

Via email

30th September 2017



Dear HS2 Ltd,

HS2 Phase 2a (West Midlands – Crewe) hybrid Bill environmental statement

Staffordshire Wildlife Trust supports the comments made regarding ecology by the Staffordshire County Council, the Woodland Trust and the National Trust.

LINE-WIDE ISSUES

Adequacy of the Environmental Statement

We are very concerned that the Environmental Statement is clearly not complete, and has been very rushed, therefore does not present an accurate picture of the likely impacts. It is more akin to a draft ES, with draft designs, and we feel is not adequate to base decisions upon.

In comparison, we have a large project of national significance currently proposed in Staffordshire, a 300 hectare freight hub near Gailey. Ecology surveys were begun in late 2015, with a draft ES consulted upon in August 2017 (some areas had not been completed), and with a full ES expected with the formal application in early 2018. This is around 2.5 years. In our experience, EIAs for large developments tend to take around 2 to 3 years; this is necessary to ensure adequate surveys are completed for the entire area affected, at the right times of year, with re-visits/ in depth surveys where necessary, and to allow the iterative design process to react to the variety of environmental and engineering constraints/ opportunities. Therefore it is unacceptable that an EIA for Phase 2a, which is vastly larger and more complex, can possibly be completed adequately in around a year and a half, and it is clear that it fails to do so.

We are concerned that many areas have not been accessed for survey, despite SWT having accessed several sites in the last two years, and landowners having given permission for access where HS2 has stated access was not available. This would appear to be an issue with a lack of time or perhaps ecologist availability, rather than lack of access permission. There are also permissive powers for access to Phase 2a land granted as part of the Phase 1 Hybrid Bill, so there should be less reason for areas to be missed. The Ecological baseline data - phase 1 habitat survey report (BID-EC-002-000) provides figures for the % area where access was obtained

The Wolseley Centre
Wolseley Bridge
Stafford
ST17 0WT
Tel: 01889 880100
Fax: 01889 880101
info@staffs-
wildlife.org.uk
www.staffs-
wildlife.org.uk

Chairman
Richard Higgs
Chief Executive
Julian Woolford

Registered Charity No. 259558
Limited Company No. 959609
Registered Office: The Wolseley
Centre
Wolseley Bridge, Stafford, ST17 0WT



Working for a Living Landscape

to land required for the construction of the Proposed Scheme and a 250m buffer from this boundary, for each Community Area (CA): CA1- 67%, CA2 - 51.8%, CA3- 78.9%, CA4- 72.3%. Phase 1 habitat surveys are ongoing, meaning further data will be available after the ES has been written. It is not acceptable for an ES to be missing this amount of survey coverage.

The assessment needs to be iterative and incorporate design changes as information is gathered. Many of the significant habitat losses reported should be avoidable, such as proposed compensatory habitats causing loss of existing valuable habitats, or where temporary or flexible infrastructure is proposed. For example balancing ponds and temporary road/ path diversions causing losses of veteran trees. This should have been dealt with by this stage, with an accurate number and scale of losses documented- at detailed design is too late for the ES to present an accurate impact assessment. Once any losses have been permitted, there is also no guarantee they will be avoided in future.

No-where could we find in a document a clear table showing valued receptors, the impacts before mitigation, the mitigation/ compensation proposed, and residual impacts. The text within the many documents does address these issues in the main, but it is hard to follow for each receptor and some receptors are mentioned but the impacts are then not explained, or mitigation is missing.

It is not clear why a project of this scale should have different 'rules' to smaller projects when it comes to adequate impact assessment. At least another year, if not two, is required to gain a full picture of the impacts. A scheme that will impact huge areas of the country over many decades should not be rushed. There is also the very likely danger that issues missed now will cause problems, delays and increased costs during construction and operation.

Out-of-date and incomplete Local Wildlife Site (LWS) data

Due to resource limitations and access restrictions, the comprehensiveness and accuracy of LWS locations, status and boundaries is very rarely complete for any area. Many LWS affected by the HS2 proposals have not been surveyed for over 10 years, so their status and/or boundaries could change on re-assessment, due to changes in the habitats themselves, further areas being accessible for survey, or updates to the selection criteria. This means the currently assessed impacts are very likely to change in magnitude or significance. Already this year, several LWS have been updated following surveys, including changes in status, extensions and the addition of new sites. This will continue each year as SWT and partners gather data, including any generated by HS2's surveys, and take this to the LWS grading committee. This means that some assessed impacts in the ES are incorrect in terms of their significance, and may be for a number of other sites. To achieve an accurate picture, HS2 Ltd should not rely on all currently available data, but use the LWS criteria when assessing the value of out-of-date LWS and any surrounding habitat of similar value.

