

MPF/PR0680/L02

2 February 2026

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Dear Bohdan

1NQ & CLEMENTS, TARIFF STREET, MANCHESTER – PLANNING CONDITION 12

I write with confirmation of the results of the acoustic assessment of the proposed emergency and non-emergency plant at 1NQ and Clements, Tariff Street, Manchester.

INTRODUCTION

Fisher Acoustics Ltd has been commissioned by United Living Limited to determine the expected external noise levels generated by the proposed external building services plant that will serve the ancillary and amenity spaces of the two residential blocks of 1NQ and Clements, Tariff Street, Manchester and to assess the expected noise levels in relation to the planning permission for the development.

PLANNING CONDITIONS

In relation to building services plant, the planning permission for 1NQ and Clements, Tariff Street, Manchester (planning application number: 137807/JO/2023) states:

Condition 2

The development hereby approved shall be carried out in accordance with the following drawings and documents:

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(x) Fisher Acoustics 1NQ, Tariff Street, Manchester Environmental Noise Study dated November 2022;

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Condition 12:

- “12) Prior to occupation of:
(a) The residential accommodation; and
(b) The ground floor commercial units

a scheme for the acoustic insulation of any externally mounted ancillary equipment associated with the development to ensure that it achieves a background noise level of 5dB below the existing background (LA90) at the nearest noise sensitive location shall be submitted to and approved in writing by the City Council as local planning authority in order to secure a reduction in the level of noise emanating from the equipment.

The approved scheme shall be completed before the premises is occupied and a verification report submitted for approval by the City Council as local planning authority and any non compliance suitably mitigated in accordance with an agreed scheme prior to occupation. The approved scheme shall remain operational thereafter.

For any emergency plant proposed, although plant limits have been given, as these only operate in an emergency any maintenance, servicing and testing is confined to 09:00 to 18:00 Monday to Friday.

The approved details shall be implemented and remain in place for as long as the unit is in use (and any subsequent permitted changes of use under Class E)

Reason - To secure a reduction in noise in order to protect future residents from noise nuisance, pursuant to policies SP1, H1 and DM1 of the Core Strategy..."

ENVIRONMENTAL NOISE CRITERIA

The Environmental Noise Report Study referenced by condition 2 identifies the allowable environmental noise levels due to the combined operation of all building services plant serving the development to allow compliance with condition 12 of the planning permission.

Table 1 below gives the applicable non-emergency building services plant noise limits at the nearest noise sensitive dwellings.

Location	Rating Noise Level (dB LAeq)	
	Daytime (07:00 hrs to 23:00 hrs)	Night time (23:00 hrs to 07:00 hrs)
Proposed Development, Tariff Street Elevation	43	41
Proposed Development, Port Street Elevation	44	43
Proposed Development, Eastern (Great Ancoats Street) Elevation	43	42
Proposed Development, Brewer Street Elevation	43	40
The Astley, Port Street	49	42
The Wentwood, Dean Street	49	42
Jacksons Warehouse, Tariff Street	43	39
Avro, Great Ancoats Street	43	40

Table 1: Environmental noise limits for non-emergency building services plant

Table 2 below gives the applicable emergency building services plant noise limits at the nearest noise sensitive dwellings.

Location	Daytime Noise Level (dB LAeq)
Proposed Development, Tariff Street Elevation	66
Proposed Development, Port Street Elevation	71
Proposed Development, Eastern (Great Ancoats Street) Elevation	62
Proposed Development, Brewer Street Elevation	68
The Astley, Port Street	72
The Wentwood, Dean Street	72
Jacksons Warehouse, Tariff Street	69
Avro, Great Ancoats Street	64

Table 2: Environmental noise limits for emergency building services plant

PROPOSED EXTERNAL BUILDING SERVICES PLANT (NON-EMERGENCY)

1NQ

The following non-emergency external plant items are to be installed at 1NQ (Block 1, Tariff Street):

- 3 no. VRF condensers (Ground Floor, outside Refuse Store 01)

Figure 1 identifies the locations of the external non-emergency Ground floor plant at 1NQ.

