

HS2 Phase 2a West Midlands to Crewe Working Draft Environmental Impact Assessment Report, A Summary of Consultation Responses

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A report to HS2 Ltd and the Department for Transport

Prepared by Dialogue by Design

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Executive summary

This report provides a summary of the responses to the Government's HS2 Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report consultation. The consultation took place between Tuesday 13 September and Monday 7 November 2016.

The purpose of the consultation was to inform the developing design and the formal Environmental Impact Assessment Report which will be published when the hybrid Bill is deposited, considering the views of those individuals and organisations who expressed their opinions on the Working Draft report.

Consultation process

The consultation was owned and managed by High Speed Two Ltd (HS2 Ltd) and the Department for Transport (DfT). [Dialogue by Design](#) was commissioned to receive, collate, analyse and report on responses to the consultation made via the webform, email or the Freepost address set up for this consultation.

A total of 475 responses were received. 70 responses were received from organisations and elected representatives, the remainder submitted by members of the public.

Chapter 1 provides a background to the consultation and chapter 2 gives a breakdown of the responses to the consultation. Chapters 3 and 4 of this report offer a description of Dialogue by Design's approach to response handling, analysis and reporting. Chapters 5 to 13 summarise the issues raised by respondents during the consultation.

Consultation responses

This report summarises respondents' views by considering comments made in relation to the four consultation questions, as well as responses submitted to the consultation which did not follow the question format. Chapters 5 to 13 summarise the issues raised by respondents during the consultation.

Due to three HS2 Phase 2a consultations running concurrently (working draft EIA, working draft EQIA, Design Refinement), respondents may have referred to information provided in the other two consultations' documents. These comments have been included in this report for completeness and will be considered as part of the design development and EQIA.

Comments on Question 1 – Non-Technical summary

Chapter 5 addresses issues raised in relation to Question 1, in which respondents were asked to provide feedback on the Non-Technical summary (NTS). The chief concern in relation to Question 1 surrounds the assessment of impacts. Respondents are concerned that some issues

or areas appear to be absent from the report and/or are reported on inaccurately. Some respondents believe that the process and report are biased, with an emphasis on cost over the effects on landscapes and communities. Regarding the Non-Technical Summary specifically, some respondents feel that the Non-Technical Summary is a useful overview of the documents which make up the working draft EIA report and the HS2 Phase 2a scheme while others criticise it as generalised and too brief.

Comments on Question 2 – Volume 1 and its appendices

Chapter 6 addresses issues raised in relation to Question 2, in which respondents were asked to provide feedback on the documents that form Volume 1 of the report. The majority of responses about the Introduction and Methodology relate to the working draft EIA themes. The main issues raised relate to the effect of the railway and/or its construction on the visual landscape and on the environment. Some respondents feel there should be more detail in the working draft EIA with specific suggestions made as to further information needed. Some respondents also provide feedback on the Stakeholder Engagement section within the Introduction and Methodology, requesting detailed plans for future engagement and suggesting specific stakeholders they believe HS2 Ltd should engage with.

The main issue raised by respondents regarding the Alternatives Report relates to tunnelling in Staffordshire, particularly that one long tunnel should be built instead of two tunnels at Whitmore Heath and Madeley. Other common points include suggesting HS2 Ltd build a cut and cover tunnel to the north of Swynnerton as well as adopting the Atkins Report's¹ high cost Alternative Option One.

One of the key issues raised in relation to the Code of Construction Practice surrounds construction working hours, with queries and concerns about whether it would be 24/7, night working or normal daytime working hours. Some respondents also express concerns about personal safety, utility diversions, having clearly drawn construction boundaries as well as requesting advance notice of works.

Comments on Question 3 - CA1

Chapter 7 addresses issues raised in relation to Community Area 1 (CA1) within Question 3, in which respondents were asked to provide feedback on the CA reports within Volume 2 of the report. Respondents to CA1 are particularly concerned about the implications for traffic and transport in the area. There are both short term concerns, relating to construction traffic and potential disruption from road closures, as well as longer term concerns including about the proposed permanent closure of Common Lane near Kings Bromley. There are also concerns

¹ Rail Alternatives to HS2 Phase 2a, Atkins November 2015
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480645/rail-alternatives-to-hs2-phase-2a.pdf

about access to their properties, businesses or local amenities during the works. The other common concerns are about the perceived impact of the construction on the community and about the landscape and visual and noise impacts of the works. Respondents also refer to the rural nature of the region as context for why the work would have a significant impact, and make proposals for how this could be minimised. From an agricultural perspective, there is an expectation that the land take should be strategic and minimised, to reduce potential impacts on farms.

Comments on Question 3 - CA2

Chapter 8 addresses issues raised in relation to CA2 within Question 3, in which respondents were asked to provide feedback on the CA reports within Volume 2 of the report. The chief concerns of respondents to CA2 centre on the visual impact of the route, potential impacts on traffic and access, and the impact of noise to the area. In addition, responses often refer to the overall perceived impacts of the route on the cohesion of the local community, and refer to major businesses and community amenities which could be affected. Respondents are concerned about the height viaducts, embankments and the line in general, and the potential negative visual and noise impacts. Respondents also reference the previous plans to use a green tunnel at Hopton as being preferable to the current proposal. Some respondents challenge the suggested approach to mitigation, believing it to be insubstantial and not considerate of how people and communities, as well as animals, interrelate with their environments.

Comments on Question 3 - CA3

Chapter 9 addresses issues raised in relation to CA3 within Question 3, in which respondents were asked to provide feedback on the CA reports within Volume 2 of the report. Key concerns from respondents to CA3 include: the potential impact changes to the local road infrastructure would have on the lives of local people, for example causing access difficulties, increased traffic flow and longer journeys; potential noise pollution from traffic, construction and the railhead and permanent maintenance facility; potential light pollution from the railhead and permanent maintenance facility; the impact of construction on the landscape, perceived destruction of the countryside and potential loss of wildlife species; the potential impact on villages, local businesses and farms; and concerns about the effect the proposals would have on the lives of local people, including children and older residents, and businesses. Some comment that the proposals need to be urgently reconsidered. Some argue that there must be other more suitable locations for the proposed railhead and permanent maintenance facility near Stone, such as Crewe. Some suggest mitigation measures, such as tunnelling a section of the route near to Swynnerton.

Comments on Question 3 - CA4

Chapter 10 addresses issues raised in relation to CA4 within Question 3, in which respondents were asked to provide feedback on the CA reports within Volume 2 of the report. Respondents who responded to CA4 often have a similar set of concerns about the disruption the scheme could cause locally: potentially increased noise and pollution, the impact on traffic, and the visual and environmental effects the proposals could have on the area. The closure of local roads and the separation of farms from their land are also stated as being significant local impacts. Respondents focus on the effects of the construction phase more than the operational phase. Others suggest a potential solution: to construct a single tunnel from Whitmore to Madeley. There are also some comments about the Option One from the Atkins alternatives report, to make use of the existing West Coast Main Line track. Other respondents suggest lowering all or part of the route, or extending the tunnels proposed in the current plans.

Comments on Question 3 - CA5

Chapter 11 addresses issues raised in relation to CA5 within Question 3, in which respondents were asked to provide feedback on the CA reports within Volume 2 of the report. Respondents to CA5 often comment on the potential implications for traffic and transport in their area. Concerns include that the local roads may be too small for construction traffic, leading to potential congestion, noise pollution, and road safety issues. Respondents link this to perceived impacts on communities, such as increased social isolation due to reduced access. Some make alternative mitigation suggestions for construction routes. Other key issues for respondents include impacts on views from properties due to features such as viaducts or embankments, potential impacts on ecology and biodiversity, increased property blight, and diverted public rights of way. Some respondents also note the potential benefits to residential areas as a result of proposed design refinements, moving the tunnel portal further south of Crewe and moving the infrastructure maintenance depot to Stone.

Comments on Question 4 – Route-wide effects

Chapter 12 of the report addresses issues raised in relation to Question 4, in which respondents were asked to provide feedback on Volume 3: Route-wide effects. Responses in relation to Volume 3: Route-wide effects are often general concerns about impacts across the route without going into further detail. These include potential impacts on communities alongside the route, as well as impacts on the environment, countryside or landscape. Some respondents express more specific concerns such as the irreplaceable nature of ancient woodlands, the transporting and storage of construction waste and the omission of certain cultural heritage assets from the working draft Environmental Impact Assessment report.

Other comments

Chapter 13 of the report covers additional comments in relation to the HS2 project as a whole and the consultation process. Respondents are critical of the consultation process, expressing concerns that those affected may have been unaware of the consultation or community events. Others consider that the consultation period was too short given the long length and detailed nature of the consultation documents. More specifically regarding the documentation, respondents highlight perceived errors and omissions. Both the public and organisations make requests for further or continued engagement with HS2 Ltd.

Several respondents express either support for, or opposition to, HS2 in general, often highlighting the potential economic benefits or perceived lack of need case.

Chapter 1: About the consultation

1.1 Background

- 1.1.1 High Speed Two Ltd (HS2 Ltd) is the organisation responsible for developing and delivering the High Speed Two (HS2) project. HS2 Ltd is owned by the Department for Transport (DfT).
- 1.1.2 In November 2015 the Secretary of State for Transport announced his decision to bring forward plans for the West Midlands to Crewe section of the HS2 route (known as Phase 2a) to open in 2027, six years ahead of schedule. To obtain the legal powers to build and operate this part of the railway, the Government intends to deposit a hybrid Bill in Parliament by the end of 2017.
- 1.1.3 Parliamentary Standing Orders require an Environmental Impact Assessment (EIA) Report to be submitted alongside the Bill. To prepare for this Bill, the Government has commissioned consultants to undertake an EIA and prepare an EIA Report.
- 1.1.4 In advance of the formal submission High Speed Two Ltd (HS2 Ltd) developed a working draft EIA Report which presented draft environmental information based on the stage of the design at the time. This included a description of the environment as it is at the moment; an evaluation of the anticipated environmental impacts (and where possible, the significant environmental effects) of the scheme and the measures that were proposed to avoid, reduce or manage these likely significant adverse effects. This was consulted on between 13th September and 7th November 2016.
- 1.1.5 Responses from the working draft EIA consultation will be considered as the design and assessment is developed and during the production of the formal EIA Report which HS2 Ltd intend to publish when the hybrid Bill is deposited in Parliament.
- 1.1.6 HS2 Ltd and DfT will separately publish a report explaining how the comments received have been used to inform the formal EIA Report.
- 1.1.7 Dialogue by Design (www.dialoguebydesign.co.uk) is a specialist company that works with many organisations in the public and private sectors to handle responses to large or complex consultations.

1.2 The consultation process

- 1.2.1 The High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report consultation was managed by HS2 Ltd on behalf of the DfT. Dialogue by Design were commissioned by HS2 Ltd to set up consultation response channels for this consultation, including a consultation webform and an email address, and to receive, collate, analyse and report on responses made via the response channels.
- 1.2.2 Two other consultations for Phase 2a ran in parallel with this consultation. These were the HS2 Phase 2a West Midlands to Crewe Working Draft Equality Impact Assessment Report consultation and the HS2 Phase 2a West Midlands to Crewe Design Refinement consultation.
- 1.2.3 This report summarises the consultation responses sent through the West Midlands to Working Draft EIA Report consultation response channels, regardless of which consultation documents or proposals respondents referred to. Due to three HS2 Phase 2a consultations running concurrently (working draft EIA, working draft EQIA, Design Refinement), respondents may have referred to information provided in the other two consultations' documents. These comments have been included in this report for completeness and will be considered as part of the design development and EQIA.
- 1.2.4 HS2 Ltd and the Department for Transport produced a number of documents and maps to enable people to provide informed responses to the working draft EIA consultation:
- **High Speed Two Phase 2a: West Midlands to Crewe - Working Draft Environmental Impact Assessment (EIA) Report**, providing the public and stakeholders with an opportunity to review and comment on the draft environmental information for Phase 2a of the proposed High Speed Two (HS2) rail network, between the West Midlands and Crewe (the Proposed Scheme). Comments received during the consultation of this report are being considered during the on-going process of assessment and design of the Proposed Scheme, and will be reflected in the formal EIA Report. The working draft EIA report is made up of a number of documents:
 - - **Non-Technical summary** – providing a summary in Non-Technical language of the Proposed Scheme, its impacts (and where possible, the likely significant environmental effects) both beneficial and adverse, and the proposed means of avoiding, reducing or managing the likely significant adverse effects.
 - **Volume 1: Introduction and methodology** – providing:
 - a description of HS2 and Phase 2a, the EIA process and the approach to consultation and engagement;

- details of the permanent features of the Proposed Scheme and generic construction techniques;
 - a summary of the scope and methodology for the environmental topics; and
 - a summary of the strategic, route-wide and route corridor alternatives to the scheme and local alternatives considered prior to November 2015.
- This volume is supported by a glossary and list of abbreviations and two appendices: an Alternatives Report and a Draft Code of Construction Practice.
 - **Volume 2: Community area reports** – consisting of five reports, together with maps, which provide a description of the Proposed Scheme, divided into a series of community areas,
 - **Volume 3: Route-wide effects** – describing the impacts and effects that are likely to occur at a geographical scale greater than the community areas described in Volume 2.
- 1.2.5 To support the consultation, the following were also developed:
- a guide to the HS2 Phase 2a (West Midlands to Crewe): Working Draft EIA Report;
 - a leaflet providing basic information about the consultation, the proposals and details of how to access further information;
 - HS2 Phase 2a (West Midlands to Crewe) working draft plan and profile maps;
 - consultation response forms; and
 - diversity monitoring forms.
- 1.2.6 All documents were available to download from www.gov.uk and to order in hard copy through the HS2 Helpdesk directly. Complete sets of the documentation relating to the three consultations were available to view at libraries along to the Phase 2a route.
- 1.2.7 Local authorities and Parish Councils were offered briefings following the launch of the consultations.
- 1.2.8 HS2 Ltd and the DfT raised awareness of the consultation process in a number of ways. Once the consultations had been launched HS2 Ltd commissioned Royal Mail to send a letter and leaflet to addresses up to 1km each side of the line of route and 1km from the design refinement changes proposed in the areas around Crewe and Stone.

- 1.2.9 Letters were sent to local authorities, parish councils and Citizen's Advice Bureau offices along the Phase 2a line of route as well as statutory organisations and other stakeholders to inform them of the launch of the three consultations.
- 1.2.10 Posters advertising the consultation's information events were also sent to local libraries, village halls and places of local interest. HS2 Ltd used its social media presence to advertise the launch of the three consultations.
- 1.2.11 Regional press releases and local advertisements in newspapers were issued to raise awareness of the consultation and public events

1.3 Public events

- 1.3.1 HS2 Ltd organised a series of information events at community venues along the Phase 2a line of route between 30 September and 19 October 2016. The events were intended as an opportunity for members of the public to view relevant maps and documents, and to speak with appropriately qualified members of staff about how the consultation proposals might apply to them. In total, the events attracted over 1,900 visitors.

Table 1.3.2: List of information events

Venue	Location	Date	Event time
Whitmore and District Village Hall	Coneygreave Lane, Newcastle-under-Lyme ST5 5HX	Friday 30 September	11am – 7pm
Kings Bromley Village Hall	Alrewas Road, Kings Bromley, Burton-on-Trent DE13 7HW	Wednesday 5 October	12pm – 8pm
Great Haywood Memorial Hall	Main Road, Great Haywood, Stafford ST18 0SU	Friday 7 October	12pm – 8pm
Stafford Gatehouse Theatre	Eastgate Street, Stafford ST16 2LT	Monday 10 October	12pm – 8pm
Yarnfield Park Training and Conference Centre	The Cedar Suite, Yarnfield, Stone ST15 0NL	Wednesday 12 October	12pm – 8pm
The Madeley Centre	New Road, Madeley, Crewe CW3 9DE	Saturday 15 October	10am – 5pm

Wychwood Park	The Wychwood Suite, Weston, Crewe CW2 5GP	Wednesday 19 October	12pm – 8pm
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Chapter 2: Participation

2.1 Introduction

- 2.1.1 This chapter provides an overview of participation in the consultation. It covers response types and a breakdown of respondent sectors.

2.2 Response channels

- 2.2.1 There were three ways to submit a response to this consultation, all of which were advertised in consultation material and on the www.gov.uk website. The three response channels – a freepost address, an email address and an online response form – were free for respondents to use. The online response form and the email address (subject to the user's account settings) provided confirmation messages explaining that each response had been successfully received by Dialogue by Design.

2.3 Response types

- 2.3.1 A total of 475 responses were received on the working draft EIA Report, in a number of different formats. Table 2.3.3 describes these in more detail.
- 2.3.2 In addition to the response types described in the table, Dialogue by Design also received other documentation that was categorised as a null response, according to the following classification agreed with HS2 Ltd. Null responses comprised: general enquiries such as requests for consultation documents; duplicate submissions; or submissions which were obviously not intended as consultation responses. 69 records were categorised in this way and were not processed or analysed any further for the consultation. General enquiries were sent to HS2 Ltd to be processed.

Table 2.3.3: Count of different response types

Response type	Count
Online response form Responses submitted via the response form on the consultation webform	165
Offline response form Completed response forms submitted by post or email	70
Letter or email Individual responses submitted by post or email	240
Total	475

2.4 Responses by question

2.4.1 Respondents could answer any number of the four questions raised by the consultation (see Table 2.4.2). Table 2.4.2 shows a count of how many respondents provided responses to each question. Respondents who did not specifically address the consultation questions, or provided supplementary information beyond their answers to the questions are also included in the table below.

2.4.2 **Table 2.4.2: Count of responses to each question**

Question	Total
Question 1: Please let us know your comments on the Non-Technical Summary (NTS)	184
Question 2: Please let us know your comments on the documents that form Volume 1 of the working draft EIA Report.	188
Question 3: Please let us know your comments on Volume 2: Community Area (CA) reports.	359
Question 4: Please let us know your comments on Volume 3: Route-wide Effects.	158
Responses that did not directly respond to the question structure or added additional information.	226

2.5 Responses by sectors

- 2.5.1 Respondents who responded online or using the response form were asked to classify which sector they identified themselves as being from. Organisation responses that did not self-classify have been categorised based on any relevant information provided in their response or through information available online, in an iterative process between Dialogue by Design and HS2 Ltd. A list of organisations within these sectors is included in Appendix A.

Table 2.5.2: Breakdown of responses by sector

Sector	Count
Members of the public	405
Academics (includes universities and other academic institutions)	1
Action groups (includes rail and action groups specifically campaigning on the high speed rail network proposals)	7
Businesses (local, regional, national or international)	14
Elected representatives (includes MPs, MEPs, and local councillors)	1
Environment, heritage, amenity or community groups (includes environmental groups, schools, church groups, residents' associations, recreation groups, rail user groups and other community interest organisations)	23
Local government (includes county councils, district councils, parish and town councils and local partnerships)	17
Statutory agencies	6
Transport, infrastructure or utility organisations	1
Total	475

Chapter 3: Methodology

- 3.1.1 This summary report does not make recommendations or seek to draw conclusions from responses. Neither does it attempt to respond to comments made by respondents, nor seek to verify or pass judgement on the accuracy of comments made by respondents. Its purpose is to organise, analyse and report on what people said and provide results in a format that is as accessible as possible for the general public, stakeholders and for decision makers in Government.
- 3.1.2 There were four stages to the processing and analysis of the consultation responses:
1. Data receipt and digitisation of all submissions
 2. The development of an analytical framework
 3. The implementation of an analysis framework
 4. Reporting
- 3.1.3 Appendix B provides a detailed explanation of the methodology used in processing and analysing responses.

Chapter 4: Reading the report

4.1 Reading the report

- 4.1.1 This report summarises the responses to the HS2 Phase 2a West Midlands to Crewe Working Draft EIA Report consultation. The report summarises the issues raised by respondents and indicates where specific views are held by a large proportion of respondents.

4.2 Numbers in the report

- 4.2.1 Numbers are used in this report to provide the reader with an indication of the balance of views expressed by respondents. It is important to note that this consultation was an open and qualitative process, rather than an exercise to establish dominant views across a representative cross-section of the public. Therefore, no conclusions can be reliably drawn about any population's views beyond those who responded to the consultation. Dialogue by Design's intention is to accurately reflect the issues raised, rather than attributing any weight to the number of respondents raising them.
- 4.2.2 Where appropriate and possible, and by way of context only, numbers have been used to illustrate whether a particular point of view was expressed by a greater or smaller number of respondents.
- 4.2.3 Throughout the report, respondents' views are summarised using quantifiers such as 'many', 'some' and 'a few', to ensure the narrative remains readable. These are not based on a rigorous metric for use of quantifiers in the report – reporters have exercised their editorial judgement over what quantifiers to employ. Quantifiers used are therefore generally relative to the number of responses raising the topic discussed, rather than an objective measure across the report. For a detailed, quantitative breakdown of the number of respondents raising each issue, the reader can refer to Appendix C.
- 4.2.4 A substantial number of responses were made partly or entirely without reference to specific consultation questions. The points made in these responses have been integrated into the chapters that cover the relevant themes identified.
- 4.2.5 In this report, specific views or issues are frequently presented without indicating precisely how many comments were made containing this view or issue. This is because this is a consultation summary report, which needs to provide a balance between qualitative findings and the numbers of respondents raising specific points. Detailed numerical information is available in the appendices.

4.3 Structure of the report

4.3.1 Chapter 5 addresses issues raised in relation to Question 1:

‘Please let us know your comments on the Non-Technical Summary (NTS)’.

Chapter 6 addresses issues raised in relation to Question 2:

‘Please let us know your comments on the documents that form Volume 1 of the working draft EIA Report.’

Chapters 7 to 11 address issues raised in relation to Question 3:

‘Please let us know your comments on Volume 2: Community Area (CA) reports.’

Chapter 12 addresses issues raised in relation to Question 4:

‘Please let us know your comments on Volume 3: Route-wide Effects.’

Chapter 13 of the report covers additional comments in relation to the HS2 project as a whole and the consultation process.

4.3.2 Quotations from responses have been included in the following chapters to illustrate views discussed in the narrative. The quotations are taken from a mix of responses including organisations, elected representatives and members of the public. Quotations have been attributed where these are taken from a response from an organisation or an individual in a public role such as an MP. Quotations have not been attributed to private individuals other than indicating that they are from an individual’s response. No quotes have been included from confidential responses.

4.3.3 Quotations are taken directly from responses and any typos are the respondents’ own. This report reflects what respondents say without judgement or interpretation. Comments from respondents that misinterpret or misunderstand the content of HS2 Ltd’s or other organisations’ proposals are therefore reported in the same way as any other comments. Similarly, this report does not seek to judge the accuracy of respondents’ comments.

4.4 Appendices

4.4.1 Appendices include:

- a list of organisations and elected representatives that responded to the consultation (Appendix A);
- a detailed methodology explaining how responses were received, processed and analysed, (Appendix B);

- a table listing all codes in the analysis framework and the number of times they were used in the analysis of responses to each of the consultation questions (Appendix C);
- a glossary of terms (Appendix D); and
- the results of a simultaneous equality and diversity monitoring exercise (Appendix E) and the form used in this monitoring exercise (Appendix F).

Chapter 5: Responses in answer to Question 1 - comments on the Non-Technical summary

5.1 Introduction

5.1.1 This chapter provides a qualitative summary of the issues respondents raised in response to question 1 in the response form, which asks about the Non-Technical summary.

5.1.2 Question 1 asks:
‘Please let us know your comments on the Non-Technical Summary (NTS)’.

5.2 Overview of responses

5.2.1 Question 1 received 184 direct responses, however this chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to the question.

5.3 Discussion

5.3.1 This chapter covers overall comments on the Non-Technical Summary.

5.3.2 Overall comments on the Non-Technical Summary

5.3.3 A few respondents feel that the summary appears to be suitably comprehensive. The Madeley Conservation Group thinks that as a Non-Technical summary, it has been prepared well. Several respondents, including Weston and Basford Parish Council, Ingestre with Tixall Parish Council, and Ingestre and Tixall Against HS2 Action Group, feel that it is a useful overview of the EIA reports and HS2 Phase 2a scheme.

‘The Non-Technical summary gives a good overview of Phase 2a. The illustrations are especially helpful for the lay reader.’

Individual submission

5.3.4 A couple of respondents, including Whitmore and Baldwins Gate HS2 Action Group, feel that the summary is generalised, brief, and includes a bit of everything. One of these respondents believes it only deals with the most obvious problems, and that to understand the impacts of the proposals, local people have little need for such documentation.

- 5.3.5 Weston and Basford Parish Council thinks it will be the only EIA document read by most of their community members, and should therefore include all key points for each area. They feel that it needs to include further text describing the process of assessment of the likely environmental impacts. A few respondents feel that there is insufficient detail for people to provide an informed response.

'The Non-Technical summary does not contain sufficient detail to allow people to make a proper informed response.'

Individual submission

- 5.3.6 A few respondents, including Cheshire East Council, Ingestre with Tixall Parish Council, and Ingestre and Tixall Against HS2 Action Group, think the summary is useful as they feel it is a simplified and accessible overview of the Proposed Scheme and its potential impacts. Weston and Basford Parish Council thinks that it is written in a way that is relatively easy for Non-Technical readers to understand. A couple of respondents feel that it is too complex and technical to enable the average person to respond comprehensively. One respondent feels the document is too long.

'We believe that the Non-Technical summary is a welcome addition and is useful for those seeking a general and simple overview of the project.'

Ingestre and Tixall Against HS2 Action Group

- 5.3.7 One respondent feels that the NTS is a helpful introductory resource for consultation and engagement. They think it identifies the importance of ongoing consultation and engagement throughout the life of the scheme. A couple of respondents believe that the mitigation hierarchy, as set out in Figure 12 of the NTS, needs to include engagement with relevant stakeholders.
- 5.3.8 Public Health England supports the approach of considering impacts at a CA level. They feel this approach provides communities with balanced, relevant, and accessible information, helping identify localised impacts and mitigation measures. They are satisfied that the NTS provides a concise and representative overview of the potential risks to public health.

- 5.3.9 A couple of respondents, including Weston and Basford Parish Council, note that they find the illustrations helpful, especially for picturing key features on the route. However, a few respondents, including Weston and Basford Parish Council, feel that more illustrations, using a variety of media, are required to enable visualisation of areas before, during, and after construction. Swynnerton Parish Council and Chebsey Parish Council feel that a lack of realistic visualisation makes information difficult to follow and sometimes misleading. Weston and Basford Parish Council feels the description of the route is high level, and people struggle to picture what it will look like, making it difficult to evaluate the possible impacts on them and their environment.

'The illustrations are especially helpful for the lay reader. More illustrations would make the document even better, especially illustrations showing before and after examples of areas that will be affected by major features such as embankments and viaducts.'

Individual submission

- 5.3.10 Many respondents are concerned that some issues or areas appear to be absent from the report and/or reported on inaccurately, these are discussed under the relevant themes. The Inland Waterways Association thinks that the impacts of the project would vary, depending on the outcome of the design refinements. They feel these various potential changes could be reflected in the Non-Technical Summary, particularly, they note, if the refinements remain unresolved when the next version of the document is released. One respondent believes that the proposals of the Non-Technical Summary fail to follow the mitigation hierarchy.
- 5.3.11 Some respondents feel that the process and report are biased. They believe it favours HS2 Ltd and is steered by cost, with little regard for effects on landscapes and communities.
- 5.3.12 A couple of respondents, including the National Trust, are concerned that Areas of Outstanding Natural Beauty (AONB) and their national protection status are not properly addressed.

'However, the nationally protected status of the AONB landscape should be more explicitly stated.'

Individual submission

- 5.3.13 A couple of respondents are concerned that the Non-Technical Summary does not discuss Entry Level Stewardship Schemes or Countryside Stewardship Schemes and how they will be affected.

- 5.3.14 The National Trust and Jeremy Lefroy MP feel that as the Non-Technical Summary needs to fairly summarise the main report, they expect that the final version will be re-written from the final EIA report rather than revised from the current version.
- 5.3.15 Many respondents took the opportunity to comment on the consultation process, CA reports, and HS2 generally, this is discussed under the relevant sections of this report.
- 5.3.16 Many respondents are concerned that some issues or areas appear to have been excluded from the EIA process and/or the information is inaccurate, these are discussed under the relevant themes.

'We are, however, surprised and disappointed by the complete omission of Shugborough from the draft version and the very cursory mention of the Cannock Chase AONB.'

National Trust

- 5.3.17 One respondent feels that the Non-Technical Summary was an adequate analysis of the overall effects of the project.
- 5.3.18 One respondent is concerned that given the scale of the project and nature of the reports, that there are still assumptions being made on issues for which information is still not available.
- 5.3.19 One respondent notes that the Non-Technical Summary does not put a limit on the adverse effects of the scheme at the 120m limit of the voluntary purchase scheme.

Chapter 6: Responses in answer to Question 2 - comments on Volume 1 and its Appendices

6.1 Introduction

6.1.1 This chapter provides a qualitative summary of the issues respondents raised in response to question 2 in the response form, which asks about Volume 1 and its appendices.

6.1.2 Question 2 asks:

‘Please let us know your comments on the documents that form Volume 1 of the working draft EIA report (Introduction and Methodology, Alternatives Report, Draft Code of Construction Practice)’.

6.2 Overview of responses

6.2.1 Question 2 received 188 direct responses, however this chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to the question.

6.3 Discussion

6.3.1 This chapter starts by providing a brief overview of comments received on Volume 1 of the draft EIA (Introduction and Methodology) and its Appendices (Alternatives Report, and Draft Code of Construction Practice (CoCP)). It then summarises the key points respondents raise when discussing these documents, following the themes of the working draft EIA:

- agriculture, forestry and soils;
- air quality;
- climate change;
- community;
- cultural heritage;
- ecology and biodiversity;
- health;
- land quality;
- landscape and visual impact;
- major accidents and natural disasters;
- socio-economics;

- sound, noise and vibration;
- traffic and transport;
- waste and material resources; and
- water resources and flood risk.

6.3.2 Volume 1 Introduction and Methodology

6.3.3 Eighty-six respondents selected the tick box to indicate their response was referring to Volume 1: Introduction and Methodology in response to Question 2. However, many other responses were made in relation to this section of Volume 1 without indicating this within the tick boxes provided.

6.3.4 The majority of comments relate to the draft EIA themes, for example ecology and biodiversity, landscape and visual impact, and traffic and transport. These points are summarised under the thematic section below.

6.3.5 Some respondents provide detailed feedback on Volume 1: Introduction and Methodology, such as the Staffordshire authorities. This includes critiquing specific sections, requesting further information, and making detailed recommendations; comments are set out in the sections below.

6.3.6 Stakeholder engagement

6.3.7 Some respondents note that Volume 1: Introduction and Methodology includes a section called stakeholder engagement, and express views on this topic.

6.3.8 Some respondents express concern about the adequacy/extent of the consultation that has taken place with affected communities, individuals and stakeholders.

'Volume 1 Intro & Method - We found this document disappointing. Funding would have been better used by carrying out consultations from the beginning and involving the local community in practical discussions.'

Swynnerton Parish Council

6.3.9 Some respondents highlight the importance going forward of maintaining and improving communication with HS2 Ltd, so that they have a detailed understanding of the design and its potential effect on them.

'... going forward it is critical that one to one meetings are carried out on a regular basis directly with affected landowners and occupiers so that they understand how the scheme will impact on them as the design progresses.'

National Farmers' Union

- 6.3.10 Specific issues raised include the need for more detail on future engagement plans, and on the effect of confidentiality restrictions on enabling stakeholders to communicate with their own stakeholders. Suggestions for other stakeholders with whom HS2 Ltd could engage include the Waste Resources Action Programme. The visual impact of the Proposed Scheme is also cited as an aspect that would benefit from further engagement with stakeholders, such as local authorities.
- 6.3.11 Some organisations and members of the public welcome the opportunity for direct engagement with HS2 Ltd, for example on matters relating to ecology and biodiversity, and landscape.
- 6.3.12 Volume 1 Appendix Alternatives Report**
- 6.3.13 One hundred and seven respondents selected the tick box to indicate their response was referring to Volume 1: Appendix: Alternatives Report in response to Question 2. However, many other responses were made in relation to this section of Volume 1 without indicating this within the tick boxes provided.
- 6.3.14 The majority of respondents comment on which of the alternatives set out in the appendix they would prefer.
- 6.3.15 Some respondents suggest tunnelling in Staffordshire, particularly that one long tunnel should be built instead of two tunnels at Whitmore Heath and Madeley, to reduce disruption to local villages and countryside. Some respondents also suggest building a cut and cover tunnel to the north of the Swynnerton area.

'There is almost no tunnelling in Staffordshire, despite the hilly terrain. This contrasts with the extensive tunnelling in Buckinghamshire.'

Jeremy Lefroy MP

- 6.3.16 Some respondents strongly recommend adoption of the Atkins Report's high cost alternative option, citing a number of positive outcomes. These include: reduction in length of the Phase 2a route, thus reducing the adverse environmental impact of disruption to local communities, wildlife and landscape, including woodlands and saltmarsh areas; reduced construction costs e.g. by removing the necessity for tunnelling; and reduced road restructuring, by enabling the line to be lower.

'This alternative would do away with having to make the Whitmore Heath Tunnel and all the devastation between Baldwins Gate and Crewe. This has to be a cheaper and more all round better alternative.'

Individual submission

- 6.3.17 Some call into question the decision to bypass the city of Stoke-on-Trent, given the potential adverse impact this could have on its economy.
- 6.3.18 Other suggestions made by respondents include: using Corridor/Route B (North of Pasturefields) as an option south of Crewe with consultation taking place in advance of Bill finalisation; building a direct high speed rail link to improve the link between northern cities not on radial routes to and from London, rather than requiring a trip via Birmingham as with HS2; and, given technological advances, considering alternatives to high speed rail, so that travel is discouraged rather than promoted.
- 6.3.19 Although some respondents welcome the extent and coverage of the research contained in the Alternatives Report, others request more information, particularly regarding the reasons for increasing the height of viaducts and embankments in certain sections of the route.
- 6.3.20 Other information requested includes: why the green tunnel option in the Hopton area has been abandoned on the grounds of Kingston Brook, given the Brook has always been there; a table giving clear pros, cons and costs for each option; more explanation of why 'Option 8 Stone Hybrid' represents the preferred option for the railhead and associated compound; how the choice of route will impinge on other rail services; e.g. the Great Haywood area; how consultation will take place on construction and engineering options prior to their publication in the final EIA; further detail regarding freight; and information on the impact on HS2 of the UK leaving the EU.
- 6.3.21 Volume 1 Appendix Draft CoCP**
- 6.3.22 Eighty-five respondents selected the tick box to indicate their response was referring to Volume 1: Appendix: Draft CoCP in response to Question 2. However, many other responses were made in relation to this section of Volume 1 without indicating this within the tick boxes provided.
- 6.3.23 Some respondents provide detailed feedback on this appendix, such as the Staffordshire authorities. This includes critiquing specific sections, requesting further information, and making detailed recommendations; comments are set out in the sections below.
- 6.3.24 Working hours are the main issue raised by respondents regarding construction. They report confusion and conflicting information being given about this, i.e. whether there will be 24/7 or 'normal' working hours. They express considerable anxiety about the impact on local people if the former is the case, as seems to be allowed for in the Draft CoCP, particularly regarding the effects of night-time working, with the suggestion made that this should only be allowed with the advance permission of the local authority.

- 6.3.25 To a lesser degree, concern is also expressed about the impact of daytime and weekend construction on everyday life/business e.g. the effect on those who work from home. Respondents call for such concerns to be taken greater account of in weighing the costs and benefits of different route options.
- 6.3.26 Some respondents express concerns about personal safety in relation to the impact of a large number of construction workers coming into the area; and query how these workers will be vetted before being hired.
- 6.3.27 Some respondents call for HS2 Ltd to guarantee that local people's concerns will be addressed when expressed, and clarify how far in advance notice of works/road closures will be made. This should be far enough ahead to allow for constructive dialogue with affected parties. Clarification is sought of what will be included within the community engagement framework. Some respondents emphasise the importance of each section of works having named personnel with contact details, and that agricultural contact persons need to have an understanding of agriculture and farming from the farmer's point of view. It is suggested that it might be efficient to run a joint HS2 Ltd/Network Rail 24-hour community helpline, and that the two companies could also work together to agree reasonable measures to predict and mitigate extreme weather events.
- 6.3.28 Some respondents highlight the need for: construction boundaries to be clearly delineated (with the design of fencing, hoardings etc. agreed with those with adjacent property); for full consideration to be given to the alternative means of constructing viaducts (to minimise environmental impacts). It is also suggested that a full impact assessment, including consultation with interested parties, is needed where the respondent believes 'blasting' is required and that precautionary measures are needed where haul routes cross watercourses.
- 6.3.29 Some respondents request more detail on proposed utility diversions (e.g. when and where they will be undertaken, and with how much notice), and on how power will be supplied for long term constructions and accommodation.
- 6.3.30 Some respondents express scepticism at the adequacy of the proposals in the Draft CoCP for monitoring construction practices, suggesting that this should not be left to the contractors themselves; and ask for details of how compensation claims above £10,000 (the limit for the small claims procedures) will be dealt with.
- 6.3.31 A few respondents comment that it would be expected that contractors would be in compliance with government policy as set out in the National Planning Policy Framework, the Natural Environment White Paper and other relevant documents such as British Standards.
- 6.3.32 A few respondents are concerned as they believe that lead contractors would be self-monitoring with regard to local environmental management plans (LEMPs) and request independent monitoring.

'Essentially the lead contractors will be self-monitoring for compliance with the LEMP. This is open to abuse and avoidance of compliance. Independent monitoring is expected for a project of this size and significance.'

Staffordshire Local Authorities

6.3.33 Thematic overview of comments

6.3.34 The following section provides a summary of thematic points raised in response to Question 2. The main issues raised relate to the effect of the railway and/or its construction on the visual landscape and on the environment. Some respondents feel there should have been more detail in the working draft EIA Report with specific suggestions made as to further information needed. These are reflected in the relevant sections below.

6.3.35 Agriculture, forestry and soils

6.3.36 Some respondents identify a range of adverse effects on farms. Negative impacts cited include: rerouting causing extra travelling and disruption; the loss of farmland and therefore jobs; impacts on soil productivity and field drainage; and impacts on livestock's productivity and wellbeing. Some question the accuracy of the impact levels reported in the working draft EIA Report.

6.3.37 Some respondents call for mitigation measures to be designed into the proposals to reduce such potential impacts, and for agricultural land required for temporary purposes during construction to be restored to the same agricultural land classification as far as possible. Other respondents make specific suggestions on how drainage should be maintained and brought back into working order post-construction.

'...mitigation measures must be practical on the ground in order to enable farm businesses to operate.'

National Farmers' Union

6.3.38 The extent and quality of the engagement undertaken with affected farmers and landowners to date is criticised by a few respondents who call for closer engagement with affected individuals to enable detailed mitigation proposals relating to specific farms to be drawn up. The need for an Agricultural Liaison Officer role in Phase 2a as well as Phase One is highlighted.

6.3.39 Air quality

6.3.40 Some respondents express concern about the effect of construction on air quality (e.g. the effect of dust on residents' quality of life, businesses' ability to operate and on grass and grazing animals).

6.3.41 While one respondent fears an increase in CO2 emissions caused by heavy lorries, another is encouraged by the proposed employment of industry good practice and Institute of Air Quality Management guidance in managing emissions to air during construction, plus the comprehensive set of mitigation measures for fugitive dust emissions. Moving stockpiles and mounds of soil further away from residential properties is suggested to reduce dust.

6.3.42 One respondent comments on the need to screen the project for impacts on Cannock Chase Special Area of Conservation (SAC) because SACs are vulnerable to nitrogen deposition.

6.3.43 Climate change

6.3.44 One respondent comments on the importance of planting trees and shrubs in restored areas from a mix of seed provenances to ensure resilience to climate change.

6.3.45 Community

6.3.46 Some respondents express deep concern at the potential effect of HS2 construction and operation of the railhead on the life and viability of affected communities. They are concerned about the cumulative impacts of congestion and disruption and the adverse impact on access routes, shops, local businesses and property. Some highlight the adverse effect on local schools, on access to healthcare facilities, and physical activity and recreation opportunities. Some respondents call for investment to be made to avoid or compensate for these effects

'...it will ruin the lives of many, like myself, who chose to retire to a rural environment for well-earned peace and quiet and bought in this area in good faith...'

Individual submission

6.3.47 Some respondents also raise the potential impacts on development activity. They are concerned that without details on proposed mitigation activities, it is not possible to assess the extent of the land needed and the subsequent impact on development plans. They feel that the final EIA should include a full and robust assessment of the residual impact on development schemes after mitigation; and its baseline should include future developments in communities such as how they will change in response to local demands for housing growth.

6.3.48 Some respondents also suggest: amending the definition of receptors of construction effects to include people who move between 2020 and 2027; including in the formal EIA site allocations adopted in future local plans; documenting and agreeing with the local planning authority future developments included in the formal EIA.

- 6.3.49 Some respondents particularly highlight the potential impact of the railway and/or its construction on residents and local people; and on the individual respondents themselves. Other impacted groups identified include landowners; older people; children and young people; people with learning disabilities or mental health issues (mainly owing to the perceived impact on a particular care centre); and rural businesses.

6.3.50 Cultural heritage

- 6.3.51 While some respondents support the approach taken to archaeological heritage, some stress the importance of also acting to protect built heritage assets. For example, through erecting robust fencing, and putting in place a robust contingency plan for damage repairs. Further detail is requested on the avoidance/mitigation of the indirect as well as direct effects on heritage.

'We are significantly concerned that while the design of the scheme has sought to avoid direct impacts on all heritage assets (9.7.1) and to mitigate direct impacts where this is not possible, this section is silent on the avoidance and mitigation of indirect effects on heritage assets. This needs to be remedied.'

National Trust

- 6.3.52 Some respondents, however, feel that HS2 Ltd places more importance on avoiding adverse impacts on heritage (e.g. the rejection of a route option to protect Hopton battlefield) than on communities.
- 6.3.53 A few respondents stress that the potential for previously unrecorded archaeological remains, and the preparation of an archaeological risk model, needs to be referenced in Volume 1.
- 6.3.54 A few respondents also recommend: assessing heritage assets beyond the Zone of Theoretical Visibility (ZTV) boundary when required; interdisciplinary working between historic and landscape specialists; and periodic consultation of the relevant Historical Environment Records (HER) for the latest literature relating to the route.
- 6.3.55 A few respondents welcome the Archaeological and Heritage Works Plan, which states that there will be controls on construction vehicles in areas of heritage interest. However, they add that it should include construction traffic using the local road network, as well as when onsite.

