February 2023

HIGH SPEED RAIL (CREWE - MANCHESTER) BILL

HOUSE OF COMMONS SELECT COMMITTEE

Petition No. HS2-P2B-012: Davenham Parish Council

Promoter's Response Document

INTRODUCTION

This Promoter's Response Document (PRD) forms the Promoter's response to Petition No. HS2-P2B-012, from Davenham Parish Council.

In this PRD, 'the Promoter' means the Secretary of State and HS2 Ltd acting on their behalf.

The purpose of the PRD is to advise you and the Select Committee of the Promoter's position in relation to the petitioning points raised. It is intended that the PRD will alleviate many of the concerns raised in the petition.

The Table of Contents overleaf lists the page number, petitioning points in the order they appear in the petition, and a summary statement of the issue(s) contained in the petition for quick reference. Other supporting material (e.g., reports, drawings, and photographs) referred to in the response are attached where applicable.

Copies of the HS2 Phase 2b Information Papers referred to in the response can be found at
HS2 Phase 2b (Crewe – Manchester) Information Papers - GOV.UK (www.gov.uk).

Department for Transport
High Speed Two (HS2) Limited

BACKGROUND

Davenham Parish Council represents the inhabitants of Davenham Village and Whatcroft within the local authority administrative area of Cheshire West and Chester.

PETITION NO. HS2-P2B-012

DAVENHAM PARISH COUNCIL

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HIGH SPEED RAIL (CREWE - MANCHESTER) BILL

PROMOTER'S RESPONSE TO PETITION OF: Davenham Parish Council

PETITION NO: HS2-P2B-012

PARAGRAPH NO: 1, 1A - 1B

ISSUE RAISED: Ground conditions

PETITION PARAGRAPH: High risk of subsidence to the bank and rail track due to the geographical structure of the Brine fields in the immediate area.

1A. GROUND CONDITIONS - (Request) To pay for and install noise and vibration monitoring systems at the embankments and viaducts within the parish boundaries before any new trains run on the new track and /or when used, should be monitored to ensure thresholds are not breached. If a breach occurs immediate discussion should be initiated with the Parish Council and immediate action taken to reduce the speed throughout the parish until which time it is appropriately mitigated

1B. ONGOING MAINTENANCE MEASURES - The cost of providing, monitoring and maintaining any mitigation measures needs to be fully funded from HS2 Ltd. on an ongoing basis. To pay for and reinforce current bridges now to mitigate against future ground movement which could be otherwise catastrophic (e.g. Whatcroft Lane Rail Bridge)

PROMOTER'S RESPONSE:

Ground conditions

1. HS2 is in consultation with the operators of the Salt Industry infrastructure and discussions are ongoing with the business owners/operators to ensure public safety and their safe continued business operations during constructing and operating the Proposed Scheme.

2. HS2 has undertaken a significant amount of data gathering to inform the design with specific reference to the geology and ground conditions. HS2 has held discussions with relevant agencies that have significant knowledge and information on existing infrastructure assets within the area and captured data on the interaction

between their activities and the ground conditions. These agencies include Network Rail, The Canal and Rivers Trust, the relevant Salt Industry companies and the Cheshire Brine Subsidence Compensation Board. In addition, HS2 has listened to local communities who have knowledge of the local geology and taken note of their observations and opinions.

3. A comprehensive desk study has been compiled for the Phase 2b Western Leg route. Following a review of desk study information, two phases of ground investigations have already been carried out.

4. It is industry practice to undertake Ground Investigation in a phased manner, with each phase building on the next. HS2 has planned a routewide Ground Investigation activity which is proposed to commence in 2023. This proposed routewide Ground Investigation will involve closely spaced exploratory sampling points along the full route from Crewe to Manchester, with more frequent and site-specific exploration at specific locations, where the ground risk may be greater due to the local geological conditions. Future contractors will normally also deploy additional ground investigations in the later stages of design and the early stages of construction to finalise design elements that could be sensitive to ground conditions along the HS2 corridor. This ensures the engineering solutions proposed are verified and the safety of the Proposed Scheme is validated and assured.

5. The Promoter has previously given commitments on the design of the Proposed Scheme in HS2 Phase 2b Western Leg Information Paper D1: Design, in particular the Promoter would highlight Sections 3.1 of this publication, which states:

> "The Promoter and the nominated undertaker will seek to ensure that:
>
> the design is safe, efficient, and meets with the requirements of whole life operation and maintenance alongside initial buildability and will integrate with the local setting;
> - the design is developed through engagement to seek peoples' views and including integration with setting design of the visible buildings and permanent structures"

6. HS2 continues to work with its design partners to optimise the Proposed Scheme with respect to engineering design and cost as more information relating to the ground conditions emerges.

Ground noise and vibration

7. As set out in HS2 Phase 2b Western Leg Information Paper E10: Control of Ground-borne Noise and Vibration from the Operation of Temporary and Permanent Railways, the nominated undertaker will design the temporary railways (required for tunnelling activities) and permanent railways such that the level of ground-borne noise and vibration predicted in all reasonably foreseeable circumstances does not exceed the

Significant Observed Adverse Effect Levels given in Table 1 in Appendix B of HS2 Phase 2b Western Leg Information Paper E10.

8. The nominated undertaker would reduce ground-borne noise and vibration from the temporary and permanent railways as far as is reasonably practicable.

9. In addition to the effects on people inside residential dwellings, it is recognised that impacts can also occur on people and activities in noise sensitive non-residential locations.

10. The nominated undertaker would design the temporary and permanent railways so that the level of ground-borne noise and vibration predicted in all reasonably foreseeable circumstances does not exceed the impact levels given in Tables 2 and 3 in Appendix B of Information Paper E10. The nominated undertaker would take all reasonably practicable steps to construct, operate and maintain the temporary and permanent railways so that this design objective is fulfilled.

Control measures – operation

11. For the operational railway, significant ground-borne noise and vibration effects would be reduced or avoided through, for example, the performance specification and design of the rolling stock and infrastructure, especially the track system.

12. The Promoter's policy relating to ground-borne noise and vibration is explained further in HS2 Phase 2b Western Leg Information Paper E10: Control of Ground-borne Noise and Vibration from the Operation of Temporary and Permanent Railways.