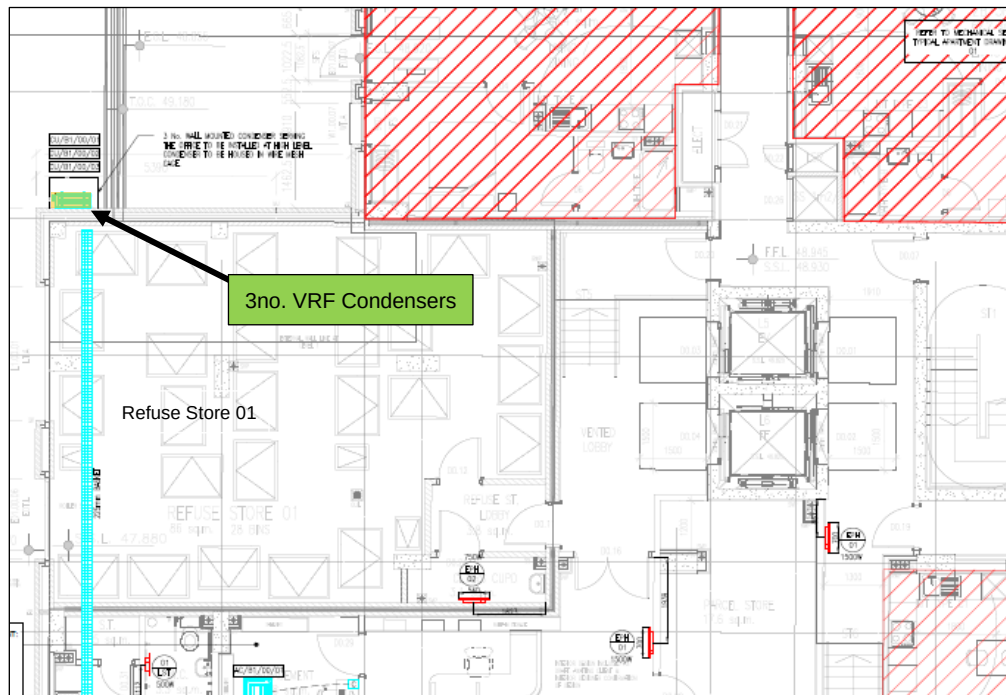


Figure 1: Ground floor external non-emergency plant layout, 1NQ

Table 3 identifies the reported sound pressure levels of the external VRF condensers at 1NQ.

Building services plant item	Sound Pressure Level (dB re 2×10^{-5} Pa) at 1 m							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Mitsubishi SUZ-M25VAR2 VRF Condenser Unit, Heating Mode	54	59	55	54	51	48	46	40

Table 3: Sound pressure levels of ground floor VRF condensers, 1NQ

The following non-emergency external plant items are to be installed at Clements (Block 2, Tariff Street):

- 2 no. VRF condensers (Ground Floor, outside Bin Store)

Figure 2 identifies the locations of the external non-emergency plant at Clements.

