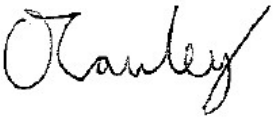
RESULTS OF A 24-HOUR NOISE LEVEL SURVEY CARRIED OUT AT THE REAR OF THE THEATRE AND RESIDENTIAL BUILDING LOCATED AT 110 CHARING CROSS ROAD, CAMDEN AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MITIGATE THE IMPACT OF ANY PROPOSED NEW EXTERNAL PLANT



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Release by : I J Marchant

Client	:	Peter Deer Associates
Project	:	Phoenix House, 104-110 Charing Cross Road, London WC2
Emtec Ref.	:	QF9300/PF7658/RP2
Issue Date	:	16th September 2024

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RESULTS OF A 24-HOUR NOISE LEVEL SURVEY CARRIED OUT AT THE REAR OF THE THEATRE AND RESIDENTIAL BUILDING LOCATED AT 110 CHARING CROSS ROAD, CAMDEN AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MITIGATE THE IMPACT OF ANY PROPOSED NEW EXTERNAL PLANT

1.0. INTRODUCTION

This report details the results of a 24-hour noise survey carried out at the rear of the Phoenix Theatre building located at 110 Charing Cross Road in Camden, London WC2.

The objectives of this survey were as follows:

- To assess the proposal to install new external plant at the rear of the residential flats which are located above the entrance area and retail units at the front of the building.

- To establish the existing background noise level outside the nearest noise sensitive properties.

- To recommend noise limits and any necessary measures to ensure that the operation of the new plant does not disturb the occupants of the nearest affected properties.

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

1.0. SITE DESCRIPTION

The property at 110 Charing Cross Road consists of the Phoenix Theatre and a front area which is made up of the Theatre entrance foyer, a number of retail units and a residential block of flats over the frontage onto Charing Cross Road. The front of the building can be seen on the attached Photo A.

The Theatre is located behind the retail/residential block as indicated on the attached aerial view of the site in Photo B.

Between the front and rear sections of the building there is an open lightwell area with balconies on each floor to allow pedestrian access to the rear entrance doors of the residential flats. This area can be seen on the attached Photo C.

3.0. TEST INSTRUMENTATION

All measurement equipment used during the survey complied with the requirements of BS4142:2014 "Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas". Details of the equipment are as follows:

Integrating Sound Level Meter: Rion type NL-52 class 1 Sound Level Meter fitted with a Rion type UC-59 ½ inch condenser microphone. Serial No 01232569

Statistical Analysis Modules: Built in module capable of computing the percentile levels LA_1, LA_{10}, LA_{50}, LA_{90} and LA_{99} and also the LA_{eq} level.

Acoustic Calibrator: Bruel & Kjaer type 4231 electronic calibrator. Serial No 1934160

Calibration was performed before and after the survey and was +/- 0.1 dB from the reference source.

3.1. Existing Noise Climate

Road traffic travelling on surrounding roads could be heard at the start and end of the survey, so the noise levels measured will include contributions from road vehicles.

Commercial jet aircraft were observed at medium and high altitude during the manned periods at the start and the end of the survey, so it is possible that the noise levels measured could include contributions from medium altitude jet aircraft.

There are no overland railways nearby, so the noise levels measured will not include contributions from rail noise.

Construction works were not observed being carried out in the vicinity during the manned periods at the start and end of the survey so the sound levels recorded should be typical of normal daytime background noise levels.

4.0. TEST PROCEDURE

The survey was conducted during a continuous 24-hour period from 8:45 am on Tuesday the 3rd of September 2024 to 8:45 am on Wednesday the 4th of September 2024.

Data was continuously acquired throughout the measurement period with the individual averaging time for statistical noise data set to 15 minutes. The following 'A' weighted statistical measurements were recorded concurrently: -

LA_1 - The Sound Pressure Level exceeded for 1% of the measurement period.

LA_{10} - The Sound Pressure Level exceeded for 10% of the measurement period.

LA_{50} - The Sound Pressure Level exceeded for 50% of the measurement period.

LA_{90} - The Sound Pressure Level exceeded for 90% of the measurement period. LA_{90} 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 4142:2014).

LA_{99} - The Sound Pressure Level exceeded for 99% of the measurement period.

LA_{eq} - The continuous steady state Sound Pressure Level that has the same acoustic energy as the real fluctuating level.

4.1. Measurement Positions

Noise levels were measured at the end of the fourth floor access balcony overlooking the triangular light well area between the end of the block of flats and the rear of the buildings in Flitcroft Street. The microphone location can be seen on the attached Photos B, C, D and E.

The microphone was strapped to a boom that was attached to the handrail of the access stairs at the far end of the balcony. The rest of the measurement equipment was located in a weatherproof enclosure with a low impedance cable running from the microphone to the instrumentation.

4.2 Weather Conditions

The weather conditions prevailing during the measurement period were in line with those recommended in BS 4142:2014: -

Weather daytime: -	Overcast	Weather night time: -	Overcast
Wind daytime: -	Calm	Wind night time: -	Calm

The microphone was protected during the survey by an acoustically transparent wind balloon.

5.0. RESULTS AND EVALUATION OF NOISE CRITERIA

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

The 'A' Weighted L_{eq} levels measured over each 15 minute interval throughout the 24-hour period, denoted by LA_{eq}, (15 mins), are displayed as a bar graph on the attached Sketch No QF/9300/TT1 at the back of this report.

The 'A' Weighted percentile levels measured over each 15 minute interval throughout the 24-hour period, denoted by LA_{10} (15 mins), LA_{50} (15 mins) and LA_{90} (15 mins) are displayed as line graphs on the attached Sketch No QF/9300/TT2 at the back of this report.

5.1. Summary of Results

The table QF/9300/DD1 below summarises the noise levels taken over the 24-hour period in terms of the maximum and minimum Sound Pressure Levels recorded.

