# **Government Consultation on HS2**

# Response from Derbyshire Local Authorities











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This response has been prepared by Derbyshire County Council. Every effort has been made to reflect as accurately as possible the views, where known, of the Borough and District Councils. Their contributions have proved invaluable in gaining a better understanding and insight into the potential impacts of HS2. This response, however, does not necessarily represent the formal views of the individual authorities, some of whom will be making separate responses to the consultation.

# **Borough and District Councils**

This response has been prepared in partnership with:

- Bolsover District Council
- Chesterfield Borough Council
- Erewash Borough Council
- High Peak Borough Council
- North East Derbyshire District Council
- South Derbyshire District Council

# Other organisations

The report has also benefited from input from groups and organisations including: Broxtowe Borough Council, Chesterfield Canal Trust, D2N2, Derby City Council, East Midlands Councils, English Heritage, National Trust, Network Rail, Nottingham City Council, Nottinghamshire County Council, Sheffield City Region, as well as by residents, local community groups, land owners and developers affected by the scheme. Advice has also been provided by specialist consultants Arup (rail links to MML and IMD), URS (highways and light rail) and Volterra (economic impact).

The input of all those who have contributed is gratefully acknowledged.

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# **Derbyshire County Council**

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#### 1 EXECUTIVE SUMMARY

- 1.1 The Department for Transport announced an "initial preferred route" for HS2 on 28 January 2013. A six month period of public consultation commenced on 17 July 2013 and closes on 31 January 2014. HS2 is by far the largest infrastructure project in Derbyshire since the construction of the M1 Motorway in the 1960's and it has far reaching implications for the County's residents. The consultation provides one of the best opportunities to influence and help shape the project.
- Derbyshire County Council's response is focused on the need to maximise local and strategic economic benefits and other opportunities presented by HS2 whilst pressing hard for changes and measures that reduce the adverse impacts. The overall aim is to secure the best possible outcome for Derbyshire's residents, businesses and others along the route.
- 1.3 This response answers the Consultation Questions and then discusses the key issues in more detail.
- Joint meetings have been held with District and Borough Councils in order to provide, as far as possible, a co-ordinated response to the consultation.
- 1.5 To help achieve a better understanding of the implications of the scheme a number of specialist reports to investigate the impacts of HS2 were commissioned:
  - maximising the Economic Benefits of the East Midlands HS2 Station at Toton, (by specialist consultant Volterra), commissioned by Nottingham City Council and its partners Nottinghamshire County Council, Broxtowe Borough Council and Derbyshire County Council; a feasibility study of extending the NET tram service west of the proposed station at Toton, (URS), commissioned by Chesterfield BC and Derbyshire County Council;
  - the economic impact of the Infrastructure Maintenance Depot, (IMD) at Staveley, (Volterra), commissioned by Derbyshire County Council;
  - the impact of the IMD on the A619 Chesterfield –Staveley Regeneration Route, (URS), commissioned by Derbyshire County Council;
  - classic compatible access to HS2, (Arup), commissioned by East Midlands Councils (EMC) with support from a number of Local Transport Authorities, including Derbyshire County Council.
- **1.6** Reference is also made to other reports, notably:
  - alternative Layout of the depot at Staveley, (Arup), commissioned by others:
  - Employment Forecast Report, (Oxford Economics) commissioned by Derbyshire County Council.

- 1.7 The study of the economic impact of the HS2 station at Toton confirmed the County Council's initial assessment that the project can be expected to result in significant local economic benefits. The active involvement of D2N2 and the Local Economic Prosperity Boards is crucial to ensure that these economic benefits are realised. The study also investigated the wider opportunities for the region that HS2 would bring and concludes that the D2N2 area would benefit more than other regions, notably in the manufacture of rolling stock.
- The study of the Economic Impact of the IMD at Staveley also concluded that whilst the proposals may displace some planned employment and housing development the depot will have a positive impact on the area. Further work is needed in order to ensure that it is made as compatible as possible with the existing regeneration plans in order to maximise the economic benefits for the area.
- 1.9 Derbyshire County Council support the HS2 Growth Taskforce in its aim to *'identify the work that must be done in advance to ensure we capture the full potential of this investment for our country.*" In particular HS2 Ltd needs to unlock the potential opportunities for the local supply chain and workforce.
- 1.10 The HS2 proposals give rise to some potentially significant issues for residents, businesses and others along the route. These include severance, loss of residential amenity, conservation, noise and visual intrusion. The proposals also include the demolition of several properties and directly or indirectly affect a number of key employment/development sites that contribute to economic growth and prosperity in the region. Derbyshire County Council aims to be vigorous in seeking modifications and measures to remove or mitigate these adverse impacts or provide adequate compensation to individuals and businesses affected. These are discussed within Sections 4 to 7 of this report.
- 1.11 Consideration has been given to the way in which the scheme affects different groups and communities to ensure, as far as possible, that some sections of the community are not unduly disadvantaged because of, for example, the severance effects of the new railway. Derbyshire County Council carried out a Health Impact Assessment (HIA) to highlight the potential benefits and identify any negative impacts of the proposals. The assessment makes a series of recommendations and these are summarised in section 7.
- Derbyshire County Council is broadly supportive of the proposals because of the potential job and economic growth that may benefit the design, manufacturing, construction and service sectors in Derbyshire. There are serious concerns however in areas where local economic performance and growth will be severely impacted. Some examples include Long Eaton and Markham Vale. Derbyshire County Council believes that its best interests will

be served through constructive engagement with the schemes promoters, HS2 Ltd. In some instances a practical change such as replacing a cutting with a tunnel could potentially resolve the matter.

- 1.13 Soon after the announcement of the preferred route in January, Derbyshire County Council identified four major areas of concern. These have already been the subject of discussions with HS2 Ltd and remain key issues:
  - Long Eaton severance of access to the town centre (where level crossings are to be closed); noise and disruption; provision of convenient access from Long Eaton to the proposed HS2 station; and links to Derby and Nottingham City Centres;
  - · impact on Markham Vale development;
  - Staveley Infrastructure Maintenance Depot (IMD) and impact on Staveley and Rother Valley Corridor Action Plan, (SRVCAAP). Staveley and Rother Valley Corridor Area Action Plan;
  - Chesterfield Canal severance, loss of navigation potential, impact on regeneration proposals including reduction in value of Chesterfield Waterside development.
- 1.14 Derbyshire County Council has increased its understanding of these issues and other impacts of the route. In particular Derbyshire County Council is aware of the concerns of residents living close to the line of the route in places such as Killamarsh, Renishaw, Woodthorpe and Long Eaton, (see above). The scheme also has a significant impact on the Trans Pennine Trail and other footpaths and trails. There is also serious concern about the impact on Derbyshire's historic and cultural heritage notably on the settings of Bolsover Castle, Hardwick Hall and Sutton Scarsdale Hall.
- Sensitive design will be needed in order to reduce the negative impacts of the scheme and, where necessary, to develop appropriate mitigation measures. In some locations there may be opportunities to bring about environmental improvements, for example, through landscaping, additional planting and/or the creation of new habitats. HS2 Ltd refer to the possibility of 'exemplar projects' and it is suggested that the route through Derbyshire, notably where it passes close heritage sites of international importance presents an ideal and appropriate opportunity to deliver a project of this nature.
- 1.16 HS2 can be expected to relieve pressure on the existing rail network and there needs to be effective use of any 'released capacity' on the Midland Main Line. It will be important to ensure that passengers using conventional rail services also benefit from the investment and are not disadvantaged by any consequential changes to services on the 'classic' rail network. It is considered important that there should be effective integration of the scheme with the conventional rail services.

- In the area around the proposed station at Toton the aim is to ensure convenient access for all road users, including pedestrians, cyclists and bus and taxi passengers. It is important that local residents should have good access to the station and should not be disadvantaged by increased congestion or parking problems caused by the HS2 proposals.
- This report does not discuss HS2 national issues or the cost-benefit of the project as a whole. These are matters for Government and the report focusses on issues of concern to Derbyshire local authorities and the interests of the communities they serve.
- The County Council is broadly supportive of the proposals because of the potential job and economic growth that may benefit the design, manufacturing, construction and service sectors in Derbyshire. Nevertheless the local authorities will be seeking satisfactory solutions to the major concerns identified in this response and will continue to press for the best possible deal for Derbyshire and its residents.

#### 2 INTRODUCTION TO MAIN REPORT

- In January 2009 the Labour Government established HS2 Ltd to develop proposals for a new high speed line from London to West Midlands and possible extensions further north. A report published in December 2009 made recommendations for a Y shaped network extending the route from Birmingham in two arms: one to Manchester and one to Leeds. The current Government agreed to pursue a broadly similar strategy and announced its 'initial preferred route' in January 2013. Derbyshire County Council and other local authorities had no involvement in the process of planning the route and was not consulted regarding the design or selection of the route prior to this date.
- The Birmingham Manchester section, (including a new station at Manchester Airport), will not directly affect Derbyshire, although residents and businesses in the High Peak area may benefit from reduced journey times to Birmingham and London, provided that they have convenient access to the stations. Those using the Glossop line could see this improvement but those currently travelling on the Buxton or Hope Valley lines could be disadvantaged due to the need to access HS2 via Manchester station and not at Stockport, assuming the West Coast Mainline service at Stockport is considerably reduced.
- 2.3 The approximate line of the proposed Birmingham to Leeds route through Derbyshire is shown in Figure 1. A more detailed plan showing some of the main features is attached in Appendix A.
- 2.4 The Birmingham Leeds section of the route enters Derbyshire south of Long Eaton, and runs through a largely residential area of the town on the alignment of the current 'low level' railway. The existing tracks will be relocated on to the nearby 'high level route'. The high speed line continues north into Nottinghamshire to Toton Sidings area where a new station will be provided for high speed services, together with an adjacent station for conventional rail.
- North of Toton, the new line initially follows the existing rail corridor, comes back into Derbyshire for a short distance, then heads in a north-easterly direction broadly following the M1 corridor through Nottinghamshire, before reentering Derbyshire east of Junction 28, immediately to the east of the McArthur Glen East Midlands Designer Outlet building.

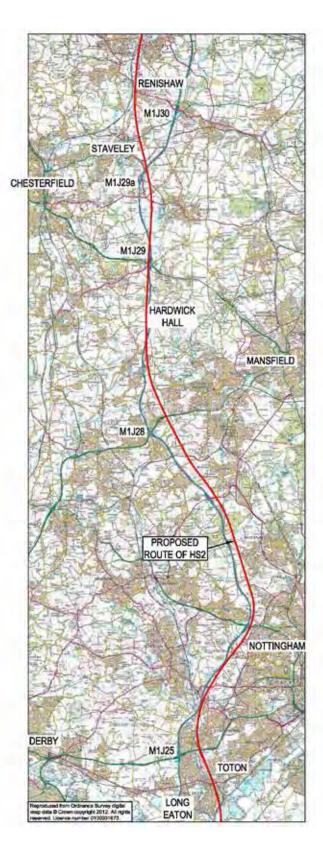


Figure 1 HS2 Route Through Derbyshire

- 2.6 The route re-joins the motorway corridor near Tibshelf, dissecting the Saw Pit Lane Industrial Estate, then crosses to the west side of the motorway south of Hardwick Hall, and continues through Junction 29, before crossing back to the east of the motorway. It continues on the east side of the motorway before passing through Markham Vale. The route then leaves the motorway corridor and continues in a northerly direction passing immediately west of Woodthorpe and under the A619 between Staveley and Mastin Moor. From here a short spur from the main line will run north of Lowgates to the site of a proposed IMD at the Staveley Works site. The main route then continues north on the west side of Renishaw and Killamarsh towards South Yorkshire, where a new station will be provided at Meadowhall.
- 2.7 The proposed Sheffield Meadowhall station is in South Yorkshire and will not directly affect Derbyshire but it may be close enough to residents and businesses in the north east of the County for them to benefit from the reduced journey times to Birmingham, London and Leeds. There may also be local employment opportunities associated with this HS2 station.
- The Government has developed the current proposals and strategic decisions about the scheme, for example about the broad alignment and affordability, at a national level. As such, fundamental decisions about the scheme are outside local authority control. In these circumstances, it is considered that the interests of Derbyshire's residents would be best served through constructive engagement with the schemes promoters.
- This response does not attempt to represent the views of individuals or other organisations within Derbyshire who may be better placed and have the opportunity to make their own views known to HS2 Ltd. The response recognises that there may be other points of view and that these will all need to be taken into account if the best outcome for Derbyshire and its residents is to be achieved. Organisations known to be making separate representations include:
  - · Woodthorpe Village Community Group (for Woodthorpe and Norbriggs).
  - Eventide Group (for Mastin Moor);
  - · Killamarsh and Renishaw HS2 Action Group:
  - Chesterfield Canal Trust:
  - Chesterfield Canal Partnership;
  - · Canal and River Trust.
- The views of the District Councils within Derbyshire are detailed in their own representations. However there are many common interests and concerns and these are highlighted within this report.

# **Derbyshire County Council**

- 2.11 Derbyshire County Council welcomes the potential opportunities for jobs and economic benefits in the region. The local authorities will work to ensure that opportunities are realised for investment in infrastructure, and the conditions are created in terms of the provision of skills training and planning policies to maximise the benefits of HS2. There are, however, some areas of concern that require further action by HS2 Ltd and these are detailed in the following sections.
- The Appendices in this report are included for information. They have been used to help inform the council in making its response and do not necessarily represent the formal views or policy of the County Council.

### **Derbyshire District Councils**

In considering its response to the consultation, the County and District Councils have co-operated in seeking a shared understanding of the impact of HS2 and there is a broad consensus about the nature of the impact of HS2 on Derbyshire and the actions needed to overcome the adverse impacts. Some District and Borough Councils will be making individual responses to the proposals. The text in the boxes below shows no more than a snapshot of the views of District and Borough Councils and is included here to provide an overall impression of local authority views.

#### **Bolsover District Council**

- 2.14 Bolsover District Council has worked closely with officers from Derbyshire County Council in considering its response to the HS2 proposals. The key issues for Bolsover District are as follows:
  - Impact on key Employment/development sites at McArthur Glen East Midlands Designer Outlet centre at Pinxton/A38, Saw Pit Lane Industrial Estate at Tibshelf.
  - Impact on employment sites that are/can be rail served including Coalite and Markham Vale (need to maintain access).
  - The impact on key Attractions including Hardwick Hall and Bolsover Castle.

# **Chesterfield Borough Council (CBC)**

- 2.15 Chesterfield BC has worked closely with Derbyshire County Council in considering its response to the HS2 proposals, notably on the economic and planning implications of the proposals. Key concerns include:
  - · protecting the planning and development interests at Markham Vale:
  - protecting the existing Chesterfield Canal in water and proposed routes for on-going restoration of the canal and keeping the long term aim for a navigable waterway alive;
  - maintaining the viability of the Staveley Action Plan, a key development plan for CBC that includes provision for 1500 to 2000 homes;
  - potential impacts on flood risk, where the River Doe Lea meets the River Rother.

# **Erewash Borough Council**

- 2.16 Erewash BC agrees with the Government's proposed route between West Midlands and Leeds and to the proposal for an East Midlands station to be located at Toton subject to:
  - the provision of a southern access road to Long Eaton Green;
  - legal provision for Erewash licensed taxis to pick up passengers from the station:
  - naming the station Long Eaton Green Station;
  - possible change in elevation of the high speed line;
  - replacing the embankment west of the Erewash Canal in Sandiacre with a viaduct.
  - early implementation of landscaping, where possible.
  - utilisation of the existing rail corridors for plant and material transport to works in Long Eaton.
  - · restrictions on night-time and weekend working in Long Eaton.
  - an engineering solution to minimise disruption from replacing the A6005 Nottingham Road Bridge.
  - compensation to the council for the loss of council tax and business rate revenue.
  - possibility of compensation for noise insulation purposes for those properties most likely to suffer detrimental noise impact.

# **High Peak Borough Council**

- 2.17 High Peak Borough Council had not formally expressed a view on the impact of HS2 on their area at the time of writing this report but officers have collaborated by providing the following statement:
  - "High Peak Borough Council can see a number of potential benefits that may accrue from the HS2 investment. The improved links to Manchester that will result from HS2's northern extension will increase the economic development potential in the Manchester City Region and result in significant job creation particularly around the proposed stations. The High Peak will benefit from the economic boost to the wider region through job opportunities, an increased regional market for goods and services, and improved access to other UK markets. The potential for High Peak would be greatly enhanced by complementary investment in connecting rail links especially the Buxton line and the Glossopdale line. However, the Borough Council remains open-minded towards the merits of other potential alternative schemes that could be more cost effective."

# **South Derbyshire District Council**

- 2.18 South Derbyshire District Council has made its own response to the HS2 consultation. South Derbyshire is not directly affected by the published route but the Council has concerns regarding suggestions for an alternative route through Derby City. The response is published on the District Council's website. "HS2 Phase 2 Route Consultation" and includes responses to 5 of the Consultation guestions:
  - The Council agrees with the Governments proposed route between West Midlands and Leeds.
  - The Council also agrees with a station at Toton. "Locating the station at Toton will maximise economic benefits to the Derby and Nottingham area and attract a greater level of patronage than would a station at Derby Midland. It would also put a substantial area of previously developed land to beneficial use".
  - The Council does not think there should be any additional stations in the eastern leg, "Additional stations would detract from the objective of providing a means of high speed travel".
  - The Council would not support an alternative route through Derby. "The alternative route through South Derbyshire and Derby would generate substantially fewer economic benefits and less patronage and therefore lower revenues for HS2; it would involve the demolition of more community properties; noise annoyance to a greater number of people; more dwellings qualifying for noise insulation compensation; the displacement of more jobs; cross more Grade 2 agricultural land; cause significant harm to the setting of conservation areas and heritage features at Repton and Derby; involve the diversion of more minor rivers; infringe the Derwent Valley Mills World Heritage Site and cause severe detrimental landscape impacts, particularly in the Trent Valley. It would also create pressure for further housing growth in an area where meeting currently projected needs in a sustainable manner is already an enormous challenge".
  - The Council suggests that "Freed up capacity should be used to provide integrated conventional rail services to HS2 stations to maximise the benefits of high speed rail travel. It should also be used and to help meet forecast growth in demand for passenger and rail freight services".

# **Other Organisations**

Other organisations that contributed to this report include Derby City Council, East Midlands Councils, the D2N2 Local enterprise Partnership (LEP) and Sheffield City Region LEP. East Midlands Councils is the consultative forum for local authorities in the Region. It provides support to Councils to improve their services and is a strong voice for the East Midlands. D2N2 is the LEP comprising the local authority areas of Derby, Derbyshire, Nottingham and Nottinghamshire. Sheffield City Region is a LEP comprising the nine local authority areas of Barnsley, Bassetlaw, Bolsover, Chesterfield, Derbyshire Dales, Doncaster, North East Derbyshire, Rotherham and Sheffield.

# **Derby City Council**

- Derbyshire County Council and Derby City Council may differ on preferences for the location of the HS2 station, but the two authorities are in agreement on some of the higher level objectives and share concerns about a number of issues. For example:
  - maximising the benefits for the local rail technology sector during the construction and operational phases of the scheme;
  - released capacity issues the need to maintain a good level of service on the Midland Main Line (MML) (including the Derby-Chesterfield-Sheffield corridor) following the introduction of HS2 services;
  - opportunities to serve Derby City Centre (and potentially Chesterfield and Sheffield City Centre) by 'classic compatible' services. This would require a physical connection between HS2 and the classic rail network;
  - concerns about 'classic' rail access to Toton. HS2 Ltd propose a new four platform station for 'classic' train services. It is envisaged that this would be served by new shuttle services from Derby and Nottingham as well as by 'diverted' services. The latter are a particular concern as they could add to journey times for existing rail users. It is important that passengers using the classic rail network should not be disadvantaged by the HS2 proposals:
  - the possibility of extending the NET tram service west of the proposed HS2 station, initially as far as Long Eaton/Sandiacre, but possibly further west towards Derby.

# **East Midlands Councils (EMC)**

- East Midlands Councils, with local authority support, commissioned a study of the potential for a physical link between HS2 and the Midland Main Line. EMC has also made its own response to the HS2 proposals. This sets out some key principles that should be applied including:
  - nil detriment to existing plans to upgrade the Midland Main Line.
  - use of existing rail capacity released by HS2 to improve services at stations across the East Midlands;
  - adverse environmental impacts of the line and new Toton Station should be avoided, or minimised and mitigated through excellent design;
  - full compensation for people and businesses adversely effected and at the earliest opportunity;
  - development of high quality 'classic rail' services between the new
     Toton Station and the city centres of Derby, Leicester & Nottingham;
  - maximum access to the new Toton Station by tram, bus, walking and cycling;
  - · minimum impact of the new Toton Station on local and strategic roads;
  - effective connectivity between HS2 and existing rail lines, including the option to run 'classic compatible' trains on HS2;
  - ensuring that rail engineering and construction companies based in the East Midlands have a fair opportunity to win contracts to build the new line and rolling stock; and
  - ensuring that local people have the skills to access the design, engineering and construction jobs created during the delivery of HS2.

#### D2N2 LEP

- 2.22 A summary of the response from the D2N2 LEP is as follows:
  - Rail engineering and construction companies in the D2N2 area should have a fair opportunity to win contracts;
  - An HS2 Academy should be established in the D2N2 area providing training in high speed rail technology;
  - No detriment to plans to upgrade and electrify the Midland Main Line;
  - Opportunities provided by the proposed Infrastructure Maintenance Depot at Staveley should be maximised and integrated with plans for the regeneration of the area;
  - Exemplar projects should be developed to protect the cultural heritage of the area and support the visitor economy;
  - High quality links to the new Hub Station to Nottingham and Derby City Centres, East Midlands Airport and the wider D2N2 area and good access for local people;
  - Effective integration with existing rail lines, including the option to run 'classic compatible' trains to/from Nottingham, Derby and Chesterfield;
  - Future proofing the investment by flexible and adaptable design.

