

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

ES Appendix 10.5 Noise Survey Method Statement

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations
2009 Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
Regulation 14

This document forms a part of the Environmental Statement for the Hinckley National Rail Freight Interchange project.

Tritax Symmetry (Hinckley) Limited (TSH) has applied to the Secretary of State for Transport for a Development Consent Order (DCO) for the Hinckley National Rail Freight Interchange (HNRFI).

To help inform the determination of the DCO application, TSH has undertaken an environmental impact assessment (EIA) of its proposals. EIA is a process that aims to improve the environmental design of a development proposal, and to provide the decision maker with sufficient information about the environmental effects of the project to make a decision.

The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects.

Further details about the proposed Hinckley National Rail Freight Interchange are available on the project website:



The DCO application and documents relating to the examination of the proposed development can be viewed on the Planning Inspectorate's National Infrastructure Planning website:

<https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/hinckley-national-rail-freight-interchange/>

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Method Statement

Project	Hinckley Rail Freight Interchange		
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Hinckley Rail Freight Interchange – Baseline Noise Survey

As part of the noise and vibration assessment for the proposed Strategic Rail Freight Interchange (SRFI) at Hinckley, a baseline noise survey is required. This document sets out the methodology for undertaking the baseline noise survey.

Objectives

Purpose of the Noise Survey

The purpose of the baseline noise survey is to characterise the existing ambient and background noise levels at nearby existing sensitive receptors (ESRs). Characterising the local noise environment in this way will allow the impact of any noise generating sources associated with the SRFI to be assessed against the existing baseline conditions.

The ambient sound level refers to the equivalent continuous sound pressure, which is influenced by sources near and far. It is the averaged total sound level over a specified time period. This is the level which the noise from any noise generating sources associated with construction phase will be compared against.

The background level, which is also called the L_{A90} value, is the level that is exceeded 90% of the time. This is the level which the noise from any noise generating sources is compared against.

The measured noise levels will be used for the following;

- Ambient noise levels
- Construction phase noise assessment
- Development generated road traffic assessment and assessment of offsite rail noise, where required.
- Background noise levels
- On-site operational assessment including loading/unloading activities and onsite rail noise.
- Setting of limits to be achieved by fixed plant and equipment.

