

REF: AS11704.220715.L2

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Dear Paul

AS11704 ABBEY FRUIT FARM**Planning Condition 16 (External Noise Intrusion)**

We are writing with regard to the discharge of Planning Condition 16 in relation to Eastleigh Borough Council's [EBC] planning approval notice, reference O/16/079466.

16. Prior to the commencement of the residential development hereby permitted a further detailed assessment of existing and proposed noise sources and a detailed noise mitigation scheme (with measures to provide satisfactory noise standards to include site and building layout, building construction, glazing and mechanical ventilation) shall be submitted to and approved in writing by the Local Planning Authority. The internal noise standards to be achieved shall be agreed in writing by the Local Planning Authority prior to the submission of the noise mitigation scheme. The noise mitigation measures, as approved in writing by the Local Planning Authority, shall be fully installed and verified as performing as required prior to the first occupation of each dwelling unit, and shall thereafter be retained.

Following liaison with Mr Jon Pyke, an environmental health officer at EBC, a two-step method statement was agreed upon for the discharge of this condition. It was agreed that Clarke Saunders Associates [CSA] would conduct a noise survey to determine the internal ambient noise levels in the agreed habitable rooms within the two construction phases. This letter addresses one of the plots assessed in Phase 2.

Internal Noise Standards

As discussed with Mr Pyke, an environmental noise survey was undertaken at planning stage of the development to inform suitable acoustic mitigation specifications for façade design. Following available guidance, internal noise standards targeted the desirable internal noise levels given in BS8233:2014 *Guidance on Sound Insulation and Noise Reduction for Buildings* as reproduced below.

ACTIVITY	LOCATION	07:00 TO 23:00	23:00 TO 07:00
Resting	Living Room	35 dB $L_{Aeq,16\text{ hour}}$	-
Dining	Dining Room/area	40 dB $L_{Aeq,16\text{ hour}}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16\text{ hour}}$	30 dB $L_{Aeq,8\text{ hour}}$

Table 1: Summary table reproducing desirable internal noise levels for residential purposes. [dB ref 20µPa]

Based upon further guidance from The Professional Practice Guidance on Planning and Noise (May 2017) and The Guidelines for Community Noise (1999), design intent is for noise events above L_{Amax} 45 dB to be restricted to less than 10-15 times per night.

Post completion measurements

CSA undertook a survey of internal noise levels between 16:10 hours on Thursday 7th July and 11:05 hours on Monday 11th July 2022 in accordance with the agreed method statement, appended for ease of reference.

The measurements were undertaken in Bedroom 1 of Plot 92, a first-floor flat overlooking Woolston Road. The plot was unfurnished but carpeted.

The following equipment was used for the survey:

- 1 no. Rion sound level meter type NL32;
- 1 no. Rion sound level calibrator type NC74.

The calibration of the sound level meter was verified before and after the survey period. No calibration drift was observed. All CSA equipment has current certified laboratory certification which is available upon request

The construction site was 'live' during the daytime measurement periods with the exception of Sunday 10th July 2022, thus, data measured during construction periods has been removed from the dataset. However, site management advised that works were finished within the tested plot and that internal influence should be minimal.

Results

Figures AS11704/TH1-TH4 show the internal L_{Aeq} , L_{Amax} , L_{A10} , L_{A90} noise levels as time histories.

Table 2 shows the measured average noise levels alongside the 'typical' maximum noise levels where relevant for the night-time period. The typical L_{Amax} noise levels have been calculated using the 10th percentile of the L_{Amax} dataset.

DATE/PERIOD	PLOT 92 BED 1	
Thursday* 7 th July 2022	Day	L_{Aeq} 31dB
	Night	L_{Aeq} 26dB L_{Amax} 44dB
Friday 8 th July 2022	Day	L_{Aeq} 31dB
	Night	L_{Aeq} 25dB L_{Amax} 44dB
Saturday 9 th July 2022	Day	L_{Aeq} 30dB
	Night	L_{Aeq} 24dB L_{Amax} 44dB
Sunday 10 th July 2022	Day	L_{Aeq} 30dB
	Night	L_{Aeq} 25dB L_{Amax} 44dB

Table 1: Summary of measured internal noise levels.

