High Speed Rail 2 (Phase Two)

in Staffordshire

Response to the Phase Two

Route Consultation

Staffordshire County Council

Revision F

CONTENTS

INTRODUCTION

Of the 95 miles for the Phase Two West Midlands to Manchester route, 33 miles are in Staffordshire, which will have a significant impact on our countryside and communities. There is also a short section of the West Midlands to Leeds route at the very southern tip of Tamworth.

In addition to effective mitigation, we believe removing blight and providing appropriate timely compensation to the communities affected by the proposals should be a primary focus of Government, Department for Transport and HS2 Ltd.

We are aware of the proposals being promoted by other local authorities which entail a change to the initial preferred route as published in January 2013. Any such change has the potential to bring with it further impacts on Staffordshire's environment and communities. We do not intend to respond to these proposals in this document but would expect full community consultation to take place should any of the proposals to radically alter the current published route be given further consideration by the Secretary of State for Transport. This response concentrates on the initial preferred route.

QUESTION ONE

Do you agree or disagree with the Government's proposed route between the West Midlands and Manchester? 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?

Disagree.

Staffordshire is one of a number of counties that make up the central 'cross roads' of Britain, and is consequently very much aware of the significance of the transport network to the well-being of the economy and the people of Staffordshire. Part of this awareness includes the need for the transport networks, primarily road and rail, to work effectively and not suffer from unreliability and congestion. Consequently, efforts to maintain or improve the network in these respects are welcomed. Upgrades to the West Coast Main Line have and will continue to bring benefits in terms of service improvements to various stations/settlements across Staffordshire.

In responding to this question, we do not deny the need for sustainable improvements to the national transport network but, we are of the view that the current High Speed Rail network proposal, intrinsically (by virtue of the essential characteristics and requirements of High Speed Rail) fails to maximise the possible benefits of such improvements across the country. It presents a real risk of concentrating future economic development rather than dispersing it away from London and the south-east. This is exacerbated by the consultation documents referring to "two-thirds of the population of northern England will be within two hours of London". We are concerned that ultimately HS2 may result in higher benefits for London than any of the connected cities.

There is little doubt that the use of the railways by passengers and freight has been increasing over the recent past. Similarly, there can be little to counter the prospect of this increase continuing for some time to come both of its own accord and positively encouraged by the diversion of traffic from less sustainable road and air travel. Improvements in transport and communications over history have undoubtedly had economic benefits for the country, albeit with varying impacts on different regions/areas/places depending on the localities served or ignored/bypassed.

Both policy and technology are working to reduce the need to travel. Technology forms part of the need to travel with recent advances in e-technology including e-conferencing often removing the requirement to travel completely. Businesses are continually exploring options to reduce costs and improve efficiency, and advances in technology are assisting with this. As a consequence of these continuing technological developments, forward projection of travel demand should be approached with caution.

There is much debate around the basis for forecasting future travel demand, particularly over the long term which provides the context for the assessment of the High Speed Rail network. We are concerned that the High Speed Rail proposal and its justification are based on unjustified projections of travel requirements including substantial new demand expected to be generated by

the existence of the high speed service, with over optimistic expectations of modal shift.

The evidence for linking significant economic development with high speed train facilities is inconclusive. A particular set of circumstances would appear to be necessary for significant economic development to take place (well-established or strongly developing service sector with extensive local public transport networks) and most of this development would appear to be simply diverted from other localities rather than totally new. Work undertaken by Atkins for the County Council in 2011 confirmed the above, with a general conclusion that it is difficult to find well-defined empirical and quantified evidence on the impacts of HSR.

Consideration also needs to be given as to how HS2 will restrict future growth within areas that it will pass through, obviously a particular concern for Staffordshire given the length of the line that is expected to run through the county. It appears that the initial preferred route minimises the impact on the larger urban areas in Staffordshire. However, by doing so it should be recognised that by directing the line through rural areas, Staffordshire is potentially losing a significant amount of land that is used for farming and could be used for future employment and housing developments. The line is also likely to prove to be a significant barrier to the future expansion of settlements, employment sites and infrastructure projects, something which will not be fully considered within local plans as this problem may not be fully realised for many decades to come.

A mechanism therefore needs to be put in place to mitigate HS2 restricting future growth by acting as a barrier to the development of land for employment and housing, constraining the expansion of urban settlements and dissuading investment in infrastructure projects. Essentially, we believe that we should not be disadvantaged in promoting future growth within the county due to there being a need to cross the HS2 line. In the future, if a need arises to provide a road crossing over the line, HS2 Ltd should work proactively with the promoter of any scheme and in the interests of economic growth nationally relinquish any claim they may have for an uplift in the value of any land that is opened up for development as a result of the creation of the road link/access road.

Having highlighted the principal areas of concern in relation to the proposed route from West Midlands to Manchester, the following outlines areas of concern within each Parish the proposed route passes through. The following text presents initial mitigation that we expect HS2 Ltd to develop further so as to form the basis for further discussion as the detailed design progresses.

Kings Bromley

The village of Kings Bromley will be impacted by both Phases One and Two of HS2, particularly during construction. Whilst having awareness of the differences in timescales between the two phases, we expect seamless construction between Phases One and Two so as to reduce the impact on the local community.

Some residents and businesses of Kings Bromley have been engaging with HS2 Ltd under the Phase One proposals for almost two years. Whilst the residents are opposed to the proposals, they have invested a huge amount of their own time and effort in trying to shape the project so as to reduce the

impact of the route in this Parish. We expect HS2 Ltd to learn from their engagement experience in Phase One and develop an inclusive engagement programme which provides timely feedback and information.

It should be noted that the proposed route appears to have moved closer to Woodend Common Barn when comparing against the drawings published on 28th January 2013. Further details are required so as to understand why the line of route has moved as this amendment is causing frustration and anxiety amongst the local community

The proposed route passes close to Listed Building clusters at Fradley Junction, Kings Bromley and Pipe Ridware. HS2 Ltd should carefully consider approaches to mitigating the constructional and operational impacts of the route on the local community along with these groups of nationally important buildings and structures.

North of proposed Phase Two junction, the proposed route dissects Fradley Wood, a Biodiversity Alert Site (BAS) which includes the habitat of principal importance Lowland Mixed Deciduous Woodland. Moving northward, the route passes through an agricultural landscape, running through several small copses and dissecting hedgerows.

The route passes close to Kings Bromley within the valley of the River Trent. The Historic Environment Record (HER) identifies considerable archaeological potential within this area, and the proposed route passes through an area of considerable crop mark activity particularly to the north and north-west of Riley Hill. Given the location of the route within the Trent valley at this point, there is the potential for significant prehistoric archaeological remains to be encountered.

We are concerned with the length and height of the proposed viaducts at Bourne Brook and River Trent. The height of these structures will have significant impacts on the local environment and communities. It is expected that detailed design will allow modifications to the current proposals in order to develop a solution which is more environmentally suitable.

Due to the proposed elevated position (between 6 and 8 metres) of the line between Fradley and Handsacre for a distance of around 6km, it generates concerns on the potential for significant noise impacts on the village of Kings Bromley along with smaller communities in Hill Ridware and Pipe Ridware. These impacts have the potential to be exacerbated at Pipe Ridware where the consultation documentation illustrates a maintenance loop. At this stage there is insufficient information to provide meaningful comments on the proposed location and associated infrastructure; as design progresses, detailed dialogue is expected so as to understand the proposals along with the potential impacts to the local community and environment. We expect details to be provided on the type and frequency of vehicles accessing the proposed loop 'site,' as well as the operating hours which would extend to the potential delivery of materials for maintenance of HS2.

Armitage with Handsacre

Continuing on viaduct into the Parish of Armitage with Handsacre over the River Trent and floodplain, the height and length of the viaduct for HS2 will affect character and views within this landscape. This could reduce potential impacts on Trentside Meadows Site of Biological Importance (SBI), dissected by the

route which passes through the most botanically diverse part of the site. This SBI supports habitats of principal importance, is an exemplar of good agricultural management, supports very high quality grassland habitat of principal importance for biodiversity, has been in Environmental Stewardship for at least ten years, and is used for environmental education. The SBI supports several bird species of principal importance, including snipe and barn owl, which are likely to be adversely affected by the scheme.

We consider these features to add amenity and educational value to our countryside and its direct loss, or loss as a result of severance, has the potential to have an impact on the wider community, educational visits and those in the local area. It is expected that HS2 Ltd demonstrate that the special interest of this site has been fully considered and impacts fully mitigated.

Mavesyn Ridware

North of the River Trent floodplain the route passes through several smaller copses, ponds and hedgerows and passes close to Pipe Wood Lane SBI, which covers an important hedgerow which should be protected if the proposed maintenance loop is incorporated into the proposals at this location.

Due to the proposed elevated position (between 2 and 8 metres) of the line, we are concerned on the potential for significant noise impacts on the communities in Hill Ridware and Pipe Ridware. These impacts have the potential to be exacerbated at Pipe Ridware where the consultation documentation illustrates a maintenance loop. At this stage there is insufficient information to provide meaningful comments on the proposed location and associated infrastructure; as design progresses detailed dialogue is expected so as to understand the proposals, along with the potential impacts to the local community and environment.

In order to reduce the impact of HS2 on the local isolated communities in this Parish, we believe the vertical crest shown on the current design (between CH9145.5 and CH10305.9) can be reviewed so as to achieve a lower alignment through this section. Should a lower alignment to current ground level be achievable, it could reduce the need for an embankment at CH9650. It should be noted that this realignment is linked into a lower vertical alignment at Stockwell Heath as explained in the next section.

