

Proposed Roof Plan Layout - Scale 1:200

Ref	System	Location	Heating Coils	Fans	Comments
AHU01	Playhouse Supply AHU	Playhouse Roof Space	Frost Coil - 36.4kW Reheat Coil - 61.8kW	Supply Air volume - 3m ³ /s. E&H static pressure - 200Pa. Weight 575kg	c/w Bag Filter Electrical - 3PH Max Power - 4.1kW Max Current - 6.3A
EF01	Playhouse Extract Fan	Playhouse Roof Space	N/A	Extract Air volume - 3m ³ /s. E&H static pressure - 200Pa. Weight 22kg	Electrical - 3PH Max Power - 3.5kW Max Current - 5.3A

The AHU and Extract Fan to be manufactured by Danterm Ltd or equal and approved.

AHU/Fan Schedule

Ref	Location	Type	Duty (m ³ /s)	Size (LxW) mm	Comments
EG01 - 02	Playhouse	Series GECA-RC	1.5	1000x1000	Gilles to be egg crate type suitable for mounting in the ceiling and c/w top entry plenum box.

Extract grilles to be manufactured by Gilberts Blackpool Ltd or equal and approved.
Finish of diffusers to be in a white RAL9010 finish.

Extract Grille Schedule

Ref	Location	Type	Duty (m ³ /s)	Size (LxW) mm	Comments
SG01 - 03	Playhouse	Series GECA-RC	1	900x900	Gilles to be egg crate type suitable for mounting in the ceiling and c/w top entry plenum box.

Supply grilles to be manufactured by Gilberts Blackpool Ltd or equal and approved.
Finish of diffusers to be in a white RAL9010 finish.

Supply Diffuser Schedule

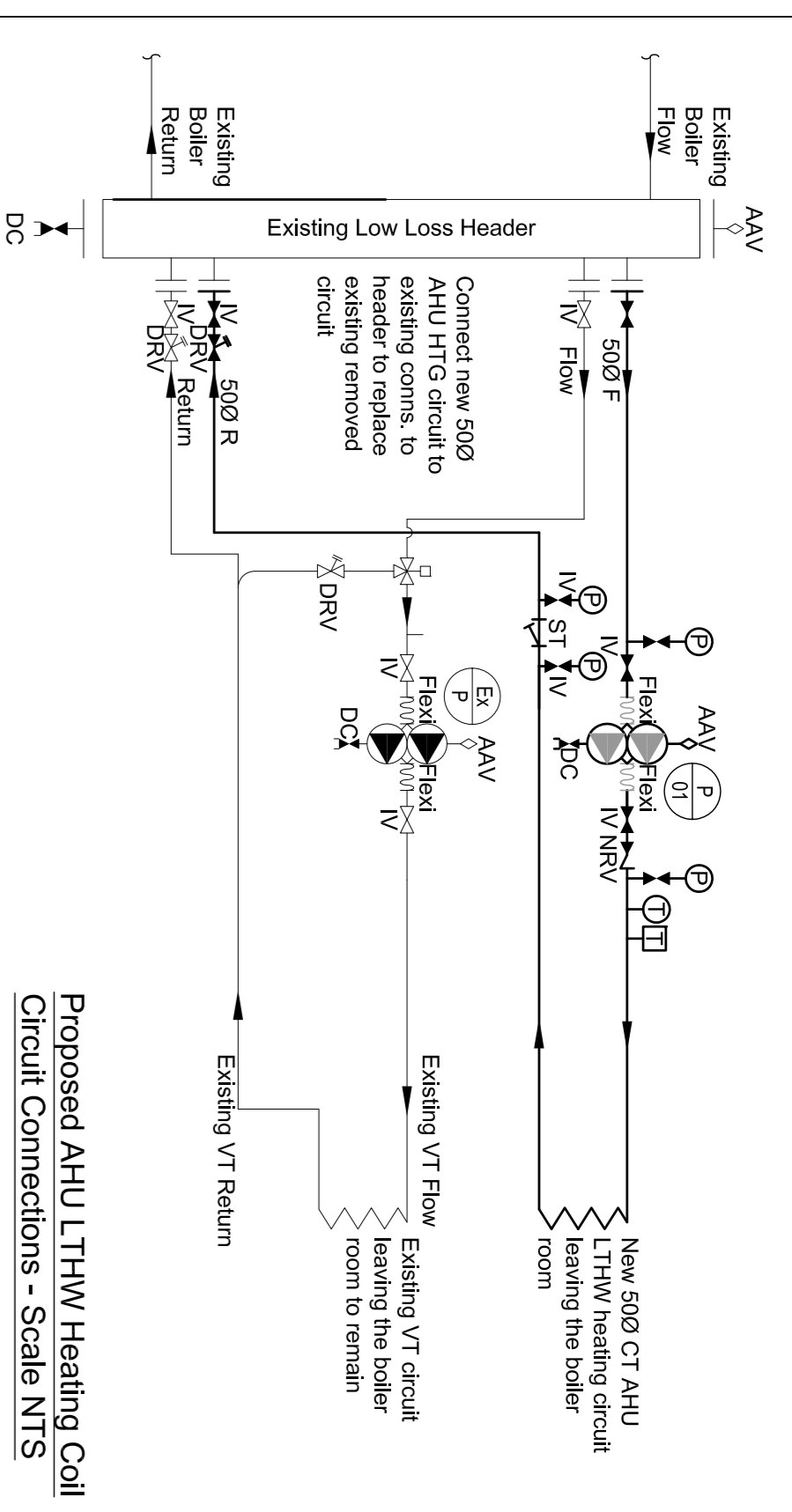
Ref	Location	Type	Duty (m ³ /s)	Size (MMxH) mm	Comments
L01 - 02	New Roof Gable End	WGF-38	3	1800 x 1400	Weather proof louvre c/w bird guard and rear entry plenum box

