Consultation Response to Volume 2
CFA LA10: TIBSHELF TO SHUTTLEWOOD

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VOLUME 2: CFA LA10: TIBSHELF TO SHUTTLEWOOD

1.1 General Comments

1.1.1 This report contains our comments for the Community Area 10 of WDES Volume 2.

1.1.2 Please also refer to the General response to WDES Volume 2 where comments apply to all areas within Derbyshire.

1.1.3 Detailed comments on other Community Area Reports are contained in separate local area volume which also form part of this consultation response.

1.1.4 The Council continue to be disappointed with HS2's failure to address key concerns in this area which have been raised by DCC on numerous occasions. These include the impact on key heritage assets such as Hardwick Hall, Bolsover Castle and Heath Church. DCC do however welcome the proposals for the introduction of high speed services from Chesterfield Station and the potential economic benefits from the IMD at Staveley provided that they take account of local concerns and connectivity.

1.2 Overview and description, Section 2.

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Paragraph reference	**Full ES comment**
2.1.5	To the West of Bolsover, there are major redevelopment proposals that are currently underway (not just proposed) at Markham Vale and the former Coalite site. HS2 Ltd have been made aware of these site over the past 4 years.
2.1.24	This section makes appropriate reference to relevant development plans in Derbyshire covering the proposed route including the Saved Policies of the Adopted Bolsover Local Plan; Saved Policies of the Adopted North East Derbyshire Local Plan; Chesterfield Adopted Core Strategy; Saved Policies of the Adopted Chesterfield Borough Local Plan; Derby and Derbyshire Adopted Minerals Local Plan; Derby and Derbyshire Local Waste Plan; and Derbyshire Local Transport Plan.
2.1.25	Reference should be made in this section to the North East Derbyshire Local Plan that was submitted to the Secretary of State on 24 May 2018, and to the Bolsover District Local Plan that was submitted to the Secretary of State on 31 August 2018. These two plans should therefore be taken into account in the assessment process for the ES. For completeness, reference should also be made to the emerging Derby and Derbyshire Joint Minerals Local Plan and emerging Derby and Derbyshire Joint Waste Local Plan neither of which have yet to reach the submission stage.

2.1.26 - 2.1.29	In terms of committed development, allocations and safeguarded areas for minerals development, HS2 is requested to ensure that it continues to engage with officers at DCC, particularly to ensure that the baseline information for these forms of development is robust and up-to-date as the WDES progresses towards its finalised version.
2.1.30	There are a considerable number of areas in the design which are subject to further development. As a result it makes it difficult to provide a meaningful response to this consultation.
2.2.12 - 2.2.14	Tibshelf bridleway 21 currently connects to footpath 35, both are diverted to Mansfield road on either side of the line. There is no connection shown across the bridge between them. Safe connection and crossing facilities will be required CT-05-452. (Should be same as Deep Lane overbridge CT-05-453). The depth of the proposed cutting at Tibshelf (up to 27m deep), seems totally out of proportion with the surrounding area. Could a cut and cover tunnel be built instead to lessen the visual impact linking with the tunnel already proposed below the M1 adjacent to the cutting? The depth of the Hardstoft south cutting is up to 37m deep so again could a cut and cover tunnel be considered to lessen the impact.
2.2.17	The depth of the Hardstoft north cutting is up to 36m deep so again could a cut and cover tunnel be considered to lessen the impact. The Council are concerned about the closure of Mill Lane and the associated impact on access to Hardwick Hall.
2.2.18	There is no acknowledgement that a high voltage pylon will need relocation as part of the works, it is still shown in the middle of the embankment south of M1 junction 29 (CT-06-455). Associated works could have a major impact in the area. How will the impacts of associated works be addressed and mitigated?

2.2.22	The Council are concerned about the disruption during construction associated with the major works around M1 Junction 29. The proposed main line crosses the A6175 and A617 at Junction 29 of the M1 motorway. This requires the elongation of the existing motorway junction with proposed spans over the line on bridges 23m long. Five alternative options were considered for this section of the route with option D being carried into the proposed scheme. Options O, A, B, and C of the alternatives considered all required less land than the proposed scheme but had higher costs. Consequently the cheapest option has been chosen paying insufficient regard to the impact on the motorway junction and travel to and from Chesterfield and surrounding areas. This again is an area where the impact on the local highways network has been underestimated and under assessed. Option B within the alternatives report is cited as having 'marginally fewer historic environment impacts' than the proposed scheme and 'less disruption to the M1 Junction'. However this option will not be subject to further consideration. Rejection of this option and the other alternatives listed is based on 'higher costs compared to the proposed scheme'. This is a clear indication that HS2 consider cost the principle factor in its design and not the options that can lessen disruption and impact during construction and subsequent operation. Therefore DCC urge HS2 reconsider the alternative options for this section of the route giving more weight to factors other than cost.

2.2.27	Bolsover south embankment is NOT shown with mitigation planting on both sides CT-06-457. (It is shown on CT-06-456) this is an error. The auto transformer at CT-06-457 (B5) does not appear to have a vehicular access route to permit construction or future maintenance - An access route is stated from Palterton Lane but not indicated on the plan. During re-alignment of the A632 provision should be made for the construction of a shared 3m width NMU route separated from the carriageway by a grass verge to replace the link for which non highway land and planning consent have been secured within the Markham Vale DCC portfolio. Provision of a turning head on the southern closed section of the A632 is admirable but the Council would prefer the land to be transferred to the adjacent farm owners as the only user of the closed road section, once all highway rights and utilities are diverted from its corridor lest the council be left with a long term maintenance liability. It is unclear where the permanent access will be to the Railway Cottages from Chesterfield Road. Can redundant sections of Chesterfield Road be landscaped? No mention is made regarding need for the diversion of the overhead 132kV electricity apparatus though it is shown on at CT-06-460(F4-G8) The location of the viaduct over the M1 is likely to require a diversion which will have significant impacts. The County Council has long term plans for the creation of a new NMU greenway on line of the former Bolsover Rail trackbed as shown in the proposed Bolsover Local Plan (also a proposed route within the Derbyshire Strategic Cycle Network). Provision of an underpass to accommodate this future use of the trackbed is in progress at its intersection with the A632. To facilitate this future greenway Bolsover North Embankment needs to be reduced in length by approximately 130m at its southern end. This will remove both any impact upon Snipe Bog and create space around the base of the toe of the embankment for future greenway construction, principally on the former railway alignment.

2.2.32	To control any cost increase from this work DCC suggest that the Bolsover South Viaduct could be reduced in length by up to 200m at its northern end where it runs closely alongside the Bolsover South Spoil Tip and where alternate embankment provision could perhaps provide the better, and cheaper solution. The tip could perhaps be used to provide additional screen to HS2 and the footpath within Peter Fidler Reserve re-aligned to suit any new topography within the restored colliery tip site. Shuttlewood auto-transformer at CT-06-460 (F5) does not appear to have a vehicular access route to permit construction or future maintenance. An access route is stated from Woodthorpe Road but not indicated on plan. The depth of the proposed cutting at Shuttlewood (up to 24m deep), seems totally out of proportion with the surrounding area. Could a cut and cover tunnel be built instead to lessen the visual impact? Shuttlewood Cutting - The proposals do not provide details of how vehicular access to Markham Vale North Tip will be maintained. A balancing pond for highway drainage for the diverted B6418 Chesterfield Road/Buttermilk Lane, the reference to CT-06-454 is incorrect. DCC fail to see the need for the permanent diversion of Bolsover Footpath 34 adjacent to the Shuttlewood Cutting on to DCC Markham Vale estate land. DCC own land as part of the Markham Vale estate where HS2 propose woodland planting to western side of the Shuttlewood cutting. Map CT-06-459 F5. Discussions on access or acquisition of this land has not yet started. DCC own land as part of the Markham Vale estate where HS2 propose ecological mitigation ponds to western side of the Shuttlewood culvert. Map CT-06-459 I5. Discussions on access or acquisition of this land has not yet started. DCC own land as part of the Markham Vale estate where HS2 propose woodland planting to western side of the Shuttlewood culvert. Map CT-06-459 G5 to I5. Discussions on access or acquisition of this land has not yet started.