6.3.56 Ecology and biodiversity

- 6.3.57 Impact on ecology and biodiversity is a matter of concern to some respondents who take the view that certain sections of the route will cause severe adverse impacts for flora and fauna, wildlife (e.g. white hart deer, white-clawed crayfish and birds), irreplaceable ancient woodland and other habitats (e.g. ponds and a rare inland salt marsh).

'...the whole ecosystems including habitat, insect life, vegetation, and a multiplicity of bird and other species all interconnect, all these are in jeopardy in this Proposed Scheme.'

Individual submission

- 6.3.58 Some respondents stress the need to take greater account of non-protected species rather than focusing only on protected species such as bats and barn owls. One respondent believes that affected deer should be translocated. Some see the mitigation measures proposed as inadequate given the potential scale of the ecological impacts.
- 6.3.59 A few respondents stress that mitigation measures need to be put in place before habitat is destroyed, to enable displaced species to disperse, as habitats will take time to reach the desired condition, and ask for further detail to be provided to give assurance that the ecological impacts of construction will be appropriately mitigated. It is also requested that the EIA recognise the potential of attenuation and balancing ponds to play a part in ecological and landscape mitigation. The proposal to put in place controls on lighting/illumination to minimise adverse effects on sensitive ecology is welcomed.
- 6.3.60 Some respondents raise specific issues about proposed replanting:
- Resilience of species for woodland and landscape planting needs to be considered, to ensure that the investment in such planting is realised;
 - Where biodiversity is the prime objective, a mix of seed provenances should be planted alongside the current population;
 - Locally sourced species-rich grassland habitat (of local genetic stock) should be created, to help conserve the local genepool;
 - Excavated top soil should not be used in areas proposed for ecological mitigation; and
 - Woodland plantation needs to be managed if quality wildlife habitat is to be achieved (a process which will take thirty years) rather than merely improving the landscape.
- 6.3.61 It is also emphasised that where ancient woodland soil is translocated the soil should be moved directly to the receptor site (not stored), and that the impact on the establishment and quality of the new woodland should be monitored.

- 6.3.62 Further specific suggestions include: using box culverts only in exceptional circumstances as they sever ecological connectivity, and including mammal ledges as a minimum requirement; making all watercourse crossings and underbridges wide enough to retain a corridor of habitat underneath, and high enough for use by flying bats (where present); using green overbridges or viaducts in sensitive locations (e.g. when the route crosses a Nature Improvement Area); and putting fencing in place to protect all retained habitat on site, not just trees.
- 6.3.63 One respondent suggests that biodiversity initiatives should occur away from Network Rail infrastructure to avoid the increased risks for the maintenance and operation of the railway.
- 6.3.64 A few respondents also urge account to be taken of the long range movement of species in determining the scope of ecological survey work; and for the scope to extend well beyond the narrow corridor of the route to ensure that linear habitats/wildlife corridors are fully considered, and to include wintering and breeding birds.
- 6.3.65 Clarification is sought of which records have been used to inform the EIA dataset and its conclusions, stressing that the baseline needs to be set high in areas where biodiversity records are lacking. Respondents also call for publication of the revised metric for biodiversity offsetting; and for reference to be made in the Environmental Memorandum to the Ecology Review Group, and for its terms of reference to be agreed with stakeholders (including who is responsible for enforcement issues should remedial action be required). A few respondents suggest what biodiversity data should be collected, for example records for species of principal importance (NERC Act 2006), bird species of conservation concern (British Trust for Ornithology Red and Amber lists) and habitats of principal importance.
- 6.3.66 A few respondents comment that good examples of mitigation, compensation and biodiversity offsetting were achieved during Phase One, such as Whittington Heath Golf Course heathland creation.
- 6.3.67 A number of other suggestions are made, for example: cross referencing compensation and offsetting sites against relevant local policy and guidance; providing a revised metric for offsetting biodiversity impacts; and compliance with best practice and guidelines for protection of species.
- 6.3.68 A few respondents query how monitoring by contractors would interface with the Ecology Review Group with respect to ecological matters.

6.3.69 Health

- 6.3.70 Some respondents identify a number of potential adverse impacts of the railway and its construction on the health and wellbeing and quality of life of those living in affected communities. They stress the physical, mental and emotional effects of loss of access to community facilities, physical activity and green areas; loss of tranquillity and privacy; traffic congestion and rerouting; 'blighted' property; and noise and light pollution leading to disturbed sleep.
- 6.3.71 Some respondents raise the potential health hazards of living near an Auto-Transformer Feeder Station.

6.3.72 Land quality

- 6.3.73 Respondents stress the importance of using proven techniques and complying with industry good practice and the regulatory framework when excavating and constructing on potentially contaminated areas of land; and of the appropriate utilisation of extracted minerals.
- 6.3.74 Some respondents support proposals relating to mitigation measures for mineral resources, including prior extraction of the resources for use within the Proposed Scheme or elsewhere.

6.3.75 Landscape and visual impact

- 6.3.76 Landscape and visual impact is a matter of concern for some respondents. They emphasise the importance of choosing options that minimise the impact on the landscape, and the need to guarantee Environmental Minimum Requirements with action post-construction to restore the environment and landscape.
- 6.3.77 Some respondents call for confirmation that landscape mitigation work is proposed to be undertaken, with the suggestion made that this should consider seasonal differences.

'Consideration should be given to seasonal differences in effects - winter and summer views. The competent authority should decide if both winter and summer conditions should be considered or just winter conditions.'

Cheshire East Council

- 6.3.78 Specific mitigation suggestions include: building or extending tunnels rather than constructing viaducts; paying special attention to the design and construction of viaducts and embankments, (e.g. ensuring their scale, height and visibility does not blight the visual landscape); increasing mitigation banking and planting to reduce visual impact.

- 6.3.79 It is suggested that the design, creation, maintenance and removal of hoardings, fencing and screening adjacent to existing railway property should be agreed with Network Rail, including taking into account the effect on the landscape; and that information should be provided to landowners on permanent land take from their holdings, broken down between that taken for the railway line and that taken for habitat mitigation.
- 6.3.80 Some respondents criticise the lack of detailed information on the ZTV, and that the methodology should be clear as that described in the working draft EIA is more akin to a Zone of Visual Influence. Some call for overhead line electrification gantries and for significant receptors, whatever their distance from the Proposed Scheme, to be included in the ZTV; and for visual impact to be taken account of in assessing whether residents qualify for blight compensation.

'2.8. Production of a ZTV is an important part of the LVIA methodology. While an interim ZTV has been prepared (8.10.2) it has not been published as part of the consultation. This precludes any commentary on the likely veracity of the ZTV or consideration of its implications.'

National Trust

- 6.3.81 A few respondents are critical that the documentation does not recognise the potential role that historic landscape character and built environment character could play in informing understanding of the value and susceptibility to change for character areas.
- 6.3.82 Light pollution, both temporary (arc lights used during construction) and permanent (at the proposed Infrastructure Maintenance Depot) is a key concern for those living in rural environments with low existing levels of light pollution; especially given the allowance for construction work to be done at night, which could impact on residents' sleep.
- 6.3.83 Major accidents and natural disasters**
- 6.3.84 One respondent feels that a more challenging approach to identifying the potential for major accidents and natural disasters is needed, as these often occur as a result of unexpected combinations of factors.
- 6.3.85 Socio-economics**
- 6.3.86 Some respondents express concern at the potentially severe impact of permanent road closures and/or construction traffic on nearby roads on the viability of running specific businesses and farms.

'This the long term would have a catastrophic effect on the business and cause it to shut down.'

Individual submission

- 6.3.87 A few respondents also stress the importance of implementing and evidencing the proposed employment of local staff and apprentices by the nominated undertaker and its contractors.
- 6.3.88 Some respondents, some themselves directly affected, strongly criticise the 'blight' caused to property (e.g. causing unsaleable or structurally damaged houses).
- 6.3.89 Respondents call for the National Compensation Code to be reviewed in light of the scale and potential impact of the Proposed Scheme, and for the HS2 land take and returns policy to be brought into line with national policy.

'Quite clearly the total destruction of the community we live in, requires the necessary individual case support from HS2 to ensure properties and owners are offered the opportunity to relocate to an area unaffected.'

Individual submission

- 6.3.90 Other specific suggestions made by a few respondents include clarifying the arrangements for premises where private water supplies are affected by the scheme, and adding Network Rail as a stakeholder/consultee with regard to property.

6.3.91 Sound, noise and vibration

- 6.3.92 The impact of sound, noise and vibration is another area of concern.
- 6.3.93 Some respondents emphasise the adverse effects on everyday personal and business life of the noise pollution caused by construction (works noise, traffic including heavy lorries, and vibration - also seen as potentially causing structural damage to property) and/or ultimately the noise made by trains, (e.g. those going over viaducts). Some express particular concern at the allowance made for night time construction activities with the potential effect on nearby residents' sleep.

'We live in the countryside in an extremely quiet courtyard with no noise or light pollution therefore to have maintenance works carried out during the night will be unbearable given the close proximity of the new HS2 construction to the west of the WCML.'

Individual submission

- 6.3.94 Some respondents ask whether noise insulation measures or rehousing will be available for the full duration of the construction programme in affected areas, and for the qualifying criteria for these to be clarified; and whether details of the properties likely to be affected by construction noise and vibration will appear in the final EIA.
- 6.3.95 Respondents raise the lack of noise mitigation measures in certain sections of the route and strongly ask for these to be applied to reduce perceived adverse impacts on local people, including those living on or using inland waterways. Respondents ask:
- Why operational noise is not being future proofed to achieve lowest-observed-adverse-effect level (LOAEL);
 - Whether noise mitigation will reflect health based research and be designed to achieve LOAEL;
 - For exploration of the opportunities to reduce vibration by means of alternative machinery;
 - For detailed evidence on noise mitigation to be provided (e.g. on the use of technology, the standards and limits set for noise barriers).

'9.14.8 mentions again 'proven East Asian technology' however again there is no reference to back up this assertion. Please provide the data to back this up- noise is a key issue for most people.'

Inland Waterways Association

- 6.3.96 One respondent calls for clarification of what a Qualifying Building is; the approach to monitoring and enforcing noise minimisation measures; for baseline noise data to be provided in the formal EIA Report; and for explanation of the rationale behind the criteria for assessing noise impact on community facilities. Respondents also call for the full noise assessments to include comprehensive background monitoring, and for continued monitoring of the evidence base on the health effects attributable to exposure to railway noise, with this reflected in assessments.
- 6.3.97 Concern is expressed by a few respondents about the adequacy of the contour maps showing the noise impacts of trains; and that the noise assessments done to date do not appear to have taken account of the prevailing winds, nor to have addressed noise around the tunnel portal.

6.3.98 Traffic and transport

- 6.3.99 Road congestion and temporary and permanent road closures are matters of concern to some respondents who raise a number of potential adverse effects on pedestrians and other road users. These are raised as needing quantification in future environmental assessments, which need to include taking a 'reasonable worst case' approach that is felt to be absent from the EIA.
- 6.3.100 The potential adverse impacts of congestion and road closures identified include: increased traffic danger (including to children and young people where near to schools); loss of business; increased journey times and stress levels (e.g. for commuters and those using health and leisure facilities); knock-on congestion effects on nearby routes; delays to the work of the emergency services; and isolation for those living in rural communities without a bus service.
- 6.3.101 Some respondents question the suitability of some of the roads proposed for use by construction traffic, suggesting the re-location of satellite compounds to allow for more suitable roads to be used.

'Inappropriate for construction traffic to use public roads, particularly narrow country lanes which also serve residential properties & are frequently used by walkers, cyclists etc...'

Individual submission

- 6.3.102 Some respondents call for specific mitigation actions including building: a bridge high enough to accommodate agricultural traffic; a footbridge to enable pedestrian access to green areas; a shared use footway/cycleway; and a verge for equestrian use. The need to maintain the connectivity of the public right of way (PRoW) and rural lane network is also emphasised, (e.g. through the provision of underpasses and overbridges). It is requested that HS2 Ltd share the results of its PRoW usage surveys with affected local authorities. Clarification is sought on who would retain ownership and responsibility for maintaining severed sections of road where access to residential properties is still required. Further details are also sought as to what is proposed in relation to certain sections of the route, (e.g. the potential to access roads after the construction of haul roads); and the impact on existing railway infrastructure and operations. The use of user surveys as a tool to assess the value of a PRoW to the local community and internal and external tourists is also challenged.

- 6.3.103 A few respondents call for a quantitative assessment to be submitted and audited by Staffordshire local authorities to validate HS2 Ltd findings. The Staffordshire authorities also expect that any impact is mitigated by HS2 Ltd, with any reasonable measures being implemented or funded to leave Staffordshire in 'no worse' position.
- 6.3.104 Concerns are raised by a few respondents about the implementation of the proposed travel plan (which favours sustainable travel) because the rural road network has limited bus operation and the roads are not an ideal width to support walking and cycling. It is therefore recommended that rather than taking a generic approach, measures are developed that are relevant to specific locations.

6.3.105 Waste and material resources

- 6.3.106 A few respondents ask for clarification of what is meant by sustainable material; and whether HS2 Ltd would consider or be required to conduct any permitted or regulated activities.
- 6.3.107 A few respondents recommend that once the quantities of waste material for landfill are known, further dialogue is undertaken by HS2 Ltd with local authority waste policy officers; to enable the former to have access to accurate current data on waste arising and capacity, and the latter to make robust predictions for the future. It is also recommended that the formal EIA Report contain a statement about methods of reduction of waste generation and assessments prior to design/construction; and that 'contaminated soils which cannot be remediated' should be included as a waste stream.
- 6.3.108 The visual impact of stockpiled excavated material on residents of facing properties is also highlighted by a few respondents.

6.3.109 Water resources and flood risk

- 6.3.110 Some respondents express concern at the potential for increased flood risk caused by the impact of construction on the use of fields.
- 6.3.111 Some respondents call for a written agreement with the local authority to mitigate for the loss of floodplain storage and the design of compensatory storage. Some respondents ask for clarification in the formal EIA report of why the extent of surface water feature searches is reduced to 500m in urban areas. Owners and operators are identified as the primary source of detailed information about water features and their dependencies.

'Mitigation for loss of floodplain storage should be agreed with the Council in writing to ensure no increase in flooding. Compensatory floodplain storage should be designed on a level for level basis.'

Cheshire East Council

- 6.3.112 The wording on water pollution and quality standards is seen as too abstract and in need of rewording to make it enforceable. Other specific suggestions include: restricting the infiltration to ground to clean, uncontaminated surface water; not allowing infiltration drainage into contaminated land, to avoid the risk of mobilising contaminants; giving consideration to the infiltration capacity of the ground, and rate of discharge.

Chapter 7: Responses to Question 3 - CA1

7.1 Introduction

- 7.1.1 CA1, the Fradley to Colton area is approximately 14 kilometres in length, extending from near Fradley, approximately three kilometres north east of Lichfield, where the Phase 2a route would join the HS2 Phase One route, in a north westerly direction past Kings Bromley to Colton. The area is predominantly rural in character, with agriculture being the main land use. The first half of the area includes extensive floodplains associated with the River Trent. Small settlements are located near the route at Fradley, Kings Bromley, Handsacre, Pipe Ridware, Hill Ridware, Blithbury, Stockwell Heath and Colton.
- 7.1.2 This chapter provides a qualitative summary of the issues respondents raised in response to Question 3 with respect to Volume 2: CA1 - Fradley to Colton.
- 7.1.3 Question 3 asks:
- ‘Please let us know your comments on Volume 2: Community Area (CA) reports. We welcome any information you may have on how the scheme may impact the local environment and community in your area, and any opportunities you feel there may be to reduce these impacts. Please attach additional pages as required’.
- 7.1.4 Comments are discussed under different thematic subheadings such as ‘Community’ or ‘Landscape and visual’. Where a significant number of comments have been raised in relation to one of these themes, these sections may be further subdivided into ‘Impacts’, ‘Mitigation’, or ‘Assessment’.

7.2 Overview of responses

- 7.2.1 Sixty respondents selected the tick box to indicate their response was referring to CA1 – Fradley to Colton. However, many other responses were made in relation to this CA without indicating this within the tick boxes provided. This chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to this CA.

7.3 Discussion

- 7.3.1 This chapter covers the following themes:
- agriculture, forestry and soils;
 - air quality;
 - community;
 - cultural heritage;

- ecology and biodiversity;
- health;
- land quality;
- landscape and visual;
- socio-economics;
- sound, noise and vibration;
- traffic and transport;
- water resources and flood risk.

7.3.2 Agriculture, forestry and soils

7.3.3 Impacts

- 7.3.4 Some respondents express concerns about the way the construction work will impact on local agriculture. They describe three main impacts: restricted access to farmland, problems caused by additional traffic and loss of productive farmland. Some believe there will be a significant impact on their business, and one farm is concerned their viability could be threatened.
- 7.3.5 There are concerns about the temporary or permanent closure of roads that are important for accessing fields. Concerns include farm traffic being diverted on to major roads, or on to roads that are too small for farm machinery. Some farms raise specific issues where their land will be severed by the works, leading to long alternative routes.
- 7.3.6 A few respondents also raise specific concerns about narrower lanes used by agricultural vehicles, which might also be used by construction traffic, as there would not be enough room for both – especially at harvest time.
- 7.3.7 Some people also have concerns about the permanent changes to roads. Another respondent mentions the proposal to combine Moor Lane and Newlands Road, which they believe will make the road narrower, which is a concern given the amount of agricultural traffic on that route.
- 7.3.8 Some respondents raise concerns about the loss of good agricultural land. In Marlpit Wood one respondent expresses the view that the soil type is gravelly, and therefore, the proposal to create a wetland is not appropriate. The Forestry Commission also note that an area identified in the plan has soil unsuitable for wetland habitat.
- 7.3.9 There are a few concerns that in some cases excessive amounts of land are being taken for earthworks or landscaping, and in a couple of cases people comment that where the land is coming from a single farm their productivity is likely to be negatively impacted.

'A large, random chunk of permanent land take, sited haphazardly in a 14.57 ha field – blighting it in its entirety.'

Individual submission

7.3.10 Similarly, a couple of respondents identified a specific drainage channel that, if disturbed, would result in flooding on their land, which again would reduce productivity. Another respondent expresses concern about the temporary land take either side of Shaw Lane, which they consider to be unnecessary.

7.3.11 One respondent has concerns about the impact of construction on a borehole and groundwater, which in turn could impact on fish stocks and fish pools. They also raised specific concerns about biosecurity as a result.

7.3.12 A few respondents raise concerns about the impact of 24-7 working, and increased traffic, on livestock and other animals.

7.3.13 Mitigation

7.3.14 Some respondents make specific proposals regarding access, to mitigate the problems caused to farmers by severance of their land. Specifically, a couple of overbridges are proposed and one respondent highlights this should be put in place before work starts to avoid any disruption to their farm. Additionally, a few of the proposed access roads are subject to flooding so alternatives have been proposed for these.

7.3.15 A few respondents question the need to remove some established woodland or hedgerows. For example, around Marlpit Lake and Marlpit Wood. They also feel that keeping woodland where possible will be important for the environment and will reduce visual and noise impacts. The Forestry Commission welcomes the principle of connectivity and expects the final EIA will ensure any loss of woodland is replaced by the equivalent area or more.

7.3.16 One respondent suggests they would be open to the idea of land swaps for the land lost to the scheme.

7.3.17 Assessment

7.3.18 A few respondents propose that the impact on farms has been underestimated, and propose increasing the assessment (e.g. from moderately adverse to severely adverse).

7.3.19 The Forestry Commission notes that the assessment of the impact just looks at biodiversity, even though Section 4 recognises the wider contributions that forestry land can produce. They also request further clarity on the amount of woodland lost as there is a difference between the full consultation document and the Non-Technical summary.

7.3.20 **Air quality**

- 7.3.21 A number of respondents raise concerns about the amount of dust caused by the works. Specifically, a few local businesses including farms, a bed and breakfast and a cattery are concerned that their businesses might become inoperable as a result.
- 7.3.22 In addition to concerns about the impact on humans, a couple of respondents raise concerns about the impact of air quality during the works on animals.
- 7.3.23 One respondent had concerns that solar panels installed on their barn would need cleaning more regularly as a result of the dust.

7.3.24 **Community**

7.3.25 *Impacts*

- 7.3.26 There are a number of impacts on the local community raised as being of particular concern: access and isolation, disruption, loss of community amenities, issues about crime and personal safety, access to local facilities and concerns about fly tipping. One respondent also mentions there are other developments happening in the region which will happen at the same time, and feels the assessment should take this into account. A couple of respondents mention that the works have no benefits to the community but a high cost.
- 7.3.27 Issues with access are a common concern for many respondents. Even where some roads will stay open, there is a concern that alternatives are narrow and will be difficult to navigate with heavy traffic.
- 7.3.28 A few respondents have significant concerns about the impact of the works on the community in Stockwell Heath, specifically in terms of access – both during construction and permanently. One respondent mentions concerns for the high proportion of elderly residents in this hamlet, who are reliant on a small local bus service and require good access for emergency vehicles.
- 7.3.29 Some respondents feel that their homes or villages will be blighted by the works, and that this is not sufficiently recognised or mitigated. One mentions the emotional impact of the uncertainty surrounding the future of the hamlet. They also assert that HS2 Ltd engineers said that the residents of Stockwell Heath would not be able to live with the amount of construction.
- 7.3.30 One respondent expresses specific concerns about the positioning of the maintenance loop satellite compound, due to the high level of disruption this would create very close to a family home. Another is concerned that plans would mean their only access in the future would be a road prone to flooding.

- 7.3.31 Some respondents feel that smaller communities might be adversely impacted by a high number of construction workers, on site for up to seven years. They feel having significantly more people is likely to impact on quiet, rural hamlets and raise concerns about whether the infrastructure (roads, but also utilities including water and power) are sufficient for the increased demand.
- 7.3.32 A couple of the lanes identified to be closed are used by residents for recreational purposes, such as countryside walks, dog walking, rambling, cycling, horse riding and running. Some of the changes are likely to impact on whether people can do circular walks. Similarly, one respondent mentions the importance of the canal as a recreational facility. The Colton Ramblers note that there is an opportunity when rerouting a PRow to ensure it is accessible by using gates instead of styles. They also request that consideration is given to continuing footpaths over or under the railway, rather than diverting them.
- 7.3.33 A few respondents raise concerns about potential crime and safety issues. In particular, there are concerns that road and footpath closures could lead to potential fly tipping, places for campers or illegal gatherings and potential trespass or security breaches. One respondent has concerns that people, or livestock, could get trapped on or near the new line.

‘Hopefully the redundant lower part of Hopton Lane will be closed to traffic from the revised Sandon Road, for if this is not the case it will inevitably encourage undesirable fly tipping and unauthorized overnight parking.’

Individual submission

- 7.3.34 There are a couple of concerns about safeguarding. Some route diversions could lead to increased traffic near schools, which a few respondents raise as a concern. Also, one respondent expresses concern about the number of strangers who would be working in the area, and specifically the impact on children’s safety.
- 7.3.35 A few of the responses refer to concerns that the works could cut off access to primary and secondary schools, shops and health resources (such as medical centres). This is a particular concern if several roads are closed at once. One shop owner is also concerned that rerouting of traffic might result in a reduction in passing trade as busy roads would make people less likely to stop in their village.
- 7.3.36 There were a few respondents who have particular concerns about how some of the new sites will be accessed, including the permanent land take at Woolly Moors. There are also concerns about the cumulative impact of large amounts of heavy construction traffic over a period of several years.

7.3.37 Mitigation

- 7.3.38 There are a number of requests for suitable compensation for individuals and communities impacted by HS2. Beyond compensation for disruption, there are also concerns about the impact of isolation caused by the work, which some respondents believe can be mitigated by keeping roads open, or strategically closing roads so that several roads important to a single village are not closed simultaneously.
- 7.3.39 There are a few suggestions to move specific aspects of the development, such as satellite compounds, to reduce the impact on residential properties.
- 7.3.40 One respondent showed an interest in how funds for community improvement programmes could be accessed, as well as questions about whether / how people could get funding for taking objections to a hearing.

7.3.41 Cultural heritage

- 7.3.42 A couple of respondents raise concerns about how heritage assets are considered in the EIA. Specifically, they identify inequalities in the way different assets are treated in the assessment, not necessarily linked to whether they are designated or non-designated. One respondent also comments on the cost of surveying these properties in advance of the work, so that they can prove any damages as a result of the work.
- 7.3.43 Lichfield District Council suggests that the current approach to assessment is not in line with best practice. For example, it should take into account the impact on the landscape in which a building is situated, as well as the views from the building. They also have concerns about the height of finished structures as well as their distance from heritage assets. Similarly, Staffordshire Local Authorities suggest that the landscape and visual and cultural heritage assessments should inform each other. They also comment that historic hedgerows and a ring ditch should be considered under this assessment.
- 7.3.44 A couple of respondents mention sites of particular local interest, including an old stone quarry, which is believed to have supplied the monumental stone for the local church. They request that these sites are not disturbed by the works. One household was particularly concerned as their building is Grade II listed and they felt that the planned works might impact on the building.

7.3.45 Ecology and biodiversity

- 7.3.46 Respondents have a number of concerns about the impact of the works on the trees and woodland, plants and flowers and animal and bird life in the region. A few also raise concerns about the potential for habitat fragmentation. Staffordshire Local Authorities comment that overall HS2 Ltd have not applied best practice regarding ecological assessment and mitigation. More specifically, they comment that the documents do not reference two local wildlife sites in Stockwell Heath potentially affected by transport diversions. They also comment that habitats of principal importance have not been acknowledged.
- 7.3.47 Trees receive the most mentions, with a couple of respondents raising concerns about veteran or old Oak trees. The EIA does not make it clear if these will be retained but these respondents think that preserving them will be important. Similarly, a couple of respondents identify questions about how woodlands have been classified as ancient and request more information about the methodology for assessing this. Specifically, the Woodland Trust highlights Pipe Wood, which they believe is an ancient semi-natural woodland (ASNW), and not a plantation on ancient woodland (PAWS) as mentioned in the EIA. A few other respondents highlight the importance of retaining, or transplanting hedges.
- 7.3.48 A few respondents mention the potential impact on Stockwell Heath, which is seen as an important habitat with protected species. Another respondent is concerned that a wood that is scheduled for temporary removal is a home to red deer.

'Stockwell Heath has an ancient pond; originally a farm animal watering pool. Currently the pond is home to Moor Hens, Mallard Ducks, Swans, Coots and, seasonally, Canada Geese. More significantly the pond is a breeding ground for Great Crested Newts. In the region of the pond there are also bats, barn owls and buzzards.'

Individual submission

- 7.3.49 One respondent also mentions wild flower meadows that have been in situ for the last 400 years, but will be disrupted by a planned haul road. Another mentions the loss of species-rich grassland, which is not expected to be replaced. Staffordshire Local Authorities suggest extending the Moreton Brook viaduct to reduce impacts on the Lount Farm Unimproved Grassland Local Wildlife Site. The same authority supports the proposed viaduct over the River Trent, but requests that land take from Trentside Meadows should be reduced. Similarly, the Authorities suggest that mitigation ponds should be located within or adjacent to complimentary habitats to encourage habitat connectivity.

7.3.50 Some stakeholders express support for the direction of travel HS2 Ltd is committing to, and encourage HS2 Ltd to continue to recognise the importance of the habitats in the region. For example, they are supportive of the plans to develop a barn owl action plan. Natural England requests bat mitigation structures are placed at current crossing points and designed in accordance with best practice.

7.3.51 Health

7.3.52 Some respondents express concerns about emotional impacts, including stress, anxiety and isolation. There are also a few concerns about physical wellbeing where access to community assets such as footpaths is reduced, or as a result of increased traffic, or the line itself once operational. One respondent also mentions local residents' concerns about living in proximity to an auto-transformer feeder station. Increased journey times and the need to use alternative routes are also identified as potentially detrimental to health by several respondents including Staffordshire Local Authorities.

7.3.53 Land quality

7.3.54 A few respondents make reference to land quality. Specifically, a couple of respondents mention that the area is prone to mining subsidence. Additionally, it is noted that there are some potentially contaminated sites including authorised landfill, a petrol filling station and a location where foot and mouth disease carcasses were disposed. The Environment Agency encourages HS2 to work with them to agree appropriate remediation where necessary.

7.3.55 Staffordshire Local Authorities comment that potential construction impacts on Manor Park Quarry and a future sand and gravel resource need to be considered in the assessment.

7.3.56 Landscape and visual

7.3.57 Impacts

7.3.58 Some respondents welcome efforts to reduce noise, but have some concerns about the visual impact of some proposals, including a high embankment and gantries. One person raises a concern that concrete barriers would urbanise a rural environment.

'The visual impact of the embankment, through what was a green valley, will be devastating.'

Individual submission

- 7.3.59 Respondents identify a number of locations where they believe small woods or spinneys should be preserved, especially as these potentially reduce the visual impact of the railway. There is particular concern where the proposal is for a temporary change.
- 7.3.60 Some raise concern about additional planting. Specifically, a few respondents express concerns that planting of trees could lead to a loss of light to their properties. In other cases, landowners suggest the amount of time being set aside for planting is excessive.
- 7.3.61 A few respondents raise concerns that the additional lighting at night for maintenance loops will cause disruption to local properties. In particular, one respondent felt that the raised embankment will mean that lights can be seen from further away.

7.3.62 Mitigation

- 7.3.63 Some respondents suggest the impacts could be partly mitigated with appropriate planting. A couple of respondents are keen to see landscape planting established quickly. One respondent encourages planting to be completed early, so that it will provide mitigation as early as possible. Another recommends use of semi-mature trees rather than saplings.
- 7.3.64 The Forestry Commission support the plan for the ownership and responsibility for managing agricultural land reinstated to landscape planting to be the subject of agreements with existing land owners. They encourage the consideration of incentives to ensure ongoing management, or suggest a more innovative approach could be adopted.
- 7.3.65 A few respondents comment that if the Infrastructure Maintenance Depot (IMD) is moved to Stone, the Pipe Ridware maintenance loop would not be needed and this would reduce the environmental impact. If this occurs, they would still support the lowering of the track at Pipe Ridware.

7.3.66 Assessment

- 7.3.67 Staffordshire Local Authorities comment that the impact of any overnight lighting (for example, introduced temporarily for security reasons) have been dismissed and request that these are considered.

7.3.68 Socio-economics

- 7.3.69 As noted elsewhere, some businesses have concerns about their short- and long-term sustainability as a result of the construction works, road closures and permanent infrastructure. One respondent suggests that local resources, such as a sand and gravel extraction site already identified could be utilised as a construction resource.

7.3.70 Sound, noise and vibration

7.3.71 Impacts

- 7.3.72 Some respondents have concerns about the noise impact of both the construction works and associated traffic and also the finished railway. Some respondents raise concerns that proximity of HS2 infrastructure, either temporary or permanent, will make businesses inoperable due to noise, for example the Satellite Compound and Transfer Node, proposed access routes and temporary materials stockpiles.
- 7.3.73 One respondent notes that the noise will impact on animals as well as humans.
- 7.3.74 As noted above, one respondent raises concerns about vibration due to the mining history in the area and the potential for associated subsidence.

7.3.75 Mitigation

- 7.3.76 Lichfield District Council notes that some of the properties shown to be potential noise insulation qualifiers are listed buildings, and are keen to understand the implications of this.
- 7.3.77 As noted above, a few respondents believe the need to mitigate noise must be balanced against the visual impact of any proposed measures, while others propose that maximum noise mitigation measures are applied throughout. Some respondents, including Staffordshire Local Authorities, propose additional locations for noise reduction measures.
- 7.3.78 In addition to Kings Bromley Marina, there are other long term mooring sites, and the Canal and River Trust offers to facilitate further discussions with these non-residential receptors.

7.3.79 Assessment

- 7.3.80 A few respondents express concerns that the method for assessing noise could underestimate the impact. Specifically, they encourage consideration of the relative level of background noise, which is typically very low. They also highlight the importance of not averaging out the volume over a 24 hour period, as they feel this underestimates the effect on the environment and the community.

7.3.81 Traffic and transport

7.3.82 Impacts

- 7.3.83 A large number of responses relate to potential impacts on traffic and transport. Specifically, there are concerns about access, for example, a few respondents advocate keeping Common Lane, Moor Lane, Newlands Lane and Sherracop Lane open. Some respondents comment that they need access to their property at all times of the day and night, and express concerns about potential longer journey times.

- 7.3.84 Additionally, as outlined above, some respondents have particular concerns about construction traffic using narrow lanes, and the noise and disruption from large volumes of construction traffic in a rural environment. A handful of respondents raise concerns that some roads are already in bad condition, and are unlikely to withstand heavy construction traffic. One specifically mentions the use of High Street, Colton because while it is two-way, there are often parked cars on one carriageway.

'The use of Newlands Lane over a long period of time for a large amount of HS2 contractor's HGV's and smaller vehicles would have a catastrophic effect on the residents living in the proximity of the Compound.'

Individual submission

- 7.3.85 A couple of respondents mention that the design of new infrastructure should keep in mind the need to move large agricultural machinery, which can include cranes that are high as well as wide. Similarly, for any new junctions it will be important to ensure there is sufficient space to accommodate the turning circle of large vehicles.

- 7.3.86 As outlined above, in the section about community, there are also a few respondents with concerns about the impacts on walkers, cyclists and horse-riders. A few respondents request that the safety of these road users is also taken into consideration.

'Despite being major artery, it is a narrow road with no footpath all along, horses, pedestrians, farm traffic, many cyclists and motorcyclists currently use the route, and the extra traffic would be severely dangerous.'

Individual submission

- 7.3.87 The Canal and River Trust believe that if HS2 were to propose closing the Trent and Mersey canal, this would be unacceptable as it is a strategic north-south canal route. They note that for HS2 Phase One, alternative options were identified to ensure the waterway remained open.

- 7.3.88 A few respondents suggest that some of the new proposals, including straightening a road as part of the works, are expected to make the roads more dangerous, if they enable people to drive faster. This is both because of the risk to farm traffic joining the road, and also because the remaining corners must still be taken slowly.

- 7.3.89 Some respondents express concerns about relying on routes prone to flooding as diversions, although some of the proposed changes to roads are thought to reduce the flood risk.

7.3.90 Mitigation

- 7.3.91 A number of respondents request that careful planning is undertaken to ensure that not too many alternative routes are closed simultaneously. Similarly, one respondent questions whether the length of proposed diversions could be reduced. A couple question whether proposed alternative routes such as Sherrocop Lane are appropriate, given it is a narrow lane with grass in the middle, steep sides and no passing places.

'Traffic into and out of Stockwell Heath would have to travel along Sherrocop Lane, which is a narrow single track lane, with grass growing up the middle and very steep grass banks either side with no passing places; very poorly maintained with lots of potholes, making it difficult to negotiate.'

Individual submission

- 7.3.92 A few respondents make specific suggestions. One requests that Common Lane is kept open permanently by building a bridge that is high enough to accommodate large vehicle access, lowering the road if necessary. Another proposes that Newlands Lane and Moor Lane are widened, or additional passing places are constructed, to make access easier. They note passing places should be able to accommodate fully laden articulated lorries with trailers. Colton Parish Council proposes a traffic island at the junction of Moor Lane, which they believe will improve access. Staffordshire Local Authorities make a general request for alternative options to enable Common Lane to remain open, but do not specify how this could be achieved.
- 7.3.93 There are a few proposals to enlarge the compound site at the River Trent viaduct, to reduce the traffic on narrow, unclassified lanes – specifically Pipe Ridware and Lichfield Road.
- 7.3.94 Colton Parish Council specifically requests that consideration is given to the Phase One and Phase 2a connection, to limit the impact on the area of additional traffic.
- 7.3.95 Some respondents also make proposals about ensuring road safety. Specific examples, such as keeping roads open for light traffic, are given to show how impacts on cyclists and farm traffic could be mitigated. Similarly, a couple of respondents encourage the introduction of traffic calming measures, or speed limits.
- 7.3.96 Staffordshire Local Authorities suggest that all PRoW diversions should be as short and easy as possible and specify individual routes and how these may best be diverted. They also believe that HS2 Ltd is being evasive by stating that public roads and PRoW will be retained wherever 'reasonably practicable' during the construction phase.

7.3.97 Assessment

- 7.3.98 One respondent raises concerns that the transport assessments will be outdated and are likely to underestimate the amount of traffic on the affected roads. Even temporary closures or temporary diversion of the A513 are viewed to be very disruptive.

'There is no information as to how long the A513 could be closed. It is a very busy road and will cause huge inconvenience to many motorists and create even more traffic on the A515.'

Individual submission

- 7.3.99 Staffordshire Local Authorities query what constitutes a 'substantial accident cluster'. They also highlight a perceived lack of information to validate the traffic assessments such as junction turning counts.

7.3.100 Water resources and flood risk

- 7.3.101 A couple of respondents are concerned that earthworks might increase the runoff onto their properties, resulting in a flood risk. There are also concerns that if planned banking fails this could lead to detrimental impacts on properties. The Environment Agency notes that the formal EIA should ensure that all risks to the groundwater bodies are understood and environmental mitigation proposed where this is required. They note some potential errors and omissions in the draft EIA Report.

'I am concerned what would happen if there was a failure of the banked up ground. What provisions will be put in place to protect my property from such an event?'

Individual submission

- 7.3.102 There are also concerns about how existing arrangements could be impacted. One respondent also mentions the potential impact on local boreholes – specifically that their catchment areas could be affected and potentially contaminated – with a resulting impact on water quality. Another is concerned about the impact on an existing drainage channel, which is important to them. A third is concerned about the impact on wildlife of redirecting watercourses.
- 7.3.103 Some respondents also identify roads prone to flooding and raise concerns about the impact this could have if the alternative routes are closed. They also raise concerns that construction traffic travelling on flooded roads could lead to increased potholes.
- 7.3.104 There are also some concerns that where flood mitigation measures are proposed, these are welcomed but may not be sufficient. The Colton Parish Council raises particular concerns about Sherracop Lane.

'Your map at the Kings Bromley Consultation did not show the existing drainage ditches at this junction nor did they, understandably, show the irregular flood drainage routes after sustained heavy rainfall'

Colton Parish Council

7.3.105 Additionally, the Canal and River Trust notes that failures in their infrastructure might impact on the train line and that this risk should be mitigated.

'There is the potential for flood water release to affect the railway and the Trust would be happy to work with HS2 to identify this risk and any mitigation measures.'

Canal and River Trust

7.3.106 Staffordshire Local Authorities suggest that attenuation ponds need to be designed to be effective across the range of different rainfall rates. They also query whether HS2 Ltd will use sustainable urban drainage systems (SUDS).

Chapter 8: Responses to Question 3 - CA2

8.1 Introduction

- 8.1.1 CA2, the Colwich to Yarlet area, is approximately 15 kilometres in length, extending from west of Moreton in a northerly direction past Hopton and on to Yarlet. The area is mainly rural, with scattered residential settlements and limited community facilities.
- 8.1.2 This chapter provides a qualitative summary of the issues respondents raise in response to Question 3 with respect to Volume 2: CA2 – Colwich to Yarlet.
- 8.1.3 Question 3 asks:
- ‘Please let us know your comments on Volume 2: Community Area (CA) reports. We welcome any information you may have on how the scheme may impact the local environment and community in your area, and any opportunities you feel there may be to reduce these impacts. Please attach additional pages as required’.
- 8.1.4 Comments are discussed under different thematic subheadings such as ‘Community’ or ‘Landscape and visual’. Where a significant number of comments have been raised in relation to one of these themes, these sections maybe be further subdivided into ‘Impacts’, ‘Mitigation’, or ‘Assessment’.

8.2 Overview of responses

- 8.2.1 Sixty-one respondents selected the tick box to indicate their response was referring to CA2 – Colwich to Yarlet. However, many other responses were made in relation to this CA without indicating this within the tick boxes provided. This chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to this CA.

8.3 Discussion

- 8.3.1 This chapter covers the following themes:
- agriculture, forestry and soils;
 - air quality;
 - community;
 - cultural heritage;
 - ecology and biodiversity;
 - health;

- land quality;
- landscape and visual;
- socio-economics;
- sound, noise and vibration;
- traffic and transport;
- water resources and flood risk; and
- other comments.

8.3.2 Agriculture, forestry and soils

8.3.3 Impacts

- 8.3.4 Most responses relating to agriculture are from farms in the area affected by the scheme. Many respondents are seriously concerned about the future viability of their farming business. Often this is in relation to land take and the resultant impact on their operations.
- 8.3.5 Most affected farms raise access as a concern. Realignment of farm tracks, increased labour costs for moving stock around the farm during the disruption, and closures of common roads and lanes are all mentioned as negative impacts of the scheme. A few respondents raise concerns about the impact on septic tanks and effluent tanks due to realignment of roads.
- 8.3.6 Some respondents mention the effect the scheme would have on their livestock. They reference the noise, vibration, and disruption that would upset their animals. Another respondent also raises concerns about the dust created by construction making their grass unpalatable for cattle.

8.3.7 Mitigation

- 8.3.8 There are few recommendations for mitigation. One respondent comments that the 'devastation' of their farm would be such that they are unable to provide mitigation suggestions.
- 8.3.9 Some respondents request that route alignments should be designed to take the least productive land from farmland as one way of mitigating the effect on the viability of the farm.
- 8.3.10 Another respondent recommends the use of stock-proof fencing to be put in place during construction, and additional stock-proof hedgerows when operational.

8.3.11 Assessment

- 8.3.12 Respondents concerned about the impact of the scheme on their farm consider themselves to be severely affected by the scheme. Some challenge the assessment of the impact it would have on their land and business.

- 8.3.13 One respondent feels it is unclear how many existing trees must be removed and what replacement planting should be provided. Another raises the issue of the quantity of soil needing to be disposed of, how that would be achieved, and if consideration has been given for ensuring replaced/reallocated soils have a similar structure.

8.3.14 Air quality

8.3.15 Impacts

- 8.3.16 Some respondents refer to the negative impact of reduced air quality, especially during the construction phase of the scheme. They feel reduced air quality would be dangerous to the health of residents, and that of those visiting the area.
- 8.3.17 Specific mention is made by Jeremy Lefroy MP of the potential detrimental effects of reduced air quality for children attending Yarlet School, and the possible health consequences for young people.
- 8.3.18 Respondents also mention concerns over dust particularly from the construction process in terms of impact on air quality. A small number of respondents, including the National Trust (referring to National Trust land at Satnall Hills) raise the issue of increased air pollution due to construction traffic.

