHROOM
UF7	Z5	M2	BATHROOM 2
UF8	Z6	M1	BEDROOM 3
UF9	Z7	M1	BATHROOM 1
UF10	Z8	M1	HALLWAY LOWER

If a grille is used for both ventilation and cooling, the plenums for either service connected to the grille must be separated

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARDMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING No: 3596-KDS-BA-XX-DR-A-06-1154	REVISION: C2	DATE RECEIVED: 20.01.2022

AB	16.09.2022	AS BUILT	JH	E
C4	27.06.2022	Updated to new background	JH	E
C3	11.01.2022	Added cupboard, shower room and utility extract	JH	E
C2	19.08.2021	Updated cooling, updated to fire strategy and comments	DALS/ SP	E
C1	02.10.2020	Construction Issue	CDS	E
P1	20.03.2020	Preliminary Issue	AJH	E
Rev	Date	Description	Drawn	Checked


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CONSULTING

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CONSULTANTS**
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Title: MECHANICAL SERVICES LAYOUT
FLAT TYPE 44 (SHEET 2 OF 2)
Plots: AN48

Project: HORNSEY
TOWN HALL

Client: ARDMORE

Dwg Number: 10687-M-03-A-0044(2)

Rev:

AE

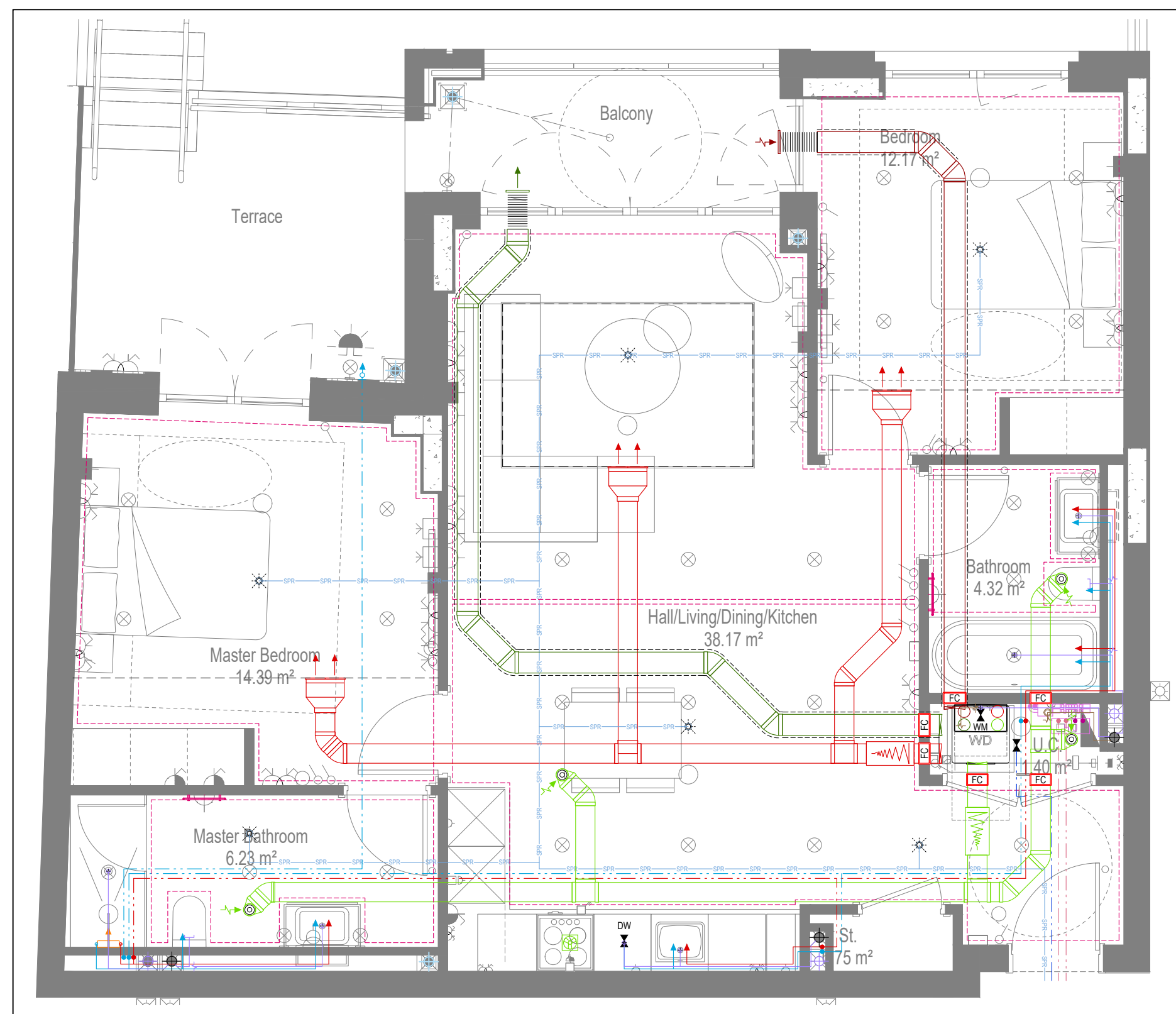
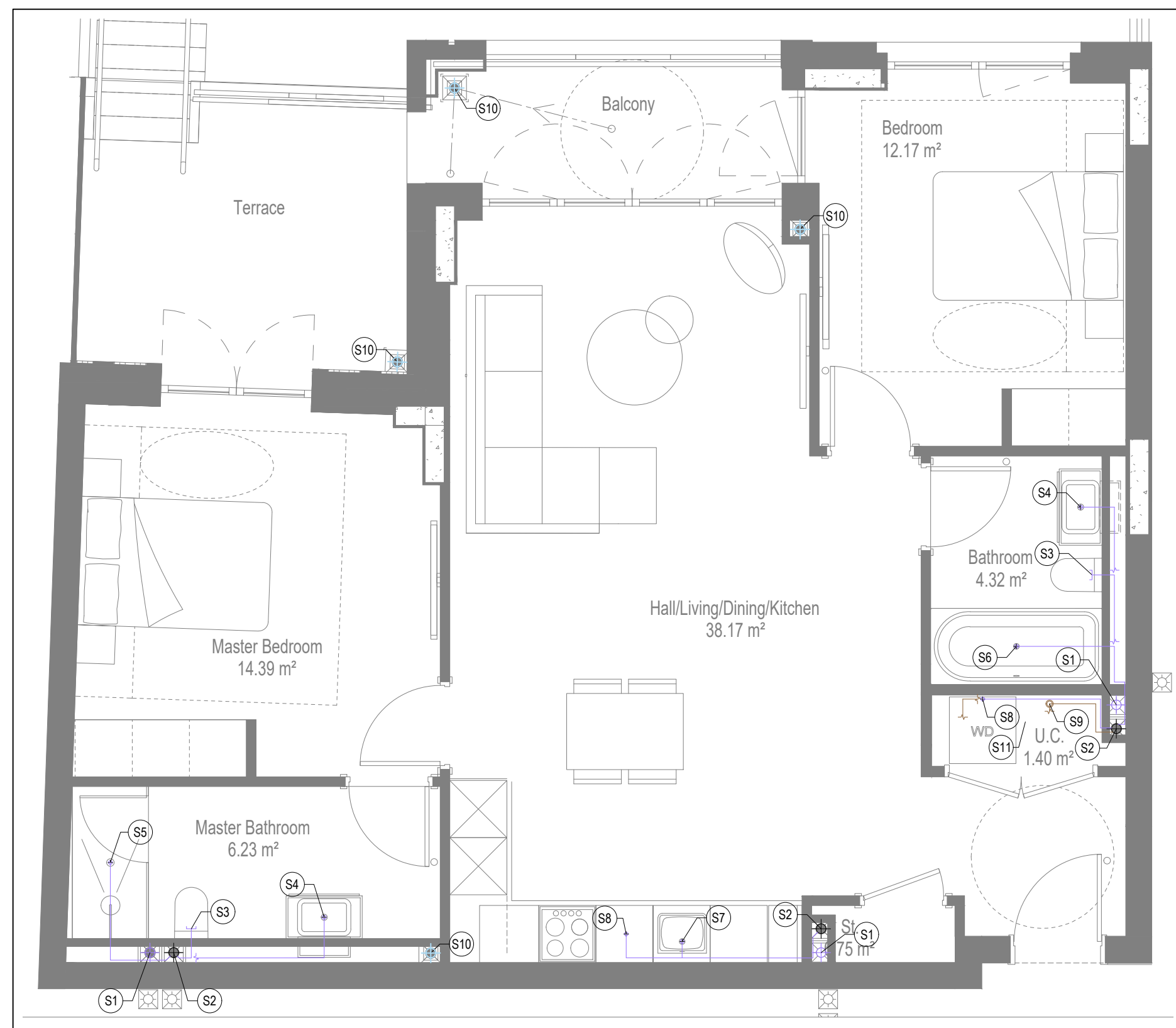
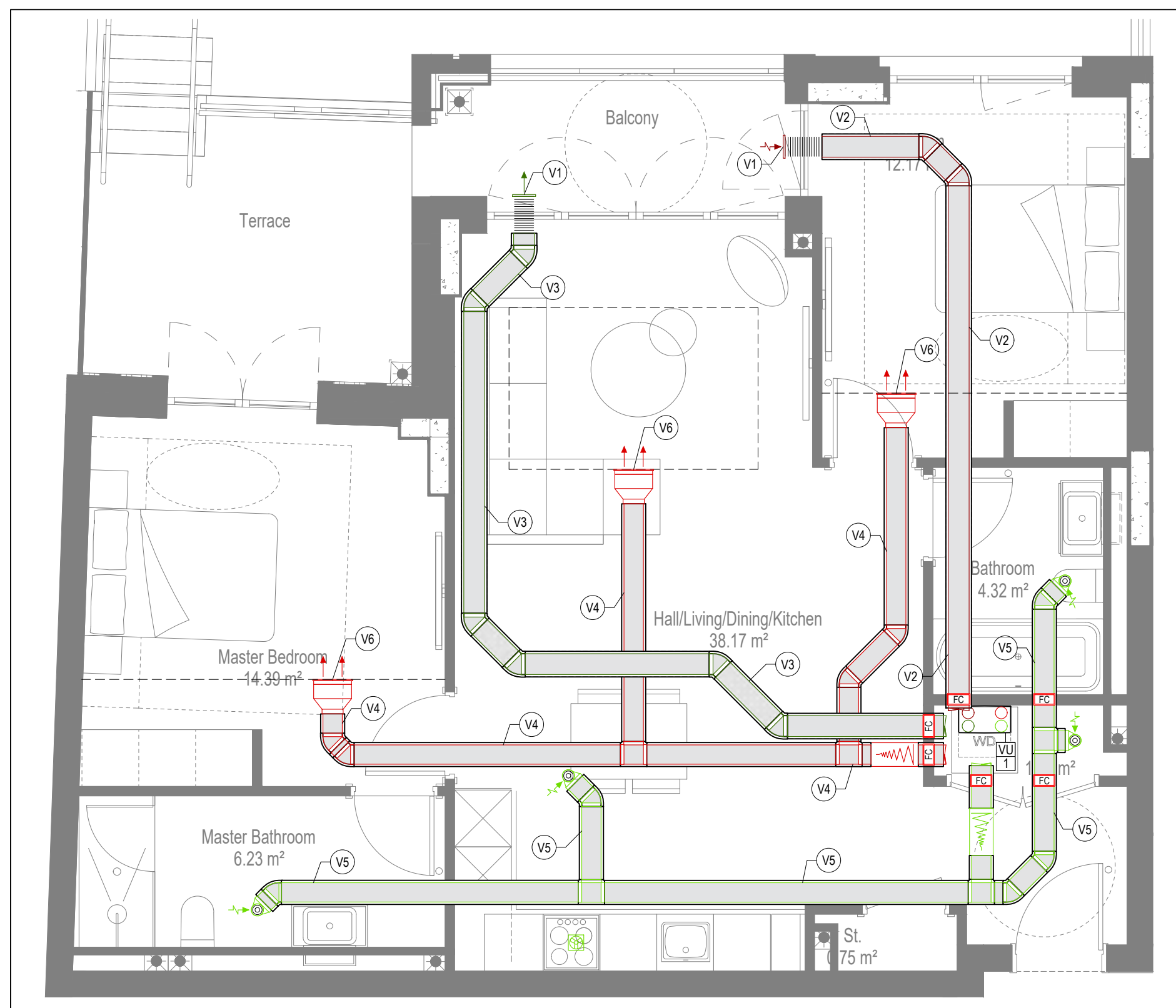
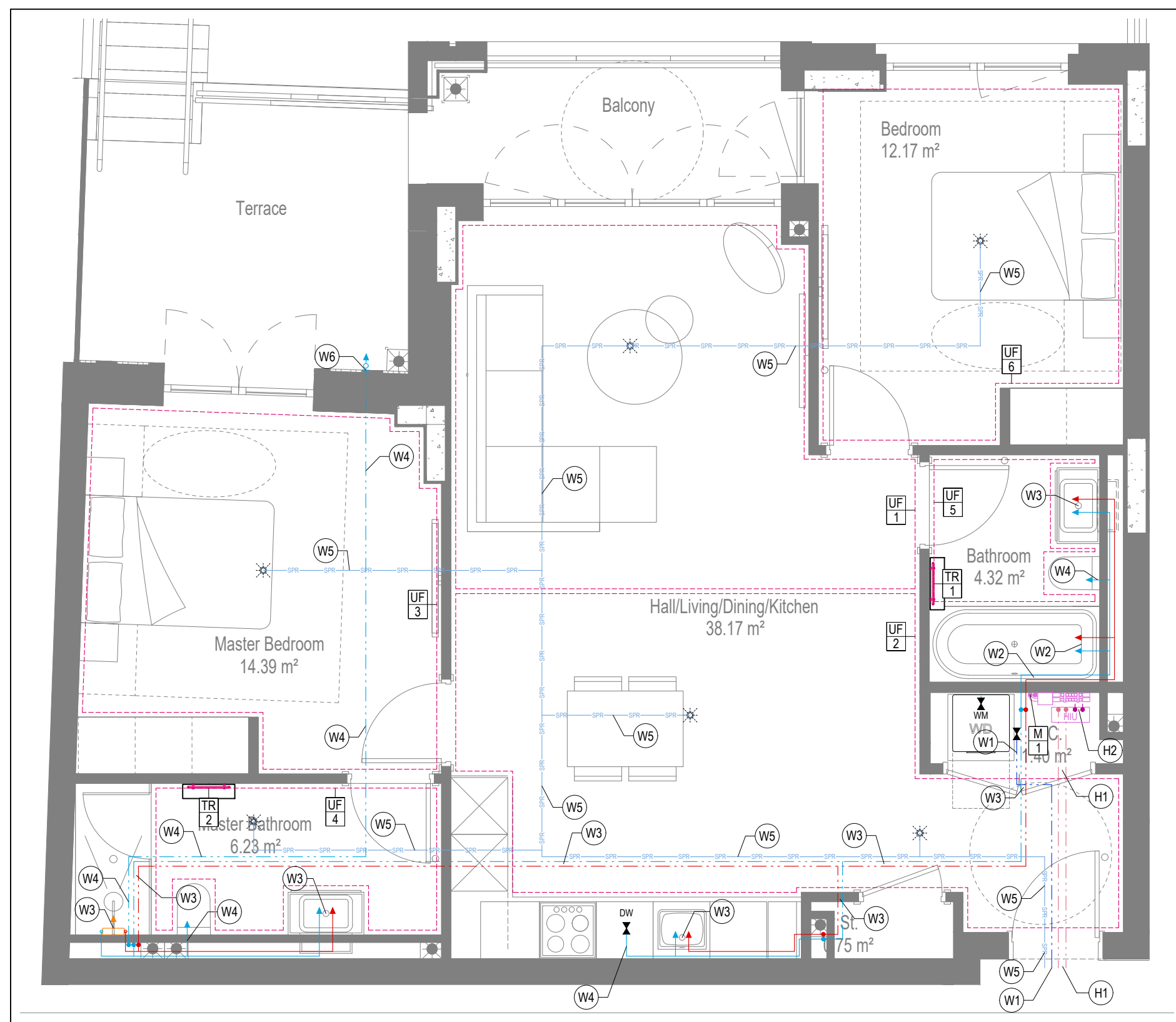
HIU SCHEDULE		
MANUFACTURER		YGHP
REF	LOCATION	MODEL
HIU 1	LOWER FLOOR	CAPACITY 1
HIU 2	UPPER FLOOR	CAPACITY 2

