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Ref: 23102.240214.L4

Sue Wheatcroft
Architectural Technologist
Norder

Dear Sue,

23102: HEINEKEN MANCHESTER – NEW WAREHOUSE

Introduction

KP Acoustics has been commissioned to assess and advise on the potential breakout of noise, relating to the installation of a new warehouse at Heineken, Denmark Road, Manchester, M15 6LD. Manchester City Council, in condition 6 of their planning decision regarding the site, states:

"Prior to commencement of the use hereby approved a Noise Management Plan (NMP) shall be submitted to and approved in writing by the City Council as local planning authority. The NMP shall include an assessment of noise from all activities associated with the loading bay, service yard and loading dock area. The scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority."

Previous Noise Study

A full study of the noise environment was carried out and detailed in KP Acoustics report with reference 23102.PCR.01, dated 23/12/2021. This study included a noise survey with noise measurements of the surrounding area, taken between 18:46 on 27/09/2021 and 14:41 on 28/09/2021. Detailed measurements of many noise sources at the Heineken site were also taken during this time, and a computer model of the noise contribution of the site to the wider environment was created as part of the study.

In the above study the noise impact of the site was found to be acceptable, with mitigation measures recommended to bring down the noise levels of some elements which had been complained about or were otherwise found to need noise mitigation.

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Description of Proposed Finished Goods Warehouse

A new finished good warehouse is proposed at the north portion of the site bordering Greenheys Lane. This warehouse will be used to stack finished goods, and load them to lorries. We have been informed by the client that this will not lead to increased activity at the site; rather it allows moving the activity described above to the new warehouse, from the existing palletiser building.

The proposal is described below, with any useful noise mitigation measures included. The location of the proposed warehouse is shown in Figure 1.1, and the layout of the warehouse is shown in Figure 1.2.

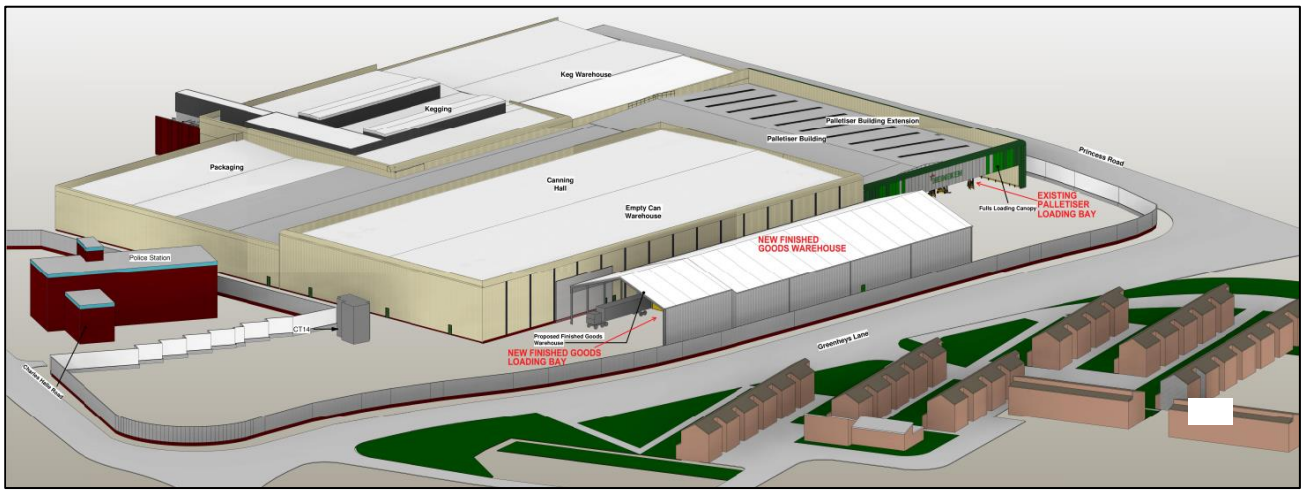


Figure 1.1 Proposed Warehouse Location (Source: Norder)

