Supporting Statement

APPENDIX C

Noise Assessment

BDP

years from the date of this permission.

Reason: In order to comply with the provisions of Section 91 of the Town and Country Planning Act 1990 (as amended).

2 All new external work shall be carried out in materials that resemble, as closely as possible, in colour and texture those of the existing building, unless otherwise specified in the approved application.

Reason: To safeguard the appearance of the premises and the character of the immediate area in accordance with the requirements of policies EN1, EN13 and EN31 of the London Borough of Camden Unitary Development Plan 2000 and policies S1/ S2 and B1 and B7 of the London Borough of Camden Replacement Unitary Development Plan 2006.

3 Noise levels at a point 1 metre external to sensitive facades shall be at least 5dB(A) less than the existing background measurement (LA90), expressed in dB(A) when all plant/equipment are in operation. Where it is anticipated that any plant/equipment will have a noise that has a distinguishable, discrete continuous note (whine, hiss, screech, hum) and/or if there are distinct impulses (bangs, clicks, clatters, thumps) special attention should be given to reducing the noise levels from that piece of plant/equipment at any sensitive façade to at least 10dB(A) below the LA90, expressed in dB(A).

Reason: To safeguard the amenities of the adjoining premises and the area generally in accordance with the requirements of policies EN1, EN5, and EN7 of the London Borough of Camden Unitary Development Plan 2000 and policies SD6, SD7B, SD8 and Appendix 1, of the London Borough of Camden Replacement Unitary Development Plan 2006.

4 Before the use commences, the extract ventilating system and the air-condition plant shall be provided with acoustic isolation and sound attenuation in accordance with the scheme approved by the Council. The acoustic isolation shall thereafter be maintained in effective order to the reasonable satisfaction of the Council.

Reason: To safeguard the amenities of the adjoining premises and the area generally in accordance with the requirements of policyies EN1, EN5 and EN7 of the London Borough of Camden Unitary Development Plan 2000 and policies SD6, SD7B, SD8 and Appendix 1 of the London Borough of Camden Replacement Unitary Development Plan 2006.

5 Notwithstanding the information submitted for the kitchen extraction ducting hereby approved details of the secondary filtration system incorporating "Halton Vent Master Pollustop Model PS00 shall be submitted to and approved in writing by the local planning authority before the kitchen use is commenced.

Reason: To safeguard the amenities of the adjacent residential premises and the area generally in accordance with the requirements of policies RE2 and EN1 of the London Borough of Camden Unitary Development Plan 2000 and policies S1 and S2 of the Revised Deposit Draft as amended by the Proposed Modifications

Sent 03/05/06
LC.

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BC\P20000562\BC

2 May 2006

FAO Vanessa Leddra
Development Control
Camden Town Hall
Argyle Street Entrance
Euston Road
London WC1H 8ND

Dear Ms Leddra,

ERECTION OF PLANT ENCLOSURE AND HANDRAIL, EXTRACT DUCT AND 8 NO SATELLITE ANTENNAE TO ROOF OF 34-36 JAMESTOWN ROAD, CAMDEN

We refer to your letter dated 31st March 2006 (ref: 2006/1427/INVALID), and our letter dated 13th April 2006. With reference to point one of your letter, and for clarification, the extract duct relates to a kitchen/restaurant at ground floor level, which will be used by staff, incidental to the B1office use. Enclosed are 5 copies of the existing and planned layout of the ground floor of the office building. As you correctly stated, there are residential units within the building therefore please also find enclosed five copies of an amended application form. In relation to the second point raised, please find enclosed five copies of an acoustic report which contains the following:

- Background noise levels
- An assessment of the noise output of the proposed new Air Conditioning Plant in relation to adjacent residential properties

For your information, we recently received planning permission for the erection of a lift to the roof of 34-36 Jamestown Road, which was dealt with by an officer in your team (Hugh Miller).

Please do not hesitate to contact us if you require any additional information or assistance. We look forward to receiving validation of the application in due course.

Yours sincerely,

Becky Cocker
Town Planner for BDP

a member of
BDP International

Offices in Bristol, London and Southampton; Birmingham, Liverpool, Manchester and Sheffield; Glasgow; Belfast and Dublin; Singapore; Grenoble and Paris (with Groupe 6). Associations in Germany, Portugal and Spain

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24 HOUR NOISE LEVEL SURVEY CARRIED OUT ON THE ROOF OF THE RESIDENTIAL UNITS AT NO. 34-36 JAMESTOWN ROAD, LONDON NW1

AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MINIMISE THE NOISE IMPACT OF THE PROPOSED NEW AIR CONDITIONING PLANT

Test Engineer : M G Roberts

Report Author : .....
M G Roberts

Authorised for
Release by : .....