Table QF/9300/DD1 – Summary of Maximum and Minimum Noise Levels

	LA_{eq}	**LA_{1}**	**LA_{10}**	**LA_{50}**	**LA_{90}**	**LA_{99}**
Minimum	50dBA	52dBA	51dBA	48dBA	47dBA	47dBA
Maximum	71dBA	74dBA	72dBA	64dBA	54dBA	54dBA

The table QF/9300/DD2 below states the minimum LA_{90} noise levels recorded during the time periods of 7.00am to 23.00pm (Daytime / Evening) and 23.00pm and 7.00am (Night time)

Table QF/9300/DD2 – Minimum LA_{90} Noise Levels – Daytime/Evening and Night time

	Minimum LA_{90}
Daytime/Evening (7am to 11pm)	49dBA
Night Time (11pm to 7am)	47dBA

5.2. Summary of the Local Authority's planning requirements regarding noise for noise sensitive properties

The local planning authority is the London Borough of Camden.

The Camden Local Plan sets out the Council's planning policies and replaces the Core Strategy and Development Policy planning documents (adopted in 2010). It ensures that Camden continues to have robust, effective and up-to-date planning policies that respond to changing circumstances and the borough's unique characteristics and contribute to delivering the Camden Plan and other local priorities.

The Local Plan will cover the period from 2016-2031. Policy A4 of The Local Plan is entitled Noise and Vibration and states:

The Council will seek to ensure that noise and vibration is controlled and managed. Development should have regard to Camden's Noise and Vibration thresholds (Appendix 3). We will not grant planning permission for a) a development likely to generate unacceptable noise and vibration impacts or b) a development sensitive to noise in locations which experience high levels of noise, unless appropriate attenuation measures can be provided and will not harm the continued operation of existing uses. We will only grant permission for noise generating development, including any plant and machinery, if it can be operated without causing harm to amenity. We will also seek to minimise the impact on local amenity from deliveries and from the demolition and construction phases of development.

The parts of Appendix 3 that we have identified as relevant to this application are as follows:

Appendix 3: Noise thresholds

The significance of noise impact varies dependent on the different noise sources, receptors and times of operation presented for consideration within a planning application. Therefore, Camden's thresholds for noise and vibration evaluate noise impact in terms of various 'effect levels' described in the National Planning Policy Framework and Planning Practice Guidance:

- *NOEL – No Observed Effect Level*
- *LOAEL – Lowest Observed Adverse Effect Level*
- *SOAEL – Significant Observed Adverse Effect Level*

Three basic design criteria have been set for proposed developments, these being aimed at guiding applicants as to the degree of detailed consideration needed to be given to noise in any planning application. The design criteria outlined below are defined in the corresponding noise tables. The values will vary depending on the context, type of noise and sensitivity of the receptor:

- *Green – where noise is considered to be at an acceptable level.*
- *Amber – where noise is observed to have an adverse effect level, but which may be considered acceptable when assessed in the context of other merits of the development.*
- *Red – where noise is observed to have a significant adverse effect.*

Table C: Noise levels applicable to proposed industrial and commercial developments (including plant and machinery)

Existing Noise sensitive receptor	*Assessment Location*	*Design Period*	*LOAEL (Green)*	*LOAEL to SOAEL (Amber)*	*SOAL (Red)*
*Dwellings***	*Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)*	*Day*	*'Rating level' 10dB* below background*	*'Rating level' between 9dB below and 5dB above background*	*'Rating level' greater than 5dB above background*
*Dwellings***	*Outside bedroom window (façade)*	*Night*	*'Rating level' 10dB* below background and no events exceeding 57dB L_{Amax}*	*'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dB L_{Amax}*	*'Rating level' greater than 5dB above background and/or events exceeding 88dB L_{Amax}*

**10dB should be increased to 15dB if the noise contains audible tonal elements (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.*

***levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.*

The periods in Table C correspond to 0700 hours to 2300 hours for the day and 2300 hours to 0700 hours for the night. The Council will take into account the likely times of occupation for types of development and will be amended according to the times of operation of the establishment under consideration.

There are certain smaller pieces of equipment on commercial premises, such as extract ventilation, air conditioning units and condensers, where achievement of the rating levels (ordinarily determined by a BS:4142 assessment) may not afford the necessary protection. In these cases, the Council will generally also require an NR curve specification of NR35 or below, dependant on the room (based upon measured or predicted L_{eq} (5mins) noise levels in octave bands, 1 metre from the façade of affected premises, where the noise sensitive premise is located in a quiet background area.

5.3. Determination of noise sensitive property design criteria

We believe that the sound produced by the new plant will not be intermittent or contain tones. To comply with a green rating from the table above the new plant should therefore have a Sound Pressure Level 10dB below the lowest LA_{90} background noise level at 1 metre from the nearest noise sensitive window.

The lowest recorded LA_{90} background noise levels measured during the 24 hour survey period are given in Table QF/9300/DD2 above.

Applying the above criteria gives limiting rating levels as listed in table QF/9300/DD3 below:

Table QF/9300/DD3 – Proposed Design Rating Levels (LA_{eq})

Existing Noise sensitive receptor	*Design Period*	*Lowest measured background level*	***Proposed rating level***	*Proposed Local Authority criteria*
Dwellings	*Day*	*49dBA*	***39dBA***	*Green*
	Night	*47dBA*	***37dBA***	*Green*

5.4. Determination of commercial design criteria

The use of the commercial premises surrounding the site consists mostly of offices. It is therefore proposed that the recommendations given in BS8233:2014 and that Table 2 of that standard be considered.

	Good	Reasonable
Open Plan offices: $LA_{eq,T}$	45dBA	50dBA

We propose that the lower of these rating levels is adopted, i.e. 45dBA.

Assuming a 10dB noise reduction due to a partially open window the rating level at 1 metre external to the nearest affected office windows should be 45dBA + 10dB = 55dBA.

5.5. Summary of external noise criteria

Based upon the lowest measured LA_{90} background noise levels during the survey and the Council's requirements outlined above we summarise the design rating levels to be adopted for this project in table QF/9300/DD4: -

Table QF/9300/DD4 – recommended design rating levels $L_{Ar,T}$

Type of premises	**$L_{Ar,T}$ (7am - 11pm)**	**$L_{Ar,T}$ (11pm - 7am)**
Noise sensitive	39dBA	37dBA
Commercial	-	55dBA

6.0. DISCUSSION OF RESULTS

The residential block of flats known as Phoenix House are to be extended and the two new flats at high level are to be fitted out with air source heat pump condensers to provide heating and cooling to the flats. There will be four number Mitsubishi air cooled condensers mounted in the triangular void space at the end of the residential block of flats behind the rear wall of the building in Flitcroft Street. The proposed location of the condensers can be seen on the attached Peter deer Associates sketch drawing No 4242-240827-04.