*Full daytime period not measured

The above internal noise levels can therefore be accepted as a demonstration that the noise mitigation measures are performing as required and the requirements of the condition have been discharged for this part of the Phase 2 works.

We trust the above to be of assistance. Please do not hesitate to contact us with any queries you may have.

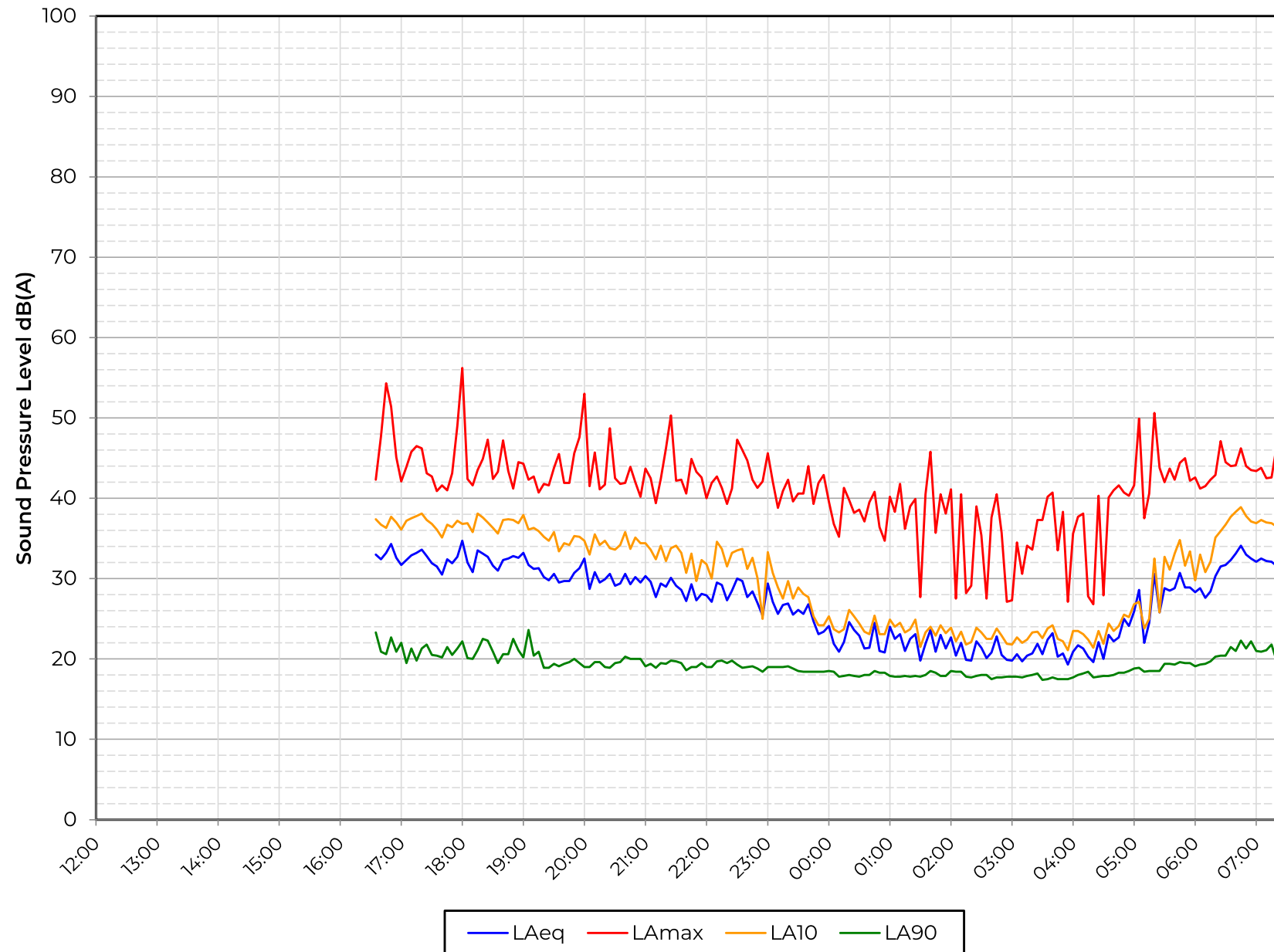
Yours sincerely
for CLARKE SAUNDERS ASSOCIATES