R T Roberts

Client : Peter Deer and Associates
Project : 334-36 Jamestown Road
Emtec Ref. : QF2973A/2865/RP2
Date : 24th April 2006

QF2973A/PF2865

EMTEC PRODUCTS LTD.

24 HOUR NOISE LEVEL SURVEY CARRIED OUT ON THE ROOF OF THE RESIDENTIAL UNITS AT NO 34-36 JAMESTOWN ROAD, LONDON NW1 AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MINIMISE THE NOISE IMPACT OF THE PROPOSED NEW AIR CONDITIONING PLANT

1.0. INTRODUCTION

This report details the results of a 24 hour noise level survey carried out on the roof of the residential properties at the rear of No. 34-36 Jamestown Road, London NW1. The front section of the building has been developed as offices and is going to be fitted out with new air conditioning and ventilation systems.

The objectives of this survey were as follows:

- To establish the background noise level on the roof of the residential properties to the rear of No. 34-36 Jamestown Road.

- To assess the proposed new office Air Conditioning Plant that is to be installed on the front section of the building and to recommend areas that may require particular treatment to ensure that the operation of the new plant does not disturb the occupants of the residential properties either adjacent to or at the rear of the development.

This report has been divided into the following sections for ease of analysis:

1.0. INTRODUCTION
2.0. TEST INSTRUMENTATION
3.0. TEST PROCEDURE
4.0. RESULTS
5.0. DISCUSSION OF RESULTS

2.0. TEST INSTRUMENTATION

All measurement equipment used during the survey complied with the requirements of BS4142:1990 "Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas". Details of the equipment are as follows:

Integrating Sound Level Meters	: Bruel & Kjaer type 2231 fitted with a Bruel & Kjaer type 4155 ½ inch condenser microphone.
Statistical Analysis Modules	: Bruel & Kjaer type BZ 7115 capable of computing the percentile levels L1, L10, L50, L90 and L99 and also the Leq level.
Acoustic Calibrator	: Bruel & Kjaer type 4231 electronic calibrator.

Calibration was performed before and after the surveys and found to be, in all cases, +/- 0.1 dB from the reference source.

3.0. TEST PROCEDURE

The survey was conducted during a continuous 23 hour period from 13.15pm on Thursday the 20th of April 2006 to 12.15pm on Friday the 21st of April 2006.

Data was continuously acquired throughout the measurement period with the individual averaging time for statistical noise data set to 20 minutes. The following statistical measurements were recorded concurrently:

LA1 - The Sound Pressure Level exceeded for 1% of the measurement period.

LA10 - The Sound Pressure Level exceeded for 10% of the measurement period.

LA50 - The Sound Pressure Level exceeded for 50% of the measurement period.

LA90 - The Sound Pressure Level exceeded for 90% of the measurement period. LA90 is considered to represent the "background noise level" during the measurement period and is used for the assessment of noise to determine the likelihood of complaints (See BS 4142).

LA99 - The Sound Pressure Level exceeded for 99% of the measurement period.

LAeq - The continuous steady state Sound Pressure Level that has the same acoustic energy as the real fluctuating level.

All noise levels recorded were filtered using a standard 'A' Weighting filter.

3.1. Measurement Position

The noise levels were measured at a position on the roof of the residential units to the rear of the site at No. 34-36 Jamestown Road. The location is shown on our attached sketch No. QF/2973A/T1.

The microphone was positioned so that it was pointing towards the front of the building on the 34-36 Jamestown Road site.

The microphone was approximately 1.2 metres above roof level. The rest of the measurement equipment was located under a protective cover with the microphone cable running from the instrumentation to the microphone location.

3.2. Weather Conditions

The weather conditions prevailing during the measurement period were in line with those recommended in BS 4142:1990 with no precipitation and no wind. The weather was bright and clear throughout the daytime and nightime period.

The microphone was protected throughout the tests by an acoustically transparent wind balloon.

4.0. RESULTS

The raw test data, gathered during the 23 hour noise survey, is given in Appendix 'A 'of this report.