8.3.19 Mitigation

- 8.3.20 Jeremy Lefroy MP recommends ensuring adequate screening of the A34 east and west satellite compounds to minimise the negative effects of reduced air quality on children at Yarlet School.

8.3.21 Assessment

- 8.3.22 One respondent requests an assessment of emissions from fixed machines and vehicles on construction sites.
- 8.3.23 The National Trust requests that residential properties in their ownership on the southern fringe of the Shugborough estate are included in the air quality assessment due to the nearby A513 construction route.
- 8.3.24 One respondent suggests that Little Ingestre Care Home should also be added to the list of receptors.

8.3.25 Community

8.3.26 Impacts

- 8.3.27 The majority of respondents reference the negative impact they feel the scheme would have on various aspects of their community.
- 8.3.28 A few respondents, including Jeremy Lefroy MP, use words such as 'destroy' or 'devastate' to demonstrate the perceived impact on the communities in this area.

- 8.3.29 Some respondents talk of the isolation caused by the effects of the scheme. Respondents from Mount Edge mention how the village, as well as the nearby Ministry of Defence (MOD) housing, would be isolated from the rest of Hopton. What was once a short walk would now be a car journey. Respondents also raise concerns about the isolating effect of increased journey times to friends, families, medical facilities, and other community amenities and social activities.
- 8.3.30 A small number of particularly affected residents comment on the isolating effect of losing long-standing neighbours due to the compulsory purchase of surrounding properties.
- 8.3.31 A few respondents draw attention to the fact the scheme will destroy parts, or all of their property, or come so close to it as to significantly change the experience of living and working in the area. One respondent believes that property blight is the single biggest impact on the area, and that the character of the community would be permanently threatened in a complex way.
- 8.3.32 One respondent believes that the route impacts negatively on the proposed new housing and community development in the Beaconside and Sandon Road area. They believe that the scheme will reduce the developable area and provides constraint to the site.
- 8.3.33 Some respondents raise concerns about a perceived higher security risk in the area. Specific concerns are expressed about the possibility of fly tipping and overnight camper vans due to roads being blocked off and the potential for vandalism, sabotage, and terrorism on the railway line. Some respondents are generally concerned about the potential for an increase in crime overall, especially in relation to the construction sites.
- 8.3.34 Several respondents raise concerns over the perceived uncertain future of local businesses and community amenities. Particular concern is expressed about the future viability of the Staffordshire County Showground, Canalside Farm and Great Haywood Marina.

'Any impact on income to levels below where it is conducive to trade further would see the villages lose a destination that has been part of its fabric and personality for the last 30 years.'

Individual submission

- 8.3.35 Jeremy Lefroy MP questions the future viability of Yarlet School if access is negatively affected. Jeremy Lefroy also expresses concern, alongside a small number of other respondents, about the provision for buses and bus shelters following the changes to the area around Mount Edge and Hopton.

- 8.3.36 A small number of respondents are concerned that the total loss of land would have a negative impact on their land, post scheme. The Church Buildings Council say they are worried that disruption to the community and related access issues may force churches to close for regular worship.
- 8.3.37 One respondent comments that the closure of Hopton Lane may discourage residents from accessing the Village Hall and taking part in community events.
- 8.3.38 Another respondent comments that due to the natural beauty of the area it is often used for airborne activities such as gliding and hot-air ballooning. They are concerned that the viability of these activities may be threatened by the scheme.
- 8.3.39 The response from Ingestre with Tixall Parish Council notes that the scheme may result in the removal of a community-sponsored avenue of horse-chestnut trees.

8.3.40 Mitigation

- 8.3.41 Respondents offer a variety of solutions to mitigate impact on communities. Several responses refer to the previous design, or state a preference for a 'northern route' instead of the currently proposed route.

'Why was the Trent valley 'Northern' route alternative not given more consideration? Clearly there is a case for choosing a 'Northern route' with regard to ease of construction, cost and minimising disruption to services and households which would follow the Trent valley alongside the existing railway and the A51 road...'

Individual submission

- 8.3.42 Several respondents suggest tunnelling under Hopton as a preferred mitigation solution. A few respondents request more crossings between Staffordshire Showground and Mount Edge to accommodate the heavy use of the area by civilians as well as for MOD training. Other suggestions from a few respondents include blocking off the lower part of Hopton Lane to avoid fly tipping and unauthorised parking, and not rerouting Marston Lane to avoid creating two cul-de-sacs.
- 8.3.43 One respondent requests supporting upfront costs for architect and planning fees for affected residents and businesses. Another respondent suggests that no work is carried out on Saturdays at the large compound near Great Haywood to provide respite to the local community.
- 8.3.44 In a few cases, respondents suggest that the scheme will be closer to their house than the assessment implies, and that demolishing their property would be the preferable option rather than trying to mitigate with walls and barriers.

8.3.45 *Assessment*

- 8.3.46 One respondent believes that there is an inadequate assessment of the impact of the loss of local amenities in the area.

8.3.47 *Cultural heritage***8.3.48** *Impacts*

- 8.3.49 The area is home to several sites of cultural and historical interest, including ancient parklands, the Pavilion on the Ingestre Estate and Shugborough's park. Some respondents are concerned about the potential negative impact of the scheme on these sites.

'The impact on Shugborough is insufficiently addressed, as there are several well-attended events that occur both within Shugborough and also the surrounding area, e.g. cycling, running events, triathlon/ironman etc.'

Individual submission

- 8.3.50 The Church Buildings Council also asks who would maintain listed churches if they closed as a result of the disruption in the area.
- 8.3.51 The Commonwealth War Graves Commission raises concerns about the impact of the scheme on war graves in the area.
- 8.3.52 Staffordshire Local Authorities note that construction traffic may have an impact on Tixall Conservation Area.

8.3.53 *Mitigation*

- 8.3.54 A few respondents request that the design of viaducts should take into consideration the historical buildings in the area to make them in keeping with the surrounding rural landscape. The National Trust suggests using and learning from mitigation measures that were implemented historically for the creation of major transport corridors in the area (i.e. canals being built in the 17th and 18th centuries).
- 8.3.55 The Canal and River Trust requests that all traffic related to the scheme accessing the main compound should be required to use the A51 rather than Hoo Mill Lane. This would minimise the impact on the canal environment at Hoo Mill Lock, and reduce wear and tear on the Grade II listed Hoo Mill Bridge owned by the Trust.
- 8.3.56 Staffordshire Local Authorities suggest monitoring for sensitive archaeological remains beneath earth bunds.

8.3.57 *Assessment*

- 8.3.58 Several respondents suggest that the effects of the scheme on cultural heritage sites in the area would be severe, not moderate.

- 8.3.59 The National Trust and Jeremy Lefroy MP request that the Shugborough Estate should be treated in the same way as the County Showground in terms of consideration and assessment. The National Trust comments that due to the transition of management of Shugborough to the National Trust, use of the area is expected to grow rapidly. As such, it would be appropriate to use the 'future baseline' approach in terms of assessing impact.
- 8.3.60 Several respondents request more robust assessment of the effect of the scheme on the significantly historic parklands of Shugborough, Tixall and Ingestre.
- 8.3.61 Some respondents, including Ingestre with Tixall Parish Council, note that the settings of such cultural heritage sites can be just as important as the sites themselves. Therefore, enough consideration should also be taken to assess the impact of the areas surrounding culturally important sites, and the relationship of heritage assets to areas beyond their immediate surroundings.

'Even though direct impacts on heritage assets has been minimised, a very large number will have their settings diminished.'

Ingestre with Tixall Parish Council

- 8.3.62 One respondent requests that the listing grade of sites should be fully reported within the assessment.
- 8.3.63 Staffordshire Local Authorities note that it is not agreed that all the farmhouses in the area are post-medieval, as it is possible some have medieval cores. In addition, the local authorities note there is a lack of clarity around a non-designated square enclosure recorded on the historic environment record. Staffordshire Local Authorities also argue that Trent and Mersey Canal is a heritage asset of high value, not moderate value as currently assessed.
- 8.3.64 In addition, several respondents note that the impact of noise on cultural areas of tranquillity had not been considered.

8.3.65 Ecology and biodiversity

8.3.66 Impacts

- 8.3.67 Most respondents express concern about the potential negative impact on the ecology of the area.
- 8.3.68 The Woodland Trust expresses disappointment that despite Yarlet Wood being recognised as a possible ancient woodland, the scheme plans to locate a temporary satellite compound there. Several respondents are concerned about the impact of the scheme on the historic Pasturefields Salt Marsh and related ecology of the area.

- 8.3.69 One respondent gives details of the loss of species-rich hedgerows, unimproved grasslands, veteran trees, grassland fungi, and soft verges with damson trees in numerous areas affected by the scheme.

8.3.70 Mitigation

- 8.3.71 Some respondents reference the decision to preserve the salt marsh at Pasturefields. While most acknowledge the need to mitigate the effects of the scheme on this area, they also suggested that with slower speeds the track could be re-aligned around the area and request that this solution be taken into consideration.
- 8.3.72 Several respondents suggest specific mitigation efforts to reduce the impact on the ecology of the area. These include provision of green bridges and nature corridors, creation of new species-rich grasslands and the extension of the Moreton viaduct to reduce the length of the embankment, and therefore associated habitat losses.
- 8.3.73 The Woodland Trust believes that impacts on potential ancient woodland (based on historical mapping) cannot be offset by planting.
- 8.3.74 Jeremy Lefroy MP requests the provision of a timetable for mitigation works, including habitat creation and landscape planning.

8.3.75 Assessment

- 8.3.76 Several respondents note that Pasturefields, due to its status as an SAC and Site of Specific Scientific Interest (SSSI), has meant that the 'northern' route alternative is not an option. Some of these respondents do not understand why Pasturefields is a site of such national significance and feel the 'northern' route would be preferable in terms of impact, and cost.

'An inspection of this SSSI using binoculars, because the closest public access is at least 200 metres away, reveals a small marshy area with no unusual wildlife or other interesting features at all. The thought that this salty marsh is so precious that it triggers a decision adding hundreds of millions of pounds to the HS2 project, displaces many people from their homes and farms while causing years of stress to hundreds of affected residents, beggars belief!'

Individual submission

- 8.3.77 Several respondents note areas that they feel have not been fully explored in the assessment or have been assessed incorrectly. Several respondents raise the point that mitigation efforts themselves (i.e. balancing ponds, tree planting) need to be properly assessed in terms of their impact on the local ecology. A few respondents reference that the impact on the source of the active brine springs and general drainage issues in the area should be more thoroughly assessed. A few respondents, including Staffordshire Local Authorities draw attention to the salt spring / well on the southern edge of Lionlodge Covert and mention this may well be associated with Pasturefields and so should be considered in terms of the impact of the scheme.
- 8.3.78 One respondent notes that there is no assessment of the connectivity of species – which they feel is needed to understand species needs when planning mitigation efforts.
- 8.3.79 The Woodland Trust raises concerns that the assessment has potentially misidentified ancient woodland. They provide a list of areas with potential ancient woodland based on historical mapping and areas which need further investigation.
- 8.3.80 A small number of respondents draw attention to the fact that the assessment only references those habitats that would be permanently lost, and does not include the impact of the scheme on nearby habitats.
- 8.3.81 Ingestre with Tixall Parish Council mention that they found no evidence that the wildlife report for Ingestre and Tixall was used in the assessment.
- 8.3.82 Staffordshire Local Authorities note that there is no reference to the impact of the route on Lount Farm Site of Biological Importance (SBI). The Council also notes a potential need to map bat foraging patterns to assess HS2 impacts, and draws attention to the presence of Great Crested Newts and Lapwings in this section of the route.

8.3.83 Health

8.3.84 Impacts

- 8.3.85 Health and wellbeing is a key concern for some respondents, and responses reference a variety of different potential health impacts.
- 8.3.86 Some respondents refer to the increase in stress and anxiety due to the scheme. For some heavily affected respondents, this stress is in response to the current consultation process and has been a reality since the announcement of the scheme. Respondents also comment that the disruption of the beautiful landscape and tranquillity of the area will create increased stress.

8.3.87 One respondent mentions that the fear of increased crime is also likely to cause health effects such as anxiety. A small number of respondents mention they are concerned about the increase in stress due to increased journey times because of road closures and rerouting.

8.3.88 Several respondents are concerned about potential physical health impacts including impacts from air pollution, dust from construction, and the impact from loss of recreational opportunities such as the Ingestre Park Golf Club.

8.3.89 A small number of respondents also reference the potential impact on their health due to increased journey times for emergency vehicles.

8.3.90 Mitigation

8.3.91 There are no suggestions as to methods for mitigating negative health impacts as the result of the scheme. However, respondents give suggestions of ways to mitigate effects of the scheme that may cause a health impact (such as mitigating noise, air quality etc.).

8.3.92 Assessment

8.3.93 A small number of respondents raise concerns as to how the assessment could draw any meaningful conclusions as they believe there has been no engagement with key public health bodies.

8.3.94 Several respondents suggest that any health assessment should cover the time from the point at which the scheme was announced, and not just during the construction and operation of the scheme.

8.3.95 Ingestre with Tixall Parish Council raise a concern that there is no assessment made of the impact of health due to property blight.

8.3.96 One respondent comments that the assessment that the loss of the function of the Golf Club would have no effect on health and wellbeing in the community is incorrect. Another respondent requests a stronger statement on the effects on response time for emergency vehicles.

8.3.97 A small number of respondents say that it is 'unfair' that support is provided for those falling within a radius designating them as 'receptors', but none for those bordering those areas.

8.3.98 Land quality

8.3.99 Impacts

8.3.100 One respondent is concerned about the possibility of mineral extraction in the area and the related impacts of these activities. The response from Ingestre with Tixall Parish Council also raises the issue of subsidence, and the effect this could have on the construction of the scheme and the area itself.

8.3.101 Assessment

- 8.3.102 One respondent mentions that it is unclear how the land values were arrived at. Several respondents, including Jeremy Lefroy MP, consider that the assessment is inadequate as it does not take into consideration the usability of land indirectly affected by the scheme.

'It is not just land take that is involved but the usability of the land that remains.'

Ingestre with Tixall Parish Council

- 8.3.103 One respondent notes that there is currently no mention of the effect on ground moisture conditions arising from permanent alteration of the water table.
- 8.3.104 The response from Ingestre with Tixall Parish Council suggests that important information about the area (e.g. the halite deposits near the Needwood Basin, and the Sherwood Sandstone outcrop) have been ignored and not included in the assessment.

8.3.105 Landscape and visual**8.3.106 Impacts**

- 8.3.107 The vast majority of respondents that responded to this question are concerned about the impact of the scheme on the landscape in the area.
- 8.3.108 Some respondents, including the National Trust, Jeremy Lefroy MP, the Inland Waterways Association, and Ingestre with Tixall Parish Council, raise concerns about the increased height of viaducts, the embankments, and the line in general, in comparison to the previous design. All respondents who mention the increased height of the viaduct comment that this would have more of a negative impact on the landscape.

'It has now been raised to 16.5m at that point without any explanation, making it even more visually intrusive.'

The Inland Waterway Association

- 8.3.109 Several responses raise concerns that the scheme will have a negative impact on the local views, ambience, and tranquillity of particular areas. Such concerns are mentioned in relation to Cannock Chase Area of Outstanding Natural Beauty (AONB), Hopton village, the Great Haywood Marina and Canalside Farm and views around Pyford North embankment, the River Volley, Tixall Road and Great Haywood Road and from local footpaths. One respondent notes that construction work will be very visible for the five properties on Marston Lane.

- 8.3.110 Many respondents refer to the CA of Colwich to Yarlet as being one of natural beauty. Some mention the peace and tranquillity of the area as being a specific reason for why they live in the area, and why patrons to local businesses visit the area.
- 8.3.111 A small number of responses also note that there is very little proposed mitigation of the track from high viewpoint positions, and this is more difficult to solve through planting and other similar measures. One respondent notes this from the perspective of airborne activities (such as gliding and hot-air ballooning) and raises concerns that these activities would be negatively impacted due to the degradation of the countryside from an aerial perspective.
- 8.3.112 The National Trust comments that they are considering how to reinstate some of the outward views from the lower areas of Shugborough and that the scheme may impinge on their ability to reinstate these historic views.
- 8.3.113 A small number of respondents, including Jeremy Lefroy MP, are concerned about the depth of Coley Cutting:

'The feeling will be more of being on the edge of a cliff rather than being next to a railway line.'

Jeremy Lefroy MP

- 8.3.114 One respondent feels that the land take for the balancing ponds, tree planting, and access roads is excessive.
- 8.3.115 Mitigation**
- 8.3.116 Several respondents offer comments on the mitigation efforts proposed for the scheme. One respondent requests further mitigation to reduce the impact of construction on the village of Hopton. Staffordshire Local Authorities request evidence that the mitigation bund south of Hopton will be sympathetic to the local landscape character. The Canal and River Trust request that mitigation is put in place for any removal of current vegetation around the canal corridor, and suggests supplementing woodland along the Trent and Mersey Canal to mitigate the effects from the main compound. In addition, the Trust notes that it is important to consider canal craft sightlines when considering visual impact and related mitigation around the canal areas.
- 8.3.117 One respondent comments that the land take proposed for the landscape mitigation is excessive.
- 8.3.118 The National Trust expect to see a firm commitment to mitigation and a detailed timetable as part of the hybrid Bill EIA Report.

- 8.3.119 Some respondents offer specific mitigation suggestions. Several respondents propose returning to the previous proposal to put the line in a 'green tunnel'. Some also suggest reducing the width of the Hopton South Cutting by using sidewalks and / or steeper cutting ways.
- 8.3.120 Some respondents suggest making the Great Haywood viaduct an elegant, longer viaduct across the valley of the River Trent to allow greater visual permeability and reduce other severe effects.
- 8.3.121 Many responses relating to mitigation of the visual impact of the scheme on the landscape reference the need for tree planting. Some request additional tree planting as mitigation in certain areas, including: the area behind the property isolated at Marston, areas around the Trent and Mersey Canal, the abutment to the east of the Great Haywood Marina and east of the existing railway; and an extension of the planting schemes proposed along Yarlet Lane and Marston Lane.
- 8.3.122 Other respondents comment on the proposed approach to tree planting as a form of mitigation. A small number of respondents request that tree planting should take place in advance of the construction phase. One respondent suggests remote tree planting to provide screening.
- 8.3.123 Natural England request that any tree planting would need to respect the area's character, including the existing pattern of woodland.
- 8.3.124 *Assessment***
- 8.3.125 Several respondents request an elevation projection, visual montage, or 3D modelling of the viaduct and embankment to provide a clearer sense of the actual impact of the scheme on the surrounding landscape.
- 8.3.126 A small number of respondents express confusion over the height of the route in certain areas – both in the construction phase, and in the operational phase.
- 8.3.127 Several respondents consider that the impact on the landscape should be assessed as 'high', rather than 'medium to high'.

- 8.3.128 Several responses suggest items that they believe should feature in the assessment but are not included. Staffordshire Local Authorities request that the group of Parkland Landscapes at Shugborough, Ingestre and Tixall should be specifically addressed, as well as Ingestre Hall. Some respondents request topographic features, including the valley of the River Trent and Sow and information on the height and design of the auto-transformer station. A few respondents request an assessment of particular impacts. These include: the impact on the landscape of the woodland habitat creation west of the Trent North embankment, and the balancing ponds; the impact arising from the introduction of a strong linear feature across the wider landscape where it can be seen from a distance; the impact of moving, bright, regularly passing trains (in addition to the impact of fixed structures); and the effect of the scheme on the Cannock Chase AONB.
- 8.3.129 Natural England feels that the areas of Shugborough designated parkland landscape character area and Shugborough riparian alluvial lowlands landscape character area have not been sufficiently assessed.
- 8.3.130 One respondent suggests that the assessment should also refer to any additional land required for soil storage in addition to the compounds and temporary material stockpiles.
- 8.3.131 One respondent challenges the assessment that the visual impact on the area would be decreased by the design change. The respondent believes that the design change would result in a greater visual impact, especially for the five residential properties cut off by the Marston South Embankment.
- 8.3.132 Jeremy Lefroy MP notes that Shugborough is not enclosed by a 'dense' tree belt as stated in the assessment as there are still views across it from more elevated areas.
- 8.3.133 The National Trust considers that the distance of 500m is not sufficient for the assessment of impacts on landscape and on visual receptors.

'The general limitation of landscape and visual receptors to within 500m, or 1km at settlement edges (11.2.3), limits consideration of the effects arising from the introduction of a strong linear feature across the wider landscape where it can be seen from a distance...'

The National Trust

8.3.134 Socio-economics**8.3.135 Impacts**

8.3.136 Several respondents commented that the scheme would have major effects on the viability of businesses in the area. Specific businesses referred to include The Pavilion on the Ingestre Estate, The Great Haywood Marina, Canalside Farm and associated businesses, The Trent and Mersey Canal, Staffordshire Showground, the housing development north of Beaconside, and local farms and churches.

8.3.137 Mitigation

8.3.138 Staffordshire and Birmingham Agricultural Society request that additional land for car parking should be found for the showground to enable events to continue during the construction period.

8.3.139 Assessment

8.3.140 Several respondents give details about areas that they feel have been inadequately assessed. Several respondents feel there is inadequate assessment of the indirect impact on businesses and facilities adversely affected by the scheme. One respondent comments that the assessment that the scheme will have major beneficial economic effects seemed biased. Another respondent remarks that there is insufficient detail on how future generations will support the ongoing costs and maintenance and suggests that these costs will be an unsustainable burden.

8.3.141 Some respondents believe that there is significant underestimation of the impact of the scheme on local businesses.

'HS2 appear to be underestimating significantly the impact that construction and then the ongoing operation of the HS2 line is going to have on our overall business activities.'

Individual submission

8.3.142 One respondent requests clearer information regarding a high-pressure gas diversion for the length of the Great Haywood Viaduct and the impact this may have on the operation of surrounding businesses – including the Great Haywood Marina.

8.3.143 Another respondent notes that there are significant pheasant breeding sites locally and that an impact assessment should include the effect the scheme may have on such a business (i.e. from birds transgressing the area of the route).

8.3.144 Sound, noise and vibration

8.3.145 Impacts

- 8.3.146 Many respondents raise concerns about the impact of increased noise in the area due to the scheme.

'Hopton is a small quiet, peaceful village. The route through Hopton is very close to the settlement and the trains exit a deep cutting for a few hundred metres and re-enter a deep cutting. This occurs at the point where there are most dwellings, i.e. the worst possible place. It causes noise levels that are not acceptable to the WHO and should not be imposed on a sleepy village.'

Individual submission

- 8.3.147 Some respondents consider the noise level to be 'dangerous' to residents. Most respondents refer to noise levels both from construction and operation. A few respondents also refer to increased noise levels due to increased traffic.
- 8.3.148 Several respondents, including Jeremy Lefroy MP, reference the barriers on the viaduct, and the fact that the barriers seem to stop halfway across. They raise concerns about the sudden increase and decrease in sound that may result from the trains passing in and out of this section of the line and impact on both people and animals.
- 8.3.149 Some respondents also note that raising the height of the line and viaduct will potentially radiate the noise over a wider area. Some also mention that the removal of the green tunnel (as proposed previously) will result in much less noise protection.
- 8.3.150 Several respondents raise concerns about the long-term effect of continuous noise, both from the construction and operation of the scheme. This is also mentioned by a few respondents in reference to the potential negative impact on tranquil areas and heritage sites.
- 8.3.151 One respondent notes the potential effect on St Leonards church of vibrations as well as noise. This could affect stained glass windows and old headstones in the church yard.

8.3.152 Mitigation

- 8.3.153 Some respondents note that noise barriers do not run along the whole length of the Great Haywood Viaduct. All these respondents – including the National Trust and Ingestre with Tixall Parish Council, request that noise barriers should be extended across the whole length of the viaduct. Some respondents also request that the noise barriers extend some way onto the embankment to provide equivalent noise reduction and minimise adverse impacts on the users of the canal. One respondent comments that the noise barriers would only shield wheel noise, and not aerodynamic or pantograph noise sources. They suggest higher fencing to mitigate for these noise sources.
- 8.3.154 A few respondents refer to the original proposal to place the line in a ‘green tunnel’ and request this tunnel be reinstated in the design.

‘The original proposal recognised this and put the line in a ‘green tunnel’ which is an acceptable solution that also helps to mitigate the visual impact.’

Individual submission

- 8.3.155 Other respondents comment more generally that the route should be lowered and more tunnelling techniques used as a way of mitigating noise impact. These comments refer to Hopton and the Pyford North embankment.
- 8.3.156 A few respondents request additional noise barriers in specific areas. These areas include: the south side of Coley Cutting; Marston South Embankment; and the north side of Mount Edge.
- 8.3.157 Some respondents, including The Canal and River Trust, believe that additional tree planting could mitigate noise impacts. Specific tree-planting suggestions are made with regards to Mount Edge, Yarlet Lane, and Marston Lane.
- 8.3.158 A few respondents mention that there is no reference to what the noise barriers will look like and request that due consideration is given to their design. One respondent requests more mitigation for the effects on Hopton village due to construction noise. One respondent notes that noise impact for the housing development north of Beaconside currently has not been mitigated.
- 8.3.159 One respondent requests financial assistance for dealing with noise impacts – for example to cover installing insulation in affected properties. Another respondent requests that when noise insulation is required, there should be options for ventilation so that windows can be kept closed to reduce noise.

8.3.160 *Assessment*

- 8.3.161 Several respondents disagree with the assessment provided with regards to the noise level. These respondents also suggest that the train noise could be more significant than the averages described. One respondent thinks that the noise testing is 'flawed'. Another respondent challenges the idea that noise impact would be decreased by the design change, suggesting that it would be increased for the five residential properties cut off by the Marston South Embankment.
- 8.3.162 One respondent notes that the assessment states that the B5066 runs through the village of Hopton and has been used as the baseline for sound assessments. However, they say that the B5066 does not run through Hopton and therefore challenge the assessments on that basis.
- 8.3.163 A few respondents, including Jeremy Lefroy MP, request that locations within the Shugborough Estate should be more fully considered as part of the noise assessment.
- 8.3.164 Some respondents, including The Canal and River Trust comment that long-term mooring sites within the area – including the canal and the marina – should be assessed as receptors. One respondent also notes that the sound map fails to recognise the residential manager's flat at the Great Haywood Marina.
- 8.3.165 Ingestre with Tixall Parish Council believe there will be more properties and businesses in the affected areas than is currently understood and that a 'proper mapping' should be done.

'It is not obvious that the mitigation measures of the draft scheme have been developed with a proper understanding of the distribution of residents in the two parishes.'

Ingestre with Tixall Parish Council

- 8.3.166 The National Trust and Jeremy Lefroy MP note that there is no assessment of the impact of noise on cultural heritage sites.
- 8.3.167 Several respondents comment that the noise level contour maps and analysis are 'incomprehensible' to many, and request a more understandable demonstration of noise levels. Ingestre with Tixall Parish Councils request noise contour maps showing peak values of noise generated during the passage of an individual train.
- 8.3.168 One respondent notes that the assessment states that HS2 trains are 'assumed' to be quieter than existing trains and questions whether noise mitigation had been designed on this assumption.
- 8.3.169 One respondent requests clarity regarding the height of the noise barriers.

8.3.170 Traffic and transport

8.3.171 Impacts

- 8.3.172 Several respondents express concern that local roads are not suitable for construction traffic. Not only are local roads often small and windy, but also many respondents, including Jeremy Lefroy MP, comment that they are already overloaded and prone to congestion and traffic incidences.

'From a national perspective, any plan to restrict traffic on the M6 and A34 at the same time, even overnight, would cause complete traffic chaos, as local experience will testify.'

Jeremy Lefroy MP

- 8.3.173 Staffordshire Local Authorities raise concerns about any potential works on the A34 Stone Road due to the fact it is already subject to additional usage in cases of M6 motorway closures or abnormal loads.
- 8.3.174 Several respondents express concern about road safety implications. Some think that new road alignments may cause increased traffic speeds on roads that are already accident-prone, and regularly used by cyclists, pedestrians and horse riders.
- 8.3.175 Some respondents are concerned about access issues to either their property, or to parts of their community. Specific areas mentioned include Yarlet School, Hoo Mill Lane, Common Lane, and Hanyards Lane. Several respondents reference various diversions around Hopton, which may mean people would need to drive when they previously could walk. The National Trust and Jeremy Lefroy MP note that the closure of Colwich Footpath 55 south of Tolldish Lane may reduce permeability through the landscape. A small number of respondents are concerned about the closure of Shaw Lane and rerouting of the A515.
- 8.3.176 Some of these respondents also note that such access issues may cause an isolating effect on residents. The Church Buildings Council also says access issues may make it difficult for people to get to churches in Hopton, Ingestre, Marston and Pipe Ridware.
- 8.3.177 One respondent questions whether proposed road closures have given any consideration to walkers who may use the road, and what alternative routes would be provided.
- 8.3.178 Several respondents, including North Staffordshire Bridleways Association, raise concerns that road closures and other changes to local transport may have a negative impact on bridleways. Staffordshire Local Authorities note that the scheme will affect four promoted PROW routes.

8.3.179 Some respondents are concerned that increased volumes of traffic and changes in access may discourage visitors from outside the area.

8.3.180 Mitigation

8.3.181 Many respondents offer suggestions for ways to mitigate the impact of traffic, and road changes on the local community.

8.3.182 Several respondents offer alternative solutions for changes to the road network. These include:

- building a purpose built road from the A51 for access rather than using Tixall Road;
- running a new slip road off the M6 motorway;
- keeping Common Lane and Shaw Lane open;
- reassessing the route alignment of the A515;
- building additional crossings between Staffordshire Showground and Mount Edge as the area is heavily used by civilians and for MOD training;
- providing a pedestrian underpass through the embankment and under the railway on the walking route from Kings Drive to the Beadon Hill;
- providing a foot cycle bridge near the intersection of the railway and (old) Hopton Lane;
- ensuring HS2 traffic accesses the main compound via the A51 rather than Hoo Mill Lane to minimise the impact on the canal environment at Hoo Mill Lock and wear and tear on the Grade II listed Hoo Mill Bridge; and
- building an HS2 station near the Staffordshire Showground, or having a fast connection of at least 200kph through Wolverhampton to Curzon Street.

8.3.183 Several respondents request replacement bus shelters and appropriate access for buses on amended routes.

8.3.184 Many respondents, including Staffordshire County Council, comment on the importance of ensuring that new lanes are appropriate for local needs. Recommendations include that roads should be built to be wide enough for agricultural traffic, suitable for equestrian use, and strong enough to carry large lorries and farm machinery for local farm access. A few other respondents request that roads should be built with verges and ample passing places for vehicles and with appropriate hedgerows and nature corridors.

'The bridge will need to be strong enough to carry 50 tonne lorries as both Moreton House Farm and Moreton Farm are mainly arable farms with some livestock.'

Individual submission

- 8.3.185 Some respondents also request that footpaths and cycle paths are built alongside any new roads and that plans for this are clearly represented on scheme maps.
- 8.3.186 Respondents also have queries relating to haul routes for the scheme. One respondent questions whether the haul routes proposed are achievable, and raises concerns that if not, construction traffic levels will go unmitigated. One respondent requests that all proposed haul roads are marked on the scheme maps.
- 8.3.187 Some respondents request that certain areas are given due consideration in terms of access provision, but do not provide alternative solutions. For example, some respondents want Bishton Lane to remain open and an alternative route found to Hopton Lane for construction traffic, and that reliable road access to Yarlet School is ensured.
- 8.3.188 A few respondents, including Jeremy Lefroy MP, request that traffic works are scheduled with due regard to events at significant venues.
- 8.3.189 Another respondent also requests sensitivity in the design of new footpaths as some are higher and more visible than current paths.
- 8.3.190 A few respondents think that the land take for access is excessive.
- 8.3.191 *Assessment***
- 8.3.192 Some respondents, including Staffordshire Local Authorities, comment that the assessment of the impacts relating to traffic requires greater clarity, or additional information. Some of these request clarity on the movement of construction traffic, and how construction traffic would access certain key areas. One respondent suggests that the access described for the balancing pond at Lower Bridge Farm is incorrect. In addition, some respondents ask what measures will be taken to prevent construction traffic from using certain areas, and whether such measures will extend to light vehicles as well as heavy construction vehicles.
- 8.3.193 Several respondents request clarity on the impact of road closures and changes on bus routes and bus stops in the area.
- 8.3.194 The Landmark Trust also draws attention to the new bridge proposed to provide alternative access to The Pavilion and requests that it should be more fully covered in the assessment.
- 8.3.195 Network Rail note that there are references to construction logistics via the national rail network and that temporary use of Network Rail land has not been identified.
- 8.3.196 One respondent asks for clarity on whether private roads that are being diverted would remain private or will be adopted and maintained by the council.

- 8.3.197 The National Trust and Jeremy Lefroy MP request a timescale for the roadworks affecting the A51.
- 8.3.198 Staffordshire Local Authorities request further information on where the Proposed Scheme may cross PRowS.
- 8.3.199 A few respondents are concerned that no quantitative assessment of traffic has been undertaken. These respondents comment that this limits the usefulness of the information and their ability to comment. Some respondents also suggest that the impact assessments for the use of some roads is insufficient (for example Tixall Road) as it does not consider the effect of local events.
- 8.3.200 Ingestre with Tixall Parish Council request that Tixall is added to the list of affected settlements.
- 8.3.201 One respondent comments that the assessment hasn't considered the potential benefits of replacing the obsolete Handsacre Link with a North Stone link.
- 8.3.202 The National Trust requests detailed information for the operation of the Mill Lane compound in terms of the likely associated traffic and how it will be controlled.

8.3.203 Water resources and flood risk

8.3.204 Impacts

- 8.3.205 Several respondents, including the Canal and River Trust and Jeremy Lefroy MP, raise concerns regarding increased flood risk in the area. These concerns cover the following areas:
- the potential impact on the route of any failure of the Canal and River Trust's infrastructure that could result in flood water affecting the railway;
 - two large balancing ponds on the floodplain;
 - disruption of drainage under farm lands;
 - the A51 compound and the related effects of contaminants to local rivers in the event of a flood; and
 - increase in surface water discharge resulting in accelerated deterioration of watercourses.
 - construction within the floodplain may negatively impact the River Trent and its tributary through unintentional pollution

8.3.206 Mitigation

- 8.3.207 Ingestre with Tixall Parish Council note that proposed mitigation measures appear more focused on the management of water for excavation works rather than the preservation of existing groundwater conditions.

- 8.3.208 A few respondents request provision of a water supply to the land to the rear of Moreton Grange Farm.

8.3.209 Assessment

- 8.3.210 Some respondents, including the Environment Agency, Jeremy Lefroy MP, the National Trust and Ingestre with Tixall Parish Council raise concerns that the assessment does not adequately cover flood risk and associated issues for many elements of the project. A few respondents note that the wording relating to flood risk is unclear.

'The fifth bullet uses the phrase 'no significant increases in flood risk', but fails to define what the word significant means.'

The Environment Agency

- 8.3.211 The National Trust asks for confirmation that Shugborough is considered a vulnerable receptor in terms of flood risk and request to see the conclusions of the hydraulic modelling.
- 8.3.212 Several respondents make requests about items they want to see as part of the formal EIA. These include: risks to groundwater bodies; inclusion of groundwater resources and related relationships in the surface water baseline maps; identification of all water features; a comprehensive assessment of the exact nature of the surface and underground drainage networks; consideration of the salt marsh and associated brine springs; the impact on ground moisture from permanent alteration of the water table; and detailed information about hydrology previously provided by respondents.

8.3.213 Other comments

- 8.3.214 A few respondents suggest that Phase 2a makes the Handsacre link obsolete and propose replacing with a North Stone link.

Chapter 9: Responses to Question 3 - CA3

9.1 Introduction

- 9.1.1 CA3, the Stone and Swynnerton area is approximately 14 kilometres in length, extending from south west of Aston-by-Stone in a north west direction, passing south of Stone, north of Swynnerton and to the south of Swynnerton Old Park. The area is predominantly rural in character with agricultural land use interspersed with villages and isolated dwellings and farmsteads.
- 9.1.2 This chapter provides a qualitative summary of the issues respondents raised in response to Question 3 with respect to Volume 2: CA3 – Stone and Swynnerton.
- 9.1.3 Question 3 asks:
- ‘Please let us know your comments on Volume 2: Community Area (CA) reports. We welcome any information you may have on how the scheme may impact the local environment and community in your area, and any opportunities you feel there may be to reduce these impacts. Please attach additional pages as required’.
- 9.1.4 Comments are discussed under different thematic subheadings such as ‘Community’ or ‘Landscape and visual’. Where a significant number of comments have been raised in relation to one of these themes, these sections maybe be further subdivided into ‘Impacts’, ‘Mitigation’, or ‘Assessment’.

9.2 Overview of responses

- 9.2.1 One hundred and two respondents selected the tick box to indicate their response was referring to CA3 – Stone and Swynnerton. However, many other responses were made in relation to this CA without indicating this within the tick boxes provided. This chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to this CA.

9.3 Discussion

- 9.3.1 This chapter covers the following themes:
- agriculture, forestry and soils;
 - air quality;
 - community;
 - cultural heritage;

- ecology and biodiversity;
- health;
- land quality;
- landscape and visual;
- socio-economics;
- sound, noise and vibration
- traffic and transport
- water resources and flood risk; and
- other comments.

9.3.2 Agriculture, forestry and soils

9.3.3 Impact

- 9.3.4 Some respondents express concern about the impact HS2 would have on farmland, landowners and the farming community in CA3. A number of individual farmers and landowners provide detailed comments on the impact HS2 would have on their land or businesses during construction and operations.
- 9.3.5 Some respondents are concerned about temporary and permanent land take as a result of the proposals, with some arguing this has been underestimated in the draft EIA.
- 9.3.6 Some are also worried about the severance of land. For example one respondent explains that they would not be able to graze cattle across their entire holding within an arable or grass rotation, unless an overbridge is provided. Another respondent comments that a significant area of land would be inaccessible other than via a dual carriageway, which would involve a huge diversion around the public highway, unless a bridge is provided.
- 9.3.7 Other issues raised by landowners and individual farmers include the potential loss of farm buildings, and noise and light pollution from the railhead/maintenance facility.
- 9.3.8 Respondents express concerns that the proposals could impact the operations and/or viability of different types of farming enterprises including dairy farming, an equestrian facility, sheep, cattle, arable farming, and pheasant shooting.

9.3.9 Assessment

- 9.3.10 The majority of the responses from farming enterprises and landowners challenge the assessment of impacts on their businesses or land, arguing that the impacts have been underestimated.

9.3.11 There is concern from a few respondents that not all the input provided by farmers and landowners on previous occasions has been reflected in the documentation. One farmer comments that they have received no official information about the consultation, even though they are directly impacted. In contrast, another respondent welcomed the offer of a site visit for their farm at one of HS2 Ltd's community events.

9.3.12 Several respondents welcome further discussions with the engineering team in order to seek necessary changes.

9.3.13 *Mitigation*

9.3.14 Nearly all responses from farming enterprises make detailed suggestions with regard to mitigation measures. For example, some respondents request crossing points, such as overbridges or underbridges, to allow the movement of cattle and/or agricultural machinery. Another common request is for the removal or relocation of balancing ponds and environmental mitigation measures. Suggestions focus on reducing land take, maintaining access, and reducing the impact on farming operations. A few respondents ask questions about how certain impacts would be mitigated.

9.3.15 The Forestry Commission supports HS2 Ltd's proposed options for the usage of agricultural land when work is complete. Specifically, they suggest that ecosystem provision should be incentivised along the lines of countryside management schemes.

9.3.16 *Air quality*

9.3.17 A few respondents express concerns about pollution, dust, dirt and reduced air quality during construction and the impact this could have on local people. There is also concern about emissions from construction traffic and congested local roads. A few are worried about the impact of reduced air quality on children, the elderly, and residents with pre-existing health conditions, such as asthma.

'It is apparent that the health benefits of living in the countryside are likely to be lost by the harmful effects of increased traffic pollutants and dust.'

Individual submission

9.3.18 One respondent comments on the importance of monitoring air quality, and notes that there is already an above average number of children affected by asthma at Yarnfield School, which they believe is due to pollution from the M6 motorway.

9.3.19 Comments on community

9.3.20 Impact

- 9.3.21 Many respondents are concerned that the proposals in CA3 would have a detrimental impact on the lives of local people, including children and older residents. Concerns relate to the proposed railhead, disruptions to local roads during construction, and the HS2 line itself. There is concern that the character and advantages of settlements in this area would be affected, resulting in them becoming less attractive places to live. A few worry that the reasons they chose to live in the area, such the rural countryside with good access to the local town, would be damaged irrevocably.

'I chose to move, with my family into Yarnfield 12 months ago... We chose to live here due to the quality of life - quite village location, rural with access to unspoilt countryside, excellent access to local town of Stone and an outstanding school. The proposal to now site a railhead in the vicinity along with the disruption throughout an extensive building period will damage all the above beyond repair.'

Individual submission

- 9.3.22 Many refer to specific settlements in CA3 that they believe would be negatively impacted, such as Yarnfield and Swynnerton. Several respondents are worried about the impact of the proposals on Yarnfield, which is described by some as a growing and vibrant village; concerns focus on the impact the proposed railhead/permanent maintenance facility, and the proposed closure of Yarnfield Lane would have.

'Currently the village is enjoying strong growth and developing into a vibrant, prosperous community and location that is now threatened by the proposed Design Refinement.'

Individual submission

- 9.3.23 Respondents from other settlements are concerned that their areas would be negatively affected by the proposals, including Swynnerton, Stone and Walton. Many respondents worry about the impact HS2 would have on Swynnerton, which is described as a beautiful, unspoilt village. Others are concerned about the impact on Stone, which is described as a peaceful semi-rural canal town. Concerns are also expressed about impacts on a number of other settlements, such as Walton.

- 9.3.24 Many are concerned about the disruption that the proposed closure of Yarnfield Lane would have on the village of Yarnfield and surrounding communities. Several comment that it would become difficult accessing local services in Stone, which is described as the “first port of call” for a range of services and facilities, such as health care provision and secondary schools. It is also described as the most convenient route in and out of Yarnfield, as it leads directly to the A34. There is concern that this road closure would result in a loss of connectivity and isolation for many years.

