Churchfields Road Application 24/00815/FULL2

Noise Proof of Evidence of Innes Urbanski on Behalf of The Appellant

July 2025

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1. Introduction

1.1 A noise assessment of current B8 operations on the Appeal Site has been undertaken by Waterman Infrastructure & Environment Ltd (WIE) using the industry standard methodology, namely BS4142. The results demonstrate that the noise impact is not 'significant adverse' as defined by BS4142. Mitigation in the form of an acoustic curtain has been provided to reduce noise emissions during infrequent ad-hoc pole cutting operations thereby minimising the adverse impact to acceptable levels and therefore compliant with the requirements of The London Plan 2021, the National Planning Policy Framework and Technical Guidance Note of London Borough of Bromley Council. No cumulative effect on background was evidenced due to the combined noise from the Appeal Site and Churchfields Reuse & Recycling centre and the appeal scheme is therefore complaint with Policy 119 of the Bromley Local Plan. B8 operations at the Appeal Site do generate noise, but the BS4142 assessment when taking account of context indicates they are not at a level causing 'significant adverse impact' on the existing residential amenity and do not result in the detrimental impact on resident's amenity.

1.2 My name is Innes Urbanski. I am an Associate Director (Acoustics) at Waterman Infrastructure & Environment Limited (WIE). I have over 20 years of acoustic consultancy experience in building and environmental acoustics. I have a Bachelor of Science degree (BSc (hons)) in Environmental Science from the University of Sheffield and a MSc in Applied Acoustics from the University of Derby. I am a member of the Institute of Acoustics (MIOA).

1.3 Waterman was not involved in the making of application 24/00815/FULL2, which is the subject of Appeal B, but was first instructed following the refusal of that application. The original BS4142 assessment (dated 12th March 2024) which accompanied the application had been undertaken by Clement Acoustics, and was based on predicted operational noise level from the Class B8 use together with the measured background sound level (L_{A90}) prior to operation of the Class B8 use on the Appeal Site.

1.4 The retrospective planning application (application 24/00815/FULL2) was refused on 17th October 2024 by The London Borough of Bromley (LBB). Part of the reason for refusal stated in the Decision Notice (DC/24/00815/FULL2) dated 17th October 2024 (CD3.04), was noise. Specifically

it asserted that the operation *"represents a significantly more intensive use of the site which has a detrimental impact on the general residential amenities of the area, resulting in* ***additional noise*** *and* ***disturbance*** *associated with the* ***comings and goings to and from the site****, as well as* ***activities upon the site itself****, and* ***insufficient information*** *has been* ***provided*** *to* ***demonstrate*** *that the* ***impact*** *of the use on the residential amenities of the area and with regards to highways safety* ***could be successfully mitigated and controlled****."*

1.5 The Delegated Report (CD3.03) highlighted the reason why the EHO raised objection on noise grounds, namely due to concerns of the potential impacts from the B8 use. The EHO recommended refusal on the basis that the **noise could not be controlled by condition** and that the **impact of vehicle movements** had **not** been **addressed**. The Delegated Report also noted that the EHO's concern regarding potential noise impacts was "*supported by evidence supplied by neighbouring residents"*. Despite repeated requests although some video evidence has been provided no further details surrounding this 'evidence' has been shared with me and therefore it has not been possible to comment on this directly within this Proof of Evidence.

1.6 Following this decision, Waterman were instructed on 20th February 2025 to undertake an additional BS4142 assessment of Churchfields Road Class B8 (*scaffolding equipment storage/distribution yard*) use, which included the *installation of 2 no. single storey cabins and CCTV/lighting*. I became involved shortly after this date and oversaw the additional BS4142 assessment which is based on noise measurements of current B8 operations at the Appeal Site, the results of which are presented in the Noise Assessment Report (CD8.03). I first visited the Appeal Site on 6th March 2025 and did a site walkover observing typical operations. Subjectively I noted that noise from the B8 operations occurring at the time of my site visit were not regarded as being at a level that would cause 'harm' or cause a 'significant adverse impact'. Noise from the adjacent Churchfields Reuse & Recycling centre was noted, particularly from JCB operations and reverse alarms.

1.7 Waterman's report was issued to LBB as part of the Statement of Case. LBB made a number of comments on the noise assessment undertaken by Waterman, with a number of these being

unsupported statements and with the use of emotive language. These are addressed in Appendix 1 to this proof of evidence.

