

Proposed Decision to be made by the Portfolio Holder for Transport and Planning on or after 7 December 2018

HS2 Phase 2b Working Draft Environmental Statement (WDES) Consultation; Warwickshire County Council's Response

Recommendations

That the Portfolio Holder for Transport and Planning:

1. Agrees to Inform HS2 Ltd that in its view the WDES (Working Draft Environmental Statement) is deficient and provides little assurance at this stage to Warwickshire that the impact of HS2 is being appropriately considered.
2. Endorses the recommendations outlined in the attached appendix as the County Council's consultation response. This response will request that HS2 Ltd addresses the shortcomings and improves its documentation for the full Environmental Statement prior to the deposit of the hybrid Bill in 2020.

1.0 Introduction

- 1.1 HS2 Ltd issued the WDES on 11 October 2018. The paper consists of over 10,000 pages made up of 28 local area reports, four route wide volumes and a series of map books illustrating over 150 pages of detail for Warwickshire. The consultation period offered by HS2 is 10 weeks, closing on 21 December 2018.
- 1.2 The eastern leg of the railway to Leeds runs through 18 kilometres of North Warwickshire from Kingsbury to the Leicestershire border. The route is proposed to run through North Warwickshire, affecting communities at Bodymoor Heath, Kingsbury, Whateley, Birchmoor, Polesworth, Warton and Austrey.

2.0 Warwickshire County Council's main areas of concern

- 2.1 It is the County Council's view that the WDES requires further improvement in a number of key areas not least:
 - a) the design of Bodymoor Heath Lane
 - b) the access and operation at Kingsbury Water Park
 - c) the impact on villages and roads at Kingsbury, Whateley, Overwoods Road and Birchmoor

- d) the need to refine the design at J10 of the M42 to reduce the impact on all the communities in North Warwickshire and ensure the future housing and economic growth in the borough
- e) the potential for isolation within Birchmoor
- f) the suitability of the roads near to Pooley Park for HGV traffic and the impact on the park during and after HS2
- g) the impact at Austrey on the roads, HGV movements, flooding risk and loss of their recreational facilities.
- h) the detailed consideration of the use of slip accesses on and off the M42 in preference to the use of the local rural road network.
- i) the lack of baseline data in the WDES
- j) the inconsistency between PROW in Phase 1 and Phase 2b
- k) the overall impact on health, wellbeing and equalities for the communities of North Warwickshire

2.2 The accompanying appendix provides greater analysis by the County Council of these impacts and where possible at this stage makes broad suggestions for improvement prior to the Full ES in 2020.

2.3 The omission of almost all baseline data means that our ability to provide a comprehensive response on the WDES is limited. Without data and evidence it is very difficult to assess the assertions made in the documents or consider the appropriateness of the mitigation.

2.4 It has not been possible to conduct a full analysis of the DWES because of the relatively short duration of the consultation period and limited data. It is the Council's expectation that HS2 Ltd pays due attention to the concerns raised in the **Appendix**, addresses each point and mitigates accordingly prior to the deposit of the full ES. This will provide a robust position statement that communities can have confidence in and negate the necessity to see amendments through the Parliamentary process in the Commons and Lords.

3.0 Timescales associated with the report and next steps

3.1 The Council understands that the consultation responses will be analysed in the New Year and the "accepted comments" will be incorporated into the full ES ready for publication and deposit of the hybrid Bill in 2020.

3.2 Furthermore, the Council understands that in line with the Parliamentary process there will not be a separate consultation on the Full Environmental Statement. The scrutiny of the final ES will be done via the Parliamentary process through the Select Committee sitting during the passage of the hybrid Bill.

4.0 Conclusion

4.1 Officers on behalf of the Council will continue to engage with HS2 Ltd on every aspect of the plans and scrutinise the work and proposals from HS2 Ltd to achieve the best possible outcome for those most affected.

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This report was circulated to the following elected members prior to publication.

Councillors Parsons, Reilly, Wright, Jens, Butlin and Clarke

Appendix

Warwickshire County Council wishes to comment on the following sections of the Working Draft Environmental statement:

Question 1: What comments do you have on the information presented in the Working Draft Environmental statement?

LA01 Lea Marston to Tamworth

LA02 – Birchmoor to Austrey

Question 2: Do you have any suggestions about additional information or assessments that should be included in the Environmental Statement?

2.1 Bodymoore Heath Lane

2.1.1 HS2 Phase 2b Leeds leg starts just to the south of Bodymoore Heath Lane and necessitates the realignment of this road. The HS2 drawings suggest that it will be elevated to pass over both the M42 and the HS2 line with a junction to access properties on the old Bodymoore Heath Lane and Kingsbury Water Park at the Marston end. The council has a number of concerns about the draft design and safety of the road in this area.

2.1.2 The draft design indicates the design speed of 85kph where the current road is 100kph. The text of the WDES suggests that the average speed is 40-45 mph and therefore the HS2 proposed solution is suitable. The council disagrees with this assertion because average speed does not take account of the actual speed travelled or factor in the necessity to brake for the narrow canal bridge. Moreover the new design currently fails to take account of a number of other factors.

2.1.3 The design does not appear to meet the DMRB (Design Manual Roads and Bridges) standard and may be three or four steps down from it. Where reduced standards for both horizontal and vertical alignments are unavoidable additional mitigation must be in place: the design to date does not show this mitigation.

2.1.4 No mitigation measures appear to be in place to respond to previous concerns raised by the council earlier in the year. It is the view of the council that as a bare minimum the addition of two roundabouts at the tie in near the canal bridge and the tie in to access Kingsbury Water Park are necessary. These will slow the existing through traffic, remove the need for some of the domestic property demolition in the hamlet of Bodymoore Heath by negating the need for the junction alteration at Dog Lane, increase the right turn options for both the caravan site and

safer access to the Water Park and improve the indicative lorry route from the compound from the water park through Marston Village and out towards the strategic road network at J9 of the M42.

2.1.5 Other design considerations include the necessity that vulnerable road users and NVU are catered for. The design will require at least a 3m wide footway and cycle path to meet the current DMRB standard. The significant gradient on the approach to the new road bridge raises concerns for non- motorised users and access for cyclist, walkers and equestrian users during period of flood as the only other access under or over the M42 near to the Water Park becomes impassable. Furthermore the WDES does not appear to reconnect the PROW from the stopped up point adjacent to Heath House Cottage.

2.1.6 Seeney Lane area (section earlier in the map book than Bodymoor Heath Road) - changes to the PROW that were made by HS2 Phase 1 permanent works are not reflected in the design for Phase 2b.

2.1.7 This impacts on the design of the whole area including the alignments and status of Marston Lane, Seeney Lane, M23, M23a and M22. The disconnect between Phase 1 and Phase 2b should be resolved before an informed response can be made on the design.

2.1.8 Provision for users in general and those using M23a/Seeney Lane for access needs to be more considered during the construction phase than is currently evident in the WDES.

2.1.9 Permanent alignments of PROW need to be considered carefully to take into account of the practicalities for use. The alignment of M23 (as shown in the plans notwithstanding any corrections that may need to be made due to Phase 1) passes over the embankment of the access track and the access track itself. M22 cuts diagonally across land that will potentially be taken back into agricultural use and will therefore have a detriment on land use. A more sensible alignment would be as close as possible to the current alignment and that was proposed by HS2 Phase 1 and passed in-to law at Royal Assent.

2.1.10 The permanent alignment of footpath T26 requires further consideration; it is currently indicated as running up/down the new Bodymoor Heath Road embankment - the practicalities of use need to be considered. Additional PROW provision to provide off road routes for both sides of HS2 may be appropriate. Provision for pedestrians should be provided on the new Bodymoor Heath Road and consideration given to crossing points.

2.1.11 When considering the impact of water resource and flood risk in this area there is very limited floodplain mitigation shown on the drawings; although we would expect it to be considered by the Environment Agency, this is done in consultation with the LLFA (Lead Local Flood Authority) and where alternative land solutions are

required we would expect this to be addressed in the full ES and hybrid Bill submission rather than left to latter additional provisions.

2.1.12 A new watercourse to the south of the main line drains the embankment from the east of Seeney Lane, this is a significant length that appears to connect into a balancing pond within Flood Zone 2. In such cases, the council would not accept attenuation features within a fluvial flood zone without additional modelling to show that attenuation volumes are not compromised. The council is unable to critique this aspect of the route until the necessary detail is made available. This modelling should include the embankments and ensure that the floodplain extents are not transferred east to the Water Park.

2.1.13 The embankment and proposed new watercourse do not appear to leave a sufficient maintenance easement around the proposed attenuation basin adjacent to the Bodymoor Heath Lane diversion. The LLFA would require sufficient width to be left between the diverted watercourse, the embankment and the attenuation feature to allow access for maintenance machinery.

Kingsbury Auto-Transformer Feeder Station

2.1.14 It appears that the Kingsbury Auto-Transformer Feeder Station will sit in a localised low spot where water currently gathers. This is indicated by a high risk outline on the EA Surface Water Flood Maps. There does not appear to be an obvious route for this water to drain into a watercourse or sewer, so it is assumed that the area remains wet for extended periods.

2.1.15 It is assumed that the ground levels will need to be raised to build the Feeder Station and this will take up the existing local storage volume and push these flooded areas elsewhere to areas that may not previously have been flooded.

2.1.16 Additionally, all of the new drainage for the rail line west of Seeney Lane is also directed towards this area and into proposed balancing features. If this area is naturally flooded by existing overland flows, there will not be sufficient capacity in these proposed basins to manage the new flows from the rail line.

2.1.17 Clarification on where the flows in the area currently go and where they will go post construction must be addressed prior to the Full ES Submission in 2020 to ensure that there is a viable solution that will not create a new flood risk to areas or properties nearby.

2.1.18 Kingsbury Water Park currently receives in excess of 350,000 visitors a year with usage expected to increase in coming years. The confluence of existing traffic utilising the local road network to avoid current delays on the M42 and the addition of the HS2 HGV lorries necessary for the construction of HS2 and the need to protect vulnerable road users justifies the provision of the modest additional works.