13. Volume 1, Section 9 of the main ES sets out the general approach to environmental monitoring during the operation of the Proposed Scheme. Operational noise and vibration monitoring would be carried out at different times during the lifetime of the Proposed Scheme at a combination of carefully selected monitoring locations including: adjacent or attached to moving vehicles, at fixed positions or in the vicinity of individual assets; and locations within the surrounding areas and communities alongside the railway corridor.

14. The expected noise and vibration performance of the Proposed Scheme, operational noise and vibration measurement data, associated asset information, description of corrective actions, results of measured performance compared to expected conditions, and monitoring reports would all be shared with the relevant local authorities at appropriate intervals.

15. To control ground-borne noise and vibration from the temporary and permanent railways, the nominated undertaker would be required to do the following in relation to the track systems:

- at design stage, predict, through the use of appropriate modelling, the engineering requirements of the track system that would fulfil the objectives;

- design a standard track form with the objective of meeting as many of those engineering requirements identified in the previous bullet as could reasonably be achieved by such a standard track system;
- design an enhanced track form for locations where it is predicted that the standard track system would not meet the engineering requirements or to discharge other project commitments and undertakings;
- translate the engineering requirements into contract specifications for the track systems; and
- procure, install and maintain the track systems to meet the contract specifications established above.

16. To ensure that the measures to control ground-borne noise and vibration are reasonable, the nominated undertaker would take account of the set of shared UK principles that underpin the Government's sustainable development strategy.

17. Measures to control noise would be applied in the following order: selection of quiet and low vibration equipment, review of construction methodology to consider quieter methods, location of equipment on site, control of working hours, the provision of acoustic enclosures, the use of less intrusive alarms, local screening of equipment, and perimeter hoarding.

18. If, despite the implementation of best practicable means, the noise exposure were to exceed the criteria defined in the draft Code of Construction Practice (CoCP), noise insulation or ultimately temporary re-housing would be offered in accordance with the noise insulation and temporary re-housing policy set out in HS2 Phase 2b Western Leg Information Paper E13: Control of Construction Noise and Vibration.

19. Contractors would undertake and report such monitoring as necessary to assure and demonstrate compliance with all noise commitments. Monitoring data would be provided regularly to, and be reviewed by, the nominated undertaker. It would also be made available to the local authorities.

20. Contractors would be required to comply with the terms of the draft CoCP and appropriate action would be taken by the nominated undertaker as required to ensure compliance.

21. This is explained further in HS2 Phase 2b Western Leg Information Paper D3: Code of Construction Practice and HS2 Phase 2b Western Leg Information Paper E13: Control of Construction Noise and Vibration.

22. In light of the measures set out above, the Promoter does not consider that it is necessary or appropriate to provide additional mitigation in response to the Petitioner's request to install noise and vibration monitoring systems at all the embankments and viaducts within the parish boundaries prior to operation of the Proposed Scheme

Ongoing maintenance measures

23. Representatives of HS2 Ltd and a parish councillor discussed the parish council's concerns regarding future ground movement around the Network Rail asset Whatcroft Hall Lane bridge in a meeting in October 2022.

24. The design of the Proposed Scheme sought to minimise disruption to the conventional rail network during construction. In this case, the Proposed Scheme's security fence would be located at approximately 250m away from Whatcroft Lane Rail Bridge.

25. The Promoter continues to work closely with Network Rail to co-ordinate interfaces between the Proposed Scheme and Network Rail's existing assets and responsibilities. This will include discussions on potential monitoring and protective measures, defect surveys and repairs of assets.

HOUSE OF COMMONS SELECT COMMITTEE

HIGH SPEED RAIL (CREWE - MANCHESTER) BILL

PROMOTER'S RESPONSE TO PETITION OF: Davenham Parish Council

PETITION NO: HS2-P2B-012

PARAGRAPH NO: 2, 2A - 2D

ISSUE RAISED: Environmental mitigation

PETITION PARAGRAPH: 2. Impact of potential infrastructure (embankments/viaducts) on attractiveness of surrounding area (Whatcroft /Davenham)

- Impact in attractiveness to live in these areas
- Impact on property values, residential & business

Request

2A. ECOLOGY & BIODIVERSITY - We wish to see an up to date HS2 report on the construction of the viaducts across our Parish that documents the known impacts on the ecology & biodiversity within this area and the plans to establish new habitats for species misplaced, lost during construction

2B. LANDSCAPE & VISUAL - Pre-Construction: Implement a landscaping design sympathetic to the surrounding environment with planting of mature trees /and shrubs to immediately reduce visual impact (screening) carbon emissions and to benefit reduction in noise levels. We ask that replanting continues up to the highest point on Manor Lane. Post-Construction: Efforts to screen the viaduct and reduce noise pollution must be sustainable post construction with funds set aside for maintenance. £100k spend over 4 years.

2C. ENVIRONMENTAL HEALTH - Houses on Davenham Road, Shipbrook Road, Church Street, and London Road should be considered for free double glazing if HS2 noise levels are in excess of acceptable industry norms/standards

2D. ONGOING MAINTENANCE MEASURES -The impacts of HS2 on the environment, landscape, highways, environmental health and mental health re the increased noise & emissions post completion remain unknown. We recommend that HS2

Ltd provide CWAC with a significant BAU budget to tackle post HS2 issues including but not limited to local maintenance measures, with this sum being made available to Parish Councils against a set criteria.

PROMOTER'S RESPONSE:

Ecology and biodiversity

1. The ecological impact assessment considers all ecological receptors which have the potential to be affected by the construction and/or operation of the Proposed Scheme. The assessment includes the consideration of effects arising from habitat loss, fragmentation of sites, severance of ecological networks, noise and visual disturbance, barrier effects to movement of fauna, lighting, changes in water quality and quantity, air pollution, and mortality as a result of collisions with trains. In line with the CIEEM approach, the evaluation of species receptors has been based on the distribution and status of the species concerned.

2. The effects of the construction and operation of the Proposed Scheme on ecology and biodiversity in the parish are set out in the HS2 Crewe – Manchester Environmental Statement January 2022 (main ES) Volume 2 report MA02: Wimboldsley to Lostock Gralam. As described in Paragraph 7.4.1, various elements of the Proposed Scheme will contribute towards limiting effects on habitats and species.