Many habitats and species populations identified by HS2 to be of county and district value also have the potential to be LWS, as the surveys have discovered many features that have never been surveyed before. This means the valuation and assessment of impact significance is likely to be inaccurate for many sites. For example, Cash's Pit, a woodland in CA3, is deemed to be of local/parish value by

HS2, but was recently surveyed by SWT and designated as a Biodiversity Alert Site (district value LWS). The Ecological baseline data report BID-EC-004-000 lists 42 sites, including ancient woodlands, where the requirement for NVC survey was identified, but access for survey was not available. There are also many tens of Important or species-rich hedgerows that could be of LWS quality, along with many ponds. This means the value, and designation status, of a great many sites is unknown, and therefore the ES cannot accurately assess impacts to these. The EcIA guidelines recommend that any area that appears worthy of a designation (or de-designation) should be assessed against the appropriate criteria, in consultation with the relevant designating body. SWT will endeavour to assess as many sites as possible within our resources, but this is likely to mean ongoing updates on sites' status over several years. In order to achieve adequate valuation and impact assessment, and avoid future changes to the significance of impacts, the assessment of county and district value areas by HS2 Ltd. is vital.

Inconsistency between documents

The Phase 1 habitat maps appear to be fairly inaccurate, judging by several areas visited or known to SWT that have been mapped incorrectly, including parts of our own headquarters site at Wolseley Bridge, which has clearly not been visited by ecologists. The text within the CA reports also documents many areas of habitat that have received more in-depth survey, that conflict with the habitats mapped in the Phase 1 surveys, showing that these have not been updated since their initial formation. The Ecological baseline data - phase 1 habitat survey report (BID-EC-002-000) does state that 'In many locations it has not been possible to determine the precise habitat type for phase 1 mapping' and that desk study data and aerial photography interpretation has been used where access has not been gained. If the Phase 1 maps have been used to calculate habitat losses, then these are very likely to be inaccurate, especially for no net loss calculations. The Phase 1 habitat maps need to be updated to reflect all data collected, and areas that have been mapped via other data sources and not visited on foot should be clearly shown.

The Non-technical summary does not give an accurate reflection of ecological impacts, with many LWS not mentioned and species impacts incomplete. It also exaggerates the value and certainty of mitigation/ compensation measures.

The Route -wide Effects reports that 15 LWS and 8 BAS would be affected by the scheme – this is vastly less than reported in the CA reports.

Locations of many areas of valued habitat and species populations are not provided on maps, and it is hard to cross-reference locations in the text with the Phase 1 habitat maps, especially where no grid reference is given. We request maps showing identified veteran trees, new ancient woodland and any features/ populations that are of county or district value.

Habitats are categorised and described in a variety of ways, using Phase 1 definitions, priority habitats and NVC habitat types. Many of the proposed compensatory habitats are simply 'grassland' or 'wetland'. This has, and will, make it difficult to carry out biodiversity offsetting metrics calculations, as the values gained vary a lot depending on how the habitat type is categorised.

Irreplaceable habitats

Currently we understand 10 ancient woodlands will be directly impacted and 6 indirectly. Of these, 11 are newly discovered. A further two are still being researched to identify their status. The discovery of ancient woodlands after the route was decided, shows that avoidance measures have been insufficient so far. There is also incomplete survey data for some of these woodlands, and insufficient detail in terms of mitigation/ compensation, as an ancient woodland strategy has yet to be published. This means the ES cannot accurately report on ancient woodlands. The loss of ancient woodland is of national significance and is unacceptable, and we request that further design changes are made to reduce this.