Colton

The proposed route crosses close to clusters of Listed Buildings at Colton and Blithfield Hall and close to the Blithfield and Admaston Conservation Area. HS2 Ltd should carefully consider approaches to mitigating the constructional and operational impacts of the route on these groups of nationally important buildings and structures.

HS2 Ltd should note that the proposed route crosses through a well preserved historic landscape, identified as having been created as squatter enclosure representing encroachment onto former heathland which was under way by the late 18th century. The character of the extant settlement pattern, and potentially the historic built environment, of Stockwell Heath also reflects its origins as encroachment on the heathland.

North of Colton the route dissects two Biodiversity Alert Sites supporting species-rich hedgerows – habitats of principal importance and likely to be of

high value for foraging bats. The local ecological network will be significantly affected in this location as a result of HS2.

Where the line passes close to Stockwell Heath on an 11.8 metre embankment, we have significant concerns regarding the noise and visual impacts on the communities in Stockwell Heath as well as Colton to the west. The affected area also retains historic field patterns and intimate secluded character, and Planning for Landscape Change[1], prepared to support the Staffordshire and Stoke-on-Trent Joint Local Waste Plan (2010–2026), identifies this area as a high quality landscape.

The embankment (11.8m high) past Stockwell Heath and the associated loss of ancient hedgerows and trees would have a locally major impact on the local landscape. In addition to the resulting impacts of HS2 on the community of Stockwell Heath, the route will also dissect the popular Staffordshire Way which has the potential to impact on its amenity value to the local and wider community.

We also have concerns for the residents of Upper Moreton where HS2 proposes to pass over a small watercourse and floodplain on a 140m long viaduct at a height of 7 metres. In addition to the potential impacts on the local community, the height and length of the viaduct will permanently change the landscape, affecting the wider environment. It should be noted that the viaduct over Moreton Brook does not take the route over Lount Farm SBI and Natural England Grassland Inventory site which supports grassland habitats of principal importance and extreme rarity in the county. It is considered that a minor extension of the viaduct could potentially reduce impacts on these habitats.

As outlined in the section above, the current proposal will have a significant impact on the community and environment at Colton and Stockwell Heath. Subject to geology and ground water levels, we believe the height of the proposed embankment can be lowered as illustrated in Figure 1.1.

While this proposal creates a deep cutting (approximately 20m) at CH10100, an engineered solution would need to be explored so as to balance the lower alignment and land take. In lowering the route this could allow Newlands Lane and Moor Lane to pass over HS2 through realignments acceptable to the highway authority.

[1] Staffordshire and Stoke-on-Trent Joint Waste Local Plan (2010–2026) (Adopted March 2013)

http://www.staffordshire.gov.uk/environment/eLand/planners-developers/landscape/NaturalEnvironmentLandscapeCharacterTypes.aspx

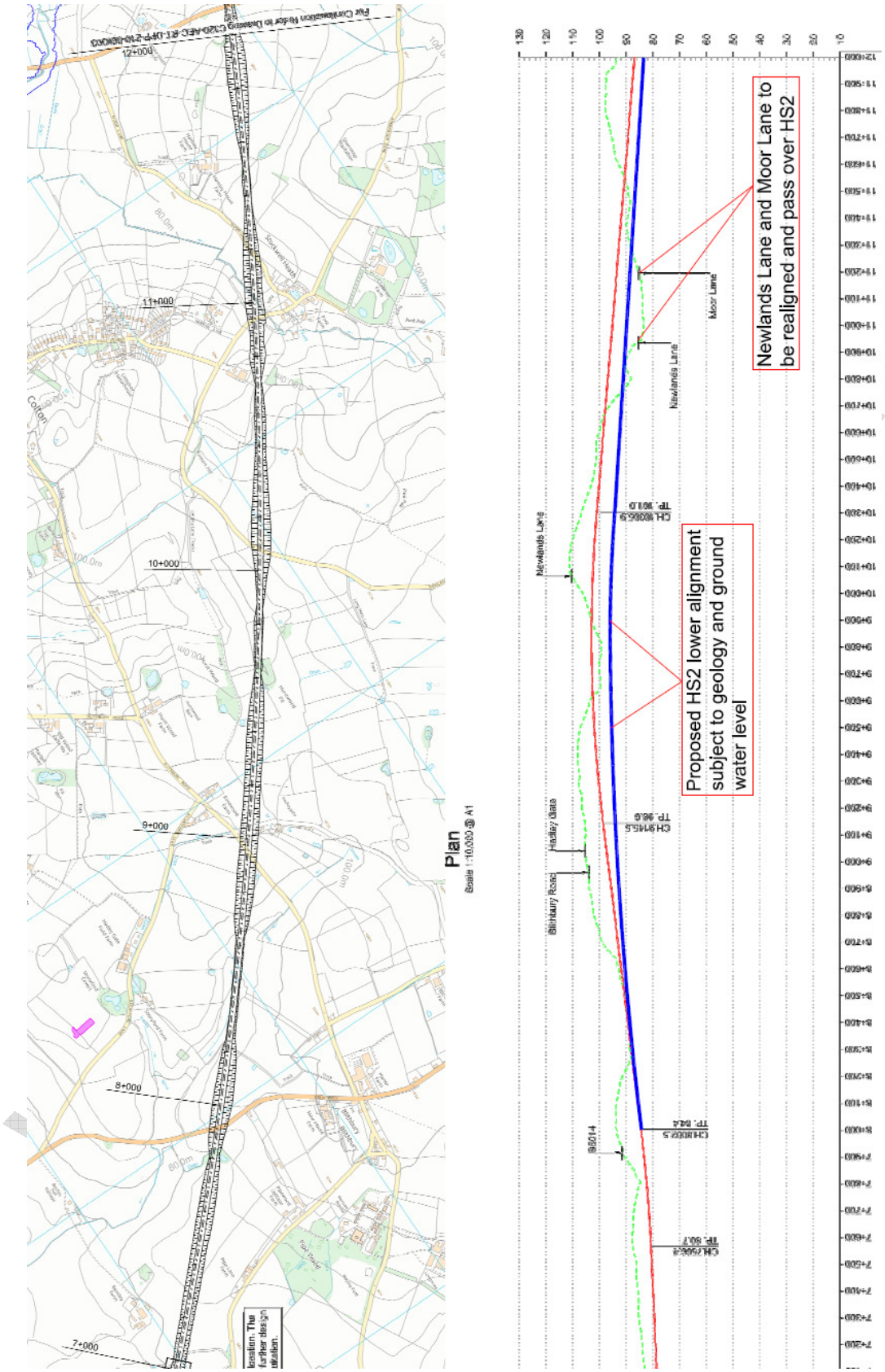


Figure 1.1: HS2 lower alignment at Stockwell Heath

Colwich

The depth of cutting (at its maximum 19m below ground surface) increases the potential for the proposed works to encounter Palaeolithic remains within particularly gravel deposits. The proposed route also crosses the River Trent to the north of Shugborough estate where there is the potential for significant archaeological remains that relate to late prehistoric activity within this area of the river valley.

As the proposed route travels north towards the A51 Stone to Lichfield road, it changes from cutting to embankment followed by viaduct as it crosses both the River Trent and the Trent and Mersey canal. For a distance of some 4km the line is elevated at a height of between 9 and 13 metres. This elevation is a major concern as this is likely to have a significant impact on increased noise levels at Great Haywood and Ingestre. In addition to the potential noise impacts, there are very strong concerns regarding the potentially limited options available to provide effective mitigation to the local communities.

In passing close to Shugborough and Great Haywood, a Conservation Area and Grade I Registered parkland which contains a range of Listed Buildings, it is expected that HS2 Ltd will fully consider approaches to mitigating the constructional and operational impacts of the route on these groups of nationally important buildings and structures. It is expected that these approaches will be developed in consultation with the Local Planning Authority, English Heritage, the National Trust, the County Council and the Staffordshire Parks and Gardens Trust regarding potential impacts to this nationally significant heritage asset.

The proposed route passes through further small woodlands, hedgerows and ponds through this Parish. Passing to the north of Great Haywood, the proposed route affects a site at Great Haywood Marina which has been landscaped for biodiversity and amenity through the development planning process. This will impact on restoration wildflower grasslands, wetlands and water vole habitat. A minor extension of the proposed viaduct over the Trent floodplain could reduce impacts on this site. However, it is expected that through detailed design, the length and height of viaduct over the River Trent floodplain can be developed to provide the optimal environmental and social balance of the proposed route on the surrounding communities and Great Haywood Marina.

Tixall with Ingestre

Moving west, the route passes close to a cluster of Listed Buildings at Ingestre, grouped around a Grade II* Listed Hall. It is expected that HS2 Ltd will carefully consider approaches to mitigating the constructional and operational impacts of the proposed route on these groups of nationally important buildings and structures.

In moving west the line also passes through undesignated woodlands and Ingestre Park Golf Course whose habitat quality is unknown. The line then enters a landscape of small fields and hedgerows with many scattered ponds where great crested newt populations may be affected.

An area around Ingestre is identified in Planning for Landscape Change[1] as being of high quality and highest sensitivity. It is expected that HS2 Ltd in

developing their detailed design will assess the impacts on Ingestre Conservation Area which will inform the development of meaningful mitigation.