2.2.33	This statement grossly understates the amount of work in this section, it does not mention the 40m high M1 Motorway North viaduct that extends from here into LA11; it also misses the potential major issues with electricity pylons. The power lines appear too close to the embankment. (See response to 2.2.12 for LA11). The associated map LV-03-397a does not show a photomontage location of this structure, (suggest 397-02-001 and Mastin Moor). The continuation/division of sheets is very confusing between CT-06-460 and CT-06-635, (LA11). The M1 Motorway North Viaduct, the replacement flood plain, the balancing pond and access track are all described in LA11 despite being almost completely within the cut-line of maps of LA10.
2.3.2	DCC own land along the route of the proposed HS2 alignment as part of the Markham Vale Estate. Discussions on access or acquisition of the land have not yet started.
2.3.6	DCC have invested significant resources at Markham Vale to attract new businesses and create employment. How do HS2 and its contractors propose to engage with the business community to minimise impacts on their operations? How do HS2 propose to mitigate against job losses due to impacts on employment land and to compensate DCC for its lost investment?
2.3.12	How do HS2 propose to mitigate against disruption to utilities during construction phase so that there is no impact on business operation needs at Markham Vale?
2.3.23	DCC own land as part of the Markham Vale Estate which have been identified for soil storage, notably at CT-05-458 F2 - G2, CT-05-459 H5 to I5. Discussions on access or acquisition of the land have not yet started.

2.3.30	Heath South Cutting Main Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. It is unclear from the plan provided, specifically where the access will be taken from. Mill Lane is a narrow, tortuous unlit country lane, subject to the national speed limit. Due to the road alignment it is not currently possible to determine whether an access would meet minimum safety requirements. A speed survey will be required to determine if adequate visibility is achievable, and it is likely that modifications may be required to the existing public highway. Should this be the case, detailed layout designs complying with current design guidance will need to be provided. This may require third party land. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.
2.3.39	Tibshelf Cutting Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan although the access appears to be taken directly through controlled land onto Mansfield Road, at a point where the carriageway alignment is level and straight, thus visibility may be adequate within the 40 mph speed limit. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.

2.3.48	Hardstoft South Cutting Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. Visibility is substandard at the junction onto Chesterfield Road. Third party land is required to provide necessary visibility sightlines. Visibility at the Biggin Lane/Chesterfield Road junction is substandard and may require third party land. There are potential conflicts with users of PROW. The route from Chesterfield Road requires widening and/or inter-visible passing places. This may require third party land. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway, it will be for the promoter to ensure that rights to access a site exist.
2.3.56	Hardstoft North Cutting Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. No access details provided but visibility is likely to be restricted by existing road alignment so may require third party land. Topography of the site may present a highway problem as there appears to be a level difference between the road and the site compound. The existing road alignment currently restricts visibility but the road appears to be being realigned as part of the proposal. The order of works will determine whether a suitable access can be achieved. The level difference may present a constraint to the establishing a safe compound at this location. The route to site is via narrow country lanes with restricted forward visibility. These may require widening or provided with passing places which may require third party land. The Hawking Lane diversion at its junction onto Deep Lane falls within a 60 mph limit so will require 2.4m x 203m splays. Visibility onto the Deep Lane/A6175 junction is possibly substandard so may require third partly land. There are also potential conflicts with users of the PROW.

2.3.56(cont)	This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.
2.3.64	Stainsby Viaduct Satellite Compound A satisfactory access cannot be achieved to serve the site as drawn on the plan. No access details are provided. Two compounds are indicated in the plan. The Southern compound appears to have no link to the public highway. Third party land may be required to address this. Visibility is substandard where the Mill Lane diversion re-joins the existing Mill Lane at Stainsby Mill. There are potential conflicts with users of the PROW. DCC have concerns about construction traffic using Stanley Lane (?) at its junction with Stainsby Brook Cottage. Hawking Lane is constrained due to limited width and has severely restricted forward visibility. Formation of a new junction onto the Hawking Lane diversion will require 2.4m x 203m visibility sightlines and therefore may require third party land. There are also potential conflicts with users of PROW. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway, it will be for the promoter to ensure that rights to access a site exist.
2.3.69	Mill Lane Diversion Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. No access details are provided. There are potential conflicts at the junction of the unclassified Mansfield Road with the A617. Increases in traffic arising from the use from compound, Mill Lane diversion traffic, and diverted traffic may require mitigation, possibly by means of the introduction of traffic signal control.

2.3.69(cont)	Visibility is substandard where the Mill Lane diversion re-joins Mill Lane at Stainsby Mill. A re-prioritisation of the Mansfield Road route into Mill Lane diversion rather than a T-junction may overcome this. There are also potential conflicts with users of PROW. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.
2.3.74	M1 Motorway South Viaduct Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. No access details are provided. The visibility is substandard due to the vertical alignment of the road. The development of the site would cause an adverse impact on surrounding highway network. There are restricted carriageway widths and the horizontal and vertical alignments which limit forward visibility are not easily mitigated. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.

2.3.82	Bolsover South Embankment Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. The position of the access is not shown but visibility is restricted by boundary features on both sides of road. The development of the site would cause an adverse impact on surrounding highway network. There are restricted carriageway widths and the horizontal and vertical alignments which limit forward visibility are not easily mitigated. Land is potentially required during construction as shown on the drawing and the access is severely substandard in terms of visibility and conflicts with PROW, FP19. Access is from the north side of Palterton Lane, opposite the compound. Boundary features would require removal to achieve satisfactory visibility. Access widening for at least 20m into the site would be required to allow two-way vehicle movements and passing bays need to be inter-visible. This may require third party land. The reason for potential works to Palterton Lane south of the site is unclear. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.

2.3.91	Carr Vale Embankment Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan due to the vertical alignment of the road. The topography of the area presents a highway problem. The visibility is restricted by vertical the alignment; however realignment of Chesterfield Road may overcome restrictions to the visibility and access issues. Construction traffic on Buttermilk Lane (40 mph) and access into "land potentially required…" has visibility obstructed by the river bridge parapet. Note that there is also a weak bridge. Construction traffic at the pinch point on Woodhouse Lane near the junction with Station Road may require mitigation and third party land. The permanent closure of the disused railway line as indicated on drawing impacts the aspirational multi-user route at this point. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway, it will be for the promoter to ensure that rights to access a site exist.
2.3.98	Shuttlewood Viaduct Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan due to lack of adequate forward visibility, demonstrated by existing solid white centreline. The exit visibility could be improved but forward visibility is restricted by the existing carriageway topography. Any improvements may require third party land. The development of the site would cause an adverse impact on surrounding highway network. It is unlikely that any mitigation would be feasible from a safety perspective. The Site is constrained with solid white centreline, the lack of a controlled frontage and potential conflict with Buttermilk Lane (Coalite). The site topography presents a highway problem as the vertical alignment of the highway adversely impacts upon forward visibility. The footway fronting Chesterfield Road is narrow and on a bus route. There is a narrow and weak bridge on Buttermilk Lane presenting a constraint to accessing a compound on this site.

2.3.98 (cont)	This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway, it will be for the promoter to ensure that rights to access a site exist.
2.3.105	M1 Motorway North Viaduct Satellite Compound. A satisfactory access cannot be achieved to serve the site as drawn on the plan. There is restricted visibility to the left on exit from the existing access on Mill Lane which could be improved by the removal of adjacent trees and vegetation. Access is at the bottom of a dip so the approach gradients could impact on stopping distances. DCC would require a structural assessment of the adjacent bridge to ensure suitability. The highway gradients approaching the access also require investigation and may require third party land to overcome. This site has been assessed based on the information / plans provided by HS2 and on an individual basis looking at access to the existing local highway network issues only. No assumption has been made as to whether the boundary of a site necessarily abuts the public highway; it will be for the promoter to ensure that rights to access a site exist.
2.3.106	Reference is made to the demolition of an outbuilding at Seymour Link Road but there are no details provided about this building.
2.3.116	DCC support the approach that excavated material generated across the scheme would be re-used as engineering fill material or in the environmental mitigation earthworks of the scheme where suitable and reasonably practicable. This would help ensure that the amount of excess waste produced from the scheme is minimised.