2.2 Kingsbury Water Park access and operation

2.2.1 The WDES papers show that the existing Bodymoor Heath Lane will be realigned (see points raised above) and appear to result in a long cul-de-sac stretch of highway to access the main visitor facilities for the park and several domestic properties. The design as shown at present creates a number of significant access, highway and park operational concerns for the council that must be addressed.

2.2.3 The stopping up of the Lane in preference to the maintaining the existing alignment has the unintended consequence of creating both a parking enforcement issue and a potential for antisocial behaviour through fly tipping and other unsociable activities.

2.2.4 The issue of unauthorised parking on what will become the 'Old Bodymoor Heath Lane' creates both a park management issue due to the loss of revenue, and a potential road safety issue where by the public treat the highway as a car park, alter their behaviour and there is a resulting RTC (Road Traffic Collision) with other vehicles. It is incumbent on HS2 to work with the park management team at the council to resolve this and other issues concerning Kingsbury Water Park (KWP) prior to the Full ES.

2.2.5 Linked to the issue of unauthorised parking on the lane there may be resulting access issues for the domestic properties ranging from mild inconvenience to access or exit their homes to frustration for deliveries and most seriously of all clear access for blue light services if they are delayed due to inappropriate parking. It is the council's view that HS2 has not provided sufficient detail to allay these concerns and must engage in a robust and active design refinement process to take account of this complex situation. To treat this as a "stop up" and "reconnect" process significantly underplays the complexity of the interdependent aspects of the Park, users, businesses and residents.

2.2.6 KWP is as much a tourist destination as it is a well-loved community resource attracting over 350,000+ visits annually. Many visitors now return as adults with their own children and grandchildren. The park has a very high repeat and longevity coefficient that must not be underestimated, this has been born out by numerous surveys and research reports, the most recent of which was 2017. With a wide range of water sports activity, award winning Camping and Caravan Club site, diverse fishery, cafes, cycle hire, Children's Farm and a host of other public facing activities the Park is much more than the sum of its parts.

2.2.7 Tourism destination visitors have a choice of providers and will choose to go elsewhere if they feel their time/visit is being adversely affected by the work of HS2. The Conkers Centre, Sutton Park and Cannock Chase all provide similar or enhanced facilities for visitors but would require the users to travel, and, importantly, spend their day trip revenue outside of the County.

2.2.8 The impact of HS2 Phase 2b presents a perfect storm of disruption for the Park. The operating model and the economic ecosystem that exists between the council, community ventures, small businesses and park users is neither considered, nor mitigated. In short each relies on the other for survival:

- a. visitor footfall is essential to sustain the businesses, community ventures and clubs, that together employ over 200 people
- b. small businesses in turn provide and generate the facilities that attract visitors
- c. revenue from the business leases and parking fees are in turn invested in the management of the water Park, and its infrastructure, to ensure a safe, welcoming and well managed visitor environment that ensures repeat visits.

2.2.9 The WDES and EqIA refer only to Echils Wood Miniature Railway and fail to acknowledged or mitigate the interdependencies between the mosaic of commercial and community enterprises. Nor does the socio- economic section of the WDES give any profile to the value of employment and revenue turnover that the Park contributes to the regional economy; a conservative estimate puts the value at £2.5m per annum.

2.2.10 This is an unacceptable oversight within the WDES and must be addressed in the Full ES and deposit of the hybrid Bill if the Park is to survive the extended disruption of the construction phase of HS2.

2.2.11 The proximity of the HS2 construction works and inevitable HGV traffic across the front of the main visitor access and the impact on the visitor hub area of the Park is of deep concern to the council and its partners. It is recognised by the council that there will be construction within the Park but the WDES does not in any way mitigate the effects or damage the works will cause to the attractiveness of the existing facilities and their viability.

2.2.12 Further the WDES fails to reasonably recognise and mitigate at this stage the value and significance to the West Midlands wide communities who use it as their primary source of public open space and access to the countryside which in turn supports physical and mental well-being for all communities who use the park. Maintaining visitor footfall is vital to sustaining all the interconnected ventures within the Park and its contribution to the local visitor economy. It is of concern that access to the new 'changing places' facility at Broomey Croft during construction or operation has yet to feature in the HS2 design. It appears that there will be an increased journey via the new road layout based on current plans, raising concerns about equality and dignity for those who need to use the facilities and the practicalities for the carers and family members who support those individuals.

2.2.13 The council envisages that the only viable option is to move the visitor hub facilities away from the construction area of HS2 and consider an alternative provision within the Park that enables HS2 to operate without severe detriment to the Park as a whole.

2.2.14 A location for such a facility on the bank of Bodymoor Heath Water is attainable through appropriate Flood Resilient design and provision of sufficient mitigation for any loss of flood plain volume. There is land adjacent to the floodplain that can be lowered or connected through to the floodplain to provide floodplain compensation.

2.2.15 The council expects HS2 to consider this alternative and provide mitigation in a holistic and sympathetic way that reflects the social, economic, environmental, and health and well-being benefits derived from this much loved and regionally important amenity.

PROW considerations

2.2.16 When considering the impact of HS2 on KWP it is necessary to look at the full extent of PROW network in conjunction with design drawings. It appears that many of the PROWs are being used as access tracks and construction routes for HS2 but the impact is not reflected within the design. The nature of the park is such that the paths and walkways are integral to the fabric and enjoyment of the Park. Therefore the temporary diversions proposed by HS2 must maintain the amenity value, be shared at the earliest opportunity and not viewed in isolation from the rest of the Park operation or in silo as merely a construction logistic issue. HS2 must consider the permanent alignments of PROW through and to KWP with similar sensitivity and recognise that slavishly keeping to the existing alignments may not be suitable once the viaducts are present in the Park. Taking the Design Panel feedback from the summer of 2018 into consideration; to create a legacy for the landscape and users must be the guiding principle of design in this area.

2.2.17 The stopping up of the Old Bodymoor Heath Lane leads onto two public footpaths (both parts of T26) becoming cul-de-sac routes. As a bare minimum pedestrian rights need to be maintained on the stopped up element of these roads with higher rights (bridleway status) being a desirable addition to the network to allow disability scooters and other disability equipment to access the Park's full network of paths. A bridleway bridge (suitable for disability scooters) should be provided over the HS2 line to allow access to KWP (from the west), and to connect the PROW, to avoid the lengthy diversions along the new road for pedestrians, cyclists and equestrian users.

Ecological considerations

2.2.18 Areas of land take and permanent areas of ecological habitat mitigation are already of high nature conservation importance under sensitive management and/or HLS (see complementary point raised for Pooley Park about 'double counting' of offsets).

2.2.19 Lying at the heart of the Tame Valley Wetlands, KWP is a regionally important mosaic of wetland habitats, and the park contains some of the largest areas of open

water in the Midlands. There appears to be no information in the DWES to demonstrate suitable mitigation or in particular how the issue of 'bird strike' will be managed given the elevated viaduct and gantries.

2.2.20 The wetlands of and surrounding KWP form a potential Local Wildlife Site called Kingsbury Wetlands pLWS and should be classified and listed as a Local Wildlife Site and recognised in the text for the Full ES.

2.2.21 On the subject of floodplain mitigation, a significant length of the rail line passes through areas of existing flood plain whilst only a small area of replacement flood mitigation is proposed directly adjacent to the River Tame. It is unclear if this volume has been modelled at this stage. There is no assessment at this time of the impact the HS2 line will have on the businesses in the park; it is the council's view that an increase in the flooding frequency (however small) would not be acceptable.

2.2.22 The current M42 underpass will still flood in the proposals shown by HS2, this will need further consideration if it becomes the only or main cycle/ pedestrian access between the two sides of the Park.

2.2.23 Public Health Warwickshire has raised a number of route wide concerns (see later thematic section) and several Park specific concerns:

- I. lack of access to KWP for Warwickshire and wider populations, and permanent loss of open space at the Park
- II. loss of access to open space and the health benefits that come from that access including improved well-being, and physical activity levels.
- III. proximity of main visitor complex, (cafe, visitor centre, office, education room) to the construction site.

2.3 Kingsbury Village & A51

2.3.1 In addition to the need for HS2 to pay due care and attention to the impact of all their traffic movements in the village and adhere to the speed limits whilst in the village, it is the council's considered opinion that there are a number of other factors to be considered before the proposed design in this area is mitigated sufficiently.

2.3.2 The implications of the vertical alignment of the new A51 needs further consideration. It is unclear what the forward visibility is to access the balancing ponds near to the HS2 bridge over the road. Coupled with that is the need for further consideration regarding the PROW in this area, specifically the severance of footpath T24 which results in a cul-de-sac route that serves no amenity purpose. Public access to T24 must remain. However the diversion along the new A51 alignment is unacceptable as it is both on the road and an overly lengthy diversion. An alternative access can be provided by reusing the old alignment of the A51 and connecting in to the HS2 access route on the eastern side of the HS2 line by passing under the HS2 line.

2.3.3 The bridleway T76p is not indicated on the HS2 plans in its entirety and is potentially being used as an access route for HS2. Further consideration needs to be given to the effects on users of the route and the conflict between them and HS2 construction works. Furthermore, it is unclear that an adequate width has been provided for in the diversion of T76p between the HS2 embankment and the M42. As this is a bridleway the alternative route needs to accommodate all bridleway users.

2.3.4 The water resource and flood risk assessments will be required to understand the flows from the catchment upstream of the M42 culvert of the tributary of the Thistlewood Brook inclusive of the embankment drainage of the A51 diversion.

2.3.5 Attenuation basins are sited outside of the fluvial flood zone but are within a high risk surface water outline. This will be exacerbated by the embankment for the A51 diversion creating further topographical changes that will impact overland and surface water flows.

2.3.6 Part of the A51 Tamworth Road Satellite Compound sits on an existing culverted watercourse and as part of the necessary proposed watercourse diversion most of it will be opened up. There must be scope to open up the full length to the south of the M42 and design in flood alleviation rather than look at opportunities at a later stage as was the case in some parts of the Phase 1 route.