HS2 will have a significant impact on Ingestre both during construction and operation of the proposed route. The height of the embankment (12.9m) will have a permanent change on the landscape and will impact on the small communities of Little Ingestre as well as Ingestre. We are concerned about the potential noise impacts HS2 could have on the hamlet. Ingestre is a small hamlet and HS2 poses significant impacts on the tranquillity of the area as well as loss in amenity value as the route cuts through some of Ingestre Park Golf Club. We expect HS2 Ltd to support the club in remaining functional both during construction and operation of HS2 so that this important recreational and employment venue can continue to function upon completion of HS2.

HS2 cuts through Upper Hanyards farmhouse and associated buildings. In addition to dissecting high quality farmland, the loss of this farm will have an impact on our rural economy. We expect HS2 Ltd to support the affected farmer and develop an approach so that viable farmland remains upon completion of the proposed route. This means suitably sized viable areas of land complete with good soil structure and gradient for natural drainage.

Hopton and Coton

The proposed route passes adjacent to the County Show Ground that will see the loss of land and associated infrastructure owned by the Show Ground. To reduce the impact of the route on the County Show Ground, we believe a 600m cut and cover tunnel as shown in Figure 1.2 will allow the venue to remain functional during operation of HS2.

As the proposed route continues towards Hopton, it passes close to the Registered Hopton Heath Battlefield. It is expected that HS2 Ltd will give due consideration to mitigating impacts on this historic site and we expect that the relevant organisations will be consulted in due course. A number of ring ditches and barrows are also recorded in this area suggesting the presence of a Bronze Age burial landscape, and HS2 Ltd should fully consider the potential for further archaeological remains to be present in the area to the north east of Stafford.

At Hopton the proposed line passes through deep cutting and a ‘green’ tunnel. This combination could assist in screening the noise impact on some areas of the village, although there is significant concern that dwellings to the west in Mount Edge would be exposed to increased levels of noise. We expect HS2 Ltd to take into account the cumulative impacts of noise in the area so as to incorporate meaningful mitigation into the proposals.

We have concerns regarding the impacts, including severance, of the dispersed village of Hopton. We expect that the raised tunnel proposed to the south of Hopton will blend into the landscape sensitively.

It is understood that HS2 Ltd has already considered the impacts of the proposed route on the village of Hopton. However, we believe that the proposed cut and cover tunnel needs to be extended so as to further reduce the impacts of the railway on the village. We believe this tunnel should be extended by a further 400m beyond Hopton Lane. In extending the length of the tunnel we believe it will reduce the noise and visual impacts of the railway on the village and contribute to removing community severance.

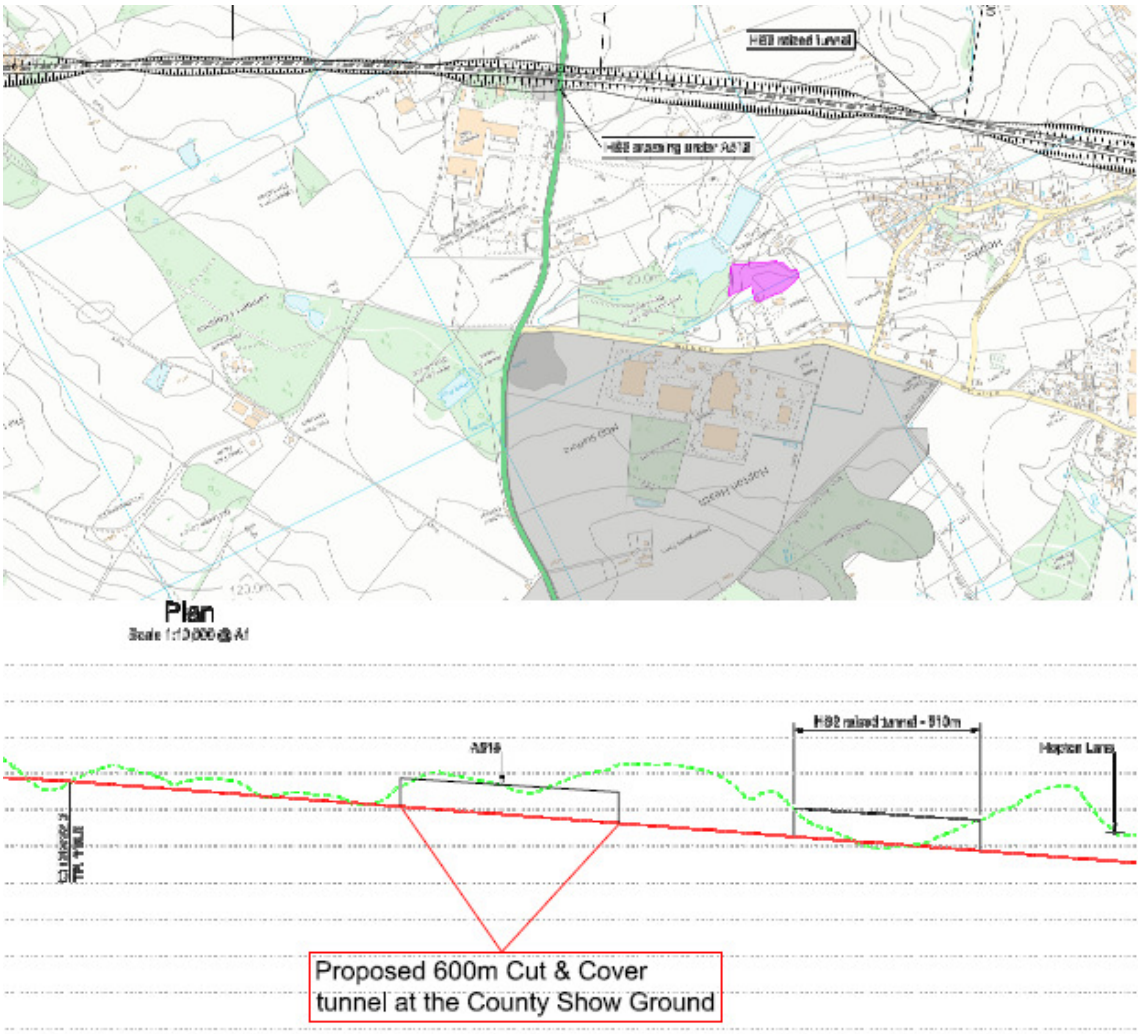


Figure 1.2: Proposed 600m Cut and Cover Tunnel

Marston

The proposed route will have a significant effect on the small rural community of Marston as well as affecting its landscape character and setting resulting in visual impacts. On the approach to Marston the line is on an 8 metre embankment for around 700m which is then followed by a shallow 4 metre cutting for around 900m. At this location the line is broadly parallel to Yarlet Lane and we are concerned that there are a number of dwellings which would experience a significant impact in increased levels of noise that will impact on their tranquillity.

We expect HS2 Ltd to consider lowering the route and remove the vertical curve from CH24725.4 to CH26720. By doing this, and subject to detailed design and consultation, we believe the proposal could reduce the proposed 8m embankment by 5m. Through detailed discussion with the highway authority and the local community, Marston Lane could be realigned to pass over HS2 as a result of lowering the proposed route.

The further loss of high quality farmland will have an impact on our rural economy in this area and HS2 in its current form has the potential to see the loss of two farms. The proposed route also cuts through the County Council's

farmland at Yarlet Bank that will affect the operation of the farms both during construction and operation of the proposed route.

We expect that HS2 Ltd will give full consideration to mitigating the constructional and operational impacts of the route on this small community and agricultural businesses through detailed dialogue.

Stone Rural

The 13.7m high embankment at CH29600 has the potential to impact on local farming as a result of the permanent and temporary land take. HS2 in this Parish passes through two farmhouses and is within 500m of three other farmhouses over a distance of 3.4km. In doing so it also dissects high quality farmland and potentially associated farm infrastructure that will have an impact on our rural economy and employment. We expect HS2 Ltd to provide support to affected land/property owners and tenants to ensure those affected receive fair and timely compensation. We also expect that where land is required on a temporary basis that this land is to be returned to its current owner which is of quality that is suitable for farming. This means suitably sized viable areas of land complete with good soil structure and gradient for natural drainage.

In continuing north, the proposed route passes over the B5026 and West Coast Main Line. HS2 also dissects part of Poolhouse Wood SBI that will affect broadleaved semi-natural woodland while severing the two parts of the SBI.

In developing its design, we expect HS2 Ltd to incorporate the proposed embankments between CH32600 and CH33600 into the existing landscape and we do not expect to provide comments on linear planting along the line of the proposed route. We believe planting and environmental enhancement needs to be linked to existing wooded and hedgerow areas in order to promote ecological connectivity and landscape character.

Swynnerton

After crossing the M6 the proposed line passes through wet grassland and other habitats within Highlow Meadows SBI. It also passes through several ponds and hedgerows while severing a significant woodland network at Swynnerton which is already affected by the M6.

Due to the 14m high embankment to the east of Swynnerton, it could result in residents in properties on the edge of the village being affected by increased noise levels which is a concern to the local authorities and the local community.

The route passes close to a cluster of Listed Buildings at Swynnerton; we expect HS2 Ltd to develop mitigation so as to reduce the constructional and operational impacts of the route on these groups of nationally important buildings and structures.

As shown in Figure 1.3, we believe the proposed route could be lowered by approximately 5m. Together with a combination of vertical realignment of Tittensor Road to pass over HS2, we believe the route could be lowered. In lowering HS2 through this section, we believe this could reduce the visual and noise impacts of the proposed route from the Tittensor Road approach.

