

Warrington Local Plan Examination

Hearing Session Note

Action 36

Matter 7d – Technical Note: Noise
produced on behalf of site promoter –
Gladman Developments Ltd

11th October 2022

Introduction

- 1.1 This note has been prepared to address points, raised in the Hearing Session about the proposed Warrington Road/Pool Lane allocation (OS4), in respect of comments made in the hearing session.

2. Information Provided

- 2.1 Technical Note on noise produced by Noise Consultants Ltd on behalf of the site promoter Gladman Developments Ltd.

Technical Note: Noise

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To	Neil Williams	Date	12/10/2022
	Gladman Developments Ltd	Our Reference	13647B-20-R01-01-F02
		Your Reference	2017-138
		Issued By	David Sproston Principal Consultant
		Approved By	James Trow Managing Director
		Subject	LAND OFF POOL LANE/WARRINGTON ROAD, LYMM

Introduction

This note describes in outline terms, the suitability of land off Pool Lane/Warrington Road, Lymm (the 'Site') for residential development with regards to noise. This opinion is based on the work completed for the site to date by Noise Consultants Limited (NCL). It is acknowledged that a detailed noise assessment would be submitted as part of any future planning application and appropriate conditions would be appended in order for detailed assessment and modelling to inform any mitigation requirements.

Background

NCL has been appointed by Gladman Development Ltd to advise them of the existing noise climate and undertake a site suitability assessment for residential development on the site. NCL have been retained by Gladman Development Ltd to prepare a Noise Assessment to accompany an outline planning application.

Road traffic noise from the elevated section of the M6 Thelwall Viaduct to the west of the Site is the main source of noise affecting the amenity of future residents of the proposed residential development at the Site. As noted in Policy OS4 of Warrington Borough Council's (WBC) draft Local Plan some noise from Statham Lodge Hotel may be present in a limited area of the Site.

An initial noise study has been completed for the Site, which has:

- Established existing baseline noise levels at the Site by a site-specific noise survey, over the course of several days and nights, with data collected from a number of representative locations along the western boundary and within the site.
- Included preparation of an initial computer noise model to determine the suitability of the Site for residential development and assist in informing the layout through an iterative process to ensure acceptable levels of residential amenity can be achieved.

External Amenity

From the work completed to date, reducing daytime noise levels in all rear gardens using the layout and development massing, to ensure acceptable residential amenity for future residents, is feasible. This outcome is based on reducing external noise levels to or below 55 dB $L_{Aeq,16hr}$, as recommended in well-established guidance and standards, as are used by Warrington Borough Council to evaluate noise impacts.

As a worse case, the first line of properties located along the western boundary could be orientated westwards to provide a near continuous built form, with a combination of house types and garages with a varying building line, in order to achieve the required levels in rear gardens. Properties located further eastwards into the site would then be less susceptible to daytime noise and rear gardens could be orientated more flexibly and would also be capable of achieving daytime noise levels below 55 dB $L_{Aeq,16hr}$.

More detailed modelling and assessment will form part of an outline application including an indicative layout and noise assessment criteria in the normal way, which would then be satisfied by noise conditions in the normal way at the reserved matters stage.

Internal Amenity (particularly during the night)

From the initial assessments of the night-time noise climate and the potential position of dwellings relative to the western boundary, the worst case is that the western elevation of those properties closest to the western boundary would benefit from improved glazing (6:12:4 mm glazing for Living Rooms and 8:12:6 mm glazing for Bedrooms, including Acoustic Trickle Vents). This would enable typical internal noise levels for properties along the western boundary to accord with the requirements outlined within BS8233:2014, as would be required by WBC, but may be a necessary requirement of more stringent building regulation standards (see below), in any event.

As of 15th June 2022, Part L – Interim Standard comes into force which introduces more stringent requirements for the thermal efficiency of homes.

Part O of the Building Regulations also came into force on 15th June 2022 and identifies the requirements of providing adequate ventilation either via the Simplified Method or the Dynamic Thermal Modelling Method, where the simplified method cannot achieve the desired outcomes. As a result, mechanical ventilation is likely to become a feature that could assist the noise environment and the design of some dwellings on this site.

In addition, from 2025 when the dwellings from this site could be expected to be commenced, it is anticipated that the Future Homes Standard Part L (Net Zero Ready 75-80% reduction in CO₂ emissions) will come into force. This will require a further step change in dwelling design

which could also assist with the noise properties of dwellings and the way in which they are heated and cooled. As part of this progression, it is expected that there will be an increase in the use of heat recovery systems and air source heat pumps as a way of controlling the temperature in dwellings. At this point in time, the detailed requirements of this standard are not yet known in detail, but the headline objectives are expected to result in the use of more advanced heating and cooling systems for our homes, which will also have added benefits of aligning with some of the noise mitigation methods which could be used to achieve suitable internal noise levels at night within bedrooms on this site.

It is considered that suitable noise mitigation schemes (pursuant to planning conditions) can be devised in order to achieve the requisite internal noise levels whilst providing a range of alternative choices to assist the adequate ventilation and cooling of dwellings.

Conclusions

Accordingly, from the work completed to date, the site is considered suitable for noise-sensitive residential development, provided that a commensurate level of protection against noise is incorporated into its design to secure an acceptable degree of amenity for the future incoming residents. Further, more detailed assessments will inform the composition and details of all properties as part of the subsequent planning application processes.

NCL and Gladman consider that the work undertaken to date is proportionate and sufficient to demonstrate that the site is deliverable within the plan period, and that Policy OS4 is positively prepared, justified, effective and consistent with national policy and therefore sound.

Should the Inspector wish to add an additional level of certainty to the policy then Gladman consider that a main modification to Policy OS4 to make it clear that a noise assessment would be required to be submitted as part of any planning application for residential development when the site comes forward, would give this certainty.

As presently drafted, Criterion 21 of Policy OS4 stipulates that the design of development must incorporate appropriate measures to mitigate noise impacts from Statham Lodge Hotel (which has also been assessed as part of the noise assessment work that has been undertaken to date).

In the interests of clarity and for the avoidance of doubt, it may also be helpful to state that noise from the M6 corridor should also be taken into consideration within this criterion, via a main modification.

Kind regards,

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Principal Consultant