

## Appendix 1:

### North West Leicestershire District Council

#### Potential Impact of High Speed 2

##### Summary of key points:

- Issues with the proposed route amendment east of Measham; impacts on villages and “boxing in” of the area, with related effects upon listed buildings and conservation areas
- Effects on planned developments around Kegworth with the northern amendment, moving the route in line with the A42
- Environmental impact on the National Forest
- Current scheme for works on J13 of M42 to be disrupted by HS2 route
- Road access for HS2 users via M42/A42 to Birmingham Interchange. Information needed from Highways England
- Information needed on HS2’s plans for rights of way, e.g. footpaths, cycle ways
- Impact on HS2 route as a result of approved planning application for East Midlands Gateway air freight terminal

##### Introduction

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

1. Landscape and Visual
2. Ecology and Wildlife
3. Noise
4. Roads and Traffic
5. Development



6. Heritage
7. Public Amenities
8. Water and flooding

This version of the document sets out the original route alignment and the November 2016 proposed amendments in a parallel view.

The route was divided into three geographical sections. 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, although this alignment has now moved away from the road corridor around Measham.

Some of the disadvantages from the railway placement, where it runs in the same corridor as the M42/A42 can be viewed in the context of existing visual, noise and other intrusions from the heavily-used trunk road.

It is worth noting that HS2 Ltd have not carried out any detailed land surveys on Phase 2 yet; these will be part of the formal development process and will help to determine what work is done to manage the integration of HS2 with the landscape and the road network.

## Section 1. Appleby Parva to Ashby de la Zouch.

	Original alignment	Proposed amendment
<b>Landscape and Visual</b>	<ul style="list-style-type: none"> <li>Route will closely follow A42, mostly at grade with existing highway. Cuttings/embankments will mirror those already provided for the road</li> <li>Overhead line equipment (OLE) will be visible, but absence of junctions should avoid the need for large support structures and complicated wiring runs</li> <li>HS2 engineers may consider more aesthetically pleasing OLE designs</li> <li>It is unknown whether power feed points are planned on this section, which would require substantial support structures and lineside electrical equipment</li> <li><b>Review when more detailed plans become available</b></li> </ul>	<ul style="list-style-type: none"> <li>The revised route veers away from the road corridor and moves to the east of Measham, rejoining the original alignment beyond Packington. It will cross land mainly used for agricultural purposes, partly on embankments up to about 11 metres high. Over certain sections, the line is likely to be visible from some distance away, such as near the Sir John Moore's Foundation school and past parts of Packington village</li> <li>The village of Austrey will also be affected by the change in route alignment as the eastern move brings the line closer to the village</li> <li>The line will cross the River Mease on a viaduct 880m long and 11m high before rising with the terrain into a shallow cutting and rejoining the M42/M42 corridor.</li> <li>See comments on OLE and power feed points in the original alignment section</li> <li><b>Review when more detailed plans become available</b></li> </ul>
<b>Ecology and Wildlife</b>	<ul style="list-style-type: none"> <li>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</li> <li>River flow and bank habitats must be conserved during and after railway construction</li> <li>Other local areas, particularly woodlands provide amenities for local residents</li> <li>Measham lies within the National Forest and there has been significant tree planting along the A42 in recent years.</li> <li>Trees affected by the railway construction must be replaced, and there may be opportunities for new planting</li> </ul>	<ul style="list-style-type: none"> <li>The concerns about the River Mease are identical for both track alignments, as the track must still cross it at some point.</li> <li>The National Forest will still be affected under the proposed amendment as plantings cover a wide area of the county</li> <li>As the area is rural, concerns about woodlands, trees and deciduous plantings are the same.</li> </ul>

	<p>to mitigate visual issues or noise</p> <ul style="list-style-type: none"> <li>• HS2 are unlikely to want deciduous planting near to the railway to minimise leaf fall on railway operations</li> </ul>	
<b>Noise</b>	<ul style="list-style-type: none"> <li>• The proposed route will be nearer to Appleby Parva, Appleby Magna and Measham than the A42; passing trains will cause additional noise</li> <li>• However, railway noise will be intermittent and unlikely to occur 24 hours a day (road noise more likely to be continuous). Effects of noise will be clearer when the HS2 timetable is published</li> <li>• There may be occasional noise at night from engineering works; re-laying track is the most intrusive, but this is only likely happen after the line has been in operation for a number of years (at least 10, and maybe up to 20 years)</li> <li>• Noise is a subjective issue and effects upon individuals vary greatly. See more detailed notes in the report on noise</li> <li>• <b>Ensure timetabling information is kept under review</b></li> </ul>	<ul style="list-style-type: none"> <li>• The revised route will pass to the <b>east</b> of Appleby Parva, Appleby Magna, Measham and Packington, affecting parts of these villages that presently look out onto quiet agricultural land without major roads. Although some sound does carry from the M42/A42 road on the west side of the villages, the railway will be near residential and commercial properties not currently affected by traffic noise</li> <li>• See other points on noise in the original alignment section</li> <li>• <b>Ensure timetabling information is kept under review</b></li> </ul>
<b>Roads and Traffic</b>	<ul style="list-style-type: none"> <li>• Increase in road traffic likely during construction period</li> <li>• Temporary closures or restrictions may be required on local roads and new temporary access roads may be required for construction purposes</li> <li>• 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</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> <li>• The proposed alignment east of Measham may cause less issues with the diversion of the A42</li> </ul>