3. The assessment assumes implementation of the measures set out within section 9 of the draft CoCP, which would include sensitive construction practices and habitat management plan that would avoid or reduce effects on ecological receptors.

Impacts to designated sites and habitats in Davenham - Woodland

4. Construction of Stanthorne North embankment and the River Dane viaduct would result in the permanent loss of 2ha (10%) of the River Dane, Bostock Local Wildlife Site (LWS), including loss of wet woodland habitat. Habitat loss from this LWS would result in a permanent adverse effect on the structure and function of the site that would be significant at the county/metropolitan level.

5. Construction of River Dane viaduct and Dane Valley embankment would result in the permanent loss of 0.5ha (19%) of Trent and Mersey Canal LWS, including loss of deciduous woodland habitat. Habitat loss from this LWS would result in a permanent adverse effect on the structure and function of the site that would be significant at the county/metropolitan level.

6. Construction of Puddinglake Brook viaduct would result in the permanent loss of 0.6ha (85%) of Puddinglake Brook Wood LWS, including loss of deciduous wet woodland habitat. Habitat loss from this LWS would result in a permanent adverse effect on the structure and function of the site that would be significant at the county/metropolitan level.

7. Construction of Gad Brook viaduct and works associated with the realignment of a gas pipeline and high voltage power line would result in the permanent loss of 2.2ha (45%) of deciduous woodland habitat at Marshall's Gorse. The loss of this woodland would have a permanent adverse effect that would be significant at the district/borough level.

8. Within the Davenham, woodland habitat creation would be undertaken to compensate primarily for adverse effects upon non-ancient woodland at locations including the following:

- 3.6ha in total at two locations within and immediately adjacent to The Willowbeds LWS, which would compensate for the loss of 0.8ha of woodland habitat from the River Dane, Bostock LWS and would enhance ecological connectivity between woodlands in the Bostock area;
- 0.5ha in total at two locations, one to the north-east of Bank Farm, Bostock and the other along the western bank of the Trent and Mersey Canal, which would partly compensate for the loss of woodland habitat from the Trent and Mersey Canal LWS and would enhance ecological connectivity to existing bankside woodland along the Trent and Mersey Canal;
- 2ha in total at four locations between the River Dane and Bostock Hall, which would enhance ecological connectivity between the complex of existing woodlands in this area including Bull's Wood, Oak Clump and Hill Wood. In particular, this would compensate for the loss of woodland habitat from the Trent and Mersey Canal LWS and other small areas of woodland within the area;
- 0.4ha north of Whatcroft Hall Lane to compensate for the loss of 0.3ha of woodland from Puddinglake Brook Wood LWS; and
- 8.9ha in total at three locations, to the south and to the east of Marshall's Gorse, south of Penny's Lane and to the west of Cooke's Lane. These areas would compensate for the loss of 2.2ha of woodland from Marshall's Gorse and 1.3ha of other smaller areas of woodland loss in the vicinity of Rudheath.

9. The target habitat type for woodland planting is lowland mixed deciduous woodland habitat of principal importance. The new areas of woodland habitat would connect and help maintain the integrity of remaining areas of woodland. A temporary adverse effect would be expected until these areas became established, after which these measures would reduce the overall effect on woodland to a level that would not be significant.

Traditional Orchard

10. Construction of the Gad Brook viaduct would result in the permanent loss of 800m^2 (66%) of Pear Tree Farm LWS including orchard habitat. Habitat loss from this LWS would result in a permanent adverse effect on the structure and function of the site that would be significant at the county/metropolitan level.

11. Where reasonably practicable, measures would be taken to protect as much of the orchard habitat at Pear Tree Farm LWS. For unavoidable loss, the trees within the orchard would be soft-felled and sections placed within retained habitats to provide a continued deadwood resource. The loss of orchard habitat would represent a residual adverse effect that would be significant at the county/metropolitan level.

Reedbed

12. Construction of Trent and Mersey Canal viaduct would result in the permanent loss of 1.1ha (58%) of Whatcroft Lane Wetlands LWS including reedbed habitat. Habitat loss from this LWS would result in a permanent adverse effect on the structure and function of the site that would be significant at the county/metropolitan level.

13. To address the loss of 0.3ha of reedbed habitat at Whatcroft Lane Wetlands LWS, replacement reedbed habitat would be created within 1.4ha of wetland habitat creation areas immediately to the east of the LWS along the Trent and Mersey Canal and to the south and south-west of the LWS on the opposite bank of the Trent and Mersey Canal between the canal and the Mid-Cheshire Line railway. Once established, it is anticipated that any adverse effect on reedbed habitat would be reduced to a level that would not be significant.

Hedgerows

14. On a precautionary basis, it is assumed that all hedgerows (approximately 5km) within the land required for the construction of the Proposed Scheme in Davenham would be permanently lost and the remaining hedgerow network would be fragmented. This includes the native species rich hedgerows at River Dane, Bostock LWS. This total, however, includes some hedges that would likely be retained, such as those located within land required for habitat creation. The combined loss and severance of hedgerows within the land required for the construction of the Proposed Scheme in Davenham would contribute to permanent adverse effect within the MA02: Wimboldsley to Lostock Gralam community area as a whole that would be significant at the County/Metropolitan level.

15. New hedgerows would be planted as replacement for those lost as a result of the Proposed Scheme. Where practicable the hedgerows within the River Dane, Bostock LWS would be translocated to the nearest suitable habitat creation areas. A total of approximately 4.3km of new hedgerows would be planted in Davenham and the species composition would be characteristic of the surrounding area. This represents a net reduction in hedgerow of approximately 0.7km that would contribute to a deficit of 56.9km after mitigation in the Wimboldsley to Lostock Gralam area as a whole, which is a residual adverse effect that would be significant at the county/metropolitan level.

Waterbodies

16. On a precautionary basis it is assumed that 12 ponds located within the land that would be required for the construction of the Proposed Scheme in Davenham would be permanently lost. The loss of ponds within the land required for the construction of the Proposed Scheme would lead to a permanent adverse effect on the conservation status of water bodies that would be significant, in each case, at up to district/borough level.