2.3.117	It is noted from this section that forecasts of the amount of construction, demolition and excavated waste that would be produced during construction of the proposed scheme is to be reported in Volume 3 of the ES. However, DCC considers it to be important that full details of the likely amounts of construction, demolition and excavation waste should be set out for this specific section of the route in the ES so that DCC can make a more detailed assessment of the potential environmental impacts of the generation of waste material, particularly if it is proposed that any excess waste material will need to be exported from the study area. Without knowing the balance between cut and fill the extent to which borrow pits will be required is unknown and therefore an assessment of the accuracy of the proposal in forecasting the requirement for land take to accommodate borrow pits and stocking areas is uncertain. The transport implications of this uncertainty in cut and fill balance, and in the need to export/import materials is also uncertain. Movement of excavated and imported materials will have the potential for a significant impact on the local road network, this should be addressed.
2.3.118	DCC support the approach that local excess or shortfall of excavated material within the Tibshelf to Shuttlewood area would be managed through an integrated design approach with the aim of contributing to an overall balance of excavated material on a route wide basis. However, DCC's comments made on section 2.1.117 are reaffirmed. It is important that details are provided of the likely amounts of excavated waste that would be generated from this specific section of the route so that the County Council can make a more informed judgement of the likely environmental impacts of the scheme. This is particularly important if significant amounts of excess waste need to be exported from the area. Without knowing the balance between cut and fill the extent to which borrow pits will be required is unknown and therefore an assessment of the accuracy of the proposal in forecasting the requirement for land take to accommodate borrow pits and stocking areas is uncertain. The transport implications of this uncertainty in cut and fill balance, and in the need to export/import materials is also uncertain. Movement of excavated and imported materials will have the potential for a significant impact on the local road network, this should be addressed.

2.3.121	It is not clear which of the main or satellite compounds in this area, if any, would remain in place for the rail systems works. Figure 8 on page 50/54 shows the Heath South cutting main compound and 10 satellite compounds open at some point between Q4 2024 to Q3 2030. Yet rail systems work are not due to begin until Q3 2031 and end in Q4 2033. Will these require work sites? If so where will they be?
2.4.7 / 2.4.8	With regard to operational waste and material resources, DCC considers it important that full details of the likely amounts of operational waste that would be generated by this specific study area of the scheme should be set out in the ES. DCC can then make a more detailed assessment of the likely environmental impacts of the scheme, particularly if there is likely to be a need for significant amounts of excess waste material to be exported from the study area. Without knowing the balance between cut and fill, the extent to which borrow pits will be required is unknown and therefore an assessment of the accuracy of the proposal in forecasting the requirement for land take to accommodate borrow pits and stocking areas is uncertain. The transport implications of this uncertainty in cut and fill balance, and in the need to export/import materials is also uncertain. Movement of excavated and imported materials will have the potential for a significant impact on the local road network, this should be addressed.

2.5.2	Heath and Heath Church site. DCC urge HS2 to give further consideration to options for the route where it passes Heath. The proposed route passes to the east of Heath in a cutting before passing under Junction 29 of the M1. This design requires realignment of this junction. The selected route (option D) for the proposed scheme, at this site provides a retained cut with pile concrete walls crossed by two single span over bridges requiring elongation of the existing motorway junction. Additionally the selected option will require extensive intrusion into the former Heath Churchyard requiring the demolition of a Grade II Listed property and the exhumation of over 1000 burials. This is required in order to accommodate the significant cut with the alternative report recognising greater land is required for this selected option in comparison to the alternatives. The alternatives report also recognises the increased potential for impacts on the historic environment through the disturbance of unrecorded archaeological remains associated with the village of Heath. However it gives no regard to the impact on the former burial ground and the significant complications arising from the exhumations. Furthermore the appraisal of the options gives no regard to the disruption this will create to the area and the significant intrusion on consecrated ground and the relocation of headstones, bodies and a Grade II Listed property. It is noted that the alternative report states the other options considered (namely O and A) for the Heath cut and cover tunnel were deemed to cost more to construct than the proposed scheme. On this basis we believe that HS2 has made the decision based on financial constraints which is disproportionate given the significant complications with construction of the selected option. Therefore we urge HS2 to strongly to reconsider the options for the Heath cut and cover tunnel and revisit the alternative options. If HS2 are to proceed with Option D the District and County Council urges alternatives to the proposed engineering model for the cut and cover tunnel are used providing a retaining wall design requiring less intrusion into the historic burial ground. This will significantly lessen the environmental impact and provide a more proportionate and reasonable approach.

1.3 Stakeholder engagement and consultation, Section 3.

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Paragraph reference	**Full ES comment**
3.3.2	There is no acknowledgement of the impacts on the business community at Markham Vale despite several meetings being held over the past four years between DCC officers with responsibility for Markham Vale and HS2 personnel.
3.4.6 / 3.4.9	DCC request that HS2 LTD continues to engage with the County Council on the scheme, particularly on the baseline information to be used in the ES to ensure that it is robust and up-to-date as the WDES progresses towards the final version. There have been many meetings between DCC and various HS2 staff and consultants with the local authority providing considerable amounts of information and views on the different elements of the proposed scheme. However it has often been felt that this is one way process with little or no feedback from HS2 on what they think of the views expressed by DCC. The lack of any notes from many of the meetings also is a cause of concern as it is hard to tell if the issues raised by DCC have been recorded, understood or taken on board.
3.4.8, 3.4.10 and 3.4.19	There is no acknowledgement of numerous meetings held over the past four years between DCC officers with responsibility for Markham Vale, Henry Boot developments Ltd and HS2 personnel regarding the major development proposals at Markham Vale and the impacts on them from HS2. There has been a significant exchange of information on this matter but the proposals do not even use up to date OS information showing the new and proposed industrial units and infrastructure at Markham Vale.

1.4 Agriculture, forestry and soils, Section 4.

1.4.1 Please also refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

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Paragraph reference	**Full ES comment**
4.1.2	DCC own agricultural and forestry land as part of its Markham Vale Estate and have not been consulted by HS2 in this context.
4.4.3	It is unclear how the agricultural land forming part of DCC's Markham Vale estate will be accessed by vehicles over the proposed Bolsover Footpath 35 accommodation overbridge Woodside Farm (CT-06-460).
4.4.26	Part of the woodland on Markham Vale land has been planted (and managed) for commercial purposes but this is not recognised here.

4.4.28	Table 16: Summary of permanent effects on holdings from construction should be reviewed in the light of the previous comment.

1.5 Air Quality, Section 5.

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Paragraph reference	**Full ES comment**
5.2.3	The Council notes, and raises its concern, that there is no reference to the formal ES presenting further assessment of dust effects.
5.2.4	The selection of the year 2023 as "worst case" is noted, but the Council is provided with no information on construction traffic levels over the period 2023-2032 so is not able to comment on whether this is correct.
5.4.1	It is noted that the control and management measures as specified are "generally sufficient to avoid any significant effects". The Council will wish to see confirmation in the formal ES that this holds true for specific impacts in the LA10 area.
5.4.6	It is noted that the risk of dust effects could be "high" and human health effects arising could be "medium" in this area.
5.4.7	Given 5.4.6 above the Council is concerned that no further assessment in the formal ES is mentioned. DCC request that further work is undertaken as part of the formal ES.
5.4.9	It is noted that the WDES identifies "likely" routes and impacts, which will need to be confirmed, and impacts quantified, before the Council can respond.
5.4.10	It is noted that the effects of changes in air quality on local receptors will be considered in more detail within the formal ES.
5.5.1	It is noted that "no specific mitigation measures for air quality are proposed". The Council wishes to record that such measures may be required subject to the findings of the further assessment and monitoring set out in the WDES.

1.6 Community – incorporating health related issues outside of the HIA, Section 6.

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Paragraph reference	**Full ES comment**
6	The proximity of the line to a number of settlements is of concern to the Council, since this will plainly significantly impact on the lives and homes of the people living in these areas. Specifically the line will come within 20m of the edge of Tibshelf, a village already affected by being so close to the M1. DCC note with concern that a further 10 homes, the East Midland Ambulance Station and the historical Heath Church and burial ground will be significantly affected through demolition and works. The loss of the Ambulance Station and the facility also used by Derbyshire Police could impact adversely on local communities, increasing the travel time of emergency vehicles, and further endangering the lives of local people if they take seriously ill or are in an accident. DCC stress the value of Hardwick to the visitor economy of this part of Derbyshire and the potentially catastrophic impact of construction works on accessibility and visitor impact and the knock on economic impact on the rea. These impacts will be felt not only during construction but also once the scheme is complete unless changes are made to the proposals. DCC would also like to have more information about how the development will affect Stainsby Mill which is a historical monument and visitor attraction, and the land where the annual Stainsby festival is held. This is a hugely successful local social and music event, which draw people from outside the area and benefits the local economy. DCC note with disappointment that a number of wildlife sites will be affected or lost, impacting on local wildlife and fauna, and reducing the opportunities for local people to engage in leisure and recreation, and to learn about their local area.
6.1.2	DCC are disappointed to note that there is no acknowledgement of the outcome of engagement discussions with DCC Officers re the impacts on the Markham Vale regeneration project.
6.2.3	It should be recognised that not all promoted routes for vulnerable users are dedicated as public rights of way. This should not lessen the value placed on them but rather ensure that safeguards are in place to accommodate them to avoid issues of severance in the network.