# **Sheffield City Region (SCR)**

- The LEP has contributed to the representation from South Yorkshire
  Passenger Transport Executive (SYPTE). The SYPTE response is on
  behalf of the South Yorkshire Integrated Transport Authority (ITA) and SCR.
  Derbyshire County Council share their view in the following statements:
  - "We support the location of the proposed Infrastructure Maintenance Depot at Staveley, provided improvements are made to approach lines and footprint, so that it facilitates, rather than compromises development of surrounding land, and subject to guarantees regarding the utilisation of SCR expertise in its construction and operation."
  - "HS2 should not negatively affect existing plans to upgrade and electrify the Midland Main Line, including enhancements at Sheffield."
  - Adverse environmental impacts of the line, the new Meadowhall Station and the proposed Infrastructure Maintenance Depot at Staveley should be avoided where possible, or minimised and mitigated through excellent design."
  - "Full compensation for people and businesses who are adversely affected by the new line, Meadowhall Station and maintenance depot made available at the earliest opportunity;
  - High quality 'classic rail' services should be developed between Meadowhall and the SCR urban centres."
  - "A comprehensive access package should be provided to the new Meadowhall Station by tram, bus, walking and cycling;
  - Sustainable access for workers and construction workers to the Staveley Infrastructure Maintenance Depot should be similarly integrated."
  - "Connectivity is required between HS2 and existing rail lines."
  - "Companies based in SCR should have a fair opportunity to win contracts to support construction and delivery."
  - "Construction of the 'Y' network, and particularly the Eastern leg, should be accelerated so that the economic benefits of HS2 can be realised earlier in the north".
  - "There should also be a package of support for businesses to relocate within SCR boundaries ensuring there is no further economic impact on our economy".
  - "It is important that we maximise the readiness of the SCR workforce for the opportunities presented by HS2 and that local people can access the jobs that HS2 creates in their area."

#### 3 RESPONSE TO CONSULTATION QUESTIONS

The Consultation asks nine specific questions from the respondents. An attempt is made to answer these questions briefly below with the understanding that this report should be read in full for the complete view of Derbyshire County Council response to the Consultation.

Response to Consultation Questions, (on the route from the West Midlands to Manchester, Leeds and beyond).

(i) Do you agree or disagree with the Government's proposed route between the West Midlands and Manchester as described in Chapter 7? This includes the proposed route alignment, the location of tunnels, ventilation shafts, cuttings, viaducts and depots as well as how the high speed line will connect to the West Coast Main Line.

#### Answer:

- The proposed route from the West Midlands to Manchester will not directly affect Derbyshire. However, some Derbyshire residents in the High Peak area will benefit from improved connectivity to Birmingham and London, (see below).
- 3.3 It is suggested that HS2 Ltd should investigate the economic potential for a triangle junction on HS2 near Tamworth, (where the western and eastern arms meet); this would offer additional journey opportunities (eg Toton Manchester Airport).
- (ii) Do you agree or disagree with the Government's proposals for:
  - a. A Manchester station at Manchester Piccadilly as described in Chapter 7 (sections 7.8.1 7.8.7)?
  - b. An additional station near Manchester Airport as described in Chapter 7 (sections 7.6.1 7.6.6)?

#### **Answer:**

The stations at Manchester Airport and Manchester Piccadilly may be close enough for residents and businesses in the north west of the County to benefit from the greatly reduced journey times to Birmingham and London. In order to maximise the benefit there needs to be to be good connectivity between northwest Derbyshire and the HS2 stations. This may require investment in better road links and improvements in public transport services.

(iii) Do you think that there should be any additional stations on the western leg between the West Midlands and Manchester?

#### Answer:

- The proposed route from the West Midlands to Manchester will not directly affect Derbyshire. The County Council would support any changes that increased travel opportunities for Derbyshire residents.
- (iv) Do you agree or disagree with the Government's proposed route between West Midlands and Leeds as described in Chapter 8? This includes the proposed route alignment, the location of tunnels, ventilation shafts, cuttings, viaducts and depots as well as how the high speed line will connect to the East Coast Main Line.

#### Answer:

- 3.6 Derbyshire County Council supports in principle the proposed route of HS2 but has a number of concerns regarding the impact on the local economy, environment, traffic, and the health and wellbeing of Derbyshire residents. These concerns are discussed in more detail within this report which should be treated as the full response to this question. Derbyshire County Council's continued support for the proposed route through Derbyshire is dependent on satisfactory progress being made in resolving these issues.
- The potential economic benefits are welcomed, but the local authorities have concerns about the possible impact on existing and future job opportunities. Section 4 of the report explains local authority concerns that the route will have a direct impact on planned employment growth, notably at Markham Vale and at the site of the Infrastructure Maintenance Depot at Staveley. The report also outlines wider impacts on the local economy through, for example, the effect of the scheme on plans for the restoration of the Chesterfield Canal and the potential loss of jobs in farming and tourism.
- The report also details the environmental impact of the scheme (Section 5). The route will adversely affect a number of residential areas along the line of the route, particularly in terms of severance, noise effects and, in some cases, demolition. The areas affected are outlined in the report. They include Long Eaton, Woodthorpe, the Lowgates/Staveley area, Renishaw and Killamarsh, as well as a number of other sensitive locations.
- There is also serious concern about the impact of the scheme on the cluster of heritage sites that includes Bolsover Castle, Hardwick Hall and Sutton Scarsdale. The report explains that this may be the most important concentration of heritage sites along the entire HS2 route and should be

afforded the highest possible protection. There is also concern about the need for sensitive design where the route crosses the flood plains of the River Soar and River Trent.

- 3.10 HS2 generally follows the M42 and M1 corridor and the proximity of the motorway helps to facilitate road access to the proposed station at Toton (via M1 Junction 25). Currently the site is not served by passenger train services and further development will be needed if the station is to act as an effective transport hub for the East Midlands. It will be important to ensure that there is good access to the site for the local community, but this is an area that already suffers traffic problems and care will be needed to ensure that existing problems are not exacerbated by HS2. The local authorities look forward to working closely with HS2 Ltd and other partners on the further development of proposals for the Toton area.
- The HIA of the Derbyshire section of the route (Section 7) noted that the proposed alignment of HS2 runs through or close to some of the most deprived communities in Derbyshire. This underlines the importance of maximising the economic benefits of the scheme and working to ensure that these communities are not further disadvantaged.
- A very high standard of design will be needed to avoid or reduce these adverse effects and to develop appropriate mitigation measures. Consideration should be given to investigating any opportunities to enhance the local environment and to compensate local communities for the loss of local amenities on a 'like for better' basis. These matters are likely to be most effectively addressed by a continuing dialogue with local communities, business interests and local authorities.
- (v) Do you agree or disagree with the Government's proposals for:
  a. A Leeds station at Leeds New Lane as described in Chapter 8 (sections 8.8.1 8.8.5)

#### Answer:

The proposed station at Leeds will not directly affect Derbyshire.

b. A South Yorkshire station to be located at Sheffield Meadowhall as described in Chapter 8 (sections 8.5.1 – 8.5.8)?

#### Answer:

- The proposed Sheffield Meadowhall station is in South Yorkshire and will not directly affect Derbyshire but it may be close enough to residents and businesses in the north east of the County for them to benefit from the reduced journey times to Birmingham, London and Leeds and the anticipated economic benefits surrounding the HS2 stations.
- 3.15 Derbyshire County Council supports in principle a Sheffield Meadowhall station but at the same time recognise the need for good links into the city centre and north east Derbyshire. We are aware of alternative proposals for a high speed station to be located in Sheffield city centre and would wish to be consulted further in the event that this concept was to be further developed or investigated.
  - c. An East Midlands station to be located at Toton as described in Chapter 8 (sections 8.3.1 8.3.6)?

#### Answer:

- 3.16 Derbyshire County Council supports in principle a station at Toton and the associated economic benefits and development opportunities. There are concerns however regarding the impact on Long Eaton and the surrounding area which already suffers from severe congestion at peak times. Sensitive design and planning will be needed to minimise the adverse local impacts and to maximise the economic potential.
- 3.17 Several issues of concern are identified later in this report. They relate to: the economic impact (Section 4); the, environmental impact (Section 5); traffic and transport issues (Section 6); and health, wellbeing and equalities (Section 7). These are discussed in more detail in the relevant chapters and complete the full response to this question. The local authorities will look for satisfactory resolution of these issues and concerns as the scheme is developed and for effective engagement with local communities and other interested parties.

(vi) Do you think that there should be any additional stations on the eastern leg between the West Midlands and Leeds?

#### Answer:

- 3.18 Derbyshire County Council believes that the number of existing stations is correct providing that associated investment is carried out to ensure that good links to surrounding areas and main cities are available. We support the use of classic compatible services to facilitate this, together with major improvements in the public transport to serve the proposed station at Toton.
- (vii) Please let us know your comments on the Appraisal of Sustainability (as reported in the Sustainability Statement) of the Government's proposed Phase Two route, including the alternatives to the proposed route as described in Chapter 9.

#### Answer:

- Derbyshire County Council welcomes HS2 Ltd's commitment to develop an 'exemplar project' and in the process, limit the projects negative impacts. Derbyshire County Council welcome the seven themes of the Sustainability Policy but disagree with some of the contents of the Sustainability Statement. These concerns are raised within the sections of this report and include:
  - · Query the amount of released capacity.
  - Disagree that the presence of the M1 would limit the potential impact of the proposed route past Hardwick Hall, Sutton Scarsdale and Bolsover Castle.
  - The statement does not represent the significance of Chesterfield Canal with sufficient importance and does not recognise the fact that Derbyshire County Council is the navigation authority and owns much of the route.
  - Concern regarding the issues surrounding the more deprived areas to the north east of the county.
  - Paragraph 6.5.15 does not include either of Derbyshire County Council's multi-user Blackwell Trail (one intersection) or Silverhill Trail (one intersection), just south of Tibshelf. These form part of a wider network of the Phoenix Greenways. It does not include development of the Greenways network in the North East of the County.
  - Paragraph 6.6; Airborne noise: impacts from noise are assessed from a residential perspective only. In the context particularly of the Trans Pennine Trail, Cuckoo Way and Chesterfield Canal (and perhaps equally the Erewash Canal and Nutbrook Trail) where the high speed line is expected to parallel linear routes, the impact to the quiet quality of the green corridor could be significant.

- Paragraph 6.9.8; in the vicinity of Stanton Gate south to Long Eaton, does not fully reflect the visual impacts and noise impacts to recreational users on the Erewash Canal and Nutbrook Trails.
- Paragraph 6.9.12 regarding landscape impacts does not mention the line of the future restoration of the Chesterfield Canal.
- Biodiversity paragraph 6.11.11 notes no direct impact to Derbyshire Wildlife Trust reserves. However, HS2 closely parallels (within 200 300m) the DWT Carr Vale Nature Reserve and the adjacent Derbyshire County Council Peter Fidler Nature reserve. This needs to be included in recognition of the potential for increased noise disturbance to wildlife and the tranquillity of the setting for visitors.
- Paragraph 6.12.5 of the Sustainability Statement mentions that HS2 Ltd will be consulting with the Chesterfield Canal Trust. Within Derbyshire, it will be the County Council who will be taking the lead role in this matter as landowner and Navigation Authority for the currently restored sections of the canal.

# 3.20 Additional comments on Chapter 9:

- On Visual Impact (9.1) and Landscape Impact (9.2). Although there are no national landscape designations, the recreational value of assets such as the Trans Pennine Trail to local communities is very high. Walking and cycling usage of this Trail is already recorded as the fourth busiest section of the whole of the Trans Pennine Trail network. The Trail section between Staveley and Killamarsh is a significant asset for local communities and will be even more so when the restoration of the Chesterfield Canal, which runs parallel, is complete.
- On Wildlife and Ecology (9.3). Although there are no Sites of Special Scientific Interest (SSSI) in this section, the opportunity is for the restoration of the Chesterfield Canal to positively contribute to both improving bio-diversity and providing quality green space for the enjoyment of local people. Unless adequate separation is accommodated from noise and disturbance from the high speed rail link, HS2 will potentially devalue this opportunity.
- It is noted that in paragraph 9.4.1 that there are opportunities for water resources to provide environmental enhancement. It would be useful to note that HS2 could support the Chesterfield Canal as such an opportunity in this area. It is important that they liaise with our engineers to identify any design implications for and accommodate water flow management necessary to feed the canal.

(viii) Please let us know your comments on how the capacity that would be freed up on the existing rail network by the introduction of the proposed Phase Two route could be used as described in Chapter 10?

#### Answer:

- 3.21 Derbyshire County Council is not convinced that substantial capacity will be freed up on the Midland Main Line because of the predicted growth in passenger travel and notes Network Rail's conclusions in its recent study, (Better Connections: Opportunities for the Integration of HS2), that there was no case for reducing the number of train paths to London post HS2. Nevertheless, HS2 may provide opportunities for changes in the pattern of services and the opportunity should be taken to enhance services to Chesterfield and other Derbyshire stations, including Alfreton, Langley Mill and the proposed new station at Ilkeston on the Erewash Valley line. Section 6 of this report provides further details on concerns regarding the need to maintain the existing level of service for 'classic' rail, (both passenger and freight services). Derbyshire County Council would welcome any new opportunity where the demand exists providing it does not compromise any existing services.
- (ix) Please let us know your comments on the introduction of other utilities along the proposed Phase Two line of route as described in Chapter 11?

#### Answer:

Derbyshire County Council is not in a position to comment on any future provision of infrastructure along the route but would welcome any 'future proofing' that could provide economic opportunities for residents and businesses in Derbyshire. Local authorities look forward to working closely with HS2 Ltd to maximise the benefits to the region's infrastructure.

#### 4 ECONOMIC IMPACT

#### General

- Derbyshire County Council support the HS2 Growth Taskforce in its aim to identify the work that must be done in advance to ensure we capture the full potential of this investment for our country." In particular HS2 Ltd needs to unlock the potential opportunities for the local supply chain and workforce. With that aim, HS2 Ltd needs to sponsor further, independent research on the wider economic impacts of HS2.
- Derbyshire County Council welcomes the opportunities for direct employment 4.2 at Toton and Staveley during the construction and operational phase of HS2 and will work to ensure that these opportunities are fully realised. Opportunities also exist during the design phase. Actions are needed in the design and provision of appropriate infrastructure, skills/training and planning policies to take advantage of these new opportunities. In January 2014 ministers announced that HS2 is to have a dedicated further education college to train engineers. Derbyshire County Council support this and the establishment of an HS2 Academy in the D2N2 area as set out in the D2N2 Strategic Economic Plan. 2 Given the concentration of the rail supply industry in the local area it is considered that Derby or Derbyshire would provide a natural home for such an establishment. Derbyshire County Council recognise that HS2 could help secure existing and create new jobs and economic growth in Derbyshire's rail, construction, services and maintenance sectors. See paragraphs 4.61 to 4.85 for a further details of the impact of the station at Toton and the IMD at Staveley.
- 4.3 In their report, "Maximising the Economic Benefits of the East Midlands HS2 Station at Toton", specialist consultant Volterra notes that the D2N2 area can expect to see a 2.2%-4.3% increase in local economic output, the largest percentage increase in economic productivity amongst those affected by HS2. One sector that will particularly benefit is the manufacture of rolling stock. Over half of national employment in this sector is in the East Midlands and two-thirds of this is within Derby. This suggests that around 2,500 workers in Derby could be involved in manufacturing of rolling stock connected with HS2.

<sup>&</sup>lt;sup>1</sup>14/1/14 BBC news article stated "Sir David Higgins, who is officially beginning his new job as chairman of HS2, said the college would address the problem of a lack of engineers."

<sup>&</sup>lt;sup>2</sup>First Draft Submission 19th December 2013: www.d2n2lep.org/write/Documents/D2N2\_Strategic\_Economic\_Plan\_clean.pdf.

- Derbyshire County Council request government recognition and support for the range of master planning, local plan and strategic spatial planning interventions required to fully realise the wider benefits of HS2. These will require alignment of policies and related funding streams in areas such as integrated transport, land assembly and skill development over an area which reflects functional economic geography. This will help realise regional economic benefits for both SCR and D2N2.
- Evidence on the strategic benefits for the SCR in a report carried out by KPMG suggests an increase in total economic output (GVA) of between 1.9% and 3.2% per annum. This level of output change would have disproportionate sector-specific impacts. The implications of these, together with consequential displacement effects, will need to be properly considered in relevant employment land/premises policies.
- A high speed rail station in Toton has the potential to serve large population centres of Nottingham and Derby and thereby generate growth. To do this it is essential that associated infrastructure is put in place to ensure that good connections are provided to these cities. This is anticipated to include the provision of rail, NET2, bus, cycle, pedestrian and vehicle access. There is a risk that this potential will not be realised without significant investment in the surrounding road and rail networks.
- A high speed rail station at Sheffield Meadowhall, South Yorkshire, has the potential to serve Chesterfield and other populations in north east Derbyshire and provide employment opportunities. To do this it is essential that associated infrastructure is put in place to ensure good links into the city centre and north east Derbyshire.
- There is concern that the potential negative impact on jobs has not been adequately addressed in the consultation documents. Concerns include not only losses of potential job opportunities at Markham Vale and in the Staveley Works area but also the threat to existing jobs at various locations on the line of the route, including the potential loss of tourism and farming jobs.
- HS2 crosses through Markham Vale, the County Council's largest ever regeneration project which has the aim of creating 5,000 jobs. Parts of Markham Vale affected by HS2 also have the benefit of Enterprise Zone status. The loss of employment opportunities as a result of HS2 passing through Markham Vale needs to be addressed by HS2 Ltd. See paragraphs 4.30 to 4.40 below.
- 4.10 Some areas, especially to the north-east of the county are economically depressed but have a potential to develop tourism. The design of HS2 should not restrict the growth in the areas tourism potential a recent survey by the

Heights of Abraham Company shows that "1 job is created for every £53,000" spent on tourism" - approx. Careful design should make an alignment possible that doesn't compromise the tourism potential.

- 4.11 Care needs to be taken not to adversely impact on the viability of farming and agriculture in the area as these land uses are both important for the local economy and the landscape character. The viability of the Chesterfield Canal and associated development also needs to be protected for the same reasons. Derbyshire County Council welcomes the anticipated creation of jobs at Staveley IMD and around the Station at Toton but is concerned by the potential loss of jobs elsewhere. Many of these are likely to be in the more deprived areas of the County that would benefit from more investment. A plan showing areas of deprivation and the route of HS2 is provided in Appendix B and it can be e seen that the route directly affects some of Derbyshire's most deprived communities.
- HS2 crosses a number of economically important minerals sites in Derbyshire. There is a possible requirement for prior extraction of these deposits so they are not sterilised by HS2. These areas are shown in detail in the plan in Appendix C and itemised in Appendix D.
- There are a number of highly significant heritage assets that form a tourism cluster in the north east of Derbyshire. Hardwick Hall, Bolsover Castle and Sutton Scarsdale Hall contribute to this cluster. HS2, if not dealt with sensitively, could negatively impact on the setting and visitor experience of Bolsover and these historic buildings. The full potential of these assets as part of a tourism cluster has probably yet to be fully realised. It is essential that a sensitive design response for HS2 is afforded to this stretch so as not to inadvertently constrain their economic potential. It is vitally important not to diminish the setting and visitor experience of key attractions. See Appendix E for details of visitor numbers, economic data and investment plans.
- Derbyshire County Council has several long term strategies across the region involving Greenways and Rights of Way which should not be compromised by HS2. Where affected, Derbyshire County Council seek appropriate mitigation to retain the vision and viability of these strategies. From visitor numbers and overnight stays, there is evidence that the multi-user Greenways network in north east Derbyshire is already valued as a key part of the tourism interest in this part of the County, connecting as it does attractions like Rother Valley Country Park with Chesterfield along the Trans Pennine Trail (TPT), the fourth busiest section of the whole TPT. Through Derbyshire County Council's ongoing investment, this off-road network in Derbyshire is a continuously expanding one, providing for example off-road links between the likes of Hardwick Hall and Bolsover Castle and links eastwards into the Nottinghamshire Trails network. The network also provides active travel

connections for local communities to shops, schools and employment. HS2 Ltd confirmed their approach to mitigating Rights of Way in a letter dated 8 October 2013 (see Appendix F). This is considered to be an acceptable approach.

- The long term plans for the control, ownership and operation of HS2 are not clear at present. Moves towards a closer integration of the high speed and classic rail networks are welcomed, but the long term intentions for the management and operation of the line should be clarified. The County Council wish to see a holistic approach that effectively integrates high speed and conventional rail services. HS2 operation, timetables and pricing should be designed to maximise benefits to both the road and rail networks and thus deliver key objectives.
- There is also concern regarding the proposed route construction sequence. Derbyshire County Council suggest that construction from the north to the south would maximise the opportunity to use Staveley as a key location for the supply of construction materials. A recent report by the House of Commons Transport Committee.3, stated that the economic, transport and political case for this has strengthened. The Committee indicated that serious thought should be given to building the two phases at the same time, a view shared by Derbyshire County Council.
- Derbyshire County Council would wish to see local labour used as much as possible in the construction and operation of HS2. Safeguards should be put in place to ensure that local jobs are created and local businesses used as the preferred option. Derby or Derbyshire has the largest cluster of rail engineering businesses in the world and HS2 Ltd should ensure that British and preferably local suppliers and workforce are given priority. Derbyshire County Council also request HS2 Ltd to ensure that a percentage of Apprentice jobs are created.

<sup>&</sup>lt;sup>3</sup>December 2013 House of Commons Transport Committee – High speed rail: on track? Ninth Report of Session 2013-14 <a href="http://www.parliament.uk/documents/commons-committees/transport/HS2%20Report%20revised%20FM%20(4).pdf">http://www.parliament.uk/documents/commons-committees/transport/HS2%20Report%20revised%20FM%20(4).pdf</a>.

# **Economic impact area by area (Areas A to M)**

4.18 The assessment of the impact of HS2 on Derbyshire's landscape is considered in Section 5. The analysis divides the route into a series of sections (Areas A to M). For convenience the same division has been made for considering the more local economic impact of the scheme. The following paragraphs highlight the economic impacts associated with each area. These areas are illustrated in the plan in Appendix G and are listed south to north through Derbyshire.

# Trent Valley (Area A)

- The further development of HS2 in this area should respond to the objectives of Trent Valley Vision being developed and promoted by the Lowland Derbyshire and Nottinghamshire Local Nature Partnership (LDN LNP).
- 4.20 The proposed route runs directly through the current working area of Attenborough Quarry, used for Sand and Gravel extraction. Plans have been put forward to extend this quarry.