FAN COIL UNIT SCHEDULE							
MANUFACTURER		MITSUBISHI					
REF	AREA SERVED	MODEL	DIMENSIONS WXDXH	HEATING DUTY [Kwh]	COOLING DUTY [Kwh]	AIRFLOW [l/s]	
FCU1	LIVING ROOM	PEFY-P50VMS1-E	900X700X200	2.33	4.66	188	
FCU2	MASTER BEDROOM	PEFY-P25VMS1-E	900X700X200	1.09	2.18	117	
FCU3	BEDROOM 2	PEFY-P20VMS1-E	900X700X200	0.67	1.34	117	
FCU4	BEDROOM 3	PEFY-P25VMS1-E	900X700X200	0.73	1.46	117	

FCU ORILLE SCHEDULE											
MANUFACTURER		BROOKE AIR									
REF	AREA SERVED	MODEL	SUPPLY/RETURN	VOLUME [l/s]	LENGTH [mm]	NOISE [NR]	PRESSURE DROP [Pa]	NO. SPIGOTS	SPIGOT DIAMETER [mm]	PLENUM ORIENTATION	
GR1	LIVING ROOM	FLOWLINE 2F	VENT + FCU SUPPLY	201	2000	27	11	4	150	SIDE ENTRY	
GR2	MASTER BEDROOM	VENT + FLOWLINE 2F	FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY	
GR3	BEDROOM 2	FLOWLINE 2F	VENT	146	1400	27	11	3	150	BOTTOM ENTRY	
GR4	BEDROOM 3	FLOWLINE 2F	VENT + FCU SUPPLY	146	1400	27	11	3	150	BOTTOM ENTRY	
GR5	LIVING ROOM	FLOWLINE 2F	RETURN	188	1600	N/A	N/A	N/A	N/A	N/A	
GR6	MASTER BEDROOM	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	
GR7	BEDROOM 2	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	
GR8	BEDROOM 3	FLOWLINE 2F	RETURN	117	1000	N/A	N/A	N/A	N/A	N/A	

TOWEL RAIL SCHEDULE			
MANUFACTURER:		TOWEL RADS	
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM 1
TR2	Z2	PISA WHITE STRAIGHT 500 x 800	BATHROOM 2
TR3	Z2	PISA WHITE STRAIGHT 500 x 800	ENSUITE

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC ADVANCED S



GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating that match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be built strong by 10mm to allow it pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible ductwork is used, it must be installed at 90% of its maximum length, be no longer than 300mm in each section and follow a slow radius bend.
- Where ducts need to drop/rise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.4W/mk or equivalent.
- Ventilation ducts to be insulated by use of a flexible duct.
- Where flexible duct work is used it is to be PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- | | |
|-----|---|
| W1. | Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted.
Refer to schematic for valve arrangement and sizing. |
| W2. | 220 balanced CWS & HWS. |
| W3. | 150 balanced CWS & HWS. |
| W4. | 150 CWS. |
| W5. | Sprinkler main - Refer to Sprinkler schematic and layouts for details.
Subject to specialist confirmation. |
| W6. | BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap. |
| W7. | Heating tape to be added to hot water supply. |

HEATING NOTES

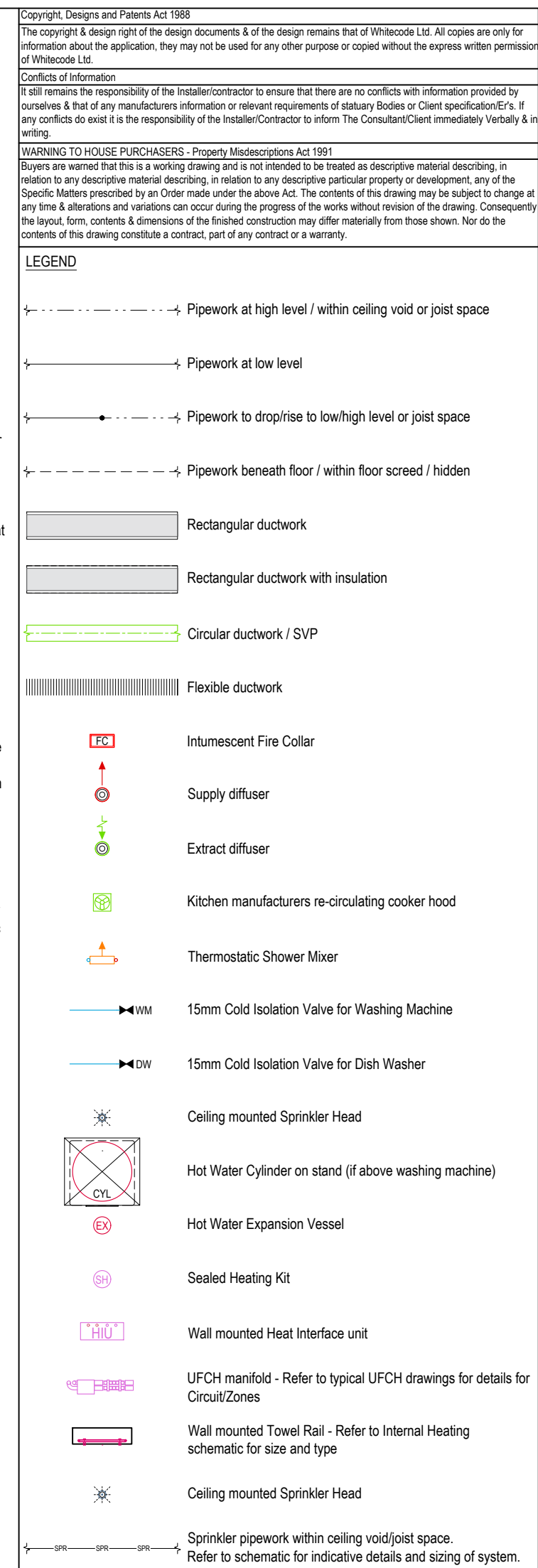
- | | |
|-----|--|
| H1. | Insulated Heating Primary F&R. Refer to schematic for sizing |
| H2. | 22Ø Heating F&R. |
| H3. | Under floor Heating. |

SOILS NOTES

- | | |
|------|--|
| S1. | 1000 SVF from above with rodding eye and access hatch. |
| S2. | S300 SV with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details. |
| S3. | 1000 soil pipe from pan to SV/SP/SS. |
| S4. | 320 basin waste with anti-siphon to run to 400 to SV/SP/SS. |
| S5. | 400 shower waste to run to SV/SP/SS. |
| S6. | 400 bath waste to run to 400 to SV/SP/SS. |
| S7. | 400 sink waste to run to 400 to run to SV/SP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher. |
| S8. | 400 standpipe for Washing Machine/Dishwasher waste to run to SV/SP/SS. |
| S9. | Copper Scaled Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SV up a hevo-to trap. |
| S10. | Run to an Internal drainage scheme. |
| S11. | RWP from above with access hatch & rodding eye. |
| S11. | 220 plastic condensation from Fan Coil Unit or Heat Recovery Unit to run to SV/SP/SS hevo-to trap. To fall by gravity where possible, or be pumped if run. |

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
V2. 220x90 Insulated Intake duct.
V3. 220x90 Insulated Exhaust duct.
V4. 204x60 Supply duct.
V5. 204x60 Extract duct.
V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-0012 for details.