<b>Development</b>	<p>The District Strategic Housing Land Availability Assessment (SHLAA) identifies a number of sites for residential development within about 1Km. of the proposed railway alignment:</p> <table border="0"> <tr> <td>Appleby Magna</td> <td>333 houses</td> </tr> <tr> <td>Measham</td> <td>533 houses</td> </tr> <tr> <td>Ashby de la Zouch</td> <td>2,228 houses</td> </tr> </table> <p>Larger applications currently in the planning process include:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• David Wilson Homes – 56 residences, Leicester Road, Ashby de le Zouch</li> <li>• Icen Projects – 605 residences, primary school, health/care facilities, open space and community/associated uses on land north of Nottingham Road, Ashby de la Zouch (near A42 J13)</li> <li>• Other residential/commercial development proposals are included in the District Plan, or are under consideration. These are further away from the HS2 route but may impact on traffic levels and the number of people affected in the longer term</li> <li>• <b>Review when further details of HS2 plans become available</b></li> </ul>	Appleby Magna	333 houses	Measham	533 houses	Ashby de la Zouch	2,228 houses	<ul style="list-style-type: none"> <li>• See notes on original alignment</li> <li>• The fact that Appleby Parva, Appleby Magna and Measham will be bounded on both sides by transport corridors (M42 / A42 to the west and HS2 to the east) may affect the availability of land for future development.</li> <li>• <b>Review when further details of HS2 plans become available</b></li> </ul>
Appleby Magna	333 houses							
Measham	533 houses							
Ashby de la Zouch	2,228 houses							
<b>Heritage</b>	<ul style="list-style-type: none"> <li>• No designated ancient monuments, listed buildings or known historical sites along this section of route</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• The Grade 1 listed Sir John Moore’s School is close to the revised route and the line will pass by on an embankment, so will be both more visible and generate more noise than if the line were placed in cutting. The Sir John Moore’s Foundation have considerable concerns about the effect on the building and its operations. See detailed notes in Appendix ?? to the report. Both Appleby Magna and Packington have Conservation Areas which will be very close to the proposed</li> </ul>						

		<p>route amendment</p> <ul style="list-style-type: none"> <li>• The viaduct section will pass through a brickworks quarry (still in use) and an historic landfill site</li> <li>• See notes in original alignment section about construction work uncovering artefacts or sites of historical interest</li> </ul>
<b>Public Amenities</b>	<ul style="list-style-type: none"> <li>• HS2 will affect public rights of way including footpaths and bridleways. The County Council must develop plans for diversion, closure or other appropriate measures</li> <li>• See note above on woodland areas</li> <li>• <b>Review information as more detailed plans become available</b></li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> </ul>
<b>Water and Flooding</b>	<ul style="list-style-type: none"> <li>• All rivers in the area have identified flood plains; as far as is known, none of these are flood mitigation areas</li> <li>• Flooding has affected Packington in the past; avoid increased risk here, particularly during construction phases</li> <li>• There are no known aquifers or other groundwater sites</li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> <li>• Further work may need to be carried out to assess whether flood risk to Packington is increased by the route amendment</li> </ul>