6.2.4	When reinstating or sourcing alternative public footpaths in this locality HS2 should pay particular attention to the impact of disrupted access upon those with physical disabilities, such as wheelchair users, to ensure any particular needs are catered for as part of the planning for temporary diversions or permanent route/footpath changes.
6.4.2 - 6.4.6	The loss of amenity to the residents and its impact on their physical and especially mental wellbeing should be considered.
6.4.12 - 6.4.13	Effectively the demolition of 4 properties at one site.
6.5	There is no detail available and so DCC are unable to comment.

1.7 Ecology and biodiversity, Section 7.

1.7.1 Please also refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

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Paragraph reference	**Full ES comment**
General	The lack of a detailed analysis of ecological impacts and details of proposals for compensation and mitigation mean that a detailed site-by-site and feature-by-feature analysis of and response to ecological issues, impacts and opportunities is not possible at this stage. It is understood that various studies are ongoing and it is of course anticipated that a thorough analysis off this kind will be included within the final version of the ES. Whilst not wishing to consider potential impacts on individual sites, features and species at this time, with regards only to the section of the route (and potential receptors) within the county of Derbyshire, DCC suggest that the following broad and/or overarching issues will need thorough consideration prior to the next step of the ES development. It is understood that the area around Hardwick is one of the most sensitive sections of the HS2 route for multiple interests and assets - heritage, archaeology, landscape, and to some extent, ecology. It is anticipated that the scheme design in this area will be subject to significant scrutiny, and potentially, redesign.

General (cont)	Whilst it is accepted that the M1 currently presents a significant barrier to ecological connectivity in this area (and is also a significant environmental detractor in terms of noise, visual intrusion, landscape severance etc) the proposals for HS2 should not exacerbate this, as a large cutting for HS2 (and indeed a second cutting to accommodate the diversion of Hawking Lane) arguably does. Any reconsideration of the scheme in this area should seek to address east-west connectivity issues, including for species movement. This should not only include reconsideration of the proposals for HS2 and associated highways work so as not to exacerbate the current situation, but should also consider the potential to use this scheme to help address the impacts currently arising from the M1. From the M1 Sutton Scarsdale realignment, would this offer any opportunities to build-in improved habitat connectivity in this area, through the use of green bridges or underpasses etc? The use of a viaduct in the Peter Fidler and Carr Vale area will to some extent alleviate some of the impacts that might have been foreseen, particularly associated with habitat loss that would have been caused had an embankment been proposed. Residual impacts will require further consideration both to protect the ecological interest and the public amenity value of the site. Reptiles, amphibians, riparian mammals and avian interests will require particular consideration in this area.
7.3.7	There is insufficient information provided on the location and impacts on Markham Colliery Reedbed LWS. There is insufficient information provided about the location and impacts on Woodside Field Slope and Stream LWS.
7.3.12	The report has not identified woodland located around the Markham Vale regeneration park, some of which is impacted by the proposals.
7.3.16	The report fails to acknowledge the presence of improved watercourses and ponds that were created around the former Markham Colliery (between Woodside Farm and the Doe Lea). These were created as part of the Doe Lea catchment improvement works and also as part of the Markham Vale Environmental Improvement work and to manage the run-off from the former Markham Colliery North tip.
7.3.19	The report fails to acknowledge the presence of reedbeds that were created as part of the Markham Vale project along the toe of the former Markham Colliery north tip. These are impacted by the HS2 proposals in the vicinity of Woodside farm.
7.3.20	DCC hold several years of detailed ecological surveys undertaken as part of the Markham Vale project; the results can be made available if required.

7.4.16	There is insufficient detail about the Poolsbrook Flash LWS, part of which is within DCC's ownership as part of the Markham Vale estate.
7.4.19	Given previous comments, this area of woodland lost does not include the recently planted woodlands as part of the Markham Vale project.
7.4.24	The study report fails to acknowledge that the route crosses Hawke Brook in at least two locations.
7.4.40	The DCC Markham Vale project team need to be consulted on land that forms part of the Markham Vale estate as these areas may form existing mitigation measures to the Markham Vale project.

1.8 Health, Section 8.

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Paragraph reference	**Full ES comment**
8.2.2	Demonstrates an understanding that the wider determinants of health will be affected as a result of this development.
8.2.3	Identifies that there will be adverse and beneficial health impacts.
8.2.4	DCC agree with the health determinants listed. However, HS2 has neglected to include: • potential affects on mental health and wellbeing, community connectivity, employment, housing, local transport, food and farming and economy.
8.2.6	DCC agree that the strength of evidence does not necessarily determine the importance of the outcome. HS2 also need to consider what our community tells us. The Derbyshire HS2 HIA outlines extensive community insight for example the development might improve pride in the area/better self-worth or anxiety over the threat of a compulsory purchase order.
8.2.8	DCC encourage HS2 Ltd to use and refer to DCC's "Rapid Health Assessment of HS2" (2013) and "Update on the 2013 Rapid Health Impact Assessment of HS2" (2017) when constructing the formal ES document.
8.4.1	DCC agree with the mitigation listed but ask that HS2 also consider adding: commission access to expert counselling services for dealing with loss related to demolition.
8.4.5	Community engagement framework and personnel is vitally important.
8.4.8	DCC request that HS2 also include reference to community connectedness in this section.
8.4.16	DCC request that HS2 Include reference to mitigation such as using aesthetic design solutions.

8.4.18	Special attention must be paid to retaining easy access to healthcare services, particularly community services at Bolsover hospital.
8.4.22	Permanent loss of Snipe Bog nature reserve will have direct impacts on access to green space, recreation and physical activity.
8.4.23	Due to impact on PRoW in this locality HS2 should pay particular attention to the impact of disrupted access upon those with physical disabilities, such as wheelchair users, to ensure any particular needs are catered for as part of the planning for temporary diversions or permanent route/footpath changes.
8.4.24	DCC request that HS2 add an additional mitigation of avoiding using important local roads for construction traffic. Increased traffic congestion will make it more difficult for pedestrians and cyclists to utilise active travel options and increased journey times will lead to increased stress levels for commuters.
8.4.28	DCC request that HS2 include additional mitigation to work with Derbyshire constabulary and community safety partnerships during the construction phase to monitor any adverse impact on community cohesion and community safety during the construction phase. HS2 should ensure that construction sites and all companies contracted to service them are registered with the Considerate Constructors Scheme which will include monitoring against 'respecting the community'.
8.4.32	A total of 11 residential properties would be demolished. The erosion of social networks resulting from these demolitions would have the potential to reduce social capital, reducing the beneficial health effects that are gained through social contact and support. Relocation, whether forced or voluntary, may cause stress impacting more on low income families and those with disabilities or poor social support.
8.5	There is no detail available DCC are therefore unable to comment.

1.9 Historic environment, Section 9.

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Paragraph reference	**Full ES comment**
9.2.4	DCC suggest that the 2km study area for gathering data, "either side of the land required in rural areas and urban areas", should be appropriately broadened in areas where there is the potential for more far reaching impacts on the setting of heritage assets. This is because the extent of the setting of a heritage asset is not fixed, or in other words it has no definable limit. Therefore the potential impacts and so the study area should be considered more organically in response to this.
9.3.17-18 and 9.4.18-23	The Hardwick group of heritage assets is considered to be of international importance, including 'perhaps the finest 16th century house in Europe'. It includes the Grade I Listed Old Hall and New Hall, a Scheduled Monument, a Grade I Registered Park, and a Conservation Area. It is one of only two places in Derbyshire (Bolsover Castle being the other) with Grade I buildings, a Grade I Park and a Scheduled Monument on the same site. The significance of the Halls and Park draws upon designed views over the Park and the historic estate landscape beyond. Views to the west over the Vale of Scarsdale are particularly important where the historic field pattern of the former estate is largely intact despite the obvious impact along the line of the M1. This was assessed as of 'exceptional landscape and visual sensitivity by Mott MacDonald in a study of the setting of Hardwick in 2004. The proposed impacts in this area of 'exceptional landscape and visual sensitivity' would be substantial. The large 'Hardstoft North' and 'Astwith' cuttings would be doubled by additional cuttings for the Hawking Lane diversion upslope to the west. Further impacts would also arise from the proposed material stockpiles, compounds and further disruption to the historic road network including diversion of the main visitor approach through Doe Lea. The landscape and visual assessment for this section assesses impacts in and around the Hardwick estate as a 'high' magnitude of change and 'major adverse' effect. It therefore seems scarcely credible that the historic environment assessment finds a 'low' magnitude of change leading to a 'moderate adverse' effect. Although no historic environment visualisations are submitted in the WDES it is clear from the sheer scale of the proposed changes that a 'moderate' or 'high' level of change should be assessed resulting in a 'major adverse' effect.