Access Panel - Size variant

 Triton Attenuator

 Titan Trimbox NOX Filter

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING
CONFIRMATION FROM ARDMORE ON 12.09.2022 THAT
THERE WERE NO CHANGES ON SITE AGAINST THE
CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING No: 3596-KDS-BA-XX-DR-A-06-1102	REVISION: C3	DATE RECEIVED: 04.01.2021

AB	16.09.2022	AS BUILT	JH	EJ
C2	05.07.2021	Updated to latest RCP, fire strategy and comments	IV/SP	EJ
C1	11.09.2020	Construction Issue	DALS	EJ
P1	04.02.2020	Preliminary issue	AJH	JC
Rev	Date	Description	Drawn	Checked

Rev	Date	Description	Drwn	Chkd
Current purpose:	AS BUILT	Scale: 1:50	Size: A1	
Original Issue Date:	04.02.2020	Drwn: AJH	Chkd: JC	

 BUILDING SERVICES DESIGN
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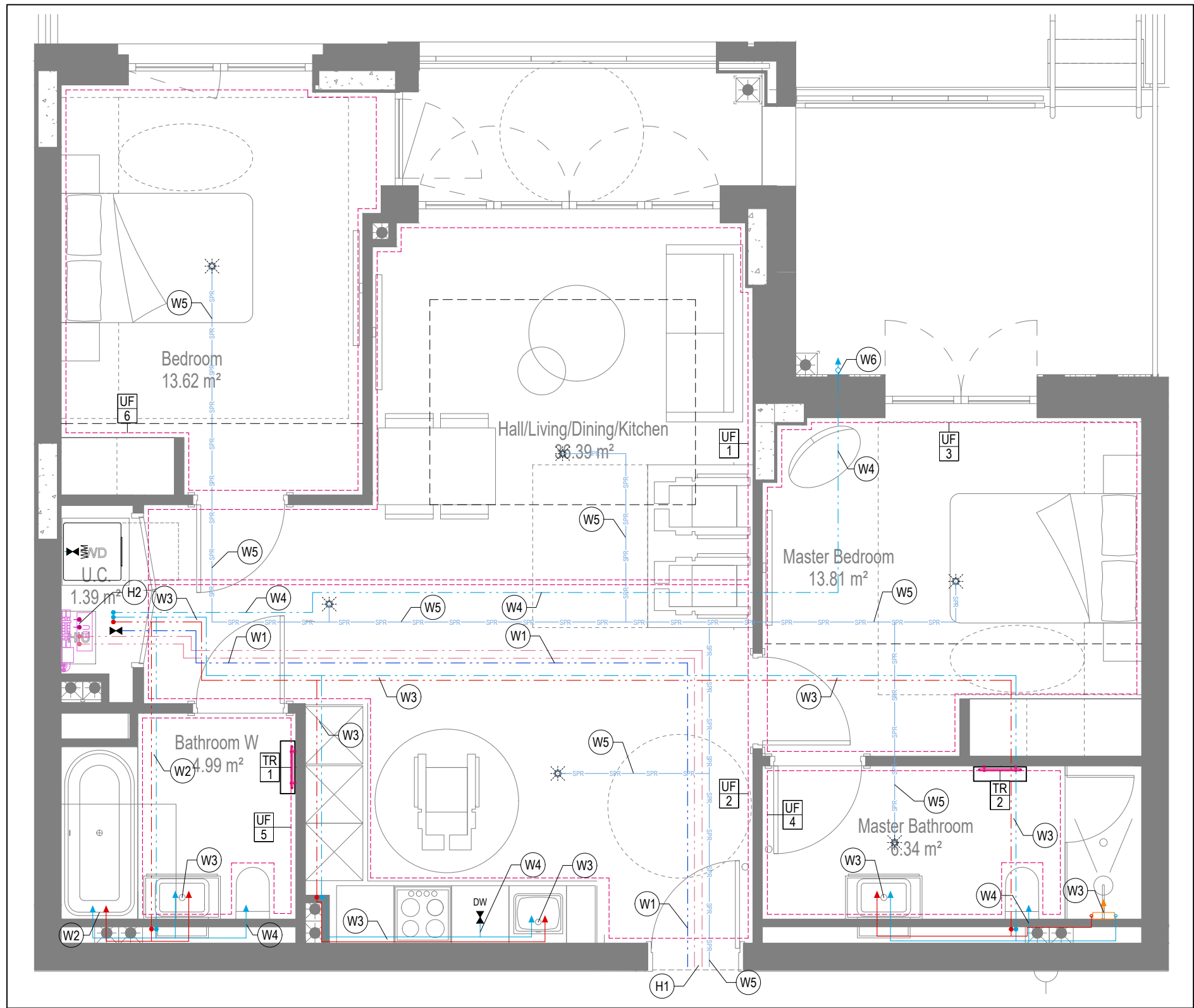
Title: MECHANICAL SERVICES LAYOUT
FLAT TYPE 03
Plots: AS03, AS13, AS23, AS33

HORNSEY
TOWN HALL

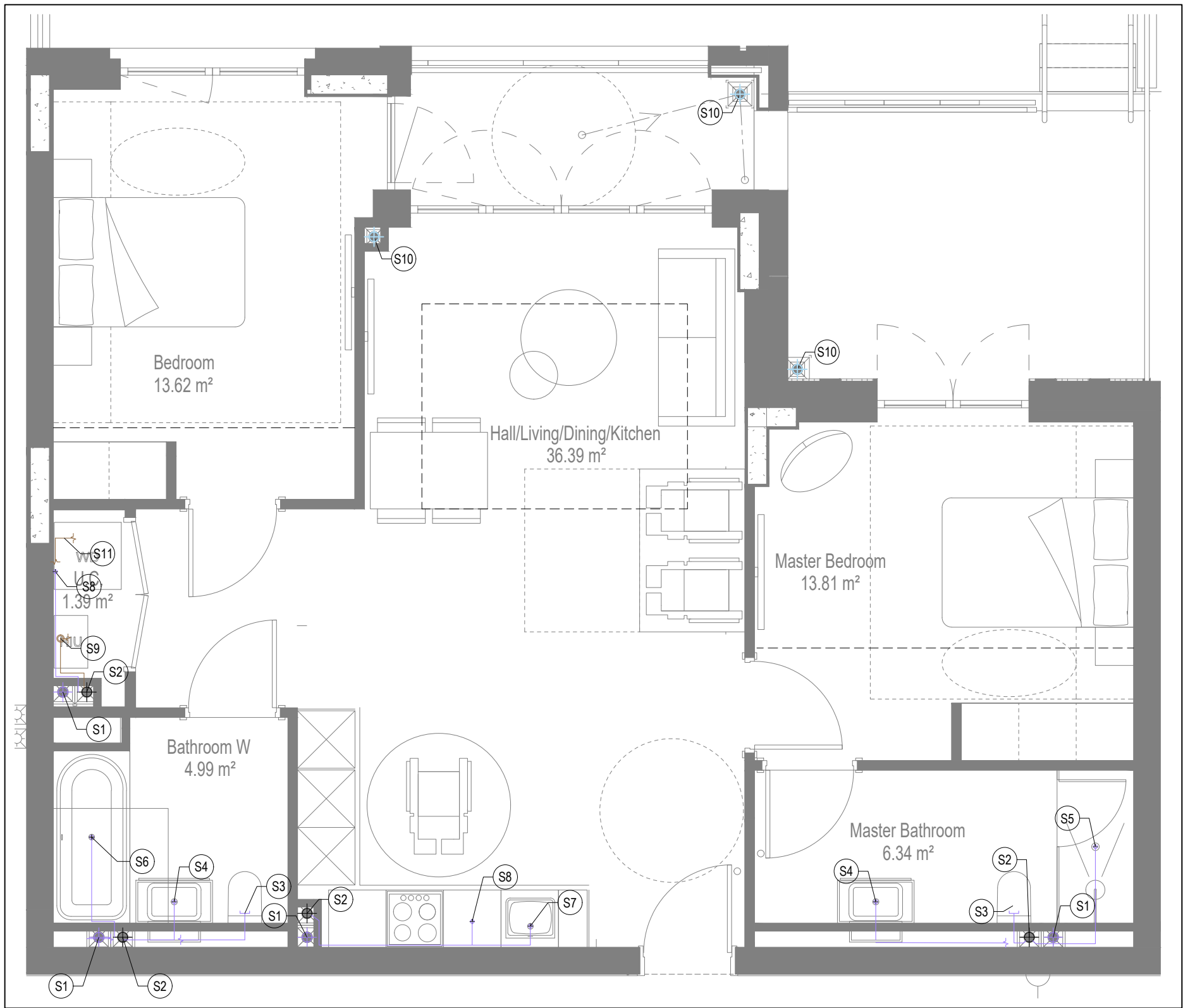
Client:	ARDMORE	Rev: AB
Dwg Number:	10687-M-03-A-0003	

Dwg Number:	10687-M-03-A-0003	AD
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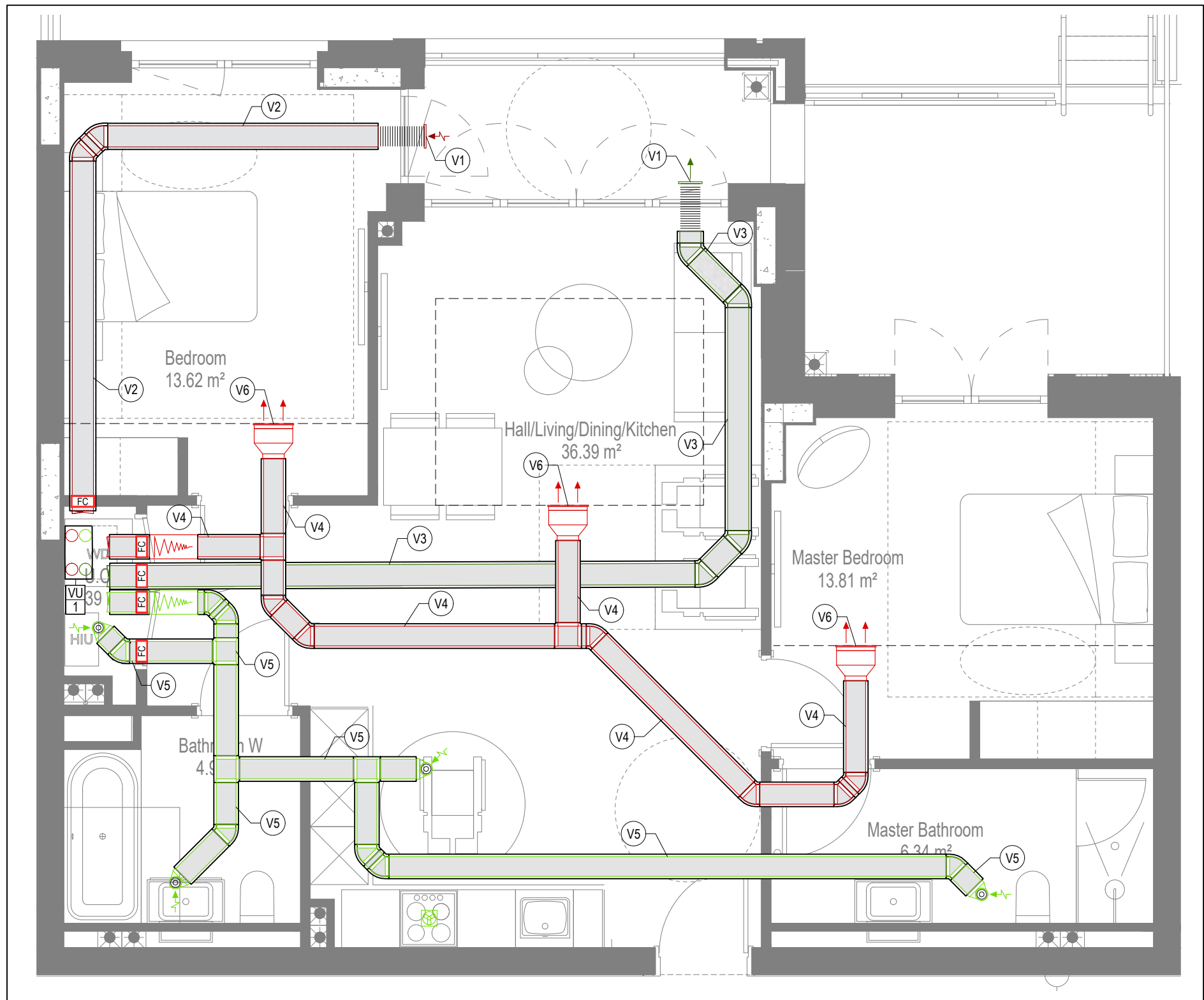
AB