The following table QF/9300/DD6 lists the noise levels of the equipment to be installed and the natural attenuation and required mitigation measure to allow operation of the plant during the daytime and the night time periods.

Table QF/9300/DD6 – Noise Levels of Condensers and Natural and necessary attenuation to operate on a 24 hour basis for the adjacent residential flats in Phoenix House

Source/Attenuation	Sound Pressure Level (dB ref 2 x 10^{-5} N/m^2)								dBA
	63	125	250	500	1k	2k	4k	8k	
Mitsubishi PUMY-P250YBM2 (2off) Mitsubishi PUZ-WM112YAA-PK20 (2off)	75 58	67 60	64 49	60 47	61 45	54 37	47 35	40 30	64 50
Overall SPL at 1m (free field) Reverberation of surroundings	75 +5	68 +5	64 +5	60 +5	61 +5	54 +5	47 +5	41 +5	
Unattenuated SPL at 1 metre from condensers	80	73	69	65	66	59	52	46	69
Distance attenuation to windows of residential block (10 log A_3/A_1) Barrier attenuation of block of flats (barrier effect -600mm)	-8 -6	-8 -8	-8 -10	-8 -12	-8 -14	-8 -16	-8 -18	-8 -18	
Unattenuated SPL at 1 metre from residential window of flats	66	57	51	45	44	35	26	20	49

The above unattenuated noise level is 12dB higher than the daytime limiting LAeq noise level of 37.4dBA. Therefore mitigating attenuation will need to be introduced to reduce the resultant noise level.

Unattenuated SPL at 1 metre from residential window of flats	66	57	51	45	44	35	26	20	49
Emtec LAAC 30/105 Acoustic louvred screen to void area plus Emtec WCAC30 Wall Cladding	-6	-9	-11	-17	-20	-22	-24	-24	
Attenuated SPL at 1 metre from residential window of flats	60	48	40	28	24	13	2	-	37

Based upon the above calculations It will be possible to operate the four new Mitsubishi air cooled condensers on full duty on a 24 hour basis. It is highly unlikely that all four units will operate, at maximum duty, during the night time period and if low noise mode operation of the larger units is possible between the hours of 11pm and 7am this would guarantee that the limiting LAeq level of 37dBA is not exceeded.

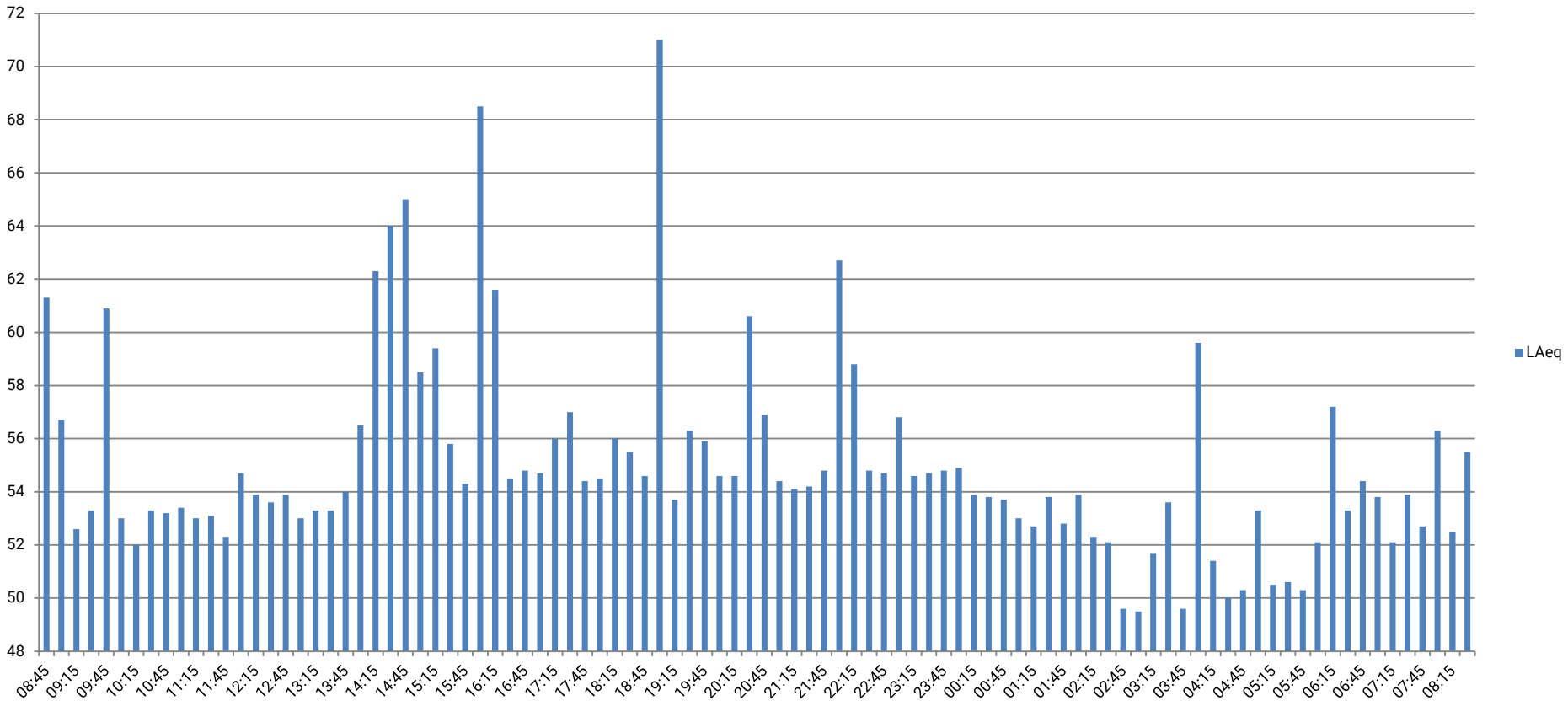
Based upon the above calculation the noise levels both during the day and at night, at 1 metre from the nearest flat's window, will achieve a Green LOAEL noise level.

The mitigating attenuation that is required is detailed on the attached sketch No QF/9300/GA1(A).

