

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Applicant's response to deadline 3 submissions [Appendix C - Update to Development Generated Road Traffic Noise Assessment]

Document reference: 18.13.3

Revision: 01

9 January 2024

Planning Act 2008

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

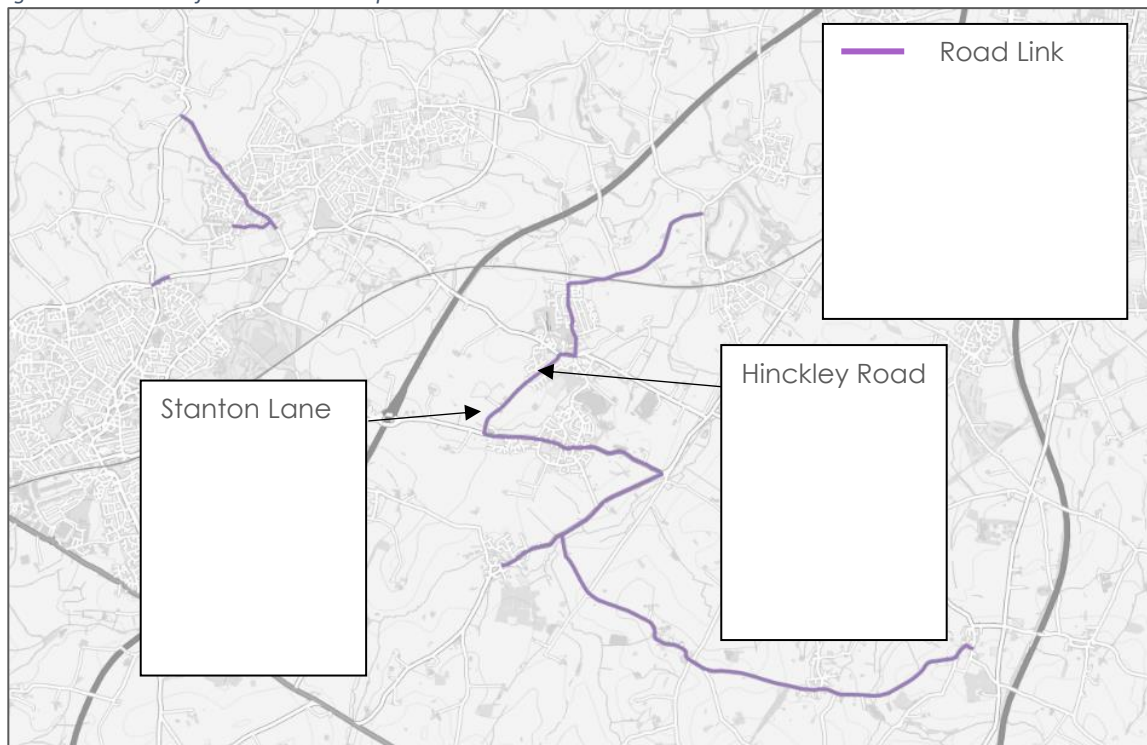
Project	Hinckley Rail Freight Interchange		
Document Number	NTT2814/TN/LS/001/20240109	BWB Ref	NTT2814
Author	Luke Smith BEng (Hons), MIOA	Status	Issue
Checked	Lucy Elmer BA (Hons), MSc, MIOA	Revision	P01
Authorised	Mike Barrett BSc (Hons) MIOA	Date	09/01/24

Update to Development Generated Road Traffic Noise Assessment

1 Introduction

- 1.1 Further to the assessment of development generated road traffic which is presented in the Noise and Vibration ES Chapter (Chapter 10, 6.1.10 Rev 07; referred to hereafter as the 'Chapter assessment'), an additional assessment has been undertaken of road links which extend beyond the study area in the Chapter assessment. This assessment predicts the likely change in noise level as a result of development generated traffic along the identified links and considers the potential effect, where necessary. The assessment considers the change in noise level in both the short term and the long term.
- 1.2 The traffic data which have been used in the assessment are presented in **Appendix A**, at the end of this document and below in **Figure 1**, for reference. Note that these links adjoin those in the study area for the Chapter assessment (hence the gap between the links east and west of the M69 in Figure 1 where the Chapter assessment study area lies), however the links from the Chapter assessment have been omitted in **Figure 1** to make clear the links which form the basis of this updated assessment, only.