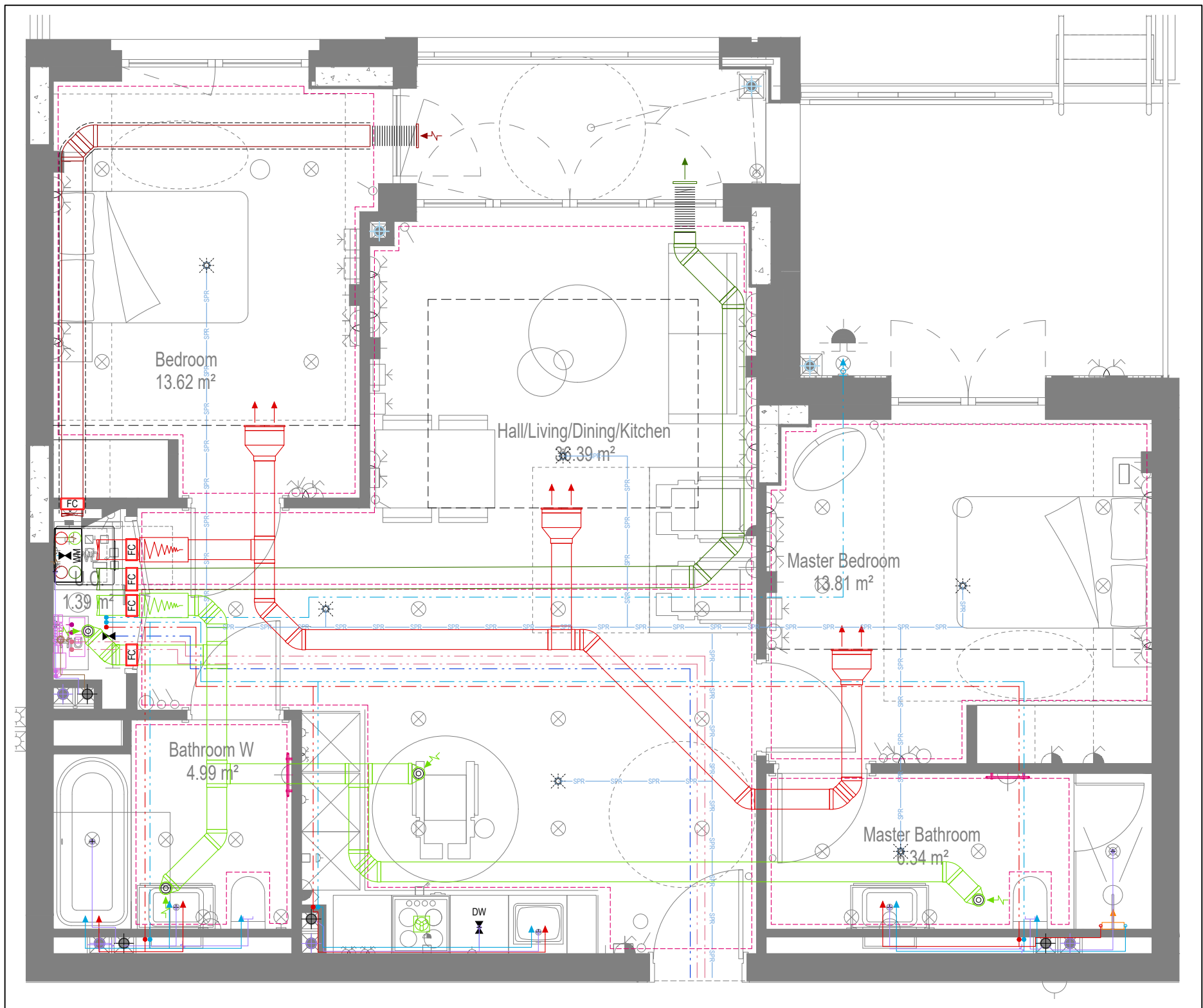
WATER AND HEATING LAYOUT



SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
- All discrepancies are to be queried with WDA before works commence.

GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to drip/drain within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details. Subject to specialist confirmation.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/SS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-vo trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS hep-vo trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x60 Insulated Intake duct.
- V3. 220x60 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-0012 for details.

UF HEATING SCHEDULE

MANUFACTURER:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	LIVINGKITCHEN
UF2	Z1	M1	LIVINGKITCHEN
UF3	Z2	M1	MASTER BEDROOM
UF4	Z3	M1	ENSUITE
UF5	Z4	M1	BATHROOM
UF6	Z5	M1	BEDROOM

TOWEL RAIL SCHEDULE

MANUFACTURER:		TOWEL RADS	
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM
TR2	Z1	PISA WHITE STRAIGHT 500 x 800	ENSUITE

VENTILATION UNIT SCHEDULE

UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

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WARNING TO HOUSE PURCHASERS - Property Misdescriptions Act 1991
Buyers are warned that this is a working drawing and is not intended to be treated as a descriptive material describing, in relation to any descriptive material describing, in relation to any descriptive particular property or development, any of the Specific Matters prescribed by an Order made under the above Act. The contents of this drawing may be subject to change at any time & alterations and variations can occur during the progress of the works without revision of the drawing. Consequently the layout, form, contents & dimensions of the finished construction may differ materially from those shown. Nor do the contents of this drawing constitute a contract, part of any contract or a warranty.

LEGEND

- > Pipework at high level / within ceiling void or joist space
- > Pipework at low level
- > Pipework to drip/drain to low/high level or joist space
- > Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titan Attenuator
- Titan Trimbox NOX Filter

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARDMORE ON 12.05.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION/ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS

DRAWING NO: 3556-KDS-BA-XX-DR-A-06-1103 REVISION: C3 DATE RECEIVED: 04.01.2021

AB	16.09.2022	AS BUILT	JH	EJ
C2	05.07.2021	Construction issue. Updated to comments	IV/ZM	EJ
C1	01.10.2020	Construction Issue	CDS	EJ
P1	04.02.2020	Preliminary Issue	ZM	JC
Rev	Date	Description	Drawn	Chkd

Current purpose: AS BUILT Scale: 1:50 Size: A1
Original Issue Date: 04.02.2020 Drawn: ZM Chkd: JC



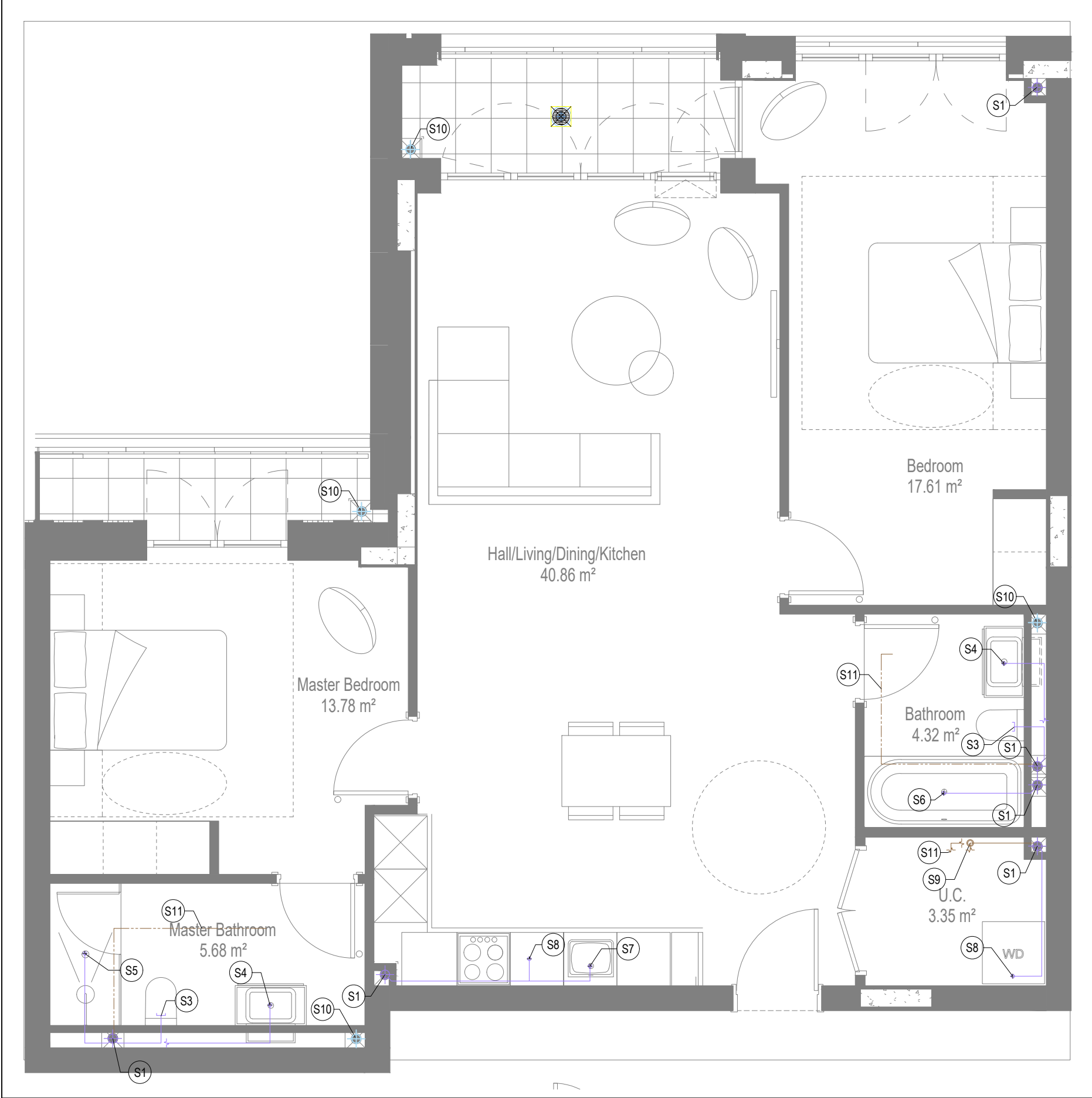
Title: MECHANICAL SERVICES LAYOUT
Plots: FLAT TYPE 04
AS04, AS14, AS24, AS34

Project: HORNSEY TOWN HALL

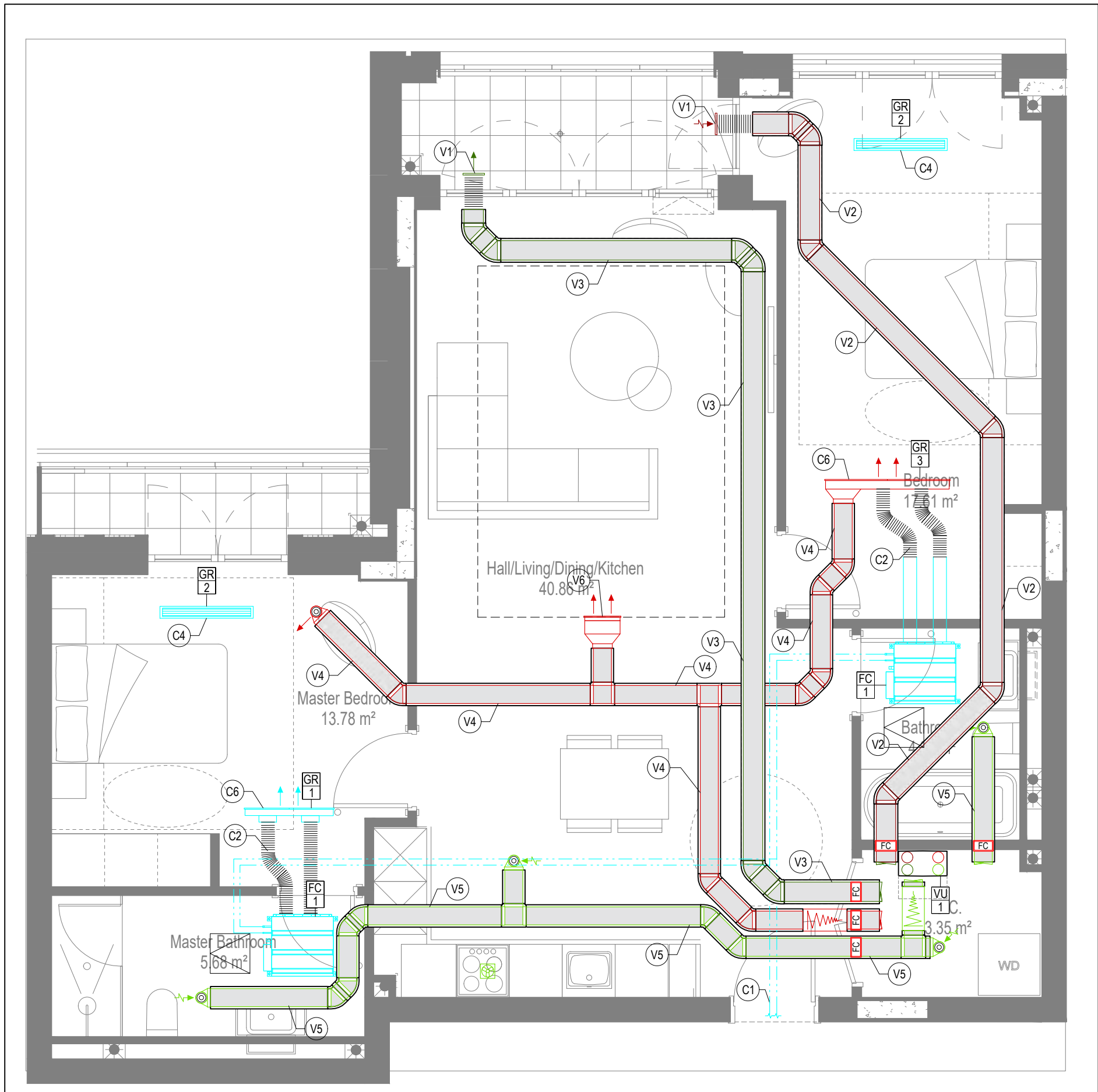
Client: ARDMORE
Dwg Number: 10687-M-03-A-0004
Rev: AB