1.8 The additional BS4142 assessment includes the use of two electric Forklift Trucks (EP Li-ion ELECTRIC Forklift Truck 2.5T) rather than the inherently noisy diesel engine Forklift Trucks used in the original BS4142 assessment by Clements Acoustics (CD1.05). Further to this, additional noise assessment information is provided, which includes an assessment of HGV movements between 06:30 and 07:00 associated with the B8 usage as well as inclusion of HGV movements as part of the general operational noise in addition to operational yard noise, thereby addressing comments raised by the EHO.

1.9 The additional BS4142 assessment quantifies the noise impact and demonstrates that the noise from B8 usage operations on the Appeal Site, established through measurement, would not '*cause harm to neighbouring residential amenity*'. The term 'harm' used by the EHO is taken to be a noise level that is above the Significant Observed Adverse Effect Level (SOAEL), which is described in Table 3-2 of the noise assessment report.

1.10 The evidence which I have prepared for this Public Inquiry (PINS Ref: APP/G5180/C/3363900, PINS Ref: APP/G5180/W/25/3365514) in this proof of evidence is true and has been prepared and is given in accordance with guidance of my professional institution and I confirm the opinions expressed are my true and professional opinions.

2. Relevant Policy & Guidance

2.1 Relevant policy and guidance are presented in Section 2 of the noise assessment report with noise assessment criteria in Section 3. These are as follows:

- The National Planning Policy Framework[1] (NPPF) paragraphs 198 and 200 (Appendix 3 to this PoE);
- Noise Policy Statement for England[2] (NPSE) (CD10.05);
- Planning Practice Guidance[3] (PPG); Paragraphs ID:30-001-2019722 to ID:30-006-20190722 and Paragraph ID 30-005-2019722 (CD10.06);
- The London Plan 2021[4], Policies D13 and D14 (CD6.05 and CD6.06);
- Bromley's Local Plan[5], Policy 119 (CD6.15),
- LBB's Noise Technical Guidance[6] titled 'Planning requirements for noise' (CD10.07);
- BS 4142:2014+A1:2019[7] 'Methods for Rating and Assessing Industrial and Commercial Sound' (CD10.08).

2.2 The World Health Organisation (WHO) guidance on L_{AFmax} and sleep disturbance was referred to within Section 6 of the noise assessment report. This is primarily contained within Guidelines for Community Noise[8] (Appendix 3 to this PoE).

2.3 BS8233:2014 'Guidance on sound insulation and noise reduction for buildings' (Appendix 3 to this PoE), although not specifically mentioned in the noise assessment report, provides a benchmark reference for residential amenity albeit for anonymous noise sources.

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1 Ministry of Housing Communities & Local Government. (December 2024) National Planning Policy Framework. HMSO. Available at https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf

2 Defra. (2010) Noise Policy Statement For England (NPSE).

3 Noise - GOV.UK

4 https://www.london.gov.uk/programmes-strategies/planning/london-plan/london-plan-2021

5 https://www.bromley.gov.uk/downloads/file/51/bromley-local-plan

6 London Borough of Bromley. (n.d.) Noise Technical Guidance – Planning requirements for noise. https://www.bromley.gov.uk/downloads/file/2408/noise-technical-guidance-planning-requirements-for-noise

7 British Standards Institution (2019). BS 4142:2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound. BSI.

8 WHO. (1999). Guidelines for Community Noise. WHO.

2.4 The Association of Noise Consultant's Technical Note on BS 4142:2014+A1:2019[9] published March 2020, assists with the interpretation and application of BS 4142 (CD10.09). This was not referenced in the noise assessment report but is an additional point of reference relevant to this PoE.

[9] Association of Noise Consultants. (2022). Technical Note on BS 4142:2014+A1:2019 Version 1.0. ANC.