2.3.7 The experience in dealing with HS2 Phase 1 suggests that culverts under the main line will be perpendicular to the line wherever possible (as detailed in the technical standards) but the A51 Tamworth Road Culvert East does not follow this principle and needs to be amended or a technical explanation for the change in approach provided to the satisfaction of the LLFA.

2.4 Whateley Lane

2.4.1 The draft plan at Whateley Lane Overbridge shows a relatively narrow structure; the council would expect full consideration to be given to the safe passage of pedestrians, cyclists and equestrian users. It appears that the bridge will need to have significant vehicle safety restraint (VSR) barriers on the approach to the structure. Therefore the full ES design must consider the impact on the rural setting and provide a wider structure which will also provide a safer environment for non-road users and wildlife. The DMRB requires a minimum of 3m in addition to the width of the carriageway and VSR.

2.4.2 The use of Holt Farm access bridge as a lorry route is undesirable from a road safety perspective without suitable amendments to Trinity Road that facilitate safe right-turns. Once footpath T70 is also factored in sufficient width needs to be provided for a footpath alongside the construction route (although undesirable from an amenity perspective). Where the footpath is diverted to run alongside the cutting consideration must be given to use of the access track. The permanent alignment does not appear to be suitable, as users need to cross the access roads at a number

of points. This design does not yet safely satisfy the combined needs of all user groups; a refined version that achieves this is expected in the Full ES.

2.4.3 There is no mention of the effect on E994 Back Lane - the extent of the necessary stopping up should be provided.

2.4.4 The diversion routes for AE203 and T77 diversions require additional consideration. A bridleway compatible bridge over HS2 is needed for T77 to prevent an unacceptably long diversion for users along roads, where previously users have had the benefit of off road routes. The circular linkages of T177 and T170 need to be a priority when designing the PROW network for use post HS2. The provision of a bridge would enable the network to perform more effectively once the permanent alignments of AE203 and T177 are reconsidered.

2.4.5 The new structure and link road uses the same alignment as the existing road which means a diversion will need to be considered as this is the main route into and out of the village. The construction phasing will be critical to ensure the minimum of disruption and severance for the community in Whateley. This is turn raises concerns about the detailed specification of HGV routes in this area. There appears to be two HGV routes in this area both emanating from the Whateley area and using the farm accommodation bridge and the new Whateley Lane bridge to turn left towards J10. This implies a return journey that will require a right turn; it is the council's view that at present neither right turn access is suitable for the potential additional volume of additional traffic from HS2 in this area without further mitigation to ensure road safety.

2.4.6 When considering water and flood risk all new cut off ditches proposed by HS2 to protect the railway line through the cutting need to have an outfall, The new ditches out to the north of the Piccadilly Embankment Culvert in the present design seem to just exit to the proposed new woodland habitat. This is an unacceptable design without further detail. In addition to no positive outfall shown for the cut off drainage, the outfall for the proposed attenuation features is also not demonstrated. Experience from HS2 Phase 1 is that outfalls must be demonstrated at the early stages to ensure they are viable, sustainable and as high up the drainage hierarchy, as possible. (see below)

1. To the ground (infiltration)
2. To a watercourse
3. To a surface water sewer
4. To a combined sewer

The council would expect HS2 to rectify this prior to the Full ES.

2.5 Overwoods Road

2.5.1 This is a particularly sensitive site in Warwickshire and tragically the location of a multi-fatality collision involving several members of the same family. It has been the focus of questions in Parliament by the local MP and commentary by the Secretary of State for Transport Chris Grayling MP.

2.5.2 The junction with Trinity Road presents an especially complex set of considerations that HS2 must take full account of in the design process. A previous planning consent for a traffic signal junction at Trinity Road/Overwoods Road intersection will now not be forthcoming because of the HS2 works. This means that the necessary and planned improvements at the junction are no longer an option and the junction remains a safety concern.

2.5.3 It is incumbent on HS2 to now provide mitigation as part of their main works because of the inevitable increase in traffic movements on Trinity Road (which is a second indicative lorry route with Whateley, see previous section) and the impact of the associated works at J10 M42.

2.5.4 It is the council's view, based on the information available in the WDES; which suggests that there will be significant lorry volumes and right turn movements by HS2 vehicles over an extended period of construction time, that a roundabout is absolutely necessary if future road traffic collisions are to be avoided and the safety of the travelling public is to be preserved. This is a priority consideration for the council and any reduction of mitigation or design standards will be vigorously resisted.

2.5.5 The council remains concerned at this time that the construction timing will exacerbate the issues at Whateley Lane with those at the M42 Junction 10 as these could both increase traffic on Overwoods Road. Consideration should be given to this in the phasing of the works.

2.5.6 The proposed 25 hectare employment site off Trinity Road adjacent to M42 Junction 10 (planning application PAP/2014/0648) may be a material consideration for HS2 for the Full ES in 2020; the associated additional trips the site will generate must be included in the baseline traffic data for assessment in the technical volume.

2.5.7 It appears that the HS2 works will impact upon PROW T170 as a permanent diversion, if this is the case there needs to be suitable alternative provision for pedestrians on Overwoods Road and the new bridge, as a bare minimum there must be a 3m wide footway and tie ins to the wider PROW network and consideration for the amenity of users.

2.5.8 The AE58 permanent diversion takes the bridleway out of Warwickshire into Staffordshire; the council would expect a joint solution to be worked out with the adjacent authorities prior to the deposit of the hybrid Bill.

2.5.9 Consideration of the water and flood risk in this area carries equal weight for further consideration. This area has been subject to planning considerations prior to HS2 and intends to use point soakaways to drain the proposed site for each individual property.

2.5.10 HS2 need to consider the impact if the properties are built and the soakaways are used for any length of time; it will be especially important if the HS2 proposal is to tunnel underneath the site. Also Phase 2 of the site now has an attenuation basin located in the middle of both the development and HS2 works. Planning ref: PAP/2017/0410& PAP /2018/0332

2.5.11 The proposed HS2 drainage basins (although in Staffordshire) are closely surrounded by buildings, access tracks and new watercourses which do not appear to leave a sufficient maintenance easement to gain access with machinery; a further refinement is required before concerns on this point are satisfied.

2.6 Junction 10 of the M42

2.6.1 There will be major impacts on traffic at this junction whilst the HS2 works are in place. Junction 10 is already near capacity and has been identified as requiring a significant upgrade by both Highways England and the council. It is incumbent on HS2 to ensure their works do not fetter the economic vitality of the area, prevent future transport projects lead by other agencies and leave a positive legacy for the North Warwickshire and the wider sub-regional and regional economy. In many respects, the need for changes to be made to the junction as part of HS2 Phase 2b provide an opportunity for this legacy to be realised.

2.6.2 There will be significant intensification of HGV traffic due to the HS2 works at this already constrained junction. The A5 east of this junction is identified as a lorry route which will impact upon the delivery of significant Local Plan sites along the A5 corridor. North Warwickshire Borough Council has identified this corridor for allocation of up to 6,500 houses which also delivers the sub-regional growth linked to the housing needs of Birmingham City Council, Tamworth Borough Council and Coventry City Council. In addition to the housing, there are significant levels of employment growth in the immediate vicinity of Junction 10 and along the A5 corridor, including the planned expansion of the Horiba –MIRA enterprise Zone, Birch Coppice and Relay Park all of which will contribute to the natural growth of traffic before HS2 gains Parliamentary approval and must be modelled accordingly, without such modelling and mitigation the local and strategic road network will fail.

2.6.3 To accommodate the proposed level of growth, WCC is currently working with HE (Highways England) and the Ministry of Communities, Housing and Local Government on a major Housing Infrastructure Fund bid for the dualling of the A5 within North Warwickshire. In parallel, Midlands Connect is conducting a strategic study into which is considering improvements on this section of the A5 and the Highways England SRN Initial Report identified the A5 (between the M6 and M1) as

an option for a potential future Expressway standard. HS2 must should take account of the resilience that the A5 provides to the Midlands Motorway Hub and how this resilience capacity will be detrimentally affected by HS2 works at in and around Junction 10.

2.6.4 WCC has commissioned an initial study to consider the impacts at J10 and, the report concluded that it is essential that the junction is not reinstated construction in its current form following the construction of HS2. If it is, all future planned growth in this area will be constrained in such a way as to make it untenable. The council recognises that it is a DfT and HE issue to resolve in conjunction with HS2 to identify a single integrated solution that supports the needs of UK plc.

2.6.5 Turning to the specifics proposed in the WDES, the traffic management required to keep J10 open whilst constructing the proposed “cut and cover” tunnel would be extremely difficult to deliver without significantly disrupting the travel patterns of communities and commerce. At this stage it is difficult to ascertain whether a twin bored tunnel is a more appropriate solution. However this option must be fully investigated and shared with both the councils and communities to demonstrate why it is not a more acceptable solution to the widespread concerns in this area.

2.6.6 It is the council’s view that if HS2 decide not to pursue the bored tunnel, the next best alternative will be to replace the south bridge at the J10 to improve capacity before HS2 works are started. If HS2 choose to adopt this methodology it will improve the junction and create a stronger resilience to deal with the additional construction traffic from the various construction sites in the immediate area.

2.6.7 The WDES leave a number of unanswered concerns regarding water resource and flood risk at this stage. The modelling of the Kettle Brook must include the multiple access track crossings to the attenuation basins and industrial estate at Centurion Way. The layout for the access tracks to the basins indicates that up to seven new culverts will be needed, a design refinement may improve and minimise the need and should be evident in the Full ES.

2.6.8 Modelling must demonstrate that the proposed culverts under the M42 and the under the HS2 rail line do not cause throttling or increase flows conveyed downstream. HS2 must ensure that the main compound has the appropriate layout and storage capacity and does not exacerbate or increase the likelihood of areas prone to flooding. The council will not support culverts through compounds as has been proposed in some areas for Phase 1.

2.6.9 The proposed basin adjacent to the A5 (Tamworth side) appears to outfall into the industrial estate road, the council requires assurance that drainage in the road has sufficient latent capacity to take these new flows.

