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supplementary planning guidance

Planning and noise

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Supplementary planning guidance

PLANNING AND NOISE

Introduction

1.1 The aim of this supplementary planning guidance is to provide developers with information on dealing with the planning process where, new noise sensitive developments are planned near to existing noise sources and where potentially noisy developments are introduced into existing noise sensitive areas.

1.2 This guidance takes into account current policy in relation to planning and noise and provides guidance on undertaking noise assessment which may be required for any potential development in determining planning applications.

Planning and noise

2.1 Generally developments, where noise is an issue, fall into two main categories:

(1) The introduction of housing developments or other noise sensitive developments, such as hospitals schools or residential homes, close to existing significant transportation noise sources (road, rail, and aircraft) or noisy industry or commerce.

(2) The introduction of industrial or commercial developments close to noise sensitive land uses.

Where developments fall into categories above, and noise is considered to be a material consideration in determining a planning application, a noise assessment will be required to assess the potential noise impact on or from the development.

2.2 Planning guidance on noise aims to separate noisy and noise sensitive land uses. However, mitigation of noise impact through separation alone can be difficult to achieve. Noise sensitive developments may need to incorporate mitigation measures through design, layout, construction or physical noise barriers to achieve acceptable acoustic conditions.

2.3 Whilst it may be possible to mitigate the adverse effects of noise, noise-sensitive development will rarely be appropriate in areas, which are already subject to unacceptably high noise levels.

2.4 Existing industry or commerce need to be protected from the adverse impacts of complaints of nuisance from residents of new housing or other sensitive developments.

Policy and guidelines

3.1 The Finalised West Lothian Local Plan 2005, includes Policy IMP10 and IMP11 in Chapter 12:

POLICY IMP 10

There is a presumption against developments that are likely to generate significant amounts of noise being located close to noise sensitive developments such as existing or proposed housing."

POLICY IMP 11

Housing and other noise sensitive developments will not normally be permitted close to existing noisy land uses. The only exceptions will be where it can be demonstrated that:

a) through design or mitigation, satisfactory internal and external noise levels can be achieved at the noise sensitive development; and

b) through design or mitigation, there will be no adverse impact on the continued operation of any existing or proposed business or activity.

Paragraphs 12.58 and 12.59 of the local plan also acknowledge that:

The assessment of noise is a complex issue and it is therefore necessary to consider each proposal on its merit. In all circumstance the council will adopt a precautionary approach….

Additionally, unless it can be demonstrated that there are exceptional circumstances, noise assessments undertaken to predict internal noise levels within houses and other noise sensitive developments, will require noise prediction methodology to be based on an open window scenario.

3.2 Only in exceptional circumstances (see 3.4) should satisfactory internal noise levels be achievable with windows closed and other means of ventilation provided. Where these exceptional circumstances exist, and achieving satisfactory internal noise levels are based upon closed windows, external amenity areas may well be noisier than would otherwise be considered acceptable. For this reason it is considered that flatted developments, where common outdoor areas are the norm, are considered a suitable type of residential development. It would not be however be considered acceptable for private garden grounds to have unnacceptable external noise levels. For this, reason exceptional circumstances are only likely to apply to flatted developments nears to existing significant transport noise sources.

It may be possible for sites exposed to higher levels of transportation noise to have a mix of flatted development and housing, providing the flatted dwellings face the noise source and provide a barrier to the rest of the development site. Where houses are considered within the mix of a development, internal noise levels will have to be considered to be achievable with an open window.

3.3 Where internal noise levels can only be achieved with closed windows, developers will need to demonstrate that all other mitigation measures have been exhausted to reduce external/internal noise levels.

These measures may include:

- screening by natural barriers, or purpose built acoustic barriers, other buildings or non critical rooms or elevations of a building, and/or
- minimum separation distances from transport sources, design and layout of the development.

Exceptional circumstances

3.4.1 In lieu of noise impact assessments, that may be required for development proposals, only an indicative guide can be given to cases, which might merit special consideration. Owners, purchasers and developers of land should be aware of the potential constraints on residential and other noise sensitive development near to transport noise sources.