The 'A' Weighted Leq levels measured over each 20 minute interval throughout the 23 hour periods (denoted by LAeq, (20 mins)) are displayed as bar graphs on the attached Sketch No. QF/2973A/T2 at the back of this report.

The 'A' Weighted percentile levels measured over each 20 minute interval denoted by LA10 (20 mins), LA50 (20 mins) and LA90 (20 mins) are displayed as line graphs on the attached Sketch No. QF/2973A/T3 at the back of this report.

4.1. Summary of Results

The table QF/2973A/D1 below summarises the noise levels taken over the 24 hour period in terms of the maximum and minimum Sound Pressure Levels recorded.

Table QF/2973A/D1 – Summary of Maximum and Minimum Noise Levels

	LA1	LA10	LA50	LA90	LA99	Laeq
Min.	50.4 dBA	46.4 dBA	44.4 dBA	42.4 dBA	41.4 dBA	45 dBA
Max.	73.4 dBA	58.4 dBA	53.9 dBA	50.9 dBA	49.9 dBA	58.2 dBA

5.0. DISCUSSION OF RESULTS

The lowest recorded LA_{90} noise level was 42.4 dBA which occurred at 1.55am but the LA_{90} noise level was fairly constant between the hours of midnight and 6.00am between 46-42 dBA.

If the external plant is to be operated on a 24 hour basis the new plant will have to meet an external noise criteria of at least 5dB below the lowest background LA_{90} level. This would mean the plant should be designed to achieve no more than 37 dBA at 1 metre from the nearest adjacent residential property.

The chiller that has already been installed on the front part of the building, which has been developed as offices, has been designed to achieve 33 dBA at 40 metres from the chiller. To check that this criteria is being met a sound pressure level was measured at 4 metres from the chiller compound with the chiller running on full load. The results of this test are shown in table QF2973A/D2 below:-

Table QF2973/D2 – Sound Pressure Levels of Installed Office Chiller

Location	Units	Sound Pressure Level (dB ref 2 x 10^{-5} N/m^2) 63	125	250	500	1k	2k	4k	8k	dBA
Lennox WA230 DKLN Chiller @ 4 metres from enclosure (full load)	Leq	64.0	56.2	51.2	49.2	46.6	42.9	32.9	22.1	53
Background Noise Level (Chiller Off)	L90	59.0	50.5	45.5	42.5	43.0	38.5	32.0	11.5	47
Corrected Lennox WA230 DKLN Chiller noise levels	Leq	62.3	54.8	49.8	48.2	44.1	40.9	25.6	21.7	50

The predicted noise level of the chiller at the measurement position can be calculated as follows:-