3. Baseline Conditions

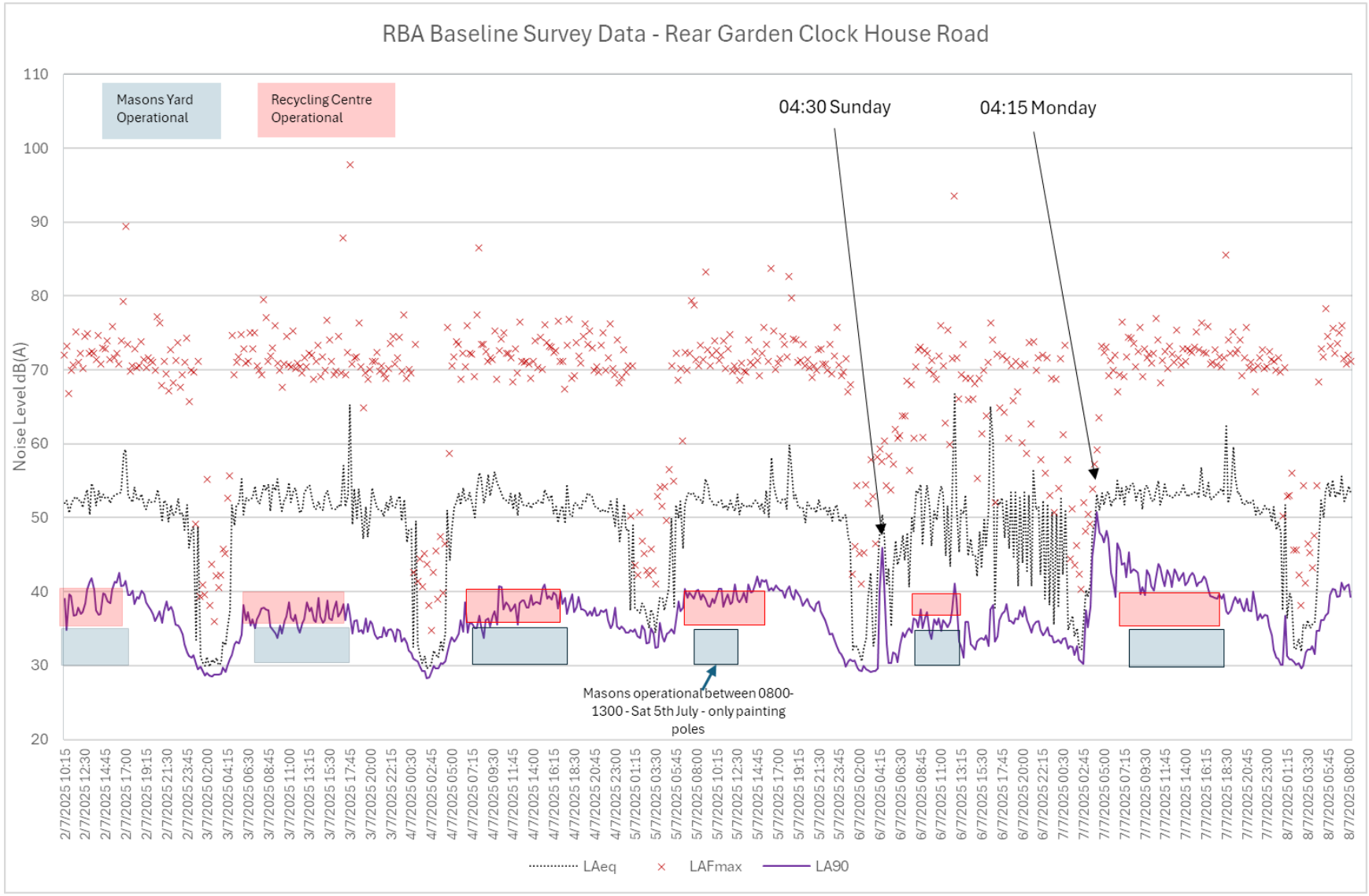
3.1 Baseline noise conditions established through survey are presented in Section 4 of the noise assessment report.

3.2 The background sound level established by Clements Acoustics through survey at the Appeal Site in January 2024 prior to B8 operations, namely 42dB L_{A90} for day and early morning weekday period and 30dB L_{A90} during the night-time period (OOH – out of operational hours) was used for the purpose of the BS4142 assessment by WIE. Loading yard operations on a Saturday and Sunday were assessed against a pre-operational background sound measurements by WIE on a Sunday between 07:30-08:00 of 40dB L_{A90}.

3.3 Dani Fiumicelli of RBA acoustics, acting on behalf of LBB, conducted further baseline surveys in July 2025 both during and outside of B8 operational hours within a garden of a resident at Clock House Road. Between 06:00-07:00 weekday the mean prevailing background sound level is reported as 39dB L_{A90}. On Saturday between 06:00-07:00 the mean prevailing background sound level is also reported as 39dB L_{A90} reducing to 32dB L_{A90} on a Sunday. The preliminary indication is that prevailing L_{A90} in resident's gardens on Clock House Road prior to yard operations is lower than used in WIE noise assessment. Dani Fiumicelli indicated that this may be due to screening within the garden area due to the garden fence.