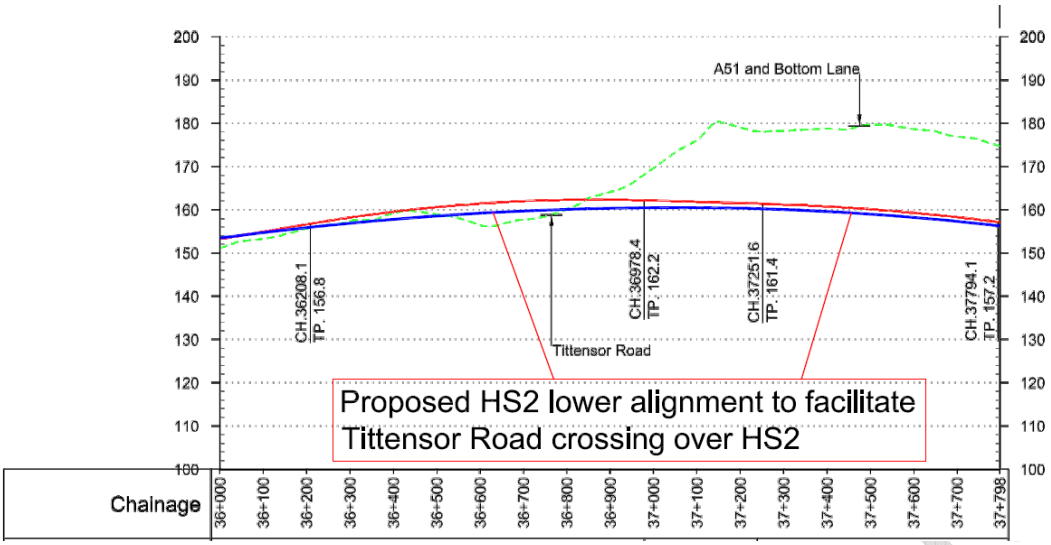


Figure 1.3: Lower Route at Tittensor Road

Before passing under the A51, where small woodlands will be lost, the route passes very close to Closepit Planation SBI which supports broadleaved woodland. We expect HS2 Ltd to avoid the impacts of the railway on Closepit Planation during construction works or any ancillary equipment that may be required to support HS2, e.g. access tracks.

As the line passes to the east of the A51 at Stableford generally in cutting with a short 8 metre high embankment over Dog Lane, we are concerned that there are a number of dwellings to the west of the line at Stableford and east of the A53 which could be affected by increased levels of noise which is a concern.

The proposed route continues to pass through a further woodland network, affecting part of Clifford's Wood SBI whose owner won the Elsie Ashley Trophy, awarded by the County Council for conservation work by farmers, for work to enhance the woodland. The line passes through further small woods before running close to Hatton Common SBI. There are a number of barn owl records in this location; we expect HS2 Ltd to develop meaningful mitigation of the impacts on this Schedule 1 species.

The route passes through areas of high sensitivity (identified in Planning for Landscape Change[1]) north of Swynnerton Heath Farm. The route passes through this area approximately at grade which will result in detrimental impacts to the landscape and local community. We expect HS2 Ltd to develop mitigation measures that will take into account the context of the local landscape character type (Sandstone Hill and Heath subtype Forest). There would be potential for increasing woodland cover and a landscape scale approach should be taken that helps to integrate the linearity of the route into the subtle undulations of the landform.

The proposed route through Swynnerton will have an impact on local farming and our rural economy. We expect HS2 Ltd to engage with local landowners at the earliest opportunity so that meaningful mitigation can be developed which allows affected farms to continue operating during construction and operation of HS2. Subject to each business need, we expect agricultural crossings to be provided and HS2 Ltd to provide support in redefining field boundaries. We also expect HS2 Ltd to reduce the width of the proposed cutting by developing engineered solutions so as to reduce the permanent land take.

In addition to the permanent and semi permanent loss of high-quality farmland, we are concerned that HS2 will impact on the open countryside that will impact on the tranquillity of the area. We expect this loss in tranquillity to be taken into full consideration when developing the design and Environmental Impact Assessment (EIA).

Where the proposed route passes under the junction with the A51 and Bottom Lane, we expect highway alignments that are acceptable to the highway authority but also achieve a balance of reduced additional land take. Through discussion with the Parish Council, land owners and the local community we expect an informed design to be incorporated at this location.

Whitmore

It is expected that detailed floodplain modelling will take place which could permit a lowering of the proposed viaduct over Meece Brook floodplain.

The route passes under the A53 to the east of Baldwin's Gate in cutting before entering a tunnel under Whitmore Heath for 710m. At Whitmore we are concerned about the combined noise impact on the village from trains exiting the tunnel and also from the existing West Coast Main Line to the west.

In an area of high landscape quality it is acknowledged that the Whitmore tunnel could reduce landscape impacts of HS2 in this area. However, we seek to maximise the length of this tunnel and/or the creation of a cut and cover tunnel under Whitmore Wood ancient woodland as shown in Figure 1.5.

The proposed route passes under Whitmore Heath but then travels through Whitmore Wood Ancient Woodland SBI in cutting. We believe continuance of the tunnel would radically reduce habitat and severance effects for this irreplaceable habitat. Despite coniferous planting, the woodland retains ancient woodland species diversity.

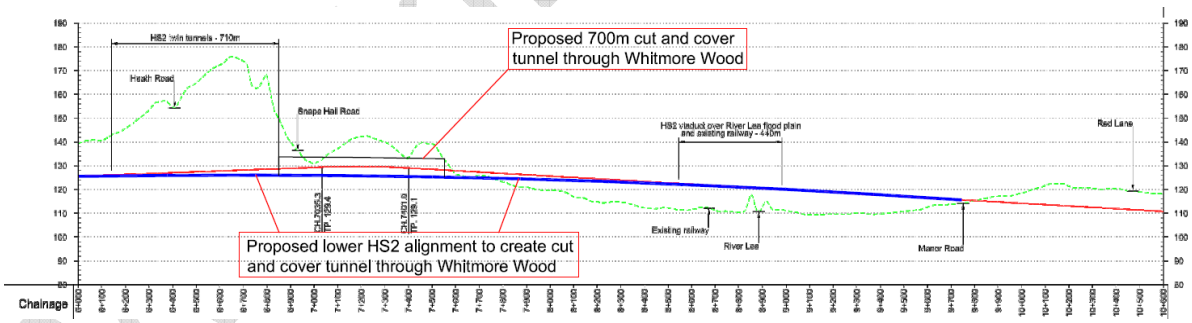


Figure 1.5: Lower alignment, cut and cover tunnel at Whitmore

We believe removing the vertical curve at CH7035 and CH7401 could contribute to lowering the HS2 alignment and facilitate the installation of a 700m cut and cover tunnel, if possible, as an extension to the proposed bored tunnel. Through detailed discussion with the local community, Parish Council and local authorities, we expect a balanced mitigation proposal to be developed which reduces the impact of HS2 on the local community, environment and open countryside. This mitigation proposal could reduce the destruction of the ancient woodland currently proposed by the cutting; in proposing this mitigation option, it is recognised that it will have an impact on the ancient woodland during construction but long term there could be improved habitat connectivity as well as reducing the visual and noise impacts on the local community.

Beyond the tunnelled section and cutting to the north of Whitmore Heath, the line is on embankment followed by viaduct as it crosses both the West Coast Main Line and the disused Silverdale to Madeley railway line. With the line being elevated for a distance of around 1000m, there is concern that a significant number of dwellings to the west at Madeley Park could be adversely affected by noise.

Madeley

After crossing the West Coast Main Line and River Lea on viaduct, the line impacts on species-rich woodland road verges within Manor Road Verges BAS.

The route crosses the A525 at Madeley in cutting before entering a tunnel for 720m. A short section of cutting is followed by a 14 metre high embankment for around 1500m as the route moves northwards into Cheshire. We are concerned about the noise impacts in this area on isolated dwellings to the west and on the village of Wrinehill to the east.

After crossing under the A525, the route runs very close to Barhill Wood Ancient Woodland. Though not designated, this is likely to qualify as a Site of Biological Importance and we expect HS2 Ltd to develop robust mitigation proposals so as to limit the impacts of the route on the local environment.

The route passes close to the east of the scheduled remains of Madeley Moated Manor House. HS2 Ltd should carefully consider approaches to mitigating the constructional and operational impacts of the route on this nationally important heritage asset and should consult with English Heritage at an early stage regarding ways to mitigate construction and particularly operational impacts.

The proposed route also passes close to a cluster of Listed Buildings at Madeley. The proposed tunnel at Madeley will substantially reduce impacts on the historic character of Listed Buildings within the settlement, although HS2 should still consider approaches to mitigating the constructional and operational impacts of the route on these groups of nationally important buildings and structures at the southern end of the tunnel.

We expect HS2 Ltd to develop mitigation which complements the existing landscape and does not create linear screening along the route. Noise and visual mitigation needs to have the right balance so as to reduce the impact of the route on local farming.

QUESTION TWO

Do you agree or disagree with the Government's proposals for:

a. A Manchester station at Manchester Piccadilly?

Notwithstanding our response to question one, we agree with the logic of the Government's proposals for a station at Manchester Piccadilly, subject to the details contained in response to question three being incorporated into the scheme.