Veteran trees have not been identified in all areas that may be affected. There is no map to indicate the locations of those so far identified and no grid references given. These are an irreplaceable habitat and must be accurately identified and avoided as far as possible. Many are predicted to be lost through temporary work or features that could be relocated or redesigned to avoid them, such as widening one side of a road only. While it is stated that avoidance will be an aim of detailed design, these impacts need to be avoided or decided now, or the full impacts cannot be judged.

Lengthening of Viaducts

In each area where viaducts are proposed, the lengthening of these structures in certain directions would much reduce losses to important habitats and LWS, as well as important species assemblages. Landscape impacts would also be reduced in terms of large embankments. We request design changes are included in future Additional Provisions.

Cumulative impacts

These have not been well assessed, as they include only other approved developments in the area, rather than all impacts to receptors. This includes land-use change, pollution, climate change and other trends.

Green bridges

The currently proposed 'green' bridges within the scheme are not sufficient for effective species commuting, and, according to standards in the Natural England and the Landscape Institute (Technical Guidance Note 09/2015 December 2015) would be defined as modified grey bridges. The design of green bridges needs to meet the appropriate standards, and further green bridges need to be considered where there are significant bat populations.

Species issues

There are several bat assemblages identified of county and regional value that the route will disrupt. There does not appear to be sufficient mitigation proposed for a number of these, in terms of structures to either enable safe crossing or dissuade

bats from crossing, as well as insufficient compensatory planting, that may not reach maturity soon enough to effectively reduce construction impacts.

Great crested newt mitigation does not appear to be strategically thought out, or well combined with other proposed developments adjacent the scheme that will be affecting the same populations.

Culverts – there is a lack of information on the design of culverts in terms of passage of animals, especially drop inlet culverts which restrict access.

Many impacts to birds, especially farmland and wetland bird assemblages, are not specifically mitigated. Over the whole scheme, impacts to birds will be more significant than the individual value of each assemblage. Mitigation for Barn in various locations is not in line with the emerging Phase 1 Barn Owl strategy, where measures will be required over 3km from the line to counteract collision mortality.

Habitat mitigation/ compensation

There is only scant evidence of avoidance, and further work is required if the EIA Regulations 2017 are to be met. If losses are agreed at this stage where is the incentive to reduce impacts in the final design?

It is encouraging to see more areas included in the land required for habitat creation, and use being made of areas further from the rail line to join up habitats – notably where landowners of large areas have made more opportunities available. However, this should be applied across the whole scheme. There is a danger that, where landowner agreement is not gained, the management of habitats in future may be complex with too many small pockets. There is a need to concentrate habitats in larger units where third parties may be asked to manage them.

We appreciate that some mitigation/ compensation has to be in particular locations, but are concerned that in some places, proposed habitat compensation is not wanted or practical for landowners or indeed the landscape, which may cause issues with future management. We would support a mechanism whereby the required habitats are offered out to landowners further from the line who may want to deliver this for HS2, as long as connectivity and function are met. This would give more choice and flexibility to landowners, and also provide possibly better and more secure opportunities.

Access for management and monitoring of habitat creation areas needs to be considered, and how this might affect landowners. How will oversight, monitoring and enforcement be managed? It would be very positive if HS2 were to publish methods for this, following best practice, and specifically addressing issues experienced on other similar rail and road schemes, such as issues with landowners managing land, unforeseen further work damaging/ changing restored areas, and lack of monitoring.

Borrow pits

The Borrow pits restoration strategy (CT-009-000) reports on 6 pits that are proposed in Staffordshire. Ecological enhancement is mentioned as an aim, but the

best location for replacement of enhanced habitats, in terms of practicality for the landowner, and good habitat connectivity, should be considered. Habitats must be of equal or greater value, but sustainably positioned for best long-term management and to avoid field re-organisation by landowners, e.g. removal of other hedges.

OFF-ROUTE EFFECTS

A number of Local Wildlife Sites have not been listed or considered as being adjacent or within the land required for off-route highway modifications. Further hedgerow assessments are needed to establish their value, especially if any are of possible Local Wildlife Site quality.

B5014 Uttoxeter Road, Hill Ridware:

Temporary Provision of six passing bays, localised widening and two HGV control points. The adjacent 'Bailey Bridge Wetland and Sitch Covert' LWS is not mentioned. This LWS was last surveyed in 1995, and given that it is surrounded by additional habitat similar to the site, the boundary could well be extended upon re-assessment, putting more of the site adjacent to the modifications.