3.4 The raw measurement data provided by Dani Fiumicelli on Friday 18th July 2025 has been reviewed. Figure 3-1 presents the time history plot of the measured noise levels from Wednesday 2nd July to Tuesday 8th July 2025 with inclusion of times when Mason's and Churchfields Reuse and Recycling centre were operational. The time history plot illustrates similar noise levels during and outside of the operational hours of Masons Yard and Churchfields Reuse and Recycling centre. Further to this it illustrates noise events occur outside the operational hours of Masons Yard and Churchfields Reuse and Recycling centre. These are considered likely to be linked to the railway line, which is understood to accommodate both freight and empty stock movements. Generally, these are understood to occur during the night or off-peak times.

Figure 3-1: Time History Plot of RBA Acoustics Noise Measurement at Clock House Road (Wednesday 2nd July – Tuesday 8th July 2025)



3.1 Of key importance to the noise assessment is the operational hours of Masons yard as well as the operational hours of the HGV drivers, which are understood to be as follows. This is slightly different to those used in the noise assessment by WIE as presented in Table 3-1.

Table 3-1: Masons Operational Hours

Actual Operational Hours	**Operational Hours Used in WIE Noise Assessment**
Yard Operations	
Monday-Friday 08:00-18:30	Monday-Friday 07:00-18:30 (assessed with HGV movements)
Saturday 08:00-17:00 (loading/unloading only)	Saturday 08:00-17:00 (loading/unloading only)
Sunday 08:00-13:00 (loading/unloading only)	Sunday 08:00-13:00 (loading/unloading only)
HGV Drivers	
Monday-Friday 06:30-17:00	Monday-Friday 06:30-18:30 (assessed between 06:30-07:00)
Saturday 07:00-16:00	Saturday None
Sunday None	Sunday None
OOH (no yard operations on HGV movements)	
Anytime but typically between 05:00-06:30 or 16:30-23:00	Any day 22:00-05:00

3.2 It should be borne in mind that noise from the railway line is a key noise source for residents on Clock House Road, with the nearest railway line being approximately 6 metres from the nearest garden boundary and approximately 25 metres from the nearest building. The number of trains varies dependant on time of day, day of the week. Based on current timetable, during the week daytime period approximately 8 passenger trains per hour run. The first weekday passenger train at Clock House Station is listed as 05:25 with last at 00:36. The first and last on Saturday is 05:40 and 00:38 and on Sunday 06:21 and 00:38. In addition, there are the freight and trains, referred to above, which run at night. Of note is that noise from Churchfields Reuse and Recycling centre is

audible at the Appeal Site rail boundary and I therefore conclude it would also be audible to residents at Clock House Road.

3.3 The key noise sources for residents on Churchfields Road are road traffic noise and noise associated with Churchfields Reuse and Recycling centre, which uses a JCB to load skips and push material down into the skip (metal on metal) using the JCB bucket. Refuse vehicles from Churchfields Reuse and Recycling facility were observed leaving their site from 06:30 onwards.

4. BS4142 Assessment of Churchfields Road B8 Use

4.1 Key to a BS4142 assessment is the difference between representative background sound level (L_{A90}) and the rating level (sound from B8 use at **receptor** location adjusted for acoustic character in accordance with BS4142). Context, which is an important aspect of BS4142 and often ignored by EHO's, also needs to be taken into account being an integral part of a BS4142 assessment.

4.2 The BS4142 assessment is presented in Section 6 of the noise assessment report. Early morning HGV movements between 06:00-07:30, weekend unloading / loading operations together with out of office hours (OOH) HGV movements conclude negligible (low) impact. This would not change should a lower background sound level of 39dB L_{A90} be used rather than 42dB L_{A90} weekday and 40dB L_{A90} weekend due to the level difference reported and prevailing ambient noise levels without Masons operations. OOH assessment is based on a 'night-time' background sound level of 30dB L_{A90}, which is considered to be a low background level and therefore consideration of absolute noise level is important as is prevailing noise level and location of residents, namely indoors.

4.3 Table 4.1 presents further noise measurements conducted by WIE on Churchfields Road proximate to 120 Churchfields Road opposite the access road. The survey was undertaken Thursday 3rd July 2025.

Table 4-1: Summary of Measured Noise Levels On Churchfields Road Opposite Site Access

Time Period	dB $L_{Aeq,1\ min}$ (log average)	dB L_{AFmax}	dB $L_{AFmax,\ 90th\ perc}$	dB $L_{A10,1min\ ave}$	dB $L_{A90,1\ min\ ave}$	Total Volume	No. HGVs
06:06-06:15	62	82	80	61	44	17	0
06:15-06:30	60	80	79	60	44	32	0
06:30-06:45	63	80	79	64	48	40	7
06:45-07:00	62	81	78	62	46	50	3
07:00-07:14	66	86 (bus)	81	65	48	70	3

4.4 There is an increase in both the dB L_{Aeq}, that is the average noise level and dB L_{A10} indices which is typically used to measure road traffic noise in the period 06:30-06:45. This is when HGVs start to leave the Masons site. However, as illustrated by Table 4-2, 4 HGVs left Churchfields Reuse and Recycling centre and 3 left Masons. The operational hours for the Reuse and Recycling

centre are understood to be 07:00-17:30 Monday to Friday, therefore HGVs leave their site prior to 07:00, similar to Masons.