If, as suggested, high speed rail is about linking cities together and bridging the north south divide, then a station at Manchester Piccadilly is potentially a key part of the proposed new network. Notwithstanding our objection in principle against HS2, it appears logical to site a station at Manchester Piccadilly as this provides greater connectivity to the wider north west and makes use of existing intermodal public transport networks.

From a Staffordshire perspective, residents and businesses of Staffordshire are unlikely to travel north to make use of the proposed station at Manchester Piccadilly and in fact would predominately use the 'classic' network to access Manchester Piccadilly and the north west. With this in mind, we believe the classic compatible connectivity package, as outlined in response to question three, should be incorporated in the proposals in order to provide Staffordshire's residents and businesses with frequent reliable services to Manchester and beyond.

b. An additional station near Manchester Airport?

Notwithstanding our response to question one, and as above, we agree to the Government's proposals for a station at Manchester Airport, providing the information contained in response to question three is incorporated into the scheme.

If the decision to proceed with HS2 is made, then it would appear logical to link up the UK's major airports into the proposed high speed network. Staffordshire supports the development of regional airports.

From Staffordshire, the rail connectivity to Manchester Airport is currently very poor. At best the rail journey from Stafford to Manchester Airport would take approximately 1hr 30mins – which requires a change at Manchester Piccadilly or Crewe. If the proposals as outlined in our response to question three are incorporated into the scheme, we believe a classic compatible service serving Birmingham Interchange and Manchester Airport provide some of Staffordshire's residents and businesses with improved access to Manchester Airport.

It is considered a reasonable assumption that those arriving at Manchester Airport will be either living or visiting north Staffordshire conurbation and the north west and would have deliberately chosen to fly to that airport for proximity of their final destination. It seems unlikely that significant numbers of inbound passengers would fly into Manchester Airport then make use of the high speed network to travel to Birmingham or London. Having considered the costs and travel time, it is highly likely that passengers would fly direct to the areas closest to their final destination – and vice versa.

It is expected that, as a result of released capacity and the introduction of classic compatible rail services, access to Manchester Airport and beyond from Staffordshire can be improved. This would support Staffordshire's ability to attract inward investment, create employment and economic prosperity. Improved rail access from Staffordshire to Manchester Airport also links into their future aspiration of increasing its rail modal share of arrival and departure journeys[2], i.e. a greater number of passengers using rail services to access the airport.

[2] Manchester Airport, Ground Transport Plan: Part of the Manchester Airport Master Plan to 2030.

http://www.manchesterairport.co.uk/manweb.nsf/AttachmentsByTitle/TransportStrategy/$FILE/Grndtrans-screen.pdf

QUESTION THREE

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

In considering the consultation information, and having an awareness of the aspirations of other organisations in Staffordshire, we believe that there should be no additional stations on the western leg between the West Midlands and Manchester. On reviewing the proposed route, we believe there appears to be no clear location that could lend itself to a site suitable for an intermediate station. Whilst no detailed analysis has been carried out, this is based on the location of the proposed route in relation to existing road and intermodal transport networks as well as the proximity of Stafford and Crewe being served by a 'classic compatible' service. However, if HS2 is to be imposed on us we do ask for the following:

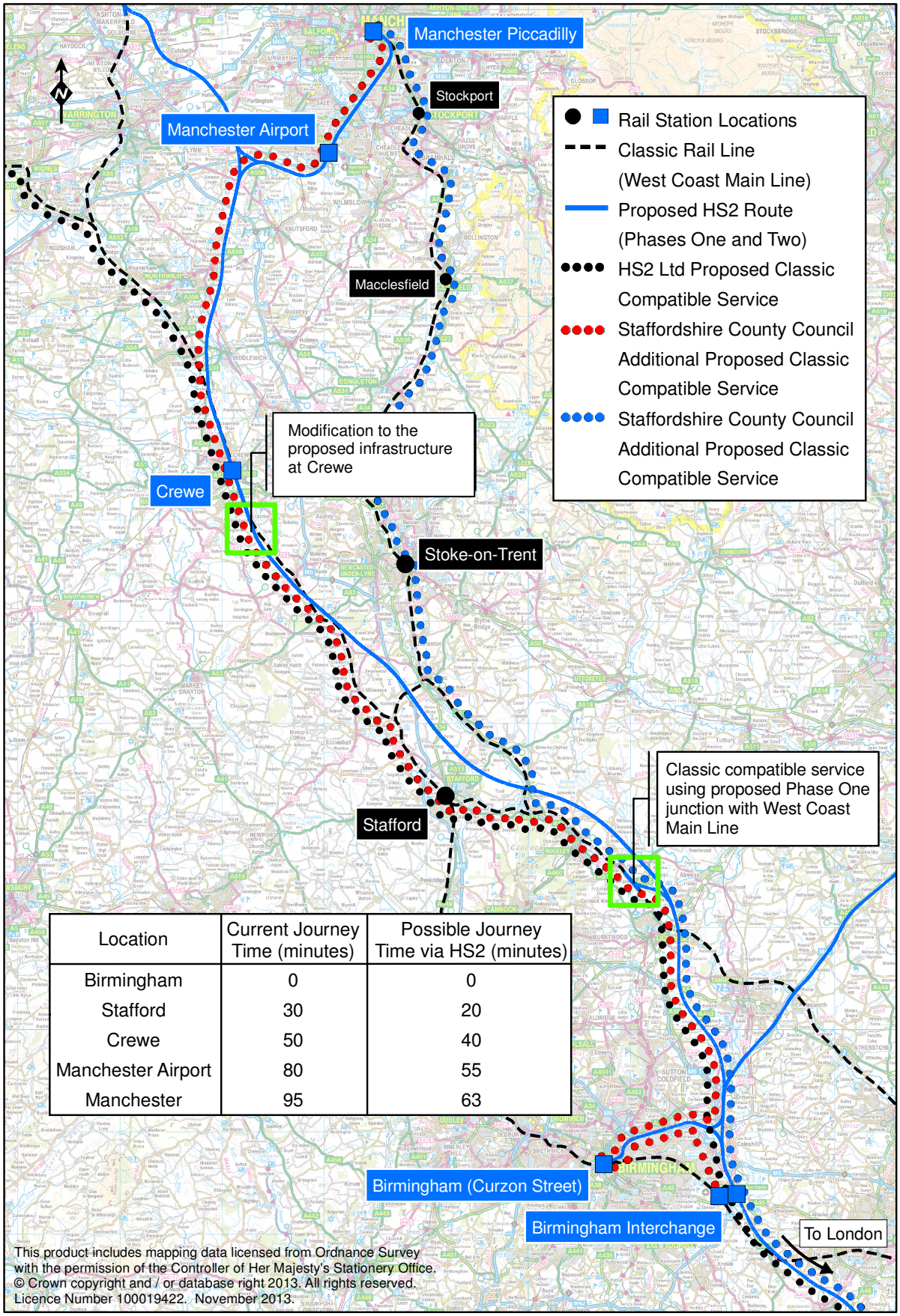
- A package of intermodal connectivity measures to provide Staffordshire's residents and businesses with improved access to the proposed high speed rail network
- Modifications to the proposed infrastructure at Crewe to maximise connectivity between classic compatible and high speed services
- Greater use of classic compatible rail services that can serve Staffordshire stations on the West Coast Main Line to provide improved rail connectivity to both the north and south

The rationale behind the above 'asks' are outlined in the following text.

Modifications to the proposed infrastructure at Crewe

As shown in Figure 3.1, we believe that through making use of the proposed junction at Handsacre under the Phase One proposals, both Stafford and Stoke-on-Trent could make use of the existing and proposed infrastructure to provide improved rail services than those currently available. Through modifications to the proposed HS2 infrastructure at Crewe, there is potential for classic compatible trains to use the proposed HS2 route north of Crewe to serve Manchester Airport and Manchester Piccadilly as illustrated in Table 3.2, without further impacting on Staffordshire. Modifications to the proposed infrastructure at Crewe also provide the potential for other stations on the West Coast Main Line (such as Lichfield Trent Valley and Tamworth) to access the proposed high speed rail network north of Crewe. We believe modifications to the proposed infrastructure at Crewe could provide improved integration of the HS2 network and the existing classic rail network should the scheme go ahead.

In order for north Staffordshire to compete on a national level, it is important that the current rail services from Stoke-on-Trent to London do not diminish from 29 to 19 as suggested in the current documentation. HS2 is already having a significant impact on Staffordshire and we need to ensure our existing good connectivity to London is maintained should the scheme go ahead.



Location	Current Journey Time (minutes)	Possible Journey Time via HS2 (minutes)
Birmingham	0	0
Stafford	30	20
Crewe	50	40
Manchester Airport	80	55
Manchester	95	63

Figure 3.1: Proposed classic compatible rail services utilising existing rail infrastructure and the proposed HS2 route

Table 3.3 illustrates a possible service pattern that provides Staffordshire's residents and businesses with the best possible opportunity to gain access to the proposed high speed passenger network. It should be noted that both Tables 3.2 and 3.3 suggest possible service patterns and are subject to further detailed analysis to determine frequency in addition to other service patterns and freight movements as a result of any released capacity.