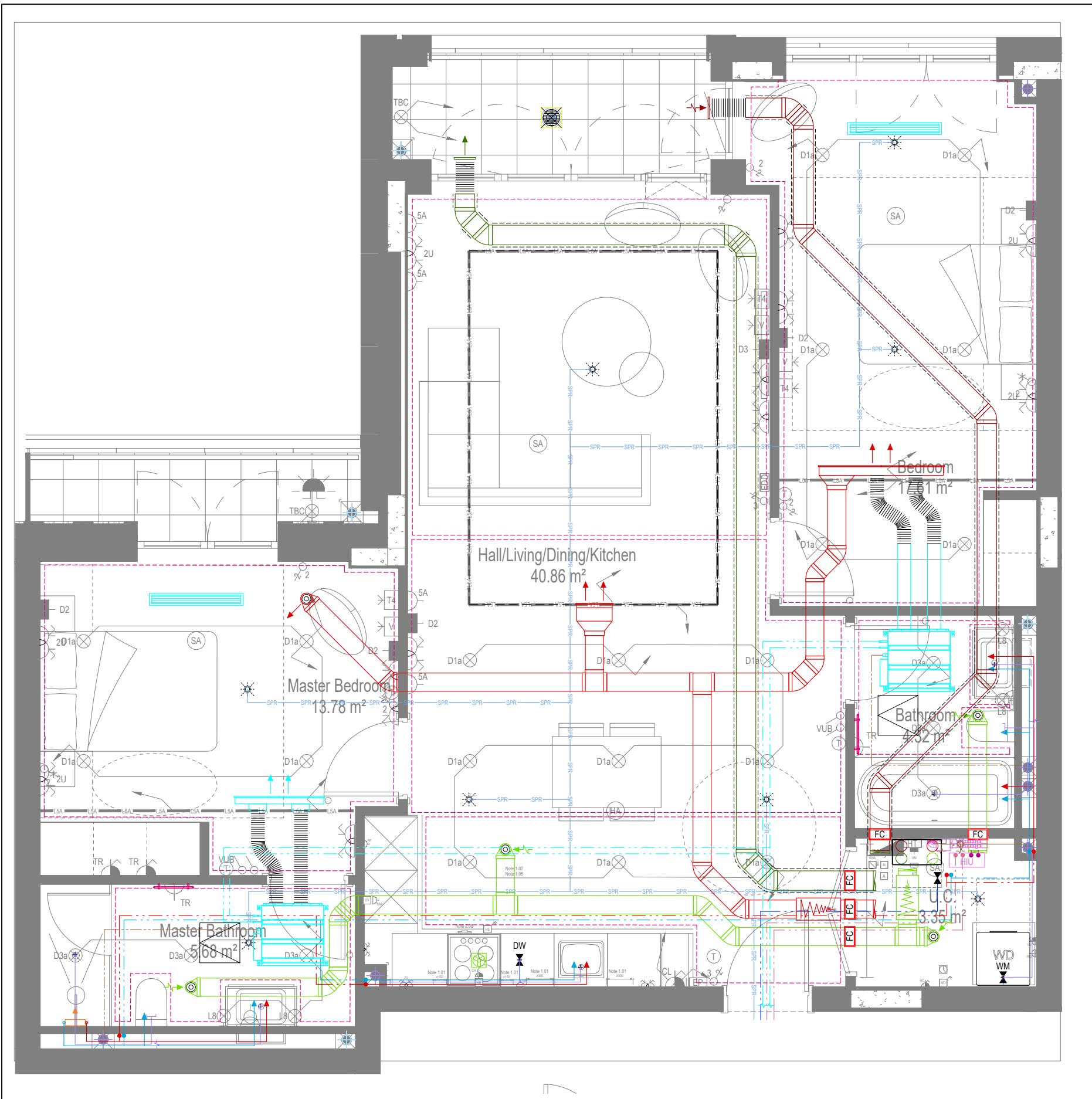
WATER AND HEATING LAYOUT



SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

- Electrical services shown for coordination purposes only. Refer to electrical drawings for Electrical services information.
- Before commencing work on site, please read Design Risk Management Information.
- All manufacturer's instructions to be reviewed prior to installation.
- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensioned setting out details to be confirmed by architect.
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GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all hot water pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of D10-welm or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CWS & HWS.
- W3. 150 balanced CWS & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pen to SVP/SS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
- S7. 400 sink waste to drop in 400 to run to SVP/SS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Int/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x90 Insulated Intake duct.
- V3. 220x90 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Brookeair flowline linear grille.

COOLING NOTES

- C1. VRF pipework to FCU.
- C2. FCU to connect to supply air plenum with duct.
- C3. Supply grille within ceiling.
- C4. Return air to FCU via return air grille within ceiling.
- C5. Boarding to stop at ceiling level to allow for return air path to FCU.
- C6. Supply grille mounted on side of bulkhead.
- C7. Return air to FCU via grille mounted on side of bulkhead.
- C8. Dummy grille to make up continuous slot diffuser.

U/F HEATING SCHEDULE			
MANUFACTURER: POLYPIPE			
CIRCUIT REF:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M1	LIVING ROOM
UF2	Z1	M1	KITCHEN
UF3	Z1	M1	LIVING ROOM/KITCHEN
UF4	Z2	M1	MASTER BEDROOM
UF5	Z2	M1	ENSUITE
UF6	Z3	M1	BATHROOM
UF7	Z4	M1	BEDROOM

TOWEL RAIL SCHEDULE			
MANUFACTURER: TOWEL RADS			
TR REF:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM
TR2	Z1	PISA WHITE STRAIGHT 500 x 800	ENSUITE

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

FCU SCHEDULE			
MANUFACTURER / RANGE: MITSUBISHI			
REF:	MODEL:	DUCT SIZE:	SERVING ROOM:
FCU1	PEFY-P15VMS1-E	1500	BEDROOM 1 & 2

FCU GRILLE SCHEDULE					
MANUFACTURER / RANGE: BROOKAIR FLOWLINE					
GRILLE REF:	ROOM	FLOW RATE (L/S)	GRILLE LENGTH	GRILLE TYPE	DUTY
GR1	BEDROOM 1	100	1000	2F	FCU SUPPLY
GR2	BEDROOM 1	100	1000	2F	FCU RETURN
GR3	BEDROOM 2	121	1400	2F	FCU + VENT SUPPLY
GR4	BEDROOM 2	100	1000	2F	FCU RETURN

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LEGEND

---> Pipework at high level / within ceiling void or joist space

---> Pipework at low level

---> Pipework to droprise to low/high level or joist space

---> Pipework beneath floor / within floor screed / hidden

Rectangular ductwork

Rectangular ductwork with insulation

Circular ductwork / SVP

Flexible ductwork

Intumescent Fire Collar

Supply diffuser

Extract diffuser

Kitchen manufacturers re-circulating cooker hood

Thermostatic Shower Mixer

15mm Cold Isolation Valve for Washing Machine

15mm Cold Isolation Valve for Dish Washer

Ceiling mounted Sprinkler Head

Hot Water Cylinder on stand (if above washing machine)

Hot Water Expansion Vessel

Sealed Heating Kit

Wall mounted Heat Interface unit

UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones

Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type

Ceiling mounted Sprinkler Head

Sprinkler pipework within ceiling void/joist space. Refer to schematic for internal details and sizing of system.

Access Panel - Size varies

Titan Attenuator

Titan Trimbox NOX Filter

Leak Detector

Fan Coil Unit

Grille for Fan Coil Unit

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARMORE ON 12.09.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION/ISSUE DRAWING.

BACKGROUND PLAN AS PER: KDS

DRAWING No: 3596-KDS-BA-XX-DR-A-06-1104

REVISION: C2

DATE RECEIVED: 04.01.2021

AB	16.09.2022	AS BUILT	Construction issue	JH	EJ
C1	29.06.2021	Construction issue		DALS	Chkd
Rev	Date	Description		Dwn	
Current purpose:	AS BUILT	Scale: 1:50	Size: A1		
Original issue Date:	29.06.2021	Dwn: DALS	Chkd: EJ		

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BUILDING SERVICES DESIGN CONSULTANTS

26-27 The Hill, Northfleet, Gravesend Kent, DA11 9EU

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T: 01322 289977 E: design@whitecode.co.uk

