West Winch Housing Access Road

Environmental Statement Chapter 10: Noise and Vibration: Appendix 5: Future Baseline

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Tables

1 Future baseline assessment

1.1.1 This Appendix is only relevant for the operational stage as the future baseline does not need to be considered for the construction stage.

1.1.2 Section 10.3.35 within **Environmental Statement: Chapter 10 Noise and Vibration** describes the two baseline scenarios which are modelled:

- Do-minimum opening year (DM2027); and
- Do-minimum design year (DM2042).

1.1.3 The DM2042 scenario is used to determine the future baseline. This scenario, and a comparison with the DM2027 scenario, is useful in understanding the likely changes in noise level as a result of general traffic growth without the Proposed Scheme.

1.1.4 The noise model has been used to calculate noise levels within the detailed calculation area. Table 1-1 compares the number of dwellings in the DM2027 scenario that are above the LOAEL and SOAEL thresholds with those in the DM2042 scenario. The other sensitive receptors have been identified in brackets.

Table 1-1 Numbers of dwellings compared to LOAEL and SOAEL

Noise level	DM2027 day	DM2027 night	DM2042 day	DM2042 night	Day comparison	Night comparison
Below LOAEL	828 (6)	549 (4)	818 (5)	532 (3)	-10 (-1)	-17 (0)
Greater than or equal to LOAEL and less than SOAEL	395 (5)	671 (7)	403 (6)	686 (7)	8 (1)	15 (0)
Greater than or equal to SOAEL	143 (3)	146 (3)	145 (3)	148 (3)	2 (0)	2 (0)

1.1.5 **Table 1-1** shows that there are minimal changes in terms of the absolute noise level thresholds without the Proposed Scheme in the long-term.

1.1.6 In line with the guidance in DMRB LA111, consideration has also been given to the change in noise levels that would arise in the long-term without the Proposed Scheme.

1.1.7 **Table 1-2** presents the noise level changes based on a comparison of the DM2027 scenario compared to the DM2042 scenario, sorted into the magnitude of impact bands for long-term noise level changes (**Table 10-12** within the Noise and Vibration Chapter). The other sensitive receptors have been identified in brackets.

Table 1-2 Long-term road traffic noise level changes without the Proposed Scheme

Long-term noise level change without the Proposed Scheme	Daytime, number of residential receptors	Night-time, number of residential receptors
Negligible increase	1308 (10)	1309 (10)
Minor increase	0 (0)	0 (0)
Moderate increase	0 (0)	0 (0)
Major increase	0 (0)	0 (0)
No Change	6 (0)	5 (0)
Negligible decrease	52 (4)	52 (3)
Minor decrease	0 (0)	0 (0)
Moderate decrease	0 (0)	0 (0)
Major decrease	0 (0)	0 (0)

1.1.8 **Table 1-2** shows that all receptors are predicted to experience negligible or no change in noise level in the long-term without the Proposed Scheme.