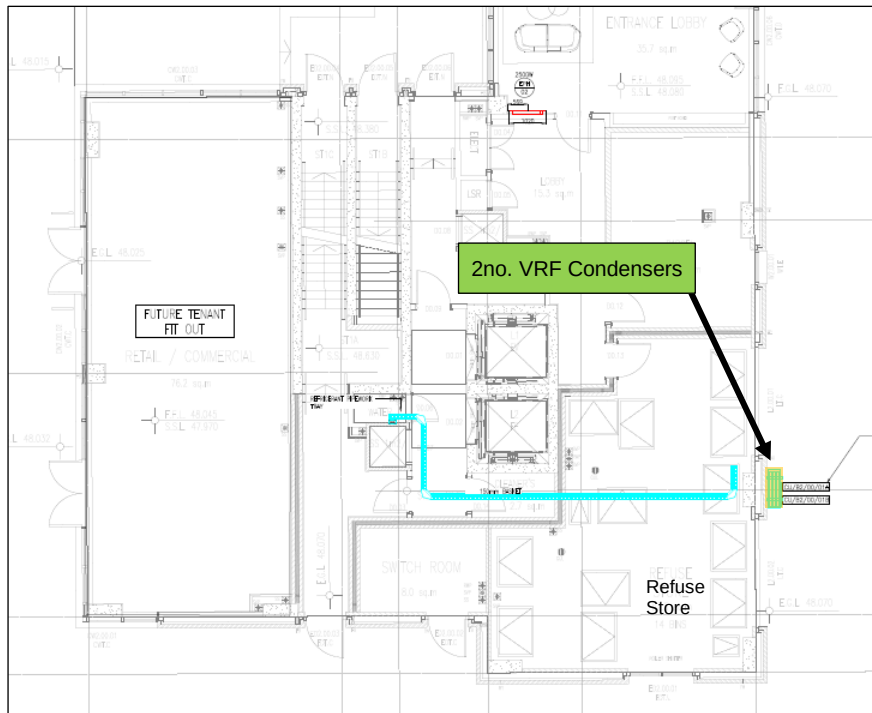


Figure 2: Ground Floor non-emergency plant layout, Clements

Table 4 identifies the reported sound pressure levels of the external VRF condensers at Clements.

Building services plant item	Sound Pressure Level (dB re 2×10^{-5} Pa) at 1 m							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Mitsubishi PUZ-M100VKA2VRF Condenser Unit, Heating Mode	54	59	55	54	51	48	46	40

Table 4: Sound pressure levels of ground floor VRF condensers, Clements

PROPOSED EXTERNAL BUILDING SERVICES PLANT (EMERGENCY)

1NQ

The following emergency plant items are to be installed externally on the upper room (Level 11) roof and lower roof (Level 9) of 1 NQ.

- 2 no. TITAN7-M7 710 mm diameter inverter driven roof mounted smoke-rated axial fans (1no. fan is stand-by unit)
- 1 no. Generator
- 2 no. TITAN7-M7 710 mm diameter inverter driven Level 9 mounted smoke-rated axial fans (1no. fan is stand-by unit)

Figure 3 identifies the location of the emergency plant on the upper roof at 1NQ.

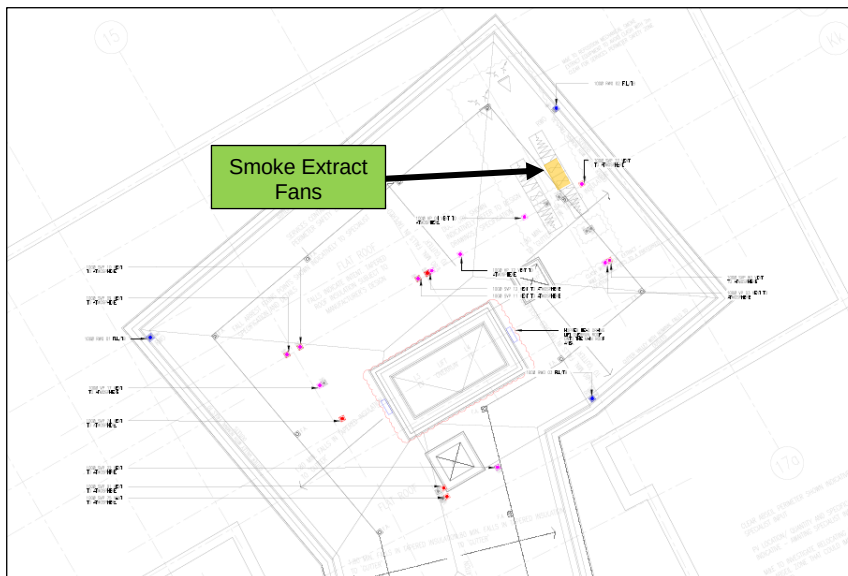


Figure 3: Rooftop emergency plant layout, 1NQ

Figure 4 identifies the location of the emergency plant on the lower roof (Level 9) at 1NQ.