2.6.10 Issues of groundwater for the cut and cover tunnelling aspects need to be addressed in the future iteration of the WDES as well as the removal of any contaminated fire water (water that has been used to extinguish fires and must have additional treatment) from tunnels during operation. It is not clear at this stage how the management of pumping stations and their long term maintenance liability will be addressed. Where pumped outfalls and pumping stations are proposed, justification should be provided why a more sustainable option is not possible. This should include, where the water will be pumped to, failure and exceedance flow routing, and an assessment on the effect to the receiving waterbody. The council would not wish to see any additional cost liability place on the highway maintenance department without appropriate financial recompense.

2.7 Birchmoor, Green Lane & Hermitage Lane

2.7.1 The council is concerned about the access arrangement for the community of Birchmoor during the construction phase. It is especially important for pedestrians and cyclists to maintain access by the nearest and safest routes throughout. The draft proposed diversion through Tamworth utilising the A5 is not acceptable for these user groups or local traffic. It appears that little detail is available on the impact to school traffic or the need to fund additional costs to school or regular bus services. The convention is that up to 3 miles is walkable for children over 8 years old. Polesworth Academy is about 1 mile away under existing access arrangements but the alteration in traffic and construction during the HS2 works will render the option of walking untenable.

2.7.2 As previously noted the proposed new bridge link over HS2 and the M42 is required to provide sufficient width for cycling and pedestrian movements (3m minimum), this link connects a severed section of the community and is an important amenity.

2.7.3 The temporary proposed diversion route creates a situation where a small section of the community is isolated from their community infrastructure. Access to facilities in Polesworth such as medical and social facilities is severed without a private vehicle; this presents an unacceptable outcome. There is currently no indication of how people will access and engage with the rest of their community. Those who do have a vehicle will still face a considerable inconvenience and disruption to their lives for a number of years.

2.7.4 The significant Local Plan growth of 1,400 houses allocated for Robey's Lane and south of Tamworth Road (west of M42) which is adjacent to this area will increase traffic flows on B5000 Tamworth Road and add to the inevitable concerns of local communities. We estimate that there is already a peak hour flow in excess of 1,400 vehicles before HS2 works commence. This is a further consideration HS2 must take account of in their design, planning and management; it will not be acceptable to compartmentalise issues and down play their impact on the

communities, road network and ability to maintain the free flow of traffic in North Warwickshire, the Tamworth area and the wider West Midlands conurbation.

2.7.5 The proposed new balancing pond west of Pooley Lane will sit in a localised low spot where a significant amount of water currently gathers. This is indicated by a high risk outline on the EA Surface Water Flood Maps. There does not appear to be an obvious route for this water to drain into a watercourse or sewer, so it is assumed that the area remains wet for extended periods.

2.7.6 If this area is naturally flooded by existing overland flows, there will not be sufficient capacity in these proposed basins to manage the new flows from the rail line and amendments to the highway.

2.7.7 Clarification on where the flows in the area currently go and where they will go post-construction must be addressed prior to the Full ES Submission in 2020 to ensure that there is a viable solution that will not create a new flood risk to areas or properties nearby.

2.7.8 The proposed new ditch south of Birchmoor Culvert appears to end abruptly after curving around the attenuation basin. It is not evident where this is proposed to go. The council has concern about the drainage proposals in this area due to the lack of detail and the large catchment to be drained which is expected to produce large volumes and flows. As the area has historically suffered from surface water flooding, the proposals must provide robust mitigation to ensure no further increase in flood risk.

2.7.9 The drawings show a pumping station adjacent to the ponds, but do not show where the flows will be pumped to. Where pumped outfalls and pumping stations are proposed, justification should be provided why a more sustainable option is not possible. This should include where the water will be pumped to, failure and exceedance flow routing, and an assessment on the effect to the receiving waterbody. If it is proposed to pump into the asset of a risk management authority such as the water company or the Canal & River Trust, confirmation of capacity must be obtained to prove it is a suitable outfall.

2.7.10 Although separate basins are proposed for the rail line and for the amendments to the highway, both features appear to share a common pumping station. Clarification must be provided on the ownership and maintenance of these pumps as WCC does not consider pumped systems to be sustainable and would not accept the additional cost associated with the upkeep.

2.7.11 Public Health Warwickshire have identified a specific sensitivity in Birchmoor that does not yet appear in the HS2 assessment, namely that Birchmoor is the location of a residential care home for people with learning disabilities including sensory disorders. This sensitive receptor must be considered and mitigated to fully protect the residents from the worst impacts of construction and disruption in addition

to the normal mitigation for the wider village who will be in close proximity to the construction works on several sides. The council, Public Health Warwickshire and the specialist services that commission care in Warwickshire expect a fully appraised and mitigated solution to be provided prior to the deposit of the hybrid Bill.

2.8 Pooley Country Park, road network and other area issues

Pooley Country Park

2.8.1 The HS2 Phase 2b route will cause a catastrophic impact on the economic fabric of Pooley Country Park. The construction land take as shown in the WDES clearly makes the Country Park unviable as the east side of the M42 contains the visitor infrastructure; business tenants, café and heritage centre, and play area will be lost, resulting in the cessation of the revenue and income streams that sustain the park.

2.8.2 The published EqlA [para 7.4.4] erroneously states that ‘the main recreational activity is to the West of the M42’. This is factually incorrect. The land to the west mainly comprises of a Nature Reserve and SSSI that is leased to Warwickshire Wildlife Trust. Recreation to the west of the M42 is therefore limited to nature watching, walking and cycling. The EqlA acknowledges that the nearest alternative country park is Kingsbury Water Park, which is also directly affected by HS2 Phase 2b, but it fails to reflect on the combined impact on North Warwickshire’s two main country parks.

2.8.3 In terms of the natural environment, a significant proportion of the area proposed for mitigation by HS2 is already under sensitive ecological management by the council through an existing Higher Level Stewardship (HLS) Agreement with Natural England. Therefore, the environmental benefits in the report have been double counted and cannot be considered an accurate picture of mitigation.

2.8.4 The land take and further segmentation of the Park by the railway will result in an unattractive proposition for visitors, along with increased noise levels which acutely diminish the quiet recreation of the green space.

2.8.5 The council is extremely concerned that the loss of visitor infrastructure including café and heritage centre, toilets and car parking provision will adversely affect the health and well-being of the community, including vulnerable user groups. Together, the park infrastructure facilitates easy access to well managed green space, play equipment and the Coventry Canal.

2.8.6 The council insist HS2 provide assurance to its tenants and leaseholders that they will be satisfactorily compensated or relocated. In the case of the Polesworth Scout Association, it is imperative that HS2 maintain safe access to the (new) scout activity centre and provide an overall solution which is acceptable both to them and the council.

2.8.7 While the EqlA acknowledges that the nearest alternative country park (Kingsbury Water Park) is also affected by HS2 2b and that protected groups are affected, it fails to identify appropriate mitigation or alternative provision for them.

2.8.8 For reasons outlined above, the council contends that the detrimental effects upon the Country Park to the east of the M42 to be so severe that following construction, provision of a country park in this location is not viable due to the combined effect of the land take and position of HS2 (essentially bisecting the main visitor infrastructure to the east of the M42).

2.8.9 Given the incompatibility with 'quiet recreation', imaginative re-provisioning solutions must be designed by HS2 as a key design element, with the local community as the focus. Alternative land solutions are clearly required and we would expect this to be addressed in the hybrid Bill submission rather than left to a later additional provision.

2.8.10 Opportunities for re-provisioning the Park include trim trails, passive provision for cycling, better connections to Polesworth village, and proposed new housing allocations on the Tamworth side. It is essential that HS2 provides a masterplan of the various options to look in more detail at delivering these opportunities alongside the scheme.

2.8.11 Communities such as Polesworth have a strong community identity and are actively engaged with their mining heritage through the collection and display at Pooley Country Park. HS2 will sever that link physically between Polesworth and the collection at Pooley. The council expects that an alternative provision within Polesworth is found to provide space for the mining collection, ensuring the ongoing access for the local community to their mining heritage.

Road network

2.8.12 Pooley Lane is classified only as a footpath. It is not public highway and should not be treated as such. It is narrow (around 3m) and is unsuitable for significant two way traffic. Leading from Pooley Lane is a number of residential and commercial premises, in addition to the local Scout activity centre.

2.8.13 The intended use of Pooley Lane for HGV traffic to access the HS2 works compounds to the east of the M42 is unacceptable. It conflicts with the large numbers of vulnerable road users, residents, scout centre users and commercial premises users who currently can utilise the Lane without this threat. Although public footpath AE16 runs along part of the Pooley Lane, there is currently no facility for pedestrians to separate them from traffic. It is therefore inconceivable that these public and private rights can safely coexist with a haul or HGV route.

2.8.14 The council has grave concerns about the proposal to use the junction of B5000 and Pooley Lane for HGV turning movements. Extensive road safety work would be required at the junction of B5000 Tamworth Road/ Pooley Lane to make it

safe for lorries to use and the junction is further constrained by domestic properties. The minimum requirement at this location would be the introduction of traffic signals, a roundabout is the most suitable solution. However the removal of all HS2 HGV traffic through the provision of an M42 slip on and off is the most desirable option.

2.8.15 The HGV traffic intended for Pooley Lane must not and cannot be directed towards Polesworth on the B5000 east of Pooley Lane due to a structurally inadequate bridge, and the narrow canal bridges on this highway are also unsuitable for lorry traffic. It is unclear how HS2 intends to reach Pooley Lane while the B5000 is reconstructed near Hermitage Lane. No other route is identifiable.

2.8.16 On Pooley Lane itself, the sharp right hand bend into the Park does not meet design standards and carries a road safety concern with reduced visibility and other factors.

2.8.17 The width of Pooley Lane for passing HGV traffic is required to be a minimum of 6m for safe two way flow. Passing places are not considered acceptable in this location.

2.8.18 The environmental impact of the use of Pooley Lane over an extended time period is considered to be detrimental to the health and well-being of residents and users of the Park.

2.8.19 As an alternative, the council recommends that an access for the HS2 compounds to be created from Tamworth Road to the north of the trace. The current WDES indicates a spur from Tamworth Road to facilitate the construction of Birchmoor Express Feeder Auto-Transformer Station. A sensible solution would be to construct this spur to facilitate access into the main compound and materials stockpile. This is within the domain of the WDES plans.