In order to ensure that the operation of the condensing units does not transfer structural noise into the fabric of the block of flats the PUMY-P250YBM2 condensers should be supported off four number Emtec/VMC RD2 Blue neoprene-in-shear anti-vibration mounts and the PUZ-WM112YAA-PK20 condensers off four RD1 Red mounts having minimum static deflections of 6mm. All the associated DX pipework to the condensers should be supported by pipe clips having soft neoprene inserts around the pipes.

If these mitigation measures are installed then the new mechanical plant will operate within the recommended design rating levels listed in table QF/9300/DD5 above, will be acceptable to the Camden planning authority and should evoke no justifiable complaints from the residents of the flats under the guidelines of BS4142:2014.

Emtec Products Ltd
16th September 2024



TITLE: *LAeq Levels*	*ISSUE DATE:* *14th September 2024*				*DRAWN BY:* *MGR*	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*
CLIENT: Peter Deer Associates	*PF No: 7658*				*APPROVED BY:* *MGR*	*REVISION*							
PROJECT: Phoenix House, 104-110 Charing Cross Road, London WC2	*Q*	*A*	*M*	*I*	*DESIGN AUTH:* *MGR*	*SKETCH No. QF/9300/TT1*							

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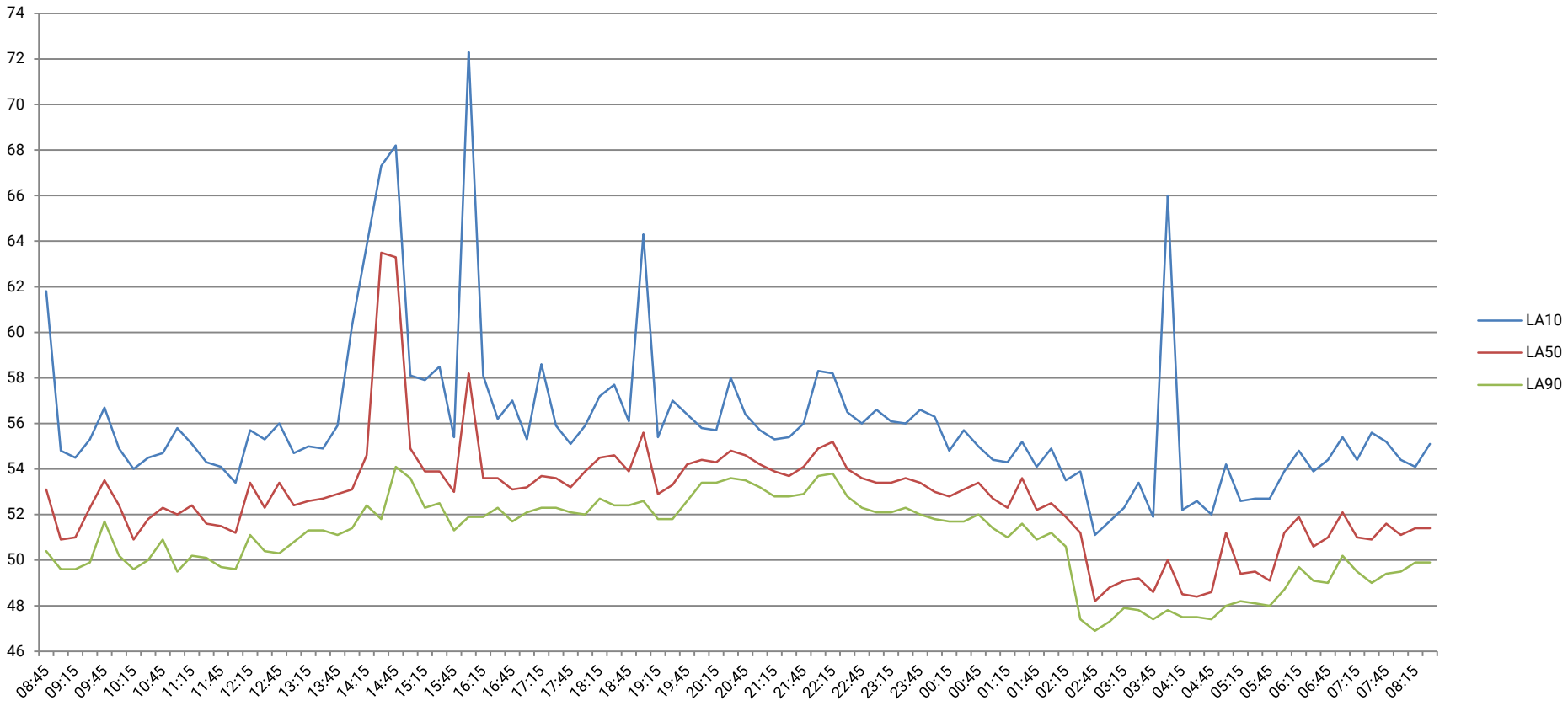

TITLE: *LA10; LA50 & LA90 Levels*	*ISSUE DATE:* *14th September 2024*				*DRAWN BY:* *MGR*	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*
CLIENT: Peter Deer Associates	*PF No: 7658*				*APPROVED BY:* *MGR*	*REVISION*							
PROJECT: Phoenix House, 104-110 Charing Cross Road, London WC2	*Q*	*A*	*M*	*I*	*DESIGN AUTH:* *MGR*	*SKETCH No. QF/9300/TT2*							

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APPENDIX ‘A’

Raw Data – Noise Survey

3rd of September 2024 to 4th of September 2024

EMTEC PRODUCTS LTD.

Project: Phoenix House, 104-110 Charing Cross Road, London WC2
Client: Peter Deer Associates
Date: 3rd to 4th September 2024
Serial No: 01232569

