

## **Comments and Questions: HS2 Ltd's Engineering Proposals for the Central Chilterns Community Forum Area**

### **Rights of Way Diversions Along HS2 Exposes the Public to Sharp Noise Rises**

1. HS2 will cut through a network of rights of way which extend from the B485 Chesham Road to the North Chilterns Tunnel Portal at Mantle's Wood. This network is made up from GMI/33/4, GMI/33/3, GMI/27/1, GMI/23/7 and LMI/21/1. These rights of way provide public access from the B485 and the pub car park at the Barleymow/Annie Baileys to Mantle's Wood where there are attractive views over the Misbourne Valley.
2. This rights of way network will be destroyed by HS2. HS2 Ltd's proposed design is that the rights of way are juxtaposed to HS2 for 1.4kms. This is unacceptable. HS2 trains will be passing potentially every 100 seconds. All rights of way should cross the HS2 route directly in order to reduce the public's exposure to numerous sharp increases in noise rises. In addition, several rights of way have been lost in HS2 Ltd's design here, resulting in an unattractive experience for walkers.
3. Similarly, HS2 Ltd has proposed long diversions for GMI/13/3 and GMI/2/1. All rights of way should cross the HS2 route directly in order to reduce the public's exposure to noise.
4. In addition to concerns over noise resulting from diversions, combining rights of way reduces the attractiveness of each right of way. There is a loss of individuality and historic value of the ancient rights of way.

### **All Rights of Way Bridges Should Be Green Bridges in the AONB**

5. It is proposed all rights of way bridges over HS2 are constructed as green bridges in the Chilterns Area of Outstanding Natural Beauty (AONB). This will:
  - a) Make it more pleasant for people walking, riding or cycling over HS2.
  - b) Act as a means of conveying wildlife over HS2.
  - c) Enable hedgerows acting as ecological networks to be continued over HS2.
  - d) Potentially act to reduce Deer Vehicle Collisions (DVCs).
6. Defra tells us the hedgerows are of tremendous value in biodiversity. They are used as conduits through which wildlife may move.<sup>1</sup>

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<sup>1</sup> Defra Hedgerow Survey Handbook – Foreward <http://www.defra.gov.uk/publications/2011/03/29/pb11951-hedgerows/>

7. A Chilterns Conservation Board Survey of the February 2011 design indicates the level of damage that would be done to ecological networks by the current design. The Board found that a total of 98 hedgerows would be severed between Mantle's Wood and Leather Lane alone (i.e. less than half the surface AONB route length) within a 30m corridor of the route. The Conservation Board found that of the 5kms of hedgerow destroyed, 3kms were pre-1840 species rich hedgerow (simplified Defra criteria). Government places a high value on ecological networks and emphasises transport planners' role in creating such networks.<sup>2</sup>
8. A report was issued on 23 November which drew HS2 Ltd's attention to the fact that the scheme could potentially cause a rise in the number of Deer Vehicle Collisions (DVCs).<sup>3</sup> DVCs in the Chilterns are the highest in the UK (see report for details). If HS2 were to go ahead, DVCs will potentially increase because deer will become funnelled on to road over-bridges, road under-bridges and viaducts during migration and foraging. It is likely that deer will tend to congregate in the trees and other vegetation used to conceal HS2 infrastructure. This is because deer will tend not to be disturbed by walkers and their dogs near HS2.
9. It is important - when designing bridges which are to act as pathways for migratory and foraging deer crossing HS2 - that animals' access to bridges is not permitted to be blocked by farm vehicles, fencing or other structures. It has often apparently been the case for bridges crossing motorways, for example, that although intended for deer, animals' access has been prevented. Accordingly, poor design has apparently led to more DVCs than was necessary.
10. In order to reduce the number of animals, including deer, on roads crossing over HS2, consideration should be given to continuing the fence that runs beside HS2 underneath the road bridges. This will mean that animals that come up against the fence will travel along the fence parallel to HS2 and under the road bridges, rather than the animals travelling onto the road bridges. The latter would happen if HS2's fencing joined the road bridges.