2.8.20 A better overall option for this area would be for HS2 to consider accessing its compounds directly from the M42 with a left-in/left-out arrangement from the southbound carriageway. This In conjunction with the improvements to M42 Junction 10 (as set out earlier), this would remove disruption from the local road network and resolve the many issues which the council has highlighted in this response.

2.8.21 On the proposals for the public rights of way in this area, the Promoter needs to clarify the adequate width of road and footpaths for the new Pooley Lane Overbridge.

2.8.22 Alternatives to the permanent diversion of AE16 should be considered to avoid conflict between vehicular users accessing the proposed car park and people on foot. The permanent diversions should take into account the practicalities of the route. The new bridge should include adequate provision for pedestrians, regardless of any alternative pedestrian routes.

2.8.23 The permanent diversion of bridleway AE3 follows a farm track and there must be suitable provision for pedestrians, horse riders and cyclists. Sight lines need to be addressed, as does the gradient to the bridge, given that the current alignment has a gentle incline.

2.8.24 The permanent diversion of AE4 must include an adequate width to prevent a future maintenance burden due to the effects of the landscape mitigation. The underpass must be wide enough to allow pedestrians and farm vehicles to pass.

Flooding

2.8.25 One of the new ditches appears to outfall to the land within the floodplain of the River Anker via the Pooley Lane Scout activity centre access culvert (grid square H6). No channel or culvert is shown downstream of this point so confirmation of its route to the discharge point is required. A discharge onto land is not acceptable.

2.8.26 If a culvert is proposed, a technical justification is required to demonstrate why a culvert is necessary for the full length as the LLFA position is to minimise the use of culverts.

2.8.27 The construction phase plan shows a strip of land to be used during construction leading to the Coventry Canal and in turn towards the River Anker. If an inverted siphon or a drop inlet culvert is proposed, this should be highlighted at the earliest opportunity along with details of the party who will be responsible for the ongoing maintenance.

Health and well-being

2.8.28 The council has severe concerns around the impact on health and well-being for the population in this area.

2.8.29 Within the community there are several care homes and a residential care home for people with complex needs and learning disabilities, including sensory disorders who will be living next to the construction site. One of which is on Pooley Lane. The impact of HS2 on the care services which are commissioned by the council and others in this area have not been properly assessed in this report. The council expects this to be rectified in the full ES.

2.8.30 The loss of access to green open space for residents in the Park during the construction phase and permanent loss of open space within the park at operational phase is not re-provisioned and will cause a negative net effect on health and well-being indicators.

2.8.31 There is a notable lack of mitigation provided to balance the effects on the Polesworth community which must be addressed in the full ES.

2.9 Austrey road network and HGVs

2.9.1 The HGV routing through and around Austrey is highly undesirable. If a compound on or near Warton Lane is a possibility (as indicated by the green dash line on plan CT05- 410) then the use of Cinder Lane with a single right turn onto Orton Lane then left onto Norton Lane and then left onto the A444 may be less intrusive, notwithstanding any road safety improvements that will be required to facilitate the safe movements of lorries.

2.9.2 The majority of the village roads within Austrey are narrow (less than 6.0m wide) and are therefore unsuitable for two way HGV traffic, the visibility at most junctions is limited and restricts the view of drivers to oncoming traffic. None of which suggests that they will safely cope with the proposed HS2 construction traffic. Furthermore Austrey has limited footway provision, so any increase in traffic through the village will result in reduced pedestrian safety. All of which may contribute to a sense of social isolation and discourage the elderly or less mobile users to feel safe when travelling around the village.

2.9.3 The proposed new link road for Newton Lane appears to funnel all the traffic entering the village into one access point at Austrey Lane. However there is no evidence to support the design amendment or the impact on the No Man's Heath Lane/ Main road/ Appleby Hill Road crossroads. Without the analysis of this the council cannot support the change in the network. The resulting stopped up sections of Newton Lane will cause concern and may encourage fly tippers, unauthorised travellers encampments or antisocial behaviour in the area. The location and accessibility of the playing and recreational facilities need to be more carefully considered and addressed in association with the impact of the stopped up section of highway. Further detail on this point is contained in the next section.

2.9.4 Consideration should be given to accessing the Newton Lane construction compound via a temporary slip road from the M42 rather than routing HGVs through Austrey village and No Man's Heath.

2.9.5 The Newton Lane Diversion Road with Newton Lane junction requires consideration for vulnerable road users. The potential conflict between traffic turning to/from the new alignment of Newton Lane and traffic continuing straight on along the existing route (Newton Lane) is in conflict with the natural flow of traffic. The council remains concerned at this time that the design does not recognise the potential conflict between road users brought about by the very occasional use by HS2 to access the ATFS. It is the council's view that an alternative junction arrangement that enables Newton Lane to become a single continuous route with a turn off for HS2 access needs to be provided.

2.9.6 E11 starts near to the access for the playing fields but there is no reference in the WDES to this E route. It will be crossed by the new HS2 line and therefore the public rights need to be stopped up. HS2 must provide suitable private rights of

access from Newton Lane to the land holdings that will lose their access during the construction period and beyond.

2.9.7 In order to create an effective diversion HS2 must show that the route is as commodious to the public as the existing one. This is not demonstrated in the WDES drawings. The provision of a crossing that enables T140 to remain on or close to the current alignment is required as a bare minimum.

2.9.8 The village of Austrey has a number of known existing flooding issues and the community and county flood group have already been in correspondence with HS2. The surface water sewers within the village are relatively shallow and have seen multiple collapses and crushes, repairs are already programmed to internally line them. However, the multiple HS2 HGV trips suggested in the WDES (as indicated by the green dashed line) will almost certainly cause a repeat of the issue and HS2 must be aware of this in their planning, management and reinstatement programme, the only other alternative to avoid this detrimental impact is to reroute the HGV traffic away from the vulnerable sewer system.

2.9.9 Appleby Hill forms a significant surface water flow path into the village so any proposed amendments to allow HGVs to use this route regularly must not exacerbate the current problem and measures must be installed to break up the connectivity of the flow path (e.g., deflection into and storage within roadside ditches or an alternative HGV route needs to be found).

2.9.10 Evidence is needed to show how the floodplain storage for the Bramcote Brook floodplain compensation has been modelled. The embankment and proximity to the landscaping needs to be considered in more detail, the proposed attenuation features do not appear to have an outfall. Experience from HS2 Phase 1 is that outfalls must be demonstrated at the early stages to ensure they are viable, sustainable and as high up the drainage hierarchy, as possible;

1. To the ground (infiltration)
2. To a watercourse
3. To a surface water sewer
4. To a combined sewer

The council would expect HS2 to rectify this prior to the Full ES.

2.9.11 The Newton Lane diversion and proposed balancing ponds sit within a high risk surface water outline and flow path based on current levels. The high risk and historic instances of surface water flooding in Austrey means there must be an upsize of the attenuation features in order to manage the existing vulnerable land drainage, in addition to the HS2 embankment drainage.

2.9.12 It is not clear from the WDES if the drainage for the new Newton Lane is separated from the track drainage or how will this be managed in the future. The likely impact of exceedance routes from the proposed channels must be considered

in the design given the current flow paths into Austrey Village and the proximity of the proposed new ditches to the village where they cross the re-aligned road.

2.9.13 The drainage for the proposed realignment of No Man's Heath Lane taking it under the railway appears to break its back and flow in opposite directions despite being the low point; this appears to be counter intuitive as it is not clear that the levels work in this location.

2.9.14 The arrangement of No Man's Heath Culvert is of specific concern; the location is directly upstream of the village which has an existing flooding issue and the proposed 90 degree bend needs to be detailed in such a way as to avoid regular blockage and scouring. A possible solution of a dual stage culvert to release flows across the road rather than overtopping may be acceptable.

2.10 Austrey Playing Fields

2.10.1 The council understands there is a level of community anxiety over the current playing field proposal. This is a vital community asset and is central to the social fabric of the village. The WDES acknowledges that: 'The affected playing fields would no longer be usable given that the loss of land would impair the ability of users to utilise the resource for its intended purpose.' and 'there is no adequate alternative resource in the local area'. (see reference to Volume 2:LAO2 page 88, para 6.4.19.)

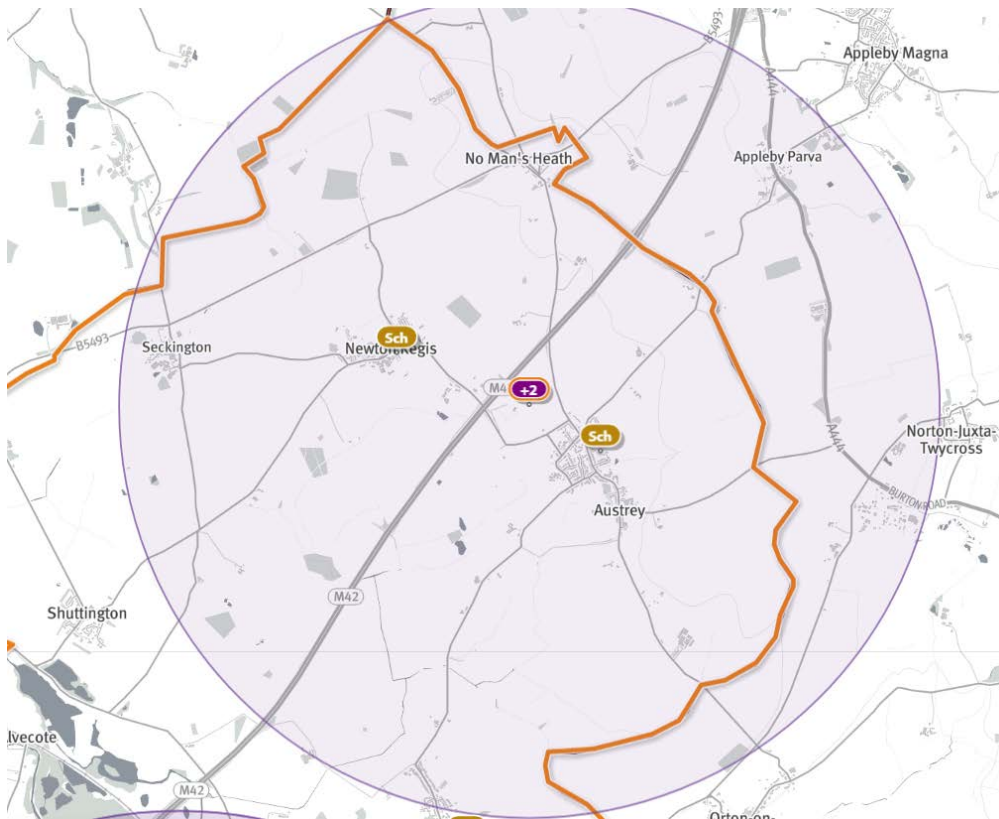
2.10.2 The facility provides an essential public green space for all age groups to enjoy. The loss of the play area, sports pitches and land utilised for community activities would have a materially detrimental effect on village life.