#### Long Eaton (Area B)

- There are possible economic benefits in Long Eaton due to the anticipated business development around Toton station. The Volterra report, "Maximising the Economic Benefits of the East Midlands HS2 Station at Toton" discusses the economic impact of the HS2 station at Toton in detail. The report is attached in Appendix H and summarised in paragraphs 4.61 to 4.78.
- These benefits will only be realised if good transport links are provided. In particular, provision needs to be made for convenient access between Long Eaton town centre and the proposed station at Toton. It will also be important to ensure that the proximity of the HS2 station does not exacerbate existing parking and congestion problems in Long Eaton.

#### Sandiacre and Stanton Gate (Area C)

4.23 No major economic issues have been identified in this section.

#### From A38 to M1 Junction 29 (Areas D to F)

- 4.24 The McArthur Glen East Midlands Outlet centre, located close to Junction 28 of the M1, is an important source of local employment. It is understood that the HS2 proposals may affect the expansion plans for this business. HS2 Ltd is urged to minimise the impact on this business which is especially important for full time and part time employment opportunities. Likewise the route goes straight through a number of established company premises at Saw Pit Lane Industrial Estate at Tibshelf. If it is not practical to adjust the alignment, then these companies will need to be relocated. It is important to ensure that businesses are not displaced from the local area and alternative sites/premises can be provided.
- 4.25 The local authorities would wish to encourage HS2 Ltd to investigate all options available to provide the best possible mitigation for the impact on these locations, including minor adjustments to the alignment.
- An ill-considered design for rural sections of this area could lead to impacts on the agricultural viability of stretches of farmland as a result of severance.
- The Blackwell Trail and Silverhill Trail are important tourism and recreation assets that would be severed by the route. Accommodation for the continuation of these Greenways, as part of the wider network, would be required.

#### **Bolsover and Carr Vale (Area H)**

- There are a number of highly significant heritage assets in the north east of Derbyshire. This landscape provides the landscape character and visual amenity for at least two of these heritage assets Bolsover Castle and Sutton Scarsdale Hall. The full potential of these assets as part of a tourism cluster with Hardwick Hall has probably yet to be fully realised. It is essential that a sensitive design response for HS2 is afforded to this stretch so as not to inadvertently constrain their economic potential.
- 4.29 An ill-considered design for this rural section could lead to impacts on the agricultural viability of stretches of farmland as a result of severance.

#### Markham Vale (Area I).

- The consultation document acknowledges that the route would affect the planning and development at Markham Vale, a major regeneration site.

  Derbyshire County Council concerns include:
  - · adverse effects on Markham Vale Enterprise Zone; and

- impact on rail connections to Erin landfill void south of Poolsbrook and Markham Vale Development site (including the former Coalite site which is subject to development proposals).
- 4.31 Markham Vale is Derbyshire's largest ever regeneration project. It is important that the impact on the economic viability of Markham Vale is kept to a minimum. HS2 Ltd's current proposals:
  - require the demolition of one industrial property;
  - · cross several sites ready for development;
  - remove the potential for rail heads;
  - compromise access roads to the plots; and
  - compromise the surface water drainage balancing pond.
- Derbyshire County Council and its private sector partner, Henry Boot Developments Limited (HBDL) have concerns about the immediate impact on employment development at Markham Vale.
- Markham Vale is projected to create 5,000 new employment opportunities. Today, new development completed provides for over 350 jobs. The project has received substantial public and private sector investment and has been highlighted as a target area for immediate business and industrial growth, and hence has been granted Enterprise Zone status in 2012 and specifically allocated Enhanced Capital Allowances.
- 4.34 The public sector funding has been used to create the necessary infrastructure, environmental and development improvements required to attract some £150m of private sector investment. This investment far exceeds the land values created, but was made in order to create the employment opportunities. The HS2 route severely impacts on development land and therefore on this investment. Markham Vale is seeking to recover this investment, over and above that automatically given through Land Value compensation.
- 4.35 The development that has already taken place includes:
  - · major infrastructure investment of a new M1 motorway junction (J29a);
  - access roads, balancing pond and contaminated land tip management;
     and
  - a number of major businesses securing sites and building offices/depots and manufacturing plants.
- The private sector investment has enabled many of the companies to deliver business growth through substantial expansion of existing and the setting up of new operations. This growth has been delivered despite the difficult economic environment.

- A detailed breakdown of the impacts across the site is presented in Appendix I.
- The proposed route for HS2 has an impact on much of the available, fully prepared and serviced development land at Markham Vale. See Appendix J for a plan of the development. In addition to the direct impact from the route, the local authorities are also concerned about the uncertainty of the route between now and when the preferred route becomes finalised. This uncertainty effectively sterilises the areas affected within the project, as no investor will invest in a new building or operation before the route is settled, and safeguarded areas defined.
- Derbyshire County Council and HBDL have met HS2 Ltd since the publication of the route in January 2013 to discuss their proposals and how they impact on Markham Vale. The programme and process was outlined, and there was discussion about the impact of the scheme. The local authorities understand that it will not be possible to remove the overall uncertainty until the final route is settled after public consultation.
- The local authorities would wish to encourage HS2 Ltd to investigate all options available to provide the best possible mitigation for the impact on Markham Vale and other sensitive locations, including minor realignments. We urge HS2 Ltd to provide details of how these issues can be resolved as early as possible to remove the uncertainty around this development.
- 4.41 Chesterfield Borough Council share concerns in this area regarding:
  - adverse effects on Markham Vale Enterprise Zone (South Tip and 'Green Giant' planning permission);
  - loss of tip forming landscape screen in view of Markham Vale from Bolsover Castle; and
  - need to retain rail connections to Erin landfill void south of Poolsbrook, to Markham Vale railhead, Seymour, and to Bolsover, Stanfree and Clowne for long term.

#### **Netherthorpe/Woodthorpe/Mastin Moor (Area J)**

- 4.42 There are concerns in this area regarding:
  - adverse effects, including noise, visual intrusion and uncertainty on the Riverdale Park Homes Site (Lowgates) resulting from approach lines to Staveley IMD;
  - environmental impacts for residents living close to the line and IMD; and
  - adverse effects on the Trans Pennine Trail and the line of Chesterfield Canal.

The Trans Pennine Trail, the line of Chesterfield Canal and other important ecological habitats are crossed by the route in this area. An ill-considered design could have a significant negative impact on these Green Infrastructure (GI) assets. This could adversely impact on the social and ecological integrity of the area and limit the economic potential of the trail and restored canal.

#### Chesterfield Canal

- Derbyshire County Council owns and manages a 5 mile navigable stretch of the Chesterfield Canal<sup>4</sup>. in Derbyshire which runs north and east from Chesterfield to Staveley. This waterway forms part of an on-going canal restoration programme which has been active since the early 1990's. Derbyshire County Council is the Navigation Authority for the Chesterfield Canal in Derbyshire. A detailed description of the issues are reported in Appendix K, summarised below.
- The line and level of HS2 and the developing Chesterfield Canal are in conflict in several locations. An engineering solution needs to be sought whereby construction of the railway and the canal can be accommodated without any significant detriment to their operation.
- It is vital that continuity of the route of the Chesterfield Canal is retained or protected. Derbyshire County Council would not object to some realignment but the new route would need to facilitate navigation through curvature, continuity of level and headroom. It is essential that the HS2 line does not create a physical or financial barrier to this on-going programme and that consideration is given to its on-going restoration.
- Where it is intended that the canal and HS2 run alongside one another ie at Renishaw and Killamarsh, careful consideration must be given to providing a separating buffer zone (corridor) to eliminate or minimise the visual impact and noise resulting from HS2 on the scenic and tranquil setting of the canal and the Trans Pennine Way.
- 4.48 Derbyshire County Council request that all engineering options are considered to resolve the issues, including possible adjustment of the alignment to reduce the impact of the current proposals.
- 4.49 Derbyshire County Council is a partner of the Chesterfield Canal Partnership which is a key cross-boundary stakeholder with a direct interest in the restoration of the canal.

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<sup>&</sup>lt;sup>4</sup> The Chesterfield Canal followed an Act of Parliament which received the Royal Assent on 28 March 1771, entitled An Act for making a navigable Cut or Canal from Chesterfield, in the county of Derby, through or near Worksop and Retford, to join the River Trent, at or near Stockwith, in the county of Nottingham.

- 4.50 The Chesterfield Canal Trust (CCT), established in 1996, acts to campaign for the restoration of the Chesterfield Canal and actively provides significant volunteer time to help manage, promote and activate the canal. Derbyshire County Council has a Memorandum of Understanding with the CCT for mutual support of activities to promote the canal.
- 4.51 The Trans Pennine Trail and the line of the Chesterfield Canal (the Cuckoo Way promoted footpath) run in parallel for the length between Renishaw and Killamarsh. This underlines the need to collaborate with local authority officers in developing appropriate solutions which benefit both Greenway and Waterway assets. CCT has written its own response to HS2 consultation.<sup>5</sup>

#### Staveley Maintenance Depot (Area K)

- 4.52 There are concerns in this area regarding:
  - impact on rail connections to Erin landfill void south of Poolsbrook, to Markham Vale railhead;
  - economic significance of 11-hectare rail depot proposal at Staveley Works site and its potential clash with Staveley and Rother Valley Corridor Area Action Plan (SRVCAAP) as published 2012 by Chesterfield BC;
  - how to improve IMD footprint and reduce the environmental impacts of rail depot proposal and approaches;
  - how to get IMD to take account of infrastructure known to be required in connection with SRVCAAP;
  - how to improve HS2 main line and approach lines to IMD so as to safeguard or facilitate reinstatement of a functioning Chesterfield Canal; and
  - environmental impacts for residents adjoining line and IMD.
- Derbyshire County Council had no part in the identification of Staveley IMD site, and had no prior knowledge about it before the public announcement in January 2013. Derbyshire County Council acknowledge that it fulfils all the requirements for HS2, it:
  - is midway between Birmingham and Leeds;
  - is a large and long site capable of handling HS2 maintenance trains;
  - has existing rail connections; and
  - · is already identified for development.
- Derbyshire County Council has concerns shared by Chatsworth Settlement
  Trustees and Chesterfield Borough Council regarding the impact on the Action
  Plan proposals. This is a key development interest for Chesterfield BC
  including 1500 to 2000 new homes. The Chesterfield Canal and Markham

<sup>&</sup>lt;sup>5</sup> "Chesterfield Canal – HS2 Mitigation options" proposes different options for the route of the canal.

Vale are also key areas of concern that are likely to be affected by the depot location. Three studies have been commissioned from specialist consultants to investigate and advise on the issues around this IMD, these are discussed in more detail in paragraphs 4.80 to 4.87.

The links connecting the Staveley IMD to the HS2 route pass through the 4.55 existing rail corridor under Eckington Road at Staveley. This existing rail corridor provides the connection between the rail network and the planned rail freight terminal at Markham, Seymour as well as serving the former Coalite site. The latter is subject to development proposals along with the existing facility at Oxcroft along the Bolsover and Oxcroft branch lines. A new road over rail structure was specifically built in 2010 at this location on Eckington Road as part of the Markham Vale project. The rail freight facilities at Seymour and Markham form part of the Markham Vale master plan and have full Planning Approval. From discussions with HS2 Ltd, it is unclear whether the rail connection southwards from Staveley will be lost and that remains a concern. The Council has invested heavily not only in building the new road over rail bridge at Eckington Road but also in creating the base for the rail freight terminal at Markham. The site is currently being marketed to potential occupiers with the advantage of Enterprise Zone status. Derbyshire County Council have concerns about the lost investment, the lost employment opportunities and the uncertainties caused by the HS2 route announcement.

# West of Renishaw and Sitwell Arms Hotel (Area L)

# and Killamarsh (Area M)

- The consultation documents acknowledge that "there would be a need to demolish an estimated nine dwellings at Renishaw". They are not individually identified but are likely to include the hotel as it lies directly on the route.
- The Trans Pennine Trail, the line of Chesterfield Canal and other important ecological habitats are crossed by the route in this area. The canal is discussed in more detail in paragraphs 4.42 to 4.49.
- 4.58 An ill-considered design could have a significant negative impact on these GI assets. This could adversely impact on the social and ecological integrity of the area and limit the economic potential of the trail and restored canal.

#### All Areas

Improved connectivity

- 4.59 High Peak Borough Council can see a number of potential benefits that may accrue from the HS2 investment. The improved links to Manchester that will result from HS2's northern extension will increase the economic development potential in the Manchester City Region and result in significant job creation particularly around the proposed stations. The High Peak will benefit from the economic boost to the wider region through job opportunities, an increased regional market for goods and services, and improved access to other UK markets. The potential for High Peak would be greatly enhanced by complementary investment in connecting rail links from Buxton and Glossop.
- 4.60 Proposed Greenways links identified for future development such as at Hardwick Hall, Doe Lea, Carr Vale, Markham Vale etc are identified in Appendix L. Although in the planning phase currently, the design of HS2 route would need to be able to accommodate these connections. Consultation with Derbyshire County Council officers would be required to ensure that suitable accommodation of these proposed routes could be achieved.

Maximising the Economic Benefits of Proposed HS2 Toton Station

- Volterra is a specialist economic consultancy and were asked to assess the economic benefits of the proposed East Midlands HS2 Station at Toton. See Appendix H for the full report. They surmise that the station at Toton will offer significant benefits to Derby, Derbyshire, Nottingham and Nottinghamshire (D2N2) and surrounding area. A discussion of the benefits for Derbyshire is included below.
- A high speed rail station in Toton will serve a large population of over 1.7 million people in the D2N2 Local Enterprise Partnership (LEP) area. Nottingham and Derby are the main centres of employment in this area and good transport links to both cities is crucial to the prosperity of the wider region.
- 4.63 HS2 Ltd's October 2013 strategic and economic case for HS2 concludes that there is a high likelihood (78.7%) that HS2 would be a high value for money investment.
- Volterra's high level indicative estimate is that around £5.4bn of the £70.9bn net benefits estimated by HS2 are likely to accrue to the East Midlands region.
- 4.65 "New work by HS2 looking into alternative methods of quantifying the benefits of HS2 concludes that it could support economic productivity uplifts of £15bn per annum nationally, of which £1.1bn-£2.2bn, would accrue to the

Derby/Nottingham area. This amounts to a 2.2%-4.3% increase in local economic output in 2037."

- 4.66 "HS2 will increase labour connectivity by rail by 14.3% and business connectivity by 23.2% in the Derby/Nottingham area."
- Volterra estimate that "of the 89,000 FTE jobs estimated to be created nationally, 13,350 jobs could be created in the East Midlands. These opportunities relate to the planning and design, construction, rolling stock, operation and maintenance, and renewals."
- Volterra state that other potential development "could deliver over 4,000 new homes and support over 10,000 new jobs, providing a significant boost to the local economy". This would include those along the tram route in Nottinghamshire, Stanton Regeneration Site in Ilkeston and the proposed Strategic Rail Freight Interchange near East Midlands airport.
- The other long-term impacts are those related to capacity release on the existing classic lines. This will affect both passenger networks and rail freight. Network Rail has been commissioned to analyse the options related to capacity release and has published an initial assessment which detailed three possible approaches. The assessment of these options is still preliminary and further work will be carried out in consultation with the affected regions.
- 4.70 Economic development and regeneration benefits could come through the following channels:
  - net additional jobs as agglomeration indirectly produces more employment;
  - Regeneration benefits through the improvement in the type of employment attracted within defined local areas;
  - · land value uplift, which would offset local capital costs;
  - value of place through improvement in the user benefits of the amenities, upgraded facilities and places; and,
  - · inward investment and tourism impacts.
- Voltera state that "Overall, while the shape of the local and regional transport infrastructure beyond HS2 is not yet clear, it is important that a coordinated and integrated strategy emerges at the local authority and LEP levels over the course of the consultation period. This would help to cement the status of Toton as a regional transport hub that is capable of generating sufficient passenger numbers and thereby capable of boosting the economic prospects of the region as a whole. This will be a fundamental consideration on the part of Government as it fixes the HS2 route throughout its current consultation period."

Toton

- 4.72 Bringing forward development of the residential components of the proposed scheme around Toton is crucial to realising the economic benefits at an early stage. The Nottingham Express Transit (NET) tram line will link the site at Toton to main employment locations to the east. Since the HS2 station is not due to be operational until 2033, the demand for commercial office space is likely to be limited in the immediate term and so economic benefits will almost definitely not come from this source until much later on.
- The Stanton Regeneration Site is in close proximity to the HS2 station at Toton, could see a boost to its economy if there is direct connectivity to the proposed station. This could come through an extension to the NET2 tram network or other forms of rapid transit. See URS study in Appendix M for further details. A heavy rail station is also under construction in Ilkeston, which will lie on the Northern Rail network, providing direct connections to Nottingham and Sheffield.
- The benefits of station investments to economic development and regeneration of areas are well-documented; there are some challenges and risks that need to be considered. Some of these challenges include:
  - poor planning policies and preparation for a new station investment;
  - unrealistic expectations in relation to the scale of development following a station investment; and,
  - haphazardly designed stations and poor urban environment.
- Overall, the risks to the estimates of the economic benefits are firmly skewed on the upside, provided that the right policies are implemented to maximise the potential benefits.
- The success of an HS2 station in the East Midlands will largely depend on the region's competitive ability to attract businesses and jobs, and the capacity that will be released for local transport infrastructure and commuter networks. The maintenance of the current service levels on the Midland Mainline is also crucial.
- The development of local skills in particular will form one of the main challenges. As things stand, the region falls behind much of England and the other core cities in relation to the local skill levels. This will form a key part of its ability to attract the right kind of highly-skilled employment opportunities that will boost its productivity and future economic fortunes.

- As jobs are created in the main urban centres, other residents need to be able to access these opportunities, from both transport and skills perspectives. Accessibility to these jobs will help to enable the economic development and regeneration of large swathes of Derbyshire.
- Within the context of transport connectivity, these could take the form of heavy and light rail, and other rapid transit options, such as bus routes. Whether these schemes are actually realised will depend largely on investment viability and projected demand in the affected areas.

Maximising the Economic Benefits of Proposed HS2 Staveley IMD

- Another site that could benefit from job creation is the Staveley IMD. The site is currently earmarked for development and so it will be important to ensure that the specific location of the depot is compatible with wider regeneration aims for the area.
- The following three studies have been commissioned from specialist consultants to investigate and advise on the issues around this IMD:
  - Volterra report on the Economic Impact of the IMD is included in Appendix
     N:
  - Arup "HS2 Depot (Staveley) Options Study" is included in Appendix O and considers alternative site layouts to minimise the impact on the development interests; and
  - URS have carried out an associated study on the impact of the IMD on the A619 Chesterfield - Staveley Regeneration Route and is included in Appendix P.
- In their report, Volterra "conclude that construction of the depot could support around 70-75 jobs; once operational the depot could employ 200-250 full time equivalent workers; and if the depot is used as a construction site for HS2 it might support a further 260 jobs. Furthermore, it is estimated that around 20-25 indirect jobs could be supported locally by the depot, or 100-125 jobs regionally. This means that overall we estimate that the total impact of locating the IMD at Staveley could be in the region of 540-580 direct jobs locally, or up to 700 including indirect impacts and at a wider spatial level."
- "Considering just the full time jobs that would be supported at the IMD itself, an estimate of the occupational disaggregation was based on the situation at the comparator IMD at Singlewell. This analysis led to the conclusion that there could be between 25 and 30 managers based at Staveley IMD; between 65 and 80 elementary positions; and 115 to 140 employees in process, plant and machine occupations. Hence the majority, over 50 per cent of employees, would be operatives."

- Arup conclude that further work is required by HS2 Ltd to ensure the viability of the regeneration site. The preferred option is to move the IMD further north to allow the regeneration route to pass to the south and maximise the potential of the development sites in the vicinity. The regeneration route needs to pass close to the Clocktower Business Centre to ensure viability of the development.
- The URS study identifies 2 possible options that are comparable with Arup scenarios S1 and S4 and use a 40mph design speed. The first passes to the north of the proposed depot and the second passes to the south. The northern route is not supported because it: does not allow access to development land to the south of the IMD; incorporates a change in direction at Hall Lane roundabout; and presents some engineering difficulties at the eastern end close to mineral railway and HS2. The southern route is preferred as it would better support the development and could deliver each party's requirements. The report concludes that HS2 Ltd should be urged to review the location and internal layout of their site in order to accommodate a route to the south. The parties should investigate whether some of the proposed route should be built at an early date in order to facilitate construction of the IMD.
- 4.86 HS2 Ltd is requested to consider options for relocating the IMD slightly to the north and to consider the scope for adjusting the internal layout of the site. The key requirement from a highways viewpoint is to allow more flexibility where the new road has to pass through a pinch point between the river and the south west boundary of the IMD site.
- Derbyshire County Council welcomes continued discussion on the IMD with HS2 Ltd and expect the stakeholders to be fully consulted in the detail design.

