2 Kestrel Close, Kingsnorth, Ashford, Kent TN23 3RB

T. 01233 502513

F. 01233 502513

M. 07534 734347

E. matt.lawrence@mrl-acoustics.co.uk

www.mrl-acoustics.co.uk



Our Reference: MRL/100/735.1v1 17th September 2014

Ian Hayton ARCHITYPE Morocco Store 1b Leathermarket Steet London SE1 3JA

Dear Ian,

Re: Camden Centre for Learning, Camden, London : Rooftop Plant Noise Assessment

Further to your recent request regarding the above matter, I am writing with our acoustic assessment of the proposed rooftop condenser unit to cool the server room at the above site.

Background Noise Levels

Noise level readings were carried out opposite the front of the school site along Agincourt Road on Tuesday 9th September 2014 between 1am – 2am in order to obtain the existing ambient noise climate at the nearest residential properties to the proposed rooftop plant during the early hours of the morning.

It was observed during the noise survey that road traffic noise is the main noise source in the area followed by intermittent aircraft noise.

The noise measurements were taken over 4 no. consecutive 15-minute periods outside the dwellings directly opposite the school building elevation facing Agincourt Road and the average result was 45 dB L_{Aeq}(30 minutes).

The noise levels were recorded using a Rion NA-28 Type 1 sound level meter (serial no. 00370312). The meter was mounted on a tripod with the microphone approximately 1.5m above ground level and a windshield was fitted to the microphone at all times. The calibration of the meter was checked before and after the survey with no variation in level noted.

The distance from the location of the proposed plant and the nearest affected dwellings opposite the school site on the other side of Agincourt Road is approximately 25m distance.

The results of the noise survey are shown in Table 1 below:-

Measurement	Time	Noise Levels, dB(A)					
Location	(Hours)	LAeq	La90	LAmax			
	01:00 - 01:15	46	40	65			
In Agincourt Road Outside	01:15 – 01:30	45	40	62			
Properties	01:30 - 01:45	45	39	64			
	01:45 - 02:00	45	38	67			

Table 1: Summary of Ambient Noise Levels at Nearest Dweilings	Та	able	e 1:	Summary	of Ambie	nt Noise	Levels a	t Nearest	Dwellings
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Plant Noise Levels

The proposed item of plant is to be located at the rear of the premises on a small area of flat roof, as shown in the plan at the end of this report.

Based on the following noise emission data of the plant provided by the manufacturer, we have calculated the total noise level with plant operating continuously over any given 5-minute period:-

• Mitsubishi MUZ-HJ35VA: 50 dB(A) at 3m distance

The total predicted noise level at 25m distance to the nearest dwellings is 27 dB(A), allowing 5 dB attenuation for screening by the building itself and attenuation of sound over distance. The calculation is shown at the end of this report.

This noise impact level is 11 dB(A) lower than the lowest measured background noise level of 39 dB L_{A90} at the nearest dwellings and is a positive indication that complaints are unlikely in accordance with BS 4142 : 1997.

Summary

An assessment has been carried out of the noise impact of the proposed building services plant at the Agincourt House site, Camden Centre for Learning, Camden, London.

The results of the assessment indicate that the plant Noise Rating Level provides a positive indication that complaints are unlikely in accordance with BS 4142 : 1997 and is within acceptable limits.

If you have any queries with this report, require additional information or wish to discuss anything further then please do not hesitate to contact me.

Yours sincerely

M Lawrence

Matthew Lawrence MSc MIOA Principal Consultant

Plant Location Plan



Calculations

				1	1			1	1			1	1			
Plant Noi	se Calculations															
Camden	Centre for Learning - Ag	incourt	House													
Total Pla	nt Noise Calculation															
		Noise	Level	a	x	m	Distance	Distance C	orrection	Screening	On-time	On-time	Correction	Level	Resulta	nt Level
Mitsubish	i MUZ-HJ35VA	Noise 5	Level O	æ Q	х З	m m	Distance 25	Distance C 18	Correction 4	Screening 5	On-time 300	On-time	Correction 0.0	Level 27	Resulta 27	ntLevel dB(A)
Mitsubish	i MUZ-HJ35VA	Noise 5	Level O	a Q	x 3	m m	Distance 25	Distance C 18	orrection 4	Screening 5	On-time 300	On-time C	Correction).0	Level 27	Resulta 27	nt Level dB(A)
Mitsubish	i MUZ-HJ35VA	Noise 5	Level O	0	x 3	m m	Distance 25	Distance C 18	orrection 4	Screening 5	On-time 300	On-time (Correction).0	Level 27	Resulta 27	nt Level dB(A)
Mitsubish	i MUZ-HJ35VA	Noise 5	Level O	0	x 3	m	Distance 25	Distance C 18	orrection 4	Screening 5	On-time 300	On-time (Correction).0	Level 27	Resulta 27	nt Level dB(A)