Appendix 11.1: Legislation, Policy and Guidance – Noise

The Welsh Assembly Government (1997), Planning Guidance (Wales) TAN 11 – Noise

TAN 11 (Wales) provides advice on *'how the planning system can be used to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business.*'

For noise sensitive developments, Paragraph 10 states:

> *"Local planning authorities should consider whether proposals for new noise-sensitive development would be incompatible with existing activities, taking into account the likely level of noise exposure at the time of the application and any increase that may reasonably be expected in the foreseeable future. Such development should not normally be permitted in areas which are, or are expected to become, subject to unacceptably high levels of noise and should not normally be permitted where high levels of noise will continue throughout the night."*

The TAN11 guidance provides specific Noise Exposure Categories (NECs) for proposed Residential Developments which aim to assist local planning authorities (LPAs) to determine the suitability of areas for development. With regard to noise sensitive developments, the guidance suggests that LPAs should consider the compatibility of existing activities taking into account the noise exposure at the time of the application and any foreseeable increase in levels in the future. Development should not normally be allowed in areas which are exposed to unacceptably high levels of noise, particularly where these levels continue throughout the night.

The guidance provides specific advice on methods for mitigation of noise levels which may be proportionate and reasonable, including options which contains solutions for:

- Engineering
- Layout
  Administrative options

The TAN11 guidance puts a potential residential site that are exposed to transportation noise into daytime (07:00 – 23:00) and night-time (23:00 – 07:00) period Noise Exposure Categories (NEC's) which affect the likelihood of planning permission being approved. The proposed development site is affected by road traffic noise, hence the 'Road Traffic Noise Sources' levels have been used for this assessment as presented in **Table 1**.

Table 1: Recommended NECs for New Dwellings Near Existing Road Traffic Noise Sources, TAN 11

oise Exposure Category (NEC)	Noise Levels Corresponding to The Noise Exposure Categories For New Dwellings $L_{Aeq,T}$ dB for Road Traffic Noise Sources		
	Daytime $L_{Aeq, 0700-2300}$	***Night-time*** $L_{Aeq, 2300-0700}$**	**Guidance**
A	< 55	< 45	Noise need not be considered as a determining factor in granting planning permission, although the noise level at the high end of the category should not be regarded as desirable.
B	55 - 63	45 - 57	Noise should be taken into account when determining planning applications and, where appropriate, conditions imposed to ensure an adequate level of protection.
C	63 - 72	57 - 66	Planning permission should not normally be granted. Where it is considered that permission should be given, for example, because there are no alternative quieter sites available, conditions should be imposed to ensure a commensurate level of protection against noise.
D	> 72	> 66	Planning permission should normally be refused.

* Night-time noise levels (23.00 - 07.00): sites where individual noise events regularly exceed 82 dB L_{Amax} (Slow time weighting) several times in any hour should be treated as being in NEC C, regardless of the $L_{Aeq,8h}$ (unless already NEC D).

The Welsh Government has committed to a detailed review of Technical Advice Note 11, which will be replaced with new guidance addressing air quality and soundscape. The draft plan aligns noise and soundscape policy in Wales and encourages greater integration between noise and air quality management activities by public bodies.

Institute of Environmental Management and Assessment (IEMA) (2024), Guidelines for Environmental Noise Impact Assessment

The Institute of Environmental Management and Assessment (IEMA) – Guidelines for Environmental Noise Impact Assessment provides a methodology for noise impact assessment which achieves integration with the Environmental Impact Assessment (EIA) process. The guidelines cover:

- how to scope a noise assessment;
- issues to be considered when defining the baseline noise environment;

- prediction of changes in noise levels as a result of implementing development proposals; and
- definition and evaluation of the significance of the effect of changes in noise levels.

Highways England (2020), Design Manual for Roads and Bridges (DMRB) LA 111 Noise and vibration, Revision 2

DMRB LA111 is accepted as the standard methodology within the United Kingdom for evaluating the noise impacts of road traffic resulting from road projects. DMRB allocates an assessment method according to risk, the process of which utilises 3 levels of assessment; scoping, simple and detailed.

Department of Transport, Welsh Office (1998), Calculation of Road Traffic Noise

Guidance and methodologies for predicting road traffic noise are detailed in the document Calculation of Road Traffic Noise (CRTN). This methodology combines data on road traffic flows, mean traffic speeds and traffic composition in terms of percentage of Heavy Goods Vehicles (HGV), road and site layouts in order to calculate and predict road traffic noise at a selected location. A methodology for the calculation of hourly road traffic noise is also presented. The LA10(18 hour) parameter has historically shown a good correlation with community response to road traffic noise and is often referred to as the 'UK traffic noise index'.

British Standards Institute (2014), BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

BS 5228-1 provides guidance on the prediction and assessment of noise from construction related activities. The Standard provides methods of predicting noise levels from various demolition and construction works, using noise emission data of typical plant items, information for which is provided within the Standard. Corrections are applied to the noise level to account for likely percentage on-time, the effect of intervening barriers, ground effects and distance to the assessment location. The Standard also provides advice on practical measures that may be undertaken to control noise from construction sites.

BS 5228 considers construction activities involving large scale and long-term earth moving activities to be more akin to surface mineral extraction than to conventional construction activity. It therefore suggests that the guidance contained within the Technical Guidance to the National Planning Policy Framework needs to be taken into account when setting criteria for acceptability.

The Technical Guidance states:

> *"Subject to a maximum of 55dB(A) $L_{eq,1h}$ (free field), mineral planning authorities should aim to establish a noise limit at the noise-sensitive property that does not exceed the background level by more than 10dB(A). It is recognised, however, that in many circumstances it will be difficult to not exceed the background level by more than 10dB(A) without imposing unreasonable burdens on the mineral operator. In such cases, the limit set should be as near that level as practicable during normal working hours (0700-1900) and should not exceed 55dB(A) $L_{eq,1h}$ (free field). Evening (1900-2200) limits should not exceed background level by more than 10dB(A) and night-time limits should not exceed 42dB(A) LAeq,1h (free field) at noise-sensitive dwellings."*

Based upon the above, BS 5228 suggests that a limit of 55 dB $L_{Aeq,1h}$ is adopted for daytime construction noise for these types of activities, but only where the works are likely to occur for a period in excess of six months. This will be the adopted criteria for our assessment.

British Standards Institute (2003), BS 7445-1: 2003 Description and measurement of environmental noise – Part 1: Guide to quantities and procedures

BS 7445 defines the basic quantities to be used for the description of noise in community environments and describes basic procedures for the determination of these quantities. The methods and procedures described in this British Standard are intended to be applicable to sounds from all sources, individually and in combination, which contribute to the total noise at a site.