Table 4-2: Summary of Vehicle Counts

Time Period	Total Traffic Volume	Total HGV	No. of Mason HGVs	No. Recycling Centre HGVs
06:06-06:15	17	0	0	0
06:15-06:30	32	0	0	0
06:30-06:45	40	7	3	4
06:45-07:00	50	3	1	2
07:00-07:14	70	3	1	2

4.5 During the period 07:00-07:14 the increase in noise level for this period was due to a noisy bus event which occurred between 07:00-07:01. When this data set is removed the period value reduces to 63dB L_{Aeq} and L_{A10} to 64dB L_{Aeq} and therefore comparable to 06:30-06:45 noise levels. Noise levels in terms of L_{Amax} are comparable across the survey periods which suggests that Masons operations do not change the maximum noise levels experienced on Churchfields Road.

4.6 The additional noise survey supports the conclusions of the BS4142 assessment in that the noise impact of Masons Vehicles leaving early morning between 06:30-07:00 is low on receptors on Churchfields Road. It needs to be borne in mind that the BS4142 assessment period pre 07:00 is over a 15 minute period and not each event *per se*. However, as requested by the EHO, assessment of L_{AFmax} was undertaken. The highest measured L_{AFmax} during the noise survey was from a bus event. It is also important to note there is no increase in the L_{AFmax} noise levels between the period when no HGVs were noted leaving the appeal site and the recycling centre and those when vehicles were leaving. Further to this, between 06:06 and 06:30, so pre Masons' HGVs leaving site, all of the twenty four 1-minute data sets exceeded 60dB L_{AFmax} except two. Post 06:30 to 07:14 the L_{AFmax} in each of the 1-minute data sets exceeded 60dB L_{AFmax}, this is likely to be a function of vehicle movements on Churchfields Road rather than a result of Masons HGVs per se. This indicates that the Appeal Site has no impact on the overall maximum noise level experienced by residents of Churchfields Road.

4.7 It is important to reiterate that yard operational sound levels at receptor locations are based on measurements of key operations at the Appeal Site and predicted at receptor locations using CadnaA noise modelling software, which is a recognised approach. It is considered that the impact on Churchfields Road residents with and without pole cutting would not change should a lower L_{A90} be used, although based on results of the early morning survey it indicates that a higher L_{A90} may be more appropriate than used by WIE. Also, when account is taken of prevailing ambient noise levels, with contribution from road traffic noise not associated with Masons, even with an increase in rating penalty applied (although WIE consider it should be zero at this location) this would not alter the reported BS4142 results.

4.8 For residents on Clock House Road a reduction in the L_{A90} for BS4142 assessment of weekday yard operations, including with and without pole cutting, would increase the level difference. This would further increase should a higher rating penalty be applied.

4.9 For typical operations without pole cutting a rating penalty of +3dB was applied by WIE to take account of 'just' impulsive (as defined in BS4142) at Clock House Road gardens/dwelling locations for occasional metal on metal clangs/bangs during handling of poles and loading. During pole cutting a rating penalty of +6 was applied to the predicted specific sound level at Clock House Road (+3 for 'just' impulsivity as per previous with an extra +3dB for the intermittency of the ad-hoc pole-cutting operation). No rating penalty was applied for tonality as none were evident using Annex C 1/3 octave method of BS4142.

4.10 Subsequent to the BS4142 assessment by WIE, an acoustic curtain has been installed to reduce noise emissions from pole cutting operations. Figure 4-1 presents the measured pole cutting sound level inside the curtain, outside the curtain and concurrent measurements at the rail boundary. The acoustic curtain reduces noise emissions from this operation by approximately 10dB. The concurrent measured noise level at the boundary location does not exhibit an increase in noise due to pole cutting operations and is likely to be influenced by other noise sources such are rail events and other localised noise sources.