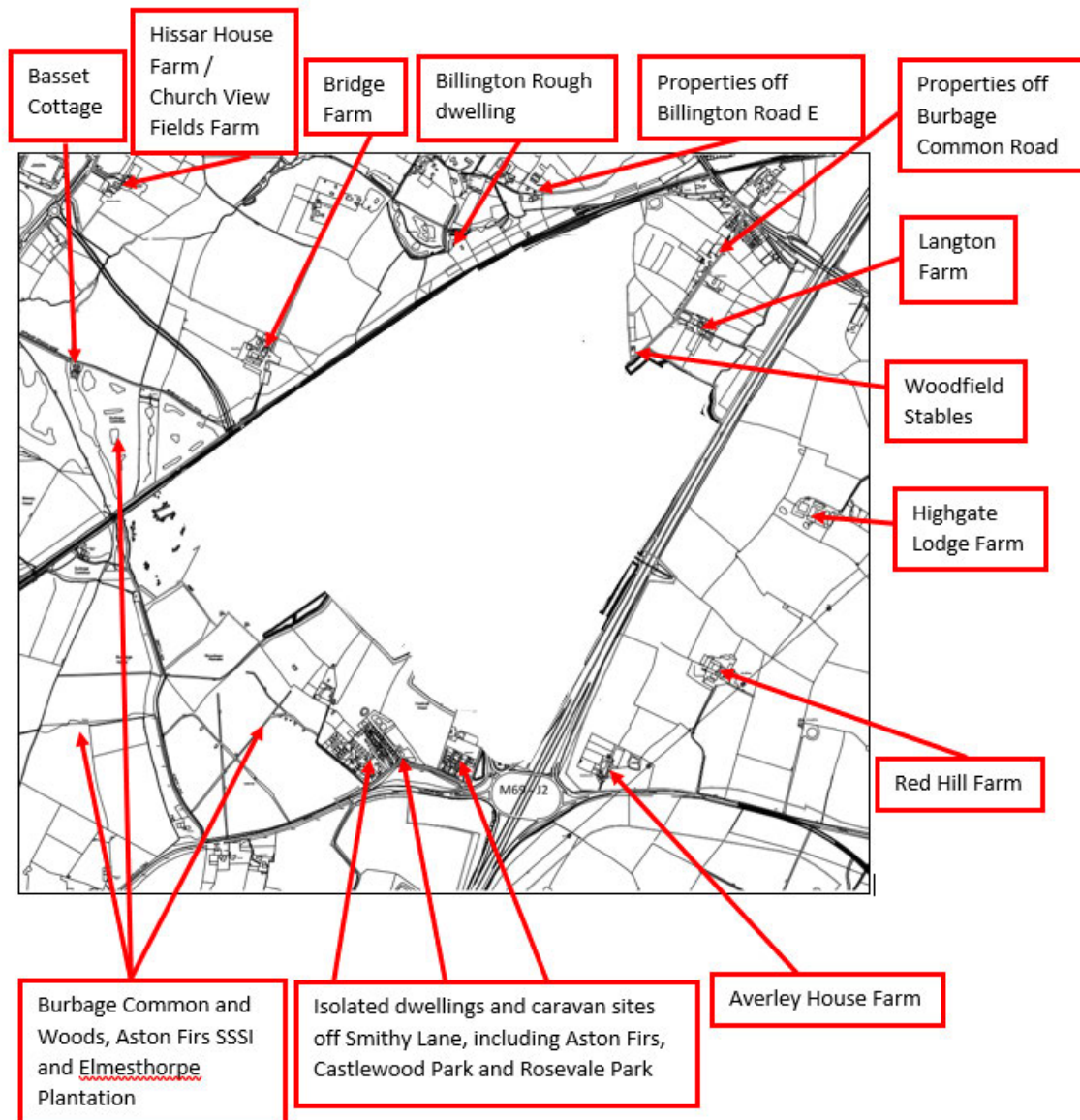
Monitoring will be undertaken at locations considered representative of ESRs that may experience an impact as a result of the proposals. The survey will be undertaken to cover a

seven-day period to capture any fluctuations in the noise levels from day to day, particularly over the weekend period when noise levels are generally lower.

In addition, noise monitoring will be undertaken in the vicinity of receptors to the proposed link road, to cover a 24-hour period on a weekday.

The nearest receptors to be considered are shown below in Figure 1. It is also understood that there is a proposed crematorium which has planning consent (18/00751/DEEM), located off the junction of the A47, B4668 and The Common, which will also need to be considered within the assessment.

Figure 1 – Identified Existing Sensitive Receptors



We will liaise with the projects ecologists and provide any noise data that is required for ecological receptors.

Noise monitoring will be undertaken in accordance with the following guidance;

- BS7445-1: 2003 Description and measurement of environmental noise – Part 1: Guide to quantities and procedures; and

- BS4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound.

Noise Survey

It is anticipated that monitoring will be undertaken at up to four locations over a seven-day period, providing secure locations are available, and one location over a 24-hour weekday period. The noise level meters will log the noise levels continuously over the monitoring period.

Following the site walkover, monitoring locations have been identified for ML1, ML3, ML4 and ML5 (shown in red). For ML2, the preferred monitoring location is shown, however, should it not be possible to install a meter in this location, it is anticipated that monitoring could be undertaken within the areas shown in blue. Table 1 details the ESRs that are considered to be represented by each monitoring location.

Figure 2 – Proposed Monitoring Locations



Table 1 – Monitoring Locations and Nearby ESRs

Monitoring Location	ESRs
1	Representative of ESRs at Woodfield Stables, Langton Farm
2	Representative of ESRs at Aston Firs caravan park, Castlewood Park, Averley House Farm, Rosevale Park
3	Representative of Burbage Common and woods, Aston Firs SSSI and Elmesthorpe Plantation
4	Representative of Bridge Farm, the single dwelling at Billington Rough, dwellings off Billington Road East.
5	Representative of Hissar House Farm, Church View Fields Farm and the proposed crematorium

It is important to note the weather conditions during the survey period, in accordance with the relevant guidance. Weather should be conducive to environmental noise monitoring, mainly being dry and with low wind speeds (less than 5 m/s). Therefore, to ensure that conditions are conducive to environmental noise monitoring, and there is an accurate record of the weather, a weather station will be installed to log the weather for the duration of the survey.