# 5 ENVIRONMENTAL IMPACT

#### Introduction

- This section identifies the key environmental considerations associated with the development of the HS2 route through Derbyshire. To assist in identifying the key environmental impacts, the route has been sub-divided into colour coded areas for ease of reference (identified on a plan in Appendix G by the letters A to M and listed south to north through Derbyshire). The following section sets out the main issues associated with the proposed route in each area highlighting both direct and indirect impacts. It also recognises opportunities to deliver wider enhancement of the environment including the amelioration of some existing impacts.
- The report utilises a number of known environmental datasets relating to landscape character, ecology, archaeology and the historic environment. The report also makes use of other spatial data developed by the County Council for the purpose of strategic planning, including the 'Areas of Multiple Environmental Sensitivity' mapping. GIS data with this information can be provided to HS2 Ltd on request from Derbyshire County Council.
- Areas of Multiple Environmental Sensitivity are broad areas of landscape that have been identified by Derbyshire County Council as being sensitive with respect to a range of environmental datasets. The areas are defined using the Derbyshire landscape character assessment as a spatial framework for reviewing data relating to biodiversity, the historic environment and visual unity (the 'intactness' of the landscape). Those areas assessed as being the most sensitive with respect to these environmental datasets will be the most susceptible to significant change. Those areas defined as least sensitive have the potential for more change which could help deliver a range of environmental benefits, provide strategic GI and bring about enhancements for landscape character and local distinctiveness. These areas have been identified on a plan in Appendix Q.
- For each section of the route the response contained is broken down into four parts:
  - The principal findings of the Consultation Documents with respect to the environmental assessments:
  - The County Council's views on the key environmental considerations. The
    areas of major strategic concern are contained in a red box, but this is not
    intended to detract in any way from the significant local impact elsewhere
    on the route. The impact on people's homes is also discussed in Section
    7 Health and Wellbeing;
  - · A summary of the environmental constraints and baseline conditions;

- The main design considerations that need to be taken account of to bring about a satisfactory development.
- The overall aim is to secure a project that delivers minimum environmental impacts whilst maximising opportunities for wider environmental enhancements.
- through a number of different landscape areas all with their own distinctive character. At the national scale the route passes through the Trent Valley Washlands and the Derbyshire, Nottinghamshire and South Yorkshire Coalfield National Character Areas (NCA) as defined by Natural England (previously Countryside Agency). In Derbyshire these NCAs have been subdivided into landscape character types in the Derbyshire landscape character assessment. Each of these landscapes types will present its own constraints and opportunities for landscape mitigation and enhancement as part of the construction of HS2. Areas A to M below set out the landscape character Types affected by the route but for detailed descriptions of all landscape types HS2 Ltd should review the "Landscape Character of Derbyshire" publication.
- Ecological issues As HS2 passes through Derbyshire, it travels through a variety of different areas and landscapes, with diverse ecological characters and characteristics, and with varying levels of sensitivity. These are briefly explored below in relation to each section of the route. HS2's assessments appear to have taken account of the most highly valued ecological sites, including those which are statutorily designated sites such as SSSI. However, because of the strategic nature of the assessment other ecological assets including locally designated sites and undesignated assets have not been considered. So, whilst the route through Derbyshire does not appear to directly affect any SSSI or similar sites, numerous ecological receptors, both designated and un-designated, are affected by the route.
- Although ecological constraints may be encountered throughout the length of the route in Derbyshire, it would appear that the route may be most sensitive where it passes through the river valleys of the Trent, Erewash, Doe Lea and Rother, and where it interacts with linear routes and pieces of GI (existing or planned GI) such as former railway lines and remnant sections of canal. Ecological assets in those areas may be locally designated or even undesignated, but the importance of those resources, in that area and in the wider context, needs to be recognised, considered and addressed. Habitat

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<sup>&</sup>lt;sup>6</sup> "Landscape Character of Derbyshire" available at http://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/default.asp.

connectivity, permeability and severance issues, both around known ecological receptors and in the wider countryside, should also be key environmental considerations.

- In developing this report, the County Council's ecologist has used local knowledge, and had regard to known datasets, including statutorily designated sites, local site designations such as Local Wildlife Sites and Local Geological Sites (also known as RIGS Regionally Important Geological Sites), and other indicators of ecological value such as potential Local Wildlife Sites (or pLWSs). Locally held datasets such as records for protected and notable species have also been considered. More information about Local Wildlife Sites, pLWS sites, and protected species records can be obtained from the county council's ecologist if required.
- Archaeological/historic issues The main heritage assets, particularly designated features, along the proposed route of HS2 have been identified in the Consultation Documents, but as well as the designated archaeological sites there is also considerable potential for non-designated sites and features to be impacted by the line of the route. These include sites already identified on the Derbyshire County Historic Environment Record but there is also significant potential for as yet unrecognised significant sites to be present. Once the route has been agreed there needs to be appropriate surveys to identify such sites and develop appropriate mitigation strategies to deal with them.
- Overall the County Council seeks a commitment that the detailed design will apply the seven themes of the HS2 Sustainability Policy:
  - "Growth and regeneration Support sustainable economic development and the localism agenda for regeneration;
  - **Environmental change** Seek to avoid significant adverse effects on communities, business and the natural, historic and built environment. Minimise impacts where they occur and deliver enhancements as far as practicable to ensure there is no net loss to the natural environment;
  - Skills and employment Improve skills, jobs, education and the economy through our investment along the length of the route. Act as a driver for improvements in the sustainability of the engineering and construction sector. Promote diversity, openness and fairness;
  - Climate change Minimise the carbon footprint of HS2 as far as practicable and deliver low carbon long distance journeys that are supported by low carbon energy;
  - Resilience Build a network which is resilient for the long term and seek to minimise the combined effect of the project and climate change on the environment;

- Resources and waste Source and make efficient use of sustainable materials, maximise the proportion of material diverted from landfill and reduce waste: and
- Integrated transport Engage with stakeholders to create seamless transport links with other modes and ensure accessibility for all."
- The Chesterfield Canal is conflicted by HS2. Derbyshire County Council owns and manages the canal through Derbyshire which runs in water north from Tapton Lock, Chesterfield to Staveley. This Canal is discussed in detail in section 4 Economic Impact.
- The Erewash Canal which is conflicted by HS2 is managed by the Canal & Rivers Trust. The towpath is a Public Right of Way (PRoW) and the waterway is integral to the quality of the path. Continuity of both waterway and towpath are inseparable.
- The impact on the canals is listed in the Area breakdown below. The issues raised are expected to be included in separate representations from the Canal and River Trust, Chesterfield Borough Council and Chesterfield Canal Trust. In developing its proposals HS2 Ltd is asked to take into account the comments of the groups and organisations that have a detailed knowledge and understanding of the impact of the proposals on the canals and waterways.
- HS2 impacts at least fifty two sections of PRoW within a 60m buffer of the proposed line. HS2 Ltd is expected to follow due process for managing such diversions, closures or creations as are necessary, in collaboration with the Highways Authority. Design mitigation is required.
- Derbyshire County Council has developed long term strategies for Greenways and Rights of Way which should not be compromised by HS2. Where affected, Derbyshire County Council seek appropriate mitigation to retain the vision and viability of these strategies. Derbyshire County Council welcomes the approach to mitigating impacts on Rights of Way outlined in a letter dated 8 October 2013, see Appendix F.
- The proposals show that a number of residential properties would be demolished in Derbyshire, notably in Long Eaton (six demolitions) and Renishaw (nine demolitions). Other smaller groups of residential properties would also be demolished. HS2 Ltd estimate that about 3,300 dwellings are within 100m of the route construction boundaries of the Eastern leg, but it is not clear how many of these are within Derbyshire. Derbyshire County Council concerns regarding the health and wellbeing of people affected by the proposals are discussed in Section 7.

HS2 has significant waste implications particularly in relation to the construction and earthworks elements. In terms of waste generation the scheme needs a detailed waste arising's assessment to look at issues such as quantity, type, facility capacity available and likely fate destination along the proposed route. This needs to be framed around an economic, environmental and waste hierarchy agenda. Construction and demolition waste by nature is heavy and difficult to transport and so is unlikely to travel very far from the construction areas. It therefore has local waste capacity implications for Derbyshire. Current available data is poor and existing survey techniques are unsuitable for a scheme of this type and size. Any such assessment should also take into account the need for prior extraction of minerals along the route.

# Trent Valley (Area A)

**HS2** comments

- The HS2 sustainability statement acknowledges that the viaduct over the Soar Valley, within open landscape, "would be widely visible" but the impact on the landscape is seen as being reduced by the "prevalence of power lines, roads and existing power station."
- The statement comments that "A direct impact on the prominent wooded riverside bluffs at Thrumpton, (Nottinghamshire), would affect the setting of its Conservation Area, and intrude into skyline views from the Trent Valley. The long viaduct across the valley would exacerbate the landscape impact and would need to be carefully designed."



Figure 2

Trent Valley & Long
Eaton Sections

above statement suggests that HS2 Ltd has assessed this area as having a 5.22 low quality landscape due to the presence of existing power lines and roads, despite the landscape impacts being identified as 'major' in Appendix E1 of the Sustainability Statement. The County Council is concerned that HS2 Ltd appears to have set low aspirations for this area and considers the current approach to be inadequate. The assessment fails to recognise that the Trent Valley is a landscape in flux. Whilst it is currently being affected by mineral extraction and other operations, in the longer term, there are aspirations to see this landscape restored to a high quality landscape, rich in ecology, and providing extensive opportunities for leisure, recreation and tourism. Other impacts in the area such as power stations, pylons and electrical transmission lines may have a limited lifespan, and may have been removed before HS2 comes to fruition. It is considered that the aspirations set by HS2 for this area should be much higher, and should reflect and respond to the high potential future value of this area. Proposals in this area should aim to contribute to, rather than detract from, high quality landscapes, and we would agree that the viaduct needs to be carefully designed.

#### **Environmental Baseline and Constraints**

- The landscape character includes Trent Valley Washlands: riverside meadows

   landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing. The area includes:
  - listed buildings at Cranfleet lock and canal bridge;
  - ecological receptors directly affected by the route: Meadow Lane Carr LWS, Cranfleet Farm flood banks pLWS (Local Wildlife Site);
  - other ecological considerations: The River Trent, along with established wetlands (including many old mineral workings) along the Trent Valley hold significant ecological value; HS2 will cross over post extractive wetlands. Forbes Hole LNR and LWS are in close proximity to route;
  - conflicts with Trent and Mersey Canal and Trent Valley Way; and
  - Trent Valley Vision and Strategy<sup>'</sup>.

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<sup>&</sup>lt;sup>7</sup> The Trent Valley Vision (TVV) is a priority project for the Lowland Derbyshire and Nottinghamshire Local Nature Partnership (LDN LNP) aimed at delivering high quality GI across the entire Trent Valley within Derbyshire and Nottinghamshire. Any development within the area defined by the TVV will be expected to contribute towards and assist in delivering the vision in accordance with the emerging Strategy.

# Design considerations

### 5.24 It is considered that HS2 Ltd should:

- respond to the identified landscape and visual effects of crossing the Trent Valley; and
- ensure that the delivery of HS2 in this area respects the existing and future value of this area and seeks to deliver the objectives of the Trent Valley Vision being promoted by the Lowland Derbyshire and Nottinghamshire Local Nature Partnership (LDN LNP).

### Long Eaton (Area B)

**HS2** comments

The consultation document estimate that "six dwellings would be demolished in Long Eaton, with a further six south-west of Toton", (Nottinghamshire). It anticipates that there would be some affect on the townscape character, including the Long Eaton Town Centre Conservation Area but this is expected to be relatively minor and localised.

Key considerations

There remains concern about the potential severance of the built fabric in Long Eaton especially as a result of the closure of the level crossings. Design through Long Eaton will need to respond to the identified impacts on townscape character. As well as the direct impacts of HS2 there may be additional impacts associated with the support infrastructure required to connect the proposed station at Toton to the wider area. The impact of this and associated development will also need to be carefully considered.

#### **Environmental Baseline and Constraints**

5.27 The landscape character is a predominantly urban area including:

- a Conservation Area in Long Eaton Town Centre;
- listed buildings at 38 and 40 Market Place, War memorial, Church of St Laurence and St James, the Hall, Halifax Building Society, Midland Bank and J and H Lacey Warehouse;
- ecological receptors directly affected by the route at Nottingham Road Carr LWS; and
- other ecological considerations include LWS s at Toton Sidings Pond and River Erewash Floodplain, and Toton Fields LNR, (all in close proximity to route).

## Design considerations

- 5.28 It is recommended that HS2 Ltd should:
  - recognise and seek to address the potential severance effects on Long Eaton:
  - ensure that design, including of embankments and retaining structures, responds to the identified impacts on townscape character;
  - recognise the indirect impacts of the support infrastructure required to connect the Toton Station into the wider area and ensure that appropriate design solutions are implemented;
  - consult with Borough and County Council officers in seeking design solutions for the embankment; and
  - give careful consideration to the impact on the Erewash Valley north of Long Eaton to ensure the area retains its character and negative impacts are reduced or mitigated.

### Sandiacre and Stanton Gate (Area C)

#### HS2 comments

- 5.29 The Sustainability Statement states that "At Sandiacre, just north of the station, the proposed viaduct would intrude into a traditional floodplain landscape of open meadows and woodland."
- Appendix E1 of the Sustainability Statement concludes that "the proposed viaduct and embankment near Sandiacre would intrude significantly on the characteristically flat floodplain landscape, giving rise to major impacts on landscape character in this specific area" and that "the visual impacts locally would be major as the viaduct would obstruct scenic views east to the historic canal bridge and valley bottom woodland."

### Key considerations

In this area the landscape character, ecology and visual amenity of the Erewash Valley will be the key constraint necessitating both good design and judicious use of viaducts to minimise impacts.

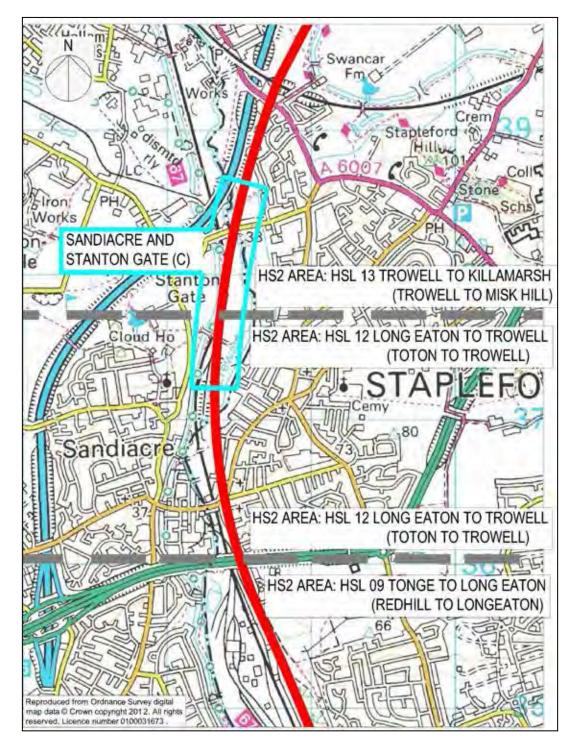


Figure 3

Sandiacre & Stanton
Gate Section

### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, coalfield village farmlands. This comprises relatively small-scale and well-settled landscape; riverside meadows; landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing. The area includes:
  - a conservation area at Sandiacre Cloudside;
  - · listed buildings at Church of St Giles and canal bridge on Erewash Canal;
  - ecological receptors directly affected by the route are Erewash Canal LWS
    crossed twice by HS2, whilst Sandiacre Marsh LWS is crossed once by
    the route. Furthermore, a significant amount of embankment seems to be
    located within Ilkeston Road Pastures pLWS, and the route lies in very
    close proximity to Stanton Gate LNR. West Hallam Towpath Scrub LWS,
    Erewash Canal LWS and Stanton Regeneration Site pLWS are all affected
    by the proposed realignment of the M1;
  - other ecological considerations include sites along this stretch of the route (along the Erewash Valley) are known to support species such as water vole and grass snake; and
  - amenities of Erewash Canal and the Nutbrook Trail, the towpath is a Public Right of Way and the waterway is integral to the quality of the path.

### Design considerations

- 5.33 It is recommended that HS2 Ltd should:
  - consider that the provision of embankments near the River Erewash will be subject to environmental constraints, including from protected species, and may result in delays;
  - · consider the choice between embankment and viaduct;
  - ensure that the viaduct design responds to the identified impacts on the landscape, ecology and visual amenity of the Erewash Valley; and
  - in developing detailed proposals consult Borough and Council design and conservation officers.

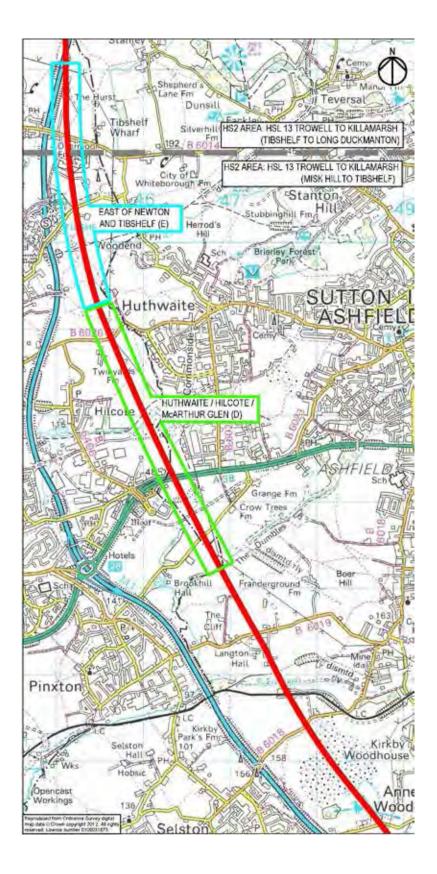


Figure 4

Huthwaite/Hilcote/
McArthur Glen & East of
Newton & Tibshelf
Sections

### **Huthwaite/Hilcote/McArthur Glen (Area D)**

#### HS2 comments

- Appendix E1 of the Sustainability Statement states that the route would "cut through what appears to be unregistered parkland landscape around Brookhill Hall, which would be directly impacted. In these areas moderate landscape character impacts are expected."
- It comments that "The route would diverge temporarily from the M1 near Pinxton, South Normanton and Huthwaite and there would be a high viaduct crossing of the River Erewash. Visual impacts are possible in this area, although otherwise the route would be generally in cutting and well-separated from the main settlements."

# Key considerations

5.36 We would agree that the parkland landscape around Brookhill Hall is a key consideration for this area, but would draw HS2 Ltd's attention to habitat connectivity and protected species issues along Normanton Brook.

#### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, coalfield estatelands. This comprises an urbanised and well-wooded landscape with coalfield village farmlands, (a relatively small-scale and well-settled landscape). The area includes:
  - scheduled monuments of Pinxton Castle Motte and fortified manor with moated site and five fishponds;
  - · listed buildings Brookhill Hall and the stable block at Brookhill Hall;
  - ecological receptors directly affected by the route: The route crosses directly through 'Cambro Tip and Lane' pLWS. This site is known to support a number of great crested newts. Crucially, this site lies on a strong east/west habitat connectivity corridor, along and adjacent to Normanton brook, with a number of locally designated sites in that area:
  - other ecological considerations: east-west habitat connectivity and protected species; and
  - Areas of Multiple Environmental Sensitivity (AMES), part of the route in this section passes through an area of 'secondary sensitivity' and therefore will be moderately sensitive to change.

Design considerations.

# 5.38 It is recommended that HS2 Ltd should:

- note the east-west habitat connectivity provided by Normanton Brook and the presence of protected species, particularly Great Crested Newts where the route crosses Cambro Tip;
- ensure that a sensitive approach is taken in relation to the parkland landscape around Brookhill Hall; and
- ensure that when crossing open agricultural areas opportunities are taken to minimise visual impacts and integrate the route with the surrounding landscape character, and consider long-term agricultural viability.

# Land east of Newton and Tibshelf (Area E)

HS2 comments

This area is not mentioned specifically in the consultation document but will be adversely affected by the proposals.

Key considerations

### 5.40 Minor concerns relating to habitat connectivity.

#### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, coalfield village farmlands, (a relatively small-scale and well-settled landscape). The area includes:
  - ecological receptors directly affected by the route of a potential LWS at Red Barn Meadows; and
  - other ecological considerations include possible habitat connectivity concerns where HS2 crosses former Silverhill Colliery branch line, (an undesignated site which joins a number of other ecological assets to the west). The area also includes a potential LWS at Saw Pit Lane Grassland.

### Design considerations

### 5.42 It is recommended that HS2 Ltd should:

ensure that when crossing open agricultural areas opportunities are taken to minimise visual impacts, integrate the route with the surrounding landscape character and consider long-term agricultural viability.

# Hardwick and Stainsby (Area F)

**HS2** comments

- The Sustainability Statement states that "North of Tibshelf, the route would pass through a landscape with a complex mix of historic assets including the Hardwick Hall complex (comprising a Grade I House, Grade II\* Registered Park and Garden and the Scheduled Old Hall), several Conservation Areas (with numerous Listed Buildings) and two further Scheduled Monuments. Given the sensitivity of this area, the route has been closely aligned with the M1, and this is instrumental in helping to limit the potential impacts of the railway. The setting of the Scheduled Hardwick Old Hall and the Grade I Listed Hardwick Hall, both situated some 1km east of the scheme, are already affected by views and noise from the M1 and the proposed route would not exacerbate this to any great degree, although with a more exposed aspect, the Old Hall would be moderately affected. Views of the scheme from higher ground within the New Hall's associated Grade II\* Registered parkland, as well as noise from trains, could have local impacts on the character of the area."
- The Statement continues "However, the amalgamation of prominent historic features and landscapes makes the area sensitive to change, and some impacts would prevail, including effects on the setting of the Scheduled Monument at Stainsby and loss of character to the registered parkland around Hardwick Hall and setting of Hardwick Old Hall."

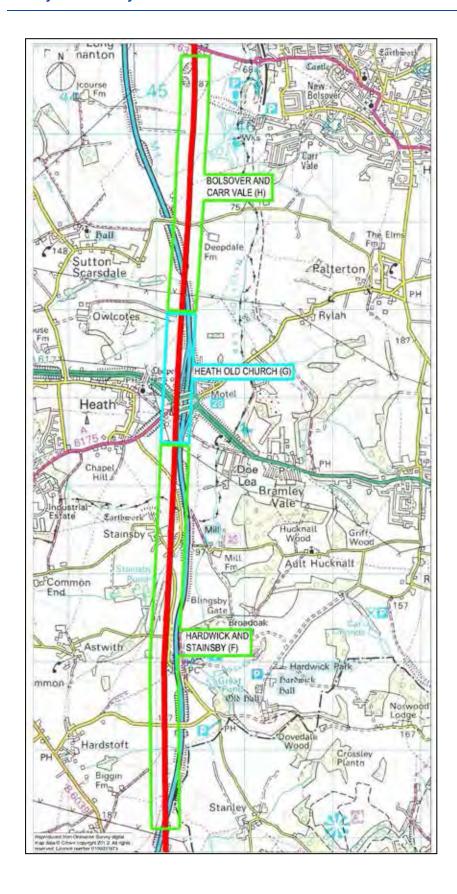


Figure 5

Hardwick & Stainsby,
Heath Old church &
Bolsover & Carr Vale
Sections

## Key considerations

The impact of HS2 on the heritage assets in this area is a major concern.

