Michael Pia 1 Railey Mews, London NW5 2PA

28th November 2017

PLANNING APPLICATION 2017/6027/P

38 - 52 Fortess Grove NW5 2HB

I am the Freeholder of 1 Railey Mews and have owned the property since 1985. I am writing to **OBJECT** to the proposed planning application **2017/6027/P**.

- 1. The redevelopment of the workshops to office space at the rear of Fortess Road and, in particular, the redevelopment within the workshop facing the back of Railey Mews is not an entirely new planning application, but an extension to applications 2017/4184/P and 2017/4731/P, presided over by Senior Planning officer Mr Gideon Whittingham. The application refers to a UKPN electric substation and 22 heating / condensing units to supply the entire electricity and heating requirements for the two office buildings behind.
- 2. The noise report supplied by Clark Saunders AS9808.170725.NIA1.1, in support of the planning application, does not correctly assess potential acoustic impacts to my house, including through the party walls and to Railey mews. A technical review of the above report conducted by INACUSTIC, a recognised industrial environmental noise and acoustic specialist (see attached document), notes failings in the methodology used and omission of tests required to understand if my house in particular and Railey mews will be polluted with noise from the installation of twenty two heating / condensing units located on a new mezzanine floor attached directly to my part walls.

The report refers to failing and omissions with the Base line survey assessment - approach, Vibration, Facade brake out, Direct - structure - borne and re - radiated sound transfer and others. The Inacustic report recommends the Clark Saunders noise assessment report does not fully assess the potential acoustic effects upon sensitive receptors in the vicinity and should not be considered sufficient to support a grant of planning permission for the Proposed Development

Considering the serious potential for noise pollution, I request, in support of the application, complete working drawings to include the precise position, model of all plant devises, the type, position and quantity of acoustic insulation and anti vibration materials used for the mezzanine floor, party walls, exterior walls and ceilings and clear demarcation on the drawings of the proposed exterior ventilation. Without a meaningful noise assessment report and detailed drawings supporting the application it is impossible to assess the potential noise pollution to my house.

3. I object to the use of the proposed new double doors leading out to Railey mews from the yellow shaded area, drawing number 1014-PL-C-00, being used as a fire exit or inappropriate unfettered ingress for Office / Support Workers to and from the Main Office Development behind. I understand there will be in excess of eighty to one hundred workers housed in the two main office buildings. This entrance will inevitably will become a smokers corner and regularly used route to the pub, shops and transportation points. The sheer number of office / support workers potentially using / having access to this entrance would completely destroy our quiet residential mews and seriously compromised our lives.

The two new double doors are introducing something new to the facade which is part of Kentish town conservation zone. I request detailed drawings of the doors and materials should be provided to support the application.

The proposed doors are immediately adjacent to my two downstairs children bedrooms shown in drawing no 1014-PL-C-S-01.

I request a condition to granting planning would be the aforementioned doors cannot, under any circumstances, presently or in the future, be used as a fire exit, or an unfettered ingress for office / support workers to and from the two Main Office Buildings.

The workshop, positioned betweenS numbers 1 & 2 Railey mews, is within the Kentish Town Conservation zone. I request all the conditions noted for the zone should be adhered to by the developers and in the planning application **2017/6027/P**, including detailed drawing and materials to be used in connection with the exterior of the building.

Yours Faithfully,

Michael Pia 1 Railey mews NW5 2PA Environmental Noise Building Acoustics Industrial Noise



22nd November 2017 **your reference** 2017/6027/P

our reference 17-398

Sent by Email: m.pia44@gmail.com

Michael Pia & Mimi Samson 1 & 2 Railey Mews London NW5 2PA

Review of Noise Assessment Report Submitted in Support of Planning Application at 28-34 Fortess Road, London.

Introduction

inacoustic has been commissioned to undertake an independent review of the acoustic assessment submitted in support of Planning Application 2017/6027/P submitted to Camden Council, for a new plant compound at 28-34 Fortess Road, London. The acoustic report was prepared by Daniel Saunders of Clarke Saunders Associates and bears the reference AS9808.170725.NIA1.1.

Daniel Saunders has been contacted prior to the issuing of this review, to ensure compliance with the Institute of Acoustics' Code of Conduct.