17. At least one pond would be created for every pond lost within the land required for the construction of the Proposed Scheme. New ponds would be established in accordance with the Ecological Principles of Mitigation in the HS2 Phase 2b Environmental Impact Assessment Scope and Methodology Report. Once established, it is anticipated that any adverse effect on pond habitats would be reduced to a level that is not significant.

Watercourses

18. The Proposed Scheme would cross the following watercourses on viaducts:

- the River Dane would be crossed by the River Dane viaduct;
- the Trent and Mersey Canal would be crossed to the east of Bostock by River Dane viaduct, to the north of Whatcroft by the Puddinglake Brook viaduct and to the south of Billinge Green by Trent and the Mersey Canal viaduct;
- Puddinglake Brook would be crossed by the Puddinglake Brook viaduct; and
- Gad Brook and a tributary of Gad Brook would be crossed by the Gad Brook viaduct.

19. A series of smaller watercourses would also be permanently realigned or culverted, reducing the connectivity of the habitat corridors associated with watercourses. The habitat loss and reduction in connectivity would result in a permanent adverse effect that would be significant at up to district/borough level.

20. For the realignment of any smaller watercourses, the channel would be naturalized where reasonably practicable, with a profile to promote the establishment of marginal vegetation and pools. Development of the vegetation would cause the adverse effect on these watercourses to reduce to a level that would not be significant.

Impacts on species in Davenham – Protected species

21. Protected species that may be affected by the Proposed Scheme include, but are not limited to, a number of bat species, great crested newt, otter, barn owl, water vole, and badger.

22. As outlined in HS2 Phase 2b Western Leg Information Paper E2: Ecology, the nominated undertaker would ensure compliance with the relevant statutory provisions in respect of areas of nature conservation interest and of protected species, including protected bat species. Relevant provisions include (but are not limited to) the

Wildlife and Countryside Act 1981; the Conservation of Habitats and Species Regulations 2017; Countryside and Rights of Way Act 2000; and Protection of Badgers Act 1992. In all locations where significant effects on protected species are identified, details would be discussed with Natural England and NatureScot, and licences would be obtained in compliance with legal requirements (fully supported by the required survey work).

23. Mitigation and compensation to address effects on legally protected species would, where appropriate, include translocation of species, the provision of replacement habitat and provision of special measures such as appropriately sized culverts to facilitate the movement of species across the route. These measures are described in Community Area Reports, in Volume 2, of the Environmental Statement.

Landscape: Route-wide approach to landscape mitigation

24. HS2 Phase 2b Western Leg Information Paper D1: Design, states that: "the design of all visible elements of the built and landscaped environment are sympathetic to their context, environment and social setting". The approach to the design of the landscape is to create a well-connected landscape, embankments and cuttings shaped to integrate the Proposed Scheme into the character of the surrounding landscape and planting to screen the new railway and associated roads from the neighbouring residences and users of public rights of way.

25. Land has been included in the Bill to mitigate the significant effects identified as far as reasonably practicable. The Promoter does not consider that land is required outside of the current Bill limits, extending up to the highest point on Manor Lane, to mitigate visual impacts over and above that already identified.

Landscape and visual

26. The landscape and visual effects of Dane Valley Embankment, Puddinglake Brook Viaduct, Whatcroft South Embankment, Trent and Mersey Canal Viaduct, Whatcroft North Embankment and the Gad Brook Viaduct have been assessed in the Environmental Statement (main ES) and reported in section 11, Community Area MA02 Report. The following viewpoints have been used within the assessment as being representative of potentially affected viewpoints within the parish of Davenham:

- 309-03-004: View north-west from the Trent and Mersey Canal, Dane Valley;
- 309-03-005: View south-east from the Trent and Mersey Canal, Dane Valley;
- 310-02-001: View south-east from Bridge Farm, Whatcroft Hall Lane;
- 310-03-002: View south-east from the Trent and Mersey Canal, Puddinglake Brook;
- 310-03-003: View west from the Trent and Mersey Canal, alongside Whatcroft Hall Lane;
- 310-03-004: View north-west from the Trent and Mersey Canal, north of Whatcroft;

- 310-02-005: View south-east from Brook Farm, Old Lane;

- 310-02-006: View south-west from Croft Lodge Kennels, Whatcroft Hall Lane;
- 310-02-007: View south-east from the Trent and Mersey Canal, Oakwood Marina;
- 310-02-008: View west from Pear Tree Farm Cottages, Davenham Road; and,
- 310-02-009: View east from Footpath Rudheath 5/2, Park Farm, Rudheath.

27. During construction, the following viewpoints are reported as experiencing significant effects due to views of the railhead and the construction of the Proposed Scheme:

- 309-03-004: View north-west from the Trent and Mersey Canal, Dane Valley;
- 309-03-005: View south-east from the Trent and Mersey Canal, Dane Valley;
- 310-02-001: View south-east from Bridge Farm, Whatcroft Hall Lane;
- 310-03-002: View south-east from the Trent and Mersey Canal, Puddinglake Brook;
- 310-03-003: View west from the Trent and Mersey Canal, alongside Whatcroft Hall Lane;
- 310-03-004: View north-west from the Trent and Mersey Canal, north of Whatcroft;
- 310-02-005: View south-east from Brook Farm, Old Lane;
- 310-02-006: View south-west from Croft Lodge Kennels, Whatcroft Hall Lane;
- 310-02-007: View south-east from the Trent and Mersey Canal, Oakwood Marina;
- 310-02-008: View west from Pear Tree Farm Cottages, Davenham Road; and
- 310-02-009: View east from Footpath Rudheath 5/2, Park Farm, Rudheath.

28. The draft CoCP includes measures to limit landscape and visual impacts during construction. These would include protecting existing trees where possible, use of well-maintained fencing around construction areas and designing lighting to avoid intrusion on adjacent residential properties. This is explained further in HS2 Phase 2b Western Leg Information Paper D3: Code of Construction Practice.