2.10.3 The land loss is exacerbated by the access issues caused by the permanent diversion of Newton Lane which frustrates access to the playing fields from neighbouring communities. Also, the usage of Newton Lane as a HGV route poses an additional conflict between construction traffic and villagers travelling to the site from the centre of the village on foot or bicycle.

2.10.4 Dialogue between HS2 Ltd and the community has not yet yielded any assurances despite the parish council being proactive in identifying an alternative and available site within the centre of the village which they consider suitable. It is the council's view that an early resolution on this matter must be reached to enable the village to minimise the impact on the community, remove the need to comment or petition and potentially allow HS2 to take possession of the old site in preference to other productive agricultural land for construction. The provision of the replacement facilities will require both the support of the LPA (Local Planning Authority) and a detailed assessment of any potential impacts on the historic environment (including archaeological features).

2.10.5 Public Health Warwickshire has highlighted the lack of alternative provision or outdoor activity areas for children and specific concerns about this area are:

- Isolated community with few services (see map below)



- Loss of children's play area at Austrey
- Local primary school close to construction traffic routes
- Loss of access to and use of Austrey playing fields during construction

2.11 No Mans Heath Road

2.11.1 It is unclear from the information provided to date how the HGV routes connect to No Mans Heath Lane and Austrey Lane area. The provision of the new link road at Newton Lane joining Austrey Lane suggests this will be used for a lorry route to the main compound at Austrey. The routing of lorries through the village of Austrey is extremely undesirable. The village has a lower classification of roads, many being narrow with listed properties situated adjacent to the highway at the main crossroads junction in the village.

2.11.2 An option for further investigation and discussion with the council should the direct access slips on and off the M42 not be forthcoming is to remove the need for lorries entirely within the village though the addition of a temporary construction link road between Appleby Hill Road and Austrey Lane. Further the council would wish to

see the priorities changed so that the new Newton Lane is continuous to Appleby Hill Lane with No Mans Heath Lane and Austrey Lane becoming the minor roads.

2.11.3 If HS2 continues with the suggested routings then detailed and early consideration must be given to the necessary highway improvements including but not limited to:

1. Right turn onto B5493; there is poor visibility to the right for approaching traffic on the main road. The use of this as a HGV route will need to see amendment to the junction to include some form of active traffic management.
2. Austrey Village where Newton Lane narrows to below 6.0m and there are tight pinch points onto Warton Lane.
3. The heavily residential areas with footpaths are not suitable for HGV's where there could be a safety risk from overruns and pedestrians being hit by wing mirrors at pinch points.
4. Appleby Hill is almost a single track for the whole length so there are no safe place for HGV's to pass.

2.11.4 Part of the Salt Street PROW appears to be within the land take for HS2. This is an unrecorded PROW route of undetermined status and use of it for access may not be suitable. The majority of the route falls within Leicestershire who should be actively consulted on these matters.

2.11.5 A last consideration in this area is the planned works and development at the A444 Appleby Parva which in turn may displace traffic and create a further pressure on Austrey Lane if traffic reroutes through the village to avoid No Man's Heath Road.

Question 3: Do you have any other comments?

Thematic considerations that affect more than one locality within Warwickshire.

3.1 Access to compounds from M42.

3.1.1 There are two main compounds in close proximity to each other and the M42. The Polesworth compound is currently accessed from Pooley Lane which is undesirable for the reasons listed previously. The council wishes to see significant consideration given to the use of slip lanes onto/from the M42 for direct access to the compound. This would mirror the practices in Phase 1 at the A46 where a similar road complexity exists.

3.1.2 The second compound at Austrey is also in close proximity to the M42. The local road network here is entirely unsuitable and too far from the strategic road network for the likely volumes of HS2 HGV and construction traffic. Without this alternative provision construction lorries will have to use local roads which are unsuitable for this volume and type of traffic, being; too narrow, with no separation for pedestrians, junctions that are unsuitable for proposed turning manoeuvres, all posing unacceptable risk. Again the council strongly recommends consideration is given by HE and HS2 to form accesses from/to the M42 for this construction compound.

3.2 Highway Design Standards

3.2.1 All highway designs (permanent or temporary) should meet the current DMRB published standards. Where departures from standards are proposed; justification, suitable mitigation measures and confirmation that it is not solely a cost driven exercise must be demonstrated and documented.

3.3 PROW

3.3.1 Phase 2b of HS2 appears to regard Public Rights of Way with less consideration than was the case in Phase 1. The use of stopping up and diversions via lengthy detours rather than providing a suitable crossing point (bridge or underpass as appropriate) is of particular concern, especially in North Warwickshire where the PROW network is already heavily constrained. Aside from one location where the PROW is shared with a farm route there are no instances where a PROW is accommodated on or close to its current line where it intersects with HS2. It is disappointing that Phase 2b appears to have taken a very blunt approach and failed to see the network as a whole thus rendering some public paths useless to the community.

3.3.2 As a result, if the 'diversions' are to be on the road, HS2 must as a bare minimum ensure that there are sufficient precautions taken to ensure the safety of

users - segregated footways, safe crossing points, provision for equestrian users and cyclists, etc.

3.3.3 There are instances where routes are not diverted (e.g. Bodymoor Heath Road) that are crossed by works required for the construction of HS2 but no provision has been made for the practicalities of use; the change from a flat route to a very steep slope on both sides of a new road is unacceptable and will discourage usage and reduce amenity.

3.3.4 There are instances where highways have been diverted with no consideration for the PROW that intersects them. This leaves a legacy of 'cul-de-sac' paths with a significant loss of access to the countryside for communities and the wider users. This is a shortcoming that must be addressed before the submission of the Full ES and hybrid Bill.

3.3.5 The WDES does not show complete diversions on the network, this style of tightly cutting the plans to the track centre line can lead to small parts of a route being diverted inappropriately, whilst others become unconnected with gaps between the end of one section and the remainder of the route. The Full ES needs to address this shortfall and negate the need to guess what the intention is.

3.3.6 Public Rights of Way are by their very nature often used seasonally or infrequently, any survey is purely an instance in time and does not reveal if and when a route may be used. The council has a duty to protect and assert these rights for the public, it is unacceptable either by design or omission to marginalise their value to the point of extinguishment.

3.4 Health Considerations

3.4.1 There are general Warwickshire wide public health concerns for the HS2 construction and operational phases in North Warwickshire that include the following:

3.4.2 The cumulative effects of noise and air pollution from both M42, local airports and construction of HS2 over a prolonged period of time (more than 12 months), and the impact this will have on sleep, mental health and emotional well-being in combination with the potential to isolate communities and separate them from traditional services (impact of road closures).

3.4.3 Loss of public access to green spaces (Kingsbury Water Park, Pooley Park and the playing fields at Austrey) public rights of way, cycle ways/ jogging routes/access to work routes and the impact of this on physical activity, obesity, and active non-vehicular travel routes.

3.4.4 Warwickshire Public Health remains concerned about the actual impact on communities despite the statements in the COCP. It identifies core working hours of 8am-6pm Monday to Friday and 8am -1pm on a Saturday, however there are numerous clauses that allow working outside these hours i.e. on site set up and

close down takes operating hours from 7am-7pm, deliveries of abnormal loads is planned for outside core working hours, and tunnelling operations that can operate 24 hourly. The effect on sleep for night workers may need additional mitigation, particularly as recent Trades Union Congress estimations suggest 1:8 workers may at some point be night workers.

3.4.5 There are particularly concerns about the following health needs that have been identified in North Warwickshire in the recent JSNA (Joint Strategic Needs Assessment) and the impact of the above issues on them:

North Warwickshire has:

1. Raised numbers of those killed or seriously injured on the road
2. Above England averages for air pollution – fine particulate matter
3. Statistically older population than the rest of the UK, compounding the social isolation concerns that may arise with HS2 construction works and disruption
4. Raised rates of over 18s with obesity
5. Lower than average rates than England participating in active physical activity

3.4.6 All of these matter will require further consideration by HS2 before the submission of the Full ES and Health Impact Assessment.

3.5 Minerals

3.5.1 The WDES Non-Technical Summary (NTS) recognises an anticipated shortfall of acceptable engineering material (typically sands and gravels) required to construct the railway embankments, and outlines three potential solutions, which will be explored as the ES develops:

1. Using materials extracted during the construction of the Proposed Scheme, which are unlikely to be acceptable on their own, and stabilise with cement or lime;
2. Using suitable granular material imported from commercial quarries; and
3. Excavating acceptable engineering material from borrow pits.

3.5.2 The council requires additional information to comment further. The Full ES will need to:

- a) clarify the extent to which each solution will be used
- b) where they will be used locally
- c) assess the adverse effects of the solutions proposed, and
- d) how these will be mitigated.

3.5.3 The Full ES will need to discuss and assess the cumulative requirements of the scheme for materials to enable further comment, not just railway embankments. Other material requirements potentially include ecological mitigation sites, landscaping, highways schemes, haul roads and compounds.

