

North West Leicestershire District Council

Potential Impact of High Speed 2 – REVISED VERSION

This is a revised version of the original document which was prepared by SLC Rail based on the 2013 route. Since then, HS2 Ltd consulted on two route amendments in November 2016, which were:

- To move the line to the east of Measham, away from the M42/A42 road corridor
- To remove the line from tunnel underneath East Midlands Airport and run it east of the A42 through the rest of the District, passing close to the western side of Kegworth

The revised route was announced in July 2017; the proposition to move the line east of Measham was dropped, but there was a minor amendment to avoid the Plastic Omnium development (with further knock-on effects to this area which are discussed below). The proposed northern amendment towards Kegworth was retained.

However, it is worth noting that HS2 Ltd state on their website that the final route of Phase 2b is **not confirmed** and therefore could be subject to further minor alterations.

Summary of key points:

- Environmental impacts on the River Mease and National Forest
- Opportunities for regeneration in Measham (via government compensation) but loss of Measham Wharf and associated S106 benefits in the short term
- Impacts on Kegworth through loss of development sites and S106 benefits
- Current scheme for works on J13 of M42 to be disrupted by HS2 route
- Disruption to M1 J24 (with knock on effects to East Midlands Airport/freight interchange site and Donington Park)
- Road access for HS2 users via M42/A42 to Birmingham Interchange. Information needed from Highways England and HS2 Ltd
- Information needed on HS2's plans for rights of way, e.g. footpaths, cycle ways
- Improvements to M42/A42 likely to be needed to manage increased traffic to Birmingham Interchange/Toton. Liaison needed with Highways England and HS2 Ltd

Introduction

The potential effects of the proposed HS2 alignment through North West Leicestershire have been assessed against the following headings:

- 1. Landscape and Visual
- 2. Ecology and Wildlife
- 3. Noise
- 4. Roads and Traffic
- 5. Development and property (Development in first version)
- 6. Heritage
- 7. Public Amenities
- 8. Water and flooding



In view of the strength of local opinion on HS2, a further section has been added to this second edition of our impact assessment:

9. Community

The route was divided into three geographical sections, which have been redefined for the revised version of this document. For most of its length through the area of interest, the proposed route for HS2 runs parallel, and in close proximity, to the A42 trunk road. It will be necessary to view disadvantages from the railway placement in the context of existing visual, noise and other intrusions from the heavily-used trunk road.

When HS2 carry out their own Environmental Impact Assessment work in Spring 2018, their categories will include the following:

- Agriculture, forestry and soils
- Air quality
- Climate change
- Community
- Ecology
- Electromagnetic interference
- Health
- Historic environment
- Land quality
- Landscape and visual
- Major accidents and disasters
- Socio-economics
- Sound, noise and vibration
- Traffic and transport
- Waste and material resources

This impact assessment may be used as a starting point for the District's responses to the Environmental and Equality Impact Assessments, and to help formulate to strong mitigation plan to help achieve the best results for the community.