29. The Proposed Scheme design includes the following areas of landscape mitigation in order to reduce the visual effects of the Proposed Scheme on viewpoints within the Parish of Davenham and to assist in integrating the railway infrastructure into the surrounding landscape:

- landscape screen planting located on both sides of the Dane Valley embankment;
- landscape screen planting located on both sides of the Whatcroft South embankment;
- hedgerow habitat creation located to the west of the Whatcroft South embankment; and

- landscape screen planting located on both sides of the Whatcroft North embankment;

30. The Proposed Scheme would be partially screened by existing vegetation in the first year of operation, and therefore the likely significant effect at 310-02-006: View south-west from Croft Lodge Kennels, Whatcroft Hall Lane, is predicted to be removed at this time.

31. By year 15 of operation of the Proposed Scheme, the maturing proposed mitigation planting would partially screen views of the embankments and viaducts described above. Therefore the likely significant effect at 310-02-009: View east from Footpath Rudheath 5/2, Park Farm, Rudheath is predicted to be removed at this time.

32. By year 30 of operation, the proposed mitigation planting is expected to have matured and would serve to partially screen views of the embankments and viaducts, however the following viewpoints are predicted to experience a likely significant residual effect:

- 309-03-004: View north-west from the Trent and Mersey Canal, Dane Valley;
- 309-03-005: View south-east from the Trent and Mersey Canal, Dane Valley;
- 310-02-001: View south-east from Bridge Farm, Whatcroft Hall Lane;
- 310-03-002: View south-east from the Trent and Mersey Canal, Puddinglake Brook;
- 310-03-003: View west from the Trent and Mersey Canal, alongside Whatcroft Hall Lane;
- 310-03-004: View north-west from the Trent and Mersey Canal, north of Whatcroft;
- 310-02-005: View south-east from Brook Farm, Old Lane;
- 310-02-007: View south-east from the Trent and Mersey Canal, Oakwood Marina; and,
- 310-02-008: View west from Pear Tree Farm Cottages, Davenham Road.

33. The Promoter recognises the importance of public engagement in the design development process. The HS2 Phase 2b Western Leg Information Paper D1: Design identifies the Trent and Mersey Canal Viaduct as a key design element for local engagement. The nominated undertaker would therefore engage with local residents on the design development of the Trent and Mersey Canal Viaduct.

Operational noise assessment

34. The Lowest Observed Adverse Effect Levels (LOAELs) set by the Promoter are set out in HS2 Phase 2b Western Leg Information Paper E9: Control of airborne noise from altered roads and the operational railway. The values have been derived with due regard to the World Health Organization's Guidelines for Community Noise. The LOAELs are 50 decibels (dB) for the day (0700-2300), 40 dB for the night (2300-0700)

and 60 dB at the façade (with reference to sound pressure measurement locations: a position 1m from the building) from any nightly noise event (2300-0700).

35. The Promoter would take all reasonable steps to design and construct altered roads, and to design, construct, operate and maintain the railway so that the combined airborne noise from these sources, predicted in all reasonably foreseeable circumstances, does not exceed the LOAELs.

36. Dwellings where the noise level during the operation of the railway would likely exceed the SOAEL have been identified individually through the environmental impact assessment as being likely to experience a significant adverse operational noise effect. This is an indication that noise insulation and ventilation would be offered as a means of avoiding any significant adverse effect on the health and quality of life of those living inside. Qualification for noise insulation would be identified and noise insulation offered at the time, should the Proposed Scheme become operational.

Operational noise impacts

37. The operational sound, noise and vibration assessment of the Proposed Scheme takes into account both the route-wide and localised control measures proposed in MA02 Wimboldsley to Lostock Gralam, Volume 2, of the main ES.

38. The operational assessment of the Proposed Scheme takes into account both the route-wide and localised control measures proposed in the ES as updated by the Supplementary Environmental Statement 1 (SES1) and Additional Provision 1(AP1) ES. As the design progresses these proposals would continue to be reviewed to ensure that the Promoter's noise and vibration policy commitments are met. These are set out in:

- HS2 Phase 2b Western Leg Information Paper E9: Control of Airborne Noise from altered roads and the operational railway;
- HS2 Phase 2b Western Leg Information Paper E10: Control of Ground-borne Noise and Vibration from the Operation of Temporary and Permanent Railways;
- HS2 Phase 2b Western Leg Information Paper E11: Control of Noise from the Operation of Stationary Systems; and
- HS2 Phase 2b Western Leg Information Paper E12: Operational Noise and Vibration Monitoring Framework.

39. As reported in the main ES Volume 2, MA02, 6.5.7, a group of approximately 10 residential properties at Pear Tree Farm Cottages on Davenham Road would be in close proximity to the route of the Proposed Scheme. The operation of the Proposed Scheme is likely to cause a significant adverse noise effect on these properties during the daytime and night-time due to the running of the trains on Gad Brook viaduct. Where significant effects have been predicted at a property, the nominated undertaker would be required during detailed design to take all possible reasonable steps to avoid those effects.

40. Likely residual significant operational adverse airborne noise effects due to increased noise levels have been identified at residential properties on Davenham Road, identified by MA02-O-C5 on Map SV-05-307. The nominated undertaker would be required to seek reasonably practicable measures to further reduce or avoid these significant adverse operational effects.

41. Dwellings where the noise level during the operation of the railway is predicted to exceed the Significant Observed Adverse Effect Level (SOAEL) have been identified individually through the environmental impact assessment as being likely to experience a significant adverse operational noise effect. This is an indication that noise insulation and ventilation would be offered as a means of avoiding any significant adverse effect on the health and quality of life of those living inside. Qualification for noise insulation would be identified and noise insulation offered at the time that the Proposed Scheme becomes operational. The noise level at properties on Davenham Road, Shipbrook Road, Church Street, and London Road is not predicted to exceed SOAEL and the properties are therefore not anticipated to qualify for noise insulation. Further details, including details on the provision of noise insulation, can be found in HS2 Phase 2b Western Leg Information Paper E9: Control of Airborne Noise.

42. At the majority of individual residences, the proposed mitigation measures are expected to reduce operational noise inside all dwellings, such that it would not reach a level where it will significantly affect residents, and therefore, no likely residual significant effects are identified. Residential properties that qualify for noise insulation are reported in the ES, Volume 2, MA02, Section 13.4.9. This includes some properties within the parish, but not the roads specified in the petition.