Louvre Schedules
Louvers to be manufactured by Gilberts Blackpool Ltd or equal and approved.
Finish of Louvers to be agreed with Architect prior to ordering.

Attenuator Schedule

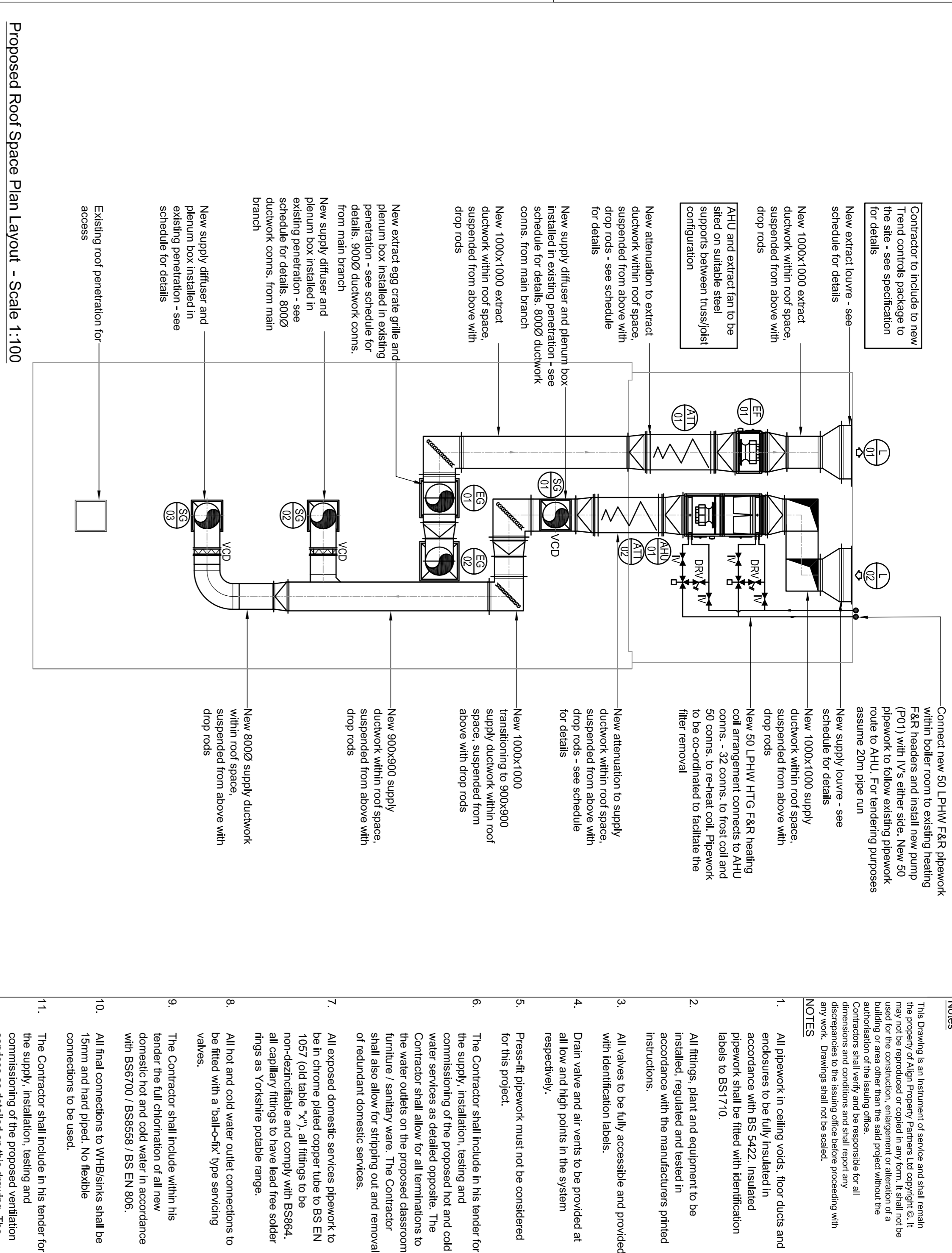
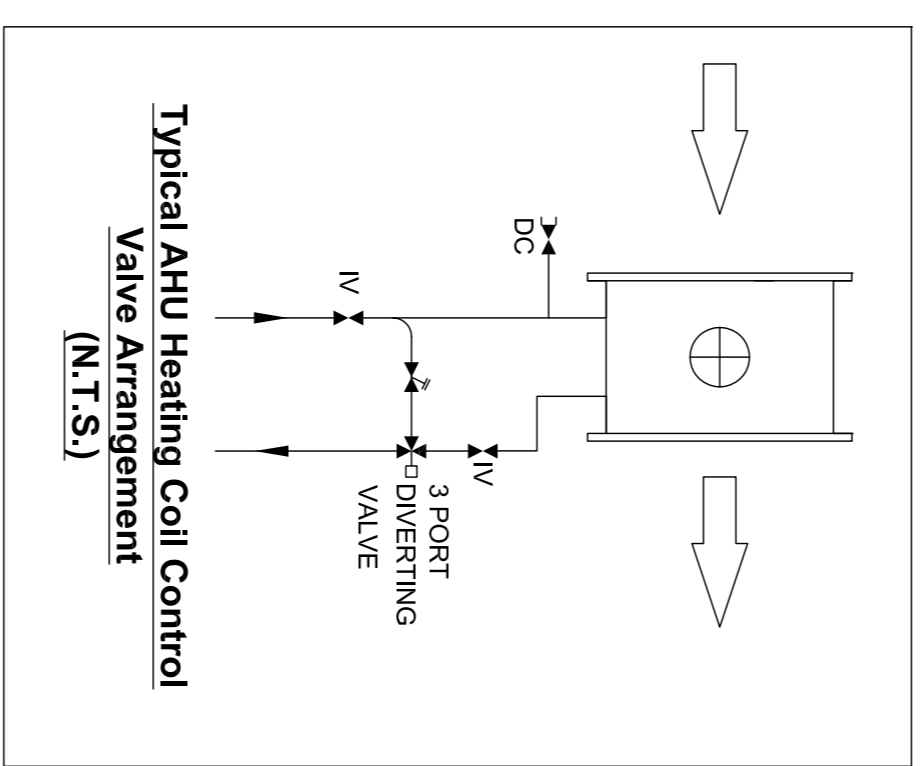
Ref	System	Location	Model/Type	Flow Rate (m ³ /s)	Pressure Drop (Pa)	Insertion Loss						
						Dimensions L x W x H (mm)	63Hz	125Hz	250Hz	500Hz	1Hz	2Hz
ATT01	EF01 Extract	Playhouse Roof Space	SPGZ211	3	20	2100 x 1100 x 1100	9	20	51	55	51	31
ATT02	AHU01 Supply	Playhouse Roof Space	SPGZ211	3	20	2100 x 1100 x 1100	9	20	32	51	55	31

The attenuators shall be manufactured by Allway Acoustics Ltd or equal and approved.
The weight of ATT01 is 280kg and the weight of ATT02 is 280kg.