9.3.17-18 and 9.4.18-23 (cont)	The current proposals do not represent the least harmful possible scheme for dealing with the route and its associated landscaping in the vicinity of Hardwick. The National Trust has drawn up a proposal which is much more sensitive to the historic landscape, in terms of reducing the size of cuttings, avoiding the deeply unsympathetic diversion of Hawking Lane, and reinstating the historic line of Mill Lane. Given the internationally important group of heritage assets and the profile of Hardwick as a major tourist destination it is essential that a world-class mitigation design is applied here in order to minimise harmful impacts. See also comments from DCC Landscape Architect on para's 11.4.7 and 11.4.11.
9.4.11	Heath Old Church and associated medieval earthworks (Grade II Listed and Derbyshire HER MDR5950 and MDR5951): the proposed total loss of these monuments is regrettable and alternative routes and designs should be explored, such as the construction of the cut and cover tunnel options.
9.4.25	Stainsby moated manorial complex (Scheduled Monument): impacts from the scheme will be within 100m of the Monument, including 'Stainsby North Embankment', 'Heath South Cutting', an attenuation pond and temporary material stockpiling. The WDES consultant places undue emphasis on the presence of the M1 in views, when the proposed cutting would be significantly closer, and larger. Other proposed works to the north (pond and stockpiling) are within 60m and Heath South Cutting main compound about 500m. There is consequently an underassessment of impact (low) and effect (moderate adverse) which lacks credibility. Impact should be assessed at least 'moderate' for this asset ('high' might be more appropriate) and effect at 'major adverse'.
9.4.26 – 9.4.27	Historically the third member of the group of elite houses with designed views over the Vale of Scarsdale, Sutton Scarsdale Hall (Scheduled Monument, Grade I Listed, Conservation Area). This is an 18th century mansion enjoying designed views to the east over the Vale towards Bolsover Castle, in many of which the interposing M1 is hidden. This key aspect of the significance of the Hall would be disrupted by the proposed new landform (Bolsover South embankment, proposed stockpiling, satellite compounds at 'M1 Motorway South' and 'Bolsover South embankment').The WDES consultant overstates the level of 'modern intrusions' in these views which are largely intact. There is consequently an underassessment of impact (low) and effect (moderate adverse) which lacks credibility. Impact should be assessed at least 'moderate' for this asset, and effect at 'major adverse'. Satellite compound locations should be re-assessed to minimise impacts.

9.4.26 – 9.4.27 (cont)	This asset would also benefit from the design solution discussed in relation to Bolsover Castle (9.4.28). The same concerns over the surrounding landscape treatment are also shared with those expressed by DCC's Landscape Architect, particularly in that "rather than mitigating the adverse effects of the scheme the landscaping is likely to add to them". There are concerns that through the incongruous arrangement of tree planting, insertion of embankments, large soakaways (plus associated land deformations) and cuttings that this will result in further cumulative damage to this sensitive historic landscape.
9.4.28	Bolsover Castle is an outstanding example of 17th century architecture of international importance. It includes the Grade I Listed Castle, a Scheduled Monument, and the Grade I Registered pleasure grounds and garden. It is one of only two places in Derbyshire (Hardwick being the second) with Grade I buildings, a Grade I Park and a Scheduled Monument on the same site. The setting of the Castle contributes strongly to its significance through its prominent and dominant landscape position designed to impress in both inward and outward views. The terrace adjacent to the 'Little Castle' is designed as a viewing platform, taking advantage of designed views westward over the Vale of Scarsdale. The key section of HS2 in relation to Bolsover Castle is therefore the section that runs south to north across this sector of the westward view. DCC have previously advised that the design of this section is critical to conserving the significance of the Castle. The large embankments currently proposed (Bolsover South, Carr Vale, Bolsover North) are major and visually intrusive new landforms at the interface between the planned town of Bolsover and rural Vale. Although no historic environment visualisations are available, the conclusion of the WDES consultants that this represents a 'low' level of impact to the significance of the Castle, is not credible. Impact should be assessed at least 'moderate', giving a 'major adverse' effect. Given the internationally important group of heritage assets and the profile of Bolsover Castle as a major tourist destination, it is essential that a world-class mitigation design is applied here in order to minimise potentially harmful impacts. We have previously advised that this might be achieved by a visually permeable viaduct, architect-designed to a high standard, to create a beautiful feature in its own right which might conserve or even enhance the setting of the Castle and contribute to its profile.

1.10 Land quality, Section 10.

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Paragraph reference	**Full ES comment**
10.2.7	Basing minerals assessment on mining records but ignoring inference of minerals provided by geological maps/reports may result in omissions of future issues from early consideration in the next design phase. Failure to deal with likely intersect of coal seams within cutting excavations could result in significant delay to construction should license for incidental coal recovery be required through application to the Coal Authority followed by undertaking of the subsequent mineral recovery process.
10.3.32	The Chesterfield Canal is mentioned in this paragraph even though LA10 section of the HS2 route does not include the Staveley spur (see LA11). Recently created water features adjacent to Hawke brook and the Doe lea as part of landscape and environmental mitigation measures at Markham Vale are not acknowledged despite being located within the HS2 route boundary - see CT-06-420a B5.
10.3.37	The report does not mention the potential contamination arising from previous land use as railway or rail sidings which applies across the whole HS2 route.
10.3.39	There are records of other opencast sites around the Markham Vale and Staveley area that are not included within the list provided.
10.3.42	No mention of Hartington Colliery nor Oxcroft Colliery.
10.3.55	Appropriate reference is made to the Derby and Derbyshire Adopted Minerals Local Plan which sets out DCC's policies for controlling minerals related development in Derbyshire.
10.3.56	Appropriate reference is made to the fact that Derby and Derbyshire Minerals Local Plan defines an Opencast Constraint Area called Hardwick Hall Constraint Area which covers part of the study area. This was designated due to its historic landscape and provides the settings for Hardwick Hall, Hardwick Old Hall and Hardwick Historic park and Gardens. Policy MP28 of the Minerals Local Plan indicates that within Opencast Constraint Areas, proposals for opencast coal extraction will not be permitted unless the proposal would not cause any material damage to the area's conservation interest.

10.3.59	This section notes that there is one area designated by the Coal Authority for future opencast licensing in the far north of the study area located west of Clowne Road between Stanfree and Shuttlewood Common for the Hoodcroft Openast Licensing Area. In this regard and the fact that the whole of the study area lies in an area of surface coal, to prevent the sterilisation of the coal resource in accordance with Policy M17 of the Derby and Derbyshire Mineral Local Plan. DCC, as Minerals Planning Authority, expect to see an assessment that examines whether prior extraction of the mineral resource in advance of the development is practicable and environmentally feasible. DCC expect borehole evidence to be used to provide an indication of the quality and depth of the deposit, particularly when such areas are considered as borrow pits. Every effort should therefore be made to extract the mineral resource in advance of the proposed development in order to prevent the sterilisation of the mineral resource. This approach would accord with the policies of the Adopted Derby and Derbyshire Minerals Local Plan.
10.4.10	Whilst screening assessment is advised as having been undertaken with each potential contaminated site given a unique reference, as listed in Table 25, there appears to be no plan to clarify or advise the location of these sites. Plans therefore need to be provided. Despite passing through the coalfields to the north of Tibshelf and from Bolsover northwards, there is no mention of consideration of the contaminative risk likely from Coal Mining, pit heads and spoil-heaps (See LA11 report).
10.4.14	Whilst consideration of construction effects is advised as having been undertaken with each potential significant site indicated by its unique reference, as listed in Tables 26, there appears to be no plan to clarify or advise the location of these sites. Plans therefore need to be provided. Again any reference to Coal mining, pit heads and spoil mounds (and recorded mine entries) is omitted. (See LA11).
10.4.16	With regard to any proposed mitigation measures required for minerals mine water or mine gas, DCC request that it is consulted on any such measures as an 'authoritative consultee'.