A. General impacts applying to all areas of the route

Landscape and Visual	 Review all landscape and visual impacts when the route is confirmed The County has produced a list of sites whose view will be impinged by HS2, particularly if the vertical alignment of the route stays the same. These have been included in the appropriate sections below.
Ecology and Wildlife	 Trees affected by the railway construction must be replaced, and there may be opportunities for new planting to mitigate visual issues or noise. It may be worth attempting to lobby for some planting to be done in advance of construction starting to allow time for tree growth HS2 are unlikely to want deciduous planting near to the railway to minimise leaf fall. It would be useful to consult with an ecologist to consider the impacts on flora and fauna in areas where there is a substantial variation in the proportion of deciduous trees to evergreens, and also the effects of felling large numbers of mature native trees.
Noise	 Noise is subjective and may be a very contentious issue to some residents, particularly those in the rural areas of the District. It is already proving to be a major issue for some residents, and it is unlikely that their fears will be easy to deal with. Community engagement will be a very necessary part of dealing with this impact However, railway noise will be intermittent and unlikely to occur 24 hours a day, except when overnight maintenance or other engineering work is taking place (road noise is more likely to be continuous). Effects of noise will be clearer when the HS2 timetable is published. HS2 Ltd have already published some noise maps, and it is worth nothing that affected areas are often outside the compensation zones, which is likely to cause discontent It is important to note that HS2 will be considering the cumulative effects of noise (and other factors) when preparing their Environmental Statement for the Hybrid Bill Continue to review as more information becomes available. Ensure that there is appropriate community engagement to address concerns
Roads and Traffic	 Increase in road traffic likely during construction period Temporary closures or restrictions may be required on local roads and new temporary access roads may be required for construction purposes. This will cause disruption during the construction period and diversions will be required. It is hoped that there will be a beneficial effect from improvements to the M42/A42, helping to manage the increased traffic load to stations when HS2 begins operations Ensure that road closures and diversions are appropriately mitigated to ensure access to schools, medical services etc. Ensure there is appropriate liaison with HS2 Ltd, Highways England and the County
Public Amenities	 A considerable number of Public Rights of Way will be affected, some permanently. The County Council must develop plans for diversion, closure or other appropriate measures



 See note above on woodland areas Review information as more detailed plans become available – recommend
early liaison with the County and other relevant bodies

Section 1. Appleby Parva to Ashby de la Zouch

Landscape and Visual	 Most of the route in this section follows the A42 closely, and will be at grade with the existing highway where this is feasible. Cuttings/embankments are likely to mirror those already provided for the road Some of the deeper cuttings from Appleby Parva to Appleby Magna will help to lessen visual impact and noise The line will rise out of cutting to an embankment and then on to a viaduct to cross the River Mease. The present projections show that this viaduct will be some 20m high and will have a significant visual impact on the village, including the church of St Lawrence and listed buildings on the High Street The area of line from just before J11 to after Measham is relatively straight, which will appeal to HS2 for engineering and timetabling reasons. It leaves the village and continues towards Packington, mostly in cutting The route will run past Packington's Conservation Area and the viaduct over Gilwiskaw Brook is estimated to be some 8m high. The combination of the deep cutting and viaduct will significantly impact the landscape views in and out of the village on the Mill Street side. Three listed buildings and the Church of the Holy Rood are noted as being visually affected The churches of St Helen and Holy Trinity Kilwardby in Ashby will be visually affected, along with Park Farm and Ashby de la Zouch Castle Overhead line equipment (OLE) will be visible except where cuttings are very deep, but absence of junctions should avoid the need for large support structures and complicated wiring runs HS2 engineers may consider more aesthetically pleasing OLE designs, but there may be a need to lobby appropriately for this (may need information as to whether there will be any sort of design guide for OLE in rural areas?) It is unknown whether power feed points are planned on this section, which would require substantial support structures and lineside electrical equipment Will need further review as HS2 Ltd move into the d
Ecology and Wildlife	 The River Mease is a Special Area of Conservation and a Site of Biological Interest. It is important as a wildlife habitat and corridor, and for flood mitigation. Notable species include the water plants <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachian</i>. The river is also a known habitat for <i>Cobitis taenia</i> (Spined Loach) and <i>Cottus gobio</i> (Bullhead). River flow and bank habitats must be conserved during and after railway construction. Special attention must be paid to protected species