Baseline Noise Survey and COVID-19

Due to COVID-19, there are currently restrictions in place which are affecting rail and road flows on the network. The Institute of Acoustics (IOA) and Association of Noise Consultants (ANC) have recently published guidance on the impact of COVID-19 on baseline noise monitoring and noise impact assessments. The current revision (Version 6, January 2021, see Appendix A) states that measured survey data should be used as the default, which can be supplemented by data from other sources to establish an appropriate robust estimate of baseline conditions.

Given the location of the site adjacent to the strategic road network and rail line, noise levels in the area are likely to be affected. However, this will likely result in lower background noise levels which will provide a more robust assessment, and therefore, subject to agreement with the relevant Local Authorities, should not be prohibitive to progressing the baseline survey.

Notwithstanding this, where data is available, the measured noise levels will be compared against relevant data sets to ensure the measured noise levels are representative.

Vibration

Vibration monitoring has previously been undertaken of the existing railway line by Hydrock in July 2018 to support previous work on the scheme. Monitoring was undertaken in an adjacent field, approximately 8m from the track. It is proposed to use the results of this monitoring as a basis for the assessment of off-site rail vibration, and therefore it is not proposed to undertake any vibration monitoring at this time.

Appendix A

Joint Guidance on the Impact of COVID-19 on the Practicality and Reliability of Baseline Sound Level Surveying and the Provision of Sound & Noise Impact Assessments

By the Association of Noise Consultants [ANC] and the Institute of Acoustics [IOA]

Version 6

2021 update

12th January 2021

Introduction

This is the sixth version of this joint guidance and the months that have passed since its previous issue have seen the introduction of a tiered system of restrictions, some periodic changes in localised lockdown measures, and full scale national lockdowns. This has resulted in some intermittent operation of specific businesses, and some with varying operating restrictions. Consequently, there has been variations in road traffic flows compared with those which existed prior to the outbreak of the pandemic in the UK. There also continues to be a significant proportion of the population working from home where they may not have before, along with the current guidance from the Westminster Government not to use public transport, unless travelling for an exempt reason¹. Railways and, in particular, aviation continue to be affected more significantly in terms of the change in the number of movements.

In spite of the periodic variation in government restrictions, there has been gradual return to work following the first national lockdown (March-July 2020) although the current Lockdown has probably reversed that trend to some extent. In any event, and, crucially, **as long as it is safe to do so**, this guidance recommends that, wherever possible and relevant, site survey measurements of the existing noise climate continue to be the default position for obtaining baseline sound level data. But the safety of staff is paramount and it must be safe to undertake such measurements. Furthermore, the prevailing sound environment must be reasonably representative and not affected by local restrictions. Therefore, where necessary, the measured data should be supplemented by other sources. Nevertheless, this guidance reiterates that, as for any sound survey, it remains the responsibility of the organisation or individual undertaking the work to describe the local sound environment and comment on its typicality, highlighting any potential factors which could affect its use in subsequent assessments.

Many Members of the ANC and IOA, are continuing to find their normal work practices impacted in the provision of Sound and Noise Impact Assessments. Even where opportunities to work from home or a return to the office exist, it is not 'business as usual'. Nevertheless, there continues to be the requirement to maintain as far as possible the standard of our working practices, and also to maintain the flow of acoustic reporting which has an important role in the fabric and functioning of society. Acoustic reports are utilised for many purposes including to assist planning applications, the discharge of planning conditions and the implementation of Building Regulations. Continuing to provide high quality acoustic reporting in a timely manner for scrutiny by regulators and decision makers will allow the important aspects of planning to continue to move forward to support our society in the longer term beyond this national emergency.