4.11 Figure 4-2 presents the measured 1/3 octave noise levels during pole cutting proximate to the source, both sides of the acoustic curtain, and concurrent measurements at the rail boundary. The

Figure clearly illustrates the reduction in noise with the acoustic curtain. The measured noise spectrum of pole cutting at the rail boundary location is different to that measured in close proximity of pole cutting, indicating the acoustic spectrum of pole cutting changes with distance, which is expected. This indicates that the acoustic character based on a noise measurement proximate to pole cutting (the source) is not the same at as at the receptor location. This is an important point to note when applying a rating penalty which is applicable to the source noise at the receptor location and not at the source location.

Figure 4-1: Additional Pole Cutting Noise Measurements

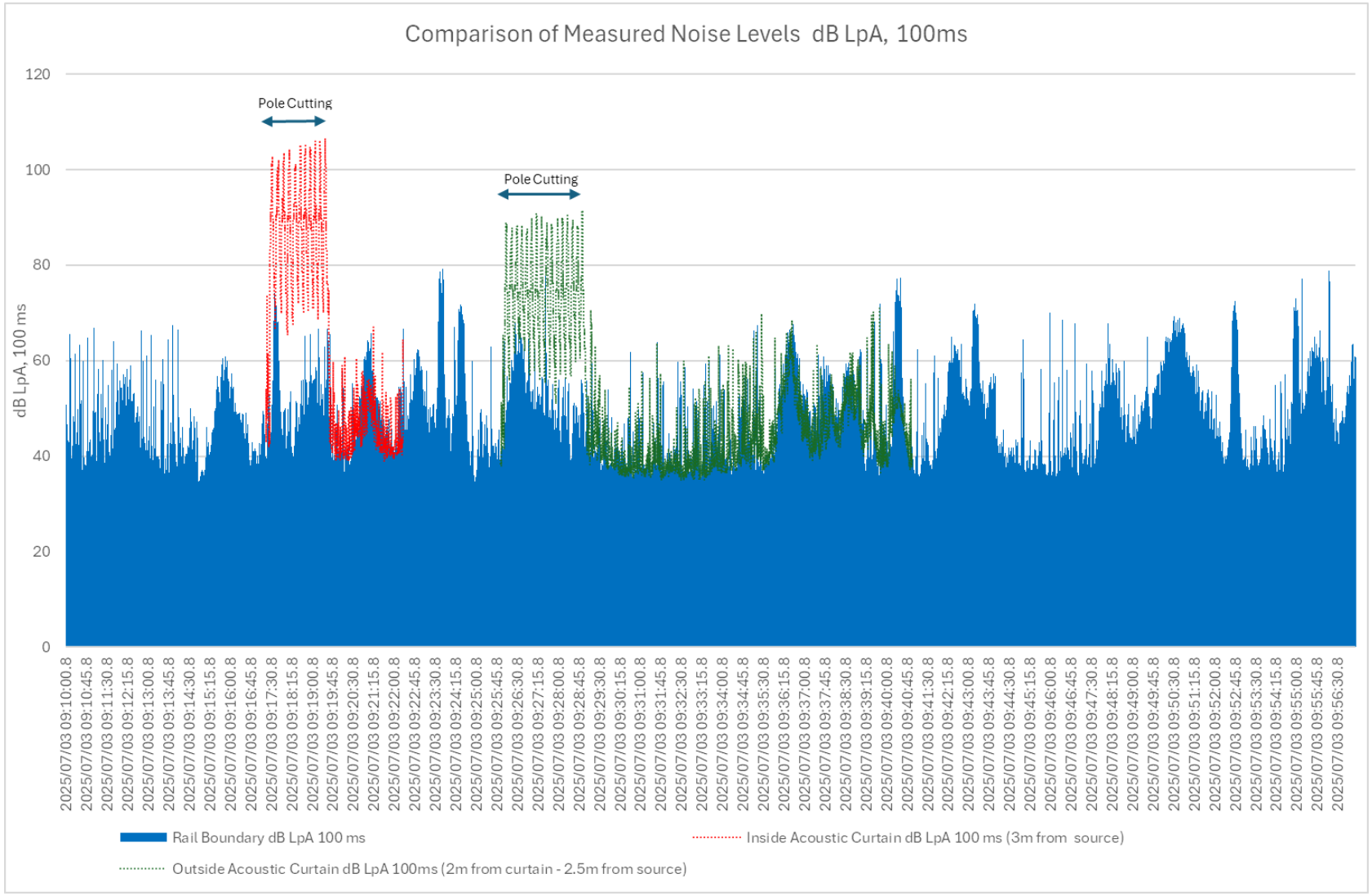
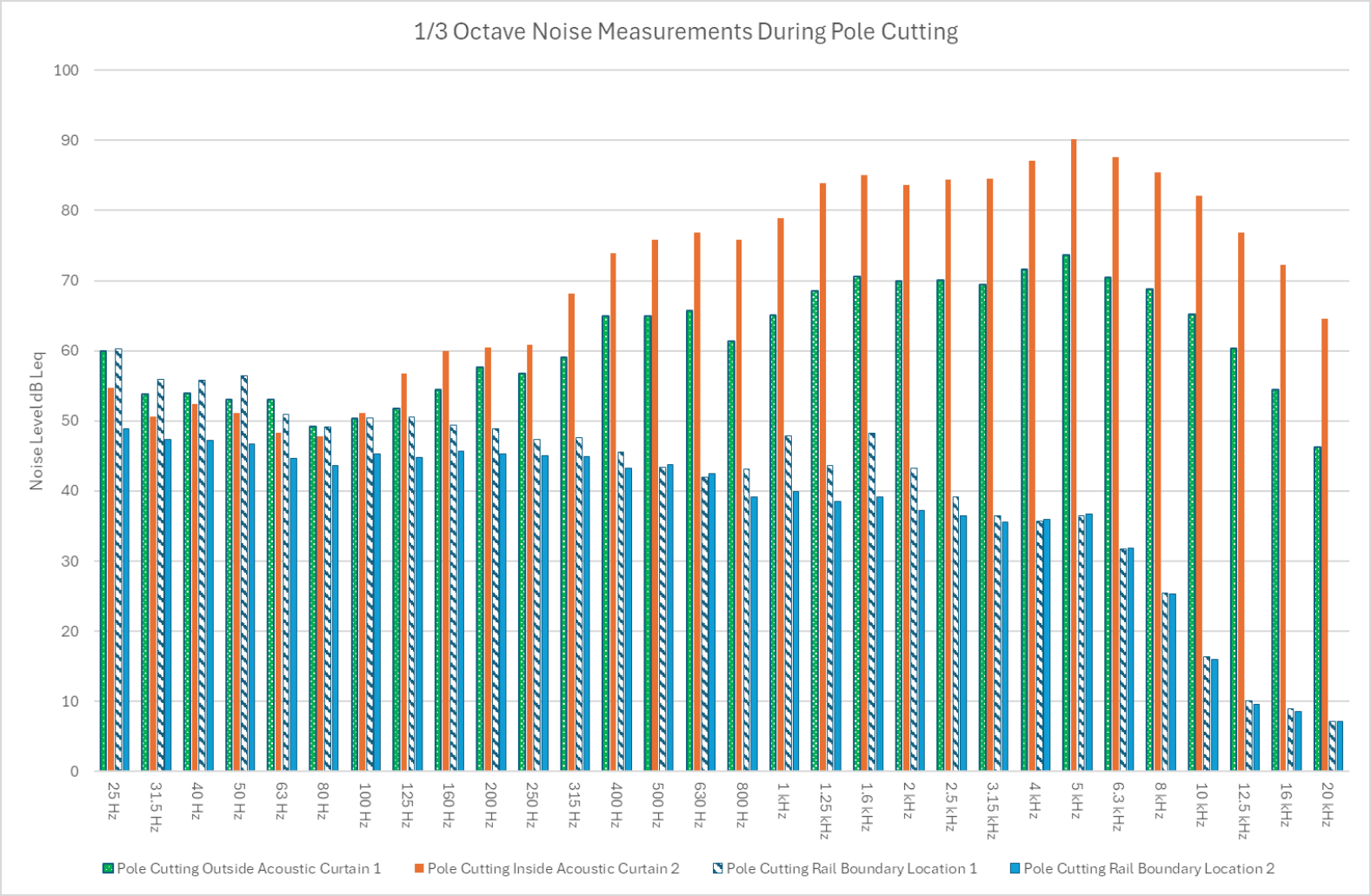