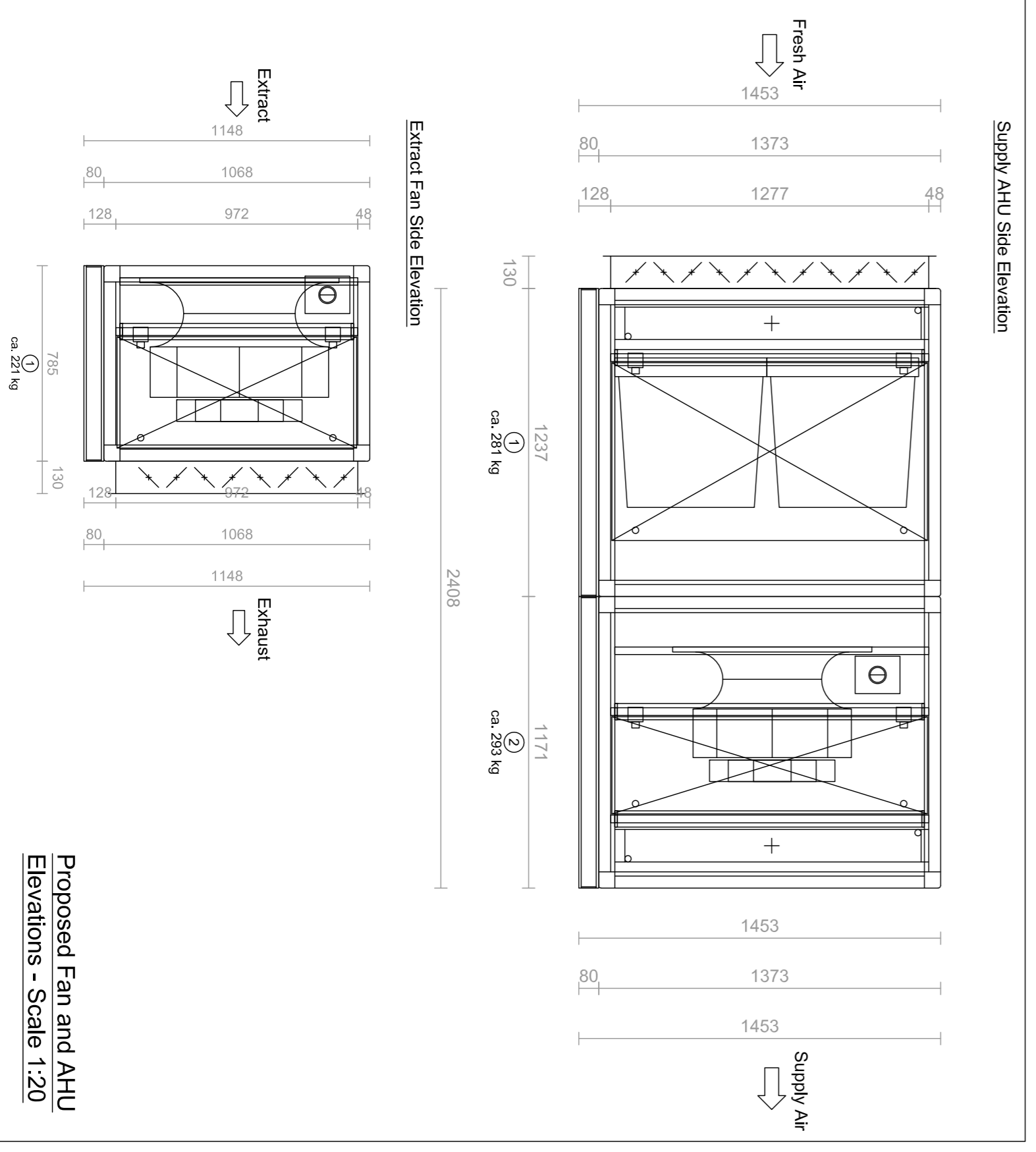


Schedule of New Pumps

Ref	Pump Design Flow Rate (kg/s)	Minimum Pump Resistance (Kpa)	Model	Type	Circuit	Notes
P01	2.12	50	Magna3 D 40-80 F	Twin Head Inverter	Constant Temp AHU Heating Pump	The new pumps and circulators shall be as manufactured by Grundfos Ltd or equal and approved. The pump duties and model references shall be as detailed in the Pump Schedule above.