	 Other local areas, particularly woodlands, provide amenities for residents and will be habitats for other wildlife, which although not all protected species, contribute to the local ecosystem as a whole Measham lies within the National Forest and there has been significant tree planting along the A42 in recent years. See also general notes on tree planting above
Noise	 The proposed route will be nearer to Appleby Parva, Appleby Magna and Measham than the A42; passing trains will cause additional intermittent noise There may be occasional noise at night from engineering works Ensure timetabling information is kept under review
Roads and Traffic	 A444, Rectory Lane and Tamworth Road will all need to be realigned to cross HS2 The viaduct section of the River Mease will also cross Repton Road, Huntingdon Way and Burton Road The A42 may need to be diverted to the west of the existing road in the Oakthorpe area to provide more space for the railway and limit the effect on properties in Measham. If confirmed, appropriate mitigation measures must be carefully planned to minimise impact on A42 traffic during construction Passing Ashby on the eastern side, the line will have to intersect with both Ashby Road and Leicester Road. It is not yet marked on HS2's maps how this will be engineered (i.e. road passing under or over the railway) HS2 will also cross the existing (freight) railway line at Ashby J13 of the A42 will require some significant work as the route crosses the A511 and A512 on the eastern side of the interchange Traffic on A42/M42 corridor may increase after 2026 when Birmingham Interchange opens. Engagement with Highways England required in relation to mitigation measures/capacity enhancements Ensure there is regular liaison with Highways England and the County on all relevant road/traffic issues
Development and Property	 The July 2017 route directly affects the following developments: Residential properties David Wilson Homes – 56 residences, Leicester Road, Ashby de la Zouch. These are now almost complete and many of them are in the compensation zones Mixed development The Measham Wharf Development (Measham Land Company Ltd) – up to 450 residences and reinstatement of 1.1km of canal, provision of public open space and vehicle/emergency/footpath access at Waterside, Burton Road, Measham. Section 106 monies earmarked to provide canal rebuild and refurbishment/extension of Measham Leisure Centre. Site now blighted Commercial Lounge site – line runs across the upper portion of the site, and the cabling to the wind turbine may be affected during the construction period. Harworth and Gazeley are in direct discussions with HS2 Ltd. Blighted Appleby Park Hotel at J11 of the M42, which will require demolition and rebuild. A suitable alternative site will need to be identified. Blighted



	 Meridian Tank Works (Ashby) – demolition and rebuild will be required. Blighted Existing property Of existing properties identified as either blighted or in the compensation zones, the following require special note: A number of farms will be severed* by the line Properties in Dysons Close, Measham, which are populated by elderly tenants The Measham Viaduct will pass directly over a number of commercial properties which will cause disruption during the construction period and further possible impacts afterwards Line still passes very close to Plastic Omnium and may affect part of their car parking facilities Keep under review when further details of HS2 plans become available and the route is confirmed. Ensure there is appropriate liaison with affected businesses as well as residents *severed farmland: this will either mean that HS2 will pass through a farm's lands, in which case some form of occupation of accommodation access will have to be provided to maintain access to isolated parts of the farm, or external access
	(i.e. from public highways) is severed, which would require an alternative access
	route to be provided.
Heritage	 No designated ancient monuments, listed buildings or known historical sites lie within the Safeguarded Area However, there are a number of listed buildings noted above in the Landscape and Visual effects section Construction work may uncover artefacts or sites of historical interest. The legal authority for HS2 construction should include details of company actions in these circumstances
Public Amenities	 HS2 will affect public rights of way including footpaths and bridleways, of which there are many in this section. The County Council must develop plans for diversion, closure or other appropriate measures The Ivanhoe Way is an important walking and cycling route, and this will also be affected during the construction phase See note above on woodland areas Review information as more detailed plans become available – recommend early liaison with the County and other relevant bodies
Water and Flooding	 All rivers in the area have identified flood plains; as far as is known, none of these are major flood mitigation areas Flooding has affected Packington in the past; avoid increased risk here, particularly during construction phase. Note that the viaduct height over Gilwiskaw Brook is projected to be 8m, far above the 1m flood limit which has been recorded in the last 100 years (flood information from Packington Action Group). This is a significant issue for this action group and they have made representations to HS2 Ltd There are no known aquifers or other groundwater sites