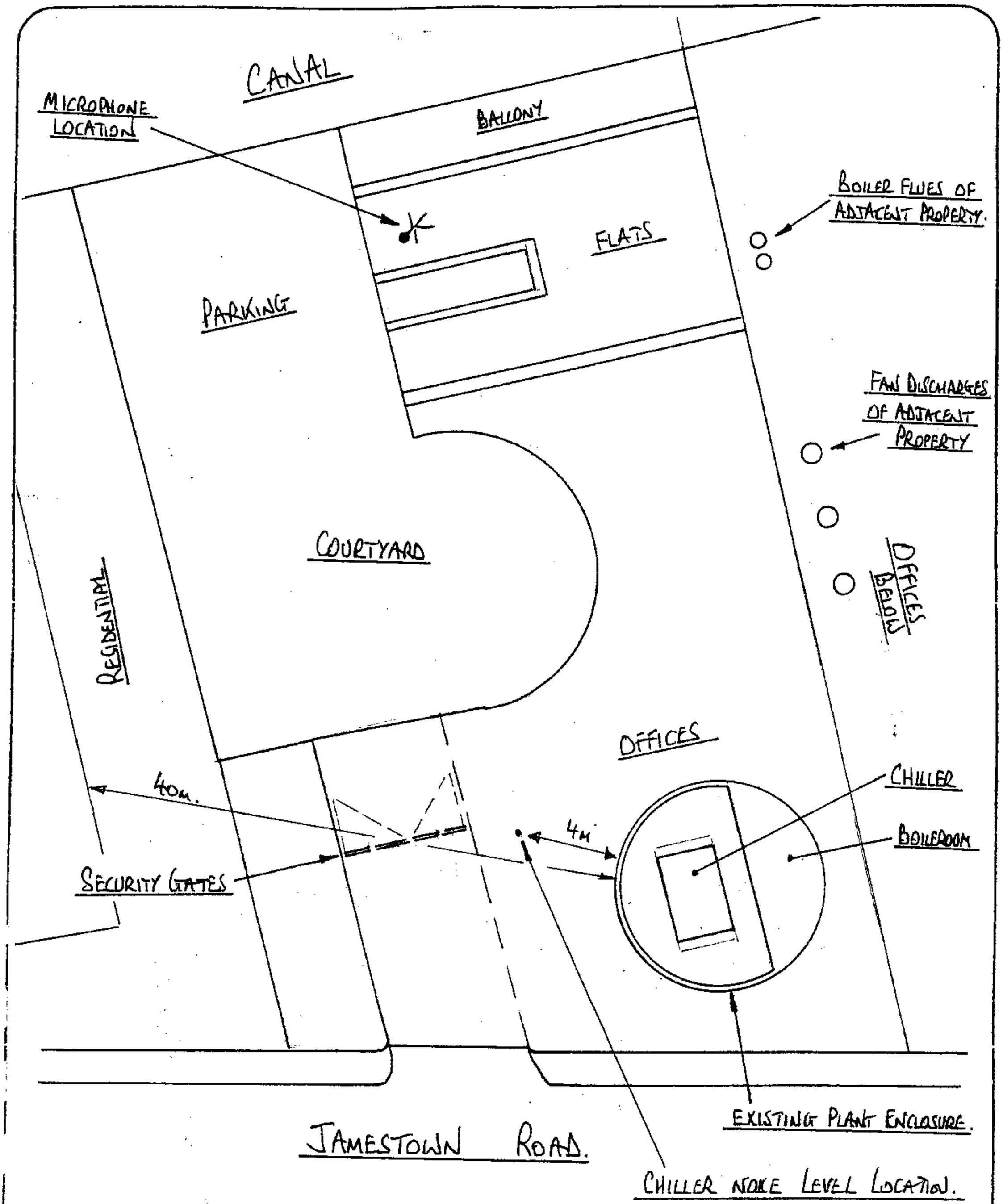
	Centre Frequencies (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound Power levels of Lennox WA230 DKLN chiller	76	87	86	85	84	84	79	72
10 Log A at 5 metres	27	27	27	27	27	27	27	27
Barrier effect (100mm)	6	8	9	10	11	13	15	16
Resultant level at 4 metres	43	52	50	48	46	44	37	29

The levels calculated are slightly higher at high frequencies and slightly lower at low frequency when compared to the measured levels. However the overall dBA level is only 1 dB different. Therefore the noise level at 40 metres, at the façade of the adjacent residential properties, will be 33 dBA or below.

The chiller was not audible, subjectively, at the microphone location for this 24 hour test. The distance to the rear residential properties is slightly less than to the adjacent properties of the building next door but the façade of these properties are at a lower level than the chiller and so will benefit from a higher level of screening.

Any new plant should be attenuated and/or screened to achieve no more than 37 dBA at 1 metre from the residential properties for 24 hour operation.