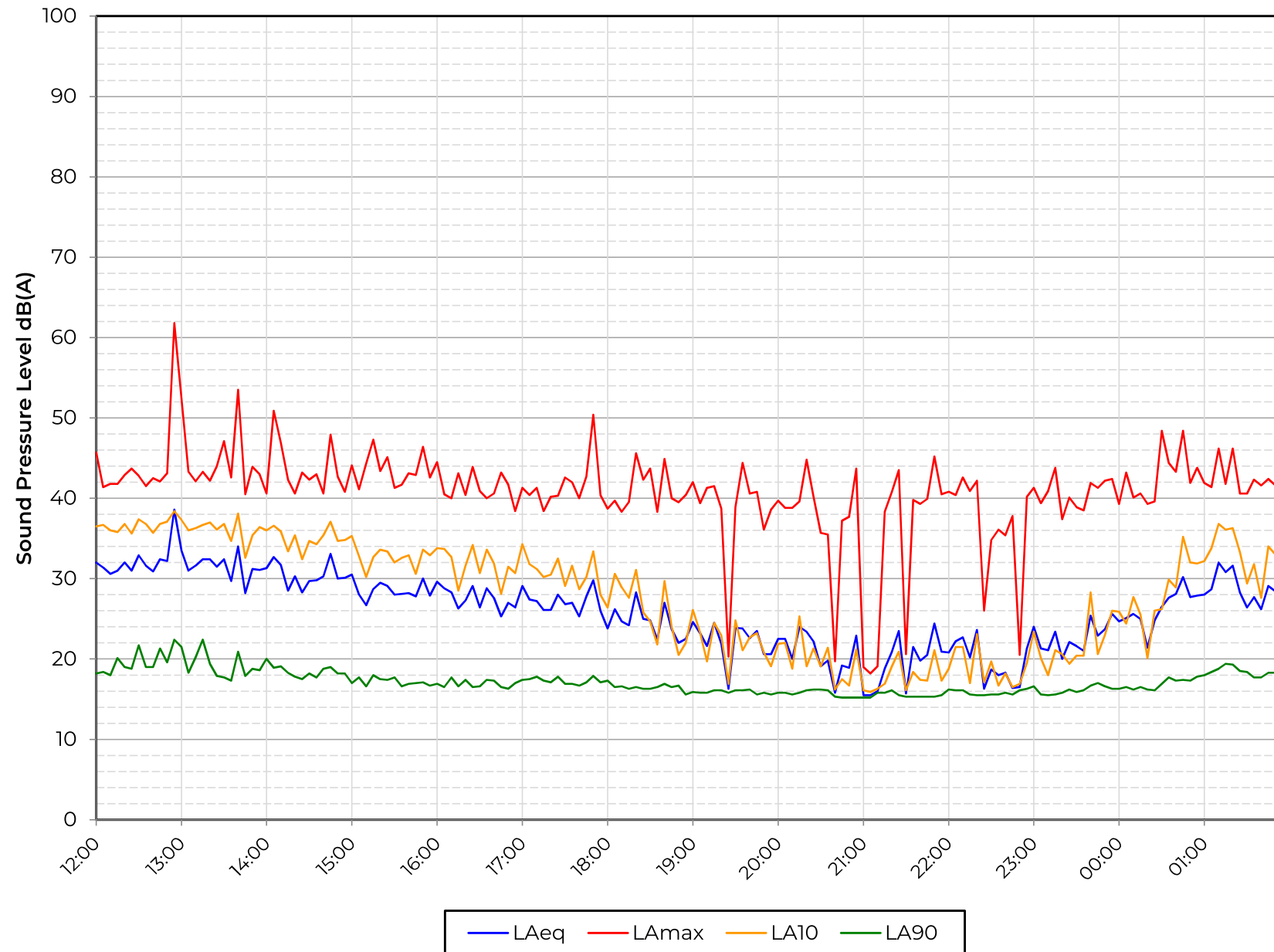
Will Fairman

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