Address	Start Time	LA_{eq}	LE	Lmax	Lmin	LA_{1}	LA_{10}	LA_{50}	LA_{90}	LA_{99}
1	08:45	61	91	90	47	66	62	53	50	50
2	09:00	57	86	86	48	57	55	51	50	49
3	09:15	53	82	76	48	56	55	51	50	49
4	09:30	53	83	70	48	56	55	52	50	50
5	09:45	61	91	85	50	59	57	54	52	51
6	10:00	53	83	63	49	56	55	52	50	50
7	10:15	52	82	67	48	55	54	51	50	49
8	10:30	53	83	69	49	56	55	52	50	50
9	10:45	53	83	74	50	56	55	52	51	51
10	11:00	53	83	66	48	58	56	52	50	49
11	11:15	53	83	65	48	56	55	52	50	50
12	11:30	53	83	71	48	56	54	52	50	50
13	11:45	52	82	72	48	55	54	52	50	49
14	12:00	55	84	87	48	54	53	51	50	49
15	12:15	54	84	65	48	57	56	53	51	50
16	12:30	54	83	72	49	57	55	52	50	50
17	12:45	54	84	68	49	57	56	53	50	50
18	13:00	53	83	66	49	56	55	52	51	50
19	13:15	53	83	72	49	56	55	53	51	51
20	13:30	53	83	63	50	56	55	53	51	51
21	13:45	54	84	72	49	57	56	53	51	51
22	14:00	57	86	75	50	62	60	53	51	51
23	14:15	62	92	94	50	65	64	55	52	52
24	14:30	64	94	73	50	68	67	64	52	51
25	14:45	65	95	84	51	68	68	63	54	54
26	15:00	59	88	82	52	62	58	55	54	53
27	15:15	59	89	82	51	61	58	54	52	52
28	15:30	56	85	69	51	61	59	54	53	52
29	15:45	54	84	69	50	57	55	53	51	51
30	16:00	69	98	85	50	74	72	58	52	51
31	16:15	62	91	80	50	66	58	54	52	52
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33	16:45	55	84	72	50	58	57	53	52	52
34	17:00	55	84	82	51	56	55	53	52	52
35	17:15	56	86	79	51	61	59	54	52	52
36	17:30	57	87	86	51	58	56	54	52	52
37	17:45	54	84	71	51	56	55	53	52	52
38	18:00	55	84	69	51	57	56	54	52	52
39	18:15	56	86	77	51	58	57	55	53	52
40	18:30	56	85	70	51	59	58	55	52	52
41	18:45	55	84	71	50	57	56	54	52	52
42	19:00	71	101	105	51	69	64	56	53	52
43	19:15	54	83	74	50	56	55	53	52	52
44	19:30	56	86	85	50	60	57	53	52	52
45	19:45	56	86	79	51	58	56	54	53	52
46	20:00	55	84	66	52	56	56	54	53	53
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49	20:45	57	87	77	52	58	56	55	54	53

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52	21:30	54	84	65	52	56	55	54	53	53
53	21:45	55	84	75	51	57	56	54	53	53
54	22:00	63	92	85	52	62	58	55	54	53
55	22:15	59	88	78	52	62	58	55	54	54
56	22:30	55	84	75	51	57	57	54	53	53
57	22:45	55	84	80	51	58	56	54	52	52
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61	23:45	55	84	69	50	59	57	53	52	52
62	00:00	55	85	73	50	58	56	53	52	52
63	00:15	54	84	75	50	56	55	53	52	51
64	00:30	54	83	62	50	57	56	53	52	51
65	00:45	54	83	67	50	56	55	53	52	52
66	01:00	53	83	65	50	55	54	53	51	51
67	01:15	53	82	61	50	55	54	52	51	51
68	01:30	54	83	66	50	56	55	54	52	51
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70	02:00	54	84	73	49	56	55	53	51	51
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77	03:45	50	79	59	46	53	52	49	47	47
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79	04:15	51	81	67	46	54	52	49	48	47
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86	06:00	52	82	67	47	55	54	51	49	48
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91	07:15	52	82	65	48	56	54	51	50	49
92	07:30	54	84	69	48	58	56	51	49	49
93	07:45	53	82	64	48	56	55	52	49	49
94	08:00	56	86	79	48	56	54	51	50	49
95	08:15	53	82	68	48	55	54	51	50	50
96	08:30	56	85	77	49	59	55	51	50	50

APPENDIX ‘B’