- The consultation documents have correctly identified the historic environment assets in this area and have recognised that heritage impacts are likely to be the greatest concern for this section. However, the appraisals appear to conclude that these heritage assets, particularly around Hardwick Hall are already adversely affected by the presence and proximity of the M1. As a result the potential impacts of HS2 are considered less significant, viewing existing impacts as a mitigating factor.
- Hardwick Hall is one of Europe's most historically significant properties and is a Grade 1 listed building. Properties in this category are of exceptional interest, sometimes considered to be internationally important; only 2.5% of listed buildings are Grade I. The heritage value at Hardwick is not just confined to the Hall but comprises a large range of listed buildings, designed landscape and the registered park and garden, which collectively make this an exceptional heritage asset.
- The current impacts of the M1 on Hardwick and its associated assets are already seen as unacceptable and the impact of HS2 risks making the situation even worse. As such, there is major concern about the impact of HS2 in this area. It is possible, however, that HS2 could provide an opportunity not only to address its own impacts but to ameliorate the current position.
- This is a once in a lifetime opportunity and therefore we would urge HS2 Ltd to explore all available options to address not only the impacts of HS2 but also address the existing impacts arising from the M1. Specific areas for consideration include:
  - Setting of the historic buildings and associated features
  - Noise impacts
  - Visual impacts
  - Sequential appreciation from main visitor routes and reconnection of historic approaches
  - Opportunities to enhance habitat connectivity

#### **Environmental Baseline and Constraints**

The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, estate farmlands. This comprises a large-scale and open landscape of coalfield village farmlands, (relatively small-scale and well-settled

landscape); and wooded farmlands, (small-scale and well wooded landscape). The area includes:

- Hardwick Hall Grade 1 listed building and registered park and garden of special historic;
- Old Hardwick Hall Grade 1 listed building;
- scheduled monuments at Hardwick Old Hall and Stainsby defended manorial complex including site of chapel;
- · listed buildings Conduit House south of Hardwick Old Hall, gazebo and garden walls at Hardwick Hall, group of six statues in the gardens of Hardwick Hall, range of cottages to the south-west of Hardwick Hall, range of outbuildings and stables, and walls enclosing a courtyard to south of Hardwick Hall, shed to north of engine house and saw mill, joiner's shop to north of saw mill, engine house, saw mill and attached chimney at Hardwick Saw Mill, The Hardwick Inn, stables to the north-west of the Hardwick Inn, Stainsby Mill and The Grange;
- conservation Areas of Hardstoft, Hardwick and Rowthorne, Astwith and Stainsby;
- other ecological considerations are LWS at Ridlocks Wood, Hardwick Hall Park, Great Pond, Row Ponds, Astwith Dumbles, Cross Wood and Oxclose Plantation, Hollingworth Woodland and Stainsby Park; and
- RIGS at Quarry north of The Hurst.

#### Design considerations

- 5.50 It is recommended that HS2 Ltd should:
  - give the very highest level of consideration to the heritage assets around Hardwick;
  - recognise that the existing impacts on Hardwick Hall and Park are already considered to be unacceptable;
  - seek to address the existing impacts caused by the M1 as well as new impacts caused by HS2;
  - give special consideration to issues of setting, noise, visual impact, sequential appreciation and historic approaches;
  - recognise that land trapped between the M1 and HS2 could become unmanageable creating an incongruous feature in the landscape and further visual impact; and
  - take the opportunity to address habitat connectivity issues in the wider area, particularly where this is complimentary to other aspirations.
- 5.51 It is understood that both English Nature and the National Trust have a strong desire to hide HS2 as it passes Hardwick Hall and Bolsover Castle and have major concerns regarding the impact of HS2 on these heritage sites.

# Heath Old Church (Area G)

**HS2** comments

The consultation document acknowledges that the route would result in the "demolition of the remains of the Grade II Listed Heath Old Church."

Key considerations

If the impacts on Heath Old Church and associated graveyard cannot be avoided then every effort should be made to reduce or mitigate their severity. Where impacts on the archaeology remain these will need to be mitigated by excavation and recording in accordance with acceptable modern archaeological standards. The opportunity to study the population of a village from the 12th to the 19th centuries is possibly unique and consideration should be given to developing a major research project in association with an academic institution to maximise the research potential such an opportunity provides.

#### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, estate farmlands, (a large-scale and open landscape). The area includes:
  - listed buildings are the ruins of Heath Old Church, Church of All Saints (and associated graveyard) and the Thatched Cottage;
  - · conservation area of Heath village; and
  - other ecological considerations are LWS at Heath Hedges, Junction 29 Meadow and Owlcotes Wood in the vicinity of the route but not directly affected.

#### Design considerations

- 5.55 It is recommended that HS2 Ltd should:
  - give consideration to maximising the research potential offered by any necessary archaeological excavation of the remains of the Old Church and associated churchyard;
  - give consideration to how any remnant built features can be sensitively retained; and
  - · Address the issue of reburial of human remains.

### **Bolsover and Carr Vale (Area H)**

**HS2** comments

- The Sustainability Statement states that "Further north, views of the route would affect visual amenity from Bolsover Castle and its Conservation Area, although these should be attenuated by distance and partly screened by landform and tree cover:"
- The Statement continues "Immediately north, the route would pass by the Conservation Areas of Sutton Scarsdale and then Bolsover Castle, adversely affecting their character, although impacts on the Scheduled Sutton Scarsdale Hall, and on the Grade I Listed and Scheduled Bolsover Castle would be negligible."
- Appendix E1 of the Sustainability Statement states that "there would be a moderate impact on Bolsover Castle and its Conservation Area, which would have views of the route on embankment 900m to the west although these should be attenuated by distance and screened by landform and tree cover in parts. The route would be seen together with the existing M1 corridor".

Key considerations

The impact of HS2 on the heritage assets in this area is a major concern.

- The consultation documents have correctly identified the historic environment assets in this area. However, the appraisals appear to have significantly underestimated the value of the landscape and the significance of the impact of HS2 on the settings of the Scheduled and Grade 1 listed buildings of Sutton Scarsdale Hall and Bolsover Castle. Although the visual impact assessment records moderate impacts on Bolsover Castle and Conservation Area and accepts that their character would be adversely affected, the overall impact on the scheduled and listed buildings is assessed as being "negligible", inferring that this issue has not been given sufficient weight.
- 5.60 The Consultation Documents imply that the impacts of HS2 will be moderated by the presence of the existing M1 corridor, but does not acknowledge that the route of HS2 would be around 500m closer to Bolsover Castle. This has the effect of bringing the impacts of HS2 significantly closer to the Castle and will also mean that the corridor of HS2 is perceived as separate from and additional to the M1 corridor. This will result in additional and cumulative impacts rather than lessening the significance of the impacts as suggested. This will mean that HS2 not only affects the setting of the scheduled and listed buildings but also impacts on the visual connection and intervening landscape between the properties at Sutton Scarsdale and Bolsover.

5.61	Grade 1 listed properties are of exceptional interest, sometimes considered to be internationally important; only 2.5% of listed buildings are Grade I. The heritage value of listed buildings is not just confined to the properties
	themselves but extends to their setting and the landscape in which they sit. Both Sutton Scarsdale Hall and Bolsover Castle were sited to take advantage of the valley in which the HS2 route will run.
5.62	HS2 Ltd is therefore urged to explore any and all design options (including alignment) to reduce the identified impacts on the setting of, visual connection and intervening landscape between these heritage assets.

### **Environmental Baseline and Constraints**

The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, estate farmlands. This comprises a large-scale and open landscape of riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing). The area includes:

- Bolsover Castle scheduled monument and Grade 1 listed building;
- Bolsover Castle registered park and garden;
- Sutton Scarsdale Hall Scheduled Monument and Grade 1 listed building;
- listed buildings at Sutton Manor, Sutton Scarsdale Hall, garden walls and attached ha-ha at Sutton Scarsdale Hall, The Old Priory, Church of St Mary, The Villas, Bainbridge Hall, New Bolsover Housing including the attached and associated back yard walls, Sandy's Bar and K6 telephone kiosk;
- conservation areas at Bolsover and Sutton Scarsdale;
- other ecological considerations are LWS at Carr Vale Flash and Peter Fiddler Reserve in the vicinity of the route, but not directly affected.

### Design considerations

# 5.64 It is recommended that HS2 Ltd should:

- give the highest level of consideration to the setting of, visual connection and intervening landscape between the Scheduled and Grade 1 listed buildings of Sutton Scarsdale Hall and Bolsover Castle;
- explore any and all design options (including alignment) to reduce the identified impacts on these heritage assets and their settings; and
- work closely with all heritage stakeholders to seek the most appropriate design solutions.

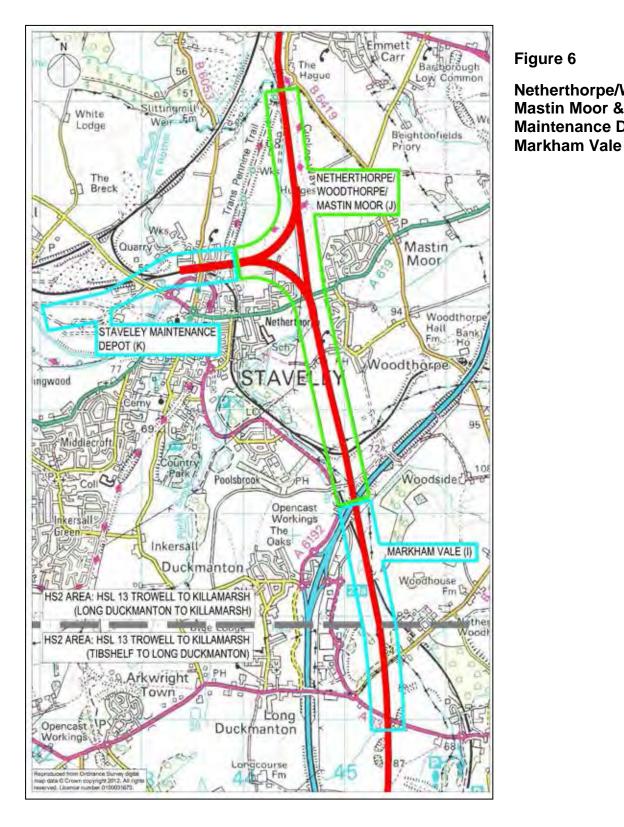


Figure 6 Netherthorpe/Woodthorpe/ **Mastin Moor & Staveley Maintenance Depot &** 

### Markham Vale (Area I)

HS2 comments

Although the Consultation Documents do not specifically refer to environmental impacts arising as a result of the HS2 route through the Markham Vale section, it is likely that there would be visual impacts on Bolsover Castle and its setting as a consequence of this part of the route.

Key considerations

It is not clear from the Consultation Documents whether the potential visual impact of the HS2 route on views from Bolsover Castle have been fully considered and addressed. In addition we would suggest that potential impacts on the sense of arrival from the A632 into Bolsover have been overlooked. There are opportunities to address these concerns through a combination of good design (including alignment), appropriate landforms and screen planting. Protected species records in this area will need due consideration in the detailed design of the scheme.

#### **Environmental Baseline and Constraints**

The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield, estate farmlands. This comprises a large scale and open landscape of riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing). The area includes:

- Bolsover Castle scheduled monument and grade 1 listed building;
- Bolsover Castle registered park and garden; and
- other ecological considerations are North of MEGZ LWS at Bolsover Colliery Marsh, Markham Colliery Reedbed, Doe Lea Flash, and a pLWS possible extension to Netherthorpe Flash. Extensive records for reptiles in this area and 'Flashes' and low lying habitats likely to be particularly vulnerable to impacts, including loss of habitats to embankments and loss of habitat connectivity.

## Design considerations

- 5.68 It is recommended that HS2 Ltd should:
  - consider how landform, screen planting and scheme design could be used to mitigate visual impacts from Bolsover Castle and grounds;
  - consider the design of the landform where the HS2 route passes through the existing former colliery tip; and
  - ensure that the crossing of the A632 by HS2 does not adversely affect or detract from the arrival experience to the historic settlement of Bolsover including Bolsover castle.

### Doe Lea Valley – Netherthorpe/Woodthorpe/Mastin Moor (Area J)

#### **HS2** comments

- The Sustainability Statement states that "The wooded landscape east of Staveley would help to contain impacts there. However, approaching Renishaw, the impacts on the character of the Conservation Area would be major, as the viaduct would cross attractive flood meadows, treed river corridors and a number of valley-side bluffs and woodlands. Views would generally be contained, but visual impacts would affect recreational users of the Cuckoo Way and the Trans Pennine Trail, the latter affected intermittently over several kilometres."
- 5.70 It comments that "Norbriggs Flash, designated for its species-rich grassland and wetland habitats and crossed by the route east of Staveley;"
- Appendix E1 of the Sustainability Statement states that together with the proposed elevated spur connections to the Staveley Depot... there would be a moderate cumulative (landscape) impact." and "Nonetheless there might be close range glimpsed views from some dwellings in the area east of Staveley, where there would also be cumulative impacts with elevated spur connections to the Staveley Depot... increasing the impacts in this area to **moderate**."

## Key considerations

It is not clear from the Consultation Documents whether the potential visual impact of the HS2 route on views from the nearby residential areas of Woodthorpe, Norbriggs, Netherthorpe and Mastin Moor have been fully considered and addressed. Furthermore it is not clear whether the environmental and ecological value of habitats along the River Doe Lea has been fully recognised. Further consideration is also required in relation to protecting existing GI and access assets, and ensuring the delivery of other strategic priorities such as the restoration of the Chesterfield Canal are not compromised. This section the route is seen as being sensitive to environmental impacts due to the presence of high quality habitats, interconnected ecosystems, GI assets and visual receptors.

#### **Environmental Baseline and Constraints**

5.73 The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield of estate farmlands. This comprises a large scale and open landscape of riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing). The area includes:

- listed buildings at Norbriggs House, Netherthorpe School, Church of St Peter:
- ecological receptors directly affected by the route are a potential Local Wildlife Site at Poolsbrook Marsh, LWS at Netherthorpe Flashes and Pinnock North Flash' Local Nature Reserve at Norbriggs Flash, and a potential Local Wildlife Site at Staveley Sewage Works Flash;
- other ecological considerations are habitat connectivity, direct loss of habitats and impacts on species are particularly of concern through the low lying habitats in this area;
- Cuckoo Way, Trans Pennine Trail and the restoration route of the Chesterfield Canal all conflict with the route; and
- residential properties at Mastin Moor, Netherthorpe and Woodthorpe are in close proximity to the route - Riverdale Park (Lowgates) may be directly affected.

## Design considerations

- 5.74 It is recommended that HS2 Ltd should:
  - recognise the value of the statutory and non-statutorily designated wildlife sites and non-designated habitats along the River Doe Lea valley and floodplain throughout this section;
  - Seek to minimise direct and indirect impacts on the habitats and species, and to maintain habitat connectivity and ecosystem function in the longer term;
  - recognise that a number of residential areas overlook the Doe Lea Valley and HS2 route in this area including Woodthorpe, Norbriggs, Netherthorpe and Mastin Moor. HS2 Ltd also needs to recognise other visually sensitive receptors in the area including users of footpaths, nature reserves and other open spaces;
  - give consideration to resolving impacts on local residents and on users of the GI in this area ensuring that HS2 does not significantly detract from the environmental quality or user experience in this locality;
  - recognise the significant GI assets in the area both existing and to be restored including the Trans Pennine Trail and the restoration route of the Chesterfield Canal; and
  - ensure that these GI assets are appropriately accommodated, that the delivery and viability of future GI and recreational routes is not compromised, and where possible the necessary infrastructure is delivered through HS2.
- 5.75 Chesterfield Borough Council shares the concerns about the impact of the route in this area and has drawn attention to:
  - adverse effects on Riverdale Park Homes Site (Lowgates) resulting from approach lines to the IMD; and
  - the need for high quality design for structures in historic setting of Rivers Doe Lea and Rother.

### **Staveley Maintenance Depot (Area K)**

HS2 comments

The Sustainability Statement states that "The wooded landscape east of Staveley would help to contain impacts there. The proposed Staveley Depot would lie amidst brownfield and industrial land, and impacts would be slight as a result. The viaducts over the River Rother would affect the character of the valley and the historic townscape of Staveley, as well as views from the Canal Marina (currently under construction). However, the landscape is already influenced by the existing rail viaduct and the Staveley bypass."

- 5.77 It comments that "The viaducts over the River Rother are likely to have a **moderate** impact on the character of the valley, potentially affecting the wider setting of Staveley Conservation Area (300m to the south) and the Canal Marina, currently under construction and almost directly adjacent to the route. The landscape is, however, already influenced by the existing rail viaduct and the Staveley bypass."
- 5.78 "The viaducts over the Rother are likely to have a **moderate** visual impact on users of the Canal Marina."

Key considerations

The main environmental concerns in this area relate to the potential impacts (both direct and indirect) on GI and recreational assets including the Cuckoo Way and the planned restoration and reinstatement of the Chesterfield Canal. The construction of HS2 in this area should seek to ensure that the existing GI assets can be protected, that provision is made for future delivery of Chesterfield Canal, and provide environmental enhancement that can attract and support inward investment.

#### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield of estate farmlands. This comprises a large scale and open landscape of riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing) and urban areas. The area includes:
  - listed buildings: 42 and 44 High Street, 7 and 8 Church Street, 5-11 Porter Street, Staveley Hall, The School, former stables and coach house of Staveley Hall, 34 and 36 High Street, The Chantry, Churchyard Cross, Church of St John the Baptist, 38 and 40 High Street and garden walls of Staveley Hall;
  - conservation area: Staveley;
  - ecological receptors directly affected by the route are a potential Local Wildlife Site at the crossing of the former railway line/ Trans Pennine Trail;
  - other ecological considerations are a LWS at Chesterfield Canal, habitat connectivity along the River Rother, protected species records in the area (mainly riparian mammals), habitat value of the depot site not known but possible open mosaic habitat on previously developed land;
  - Partly within an area of multiple environmental sensitivity (secondary sensitivity);
  - SRVCAAP, a residential and employment zone; and
  - Trans Pennine Trail and the restoration route of the Chesterfield Canal.

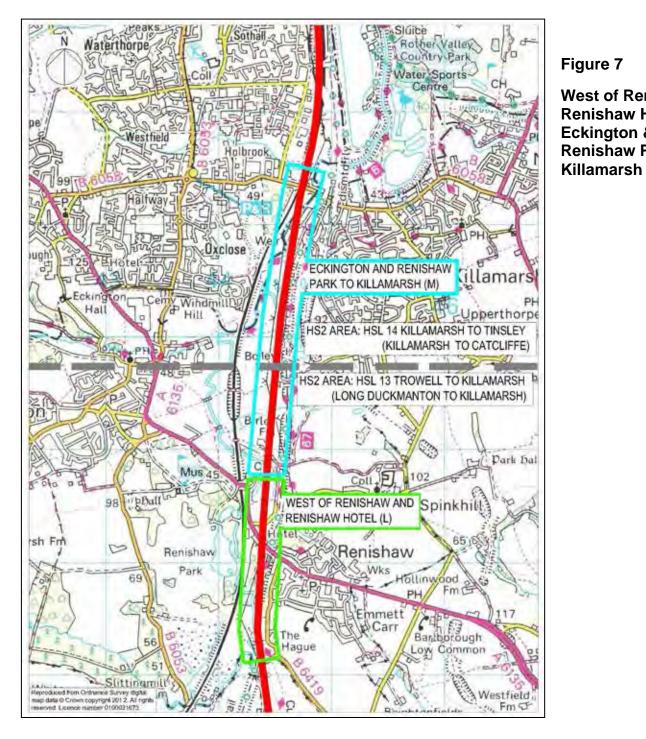


Figure 7 West of Renishaw & Renishaw Hotel & **Eckington & Renishaw Park to** 

## Design considerations

- 5.81 It is recommended that HS2 Ltd should:
  - give consideration to how HS2 will resolve impacts on residents and users of the GI in this area ensuring that HS2 does not significantly detract from the user experience;
  - recognise the significant GI assets in the area both existing and to be restored including the Cuckoo Way and the restoration route of the Chesterfield Canal;
  - ensure that these GI assets are appropriately accommodated, that the delivery and viability of future GI and recreational routes is not compromised, and that where appropriate the necessary infrastructure is delivered through HS2; and
  - seek opportunities to deliver environmental enhancement that reflects the status of this area as a priority for redevelopment and regeneration, and attracting inward investment.
- 5.82 Chesterfield Borough Council share concerns about the impact of the route in this area. These are discussed in more detail in Section 4: Economic Issues but include:
  - the need to adjust and improve the IMD footprint and reduce the environmental impacts of IMD and approaches;
  - the need for the planning of the IMD to take account of infrastructure known to be required in connection with Staveley and Rother Valley Corridor Area Action Plan (SRVCAAP);
  - the potential to improve HS2 main line and approach lines to IMD so as to safeguard or facilitate reinstatement of a functioning Chesterfield Canal; and
  - the environmental impacts for residents adjoining line and IMD, including those in Hartington and Riverdale.

### West of Renishaw and Sitwell Arms Hotel (Area L)

#### HS2 comments

- The Sustainability Statement comments that "...approaching Renishaw, the impacts on the character of the Conservation Area would be major, as the viaduct would cross attractive flood meadows, treed river corridors and a number of valley-side bluffs and woodlands."
- It comments that "Much of this route section would have little visual impact, the route often being well-contained by trees."
- The Statement continues "In addition, the route parallels both the Cuckoo Way (150m to the east of the route north of Mastin Moor) and the Trans Pennine

Trail (on disused railway line just to the east in the Renishaw area). The Trans Pennine Trail would be affected intermittently over a distance of several kilometres (and again further north) so this impact is considered **moderate**."

The consultation documents acknowledge that there would be a need to demolish an estimated nine dwellings at Renishaw, they are not individually identified but are likely to include properties in the vicinity of the hotel as well as the hotel itself as they lie directly on the route. The HS2 line is shown approximately 7m above ground level where it crosses the A6135 on a bridge close to the hotel. It is then supported on embankment until crossing the River Rother flood plain on a viaduct north of Spinkhill Lane.