Figure 4-2: 1/3 Octave Noise Measurements During Pole Cutting



4.12 Table 4-3 presents a revised BS4142 assessment for Clock House Road with and without pole cutting, taking account of the reduction in noise afforded by the acoustic curtain and based on a lower L_{A90} value of 39dB. It should be noted that the noise model includes operations being undertaken within all areas of the Appeal Site simultaneously (rail boundary areas as well as within the main loading/unloading area and surrounds near the pole storage racks) and is likely to over predict noise emissions from the Appeal Site. In light of this, Table 4-3 also presents the BS4142 assessment for Clock House Road with and without pole cutting occurring but excluding operations being undertaken within the vicinity of the rail boundary, which is understood to be representative of typical yard operations.

Table 4-3: Revised Clock House Road BS4142 Assessment Yard Operations

Operational Period	Predicted Specific Sound Level	Rating Level	L_{A90}	Difference Rating Level minus LA90	Impact (with context)
Clock House Road					
08:00-18:30 (without pole cutting) Monday to Friday - with inclusion of operations being undertaken simultaneously throughout the Appeal Site including area near rail boundary	39 to 42 dB $L_{Aeq,1h}$	+3dB 42 to 45 dB $L_{Ar,1h}$	39	+3 to +6	Small (when account is taken of prevailing noise levels with and without Masons operational)
08:00-18:30 (without pole cutting) Monday to Friday - without inclusion of operations being undertaken near rail boundary – just operations near loading area and immediate surrounds	33 to 36 dB $L_{Aeq,1h}$	+3dB 36 to 36 dB $L_{Ar,1h}$	39	-3 to 0	Low (negligible)
08:00-18:30 (with pole cutting) Monday to Friday – with inclusion of operations being undertaken simultaneously throughout the Appeal Site including area near rail boundary	38 to 42 dB $L_{Aeq,1h}$	+6dB 44 to 48 dB $L_{Ar,1h}$	39	+6 to +9	Small to occasional Medium (when account is taken of prevailing noise levels with and without Masons operational)
Acoustic Curtain					
08:00-18:30 (with pole cutting) Monday to Friday – without inclusion of operations	35 to 38 dB $L_{Aeq,1h}$	+6dB 41 to 44 dB $L_{Ar,1h}$	39	+2 to +5	Small (when account is taken of prevailing noise levels with

Operational Period	Predicted Specific Sound Level	Rating Level	LA90	Difference Rating Level minus LA90	Impact (with context)
being undertaken near rail boundary – just operations near loading area and immediate surrounds					and without Masons operational)
Acoustic Curtain					

4.13 Without pole cutting, depending on where operations are being undertaken on the Appeal Site, the BS4142 assessment indicates low to small impact. This is in part supported by the noise measurements conducted by RBA acoustics within a garden of Clock House Road where it reports mean L_{Aeq} weekday value of 53dB L_{Aeq} between 06:00-07:00 and between 07:00-19:00, indicating that Masons is having little effect on the overall ambient noise climate in terms of L_{Aeq}.

4.14 It should be borne in mind that pole cutting is the noisiest yard operational noise as established through measurement. Pole cutting is understood to be undertaken ad-hoc and is job dependent. Some weeks there is no cutting whereas in other weeks pole cutting is required. Around 50 poles would take about 1 hour to cut but the 'metal on metal cutting sound is only 4-5 seconds per pole (i.e. ~5 mins) of the overall noise. Depending on location of other yard operations, with mitigated pole cutting the BS4142 assessment indicates small to occasionally medium impact. Taking account of the predicted hourly specific sound levels, ranging from 35 to 38dB $L_{Aeq,1hr}$ with no simultaneous rail boundary yard operations to 38 to 42dB $L_{Aeq,1hr}$ with simultaneous rail boundary yard operations, this is at a level that is not expected to "cause harm to neighbouring residential amenity".

4.15 Also based on RBA Acoustics noise measurements in a Clock House Road garden there appears to be no cumulative effect between Churchfields Reuse and recycling centre causing an increase in background sound level, with weekday mean L_{A90} reported as 39dB between 06:00-07:00 and 07:00-19:00.

4.16 It is recognised that uncertainty which is a part of BS4142 was not presented in the noise assessment report. Uncertainty calculations are presented in Appendix 2 to this PoE.

5. Conclusions

5.1 In conclusion, based on measured noise levels at Churchfield Road pre and during Mason HGVs leaving site and predicted noise levels during yard operational hours, the BS4142 assessment indicates low impact and is considered reasonable without further mitigation.

5.2 At receptors on Clock House Road, with provision of mitigation to pole cutting operations which occur on an ad-hoc basis, although yard operations will cause a localised increase in noise level, the extent of this is considered reasonable in the context of:

- Daytime only operation with no pole cutting at weekends only loading/unloading operations.
- Mitigation has been provided to pole cutting operations effectively reducing noise from this source to acceptable levels.
- Main yard operational area is just south of the Reuse and Recycling centre, located at the greatest distance to Clock House Road residents.
- Electric FLTs are used rather than noisy diesel FLTs.
- FLTs do not have reverse alarms but use a light-box.
- Overall predicted daytime specific sound levels are not considered to be 'high' when compared to prevailing ambient noise levels both with and without Masons operating. The predicted specific noise level ranges with mitigated pole cutting from 35 to 42dB $L_{Aeq,1hour}$.