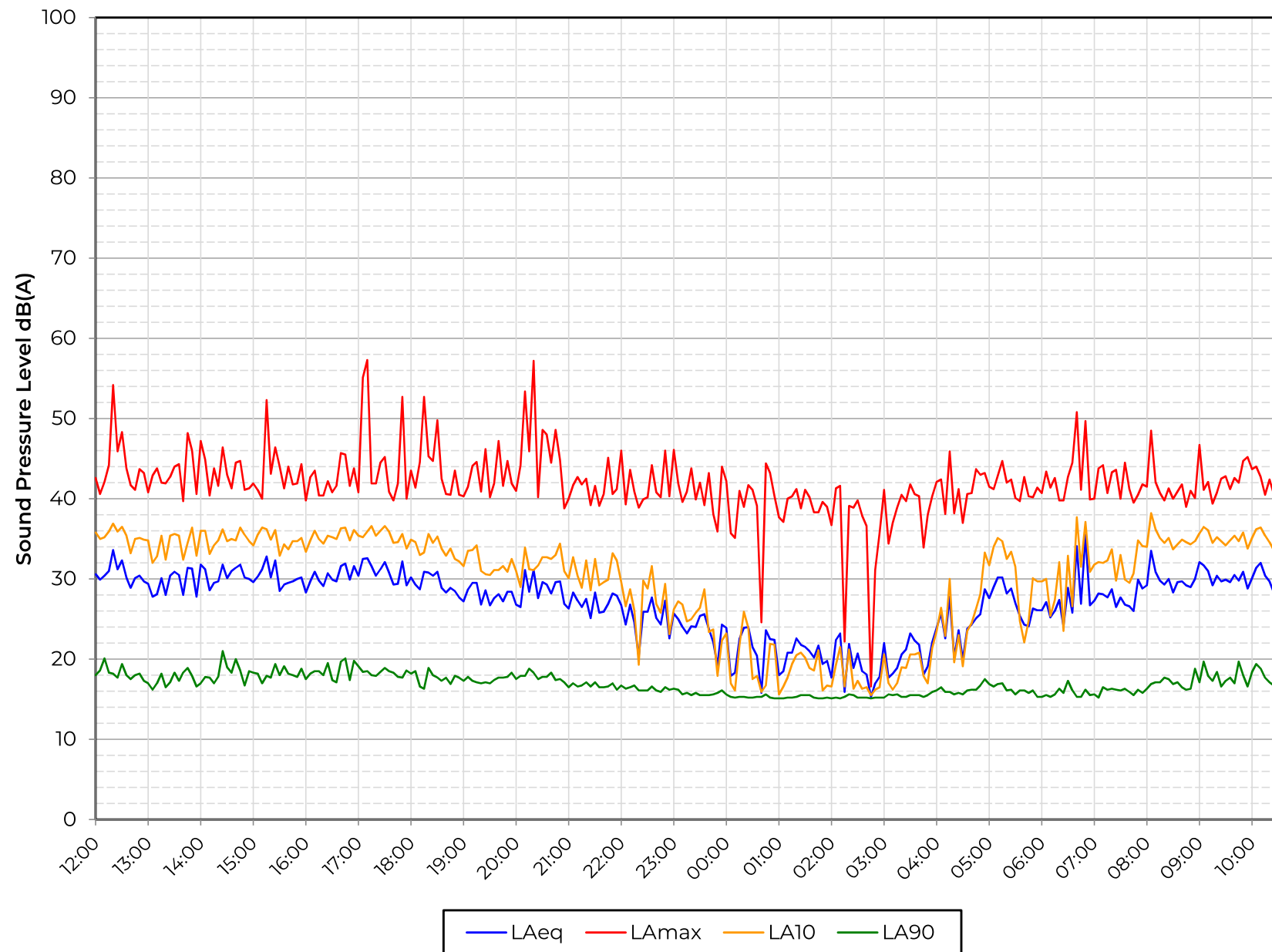
Position Plot 92



Position Plot 92



Position Plot 92



Position Plot 92