# Key considerations

The route of HS2 is extremely constrained in this section and is proposed to 5.87 run in a narrow corridor between the River Rother (to the west) and the main built-up settlement of Renishaw (to the east). As stated in the Consultation Documents the route parallels the line of the Trans-Pennine Trail in this area as well as the restoration line of the Chesterfield Canal and at various locations will directly impact on both. The route will have a severe impact in the area around the Sitwell Arms Hotel and a total of nine properties will need to be demolished. It is not clear if the significance of these impacts as well as visual impacts on local residents and other recreational users have been fully recognised and will be adequately addressed as the scheme is developed. Further consideration is required in relation to protecting the existing green infrastructure and recreational assets, and ensuring plans for the restoration of the Chesterfield Canal are not compromised. Existing tree cover is acknowledged as a mitigating factor in this narrow corridor but it is difficult to envisage how significant amounts of vegetation can be retained whilst accommodating the HS2 route and other GI and recreational assets.

### **Environmental Baseline and Constraints**

- The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield of wooded farmlands. This comprises small-scale and well-wooded landscape and riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing). The area includes:
  - · listed buildings: 31 Station Road;
  - conservation areas: Eckington and Renishaw Park;
  - · Renishaw Hall registered park and garden;
  - ecological receptors directly affected by the route: a potential LWS at Renishaw Old Goods Yard;
  - other ecological considerations: LWS at Renishaw Lake; protected species records (great crested newts, reptiles and water vole)

 Cuckoo Way, Trans Pennine Trail and the restoration route of the Chesterfield Canal all conflict with the route.

# Design considerations

#### 5.89 It is considered that HS2 Ltd should:

- recognise that a number of residential properties to the west of Renishaw overlook the route of HS2 in this very narrow corridor. HS2 Ltd also needs to recognise other visually sensitive receptors in the area including users of the Trans Pennine Trail and other footpaths;
- give serious consideration to how HS2 Ltd will resolve impacts on local residents and on users of the GI in this area ensuring that HS2 does not significantly detract from the user experience in this locality;
- recognise the significant GI assets in the area both existing and to be restored including the Trans Pennine Trail and the restoration route of the Chesterfield Canal:
- ensure that these GI assets are appropriately accommodated, that the delivery and viability of future GI and recreational routes is not compromised, and where possible the necessary infrastructure is delivered through HS2;
- consider opportunities for avoiding direct impacts on Renishaw Hotel.
   Where impacts cannot be avoided then a scheme for a suitable level of recording should be implemented prior and during demolition; and
- consider opportunities for avoiding direct impacts on other buildings of historic interest in the area.

## **Eckington and Renishaw Park to Killamarsh (Area M)**

#### **HS2** comments

The Sustainability Statement states that "Further north, the route would pass through Eckington and Renishaw Park Conservation Area. Renishaw Hall (Registered Park and Garden Grade II\*) lies on rising ground to the west, although separated from the route by woodland and existing railway embankment. The impact on the setting of the park and garden would be negligible, but impacts on the landscape of the eastern edge of the Conservation Area would be major, as the viaduct would cut across a very attractive area of flood meadows, cross the treed river corridors and cut through the valley-side bluffs in a number of places. In addition, there would be a direct impact on six woodlands (including woodlands along disused railways) over a total distance of around 1.3km, with at least a moderate effect on character."

- 5.91 It comments that "The attractive flood meadow landscape on the eastern edge of Eckington and Renishaw Park Conservation Area would be bisected by an embankment, although the park itself, with good screening from trees at its edge, would not be greatly affected by views."
- The HS2 line is shown approximately 7m above ground level where it crosses the A6135 on a bridge close to the Hotel it is then supported on embankment until crossing the River Rother flood plain on a viaduct.
- 5.93 West of Killamarsh, the design speed would fall to 350kph in order to minimise impacts on the Rother Valley Country Park. The route would pass onto an 850m viaduct to cross the B6058 and the River Rother floodplain.

Key considerations

- Although the Consultation Documents suggest that the impact on the Eckington and Renishaw Park Conservation Area would be major, it is unclear whether it is proposed to cross this area with a viaduct or bisect it with an embankment. The choice between these two options will significantly influence the severity of the impacts on the landscape of the Conservation Area, and may also determine the nature and severity of impacts on locally designated habitats.
- Through this section the proposed HS2 route would impact on the restoration line for the Chesterfield Canal at several points. The route appears to conflict with both the line of the canal and the Trans Pennine Trail for some distance. The impacts on these GI resources, both existing and proposed, needs to be fully recognised, and further consideration is certainly required in relation to protecting the existing GI and recreational assets, and ensuring the delivery of other strategic priorities such as the restoration of the Chesterfield Canal is not compromised.

#### **Environmental Baseline and Constraints**

The landscape character is typical of South Yorkshire, Nottinghamshire and Derbyshire coalfield of wooded farmlands. This comprises small-scale and well-wooded landscape and riverside meadows, (landscape associated with the river with a lack of built development and infrastructure other than the occasional river crossing). The area includes:

- · listed buildings at Renishaw Park Golf Clubhouse, Mill Farmhouse, 1, 3 and 11 Station Road, a road bridge 175 metres south of Renishaw Park golf clubhouse, The Gothick Archway, a railway overbridge 250 metres south-west of Birley Farm, a garden fountain 40m south-east of Renishaw Hall, a statue and fountain 40m south-east of Renishaw Hall, a dairy cottage, The Gothic Temple, farm outbuilding to the east of the gardeners house, a garden fountain 40m south-west of Renishaw Hall, Renishaw Hall, a stable court at Renishaw Hall and the gardener's House;
- Renishaw Hall registered park and garden;
- conservation areas: Eckington and Renishaw Park;
- ecological receptors directly affected by the route: Local Wildlife Sites at Birley Wood, Park Brook Marsh and Forge Lane Railway Trail;
- other ecological considerations are LWS at Westhorpe railway cutting and river Rother Meander and a Potential Local Wildlife Site at Chesterfield Canal pond are all in the vicinity of the route; and
- Cuckoo Way, Trans Pennine Trail and the restoration route of the Chesterfield Canal conflict with the route.

#### Design considerations

#### 5.97 It is recommended that HS2 Ltd should:

- clarify how the route of HS2 will cross the Eckington and Renishaw Park conservation area and river Rother floodplain to the north of Spinkhill Lane and, in recognition of the potentially major adverse impacts that could result from HS2, seek to minimise these impacts by choosing the most appropriate solution;
- ensure that impacts on locally designated and non-designated ecological receptors are appropriately considered and mitigated, recognising that most of these habitats are associated with linear features within the wider area:
- ensure that visual and other impacts on residential properties to the west of Killamarsh have been appropriately considered and addressed. HS2 Ltd also needs to recognise other sensitive receptors in the area including users of the Trans Pennine Trail, footpaths and other recreational space;
- seek to reduce or mitigate impacts on local residents and on users of the GI;

- recognise the significant GI assets in the area both existing and to be restored including the Trans Pennine Trail and the restoration route of the Chesterfield Canal, and the very serious direct impacts HS2 will have on these features; and
- give serious consideration to how these GI assets can be appropriately accommodated, ensuring that the delivery and viability of future GI and recreational routes is not compromised, and where possible deliver the necessary infrastructure through HS2.

#### **All Areas: Noise impact**

- 5.98 Noise impacts are predicted by HS2 Ltd. Along the line of the route, notably at:
  - · Long Eaton in Erewash borough area;
  - Poolsbrook, Netherthorpe, Woodthorpe and Mastin Moor in Chesterfield borough area; and
  - · Renishaw and Killamarsh in North East Derbyshire District Council area.
- The local authorities also believe that noise is an issue in Stainsby, Tibshelf, Huthwaite, Hilcote, South Normanton and Bolsover.
- There is particular concern about night time noise impacts from rail traffic on existing residential properties close to the IMD links, including those in Hartington and Riverdale. There is also concern that there will be noise impacts for proposed housing in the former Staveley Works Area as a result of road and rail traffic accessing the proposed IMD at Staveley.
- The route will have a significant noise impact where it crosses or runs close to PRoW, greenways and other countryside sites resulting in a significant loss of amenity to existing and future users. The local authorities would wish to see HS2 recognise potential increased noise disturbance to wildlife and the tranquillity of the countryside. Design mitigation should include for the possibility of sudden noises from passing trains frightening horses being ridden down the Trails.
- Noise during construction and operation of HS2 has the potential to cause significant impacts on the health and wellbeing of those affected by it. The issues are identified in the HIA and considered in Section 7 in more detail. The HIA recognises that noise impacts have the potential to reduce the enjoyment of the countryside.
- Any noise mitigation should be sympathetic to the local environment and minimise secondary impacts, (for example visual). Where appropriate, the mitigation should use the latest technology to maximise the benefits and minimise any adverse impacts.

## **All Areas: Visual impact**

- Visual impacts are outlined in Section 6.9 of the HS2 Sustainability Statement, which includes details on anticipated visual impacts throughout Derbyshire. Derbyshire County Council has carried out its own review. The results are discussed in more detail by Landscape Area in paragraphs 5.19 to 5.97. These considerations will be particularly pertinent in Derbyshire where the route of HS2 crosses the Trent Valley and where it impacts on the settings of Hardwick Hall, Sutton Scarsdale Hall, Bolsover Castle and Chesterfield Canal.
- The HS2 Appraisal of Sustainability (AoS) "also considered the potential visual impacts of the scheme, taking account of who is likely to see it and how these views could affect their 'visual amenity'. Visual impacts take account of the landscape impacts and also of more direct changes, either resulting from the obstruction of or intrusion into views by different HS2 structures, or the creation of new views where existing landscape features are removed or altered. Visual impacts are described in terms of these qualitative changes, as well as in terms of the likely sensitivity of people to visual impact and their opportunity to experience visual impact."
- 5.106 The design issues and assumptions are discussed in the HS2 Route Engineering Report West Midlands to Leeds.
- At this early stage of design, a common side slope has been assumed for earth structures. In practice this will not be appropriate in all areas and alternative designs will be needed that minimise any adverse impact and maximise future land use. HS2 Ltd is requested to involve appropriate local authority officers in the detailed design. We also note the structures assumptions "allow sufficient vertical clearance where HS2 would cross, or be crossed by, roads and other major obstacles, including rivers, canals and other railways. Short bridges, such as those used to carry the railway over local roads, or roads over the railway, would likely be straightforward single spans. For longer structures, the provision of a viaduct structure has been assumed."
- HS2 Ltd acknowledge that "environmental mitigation would be required. This could include significant earthworks and bunding/screening, planting areas, balancing ponds, replacement facilities, habitat enhancement and noise/visual screens. Initial potential opportunities for environmental mitigation have been identified as part of the iterative design process to date". The report states that these matters will be addressed as the design of the scheme is developed.
- 5.109 Further development will need to apply the seven themes of the HS2 Sustainability Policy and in particular that of Environmental change and

"minimise impacts where they occur and deliver enhancements as far as practicable to ensure there is no net loss to the natural environment".

- 5.110 Where HS2 impacts on PRoW, greenways and other countryside sites there is likely to be a significant loss of visual environmental quality. This will need careful consideration as the scheme is developed in more detail.
- 5.111 Chesterfield Borough Council request high quality landscaping (at a minimum to take account of settings of Hardwick Hall, Sutton Scarsdale Hall, Bolsover Castle and Chesterfield Canal). The authority encourage the use of good design of embankments, structures etc to reduce need for mitigation.
- The preference would be for tapered embankments up to open fencing to reduce the impact. Groups and isolated trees could be planted to help disguise the route and posts for overhead lines.
- 5.113 Some areas along the route would be disproportionately affected by HS2. The report acknowledges that parts of the route are already affected by the M1, which cuts through the Derbyshire countryside. There may be opportunities to mitigate adverse impacts of this at the same time, ie redress ecological severance and reduce the visual impact.
- The proposed line of HS2 compromises public access rights and promoted public access at a number of locations which arises from it crossing the line of PRoW, the Derbyshire County Council Greenways network and other Derbyshire County Council countryside sites (including the Trans Pennine Trail and other promoted recreational routes).
- The proposed line of HS2 also compromises planned future development of both the Greenways network and Waterways network in Derbyshire (specifically the Chesterfield Canal), with its alignment crossing strategically identified routes.

#### **All Areas: Biodiversity and Nature Conservation**

- 5.116 The Local Wildlife Sites (LWS), Local Nature Reserve (LNR), are identified in the Areas listed above. These are all important for conserving habitats of local importance and to retain the local countryside character. Efforts should be made to minimise the impacts on these during and after construction.
- 5.117 Protected species including water voles and great crested newts are known to inhabit the areas where the route crosses the canal. Appropriate mitigation will be needed during construction and operational phases.

- 5.118 We seek a commitment that HS2 Ltd will protect ancient woodland veteran trees on canal banks on approach to Renishaw.
- 5.119 Such continuous linear routes as Waterways, Greenways and Rights of Way in the countryside, bounded as they are by grassland, hedgerow and woodland margins, provide valuable green corridors for wildlife, which if severed would impact negatively on the sustainability of local bio-diversity.

# **All Areas: Greenways**

- 'Greenways' (or 'Trails') are specifically designed for 'multi-user' access.

  Derbyshire County Council owns and manages an extensive network,
  developed largely on disused mineral railway lines, which provide important
  safe off-road routes for local people and visitors. These routes aim to link
  communities together and to provide access opportunities to places of
  employment, education, commerce and countryside, by providing a wellconnected network of traffic free routes for users.
- Not all Greenways are dedicated as Public Rights of Way, but they are each designated for walkers (including disabled users), cyclists, families with prams, and where appropriate for horse riders.
- Development of Greenways is an on-going process guided by the County Council's adopted Greenways Strategies (eg. East Derbyshire Greenways Strategy, Derbyshire County Council 1998). The network of Greenways identified in these strategies already have significant lengths of route delivered and in active use, whilst other sections are in the process of delivery subject to funding and planning.
- Figures for different trails and Greenways vary, but as an example, the annual number of users on the Trans Pennine Trail at Renishaw (in the vicinity of the proposed HS2 line) are recorded for 2012 as 47,000 walkers and 21,000 cyclists (source Trans Pennine Trail Partnership visitor monitoring).
- A full list of existing and proposed routes where these intersect the proposed HS2 line is provided in Appendix L, Derbyshire County Council Greenways/ Trails immediately impacted by the proposed line of HS2 is also provided in this appendix.
- 5.125 The development of HS2 highlights some requirements to mitigate direct impacts, but also some opportunities to facilitate new links within the corridor of the HS2 line on connections that have yet to be formally established.
- 5.126 It is essential that those Greenways already established are protected and that consideration is given to those proposed Greenways which are envisaged to create a fully connected network. It is essential that the HS2 line does not

create a physical barrier to the connectivity of the network but accommodates the existing routes. It is equally important that it maximises the potential for further Greenway route provision.

- 5.127 It is requested that HS2 Ltd engage on an on-going basis with local authority officers throughout the duration of the project, to develop suitable mitigation measures to ensure mutually beneficial outcomes can be effectively achieved. Measures could include the development of a naturalised channel for the Chesterfield Canal and Trans-Pennine Trail, both North and South from Renishaw.
- A number of principles (adapted with reference to the Chesterfield Canal Trust) are outlined below. It is requested that these be adopted in refining route options for HS2 and for accommodating both existing and proposed Greenways (the same principles apply for existing and proposed waterways):
  - Protection of existing and proposed routes the same protection that HS2 affords to rights of way and highways schemes should be afforded to the developing Greenways/ Waterways network and to planned Greenways creation/ Canal restoration. A continuous means of alternative access should be maintained during any construction;
  - Mitigation there should be a presumption of betterment within the planning process as part of compensation of impacts to amenity, to environmental quality and to heritage features. Considering the HS2 project timescales, steps to secure advance mitigation should be sought, with designs appropriate to the local context;
  - Minimum conditions the minimum requirement will be to maintain a continuous through-route appropriate for the infrastructure user (Greenway/ Trail, Canal etc);
  - Heritage both natural and built heritage should be preserved in situ if possible and if not, presumption of relocation to preserve its qualities should be secured; and
  - Blight by their very nature both Greenway and Waterway projects are long term with slow delivery. In terms of seeking either support or finance (grants), there should be no blight on future project development and neither Greenway nor Waterway project delivery costs should need to increase as a result of HS2.
- Derbyshire County Council works closely with a number of partner organisations in maintaining and developing its network of Greenways. Some of these will be submitting separate responses to the consultation and HS2 Ltd is asked to take these into account in further developing the scheme. Some of the key stakeholders include:
  - Trans Pennine Trail Partnership;

- Sustrans (a key stakeholder in the National Cycle Network, of which the Trans Pennine Trail and Nutbrook Trail are part); and
- user groups such as the British Horse Society and Chesterfield Cycle Campaign.

# All Areas: Derbyshire County Council Countryside Sites

- Countryside sites are designated as green and open space in Local Plans. Many are LWS and highlighted in specific areas in paragraphs 5.19 through 5.97. The sites are managed by the Countryside Service for conservation, recreation and quiet enjoyment. They are promoted as 'accessible countryside' to local communities and visitors. They provide important components of GI, both as individual sites and as part of linear green corridors.
- Although the current line of HS2 does not directly cross any Derbyshire County Council Countryside Sites, it lies in close proximity to two sites, see listing in Appendix L. The impacts to these sites need to be considered should route refinement move the line of HS2 within closer proximity. The following related stakeholders should be consulted:
  - Derbyshire Wildlife Trust (DWT);
  - Peter Fidler Local Nature Reserve (LNR) near Bolsover, (integrated with DWT's Carr Vale Flash Wetland Reserve - which is ranked amongst the top 5 bird watching sites in Derbyshire by DWT).

#### **All Areas: Severance**

There are important concerns regarding the ecological connectivity in the area. It is essential that the ecosystems in the area are not severed by HS2. East/west connectivity is a particular concern, especially having already been severed by the M1 (ancient woodlands having been particularly affected) – HS2 should not exacerbate this and should seek to reduce severance across all habitat types. Although there will be specific ecological constraints along the route, more widespread sensitivities can be envisaged where the route runs along river corridors and/or within the floodplain – areas around Poolsbrook/ Doe Lea Flash/ Netherthorpe/ Norbriggs Flash; the Erewash Valley; and the Trent crossing could be especially sensitive.

# All Areas: Archaeology

5.133 Concerns regarding the known sites of archaeological interest are listed in the breakdown of Landscape Areas, including the demolition of Heath Old Church. There may be other, as yet unknown, sites that will be affected. These will need appropriate levels of excavation and recording to mitigate the impacts of the project.

## All Areas: Loss of Residential Amenity

HS2 proposals indicate that a number of residential properties would be demolished in Derbyshire, notably in Long Eaton (six demolitions) and Renishaw (nine demolitions). They have counted approximately 3,300 dwellings within 100m of the route construction boundaries of the Eastern leg. It is not clear how many of these are within Derbyshire. Derbyshire County Council have concerns regarding the health and wellbeing of the affected parties, see Section 7 for further details.

#### All Areas: Flood Risk

- HS2 proposals could have many potential impacts on flood risk, particularly in the Trent Valley, where massive embankments and viaducts are proposed, but elsewhere there are more complex works proposed where the River Doe Lea meets the River Rother and the balance between viaducts and embankments could vary following consultations. It also crosses or impacts on a number of other waterways.
- 5.136 We seek a commitment that the detailed design will work closely with the Local Authorities to ensure that the risk is managed and appropriate mitigation is put in place.
- 5.137 Derbyshire County Council concerns are summarised in the table in Appendix R. Further information on groundwater and maps of surface water are available on request.

# **6 TRANSPORT ISSUES**

#### Risk of Reduced Rail Service

- The Midland Main Line, (MML), currently provides two fast trains per hour to London through Derbyshire. Chesterfield, the largest town in Derbyshire benefits from a good level of long distance rail services and draws passengers from a wide area of north Derbyshire and the south side of Sheffield. There is a concern that the level of service could be reduced following the opening of HS2. However it is noted that Network Rail's recent study, (Better Connections Options for the integration of High Speed, July 2013), concluded that while there will be some transfer of passengers to HS2, the growth in demand will be such that any released capacity will be in the form of on-train capacity rather than a reduction in the number of train paths. The local authorities would wish to see the existing level of service on the Midland Main Line retained, albeit that there is likely to be a need for some changes in the pattern of service.
- There is concern that existing services between Nottingham and Derby and other routes will be diverted via the new Toton station. The additional mileage and the possible need to reverse out of the station before they can continue on their journeys would result in unacceptable delays to passengers. Classic train services to Toton should be in addition to and not at the expense of passengers using the existing conventional rail services.
- A suggestion contained in the report prepared by Arup and commissioned by the East Midlands Councils suggested that there may be scope for an additional rail link at Trowel to enable trains travelling north from Toton to turn east into Nottingham. This would offer the opportunity for more flexibility in conventional, and potentially classic compatible services but there must be concern about the deliverability of this project.
- Furthermore, the existing lines at Toton are to be moved east onto the high level route. There is currently no access from the Derby line onto the high level goods route at Trent Junction for classic passenger or freight services. It is not clear how these movements will be accommodated in the HS2 proposals. To maintain this link, it will be necessary to provide a new spur to the high level route from current Sheet Stores Junction to the elevated Trent junction line.

#### **Freight Services**

- The HS2 station at Toton is adjacent to an existing locomotive maintenance depot which as an important source of local employment. The implications of the HS2 proposals for rail access to and from this facility are not clear. The County Council supports the development of rail freight and would be concerned if access to and from this facility was adversely affected in any way, or indeed if there is any adverse impact on rail freight operations.
- The proposed IMD at Staveley is located near the principal freight route between the Midlands and the North of England and would be accessed by conventional rail via a branch to Seymour Junction. This link is currently out-of-use but could provide development opportunities in the future. The rail links to the IMD will not operate at high speed so should not preclude sharing lines with freight. This would allow the proposed freight access to Markham Vale and Erin landfill site to be retained.
- Derbyshire County Council requests HS2 Ltd to try to maintain this link and thus maximise the potential for freight. It may also be possible to run high value freight, (eg mail), on HS2 at some time in the future and we suggest that the option of providing freight access to HS2 in this area should be kept open. This is consistent with our view that the route should be designed in such a way that it provides as much flexibility as possible for future developments. It is also noted that HS1 has recently expanded its freight services to meet customer demand for links to Europe.
- Investments have already been made to safeguard the rail link to Markham Vale including construction of a new bridge at Eckington Road, Staveley in 2010. Land has been acquired for rail sidings at both Seymour and Markham Vale, however, HS2 cuts through the development and the planned sidings. A summary of the impacts on the Markham Vale development is included at Appendix I.