43. The Promoter's policy on assessing and controlling the noise and vibration impacts set out in HS2 information Papers E9, E10, E11, E12, E13 represents its interpretation of the Government's Noise Policy Statement for England. Each policy includes noise or vibration effect levels that are used in assessment to determine the appropriate policy action.

44. The Promoter set these levels based on established practice, research results, guidance in national and international standards, guidance from national and international agencies, and independent review by academic, industry and Government employees. They have also been further independently scrutinised during parliamentary proceedings for HS2 Phase One and Phase 2a and are provided as draft route-wide assurances for the Proposed Scheme where they will be subject to further scrutiny during the parliamentary proceedings for Phase 2b.

HOUSE OF COMMONS SELECT COMMITTEE

HIGH SPEED RAIL (CREWE - MANCHESTER) BILL

PROMOTER'S RESPONSE TO PETITION OF:	Davenham Parish Council
PETITION NO:	HS2-P2B-012
PARAGRAPH NO:	3, 3A
ISSUE RAISED:	Access routes
PETITION PARAGRAPH:	3. Severe disruption to access routes caused by diversions, re-routing and volume of users bypassing Robert's Bakery roundabout satellite site via Davenham (A556 / Hartford Road, A556 / London Road, and Church Street / London Road) resulting in significant safety concerns. The route via Church Street/ Shipbrook Road, Davenham Road, Whatcroft to Goostrey and Macclesfield is used very intensively by cyclists. When construction closes this route, users will be forced to take the A556 or divert via Middlewich. Both of these options will significantly increase the dangers for cyclists Request 3A. HIGHWAYS: To fully fund signage denoting no through access routes for service /construction vehicles and provide the finance required for CWaC / Cheshire Police to carry out enforcement. Any funds accrued as a result of fines be ring fenced for community benefit in the locale. To pay for and erect 'Welcome to Davenham' signage at A530 / Davenham Road, A556 / Hartford Road and Church Street / London Road junctions in keeping with existing signage. To pay for and install Vehicle Activated Speed Restriction Signs installed at all key access routes through the village (London Road, Church Street, Hartford Road). To make good the additional wear & tear of the roads. Pay for the complete resurfacing of Hartford Road, London Road, Church Street, Shipbrook Road & Davenham Road. To pay for the design and implementation of a designated footpath and cycle lane along Shipbrook Road & Davenham Road during the construction period and having CWAC adopt these for future use.

PROMOTER'S RESPONSE:

Maintaining access -general

1. The nominated undertaker would be required to maintain public access, where reasonably practicable, and appropriate measures would be implemented to ensure the local community, economy and transport networks could continue to operate effectively. Where not reasonably practicable, alternative measures would be identified to maintain continual public access, especially for pedestrians and cyclists, to routes in the vicinity of the construction sites. The impact of road-based construction traffic would be reduced by implementing and monitoring clear controls on vehicle types, hours of site operation, parking and designated routes for large goods vehicles.

2. Further information can be found in the HS2 Phase 2b Western Leg Information Paper D10: Maintaining access to residential and commercial property during construction.

Disruption to access routes due to closures

3. The Promoter understands the Petitioner's concerns in relation to the disruption to access routes caused by diversions and re-routing. As reported in paragraph 14.3.3 in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix TR-003-00002 of the main ES, the construction of the Proposed Scheme would require the temporary closure of a section of Davenham Road where it is crossed by the route of the Proposed Scheme for less than four weeks. During this period, traffic would be diverted via Davenham Road, Shipbrook Road, Church Street, London Road and the A556 Chester Road, increasing journey length for some users by 7.2km. This has been assessed as a major adverse effect for users of Davenham Road as a result of changes in journey times for vehicle occupants.

4. Other than the temporary closure of Davenham Road for up to four weeks, there would be no other temporary or permanent closures or realignments within the vicinity that would result in adverse significant affects as a result of changes in journey times for vehicle occupants.

5. Access would be maintained along A530 King Street and A566 Shurlach Road during the construction of the Proposed Scheme, with the exception of some short term lane closures or road closures at weekends or overnight. The lane and road closures would be expected to occur outside of the weekday peak hours, when the road network is less busy.

Disruption to access due to construction traffic

6. The construction routes in the vicinity of Davenham are the A533 Davenham Bypass, the A556 Shurlach Road and Davenham Road.

7. The A533 Davenham Bypass is a single carriageway road east of Davenham in MA02. Within the Davenham Parish boundary, it runs in an approximate south-north direction between London Road and the A556 Shurlach Road. The A556 Shurlach Road is a dual carriageway on the northern boundary of Davenham Parish which runs in an approximate west-east direction between the A533 Davenham Bypass and A530 King Street.

8. The A533 Davenham Bypass and A556 Shurlach Road are designated as HS2 construction routes. Table 14-5 in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix: TR-003-00002 of the SES1 and AP1 ES summarises the peak daily construction traffic flows associated the AP1 revised scheme. It indicates that the A553 Davenham Bypass and the A556 Shurlach Road would each carry a peak daily two-way combined flow of less than 20 HGVs over an assumed 10-hour working day, which equates to approximately one HGV every 30 minutes on average.

9. Tables 50 and 51 in Volume 2, Community Area report: Wimboldsley to Lostock Gralam (MA02) of the main ES set out the locations where there are forecast to be significant effects on traffic-related severance for non-motorised users (pedestrians and cyclists) due to changes in all vehicles or total HGVs in the Davenham area. The assessment has been updated for the AP1 revised scheme and is reported in Tables 22 and 23 of Volume 2, Community Area report: Wimboldsley to Lostock Gralam (MA02) of the SES1 and AP1 ES. There was initially forecast to be a moderate adverse effect on traffic-related severance on the section of the A533 Davenham Bypass between London Road and the A556 Shurlach Road during construction, as set out in the main ES, but this is now reported as no significant adverse effect in the SES1 and AP1 ES.

10. There are no adverse effects on traffic-related severance for non-motorised users identified on the A556 Shurlach Road in the Davenham area reported in the revised SES1 and AP1 ES.

11. Davenham Road is a single carriageway rural road south of Rudheath. It runs in an approximate west-east direction between Shipbrook Road and the A530 King Street.