Figure 1: Overview of the Links in the Updated Assessment



2 Assessment Results

2.1 The results of the updated assessment indicate that for all links within the updated assessment, the change in noise level in the short term and long term is less than 3dB at nearby sensitive receptors, with the exception of two consecutive links; these are Stanton Lane and Hinckley Road, which are both indicated on **Figure 1**. The predicted short term and long term changes along Stanton lane are presented in **Figures 2** and **3**, respectively, and the predicted short term and long term changes along Hinckley Road are presented in **Figures 4** and **5**.

Figure 2: Predicted Short Term Change on Stanton Lane

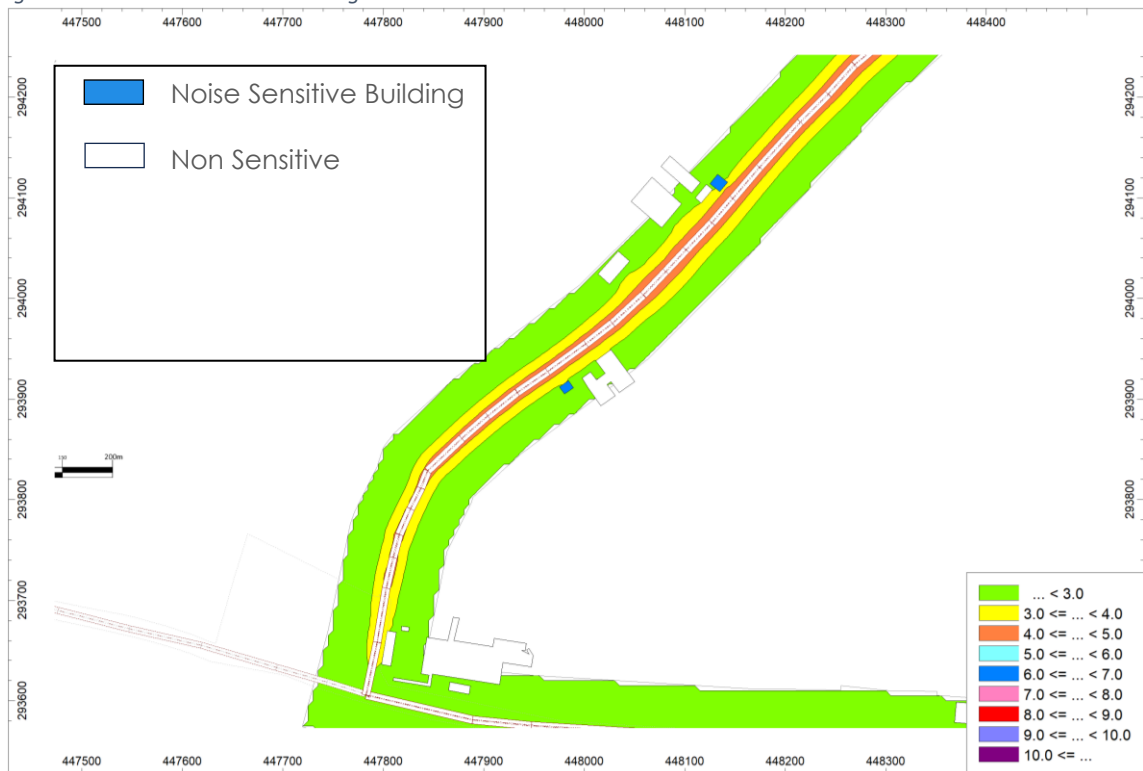


Figure 3: Predicted Long Term Change on Stanton Lane



Stanton Lane

- 2.2 The predicted change in noise levels at the nearest properties along Stanton lane are between 3.2 to 3.9dB in the short term, which equates to a moderate adverse effect (significant) in accordance with DMRB LA111. However, in the long term, the predicted levels are marginally reduced at the worst-case property, with levels along Stanton Lane ranging from 3.2 to 3.8dB. In the long term, this equates to a minor adverse effect (not significant), in accordance with DMRB LA111.
- 2.3 It is noted that the absolute noise levels at the properties range from 64 to 65 dB during the day ($L_{10,18h}$), which falls between the LOAEL and SOAEL.