#### **Released Rail Capacity**

- 6.9 In the Consultation documents HS2 Ltd provided a few examples of possible services that could arise from released capacity such as providing a Lichfield to Derby Service and an even spread of services on the Midland Main Line.
- Derbyshire County Council is not convinced that the anticipated released capacity will be realised but would welcome any new opportunity where the demand exists providing it does not compromise any existing services. Good connectivity between the new station at Toton and Alfreton, Langley Mill and the proposed station at Ilkeston on the Erewash Valley Line is also needed. A fast, frequent and reliable service is also needed between Toton and Derby.

## **Classic Compatible Rail Links**

- 6.11 If the issues raised with classic rail route north of Toton can be addressed, it would be possible for the Chesterfield service to access Toton on existing lines and then join HS2, (classic compatible option), thus maintaining good links from the town to London.
- East Midlands Councils (EMC) with support from a number of Local Transport Authorities commissioned Arup to identify and undertake a technical and economic assessment of a number of options to link HS2 with the MML. See Appendix S for the full report. The scale of latent demand between cities across the Midlands and the North led to the conclusion that a number of such linkages are not only feasible, but may add to the overall business case for HS2.
- The report concludes that the most straight forward option is to build linkages at the Hub Station, where the HS2 and MML tracks run in parallel and in close proximity. This would allow direct connectivity from Derby, Leicester and Nottingham to Leeds and the north east of England, giving a journey time between Derby and Leeds of less than 40 minutes, with similar benefits for Leicester and Nottingham. The cost of such linkages would be considerably less if built into the design of the Hub Station from the outset.
- 6.14 Arup also looked at the following additional connections:
  - provision of a chord at Trowell on the classic rail network to allow trains from Derby and Birmingham to run through to Nottingham without the need to reverse and, possibly, to allow 'classic compatible' trains to run through to Nottingham City Centre;
  - provision of connections at Killamarsh that would allow classic compatible trains to run on and off the HS2 network and serve stations at Chesterfield and Derby. The consultant's report suggested that this link would be relatively simple to provide. In practice, however, a grade-separated (twolevel) connection would be needed in line with the standard of provision elsewhere on the high speed network;
  - provision of an alternative chord linking HS2 and the Midland Main Line south of Trent Junction, (referred to in the Arup report as the Sutton Bonington chord), This would have the benefit of providing access for 'classic compatible' trains to Derby, Nottingham and Chesterfield (via the Erewash valley line).
- We request HS2 Ltd reviews all the above connectivity options with a view to increasing the flexibility and maximising the economic potential of HS2 to the region. We suggest that, as a minimum, a passive provision is made to provide future-flexibility in the network.

#### **NET Tram extension west of HS2**

- The HS2 proposals envisage the NET tram service being extended from the currently proposed terminus at Toton Lane to serve the new hub station at Toton. URS, on behalf of Derbyshire County Council, are carrying out a study into a possible extension of the tram to serve Long Eaton or other locations in Derbyshire. Such provision would not only improve access to the new station, but would also make a major contribution to developing Toton as an effective hub station and facilitating growth in the area.
- 6.17 The current plans envisage the extended tram service being at first floor level ie above the high speed and classic rail platforms. This would be at the right level to facilitate an extension of the tram and it may be possible to make provision for a 'shared use' bridge to accommodate both the tram and pedestrians. See Appendix M for further details. It also recommends that feasibility studies should be carried out to consider in more detail the scope for extending the tram to Long Eaton and/or Sandiacre. At this stage HS2 Ltd is asked to make provision for the extension of the tram west and east of the proposed station at Toton. This is consistent with the principle of ensuring the design is sufficiently flexible to make provision for future needs.

## Access to Toton Station by road

- HS2 Ltd worked on the assumption that highway access to the site would be from the A52 just east of M1 Junction 25. It is understood that some discussions had taken place with the Highways Agency which is responsible for the A52 and M1. There is concern about the impact of additional traffic using the A52 and seems likely that a grade separated (two-level) junction will be needed to provide access to the station.
- 6.19 Derbyshire County Council has responsibility for the local road network and has concerns about a number of aspects that will need to be addressed as the scheme is developed:
  - The severance of roads and communities, notably in Long Eaton where the level crossings at Main Street and Station Road will be closed. The closure of the level crossings risks severing the community from Long Eaton town centre. The options for maintaining access for vehicles, pedestrians and cyclists requires more detailed investigation. This is a major source of concern in the area and HS2 Ltd should give priority to developing options and consulting the local authorities and the local community.
  - The closure of the crossings and the additional traffic associated with the new station will have implications for the wider road network. These changes need to be modelled to provide a better understanding of the proposals.

- Access from Long Eaton to the new station would be long and circuitous if the only access was via the A52. It is considered that residents in this area should have the benefit of convenient access to the station. However, it will be important to avoid adding to parking and congestion problems in Long Eaton so it is suggested that access should be limited to pedestrians, cyclists, buses and taxis. Car access for drop-off/pick-up should be considered, but it is suggested that there should be no car parking provision. Such arrangements are likely to require provision of a pedestrian access from the western side of the station and it is suggested that this could be combined with provision for the extension of the NET tram service – see above.
- In considering options for providing access to the station it is understood that HS2 Ltd outlined the possibility of providing additional access to Toton station from the south (Long Eaton) side of the station. The existing A6005 bridge over the railway would need to be reconstructed, probably just to the north of the existing bridge. The eastern approach to the bridge would be on a gradient and there may be insufficient room to accommodate a junction to provide a link to the station. It is therefore likely that any access road from the south would need to start from the west side of the high speed line (e.g. from Midland Street). Access to the station could be gained by establishing a secondary access on the west side. This link is important in providing pedestrian, cycle, taxi and potentially bus access to Toton Station. By providing opportunities for walking and cycling it also has the benefit of offering the potential for more active lifestyles, (see Section 7).
- Erewash Borough Council share concerns regarding access to Toton Station. They note that a terminus at the western end of the proposed station concourse would avoid creating a link the proposed car park, thus limiting the level of demand lead traffic growth to this access.

# Parking at Long Eaton

- Much of the residential outskirts of Long Eaton consist of terraced housing, with minimal off-street parking facilities. On-street parking is much in demand, and there are conflicts between residents, shoppers and town centre workers.
- If provision is made for pedestrian access to the Toton Station direct from Long Eaton it is likely that there will be further pressure on on-street parking. Such pressures will increase in line with parking charges at the station. Congestion around Junction 25 and on the A52 approach to the station will also encourage drivers to seek alternative options for accessing the station. In these circumstances, some form of protected parking arrangement for residents will be needed to ensure that commuters do not clog-up the streets with parked vehicles.

If access is possible by the existing footbridge, the area likely to be worst affected is the Bridge Street, Bennet Street, Cranmer Street, Walton Street area and roads surrounding as there is no existing parking scheme for residents in these areas. However it is difficult to identify in advance the specific locations at which parking demand will be generated, but potentially the whole of Long Eaton may need some form of parking regulation/permit scheme.

#### Congestion and safety around Long Eaton

- There have been 13 slight and 1 serious personal injury collisions (PICs) in the last three years at the two main roundabouts in Long Eaton, (The Green & Waverley Street), with numerous other recorded collisions on the approach roads. Both locations and approaches are very congested, particularly in the peak hours, with long delays at all times of the day and it is difficult to see how any significant increase in traffic could be satisfactorily accommodated. There have also been complaints from local bus operators that the level of congestion was affecting punctuality.
- 6.26 There are current concerns about safety of vulnerable road users. Long Eaton has high numbers of cyclists, and Government funding has recently been provided for a scheme to improve the safety of cyclists in the area.
- 6.27 HS2 Ltd is asked to fully explore all options in order to maintain safe and sufficient traffic flow in the area. Any future increase in traffic levels will require significant and difficult improvements to the highway network, (particularly the A6005 and Tamworth Road corridors). These would need to be considered alongside proposals for the changes to the pinch points over and under the existing rail network on the A6005. The local authorities should be consulted and closely involved in any decisions about changes to the local highway network.
- At Long Eaton Station there is a need to consider what public transport links will be required if there is not a direct rail link to Toton station. This may also impact upon congestion in the town depending upon the number of services and passengers needing to transfer.
- 6.29 Previous improvements undertaken on the highway network:
  - recent works to public transport infrastructure in and around The Green;
  - resident parking scheme in operation in streets around town centre, existing pressure from residents for this to be extended. If commuter parking or extra development demand is added this will detrimentally affect the situation; and
  - traffic calming in College Street and surrounding area, due to rat-running vehicles and high numbers of pedestrian injury collisions.

6.30 There is currently an improvement scheme in progress, funded by Government to improve the situation for cyclists on A6005 Derby Road and into centre of Long Eaton (£192,000) potentially altering the roundabouts to signals.

#### Sandiacre

- Initial discussions have taken place with the relevant authorities about developing a strategic approach to the strategic management of access to the station and associated development proposals. At this stage there is uncertainty about the impact of the proposals on this area. For example, it is not entirely clear if Bessel Lane, in Nottinghamshire, would be used as an access to the station from Sandiacre. We anticipate that pedestrian and cycle enhancements to this access and the B5010 to Sandiacre would be required.
- If local people wanting to access the station have to do so from the A52 only, this is likely to increase congestion at both ends of Bostocks Lane and at the Station Road/Town Street/Derby Road junction in Sandiacre. If an alternative access for local people is provided, further information will be needed to determine effects on the highway network.
- Further information is needed before a full assessment can be made of the impact of the Toton Station proposals on the local highway network. In particular there needs to be a better understanding of:
  - access arrangements for station (pedestrian, cyclist and vehicular):
  - parking arrangements, size and charges;
  - parking arrangements for station workers and construction workers;
  - public transport arrangements, particularly from Long Eaton station and the proposed new station at Toton;
  - the location and number of pedestrian entrances to the station and access routes, (eg the implications for the existing pedestrian route over the footbridge.
- 6.34 The County Council supports the seven themes of the HS2 Sustainability Policy and would wish these to be applied as the scheme is developed in more detail. In addition, in the context of Long Eaton, the County Council seeks:
  - agreement on a level of traffic increase, real or predicted, above which HS2 Ltd undertakes road capacity improvements on routes in and through Long Eaton (and Sandiacre);
  - confirmation from HS2 Ltd that modelling will be undertaken and where necessary carry out capacity improvements implemented in advance of HS2;
  - agreement to undertake safety remedial works if collisions statistics show a correlation between HS2 and increased injury collisions in the area;

- investigation of all available options to address the severance caused by the closure of the level crossings and, in the event that an acceptable solution cannot be found, the provision of suitable alternative east-west connections; and
- agreement to undertake before and after traffic counts, at locations agreed with the Local Authorities, to verify the network is operating as expected when Toton Station is open.

#### **Access to Markham Vale**

Markham Vale is a 200 acre prime business and distribution park strategically located in the heart of the UK's motorway network, between Sheffield and Nottingham. The park has immediate access to the M1 motorway via a dedicated new junction, J29A and two dedicated railhead facilities, making it one of the UK's premier logistics locations. Bearing this in mind the proposed line of HS2 should minimise its impact on this area. Markham Vale is discussed in detail under Economic Impact, (Section 4).

## Access to Staveley IMD by rail

- 6.36 It is unclear why HS2 and classic rail lines need to be segregated in this area. Derbyshire County Council note that the rail links to the depot will not be high speed so should not preclude sharing lines with classic rail and freight. This may allow the proposed freight access to Markham Vale and Erin landfill site to be retained. The freight lines and HS2 could cross where this link currently joins.
- 6.37 Although not part of the current proposals, it may be possible to run high value freight, (eg mail), on HS2 at some time in the future and we suggest that this option is kept open.

#### Access to Staveley IMD by road

The IMD proposed in Staveley should have suitable off street parking available for employees to reduce the likelihood of vehicles parking in nearby residential streets. Access to Staveley IMD should be via the proposed A619 Chesterfield – Staveley Regeneration Route which provides convenient access to the M1 at Junction 29a. Access through residential areas should generally be avoided.

#### Diverted highways and severance

- At Long Eaton, HS2 Ltd states that "The existing level crossings at Main Street and Station Road would be closed. Alternative east-west connections would be put in place, possibly involving major highways works. The design of these will be established in collaboration with the local authority and interested stakeholders."
- 6.40 Derbyshire County Council and Erewash Borough Council are concerned about the implications of these closures. Data on the number of vehicles, cyclists and pedestrian crossing data is available on request.
- Station Road is a residential area that currently has a weight restriction and traffic calming. A primary school and a variety of community clubs including a bowling club and amateur football club are located along the road. Collision records show 5 slight & 1 Serious PICs in the last 3 years. The road is not suitable for heavy goods vehicles due to road humps, the residential nature of area and limited road width. There is also a height restricted rail bridge, which may require high vehicles to divert onto even smaller residential roads.
- Main Street and Meadow Lane are the only access/egress route for all the Meadow Lane Industrial Estate traffic. If the level crossing is closed there is no other route for all the Industrial Estate and residential area traffic, other than through a completely unsuitable residential traffic-calmed area which is currently weight restricted to prevent access by heavy goods vehicles. In addition access to/from picnic areas, the yacht club and various farms will be affected.
- Mill Lane and Astwith Lane in Stainsby and Astwith are to be realigned alongside HS2 route. These diversions need to be designed such that they do not encourage speeding. There is currently no provision for a bridge on Mill Lane to cross over HS2. This is currently the main access to Hardwick Hall which operates a one-way system. HS2 Ltd should consider maintaining this access to avoid causing unacceptable difficulties with the traffic visiting the site. It is understood that the National Trust will make its own comments on this matter.
- The M1 is to be realigned north of Toton, this will cause congestion during construction. Even though no closures are planned there are likely to be adverse effects from the traffic management which could have knock-on implications for the local road network. Construction work on new bridges where HS2 crosses the highway may also have implications for the surrounding road network.

#### **Structures**

6.45 Bridge protection to prevent instances of suicide should be considered. We request that any bridges associated with HS2 will be constructed so as not to require low bridge signing and diversionary routes.

## **Construction disruption**

- We recognise that there will be significant disruption during construction of HS2, and its associated structures.
- We welcome the statement that HS2 Ltd is "committed to managing potential construction impacts and reducing disruption to communities, businesses and the environment in ways that reflect the very best practice used by the construction industry". The County Council would wish to be consulted and will assist HS2 Ltd in seeking to reduce the adverse effects of construction, for example, in agreeing suitable routes for construction traffic.
- 6.48 We seek a commitment that the detailed design will:
  - minimise the impacts on the road network during construction of diverted roads;
  - minimise the impacts on the road network during construction of bridges and underpasses, especially at M1 Junction 29;
  - deliver commitment under Traffic Management Act;
  - carry out safety improvements to the local network where possible; and
  - use contractors registered with the Considerate Constructors Scheme.

# Access to Meadowhall station – potential increase in traffic

There is a likelihood of increased traffic through Killamarsh/Renishaw area. This could be due to extra traffic using the tram station at Halfway to get to the new Meadowhall station, or, just traffic en route to the Meadowhall station itself.

# Access to Western Leg of HS2 (Birmingham – Manchester)

For Derbyshire residents in the High Peak, (north-west of the County), the western, (West Midlands – Manchester), section of the route will be of more relevance. The access to Manchester by road is not good, however access to Manchester International Airport will be greatly improved when the "A6 to Manchester Airport Relief Road" is completed.

# **Derbyshire County Council**

- With good transport links to the rail hubs, North West Derbyshire should benefit from reduced travel times to London and beyond. The potential for High Peak would be greatly enhanced by complementary investment in better road links and improvements in public transport services. However, the Borough Council remains open-minded towards the merits of other potential alternative schemes that could be more cost effective."
- In order to meet future needs, we ask that HS2 Ltd investigate the economic and engineering potential for a triangle junction on HS2 near Tamworth, (where the western and eastern legs meet), this would offer additional journey opportunities (eg East Midlands Hub, Toton Manchester Airport). It would also utilise sections of HS2 that would be less busy. We suggest that, as a minimum, passive provision is made to provide future-flexibility of the network.

# 7 HEALTH, WELL-BEING AND EQUALITIES

- HS2 Ltd accepts that there is a "potential for both positive and negative health impacts at certain locations where existing levels of health-related deprivation are high, and identify Nottingham, Barnsley, Wakefield and Leeds in particular. The main potential negative health impacts relate to displacement of jobs, noise and demolition of housing and community facilities. Potential positive health impacts relate to improved access to employment, new housing and access to transport, which in turn could increase access to education, services and facilities. People most vulnerable to health impacts (including people living in socio-economically deprived areas, older people and young people) will experience both positive and negative impacts."
- 7.2 From April 2013 Derbyshire County Council took over responsibility from the NHS for some aspects of public health. Derbyshire County Council is carrying out a programme of Health Impact Assessments (HIA) to ensure that health impacts, positive or negative, are considered routinely in relation to all substantive policy proposals, and this includes HS2.
- An HIA assessment on HS2 through Derbyshire has been carried out to highlight potential benefits to local people. This identified benefits such as more jobs and improved transport connections, which can improve economic wellbeing and the quality of life, as well as drawbacks such as noise, air pollution and congestion. The full report is included in Appendix T. Objectives include:
  - · identifying how to improve health through new projects and programmes;
  - identifying wider influences on health such as income, education and employment as well as lifestyle and genetics; and
  - highlighting potential negative impacts.
- 7.4 Derbyshire County Council will be looking for packages of mitigation and/or compensation measures to offset the negative impacts on those disproportionally affected. The Council will also be looking to maximise the potential health gains associated with the proposal. Derbyshire County Council encourage HS2 Ltd to actively involve the Local Communities in their choice of mitigation in each area.
- 7.5 HS2 crosses areas of deprivation to the north of the county where it is also running alongside/through the Trans Pennine route and Chesterfield Canal. If local residents can be encouraged to make use of such outdoor routes there could be a benefit to their health and wellbeing. This opportunity could be lost by HS2 if its design is not carefully considered.

- The HS2 proposals indicate that a number of residential properties would be demolished in Derbyshire, notably in Long Eaton (six demolitions) and Renishaw (nine demolitions). HS2 Ltd have counted approximately 3,300 dwellings within 100m of the route construction boundaries of the Eastern leg. It is not clear how many of these are within Derbyshire. Derbyshire County Council have concerns regarding the health and wellbeing of the affected parties:
  - during the planning stages, residents could be affected by stress and worry associated with the potential effects on their property, (from the public consultation through detailed design to the start of construction);
  - during construction they could be adversely affected by disturbance including noise, congestion and access issues; and
  - during operation they could be adversely affected by permanent visual intrusion, noise and severance. Some people could be separated from certain community facilities and/or place of work. Congestion could also be a problem in Erewash due to additional traffic to the new station at Toton.
- 7.7 The resulting report, "Rapid Health Impact Assessment of HS2 initial Preferred Route in Eastern Derbyshire", included the following recommendations to HS2 Ltd with a view to enhancing the positive impacts and mitigating the negative health impacts for eastern Derbyshire. The report is attached at Appendix T.