3.4.2 Exceptional circumstances derive from the aim to promote sustainable development and transport within West Lothian. The benefits of such development include:

- reducing urban sprawl;
- reducing uptake of greenfield sites; and
- promoting higher levels of density near transport hubs, town and local centres.

3.4.3 Exceptional circumstances will, therefore, generally only apply to sites, which are small to medium scale infill sites in urban areas. This will include sites in established residential areas; brownfield sites; town and village centre sites; and, sites near public transport hubs. Exceptional circumstances are only likely to apply to flatted residential developments.

Noise sources and guidance

4.1 Transportation noise

Planning Advice Note 56 *Planning and Noise*[1] provides advice on different major sources of noise and specifically suggests the use of Noise Exposure Categories (NEC's) to determine applications for residential development on sites subjected to noise from road, rail, air, and mixed transportation sources. The noise category does not take into account industrial noise. NEC's place planned developments into categories A to D, based on measured or predicted noise levels, prior to any consideration of mitigation measures to reduce noise.

4.2 Sites falling into Category D are unlikely to be granted planning permission for residential use. Sites in Category C will not normally be granted permission however permission may be granted for housing subject to measures that ensure and adequate level of protection. An adequate level of protection should normally be interpreted to mean commensurate with Category A noise levels.

4.3 Where exceptional circumstances are demonstrated and where the residential development is desirable in terms of overall planning strategy for the area but where local circumstances or excessive costs prohibit the effective mitigation of noise commensurate with Category A (PAN56) levels, consideration will be given to relaxing noise standards.

4.4 Road traffic

Road traffic noise can be assessed using the method set out in *Calculation of Road Traffic Noise 1998*[2] (CRTN) and *The design Manual for Roads and Bridges* 1994[3]. For existing road noise, measurement of noise levels should be undertaken in accordance with the methodology set out in CRTN. It is however acceptable to undertake a shortened survey method as described in CRTN. Where night-time traffic is considered to be significant a noise survey during the night will also be required.

4.5 Rail traffic

The method set out in *The Calculation of Railway Noise*[4] will be of assistance in determining rail traffic noise. A noise measurement survey will be required for existing track usage. Where the survey is based on noise measurements of a sample of trains using a specific track, the number of train bypass used in the sample should be sufficiently representative of the total use of the track.

4.6 Industrial or commercial noise

Industrial or commercial noise sources can be difficult and complex to assess and requires to be considered in detail. There is no definitive guidance to assess this type of noise. However BS4142[5] is a method of rating industrial and commercial noise. Although an assessment based on BS4142 is useful it should not be relied solely upon to accurately establish the impact of industrial development or noise from existing developments. Developments will be considered on its merits, the methodology of any assessment of the impact of noise will depend on the nature and characteristics of potential or existing noise emissions.

It is therefore important that developers have their appointed noise consultants discuss the extent and methodology of any noise assessment with Environmental Health at an early stage to avoid unnecessary delay in the planning process.

It should be noted that the Scottish Environment Protection Agency (SEPA) would regulate noise from certain prescribed industrial processes. Notwithstanding this regulatory role by SEPA, the local authority will determine whether any noise impact on existing or proposed residential development from such industrial process is significant. The local authority will liaise with SEPA regarding any such prescribed process.

4.7 Construction site noise

Most developments will have initial site noise associated with the construction phase of the development. It is accepted that higher levels of noise will be associated with what is regarded as a relatively temporary situation. However construction noise is most effectively controlled by means of the Control of Pollution Act 1974[6].

Detailed guidance on noise issues relating to construction sites can be found in the *Code of Practice* BS 5228[7]. A Guide for Contractors titled *Construction Site Noise* is available from the Planning department.

4.8 Noise from specific developments

Some developments such as wind farms and mineral extraction sites are governed by specific detailed guidance and are therefore beyond the scope of this guide.