3.5.4 The ES will need to be developed to address various points for the County Council and HS2 Ltd to understand:

- a) if there will be a shortfall of material that needs to be addressed with locally available resources within the county
- b) the potential impact the scheme may have on the Minerals Plan 2018 as it progresses towards adoption in terms of additional demand that has not been anticipated
- c) the potential detrimental impact the construction of the scheme may have by diverting materials away from the delivery of other developments
- d) where materials will be sourced and any associated detrimental effects - e.g. the impact of transporting minerals from source to HS2 work sites, and
- e) the need for borrow pits, their siting, consenting requirements and associated impacts that need to be addressed.

3.5.5 The WDES Community Forum Reports consider the policies of Warwickshire County Council's Minerals Local Plan (adopted 1995), saved September 2007. This Plan is now somewhat out of date and as such does not consider future mineral needs during the timeframes of the construction of HS2 Phase 2b.

3.5.6 The council has an open consultation on the Minerals Plan 2018 that will guide minerals development in the county until 2032, providing more up to date policies, consistent with the National Planning Policy Framework (NPPF). The examination in public on the 2018 Plan is expected during 2019. As it progresses through the adoption process more weight will be attached to the Minerals Plan 2018 and the ES must consider it accordingly.

3.5.7 The NPPF requires Mineral Planning Authorities (MPAs) to plan for a steady and adequate supply of minerals. In particular, MPAs are required to produce a Local Aggregates Assessment ('the LAA') annually to determine aggregates supply based on 10 years past sales and other local considerations, maintaining a minimum seven year land bank of sand and gravel and 10 years for crushed rock. Unexpected demand for aggregate (for example from large scale infrastructure projects) could have significant implications on an MPA's ability to plan and provide for aggregates.

3.5.8 The 2018 Plan has allocated sand and gravel sites on the basis of the requirements outlined in the Warwickshire LAA 2017.

3.5.9 Consequently if HS2 sand and gravel needs require existing permitted sites or sites allocated within the 2018 Plan this could increase the rate of extraction of

aggregates over the plan period, which could potentially require more allocated sites coming forward sooner. This could mean that other sites may need to come forward outside the Minerals Plan or could necessitate the need for an early plan review.

3.5.10 An assessment of material requirements from commercial quarries (both existing and planned) within Warwickshire needs to be included in the ES. If needed a consultation response by HS2 on the Minerals Plan 2018 would enable the Inspector to consider HS2 mineral needs and how these may affect the Plan, at the examination in public.

3.5.11 It should be noted that sites identified in the 1995 Minerals Local Plan have largely not been carried forward into the 2018 Plan.

3.5.12 The Minerals Plan 2018 identifies Mineral Safeguarding Areas (MSAs) within the county in maps. The DWES Community Area reports states that MSAs are not included within the adopted plan and “they have therefore not been considered further in the assessment.”

3.5.13 This suggests that MSAs shall not be assessed in the ES moving forward. This approach is incorrect, as there are existing minerals safeguarding policy provisions in place.

3.5.14 Policy M5 of the 1995 Plan addresses minerals safeguarding seeking prior extraction of proven and potentially workable minerals where appropriate whether within or outside Areas of Search and Preferred Areas identified in the Plan. The supporting text goes onto clarify that Borough and District Councils, in their capacity of Local Planning Authority, have been notified of Minerals Consultation Areas (MCAs).

3.5.15 MSA maps contained have since been produced by the British Geological Society (BGS) and this approach is consistent with national policy. These maps are more accurate than the MCA maps originally provided to Borough and District Councils.

3.5.16 The council requires the impact on Mineral Safeguarding, based on known resources, to be assessed in the ES moving forward so that these are understood and further comments can be made.

3.5.17 The council supports the requirement to consult with Minerals Planning Authorities and other relevant stakeholders stated in the draft Code of Construction Practice. However, detail on how such consultations will operate, including specific requirements, is required so that the council can comment further as to whether the consultation requirements will prove effective.

3.5.18 Details of how any minerals sterilisation within the county will be mitigated should also be included in the Full ES. A Minerals Assessment should be undertaken to determine the depth and quality of resources along the route in

consultation with the council and the minerals industry to determine whether the volume and quality of the material is of potential value, and whether the prior extraction is “practicable and environmentally feasible” (para 209, NPPF 2018). This would assist both the council and HS2 in meeting the key objective of the NPPF of achieving sustainable development.

3.5.19 Kingsbury Brickworks is the only brickworks operating in the county. It is anticipated that the NPPF requirement of maintaining at least 25 years of permitted reserves of brick clay will be met by the continued operation of the brickworks during the Minerals Plan 2018 period, i.e. until 2032.

3.5.20 The works have a long history of making high quality blue bricks, supplying specialist brick products to local and regional markets from on-site marls (Etruria marl) and clays, including Staffordshire Blue bricks and special shapes. Etruria marl is a scarce resource nationally and is of a high quality for brick manufacture. The HS2 Phase 2b railway trace clips the southern end of the existing Kingsbury Brickworks Quarry, a more substantial area of the quarry is also identified as land potentially required during construction.

3.5.21 The county council is aware that the brickworks site operators are in the process of preparing a planning application to extend the quarry area eastwards and provided an EIA scoping opinion to them in November 2015 on that matter. A planning application for mineral extraction is expected to be submitted shortly.

3.5.22 Minerals safeguarding of the brick clay resource is an important consideration, and the council requires an assessment to be included in the ES to clarify if and how HS2 works will impact on the Etruria marl resource at and in the vicinity of the brickworks site, its operation and its outputs.

3.5.23 The council supports HS2’s objectives:

- of managing waste cognisant of the waste hierarchy;
- limiting the use of materials and generation of waste and
- “only if excavated material is not required, is unsuitable for use or cannot be economically treated to make it suitable for use, should it be considered for off-site reuse, off-site treatment/recycling or disposal.”

3.5.24 The WDES Volume 3: Route-wide effects; addresses the various waste streams that would arise as a result of the proposed scheme (including operation) and the potential impact on landfill capacity. It states that “the estimated quantity of surplus excavated material that would not be reused within the construction of the proposed scheme would be approximately 40% of the overall excavated material.”

3.5.25 The council, as Waste Planning Authority, has concerns; the Warwickshire Waste Core Strategy 2018 - 2028 (‘the Waste Local Plan’) addresses the county’s

predicted waste arisings up until 2028, but does not account for waste that may arise as a result of HS2 schemes. Moving forward HS2 Ltd must clarify in the Full ES any requirements for off-site waste disposal within the county so it can be understood how this will affect landfill capacity currently addressed in the Waste Local Plan.

3.5.26 The WDES also states that: “the nominated undertaker would seek to provide any surplus excavated material that arises and which is not required for reuse within the Proposed Scheme:

- a) for use in other construction projects, where opportunities arise at the time of construction; and/or
- b) for use for restoration of mineral sites, where the transportation of that material does not result in significant environmental effects.”

3.5.27 The restoration of minerals sites is seen as positive effect that could be accrued as a result of the proposed scheme. The ES will need to assess and identify minerals sites within Warwickshire where the use of material for restoration is feasible factoring HS2 construction programme and site restoration timeframes, in consultation with site operators. Construction waste arisings will need to be managed ‘at the right place, at the right time’.

3.5.28 The WDES Community Area Reports Volume 2 outlines historic landfill sites along the route. It is likely that there will be others including borrow pits associated with the construction of the M42 plus more recent small-scale inert landfill sites, which do not yet appear to have been recorded. Further investigation is required to inform the Full ES.

3.6 Landscape Character:

3.6.1 It is unclear if the Warwickshire Landscapes Guidelines (WLG, Arden) have been used to inform the more detailed Landscape Character Assessments (LCAs) or the proposed mitigation. The WLG are current and relevant and should be referenced in the HS2 assessment. Much of the Phase 2b route falls within an enhancement area as identified by the WLG and therefore mitigation proposals should look to restore the Arden landscape character rather than fragment it. The WDES does not adequately explain value, susceptibility to change, sensitivity, magnitude of change and how the level of effect is arrived at.

Marston Village Farmlands LCA

3.6.2 The LCA states that effects would be reduced to non-significant in year 15 due to “maturing vegetation present in the view”. However, the severance of the landscape and changes to landform will be permanent changes and tree planting do not mitigate this if trees are not a characteristic of this LCA. HS2 needs to demonstrate that their tree planting will enhance the existing character.

Visual

3.6.3 The council has not seen the ZTV (Zone of Theoretical Visibility); it is hard to comment on the suitability of the location viewpoints. Previous representations on this point in January 2018 do not manifest in this assessment.

3.6.4 The council expect to see a greater number of viewpoints considered for the operational phase, particularly from the two Country Parks, the public rights of way (including near Whateley) and residential areas, e.g. Polesworth looking towards the Polesworth viaduct. The lack of photomontages at this stage is disappointing and needs to be addressed in the Full ES with particular attention paid to the River Tame viaduct at Kingsbury Water Park.

3.6.5 The variance of sensitivity of visual receptors is concerning and inconsistent. Some recreational receptors, e.g. Pooley Country Park, have been given high sensitivity, whereas others, at the canal towpath and Kingsbury Water Park, have only been assessed as medium - high. This needs to be addressed in the Full ES with a common methodology in place. Views from local schools do not appear to have been considered at all.

3.6.6 It is unclear how the various photomontage locations were chosen and why some of them appear to be facing away from the route- 353-02-014. In addition viewpoint 350-03-04 is not on the map and we believe it should be 350-03-005.

Bunding to the north of Kingsbury (map no. LV-04-351).

3.6.7 It is unclear whether these are intended for visual screening or for another purpose. The height of the bunds is not given, but they look very large and 'engineered' and will potentially be as visually intrusive as the railway itself, as well as being at odds with the local landscape character. An explanation of their purpose is necessary to gain a clearer understanding of their impact. This may be achieved by a photomontage showing these bunds and whether they are planted.

Landscape general

3.6.8 The WDES does not indicate how the findings of the LVIA have influenced the scheme design and mitigation proposals. There appears to be very little offsite planting. There may be areas where linear tree planting along the route would be just as incongruous to the landscape as the railway itself, both from a visual and landscape character point of view, and a better result may be achieved with offsite planting. More detail on this point is required.