Title: MECHANICAL SERVICES LAYOUT

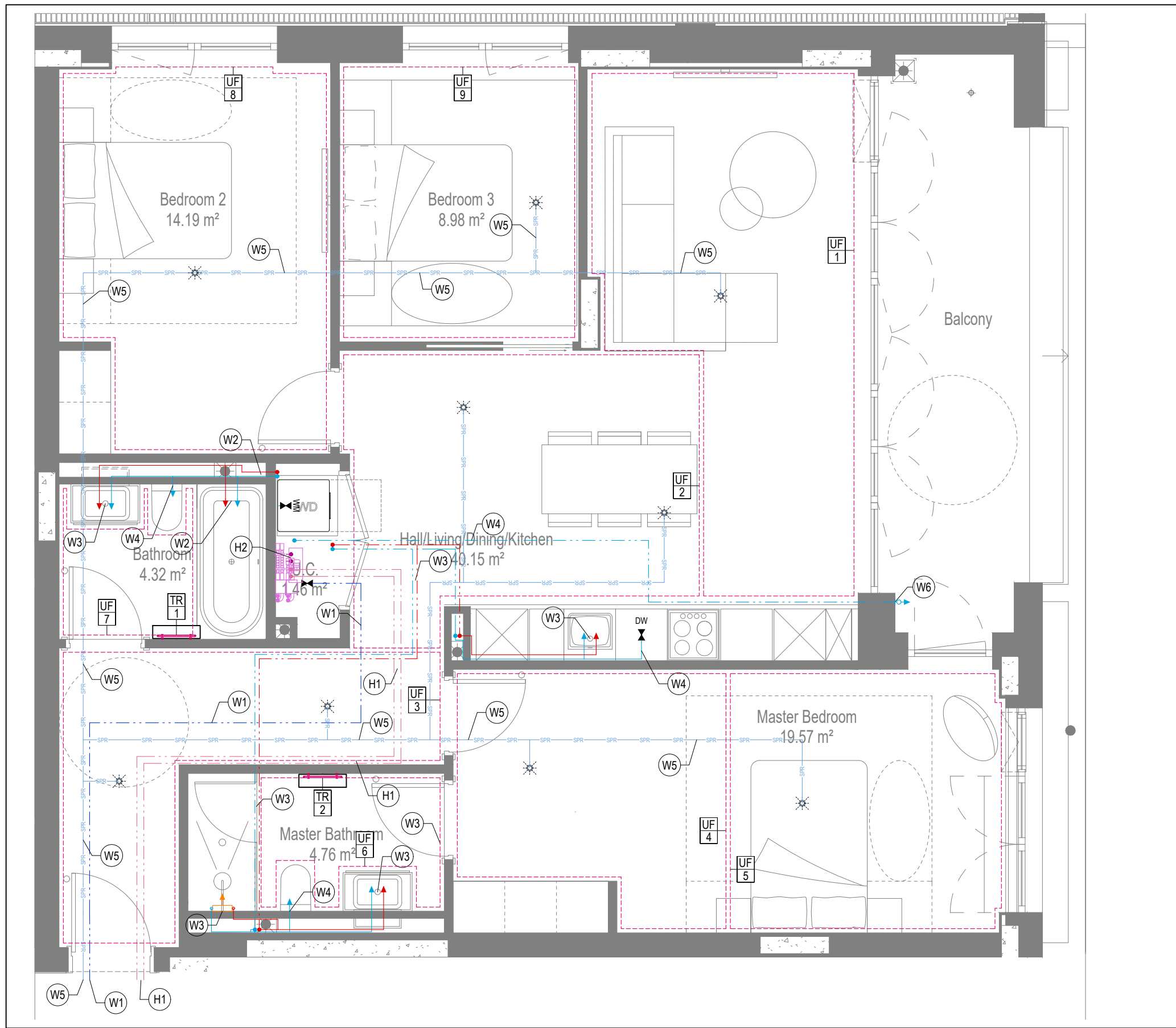
Plots: FLAT TYPE 05B

Project: AS15

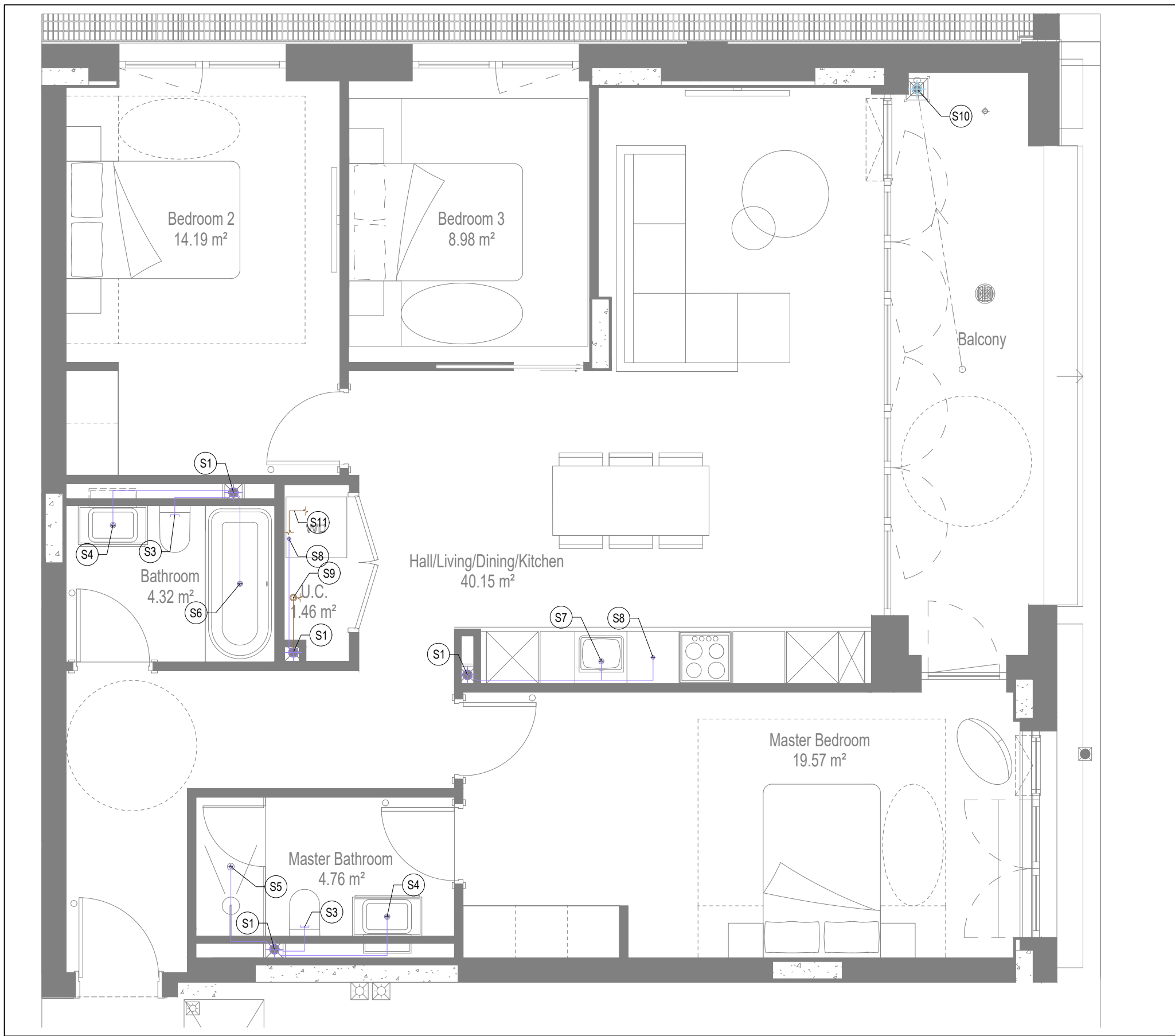
Client: ARMORE

Dwg Number: 10687-M-03-A-0005B

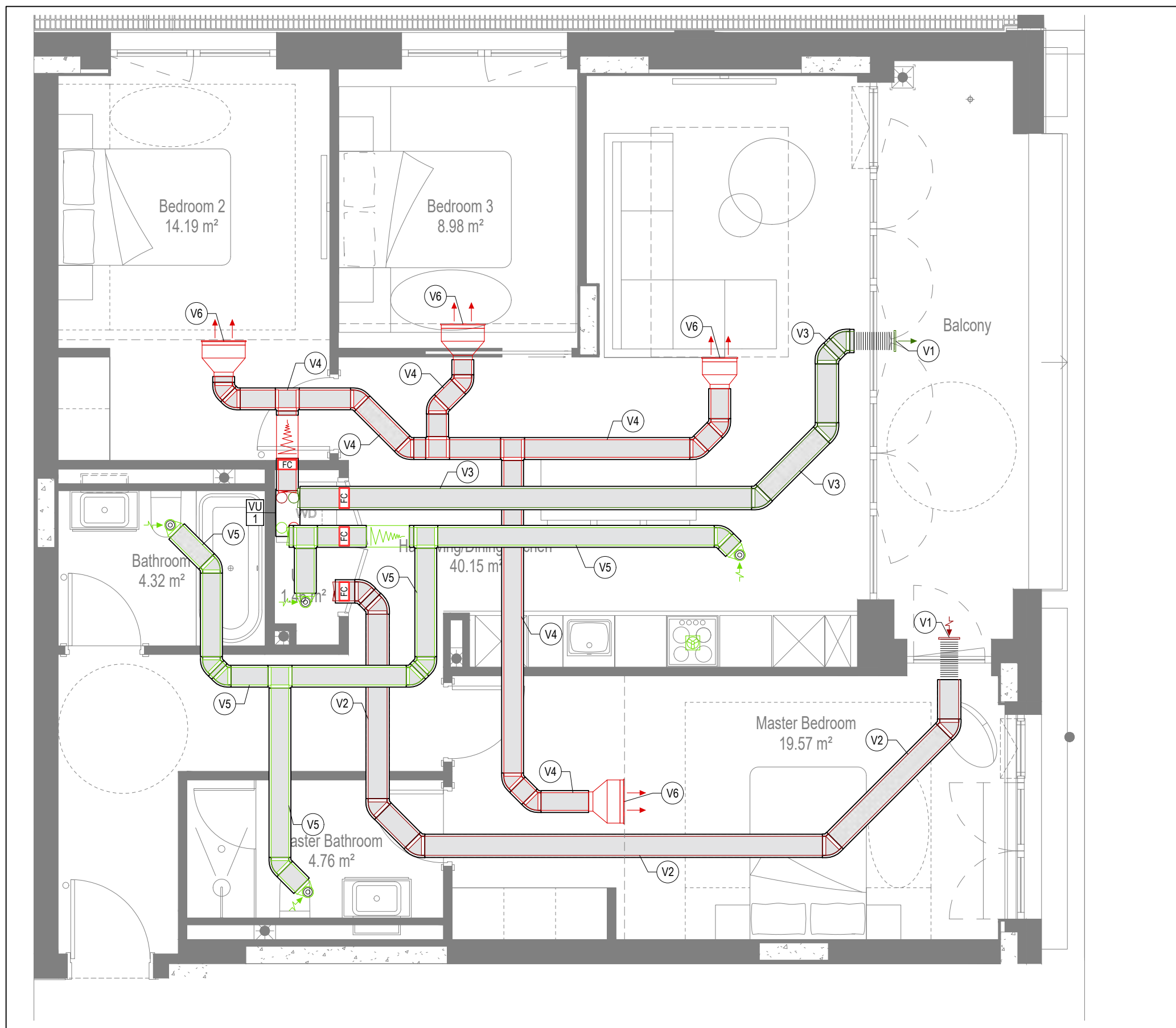
Rev: AB



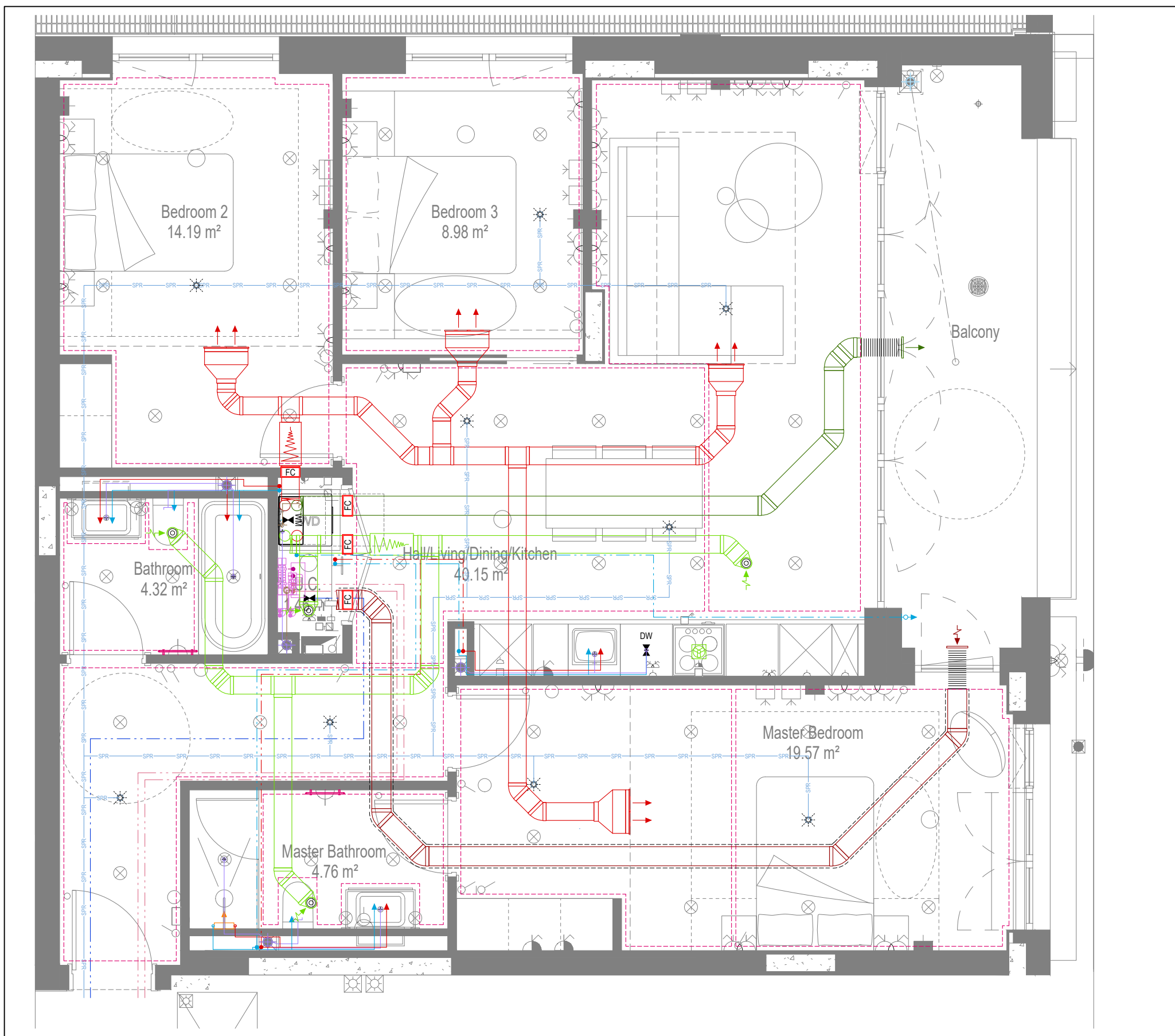
WATER AND HEATING LAYOUT



SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



COORDINATED SERVICES LAYOUT

GENERAL SERVICES NOTES

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- This drawing is to be read in conjunction with all schematics, details and specification documents.
- Dimensions setting out details to be confirmed by architect.
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GENERAL WATER NOTES

- This drawing must be read in conjunction with approved sanitaryware schedule by others.
- Positions of sprinkler heads (if applicable) are indicative and to be verified by specialist subcontractor.
- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all hot water pipework.

GENERAL HEATING NOTES

- Heating pipe work high points are to be vented with automatic air vents (AAV's), or shall be manually vented where this is not possible.