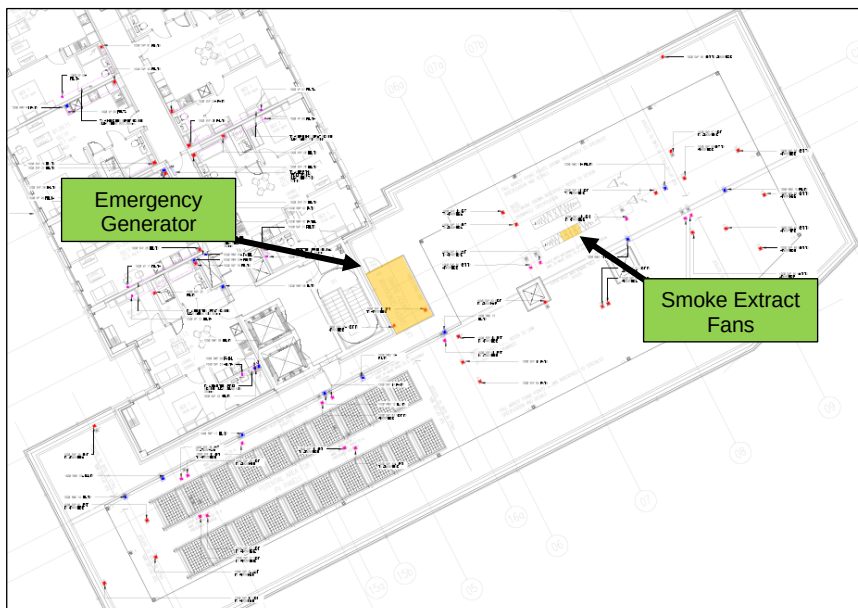


Figure 4: Lower rooftop emergency plant layout, 1NQ

Table 5 identifies the reported sound power levels of the smoke extract fans.

Building services plant item	Sound Power Level (dB re 1 x 10 ⁻¹² Watts)								
	dB(A)	Octave Band Centre Frequency (Hz)							
		63	125	250	500	1k	2k	4k	
TITAN 7, Dual Fan Mechanical Smoke Extract Fan Set, 100% duty, Roof mounted.									
Outlet	105	103	103	101	98	101	100	94	
Breakout*	76	83	83	76	70	71	70	64	

Table 5: In-duct sound power levels of upper roof and lower roof mounted emergency smoke extract plant, 100% duty

* Estimated based on historical data held on file

It should be noted that for each pair of smoke extract fans, only one of the fans will run at any time as the second unit is a standby unit.

Table 6 identifies the reported sound pressure level generated by the emergency generator on the lower (Level 9) roof.

Building services plant item	Sound Pressure Level (dB re 2 x 10 ⁻⁵ Pa) at 1 m							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Hyundai P086TI Engine with Stamford UCI274H alternator, 200 kVA, 160 kW generator, 1 no	79	-	-	-	-	-	-	-

Table 6: Sound pressure levels of level 9 roof-mounted generator, 100% duty

CLEMENTS

The following emergency plant items are to be installed externally on the roof of Clements:

- 4 no. TITAN7-M7 710 mm diameter inverter driven roof mounted smoke-rated axial fans (2no. fans are stand-by units)
- 1 no. Generator

Figure 5 identifies the location of the emergency roof plant at Clements.

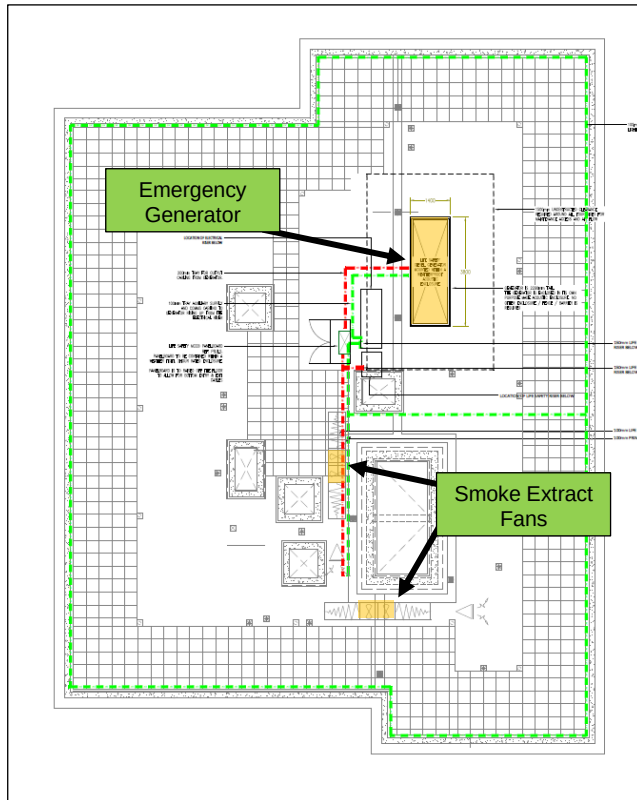


Figure 5: Rooftop emergency plant layout, Clements

Table 7 identifies the reported emergency sound power levels of the smoke extract fans.