Moor Lane permanent modifications, Colton: Provision of two passing bays and localised widening:

The proposals would impact Moor Lane Colton (hedgerow) Biodiversity Alert Site which is not mentioned, although it is listed in the CA1 area report.

Great Haywood Road temporary modifications, Tixall:

The hedgerows along this road are species-rich, and some sections are potentially of LWS value. There is at least one veteran tree present, at SJ99072368.

Marston Lane permanent modifications - Provision of three passing bays and localised widening:

Marston Lane supports species-rich hedgerows in some sections, which are not mentioned and do not appear to have been surveyed in the Phase 1 Habitat map. Sections may be of LWS value. There are also many mature trees. The conclusion that no significant environmental effects are likely is false.

Yarnfield Lane temporary modifications, Stone- Provision of localised widening:

Woodland bordering the road in this area may be diverse and possibly ancient - there is abundant dog's mercury, and ancient woodland indicator, visible. As there are AWI nearby, the potential for unregistered AW fragments to be present is possible. The area needs to be more fully assessed, and important habitats and trees avoided.

A525 Bar Hill Road Temporary - Provision of 13 passing bays and localised widening:

Some of the hedges here are potentially species-rich, and there are areas of potentially high-value habitat adjoining the road which may be of LWS value. The full extent of the modifications do not appear to have been surveyed, and are not shown, on the Phase 1 habitat maps. The woodland area at Red Lane BAS, the woodland to the east of this joining to Barhill Road, and the 'Woodland south-east of Barhill Wood South-west of Madeley' at SJ768436 (also a former Grade 2 SBI called 'Bar Hill (east of)') are all shown on the 1831 OS map, so may have potential to

be ancient, or at least diverse. They may warrant designation or changes to existing designation.

SPECIFIC SITES

CA1 Fradley-Colton

Impact to Westfield Covert ancient woodland are not clear- any proposed woodland planting should not impact the wood.

Pipe Wood has this year been designated as a LWS. We would support a green bridge at the Mavesyn Ridware Footpath 38 Accommodation Overbridge (CT-06-205) to facilitate movement of bats for the regionally important assemblage identified in the area.

Many hedgerows to the east of Blithbury look to be species-rich and may warrant designation. There are also a number of likely Traditional Orchards here and in Stockwell Heath, that may warrant LWS designation.

Finners Hill Hedgerows BAS -partly within land required, has been re-assessed this year and, having found further key flora species compared with the last survey in 2008, it will be recommended for increased status to a LWS. The hedgerows should be considered of county value.

Amended mitigation for bats is required at Spencer's Plantation CT-06-209 to reduce /mitigate likely mortality risk to bats crossing the line where it is at grade. A crossing measure or crossing deterrent for bats at should be included, along with amended woodland planting to strengthen connectivity along and each side of the line.

Rare or declining arable weeds, including small bugloss and chamomile of district/ borough value were identified at Bentley Farm, south of Blithbury in arable field margins partially within the land required for the Proposed Scheme. However no mitigation is mentioned.

Lount Farm LWS has not be re-surveyed or re-assessed against the LWS criteria since 2006. HS2 reports areas of similar marshy / diverse meadow grassland adjacent, and these may warrant inclusion in the LWS. The area also supports an up to regional value bat assemblage, a county value water vole population, up to county value barn owl pair as well as notable fish and bird assemblages. Due to its high value, the area should be assessed against current SSSI criteria in collaboration with Natural England.

7.7ha (54%) will be lost in total from the LWS, including a large proportion due to the underground diversion of an existing 132kV power line. Approximately 11.7ha of lowland meadow habitat in and adjacent to Lount Farm LWS will be lost across the Fradley to Colton and Colwich to Yarlet areas – this will impact the remaining areas in terms of connectivity and viability of the faunal species it supports. 3.3ha of lowland meadow in the LWS is proposed to be restored and enhanced on the west side of Moreton Brook., and 2.7ha of species-rich grassland created to the east side of Moreton Brook; however there would still be a residual effect significant at the district/ borough level on lowland meadow due to the net loss of 3ha of this

habitat within the LWS. This also does not take account of timescales for habitat establishment and risk that the target habitat will not be achieved – therefore more than a 1:1 ration of loss to creation is needed.