GENERAL SOILS NOTES

- Where waste pipe passes behind cooker, it shall be suitably protected against heat distortion by being lagged in foil backed 25mm thick fibreglass or to be run in copper.
- Where a waste run exceeds lengths shown in BS EN 12056-2 (table 6) a HepVo trap is to be fitted to the waste run.

GENERAL VENTILATION NOTES

- Where non-fire rated ductwork passes through a fire compartment element (such as protected hallway) the duct is to be fitted with a fire collar with a rating to match the wall being penetrated. The fire collar must be installed in line with manufacturer's requirements.
- Doors within dwellings need to be cut short by 10mm to allow air to pass under the door and to satisfy Part F1 of the Building Regulations.
- Where flexible duct work must be used, it must be installed at 90% of its maximum length, be no longer than 300mm in each instance and follow a slow radius bend.
- Where ducts need to droprise within the ceiling void, this must be done in a manner that does not form low points where condense can collect.
- Duct work shall be insulated wherever there is a risk of condensation forming.
- Where duct work is insulated, it shall be with 25mm of 0.04w/mk or equivalent.
- Ventilation unit to be installed with anti-vibration mounts.
- Where flexible duct work is used it is to be tough PVC coated glass cloth fabric (or vinyl) supported by encapsulated high tensile steel wire helix. Traditional domestic PVC flexible duct work is acceptable.

WATER NOTES

- Insulated copper water main entering flat at high level in ceiling void to go low level with stopcock, double check valve and drain off cock fitted.
- 220 balanced CWS & HWS.
- 150 balanced CWS & HWS.
- 150 CWS.
- Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- Subject to specialist confirmation.
- BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from plan to SVP/SS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/SS.
- S5. 400 shower waste to run to SVP/SS.
- S6. 400 bath waste to run to SVP/SS.
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- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/SS.
- S9. Copper Sealed Heating kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/SS hep-v trap. To fall by gravity where possible, or to be pumped if not.

VENTILATION NOTES

- V1. Inlet/Exhaust Louvre. Refer to detail drawing for dimensions of plenum.
- V2. 220x90 Insulated Intake duct.
- V3. 220x90 Insulated Exhaust duct.
- V4. 204x60 Supply duct.
- V5. 204x60 Extract duct.
- V6. Linear Slot Grille for supply air refer to drawing 10687-M-05-SW-0012 for details.

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LEGEND

- - - - - Pipework at high level / within ceiling void or joist space
- - - - - Pipework at low level
- - - - - Pipework to droprise to low/high level or joist space
- - - - - Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titon Attenuator
- Titon Trimbox NOX Filter

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARDMORE ON 12.09.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS			
DRAWING NO:	3596-KDS-BA-XX-DR-A-06-1105	REVISION:	C3
DATE RECEIVED:	04.01.2021		

UF HEATING SCHEDULE			
MANUFACTURER:	STAT ZONE:	POLYPIPE	
CIRCUIT REF:	STAT ZONE:	MANIFOLD:	ROOM:
UF1	Z1	M2	KITCHEN/LIVING ROOM
UF2	Z1	M2	KITCHEN/LIVING ROOM
UF3	Z1	M1	HALLWAY
UF4	Z2	M1	BEDROOM 1
UF5	Z2	M1	BEDROOM 1
UF6	Z3	M1	ENSUITE
UF7	Z4	M1	BATHROOM
UF8	Z5	M1	BEDROOM 2
UF9	Z6	M1	BEDROOM 3

TOWEL RAIL SCHEDULE			
MANUFACTURER:	STAT ZONE:	MODEL (SIZE):	ROOM:
TR1	Z1	PISA WHITE STRAIGHT 500 x 800	ENSUITE
TR2	Z1	PISA WHITE STRAIGHT 500 x 800	BATHROOM

VENTILATION UNIT SCHEDULE			
UNIT REF:	SYSTEM:	MANUFACTURER:	MODEL:
VU1	4	VENT AXIA	SENTINEL KINETIC BH

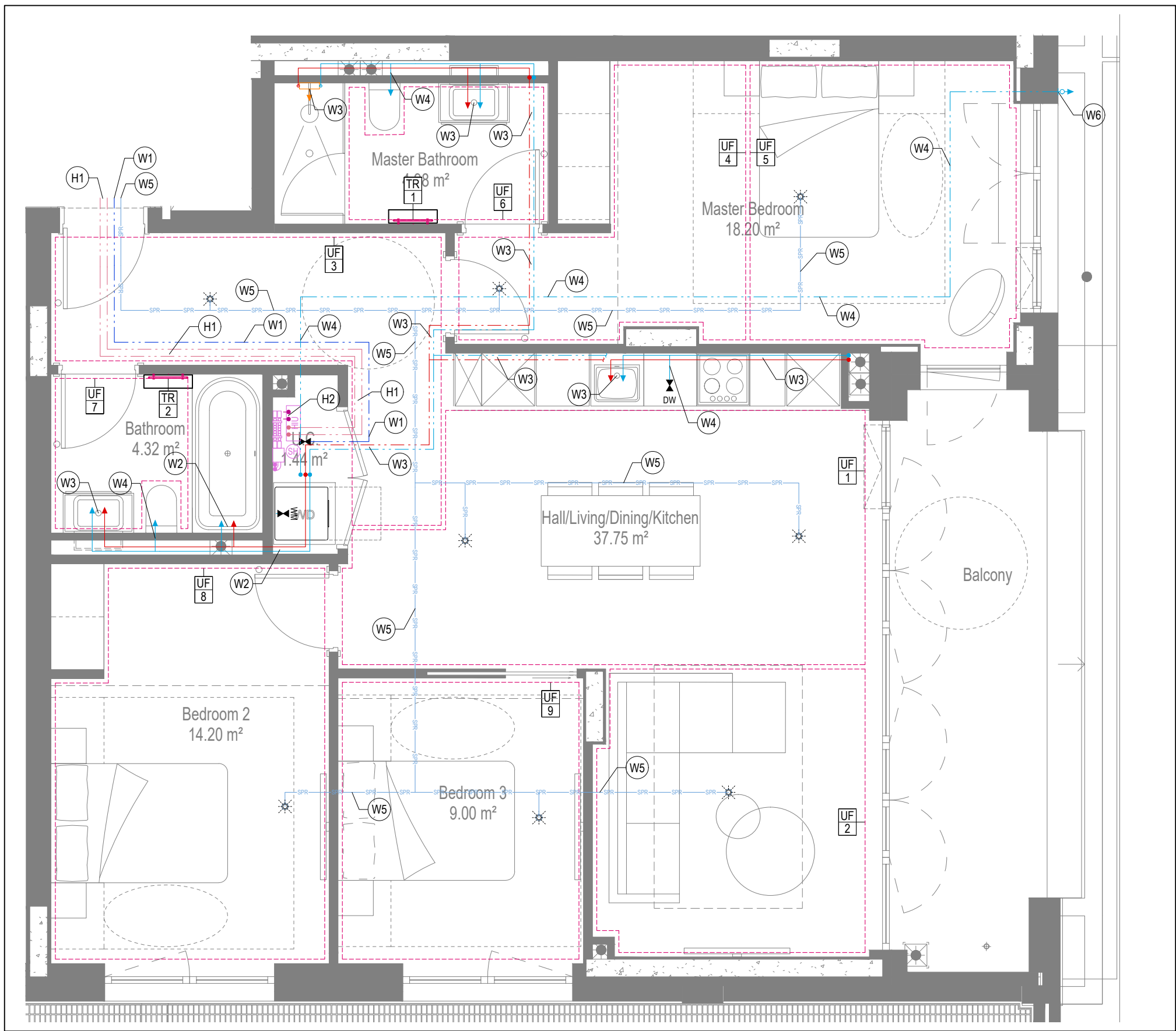
AB	16.09.2022	AS BUILT	Construction issue. Updated to latest G's and Comments.	JH	WZM	EJ
C2	05.07.2021	Construction issue.		MJ	JC	
C1	01.10.2020	Construction issue.		TN	EJ	
P1	04.02.2020	Preliminary Issue		MJ	JC	
Rev	Date	Description		Drwn	Chkd	
Current purpose:	AS BUILT	Scale: 1:50	Size: A1			
Original Issue Date:	04.02.2020	Drwn: MJ	Chkd: JC			

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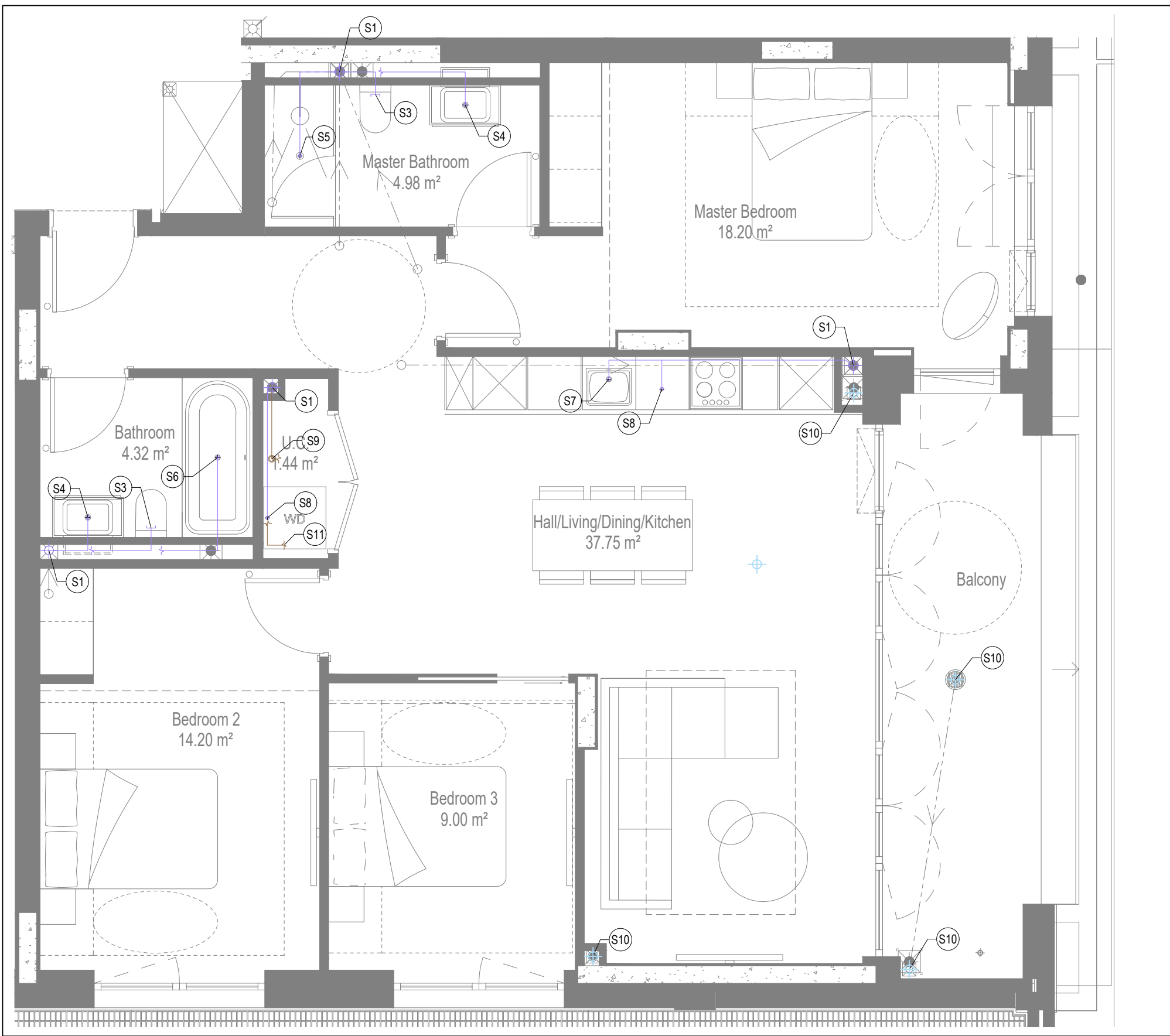
MECHANICAL SERVICES LAYOUT
FLAT TYPE 06
AS06, AS16