3.7 Archaeology & Heritage

3.7.1 The cultural heritage data presented in the WDES is limited. The WDES states that the historic environment assessment undertaken is provisional. As a result it is not possible to identify specific physical effects on heritage assets resulting from operation of HS2 and that 'An assessment of operational effects of the Proposed Scheme will be presented in the formal ES.

3.7.2 There is insufficient information in the WDES to enable us to determine with any confidence the extent to which the on-going assessment works will result in an Full ES that appropriately assesses and presents the likely impact of HS2 upon the historic environment.

3.7.3 Specific omissions include:

- a) Only designated sites are shown on the maps. The non-designated sites which have been identified by the desk-based assessment are listed in the text of the Community Area Reports in Volume 2 but not on the corresponding maps.
- b) The draft ES contains only limited information on the heritage assets it refers to. It should include the relevant further detailed information that is presently available on those sites in the final ES.
- c) It is not clear how the sites listed in the Community Reports were identified. Section 8 of Vol. 1 of the WDES lists the sources that were consulted and the surveys being undertaken, such as site visits and LiDAR surveys, it is unclear whether the information presented includes the results of each of these phases of assessment or if the results of these surveys (such as the LiDAR) are yet to be integrated.
- d) There is a significant potential for previously unidentified heritage assets to be impacted by this proposed scheme. This is only briefly acknowledged within the relevant chapters of the WDES.
- e) Volume 2 presents conclusions on the significance of the heritage assets impacted by and the scale of the impact that HS2 will have upon these (both pre- and post-mitigation). There is insufficient information included in the document to show how these conclusions were reached.
- f) The assessment to date relies on non-intrusive survey. This cannot be relied on in isolation to establish the presence or absence of archaeological sites, and to characterise them. The Full ES must be supported by field evaluation, including trial trenching (and other intrusive techniques) to ensure that that assessment is appropriately informed. The Full ES needs to set out the limitations and risks of any assessment undertaken at the point of deposit of the hybrid Bill.

3.7.4 The Community Forum Area reports do not clearly set out the limitations of the assessment works or the confidence that can be assigned to the conclusions. The council do not consider that the WDES is transparent in respect of the conclusions drawn.

3.7.5 Due to the limited information included in the WDES the council cannot provide detailed comments on whether or not it is in agreement with the conclusions presented.

Previously unidentified heritage assets:

3.7.6 The WDES only refers to known heritage assets. There may be as yet unknown heritage assets which will be impacted by HS2. The ES must assess the potential for any such sites and present the results of that assessment.

General Comments

3.7.7 The WDES does not reference any national or regional research frameworks. The council expects assessments of the significance of heritage assets potentially impacted by HS2 to take into account such research frameworks.

3.7.8 Fieldwork undertaken during Phase 2b will generate an extensive archive. Vol. 1 states that the nominated undertaker 'would archive the resulting records, artefacts and materials in suitable repositories.' This will put pressure on local museum services who have limited space to accept large archives. Whilst the capacity of museums is outside the control of HS2, the council expect the potential archiving issues to be assessed and acknowledged in the Full ES.

3.7.9 The historic environment is widely recognised as a key factor contributing to a community's sense of place and HS2 may adversely impact on that community sense of place e.g. reduced access to historic sites or the loss of local historic buildings. The council recommends that this is covered in the Communities section of the WDES. in particular providing access (both virtual and physical) to recovered material and the relocation of community heritage collections directly affected by HS2 (for example. see 2.8.11 Pooley)

3.8 Ecology:

3.8.1 The council reserves its final position until a detailed assessment is published to include species and habitat surveys.

3.8.2 At this stage, the council adopts a precautionary principle approach. The Full ES will need to recognise the following.

Volume 1: Introduction and methodology:

3.8.3 The council expects that the ES conforms to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM) plus published British Guidance and not simply 'take account of' it.

3.8.4 The council requires that an additional assumption is made for the purpose of the ecological impact assessment that, by the time HS2 is operational, Barbastelle bat would be present in Kingsbury Wood SSSI;

3.8.5 The council insists that the Full ES recognises the UK's national and international commitments to achieving biodiversity net gains and objects to the objective of 'no net loss'. The council supports the inclusion of the establishment of an Ecology Review Group and requests that the remit is widened in Phase 2b and is established prior to Royal Assent.

LA01 Volume 2- Lea Marston to Tamworth

3.8.6 As the spatial scope of the LA01 report this volume needs to reference the SSSIs of Alvecote Pools and Birches Barn Meadows and include the following Local Wildlife Sites:

- a) Mineral Railway Baddesley Ensor
- b) Penmire Lake
- c) Dordon Colliery West
- d) The Hollies
- e) Polesworth Abbey Green Park
- f) Polesworth Abbey Marsh
- g) Alvecote Wood

3.8.7 The WDES does not include the following Local Wildlife Sites; these should be considered as Local Wildlife Sites until survey work evidence is established to the contrary:

- a. Coventry Canal
- b. River Anker
- c. Cuttle Mill Pools
- d. Kingsbury Wetlands (incl. Country Park)
- e. Field at Kingsbury
- f. Birmingham and Fazeley Canal
- g. Meadow adjacent to Dosthill Tip
- h. Cliff Wood
- i. Broad-leaved semi-natural woodland (near Edge Hill)
- j. The Woodlands
- k. Freasley Common

3.8.8 The council considers it is an omission that the unnamed Ancient Replanted Woodland at Edge Wood is not listed.

LA02 Volume 2 - Birchmoor to Austrey

3.8.9 The council disagrees with the statement in WDES Volume 2 LA02 that there are no internationally important sites relevant to the assessment in the Birchmoor to Austrey area. The HS2 works fall within 2km of the River Mease SAC (Special Area of Conservation). The national statutory agencies insisted that the council considered impacts on the River Mease SAC within both its Flood Risk Strategy and Mineral Strategy and therefore it expects the same requirement will be placed on HS2.

3.8.10 The WDES does not include the following Local Wildlife Sites, these should be considered as Local Wildlife Sites until survey work evidence is established to the contrary:

- a. Bramcote Covert
- b. Meadow, near Austrey
- c. Two Ponds, Shuttington Fields Farm
- d. New Covert, Shuttington Field Farm
- e. River Anker
- f. Pooley Country Park
- g. Alvecote Quarry
- h. Alvecote Pools, wider area than SSSI boundary
- i. Coventry Canal

Habitats - Assessments of Impacts

3.8.11 The council reserves its final position until the detailed habitat assessments are published. However, the habitat inventory held by the council suggests that much of the mitigation outlined in the WDES is already of high ecological value and therefore it is unlikely to deliver biodiversity net gains. North Warwickshire contains a significant amount of Warwickshire, Coventry and Solihull's acid grassland and until the detailed habitat assessments are published, the council must object to the statement that - impacts would be of 'up to district/borough' should to determine.

Species- Assessments of Impacts

3.8.12 The council reserves its final position until detailed species assessments are published. The council holds the record for the Barbastelle bat (European species of particular importance) that may utilise the large woodland at Kingswood and thus be in conflict with HS2. Using the precautionary principle the council requests a green bridge in the Whateley area (see section 2.4.)

3.8.13 The wintering and breeding birds' status in the Tame Valley is recognised to be of regional value and therefore the residual significant impacts should be considered up to regional significance until evidenced to the contrary.

3.9 Land and geology

3.9.1 The council would like to note the inconsistency and see it addressed in the Full ES that the list of Local Geological Sites (LGS) that will be impacted upon by the scheme are not considered or shown on the current mapping. The council suggests these are:

- Kingsbury Brickworks
- Whateley Quarry
- Polesworth Railway
- Roundberry Quarry

3.10 EqIA

3.10.1 The "consultation on the working draft is on-going alongside the on-going design and development of phase 2b", which has resulted in the EqIA falling short and not yet identifying what HS2 will do about any negative impacts that are identified.

3.10.2 Of some concern is the use of language in the EqIA, such as 'mitigation measures in Section 5 are assumed to be applied.' The council expects greater assurance that the EqIA will be used to assess the actual impact of Phase 2b on the communities of North Warwickshire. Further that HS2 will identify what actions are required to remove or mitigate all negative impacts.

3.10.3 At present the EqIA only addresses age, disability, race and religion or belief, then only noting that sexual orientation, gender re-assignment or pregnancy and maternity have not yet been considered because of a lack of reliable data. Further that sex has not been considered as it is expected that the methodology would be unlikely to identify disproportionate representation of males or females in any given LSOA. It notes that the protected characteristics not currently being looked at will be considered in the formal EqIA. However the council recommends that a lack of data should not prevent HS2 from identifying potential impacts on those with those protected characteristics.

3.10.4 In cases where something is being introduced for the first time there may be little experience to draw on or other material evidence. In such situations HS2 needs to make a judgement that is as reliable as possible.

3.10.5 Due to the limited information included in the WDES the council cannot provide detailed comments on whether or not it is in agreement with the conclusions presented.

Flood & Water Resource

3.11.1 The existing route wide baseline for flood risk and land drainage uses the EA Flood Map for planning which indicates fluvial risk from larger watercourses. This does not pick up the flood plains associated with ordinary watercourses with smaller catchments (below 3km²). Detailed modelling of smaller watercourses should be considered to fully understand the existing risk of flooding for the route. The Kettle Brook south of J10 of the M42 is a key example of this.

3.11.2 Our experience in dealing with HS2 Phase 1 suggests that further work is required at this early stage to locate all minor watercourses. The detailed river network used to identify the location of ordinary watercourses is not a complete record of all watercourses and there may be others which will require site walkovers to confirm their locations, size, condition and the impacts of construction on these watercourses. Understanding where all the minor watercourses are will avoid the need for unnecessary culverting when flows could be considered and managed at an early stage. The route crosses several surface water flow paths that will also need to be considered.

3.11.3 Very limited flood plain mitigation is shown on the drawings; although this will be considered by the Environment Agency, this is done in consultation with the LLFA and where alternative land solutions are required we would expect this to be addressed in the hybrid bill submission rather than left to a later additional provision.