EMTEC PRODUCTS LTD
24th April 2006



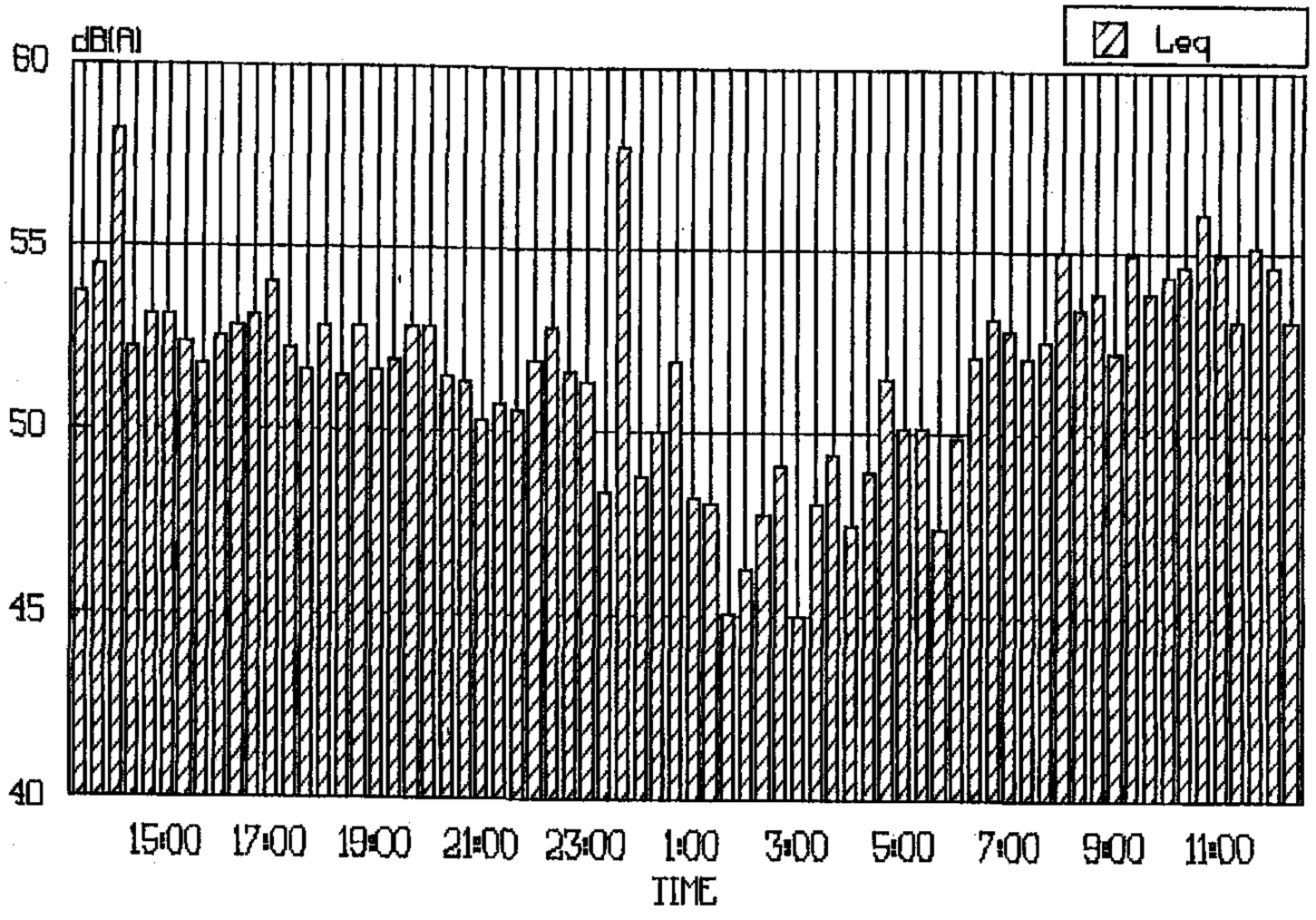
TITLE: LOCATION OF MICROPHONE.			A	B	C	D	E	F	G	H
			REVISION							
CLIENT: PETER DEER & ASSOCIATES			Q	A	M	I				
			STATUS							
PROJECT: THE ICEWORKS, 34-36 JAMESTOWN ROAD.			APPROVED BY:							
ISSUE DATE: 24/4/06	PF No. PF2865	DRAWN BY: MGR	DESIGN AUTH: MGR							

DOCUMENT No. QF/2973A/T1.

Emtec Products Ltd.,
Enterprise House, Blyth Road, Hayes, Middx UB3 1DD.
Tel: 0181-848 3031 Fax 0181-573 3625