‘As Yarnfield Lane is the main link to the village, and has already suffered major disruptions due to other railbridge works over the past 12 months, we are shocked to find that Yarnfield lane could be closed for a long period of time, even years, if this goes ahead. This would mean severe disruption to the village and for people getting into Stone. It would also force more traffic onto the country lanes.’

Individual submission

- 9.3.25 Another concern for several respondents is the impact that HS2 Ltd’s proposals would have on residential properties. There are concerns that there would be a decrease in property values and difficulties selling properties, with a few adding that there needs to be full compensation for any loss incurred. Others are concerned about the potential impact of construction traffic and increased traffic on properties near to roads; issues raised include noise, vibration and pollution.
- 9.3.26 Some respondents are particularly concerned about young people, and the impact the closure of Yarnfield Lane would have on local schools and pupils. One common example is Springfields Primary School in Yarnfield. There are concerns that access would be blocked for pupils traveling from Stone, which would result in longer journeys. There is also concern that the children’s education and health could be affected by noise and pollution from the railhead. Some feel the viability of the school could be jeopardised by the proposals. Respondents also worry that the closure of Yarnfield Lane would make it harder to access secondary schools in the east, resulting in detours and longer journeys, impacting on both children and parents.

‘Springfields First School in Yarnfield has recently had funding to support its growth to 45 per year intake. The closure of the lane will make access difficult and prolonged for those pupils coming from Stone. It is likely that people would choose other schools affecting the funding and therefore quality of education for those pupils having to attend Springfields.’

Individual submission

- 9.3.27 A few respondents worry about the impact of the proposals on older residents, who make up a significant proportion of the community. There is concern that their health and wellbeing could be affected, with one respondent commenting that the proposals are already generating anxiety.
- 9.3.28 Some respondents raise concerns about the potential impact of the proposals on recreational activities, such as walkers and cyclists, and local facilities, such as Stone Dominoes Football Club and the Yarnfield Conference Centre.
- 9.3.29 A small number of respondents worry that an increased workforce in the area as a result of HS2 would put pressure on local services, such as schools and medical facilities. One respondent asks what provisions have been made for the workers and comments that additional expenditure on infrastructure would be required.

'Our communities are in the most deprived 10% in the country for good quality services. An increased workforce will make the situation worse, imposing pressure on GP's/other health services. Waiting time for appointments will be increased with declining provision.'

Individual submission

- 9.3.30 A few respondents, including the Rector of St Mary's Church Swynnerton, are worried about increased crime and anti-social behaviour.

9.3.31 Assessment

- 9.3.32 Some respondents are critical of the community assessment. Some explain that the area is growing, and argue that the EIA has failed to take into account existing and planned housing developments in the area, for example at Yarnfield, Walton and Cold Norton. A few disagree with the assessment that Yarnfield has a limited number of facilities and go on to list community facilities that have not been included in the report. Similar concerns are raised about Swynnerton and Stone. A few respondents argue that HS2 Ltd used historical data, such as out of date ordnance survey maps, when they were developing their proposals; they are concerned this meant that HS2 Ltd did not have an accurate understanding of the area at this time.

9.3.33 Mitigation

- 9.3.34 Some respondents comment on the importance of mitigating the impacts on local communities, such as Swynnerton and Yarnfield, or argue that not enough has been done. A few respondents request compensation for local residents; in addition to requesting full compensation for any loss in property values, a few seek a reduction in council tax for local communities affected by HS2.

9.3.35 Some respondents recommend mitigation measures, for example a number of respondents argue that the impacts on Swynnerton would be lessened if the line was located in a tunnel or a cut and cover, rather than a deep cutting. A few comment that this was a previous proposal.

9.3.36 One respondent comments that they prefer one of the original alternative routes which located the HS2 line to the west of Swynnerton more closely to the West Coast Main Line.

9.3.37 **Comments on cultural heritage**

9.3.38 *Impacts*

9.3.39 A few respondents comment on the potential impact of the proposals on heritage assets in CA3. A minority of respondents are concerned about the impact on Swynnerton's conservation area. A few others are concerned about the impact of the proposals on specific Grade I and Grade II listed buildings. Staffordshire Local Authorities comment that the route of HS2 Phase 2a passes through Swynnerton Park, which is recorded on the HER.

9.3.40 *Assessment*

9.3.41 Staffordshire Local Authorities provide detailed comments on the cultural heritage section of the draft EIA for CA3. A few other respondents also comment on this section.

9.3.42 Staffordshire Local Authorities and Historic England argue that Swynnerton Park should be included as a distinct heritage asset in the assessment. Historic England also comment that it should be considered an asset of moderate value, as its significance is likely to be equivalent to that of a Grade II designated designed landscape.

'Although the landscape park around Swynnerton is not registered, we feel that it needs to be treated as an independent asset in its own right. We feel also that it should be considered an asset of moderate value, as it may well be of a significance equivalent to that of a Grade II designated designed landscape.'

Historic England

9.3.43 Staffordshire Local Authorities also explain that there is evidence for late Neolithic pit digging and early medieval activity along Meece Brook as a result of archaeological investigations conducted for the Norton Bridge Project.

9.3.44 Staffordshire Local Authorities also provide detailed comments on sections of the cultural heritage assessment that refer to effects arising during construction and from operation. For example, they note that no consideration is given to the potential temporary effects of construction on historic parkland in proximity to the scheme and in particular effects on Swynnerton Park, even though it is included in the landscape and visual section. They go on to emphasise the importance of there being a consistent approach between the historic environment and landscape specialists.

9.3.45 Another respondent argues that the impact on a medieval settlement site would be more significant than the assessment indicates.

9.3.46 Mitigation

9.3.47 Staffordshire Local Authorities make a number of suggestions with regard to mitigation measures and cultural heritage. For example, they comment that any landscape mitigation proposals should be informed by a thorough understanding of historic landscape character to ensure that, wherever possible, any such mitigation enhances the historic landscape character of the area.

9.3.48 The Council also recommends long-term monitoring in circumstances where archaeological remains are being preserved in situ, beneath earthworks. They add that the deployment of such a technique would be informed by the relative significance of the assets to be preserved.

9.3.49 Another topic which the Council raises is the potential visual impact of noise mitigation upon the setting of designated heritage assets. They comment that landscape screening and barriers should be introduced with full consideration of the heritage assets and landscape character of the area.

9.3.50 The Council also comments that landscape planting may reduce impacts on the setting of heritage assets, as long as they are developed with long term management in mind.

9.3.51 Comments on ecology and biodiversity

9.3.52 Impact

9.3.53 Some respondents are concerned about the impact of the proposals on wildlife, such as great crested newts, bats, barn owls, badgers, deer and the hare population. A few mention species that have been in decline in the area, such as the hare population, and are concerned that this would be exacerbated by HS2. A few are concerned about animal communities becoming isolated, such as the deer population.

'Impact on wild life - just one instance - the hare population in Staffordshire as a whole has decreased in the last ten years. We have, and are trying to conserve, the population here. The proposed route of HS2 cuts right through their habitat.'

Individual submission

- 9.3.54 Some respondents mention loss of habitats, such as hedgerows along roads, meadow land, grassland and ponds.
- 9.3.55 A few respondents are concerned about the potential destruction of woodlands. Two respondents discuss the importance of investigating woodlands that could be ancient woodlands, but which have not been listed on the Ancient Woodland Inventory at this time. The Woodland Trust identifies three woodlands in this category, which may need further investigation, and which are not currently in the draft EIA.

9.3.56 *Assessment*

- 9.3.57 A few respondents comment on the section of the EIA relating to ecology and biodiversity. One comments that it is in the early stages of development and is based on a desk study rather than a survey. Another is critical of the level of detail in the draft EIA, describing it as "sketchy". Staffordshire Local Authorities comment that the CT-10 series of maps is inaccurate and fails to show a considerable number of Local Wildlife Sites, including some directly affected by the route. Another respondent explains that local landowners and farmers have been actively managing their land to promote greater biodiversity.
- 9.3.58 A few respondents comment on ecological surveys. One emphasises the importance of there being full and proper surveys undertaken by competent and independent persons. Another respondent has been disappointed with their interactions with ecologists and specialists surveying their farm so far and requests that more effort is put into using local ecologists who have local knowledge.
- 9.3.59 Staffordshire Local Authorities and Stafford Borough Council, recommend HS2 Ltd contacts the Staffordshire Barn Owl Action Group to discuss impacts and off-route compensation in areas that are of good quality for barn owls, such as the Churnet Valley area of Staffordshire.

9.3.60 *Mitigation*

- 9.3.61 Staffordshire Local Authorities and a few other respondents, comment on mitigation measures with respect to ecology and biodiversity.

- 9.3.62 The Councils stress the importance of woodland connectivity, and recommend that woodland connectivity mapping is carried out to identify the most effective locations for compensatory planting to offset fragmentation and severance caused by the route. They comment on the poor location of some of the proposed compensatory planting in the draft EIA. They also comment that habitat connectivity work should not depend on localised records, but instead should be designed to enhance wider connectivity and overall habitat quality.
- 9.3.63 Other mitigation measures proposed by the Councils include hedgerows to link woodlands and providing replacement ponds whether great crested newts are present or not. They also make suggestions with regard to mitigating the impacts in specific locations; for example they provide detailed comments on wetland habitat creation adjacent to Filly Brook.
- 9.3.64 Suggestions from other respondents include making small changes to routing and providing wildlife havens. One respondent comments that the mitigation measures are not currently adequate to address the loss of ponds and hopes that additional ponds would be approved.

'Having read with interest the mitigation measures which are to be put in place, I would regard these as inadequate for the following reasons. Considering that 44 ponds in the area will be lost, I think the present pond creation scheme fails to compensate adequately for this loss (8.4.18) and I hope that the suggested provision of additional ponds is followed through.'

Individual submission

- 9.3.65 The Forestry Commission notes plans for woodland habitat creation in CA3, but adds that it is difficult at this stage to assess if it is an appropriate level of compensatory planting.
- 9.3.66 Some respondents express concerns about mitigation measures, for example the location of ecological mitigation ponds on agricultural land.
- 9.3.67 Comments on health**
- 9.3.68 Some respondents worry about the impact the construction and operation of HS2 could have on the quality of life, and the physical and mental health of local people.
- 9.3.69 A few are concerned about the potential effect of reduced air quality on the health of local people, caused by dust and debris during construction, and emissions from construction vehicles and an increased volume in traffic. A few are specifically concerned about children, residents with pre-existing health conditions such as asthma, and reduced air quality near to schools.

'Dust/debris pollution from the railhead will carry on the wind and be inhaled by causing unknown health issues.'

Individual submission

9.3.70 A few respondents are concerned about reduced wellbeing, and increased levels of stress and anxiety, as a result of the proposals. Respondents argue that the following factors could have the potential to affect wellbeing: noise, light pollution, traffic congestion and the changes to the area that would result from HS2 Ltd's proposals. A few respondents comment that the proposals in CA3 are already generating anxiety among local people. One respondent argues that the effect of the proposals on mental health, in particular stress, has not been addressed in the documentation.

9.3.71 Another respondent recommends that HS2 Ltd engages with Local Clinical Commissioning Groups.

9.3.72 One respondent queries whether community and health implications have been properly considered for CA3.

9.3.73 Comments on land quality

9.3.74 A small number of organisations comment on land quality in CA3.

9.3.75 The Environment Agency refers to potentially contaminated land within the study area, such as a petrol fill station at Stafford's M6 motorway service station. They request that the Agency is consulted when more information is available about the risks associated with these sites, to ensure that any potential environmental issues are understood and mitigation can be put forward.

9.3.76 Staffordshire Local Authorities welcome consideration of proposals to mitigate impact on any important mineral resource within mineral safeguarding areas.

9.3.77 Comments on landscape and visual impacts

9.3.78 Impact

9.3.79 Several respondents are concerned about the visual impact of the proposals on the local environment and landscape, which is characterised as countryside, and an "open rural landscape." Some argue it would destroy countryside and be out of keeping with the landscape character of the area. One respondent comments that the draft EIA underestimates the attractive nature of the countryside.

9.3.80 A few respondents comment that views close to settlements would be affected, such as on the approaches to Swynnerton and at Yarnfield, or refer to individual properties that would be affected.

- 9.3.81 Some respondents mention features that they believe would have a visual impact on the landscape in CA3, including the railhead, the HS2 line where it is located above existing ground, the autotransformer station, road works and mitigation measures such as noise barriers.
- 9.3.82 A few are specifically concerned about the height of the HS2 line near Yarnfield, and the impact this would have on the landscape.

'Within CA3, adjacent to Yarnfield in particular, the track will be mainly raised above existing ground levels on embankments up to 12m in height. The electric overheads and, of course, the trains will stand/operate above that. This will cause both visual and aural blights to the surrounding populace during use and, in particular, during construction. Completed, it would be the highest structure/feature in the area and destroy the picturesque views currently enjoyed.'

Individual submission

- 9.3.83 Several respondents are concerned about light pollution from the railhead; some worry that it would be lit 24 hours a day, impacting on the night sky. A few mention potential light pollution from road works.

9.3.84 Mitigation

- 9.3.85 Some respondents suggest ways to mitigate the visual impact of the proposals in CA3. For example, some suggest putting the railway line in a tunnel/cut and cover tunnel along the section north of Swynnerton where the line passes under the A51.

'At this point HS2 becomes a blot on the beautiful countryside, standing out like a sore thumb. Is not possible to build a tunnel at this high point where hs2 passes under the existing A51 at the end of Stab Lane. This would avoid the realignments proposed.'

Individual submission

- 9.3.86 A few respondents argue that more should be done to mitigate against the loss of landscape features and/or suggest ways to reduce the impact on the landscape. These include early and extensive landscaping and more tree planting, for example along the re-aligned Yarnfield Lane.
- 9.3.87 The Forestry Commission advises on the importance of using suitable species for compensatory woodland planting, recognising the landscape context and to ensure resilience to climate change.
- 9.3.88 A few respondents comment that because Stone is a rural area, the overall landscape impacts are greater than they would be if the railhead was located in Crewe, which is an urban landscape.

9.3.89 A few respondents are concerned about the length of time it would take for the landscape to recover, because of the time it takes for newly planted trees and hedgerows to mature.

9.3.90 Comments on sound, noise and vibration

9.3.91 Impact

9.3.92 Many respondents are concerned about increased noise levels, in what is described as a peaceful and tranquil area, and the impact this would have on the quality of life and health of local residents.

9.3.93 Some respondents are concerned about noise pollution during the construction and operation of the railhead/permanent maintenance facility, with a few worrying it would be 24 hours a day.

9.3.94 A few respondents comment that the area already experiences noise from the M6 motorway. One respondent comments that the EIA will need to take into account that the characteristics of the noise arising from the operation of the railhead will be different from the noise generated by the presence of the M6 motorway. Another respondent comments that it won't be possible for noise from the railhead to "hide behind" noise generated by the M6 motorway, especially at night time when there is less traffic.

9.3.95 Some mention operational noise from the HS2 line, and worry about the frequency of trains or the level of noise in locations where the line is raised, for example near Yarnfield.

9.3.96 A few respondents are concerned that properties located near to roads could be negatively affected by noise and vibration from construction vehicles.

9.3.97 A few are concerned that alterations to the road network would impact noise levels, for example when traffic is diverted through villages or where there is a new road.

'Of course, all this additional traffic also creates noise. For those living in Yarnfield Lane this means being woken in the early hours of the morning by traffic streaming through the village. This is hardly conducive to good health.'

Individual submission

9.3.98 Mitigation

9.3.99 A few respondents comment that further work is needed on noise mitigation measures. One respondent requests that mitigation measures at the railhead include physical noise barriers, and hours of operation and work practices that are designed to minimise noise.

9.3.100 Comments on socio-economics

9.3.101 Impacts

- 9.3.102 Some respondents express concern about the impact HS2 would have on local businesses and commuters, in particular as a result of changes to the local road network.
- 9.3.103 Some respondents worry that village shops, services and small businesses would suffer financially as a result of road closures, for example Yarnfield and Swynnerton. One respondent queries what compensation would be available for impacted small businesses.

'Yarnfield also currently has a small number of small businesses in the village (hairdressers, nursery, pub) all relying on people coming into the village to maintain a healthy income. The excessive and timely detours will again put people off coming into the village causing damage to the business.'

Individual submission

- 9.3.104 Some respondents are also concerned that the closure of Yarnfield Lane would jeopardise the future of the Wellbeing Park, which is home to Stone Dominoes Football Club, The Academy4Wellbeing and seven other sports clubs, because the majority of visitors access it from the A31. One respondent argues that it would cost in the region of £6 to £8 million to relocate this facility.
- 9.3.105 A few respondents are concerned that the closure of Yarnfield Lane would threaten the future of Yarnfield Park Training and Conference Centre, as visitors also access the venue from the A34.

'There is also a large conference/training centre at Yarnfield Park, providing work for local people. All delegates need the lane to access it. How are these people going to get here? Will they all use the diversion via Stafford several miles away [or] will these businesses close with loss of jobs and grassroots sporting facilities.'

Individual submission

- 9.3.106 A few argue that disruption to the local road network would affect businesses in Stone. They argue that because of increased traffic and difficulties accessing the town, people who normally shop in Stone would find alternatives such as Stoke-on-Trent or Newcastle.

9.3.107 A few respondents argue that it is important that local businesses benefit from HS2 Ltd's proposals and that there are jobs for local people. For example, one local company supports the proposal to make the IMD near Stone a permanent facility as a source of local jobs. However, a few respondents do not believe there would be employment opportunities for local people because skilled workers would be brought in from outside the area. One respondent argues that planning accommodation for 240+ workers on site is at odds with local job creation.

9.3.108 One local company believe that HS2 Ltd's proposals in CA3 would support the regeneration of the area. They argue that the long term gain that HS2 offers the area outweighs the inevitable short term disruption that would be experienced locally.

9.3.109 Comments on traffic and transport

9.3.110 Impacts

9.3.111 The majority of respondents who comment on CA3 are concerned about the impact of HS2 on the local road network and the significant disruption and inconvenience it would cause to local residents, businesses and visitors, including both motorists and non-motorised road users.

9.3.112 Many respondents refer to specific road closures and alterations they have concerns about, for example the closure of Yarnfield Lane, the closure of the A51 near Swynnerton and alterations to Tittensor Road. There is also concern about the impact of new roads/road alignments on the surroundings.

9.3.113 Many respondents are concerned traffic would be diverted onto roads that are not suitable for additional traffic and construction vehicles. Reasons given for their unsuitability include: sections of the local road network already experience congestion (e.g. Eccleshall Road); some roads are too narrow for construction traffic (e.g. Stab Lane); there are dangerous sections (e.g. junction where A51 meets A518, junction with Meece Road, and the A34 junction) and weight restrictions (e.g. Yarnfield Lane).

9.3.114 Many respondents are concerned that road closures and diversions would result in increased traffic flows, congestion, significantly longer journeys and increased costs for the motorist.

9.3.115 Several respondents comment on the disruption this would cause to local residents trying to access local shops and services, children/parents trying to get to schools, visitors trying to reach facilities in Yarnfield, and commuters trying to get to work. Some respondents feel that not enough attention has been paid to the effect this would have on the lives of local people. A few comment that the impact could be extensive.

'Residents of Yarnfield and Swynnerton and the surrounding hamlets could face being cut-off from Stone, the A34 and even the M6 on multiple fronts at the same time, which would be wholly unacceptable'

Individual submission

9.3.116 Some respondents explain that they have already experienced the disruption construction projects can have on the local road network (e.g. Norton Bridge) and are concerned that HS2 Ltd's proposals would be more significant, taking place over years rather than weeks.

9.3.117 Some respondents are concerned that road closures and diversions would delay emergency services, potentially putting lives at risk. A few worry that emergency services wouldn't be able to reach Yarnfield in the event the one road in/out of the village is closed.

'In severe medical situations, how would the emergency services be able to reach us? With road closure and diversions it is imperative they can get here as fast as possible, a matter of minutes can be the difference between life and death!'

Individual submission

9.3.118 Highways England is concerned about the closure of Yarnfield Lane because it has a dedicated 'turnaround' point for Emergency Services and Highways England Traffic Officers. They comment that it is essential that these vehicles can continue to pass between M6 motorway Northbound and Southbound carriageways without detour or delay at all times.

9.3.119 Some respondents worry that road safety could be compromised due to increased volumes of traffic, construction vehicles on unsuitable roads, potential accident black spots, and delays causing some road users to become angry, which would in turn affect their driving.

9.3.120 Some respondents are concerned about the impact of road closures on non-motorised road users including children, older members of the community, pedestrians, cyclists and equestrians. For example, the North Staffordshire Bridleways Association provides a list of roads that would cross HS2 in Staffordshire, which are important to equestrians. The Association explain that horse riders often rely on minor roads and sometimes major roads because there are few bridleways in the area.

9.3.121 A small number of respondents worry about the effect diversions would have on school and public buses.

9.3.122 Network Rail comments that more detail on the proposals in this area will be needed to assess what the impact might be on the Network Rail infrastructure.

9.3.123 A few respondents comment on footpaths and bridleways. Staffordshire Local Authorities express concern that a section of public bridleway (Public Bridleway No 54 Swynnerton) would be permanently lost, and make a general point that the loss of any PRoW is “extremely disappointing.”

9.3.124 Assessment

9.3.125 A few respondents criticise the transport assessment, for example arguing that the scale of the traffic problems that would be generated have been vastly underestimated. Some are concerned that the plans have not taken into account increased volumes in traffic from proposed and existing new housing developments, the HS2 workforce and when events take place at facilities in Yarnfield.

9.3.126 A few respondents comment that no quantitative assessment of traffic has been undertaken, which limits the usefulness of the EIA. Staffordshire Local Authorities comment that until the quantitative assessment is made available, they reserve comment on any assumptions made on the traffic and transport impact. The Councils also comment that no information has been provided to validate the traffic counts, junction turning counts and queue surveys undertaken by HS2 Ltd to establish the baseline and peak hour assumptions.

9.3.127 Mitigation

9.3.128 Some respondents comment on proposed changes to the road network that should not be made, and make detailed suggestions with regard to how the road proposals could be improved. For example, some argue that Yarnfield Lane should not be closed and make suggestions for improvements.

*‘I insist that you review your proposals and, at the *very* least, find a way to maintain Yarnfield Lane open throughout the duration of the construction works. Yarnfield Lane is only 2 cars wide and could be routed under, over or thorough the proposed Railhead without causing problems to the construction works - it just needs proper consideration by the team.’*

Individual submission

9.3.129 A few respondents make suggestions relating to road safety, for example locations on the network which should be reconfigured as roundabouts or traffic lights rather than T junctions.

9.3.130 Staffordshire Local Authorities comment that where temporary diversions of PRoW are needed they should be the shortest and safest route available and, where possible, should be enhanced for the benefit of the path users. The Council’s also add that non-motorised users should not be diverted onto the road network as part of any temporary PRoW closure.

9.3.131 A few respondents comment on the proposal for the railhead/permanent maintenance facility to have an access point with the M6 motorway. A local company expresses strong support for a link to the M6 motorway for wider purposes than just construction; they argue that it would significantly benefit the regeneration of the area, as well as reroute HGVs away from Eccleshall and other villages. A few respondents are concerned about the M6 motorway being used for construction traffic.

9.3.132 Comments on water resources and flood risk

9.3.133 A few respondents are concerned about an increased risk of flooding in Stone and Yarnfield. A few respondents comment that the proposals are in the area of a known floodplain, which could increase the risk of flooding locally.

9.3.134 Another respondent requests that flood risk is one of the factors that are taken into account when siting construction compounds.

9.3.135 Other comments

9.3.136 Some respondents express their opinions on the proposal to locate the railhead/permanent maintenance facility near Stone and the impact this would have on the local road network, such as the closure of Yarnfield Lane. A few comment that the proposals to site the facility in the area needs to be urgently reconsidered. Some argue that there must be other more suitable locations for the railhead/permanent maintenance facility, such as Crewe. In contrast, a few other respondents express support for the proposal to site the railhead/permanent maintenance facility at Stone, as opposed to the previously proposed location south of Crewe.

9.3.137 Respondents are also concerned there would be a decrease in property values and difficulties selling properties, with a few adding that there needs to be full compensation for any loss incurred.

Chapter 10: Responses to Question 3 - CA4

10.1 Introduction

- 10.1.1 The Whitmore Heath to Madeley area is approximately nine kilometres in length, extending from Meece Brook Valley in the south to the west of Madeley. The area is predominantly rural in character with agricultural land use interspersed with ancient woodland, small villages and isolated dwellings. Through this area the route would run broadly parallel with the M6 motorway, which at the nearest point is approximately 1.8 kilometres east of the route. Within this area the route would cross the A53 Newcastle Road, the West Coast Main Line, the River Lea, the out-of-use Silverdale line of the Stoke to Market Drayton railway and the A525 Bar Hill Road.
- 10.1.2 This chapter provides a qualitative summary of the issues respondents raised in response to Question 3 with respect to Volume 2: CA4 – Whitmore Heath to Madeley.
- 10.1.3 Question 3 asks:
- ‘Please let us know your comments on Volume 2: Community Area (CA) reports. We welcome any information you may have on how the scheme may impact the local environment and community in your area, and any opportunities you feel there may be to reduce these impacts. Please attach additional pages as required’.
- 10.1.4 Comments are discussed under different thematic sub-headings such as ‘community’ or ‘landscape and visual’. Where a significant number of comments have been raised in relation to one of these themes, these sections maybe be further subdivided into ‘Impacts’, ‘Mitigation’, or ‘Assessment’.

10.2 Overview of responses

- 10.2.1 Ninety respondents selected the tick box to indicate their response was referring to CA4 – Whitmore Heath to Madeley. However, many other responses were made in relation to this CA without indicating this within the tick boxes provided. This chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to this CA.

10.3 Discussion

- 10.3.1 This chapter covers the following themes:
- agriculture, forestry and soils;

- air quality;
- community;
- cultural heritage;
- ecology and biodiversity;
- health;
- land quality;
- landscape and visual;
- sound, noise and vibration;
- traffic and transport;
- water resources and flood risk;
- tunnels and alternatives; and
- other comments.

10.3.2 Comments on agriculture, forestry and soils

- 10.3.3 Some respondents express concern for the impact of the proposals on agriculture locally, including the temporary and permanent effects of proposed construction on farms, and the separation of farms from part of their land. Several farms are mentioned as being affected in this way, with specific details provided in each case for the effects that the scheme will have on the farm. Some respondents argue that the viability of particular farms will be threatened if the scheme proceeds as planned.
- 10.3.4 Further agricultural issues raised by a few respondents include concern for the distress that would be caused to livestock from passing trains, and the need to safeguard a farm's water supply and respect its mineral rights. In general, those who comment on agriculture would like the scheme to use as little land as possible, to minimise the impact upon agricultural land.

'Snape Hall farm is a great asset to the community. Im not sure how the farm will run without much of its land and no access from what i can see on the maps.'

Individual submission

- 10.3.5 Respondents who comment on the effect of the proposals on specific farms often disagree with the assessments that have been carried out, stating that the impacts will be greater than the assessment concludes. One response states that information on drainage gathered from the farm impact assessment was not taken into account. Another states that the farm impact assessment does not take account of access, drainage or the detrimental effect on business. This respondent requests further information and evidence.

- 10.3.6 Several respondents comment on the siting of specific facilities or balancing ponds, querying locations or suggesting alternatives. One respondent questions the proposed siting of compounds, for example, as the facilities will not be near a main road. Manor Road HS2 Action Group, and a few other respondents, suggest that HS2 Ltd offer local people the topsoil removed during construction work as a goodwill gesture, delivering the soil free of charge. One respondent suggests the use of woodland as a buffer between agricultural land and the track, while another asks who will control the weeds and hedgerows on the embankments planned as part of the scheme.

10.3.7 Comments on air quality

- 10.3.8 Some respondents are concerned about the effects of construction on air quality. These respondents refer to the dust caused by construction works as well as pollution from the increased traffic locally as being major concerns.

'We do not know how it is possible to state confidently that no local air quality impacts are anticipated due to changes in road traffic flows, given that an assessment has not yet been completed.'

Individual submission

- 10.3.9 One person notes that the Lea Valley and Whitmore Trough areas are characterised by north-westerly winds, and that mitigation of the effects of dust from construction is therefore not possible.

10.3.10 Comments on community

- 10.3.11 Some respondents express concern about the effects of the proposals on the local community. These concerns are often expressed in terms of quality of life. Some respondents feel that the character of their residential area would be lost, and express opposition to the way they believe the locality will be impacted upon by the scheme. A few respondents specify the local landscape and the quiet nature of the area as reasons why they moved there.
- 10.3.12 Respondents also express concerns about accessing services locally if the plans go ahead; in one case a respondent worries about access to their own home. A few respondents refer to fears of increased isolation if local roads are closed. Some respondents express concern about specific services, for example that road closures and congestion would impact on access to health services at Madeley, including GP, dentistry and nursing facilities.

'The construction through Whitmore to Madeley will impact the only route that our children have to get to their high school in Madeley and also access to the other facilities such as doctors/dentists.'

Individual submission

- 10.3.13 Some respondents note that congested roads and detours would give rise to extra journey time. Manor Road HS2 Action Group note that local businesses, schools and healthcare facilities will be affected by curtailed local access.
- 10.3.14 Respondents also refer to the potential impact of the plans on recreational activities in the area. The proposed closures would affect local bridleways and footpaths, representing the loss of community assets. One respondent says walkers prefer to use circular routes available in the area, which the scheme would interfere with, while another points out that HS2 Ltd intend using thoroughfares marked as advisory cycling routes. Several respondents say they use Snape Hall Road regularly for recreational purposes. Staffordshire Local Authorities request that non-motorised users are not diverted onto the vehicular network as part of PRow closures. They suggest that diversions should be the shortest and safest route available, and where possible be enhanced. They say that one of the affected PRow is a County Council promoted route, and as such information will be required prior to construction for inclusion in promotional material.

'The impact on the local community including Baldwin's Gate on the permanent closure of Snape Hall Road because of its recreational value as a link to other footpaths needs to be fully addressed.'

Staffordshire Local Authorities

- 10.3.15 In some cases, respondents refer to specific groups of local people who will be affected by the proposals, such as those who live on roads that will be congested, and elderly people. One respondent notes that there are many elderly people in the area. This respondent says that older people are slower to adapt to change and would therefore be particularly affected by the plans. A few respondents suggest that the presence of construction sites in the area could cause antisocial behaviour.

'Older people are, on the whole, less resilient, less able to accept change, and are therefore much more vulnerable. In addition they are the people most likely to require complex medical treatment. Additional difficulty in accessing this treatment will add to their anxieties.'

Individual submission

- 10.3.16 Madeley HS2 Action Group, as well as a few other respondents, request that a bridge be provided over the HS2 tracks at the location of the bridleway at Red Lane, Madeley. They describe the loss of the route otherwise as dangerous, as users would be required to use the A525. A few respondents state that the closure of Snape Hall Road could be mitigated with rerouted footpaths.

- 10.3.17 One respondent suggests that HS2 Ltd should pay for extra doctors and staff at the local hospital, given the effects the scheme will have on the health of people in the area. Another states that HS2 Ltd should compensate all residents for the effect of the proposals upon their quality of life, and refund companies affected by delays due to the works.
- 10.3.18 One respondent says that local councils, the Highways Department and HS2 Ltd should agree to improve PRoW locally as alternatives to any that are affected by the proposals, designating new locally accessible routes.
- 10.3.19 A lot of people who commented on this CA feel that people in the locality will not derive any benefits from the scheme. Some of these quote from HS2 Ltd documentation to demonstrate that HS2 Ltd already acknowledge the substantial impact of the scheme on the locality. They ask how a scheme with such acknowledged impacts can go ahead.

10.3.20 Comments on cultural heritage

- 10.3.21 Staffordshire Local Authorities feel there should be a clear interdisciplinary approach in the assessment of the impacts of the scheme on cultural heritage, and landscape and visual elements. They feel this is important to ensure that both sets of baseline evidence inform assessments carried out by each discipline. They mention some features that are incorrectly categorised in terms of distance from the route corridor. They emphasise that finding such errors in the EIA reports is made difficult by inconsistencies in naming and the lack of HER primary reference number referencing (PRN). They make a few suggestions for amendments and additional information and context that can be included in the report.
- 10.3.22 A small number of respondents state that Whitmore Village is a conservation area and that the noise and visual appearance of the proposed A53 realignment would be detrimental to the character of the village. A few respondents note that the HS2 track will pass near the cemetery. Some respondents oppose the plan for the track to pass through Madeley Great Park, which is described as a medieval park of the Earl of Stafford.
- 10.3.23 Historic England refer to locations with palaeoenvironmental deposits. They advise that details of geoarchaeological work undertaken should appear in the formal EIA. They also comment, in relation to the Madeley earthworks, on the need for assessment of the impact on historic landscape character.
- 10.3.24 Staffordshire Local Authorities is concerned about potential cumulative impacts of the scheme and the West Coast Mainline (WCML), particularly noise related, on certain heritage features and feel this must be considered in the assessment.

- 10.3.25 The Commonwealth War Graves Commission identify two sites in Madeley that will be indirectly affected by the scheme. They request that they should be included as community representatives for the LEMP.

'The peace and tranquillity and amenity value of the burial areas must remain to ensure that they are places fit to commemorate the casualties of both Wars.'

Commonwealth War Graves Commission

- 10.3.26 Staffordshire Local Authorities feel that noise mitigation measures may impact on the setting of heritage assets, and that implementation should follow consideration of individual assets, their settings and the wider historic landscape character. They feel that landscape planting may reduce impacts on the setting of heritage assets, but that long term management must be considered.

10.3.27 Comments on ecology and biodiversity

- 10.3.28 Many respondents express concern for Whitmore Heath and Wood as natural habitats for wildlife and birds. These respondents frequently mention disturbance that would be caused to the White Hart deer who live there. A few respondents emphasise that bats roost in the wood, as do buzzards and owls.

'Even partial destruction of Whitmore Heath and woodland during construction and as a result of HS2 would be undesirable since the area supports a variety of wildlife including deer and is also farmed.'

Individual submission

- 10.3.29 A few respondents note that the Bar Hill Wildlife Haven Reservoir is important for local wildlife and ask whether HS2 works will affect the water supply that feeds this ecosystem. One respondent describes local marshland as "irreplaceable". They believe that the proposals will impact on wildlife corridors, nesting sites and feeding habitat and note the presence of winter migrants in the area.
- 10.3.30 A small number of respondents specify light pollution as an aspect of the proposals that will have an adverse effect on wildlife.
- 10.3.31 The Forestry Commission note aspects of the consultation document text, and advise that the loss of confirmed ancient woodland cannot be mitigated for. They advise that the term 'compensation' should be used instead. They note that sites for additional woodland, or for enhancing extant woodland, need to be identified, and refer to information available elsewhere on appropriate species choice and seed provenance.

- 10.3.32 The Woodland Trust describe the loss of Whitmore Wood as “completely unacceptable”. They state that no information on proposed compensation has been produced and that they expect compensation at a minimum of 30:1. They note a lack of information on compensation for the loss of ancient woodland at Barhill Wood. The Trust believes that woodland at Hey Sprink is likely to be indirectly affected by the scheme, while Grafton’s Wood will become disconnected from the wider landscape, with railway lines on either side of it, an impact inadequately addressed in the draft EIA report. The Trust also notes that three further woods may be unmapped ancient woodland, and that no woodland planting has been proposed to connect any of them to woodland nearby.

‘The scheme will result in 6ha of loss from this ancient woodland. This is completely unacceptable and more needs to be done to reduce the impact on this irreplaceable habitat.’

The Woodland Trust

- 10.3.33 Natural England agree with the Habitat Regulations Assessment of Betley Mere SSSI. They describe Whitmore Wood as “irreplaceable” and want “robust compensation measures” for the loss of part of it. They comment further on potential ancient woodland in the area, welcoming enhancement of one wood and noting the loss of part of another. Staffordshire Wildlife Trust advise further consideration of local wildlife site assessments at various sites.
- 10.3.34 Staffordshire Local Authorities are concerned that biodiversity alert sites affected by the route appear to have been ignored. They provide ecological status information for two woodland areas mentioned in the report. They comment on the absence of proposed compensation for the loss and severance of ancient woodlands, and make various suggestions in this regard.
- 10.3.35 Some respondents who comment on ecological issues in this CA say that adequate surveys have not been carried out and sufficient information has not been provided. One respondent states that there does not appear to be evidence of consultation with local conservation and wildlife groups. Another states that HS2 Ltd has not produced an ecology report. Some respondents have questions on specific ecological issues, such as how it was decided that the effect on Whitmore Wood was acceptable, or whether surveys about bats have been carried out. There are requests for details of surveys carried out at Bar Hill Wildlife Haven Reservoir and the Whitmore area.
- 10.3.36 One respondent asks for information about landscape and environmental restoration when construction has been completed.

10.3.37 Comments on health

- 10.3.38 Some respondents express concern for the effects of the scheme on the health and well-being of local people. Health impacts are referred to in general terms by respondents, with some specific effects mentioned: anxiety, sleep disturbance, and the effects of loss of walking routes.

'Expect major adverse impact on health and well-being, including mental health, of residents in the community area.'

Individual submission

- 10.3.39 The potential noise from construction, as well as the potential visual impact of the works, are described by some respondents as impacting upon quality of life locally, with a general impact on well-being. One respondent discusses the emotional distress that the scheme is causing, and states that this distress, as well as the disruption of the locality, leads to a greater sense of isolation.

10.3.40 Comments on land quality

- 10.3.41 The Environment Agency states that the land in this CA is largely agricultural, while noting that there are some engineering works and historical landfill sites in the area. They advise that the agricultural nature of the land increases the likelihood of unknown contamination sources and ask to be consulted when information about risks has been gathered, to ensure understanding and mitigation if necessary. The Agency's response makes numerous recommendations about procedures for groundwater and high risk sites, for example stating that local authorities and the Plant and Animal Health Agency should be used as references for possible foot and mouth disease or anthrax burial sites in the area.
- 10.3.42 A few respondents criticise the consultation documentation for not mentioning that Whitmore Heath is an abandoned sand quarry. They relate this to the concerns about the perceived inadequate testing of local ground conditions.
- 10.3.43 Some respondents refer to the failure of HS2 Ltd to analyse the geology and ground conditions at Whitmore Heath. Respondents note that the Local Authority requested that this analysis be carried out; several ask why this has not been done. Some respondents claim that the Heath is not composed of rock, but of sand and gravel. They therefore suggest that the scheme is based on incorrect assumptions and that local people have better knowledge of specific conditions in the locality than HS2 Ltd do. Some respondents state that the boring will be more expensive than expected, given the nature of the terrain.

'It is extremely surprising that no attempt appears to have been made to clarify the local geology as no borehole tests have been carried out. The assertion on your part is that Whitmore Heath and Wood are solid rock whereas it is well known locally that this general area comprises for the most part sand and gravel. This would most certainly have an impact on construction of tunnels and viaducts.'

Individual submission

10.3.44 Comments on landscape and visual

- 10.3.45 Many respondents object to the visual and landscape impact of the plans, often including objections to the increase in the height of the proposed tracks compared to previous proposals. A few say the track would 'scar' the landscape, while many state that the character of the landscape would be changed. In a few cases, respondents describe a local view of the landscape that would be affected by the scheme.
- 10.3.46 Many responses refer to the effect of the proposals on Whitmore Wood. Some respondents ask for further information on the retaining wall proposed for that part of the track.

'The revised decision to take the route overground as opposed to via a tunnel from just before Whitmore Wood will severely impact on the landscape of this scenic area, destroying - unnecessarily - the environment of the surrounding hills and fields.'

Individual submission

- 10.3.47 Many respondents note that the use of the West Coast Main Line tracks, tunnelling or deep cutting would lessen the visual impact of the proposals on the locality. Whitmore Wood is often given as an example of a place that would be preserved through use of these alternative options.
- 10.3.48 Manor Road HS2 Action Group say that noise barriers are "unsightly". They are in favour of banking earth up against any barriers that are used, and planting on the banked earth, to mitigate the visual impact of the barriers. One respondent asks for information about landscape and environmental restoration when construction has been completed, while another notes that in areas where vegetation has been removed, it will take time to replace it.
- 10.3.49 Staffordshire Local Authorities request that enhanced mitigation is sought for the major adverse effects on landscapes that are listed in the report.
- 10.3.50 One respondent quotes from the consultation documentation to demonstrate that some significant effects of the proposals cannot be mitigated against.

10.3.51 Another respondent quotes the assessment made in the consultation documentation of local land quality as 'medium high', adding that they hope HS2 Ltd appreciate how much local people value the area. Another objects to the land of Whitmore Heath being described as 'medium' in value.

10.3.52 Comments on sound, noise and vibration

10.3.53 Many respondents express concern about the potential noise impacts of construction and of trains on the completed line. A large number of respondents object to the proposals to work throughout the night during the construction period, every day of the week. Respondents regularly refer to the length of the expected impact, six years and nine months.

'The construction work and traffic resulting from it will significantly affect this property from noise pollution and vibration 24 hours a day 7 days a week and decrease accessibility either directly or indirectly through significantly increased traffic in the area along already busy roads.'

Individual submission

10.3.54 As there is already transport infrastructure in place in the locality, some respondents refer to the cumulative impact of the HS2 proposals on the area, given the West Coast Main Line and motorway nearby. They describe local roads as having heavy vehicle usage, with the A51 and A53 used for diversions when the M6 is closed. These respondents feel that local people are already affected by existing infrastructure and that the HS2 proposals would lead to further impact upon residents. One respondent for example describes Madeley as having a train line on one side and the motorway on the other.

10.3.55 Respondents who are concerned about noise refer to some specific locations:

- the A53 crossing the route over the Whitmore Heath south portal;
- tunnel portals;
- Meece Brook viaduct;
- Whitmore Heath tunnel satellite compound; and
- Snape Hall Road.

10.3.56 Some respondents believe that the higher proposed level of the track level would have a greater impact than locals had previously expected.

10.3.57 There are several individual comments on the noise assessment:

- the noise modelling did not involve actual measurement of the scheme in operation and therefore does not represent the reality of the effect the scheme will have;
- the sound level maps are so unrealistic as to be purposefully misleading;

- none of the documents indicate existing noise at nearby residences, so the mitigation proposals are meaningless;
- sampling should be carried out to assess vibration; and
- surveys on noise mitigation, as on other aspects of the plans, have been neglected.