10.4.23	As correctly noted, construction of the proposed scheme has the potential to affect existing mineral resources and proposed areas of mineral exploitation and that this could occur by sterilisation of the mineral resource. The whole of the study area lies over a surface coal resource. In this respect, to prevent the sterilisation of the coal resource in accordance with Policy M17 of the Derby and Derbyshire Mineral Local Plan. DCC, as Minerals Planning Authority, expect to see an assessment that examines whether prior extraction of the mineral resource in advance of the development is practicable and environmentally feasible. DCC expect borehole evidence to be used to provide an indication of the quality and depth of the deposit, particularly when such areas are considered as borrow pits. Every effort should therefore be made to extract the mineral resource in advance of the proposed development in order to prevent the sterilisation of the mineral resource. This approach would accord with the policies of the Adopted Derby and Derbyshire Minerals Local Plan.
10.4.27	However low the percentage of natural resource that it is considered would be sterilised by the permanent construction of the proposed new HS2 rail route, every effort should be made to ensure full extraction of mineral resource in advance of, or during early phases of construction, to ensure the resource is not lost for posterity. This approach would accord with adopted development plan policies. Except for brief reference in Para 10.3.62 deep coal reserve is poorly considered. Impact on deep coal reserve is unmentioned (as in LA11 report para 10.4.30) despite this section of the proposed route clearly passing through the North Derbyshire Coalfields. As well as consideration of shallow 'opencast' coal sterilisation, the EIA needs to consider the impact on the deep coal reserve and determine what restriction the surface routing of the proposed HS2 rail line could introduce in respect of coal reserve which underlays the rail corridor. If these were recovered by deep mining process could cause severe detrimental impact to rail embankment integrity and thus high speed travel in the event of future mining subsidence.
10.4.30	Whilst consideration of post construction effects is advised as having been undertaken with each potential significant site indicated by its unique reference, as listed in Tables 27, there appears to be no plan to clarify or advise the location of these sites. Plans therefore need to be provided.
10.4.35	There could be residual effects from the possible sterilisation of deep coal reserve which underlays the rail corridor and which if recovered by deep mining process could cause severe detrimental impact to rail embankment integrity in and thus high speed travel in the event of future mining subsidence.

1.11 Landscape and visual assessment, Section 11.

1.11.1 Please also refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

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Paragraph reference	**Full ES comment**
11.1.5	The Map series LV-04 forming part of the LA10 Map Book shows viewpoints that would potentially be significantly affected, it is fair to assume that there are other viewpoints that would be affected but these effects are not judged to be significant. It is also noted for the record that the viewpoint is not the visual receptor so any judgement should aim to reflect the amount of people that might be impacted by the proposal (e.g. is the occupants of a dwelling or hundreds of people using a footpath for example). It is not clear whether this judgement has been made at this stage.
11.2.3	The extent of the study area has been informed by construction and operational phase Zones of Theoretical Visibility (ZTV) although the ZTV doesn't appear to be shown on the plans in the LA10 Map Book. Therefore it is not possible to comment on the findings of this work at this stage and the extent to which the visual impact assessment is a fair reflection of the theoretical visibility of the scheme.
11.3	This section outlines the nature of the landscape in the section of the route between Tibshelf and Shuttlewood by reference to the National Character Areas and the Landscape Character of Derbyshire Publication prepared by DCC (11.3.6). These published LCAs have then been adapted to provide LCAs of an appropriate and consistent scale (11.3.7). The Tibshelf to Shuttlewood study area has been subdivided into 19 LCAs (11.3.8) although the suggestion at this stage is that these remain draft and subject to review.
11.3.9	This section states that only 5 of the 19 LCAs would not be significantly affected by the proposed scheme meaning that the other 14 LCAs are significantly affected. This suggests that a significant area overall would be impacted upon by the proposed scheme. And yet there has been no attempt to combine these findings to assess the effects on the wider landscape character types defined in the county scale study to understand whether these effects are more than locally significant but potentially significant at a county scale.

11.3.10 to 11.3.15	The visual baseline describes the range and type of visual receptor potentially affected by the proposed scheme. The selected viewpoints are then set out in the map series LV-03 and LV-04 forming part of the LA10 Map Book and are all referred to as "Significantly Affected Viewpoints". This implies that there are other viewpoints (representing visual receptors) that might also be affected but these effects are not judged to be significant and as a result are not therefore included on the supporting maps. It is not possible to fully understand the accuracy of these judgements at this time without the detailed assessment in Volume 5 of the formal ES. DCC reserves its right to make further comment on this information once it has been made available.
11.4.1	The assessment acknowledges that the scale of the construction activities means that the works would be visible from many locations but these effects would be temporary. The assessment of landscape and visual effects during the construction period is based on the activities occurring during the peak construction phase. This seems to be a reasonable approach although at this stage there is no detailed description of what these impacts might be at this particular stage of the development. This may well form part of the detailed assessment in Volume 5 of the formal ES. DCC reserves its right to make further comment on this information once it has been made available.
11.4.2	The effects associated with the peak construction phase are considered to be medium-term, which again doesn't seem to be unreasonable unless any component of the construction phase would be apparent and visible for the full indicative construction programme. It might then start to approach a medium to long term impact when the landscape restoration and establishment of these areas is taken into account.

11.4.7	The landscape assessment in this section acknowledges that there would be Major adverse (significant) effects during the construction period on : • Newtonwood Farmlands LCA, • Hardwick Estate LCA, • the Doe Lea Valley LCA, and • North East Derbyshire Estate Farmlands LCA. HS2 acknowledge Moderate adverse (significant effects) on: • the Wooded Farmlands LCA, • the Sutton Estate Farmlands LCA, and • Bolsover LCA. Based on the current design, Table 31 confirms those LCAs that would be significantly affected during operation, which would include: • Newtonwood Farmlands LCA, • Hardwick Estate LCA, • the Sutton Estate Farmlands LCA, • the Doe Lea Valley LCA, • Bolsover LCA, and • North East Derbyshire Estate Farmlands LCA. Although the effects on North East Derbyshire Estate Farmlands and Bolsover LCAs would not be significant in year 15 of operation when landscape mitigation would assist in integrating the scheme with the surrounding landscape. This is not acceptable and DCC suggest that current proposals do not represent the least harmful possible scheme for dealing with the route and its associated landscaping particularly in the vicinity of Hardwick. The National Trust has drawn up a proposal which is much more sensitive to the character of the landscape, in terms of reducing the size of cuttings, avoiding the deeply unsympathetic diversion of Hawking Lane, and reinstating the historic line of Mill Lane including the option of a land bridge. Given the internationally important group of heritage assets, the quality of the immediate landscape setting, and the profile of Hardwick as a major tourist destination it is essential that a world-class landscape mitigation design is applied here in order to minimise harmful impacts.
11.4.11	Table 30 describes the potentially significant visual effects of the construction phase based on the current design for the proposed scheme from a range of viewpoint locations and Table 32 assesses the likely significant effects during operation at Years 1 and 15.

11.4.11 (cont)	It is DCC's view that these effects have been under-estimated. Where significant adverse effects at Year 15 have been identified such as those around Hardwick Hall, there is no evidence of any design response aimed at addressing these unacceptable impacts on what is a Grade1 listed House and Garden. The current proposals do not represent the least harmful possible scheme for dealing with the route and its associated landscaping particularly in the vicinity of Hardwick. The fact that there is no viewpoint from Bolsover Castle seems to be a significant omission in the assessment given that this viewpoint represents thousands of recreational visitors to the building, designed to appreciate views over the landscape to the west. If VP 395-03-005 has been used as a proxy, representative viewpoint then this should be made clear in the assessment and then assessed accordingly given that Bolsover Castle is an important vantage point designed to look at the view. VP 395-02-012 represents the residents and users of the A632, Chesterfield Road approaching Bolsover. The visual effects are assessed as Major adverse (significant) during construction and during operation up to year 15. DCC are concerned about the adverse impact on visitors to Bolsover Castle and the historic town centre. In order to assist in mitigating these clearly identified adverse visual effects, HS2 should engage an internationally renowned architect with a specialism in bridge design to create a world class feature that would endure as an attractive entry point to Bolsover. The fragmented nature of the current design utilising short sections of embankment add to the adverse effects rather than mitigating them and the scheme would benefit from a single long span viaduct that would extend from Carr Vale Nature Reserve to the Bolsover Colliery tip to the south of Woodhead Lane. Table 30 describes the potentially significant visual effects of the construction phase based on the current design for the proposed scheme from a range of viewpoint locations. As previously stated all of these locations represent "Significantly Affected Viewpoints" where the level of effect is at least moderate adverse. This does not take account of other viewpoints (representing visual receptors) that might also be affected but where the effects are not judged to be significant. Table 32 (11.5.8) assesses the same locations when the proposed scheme would become operational. It concludes that the visual impacts would remain significant at each of the identified locations other than viewpoints 391-03-005, 391-03-009 and 391-03-008 where the visual effect is not considered to be significant after 15 years of operation when landscape mitigation is sufficiently mature to screen the main impacts. DCC do not think this is acceptable for similar reasons outlined in 11.4.7.