Policy and noise criteria

The following policies and criteria are not exhaustive and other criteria may apply depending on local circumstances and on the nature and characteristics of noise sources impacting upon any noise sensitive premises.

5.1 Residential development subjected to transportation noise sources will have to ensure that internal noise levels are within current guideline levels. Reference should be made to WHO[8], BS8233[9] and PAN56 documents.

Internal noise levels are required to achieve $L_{Aeq\ (16hour)}$ 40-45 dB and $L_{Aeq\ (8hr)}$ 30 – 35 dB

Where internal noise levels are to be achieved with closed windows (i.e. in those cases where exceptional circumstances exist), the building façade will require to be insulated to achieve a daytime internal level of $L_{Aeq\ (16hour)}$ 40 dB and a night-time internal noise level of $L_{Aeq\ (8hr)}$ 30 dB. In these situations alternative means of acoustic ventilation may be required.

In order to prevent serious annoyance within outdoor living areas an external (free-field) level of $L_{Aeq\ (16hour)}$ 50 – 55 dB daytime should be achieved.

5.2 Industrial or commercial noise sources such as fans and ventilation system for example will require to meet Noise Rating Curve NR 25 during the night when measured within a noise sensitive property with windows open for ventilation. A lower Noise Rating Curve may be applicable depending on the nature and characteristics of the noise source, for example where a discernible tone is obvious.

5.3 New commercial developments where amplified music or broadcasting is an activity require to comply with inaudibility criterion within any neighbouring noise sensitive property

5.4 Construction site operations in general will be restricted to 07.00 –19.00 Monday – Friday and 08.00 – 13.00 Saturday so that noise is not audible at noise sensitive premises outwith these times. Depending on local circumstance, a start time of no earlier than 08.00 may be appropriate.

Any intended divergence from these operating times, require to be approved by the Development Manager.

5.5 Under normal circumstances, evening, night-time and Sunday working will not be considered reasonable. There may be exceptions to this, for example for reasons of public safety and/or Police requirements. In such cases contractors need to demonstrate that other Authorities require work to take place at these times.

5.6 Noise emissions from construction site activity, is controlled by the Control of Pollution Act. Section 60 of this legislation allows where necessary, restrictions to be placed on construction sites. This may include time restrictions, plant and machinery restrictions, and noise limits. However, many issues with construction sites are usually resolved informally.

Noise assessments

6.1 Where a noise impact assessment is required, these must be undertaken by suitably qualified and competent persons, usually a noise consultant.

6.2 Noise reports must be concise and contain sufficient information for the authority to assess the contents. Insufficient detail on the methodology and calculations used can result in a delay in the review process. Report should provide the basic information required for environmental noise reports and in particular information that is contained within BS 7445[10].

6.3 Except in exceptional circumstances predictions of internal noise levels within noise sensitive premises, must be calculated based on an open window scenario. The degree of sound insulation afforded by a partially open window should be taken as 10 –15 dB. For transportation noise sources reference should be made to PAN 56 regarding an open window. Industrial noise due to its nature and characteristics is only likely to achieve the lower limit of noise insulation across a partially open window (10 dB).

6.4 Any assumptions used in the prediction of noise levels must be clearly stated in the noise report. Reports must provide a sample calculation in order to demonstrate clearly how noise figures have been obtained.

GUIDANCE DOCUMENTS

1. Planning Advice Note PAN 56, Planning and Noise.1999
2. Calculation of Road Traffic Noise (DoT , Welsh Office 1988)
3. Design Manual for Roads and Bridges (DoT, 1994)
4. The Calculation of Railway Noise (DoT, Welsh Office 1995)
5. BS4142:1997 Method for Rating Industrial Noise affecting Mixed Residential and Industrial areas
6. Section 60 Control of Pollution Act 1974.
7. BS5228:1997 Noise and Vibration Control on Construction and Open Sites.
8. World Health Organisation. Guidelines for Community Noise. 1999
9. BS8233:1999 Sound Insulation and Noise Reduction for Buildings – Code of Practice
10. BS7445:2003 Description and Measurement of Environmental Noise.

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