Figure 4: Predicted Short Term Change on Hinckley Road

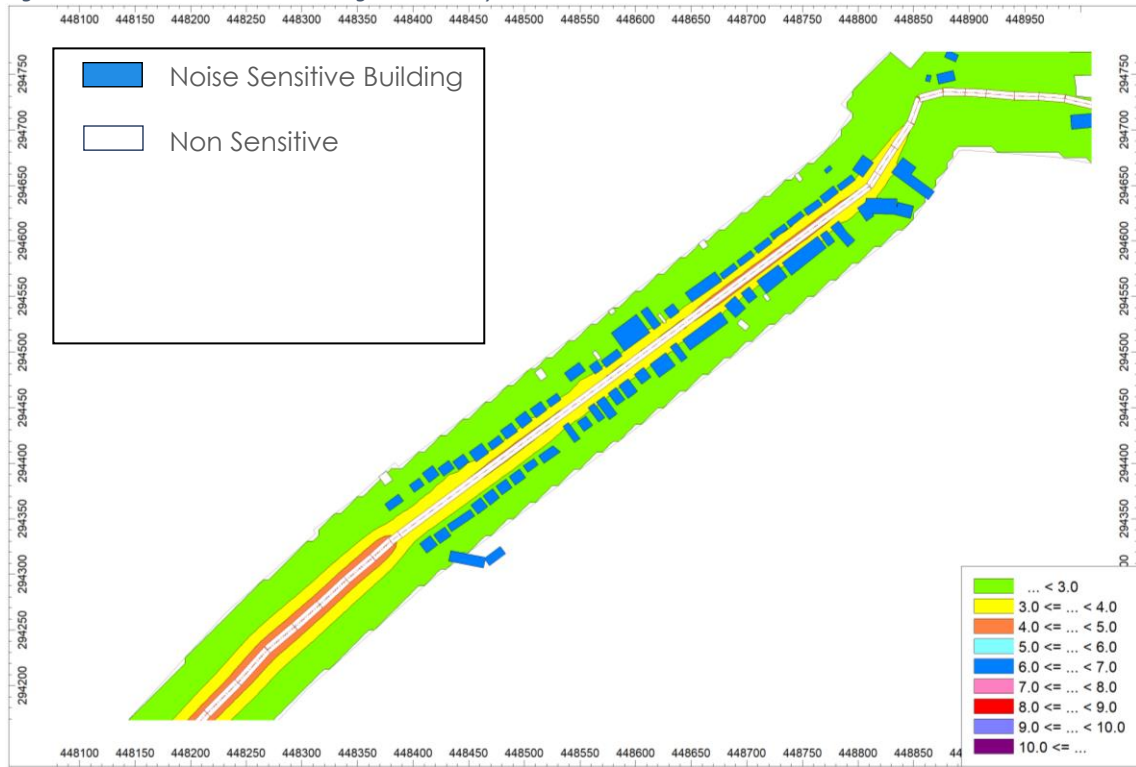
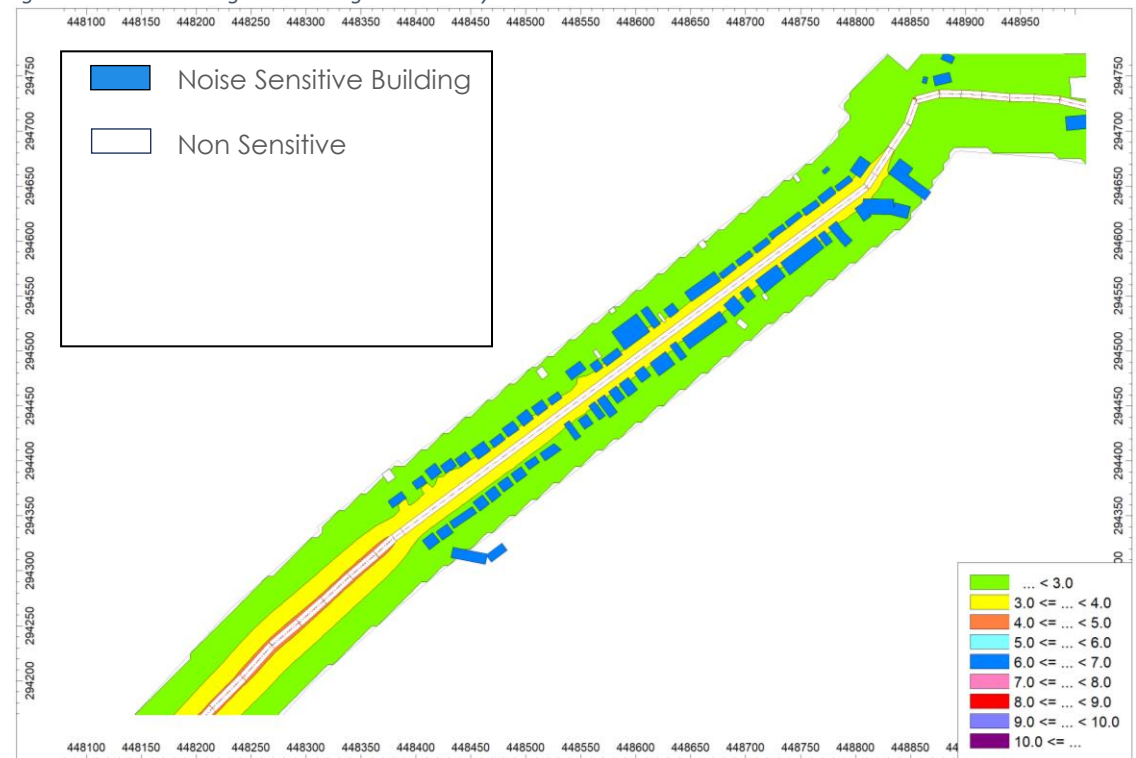