In addition to modifications to the proposed infrastructure at Crewe, we believe there should be a package of intermodal connectivity schemes incorporated into the proposals. A package of intermodal connectivity measures that would be of interest to Staffordshire could include:

- Road improvements to provide improved access to Crewe
- Rail and bus service enhancements from Stoke-on-Trent and Newcastle-under-Lyme to Crewe
- Appropriate scheduling of high speed/classic compatible rail services to minimise interchange time at Crewe and other rail stations

If modifications to the proposed infrastructure at Crewe are considered along with a package of intermodal connectivity schemes, we believe it could provide some of Staffordshire's residents and businesses with a choice of rail services along with the local authority's ability to attract further inward investment.

HS2 Ltd proposed service to Liverpool Lime Street					
Service Type	**Serving the following suggested stations**				
Classic compatible service - London to Liverpool Lime Street	London Euston	Birmingham Interchange	Stafford	Runcorn	Liverpool Lime Street

Table 3.1: HS2 proposed classic compatible service through Stafford utilising existing and proposed HS2 infrastructure

Modifications to the proposed junction south of Crewe						
Service Type	**Serving the following suggested stations**					
Classic compatible service - Airport Express	Birmingham Interchange	Birmingham Curzon Street	Stafford	Crewe	Manchester Airport	Manchester Piccadilly

Table 3.2: Suggested classic compatible service through modifications to the proposed junction at Crewe

Stoke on Trent service utilising proposed junction at Handsacre						
Service Type	**Serving the following suggested stations**					
Classic compatible service - London to Manchester	London Euston	Birmingham Interchange	Stoke-on-Trent	Macclesfield	Stockport	Manchester Piccadilly

Table 3.3: Suggested classic compatible service through Stoke-on-Trent services utilising existing and proposed HS2 infrastructure

Greater use of classic compatible rail services

We believe that Staffordshire's prosperity is better served through maintaining and maximising our existing regular and reliable rail services currently operating on the West Coast Main Line. While recognising that Government sees HS2 as a project of national importance, and notwithstanding our objection in principle to the proposals, we believe that should HS2 become operational Staffordshire should seek to maximise opportunities for classic compatible services using a combination of the existing West Coast Main Line and the proposed HS2 infrastructure. We believe the network of classic compatible services serving Staffordshire could operate as outlined in Tables 3.2 and 3.3 in addition to the proposed Liverpool Lime Street classic compatible service as outlined in Table 3.1.

With one of the principal objectives of HS2 providing increased capacity on the classic rail network, we believe that Staffordshire's intermodal connectivity to the rest of the UK should be improved. Drawing on the types of rail service currently operating on High Speed 1 (HS1), we believe that there is the potential for a network of classic compatible services that could operate from stations such as Stafford and Stoke-on-Trent; while rail stations in Lichfield and Tamworth could utilise released capacity for improved rail services to both Manchester and London.

QUESTION FOUR

Do you agree with the Government's proposed route between West Midlands and Leeds? This includes the proposed 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?

Disagree for the same reasons as outlined in response to question one.

Whilst recognising and welcoming that the proposed route is actually only in Staffordshire for a very short distance and therefore has a limited impact on Staffordshire's communities and environment, it does run alongside the county boundary and has potential impacts on the local landscape, a loss in amenity and more significantly the local economy.

We are concerned that the major changes to the M42/A5 junction will have an economic impact on Centurion Park during construction. The extensive highway remodelling works to accommodate the proposed route will have a negative impact on the efficiency of the network, resulting in delays. Such delay is expected to last for some time during construction. The economic impact locally appears to be exacerbated through the loss of the service area and other employment venues. Environmentally, the realignment may also affect the Kettle Brook Biodiversity Alert Site (BAS) and Local Nature Reserve, declared by Tamworth Borough Council. This is not acknowledged in the Sustainability Statement.

QUESTION FIVE

Do you agree or disagree with the Government's proposals for:

c. A Leeds station at Leeds New Lane?

Notwithstanding our response to question one, we agree to the Government's proposals for a station at Leeds New Lane. If, as suggested, high speed rail is about linking cities together and bridging the north south divide, then a station in Leeds is a key part of the proposed network.

Drawing on our response to question three, a proposed station at Leeds New Lane has the potential to provide Staffordshire's residents and businesses with improved access to Leeds by making use of the proposed Birmingham Interchange Station. However, it is expected that the timetabling of future high speed rail services will reduce interchange waiting times.

d. A South Yorkshire station to be located at Sheffield Meadowhall?

Notwithstanding our response to question one, we agree to the Government's proposals for a station at Sheffield Meadowhall. If, as suggested, high speed rail is about linking cities together and bridging the north south divide, then a station in Sheffield Meadowhall is a key part of the proposed network.

Drawing on our response to question three, a proposed station at Sheffield Meadowhall has the potential to provide Staffordshire's residents and businesses with improved rail access to Sheffield by making use of the proposed Birmingham Interchange Station. However, it is expected that the timetabling of future high speed rail services will reduce interchange waiting times. We also expect clear and well planned inter-modal connectivity packages to be developed to allow a continuation of journeys into Sheffield and beyond.

e. An East Midlands station to be located at Toton?

Notwithstanding our response to question one, we agree to the Government's proposals for a station at Toton subject to the content of question three being incorporated into the scheme. Providing a network of classic compatible rail services provides Staffordshire's residents and businesses with the ability to access Derby and Nottingham with improved rail services. As outlined above, to access the eastern leg of HS2, Staffordshire's residents and businesses will have to change trains at Birmingham Interchange. It is expected that the timetabling of future high speed rail services will reduce interchange waiting times.

In addition to the proposed classic compatible services as outlined in question three, HS2 Ltd should explore opportunities for improved intermodal services, particularly from east Staffordshire to Derby, Toton and Nottingham. Together with the opportunity for improved intermodal connectivity to the aforementioned cities, we would support the need for improved infrastructure to connect to the proposed HS2 station, particularly the development of the A50 given the potential increased demand on this road from the HS2 development and other known potential developments along this corridor.

QUESTION SIX

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

If the decision to proceed with HS2 is made, then it would appear logical to link up the UK's major airports into the proposed high speed rail network. Staffordshire supports the development of regional airports as a method of attracting inward investment. We believe where there is potential for connecting HS2 to regional airports, it could present advantages in terms of increased air capacity and rebalancing national infrastructure investment across the region.

Despite our objection in principle to HS2, we believe an additional station in the vicinity of East Midlands Airport could be incorporated in the scheme. Through the development of classic compatible rail services, and change at Birmingham Interchange, a station in the vicinity of East Midlands Airport has the potential to provide improved rail access for Staffordshire's residents and businesses to this airport. It is expected that the timetabling of future high speed rail services will reduce waiting times at Birmingham Interchange to provide a viable alternative to the transport network currently available.

As illustrated in Figure 8.1, we believe there is potential to improve classic rail services along the north Staffordshire line between Crewe and Derby. Together with upgrades to existing infrastructure, intermodal connectivity improvements with effective timetabling to reduce interchange times are also required from Derby to East Midlands Airport and the suggested additional HS2 station.

Together with the above, an additional interchange station in the vicinity of East Midlands Airport could provide an opportunity for Staffordshire's residents and businesses with access to the proposed high speed passenger network.

If the Secretary of State is minded to incorporate an additional station in the vicinity of East Midlands Airport, we would expect HS2 Ltd and the Department for Transport to develop associated infrastructure to provide intermodal access to the station which could comprise:

- Improved bus services from east Staffordshire
- Road access improvements particularly along the A50
- Intermodal connectivity improvements from Derby to Toton and the suggested station at East Midlands Airport
- Improvements to the classic rail network (which includes effective timetabling) to enable rail journeys from Staffordshire to Long Eaton and East Midlands Parkway with improved connections from those stations to East Midlands Airport.

QUESTION SEVEN

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.

Employment and Housing

HS2 will dissect many farms which has the potential to impact on our rural economy and these will need to be carefully mitigated. We believe there should be opportunities to capture the indirect economic benefits of HS2 during construction. The creation of links to Staffordshire's supply chain and workforce needs to result in the training and development of the local workforce.

There is also potential for wider economic benefits to be obtained in linking the operation and maintenance of a high speed line through the county. We expect detailed dialogue with the Department for Transport and HS2 Ltd so as to further understand how Staffordshire could benefit from wider economic benefits.

Property and Community Integrity

HS2 has the potential to displace home-owners and tenants, and could see the loss of some community assets – particularly the loss of open countryside. HS2 dissects farmland and associated infrastructure that will have an impact on our rural economy. It is expected that this loss and impact will be detailed within the formal Environmental Statement (ES).

The impacts of HS2 on property and affected communities are likely to be significant, not just during operation but also through many years of construction. It is expected that the formal ES will detail these impacts and the ways in which it will be avoided or reduced.

Whilst the introduction of the Exceptional Hardship Scheme is welcomed, this appears to be doing very little for property owners who are blighted by the Phase Two route since its announcement. Experience of Phase One has shown the stress and strain imposed on individuals and small communities who are impacted by the proposals, and we expect the formal compensation scheme to become operational at the earliest opportunity.

Access

The impact on Staffordshire's road network is likely to be felt most during construction, with delays caused by constructing road diversions and increased construction traffic on local roads. We expect HS2 Ltd, in developing its assessment of the impacts, to be in detailed dialogue with the local authorities so that these impacts are reduced and eliminated where possible.

To provide economic prosperity and create employment, it is important that Staffordshire's residents and businesses can utilise the highway network with little delay as a result of increased HS2 related traffic during construction.