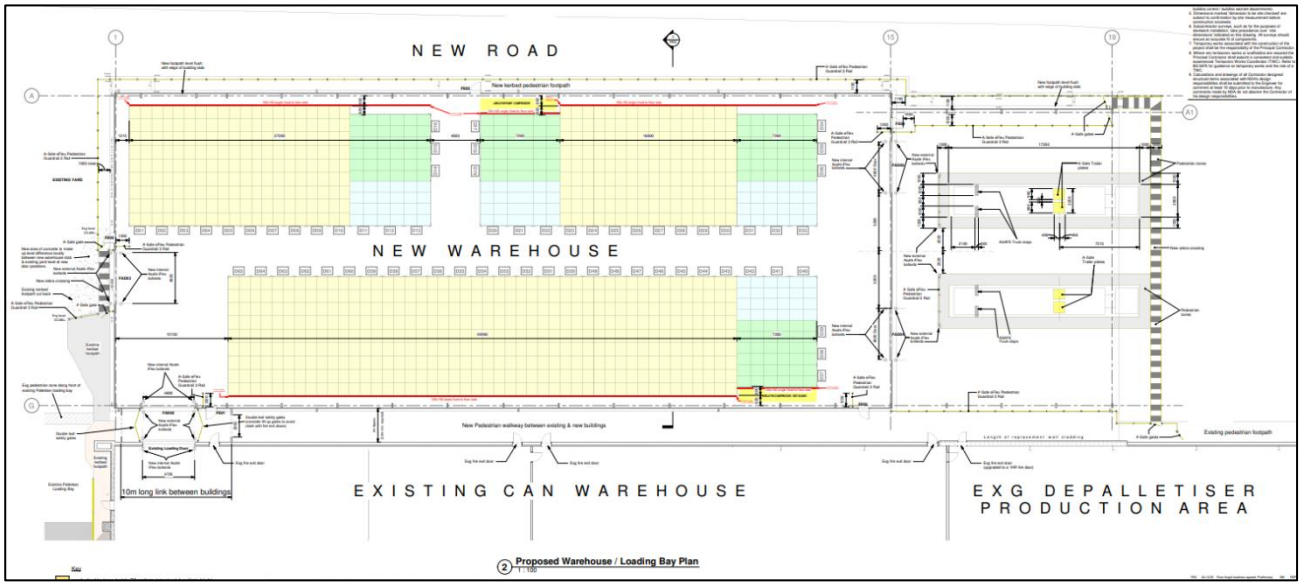


Figure 1.2 Proposed Warehouse Layout (Source: Norder)

Deliveries/Lorries

Lorries will drive up to the new proposed warehouse and park on the bays shown at the right of Figure 1.2 as they are loaded/unloaded. For the nearest receivers, this results in an activity which is the same as before, and at the same distance, but moved further east, affecting different receivers than with the existing

situation. To prevent disturbance, it will be necessary to enforce a ban on idling while the lorries are waiting at the warehouse bays. This should be done through signage and supervision by the present staff, and it is understood that this is already current practice.

Noise Breakout from the Proposed Finished Goods Warehouse

The proposed finished goods warehouse is to be constructed with metal cladding, with the sound reduction properties shown in Table 1.1.

Element	Octave band centre frequency SRI, dB					
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
JI Vulcasteel FT Thick	25	23	22	33	46	57

Table 5.1 Assumed sound reduction performance for non-glazed elements

The activities in the proposed warehouse will be stacking of products ready to be shipped, and loading of lorries at the loading bay. The noisiest part of this is understood to be operation of the electric forklifts. Assuming a worst case noise level of 66dB(A) for the operation of 5 forklifts within the proposed space, and taking into account the manufacturer's reported R_w rating of the cladding described above, the resultant noise level at the nearest receivers will remain at least 10dB below the targets set out in KP Acoustics report with reference 23102.PCR.01, dated 23/12/2021. This will ensure the internal operations at the proposed warehouse remain inaudible at the nearest noise sensitive receivers, and do not contribute to 'noise creep'.

Noise Management Plan

The following Noise Management Plan should be put in place to prevent increased noise levels at the proposed site:

- The above cladding system shall be implemented in full
- Enforce a ban on idling while the lorries are waiting at the warehouse bays. This should be done through signage and supervision by the present staff
- Signage should be displayed wherever moving plant is operated to encourage reduction of noise while operating machinery
- Doors and windows should be kept closed at all times except when used for access or purge ventilation.

- Doors should be of a soft-close type, and loading shutters should be installed that do not impact or rub on the structure/floor to avoid generating noise of metal on metal.

Conclusion

Proposals for a new finished goods warehouse have been examined, and the buildup of the proposed structure has been assessed in the context of the proposed activity. It has been found that the noise levels at the nearest representative receiver will not increase as a result, due to the similar nature of the activity after installation of the proposed facility. A noise management plan has been proposed to prevent excessive noise transfer from the new facility to the nearest residential receivers.

We trust that the above information is sufficient with regards to answering the key issues raised.

Yours sincerely,

John Cane MSc MIOA

KP Acoustics Ltd