

# A47 Wansford to Sutton Dualling

**Scheme Number: TR010039**

**Volume 6**

## **6.3 Environmental Statement Appendices**

**Appendix 11.4 – Model validation**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009

July 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Applications: Prescribed Forms and  
Procedure) Regulations 2009**

A47 Wansford to Sutton  
Development Consent Order 202[x]

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**ENVIRONMENTAL STATEMENT APPENDICES**  
**Appendix 11.4 – Model validation**

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<b>Regulation Number:</b>	Regulation 5(2)(a)
<b>Planning Inspectorate Scheme Reference</b>	TR010039
<b>Application Document Reference</b>	TR010039/APP/6.3
<b>BIM Document Reference</b>	HE551494-GTY-ENV-000-RP-LA-30009
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<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Rev 0	July 2021	Application Issue

## Appendix 11.4

### Model validation

11.4.1. Measured baseline survey results have been compared with the predicted road traffic noise index for the Do-Minimum Opening Year scenario. This comparison is shown in Table 11 4-1.

Table 11-4-1: Comparison of noise measurements and predictions (DMOY scenario)

Noise monitoring positions	Predicted dB L <sub>A10,18hr</sub> (DMOY model output)	Measured dB L <sub>A10,18hr</sub> (noise survey)	Difference dB L <sub>A10,18hr</sub>
LT1	80	82	-1
LT2	78	80	-3
LT3	65	66	-1
LT4	54	51	+3
ST1	78	78	0
ST2	68	66	+2
ST3	55	54	+1
ST4	55	53	+3
ST5	56	54	+2
ST6	58	59	-1

11.4.2. The above comparison in shows that there is very good correlation between the predicted and measured noise levels at all measurement positions, with a difference of no more than 3dB LA10,18hr.

11.4.3. It should be noted that there will rarely be perfect agreement between predicted and measured noise levels due to the comparison of relatively short-term measurement data against predicted noise levels using annual average traffic data. The measured noise levels are influenced by the local traffic conditions and the meteorological conditions at the time of the survey. In addition, the CRTN prediction method assumes light downwind propagation to every prediction point in the model. This is unlikely to occur in reality at all measurement positions. This can result in some variation between measured noise levels and predicted baseline noise levels.

- 11.4.4. On the basis of the above, the modelled results are considered robust for representing the do-minimum opening year scenario and no amendments to the road traffic noise model were considered necessary.