## Section 2. Ashby de la Zouch (A42 Junction 13) to Charnock Hill.

<b>Landscape and Visual</b>	<ul style="list-style-type: none"> <li>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</li> <li>Until the exact route is confirmed, it is unknown what, if any effect HS2 will have on the view from Breedon Hill. However, railways tend to blend into the landscape better than trunk roads, but OLE may be visible</li> </ul>	<ul style="list-style-type: none"> <li>The revised route will more closely follow the A42 north of Lount, mostly at grade with the existing highway. Cuttings/embankments are likely to mirror those already provided for the road</li> <li>The line will be further away from the viewpoints on Breedon Hill than the A42, and, in common with most railways, will have less of a visual impact than the existing dual carriageway road. However, the Overhead Line Equipment will mark out the line of the railway and cause some additional visual intrusion.</li> </ul>
<b>Ecology and Wildlife</b>	<ul style="list-style-type: none"> <li>Part of this section is within the National Forest, and there is tree planting which must be replaced if affected by HS2 construction</li> <li>See comments about deciduous planting in section 1 above</li> <li>Breedon Cloud Wood and Quarry (near Worthington) is a Site of Special Scientific Interest (SSSI) for biological and geological reasons and is less than 1Km from the proposed route</li> <li>Pasture Wood and Asplin Wood are also SSSIs and are less than 1Km east of Cloud Wood. These could be affected if the proposed route changes</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Part of this section is within the National Forest, and there is tree planting which must be replaced if affected by HS2 construction</li> <li>See comments about deciduous planting in section 1 above</li> <li>Consideration may need to be given to protective measures for Lount Meadows to prevent potential adverse effects on drainage of the grasslands</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>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</li> <li>Noise intrusion on the various SSSI locations may give rise to</li> </ul>	<ul style="list-style-type: none"> <li>See notes in original alignment section</li> <li>The proposed route amendment carries the line less close to the SSSI locations</li> </ul>

	<p>objections</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>	
<p><b>Roads and Traffic</b></p>	<ul style="list-style-type: none"> <li>• Increase in road traffic likely during construction period</li> <li>• Temporary local closures or restrictions may be necessary</li> <li>• The proposed 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, but has not received a response</li> <li>• The railway will cross the A42 at Breedon and bridge construction will cause disruption, including lane closures or a short period of complete closure for placing of bridge spans. Attempts will be made to minimise disruption</li> <li>• The proposed crossing line is very close to J14, the main access to Donnington Park Motor Racing Circuit from the south, and access to East Midlands Airport. Disruptions will need to take account of the racing calendar where possible.</li> <li>• Increased traffic levels towards Birmingham Interchange are likely to be less on this section</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> <li>• The notes on the railway crossing the A42 at Breedon do not apply to the proposed route amendments</li> <li>• Temporary local closures or restrictions may be necessary</li> <li>• Increased traffic levels towards Birmingham Interchange are likely to be less on this section</li> </ul>



<b>Development</b>	<p>The District SHLAA includes two sites designated for residential development within 1Km. of the railway alignment:</p> <p style="padding-left: 40px;">Newbold      198 houses</p> <p style="padding-left: 40px;">Worthington    24 houses</p> <p>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</p>	<p>See notes in original alignment section</p>
<b>Heritage</b>	<ul style="list-style-type: none"> <li>• There are a number of sites of historical interest within about 1Km of the proposed alignment: <ul style="list-style-type: none"> <li>○ Moat at Breedon Lodge Farm</li> <li>○ Langley Priory</li> <li>○ Breedon Hill</li> </ul> </li> <li>• The first two locations could be directly affected if the proposed route moves eastwards</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• The historic moat at Breedon Lodge Farm lies directly on the revised alignment and would be destroyed or severely damaged</li> <li>• The revised line is, however, further away from the other historic sites at Langley Priory and Breedon Hill</li> <li>• 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. The Archaeology Data Service has catalogued a number of finds in this area</li> </ul>
<b>Public Amenities</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Other public rights of way in the area are likely to be affected. The County Council must develop plans for diversion, closure or other appropriate measures</li> <li>• See notes in Ecology and Wildlife section for affected woodlands. Plans for complementary planting will need to be considered in this area</li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> </ul>
<b>Water and Flooding</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• There are no known aquifers or other groundwater sites</li> </ul>	<ul style="list-style-type: none"> <li>• See notes in original alignment section</li> </ul>