11.5.3	There are locations along the route such as the section of the route north of the M1 near Deepdale Farm, Sutton Scarsdale (drawing no LV-04-394 (Volume 2: Tibshelf to Shuttlewood)) where the planting of trees to screen views seems to be at odds with the description of the established landscape character and would be inappropriate. In this area defined as Sutton Estate Farmland LCA (page182, Volume 2: Tibshelf to Shuttlewood).
11.5.10	The summary of significant landscape and visual impacts in this section is an over simplification of the facts because viewpoints are not receptors. They are merely locations that represent the view of the receptors (people) experiencing the potential impact. There is no assessment of how many people these effects might impact upon although this information should form part of the detailed assessment in Volume 5 of the document. DCC reserve its right to make further comment on this information once it has been made available.

1.12 Socio Economic, Section 12.

1.12.1 Please refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

1.13 Sound, Noise & Vibration, Section 13.

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Paragraph reference	**Full ES comment**
13.1.4	The maps showing the noise impacts of the scheme need also to show the before situation to allow residents and other stakeholders to make comparison of what noise the scheme will generate.
13.2.4 and 13.2.5	It is noted that the WDES relies upon qualitative assessment, initial estimates and professional judgement. The Council will wish to see the full quantitative assessment in the formal ES before providing its own definitive response.
13.4.1	The Council notes the assumptions and limitations and the need for assessment in the formal ES.
13.4.3	The Council notes the assumptions made in the assessment and wishes to record the need for consideration in the formal ES of any requirements specific to the LA10 area.
13.4.4	The intention to conduct work towards estimating the requirement of noise insulation or temporary rehousing of residents and report in the formal ES is noted.
13.4.8	It is noted that residual temporary noise or vibration likely significant effects associated with construction practices will be reported in the formal ES.

13.5.2	The Council notes the lack of reference to the impacts of track maintenance and requests that these be included in the formal ES.
13.5.18	It is noted that noise effects arising from permanent changes to existing roads will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
13.5.19	It is noted that noise and vibration effects arising from the operation of the Staveley IMD will be reported in the formal ES.
13.5.20	The Council notes that further assessment of operational noise and vibration will be reported in the full ES, and requests that these take into account the impacts of track maintenance activities.
13.5.25	The Council notes that further assessment of operational noise and vibration will be reported in the full ES, and requests that these take into account the impacts of track maintenance activities.

1.14 Traffic and transport, incorporating PROW, highway design and Traffic Safety, Section 14.

1.14.1 Please also refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

Document: Volume 2: CFA LA10: TIBSHELF TO SHUTTLEWOOD	
Paragraph reference	**Full ES comment**
14.1.2	DCC as the Local Highway Authority for Derbyshire welcomes that the engagement process will continue as part of the development of the Proposed Scheme. It is noted however that much of the work carried out as part of the ES to date is mostly qualitative and that quantification of much of the impact of the Proposed Scheme will be presented in the formal ES. However DCC appreciate early sight of any preliminary outputs of the environmental appraisal prior to the ES's publication as part of the Hybrid Bill. DCC as the Highways Authority are extremely disappointed by the lack of engagement and the limited information provided prior to the WDES going into publication. The requests and approaches to meetings from HS2 Project Leads has been very fragmented and often under extreme time pressures. Prior to meetings being set up HS2 representatives, very often clear agendas have not been provided to DCC and this has at times led to the wrong officers being in attendance and meetings have therefore become somewhat abortive. Only a limited number of meetings have been requested and were not formally recorded by the HS2 representatives. No official record of the discussion points have been provided back to DCC to date. Also although it is appreciated that this project is far reaching and complex it is DCC's view that the whole route was not presented as a complete package. Therefore DCC have had an inadequate opportunity to inform the initial engagement process in a meaningful joined up way.
14.2.5	It is noted that potential effects on traffic and transportation will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.2.3, 14.3.5 and 14.3.8	There is no mention of Seymour Link Road despite this being discussed by DCC with the HS2 team on several occasions over the past 4 years.
14.3.3	It should be noted that PRoW surveys capture only one element of data and rarely demonstrates the need of permeability across new barriers. It is important that decisions relating to both statutory and non-statutory Rights of Way demonstrate both demand and market need by considering journey destinations and trip generators as well as community locations.

14.3.10	The A6175Health Road/A617 Mansfield Road is also used by the Pronto bus service from Chesterfield to Nottingham.
14.3.13	There are a number of PROWs around Markham Vale, particularly Markham Vale North, that are not shown on the proposals maps. The HS2 team have been advised of this several times over the past few years by DCC. This latest round of consultation does not give any confidence that comments will be taken on board.
14.3.14	When describing the existing multi user Greenways (off road routes) for non-motorised users, it is noted that reference is made to the NCN67/Five Pits Trail, Stockley Trail, and the NCN67/Trans Pennine Trail. However there are proposed extensions and additions to the planned network of non motorised trails that form strategic connections for the Derbyshire Key Cycle Network which DCC require to be safeguarded for future development. These include: • an extension to the Stockley trail northwards along the Bolsover Branch Line (currently shown to be covered by the Bolsover North Embankment); • an extension to the Stockley Trail west towards Arkwight Town (currently shown beneath the Bolsover South Viaduct but appropriate head room should be allowed in the vertical alignment to safeguard the trail development); • a section of the proposed route Stockley Trail to Five Pits Trail between Bramley Vale and Heath across the A617/M1 Interchange; and • a further extension southward from the Stockley Trail to Stainsby Mill and Hardwick Hall (It may be possible to add a 3m shared use path alongside the realignment of Mill Lane). There are other off-highway routes that have either been constructed or are in the process of being constructed as part of the Markham Vale project. None of these are acknowledged by HS2's report despite details of them being provided by DCC to HS2 in the past. Non-highway land alongside the A632 between the Doe Lea at Bolsover Business Park and the Markham Vale site has been acquired by DCC, as part of the Markham Vale project. The land and route has been designated as an off-highway multi-user route. HS2 need to include this within their re-alignment of the A632.
14.3.15	The report says that there are no navigable waterways within this report phase study area. Yet the report mentions the Staveley Town basin at Staveley which forms part of the Chesterfield Canal.
14.4	Due to limited information a general assessment is provided within the General Responses to WDES Volume 2 CAR.

14.4.1	One of the prime reasons why businesses have chosen to invest and locate on the Markham Vale regeneration site is due to the existence and proximity to the strategic highway network. DCC wish to know how HS2 will prevent delays on the highway network such that business needs continue to be met.
14.4.6	How will HS2 enforce and or incentivise the use of construction workers using more sustainable travel options.
14.4.8	The traffic and transport impacts during the construction period within the Stonebroom to Clay Cross area will include construction vehicle movements to and from the various construction compounds, including a compound proposed on Station New Road, Tupton. An assessment of the quantative impacts will need to be considered in the formal ES.
14.4.11	There is no mention of Seymour Link Road.
14.4.14 - 14.4.15	It is noted that potential effects on traffic and transportation will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.4.16	It is noted that potential effects upon accidents will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.4.17	It is noted that potential effects on public transport will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand). The majority of these bus services are provided on a commercial basis by operators with no direct support from local or central government. Prolonged diversions and increased journey times will reduce the attractiveness of these services. Mitigation in terms of funding to support these services during the construction period to lessen the impact and ensure their commercial sustainability will be required.
14.4.19	There is no mention of the existing and recently constructed PROWs on Markham Vale.
14.4.21	It is noted that potential effects on PRoW will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.4.24	It is noted that potential effects on traffic and transportation will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.4.26	There is no mention of Seymour Link Road.