10.3.58 Some respondents observe that sound travels widely in a rural environment, so noise will impact upon people over a larger area than HS2 Ltd might consider.

'A lot more work required as HS2 identified noise / pollution problems in documents but no firm assurances given.'

Individual submission

10.3.59 Respondents who favour alternative proposals state that they do so because these alternatives will mitigate the impact of noise. Specific cases where mitigation is necessary are mentioned in some responses:

- Meece Brook Viaduct: noise barriers should be installed;
- Whitmore Heath: insulation from ground-borne noise;
- Whitmore Wood: the proposed wall will bounce the sound around the area; and
- Manor Road and the A53 should not be realigned at the same time as this would cause too much disruption, including traffic noise.

10.3.60 Some respondents said that one way to mitigate the impact on the area would be to remove the proposal of carrying out 24/7 work, for example only working on weekdays and during standard working hours.

10.3.61 One person noted that Whitmore is in a valley so no noise mitigation will be possible. Another suggested that temporary material stockpiles be made permanent to block noise. A few respondents suggested triple-glazing for local residences affected by noise. Some of the suggestions for traffic mitigation relate to the issue of noise, for example only using HGVs that meet certain standards, maintaining a very low speed limit and fixing road surfaces. Staffordshire Local Authorities request various reconsiderations and further discussion on avoidance and mitigation measures, and related assessment.

10.3.62 Comments on traffic and transport

10.3.63 Staffordshire Local Authorities feel that information is lacking from the report, specifically regarding counts and surveys, and the impacts on PRow. They feel that without this information, accurate responses cannot be submitted. They comment on various individual PRow and other map features.

10.3.64 Many respondents express concern about the effect of the proposals upon traffic in the area. Respondents commonly note that local roads are already busy, and often describe roads in terms that suggest they are unsuitable for heavy traffic, for example stating that they are narrow or winding. They state that increased congestion from road closures, roadworks and construction traffic will have a detrimental effect on the area. Respondents often refer to several different effects that the congestion and closures will have upon the local area:

- increased journey times;
- access issues, and the effects these will have upon residents and on local businesses and services;
- road safety for motorists, other road users and pedestrians;
- the impact upon public transport; and
- the effect of delays on emergency services.

'Any proposal to close Manor Road either temporarily or permanently would cause considerable inconvenience to local residents preventing easy access to doctors, shops, schools & other local services.'

Individual submission

10.3.65 A few respondents queried the change in plans, such as the proposed flyover at the A53 instead of the track going under the road as originally proposed. One person says that FP24 in Madeley will have compound CA4/07 on both sides, resulting in traffic crossing the lane. Other aspects of the plans are also said to increase risks for road users, for example one person says that the increased gradient of the A53 to allow realignment is dangerous.

10.3.66 One respondent refers to the effects upon bus provision on the A53; no reliable timetable will be possible due to congestion. It will be dangerous for public transport users to walk to get to the bus stop as there is no footpath. Other respondents describe the dangers of having to walk on busy roads without footpaths if the proposed closures take place.

'The impact of this scheme on traffic flow will be horrendous. It will make it impossible for the bus provision on which I depend to function because it will be impossible to operate a reliable timetable.'

Individual submission

- 10.3.67 A few respondents criticise the consultation documentation for inaccurate references to footpaths, roads and bus routes. A few respondents note a discrepancy between the Non-Technical Summary and the technical drawings on the proposed closure of part of Snape Hall Road. One person points out that the police only have information on serious road incidents, whereas local people have better knowledge of road safety in their area.
- 10.3.68 A few respondents point out that no interchange is possible at Newcastle under Lyme, despite the documentation stating that this would be the case, as there has been no station or rail network there for a long time. Another respondent requests information on estimated vehicle movements on Snape Hall Road, as well as information on works to take place on the road.
- 10.3.69 Network Rail comment that the line crossing at Madeley is as expected and that they do not see significant property problems. They query how railway infrastructure and demolition materials will be removed if access to the old line is not possible.
- 10.3.70 Loggerheads Parish Council request that Staffordshire Local Authorities Highways Department run a study on A53 access before finalisation of plans.
- 10.3.71 Respondents who refer to mitigation measures for traffic favour keeping roads open. Several respondents want local roads to remain open.

‘Could the line not pass under the A53, avoiding the need to raise such an already extremely busy and noisy main route through the area? This would also allow Snape Hall Road not to be severed and it could go under Whitmore Wood.’

Individual submission

- 10.3.72 Some respondents offer specific ideas for mitigation if the plans go ahead:
- do not realign Manor Road and the A53 at the same time;
 - provide significant traffic calming measures in the area, including average speed cameras, lighting and footpaths, and temporary traffic lights as necessary;
 - prevent construction traffic from using Manor Road south of the old rail bridge;
 - improve road surfaces;
 - improve A51/A53 junction to allow use by large vehicles;
 - allow the disused railway line to become a cycle route;
 - provide a pedestrian/cycle overbridge at Snape Hall Lane;
 - provide a footpath to link Madeley and Onneley;

- provide pedestrian crossings in villages;
- only use HGVs that meet certain standards; and
- Provide alternative routes for walkers to ensure access to Whitmore Heath.

10.3.73 Loggerheads Parish Council state that a temporary realignment of the A53 is critical, as diversion is not practical. One respondent states that in any considerate contractor scheme, narrow roads would not be used as HGV routes. Another asks that local people be consulted on construction traffic times. One respondent wants HS2 Ltd to commit to retaining all public roads and rights of way unless all other options have been explored and mitigation has been put in place.

10.3.74 Comments on water resources and flood risk

10.3.75 A small number of respondents express concern that works may affect drainage into Bar Hill Wildlife Haven Reservoir, an area rich in wildlife. Others refer to the flood risk on Meece Brook, while one person states that fields that already flood will be surfaced with material under HS2 plans. A single respondent quotes the consultation documentation to demonstrate that there will be an acknowledged impact on groundwater.

'Flood risk on Meece Brook – flood control projects on Meece Brook in Whitmore Parish and Chorlton Parish are part of Borough of Stafford flood defence scheme (Farming Floodplains for the Future project). Temporary construction impact and permanent impact of HS2A?'

Individual submission

10.3.76 The Environment Agency states that the development offers an opportunity to reduce run off from agricultural land. They note that the submission does not provide hydrogeological plans and ask for details of any investigations of water quality to be provided to them. They also make specific recommendations for amendments to be made for the formal EIA, and refer to other information that should be included.

10.3.77 Comments on tunnels and alternatives

- 10.3.78 Many respondents suggest the same solution to mitigate impacts in CA4: to construct a single tunnel from Whitmore to Madeley. There are also comments about the first option from the Atkins report, to make use of the existing West Coast Main Line track. Other respondents suggest lowering part or all of the route, or extending the tunnels proposed in the current plans. Individual respondents often express support for more than one of these alternative solutions. The majority of respondents who comment on this CA favour one or more of these alternatives. Most of the comments in this chapter are made in the context of an expressed preference for alternative proposals. Both respondents who explicitly support these proposals and those who oppose these proposals refer to the same perceived impacts. These are discussed in the other thematic sections of this chapter above. Overall, respondents oppose the current HS2 plans.

'If [Atkins Report Option 1] is not possible, rather than two tunnels, one at Whitmore and one behind Bar Hill at Madeley, with the attendant costs of constructing the tunneling machine, dismantling and then reassembling again, it would cause far less devastation to construct a continuous tunnel all the way from Whitmore Heath to the far side of the proposed Bar Hill tunnel.'

Madeley Parish Council

- 10.3.79 Respondents state the benefits they perceive in the use of the West Coast Main Line track: this option would represent a saving in construction cost; it would not substantially affect journey times since the train would be slowing down at that point; there would be less impact from construction, such as noise and road closures. Staffordshire Wildlife Trust favour this option, as do others, because Whitmore Wood would remain intact. The option of a single tunnel is described in similar terms. A few people state that this option should be pursued regardless of cost.

10.3.80 Other comments

- 10.3.81 Some respondents express concern about property blight, often referring to the effect of the scheme on properties that are not included in the compensation area. One respondent, for example, says that such properties are blighted, even if not legally; many properties locally are now up for sale, with more to come. Another writes about the effect on their property on Snape Hall Road. They worry that the property will have to be left empty, giving rise to financial loss and the possibility of vandalism. This respondent states that the information available is not sufficient.
- 10.3.82 One respondent says that they will not want to remain in their house if the works go ahead as planned and asks HS2 Ltd to purchase their home.

- 10.3.83 Newcastle under Lyme Borough Council asks when the impact of construction activities on communities and individual properties will be quantified. One respondent quotes from the documentation that the route was “not chosen to avoid residential properties”, and asks why this was the case.

Chapter 11: Responses to Question 3 - CA5

11.1 Introduction

- 11.1.1 The South Cheshire area is approximately eight kilometres in length, extending from Madeley in the south to the Crewe urban fringe in the north. The first half of the area is predominantly rural in character, interspersed with small villages and a scattering of isolated dwellings and farmsteads. The second half of the area becomes more urbanised as the route approaches Crewe.
- 11.1.2 This chapter provides a qualitative summary of the issues respondents raised in response to Question 3 with respect to Volume 2: CA5 – South Cheshire.
- 11.1.3 Question 3 asks:
- ‘Please let us know your comments on Volume 2: Community Area (CA) reports. We welcome any information you may have on how the scheme may impact the local environment and community in your area, and any opportunities you feel there may be to reduce these impacts. Please attach additional pages as required’.
- 11.1.4 Comments are discussed under different thematic sub-headings such as ‘community’ or ‘landscape and visual’. Where a significant number of comments have been raised in relation to one of these themes, these sections may be further subdivided into ‘Impacts’, ‘Mitigation’, or ‘Assessment’.

11.2 Overview of responses

- 11.2.1 Forty-five respondents selected the tick box to indicate their response was referring to CA5 – South Cheshire. However, many other responses were made in relation to this CA without indicating this within the tick boxes provided. This chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to this CA.

11.3 Discussion

- 11.3.1 This chapter covers the following themes:
- agriculture, forestry and soils;
 - air quality;
 - community;
 - cultural heritage;
 - ecology and biodiversity;
 - health;

- land quality;
- landscape and visual;
- socio-economics;
- sound, noise and vibration
- traffic and transport
- water resources and flood risk; and
- other comments.

11.3.2 Comments on agriculture, forestry and soils

11.3.3 Impact

- 11.3.4 Some respondents are concerned about the impact the proposals would have on farm businesses, agricultural land and landowners in CA5.
- 11.3.5 A few respondents provide detailed comments on specific land-related businesses that they believe would be impacted including agricultural activities, horse trainers/breeders, poultry units and other farming enterprises. There is concern that the proposals could affect the viability of some of these businesses.
- 11.3.6 A number of concerns are raised including severance of land, land-take, maintaining access to land, proximity of activities to farm enterprises (e.g. chicken units), impact on agricultural infrastructure and potential loss of farm buildings, impact on farm houses, impact on drainage systems, and the inappropriate location of balancing ponds, ecological mitigation ponds and habitat creation.
- 11.3.7 A few respondents argue that the draft EIA has not taken into account all points that have been made to HS2 Ltd engineers and consultants on previous occasions.

11.3.8 Mitigation

- 11.3.9 A few respondents make suggestions with regard to mitigation measures. These include moving construction activities further away from farming enterprises and moving balancing ponds and ecological mitigation measures to prevent land loss. The Forestry Commission comments that they understand the rationale for minimising loss of agricultural land, but go on to emphasise the importance of developing mitigations elsewhere with the agreement of landowners.
- 11.3.10 A few respondents welcome further discussion with HS2 Ltd so that concerns can be addressed and impacts mitigated, without giving rise to substantial compensation claims.

11.3.11 Air quality

- 11.3.12 A few respondents are concerned about reduced air quality, dust and pollution during construction. They identify potential sources to include construction traffic, increased congestion and construction sites. One respondent queries what materials would be stored at stockpiles.
- 11.3.13 Cheshire East Council raises a number of concerns relating to air quality such as increases in traffic, construction routing, HGV movements, and the impact of the relocation of the A500 on sensitive receptors, and dust and emissions from non-mobile machinery.
- 11.3.14 Taylor Wimpey is concerned that there is a lack of information to determine the air quality impacts upon the Basford West Scheme as residential receptors have not been identified.

11.3.15 Community

11.3.16 Impact

- 11.3.17 Some respondents worry about the impact the proposals would have on local communities and residential properties in CA5, during construction and operation. A number of residential areas are mentioned including Den Lane, Weston Lane, Chorlton, Chorlton Lane, Newcastle Road, Basford and Wychwood Park.
- 11.3.18 Respondents also refer to elements of the Proposed Scheme that local people could be affected by. These include construction compounds, construction routes, and other sites such as material stockpiles. They also refer to permanent elements of HS2, such as viaducts, the tunnel portal, the height of the HS2 line, spurs, shunts, the autotransformer feeder station and the Crewe IMD.

'The Council are supportive of all the proposed design changes outlined in the consultation. The relocation of the Infrastructure Maintenance Depot (IMD) is essential for delivery of the key employment and housing sites at Basford West in Crewe, which are detailed in our emerging Local Plan Strategy and already have planning permission.'

Cheshire East Council

- 11.3.19 Respondents' concerns relating to the impact of HS2 on local communities are wide ranging and include the following: disruption during construction lasting for many years, views from properties being spoilt, congestion and safety on minor roads, and noise and vibration. A few also worry about loss of physical connectivity and social isolation, for example if Chorlton Lane is blocked.

- 11.3.20 A few respondents talk about the effects the proposals would have on the quality of life of local residents, particularly during construction, with some commenting they would be surrounded by construction works. A few describe their current surroundings, such as quiet country lanes and views over fields.

'We live in a quiet country lane, with no noise pollution or even street lights, to therefore have a long and laboured industrial site opposite and surrounding our home will be insufferable and will be akin to living on a permanent industrial site. We therefore strongly disagree with the construction of the phase of HS2 and with the amendments that are being put forward.'

Individual submission

- 11.3.21 A few respondents comment on facilities that would be affected. One respondent is concerned that the proposals would make it difficult for some older people to access Weston Church Hall. Another respondent is concerned about the impact on Mill Lane allotment.

11.3.22 *Assessment*

- 11.3.23 A small number of respondents comment on the community assessment. A few argue that properties in Chorlton, such as Lane End Court, are "consistently overlooked" in the draft EIA. A few feel that not enough attention has been paid to the opinions of local residents. One respondent argues there are more properties that would be severely affected than are identified in the draft EIA, for example at the junction of Den Lane and Mill Lane. Another respondent argues that the assessment fails to assess properly the environmental impacts of the proposals on the Basford West site. Another respondent requests that the assessment takes into account all proposed housing developments in the area and the cumulative effective of construction activity. Another respondent is supportive of the section, commenting that it effectively covers key elements such as social capital and neighbourhood quality.

11.3.24 *Mitigation*

- 11.3.25 A few respondents suggest mitigation measures. For example, one respondent suggests increasing the tunnel length or green corridor to mitigate the impact to the Wychwood Park development. Some respondents also suggest mitigation measures that address specific issues, such as noise, visual impact; these are discussed under the relevant sections.
- 11.3.26 Cheshire East Council emphasises the importance of delivering the highest standards of mitigation and compensation to the communities affected by the construction and operation of the route.

11.3.27 Cultural heritage

- 11.3.28 A few organisations comment on matters relating to sites of archaeological importance and paleoenvironmental deposits.
- 11.3.29 Cheshire East Council makes points relating to archaeology. They comment that the summary information is largely accurate, while disputing a statement relating to the prevalence of nucleated medieval settlements. They explain that recent thinking highlights the dispersed nature of medieval settlements in the region. They go on to comment that further investigations, such as geophysical surveys, are likely to identify archaeological features, which would require excavation.
- 11.3.30 Historic England comments that there are locations in CA5 where paleoenvironmental deposits might be anticipated. They request that these locations are identified, along with all other heritage assets, within the full EIA report. They also comment that the water resources and flood risk assessment needs to make more explicit reference to palaeoenvironmental and archaeological deposits, as changes to water resources can have severe detrimental impacts on these.

11.3.31 Ecology and biodiversity

11.3.32 *Impact and assessment*

- 11.3.33 Some respondents express general concern about the impact the proposals would have on the local environment, including habitats, woodlands and wildlife.
- 11.3.34 A number of organisations provide detailed comments on the ecology and biodiversity section of the draft EIA for CA5. A few explain that this section is based upon a limited amount of survey data and can only be considered preliminary at this stage. One organisation comments that a considerable amount of further field work and analysis will be required.
- 11.3.35 Cheshire Wildlife Trust comment on the environmental baseline, providing details on habitats located in the area (such as watercourses, ponds and grassland) and how they should be assessed. They highlight habitats that should be valued at county level, for example sections of watercourses that support populations of water vole. They also provide feedback on the table of protected and/or notable species.

- 11.3.36 Cheshire East Council also provides feedback on the ecology section of the draft EIA for CA5. The Council, and others, advise on areas where further surveys and assessment are needed. For example, they comment that an invertebrate survey of impacted ponds will be needed, particularly in respect of lesser silver diving beetle, which is a protected species. The Council also suggests sources of data, such as the County Biological records centre 'Record' and the Cheshire and Wirral Ornithological Society. They also recommend that the survey area extends beyond the narrow corridor of the route to ensure that linear habitats/wildlife corridors are fully considered.
- 11.3.37 The Forestry Commission provides detailed feedback on the ecology and biodiversity section, including highlighting where further information is needed to fully assess the impact on woodlands. They make a number of points, for example they emphasise the importance of there being a clear process for exercises such as the translocation of ancient woodland soil, so that the impact of this technique on the establishment and quality of new woodland can be monitored. They also express support for the principle of connectivity and suggest at the very least any loss of woodland should be replaced with an equivalent area or more.

'We agree with the implementing the principal of connectivity. We assume that the area of new woodland creation will be clarified in the formal EIA and suggest that at the very least any loss should be replaced with an equivalent area or more. With the area being closer to Crewe there may be greater opportunity to plant strategically to improve green space provision, as part of green infrastructure, around Crewe.'

Forestry Commission

11.3.38 Mitigation

- 11.3.39 Cheshire Wildlife Trust comments in detail on the section of the draft EIA called 'effects arising during construction', making recommendations on the assessment process and mitigation measures. For example, they comment on landscape planting, new woodlands, ensuring bats are not affected by viaducts, loss of hedges and the importance of hedgerow connectivity in the landscape, the loss of ponds in the Meres and Mosses Natural area and in the designated Nature Improvement Area and the need to replace them on a 2:1 basis. They suggest a number of mitigation measures, for example recommending that S41 listed amphibians and reptiles associated with impacted ponds are translocated to ensure no net loss of biodiversity, and commenting on the importance of appropriately assessing and mitigating severances of watercourses and wildlife corridors, for example by providing underpasses, hop-overs and green bridges.

'There will be severances to local water courses and wildlife corridors which should be appropriately accounted for in the biodiversity metric calculations (i.e. a connectivity multiplier should be used). These important areas of ecological connectivity will require appropriate mitigation which may be in the form of underpasses, hop-overs, green bridges.'

Cheshire Wildlife Trust

- 11.3.40 The Woodlands Trust and Cheshire Wildlife Trust mention two potential ancient woodlands in CA5 that require further investigation. The Forestry Commission also make the general point that loss of woodland cannot be mitigated as the habitat is irreplaceable.
- 11.3.41 The Environment Agency comments on Basford Brook, which they explain has a significant, but very threatened, population of native white-clawed crayfish, a legally protected species. They make detailed suggestions with regard to how to mitigate the impact of HS2 on the water course.
- 11.3.42 The Forestry Commission comment that it may be possible to plant new woodland strategically in the area nearer to Crewe to improve greenspace provision.

11.3.43 Health

11.3.44 Impact

- 11.3.45 A few respondents express concern about the negative impact the proposals could have on the health, wellbeing and quality of life of local residents.
- 11.3.46 A few respondents mention factors that they are concerned could impact on the health and/or the quality of life of local residents including the proximity of the HS2 line, disruption during construction, noise and pollution from traffic, construction vehicles and construction works, and noise from trains. One respondent argues that workers would be monitored more closely than local residents with regard to health and safety considerations.

11.3.47 Assessment

- 11.3.48 Cheshire East Council makes a number of comments relating to health. They comment that the baseline research using national and ward level data has been useful, for example by illustrating the slightly higher than average older population and the fact that Crewe south and Crewe east are two of the 10% most deprived wards nationally. They note that further engagement is needed to identify smaller groups/individuals who have special needs, or who fall outside the overall profiles, and offer to provide further details on this. A different respondent comments that further engagement is needed with the Cheshire East Council's Public Health Team with particular consideration of the Joint Strategic Needs Assessment and Ward Demographic profiles.

11.3.49 Mitigation

- 11.3.50 A few respondents comment on mitigation measures. For example, one respondent comments that appropriate early advice and guidance for vulnerable adults, who may not be confident or able to access this independently, is essential for their mental well-being.

11.3.51 Land quality

- 11.3.52 A few organisations comment on matters relating to land quality in CA5.
- 11.3.53 The Environment Agency makes a general point that land contamination in CA5 may vary widely from one land parcel to another and request that they are consulted when more is known about the risks associated with sites. They also provide detailed comments on individual sections of the land quality assessment for CA5; for example, they make suggestions with regard to remediation of high risk sites.
- 11.3.54 Cheshire East Council highlights the importance of material management (storage, reuse and disposal) and recommend that land contamination is taken into consideration when realigning watercourses.
- 11.3.55 Both Cheshire East Council and the Environment Agency comment that it would have been useful if potential and known contaminated land had been presented on a plan and request that this is included in the formal EIA submission.

11.3.56 Landscape and visual impact

11.3.57 Impact

- 11.3.58 Some respondents are concerned about the visual impact of the proposals on CA5, including views from properties.
- 11.3.59 Cheshire East Council believes that the proposals would have a very significant impact on the landscape, especially north of Den Lane where the route runs through the relatively flat Cheshire Plain Landscape.
- 11.3.60 Some respondents refer to specific features they believe would have a visual impact, including overhead equipment on the HS2 line, viaducts, embankments, road alterations, the proposed IMD and construction related activities, such as storage of excavated materials.

'I am concerned also about the visual impact of the embankments and viaducts between Blakenhall and Chorlton. There will effectively be a structure between 10m and 15m high between these two points, with the overhead line equipment on top of this.'

Individual submission

- 11.3.61 Some respondents are concerned about the severity of the visual impact on the landscape and local settlements because of the elevated position of the tracks as a result of embankments, viaducts and the need to pass connecting routes over the HS2/WCML tracks meaning that the route is “double stacked.”

‘This structure [embankment and viaduct] and the overhead equipment, rising to some 23.5m above ground level, will be clearly visible from many properties in Chorlton and Wychwood Park and, as the land on the approach to Crewe is so flat, from much further afield.’

Westford and Basford Parish Council

11.3.62 **Assessment**

- 11.3.63 A few respondents comment on the landscape and visual impact assessment. One respondent believes that the impact on landscape character and visual impact has been underestimated, but goes on to comment that the lack of detail in the assessment (e.g. lack of plans showing the ZTV) makes it difficult to fully evaluate the draft landscape and visual impact assessment. Another respondent argues that more effort appears to have been spent assessing how views from footpaths are affected rather than how the views from residential properties would be affected.

11.3.64 **Mitigation**

- 11.3.65 Some respondents comment on the importance of landscape and visual mitigation measures in CA5. Cheshire East Council, and others, argue that landscape mitigation is currently insufficient to appropriately mitigate the scheme. The Council request more appropriate bunding, false cuttings and embankments. Some respondents feel there needs to be more landscaping and planting, or request further information. The Council recommend tree/woodland and hedgerow planting for up to 500m either side of the track, which could be delivered through a grant scheme for farmers, landowners and parish councils administered in partnership with the Council.
- 11.3.66 Cheshire East Council believes that if the IMD and its associated tracks are moved to Stone, which would mean that the A500 viaduct does not have to be moved southwards, it would greatly reduce the impact of the scheme on the Cheshire East landscape and its residents. They argue this would also free up space for improvements to the currently proposed mitigation measures.

11.3.67 **Socio-economics**

- 11.3.68 A few respondents are concerned that the proposals could impact on local businesses.
- 11.3.69 A few respondents think the proposals would generate jobs and income for local people.

- 11.3.70 Cheshire East Council, and others, comment on the importance of the Basford West development in terms of employment generation, which they argue would be lost if the IMD is located in Crewe.
- 11.3.71 Taylor Wimpey notes that the location of the IMD at the Crewe site has been considered in the draft EIA. They argue that construction of the depot in such close proximity to the residential development at Basford West would be inappropriate and are concerned that not all relevant impacts have been considered in the draft EIA. For example, they are concerned that the socio-economic impacts of the loss of employment land at Basford West in the event the IMD is located in this area have not been considered in the draft EIA. They also comment that there does not appear to be any consideration of the impact of this loss in terms of dwelling requirements identified in the emerging Cheshire East Local Plan and the contribution of the site to achieving a five year housing supply as required by the National Planning Policy Framework.
- 11.3.72 Cheshire East Council, Taylor Wimpey and others also express their support for the relocation of the IMD near to Stone, as outlined in HS2 Ltd's proposed design refinement consultation. They argue this would help to protect employment and housing sites, which are outlined in the Council's Local Plan Strategy. Taylor Wimpey requests that the Safeguarding Area through Basford West is amended.

'The Council are supportive of all the proposed design changes outlined in the consultation. The relocation of the Infrastructure Maintenance Depot (IMD) is essential for delivery of the key employment and housing sites at Basford West in Crewe, which are detailed in our emerging Local Plan Strategy and already have planning permission.'

Cheshire East Council

- 11.3.73 A few respondents discuss the importance of the Crewe Hub, which they argue will encourage development in the area.

'As you are aware Cheshire East Council has always taken a supportive stance on HS2 and recognises the benefits that it will bring to Crewe and the sub-region. This has always been subject to the inclusion of the right solution for a new HS2 Hub Station at Crewe, as well as delivering the highest standards of mitigation and compensation to the communities affected by the construction and operation of the route through Cheshire East.'

Cheshire East Council

11.3.74 Sound, noise and vibration

11.3.75 Impact

11.3.76 Some respondents are concerned about noise pollution, both during operation and construction. A few worry about noise from construction traffic, road congestion, construction works and the relocation of roads. Another concern is noise from trains using the HS2 line and spur lines. A small number are particularly worried about noise from HS2 trains entering/exiting the tunnel portal, there is also concern about noise where the HS2 line is elevated for example on a viaduct.

11.3.77 A few respondents are concerned about the effect of noise on animals, such as horses and poultry units.

11.3.78 A few respondents are concerned about vibration, for example the effect of construction traffic on properties.

11.3.79 Assessment

11.3.80 A few respondents comment on the sound, noise and vibration assessment. For example, one respondent comments that it is difficult to assess the impact of the sound disturbance of HS2 because there is no information on the current noise levels from the WCML. Another respondent comments that it is not clear whether the Basford West scheme has been properly assessed in the sound, noise and vibration section of the draft EIA. A few respondents comment on the noise contour maps. For example, one argues that the noise maps do not appear to adequately reflect the distance over which the sound would travel.

11.3.81 Mitigation

11.3.82 A few respondents comment on the importance of noise mitigation measures. Some feel that the proposed measures are inadequate or not enough information has been provided. Another respondent comments that robust traffic planning is needed to mitigate noise impact on rural lanes. Another request is that low population densities immediately adjacent to the scheme should not determine lower specification acoustic mitigation treatments. Cheshire East Council emphasise the importance of maximum noise mitigation, given the number of structures proposed to be built in CA5.

'Given the amount of structures, including viaducts, within Cheshire East consideration should be given to the treatment and lining to ensure that the maximum mitigation against noise is achieved.'

Cheshire East Council

11.3.83 Traffic and transport

11.3.84 Impact

- 11.3.85 Some respondents express concerns around the impact of construction traffic on the local road network. There is concern about the suitability of minor roads being used as construction routes, such as Chorlton Lane, Checkley Lane, Den Lane and Weston Lane. One respondent argues that using these roads would be prohibited under the 'considerate constructors' scheme'.

'We are concerned that narrow country lanes such as Den Lane and Checkley lane may become haul routes for HGV's in many places. These lanes are too narrow for two cars to pass.'

Individual submission

- 11.3.86 Cheshire East Council comments that many rural roads have not been designed for HGV or regular vehicle movement and may be too narrow for two-way vehicle movement. However, they go on to say that junction visibility splays may be sufficient and should be addressed within the formal EIA.
- 11.3.87 A few respondents raise concerns about the inconvenience and disruptive effective of construction traffic on roads next to communities, including congestion as a result of worker car journeys to construction sites. A few worry about the noise, vibration and increased CO2 emissions from construction traffic.
- 11.3.88 Cheshire East Council asks for information on HGV types, numbers and routing to be included in the formal EIA; they also comment that the impact of construction traffic on communities should be addressed within the formal EIA.
- 11.3.89 A few respondents are concerned about road closures, increased volumes of traffic, increased journey times, road safety, and the impact this would have on the quality of life of local people.
- 11.3.90 Some respondents are concerned about the potential closure of the newly built Jack Mills Way. Cheshire East Council see this as the greatest highways impact of the proposals, and request that strategic traffic modelling is used to assess its closure and any proposed mitigation measures.

'The greatest highways impact of the proposal will be the stopping-up of Jack Mills Way. Its construction was justified through a strategic traffic model and the closure and any proposed mitigations should also be modelled in this way.'

Cheshire East Council

- 11.3.91 A small number of respondents comment on potential impacts on the existing railway infrastructure. Network Rail notes that there are references to construction logistics via national rail network and that temporary use of Network Rail land has not been identified. Another respondent comments that locating the IMD at Crewe has the potential to disrupt Network Rail operations at Crewe during construction.
- 11.3.92 A few respondents are concerned about the potential impact of the construction phase on road safety as a result of construction traffic and increased volumes of traffic on some roads. A few are particularly concerned about children, for example those living close to construction compounds. Another respondent is concerned about horse riders and cyclists.
- 11.3.93 Some respondents are worried about disruption to PRoW, footpaths and bridleways. They emphasise the importance of keeping them open, so that local residents, walkers and horse riders can continue to enjoy them; this would also prevent communities from becoming isolated.
- 11.3.94 A few are concerned that PRoW crossing points would be lost, or there would be too few over the HS2 line. The Peak and Northern Footpaths Society, which provides detailed comments on PRoW in the area, argues that there should be more crossings provided, bringing HS2 in line with the existing WCML. Other concerns include PRoW being closed, diverted onto roads, routes becoming longer, and safety, for example as a result of walkers having to share footpaths with farm vehicles.

11.3.95 *Assessment*

- 11.3.96 Cheshire East Council provides comments on the traffic and transport assessment. They explain that the majority of roads affected are rural in nature with relatively low vehicle numbers. The Council believe, for the most part, that highway impacts can be sufficiently managed using measures described within Volume 2 of the draft EIA. They also outline further information that will be required in the formal EIA, such as the number of additional vehicles using the roads. They also comment that they will require details on the Newcastle Road and Shavington Bypass realignments, which they assume will be designed to Design Manual for Roads and Bridges (DMRB)² and other design criteria gathered during HS1.

² Highways Agency (2007) The Design Manual for Roads and Bridges

11.3.97 Mitigations

- 11.3.98 Some respondents propose mitigation measures relating to impacts of construction on the local road network. Suggestions include robust traffic planning, construction traffic being accommodated on temporary haul roads next to the section of land under construction, and using new Chorlton Lane Diversion (to the West) as the primary route for construction traffic rather than Chorlton Lane. A few respondents argue that access to work sites should primarily be from the A-road network, rather than unclassified roads, whilst also mentioning specific locations that should be avoided.
- 11.3.99 A few respondents mention a number of road alterations that would no longer be required if the IMD is sited in Stone rather than Crewe. For example, Jack Mills Lane would not be closed, the A500 would not require realigning, Weston Lane would be retained without need for realignment, Casey Lane would be retained, and the impact on Newcastle Road would be reduced.
- 11.3.100 Cheshire East Council, and other respondents, make detailed recommendations on how to enhance HS2 Ltd's proposals with regard to specific PRow, bridleways and footway/cycleway facilities on roads.

11.3.101 Water resources and flood risk

- 11.3.102 A few respondents, primarily organisations, comment on water resources and flood risk section in the CA5 report.
- 11.3.103 The Environment Agency provides detailed comments on water resources and flood risk with regard to CA5. They acknowledge that the EIA is intended to provide an overview, and go on to provide details on information that will need to be included in the formal EIA, for example they request a comprehensive schedule of all water features. They also highlight other information that is not included in the working draft EIA, such as hydrogeological plans or details of how cuttings and tunnels would be drained. In addition, they provided detailed comments on specific sections of the working draft EIA.
- 11.3.104 The Environment Agency makes a general comment that watercourses in the area have not achieved 'good' Water Framework Directive (WFD) status due to diffuse agricultural pollution from livestock farming. They go on to comment that as part of the land management changes associated proposals, changes could be introduced that may result in a decrease in run-off from agricultural land.

'The current reason for not achieving 'Good' WFD status in the River Lea and Checkley Brook is diffuse agricultural pollution from livestock farming. As part of the land management changes associated with realignment and viaduct construction, we believe changes could be introduced that may result in an overall decrease in run off from agricultural land. We believe this opportunity should be investigated as part of the formal EIA scope.'

Environment Agency

- 11.3.105 Cheshire East Council makes a number of points relating to flood risk. They are particularly concerned about watercourse crossings, and other small land drainage crossings. They comment that when the proposals affect a watercourse's natural quantity, quality and direction, the Council would need to give approval to ensure that any diversion would be suitable. They also comment on runoff from brownfield sites, for example they comment that if the IMD is located at Crewe they would require that run-off is managed and attenuated at green field runoff rates to ensure that flooding does not occur. They also comment that mitigation must be provided for the loss of four balancing ponds at the Basford West development. They also describe the process for working with relevant bodies in the area, including the Cheshire East Council Flood Risk Management Team and the Environment Agency.

'Cheshire East Council Flood Risk Management team will continue to work with the established HS2 water management group and other regulatory partners to ensure our Lead Local Flood Authority (LLFA) detailed interests are adequately addressed. Any works affecting statutory main river may be subject to additional permits from Environment Agency and similarly for all other watercourses, culverts and groundwater matters, additional consents may be required from the Council as LLFA.'

Cheshire East Council

- 11.3.106 Taylor Wimpey also comment on water resource and flood risk considerations in the event the IMD is located at Crewe.

11.3.107 Other comments

- 11.3.108 Some respondents express views on the design refinements relevant to CA5. Some express their support for the proposed design refinements, such as the proposal to move the tunnel portal further south of Crewe. However, a few respondents who are directly impacted express concerns. Some state their opposition to the IMD being located in Crewe and welcome the proposal to locate it Stone. However, a small number argue that it would be preferable to locate the IMD in Crewe rather than Stone. A small number comment that it may be possible to move the transformer feeder station further south as a result of the proposed design refinements. Issues raised with regard to design refinements are elaborated on under the relevant themes.
- 11.3.109 Some respondents worry about the effect of HS2 Ltd's proposals on property prices and property blight. A few respondents query what compensation is available; others comment on the importance of compensation for properties that are severely impacted, such as dwellings on Newcastle Road.

Chapter 12: Responses to Question 4 - Route-wide effects

12.1 Introduction

- 12.1.1 This chapter provides a qualitative summary of the issues raised in response to question 4 in the response form, which asks about the Route-wide effects report.

Question 4 asks:

‘Please let us know your comments on Volume 3: Route-wide Effects. We welcome any information you may have on how the scheme may impact the environment at a route-wide level (i.e. on a geographical scale greater than the Community Areas), and any opportunities you feel there may be to reduce these impacts.’

12.2 Overview of responses

- 12.2.1 Question 4 received 158 direct responses, however this chapter also covers issues raised by respondents that did not follow the structure of the consultation questions, but were deemed relevant to the question.
- 12.2.2 For a detailed, quantitative breakdown of the number of respondents raising each issue, the reader can refer to Appendix C.

12.3 Discussion

- 12.3.1 This chapter covers the following themes:
- overall comments on Volume 3;
 - comments on route-wide effects:
 - agriculture, forestry and soils;
 - air quality;
 - climate change;
 - community;
 - cultural heritage;
 - ecology and biodiversity;
 - health;
 - land quality;
 - major accidents and natural disasters;

- socio-economics;
- sound, noise and vibration;
- traffic and transport;
- waste and material resources;
- water resources and flood risk; and
- Phase 1 and 2a combined impacts.

12.3.2 General comments on Volume 3

- 12.3.3 Chebsey Parish Council, Swynnerton Parish Council and Whitmore and Baldwins Gate HS2 Action Group comment that the potential impacts they highlight within their own geographical areas are likely to apply to the rest of the route.
- 12.3.4 Jeremy Lefroy MP expresses the concern that the assessment is focused on what HS2 Ltd determines as significant as opposed to what local residents determine as significant. He requests a clear commitment from HS2 Ltd to assessing and mitigating less significant impacts in addition to more significant impacts. Another respondent makes a general request for more environmental impact assessment without going into further detail.
- 12.3.5 A few respondents, including Swynnerton Parish Council, make general criticisms of the mitigation measures without going into further detail.

'The mitigation measures are insignificant compared to the continually escalating envisaged devastation.'

Individual submission

12.3.6 Comments on agriculture, forestry and soils

- 12.3.7 Natural England request clarification on how the Agricultural Land Classification (ALC) data has been adapted from the CA assessments to the route-wide assessment. This organisation and another respondent request details on the split of permanent and temporary land take in hectares.

'The final EIA report should express magnitude in terms of hectares of land required permanently and temporarily as was done for Phase 1.'

Natural England

- 12.3.8 Similarly, CLA request that agricultural land take is minimised and used for the minimum amount of time.

12.3.9 Ingestre and Tixall Against HS2 Action Group comment that they expect the formal EIA to indicate control of which soils go where. They comment that the document currently only deals with stripping, storage and reinstatement of soils.

12.3.10 The National Farmers' Union request that HS2 Ltd pay compensation to farmers who are displaced or lose income as a result of the Proposed Scheme.

12.3.11 Comments on air quality

12.3.12 Ingestre and Tixall Against HS2 Action Group comment that while air quality impacts from fixed plant and vehicles within construction sites may be small at a route-wide level, they would be significant at a local level. This organisation believes that this has not been addressed in the CA2 Volume 2 Report, as it only covers dust and altered traffic flows. One other respondent expresses general concerns about air pollution from construction across the route without going into further detail.

12.3.13 Comments on climate change

12.3.14 A few respondents believe that the project will lead to an increase in carbon emissions, directly and indirectly, through construction and operation. One respondent thinks that the increased speed of the trains requires more energy for propulsion, therefore, there is no carbon benefit, while another says there would need to be a minimum amount of passengers on board.

'A train travelling at 400kph requires 300% more energy to propel it than a train travelling at 200Kph - where is the carbon benefit?'

Individual submission

12.3.15 The Forestry Commission comments that it is important to recognise the landscape context, to ensure resilience to climate change. Their advice is that it is important to consider suitable species for compensatory planting for the site, and to consider the provenance of seed chosen, in line with HS2's Plant Procurement Strategy. The Environment Agency notes the assessment says the climate change allowance will be based on the latest guidance issued by the Environment Agency, but does not link to the HS2 climate change document, which they have provided advice on and which varies from the 'standard' interpretation in some places.

12.3.16 Ingestre with Tixall Parish Council and Ingestre and Tixall Against HS2 Action Group request that HS2 Ltd set their commitment to carbon neutrality to match the Government's 2050 carbon neutral target. These organisations also comment that HS2 Ltd's assessment of frost days is lower than their own observations.

'HS2 is predicted, at best, to be carbon neutral after 60 years of operation (2087 for Phase 2a). This has to be set against the Government's own commitment to de-carbonise the UK economy by 80% by 2050.'

Ingestre with Tixall Parish Council

- 12.3.17 The Environment Agency note the assessment says the climate change allowance will be based on the latest guidance issued by the Environment Agency, but does not link to the HS2 climate change document, which they have provided advice on and which varies from the 'standard' interpretation in some places.
- 12.3.18 Staffordshire Local Authorities and the National Trust request that consideration be made for changes in animal migration as a result of climate change.
- 12.3.19 Public Health England is encouraged by HS2 Ltd's sustainability policy to minimise their carbon footprint and shift from road and aviation transport.
- 12.3.20 One respondent expresses concern that the assessment of flooding events in this chapter only mentions those after 2010 and not since 2000.
- 12.3.21 Comments on community**
- 12.3.22 Several respondents express general concern around the impact on communities as a result of construction disruption, without going into further detail.

'The scheme will cause damage to local communities and destroy residents quality of life.'

Individual submission

- 12.3.23 A couple of respondents express general concern about the impact of the Proposed Scheme on property blight across the route. Similarly, a couple of respondents express general concern about the demolition of houses across the route. Madeley Parish Council and Madeley HS2 Action Group believe that the HS2 property department are denying elderly residents the right to move away from their properties.
- 12.3.24 The Church Buildings Council expresses concerns that several churches along the route will be made unusable or forced to close for regular use and provide a list of affected churches. They argue that the Government and developers need to mitigate this potential impact with careful planning and engineering.

'The Council urges government and developers to mitigate any disturbance or damage by careful planning and engineering, and where this is unavoidable to take the loss of these churches to their community into account in their deliberations, and to make appropriate provision.'

Church Buildings Council

- 12.3.25 Staffordshire Local Authorities suggest that there needs to be a restriction on future growth of urban settlements along the route of the Proposed Scheme. They also express concern about potential pressure on local services during the construction period and request that HS2 Ltd provide resource to mitigate this.

12.3.26 Comments on cultural heritage

- 12.3.27 The Canal and River Trust, the Inland Waterways Association and Staffordshire Local Authorities all suggest that the list of conservation areas significantly affected should include the Trent and Mersey Canal Conservation Area. Staffordshire Local Authorities also suggest that this heritage asset should be assessed as highly significant due to its links with historic figures. These bodies go on further to criticise HS2 Ltd's assessment of nationally important heritage assets as 'moderate significance' as an understatement.

'Cultural Heritage refers to two conservation areas significantly affected but should also include the Trent & Mersey Canal Conservation Area.'

The Inland Waterways Association

- 12.3.28 Lichfield District Council and Staffordshire Local Authorities express concerns that undesignated heritage assets are not included in the environmental baseline and request that these are considered. These two organisations also request that the assessment is broadened out from direct impacts to indirect impacts on the settings of assets, such as from construction routes.
- 12.3.29 Jeremy Lefroy MP and the National Trust comment that it is unclear whether any route-wide assessment of heritage assets has been done, as only individual assets are listed, not historic landscapes.