Building services plant item	Sound Power Level (dB re 1 x 10 ⁻¹² Watts)							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
TITAN 7, Dual Fan Mechanical Smoke Extract Fan Set, 100% duty, Roof mounted								
Outlet	105	103	103	101	98	101	100	94
Breakout*	76	83	83	76	70	71	70	64

Table 7: In-duct sound power levels of roof and lower roof mounted emergency smoke extract plant, 100% duty, Clements

* Estimated based on historical data held on file

It should be noted that for each pair of smoke extract fans, only one of the fans will run at any time, as the second unit is a standby unit.

In order to meet the required external noise limits, atmosphere-side attenuators must be fitted to all of the proposed smoke extract fans. Table 8 identifies the recommended minimum dynamic insertion loss of attenuators to the exhaust of the smoke extract fans to be installed at 1NQ and Clements.

Building services plant item	Minimum Dynamic Insertion Loss, dB						
	Octave Band Centre Frequency (Hz)						
	63	125	250	500	1k	2k	4k
Exhaust attenuator - all smoke extract fans	2	8	13	20	20	13	12

Table 8: Minimum recommended dynamic insertion loss of exhaust attenuator to all smoke extract fans

Table 9 identifies the reported sound pressure level generated by the emergency generator at Clements.

Building services plant item	Sound Pressure Level (dB re 2×10^{-5} Pa) at 1 m							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Hyundai P126TI Engine with HC1444D alternator, 272 kVA, 218 kW generator, 1 no	79	-	-	-	-	-	-	-

Table 9: Sound pressure levels of roof-mounted generator, 100% duty, Clements

PROPOSED INTERNAL BUILDING SERVICES PLANT

1NQ

The following building services plant items are to be installed internally within a number of spaces at 1NQ:

- 2 no VRF Condensers (Ground Floor, inside Bin Store 02)
- 1 no. Cycle Store extract fan (Basement, Tank room, Cycle Store & Cleaners cupboard)
- 1 no. Cycle Store supply fan (Basement, Tank room, Cycle Store & Cleaners cupboard)
- 1 no Bin Store extract fan (Ground Floor, Bin Store 01)
- 1 no Bin Store extract fan (Ground Floor, Bin Store 02)

Figure 6 identifies the locations of the internal cycle store extract fans to be installed in the basement of 1NQ.