Proposed Roof Space Plan Layout - Scale 1:100



Proposed Fan and AHU Elevations - Scale 1:20

Notes

- The Drawing is an instrument of service and shall remain the property of Align Property Partners Ltd copyright ©. It is not to be used for any other project without the written consent of Align Property Partners Ltd. The use of this drawing for any other project without the written consent of Align Property Partners Ltd is prohibited. The Contractor shall be responsible for all dimensions and conditions and shall report any discrepancies to the issuing office before proceeding with any work. Drawings shall not be scaled.
- NOTES**
- All pipework in ceiling voids, floor ducts and enclosures to be fully insulated in accordance with BS 5422. Insulated pipework shall be fitted with identification labels to BS1710.
- All fittings, plant and equipment to be installed, regulated and tested in accordance with the manufacturers printed instructions.
- All valves to be fully accessible and provided with identification labels.
- Drain valve and air vents to be provided at all low and high points in the system respectively.
- Press-fit pipework must not be considered for this project.
- The Contractor shall include in his tender for the supply, installation, testing and commissioning of the proposed hot and cold water services as detailed opposite. The Contractor shall allow for all terminations to the water outlets on the proposed classroom furniture (sanitary ware. The Contractor shall also allow for stripping out and removal of redundant domestic services.
- All exposed domestic services pipework to be in chrome plated copper tube to BS EN 1057 (old table 'X'), all fittings to be non-dezincifiable and comply with BS964. all capillary fittings to have lead free solder rings as Yorkshire potable range.
- All hot and cold water outlet connections to be fitted with a ball-cf-type servicing valves.
- The Contractor shall include within his tender the full chlorination of all new domestic hot and cold water in accordance with BS6700 / BS9558 / BS EN 806.
- All final connectors to VHB/Sinks shall be 15mm and hard piped. No flexible connectors to be used.
- The Contractor shall include in his tender for the supply, installation, testing and commissioning of the proposed ventilation services as detailed on this drawing. The drawing shows the tender stage proposals which shall be site checked before fabrication of the ventilation ductwork.
- All ductwork, fittings and supports shall be to the requirements of DW144 - HVAC Specification for Sheet Metal Ductwork.
- Flexible ductwork - Low pressure flexible ductwork shall only be used for a maximum of 300mm where connecting to plenum boxes.
- Manually operated volume control dampers shall be supplied and installed in the locations indicated opposite and shall be of the opposed blade type for rectangular ductwork and butterfly type for circular ductwork. All dampers shall be complete with an approved locking device adjustment positions of open - half - shut on the quadrant.
- Dampers shall not be less than the duct size where thermal insulation occurs the dampers shall have extended shafts and metal studs to make the control flush with the insulation.
- All supply air ventilation ductwork shall be insulated and provided with service identification labelling to DW144 at sufficient locations to ensure no confusion of services.

LEGEND

---	Pipework in Floor	CV	Ceiling Void
---	Pipework at Low Level	DTLL	Drop to Lower Level
---	Pipework at High Level	DTB	Drop to Below
---	Pipework in Ceiling Void	RTB	Rise from Below
---	Pipework to be Stripped Out	RTA	Rise to Above
○	Dropper/Rise	⊕	Ceiling Mounted Extract Fan
○	Isolating Valve	⊕	Wall Mounted Extract Fan
○	Isolating Valve in Dropper/Rise	⊕	Passive Infra-Red Sensor
○	Double Check Valve	⊕	Fire Damper
○	Low Level	⊕	Supply Grille
○	High Level	⊕	Extract Grille

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 BARNESLEY, MB COUNCIL
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