ID	Enhancing positive mental health & well-being impacts
MHE1	Avoid overcrowding on HS2 trains, which could mitigate some commuting-related stress, but this should not be achieved via the mechanism of exclusive rail ticket or station parking costs
MHE2	Make a commitment to a local hire policy when recruiting the construction workforce in recognition of the well-being benefits

ID	Mitigating negative mental health & well-being impacts
MHM1	Provide detail on proposed strategies for mitigating potential mental health and well-being adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
MHM2	Respond to concerns that the views of young people may not have been adequately canvased, and to repeated indications that existing information provision is not meeting needs of many Derbyshire residents
МНМ3	Commission access to expert counselling services for dealing with loss related to demolition, isolation or relocation-induced stress

MHM4	Recognise that noise is likely to have a subjective impact above and beyond model predictions, guideline standards or objective measurements; this recognition needs to be backed by accessible and responsive concern reporting mechanisms
MHM5	Reduce the duration of noise-related annoyance to local residents and businesses by imposing restrictions (with penalties for exceedance) upon the hours of operation of plant machinery and construction activity; consider including at least one noise-free day e.g. Sunday
МНМ6	Outline a communications plan that makes provision for regularly informing local residents and business about progress or problems in a timely manner using technologies with subscription options (e.g. SMS, e-mail, social media) to supplement broadcast information and signage

ID	Enhancing positive physical health & injury impacts
PHE1	Work with and support health partnerships in Derbyshire to promote HS2 as an 'active travel' compatible solution, as increasing exercise will help prevent and mitigate obesity and diabetes (a significant health issue for eastern Derbyshire)
PHE2	Pay particular attention to design solutions that enhance the safety of all road users (including pedestrians and cyclists), taking the opportunity to reconfigure high-risk crossings/ junctions impacted by the proposed route—most especially in NED where the risk of RTAs is already high and in Long Eaton where station-related traffic flows are likely to increase injury rates

ID	Mitigating negative physical health & injury impacts
PHM1	Provide detail on proposed strategies for mitigating potential physical health and injury-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
PHM2	Model the effects of changes to rail crossings traffic flows on the risk of death or injury to pedestrians, cyclists and car users and include mitigation of this within projects costs
PHM3	Work with local authorities, emergency services and the Highways Agency to develop a traffic management strategy aimed at minimising disruption to road users and limiting the risk of road traffic accidents or injuries to pedestrians as a result of construction-related traffic
PHM4	Pay particular attention to the impact of disrupted access upon those with physical disabilities, such as wheelchair users, to ensure any particular needs are catered for as part of planning for temporary diversions or permanent route/ footpath changes

PHM5	Publish details on proposed mitigation strategies for dust particles (at 10 microns in diameter or less) expected during construction, together with evidence on the effectiveness of such strategies in preventing (or preventing the exacerbation of) respiratory illness
PHM6	Consult with Derbyshire CCGs and NHS Trusts on ways to manage an expected temporary increase in patient numbers resulting from health-seeking behaviour and injuries among the construction workforce, and an increase in complaints from the general public related to sleep disturbance, anxiety, breathing problems, etc.
РНМ7	Ensure provision of adequate safety training and supervision of construction workers, recognising that hiring low-skilled workers for the length of the construction period may provide more opportunities for skill acquisition and reduce the incidence of occupational injury in conflict with the job-related benefits of short-term local hires to construct local segments
PHM8	Ensure construction sites and all companies contracted to service them are registered with the Considerate Constructors Scheme, which will include monitoring against 'Securing everyone's safety' standards

ID	Enhancing positive lifestyle & leisure impacts
LLE1	Ensure that HS2 carriages and station access routes include adequate provision for cycles in support of a rail/ cycle alternative to car use (less polluting and encourages beneficial exercise)
LLE2	Examine innovative options for 'nudging' passengers to engage in physical activity e.g. siting pay-and-display car parking adjacent to the station, with a free parking option within longer walking distance linked by a greenery-enhanced foot and cycle path
LLE3	Consider designing in track-side walking/ cycling trails and integrating these at the time of track construction with links to greenways and rights of way that support Derbyshire County Council's access strategy

ID	Mitigating negative lifestyle & leisure impacts
LLM1	Provide detail on proposed strategies for mitigating lifestyle and leisure-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate

LLM2	Ensure construction sites and all companies contracted to service them are registered
	with the Considerate Constructors Scheme, which will include monitoring against
	'Enhancing the appearance' standards

ID	Enhancing positive community impacts
COE1	Compensate communities for the loss of local amenities and support their relocation, replacing 'like-with-better' rather than 'like-for-like' via a process that involves the community in the decision-making
COE2	There may be opportunities to facilitate new greenway links between communities utilising the HS2 corridor to bridge connections that have yet to be formally established

ID	Mitigating negative community impacts
COM1	Provide detail on proposed strategies for mitigating potential community-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
COM2	Reduce the severance of local communities using design solutions that facilitate access
COM3	Offer relocation and/or compensation to dwellings identified as at risk of community isolation
COM4	Reduce the risk of crime/ address potential fears around safety of public transport and safe active travel (possibly utilising CCTV and other solutions), particularly around Long Eaton/ the East Midland hub where these indicators may be adverse
COM5	Work with the Derbyshire Constabulary and community safety partnerships to look at issues such as increased policing during the construction phase and issues around the availability of alcohol, which may result in violence or other disorder exacerbating existing problems
COM6	Ensure construction sites and all companies contracted to service them are registered with the Considerate Constructors Scheme, which will include monitoring against 'Respecting the community' standards

ID	Enhancing positive environmental impacts
ENE1	Utilise mitigation solutions intended to minimise the impact of HS2 to improve upon the existing impacts of the M1 upon Hardwick, aiming to improve resident satisfaction with the local area
ENE2	Demonstrate how HS2 will enhance the Trent Valley Vision being developed and promoted by the Lowland Derbyshire and Nottinghamshire Local Nature Partnership

ID	Mitigating negative environmental impacts
ENM1	Provide detail on proposed strategies for mitigating potential environment-related adverse impacts within Derbyshire (particularly for noise and particulates), with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
ENM2	Provide clarification of the estimated noise impact of the station at Toton and depot at Staveley, as distinct from noise due to proximity to the line itself
ENM3	Confirm whether properties (both residential and business) in proximity to construction sites or the operational track will be eligible for installation of compensatory noise insulation
ENM4	Reduce the visual and ecological severance of landscape using aesthetic design solutions
ENM5	Confirm whether the fuel type generating electrical power for HS2 has been factored into the environmental impact assessment and detail the sensitivity of estimates to passenger numbers; shift of passengers and freight from air or road to rail (allowing for efficiency gains in those alternatives); the length of tunnelling involved; and indirect emissions from stations and infrastructure, as well additional road traffic to/ from HS2 stations
ENM6	Ensure construction sites and all companies contracted to service them are registered with the Considerate Constructors Scheme, which will include monitoring against 'Protecting the environment' standards

ID	Enhancing positive housing impacts
HOE1	Work with local housing departments and developers to examine the feasibility of linking the provision of suitable accommodation for the construction workforce to longer-term affordable housing projects

HOE2	Provide relocated families with housing that is better than what they are losing (rather than like-for-like), recognising the relationship between housing quality and health and that this capacitation for community accordance.
	that this cannot fully compensate for community severance

ID	Mitigating negative housing impacts
HOM1	Provide detail on proposed strategies for mitigating potential housing-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
HOM2	Work with local authority housing departments to upgrade social housing exposed to higher noise levels with appropriate noise insulation
НОМ3	Ensure that residents who are not owner-occupiers (and therefore not covered by the compensation scheme) are also treated fairly, recognising the particular difficulties those in park homes may face in seeking alternative accommodation if relocation is required or desired

ID	Enhancing positive transport impacts
TAE1	HS2 carriages and fit-for-purpose station facilities should include adequate provision for cycles, in support of a rail/ cycle alternative to car use (less polluting and encourages exercise)
TAE2	Provision for sustainable travel to the hub needs to be built into planning so people can access jobs and other services at or via the hub
TAE3	Ensure that a Disability and Access Champion is involved at all key decisions points
TAE4	Make access to relocated community facilities more equitable

ID	Mitigating negative transport impacts
TAM1	Provide detail on proposed strategies for mitigating potential transport and access- related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
TAM2	Avoid utilising important local roads for construction traffic, which will worsen existing congestion and thereby exacerbate commuter stress

TAM3	Model current access and the potential effects of severance in Long Eaton related to
	the proposed closure of two level crossings, noting this is a particular local concern

# ID Enhancing positive nutritional impacts NUE1 Commit to ensuring that healthy eating options are available to HS2 passengers both on-board trains and in stations

ID	Mitigating negative nutritional impacts
NUM1	Provide detail on proposed strategies for mitigating potential nutritional and farming- related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
NUM2	Prioritise design solutions that afford access where access to supermarkets may be inhibited, in recognition that obesity is a major health issue locally and that healthy food choice is part of the solution
NUM3	Reduce the severance of farmland using design solutions that facilitate access

ID	Enhancing positive educational impacts
EDE1	Work with local contractors, academic partners and other stakeholders where feasible to facilitate apprenticeships or similar schemes that maximise the value of the training opportunities for local people, ideally leading to recognised qualifications
EDE2	Work with awarding organisations at an early stage to develop and promote new qualifications aimed at up-skilling local people, who will be competitively placed to apply for employment in high-speed rail technology roles

ID	Mitigating negative educational impacts
EDM1	Provide detail on proposed strategies for mitigating education-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
EDM2	Improve the accessibility of high-speed travel for students via ticket concessions

EDM3	Ensure that suppression of noise during construction and train operations is given additional consideration where educational premises are likely to be affected
	additional contration where educational profiles are interface and another

ID	Enhancing positive employment impacts
EME1	In recognition of high overall unemployment locally, commit to employing a significant proportion of local workers during the construction and operational stages of the proposed development (balancing this with a potential increase in occupational injuries)
EME2	In recognition of high rates of local youth unemployment, commit to employing inexperienced workers during the construction and operational stages in combination with educational initiatives leading to qualifications that increase the prospect of long-term employment (balancing this with a potential increase in occupational injuries)
EME3	Work with business leaders along the route to consider schemes that subsidise the cost of using HS2 (possibly in combination with active travel) in preference to reimbursement of personal mileage supporting car journeys; this could increase HS2 passenger numbers by improving access and encourage less polluting travel with the benefits of some exercise

ID	Mitigating negative employment impacts
EMM1	Provide detail on proposed strategies for mitigating potential employment-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
EMM2	Support persons losing their jobs as a result of compulsory relocation or demolition of business premises to find alternative employment, perhaps with preferential treatment in relation to jobs created as part of the HS2 scheme if they have suitable skills or wish to be re-trained
ЕММ3	Ensure construction sites and all companies contracted to service them are registered with the Considerate Constructors Scheme, which will include monitoring against 'Caring for the workforce' standards

ID	Enhancing positive economic impacts
ECE1	Work closely with planners in Long Eaton to ensure that preparation for the HS2 station in Toton is integrated with local planning policies

ID	Mitigating negative economic impacts
ECM1	Provide detail on proposed strategies for mitigating potential economy-related adverse impacts within Derbyshire, with reference to the evidence base for intervention effectiveness and proposals for monitoring and evaluation during the construction and operational stages as appropriate
ECM2	Businesses subject to land take or relocation should be financially assisted to locate new premises that are an improvement on the premises they are vacating and should be adequately compensated for the disruption caused to the conduct of their business

#### 8 CONCLUSIONS

- The Government has developed the current proposals and is responsible for strategic decisions about the scheme at a national level. As such, fundamental decisions about the scheme are outside Derbyshire County Council's control. In these circumstances, it is considered that the interests of Derbyshire's residents would be best served through constructive engagement with the schemes promoters.
- This response does not seek to represent the views of individuals or other organisations within Derbyshire. It recognises that there may be other points of view and that these will all need to be taken into account if the best outcome for Derbyshire and its residents is to be achieved.
- In the preparation of this report, Derbyshire County Council has considered the findings in specialist reports, (by Volterra, Arup, Atkins and URS). These were commissioned either by itself or other local authorities and organisations to gain a better understanding of the potential impact of HS2.
- Where available, the views of the District Councils within Derbyshire are detailed in their own representations and there are many common interests and concerns, these are highlighted within this report.
  - Bolsover District Council has concerns regarding the impact on Key employment sites such as McArhur Glen – East Midlands Designer Outlet centre, Saw Pit Lane Industrial Estate, Tibshelf, sites with rail served access, as well as the impact on key visitor attractions such as Hardwick Hall, Bolsover Castle and other nearby attractions.
  - Chesterfield BC worked closely with Derbyshire County Council on a coordinated response particularly on the economic and planning aspects of the proposals. Key concerns included Markham Vale, the Chesterfield Canal, the Staveley Action Plan, and impacts on flood risk.
  - Derby City Council differs on preferences for the location of the HS2 station, but there are a number of areas where we are in agreement.
  - Erewash BC. Key concerns include: renaming the proposed HS2 station "Long Eaton"; providing a southern access route; closure of rail crossings at Meadow Lane and Station Street; replace embankment on Erewash Canal with a viaduct; early implementation of landscaping; utilization of existing rail, night time restrictions and minimising disruption during construction; and compensation to council for loss of revenue and to residents affected by noise.
  - High Peak Borough Council anticipates potential benefits from the HS2 investment including: a benefit from the economic boost to the wider region through job opportunities; an increased regional market for goods and services; and improved access to other UK markets. The potential for High Peak would be greatly enhanced by complementary investment in connecting rail links. However, the Borough Council remains open-minded

- towards the merits of other potential alternative schemes that could be more cost effective."
- South Derbyshire DC agrees with the Governments proposed route between West Midlands and Leeds with a station at Toton. It does not think there should be any additional stations and would not support an alternative route through Derby. It suggests that "Freed up capacity should be used to provide integrated conventional rail services to HS2 stations to maximise the benefits of high speed rail travel".
- 8.5 HS2 Ltd has asked a series of questions and our formal responses to these are set out in Section 3.
- Berbyshire County Council welcomes the opportunities for direct employment, in particular at Toton and Staveley during the construction and operational phases of HS2 and will work to ensure that these opportunities in infrastructure, skills/training and planning policies are realised. The D2N2 region would see the largest percentage increase in economic productivity amongst those affected by HS2. Derbyshire County Council support the establishment of an HS2 Academy in the D2N2 area
- 8.7 Derbyshire County Council support the contributions of the HS2 Growth Taskforce and in particular the need to unlock the potential opportunities for the local supply chain and workforce.
- There is concern that the design of HS2 should not restrict the growth in tourism or adversely impact on the viability of farming and agriculture. These land uses are important for both the local economy and the landscape character.
- The route crosses strategically important minerals sites in Derbyshire including coal and sand and gravel. There is a possible requirement to enable prior extraction of these deposits so they are not sterilised by HS2.
- Markham Vale in particular is Derbyshire's largest ever regeneration projects, projected to create 5,000 new employment opportunities. It is important that the impact on the economic viability of Markham Vale is kept to a minimum. Likewise, other sites directly and indirectly affected could contribute to local growth within the region.
- The viability of the Chesterfield Canal and associated development needs to be protected for commercial, ecological, environmental, community and leisure reasons. It is vital that the proposed route of the Chesterfield Canal is protected and that consideration is given to its on-going restoration. Likewise the Trans Pennine Trail should also be protected. The issues raised are expected to be included in separate representations from the Canal and River Trust, Chesterfield Borough Council, Chesterfield Canal Partnership and Chesterfield Canal Trust.

- The IMD at Staveley is likely to bring construction and operational jobs into the area but is sited on an area already planned for development. The Chesterfield BC Staveley Area Action Plan has the potential to create a sustainable community with enhanced GI and employment opportunities. This also ties in with the SRVCAAP. We seek a commitment that the detailed design of the depot will not compromise the delivery objectives of either of these plans.
- 8.13 HS2 proposals include the demolition of several properties across the region. Derbyshire County Council expect HS2 Ltd to provide adequate compensation to individuals and businesses affected including:
  - industrial property at Markham Vale and Saw Pit Lane Industrial Estate,
     Tibshelf:
  - · farm buildings in various locations;
  - · residential properties in Long Eaton and Renishaw; and
  - · demolition of listed buildings in Renishaw and Heath.
- The proposals count a number of dwellings within 100m of the route construction boundaries of the Eastern leg but it is not clear how many of these are within Derbyshire. Derbyshire County Council urge HS2 Ltd to put in place measures to minimise the impact on the health and wellbeing of Derbyshire residents during the planning, construction and operational phases of the project.
- 8.15 Derbyshire County Council have several long term strategies across the region involving Greenways and Rights of Way, these should not be compromised by HS2. Derbyshire County Council seek:
  - protection of existing and proposed routes;
  - · appropriate mitigation with a presumption of betterment;
  - maintenance of a continuous through-route appropriate for the user (Greenway/ Trail, Canal etc);
  - both natural and built heritage should be preserved in situ if possible; and
  - there should be no blight on future project development and costs to the local authority/voluntary sector should not increase for either Greenway or Waterway projects as a result of HS2.
- The route of HS2 passes through or near sites of important archaeological and heritage interest. There could be some sites of Archaeological interest yet to be identified. Derbyshire County Council expect HS2 Ltd to provide high quality designs and mitigation sensitive to the local environment.
- The demolition of Heath Old Church will require a major archaeological project. We seek an additional commitment to carry out a Full Archaeological record prior to removal and provide a sensitive design solution for any remains.

- There are a number of highly significant heritage assets that form a tourism cluster in the north east of Derbyshire. Hardwick Hall, Bolsover, Bolsover Castle and Sutton Scarsdale Hall contribute to this cluster which has probably yet to realise its full potential. HS2, if not dealt with sensitively, could negatively impact on the setting and visitor experience of Bolsover. The setting is a key component of their significance which is already unacceptably compromised by the M1. We disagree with the Sustainability Statement that the impact of HS2 will be lessened by the existence of the M1.
- The route of HS2 through Derbyshire could have many potential impacts on flood risk, particularly in the Trent Valley, where significant embankments and viaducts are proposed. It also crosses or impacts on a number of other waterways and involves complex works where the River Doe Lea meets the River Rother.
- A number of structures are required to cross these waterways, including several viaducts over 100m long. An insensitive design of any of these structures will impact negatively on the potential visual character, restoration and recreational potential. Especially in the Trent Valley as it would constrain its existing and future recreation and tourism economy. We request that the further development of HS2:
  - responds to the objectives of the Trent Valley Vision being developed and promoted by the Lowland Derbyshire and Nottinghamshire Local Nature Partnership (LDN LNP);
  - carry out detailed Environmental Impact Assessment of the flood risk and agree appropriate mitigation with the Local Authorities; and
  - provide high quality designs to minimise the impact on the local communities.
- There are concerns regarding the impact of HS2 on the classic rail network as follows:
  - the need to ensure that the existing good rail links from Chesterfield are maintained with no reduction in the level of service;
  - that all existing journeys between Nottingham and Derby and other routes will be diverted via the new Toton station, resulting in unacceptable delays:
  - it is unclear how classic rail from Derby will be able to access platforms at Toton as the levels at Trent Junction will not currently allow this and there is no current connection between routes; and
  - classic rail journeys will be compromised, in particular north from Leicester and Loughborough, south from Chesterfield and Derby and north and south from Nottingham.
- There are concerns about the loss of rail connectivity at Staveley between the rail freight terminals at Markham Vale and the wider rail network.

- 8.23 Derbyshire County Council support the response from East Midlands Councils (EMC), this includes:
  - provision for a future extension of NET west of the station;
  - use of existing rail capacity released by HS2 to improve services at stations across the East Midlands;
  - development of high quality 'classic rail' services between the new Toton Station and the city centres of Derby, Leicester & Nottingham;
  - effective connectivity between HS2 and existing rail lines, including the option to run 'classic compatible' trains on HS2;
  - ensuring that rail engineering and construction companies based in the East Midlands have a fair opportunity to win contracts to build the new line and rolling stock; and
  - ensuring that local people have the skills to access the design, engineering and construction jobs created during the delivery of HS2.
- 8.24 Derbyshire County Council want to draw attention to a number of issues for the travelling public, including:
  - the severance of roads and communities, notably in Long Eaton where two level crossings would need to be closed.
  - the impact of the proposals on the local road network and traffic using it;
  - the need to provide local communities with convenient access to and from the proposed station at Toton;
  - the need to provide a variety of good local connections to Derby and Nottingham from Toton Station; and
  - the disruption during construction.
- The road network around Long Eaton is very congested and the approach roads of the two main roundabouts have a poor accident record. There have also been complaints from local bus operators about the level of congestion. We seek the following commitments from HS2 Ltd to ensure that this situation is not made worse, and if possible improved:
  - undertake traffic counts at Long Eaton as agreed with the Local Authority;
  - agree to undertake road capacity improvements at a very early stage where traffic flows justify:
  - agree to undertake safety remedial works where appropriate;
  - provide suitable alternative east-west connections where level crossings are closed and in consultation with the Local Authority; and
  - provide assurance that concerns about safety of vulnerable road users will be addressed.
- 8.26 Some residents of North East Derbyshire could benefit from the new station at Sheffield Meadowhall with improved links to Leeds and London. The residents of High Peak are generally likely to benefit from improved links to London from the stations at Manchester Airport and Manchester Piccadilly.

- 8.27 Derbyshire County Council is carrying out a programme of HIA's as part of its work to find out how to improve health through new projects and programmes. While the health of Derbyshire residents is generally good, there is great inequality in terms of quality of life and life expectancy in some parts of the county. There is concern that HS2 will have a disproportionate effect on some of these areas in the north east of the county. To this end, there is a need:
  - to make this section of the route 'beautiful' as it is running alongside/through the Trans Pennine route and Chesterfield Canal; and
  - to encourage local residents to make use of the outdoor routes which could be blighted by HS2 if its design is not carefully considered.
- 8.28 Derbyshire County Council remain broadly supportive of the proposals because of the potential job and economic growth that may benefit the design, manufacturing, construction and service sectors in Derbyshire. Nevertheless further work is needed to ensure that satisfactory solutions are found to the major concerns identified in this response. Local Authorities would wish to be effectively engaged as this work is taken forward.
- 8.29 Derbyshire County Council is willing to provide further advice and clarification and welcomes continued discussion with HS2 Ltd as the scheme develops.

#### 9 ABBREVIATIONS AND CONTACT LIST

AMES: Areas of Multiple Environmental Sensitivity

AoS: Appraisal of Sustainability
C&D: Construction and Demolition
CCT: Chesterfield Canal Trust

D2N2: Derby Derbyshire, Nottingham and Nottinghamshire

DWT: Derbyshire Wildlife Trust EMC: East Midlands Councils GI: Green Infrastructure

HBDL: Henry Boot Developments Limited

HIA: Health Impact Assessment

IMD: Infrastructure Maintenance Depot

LDN LNP: Lowland Derbyshire and Nottinghamshire Local Nature

Partnership

LEP: Local Enterprise Partnership LEP: Local Enterprise Partnership

LNR: Local Nature Reserve
LWS: Local Wildlife Site(s)
MML: Midland Main Line,

NCA: National Character Areas
NET: Nottingham Express Transit
PIC: Personal Injury Collisions
pLWS: potential Local Wildlife Site

PRoW: Public Right of Way

RIGS Regionally Important Geological Sites

SCR: Sheffield City Region

SRVCAAP: Staveley and Rother Valley Corridor Area Action Plan

SSSI: Sites of Special Scientific Interest

SYPTE: South Yorkshire Passenger Transport Executive

TPT: Trans Pennine Trail

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## APPENDIX A PLAN SHOWING THE APPROXIMATE ROUTE THROUGH DERBYSHIRE

#### APPENDIX B MAP SHOWING AREAS OF DEPRIVATION

#### APPENDIX C MINERAL DEPOSITS PLAN

### APPENDIX D DETAILS OF MINERAL SITES

### APPENDIX E HERITAGE VISITOR NUMBERS

# APPENDIX F HS2 PUBLIC RIGHTS OF WAY LETTER 8 OCTOBER 2013

#### APPENDIX G LANDSCAPE AREAS

# APPENDIX H MAXIMISING THE ECONOMIC BENEFITS OF THE EAST MIDLANDS HS2 STATION AT TOTON

## APPENDIX I MARKHAM VALE SUMMARY OF IMPACTS FROM HS2

#### APPENDIX J MARKHAM VALE PLAN

### APPENDIX K CHESTERFIELD CANAL AND HS2

## APPENDIX L GREENWAY CROSSINGS & COUNTRYSIDE SITES

# APPENDIX M FEASIBILITY STUDY – EXTENSION OF NET TRAM WEST OF TOTON (EAST MIDLANDS HUB)

# APPENDIX N ECONOMIC IMPACT OF THE INFRASTRUCTURE MAINTENANCE DEPOT AT STAVELEY

## APPENDIX O HS2 DEPOT (STAVELEY) OPTIONS STUDY

# APPENDIX P STUDY IMPACT OF HS2 ON THE A619 CHESTERFIELD – STAVELEY REGENERATION ROUTE

## APPENDIX Q HS2 ENVIRONMENTAL ASSESSMENT MAP OF AREAS

#### APPENDIX R FLOOD RISK TABLE

#### APPENDIX S HS2 DIRECT CONNECTIONS STUDY

# APPENDIX T RAPID HEALTH IMPACT ASSESSMENT OF HS2 INITIAL PREFERRED ROUTE IN EASTERN DERBYSHIRE

#### Government Consultation on HS2 Response from Derbyshire Local Authorities