14.4.28	There is no mention made of the existing and recently constructed PROWs on Markham Vale.
14.4.29	It is noted that potential effects on traffic and transportation will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand).
14.5.1	Further mitigation measures should considered for the safeguarding and, where reasonable, the provision of the proposed non-motorised multi-user network being developed across Derbyshire. This would strengthen the permeability of the vulnerable users (walkers, cyclists and horse riders) across the physical barrier of HS2 and provide improved connectivity to destination locations between communities.
14.5.9	Increased travel distance for bus service can impact on their commercial viability. To reduce the impact specific measures should be put in place to improve bus reliability in the area at the same time as the line opens.
14.5.11	There is no mention made of the existing and recently constructed PROWs on Markham Vale. This comment refers specifically to Tibshelf Bridleway 21 (Saw Pit Lane) and Footpath 35; Mansfield Road/B6014 and overbridge between the realignment of Saw Pit Lane/BW21 and the realigned Footpath 35 on the northern side. There should be a 3m wide shared pavement for safe connectivity between the two paths and to allow safe movement of horses across the overbridge and to the east. This comment refers specifically to Ault Hucknall Footpaths 17 and 18. Both these paths are shown as permanently stopped up, leaving access to Hardwick Hall from the west along the Deep Lane overbridge and the Mill Lane reinstatement road. The movement of vulnerable users into Hardwick Park would benefit from an additional multi user overbridge in the vicinity of the Socksutt Woods Drop Inlet Cutting to connect to the existing M1 underpass and the vulnerable user path network into the park by Great Pond. Each of the realigned roads, Hawking Lane, Deep Lane and overbridge and the realignment/reinstatement of Mill Lane should allow for a landscaped 3m wide shared use path as minimum to ensure all connectivity to the park is as accessible as possible. This is a nationally important visitor attraction and dialogue with both DCC Conservation and Design and the National Trust is essential to understand the visitor needs and design access routes appropriately.

14.5.11(cont)	In relation to Ault Hucknall Footpath 37, Map CT-06-454 of LA10 shows the whole of this path as stopped up with a diversion from part way along. DCC assumes that this is a diagrammatic error and that the path alignment remains in place west of the intersect with the diverted section. It would benefit community permeability if all of the reinstated footpath 37 can be built as a 3m wide multi user path and dedicated as public Bridleway. The network would further benefit from the Mill Lane reinstatement accommodating a 3m wide path to and beyond the M1 underpass and a landscaped bridleway alongside the Mill Lane diversion route north from Stainsby Mill to Bramley Vale. This would accommodate a strategic section of the Derbyshire Key Cycle Network and emerging Bolsover Loop Greenway. Dialogue with Conservation and Design and National Trust are essential to planning this route appropriately. This comment refers specifically to the permeability of the M1 junction 29 interchange between Heath and Doe Lea/Bramley Vale. It is accepted that the footways within the junction are to be realigned, however it would benefit current and future vulnerable use/non-motorised needs to upgrade these routes to shared use cycletracks to allow for improved commuting across the physical barriers of HS2 and the M1 motorway and to reduce community severance. Consideration should also be given to the onward walking and cycling connections between the Five Pits Trail, Stockley Trail and routes into Hardwick Park. The remodeling of this interchange and HS2 cutting could provide a significant improvement for the non-motorised network. This comment refers specifically to the Bolsover South Viaduct which crosses an as yet unbuilt and undesignated path. This is a proposed Greenway which forms part of the Derbyshire Key Cycle Network and will provide a section of a significant non-motorised trail between Bolsover and Chesterfield. As such DCC feel it appropriate to highlight this route at this point in the report. The viaduct runs alongside the Peter Fidler Nature Reserve and crosses a former railway embankment planned as a multi-user trail to connect the Stockley Trail to the Trans Pennine Trail. In order to future proof this development a height clearance of 3.7m is required (to include mounted horse riders) and a width of 5m to carry the trail.

14.5.11(cont 2)	This comment refers specifically to the Bolsover North Embankment which crosses an as yet unbuilt and undesignated path. This is a proposed Greenway which forms part of the Derbyshire Key Cycle Network and will provide a section of a significant non-motorised trail between Bolsover and Chesterfield. As such DCC feel it appropriate to highlight this route at this point in the report. The embankment sits directly over the former Bolsover Branch railway line which forms the norther extension to the existing Greenway, the Stockley Trail. The route will provide a much needed cycle and walking route through the Markham Vale Employment Growth Zone area to connect through various emerging employment development sites and onward to the north to provide connectivity to the Clowne Branch Line, the Trans Pennine Trail and to Chesterfield. Consideration would be welcomed to accommodate the route byway of an underpass of the embankment, this could be linked to the Snipe Bog culvert with short connecting sections of 3m wide trail to return to the former rail alignment.
14.5.15	It is noted that potential effects on traffic and transportation will be reported in the formal ES. This will need to take into account any effects on how traffic uses the network (ie reassignment to different routes, re-timing of journeys or the release of suppressed demand). There is no mention of the impacts on Seymour Link Road despite this being discussed with the HS2 team on several occasions over the past 4 years.
CT-05-453	This plan shows significant realignment and stopping up of existing highway network on Hawking Lane and Deep Lane. DCC as the Highway Authority have grave concerns about the lack of engagement and discussion surrounding these proposals. No information has been provided around vertical and horizontal alignment and proposed limits of adoption. The HS2 Project team have not sought Highway Authority comments about the need to stop up sections of the existing highway and how these parcels of land will need to be reverted to the subsoil owner/adjacent land owner. The plan also identifies an overbridge on Deep Lane with no liaison taking place with the Highway Authority. HS2 need to appropriately liaise with the Highway Authority to seek technical input in to the proposed effects on Derbyshire's Highway Network.

CT-05-454	This plan shows significant realignment and stopping up of existing highway network on Astwith Lane, Hawkins Lane and Mill Lane. The Highway Authority has grave concerns about the lack of engagement and discussion surrounding these proposals. No information has been provided around vertical and horizontal alignment and proposed limits of adoption. The HS2 Project team have not sought Highway Authority comments about the need to stop up sections of the existing highway and how these parcels of land will need to be reverted to the subsoil owner/adjacent land owner. HS2 need to appropriately liaise with the Highway Authority to seek technical input in to the proposed effects on Derbyshire's Highway Network. Also more detailed dialogue is required between HS2 DCC and the National Trust to fully understand the implications of the proposals around Hardwick Hall.
CT-05-455	This plan shows significant realignment and stopping up of existing highway network on Junction 29 of the M1, Mill Lane, A617, A6175 and M1 slip road. The Highway Authority has grave concerns about the lack of engagement and discussion surrounding these proposals. No information has been provided around vertical and horizontal alignment and proposed limits of adoption. The HS2 Project team have not sought Highway Authority comments about the need to stop up sections of the existing highway and how these parcels of land will need to be reverted to the subsoil owner/adjacent land owner. HS2 need to appropriately liaise with the Highway Authority and Highways England to seek technical input in to the proposed effects on both the Local and Strategic Highway Network.
CT-05-459	This plan shows significant re-alignment and stopping up of existing highway network on B6418 Chesterfield Road, Buttermilk Lane and Woodhouse Lane. The Highway Authority have grave concerns about the lack of engagement and discussion surrounding these proposals. No information has been provided around vertical and horizontal alignment and proposed limits of adoption. The HS2 Project team have not sought Highway Authority comments about the need to stop up sections of the existing highway and how these parcels of land will need to be reverted to the subsoil owner/adjacent land owner. HS2 need to appropriately liaise with the Highway Authority to seek technical input in to the proposed effects on both the Highway Network.

1.15 Water Resources & Flood Risk, Section 15.

1.15.1 Please also refer to General Responses to WDES Volume 2 CAR's for general comments on this section.

Document: Volume 2: CFA LA10: TIBSHELF TO SHUTTLEWOOD	
Paragraph reference	**Full ES comment**
15.1.2	HS2 needs to consult with DCC as landowner in respect of existing surface water drainage and storage within the Markham Vale business park area.
15.3.5	There is insufficient detail to comment on this section.
15.4.6	There is no mention of Hawke Brook as a tributary of the Doe lea.
15.4.11	There is no mention of Hawke Brook where the HS2 route crosses it.
15.4.16	The WDES states that balancing ponds for Highway and Railway drainage will be sized on a precautionary basis. The DCC Flood risk team were informed via consultations with the HS2 design teams that the ponds would be sized to a 1/100yr + 40%CC event. DCC seek clarification with regards to surface water run-off and attenuation, in particular the run-off from the viaducts. Following conversations with the Environment Agency, they have intimated that there has been some miss-understanding with regards to surface water run-off and attenuation with different Risk Management Authority (RMA) giving different advice. DCC have been advised that guidance was planned to be issued to all partners, LA's etc to try and provide an acceptable approach across the board.
15.4.17	Although this is not directly connected to this section, DCC have a general concern as to whom will be adopting and maintaining the Highway Balancing Ponds post construction. DCC have been supplied with a document "HS2 - Maintenance of Landscaped Areas Version 1 June 2018" and Section 6.7.2 in this document states "The location of these features would determine who is responsible for maintaining them". This suggests that all highway balancing ponds would be adopted by the highway authority, but with no additional funding to maintain them which is not acceptable.