The plant will be installed on a suspended mezzanine floor, within an existing building, adjacent to 1 & 2 Railey Mews. Importantly, the Application Site shares a party wall with 1 & 2 Railey Mews and the mezzanine floor is attached to this wall. The existing pitched roof of the Proposed Development building is, it is understood, to be replaced by an acoustic louvre system, to provide appropriate airflow rates to/from the proposed air handling plant.

Consequently, this technical note sets out our comments on the technical approach taken and any areas of potential risk that may remain unconsidered.

Baseline Survey

The baseline noise environment was determined via a long-term, unattended noise survey spanning Tuesday $13^{\rm th}$ to Thursday $15^{\rm th}$ June 2017, although the end date is erroneously quoted as Thursday $17^{\rm th}$ June 2017, within the report.

Figure AS9808/SP1 of the submitted noise report identifies the location of the Proposed Development, closest receptor (1 & 2 Railey Mews), denoted as 'Receptor A' and the baseline noise measurement location, denoted as 'Monitor A'. It should be noted that the position of Monitor A is to the west of the substantial massing of the pitched roof factory building associated with the Proposed Development and entirely screened from Receptor A. It would appear that the Monitor A position has a direct line of sight to the A400 road to the west of the site. Receptor A is entirely screened from this potential source of noise.



The selection of the measurement position is justified within Section 2.0 of the report by the statement "A suitable monitoring location was not available on the eastern elevation of the building". While this may well have been the case for a longer term, unattended measurement, it would most certainly not have been the case for a shorter duration, attended survey, as Railey Mews is a public road.

In such circumstances, it is suggested that a shorter duration, attended set of measurements at the actual location of the closest noise-sensitive receptor would be preferable to, and more representative than, an unattended measurement at a proxy receptor location, which is exposed to a different set of noise sources.

Moreover, no specific details of the measurement position have been included in the report, discussing the potential constraints such as whether the measurements were undertaken under free-field or façade-field conditions. There are also no photographs of the measurement position included in the report.

Consequently, it is felt that the baseline sound measurement methodology may have been steered by preferable logistics rather than technical correctness and could be compromised, as a result. Furthermore, it is considered that a validation measurement exercise, which considers the baseline environment at the northern façade of 1 & 2 Railey Mews, should be carried out to provide absolute certainty that the baseline acoustic environment at the potentially most affected receptor location is being considered.

Furthermore, meteorological data was not recorded during the baseline survey, and no evidence or source is provided to backup the assertion that "The weather during the survey was dry with light winds, which made the conditions suitable for the measurement of environmental noise". Online records held at Weather Underground indicate that average wind speeds reached 4.4 ms⁻¹, with maximum wind speeds of 10.8 ms⁻¹, and wind speed gusts to 15.8 ms⁻¹ during 15th June in the area.

Table 3.2 of the report, which is referred to in the text as "Table 4.2", presents the spectral background noise measurement results for both the daytime and night-time periods of the survey. The heading of Table 3.2 asserts that the results are "Minimum L_{90} linear spectral levels"; however, the table itself asserts that the levels are A-weighted (L_{A90}). It is assumed that this section of the report is merely stricken with typographic errors, rather than technical ones; however, confirmation should be sought from the report author as to what exactly is being presented.

Assessment Approach

Appendix B of the report sets out the calculation sheets for predicting the sound levels incident upon the closest receptor.

It would appear from inspecting these calculations, that the noise sources have been considered individually as point sources, with distance losses, louvre insertion losses and barrier attenuation losses applied individually, with the cumulative level logarithmically summed at the end of the calculation. While this technique is fairly standard and not challenged for plant operating in an isolated manner, in the open air, it is considered to be technically incorrect for the assessment of noise breakout from a plant room.

 $https://www.wunderground.com/history/airport/EGLC/2017/6/15/DailyHistory.html?req_city=London+City&req_state=\&req_statename=United+Kingdom\&reqdb.zip=00000\&reqdb.magic=104\&reqdb.wmo=WEGLC$



Although the plant room is proposed to be roofed by a continuous acoustic louvre, the space behind it will be, to a degree, reverberant, with the louvre would considered as absorbent, and the calculation should have predicted an internal reverberant level within the plant room, with the noise breakout considered as a single or series of rooftop planar sources, which would have very different attenuation rates, both in terms of distance and any screening losses, to the point sources considered.

