

19. Operational noise and vibration monitoring and mitigation

1. Operational noise and vibration monitoring and mitigation shall be carried out in accordance with the Noise and Vibration Mitigation Policy, January 2011 (Inquiry document CD/1.29/2.1, referred to in this condition as “the Policy”) and this condition. In the event of any conflict between the two, this condition shall prevail.

2. Development shall not commence within each Individual Section, until a detailed scheme of assessment of predicted noise impacts during operation of Phase 1 and 2A of the railway works, predicted vibration effects of the railway with Phases 1, 2A and 2B and details of proposed monitoring and mitigation measures, has been submitted to and approved in writing by the local planning authority.

3. The schemes of assessment of the predicted noise impacts of Phase 1 and 2A and of Phase 2B on the Individual Section or Sections that abut Wendlebury Gate Stables shall also identify measures that should be taken to ensure, insofar as reasonably practicable, that the noise caused by individual passing trains, using the railway, does not significantly impede voice communication over a distance of 30 metres within either the “large riding school” or the “small riding school” at those Stables, or within the paddock opposite Bramlow. For direct voice communications (i.e. without electro-acoustic assistance), the term “not significantly impede” shall be taken to mean that the speech intelligibility shall be at least “fair” at an increased (i.e. “loud”) vocal effort as defined in BS EN ISO 9921:2003 Ergonomics Assessment of Speech Communications. The assessment method used shall be the Speech Interference Level as described in Annex E to that Standard. The assessment shall be based on a native female speaker facing the rider under instruction and the standard to be achieved will be for alert situations where short known words are used and the wind speed is less than 5 metres per second. A correction factor of -5dB shall be used to convert the standard for male voices to female voices. If personal communications or sound reinforcement systems are proposed, the assessment methodology shall be subject to the approval of the independent expert appointed in accordance with Condition 19.9. This part of the condition shall not apply if, at the time of assessment, the Stables are no longer a licensed riding establishment under the Riding Establishments Act 1964.

4. The schemes of assessment of the predicted noise impacts of Phase 1 and 2A and of Phase 2B on the Individual Section or Sections that abut 45 Lakeside shall also identify measures that shall be taken to ensure that the noise caused by passing trains in the Studio at 45, Lakeside does not exceed 35dB $L_{Aeq, 30 \text{ min}}$ and 55dB $L_{A1, 30 \text{ min}}$, the standards to be met by music teaching rooms as defined in Building Bulletin 93, Acoustic Design of Schools (Table 1.1).

5. Where vibration mitigation measures required for Phase 2B can be installed cost-effectively during the Phase 1 and 2A works, this shall be done. All mitigation measures, including those prescribed in the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, required for Phase 1 and 2A shall be installed as soon as possible after commencement of the works and no later than the date on which a passenger rail service is resumed on that section of railway.

6. Any monitoring of noise and vibration shall be undertaken in accordance with the approved scheme of assessment and the Policy.

7. Before the commencement of the laying of the second track between the MoD Depot at Bicester and Islip, a detailed scheme of assessment of the predicted noise impacts arising from the works and from the additional services assessed as likely to operate under Phase 2B in the Environmental Statement and details of proposed mitigation measures, which achieve the standards for noise and vibration attenuation set out in the Policy, shall be submitted to and approved in writing by the local planning authority.

8. Any vibration mitigation measures not already installed during the Phase 1 and 2A works necessary for Phase 2B shall be installed during the Phase 2B works. All mitigation measures, including those prescribed in the Noise Insulation Regulations (Railways and Other Guided Transport Systems) 1996, required for Phase 2B shall be undertaken as soon as possible after commencement of the works and completed no later than the date on which the second track is brought into use.

9. The submitted schemes of assessment shall show how the standards of noise mitigation set out in the Policy will be achieved. Supporting calculations, or printouts of inputs and outputs from recognised computer software, shall be provided. Each scheme shall be accompanied by a report, prepared by an independent expert previously approved in writing by the local planning authority, on the robustness of the noise-related elements of the scheme of assessment. Noise mitigation measures shall be permanently installed as approved.

10. The submitted schemes of assessment shall show how the standards of vibration mitigation set out in the Policy will be achieved. Supporting calculations or empirical data, or a combination of the two, shall be provided. Each scheme shall be accompanied by a report, prepared by an independent expert previously approved in writing by the local planning authority, on the robustness of the vibration-related elements of the scheme of assessment. Vibration mitigation measures shall be permanently installed as approved.

11. The submitted schemes of assessment shall include a list of properties assessed and the results of the assessment at each. By the times that the mitigation measures are due to be brought into use, notice shall be served on the local planning authority of the mitigation measures that have been installed for each property assessed.

12. The situation may arise in which Chiltern finds “not reasonably practicable” the provision of mitigation measures that otherwise would be required by the Policy. In such circumstances, the mitigation measure or an equally effective substitute previously approved in writing by the local planning authority shall be installed in the timescale set out in item 1.10 of the Policy, unless the local planning authority has confirmed, in writing, its agreement that the mitigation in question is not reasonably practicable and that there is no suitable substitute.

13. Where noise barriers are promoted in an approved scheme of assessment, they shall be installed only once the local planning authority has given written approval of their size, appearance and location. Noise barriers shall be maintained in their approved form and may be removed only with the written approval of the local planning authority.

14. Development shall be in accordance with the approved schemes and this condition.

Reason: *To ensure that operational noise and vibration are adequately mitigated at residential and other noise sensitive premises.*