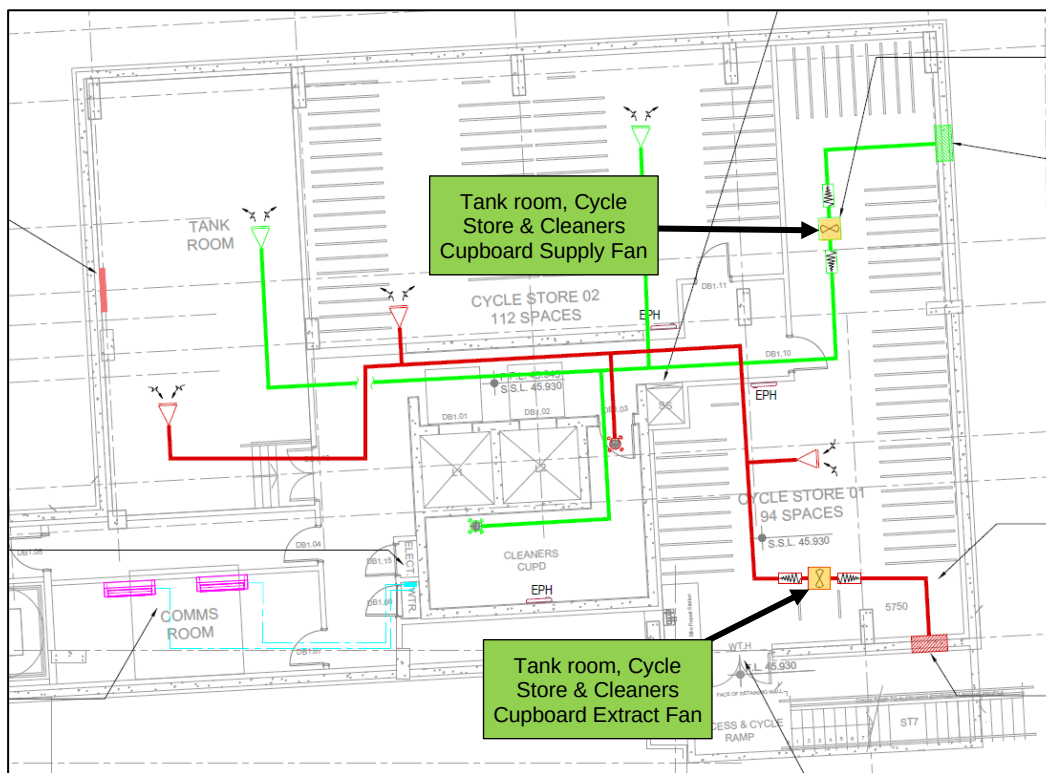


Figure 6: Basement plant layout, 1NQ

Figure 7 and 8 identify the locations of the internal VRF Condensers and extract fans to be installed on the ground floor of 1NQ



Figure 7: Ground floor plant layout, 1NQ

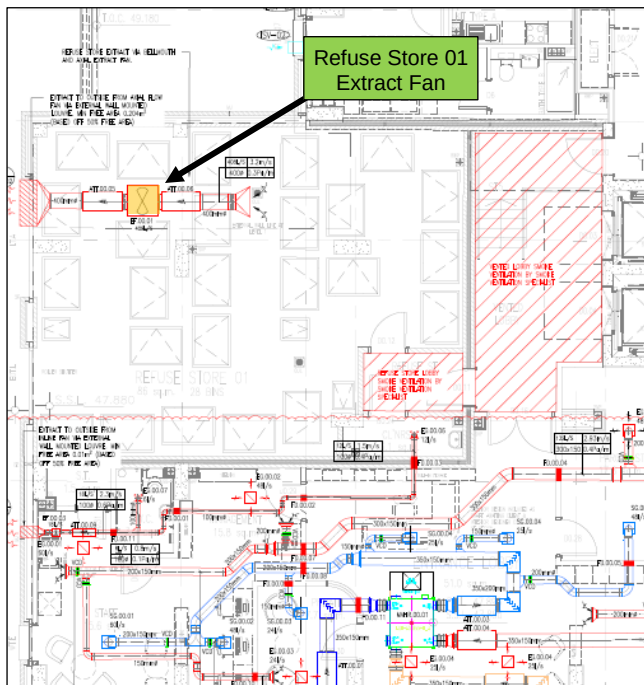


Figure 8: Ground floor plant layout, 1NQ

Table 10 identifies the reported sound pressure levels of the internally mounted VRF condensers at 1NQ.

Building services plant item	Sound Pressure Level (dB re 2×10^{-5} Pa) at 1 m							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Mitsubishi PUZ-M100VKA2VRF Condenser Unit, Heating Mode, 2 no.	54	59	55	54	51	48	46	40

Table 10: Sound pressure levels of ground floor VRF condensers

Table 11 identifies the reported sound power levels of the supply and extract fans to be installed internally on the ground floor of 1NQ.