### **Grim's Ditch Scheduled Ancient Monument and Ancient Woodland**

11. HS2 Ltd's current plans show no apparent modification in design to reduce damage from the cuttings that are designed to sever Grim's Ditch Scheduled Ancient Monument and ancient woodland – Jones's Hill Wood, Sibley's Coppice, Farthing's Wood and Mantle's Wood. Fully retained cuttings would reduce land-take from these features. Has HS2 Ltd considered whether such types of cuttings could be used to reduce damage to valuable cultural heritage and biodiversity resources?

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<sup>2</sup> Natural Environment White Paper chapter 2 paragraph 2.86  
<http://www.defra.gov.uk/environment/natural/whitepaper/>

<sup>3</sup> HS2: The Potential to Cause a Rise in Deer Vehicle Collisions Marilyn Fletcher 2012

12. What other techniques are being considered to reduce damage to these structures during a) construction b) operation?
13. During construction, the haul road appears to be diverted around Grim's Ditch. There are however buried parts of the monument further northeast for 22m of what is visible on the surface. These are part of the scheduling. The haul road must avoid these.<sup>4</sup>

### **Scale of Disfigurement/Destruction of the AONB**

14. Concerns have been raised that during construction in the AONB, HS2 will be more disfiguring to landscape than elsewhere on the phase 1 route. This is for the following reasons:
15. Almost none of the route in the AONB will be at grade.<sup>5</sup> The various structures – viaducts, embankments, cuttings, cut and cover tunnels of the 11.4kms AONB surface route<sup>6</sup> - will produce a far wider footprint than the typical 22m width of the route at grade.<sup>7</sup>
16. North of the Chilterns twin-bore tunnel, the HS2 surface route is wider than elsewhere. This is because the two bores are widely separated in the tunnel. It is not until several kms further north of the portal when the centre lines of the two tracks are the normal distance apart.
17. Construction traffic will access the HS2 route from four roads in the AONB (Hyde Heath Road, B485 Chesham Road, Rocky Lane, and Small Dean Lane).<sup>8</sup> The construction traffic will then travel along the HS2 route using a haul road in order to access the work face. The volume of construction traffic will be considerable because of the quantity of earthworks in the AONB. Spoil movement along the route in the AONB will be significant. Accordingly the haul road is likely to be wide.
18. It appears that construction sites are needed: for each road that crosses over or under HS2, at the ends of both green tunnels in the AONB, for the north portal of the

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<sup>4</sup> English Heritage, Buckinghamshire Grim's Ditch <http://list.english-heritage.org.uk/resultsingle.aspx?uid=1021198&searchtype=mapsearch>

<sup>5</sup> High Speed 2 London to West Midlands Appraisal of Sustainability – Post Consultation Route Refinements 2012 Appendix 5 page 41 <http://www.hs2.org.uk/assets/x/85355>

<sup>6</sup> High Speed 2 London to West Midlands Appraisal of Sustainability – Post Consultation Route Refinements 2012 Appendix 5 page 41 <http://www.hs2.org.uk/assets/x/85355>

<sup>7</sup> HS2 Technical Seminars, Infrastructure and Technical Specification page 14 <http://www.hs2.org.uk/assets/x/77048>

<sup>8</sup> Aerial Photographs with HS2 Route Superimposed - supplied to community forums

Chilterns Tunnel, and for both viaducts in the AONB. It is believed these sites will cover a considerable area and work will last for several years.

19. There is concern that HS2 Ltd's aerial maps produce a false impression in community forums. Construction compounds will often apparently be larger than the sizes indicated on HS2 Ltd maps.
20. Considering the numbers and sizes of construction compounds in the Chilterns AONB, how much of the 11.4kms HS2 route during the construction period in the AONB will be surrounded by construction compounds?
21. In conclusion, it appears the disfigurement of the AONB during construction will be considerable.

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