'It is unclear from the text in section 6, whether the reporting of any cultural heritage impacts at a route-wide level is proposed. Although this section discusses individual heritage assets, it does not mention the assessment of impacts on historic landscape which is to be developed for the formal EIA.'

National Trust

- 12.3.30 A couple of respondents, including Ingestre and Tixall Against HS2 Action Group, express general concern about the extent of impacts on cultural heritage assets across the route, without going into further detail.
- 12.3.31 Staffordshire Local Authorities make further specific points about the assessment of cultural heritage impacts. They comment that a lack of reference numbers for undesignated assets made locating them on digital maps difficult. This council also state that it is unclear whether historic environment considerations have informed the selection of viewpoints and photomontage locations. In addition, they request periodic reviews by HS2 Ltd of the Staffordshire HER to keep HS2 Ltd informed about heritage assets, as well as considering the impact on archaeological remains which have not yet been uncovered.

12.3.32 Comments on ecology and biodiversity

- 12.3.33 Natural England, the Woodland Trust, the Forestry Commission, the Staffordshire Wildlife Trust, Chebsey Parish Council and Swynnerton Parish Council all express concerns about potential impacts on ancient woodlands. They also comment that these ecological assets are irreplaceable and that mitigation cannot recreate them. Suggested alternative solutions include avoiding loss where possible, making sure compensation planting is connected instead of in isolated pockets, including compensation planting within the hybrid Bill limits, and developing an Ancient Woodland Strategy as was done for Phase 1.

'Ancient woodland is irreplaceable, and its loss cannot be compensated for directly. HS2 should seek to avoid this loss wherever possible. Where compensation planting is provided, it should ensure that connectivity between woodlands is maintained and improved, create connections between existing ancient woodland species and provide buffering for existing ancient woodland.'

Forestry Commission England

- 12.3.34 Natural England suggests using the term 'woodlands lost to the line' in place of 'displaced woodland' to reflect their irreplaceable nature.
- 12.3.35 Natural England welcome the inclusion of historical mapping to show the presence of ancient woodland, but overall believe that ancient woodland is not adequately assessed. They are unclear how the 96 woodlands they identified within 500m of the line have been reduced to 10 and request a methodology for how this was done. This organisation does agree that no sites of international importance for nature conservation will be directly impacted by the construction or operation of the Proposed Scheme. They request using SSSI Impact Risk Zones to screen for indirect impacts on protected sites beyond 500m of the line.

- 12.3.36 A few organisations comment on designated areas in relation to the Proposed Scheme. The Environment Agency agree that the Pasturefield SAC will not be affected, but want more detailed designs in the future to reassess this. Staffordshire Wildlife Trust express the concern that some Local Wildlife Sites (LWS) are missing from the environmental baseline, while many other LWS have not been surveyed in the last 10 years and so may be out of date. This organisation also requests consideration of LWS sites that have been considered for SSSI designation.
- 12.3.37 Jeremy Lefroy MP and the National Trust comment that the ecological assessment is limited as it does not consider impacts on wider ecological networks or habitat fragmentation. They do not believe that HS2 Ltd can achieve their ambition of no net loss to biodiversity. In contrast, Staffordshire Local Authorities are supportive of HS2 Ltd's commitment but argue that more work with national and local planning bodies is needed to achieve this.
- 12.3.38 A couple of respondents express general concerns about the impact on wildlife due to operational noise levels, without going into further detail.
- 12.3.39 The Staffordshire Wildlife Trust makes several suggestions regarding wildlife, including translocation of hedgerow habitats, increased consideration of protected mammals and the inclusion of deer. Similarly, Natural England suggest that the EIA should include mitigation for habitats and species of principal importance impacted by the scheme.

'The formal EIA report should also include the mitigation proposals for Habitats and Species of Principal Importance that will be impacted by the line.'

Natural England

- 12.3.40 The National Trust welcomes the assessment of route-wide effects as it includes the long-range movement of species including migration. On the other hand, Staffordshire Local Authorities request more consideration of migration for species such as bats and barn owls.
- 12.3.41 Staffordshire Local Authorities are critical of the following specific issues within the assessment:
- it is not based on up-to-date survey evidence;
 - it does not refer to all ecological records held by the local records centre;
 - some LWS near the route are not mapped;
 - significant protected species records are not acknowledged, such as the pipistrelle bat; and

12.3.42 Staffordshire Local Authorities also believe that a perceived lack of ecological data means that the working draft EIA does not meet Directive and EIA requirements. As a result of this, they request a draft EIA informed by survey data and impact assessment.

12.3.43 Staffordshire Local Authorities suggest the following mitigation measures:

- route crossings to encourage the connection of habitats;
- more structured locating of ponds and replacement of ponds on a two for one basis; and
- use of the Biodiversity Opportunity Mapping for the county to inform mitigation and compensation for ecological impacts.

12.3.44 Comments on health

12.3.45 A few respondents express general concerns about stress as a result of construction disruption without going into further detail. Highways England more specifically expresses their concern about the psychological impact that delays caused by road diversions may have on motorists. They go on to offer their report on this subject once it is published.

12.3.46 Ingestre and Tixall Against HS2 Action Group suggest that loss in property value should be used to assess health impacts alongside the Office of National Statistics data and other sources.

'We believe that the points we make in the body of this response concerning the very real issue of impacts on health caused by generalised property blight is clearly and rote wide issue. We repeat that that mapping of loss in property value due to HS2 should be used as a proxy "health determinant" to be considered alongside data from the Office of National Statistics and the Association of Public Health Observatories.'

Ingestre and Tixall Against HS2 Action Group

12.3.47 The Inland Waterways Association query how HS2 Ltd will establish a health profile for waterway residents by CA when they can frequently move location. They suggest that 'transient receptors' need to be factored into the assessment of health impacts and that this may be more effectively done on a route-wide basis instead.

12.3.48 The National Farmers' Union request ongoing safety mitigation within the safeguarded zone without going into further detail.

12.3.49 Comments on land quality

12.3.50 One respondent requests clarity on whether the auto-transformer stations will be flood-proof to mitigate against potential coolant leakage.

12.3.51 Comments on landscape and visual

- 12.3.52 Some respondents express general concerns about the Proposed Scheme's potential impact on the landscape, environment or countryside without going into further detail.
- 12.3.53 The Inland Waterways Association and Staffordshire Local Authorities comment that while the document states that the vertical alignment has been designed to reduced visual impacts as much as possible, they believe that the viaducts and embankments across the Trent Valley contradict this intention.
- 12.3.54 Ingestre and Tixall Against HS2 Action Group and the Inland Waterways Association comment on the assessment of landscape impacts on transient receptors. The former organisation believes that as the visual impact assessment is from a ground-based perspective, it does not consider impacts on air-based recreational activities such as hot air ballooning and hang-gliding. The latter organisation comments that canal users will face visual impacts across the route due to a perceived high level of canal crossings by the Proposed Scheme.
- 12.3.55 Lichfield District Council and Jeremy Lefroy MP disagree with the assessment that there would be no significant route-wide landscape or visual impacts. While the former organisation believes that this is contradicted by impacts listed in the CA reports, the MP believes that the system of aggregating the CA reports is ineffective and should be done route-wide from the outset. Lichfield District Council also comment that it is misleading to define landscape impact as when the route is crossing an AONB, as they believe many other undesignated landscapes will be impacted. Natural England agrees with the assessment that Cannock Chase AONB is one of the most sensitive landscape receptors along the route.
- 12.3.56 A couple of respondents request planting mitigation along the entire route to reduce the visual impact.
- 12.3.57 Staffordshire Local Authorities comment that operational lighting in rural areas needs to be considered. The council also comments that overall there are not enough landscape and visual mitigation measures. They make several more specific points about mitigation:
- restoration plans for farmland and heath lands appear incomplete;
 - planting would be ineffective screening except for alongside deep cuttings;
 - mitigation planting should not be done early in the construction process as it could impede construction or be damaged by construction;
 - the source of planting needs to be checked to ensure plants do not carry pests or disease;

- viaducts should be reduced to as low a height as possible while still allowing clearance for maintenance vehicles;
- balancing and mitigation ponds should blend into the landscape; and
- HS2 Ltd should not assume that returning construction land to its previous state is the best solution.

12.3.58 Comments on major accidents and natural disasters

- 12.3.59 A few respondents, including Ingestre with Tixall Parish Council, Ingestre Against Hs2 Action Group and Madeley HS2 Action Group, comment on the potential loss of life from sabotage or human error while operating the Proposed Scheme. In a few cases, these respondents go on to suggest thorough security checks or psychological screening to mitigate against potential sabotage.

'We believe that the assessment (and the revised EIA EMR on which it is based) remains seriously deficient in terms of the recognition and treatment of accidents arising from human error, vandalism, sabotage, or terrorism etc; which, collectively, we would suggest, constitute the greatest risk of leading to a major accident.'

Ingestre with Tixall Parish Council

- 12.3.60 A few other respondents, including Madeley Parish Council and Madeley HS2 Action Group, express concerns around potential earth tremors on the Wem Fault running across Bar Hill. They comment that a gas line was previously diverted to avoid this feature.
- 12.3.61 Highways England and the Inland Waterways Association comment on the terminology used within this chapter. This includes replacing 'trigger the use of resources' with 'require resources' and replacing 'Road Traffic Accident' with 'Road Traffic Collision'. The Inland Waterways Association also believes that 'environmental receptor' is an unusual term for people who live on boats.
- 12.3.62 Highways England and the Inland Waterways Association also criticise the assessment of impacts in this chapter. The former organisation disagrees with the assessment of all impacts as 'low' and 'very low' and goes on to suggest a complete risk assessment in the final EIA. The latter organisation believes that the assessment is complacent given the potential seriousness.
- 12.3.63 The Canal and River Trust suggest that breaches of inland waterways and reservoirs are included with the major accidents and natural disasters chapter of the report as these could flood the rail line.
- 12.3.64 One respondent expresses the concern that a person, animal or herd of animals could become stuck on the track and cause a major accident.

12.3.65 Comments on socio-economics

- 12.3.66 A few respondents express general concerns about impacts on local businesses across the route without going into further detail.
- 12.3.67 Swynnerton Parish Council and Chebsey Parish Council comment that while seven years of construction employment is put forward as a benefit, they believe that these jobs will be too specialist to be given to most local workers. Similarly, one respondent comments that only a small number of London-based and foreign businesses will receive the benefit of construction employment while locals will be negatively impacted.
- 12.3.68 Staffordshire Local Authorities state that it is important that economic opportunities benefit everyone. Specifically, they request a restriction on future growth in areas that the Proposed Scheme will pass through.
- 12.3.69 While Staffordshire Local Authorities recognise potential benefits from construction for local employment, they express the concern that this may lead to a scenario in which high demand on local services is followed by business closures and unemployment. They request that this scenario is mitigated against.
- 12.3.70 Taylor Wimpey Ltd expresses the concern that loss of employment land in Basford West is not covered in the CA5 report or the Route-wide effects document. They request that this perceived impact is included in the formal EIA.

'Community Area Report CA5 states that localised effects on businesses and observations on potential local economic effects are reported in that report and notes that effects on levels of employment are reported at a route-wide level in Volume 3: Route-wide Effects. However, this issue does not appear to be considered in either document.'

Taylor Wimpey UK Limited

12.3.71 Comments on sound, noise and vibration

- 12.3.72 A few respondents express general concerns about sound, noise and vibration from the operation of the Proposed Scheme without going into further detail.
- 12.3.73 Ingestre and Tixall Against HS2 Action Group agree that sound, noise and vibration is a local issue and that any route-wide effects should be assessed in health.
- 12.3.74 The Inland Waterways Association and Staffordshire Local Authorities comment that while the document states that the vertical alignment has been designed to reduce noise intrusion as much as possible, they believe that the viaducts and embankments across the Trent Valley contradict this intention.

12.3.75 Staffordshire Local Authorities comment on the need for baseline noise data, especially in rural areas, as well as defining noise insulation requirements from Calculations of Road Traffic Noise (CRTN). More specifically, they request that noise impacts from auto-transformers and construction compounds need to be included in the assessments.

12.3.76 The Inland Waterways Association comment that for canal users sound, noise and vibration are route-wide impacts. They express the concern that the same measures for 'indoors' and 'outdoors' are being used for permanent buildings and boats, which have comparatively thinner walls.

12.3.77 Comments on traffic and transport

12.3.78 A few respondents express general concerns about potential impacts on the existing road network without going into further detail. Highways England request details about anticipated total and peak flows at intersections resulting from construction traffic. Similarly, Staffordshire Local Authorities suggest that early discussion with Highways England is necessary to identify whether any routes are not suitable for construction traffic or other potential construction traffic issues. Ingestre and Tixall Against HS2 Action Group flags potential negative impacts during construction on the wider regional network, including emergency medical response times and commuting. One key road route they identify is from Wolverhampton to Stoke-on-Trent.

12.3.79 Staffordshire Local Authorities also comment on potential new roads that may be built as a result of growth schemes such as the Northern Gateway Partnership and Midlands Connect. They suggest that such roads are included within the construction process to avoid wider disruption.

12.3.80 In terms of mitigation, Staffordshire Local Authorities query what will happen to defunct roads and whether these will be excavated and reinstated to farmland or remain as tracks. They suggest that farm tracks should be used for construction access where possible and this should be alongside existing field boundaries to reduce the visual impact.

12.3.81 Staffordshire Wildlife Trust are concerned about deer's effects on road and rail, in particular safety due to deer crossing roads after being funnelled towards them where there is no bridge or culvert for them to cross the Proposed Scheme.

12.3.82 One respondent expresses a concern about potential traffic increase in Birmingham with people driving to access the station. They suggest a park and ride facility and query whether this has been considered yet.

- 12.3.83 A few organisations comment on PRow. North Staffordshire Bridleways Association identifies many roads, byways and bridleways crossing the Phase 2a corridor which are used by equestrians and believe that there are often no alternative routes. They suggest that any bridges and underpasses need to factor in equestrians, as they perceive focus so far has been on pedestrians and cyclists. Staffordshire Local Authorities welcome HS2 Ltd's commitment to maintaining PRow where possible. They go on to request that all new and diverted routes are short, safe, clearly signed, open before the original is closed, and not beside the Proposed Scheme unless screening is provided. They also request more information on the routes, including surfaces, widths, path furniture and revised numbering, as well as the need to contact their Legal Services regarding Definitive Map Modification Orders. Staffordshire Wildlife Trust suggests that HS2 Ltd should contribute to footpath maintenance beyond directly affected routes.
- 12.3.84 A couple of respondents express general concerns about potential impacts on the existing rail network without going into further detail. Network Rail states that they will be working closely with HS2 Ltd to ensure their ability to maintain the network is not impaired.
- 12.3.85 The Inland Waterways Association requests that no canal should be lost or blocked, and where crossed it should still be navigable and have the minimum widths.
- 12.3.86 Comments on waste and material resources**
- 12.3.87 The National Farmers' Union and Ingestre with Tixall Parish Council are pleased that HS2 is undertaking a duty of care for waste generated. Cheshire East Council feel that Cheshire East is a green and sustainable place. They emphasised their desire to protect and enhance its rural and urban character through sensitive development, environmental management, transport, and waste disposal policies.
- 12.3.88 Some respondents, including Ingestre with Tixall Parish Council and the Joint Action Group, raise concerns about the impacts of transporting and storing waste material generated during tunnelling operations, particularly outside of core hours. One respondent requests information on the expected amount of excavation material and selected routes for removal from tunnelling sites. One respondent suggests renewing and using out-of-use railways for the removal of spoil.
- 12.3.89 A few respondents, including Madeley HS2 Action Group and Madeley Parish Council, criticise the assessment of waste generation across the route as they believe this does not reflect the higher amounts that will be generated from tunnel boring at Whitmore and Bar Hill in CA4.

'Section 15 refers to the amount of waste generated for off site disposal, however this is not analysed area by area. This therefore does not reflect the amount of waste that will be generated by the boring of two twin tunnels, one at Whitmore and the other at Bar Hill, Madeley.'

Madeley Parish Council

- 12.3.90 A couple of respondents, including Madeley HS2 Action Group, say HS2 engineers admitted that despite using excavated material as much as possible, a large amount will not be used, particularly as twin bore tunnels are to be constructed. One respondent believes that the environmental impact of building materials used, and their transportation from around the world, will be immense.
- 12.3.91 Staffordshire Local Authorities express the concern that the documents do not identify timber and other waste products generated by tree removal.
- 12.3.92 One respondent requests that an old stone quarry near Pipe Ridware is not disturbed. Similarly, another respondent does not want their sand and gravel extracted, in order to maintain their mineral rights. On the other hand, one respondent suggests using a sand and gravel extraction site near Kings Bromley.

12.3.93 Comments on water resources and flood risk assessment

- 12.3.94 The Environment Agency requests as much reduction of flood risk on communities as possible, and offers to provide opportunities on how to do this throughout, as was done for Phase One. They also suggest close working with water companies to ensure potential effects on groundwater public water supplies are mitigated.

'We believe opportunities should be taken, where technically feasible, to reduce flood risk to property and communities along the route. We will continue to provide examples of opportunities that the project could undertake along the route.'

Environment Agency

- 12.3.95 Natural England suggests an extension of the scope of assessment for flood risk, from the current 1km from the centreline of the track to their own Impact Risk Zones, which could extend up to 3km around water dependent sites. They also suggest temporal assessments of water-related impacts to foresee potential changes in the future. The Environment Agency agree with the WFD compliance assessment. This stakeholder also offers to provide advice on flood risk once the Flood Risk Assessments are ready.

12.3.96 Staffordshire Local Authorities believe that the assessment fails to acknowledge the cumulative effect of the large number of small watercourses culverted. They comment on potential impacts of this on severing hedgerows, and disconnecting habitats. In terms of mitigation, this stakeholder suggests avoiding drop inlet culverts, as they could trap animals, and using other types of culvert instead. Similarly, the Environment Agency suggests that all watercourse crossings should be designed to minimise disruption to the natural processes of the watercourse and where possible enhance or restore the natural system. Specifically, they suggest avoiding inverted siphons unless there are no other alternatives.

12.3.97 Phase 1 and 2a combined impacts

12.3.98 Staffordshire Local Authorities suggest that the Trent and Mersey Conservation Area should be included in the table summary of the potential total impacts of both Phase One and Phase 2a.

Chapter 13: Responses which did not address the consultation questions

13.1 Introduction

- 13.1.1 This chapter provides a summary of those responses that do not directly address any of the four consultation questions, including comments on the HS2 project as a whole and the consultation process.

13.2 Overview of responses

- 13.2.1 A total of 226 respondents did not structure their response according to the consultation questions, however where these respondents raised issues relevant to the consultation questions these have been reported in the appropriate preceding chapters.

13.3 Discussion

- 13.3.1 This section provides a qualitative summary of the issues respondents raise in the consultation. For a detailed, quantitative breakdown of the number of respondents raising each issue, the reader can refer to Appendix C. This section consists of three subsections relating to themes arising that do not directly address the consultation questions. These themes are:

- comments on the consultation process and communications from HS2;
- overall comments on the project and the proposed route; and
- comments on the other consultation documents.

13.3.2 Comments on the consultation process and communications from HS2

- 13.3.3 Several respondents, including Weston and Basford Parish Council, criticise the consultation process, commenting that the proposals came as a surprise and that many residents were previously unaware of them.
- 13.3.4 Another common criticism of the consultation process is the timescale, that respondents were only given the minimum time to read the reports and create responses. One respondent believes that those affected by Phase 1 were given more time, while another specifically criticises the time it took for documents to be delivered, which they believe they had requested for their property. The Woodland Trust are concerned by the time they believe it took HS2 Ltd to consult with Natural England about modifications for Phase 1, and that this would be repeated for Phase 2a.

- 13.3.5 Several respondents, including Stone Town Council, comment that a perceived lack of engagement with HS2 Ltd could lead to their views not being considered. Some give specific examples of potential stakeholders they believe HS2 Ltd have not considered, such as Clinical Commissioning Groups, local authorities or local conservation and wildlife groups. On a related note, Historic England, Ingestre and Tixall Against HS2 Action Group and Ingestre with Tixall Parish Council are concerned that their responses to previous consultations have been disregarded.
- 13.3.6 Some respondents comment that the consultation process is too complex, with a perceived high level of documents and form-filling, which may dissuade certain people.

'The complexity of the documentation would take weeks of concentrated effort to absorb.'

Individual submission

- 13.3.7 A few respondents, including Cheshire East Council and Taylor Wimpey UK Ltd, express their gratitude for being able to respond to the consultation. Staffordshire Local Authorities welcome future discussions with HS2 Ltd about the design development works.
- 13.3.8 Several respondents make specific personal requests, such as a visit to their property, confirmation of receipt and that their comments will be listened to. A common example of this was requests from those representing farms to speak with engineers.
- 13.3.9 Many respondents make general requests for further engagement, project updates or continued liaison with HS2 Ltd to discuss the points they have raised. More specifically, National Farmers' Union suggest an independent ombudsman to verse duty of care. Network Rail query whether they will be the nominated undertaker.
- 13.3.10 Several organisations suggest that HS2 Ltd engages with other organisations. This includes:
- Natural England's suggestion for joint discussions between HS2 Ltd, Cannock Chase AONB, Environment Agency, Historic England, Forestry Commission, National Trust and local authorities;
 - Jeremy Lefroy MP's suggestion for engagement with the National Trust, Battlefield Trust, Canal and River Trust and the Gardens Trust;
 - The Environment Agency's suggestion for discussions with local authorities and the Animal and Plant Health Agency around the potential presence of anthrax or foot and mouth burial sites;

- Whitmore Parish Council's suggestion for working with Staffordshire Local Authorities Highways to identify the best construction access routes;
 - Network Rail's suggestion for consultation with the Department of Energy and Climate Change (DECC), the Carbon Trust and the Waste Resources and Action Programme (WRAP); and
 - Cheshire East Council's suggestion for engagement with their Public Health Team.
- 13.3.11 Chebsey and Swynnerton Parish Councils suggest that the money spent on drafting these documents would have been better spent on face-to-face engagement with communities. Similarly, the National Trust comments that the best method of consultation is in discussion with neighbours.
- 13.3.12 Several respondents criticise various parts of the consultation documentation. Maps are most commonly mentioned with respondents describing them as unclear, lacking detail or out of date.
- 13.3.13 Several respondents bring up the specific point that the Ordnance Survey maps do not show recent housing developments in Yarnfield. Natural England suggests that AONBs should be shown on the maps and that they use bolder colours and clearer shading. Similarly, the Woodland Trust suggests that the maps are accompanied by electronic map overlays with additional information.
- 13.3.14 Some respondents, including Chebsey Parish Council and Jeremy Lefroy MP, comment on a perceived lack of visualisation of the project, most commonly regarding the proposed Stone railhead but also regarding views of features such as viaducts.
- 13.3.15 The Colton Ramblers, the Peak and Northern Footpath Society and Cheshire East Council all comment that PRoW have not been described accurately, often highlighting specific routes. Madeley HS2 Action Group and Madeley Parish Council suggest that HS2 Ltd engage with North Staffordshire Bridleway Association. The Association themselves also request continued engagement with HS2 Ltd to prevent a perceived fait accompli.
- 13.3.16 Jeremy Lefroy MP and the National Trust make general comments on a perceived lack of detail within the Working Draft EIA report. The National Trust queries whether HS2 Ltd will republish their Phase 2a information papers. Walton Residents Action Group argue that HS2 Ltd is using terminology to hide impacts on the local area.
- 13.3.17 Miscellaneous points raised by respondents include:
- photos given incorrect captions;
 - incorrect surface areas of farm holdings;
 - height of the line inconsistencies between the documents and the maps;

- criticism of the term 'main farm holdings' when there are other farms in the area which are not mentioned; and
- references to 'Marston Parish Council', the respondent comments there is no council, but only a parish meeting.

13.3.18 Some respondents criticise HS2 Ltd's local community events. One of the most frequent comments is that staff were unhelpful or seemed to lack knowledge of the local area.

'I would like HS2 to hold a meeting where we can be provided with answers to our questions. So far at the consultation we were presented with a huge lack of knowledge from the staff attending.'

Individual submission

13.3.19 Respondents also comment on a lack of documents, lack of refreshments and conflicting information on whether construction will take place throughout the day or during normal working hours.

13.3.20 Overall comments on the project and the proposed route

13.3.21 Several respondents express general opposition to HS2. The most commonly given reasons include the perceived limited journey time reduction, lack of need case and high cost.

'We feel that HS2 is a complete waste of public money'

Individual submission

13.3.22 Some respondents suggest alternatives to the Proposed Scheme including improving existing rail infrastructure, such as the WCML. Respondents also suggest non-rail alternatives such as funding the NHS, education or broadband internet.

13.3.23 A few respondents express general support for the Proposed Scheme with caveats. These include a train calling at Stafford once an hour and completion of the Handsacre link to the WCML.

13.3.24 Network Rail and Cheshire East Council express their general support for the project, highlighting potential opportunities for Crewe.

13.3.25 Some respondents comment on HS2 Phase 2b. Some of these respondents raise concerns about the geological problems and engineering challenges of the projected route through Crewe to Manchester, arising from being routed through salt areas. One respondent notes that the 'HS2 Ltd Route Engineering Report - West Midlands to Manchester' from 2013 says that mitigation is required, but says that there have been no identifiable design changes intended to mitigate ecological impact.

13.3.26 Comments on the other consultation documents

13.3.27 Network Rail supports the aims of the working draft EQIA Report in general, specifically a commitment to diversity and inclusion.

13.3.28 One respondent believes that the literature review is too academic. They also suggest that it needs more documents related to the Department of Health.

Appendix A Participating organisations and elected representatives

A1 Table A2, starting on the next page, lists the names of all the organisations which submitted responses to the consultation. They are listed by sector, and alphabetically within each sector. Organisations have not been listed if they indicated that their response should be treated as confidential. It cannot be fully assured that all organisations have been accurately categorised as not all respondents classified themselves. Categorisation of responses was carried out separately from coding and does not affect the way in which coding is carried out. The potential sectors are listed below in Table A1.

Table A1: Respondent sectors

Sector
Members of the public ³
Academics (includes universities and other academic institutions)
Action groups (includes rail and action groups specifically campaigning on the high speed rail network proposals)
Businesses (local, regional, national or international)
Elected representatives (includes MPs, MEPs, and local councillors)
Environment, heritage, amenity or community groups (includes environmental groups, schools, church groups, residents' associations, recreation groups, rail user groups and other community interest organisations)
Local government (includes county councils, district councils, parish and town councils and local partnerships)
Other representative group (includes chambers of commerce, trade unions, political parties and professional bodies)
Real estate, housing associations or property-related organisations
Statutory agencies
Transport, infrastructure or utility organisations (includes transport bodies, transport providers, infrastructure providers and utility companies)
Other
Prefer not to say

³ Members of the public are not included in the following table

Table A2: Respondents

Academics
The Yarlet Trust
Action groups
Ingestre and Tixall Against HS2 Action Group
Joint Action Group (JAG) of Kings Bromley Stop HS2, Ridwares Against HS2 & Colton Against HS2
Madeley HS2 Action Group
Manor Road HS2 Action Group
Walton Residents Action Group
Whitmore and Baldwins Gate HS2 Action Group
Businesses
Baden Hall Enterprises Limited
Bentley Hall Farm
George Birchall Ltd
G V Prestwood and Sons
J Timmis and Partners of Darlaston Grange Farm
Little Hay Manor Management Ltd
Maximus Strategic Stafford LLP
Taylor Wimpey UK Limited
Upper Moreton Rural Activities Community Interest Company (UMRA)
Wellbeing Park
Elected representatives
Cllr Janet Clowes, Cheshire East Council

Jeremy Lefroy, MP for Stafford
Environment, heritage, amenity or community groups
Canal & River Trust
Chapel & Hill Chorlton, Maer & Aston and Whitmore Neighbourhood development plan
Cheshire East Local Access Forum
Cheshire Wildlife Trust
Church Buildings Council
CLA (Country land and Business Association Limited)
Colton Ramblers
Commonwealth War Graves Commission
Grosvenor & Gresty Brook Medical Centres
Guide Dogs
The Inland Waterways Association
The Landmark Trust
Madeley Conservation Group
National Farmers' Union
National Trust
North Staffordshire Bridleways Association
The parishes of the benefice of Great Haywood, Colwich, Colton, Blithfield and Abbots Bromley
Peak and Northern Footpaths Society
Rector and PCC St. Mary's Church, Swynnerton
Staffordshire Wildlife Trust
Upper Moreton Rural Activities Community Interest Company

The Woodland Trust
Local government
Betley, Balterley & Wrinehill Parish Council
Chebsey Parish Council
Cheshire East Council
Colton Parish Council
Fradley & Streethay Parish Council
Hopton and Coton Parish Council
Ingestre with Tixall Parish Council
Lichfield District Council
Loggerheads Parish Council
Madely Parish Council
Maer & Aston Parish Council, Whitmore, Madeley and Chorlton parishes
Newcastle under Lyme Borough Council
Staffordshire County Council, Lichfield District Council, Stafford Borough Council, Newcastle-under-Lyme Borough Council - Joint response
Stone Rural Parish Council
Swynnerton Parish Council
Weston and Basford Parish Council
Whitmore Parish Council
Statutory agencies
Environment Agency
Forestry Commission England
Highways England

Historic England
Natural England
Public Health England
Transport, infrastructure or utility organisation
Network Rail

Appendix B Detailed methodology

Data receipt and digitisation

- B1 All submissions were scanned and securely held before being entered into a specially designed database so that each response could be read and analysed (by assigning codes to comments).
- B2 Submissions were received in a number of formats: online response forms (via the webform); paper response forms, letters and emails. There were also variations to these formats, such as completed response forms with letters or reports attached.
- B3 At the outset of data processing, each response was assigned a unique reference number, scanned (if it had not been received electronically) and then saved with its reference number as the file name. Responses other than those submitted through the project webform were processed by data entry staff in order to prepare for import into the Dialogue by Design analysis database.
- B4 For submissions containing images, maps and other non-text content, a reference to a PDF version of the original submission was made available to analysts, so that this information could be viewed when necessary.

Responses via the webform

- B5 Online submissions were captured via the consultation webform and then imported into the analysis database on a regular basis throughout the consultation period.
- B6 While the consultation was open, webform users were able to update or amend their submissions. If a respondent updated their submission, this was imported into the analysis database with a clear reference that it was a 'modified' submission. If the original submission had already been analysed, an analyst would review it and revise the coding as required.

Responses received via email

- B7 A consultation-specific email address operated for the duration of the consultation. At regular intervals, emails were logged and confirmed as real responses (i.e. not junk or misdirected email), given a unique reference number and then imported into the data analysis system alongside paper responses, as described below.

Responses received via the Freepost address

- B8 A Freepost address operated for the duration of the consultation for respondents to submit hard-copy consultation responses. Upon receipt, letters and paper-based response forms were logged and given a unique reference number. They were then scanned and imported into the data analysis system.
- B9 At the data entry stage, all printed submissions, were transcribed using optical character recognition software, which can recognise printed text without the need for manual data entry. Each of these files was then opened and reviewed by our

transcription team in order to correct any misrecognition. Handwritten responses were typed into the database by data entry staff.

- B10 The transcription process was quality controlled by a transcription supervisor, who reviewed a percentage of the transcriptions and indicated their quality using a comprehensive scoring system. The transcription quality score is a ranked scale, differentiating between minor errors (such as insignificant typographical errors), and significant errors (such as omitted information or errors that might cause a change in meaning).
- B11 The quality control process involved a random review of each team member's work. At least 5% of the submissions they transcribed were reviewed by response type. In cases where a significant error was detected, the quality control team reviewed 10% of the relevant team member's work on that response type. If a second significant error was detected, the proportion reviewed was raised to 100%.

Responses submitted to HS2 Ltd or the DfT

- B12 HS2 Ltd and the DfT took reasonable measures to ensure that responses mistakenly sent to their offices rather than to the advertised response channels were transferred to Dialogue by Design via the specific consultation email address.

Late submissions

- B13 The consultation period ended at 23:45 on 7 November 2016. Dialogue by Design received two hard copy responses and one email response sent after the deadline. These responses were stored securely but not processed or analysed.

Verification of submissions

- B14 At the end of the consultation period, once any misdirected responses had been transferred from the DfT and HS2 Ltd to Dialogue by Design, a duplicates check was carried out on responses entered into the database. Where responses were exactly the same, one (or more if necessary) was removed and not processed.
- B15 If responses were recorded as being from the same organisation they were also checked to see whether the same response had been sent by different individuals from the same organisation.
- B16 Although the verification process identified and removed exact duplicate submissions sent by the same person in different formats, the process did not seek to remove identical submissions from different respondents.

Development of an analytical framework

- B17 In order to analyse the responses, and the variety of views expressed, an analytical or coding framework was created. The purpose of the framework was to enable analysts to organise responses by themes and issues, so that key messages as well as specific points of detail could be captured and reported on.

- B18** The process of developing the framework for this consultation involved a team of Dialogue by Design senior analysts reviewing an early set of responses for each consultation question, and formulating an initial framework of codes. At this point Dialogue by Design discussed the initial framework with representatives from HS2 Ltd and the DfT. Their feedback was used as part of the finalisation of the coding framework.
- B19** A three-tier approach was taken to coding, starting with high-level themes, splitting into sub-themes and then specific codes. Table B1 provides a full list of the top-level themes used and Table B2 provides an extract from the coding framework showing the use of themes, sub-themes and codes. The full coding framework is available in Appendix C.
- B20** Each code is intended to represent a specific issue or argument raised in responses. The data analysis system allows the senior analysts to populate a basic coding framework at the start (top-down) whilst providing scope for further development of the framework using suggestions from the analysts engaging with the response data (bottom-up). We use natural language⁴ codes since this allows analysts to suggest refinements and additional issues, and aids quality control and external verification.

Table B1 *List of themes from coding framework*

Theme
Consultation process
Design and route
General
Impacts
Locations
Other
Q1 Crewe Tunnel Extension
Q2 Connection spurs south of Crewe
Q3 Railhead and maintenance facility near Stone

Table B2 *Extract from the coding framework*

⁴ Natural language is typically used for communication, and may be spoken, signed or written. Natural language is distinguished from constructed languages and formal languages such as computer-programming languages or the 'languages' used in the study of formal logic.

Theme	Sub-theme	Code
Impacts	Agriculture, forestry and soils	Assessment
		Impact
		Mitigation
	Air quality, dust and dirt	Assessment
		Impact
		Mitigation
	Community	Access issues
		Assessment
		Crime/safety/personal security
		Facilities/healthcare
		Facilities/housing development

Implementation of the analysis framework

- B22 The coding framework was developed centrally by senior analysts. Other members of the analysis team were then familiarised with the detail of the coding framework, so they could start applying codes to individual responses. Modifications to the framework, such as adding codes or splitting themes, could only be implemented by senior analysts, although analysts were encouraged to provide suggestions.
- B23 The application of a code to part of a response was completed by highlighting the relevant text and recording the selection. A single submission could receive multiple codes. All responses to the consultation questions, as well as responses that did not directly address the consultation questions, were coded using the same framework.
- B24 The quality of the coding was internally checked by the senior analysts. The team of senior analysts reviewed a percentage of the other analysts' work using a similar approach to that described above for the transcription stage. Anomalies in the approach to coding that were picked up through the quality checking process resulted in review of that analyst's work and the codes applied.
- B25 HS2 Ltd carried out a separate and independent quality assurance exercise to assure themselves that the coding was accurate and reflective of the responses made to the consultation. HS2 Ltd performed this by checking a sample of responses and providing

feedback to Dialogue by Design. Dialogue by Design responded to this feedback and applied any necessary changes to the coding.

Appendix C Codes by theme and by question

- C1 The analysis of consultation responses was carried out using a coding framework consisting of 12 themes containing 1224 codes, of which 964 refer to specific locations mentioned by respondents. The themes and codes are listed below in Table C1 and Table C3 respectively. Table C2 shows key acronyms used within Table C3.
- C2 Table C3 provides an overview of the number of responses to which each code was applied within each consultation question. Some themes and a number of codes were created specifically for one consultation question, others were applied across multiple consultation questions.
- C3 For reference, a total of 475 responses were received to the consultation.
- C4 The column 'Total' in Table C3 provides the number of submissions to which that code was applied, not the total number of times the code was applied (e.g. if one submission has a code applied to its response to Question 1 and to Question 2, it is only counted once for the 'Total' column).

Table C1 *Coding framework themes*

Theme
Community areas (CA)
Consultation process (CP)
Design and route (DE)
Environmental Impact Assessment Report (EA)
Equality Impact Assessment Report (EQ)
General (GE)
Impacts (I)
Locations (LO)
Other (OT)
Q1 Crewe Tunnel Extension (Q1)
Q2 Connection spurs South of Crewe (Q2)
Q3 Railhead and maintenance facility near Stone (Q3)

Table C2 *Key acronyms*

Key Terms	
AONB	Area of Outstanding Natural Beauty
AR	Alternatives Report
BW	Bridleway
CA	Community area(s)
CA01/02 (example)	References to features on HS2 map
CT-05-101 (example)	Reference to HS2 construction map
CoCP	Code of Construction Practice
FP	Footpath
IM	Introduction and Methodology
IMD	Infrastructure maintenance depot
LV-11-101 (example)	Reference to HS2 Landscape and Visual map
NTS	Non-Technical Summary
PRoW	Public Right(s) of Way
SAC	Special Area of Conservation
SSSI	Site of Special Scientific Interest
SV-01-101 (example)	Reference to HS2 sound contour map

Table C3 *Count of comments per code per question⁵*

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
Consultation process						
CA - (1) Fradley to Colton	16	1	58	5	20	79
CA - (2) Colwich to Yarlet	15	2	52	3	40	87
CA - (3) Stone and Swynnerton	32	5	86	13	59	148
CA - (4) Whitmore Heath to Madeley	41	13	86	5	63	146
CA - (5) South Cheshire	13	3	39	3	15	49
Consultation process						
CP - Consultation - comment	~	4	2	8	16	26
CP - Consultation - criticise	35	22	35	23	42	120
CP - Consultation - suggestion	20	20	32	12	81	136
CP - Consultation - support	~	1	1	~	6	8
CP - Documentation - criticise	10	5	23	1	5	40
CP - Documentation - maps	6	2	21	~	10	37
CP - Documentation - suggestion	1	1	~	1	2	5
CP - Documentation - support	~	~	1	~	~	1
CP - Documentation - visualisation of plans	~	4	3	2	5	12
CP - Events - comments	7	1	8	~	3	19
CP - Not seen document(s)	1	7	~	1	~	7

⁵ The full text of the consultation questions can be found in Chapter 2, Table 2.4.

