



Cambridge South East Transport Phase 2

Environmental Statement

Appendix 7.3 Construction Vibration Assessment

31st July 2023

- 7.3.1 The assessment considers the effects of ground borne vibration during construction activities that feature vibratory soil compaction, and asphalt rolling.
- 7.3.2 Table 7.3.1 shows the predicted peak particle vibration (PPV) levels in mm/s attributed to compaction activities.

Table A Error! No text of specified style in document.. **3.1 Predicted peak particle vibration (PPV) levels attributed to construction activities (mm/s)**

Activity	10 m	25 m	50 m	75 m
Compaction	3.7	1.0	0.4	<0.3

Legend

Major	10 mm/s or higher	Moderate	1.0 to 9.9 mm/s
Minor	0.3 to 0.9 mm/s	Negligible	Less than 0.3 mm/s

- 7.3.3 It can be seen that there is the potential for vibration from compaction to be perceptible within 75 m of the works.
- 7.3.4 The SOAEL threshold would be exceeded at vibration sensitive receptors closer than 25 m during various compaction works.
- 7.3.5 Compaction works are planned for all new and altered sections of the busway, and access roads. It can be seen that vibration levels from compaction works are below those provided in BS 5228 Part 2 (Annex B.4.4) for underground services and that impacts from compaction works are unlikely.