¹ Other administrations may have slightly different requirements

As the responsible bodies, the ANC and IOA are keen to ensure that it is 'business as usual', as far as is practicably possible and responsible; not only to support continued on-going financial stability for our members, but also for the myriad strands of society that rely on our reports and input to projects. With some limitations and some self-imposed changes in pre-COVID-19 travel behaviour for all, we recognise that there remain some instances where the manner in which acoustic assessment and reporting is carried out needs to be adapted. We have, therefore, reiterated below some changes in working practices in the production of such reports, where these may be necessary. In so doing, it is still important to minimise uncertainties when determining baseline conditions, in a clear and transparent way. Furthermore, by good communication between those preparing the reports and those that will be reviewing them, the planning process (and other relevant processes) will be able to continue as smoothly as possible, otherwise there could be delays of many months.

We consider that by implementing these measures the provision of Sound and Noise Impact Assessments will be able to continue in a timely manner.

Competence

Site surveys should take place unless they cannot be carried out in complete accordance with current Government requirements. Where they cannot, alternative methods of characterising baseline conditions may be used. These are set out below. Acoustics professionals are skilled in understanding how best to use those techniques so that the outcome is representative and the conclusions drawn are technically robust, so that clients and decision-makers can come to well-informed judgements.

Baseline Sound Level Characterisation

The COVID-19 outbreak has presented new challenges in obtaining representative baseline sound levels because road, air and rail transport usage have changed due to travel restrictions, changes in travel behaviour and social distancing measures.

National road and rail traffic data are regularly updated and the relevant information can be found here: (<https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic>). It can be seen that, just before Christmas, road traffic was at about 80% of pre-Covid levels. Conversely, rail traffic was at about 30%.

Air traffic movement data can be found here - [REDACTED] and can be compared with the pre-COVID situation.

Other sound sources may also have been affected – for example, local factories may not be working at full output, shift patterns may have changed to allow for social distancing, and places of entertainment may be closed. However, given that site visits can still occur as long as it is safe to do so, measured survey data should be used as the default. Alternatively, data from other sources can be used such as existing data (for example, from previous local surveys and noise maps) or undertaking baseline sound predictions to establish an appropriate robust estimate of baseline conditions.

The most appropriate option to use must be determined on a case-by-case basis, assessing the level of uncertainty and including this information in the reporting. More importantly than

ever, before progressing with any methodology, there should be discussion of the intended approach with the relevant regulating authority.

As for any sound survey, it remains the responsibility of the organisation undertaking the work to describe the local sound environment and comment on its typicality highlighting any potential factors which could affect its use in subsequent assessments.

Methodology

For some projects there will be similar challenges to those experienced for the baseline sound level characterisation, when determining the sound levels associated with the development. Wherever possible, a site visit to understand the sound environment will assist the professional in understanding the sources contributing to the sound environment, and where these may not be typical due to current circumstances. Importantly, **any such site visits must comply with any restrictions on movement and ensure that social distancing is embedded within the site visit methodology.**

For transport schemes, there may still need to be some reliance on predicted sound levels to describe the baseline conditions, with a corresponding need to obtain flow/activity data. There are now many sources of transport data available and these should be used, where possible, along with previously made direct site measurements to describe baseline conditions. Links to data obtained from the most recent Noise Mapping carried out by the four devolved administrations and the Republic of Ireland are shown in the Appendix. Also shown are links to some road transport data sources.

Where sound from existing facilities is needed to inform future noise levels, or where it is the existing sound that is being assessed, enquiries will be needed to understand whether or not the facility has returned to operating as normal. Discussions with other operators may be needed to understand whether nearby facilities are operating normally, and whether any changes might affect sound emissions. Examples may include where the BS4142 methodology is being used to assess the impact from an industrial / commercial facility following complaints, or where existing machinery needs to be measured to use as a reference for predicted future levels.

The acoustics professional will need to consider whether alternative sources of information in respect of sound levels can reasonably be used. Where appropriate, a case should be made regarding why the proposed alternative methods are suitable for a robust assessment, and should clearly set out the estimated uncertainties in the assessment. In cases relating to the investigation of complaints, it may now be possible to carry out site measurements although caution should be applied as to whether the conditions are representative of normal activities. In some circumstances, this type of assessment may need to be postponed.