### Section 3. Charnock Hill to Lockington (District Boundary)

<b>Landscape and Visual</b>	<ul style="list-style-type: none"> <li>• Current plans are for this section to be largely in tunnel underneath East Midlands Airport and the proposed East Midlands Gateway Freight Terminal to the north of the airport. No major issues with visual intrusion are foreseen at this stage</li> <li>• Location of tunnel portals are unclear in the current plans. The topography to the north-east of the airport suggests that there will be considerable difficulties finding suitable levels for the railway compatible with the Freight Terminal, M1 and A6 trunk roads</li> </ul>	<ul style="list-style-type: none"> <li>• This section will closely follow the alignment of the A42 and motorway network to the south and east of East Midlands Airport. There will be no large tunnel in the area</li> <li>• The topography to the north-east of the airport suggests that there will be considerable difficulties finding suitable levels for the railway compatible with the M1 and A6 trunk roads. This detail will only be revealed when specific land survey work is undertaken by HS2 Ltd</li> </ul>
<b>Ecology and Wildlife</b>	<ul style="list-style-type: none"> <li>• No ecological issues are foreseen at this stage as the railway will be mainly underground</li> </ul>	<ul style="list-style-type: none"> <li>• No ecological issues are foreseen at this stage</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>• Development of HS2 Phase 1 has raised the issue of sonic resonance at tunnel entrances, producing an effect similar to a low-level sonic boom. HS2 designers are working on tunnel portal designs to mitigate this</li> </ul>	<ul style="list-style-type: none"> <li>• The main effect of the revised alignment will be to place it on the surface close to the western edge of Kegworth, thus affecting many properties that would previously have been unaffected if the line was in tunnel. However, the additional noise created by the railway must be placed in the context of the significant noise levels already generated by the M1 motorway, the junctions with the A42 and A6 trunk roads and aircraft on final approach to, or taking off from, East Midlands Airport.</li> </ul>
<b>Roads and Traffic</b>	<ul style="list-style-type: none"> <li>• Tunnelling almost certainly to be undertaken by boring machines to reduce the effect of works on the airport.</li> <li>• No indication has been given yet of the method of spoil disposal, but previous similar projects indicate a preference to use rail transport whenever possible. Work on the East Midlands Gate Terminal may offer opportunities to utilise the</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in road traffic likely during construction period</li> <li>• Temporary local closures or restrictions may be necessary</li> <li>• There may be some increase in traffic towards Toton Interchange, but this is likely to be marginal compared to existing traffic levels on the trunk road network in the area.</li> </ul>

	<p>site for loading and forwarding spoil</p> <ul style="list-style-type: none"> <li>• A conveyor system to a loading facility may be needed, and if road transport is used to any extent, improved links to nearby trunk roads may be needed</li> <li>• Ensure close engagement with HS2 to produce plans for sustainable spoil disposal which minimises effects on the local environment</li> </ul>	
<b>Development</b>	<ul style="list-style-type: none"> <li>• Current plans are for HS2 to pass beneath the Freight Terminal site in tunnel. However, topographical levels in the area suggest that the northern portal may have to be located within the terminal boundary, or a covered way constructed over the railway</li> <li>• There will be difficulties identifying practical vertical and horizontal alignments to take the railway under or over the adjacent M1 and A6 trunk roads at J24</li> <li>• The proposed route will require the demolition of the Hilton Hotel at Lockington. A suitable alternative site in the area will need to be identified</li> </ul>	<ul style="list-style-type: none"> <li>• There will be difficulties identifying practical vertical and horizontal alignments to take the railway under or over the adjacent M1 and A6 trunk roads at J24</li> <li>• Current development plans for 90 Ashby Road and the Curzon Coaker Trust will be seriously affected as the route amendment runs straight through these areas</li> <li>• Need to mitigate for loss of amenity space and recreation areas provided by permitted developments</li> </ul>
<b>Heritage</b>	<ul style="list-style-type: none"> <li>• Lockington Hall is within 1Km of the proposed route, but is unlikely to be affected unless the alignment is moved northwards</li> <li>• The possibility of archaeological finds during tunnelling cannot be discounted; an important Bronze Age hoard was found at Lockington in 1994</li> </ul>	<ul style="list-style-type: none"> <li>• The revised alignment is significantly further away from Lockington Hall than the old.</li> <li>• The possibility of archaeological finds during tunnelling cannot be discounted; an important Bronze Age hoard was found at Lockington in 1994</li> </ul>
<b>Public Amenities</b>	<ul style="list-style-type: none"> <li>• Depending on the final route alignment north of the tunnel, there may be effects on public rights of way</li> </ul>	<ul style="list-style-type: none"> <li>• There are likely to be effects on public rights of way. The County Council must develop plans for diversion, closure or other appropriate measures</li> </ul>
<b>Water and Flooding</b>	<ul style="list-style-type: none"> <li>• The great majority of the area to the north of Castle Donnington and Kegworth is a major flood plain and whatever final route is chosen, the railway will run through open air</li> </ul>	<ul style="list-style-type: none"> <li>• The revised alignment is along the edge of the flood plain to the north of Kegworth</li> <li>• There must be appropriate measures to ensure that the</li> </ul>



	<p>through this section of route</p> <ul style="list-style-type: none"><li>• There must be appropriate measures to ensure that the free flow of flood water is not affected by the railway</li></ul>	<p>free flow of flood water is not affected by the railway</p>
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