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
Design and route						
DE - Oppose Pipe Ridware depot	~	1	11	1	3	16
DE - Oppose proposals/route	21	4	30	6	31	80
DE - Prefer previous design	10	~	5	~	1	14
DE - Support proposals/route	1	~	4	1	1	7
DE - Support proposals/route with caveat	~	~	~	~	3	3
DE - Aqueduct	~	~	1	~	~	1
DE - Auto transformer feeder station	3	2	6	~	2	11
DE - Auto-transformer station	1	~	10	2	~	13
DE - Boreholes/geology	5	1	2	1	9	18
DE - Bridge/overbridge	11	1	33	3	9	55
DE - Compounds	5	5	14	~	22	40
DE - Connections	1	1	2	1	1	6
DE - Costs - cost savings/benefits/positive	4	6	14	4	10	36
DE - Costs - cost savings/too much focus/concerns	5	1	7	3	2	15
DE - Costs - too expensive	~	1	~	~	3	4
DE - Cuttings and embankments	6	7	7	6	12	33
DE - Design/mitigation suggestions	16	7	75	17	41	136
DE - Drainage and watercourse realignment	3	6	3	2	2	11
DE - Electrification/power system	~	1	2	~	~	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
DE - Height of line	9	12	53	5	21	87
DE - IMD Crewe location benefits/support	4	2	12	2	4	19
DE - IMD Crewe location concerns/oppose	1	3	3	~	2	6
DE - IMD other comments/suggestions	7	5	11	4	5	24
DE - IMD siting/design/assessment process	~	3	~	~	3	5
DE - IMD Stone location benefits/support	1	6	21	2	6	28
DE - IMD Stone location concerns/oppose	8	7	26	7	15	52
DE - IMD temporary vs permanent	2	1	6	~	4	13
DE - Journey times/service frequency	1	4	~	4	~	7
DE - Maintenance loops	2	1	5	1	3	10
DE - Material stockpile	~	4	4	~	2	10
DE - Overlapping construction of phases (1 and 2a)	~	2	1	~	1	4
DE - Proximity to populated area	7	~	~	1	~	8
DE - Route location	14	1	21	6	9	45
DE - Satellite station	5	1	32	4	5	44
DE - Shunt line	~	1	1	~	~	1
DE - Spur lines	1	1	2	~	~	4
DE - Stations (including hub)	1	4	3	5	1	13
DE - Train control and telecommunications	1	~	~	1	~	1
DE - Train speeds	4	1	1	1	4	9

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
DE - Transfer Node	~	~	2	~	3	5
DE - Tunnel portal	~	1	1	~	4	6
DE - Tunnel/green tunnel	21	28	74	10	44	128
DE - Utilities/utility works	1	5	3	1	3	12
DE - Viaducts	5	10	49	3	17	73
Environmental Impact Assessment Report						
EA - Comments - all reports (not specific)	~	7	~	~	~	7
EA - Comments - Alternatives Report (AR)	~	49	~	1	21	69
EA - Comments - CA Reports	5	~	~	2	108	115
EA - Comments - Draft CoCP	~	28	2	~	2	32
EA - Comments - Intro/methodology (IM)	3	34	1	~	3	37
EA - Comments - Non-Technical Summary	~	2	~	~	13	15
EA - Comments - Route-wide/general	2	2	2	~	14	18
EA - AR - criticise/inadequate	1	8	~	1	~	9
EA - AR - further information/detail needed	~	4	~	~	3	7
EA - AR - suggestions/other comments	5	3	~	~	~	8
EA - AR - supporting comments	1	3	~	~	~	4
EA - AR - alternatives - Route A/B/C	~	~	8	3	~	10
EA - AR - alternatives - suggestions/preferences	~	25	8	5	26	60

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
EA - AR - local alternatives - 5.3 (Great Haywood to Yarlet)	~	3	~	~	~	3
EA - AR - local alternatives - 5.5 (M6 crossing)	1	2	~	~	~	3
EA - AR - local alternatives - 6.2 (CA1)	~	3	~	~	~	3
EA - AR - local alternatives - 6.3 (CA2)	~	6	~	~	~	6
EA - AR - local alternatives - 6.4 (CA3)	~	6	~	~	~	6
EA - AR - local alternatives - 6.5 (CA4)	~	3	~	~	~	3
EA - AR - local alternatives - 6.6 (CA5)	~	1	~	~	~	1
EA - AR - options - challenge process/proposal	~	7	2	~	3	11
EA - AR - options - information inadequate	2	3	~	~	~	5
EA - AR - rail alternatives/Atkins - comments	~	3	~	~	10	13
EA - AR - rail alternatives/Atkins - high cost option/option 1	4	11	13	1	30	53
EA - AR - route corridor alternatives - 4.3 (Routes A/B/C)	~	2	~	~	~	2
EA - AR - route corridor alternatives - 4.4 alternative to Crewe	~	5	~	~	~	5
EA - Assessment - baseline/description	3	3	~	~	~	6
EA - Assessment - comment MERGE	~	~	15	~	~	15
EA - Assessment - criticise/inadequate	35	15	44	1	24	94

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
EA - Assessment - suggestion/other comments	15	13	30	2	10	48
EA - Assessment - supporting comments	~	~	2	~	2	4
EA - Draft CoCP - criticise	4	7	~	~	~	11
EA - Draft CoCP - further information/detail needed	~	5	~	~	~	5
EA - Draft CoCP - supporting comments	~	3	~	~	~	3
EA - Draft CoCP - implementation/enforcement	~	2	~	1	~	3
EA - Draft CoCP - suggestions/other comments	1	15	3	~	~	17
EA - Further information/detail requested	25	15	62	2	32	112
EA - Guidance/policy	2	4	3	~	2	10
EA - IM - criticise/inadequate	~	10	~	~	~	10
EA - IM - further information/detail requested	~	12	~	~	~	12
EA - IM - suggestions/other comments	~	7	~	~	~	7
EA - IM - supporting comments	~	5	~	~	~	5
EA - Mitigation - comments/suggestions	6	4	1	1	12	22
EA - Mitigation - criticise/inadequate	~	4	~	4	~	8
EA - Mitigation - support approach	1	1	~	~	~	2
EA - NTS - criticise/inadequate	31	~	~	~	~	31
EA - NTS - supporting comments	15	~	~	~	~	15

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
EA - NTS - alternative options 1/2/3	1	~	~	~	~	1
EA - NTS - omission	6	~	~	~	~	6
EA - NTS - suggestions/other comments	14	~	3	1	~	17
EA - RW - comments/suggestions	~	~	~	1	~	1
EA - RW - concerns/significant	~	~	~	5	~	5
EA - RW - criticise/inadequate	~	~	~	2	~	2
EA - RW - local impacts apply route-wide	~	~	~	3	~	3
EA - RW - phase 1 and 2a combined impacts	~	~	~	2	~	2
Equality Impact Assessment Report						
EQ - Literature review - criticise	~	~	~	~	1	1
EQ - Literature review - suggestion/other comments	~	~	~	~	1	1
EQ - Support	~	~	~	1	~	1
General						
GE - Alternative suggestions	6	5	5	16	9	35
GE - Alternative suggestions - local	2	1	3	2	1	6
GE - Business case	4	5	1	4	9	22
GE - Decision-making process	~	~	~	~	1	1
GE - General comments (HS2)	~	~	1	3	3	7
GE - General opposition (HS2)	20	12	13	26	25	73
GE - General support (HS2)	~	~	~	1	1	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
GE - General support (HS2) with caveat	2	~	2	1	1	4
GE - Project costs	1	~	4	3	5	13
Impacts						
I - Agriculture, forestry and soils	14	11	51	8	72	139
I - Agriculture, forestry and soils - assessment	8	8	24	7	52	85
I - Agriculture, forestry and soils - mitigation/compensation	11	10	27	8	56	95
I - Air quality, dust and dirt	12	7	40	8	25	78
I - Air quality, dust and dirt - assessment	~	3	10	2	3	15
I - Air quality, dust and dirt - mitigation	~	2	5	1	~	8
I - Climate change	2	~	3	2	~	6
I - Climate change - assessment	~	1	3	2	1	6
I - Climate change - mitigation	~	2	~	~	~	2
I - Community - assessment	11	5	26	2	15	49
I - Community - mitigation/compensation	13	7	27	3	30	68
I - Community - access issues	18	4	59	7	21	95
I - Community - crime/safety/personal security	7	2	18	3	11	33
I - Community - cumulative impact	7	6	5	1	6	22
I - Community - facilities - healthcare	3	~	13	~	8	24

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Community - facilities - housing development	3	4	21	6	12	40
I - Community - facilities - leisure facilities	1	2	17	2	8	25
I - Community - facilities - other	2	~	15	~	4	21
I - Community - facilities - places of worship	2	1	4	~	2	8
I - Community - facilities - residential and care homes	~	1	2	~	1	4
I - Community - facilities - schools/educational	8	6	27	4	15	49
I - Community - fly tipping	2	3	9	2	2	12
I - Community - general/disruption/viability	11	6	39	16	28	88
I - Community - growth/development plan	1	8	9	3	5	21
I - Community - isolation	10	3	36	3	11	59
I - Community - no benefit/cost vs benefits	5	3	6	9	12	32
I - Community - recreation/local amenity/open space	12	5	22	3	18	44
I - Construction - assessment	2	4	11	~	1	17
I - Construction - mitigation	6	8	15	1	10	34
I - Construction - 5.1.10-11 small claims procedure	1	~	~	~	~	1
I - Construction - Advance Notice of Works	~	7	~	~	~	7
I - Construction - community relations/helpline/contact person	~	4	~	~	~	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Construction - disruption	12	6	42	7	22	80
I - Construction - earthworks	14	1	11	3	5	34
I - Construction - EMS (environmental management system)	~	2	~	~	~	2
I - Construction - extreme weather events	~	1	~	~	~	1
I - Construction - general	7	~	~	~	~	7
I - Construction - hoardings, fencing and screening	~	4	~	~	~	4
I - Construction - LEMPs (local environmental management plans)	~	4	1	~	1	6
I - Construction - length of time/duration	12	2	15	2	10	38
I - Construction - local experience	5	3	11	2	7	24
I - Construction - pollution incident control and emergency preparedness	~	2	~	~	~	2
I - Construction - small claims procedure	~	2	~	~	~	2
I - Construction - workforce/contractors	7	10	25	2	10	46
I - Construction - working hours/operations	24	12	16	5	16	65
I - Cultural heritage	5	6	15	7	17	38
I - Cultural heritage - assessment	2	2	15	6	10	25
I - Cultural heritage - mitigation	1	3	10	1	7	18
I - Ecology and biodiversity	28	22	58	9	46	129
I - Ecology and biodiversity - assessment	12	10	26	6	21	51

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Ecology and biodiversity - mitigation/compensation	11	11	38	9	46	100
I - Ecology and biodiversity - woodlands	15	13	41	8	26	80
I - Equality - general/fairness	1	2	7	2	2	12
I - Health/wellbeing - assessment	4	4	11	3	5	23
I - Health/wellbeing - mitigation/compensation	3	2	7	2	4	18
I - Health/wellbeing - air quality	~	~	7	2	4	11
I - Health/wellbeing - electromagnetic fields	1	3	1	1	~	3
I - Health/wellbeing - general	19	9	27	5	13	53
I - Health/wellbeing - peace/tranquillity/quality of life	11	7	24	7	14	53
I - Health/wellbeing - pets/animals	3	1	6	4	7	14
I - Health/wellbeing - stress/anxiety	16	6	23	5	14	50
I - Impacted groups - children/young people	13	2	27	6	12	49
I - Impacted groups - impaired accessibility (incl. disabled)	~	~	2	~	~	2
I - Impacted groups - landowners	4	3	7	2	5	15
I - Impacted groups - older people/vulnerable	7	3	23	3	16	50
I - Impacted groups - residents/local people	30	12	57	13	25	111
I - Impacted groups - respondent's circumstances/property	13	11	53	10	24	94

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Impacted groups - rural community	1	1	2	1	1	6
I - Impacted groups - specific health and wellbeing conditions	~	2	3	~	4	8
I - Land quality	~	4	12	1	1	15
I - Land quality - assessment	3	2	12	2	5	21
I - Land quality - mitigation	~	2	4	~	2	7
I - Landscape and visual - assessment	3	8	30	6	13	46
I - Landscape and visual - mitigation/compensation	20	14	69	6	49	132
I - Landscape and visual - environment/general	12	10	23	13	19	64
I - Landscape and visual - land take (brownfield/greenfield)	4	3	18	4	10	39
I - Landscape and visual - light pollution	22	8	41	8	21	82
I - Landscape and visual - visual and landscape	30	28	101	18	53	177
I - Major accidents and natural disasters	3	~	~	~	~	3
I - Major accidents and natural disasters - assessment	~	1	3	9	1	11
I - Property - assessment	2	1	6	~	5	13
I - Property - mitigation/compensation	9	8	25	8	32	74
I - Property - land/assets	1	3	7	1	13	25
I - Property - loss of housing	4	~	10	1	8	22

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Property - other impacts	5	4	21	7	15	47
I - Property - value/ability to sell/blight	17	5	35	13	26	79
I - Socio-economic - assessment	2	1	10	1	5	17
I - Socio-economic - mitigation/compensation	4	~	10	3	17	30
I - Socio-economic - effects on existing businesses/livelihoods	16	10	52	14	35	97
I - Socio-economic - general	~	~	5	~	6	11
I - Socio-economic - opportunities	1	1	7	4	4	16
I - Socio-economic - tourism	~	~	~	~	1	1
I - Sound, noise and vibration	50	20	114	20	71	218
I - Sound, noise and vibration - assessment	6	12	37	4	18	60
I - Sound, noise and vibration - contour maps	~	1	14	1	5	19
I - Sound, noise and vibration - mitigation	16	14	59	7	36	111
I - Traffic and transport - assessment	8	7	36	3	9	51
I - Traffic and transport - mitigation/compensation	26	9	114	12	62	191
I - Traffic and transport - aircraft/air-borne activities	~	~	~	2	~	2
I - Traffic and transport - bridges	~	~	6	~	~	6
I - Traffic and transport - construction traffic	27	10	86	7	39	147

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Traffic and transport - emergency services	12	3	28	5	15	52
I - Traffic and transport - existing rail infrastructure	11	6	17	5	12	38
I - Traffic and transport - general	~	1	~	~	2	3
I - Traffic and transport - journey times/commuting	15	4	23	6	22	59
I - Traffic and transport - non-motorised users	9	8	38	3	20	67
I - Traffic and transport - PRow/footpaths	3	2	33	4	22	57
I - Traffic and transport - public transport	8	2	13	2	8	30
I - Traffic and transport - road safety	15	3	57	7	31	94
I - Traffic and transport - roads - economic implications	4	~	11	1	7	21
I - Traffic and transport - roads (congestion/closure etc.)	53	18	160	27	78	272
I - Traffic and transport - waterways	1	2	1	1	7	8
I - Waste and material resources	6	2	4	5	11	25
I - Waste and material resources - assessment	~	3	2	4	2	9
I - Waste and material resources - mitigation	1	3	1	~	1	6
I - Water resources and flood risk	4	9	35	6	14	55

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
I - Water resources and flood risk - assessment	2	2	13	3	7	22
I - Water resources and flood risk - mitigation	1	5	16	4	21	39
Locations						
LO - Abbots Bromley	~	~	~	~	1	1
LO - Academy 4 Wellbeing	~	~	1	~	~	1
LO - Acre Field	~	~	1	~	~	1
LO - Acton	~	~	1	~	4	5
LO - Admaston	~	~	1	~	~	1
LO - Alleyne's School	~	~	1	~	~	1
LO - Alrewas	1	~	3	~	~	4
LO - Armitage	~	~	1	~	~	1
LO - Ashley	2	~	1	~	1	4
LO - Aston	~	~	2	~	2	4
LO - Aston Pool Farm	~	~	~	~	1	1
LO - Baden Hall	~	~	1	~	~	1
LO - Baldwin's Gate	19	6	27	4	25	65
LO - Balterley	~	~	1	~	~	1
LO - Bancroft	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Bar Hill	6	1	14	4	11	27
LO - Bar Hill Aqueduct	~	~	~	1	~	1
LO - Bar Hill Farm	~	~	~	1	1	2
LO - Bar Hill Wildlife Haven Reservoir	~	~	2	~	1	3
LO - Bar Hill Wood	1	~	3	~	3	6
LO - Barlaston	1	~	1	~	~	2
LO - Barn Farm	1	1	2	1	1	3
LO - Barratt Homes	~	~	1	~	~	1
LO - Barthomley	~	~	~	~	1	1
LO - Basford	~	~	6	~	3	9
LO - Basford Bridge	~	~	1	~	~	1
LO - Basford Brook	~	1	3	~	~	3
LO - Basford Hall	~	~	3	~	~	3
LO - Basford Hall Farm	~	~	1	~	~	1
LO - Basford Hall freight yard	~	1	~	~	~	1
LO - Basford sidings	~	~	1	~	~	1
LO - Basford West	~	~	1	1	2	2
LO - Beacon Hill	~	~	1	~	2	3
LO - Beaconside	~	~	~	~	1	1
LO - Beatty Hall	~	~	1	~	1	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Beech	~	~	1	~	3	4
LO - Beech Wood	~	~	1	~	~	1
LO - Beechfields	~	~	1	~	~	1
LO - Beechwood Farm	~	~	1	~	1	2
LO - Bellamour	~	~	1	~	~	1
LO - Bentley Farm	~	~	~	~	1	1
LO - Bentley Hall Farm	~	~	7	~	1	8
LO - Berryhill	~	~	2	~	~	2
LO - Betley	~	~	2	~	2	4
LO - Betley Mere	~	~	1	~	1	2
LO - Betley Mere SSSI	~	~	~	~	2	2
LO - Bilbury	~	~	~	~	1	1
LO - Birch Hall Farm	~	~	1	~	~	1
LO - Birchwood	~	~	2	~	1	3
LO - Birmingham	2	~	2	4	4	12
LO - Bishton	~	~	~	~	1	1
LO - Bitterns Lane ATS satellite compound	~	~	~	~	1	1
LO - Bitterns Wood	~	~	~	~	1	1
LO - Black Firs & Cranberry Bog SSSI	~	~	~	~	1	1
LO - Blackbrook	~	~	2	~	1	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Blackfatts Farm Kings Bromley	~	~	1	~	~	1
LO - Blakelow Farm	~	~	~	~	1	1
LO - Blakenhall	2	~	6	~	1	7
LO - Blakenhall Community Hall	~	~	1	~	~	1
LO - Blithbury	1	~	6	~	~	7
LO - Blithbury South Cutting	~	~	1	~	~	1
LO - Blithfield	~	~	1	~	1	2
LO - Borough Hall	~	~	1	~	~	1
LO - Bottle	~	~	~	~	1	1
LO - Bottle Lodge	~	~	1	~	1	2
LO - Bourne Brook	~	1	3	~	2	5
LO - Bourne Brook Viaduct	~	~	5	~	~	5
LO - Bourne Embankment	~	~	1	~	~	1
LO - Bower End	~	~	2	~	~	2
LO - Bower End Farm	~	~	~	~	1	1
LO - Bowers	~	~	~	~	1	1
LO - Brancote Cutting	~	1	~	~	~	1
LO - Brick Hill	~	~	~	~	1	1
LO - Brock Hill	~	~	1	~	1	2
LO - Bromley Hayes Cattery	2	1	5	2	1	6

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Bromley Hayes Garden Centre	~	~	3	~	~	3
LO - Bromley Lane Farm	~	~	1	~	~	1
LO - Brook Farm	~	~	2	~	1	3
LO - BT National Training Centre	2	~	~	~	~	2
LO - Burton-on-Trent	1	1	2	1	~	2
LO - Bury Bank	~	~	~	~	1	1
LO - Butterson	~	~	1	~	3	4
LO - Buxton	~	~	1	~	~	1
LO - CA1/02	2	~	2	~	~	2
LO - CA1/06	~	~	4	~	~	4
LO - CA4/07	~	~	1	~	~	1
LO - Canalside Farm Shop and Fruit Farm	~	~	~	~	3	3
LO - Cannock	~	~	1	~	~	1
LO - Cannock Chase	~	~	2	~	~	2
LO - Cannock Chase AONB/SAC	1	3	1	~	2	6
LO - Casey Lane bridge	~	~	1	~	~	1
LO - Cash's Pit	~	~	3	~	~	3
LO - Channel Tunnel	1	~	~	~	~	1
LO - Chapel	~	~	1	~	2	3
LO - Chapel Chorlton	~	~	~	~	3	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Chebsey	1	~	~	~	~	1
LO - Checkely Brook	~	~	~	~	1	1
LO - Checkley	2	~	1	~	1	4
LO - Checkley Brook	~	~	4	~	~	4
LO - Checkley Brook Farm	~	~	1	~	~	1
LO - Checkley Wood Farm	~	~	~	~	1	1
LO - Cheshire	~	2	4	~	2	7
LO - Cheshire East	1	1	4	~	~	4
LO - Cheshire South	~	~	6	~	~	6
LO - Chester	~	~	1	~	~	1
LO - Chorlton	3	2	11	~	4	15
LO - Chorlton Dairy Farm	~	~	1	~	~	1
LO - Chorlton Lane Bridge	~	~	1	~	~	1
LO - Chorlton Viaduct	1	~	2	~	~	3
LO - Christchurch Way car park	~	~	1	~	~	1
LO - Church Field	~	~	1	~	~	1
LO - Churnet Valley	~	~	1	~	~	1
LO - Clayton	~	~	~	~	1	1
LO - Clifford's Wood	1	~	5	~	3	8
LO - Closepit Plantation	~	~	2	~	2	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Cold Meece	1	~	4	~	1	6
LO - Cold Meece Business Park	~	~	1	~	~	1
LO - Cold Norton	~	~	~	~	1	1
LO - Cold Norton Farm	~	~	1	~	~	1
LO - Coley	~	~	4	~	~	4
LO - Coley cutting	~	~	5	~	1	6
LO - Coley Farm	~	~	2	~	~	2
LO - Colne Valley	~	~	1	~	~	1
LO - Colton	6	3	18	1	6	30
LO - Colwich	2	2	15	2	6	25
LO - Colwich Junction	1	1	~	1	~	1
LO - Common Farm	~	~	2	~	~	2
LO - Common Lane Culvert	~	~	~	~	1	1
LO - Common Lane Farm	1	1	2	~	1	3
LO - Cotes Heath	1	~	~	~	1	2
LO - Coton	~	~	1	~	1	2
LO - County Show Ground	~	~	1	~	~	1
LO - Crab Covert	~	~	~	~	1	1
LO - Crabtree Farm	2	~	1	~	~	3
LO - Cranberry	~	~	~	~	2	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Creswell	~	~	~	~	1	1
LO - Crewe	17	10	46	12	36	99
LO - Crewe Auto Transformer Feeder Station	1	~	~	~	~	1
LO - Crewe East	~	~	1	~	~	1
LO - Crewe hub station	~	1	~	~	1	2
LO - Crewe South	~	~	4	~	~	4
LO - Crewe station	~	1	~	~	~	1
LO - Crewe Tunnel	~	~	2	~	~	2
LO - CS590-C1	~	~	~	~	1	1
LO - CT-05-029a	~	~	~	~	1	1
LO - CT-05-101	~	~	~	~	1	1
LO - CT-05-201	~	~	3	~	~	3
LO - CT-05-202	2	1	7	~	1	8
LO - CT-05-202-L1	~	~	2	~	~	2
LO - CT-05-202-R1	~	~	3	~	~	3
LO - CT-05-203	~	~	2	~	2	4
LO - CT-05-204	~	~	2	~	1	3
LO - CT-05-205	~	~	2	~	1	3
LO - CT-05-206	~	~	1	~	~	1
LO - CT-05-207	~	~	3	~	1	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - CT-05-208	1	~	7	~	2	10
LO - CT-05-209a	~	~	1	~	~	1
LO - CT-05-210	~	~	1	~	1	2
LO - CT-05-211	~	~	1	~	~	1
LO - CT-05-212	~	~	6	3	4	12
LO - CT-05-213	~	~	2	~	~	2
LO - CT-05-214	1	~	2	~	1	4
LO - CT-05-215	~	~	3	~	3	6
LO - CT-05-216	~	~	2	1	3	6
LO - CT-05-217	~	~	1	~	3	4
LO - CT-05-218	~	~	1	~	1	2
LO - CT-05-219a	~	~	1	~	~	1
LO - CT-05-219b	~	~	1	~	~	1
LO - CT-05-220	~	~	1	1	2	4
LO - CT-05-221	~	~	2	1	3	5
LO - CT-05-222	~	~	1	1	2	4
LO - CT-05-223	~	~	1	~	5	6
LO - CT-05-224	~	~	2	~	~	2
LO - CT-05-225	1	~	3	~	2	6
LO - CT-05-226	~	~	2	~	1	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - CT-05-227	~	~	1	~	1	2
LO - CT-05-228a	~	~	1	~	2	3
LO - CT-05-228b	~	~	~	~	1	1
LO - CT-05-229	~	~	1	~	1	2
LO - CT-05-230	1	~	2	~	3	6
LO - CT-05-231	~	~	1	~	1	2
LO - CT-05-232	~	~	1	~	1	2
LO - CT-05-233	~	~	3	2	3	8
LO - CT-05-234	~	~	2	~	2	4
LO - CT-05-235	~	~	1	~	2	3
LO - CT-05-236	~	~	2	~	1	3
LO - CT-05-237	~	1	2	~	~	2
LO - CT-05-238	~	~	1	~	~	1
LO - CT-05-239	~	~	~	~	4	4
LO - CT-05-239-P1	~	~	~	~	1	1
LO - CT-05-239-R1	~	~	~	~	1	1
LO - CT-05-2D1	~	~	1	~	~	1
LO - CT-06-201	~	~	4	~	1	5
LO - CT-06-202	1	~	5	~	~	6
LO - CT-06-203	~	~	1	~	2	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - CT-06-204	~	~	2	~	1	3
LO - CT-06-205	~	~	3	~	2	5
LO - CT-06-206	~	~	2	~	~	2
LO - CT-06-207	~	~	2	~	2	4
LO - CT-06-208	~	~	6	~	4	10
LO - CT-06-209a	~	~	1	~	1	2
LO - CT-06-210	~	~	2	~	1	3
LO - CT-06-211	~	~	2	1	1	4
LO - CT-06-212	~	~	7	2	4	12
LO - CT-06-213	~	~	2	~	1	3
LO - CT-06-214	1	~	2	~	1	4
LO - CT-06-215	~	~	3	~	2	5
LO - CT-06-216	~	~	2	1	4	7
LO - CT-06-217	~	~	1	~	1	2
LO - CT-06-218	~	~	1	~	1	2
LO - CT-06-219a	~	~	~	~	1	1
LO - CT-06-220	~	~	1	1	2	4
LO - CT-06-221	~	~	2	1	3	5
LO - CT-06-222	~	~	1	~	2	3
LO - CT-06-223	~	~	1	~	2	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - CT-06-224	~	~	1	~	~	1
LO - CT-06-225	1	~	4	~	~	5
LO - CT-06-226	~	~	3	~	~	3
LO - CT-06-227	~	~	1	~	1	2
LO - CT-06-228a	~	~	1	~	1	2
LO - CT-06-228b	~	~	1	~	1	2
LO - CT-06-229	~	~	1	~	1	2
LO - CT-06-23	~	~	~	~	1	1
LO - CT-06-230	~	~	2	~	1	3
LO - CT-06-231	~	~	1	~	1	2
LO - CT-06-232	~	~	1	~	1	2
LO - CT-06-233	~	~	1	1	1	3
LO - CT-06-234	~	~	2	~	2	4
LO - CT-06-235	~	~	3	~	2	5
LO - CT-06-236	~	~	1	~	1	2
LO - CT-06-237	~	~	2	~	1	3
LO - CT-06-238	~	1	3	~	1	4
LO - CT-06-239	~	~	2	~	3	5
LO - CT-06-239-R1	~	~	1	~	1	2
LO - CT-10-10	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - CT-10-101	~	~	1	~	~	1
LO - CT-10-105	~	~	1	~	~	1
LO - CT-10-106a	~	~	1	~	~	1
LO - CT-10-107	~	~	1	~	1	2
LO - CT-10-108	~	~	1	~	2	3
LO - CT-10-109	~	~	1	~	~	1
LO - CT-10-111a	~	~	1	~	~	1
LO - CT-10-114	~	~	2	~	1	3
LO - CT-10-117	~	~	2	~	~	2
LO - CT-10-118a	~	~	1	~	~	1
LO - Dab Green Farm	~	~	1	~	~	1
LO - Dairy House	~	~	~	~	2	2
LO - Dairy House Farm	~	~	1	~	~	1
LO - Darlaston	~	~	1	~	~	1
LO - Darlaston Grange Farm	~	~	~	~	2	2
LO - Deer Park Farm	~	~	1	~	1	2
LO - Delta Junction	~	~	1	~	~	1
LO - Den Lane East Compound	~	~	1	~	~	1
LO - Den Lane Viaduct	~	~	1	~	~	1
LO - Derby	~	~	~	1	1	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Devereux Grange	~	~	1	~	~	1
LO - Downs Bank	~	~	~	~	1	1
LO - Drake Hall	~	~	2	~	~	2
LO - Dudley Borough	~	~	~	~	1	1
LO - Eccleshall	1	~	4	~	4	9
LO - Echills Farm	~	~	2	~	~	2
LO - Edland Boarding Kennels	~	~	1	~	~	1
LO - Ellesmere Dairy Farm	1	~	~	~	~	1
LO - Elmhurst	~	~	1	~	~	1
LO - Englesea Brook	~	~	~	~	1	1
LO - Essex Bridge	~	~	1	~	~	1
LO - Euston	~	~	1	~	~	1
LO - Far Coley Farm	~	~	~	~	1	1
LO - Far End Cottage	~	~	~	~	1	1
LO - Farley Cottage	~	~	1	~	~	1
LO - Filly Brook	~	~	3	~	1	4
LO - Filly Brook Viaduct	~	~	2	~	2	4
LO - Fillybrooks	1	~	1	~	~	2
LO - Fingerpost Field	~	~	2	~	~	2
LO - Finner's Hill	~	~	1	~	1	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Fitzherbert Arms	~	~	1	~	~	1
LO - Flushing Covert	1	~	1	~	~	2
LO - Footpath - 0.1630(b)	~	~	1	~	~	1
LO - Footpath - BE54	~	~	1	~	~	1
LO - Footpath - BW (various)	~	~	~	~	1	1
LO - Footpath - BW0.1135	~	~	1	~	~	1
LO - Footpath - BW0.1628	~	~	1	~	~	1
LO - Footpath - BW01 Red Lane	~	~	1	~	~	1
LO - Footpath - BW02	~	~	1	~	~	1
LO - Footpath - BW05	~	~	1	~	~	1
LO - Footpath - BW08	~	~	2	~	~	2
LO - Footpath - BW11	~	~	1	~	~	1
LO - Footpath - BW12	~	~	3	~	~	3
LO - Footpath - BW16	~	~	1	~	~	1
LO - Footpath - BW21	~	~	1	~	~	1
LO - Footpath - BW23	~	~	2	~	1	3
LO - Footpath - BW24	~	~	1	~	~	1
LO - Footpath - BW31	~	~	1	~	~	1
LO - Footpath - BW35	~	~	1	~	~	1
LO - Footpath - BW54	~	~	2	~	~	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Footpath - FB16	~	~	1	~	~	1
LO - Footpath - FP0.390	~	~	1	~	~	1
LO - Footpath - FP01	~	~	~	~	1	1
LO - Footpath - FP01 Kings Bromley	~	~	3	~	2	5
LO - Footpath - FP02	~	~	1	~	~	1
LO - Footpath - FP03	~	~	3	~	~	3
LO - Footpath - FP04	~	~	2	~	1	3
LO - Footpath - FP05	~	~	2	~	~	2
LO - Footpath - FP06	~	~	2	~	1	3
LO - Footpath - FP07	~	~	2	~	2	4
LO - Footpath - FP08	~	~	3	~	~	3
LO - Footpath - FP09	~	~	1	~	~	1
LO - Footpath - FP10	1	~	2	~	~	2
LO - Footpath - FP11	~	~	3	~	~	3
LO - Footpath - FP12	~	~	3	~	~	3
LO - Footpath - FP13	~	~	2	~	~	2
LO - Footpath - FP14	~	~	1	~	~	1
LO - Footpath - FP15	~	~	4	~	1	5
LO - Footpath - FP16	~	~	1	~	~	1
LO - Footpath - FP17	~	~	4	~	~	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Footpath - FP19	~	~	1	~	~	1
LO - Footpath - FP23	~	~	1	~	~	1
LO - Footpath - FP24	~	~	3	~	1	4
LO - Footpath - FP26	~	~	1	1	1	3
LO - Footpath - FP27	~	~	1	~	~	1
LO - Footpath - FP28	~	~	1	~	1	2
LO - Footpath - FP30	~	~	3	~	~	3
LO - Footpath - FP31	~	~	1	~	~	1
LO - Footpath - FP32	~	~	1	~	~	1
LO - Footpath - FP32 Stone Rural Overbridge	~	~	1	~	~	1
LO - Footpath - FP33	1	~	1	~	~	1
LO - Footpath - FP34	~	~	3	~	~	3
LO - Footpath - FP36	~	~	3	~	~	3
LO - Footpath - FP38	~	~	3	~	~	3
LO - Footpath - FP52	~	~	2	~	1	3
LO - Footpath - FP54	~	~	2	~	~	2
LO - Footpath - FP55	~	~	2	~	~	2
LO - Footpath - FP56	~	~	1	~	~	1
LO - Footpath - FP63	~	~	1	~	~	1
LO - Footpath - FP76	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Footpath - FP85	~	~	1	~	~	1
LO - Footpath - FP85 Mavesyn Ridware	~	~	5	~	~	5
LO - Footpath - Sabrina Way	~	~	1	~	~	1
LO - Footpath - South Cheshire Way	~	~	1	~	~	1
LO - Footpath - Staffordshire Cake and Ale Trail	~	~	1	~	~	1
LO - Footpath - Staffordshire Way	~	~	1	~	~	1
LO - Footpath - The Newcastle Way	~	~	1	~	~	1
LO - Footpath - The Sabrina Way	~	~	1	~	~	1
LO - Footpath - The Stone Circles Challenge	~	~	1	~	~	1
LO - Footpath - Trent and Mersey Canal Walk	~	~	1	~	~	1
LO - Footpath - Two Saints Way	~	~	1	~	~	1
LO - Ford's Belt	1	~	~	~	~	1
LO - Fradley	3	1	15	4	1	21
LO - Fradley Park	~	~	1	~	~	1
LO - Fradley Wood	~	~	2	~	1	3
LO - Furnival Farms	1	1	1	~	~	1
LO - Goldhayfields Farm	~	~	1	~	~	1
LO - Gonsley drop inlet culvert	~	~	1	~	~	1
LO - Gonsley Green	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Gonsley Green Farm	1	2	4	~	2	5
LO - Grafton's Wood	~	~	1	~	~	1
LO - Grange Farm	1	~	2	~	~	2
LO - Great Haywood	3	5	9	2	7	21
LO - Great Haywood Banks	~	~	~	~	1	1
LO - Great Haywood Marina	1	2	4	~	4	9
LO - Great Haywood Viaduct	~	~	11	~	~	11
LO - Green Barn	~	~	1	~	~	1
LO - Gresty Brook	~	~	1	~	~	1
LO - Hadley Gate	~	~	~	~	1	1
LO - Hadley Gate Fields Farm	~	~	1	~	~	1
LO - Hamley Heath	~	~	2	~	~	2
LO - Hamley House Farm	2	~	1	~	~	3
LO - Hamley Lodge	2	~	2	~	~	2
LO - Hamley South Culvert	~	~	1	~	~	1
LO - Hamstall Ridware	~	~	2	1	1	4
LO - Hanchurch	1	~	1	~	2	3
LO - Hanchurch Hills	~	~	~	~	1	1
LO - Handsacre	~	~	~	~	2	2
LO - Handsacre Link	~	1	~	1	~	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Hanley	~	~	4	~	3	7
LO - Hanyards Cutting	~	1	~	~	~	1
LO - Hanyards drop inlet culvert	~	~	2	~	~	2
LO - Hanyards Lane Accommodation Overbridge	~	~	1	~	~	1
LO - Harley Farm	~	~	~	~	2	2
LO - Hatton	~	~	2	~	2	4
LO - Hatton Embankment	~	~	~	~	1	1
LO - Hatton Mill	~	~	~	~	1	1
LO - Haynards Drop inlet culvert	~	~	~	~	1	1
LO - Haywood	~	~	1	~	~	1
LO - Heath Farm	~	~	2	~	~	2
LO - Hey House	~	~	1	~	~	1
LO - Hey Sprink	1	~	3	~	1	4
LO - Highlow Bank	~	~	1	~	1	2
LO - Highlow Meadows	1	~	1	~	~	2
LO - Hill Chorlton	3	~	2	~	4	9
LO - Hill Ridware	2	~	3	~	~	5
LO - Hilliards Cross	~	~	1	~	~	1
LO - Hixon	~	~	1	~	~	1
LO - Holly Cottage	2	1	2	~	~	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Home Farm Court	~	~	2	~	~	2
LO - Hoo Mill	1	~	3	~	2	6
LO - Hoo Mill Bridge	~	~	2	~	~	2
LO - Hoo Mill Lane Compound	~	~	~	~	1	1
LO - Hoo Mill Lane Cottages	~	~	1	~	~	1
LO - Hoo Mill Lock	~	~	2	~	~	2
LO - Hoo Mill Marina	~	~	1	~	~	1
LO - Hopton	2	4	11	~	8	22
LO - Hopton Culvert	~	~	1	~	~	1
LO - Hopton Farm	~	~	~	~	1	1
LO - Hopton Heath	~	1	1	~	1	2
LO - Hopton Heath Battlefield	~	4	~	~	~	4
LO - Hopton Pools	~	~	1	~	1	2
LO - Hopton South Cutting	~	~	~	~	1	1
LO - Hough	~	~	2	~	1	3
LO - Hull	~	~	~	~	1	1
LO - Hunger Hill	~	~	1	~	~	1
LO - Hurst Wood	2	1	3	1	1	5
LO - Hurstwood Barn	~	~	~	~	1	1
LO - Ingestre	1	3	8	1	7	14

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Ingestre Conservation Area	~	1	1	~	~	2
LO - Ingestre Golf Club	~	1	~	~	5	5
LO - Ingestre Hall	2	2	4	~	1	6
LO - Ingestre Manor Farm	~	~	~	~	2	2
LO - Ingestre Park	~	~	2	~	1	3
LO - Ingestre Park Golf Club	2	~	6	~	~	8
LO - Ingestre Pavilion	~	2	~	~	~	2
LO - Ingestre Riparian Alluvial Lowlands	~	~	~	~	1	1
LO - Ingestre Salt Marsh	~	~	~	~	1	1
LO - Ingestre Wood	1	~	2	~	2	4
LO - Ingestre, St Mary, Churchyard	~	~	~	~	1	1
LO - Island Arboretum	~	~	1	~	~	1
LO - Jewstrup Covert	~	~	~	~	1	1
LO - Jubilee Farm	~	~	1	~	~	1
LO - Keele	~	~	2	~	~	2
LO - Kent's Barn Farm	~	~	~	~	1	1
LO - Kings Bromley	5	1	15	2	3	19
LO - Kings Bromley Marina	~	~	1	~	~	1
LO - Kings Drive	~	~	~	~	2	2
LO - Lambert's Coppice	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Lane End Court	1	1	~	~	~	1
LO - Lane End Farm	~	~	1	~	~	1
LO - Lea Farm	~	~	~	~	1	1
LO - Lea North Embankment	~	~	~	~	1	1
LO - Lea Valley	1	~	1	~	2	4
LO - Lea Valley viaduct	~	~	4	~	7	11
LO - Leeds	~	~	2	1	1	4
LO - Leicester	~	~	~	1	~	1
LO - Lichfield	4	2	5	3	~	9
LO - Lichfield Cathedral	~	~	1	~	~	1
LO - Lichfield Lodges	~	~	1	~	~	1
LO - Lion Lodge Covert	~	2	6	1	4	12
LO - Lion Lodges	~	~	1	~	3	3
LO - Lion Wood	~	~	~	~	1	1
LO - Little Covert	~	~	1	~	1	2
LO - Little Haywood	~	~	3	~	1	4
LO - Little Ingestre	~	1	2	~	~	2
LO - Little Ingestre Barns	~	~	1	~	~	1
LO - Little Ingestre Care Home	~	~	1	~	~	1
LO - Little Spinney	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Liverpool	~	~	2	3	1	5
LO - Lodge Covert	~	~	2	~	1	3
LO - Loggerheads	3	~	3	~	~	6
LO - London	2	1	1	2	1	7
LO - Long Acre Farm	~	~	1	~	~	1
LO - Long Compton Farm	~	~	1	~	2	3
LO - Lount Farm LWS/SBI	~	~	1	1	1	3
LO - Lower Berryhill	~	~	~	~	1	1
LO - Lower Bridge Farm	~	~	1	~	1	2
LO - Lower Compton Farm	~	~	~	~	1	1
LO - Lower Den Farm	~	~	1	~	~	1
LO - Lower Hanyards Farm	~	~	1	~	~	1
LO - Lower Hatton	~	~	~	~	2	2
LO - Lower Hatton Corner	~	~	~	~	1	1
LO - LV-11-101	~	~	1	~	~	1
LO - LV-11-107a	~	~	1	~	~	1
LO - LV-11-107b	~	~	~	~	1	1
LO - LV-11-108	~	~	~	~	1	1
LO - LV-11-109	~	~	2	~	2	4
LO - LV-11-109-L1	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - LV-11-110	~	~	~	~	1	1
LO - Macclesfield	~	~	4	1	~	4
LO - Madeley	19	12	40	3	35	90
LO - Madeley Cemetery	~	~	1	~	~	1
LO - Madeley Centre	~	~	~	1	~	1
LO - Madeley Heath	~	~	1	~	~	1
LO - Madeley High School	1	~	~	~	~	1
LO - Madeley Park	~	1	1	~	~	1
LO - Madeley Park Wood	5	1	10	~	15	28
LO - Madeley tunnel	~	8	14	~	3	19
LO - Madeley Tunnel East Satellite Compound	~	~	~	~	2	2
LO - Madeley, All Saints, New Churchyard	~	~	~	~	1	1
LO - Madely Great Park	~	~	1	~	~	1
LO - Madely Old Manor	~	~	1	~	~	1
LO - Maer	~	~	2	~	2	4
LO - Manchester	~	~	4	3	3	9
LO - Manor Farm	1	~	2	~	~	2
LO - Manor Park Wood	1	~	1	~	~	1
LO - Manor Road Overbridge	~	~	~	~	1	1
LO - Manor Road Verges	~	~	1	~	1	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Mantle's Wood	1	~	~	~	~	1
LO - Map references	~	~	1	~	~	1
LO - Market Drayton	6	1	4	~	1	10
LO - Marlpit	~	~	~	~	1	1
LO - Marlpit Lake	~	~	3	~	~	3
LO - Marlpit Wood	~	~	3	~	~	3
LO - Marston	3	4	5	~	3	10
LO - Marston - St Leonards Church	~	~	1	~	~	1
LO - Marston Bridleway	~	~	~	~	1	1
LO - Marston Brook	~	~	1	~	~	1
LO - Marston cottages	~	~	1	~	~	1
LO - Marston South Embankment	~	~	1	~	~	1
LO - Marston Villa	~	~	1	~	~	1
LO - Mavesyn Ridware	1	~	4	~	~	5
LO - Mayfield	~	~	2	~	2	4
LO - Meadows Field	~	~	1	~	~	1
LO - Meaford	~	~	4	~	~	4
LO - Meaford Locks	~	~	1	~	~	1
LO - Meaford viaduct	~	~	1	~	2	3
LO - Meece	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Meece Brook	1	1	6	~	~	8
LO - Meece Brook Valley	~	~	3	~	4	7
LO - Meece Brook Viaduct	3	~	9	1	12	23
LO - Meece Brook Viaduct Satellite Compound	~	~	~	~	1	1
LO - Meece Embankment	~	~	2	~	3	5
LO - Meece Road Viaduct	~	1	~	~	~	1
LO - Meece Valley Viaduct	~	1	~	~	~	1
LO - Mellors Farm	~	~	1	~	~	1
LO - Menford Viaduct	~	~	1	~	~	1
LO - Mercedes Brook viaduct	~	~	1	~	~	1
LO - Mere Gutter Local Wildlife Site	~	1	3	~	~	3
LO - Meres and Mosses Nature Improvement Area	~	1	1	~	1	2
LO - Merseyside	1	~	1	1	~	1
LO - Micklow Wood	~	~	~	~	1	1
LO - Midlands Meres and Mosses Phase 1 Ramsar Site	~	~	~	~	1	1
LO - Milford	~	~	2	~	~	2
LO - Mill Lane Allotment	~	~	1	~	~	1
LO - Mill Lane auto-transformer station	~	~	2	~	~	2
LO - Millmeece	2	~	2	~	1	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Ministry of Defence (MOD) Stafford	~	2	~	~	~	2
LO - Moor Farm	~	~	1	~	~	1
LO - Moor Hall	~	~	3	~	~	3
LO - Moor Hall farmhouse	~	~	1	~	~	1
LO - Moreton	~	~	6	~	2	8
LO - Moreton Bridge	~	~	1	~	~	1
LO - Moreton Brook	1	1	1	~	1	3
LO - Moreton Brook Viaduct	~	~	1	~	~	1
LO - Moreton Cottage and Barn	~	~	~	~	2	2
LO - Moreton Cutting	~	~	1	~	~	1
LO - Moreton Grange Farm	~	~	4	~	~	4
LO - Moreton House	~	2	3	~	2	7
LO - Moreton House Farm	~	~	2	~	2	4
LO - Moreton South Embankment	~	~	2	~	~	2
LO - Moss Lane Surgery	~	~	1	~	~	1
LO - Mount Edge	1	~	5	~	1	7
LO - Nantwich	1	~	3	~	~	3
LO - Needwood Basin	~	~	1	~	~	1
LO - Netherset	~	~	2	~	~	2
LO - New Farm Track	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - New Plantation	~	~	1	~	1	2
LO - Newcastle	2	1	9	2	8	21
LO - Newcastle Bridge	~	~	1	~	~	1
LO - Newcastle Road over-bridge	~	~	1	~	~	1
LO - Newcastle-under-Lyme	1	~	8	~	6	15
LO - Newlands Lane Electricity Feeder Station	~	~	1	~	~	1
LO - North Staffordshire	~	~	1	~	~	1
LO - North Staffs Railway	~	~	1	~	~	1
LO - North Stone Link	~	1	~	~	~	1
LO - Norton Bridge	6	3	10	1	7	22
LO - Norton Bridge Junction	~	1	~	~	~	1
LO - Nottingham	~	~	~	1	1	2
LO - Oak Farm	~	~	1	~	~	1
LO - Oakhanger Hall	1	1	1	~	1	1
LO - Old Rectory	~	~	1	~	~	1
LO - Old School House	~	~	1	~	~	1
LO - Onneley	~	~	1	~	3	4
LO - Ordnance Survey map references	~	~	2	~	~	2
LO - Park Barn Farm	2	~	3	~	~	5
LO - Pasturefields	2	4	6	1	8	19