An extension of the Moreton Brook viaduct for a short distance over a section of the LWS and other important habitats adjacent would reduce impacts, as would re-routing the proposed power line diversion.

CA2 Colwich-Yarlet

Pasturefields SSSI – We will be liaising with Natural England in terms of the suitability of the HRA.

The spoil heap north of Great Haywood Marina is semi-improved grassland, not improved- it is verging on LWS value according to a survey SWT carried out in 2014, but as it was established with a seed mix, it needs a few more years to settle. However, it should be valued at least at district level as a lowland meadow.

The wetland creation area at Hoo Mill Lane is welcomed, but it is not clear whether this will be feasible, as the land is currently fairly dry and improved. Re-profiling and re-meandering of the Trent in this area would also be welcomed for habitat, flood management and landscape restoration.

Lionlodge Covert has not been surveyed as yet by HS2 Ltd. We believe parts of the woodland have potential to be ancient, as they are shown on old OS maps, and the woodland contains several ancient woodland plant indicators. An extension of the viaduct in this area would remove much of the impact from the woodland and the adjacent saltmarsh area.

Tixall and Ingestre parklands are important heritage resources in the area, but could potentially be enhanced in terms of biodiversity, especially grasslands –this is an area that HS2 could consider further in terms of opportunities for landscape and ecology benefits, in line with the landowners' requirements.

CA3 Stone and Swynnerton

Stone Infrastructure Maintenance Base – Rail (IMB-R).

It appears that compensatory habitats are not sufficient in area to mitigate impacts in this area, and some are proposed on existing high value habitat, such as Fillybrook LWS.

It is clear that alongside the significant impacts proposed by HS2, there are other planned developments, flood management issues and aspirations for green infrastructure enhancement in the wider Stone/ Yarnfield area. We recommend that an informal, or official, GI group be set up similar to the Landscape Group operating around Shugborough, where relevant organisations and stakeholders in the area discuss GI issues such as ecology, landscape, flood management, access etc. and co-ordinate suggestions for mitigation and compensation that will balance needs across these themes, including opportunities in the wider area away from the rail corridor.

Highlow Meadows LWS is due to have its boundary updated and extended, as not all the marshy grassland was included in the original boundary. It is also unclear why compensatory habitats have been proposed within the LWS.

A number of LWS have been amended or added in this area – Lodge Covert has been extended and is a BAS, Closepit Plantation is now a BAS, as is Cash's Pit, Clifford's Wood LWS has been extended, and a traditional orchard, Swynnerton Heath Farm (east of) has been designated as a BAS. This orchard appears to be partly within the land required, and the impacts to this need to be determined. It has however much potential to be restored, which would add to compensation measures. The loss of Cash's Pit should be recognised as significant at the district level.

CA4 Whitmore Heath - Madeley

Whitmore Wood AWI and LWS

The impacts to this woodland should be reduced. We would be supportive of alternatives that reduce environmental, engineering and social impacts in the area, such as a longer tunnel between Whitmore Heath and Madeley. Proposed woodland planting to link existing woodland patches is welcomed, but this must avoid existing grassland/ wetland of value, and also be sympathetic to the historic landscape.

Wrinehill Wood (east of) is now a LWS rather than a BAS. It is described as being adjacent to the land required, but later in the CA report, that the Madeley tunnel and Checkley South embankment will result in permanent loss of 0.4ha (11%) of the site.

The hedges along Bowerend Lane are species-rich with a good ground flora, and may warrant LWS designation subject to assessment.

There have been numerous habitat areas and species assemblages of county and district value discovered in the area as a result of surveys, and many of these may warrant LWS designation. There are also many impacts to important habitats as a result of proposed compensatory habitat creation –these areas need to be amended to avoid impacts and enhance/ extend existing habitats.

We will continue to liaise and work with HS2 Ltd ecologists, alongside other stakeholders, to look at further detailed issues concerning habitat and species receptors, and to suggest better avoidance, mitigation, compensation and enhancement measures, including off-line opportunities.

Yours faithfully,

Kate Dewey BSc (Hons) MCIEEM

Planning and Conservation Officer

Direct dial 01889 880122

E-mail k.dewey@staffs-wildlife.org.uk