Photos and Drawing

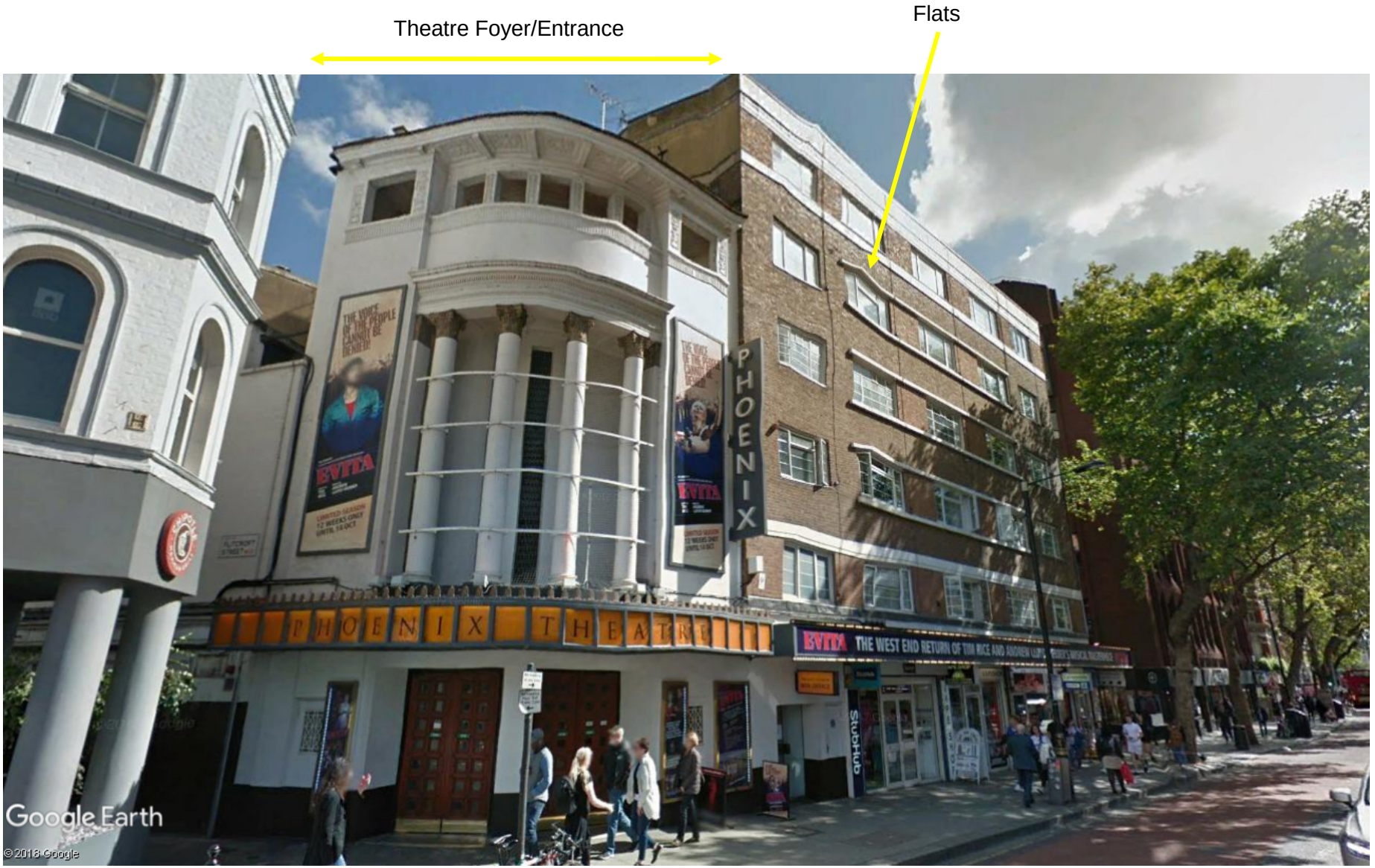


Photo A – Front of Building at 110 Charing Cross Road Showing Theatre Entrance, Retail Units and Flats

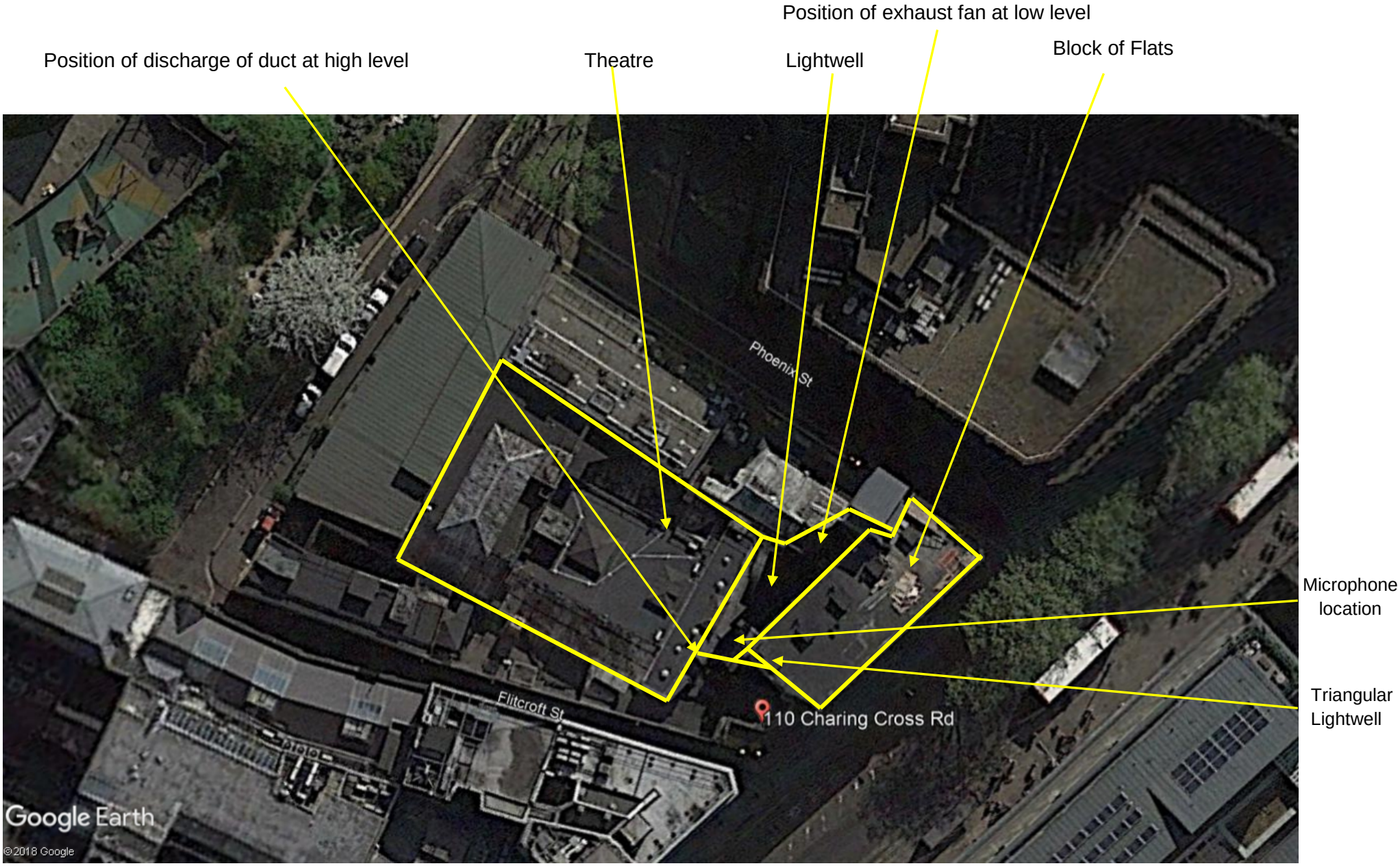


Photo B – Aerial View of Site at 110 Charing Cross Road Showing the Theatre, Flats, Microphone location & Lightwell

Photo C – Microphone location on the escape stairway from the flats overlooking the rear lightwell

Photo D – Microphone location at head of staircase looking across Flitcroft Street

