



**Proposed Development
Hampstead Police Station
Rosslyn Hill
Camden
NW3 1PA**

Review of Noise & Sunlight Reporting

**S16-296
June 2019**

R3

Prepared by :

Southwest Environmental Limited

On behalf of :

HCRD

1.0 Introduction

Acting on instruction from HCRD, Southwest Environmental Limited are to make review of the Noise Issues relating to the proposed Primary School at Hampstead Police Station.

1.1 The Site

The site is occupied by a former metropolitan police station. It is intended that this building be repurposed as a school.

Address	Rosslyn Hill Camden London
Postcode	NW3 1PA
Grid Reference	526870, 185560

1.2 Proposed Development

The proposed development (2019-2375-P) is for a Primary School, comprising 1906m² gross space. There will be 36 staff members at the school.

2.0 Aims of this Report

The aims of this report are to examine the conclusions and workings of Cole Jarman Planning Noise Assessment Report 19/0084/R1. This report necessarily makes limited appraisal of the Rapleys Sunlight Daylight Report 19-00419, as the noise barrier proposed offsets noise impacts, at the cost of sunlight impacts.

3.0 Impact on Staff and Pupils

This chapter describes likely impacts on staff and pupils.

3.1 External Noise Levels

Institute of Acoustics (IOA) Guidance states for outdoor areas:

"Noise levels in unoccupied playgrounds, playing fields and other outdoor areas should not exceed 55 dB LAeq,30min and there should be at least one area suitable for outdoor teaching activities where noise levels are below 50 dB LAeq,30min.."

The IOA state for indoor areas:

"It may be possible to meet the specified indoor ambient noise levels on sites where external noise levels are as high as 70 dB LAeq,30min but this will require considerable building envelope sound insulation, or screening."

With monitored external noise level of 67db (very close to threshold) it is clear that the building will require a considerable building envelope sound insulation, or screening. These measures have not been detailed and are not represented in the design.

3.2 Indoor Ambient Noise Levels

The most part it is suggested that rooms should enjoy an ambient noise level of 40dB LAeq,30mins. With special use rooms such as Therapy Rooms requiring ambient noise levels of 35dB LAeq,30mins.

We agree that these noise levels are appropriate, and broadly in line with World Health Organisation Values set above which occupants may experience health impacts.

3.3 Attenuation

Owing to elevated noise levels to the front of the property, it is important that double glazing is placed in all road facing windows. This has been recognised and is included in T4 of the noise report.

However, it would not appear that this feature is included in the design or whether it is allowable under listed buildings constraints. Double glazing is not mentioned in SBEM Model Inputs, and the Stride Treglowan Building Survey although setting out repair measures for existing glazing, does not give reference to installation of any modern glazing, that would provide sound attenuation properties, that are required to provide the indoor ambient noise levels set out in relevant guidance.

3.4 Impact Noise

Consideration has to be given to sound insulation between floors. Foot fall impacts, scraping of chair, closing of doors. These will add to ambient indoor noise levels, at Ground Floor yet an assessment of these impacts has not been made, nor have mitigative measure been proposed.

3.5 Ventilation Factors

An overage is then applied to the above levels to account for mechanical ventilation With classroom ambient noise level of 45dB LAeq,30mins. With special use rooms such as Therapy Rooms requiring ambient noise levels of 40dB LAeq,30mins.

These noise level are considered applicable, although over the 40dB World Health Organisation Threshold. They are likely under those found in British Standards.

4.0 Impact on Neighbours

The school will represent a new noise source in close proximity to residential properties, many with amenity spaces such as garden abutting the rear of the site.

4.1 Loss of Amenity

Play Times and PE Lessons have been measured at 79db(A) and 76dB(A). BS 8233:2014 states that:

"For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB LAeq,T"

Table 8 shows that noise levels rise to a high a 60.1dB in some of the neighbouring gardens. Taking in to account the logarithmic scale this represents a 100% increase in loudness relative to the BS 8233:2014 threshold.

4.2 Sound Barrier

The above negative impacts will be suffered by neighbours despite the erection of a 4 metre high sound barrier proposed around the perimeter of the site.

It is not thought that this is a practical, solution and will likely infringe on the right to light of the garden and south facing façades of Downshire Hill Residential Properties. This 4 meter height barrier will have negative impacts on VSC, APSH and Sun on the ground Values enjoyed by these residential dwellings.

Sunlight and Daylight report notes that the barrier will cause breaches in BRE criteria for sun on the ground in gardens at 52, 51 and 50 Downshire Hill. The figures omitted from the text of the report are 84%, 69% and 92% reductions in garden sunlight respectively at these addresses. BRE threshold value is 20% reduction.

8.0 Conclusions

To achieve acceptable IOA ambient internal noise levels for the school use, double glazing is necessitated for which there are no details, or indication of listed building acceptability.

There will be a 100% increase in noise levels to adjacent gardens resulting in levels in excess of 60dB compared to an acceptable level of 50dB, resulting in significant loss of amenity.

Sunlight to adjacent gardens is drastically reduced by up to 92% by the proposed 4m acoustic wall, which has little noise reduction benefit. The BRE threshold value is 20%.

These conclusions should be considered as grounds for refusal.

9.0 Certification

This report is produced for the sole use of the Client, and no responsibility of any kind, whether for negligence or otherwise, can be accepted for any Third Party who may rely upon it.

The conclusions and recommendations given in this report are based on our understanding of the future plans for the site. If, however, the site is developed for a more or less sensitive use, then a different interpretation might be appropriate. Information within this report should not be utilised in making of assumptions and judgements with regard to the financial value of land or property.

For the avoidance of doubt this report does not form a guarantee express or implied against negative impacts of noise or other impacts on persons, property or amenity value within the vicinity of the proposed site.

It necessarily relies on the co-operation of other organizations and the free availability of information and total access.

The scope of this Assessment was discussed and agreed with the Client. No responsibility is accepted for conditions not encountered, which are outside of the agreed scope of work.

This report may suggest an opinion regarding possible concentrations on site and in the vicinity of the site. However, this is for guidance only and no liability can be accepted for its accuracy.