Figure 5: Predicted Long Term Change on Hinckley Road



Hinckley Road

- 2.4 The predicted change in noise levels at the nearest properties along Hinckley Road are between 2.8 to 3.7dB in the short term which equates to a minor adverse effect at the least affected properties, and a moderate adverse effect (significant) at the worst affected, in accordance with DMRB LA111. In the long term, the predicted levels along Hinckley Road range from 2.8 to 3.5dB. In the long term, this equates to a negligible effect (not significant) at the least affected properties, and a minor adverse effect (not significant) at the worst affected, in accordance with DMRB LA111.

Potential Mitigation

- 2.5 Whilst it is predicted that the affected properties along Stanton Lane and Hinckley Road will experience minor adverse effects in the long term, which are not significant, consideration may be given to the feasibility of potential forms of mitigation on the basis that the absolute levels are between LOAEL and SOAEL.
- 2.6 Under circumstances where properties access the affected links directly (i.e. where drive ways lead on to the road link), as is the case along Stanton Lane and Hinckley Road, the use of acoustic barriers to attenuate noise at the properties is not common practice. This is because there are often other design constraints which make this unfeasible. Consideration may be given to low noise surface course along Stanton Road in proximity to the properties, however, it is not anticipated that such a measure would result in noise levels which fall below the LOAEL. Due to the low traffic speeds along Hinckley Road, low noise surface course would not be an effective measure to reduce road traffic noise.
- 2.7 Given that forms of mitigation are either impractical or are likely of limited benefit, and on the basis that the predicted long term noise level change is likely to result in a minor adverse effect (not significant), no further consideration is given to forms mitigation to reduce noise levels along these two links.