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Piggin's Bank	~	~	2	~	~	2
LO - Pipe Ridware	3	~	19	1	2	22
LO - Pipe Ridware maintenance loop	~	1	~	~	~	1
LO - Pipe Wood	~	~	2	~	1	3
LO - Pipewood Cottage Farm	~	~	1	~	~	1
LO - Pirehill	~	1	1	~	~	2
LO - Pirehill Farm	~	~	1	~	~	1
LO - Pirehill First School	~	~	1	~	~	1
LO - Pool Farm	~	~	1	~	1	2
LO - Pool House Farm	~	~	3	~	~	3
LO - Poolhouse Wood	1	~	2	~	1	3
LO - Pyford Brook	~	~	~	~	1	1
LO - Pyford Brook Satellite Compound	~	~	~	~	1	1
LO - Pyford Brook Viaduct	~	~	4	~	~	4
LO - Pyford North Embankment	~	~	2	~	~	2
LO - Quintons Orchard	~	~	7	~	1	8
LO - Quintons Orchard Farm	~	~	~	~	2	2
LO - Radway Green	~	~	~	~	1	1
LO - Radwood Copse & Railway Verges	~	~	~	~	1	1
LO - Rail - Madeley chord railway and Market Drayton line	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Raleigh Hall	~	~	3	~	~	3
LO - Randilow Farm	~	~	1	~	~	1
LO - Rice's Spinney	~	~	2	~	1	3
LO - Richard Crosse Primary School	2	1	3	2	1	4
LO - Rileyhill	~	~	4	~	1	5
LO - River Blithe	~	~	~	1	~	1
LO - River Blythe	~	~	1	~	~	1
LO - River Lea	1	~	2	~	2	4
LO - River Lea Valley	~	~	3	~	2	5
LO - River Lea Viaduct	3	~	8	~	5	15
LO - River Lea Viaduct satellite compound	~	~	~	~	1	1
LO - River Sow	~	~	2	~	1	3
LO - River Trent	1	3	7	2	5	14
LO - River Trent Satellite compound	~	~	1	~	~	1
LO - River Trent Viaduct	~	~	10	~	~	10
LO - Road - A34	7	2	27	2	15	45
LO - Road - A38	1	~	3	~	~	4
LO - Road - A50	3	~	~	~	~	3
LO - Road - A500	~	~	9	~	3	11
LO - Road - A5013	~	~	4	~	~	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - A51	11	3	36	3	35	83
LO - Road - A5127	~	~	1	~	~	1
LO - Road - A513	1	~	11	~	1	12
LO - Road - A515	2	~	9	~	1	10
LO - Road - A518	1	~	5	~	4	10
LO - Road - A5182	1	~	4	~	1	5
LO - Road - A519	1	~	15	~	9	24
LO - Road - A525	3	~	11	~	6	18
LO - Road - A525 Bar Hill overbridge	~	~	1	~	~	1
LO - Road - A53	27	6	32	3	33	75
LO - Road - A531	~	~	1	~	2	3
LO - Road - A534	~	~	~	~	1	1
LO - Road - Appleton Drive	2	~	~	~	~	2
LO - Road - B5013	2	~	7	~	3	10
LO - Road - B5014	1	~	8	~	3	12
LO - Road - B5026	3	3	12	~	7	21
LO - Road - B5066	1	~	4	~	3	8
LO - Road - B5104	~	~	3	~	~	3
LO - Road - Back Lane	~	~	~	~	1	1
LO - Road - Bar Hill Road	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Bar Road	1	~	~	~	~	1
LO - Road - Beacon Hill	~	~	2	~	~	2
LO - Road - Bent Lane	~	~	4	1	7	12
LO - Road - Birch Tree Lane	~	~	1	~	~	1
LO - Road - Bishton Lane	~	~	3	~	1	4
LO - Road - Bitterns Lane	~	~	1	~	~	1
LO - Road - Black Drive	~	~	2	~	1	3
LO - Road - Blackheath Lane	~	~	1	~	~	1
LO - Road - Blithbury Road	~	~	12	~	~	12
LO - Road - Bottom Lane	1	~	1	1	3	5
LO - Road - Bow Lane	~	~	~	~	1	1
LO - Road - Bower End Lane	~	~	2	1	2	5
LO - Road - Burton Road	~	~	1	~	~	1
LO - Road - Cappers Lane	~	~	1	~	~	1
LO - Road - Casey Lane	~	~	2	~	2	4
LO - Road - Cemetery Road	~	~	1	~	1	2
LO - Road - Checkley Lane	~	1	4	~	2	7
LO - Road - Checkley Road	~	~	1	~	~	1
LO - Road - Chorlton Lane	1	1	6	~	3	9
LO - Road - Clifford's Wood crossroads	~	~	2	~	~	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Cliffords Wood roundabout	~	~	~	~	1	1
LO - Road - Cobbs Lane	~	~	1	~	~	1
LO - Road - Coley Farm Drive	~	~	1	~	~	1
LO - Road - Coley Lane	~	~	~	~	1	1
LO - Road - Common Lane	7	2	15	3	4	24
LO - Road - Crawley Lane	2	1	5	2	2	7
LO - Road - Crewe Road	~	~	4	~	~	4
LO - Road - Crotia Mill Lane	~	~	2	~	1	3
LO - Road - Curzon Street	~	~	1	~	~	1
LO - Road - Dab Green	~	~	~	~	1	1
LO - Road - Dab Green Lane	~	1	1	~	~	2
LO - Road - Damson Lane	~	~	~	~	1	1
LO - Road - David Whitby Road	~	~	2	~	~	2
LO - Road - Dawson Lane	~	~	2	~	1	3
LO - Road - Deepark Drive	~	~	~	~	1	1
LO - Road - Den Lane	~	1	9	~	2	11
LO - Road - Dog Lane	~	~	2	~	3	5
LO - Road - Drab Hall Lane	~	~	1	~	~	1
LO - Road - Eccleshall Road	6	1	11	4	6	21
LO - Road - Great Haywood Road	~	~	3	~	2	5

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Green Lane	~	~	1	~	~	1
LO - Road - Gresty Green Road	~	~	1	~	~	1
LO - Road - Hadley Gate Lane	1	~	2	~	~	2
LO - Road - Hall Lane	~	~	1	~	~	1
LO - Road - Hamstall Road	~	~	~	~	1	1
LO - Road - Hanyards Lane	1	~	1	~	2	3
LO - Road - Haywards Lane	~	~	1	~	~	1
LO - Road - Haywood Road	~	~	1	~	~	1
LO - Road - Heath Road	1	1	2	~	4	8
LO - Road - High Lows Lane, Byway 36	~	~	~	~	1	1
LO - Road - High Street, Colton	1	1	1	1	~	1
LO - Road - Highlows Lane	~	~	1	~	~	1
LO - Road - Holdiford Road	~	~	1	~	~	1
LO - Road - Hoo Mill crossroads	~	~	1	~	~	1
LO - Road - Hoo Mill Lane	~	~	5	~	~	5
LO - Road - Hopton Lane	1	~	4	~	4	9
LO - Road - Hunter Avenue	~	~	1	~	~	1
LO - Road - Ingestre Road	~	~	1	~	2	2
LO - Road - Jack Mills Way	~	~	5	~	1	6
LO - Road - Jonghams Lane	~	~	2	~	~	2

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Junction 15	~	1	3	~	~	4
LO - Road - Junction 16	~	~	1	~	~	1
LO - Road - Kennels Lane	~	~	1	~	~	1
LO - Road - Kings Bromley Lane	~	~	1	~	~	1
LO - Road - Kings Drive	~	~	2	~	~	2
LO - Road - Lane End Court	~	~	1	~	~	1
LO - Road - Larch Avenue	~	~	1	~	~	1
LO - Road - Lea Lane	~	~	1	~	~	1
LO - Road - Lichfield Road	~	~	6	1	1	8
LO - Road - Long Mets Lane	~	~	~	~	1	1
LO - Road - Lount Lane	1	~	1	~	~	2
LO - Road - Lower Lane	~	~	1	~	~	1
LO - Road - M6	12	3	43	1	13	67
LO - Road - Manor Road	16	1	18	~	21	49
LO - Road - Marston Lane	1	~	2	~	3	6
LO - Road - Meece Road	~	~	5	~	~	5
LO - Road - Mill Lane	~	~	4	~	3	7
LO - Road - Moor Lane	2	1	10	~	4	14
LO - Road - Moss Lane	~	~	1	~	1	2
LO - Road - Mount Edge Road	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Narrow Lane	~	~	1	~	~	1
LO - Road - Newcastle Road	2	1	16	1	1	17
LO - Road - Newlands Lane	2	~	11	~	5	16
LO - Road - Newlands Road	~	~	2	~	~	2
LO - Road - Norton Road	~	~	~	1	~	1
LO - Road - Parkwood Drive	~	~	~	~	3	3
LO - Road - Pipe Lane	~	~	10	~	2	12
LO - Road - Pipewood Lane	~	~	2	~	~	2
LO - Road - Pirehill Lane	~	~	~	1	1	2
LO - Road - Red Lane	~	~	6	~	1	7
LO - Road - Rugeley Road	~	~	3	~	~	3
LO - Road - Sandon Lane	~	~	1	~	~	1
LO - Road - Sandon Road	1	~	5	~	4	10
LO - Road - Sandy Lane	~	~	1	~	1	2
LO - Road - Sandyford Lane	~	~	2	~	1	3
LO - Road - School Lane	~	~	~	~	1	1
LO - Road - Shavington bypass	~	~	2	~	2	4
LO - Road - Shaw Lane	1	1	9	~	3	12
LO - Road - Sherracop Lane	2	~	6	~	2	8
LO - Road - Skeath Lane	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Snape Hall road	16	6	36	3	19	60
LO - Road - South Bent Lane	~	~	1	~	~	1
LO - Road - Spode Avenue	1	~	2	1	3	7
LO - Road - Stab Lane	1	~	9	1	12	21
LO - Road - Station Road	~	~	~	~	1	1
LO - Road - Stone Road	1	~	3	~	~	4
LO - Road - Stoneyford Lane	~	~	5	~	1	6
LO - Road - Sutherland Drive	~	~	~	~	1	1
LO - Road - Swynnerton Road	~	~	1	~	~	1
LO - Road - Three Mile Lane	~	~	1	~	2	3
LO - Road - Tittensor Road	1	~	13	1	9	23
LO - Road - Tixall Lane	~	~	~	~	1	1
LO - Road - Tixall Road	~	~	5	~	3	7
LO - Road - Tolldish Lane	~	~	3	1	4	8
LO - Road - Trent Drive	~	~	~	~	1	1
LO - Road - Trent Lane	~	~	~	~	1	1
LO - Road - Uttoxeter Road	~	~	7	~	2	9
LO - Road - Walton roundabout/junction	~	~	1	~	~	1
LO - Road - Waybutt Lane	~	~	2	~	1	3
LO - Road - Weston Lane	~	~	3	~	4	7

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Road - Weston Road	~	~	1	~	1	2
LO - Road - Whites Lane	~	~	1	~	~	1
LO - Road - Winghouse Lane	~	~	~	~	1	1
LO - Road - Within Lane	~	~	1	~	~	1
LO - Road - Wood End Lane	~	~	3	~	~	3
LO - Road - Wood Lane	~	~	1	~	~	1
LO - Road - Wrinehall Road	~	~	~	~	1	1
LO - Road - Yarlet Lane	~	~	~	~	1	1
LO - Road - Yarnfield Lane	9	3	40	7	16	64
LO - Road - Yoxall Road	~	~	2	~	~	2
LO - Rookery Wood	~	~	2	~	~	2
LO - Rugeley	2	~	3	~	1	6
LO - Rugely Power Station	~	~	~	~	1	1
LO - Sandon Park	~	2	~	~	~	2
LO - Sandyfarm	~	~	~	~	1	1
LO - Sandyford	~	~	2	~	2	4
LO - Sandyford Farm	1	~	2	~	3	6
LO - Satnall Hills	~	~	2	~	~	2
LO - Shallow Bridge	1	~	~	~	~	1
LO - Shallowford	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Sheffield	~	~	~	3	1	4
LO - Shelton	~	~	~	~	2	2
LO - Shelton Culvert	~	~	~	~	1	1
LO - Shelton-under-Harley	~	~	3	~	2	5
LO - Sher Brook	~	~	1	~	~	1
LO - Shirleywich	~	1	1	~	~	1
LO - Shrewsbury	3	1	5	~	~	8
LO - Shropshire	4	~	~	~	1	5
LO - Shugborough	2	5	5	~	5	10
LO - Shugborough Hall MERGE	~	~	3	~	~	3
LO - Shugborough Park MERGE	~	~	4	~	~	4
LO - Silverdale	~	~	1	~	~	1
LO - Slaters Farm	1	~	1	~	~	1
LO - Snape Hall Compound	~	1	~	~	~	1
LO - Snape Hall Cottage	~	~	~	~	2	2
LO - Snape Hall Farm	~	4	15	~	6	21
LO - Snape Hall Road Satellite Compound	~	~	~	~	1	1
LO - South Cheshire	4	2	8	~	~	9
LO - South Cheshire Way	~	~	~	~	1	1
LO - South Crewe Auto Transformer Feeder Station	1	~	~	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Spencer's Plantation	~	~	1	~	1	2
LO - Springfields	~	~	1	~	~	1
LO - Springfields School	2	~	9	2	2	11
LO - St Barnabas Church	~	~	3	~	~	3
LO - St Leonard, Marston	1	~	~	~	1	2
LO - St Mary the Virgin, Ingestre	~	1	1	~	1	3
LO - St Mary the Virgin, Pipe Ridware	~	~	~	~	1	1
LO - St Mary, Swynnerton	~	~	~	~	1	1
LO - St Peter, Hopton	~	~	~	~	1	1
LO - Stabhill Plantation	~	~	1	~	~	1
LO - Stableford	1	~	4	~	6	11
LO - Stafford	1	3	19	2	11	32
LO - Stafford Services	~	~	1	~	~	1
LO - Stafford Station	2	~	~	~	~	2
LO - Staffordshire	12	1	28	6	8	47
LO - Staffordshire and Worcestershire Canal	~	~	3	~	1	4
LO - Staffordshire Showground	~	~	6	~	~	6
LO - Standon	1	~	~	~	1	2
LO - Stockport	~	~	1	1	~	1
LO - Stockwell Heath	5	2	11	2	3	16

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Stockwell Heath Embankment	3	~	2	~	~	3
LO - Stockwell Heath Pond Biodiversity Alert Site	~	~	1	~	~	1
LO - Stoke	~	~	7	~	~	7
LO - Stoke-on-Trent	3	4	8	4	12	26
LO - Stone	19	11	61	8	32	102
LO - Stone Dominoes Football Club	~	~	7	~	2	9
LO - Stone Railhead	2	~	~	~	~	2
LO - Stone Railway	~	~	2	~	~	2
LO - Streethay Junction	~	~	~	~	1	1
LO - Sunnyhill Farm	~	~	~	~	1	1
LO - Sutch Farm	1	1	1	~	1	1
LO - SV-01-101	~	~	1	~	~	1
LO - SV-01-102	~	~	1	~	~	1
LO - SV-01-105	1	1	1	1	~	1
LO - SV-01-106a	~	~	1	~	~	1
LO - SV-01-106b	~	~	1	~	~	1
LO - SV-01-108	~	~	1	~	~	1
LO - SV-01-109	~	~	1	~	~	1
LO - SV-01-110	1	~	~	~	~	1
LO - SV-01-116	~	~	1	~	~	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Swill Brook	~	~	1	~	~	1
LO - Swivel Bridge	~	~	~	~	1	1
LO - Swynnerton	13	2	38	2	23	67
LO - Swynnerton Heath	~	~	1	~	~	1
LO - Swynnerton Heath Farm	~	~	~	~	1	1
LO - Swynnerton Park	~	1	1	1	1	2
LO - Telford	~	~	2	~	~	2
LO - The Coach House	~	~	~	~	1	1
LO - The Grange	1	~	4	~	~	5
LO - The Grove	~	~	1	~	~	1
LO - The Mayfield Centre	~	~	1	~	~	1
LO - The Old Rectory	~	~	1	~	~	1
LO - The Old School House	~	~	~	~	1	1
LO - The Potteries	5	2	4	~	1	8
LO - The Shires	~	~	1	~	~	1
LO - The Staffordshire Way	2	~	~	~	~	2
LO - The Water Tower	~	~	1	~	1	2
LO - Tithe Barn Farm	~	~	6	1	3	10
LO - Tithebarn Covert	~	~	2	~	1	3
LO - Tittensor	1	~	~	1	2	3

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Tittensor Road Satellite Compound	1	~	~	~	~	1
LO - Tixall	1	2	6	1	5	10
LO - Tixall Bidgeway	~	~	~	~	1	1
LO - Tixall Bridleway Satellite Compound	1	~	~	~	~	1
LO - Tixall Broads	~	~	1	~	1	2
LO - Tixall Conservation Area	~	~	1	~	~	1
LO - Tixall Court	~	~	3	~	1	4
LO - Tixall Farm	~	~	2	~	1	3
LO - Tixall Gatehouse	~	~	2	~	1	2
LO - Tixall Manor Farm	~	~	1	~	1	2
LO - Tixall Mews	~	~	1	~	~	1
LO - Tixall Park Pool	~	~	~	~	1	1
LO - Tolldish	~	~	4	~	~	4
LO - Tolldish Lane pasture	~	~	~	~	1	1
LO - Tomlinson's Spinney	1	~	3	~	1	5
LO - Town Field Plantation	1	~	~	~	~	1
LO - Trent and Mersey Canal	1	1	5	2	4	10
LO - Trent and Mersey Canal Conservation Area	~	~	~	~	2	2
LO - Trent and Mersey viaduct	~	~	~	~	1	1
LO - Trent embankment	~	~	4	~	~	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Trent South Embankment	~	~	2	~	1	3
LO - Trent Valley	2	~	9	2	1	13
LO - Trent Valley Viaduct	2	1	4	~	~	6
LO - Trentham	1	~	1	1	~	3
LO - Trentham Gardens	~	~	~	~	1	1
LO - Trentside Meadows	1	~	1	~	1	3
LO - Trentside Meadows Site of Biological Importance	~	~	1	~	~	1
LO - Triumphal Arch	~	~	1	~	~	1
LO - Upper Berryhill	~	~	~	~	1	1
LO - Upper Hanyards	~	~	~	~	2	2
LO - Upper Hanyards Farm	~	~	2	~	~	2
LO - Upper Meece Brook Valley	~	~	~	~	1	1
LO - Upper Moreton Farm	~	1	1	~	~	2
LO - Uttoxeter	~	~	3	~	~	3
LO - Walton	1	~	9	~	2	12
LO - Walton Heath	~	~	~	1	2	3
LO - Walton Heath Farm	1	~	2	~	2	4
LO - Walton House Farm	~	~	2	~	1	3
LO - Walton Middle School	~	~	2	~	~	2
LO - Watford	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Way for the Millenium	~	~	1	~	~	1
LO - West Coast Mainline	16	21	~	8	30	61
LO - Wedgwood	1	~	~	~	~	1
LO - Wellbeing Park	1	~	~	~	~	1
LO - Wem Fault	~	~	~	3	~	3
LO - West Chorlton	~	1	~	~	~	1
LO - West Coast Mainline	~	~	32	~	~	32
LO - West Midlands	~	~	1	~	~	1
LO - Westfield Covert	~	~	1	~	2	3
LO - Weston	~	1	3	~	1	4
LO - Weston Church Hall	~	~	1	~	~	1
LO - Weston Hall Estate	~	~	1	~	~	1
LO - Weston Village School	~	~	~	~	1	1
LO - White Barn Farm	~	~	1	~	~	1
LO - Whitgreave	~	~	~	~	2	2
LO - Whitmore	20	7	30	6	32	75
LO - Whitmore Borehole	~	~	1	~	~	1
LO - Whitmore Common	1	~	~	~	~	1
LO - Whitmore Conservation Area	3	~	~	~	~	3
LO - Whitmore Heath	26	19	45	6	36	100

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Whitmore Heath cutting	~	~	1	~	~	1
LO - Whitmore Heath Satellite Compound	1	~	~	~	~	1
LO - Whitmore Heath tunnel	2	2	10	~	13	25
LO - Whitmore South cutting	~	~	3	~	6	9
LO - Whitmore Trough	~	~	1	~	~	1
LO - Whitmore Tunnel	~	~	4	~	~	4
LO - Whitmore Valley	~	~	1	~	~	1
LO - Whitmore Village Hall	1	~	~	~	1	2
LO - Whitmore Wood	22	11	33	~	24	70
LO - Whitmore Wood cutting	~	~	3	~	~	3
LO - Whitmore Wood Overbridge	~	~	~	~	1	1
LO - Whitmore-Madeley Tunnel	~	~	~	~	1	1
LO - Whittington Heath Golf Course	~	1	~	~	~	1
LO - Wistaston Brook	~	~	1	~	~	1
LO - Wolseley Bridge	~	~	2	~	~	2
LO - Wolverhampton	~	~	4	3	~	4
LO - Wood End Culvert	~	~	2	~	~	2
LO - Wood End Farm	~	~	3	~	~	3
LO - Wood Farm	~	~	1	~	1	2
LO - Woodend Common Barn	~	~	~	~	1	1

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Woodend Lock	~	1	~	~	~	1
LO - Woodhouse Farm	~	~	3	~	2	5
LO - Woodside	~	~	1	~	~	1
LO - Woolly Moors	~	~	2	~	~	2
LO - Woore	3	~	3	~	2	8
LO - WR-01-207a	~	~	1	~	~	1
LO - WR-01-207b	~	~	1	1	~	1
LO - Wrinehall South Culvert	~	~	~	~	1	1
LO - Wrinehill	~	~	4	1	2	7
LO - Wrinehill Hall Farm	~	~	2	~	~	2
LO - Wrinehill Mill Farm	~	~	~	~	1	1
LO - Wrinehill South Culvert	~	~	1	~	~	1
LO - Wrinehill Wood	1	~	4	2	1	7
LO - Wybunbury	~	~	2	~	~	2
LO - Wychwood	~	~	1	~	~	1
LO - Wychwood Park	2	~	6	~	1	9
LO - Yarlet	5	4	15	1	7	28
LO - Yarlet Hall	~	~	~	~	3	3
LO - Yarlet Hall Farm	~	~	~	~	1	1
LO - Yarlet Hill	~	~	2	~	2	4

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
LO - Yarlet School	~	1	2	~	~	3
LO - Yarlet Wood	1	~	4	~	3	7
LO - Yarnfield	10	8	37	5	14	57
LO - Yarnfield Conference Centre	~	~	~	2	2	4
LO - Yarnfield Lane Satellite Compound	~	~	~	~	2	2
LO - Yarnfield North embankment	~	~	1	~	~	1
LO - Yarnfield Park	~	~	5	~	~	5
LO - Yarnfield Park Conference Centre	3	~	13	~	~	13
LO - Yarnfield South Embankment	~	~	1	~	~	1
LO - Yarnfield Sports Centre	2	~	3	2	1	4
LO - Yoxall	1	~	3	~	~	4
Other						
OT - Context to organisation/response	7	4	6	9	86	104
OT - Level of public opposition	~	~	~	1	~	1
OT - No comment	19	50	35	21	~	74
OT - Quote documentation	9	5	30	4	11	48
OT - Refer to attachment	24	17	46	10	20	77
OT - Refer to HS1	~	~	~	~	1	1
OT - Refer to hybrid Bill	3	8	3	2	8	19
OT - Refer to other comment	5	5	21	28	~	48

Code	Question 1	Question 2	Question 3	Question 4	Non-fitting	Total (see C4 p.152)
OT - Refer to other stakeholder/organisation	5	2	12	7	12	34
OT - Refer to previous response/correspondence	~	~	~	~	1	1
OT - Reference other documentation	~	~	14	2	2	17
Q1 Crewe Tunnel Extension (Q1)						
Q1 - Support proposal	~	~	~	~	3	3
Q2 Connection spurs South of Crewe (Q2)						
Q2 - Support proposal	~	~	~	~	1	1
Q3 Railhead and maintenance facility near Stone (Q3)						
Q3 - Oppose proposal	2	~	~	2	6	10
Q3 - Support proposal	~	~	~	~	4	4

Appendix D Glossary of terms

Abutment - A point where two structures meet, which support or anchor the end of a bridge.

Agricultural Land Classification - The system devised and introduced by the Ministry of Agriculture, Fisheries and Food to classify agricultural land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. Land is graded from 1 (excellent quality) to 5 (very poor quality), with grade 3 subdivided into agricultural subgrades 3a and 3b.

Ambient sound - The all-encompassing sound at a given location and time. It will generally include sound from many sources near and far. Ambient sound can be quantified in terms of the equivalent continuous sound pressure level.

Ancient woodland - Land that has been continually wooded since at least 1600.

Amenity - The benefits of enjoyment and well-being that are gained from a resource in line with its intended function. Amenity may be affected by a combination of factors such as: sound, noise and vibration; dust/air quality; traffic/congestion; and visual impacts.

Area of outstanding natural beauty (AONB) - An area designated under section 82(1) of the Countryside and Rights of Way Act 2000 for the purpose of conserving and enhancing its natural beauty.

Auto-transformer station - An installation that accommodates switchgear and associated equipment. Autotransformer stations are located in the railway corridor at approximately 5km (3 mile) intervals. They allow the distance between auto-transformer feeder stations to be increased.

Auto-transformer feedback station - Permanent compounds located next to railway lines. They contain equipment that enables electrical power to be transferred between the National Grid network and the rail line.

Balancing pond - Part of a drainage system that is used to temporarily store, and thereby attenuate, the flow of surface water run-off.

Baseline - Existing environmental conditions present on, or near a site, against which future changes can be measured or predicted.

Biodiversity - The variety of life in the world or in a particular habitat or ecosystem.

Bored tunnel - A tunnel constructed using a tunnel boring machine.

Borehole - A hole bored into the ground, usually as part of investigations, typically to test the depth and quality of soil, rock and groundwater. A borehole can also be used to dewater the ground.

Compensation code – see National Compensation Code.

Community area (CA) - Defined areas along the proposed HS2 Phase 2a route (e.g. South Cheshire community area). They are used as a geographical basis for reporting local

community and environmental impacts and effects in the environmental impact assessment report.

Corridor/Route B (North of Pasturefields) - an alternative route corridor south of Crewe taking a more northerly approach, up to 2km from Cannock Chase AONB and approximately 300m to the north of Pasturefields SAC. The corridor then continues north of Hopton and Hopton Registered Battlefield, and within approximately 300m of Yarlet School, skirting the south of Stone before heading north of Swynnerton and re-joining the other corridors near to Whitmore.

Culvert - A large pipe or small underbridge carrying a watercourse under a road or railway.

Cumulative - A combination of effects. The EIA Scope and methodology report for HS2 Phase 2a defines a cumulative effect as: "incremental effects that result from the accumulation of a number of individual effects, either caused by the Proposed Scheme (intra-project effects) or by other existing and/or approved projects which would be under construction at the same time as Phase 2a or built later (inter-project effects)."

Cutting - A linear excavation of soil or rock to make way for a new railway or road. Cuttings help reduce the noise and/or visual impact of passing trains or road vehicles.

Department for Transport - Government department responsible for transport issues in the UK (where powers have not been devolved).

Design Refinement consultation – A concurrent consultation to inform the Secretary of State's decision on the next stage of design for the Phase 2a route, based on the views of those individuals and organisations who expressed their opinions on the Working Draft report.

Directive - A legal act of the European Union. Legal obligations imposed on European member states by the European Commission following approval by the European Parliament and European Council.

Embankment - Artificially raised ground, commonly made of rock or compacted soil, on which a new railway or road is constructed.

Entry level stewardship - The basic level of Defra's Environmental Stewardship Scheme, intended to encourage a large number of farmers across a wide area to adopt simple environmental management practices, such as hedgerow management, low-input grassland, buffer strips and more sustainable arable options.

Environmental Stewardship and Countryside Stewardship - A scheme run by the Department for Environment, Food, and Rural Affairs in England that aims to promote responsible use and protection of the natural environment through conservation and sustainable practices.

Grade I listed building - A listed building of exceptional interest, sometimes considered to be internationally important.

Grade II listed building - Nationally important buildings that are of special interest.

Green Tunnel - A cut-and-cover tunnel with soil spread on top to integrate it into the landscape, thus minimising visual impacts and making the presence of a railway less

noticeable. Access tracks and vegetation can be placed on the surface above the tunnel and it can be used for amenity, parkland and agricultural uses etc.

Groundwater - All water that is below the surface of the ground and within the permanently saturated zone.

High Speed Two (HS2) - Proposed high speed rail line between London and the West Midlands (Phase One) and on to Manchester and Leeds (Phase Two). Phase 2a is the section between the West Midlands and Crewe.

High Speed Two Limited (HS2 Ltd.) - The company set up by the Government to develop proposals for a new high speed railway line between London and the West Midlands and to consider the case for new high speed rail services linking London, northern England and Scotland.

Historic Environment Record (HER) - A record of all known archaeological finds and features and historic buildings and historic/ landscape features, relating to all periods from the earliest human activity to the present day; maintained by each County and Unitary Authority in the United Kingdom.

Hybrid Bill - Public Bills change the law as it applies to the general public and are the most common type of Bill introduced in Parliament. Private Bills change the law only as it applies to specific individuals or organisations, rather than the general public. Groups or individuals potentially affected by these changes can petition Parliament against the proposed Bill and present their objections to committees of MPs and Lords. A Bill with characteristics of both a Public Bill and a Private Bill is called a hybrid Bill.

Impact - Changes to the environment that have the potential to occur as a result of the construction and/or operation of the Proposed Scheme.

Infrastructure maintenance depot (IMD) - A facility providing logistical support for the maintenance and repair of the HS2 railway track and associated infrastructure (excluding trains).

Information events - a series of events at community venues along the Phase 2a line of route between 30 September and 19 October 2016 to provide members of the public an opportunity to view relevant maps and documents, and to speak with appropriately qualified members of staff about how the proposals might apply to them.

Inverted siphon - A form of culvert used on level ground where the water level has to be lowered to pass under the Proposed Scheme, other railways or a road access.

Local planning authority - The local authority or council that is empowered by law to exercise planning functions.

Local wildlife site (LWS) - A non-statutory site of nature conservation value that has been designated 'locally'. These sites are referred to differently between counties. Common terms including site of importance for nature conservation, county wildlife site, site of biological importance, site of local importance and sites of metropolitan importance.

Mineral safeguarding area - An area with known mineral resources that are of identified economic or conservation value. These areas are defined by mineral planning authorities.

Mitigation - The measures put forward to prevent, reduce and where possible, offset any adverse effects on the environment, individuals and communities.

National Compensation Code - The collective term for the principles derived from both statute and case law, relating to compensation for compulsory acquisition. It ensures that when land is needed to build an infrastructure project, the owners receive compensation to help them to move house or to relocate a business. The code also ensures that those who experience real, physical events from a scheme once it is in operation, for example vibration or noise, are entitled to compensation.

Non-Technical summary – the section of the report which provides a summary in Non-Technical language of the Proposed Scheme, its impacts and the proposed means of avoiding, reducing or managing the likely significant adverse effects.

Option 8 Stone Hybrid - a railhead, and associated compound, between the M6 and the route of the Proposed Scheme, utilising land both north and south of the Norton Bridge to Stone railway. Option 8 has been taken forward into the Proposed Scheme.

Ordnance Survey - The national mapping agency for Britain.

Overbridge - A bridge crossing over a transport corridor such as a railway line.

Pantograph - A device that is attached to the roof of an electric train to collect power through contact with the overhead catenary wire.

Phase One - Phase One of the proposed HS2 network, a high speed railway between London and the West Midlands with a connection via the West Coast Main Line at conventional speeds to the North West and Scotland.

Phase Two - Phase Two of the proposed HS2 network extends the high speed railway beyond the West Midlands to Manchester and Leeds with connections to conventional railway lines via the West Coast and East Coast Main Lines.

Phase 2a - The section of the Phase Two route between the West Midlands and Crewe. It will include a connection with Phase One at Fradley, to the north-east of Lichfield, and a connection with the WCML south of Crewe.

Proposed Scheme - Proposed high speed rail line between the West Midlands and Crewe (i.e. Phase 2a of HS2).

Public right(s) of way (PRoW) - A highway where the public has the right to walk; and, depending on its class, use for other modes of travel. It can be a footpath (used for walking only), a bridleway (used for walking, riding a horse and cycling), a restricted byway (as a bridleway, but use by non-motorised vehicles also permitted) or a byway that is open to all traffic (include motor vehicles).

Railhead - A site at strategic locations along the route with connections to the National Rail network. They will be used as the delivery location for bulk rail-borne materials, such as ballast, rails and sleepers.

Receptor - A component of the natural or built environment (such as a human being, water, air, a building or a species) affected by an impact of the construction and/or operation of a proposed development.

Satellite construction compound - A compound that is smaller in size than the main construction compounds. Satellite construction compounds provide office accommodation for limited numbers of staff involved in the construction of the Proposed Scheme. Welfare facilities for staff are also provided.

Setting (cultural heritage) – The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive, negative or neutral contribution to the significance of an asset and may affect the ability to appreciate it.

Severance - A change in ease of access for non-motorised users due to, for example, a change in travel distance or travel time or a change in traffic levels on a route that makes it harder for non-motorised users to cross it. A reference to severance in this environmental impact assessment report does not necessarily imply that a route is closed to access.

Site of biological importance (SBI) - A non-statutory designation used by some local planning authorities to protect locally valued sites of biological diversity described as local wildlife sites by the UK Government.

Site of special scientific interest (SSSI) - Area of land notified by Natural England under Section 28 of the Wildlife and Countryside Act 1981 as being of special interest due to its flora, fauna or geological or physiological features.

Transfer node - A location where bulk deliveries or excavated materials leave or enter the construction worksites from public roads.

Viaduct - A type of bridge composed of a series of spans, used to carry roads and railways across valleys or other infrastructure.

West Coast Main Line (WCML) - Inter-urban rail line connecting London, Birmingham, Manchester, Liverpool and Glasgow.

Working Draft Equality Impact Assessment (EQIA) Report - This report presents baseline information gathered to date, and reports the potential equality effects of the Proposed Scheme and any proposed mitigation, based on the information available at the time. This was consulted on to inform the development of the scheme and the EQIA report.

Working Draft Environmental Impact Assessment (EIA) Report consultation – A consultation to inform the formal Environmental Impact Assessment Report which will form part of the hybrid Bill deposit, based on the views of those individuals and organisations who expressed their opinions on the Working Draft EIA report.

Zone of theoretical visibility (ZTV) - The likely (or theoretical) extent of visibility of a development, usually shown on a map.

Appendix E Equality and Diversity monitoring

- E1 As part of the consultation, respondents were asked to complete an equalities and diversity monitoring form through the consultation webform, or on a printed response form. For confidentiality and data protection purposes, these forms were collected separately from consultation responses.
- E2 It is also important to note that this consultation ran at the same time as two other consultations, Working Draft EQIA Report Consultation and Design Refinement Consultation, and that respondents could have completed only one equalities and diversities monitoring form despite submitting to multiple consultations. As a result of these factors, the equalities and diversity monitoring forms of all three consultations have been analysed together and reported on in each Consultation Summary Report.
- E3 The forms did not ask for contact details and therefore cannot be linked to individual consultation responses. For this reason we are also unable to confirm with certainty that those who completed the diversity form also responded to the consultation. Completing the form was voluntary. We received 361 diversity monitoring forms, compared to 1139 consultation responses across the three consultations. For these reasons the results presented below are only indicative and do not fully represent a complete description of respondents. In addition, as respondents often partially filled out the form, not every table below will total 361.
- E4 Where no respondents selected one of the given options on the form, it is not displayed in the results. A copy of the paper response form, which includes all possible options for each question, can be found in Appendix F. A breakdown of the results is presented below:

National identity

Question 1 asked How would you describe your national identity?

National identity	Count of responses
British	255
English	86
Scottish	1
Welsh	1
Other	1
Prefer not to say	5

The respondent who selected 'Other' identified as Irish.

Ethnicity

Question 2 asked How would you describe your ethnicity?

Ethnicity	Count of responses
Asian - Chinese	1
Asian - Indian	2
White - English	314
White - Irish	1
White - Northern Irish	1
White – Scottish	4
White – Welsh	5
Other mixed background	1
Other white background	4
Prefer not to say	18

Among the four respondents who selected other white background, two identified as British, one as Danish and one as Isle of Man. The respondent who identified as other mixed background did not specify their answer.

Disability

Question 3 asked Do you consider yourself to be a disabled person?

Do you consider yourself to be a disabled person?	Count of responses
Yes	18
No	253
Prefer not to say	21

Among the 18 respondents who answered yes to this question, 10 further specified their disability as mobility, seven as a hearing impairment, three as a visual impairment, two as mental ill health and one as a manual dexterity impairment. Some of these respondents specified more than one of these disabilities.

Gender

Question 4 asked What is your gender?

Gender	Count of responses
Female	185
Male	148
Prefer not to say	12

Religion and belief

Question 5 asked What is your religion or belief?

Religion or belief	Count of responses
Christian	206
Hindu	2
None	84
Prefer not to say	48
Other (please specify)	4

Of the four who answered other, one identified as Bahá'í, one identified as atheist and two did not specify their other religion or belief.

Marriage and Civil Partnerships

Question 6 asked Are you married or in a civil partnership?

Married or in a civil partnership	Count of responses
Yes	264
No	65
Prefer not to say	21

Age

Question 7 asked What is your age?

Age	Count of responses
Under 16	1
16-24	1
25-29	14
30-34	16
35-39	26
40-44	11
45-49	30
50-54	29
55-59	24
60-64	48
65+	96
Prefer not to say	27

Sexual orientation

Question 8 asked What is your Sexual Orientation?

Sexual Orientation	Count of responses
Bisexual	2
Heterosexual / straight	278
Prefer not to say	57

Appendix F Equality and Diversity monitoring form



High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report **About you**

As part of our commitment to considering diversity in the delivery of HS2 we want to understand who is responding to our consultations.

Information you give us will help us improve future engagement activities.

September 2016

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Completing this form is voluntary and is not a requirement for your response to be accepted. The form will not be linked to the information you have provided in your response or your name and we won't share the information with anyone else. We will use this information to provide a summary of the types of people who responded to this consultation. This summary will not identify individuals who have provided information.

Please complete the information below and return this form with your response, either by email to DraftEnvironmental2a@dialoguebydesign.co.uk or by post, using the Freepost address below.

FREEPOST DRAFT ENVIRONMENTAL 2A

Please note: no additional address information is required and you do not need a stamp. Please use capital letters.

Q1. How would you describe your national identity?

☐ British	☐ Scottish	☐ Prefer not to say
☐ English	☐ Welsh	
☐ Northern Irish	☐ Other (please specify) _____	

Q2. How would you describe your ethnicity?

Asian

☐ Bangladeshi	☐ Chinese	☐ Indian
☐ Pakistani	☐ Other Asian background (please specify) _____	

Black

☐ African	☐ Carribean
☐ Other Black background (please specify) _____	

Mixed ethnic background

☐ Asian and White	☐ Black African and White	☐ Black Carribean and White
☐ Other Mixed background (please specify) _____		

White

☐ English	☐ Gypsy or Irish Traveller	☐ Irish
☐ Northern Irish	☐ Scottish	☐ Welsh
☐ Other White background (please specify) _____		
☐ Prefer not to say		



Q3. Do you consider yourself to be a disabled person?

The Equality Act 2010 defines a disabled person as someone with a physical or mental impairment, which has a substantial and long-term adverse effect on the person's ability to carry out normal day-to-day activities.

☐ Yes ☐ No ☐ Prefer not to say

Into which category or categories does your disability fall?
(please tick as many as apply)

☐ Hearing impairment ☐ Mobility ☐ Speech impairment
☐ Visual impairment ☐ Mental ill health ☐ Manual dexterity
☐ Learning difficulties (where a person learns in a different way i.e. someone who is dyslexic) ☐ Prefer not to say
☐ Other (please specify) _____

Q4. What is your gender?

☐ Male ☐ Female ☐ Prefer not to say

Q5. What is your religion or belief?

☐ Buddhist ☐ Christian ☐ Hindu
☐ Jewish ☐ Muslim ☐ Sikh
☐ None ☐ Prefer not to say
☐ Other (please specify) _____

Q6. Are you married or in a civil partnership?

☐ Yes ☐ No ☐ Prefer not to say

Q7. What is your age?

☐ Under 16 ☐ 35-39 ☐ 55-59
☐ 16-24 ☐ 40-44 ☐ 60-64
☐ 25-29 ☐ 45-49 ☐ 65+
☐ 30-34 ☐ 50-54 ☐ Prefer not to say

Q8. What is your sexual orientation?

☐ Bisexual	☐ Gay man	☐ Gay woman
☐ Heterosexual/straight	☐ Prefer not to say	

Data Protection

All information supplied will be held by HS2 Ltd and will remain secure and confidential and will not be associated with other details provided in your response. The data will not be passed on to any third parties or used for marketing purposes in accordance with the Data Protection Act 1998.