As the roof of the Proposed Development is currently, and is proposed to be, pitched, this would elevate the noise source location (emitting to the environment) above the parapet wall of the application building, which would significantly reduce any screening losses afforded by the parapet wall. The predicted screening losses, which are apparently calculated using the Maekawa Method on the basis of point sources, although not explicitly stated in the report, would simply not occur in reality.

Furthermore, no allowance appears to be made within the calculations for acoustic reflections arising as a result of the presence of the larger building to the west. Although, the direct sound field attributable to the eastern pitch of the louvered roof will no doubt be the dominant source at the receptor and the potential reflector comprises a pitched roof, which will reduce the significance of that component further, some evidence of consideration of the potential for reflections from the building to the west would be expected.

Other Considerations

The report considers the potential for environmental noise effects, only; however, there are other potential acoustic impacts that should be considered before a determination of the acoustic suitability of the proposals can be made. These are:

Vibration

The Proposed Development is physically connected to the closest receptor at 1 & 2 Railey Mews, with, as discussed above, the proposed mezzanine floor intended to accommodate the plant, directly connected to the party wall.

Plant of this type, in particular, rotational plant, has the potential to generate vibration, especially during the powering up and powering down cycles, when resonant frequencies may be approached. This effect has the potential to be significantly greater where plant items are mounted on a suspended structure, which does not benefit from mass isolation to the same degree as would be experienced if mounted at ground floor level.

Consequently, the potential for vibration transfer through the structure and into the adjacent receptor property should be appropriately considered, with suggested design specifications for anti-vibration mounts, or similar, proposed accordingly.

Façade Breakout

No assessment of façade breakout through the east wall of the Proposed Development has been undertaken.

The east wall of the development, which fronts onto Railey Mews and is directly adjacent to the front (north) façade of 1 & 2 Railey Mews, contains a large, single-glazed window and a steel, roller-shutter door, neither of which will offer significant acoustic attenuation performances.



Consequently, the likely effects and any upgrade requirements as a result of noise breakout through this façade should also be fully considered, as this has the potential to be acoustically significant at the closest noise-sensitive receptors.

Direct, Structure-Borne and Re-Radiated Sound Transfer

As discussed, the Proposed Development shares a party wall with 1 & 2 Railey Mews and the acoustic performance of this party wall should be appropriately considered, as a significant source of noise is to be proposed on the application side of it. There is significant potential for audible levels of sound transfer through the party wall, especially when considering the low-frequency bias of the generated noise, which may adversely affect the residential amenity of the neighbouring property. This effect could be significantly exacerbated should any degree of re-radiation occur, which typically occurs at low frequencies.

Re-radiated noise and structure borne noise should also be considered in relation to the common elements between the source and receptor locations. The assessed plant items will be directly fixed to a floor, which provides a direct transmission path through the structure, into the adjacent property, yet this is not only not assessed, but is not even considered in the report, which is a significant omission.

It is considered that the acoustic performance of the existing party wall should be obtained, via a diagnostic sound test, and the potential for sound transfer through this wall appropriately assessed. Furthermore, the potential for structure-borne noise and vibration transfer should also be fully considered and assessed, with the design tailored appropriately. This may involve the specification of additional sound insulation to the party wall and the separation/isolation of all common structural elements, in order to prevent acoustic transfer into the adjacent receptor.

Summary

The noise assessment report produced by Clarke Saunders Associates for the Proposed Development has been considered both in terms of its technical correctness, relating to what has been considered, and areas that should have been considered, but have not.

The assessment approach adopted is considered to be flawed; both in terms of the baseline survey methodology and noise prediction methodology, resulting in the significant potential for environmental noise impacts to be much higher at the closest noise-sensitive receptor than those presented within the report.

The assessment has also not considered other potentially significant means of acoustic transfer to the adjoining receptor at 1 & 2 Railey Mews, meaning that the impact upon their residential amenity has not been fully considered.

Consequently, it is felt that the noise assessment report does not fully assess the potential acoustic effects upon sensitive receptors in the vicinity and should not be considered sufficient to support a grant of planning permission for the Proposed Development. Before such a decision can be made, the noise assessment report should be revised, as advised above, and expanded to consider the other potential avenues for acoustic impact, with appropriate mitigation measures set out, where necessary.



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