Building services plant item	Sound Power Level (dB re 1 x 10 ⁻¹² Watts)							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Ground Floor								
Vent Axia, Sentinel D-Box 400S Extract Fan, Basement, Cycle Store & Tank Room, duty: 0.493 m³/s @ 128 Pa, 1 no, outlet	73	72	81	72	70	68	65	58
Vent Axia, Sentinel D-Box 400S Supply Fan, Basement, Cycle Store & Tank Room, duty: 0.580 m³/s @ 120 Pa, 1 no, outlet	71	73	81	76	66	62	59	53
Vent Axia, Sentinel D-Box 400S Extract fan, Refuse Store 01, duty: 0.408 m³/s @ 59 Pa,1 no., outlet	71	63	81	70	67	65	62	57
Vent Axia, Sentinel D-Box 315S Extract fan, Refuse Store 02, duty: 0.370 m³/s @ 56 Pa, 1 no., outlet	70	62	81	67	65	63	60	54

Table 11: Sound power levels of internal fans at basement and ground floor, 1NQ

Table 12 identifies the reported insertion loss of attenuators to be fitted to the 1NQ basement and ground floor supply and extract fans.

Building services plant item	Insertion Loss, dB						
	Octave Band Centre Frequency (Hz)						
	63	125	250	500	1k	2k	4k
Basement, Cycle Store & Tank Room, extract 1 no., Outlet	4	11	17	27	32	32	30
Basement, Cycle Store & Tank Room, supply, 1 no., Outlet	4	11	17	27	32	32	30
Refuse Store 01 extract, 1 no., Outlet	4	11	17	27	32	32	30
Refuse Store 02 extract, 1 no., Outlet	4	11	17	27	32	32	30

Table 12: Insertion loss of attenuators to basement & ground floor fans, 1NQ

CLEMENTS

Internal Non-Emergency Plant items

The following building services plant items are to be installed internally within a number of spaces at Clements:

- 1 no. Tank room & Cycle Store Supply fan (Basement)
- 1 no. Tank room & Cycle Store Extract fan (Basement)
- 1 no Refuse Store extract fan (Ground Floor)

Figure 9 identifies the locations of the basement internal tank room and cycle store extract fans.

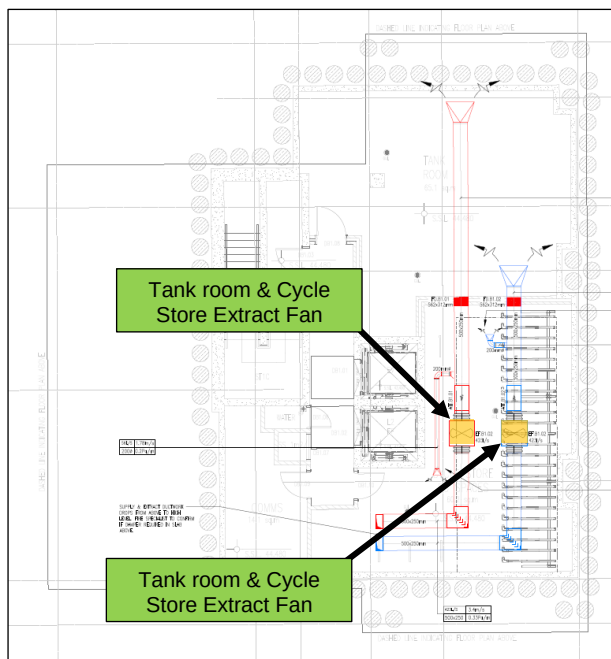


Figure 9: Basement plant layout, Clements

Figure 10 identifies the locations of the internal extract fan to be installed on the Ground floor of Clements.