12. The eastern end of Davenham Road is designated as a HS2 construction route. Table 14-5 in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix: TR-003-00002 of the SES1 and AP1 ES indicates that Davenham Road between Shurlach Lane and the A530 King Street would carry a peak daily two-way combined flow of 468 HGVs over an assumed 10-hour working day, which equates to approximately one HGV every minute on average. The busy period is expected to be three months in duration.

13. Table 51 in Volume 2, Community Area report: Wimboldsley to Lostock Gralam (MA02) of the main ES sets out a major adverse effect on traffic-related severance for non-motorised users due to changes in total HGVs on the section of Davenham Road

between Shurlach Lane and the A530 King Street during construction. This effect remains unchanged in the SES1 and AP1 ES.

14. The Promoter acknowledges that there would be an impact due to construction traffic on Davenham Road, to the east of Davenham for up to three months, but the likely impact of construction traffic on Davenham Road for the remainder of the HS2 construction period and on the A533 Davenham Bypass and A556 Shurlach Road throughout the HS2 construction period is considered to be low.

Management of construction traffic - general

15. The Promoter recognises that the impacts of construction traffic would likely be a particular concern for residents living or working near the proposed line of route. The draft CoCP has been prepared with the aim of ensuring that the significant adverse effects identified in the ES would be reduced as far as reasonably practicable. The impacts of construction traffic are outlined in the Phase 2b hybrid Bill ES Volume 2, Community Area Reports, Traffic and transport Section. A detailed assessment of traffic and transport impacts within each community area is contained in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix: TR-003-00002 of the main ES.

16. Paragraphs 14.1.1 and 14.1.2. of the draft CoCP detail provisions with regard to traffic management during construction:

> "During construction works, the nominated undertaker will require that the impacts from construction traffic on the local community (including all local residents and businesses and their customers, visitors to the area, and users of the surrounding transport network) are minimised by its contractors where reasonably practicable."

17. HS2 Phase 2b Western Leg Information Paper E3: Management of Traffic During Construction describes the proposed consultation in relation to the management of traffic during construction:

> "7.3 During construction, regular local traffic liaison meetings will be arranged with highway authorities, bus operators, taxi and trade representation (as appropriate), and the police - other emergency services will be included, as appropriate. These meetings will provide an opportunity for contractors to present proposals for future works affecting the highway, including methods of construction and proposed programme, and for a review of the associated traffic management requirements. This will allow the highway authorities to carry out their network co-ordination duties.
>
> 7.5 The nominated undertaker, as part of the requisite community liaison arrangements, will require contractors to communicate regularly with parties affected by the works. Local residents and businesses will be informed -

appropriately and in advance - of the dates and durations of any closures of roads or public right of way, and will be provided with details of diversion routes at least two weeks in advance or when final details are available. Advance warning signs of road closures will be provided for users of roads and public of rights of way."

Disruption to cyclists caused by the closure of Davenham Road

18. Davenham Road is on route 573 of the national cycle network. The Promoter appreciates the Petitioner's concerns in relation to disruption to cyclists caused by diversions during the construction of the Proposed Scheme and acknowledges that cyclists would be temporarily diverted as a result of the closure of Davenham Road for a period of up to four weeks.

Disruption to cyclists caused by construction and diverted traffic

19. The Promoter has used the Northwich Town Centre strategic traffic model to assess the impacts during construction and operation of the AP1 revised scheme. Four scenarios were assessed during construction, representing four distinct temporal phases. These scenarios include area-wide highway impacts including diverted traffic due to the combination of highway changes and construction traffic. Any diversionary impacts of construction traffic are included in the analysis, although it is acknowledged that the closure of Davenham Road is not included in any of the scenarios as it is scheduled to last less than four weeks.

20. Table 14-7 and 14-8 in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix: TR-003-00002 of the SES1 and AP1 ES set out the traffic flows for the 2030 future baseline and the AP1 revised scheme on the roads most affected by construction for the AM and PM peak hour respectively. These tables replace Table 14-7 and Table 14-8 of the main Transport Assessment. The tables include roads where there is a 10% or more change in traffic for any construction scenario. Traffic flows on all other roads are either unaffected from the future baseline or there would only be small changes in traffic flows (HGV or all vehicles of less than 10%) compared to the future baseline daily flow.

21. Table 14-7 and 14-8 in the Transport Assessment Part 3 Addendum for Wimboldsley to Lostock Gralam (MA02) in Volume 5, Appendix: TR-003-00002 of the SES1 and AP1 ES indicate that the section Davenham Road between Shurlach Lane and the A530 King Street would carry 571 vehicles per hour in the AM peak hour and 350 vehicles per hour in the PM peak hour during the 2030 future baseline.

22. During construction of the AP1 revised scheme, traffic flows on the section of Davenham Road between Shurlach Lane and the A530 King Street are forecast to increase to a maximum of 673 vehicles per hour in the AM peak hour, an increase of 102 vehicles (18%) compared with the 2030 future baseline. In the PM peak hour, traffic flows would increase to a maximum of 386 vehicles per hour, an increase of 36 vehicles (10%) compared with the 2030 future baseline.

23. Hartford Road, Church Street and London Road are not included in Table 14-7 and 14-8 as the flow changes do not meet the threshold to be included in the tables for any of the construction scenarios for these roads i.e. there are only small changes in traffic flows (HGV or all vehicles of less than 10%) compared to the future baseline daily flow.

Access for cyclists during the construction of the Proposed Scheme - general

24. The draft CoCP describes generic measures for the management of traffic (which includes pedestrians, cyclists and equestrians on public rights of way) in paragraph 14.2.2, including that:

> "Generic measures, which will apply route-wide, will be discussed in advance with the local highway authorities and any other appropriate authorities. Prior to the commencement of the works, the nominated undertaker will ensure that a Routewide Traffic Management Plan (RTMP) will be produced in consultation with the highway and traffic authorities and the emergency services and other relevant key stakeholders. The RTMP will include, as appropriate… procedures to be followed for the temporary or permanent closure or diversion of roads, PRoW or accesses."

25. Paragraph 14.1.2 of the draft CoCP explains that access for cyclists (and pedestrians and equestrians) would be retained during construction where safe and appropriate to do so.