All dimensions in mm unless stated

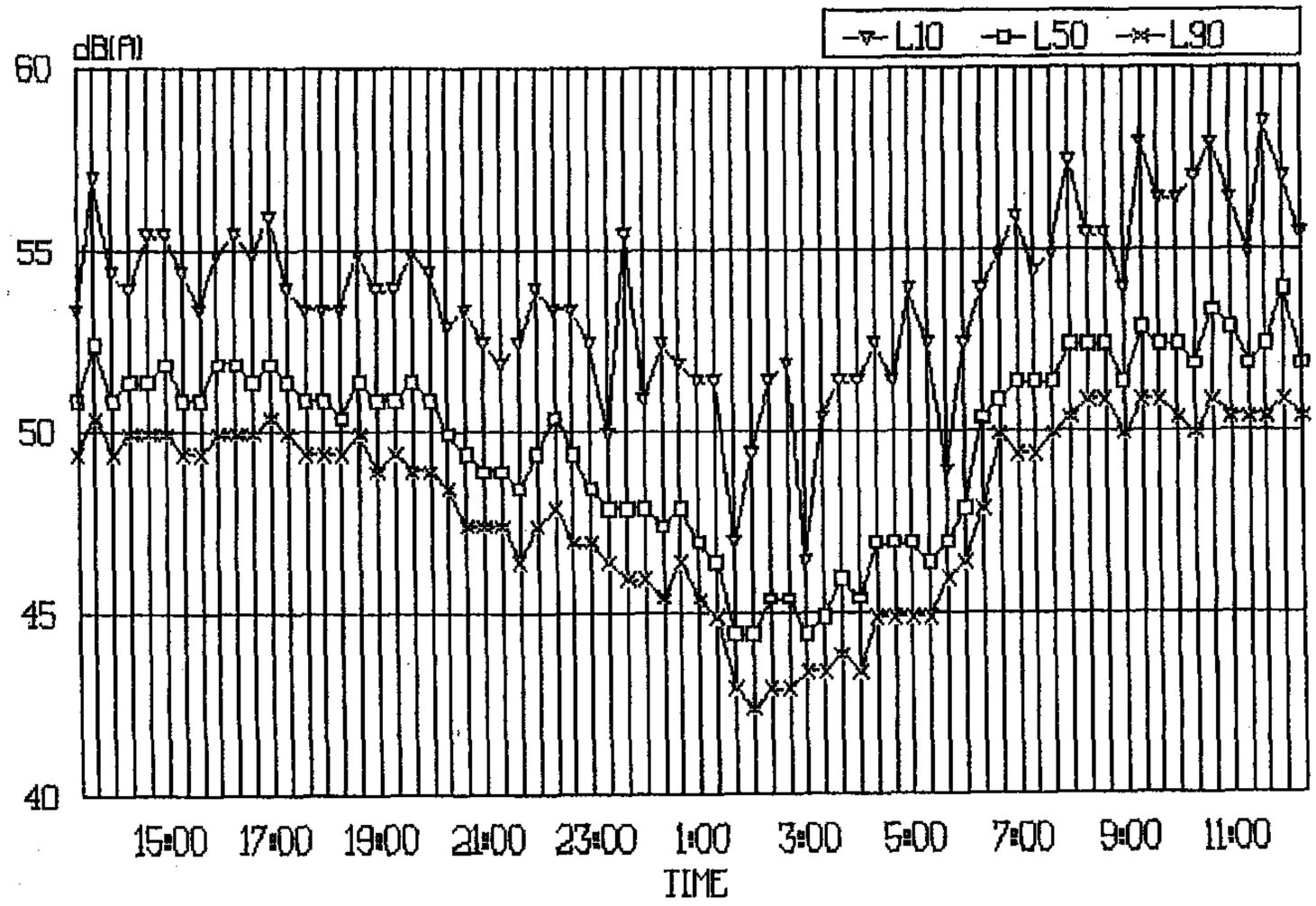
Roof of flats at 34-36, Jamestown Road. 20th to 21st April 2006



TITLE: LAeq Levels	ISSUE DATE: 24/4/06	DRAWN BY: MGR	A B C D E F G H	EMTEC
CLIENT: Peter Deer & Associates	PF No. 2865	APPROVED BY: MGR	REVISION:	Emtec Products Ltd., Enterprise House, Blyth Road, Hayes, Middx, UB3 1DD Tel: 0181-848 3031 Fax: 0181-573 3695
PROJECT: 34-36 Jamestown Road, London	STATUS: Q A M I	DESIGN AUTH: MGR	SK No. QF2973A/T2	

All dimensions in mm unless stated

Roof of flats at 34-36, Jamestown Road. 20th to 21st April 2006



TITLE: LA10, LA50 and LA90 Levels	ISSUE DATE: 24/4/06	DRAWN BY: MGR	A B C D E F G H	Entec Products Ltd., Enterprise House, Blyth Road, Hayes, Middx. UB3 1DD Tel: 0181-848 3031 Fax: 0181-573 3695
CLIENT: Peter Deer & Associates	PF No. 2865	APPROVED BY: MGR	REVISION:	
PROJECT: 34-36 Jamestown Road, London	STATUS: Q A M I	DESIGN AUTH: MGR	SK No. QF2973A/T3	