Community	Residents of Appleby Parva and Appleby Magna have already raised significant
	concerns about the effects of HS2 on their communities. These include:
	Access to public amenities during and after the construction period
	• Access to schools, medical services etc. during the construction period due to
	closure/diversion of minor roads
	Effects on house prices
	Although the District has identified regeneration benefits for Measham, the 2017
	route will have the following negative effects on the village community:
	 Loss of development opportunities as detailed above
	Disruption during the construction period
	 Negative longer-term effects on the community if regeneration is not properly secured
	 Negative longer-term effects on community health if the Leisure Centre
	redevelopment does not go ahead. North West Leicestershire has been
	identified as the unhealthiest district of the county therefore it should be a
	priority for this to be addressed
	Packington – residents have raised many concerns about the effects on their
	community, including the following:
	 Loss of access to schools and medical facilities in Ashby during the
	construction period
	Negative effects on the local school during construction due to reduced
	access from neighbouring villages
	 Negative effects on community health during construction period from loss
	of access to Ashby Road (runners, walkers, cyclists)
	 Effects of cumulative noise from HS2 and A42 when the railway is in
	operation
	Ashby – the growth of the community could be affected if the loss of
	development sites is not appropriately mitigated. The Ashby 20 Road Race is run
	every March around the area, and will include some of the roads marked for
	disruption during construction. Forward knowledge of the construction
	programme will enable race organisers to cancel or reschedule as appropriate.
	There could be a future economic impact from loss of development opportunities
	at the Lounge site
	Oakthorpe – could be affected by the A42 realignment, or if the railway route
	shifts any further west through Measham when the route is confirmed. Suggest
	a review of the effects on this community when more information is available.

Section 2. Ashby de la Zouch (A42 Junction 13) to A42 J14 (Tonge)

Landscape and Visual	 Land contours suggest that deep cuttings and high embankments will not be required, but the proposed route is further from the A42 than section 1. The route will be a new transport corridor which will cut into farmland Three listed buildings in Coleorton likely to be visually affected, including the Church of St Mary. Coleorton Hall Park and Gardens will also have HS2 near to their landscape. There is also a Scheduled Monument at Coleorton, the coal mining remains at Birch Coppice and Rough Park.
	 There are additional coal mining remains (also Scheduled Monuments) at Lount Wood, Staunton Harold and south of Smoile Farm, Worthington



	 Also in Worthington, the Church of St Matthew and The Old Farmhouse, Worthington Field Farm are likely to be affected visually From the top of Breedon Hill, the current plans show that the railway will be beyond the road corridor, which may lessen some of the visual impact. However, it is likely that OLE will still be visible, and the line will cause visual impacts to The Bulwarks (earthworks), the church of St Mary and St Hardulph, and the medieval moated lodge at Breedon on the Hill. The railway now does not cross the A42 near Breedon Lodge Farm, but stays on the eastern side of the A42 and moves towards J14. This will cause visual impacts on the farmhouse and cottage, which are listed buildings
Ecology and Wildlife	 Part of this section is within the National Forest, and there is tree planting which must be replaced if affected by HS2 construction See comments about deciduous planting in general comments above Breedon Cloud Wood and Quarry (near Worthington) is a Site of Special Scientific Interest (SSSI) for biological and geological reasons and is now nearer to the route since the July 2017 announcement. The proposed line now appears to clip the upper edge of the quarry Pasture Wood and Asplin Wood are also SSSIs and are less than 1Km east of Cloud Wood. These are now nearer the path of the line than the 2013 route Other SSSI's near the proposed route are on the western side and unlikely to be affected. However, consideration may need to be given to protective measures for Lount Meadows to prevent potential adverse effects on drainage of the grasslands Continue to review the impacts on the SSSIs in this section of the route and maintain communications with HS2 Ltd to provide the best mitigation for these sites Suggest an ecological review of the effects on Breedon Cloud Wood and Quarry following the route change
Noise	 Lount, Newbold and Worthington lie along this section, but are smaller than the centres of population noted in section 1. There are other small settlements and isolated houses Noise intrusion on the various SSSI locations may give rise to objections This section of the route is close to East Midlands Airport, and additional railway noise must be looked at in the context of existing noise generated by aircraft
Roads and Traffic	 See general notes on roads and traffic above The route passes close to J13 of the A42, with a major impact on the junction itself and the associated road network. Current plans show HS2 occupying the line of the A512 to the north-east of the junction, requiring major works to this section of road. Temporary restrictions on and around the junction will be required during the construction phase. The County Council has already contacted HS2 and expressed its concerns on the impact to J13 as it is a major connection point to other locations in the County The railway will cross Long Hedge Lane, Breedon Lane and Doctor's Lane and access to these roads and nearby agricultural land will be disrupted during the construction period



