

GOLDEN LANE ESTATE RESIDENTS' ASSOCIATION

12 February 2018

Comments on Noise Assessment

Islington Application: P2017/2961/FUL

City of London Application: 17/00770/FULL

We previously submitted comments on the revised noise assessment by Peter Brett Associates (PBA) and we note that, in the most recent updated proposals there is no response to our comments.

We set out below the method that Peter Brett Associates have used to assess the impact of noise from the school playground and explain why we believe that this has led to an incorrect assessment of the potential impact of the noise from the proposed development.

The aim of PBA's report with regard to playground noise has been to establish a background "ambient" noise level on the site, and calculate the effect of the new development. We are particularly concerned in this commentary with the methodology that PBA have used to calculate the impact of the playground noise.

Initially PBA assumed the ambient noise level was 65dB. This did not sound realistic so we asked for them to measure it. PBA measured the ambient sound level outside Basterfield House (The nearest receptors)¹ at **55dB** over the lunchtime period² (Table 4.8). They have used this figure as a baseline to assess the impact of playground noise.

They then used the following formula to calculate the loss of noise from the playground as it travels through the air towards the windows of Basterfield House:

$$L_{p1} = L_{p2} - 15 \times \log\left(\frac{d}{3.08}\right)$$

There are three variables in this formula:

Lp1 represents the sound level that will reach the windows of Basterfield House. This is the number that we are trying to ascertain, to compare it with the ambient level.

Lp2 represents the noise level at the playground boundary . In order to assess the likely level of playground noise PBA assumed a figure of 75dB at the perimeter of the playground. They based this on previous measurements that they had made:

¹ On October 6 2017. On this day the City of London had building contractors working immediately adjacent to the measuring station; operating an angle grinder, moving the digger and dumper truck, and scraping the site with a shovel to clean it, thus raising the ambient noise level. PBA claim to have made allowances for this, but since the station was not manned, there is no way that they could confirm the noise source; so this puts the baseline reading open to doubt.

² 11am to 2pm

8.4.1 We have previously undertaken noise measurements of schools' playground areas and compiled a database of these noise data for use in similar noise assessments. At the edge of an external play area with a similar number of pupils, noise level was found to be around **75 dB LAeq, 1h**.

Subsequently after we challenged the errors in the other variables PBA reduced this figure arbitrarily, suddenly abandoning their own measurements and database and preferring a study of a Mr Weixong Wu in New York in 2006. Conveniently this reduced the noise at the perimeter to 71dB. We consider that we are entitled to rely on PBA's own analysis, since our interpretation of the report by Weixiong Wu is that it is not directly relevant to UK primary schools.

“**d**” represents the distance from the playground to the windows of Basterfield House. The further the distance, the more the noise is attenuated and the less the impact. PBA initially took a figure of 25 metres from the playground to Basterfield House, but when we measured it, we discovered it was in fact **8.8m** and PBA were forced to correct this in their revised report.

Finally PBA chose to add a compensating factor. A reduction of 6dB to account for the fact that the windows to Basterfield House are recessed under balconies. There is no evidence provided to justify this figure, but as it turns out, that is of no consequence because PBA are, once again in error here. The bedroom windows at Basterfield House are not recessed, but are flush with the facade of the building. This assumption appears to have been made on the basis of erroneous information supplied to them by the project architects.

In summary PBA have made errors with all three of these variables, with the ambient noise level and with the compensation for the balconies. *In every case the mistakes that they have made have been to the benefit of the developers* and have given an unrealistically low impression of the noise impact.

Following their own methodology, but substituting the correct figures produces the following result:

$$L_{p1} = 75 - 15 \times \log (8.8/3.08)$$

$$L_{p1} = 68.2\text{dB} \text{ (Compared to the ambient noise level of 55dB)}$$

This figure is **13dB** higher than the ambient noise level.

Helpfully PBA have provided (Table 8.1) a table to assess the magnitude of the impact of the increase in sound level. This makes clear that a change of more than 10dB will be “**Noticeable and very disruptive**” with an “**Unacceptable Adverse Effect**”.

Table 8.1: Effect of Changes in Sound Levels

Change in Sound Level (dB)	Magnitude of Impact	Perception from Increase	Increasing Effect Level
0	No Change	Not Noticeable	No Observed Effect
0.1-2.9	Negligible	Noticeable and not intrusive	No Observed Adverse Effect
3-4.9	Minor	Noticeable and intrusive	Observed Adverse Effect
5-9.9	Moderate	Noticeable and disruptive	Significant Observed Adverse Effect
10+	Major	Noticeable and very disruptive	Unacceptable Adverse Effect

Peter Brett Associates' report has contained errors and inaccuracies from the start and still falls short of acceptable independent standards. We no longer have faith in the accuracy or value of this report and we are concerned that the planning decision is going forward on the basis of an inadequate assessment.

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