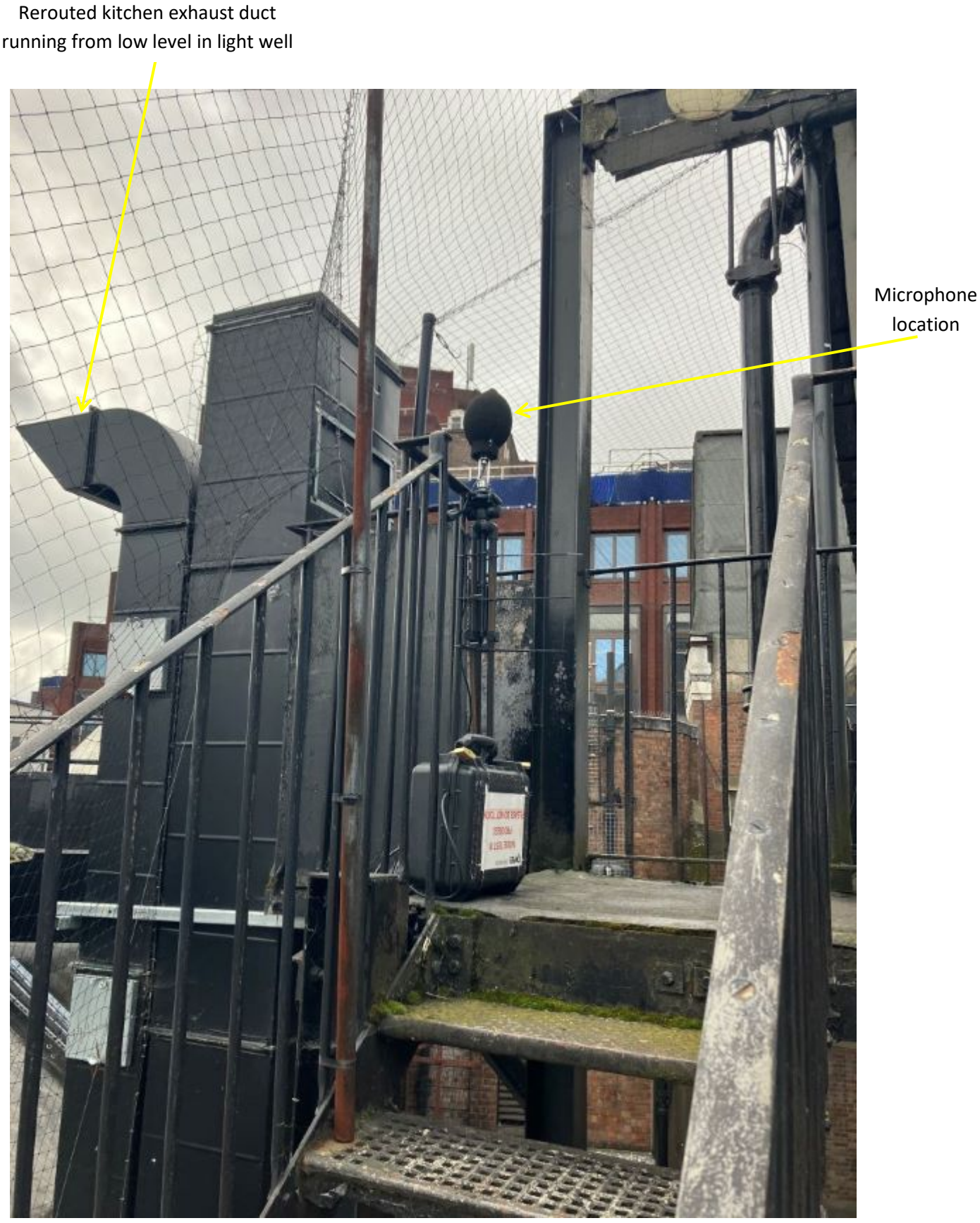
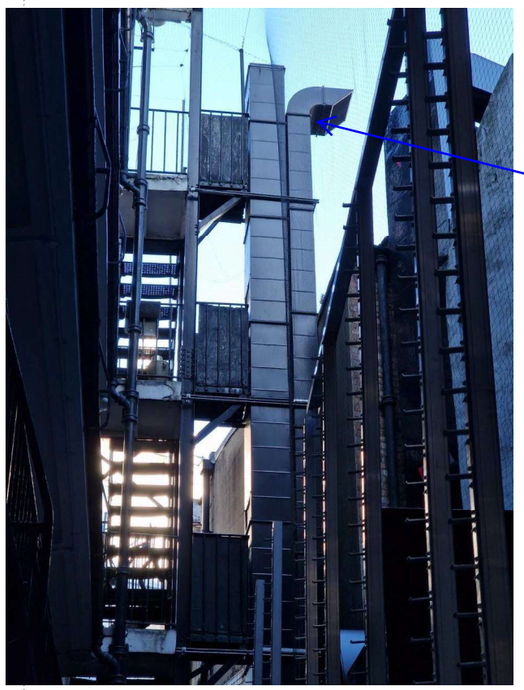


Photo E – View of the microphone location at head of staircase with kitchen exhaust ducts behind

Photo F – View looking down from staircase into the triangular lightwell



BASEMENT KITCHEN EXTRACT NOW INSTALLED AS PHOTO

PROPOSED LOCATION OF 4 NUMBER CONDENSING UNITS IN TRIANGULAR VOID AS PLAN 02 AT NORTH END OF REAR LIGHTWELL.

TANK NOW PROPOSED TO BE LOCATED IN TRIANGULAR VOID AS PLAN 02 AT NORTH END OF REAR LIGHTWELL.

BASEMENT KITCHEN EXTRACT RISES FROM LOW L;EVEL; TO DISCHARGE ABOVE THEATRE ROOF LEVEL.

BASEMENT KITCHEN EXTRACT TO OFFSET TO RISE TO HIGH LEVEL

C B A

7436 3351

PH0ENIX HOUSE

Indicative Air handling unit

Louvred Screen to enclosure

Platform Lift between Ground and Desss Circle

Existing duct modified to accomodate new floor build up

New Canopy to replace existing

First Floor

27580.0mm

New fenstration to existing openings

CHARING CROSS ROAD

Ground

24300.0mm

Basement

20660.0mm

THEATRE BAR

BASEMENT CLUB

KITCHEN

LOBBY

CORRIDOR

STALLS

LOBBY

DRESS CIRCLE

UPPER CIRCLE

Dress Circle

27240.0mm

Stalls

22010.0mm

PHOENIX HOUSE

PHOENIX THEATRE

LIGHT WELL

0 5 10

PDA NOTES FOR NOISE SURVEY.
4242 240827-04

DO NOT SCALE

THE CONTRACTOR IS TO CHECK AND VERIFY ALL BUILDING AND SITE DIMENSIONS, LEVELS AND SEWER INVERT LEVELS AT CONNECTION POINTS BEFORE WORK STARTS.

THIS DRAWING IS TO BE READ AND CHECKED IN CONJUNCTION WITH ENGINEERS AND OTHER SPECIALIST DRAWINGS & SPECIFICATIONS.