	 Boden's Brook and the associated floodplain will be crossed by a 170m long and approximately 10m high viaduct and the line will continue on embankment for another c.500m Construction work will affect J14 of the A42, which provides access to Tonge and Breedon on the Hill. Top Brand will also be intersected by the railway Increased traffic levels towards Birmingham Interchange are likely to be less on this section There may be some increase in traffic towards Toton Interchange for Leeds and the North East, but these are likely to be significantly less than for Birmingham to London traffic
Development and Property	Development The District SHLAA includes two sites designated for residential development within 1Km. of the railway alignment: Newbold 198 houses Worthington 24 houses As far as can be ascertained, there are no major commercial or residential development applications currently in the planning system on this section of the route Existing property
	 A number of farms will be affected (blight and/or severance)
Heritage	 There are two sites of historical interest within about 1Km of the proposed alignment: Moat at Breedon Lodge Farm (and Grade II listed building) Breedon Hill Any further eastwards adjustments of the route will increase the effects on The Moat at Breedon Lodge Farm See Landscape and Visual section above for listed buildings, Scheduled Monuments and other sites which may be visually affected It can reasonably be assumed that the likelihood of uncovering archaeological finds on this section are greater than the section of route south of J13
Public Amenities	 The proposed route crosses the "Cloud Trail", part of National Cycle Network Route 6, running from Derby to Cloud Quarry near Worthington. A suitable bridge will need to be provided Other public rights of way in the area are likely to be affected – see general notes above See notes in Ecology and Wildlife section for affected woodlands. Plans for complementary planting will need to be considered in this area
Water and Flooding	 There is a flood plain on the stream around Worthington which is intersected by the proposed route and may be affected. Mitigation measures to prevent damming may be required There are no known aquifers or other groundwater sites
Community	• The area is more rural than the Measham/Ashby area, but residents will still need access to other villages in the areas for schools, medical services etc during the construction period



 Disruption to the East Midlands Airport and Donington Park sites during construction may impact on workers who live in the area It will be important to ensure that this section of the community has an equal opportunity to engage on impacts and mitigation, even though a lower number of residents and businesses are directly affected
 Community engagement needed in this area – Parish Councils have not responded to email contacts so far

Section 3. A42 J14 (Tonge) to Lockington Grounds (District Boundary)

Note: The route through this section of the District takes a completely different course to that proposed in 2013 and has been revised accordingly

Landscape and Visual	 The amended route is above ground for the entirety of this section, other than a short tunnel underneath East Midlands Airport's runway lights Visibility of the railway is therefore a new impact for this section The new route remains on the eastern side of the A42 and is close to the road corridor from J14 to the M1/A42/A453 interchange There are three listed buildings which could be affected in Long Whatton and Diseworth, and a Scheduled Monument (moated site with fishponds etc.) The line is on a similar profile to the road corridor, and rises on to embankment to clear Westmeadow Brook and its floodplain From the intersection, the route moves away from the road corridor and then towards Kegworth, where there is a broad curve to enable it to pass the village on the western side, where it and OLE will be clearly visible There are likely to be visual affects on St Andrew's Church Kegworth At the northern edge of Kegworth, the route will cross the A6 and then rise on to a long viaduct over the A453 and out of the District through farmland There are two Scheduled Monuments at Lockington-Hemington; a Cropmark site, SE of Dunster Barn, and a Roman villa and associated remains. These may be impacted visually by HS2
Ecology and Wildlife	 The route will run through Diseworth Gorse as it moves away from J14 of the A42 and appropriate mitigation will be needed on this site Much of this section of the route runs through farmland, although aquatic wildlife may be affected by the line passing through or near to watercourses From Kegworth until the point that the line passes out of the District, it runs on to major floodplains for the Rivers Soar and Trent; there may be ecological considerations to constructing the railway through this area Continue to review ecological implications when the route is confirmed, and when further information is released by HS2 Ltd
Noise	 There may be noise issues for residents on the west side of Kegworth village This section of the route is close to East Midlands Airport, and additional railway noise must be looked at in the context of existing noise generated by aircraft and the trunk road network. See general note above cumulative noise above Kegworth is also near the M1, A453 and A6. The A6 bypass could have mixed effects on noise levels, as although traffic will be diverted around the village,