HORNSEY TOWN HALL

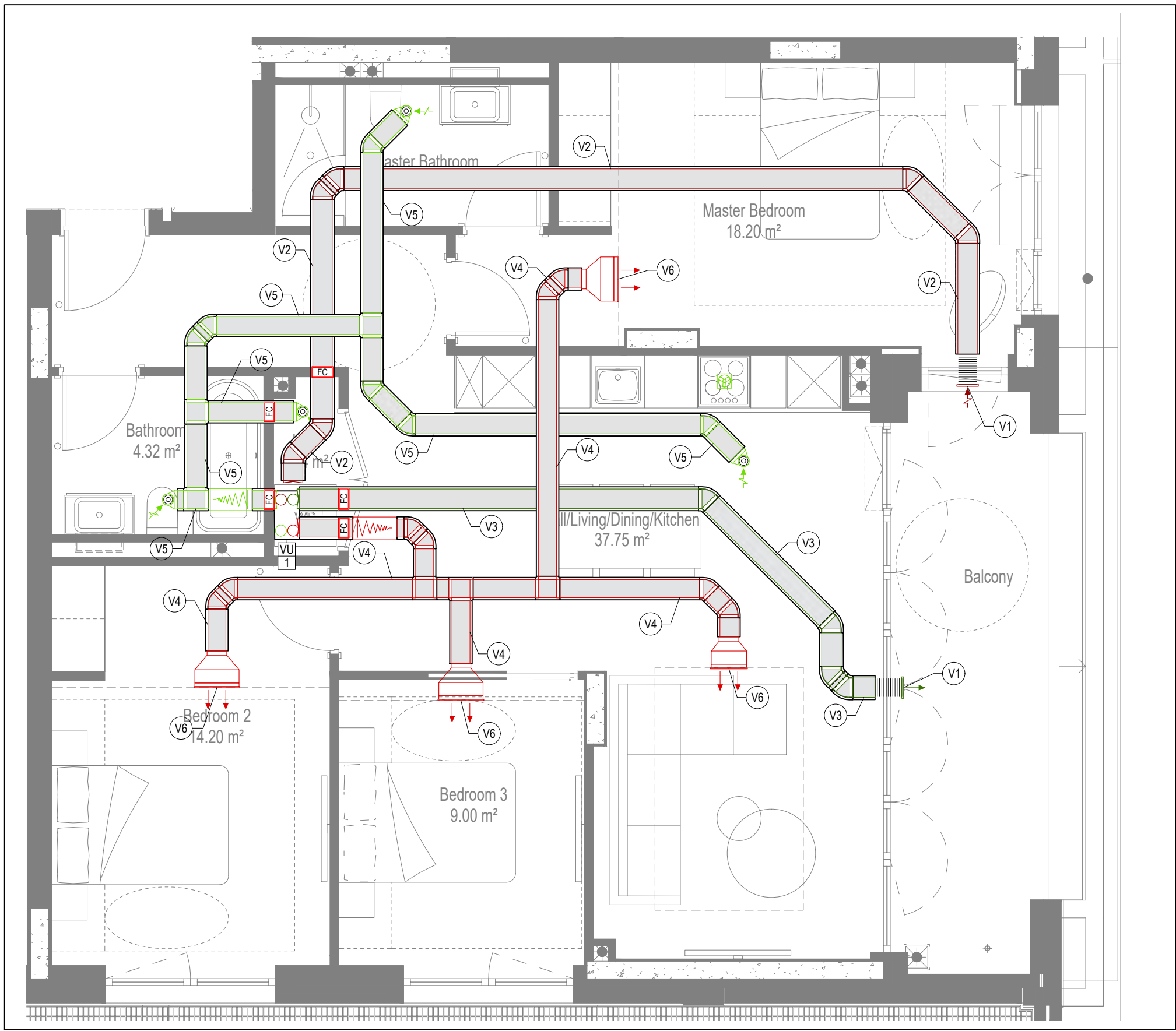
Client: ARDMORE
Dwg Number: 10687-M-03-A-0006
Rev: AB



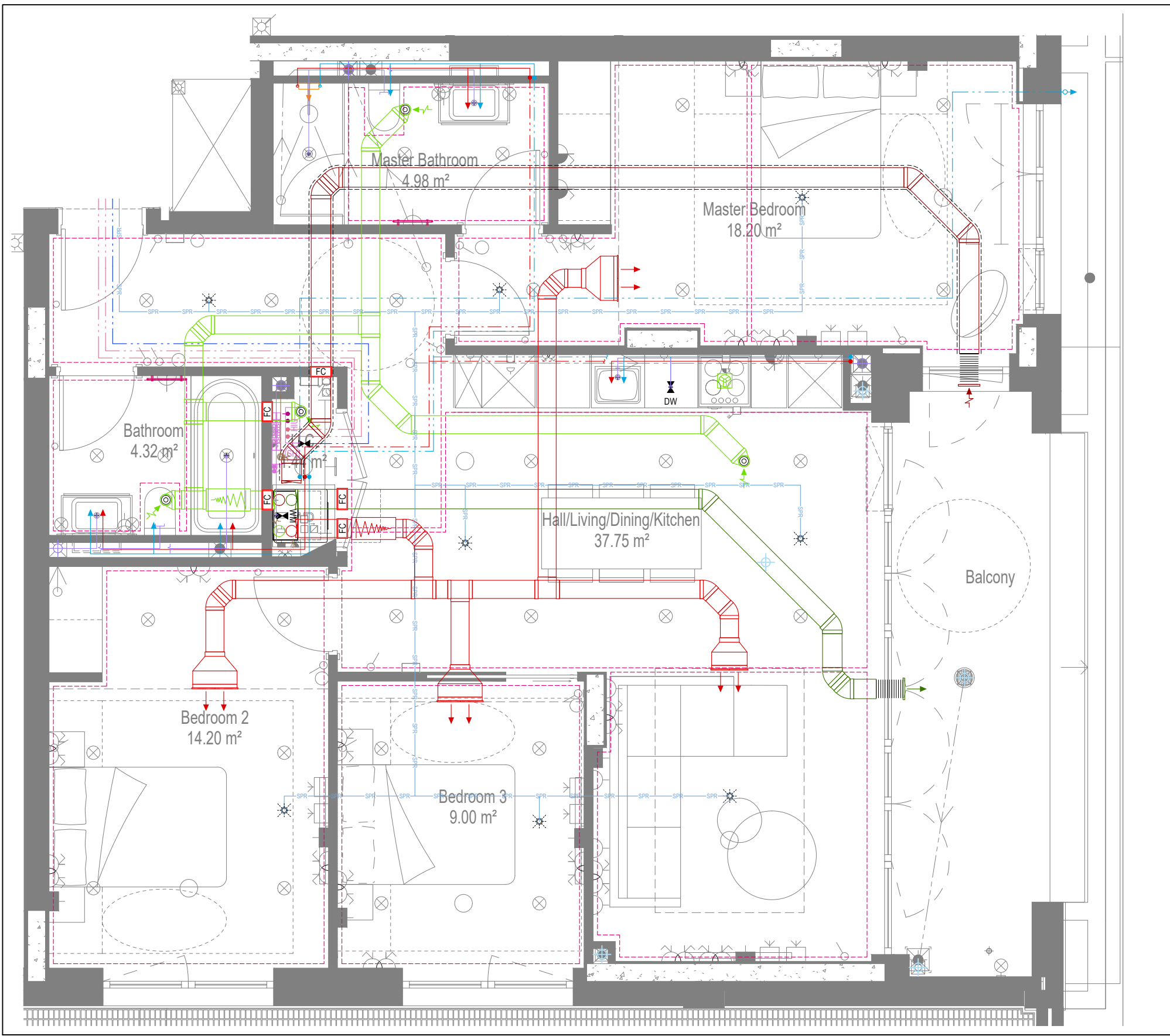
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SOILS AND WASTE LAYOUT



VENTILATION LAYOUT



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- Trace heating to be provided to all hot water pipework to within 3m of appliances.
- Trace heating to be provided to all bib tap pipework.

GENERAL HEATING NOTES

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GENERAL SOILS NOTES

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WATER NOTES

- W1. Insulated copper water main entering flat at high level in ceiling void to go to low level with stopcock, double check valve and drain off cock fitted. Refer to schematic for valve arrangement and sizing.
- W2. 220 balanced CW/S & HWS.
- W3. 150 balanced CW/S & HWS.
- W4. 150 CWS.
- W5. Sprinkler main - Refer to Sprinkler schematic and layouts for details.
- W6. BCWS pipe drops to LL with IV & DCV, then penetrates facade to serve external tap.
- W7. Heating tape to be added to hot water supply.

HEATING NOTES

- H1. Insulated Heating Primary F&R. Refer to schematic for sizing.
- H2. 220 Heating F&R.
- H3. Under floor Heating.

SOILS NOTES

- S1. 1000 SVP from above with rodding eye and access hatch.
- S2. 1000 SS with rodding access. Positions generally on ground or lower ground floors. Check drainage drawings for details.
- S3. 1000 soil pipe from pan to SVP/ISS.
- S4. 320 basin waste with anti-siphon to drop in 400 to SVP/ISS.
- S5. 400 shower waste to run to SVP/ISS.
- S6. 400 bath waste to run to SVP/ISS.
- S7. 400 sink waste to drop in 400 to run to SVP/ISS. To be fitted with capped connection if adjacent to Washing Machine/Dishwasher.
- S8. 400 standpipe for Washing Machine/Dishwasher waste to run to SVP/ISS.
- S9. Copper Sealed Heating Kit overflow and Unvented Cylinder overflow to discharge via a tundish to a 320 polypropylene waste system/SVP via a hep-v trap. See detail A on internal water schematic.
- S10. RWP from above with access hatch & rodding eye.
- S11. 220 plastic condense from Fan Coil Unit or Heat Recovery Unit to run to SVP/ISS hep-v trap. To fall by gravity where possible, or to be pumped if not.

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- V5. 204x60 Extract duct.
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Will remain the responsibility of the Installer/Contractor to ensure that there are no conflicts with information provided by ourselves & that of any manufacturers information or relevant requirements of statutory Bodies or Client specification/ET. If any conflicts do exist it is the responsibility of the Installer/Contractor to inform The Consultant/Client immediately verbally & in writing.

WARNING TO HOUSE PURCHASERS - Property Misdescriptions Act 1991

Buyers are warned that this is a working drawing and is not intended to be treated as descriptive material describing, in relation to any descriptive material describing, in relation to any descriptive particular property or development, any of the Specific Matters prescribed by an Order made under the above Act. The contents of this drawing may be subject to change at any time & alterations and variations can occur during the progress of the works without revision of the drawing. Consequently the layout, form, contents & dimensions of the finished construction may differ materially from those shown. No do the contents of this drawing constitute a contract, part of any contract or a warranty.

LEGEND

- > Pipework at high level / within ceiling void or joist space
- > Pipework at low level
- > Pipework to drooprise to low/high level or joist space
- > Pipework beneath floor / within floor screed / hidden
- Rectangular ductwork
- Rectangular ductwork with insulation
- Circular ductwork / SVP
- Flexible ductwork
- Intumescent Fire Collar
- Supply diffuser
- Extract diffuser
- Kitchen manufacturers re-circulating cooker hood
- Thermostatic Shower Mixer
- 15mm Cold Isolation Valve for Washing Machine
- 15mm Cold Isolation Valve for Dish Washer
- Ceiling mounted Sprinkler Head
- Hot Water Cylinder on stand (if above washing machine)
- Hot Water Expansion Vessel
- Sealed Heating Kit
- Wall mounted Heat Interface unit
- UFCH manifold - Refer to typical UFCH drawings for details for Circuit/Zones
- Wall mounted Towel Rail - Refer to Internal Heating schematic for size and type
- Ceiling mounted Sprinkler Head
- Sprinkler pipework within ceiling void/joist space. Refer to schematic for indicative details and sizing of system.
- Access Panel - Size varies
- Titan Attenuator
- Titan Trimbox NOX Filter

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING CONFIRMATION FROM ARDMORE ON 12.05.2022 THAT THERE WERE NO CHANGES ON SITE AGAINST THE CONSTRUCTION/ISSUE DRAWING

BACKGROUND PLAN AS PER: KDS		
DRAWING NO: 3506-KDS-SA-XX-DR-A-06-1106	REVISION: CS	DATE RECEIVED: 04.01.2021

AB	16.09.2022	AS BUILT	JH	EJ
C1	05.07.2021	Removed cooling, updated to fire strategy and comments	DALS/	EJ
P1	24.03.2020	Preliminary Issue	MJ	JC
Rev	Date	Description	Dwn	Chkd
Current purpose:		AS BUILT	Scale: 1:50	Size: A1
Original Issue Date:		24.03.2020	Dwn: MJ	Chkd: JC



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Title: **MECHANICAL SERVICES LAYOUT**
Plots: **FLAT TYPE 07B**
Project: **AS17**

Client: **HORNSEY TOWN HALL**

Dwg Number: **10687-M-03-A-0007B**
Rev: **AB**