26. Paragraph 5.1 of HS2 Phase 2b Western Leg Information Paper E3: Management of Traffic During Construction explains that during construction, cycle access would be maintained, wherever appropriate and could include the narrowing or realignment of carriageway cycle lanes, combined footways/cycleways, off-road cycle tracks and bridleways/byways. When re-routing cyclists, signage would be provided to indicate re-routed cycle paths.

27. Further information on potential impacts from local construction and operational impacts of the Proposed Scheme on cyclists is outlined in the main ES Volume 2, Community Area Reports, Traffic and transport Section. A detailed report on traffic and transport impacts within each community area is contained in the Transport Assessment (see Volume 5: Appendices TR-002 and TR-003).

28. Any changes or amendments to the potential impacts on cyclists are reported in the SES1 and AP1 Volume 2 Community Area Reports and SES1 and AP1 Volume 5 Transport Assessments. Further information is also provided in HS2 Phase 2b Western Leg Information Papers E4: Highways and Traffic During Construction – Legislative Provisions, and E29: Active Travel.

Highway signage

29. Any requests for new or modified traffic signs would require the consent and approval of the local highway authority. The Promoter is in dialogue with the local highway authority (Cheshire West and Chester Council) with regard to highway signage at various locations around Davenham and other parishes in the local area.

Resurfacing

30. With regard to the Petitioner's request that specific resurfacing works take place prior to the construction of the Proposed Scheme, the nominated undertaker would work with the highway authority in carrying out a review of local highways intended to be used by its construction traffic. It is envisaged that a representative from the highway authority would work with a representative from the nominated undertaker in a common approach to dealing with matters such as condition surveys in a proportionate manner, the format and scope of which would be discussed with the highway authorities under the auspices of the Highways Sub-group of the Phase 2b Planning Forum.

31. It is in the nominated undertaker's interests in terms of avoiding delay that any necessary highway improvements are carried out well in advance of the relevant construction route coming into use.

32. With regard to wear and tear of roads, paragraph 14.2.2 of the draft CoCP states that the RTMP would include, as appropriate, measures to ensure that the timely maintenance and condition of public roads, cycleways and PRoWs do not deteriorate due to use by construction traffic, including monitoring arrangements with local highway authorities.

33. Part 1 of Schedule 32 to the Bill includes a range of protective provisions relating to highways and traffic, including paragraph 14 which requires the nominated undertaker to make good and reinstate, to the reasonable satisfaction of the highway authority, any part of a highway that has been broken up or disturbed.

34. Further information is given in HS2 Phase 2b Western Leg Information Paper E4: Highways and Traffic During Construction – Legislative Provisions.

Designated footpath and cycle lane along Shipbrook Road & Davenham Road

35. The Promoter considers that the rural location and nature of the existing road is not appropriate for permanent fully segregated pedestrian and cycle lane facilities. Therefore, the Promoter does not consider this request to be an appropriate form of mitigation for the Proposed Scheme.

36. There are no plans for HS2 construction traffic to use Shipbrook Road. A section of Davenham Road to the east of the canal crossing and as far as the junction with the

A530 King Street would be used for construction traffic as shown on map CT-05-313. Where there is the potential for a conflict between construction traffic and non-motorised road users, appropriate temporary measures would be developed as part of a local traffic management plan. Any temporary traffic management measures would need to be developed in conjunction with Cheshire West and Chester Council as the local highway authority.

HOUSE OF COMMONS SELECT COMMITTEE

HIGH SPEED RAIL (CREWE - MANCHESTER) BILL

PROMOTER'S RESPONSE TO PETITION OF:	Davenham Parish Council
PETITION NO:	HS2-P2B-012
PARAGRAPH NO:	4, 4A
ISSUE RAISED:	Impact on village during construction
PETITION PARAGRAPH:	4. Impact to desirability and character of the village and reputational harm during construction and operation as well as significant and continued upheaval to residents and businesses. Request 4A. COMMUNITY DRIVEN: The likelihood of London Road being used as a rabbit run for traffic is extremely high. This will bring congestion to the village, the knock-on impact of this will be to discourage residents from using the village shops, which could impact their profits & viability. To support our small businesses, we ask that Business rates be reduced by 50% for the duration of the construction and HS2 pay the remaining 50% to Cheshire West & Chester Council. Identification and purchase (including transfer of ownership to Davenham Parish Council) of land that could be used to accommodate community facilities (e.g. village hall, all weather pitch, recreational use etc.). Funding for local artwork to be designed and implemented within a central village location depicting Davenham community groups helping attract new visitors (£10k). Funding for annual village event (approx. £10k /year) to prevent Community severance and actively engage and unite local community during construction (anticipated 5 years) and post construction (further 5 years).

PROMOTER'S RESPONSE:

London Road through traffic

1. The petition comment regarding the potential use of London Road as a 'rabbit run' is understood by the Promoter to refer to the Petitioner's concern to avoid through traffic using London Road. As indicated in the response to paragraphs 3, 3A of the petition, set out above in this document, the Promoter does not accept that there will be a material change in traffic on London Road but is in ongoing discussions with the local highway authority (Cheshire West and Chester Council) in relation to highway signage.

Community funding

2. The Community and Environment Fund (CEF) and the Business and Local Economy Fund (BLEF) were first announced by the Government for Phase One of HS2 in 2014.

3. On 25 January 2018 it was confirmed that £5m was to be made available for Phase 2A of the Proposed Scheme, bringing the total funding pot to £45m for Phase One and Phase 2A combined. As announced by the HS2 Minister in June 2022, an additional £10m has been made available for communities and businesses disrupted along the line of route from Crewe to Manchester, geographical allocations for the Funds will be the subject of a future announcement by the Minister and the Department for Transport.

4. As was the case for the Phase One and Phase 2a funding, the Phase 2b allocation for communities along the Proposed Scheme will not be available for application or administered by the Grant Management Body until after Royal Assent of the Crewe – Manchester hybrid Bill.

5. The HS2 Phase 2b Western Leg Information Paper C11: The Community and Environment Fund and Business and Local Economy Fund, provides further details of the extension to CEF and BLEF for the Proposed Scheme including the objectives and initiatives each Fund in addition to https://hs2funds.org.uk.