Detailed discussion with the local authority in relation to public rights of way is welcomed but it is requested that HS2 Ltd discuss impacts on public rights of way with the local access forum. Experience to date indicates that HS2 Ltd is primarily concerned with perceived important routes rather than local ones. We

do not consider this an acceptable approach or methodology and request that all public rights of way are included in the desktop and field surveys.

Noise and Vibration

We expect HS2 to fully engage with the affected local authorities on all noise and vibration issues and to provide appropriate technical information as the route design is developed.

HS2's approach to Phase Two appraisal is to follow on from the methodology developed for Phase One. The County Council and Lichfield District Council have the benefit of working as part of the Planning Forum Acoustics sub-group for Phase One and have had the opportunity to examine the noise methodology and associated matters such as the Code of Construction Practice. The outcome of the liaison process is an action tracker of issues raised and a register of candidate issues where local authorities have fundamental concerns about the noise appraisal methodology. We are concerned that the issues raised and logged with HS2 Ltd still remain outstanding and we seek assurances that these will be fully addressed and resolved before the noise appraisal work commences for Phase Two.

We seek to ensure that HS2 Ltd develops the highest level of mitigation to reduce the impact where increases in noise are identified in the appraisal process. It is vitally important that the whole community is included in the process and that all dwellings subjected to noise impact will benefit from mitigation measures and not just at locations where there are clusters of properties.

We also seek assurances that detailed baseline noise surveys are carried out and that the general level of 45 dB LAeq, 18 hr as given in the Sustainability Statement is not used in the appraisal process.

Air Quality

We are extremely concerned with the increased levels of emissions and pollutants associated with construction activities, equipment and road traffic. Construction activities will generate dust and emissions from construction traffic which could have an impact on human and sensitive receptors as well as ecological receptors.

Whilst mechanisms to control these potential impacts would be set out in and rigorously applied through the Code of Construction Practice (CoCP), we expect the CoCP to have suitable control measures in place so as to monitor and review the effectiveness of those measures.

Health, Well-being and Equality

There appears to be little detail provided on the negative health impacts along the Phase Two route in Staffordshire. It is expected that details of potential negative impacts relating to displacement of employment, noise and demolition of housing and loss of community amenity will be included in a future health impact assessment. It is expected that this will include the effects caused during construction.

The loss of community facilities can have an impact not only on those most deprived but on those that are house-bound, less mobile or older, particularly in rural areas.

There needs to be recognition of the emotional attachment that can be attached to a home, particularly if an individual has lived there a long time or it is near family and friends. The impact from severance from that home and the community should not be under-estimated. Moving away or being forced to leave your home can also lead to depression, not just stress and anxiety as stated, affecting the mental health of those being displaced. This negative impact on mental health will lead to increased health and social care costs. Any replacement housing should be of the same standard and offer the same or higher standard of living for those moving.

Landscape and Visual

The Sustainability Statement refers to Natural England National Character Area Profiles and correctly identifies that these are being updated. Many of these are now available and it would be expected that these will be used to inform assessment and mitigation. Planning for Landscape Change – Supplementary Planning Guidance to the Staffordshire and Stoke-on-Trent Structure Plan, 1996-2011 is also under review. The Landscape and Visual Impact Assessment will be expected to refer to Planning for Landscape Change or its successor document when describing landscape character and incorporate current/emerging guidance.

Cultural Heritage

One of the principal concerns within the HS2 Phase Two Appraisal of Sustainability lies within the Landscape, Townscape and Visual (LTV) technical report. The Built Heritage Technical Report correctly considers the broad aspect of the built heritage while the Archaeology technical report identifies Scheduled Monuments and Registered Battlefields clearly stating that undesignated below ground remains will not be considered at this stage. Throughout the Archaeology report and the Landscape, Townscape and Visual report there is no clear indication where the assessment of historic landscape character lies.

It is therefore advised that the historic landscape character (HLC) should be considered under both the Cultural Heritage report and the Landscape, Townscape and Visual technical report. The HLC project has identified the historic components of the landscape which informs an understanding of the processes that have affected the way the landscape looks today. Consequently, the HLC provides a context to the historic and archaeological data contained with the Historic Environment Record (HER), through an understanding of the process of landscape change. As part of the landscape assessment, the HLC provides, at the very least baseline evidence, for an understanding of historic development as well as the recognition of continuity and survival of extant historic fabric and how this contributes to current landscape character.

It is concerning that the LTV report identifies Swynnerton Park (HSM03: Marston to Swynnerton) as one area of woodland which borders the parkland but makes little mention of the parkland character itself. In a similar vein, the study does not consider the Grade I Registered landscape park at Shugborough which lies less than 1km to the south of the proposed route. This is a nationally

important landscape complete with a Grade I mansion house and a range of eighteenth century garden monuments and as such must be considered in such a preliminary landscape study. Again, the Built Heritage report does consider the Registered Park but there must be crossover between these disciplines.

Biodiversity and wildlife

The Sustainability Summary lacks consideration of sites designated for county importance which are identified as being of fundamental importance for biodiversity conservation by the Natural Environment White Paper. There is no reference in the Statement to information obtained from local records centres, including Staffordshire Ecological Record that includes that information.

The loss of ancient semi natural woodlands should be avoided as removal of this precious asset cannot be mitigated against as the soils and species composition and maturity cannot be replaced. However, in developing mitigation proposals we would expect HS2 Ltd to incorporate the optimal balance of social and environmental cost.

The loss of ancient or veteran trees, which are acknowledged in the National Planning Policy Framework (NPPF) as being of "exceptional value for wildlife, in the landscape, or culturally" has not been included for assessment. Presence of these valuable trees needs to be recorded as part of the survey data collection.

It is expected, that as a major development, HS2 Ltd will carry out a Tree Survey which records the trees affected by development, in order to offer suitable mitigation planting options, or consider the potential off site mitigation planting that will be required.

We understand that HS2 Ltd is in dialogue with the Community Forest groups to see if suitable sites can be found for mitigation planting. Further information on this and the potential community benefits should be collated.

Water Resources and Flood Risk

The introduction states that this report places emphasis on the key impacts only. Whilst this may be necessary at the early stages, there is no mention of surface water flooding or its mitigation throughout Appendix E5, not even in any 'Exclusions and Assumptions' paragraphs.

The Environment Agency estimated that two thirds of the flooding in summer 2007 was due to surface water flooding – more recent events since, in particular the flooding in 2012, followed a similar pattern.

In order to ensure that surface water is managed effectively, that existing surface water flooding issues are not exacerbated and that new surface water flooding issues are not created, the Council expects above surface sustainable drainage to be utilised. If sustainable drainage systems are to be utilised, we expect an acceptable maintenance regime and funding (to the operator of HS2) to be secured to ensure its long-term effectiveness.

We expect that HS2 Ltd will engage with Staffordshire County Council as Lead Local Flood Authority (LLFA) in the same way as it engages with the Environment Agency, and non-main rivers will be afforded the same consideration, both in terms of flooding and ecology, as main rivers.

As part of the detailed Flood Risk Assessment (FRA), it is expected that all sources of flood risk are included and considered rather than just the fluvial risks. Where local communities or authorities have highlighted known flooding issues along the route, or where the route crosses a watercourse (including ordinary watercourses), these should also be considered in the FRA, detailing whether there are any existing issues on the watercourse, and how the construction will affect this.

It is the Council's expectation, that as part of the detailed design stage, full hydrological and hydraulic models are created and shared, not only to include fluvial flooding, but also considering surface water, ground water, potential reservoir inundation and possible flooding from canals being breached.

It is essential that all bridges and other structures associated with HS2 Phase Two (including temporary works) crossing watercourses are subject to Flood Defence Consent from the Environment Agency (where crossing a main river) and Staffordshire County Council (where crossing an ordinary watercourse), so that the risk of exacerbating fluvial flooding is avoided.

The screening of viaduct crossings has been undertaken with reference to Flood Zone 2. Flood Zones only show flood risk in catchments greater than 3km^2. Surface water flooding and fluvial flooding can also occur on catchments smaller than 3km^2.

It is expected that in the next iteration, crossings are considered with reference to the 1 in 200 year shallow Flood Map for Surface Water layer, as well as Flood Zone 2.

Land Use Resources

HS2 Phase Two will see the loss of high quality agricultural land that will dissect farms. That could leave some farmers with land that is no longer viable to farm with resultant impact on their business. This will need to be carefully considered by HS2 Ltd and we expect appropriate mitigation to be provided in order to retain suitable farm holdings. As well as farmland on the permanent way of the HS2 route, further farmland will be lost during construction, for example for worksites and the construction of embankments and other development.

Extensive earthmoving operations associated with the proposals are likely to result in risk of damage to soil quality and structure across the project area which will take years to remedy. It is expected that HS2 Ltd will incorporate mature landscaping features in order to provide the maximum opportunity of its intended purpose from the start.

Excavated Material and Waste Production

The construction of HS2 will generate large volumes of excavated material. We understand that some could be used for suitable back fill and mitigation earthworks but we are concerned that the remaining material will be transported for disposal. The proposal will also have an impact on underlying mineral resources and generate demand for minerals, particularly aggregate minerals.

Details should be provided regarding the amount of waste requiring disposal off site so that options for disposal can be assessed. Whilst it is indicated that 16.7 million cubic metres of excavated material will result from constructing the

western leg of the railway, no indication is given as to how much material will be used within the construction scheme. In relation to this issue, there should be consideration of local planning policies 1.1, 1.2, 1.3, 1.4 and 1.5 of the Staffordshire and Stoke-on-Trent Joint Waste Local Plan.