As with the determination of baseline conditions, discussions with the relevant regulators, who may be able to provide vital local knowledge, will be key.

Liaison with Regulators and Decision Makers

Liaison between acoustics professionals and relevant regulators is especially important during this period where characterising the sound environment might still not be possible in the conventional way. It is recognised that projects should be assessed on a case by case basis.

Where site measurements may not be possible, a pragmatic approach may be needed with regard to the information required for planning applications and/or the discharge of planning conditions. Having said that, it will continue to be important that such assessments remain robust, and follow current good practice.

In these circumstances, one outcome may be that supplementary information will be required at a later date or controlled by condition to allow planning authorities to maintain momentum in the planning system during this period.

Guidance from the Government, from the Devolved Administrations (Scotland, Wales and Northern Ireland) and the Republic of Ireland

Guidance issued to employers and businesses is provided on the Governments' websites.

There is recognition that businesses should continue to work where possible. Therefore, where there is a need for outdoor noise monitoring work this should now occur **as long as it can be done safely and fully complies with the relevant Government's social distancing requirements**. However, as mentioned above, if the purpose of the monitoring is to determine typical conditions, it must be remembered that in some circumstances the current conditions may not be typical.

In addition to the information published by the Westminster government, there is separate guidance for those working in Scotland, Wales, Northern Ireland and the Republic of Ireland.

This guidance is not necessarily the same.

Therefore, it is essential that reference is made to the relevant national guidance if planning a site visit in those countries.

Links to the various guidance are given below:

England

<https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19>

Scotland

<https://www.gov.scot/publications/coronavirus-covid-19-returning-to-work/>

Wales

<https://gov.wales/coronavirus-covid-19-employers-and-businesses-guidance>

<https://gov.wales/taking-all-reasonable-measures-maintain-physical-distancing-workplace>

Northern Ireland



Republic of Ireland



Summary

The introduction of various different restrictions continues to have an impact of the typicality of baseline sound environments. Although in certain circumstances, little may have changed about the sound environment when compared to pre-Covid data, it is recognised that conditions are not the same as they were before the pandemic. Specific situations may have changed completely. In summary, we continue to experience deviation from typical conditions but yet, it is essential that we continue to exercise our professional skills diligently and cope with these circumstances where they may have changed. Some of the advice contained in this guidance is not new, and all professionals have probably had to cope previously with unusual circumstances from time to time in their day to day life. It is just that, at the moment, most days continue to present unusual situations.

It is important that decision making and associated development continue, including the planning process and the discharge of planning conditions. But it is also important to avoid poor decisions being made because the highest available standard of acoustic assessment was not maintained during these challenging times.

The Association of Noise Consultants

The Institute of Acoustics

APPENDIX Noise Mapping Data

The strategic noise mapping covers the major sources of transportation noise within large urban agglomerations and along road and rail corridors between them and was designed to provide a global view of noise exposure in line with the requirements of the Environmental Noise Directive for reporting above 55 dB L_{den} and 50 dB L_{night} . It does not include all possible noise sources, or all urban areas in the UK and Ireland, however it may help to provide an initial screening for sites in the vicinity of the mapped sources.

Links have been included for downloading the results in GIS format, plus an online map viewer

England

Data: <https://www.gov.uk/government/publications/strategic-noise-mapping-2019>

Maps: [REDACTED]

Northern Ireland

Data: <https://www.opendatani.gov.uk/dataset/environmental-noise-directive-noise-mapping>

Maps: <https://apps.d.aera-ni.gov.uk/noisemapviewer/index.html>

Scotland

Data: [REDACTED]

Maps: <https://noise.environment.gov.scot/noisemap/>

Wales

Data: <https://lle.gov.wales/catalogue/item/EnvironmentalNoiseMapping2017/?lang=en>

Maps: [REDACTED]

Republic of Ireland

Data: [REDACTED]

Maps: [REDACTED]

Acknowledgement: With thanks to Simon Shilton (Acustica) for supplying this information.

Transport Data Sources

Department for Transport

<https://roadtraffic.dft.gov.uk/#6/55.254/-6.053/basemap-regions-countpoints>

Highways England

[REDACTED]

Site Suitability Indicator

[REDACTED]