	more vehicles may opt for this route when it is a quicker alternative, increasing the background noise from the road
Roads and Traffic	 As the route leaves J14, it runs alongside Gelscoe Lane and it is likely that there will be severe disruption to this road during construction. This is more likely to affect agricultural traffic and joggers/walkers The line will run on a viaduct approximately 700m long x 12 m high over The Green, Diseworth Brook and the M1. The Green is one of the minor feeder roads to the East Midlands Airport site and also connects Long Whatton to the A42 and motorway There will be disruption to the M1 during construction of the viaduct near J23a Construction work will affect access to Donington Park Motor Racing Circuit. Disruptions will need to take account of the racing calendar where possible. A Kegworth bypass is scheduled to move the A6 around the village, but work on this is likely to be completed before HS2 construction starts Construction works at J24 are likely to affect access to the Rail Freight Terminal and East Midlands Airport. Appropriate mitigation will be a priority Suggest liaison with East Midlands Airport, Donington Park and the rail freight terminal's constructors to assess impacts and mitigation required
Development and Property	 Residential properties – two housing development sites on the western sites of Kegworth are blighted by the amended route. Discussions with Kegworth Parish Council have revealed that sizeable alternative sites are not available in the village. It may be possible to provide some of the housing via smaller land parcels, but there are flood plains areas to the north and east of the village which is a further complication. Section 106 monies to provide sports pitches are also lost with the blight of these developments Commercial properties - The East Midlands Gateway site is under construction and represents a significant expansion on the East Midlands Airport site. The site boundaries run close to the A453/M1 and it is inevitable that there will be disruption when construction moves to this part of the District. The works at J24 are likely to affect access to the airport and the freight terminal and alternative access must be a priority Existing properties – (note that the East Midlands Gateway will be an existing property by the time construction starts, so see notes above). Farm land is likely to be severed
Heritage	 See heritage sites listed above in the Landscape and Visual section The possibility of archaeological finds during construction cannot be discounted; an important Bronze Age hoard was found at Lockington in 1994 and there are two Scheduled Monuments in the area
Public Amenities	• With the revised route now above ground, public rights of way will be affected by the route, particularly around Long Whatton and Kegworth on the east side, and Tonge/Breedon on the Hill on the west
Water and Flooding	• The line will also pass near to Westmeadow Brook, but it is noted that this section of line is on embankment, which may be sufficient to mitigate any flood risk



	 The great majority of the area to the north of Castle Donington and Kegworth is a major flood plain for the Rivers Soar and Trent, and whatever final route is chosen, appropriate mitigation will be needed. See ecology and wildlife notes above There must be appropriate measures to ensure that the free flow of flood water is not affected by the railway
Community	 Although Tonge and Breedon on the Hill are now on the opposite side of the A42 to the railway line, access to these communities is likely to be affected by road closures and diversions during the construction period. This could affect commuter and community activities Long Whatton will be affected by the closure/rerouting of The Green (running into West End), to include commuting, leisure and community activities Kegworth is the most severely affected community in this section of the route: Loss of development sites – see notes in development and property section above. This will affect growth as the village's "envelope" is limited Loss of sports pitches which were to be provided from Section 106 monies. There is already a lack of provision for the area and a number of teams are not able to play home matches. This situation is likely to continue for some time without interim measures and another solution is needed urgently Noise from construction and railway operations (see above) "Islanding" by roads and HS2, particularly after the Kegworth bypass is complete. Read this in conjunction with the loss of development sites