Details indicate a requirement for 3.1 million tonnes of concrete on the western leg and 3.6 million tonnes of concrete on the eastern leg. This will generate extra requirements on the need for aggregates and in particular place demands on those quarries supplying plant that manufacture concrete and concrete products. In addition, in spite of the intention to re-use excavated materials, there may be sections of the proposed scheme where there is a need to supply fill material. Locations for borrow pits should be identified at the earliest opportunity. With regard to saved policies 51 and 52 of the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994–2006 early discussion with the local planning authority is encouraged where there is a need for borrow pits/ disposal.

Proposals to re-use and recycle materials are anticipated but it will be important to identify suitable sites along the project area where this type of waste treatment and stockpiling of materials can be acceptably undertaken. In relation to this issue, there should be consideration of local planning policies 3.3, 3.4, 4.1 and 4.2 of the Staffordshire and Stoke-on-Trent Joint Waste Local Plan.

No existing permitted quarries within Staffordshire will be affected but sections of the western leg will affect land with sand and gravel resources. In particular, there are river gravels around Kings Bromley; bedrock deposits around Hopton and Swynnerton; and glacial deposits at Madeley. The proposed route, therefore, would affect areas where there are potentially valuable sand and gravel resources.

It is expected that opportunities to use inert spoil to restore quarries should be investigated. Opportunities for disposal in Staffordshire quarries may arise in association with construction works for the eastern leg as well as the western leg.

With regard to policy 1.1 of the Waste Local Plan and saved policy 5 of the Minerals Local Plan, opportunities for the use of aggregate minerals excavated as part of the construction scheme should be exploited particularly where aggregate minerals can be processed to manufacture concrete.

With regard to policy 1.2 of the Waste Local Plan, opportunities should be undertaken to use alternative aggregates, e.g. recycled construction wastes from the construction area and those generated in the local area.

QUESTION EIGHT

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

It is very important to Staffordshire's residents and businesses that there is no reduction in the existing level of rail services; we believe these should be maintained and improved wherever possible. The Network Rail *Better Connections: Options for the integration of High Speed 2*[3] document already recognises that stakeholders do not wish to see existing services being diverted with extended journey times to the detriment of existing passengers, which is a view we share.

Staffordshire County Council has recently undertaken a rail survey questionnaire to inform its emerging Rail Strategy; of the 428 responses received, the key themes emerging from the comments received in relation to released capacity include:

- Improved local rail services with the West Midlands
- Increased direct rail services from a greater range of destinations to Stafford and Crewe – which will be served by a classic compatible service under the current proposals
- Improved services at evenings and weekends including higher frequencies and longer operating days
- Good interchange links to and from the proposed HS2 hub stations
- Improved rail links to airports including Birmingham, Manchester, East Midlands, Stansted, Luton and Gatwick

At the time of writing, the above data is emerging and will be analysed further to understand the long-term aspirations of Staffordshire's rail connectivity. However, we believe the above summary provides early thought which can be used to develop informed rail use planning.

As illustrated in figure 8.1 Staffordshire already has a network of classic compatible rail infrastructure. If HS2 is to become operational we believe any released capacity on the classic rail network should seek to provide improved rail links from the towns in which the classic rail station serves to regional airports and the proposed high speed network. This should be accompanied by well-planned intermodal connectivity schemes to facilitate efficient and reliable end to end journey's.

We are aware that Network Rail is currently engaged in a study looking at options for the integration of High Speed 2 with the existing network, and has held a number of stakeholder workshops to look at how the capacity released by HS2 could be used, for services on the West Coast Main Line, East Coast Main Line (ECML) and Midland Main Line (MML). A number of rail connectivity gaps have been highlighted to Network Rail which could improve Staffordshire's rail connectivity, and it is encouraging to note that a number of these have been included within the 'Better Connections' document. We believe the aforementioned document includes new direct services from Lichfield to the East Midlands, and improves the connectivity from Staffordshire to the East Midlands.

[3] Better Connections: Options for the integration of High Speed 2. Network Rail, July 2013

Faster services between Birmingham and Nottingham are also highlighted which could provide improved rail connectivity for Tamworth and Burton-on-Trent. Subject to journey times, this is something which is welcomed.

As outlined in response to question three, if the decision to proceed with HS2 is made we believe having the existing national rail network integrated with the proposed HS2 network is important. If HS2 becomes operational, it is important that all HS2 stations, whether served by a classic compatible or dedicated high speed services, are better connected wherever possible.

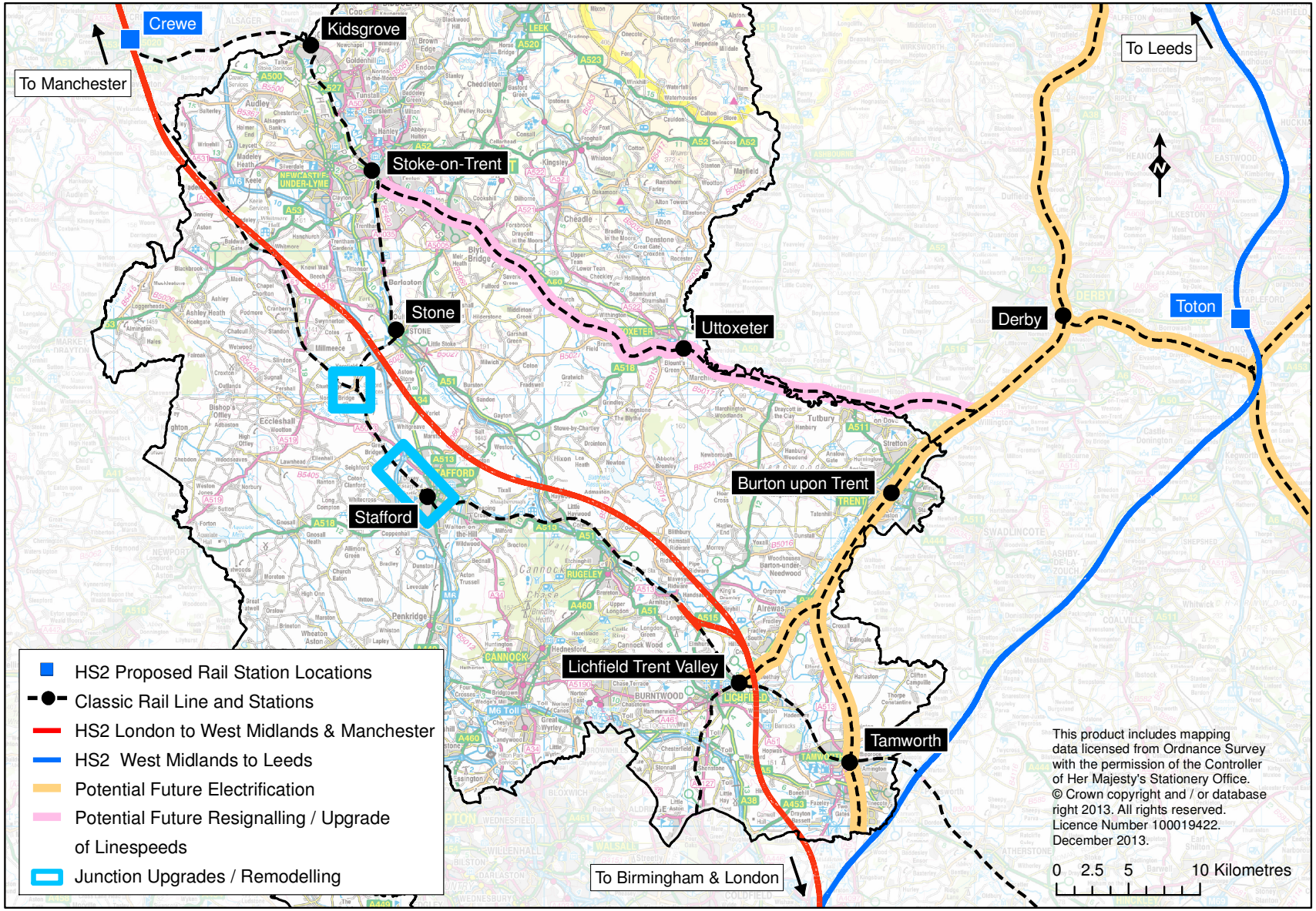


Figure 8.1: Suggested improvements to the classic rail network

QUESTION NINE

Please let us know your comments on the introduction of other utilities along the proposed Phase Two line of route

Staffordshire's landscape is marked by a range of utility equipment both above and below ground. It would appear logical for Government to think about the inclusion of utility apparatus along the proposed Phase Two line of route to further reduce the impact of future utility equipment on our landscape.

We expect Government and the Department for Transport to consult with the relevant utility companies so as to develop an understanding of their long-term aspirations and planning. This joined up approach would ensure an opportunity is not missed and potentially reduce any further impacts on Staffordshire's landscape.

However, in supporting the proposal in principle to introduce other utilities along the proposed Phase Two line of route, we feel there is insufficient information at this stage to understand the wider impacts of what the introduction of utilities along the proposed route would mean. If the introduction of utilities results in a wider footprint of the proposed railway, and ultimately greater permanent land take, then we would need to understand what the alternative option is, i.e. a new network of overhead power lines and associated pylons compared to a 2m wide underground service trench as part of HS2.

With this in mind, we expect Government to provide further details of what utilities are expected to be incorporated along the proposed Phase Two line of route and consult on the options available.