3 Summary

- 3.1 An assessment of road links which extend beyond the Chapter assessment study area has been undertaken. The assessment indicates that in the long term, road traffic on all additional links are predicted to result in effects which are not significant.
- 3.2 In the short term, all links are predicted to result in effects which are not significant, with the exception of two consecutive links; Stanton Lane and Hinckley Road, where moderate adverse effects are predicted. Consideration has been given to forms of mitigation, however, it is deemed that available measures are either unfeasible, or unlikely to result in a significant noise benefit at nearby properties. On this basis, and given that the long term effects are not significant, mitigation measures to reduce noise levels at these two links are not considered necessary.

Appendix A: Road Traffic Data for the Links in the Updated Assessment

Link ID	Speed (km/h)	2026 Without Dev		2026 With Dev		2036 Without Dev		2036 With Dev	
		18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %
20007-20002	32	1707	0	2220	0	2435	0	3156	0
20033-20002	40	894	0	1396	0	1290	0	2124	0
20169-20059	48	1140	0	1628	0	1529	0	2340	0
20408-20038	64	3128	0	3731	0	4743	0	5945	0
20408-20059	64	1140	0	1628	0	1529	0	2340	0
20409-20038	48	3128	0	3731	0	4743	0	5945	0
20488-20284	64	3183	2	4191	1	5100	1	6739	1
20507-20169	48	2580	0	3111	0	3156	0	4105	0
20648-20164	48	815	0	1010	0	1734	0	1947	0
20731-20033	64	754	0	1252	0	1149	0	1977	0
20731-20507	64	2580	0	3111	0	3156	0	4106	0
29959-20409	40	3445	0	4506	0	5385	0	7030	0
29959-20488	40	3340	2	4352	1	5258	1	6910	1
30046-39999	48	12874	5	9209	6	13905	5	10660	8
30050-30022	48	8426	2	13536	2	8425	2	13593	4
30165-30141	88	8585	5	5611	7	8695	6	6014	8
30167-30022	64	8426	2	13536	2	8425	2	13536	2
30167-30024	64	1497	5	4187	3	1904	5	5066	3
30184-30092	64	6041	1	9383	2	5961	1	9513	2
30184-30141	88	6041	1	9383	2	5961	1	9513	2
30192-30188	64	4343	0	6718	0	5564	0	8732	0
30214-30050	48	9484	2	13079	2	9467	2	13434	5
30215-30024	24	1646	5	4347	3	2051	5	5240	3
30215-30081	24	11155	2	11234	2	13403	2	13462	1



Link ID	Speed (km/h)	2026 Without Dev		2026 With Dev		2036 Without Dev		2036 With Dev	
		18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %	18h AAWT 2 way Flow	HGV %
30234-20284	55	3293	2	4320	1	5214	1	6910	1
30234-30165	88	14315	4	10251	5	15795	4	12098	5
30234-30186	88	13157	4	9440	5	14306	5	10933	5
30244-30192	64	3869	0	6396	0	4831	0	8053	0
36001-30188	40	4500	0	6896	0	5719	0	8925	0
39996-30092	48	6041	1	9383	2	5961	1	9513	6
39998-30081	24	4500	0	6896	0	5719	0	8926	0
39998-36001	40	4500	0	6896	0	5719	0	8926	0
39999-30186	48	13157	4	9440	5	14306	5	10933	5
40047-73639	40	4613	1	5901	1	6603	1	7955	0
40115-40047	24	7005	0	9109	0	9908	0	11080	0
40206-40180	48	2991	1	4303	1	4290	1	5405	1
46002-45004	32	3648	0	5110	0	6978	0	8772	0
46002-74311	32	2082	0	3066	0	2804	0	3912	0
73636-46002	40	5890	0	8337	0	9830	0	12492	0
73639-49993	40	3738	2	5317	1	5723	1	7346	1
74311-40115	24	2056	0	3041	0	2726	0	3714	0
75060-40168	64	15715	4	18011	9	16844	4	18842	10
75060-40308	64	15715	4	18011	9	16844	4	18842	10
76778-49993	64	3580	2	5162	1	5558	1	7186	1
76779-40206	64	2991	1	4303	1	4290	1	5405	1
76779-76778	64	3507	2	5059	1	4590	1	6122	1