NOTES

TO BE READ IN CONJUNCTION WITH DEMOLITION GA PLANS, SECTIONS, ELEVATIONS, ENGINEERS PLANS AND HERITAGE STATEMENT. REFER ALSO TO MEP ENGINEERS' STRIP OUT AND BUILDERSWORK INFORMATION AND LIGHTING LAYOUTS .

Rev	Date	Reason For Issue	Chk
--	-	-	-
-	-	-	-

Key Plan

pawlik+wiedmer

17 Abernethy Road
London
SE13 5QJ
london@pawlikwiedmer.com
Registered in England & Wales No: 8155464
Registered Office: 27 Mortimer Street, W1T 3BL, UK

Client
Phoenix Theatre
Charing Cross Road
Ambassador Theatre Group

Project
Project Ash
Phoenix Theatre
Charing Cross Road
-

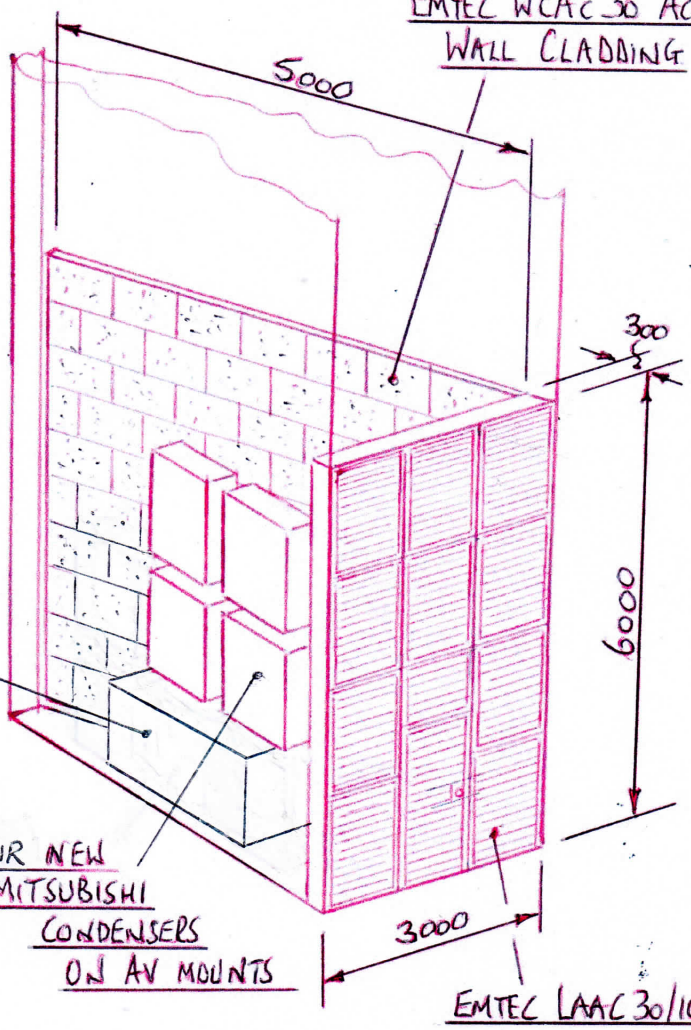
Title
Section AA
Through light
Well
Proposed

Status
PRELIMINARY

Project Number	Date	Checked By
559	Nov 2022	-
Revision: -	Scale @ ISO A1: 1:50@A1	Approved By: -

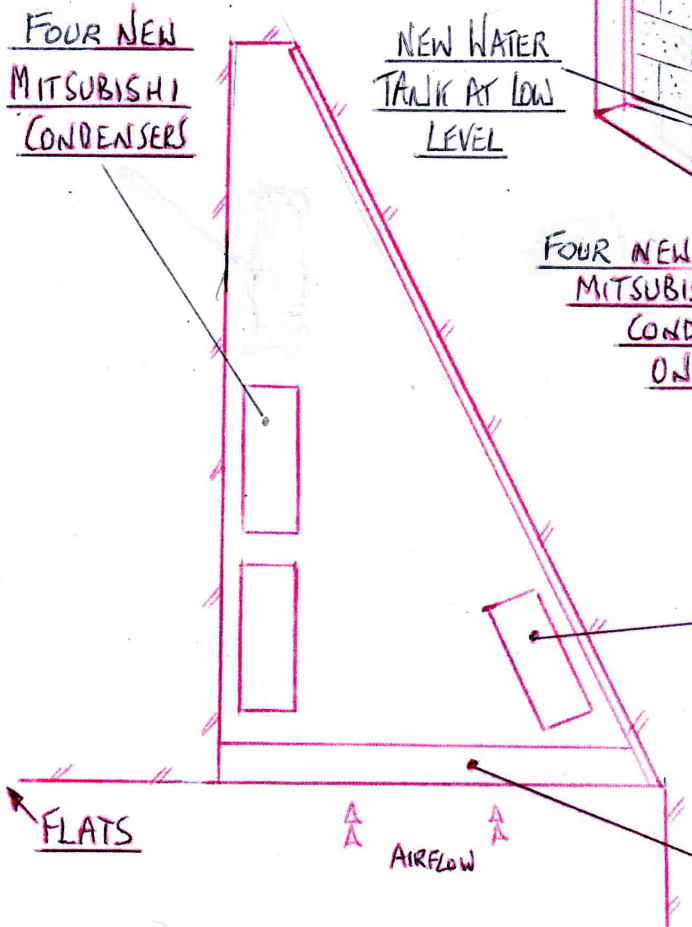
Drawing Number
559-PWL-ZZ-ZZ-DR-A-01_200

All dimensions in mm unless stated



ISOMETRIC VIEW OF VOID

NOTE:- ACOUSTIC CLADDING & ACOUSTIC LOUVRES TO BE 1000 MM ABOVE TOP OF CONDENSERS



PLAN OF TRIANGULAR VOID

TITLE: LAYOUT OF ACOUSTIC TREATMENT	A B C D E F G H REVISION A (16/8/24)		DOCUMENT No. QF/9300/GA1/A	
CLIENT: PETER DEER & ASSOCIATES	Q A M I STATUS			
PROJECT: 110 CHARING CROSS ROAD	APPROVED BY:		EMTEC	
ISSUE DATE: 16/8/2024	PF No.	DRAWN BY: MGR	DESIGN AUTH: MGR	Emtec Products Ltd., Enterprise House, Blyth Road, Hayes, Middx UB3 1DD. Tel: 0181-848 3031 Fax 0181-573 3605