
East West Rail Consultation 2026

Response to Question 17: Environmental Mitigation and Residential Conditions

We support the delivery of improved rail connectivity across the region and offer the following observations in the spirit of strengthening the environmental mitigation and residential design considerations associated with the proposal.

The Soundproof Windows is an acoustics-led specialist working with homeowners affected by environmental transport noise, including rail, aircraft and major road infrastructure. Through our work assessing existing residential buildings, particularly older and heritage-sensitive housing stock, we regularly encounter situations where external environmental-noise assessments differ from the internal conditions experienced by occupants in practice.

EWR's published "Our approach to noise and vibration" material demonstrates a detailed approach to external acoustic assessment, modelling and infrastructure-level mitigation. We would encourage the continued development of the Environmental Statement methodology to additionally consider the performance of existing residential facades under realistic occupancy and ventilation conditions, particularly within older and heritage-sensitive housing stock where practical facade behaviour may vary considerably from standardised assumptions.

In our experience of existing residential stock near comparable transport infrastructure, internal occupant experience cannot reliably be predicted from averaged external metrics alone, particularly where intermittent pass-by events or quieter night-time operational activity are concerned. We would therefore encourage consideration not only of average environmental-noise exposure, but also of how intermittent maximum events may affect practical internal noise conditions within bedrooms and living spaces during evening and night-time periods.

We also note the increasing importance of realistic ventilation assumptions within residential acoustic assessment. Following the introduction of Approved Document O and the growing policy emphasis on overheating risk, assumptions that rely primarily on permanently closed windows may not always reflect practical occupancy conditions, particularly during warmer periods or within bedrooms susceptible to overheating. This is especially relevant within existing housing stock, where constraints relating to ventilation, airtightness, conservation requirements and retrofit compatibility can significantly influence practical acoustic performance outcomes.

In addition, while we do not comment on project-specific operational acoustics, our experience of comparable residential contexts suggests that intermittent tonal characteristics associated with depot and maintenance activity have required assessment approaches that go beyond standard facade assumptions, particularly during quieter evening and night-time conditions.

We would welcome explicit consideration within the Environmental Statement of assessed internal noise conditions under realistic ventilation and occupancy scenarios, particularly for residential receptors adjacent to the Bletchley West train maintenance depot and along the Marston Vale corridor, where existing housing stock is likely to include older building typologies.

We appreciate the opportunity to contribute these observations and welcome further technical dialogue if of value to EWR's environmental assessment process.

Sebastian
Senior Acoustician & Co-Founder
The Soundproof Windows
<https://thesoundproofwindows.co.uk/>