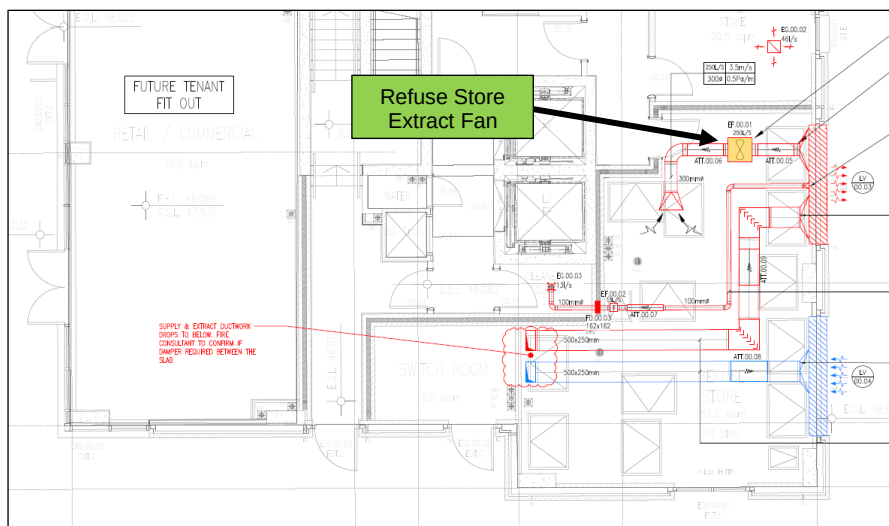


Figure 10: Ground floor plant layout, Clements

Table 13 identifies the reported sound power levels of the supply and extract fans to be installed within the Clements basement and ground floor.

Building services plant item	Sound Power Level (dB re 1 x 10 ⁻¹² Watts)							
	dB(A)	Octave Band Centre Frequency (Hz)						
		63	125	250	500	1k	2k	4k
Basement								
Vent Axia, Sentinel D-Box 400S Extract fan, Basement, Cycle Store & Tank Room, duty: 0.423 m³/s @ 85 Pa, 1 no, outlet	68	69	75	67	65	63	60	51
Vent Axia, Sentinel D-Box 400S Supply fan, Basement, Cycle Store & Tank Room, duty: 0.423 m³/s @ 90 Pa, 1 no, outlet	64	70	76	68	58	54	51	42
Ground Floor								
Vent Axia, Sentinel D-Box 250S Extract fan, Refuse Store, duty: 0.250 m³/s @ 65 Pa, 1 no., outlet	77	65	68	69	75	72	71	65

Table 13: Sound power levels of basement and ground floor internally mounted plant, Clements

Table 14 identifies the reported insertion loss of attenuators to be fitted to the Clements basement and ground floor supply and extract fans.

Building services plant item	Insertion Loss, dB						
	Octave Band Centre Frequency (Hz)						
	63	125	250	500	1k	2k	4k
Basement, Cycle Store & Tank Room, extract 1 no., Outlet	2	5	11	27	46	39	34
Basement, Cycle Store & Tank Room, supply, 1 no., Outlet	2	5	11	27	46	39	34
Refuse Store 01 extract, 1 no., Outlet	2	3	7	18	25	19	17

Table 14: Insertion loss of attenuators to basement & ground floor fans, Clements

CALCULATED EXTERNAL NOISE LEVELS DUE TO BUILDING SERVICES PLANT

The expected noise levels at the nearest noise sensitive façades have been calculated based on the reported sound power levels and attenuator insertion losses for the plant items detailed above, and the various distances and orientation of the plant to the receptors.

Table 15 identifies the calculated noise levels. The calculated noise levels assume that all plant is running simultaneously.

Location	Free-field Sound Pressure Level (dBA)					
	Non-Emergency plant				Emergency plant	
	Day Time	Night Time	Noise Limit		100% Duty	Noise Limit
			Day Time	Night Time		
1NQ West Elevation	38	38	43	40	42	62
1NQ East Elevation	24	24	43	42	61	62
1NQ North Elevation	<20	<20	44	43	50	71
Clements East Elevation	35	35	43	42	52	62
Clements West Elevation	<20	<20	43	41	57	66
Jacksons Warehouse	<20	<20	43	39	44	69
Avro	27	27	43	40	41	64
The Wentwood	<20	<20	49	42	38	72
Vita, Port Street	28	28	43	42	62	62

Table 15: Calculated noise levels at nearby receptors due to operation of all emergency and non-emergency plant at 1NQ and Clements

With reference to Table 15, it can be seen that the calculated noise levels at all of the nearest residential facades due to the emergency and non-emergency plant comply with the applicable noise limits.

CONCLUSION

Based on the reported sound level data for the proposed plant at 1NQ and Clements, Tariff Street, the calculated environmental noise levels at nearby noise sensitive receptors due to both non-emergency and emergency plant comply with the applicable noise limits.

Compliance with the requirements of Planning Condition 12 relating to noise from building services plant is therefore expected.

If there are any aspects that you would like to discuss, please do not hesitate to contact the undersigned.

Yours sincerely



MATT FISHER BEng(Hons) CEng MIOA
For and on behalf of Fisher Acoustics Limited