

M54 to M6 Link Road TR010054

8.10 Applicant Responses to Examining Authority's First Written Questions

Planning Act 2008

Rule 8 (1) (c)(ii)

Infrastructure Planning (Examination Procedure) Rules 2010

Volume 8

November 2020

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Examination Procedure) Rules 2010**

M54 to M6 Link Road
Development Consent Order 202[]

Applicant Response to ExA's First Written Questions

Regulation Number	Rule 8 (1)(c)(ii)
Planning Inspectorate Scheme Reference	TR010054
Application Document Reference	TR010054/APP/8.10
Author	M54 to M6 Link Road Project Team and Highways England

Version	Date	Status of Version
1	November 2020	Issue to the ExA for Deadline 1

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1 Responses to the Examining Authority's First Written Questions

- 1.1.1 This document has been prepared by the Applicant to set out its responses to the Examining Authority's (ExA) first written questions issued on 20 July 2020 [PD-010]. This document is being submitted at Deadline 1 for the M54 to M6 link road Examination on 3 November 2020.
- 1.1.2 All application documents have a reference number [TR010054/APP/x.y], where the last two numbers are the application document number. All documents are presented in numerical order in the Guide to the Application [TR010054/APP/1.5]. The number stays the same when a document is updated, with the 'version' being updated as shown in the Guide. This referencing style is used where a document is referenced without the need to reference a particular version. Where a response is referring to a particular version of a document, the document reference zz/x.y] is used, where 'z' is the reference given to the document in the Examination Library [\[link\]](#) and 'x.y' is the document number in the Guide to the Application.
- 1.1.3 The Applicant's responses to First Written Questions are provided in Table 1-1 overleaf.

Table 1-1 Applicant's Response to the Examining Authority's First Written Questions

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.0	General and Cross-topic Questions		
1.0.1	The Applicant	RIS2 a) Could the Applicant please provide us with the latest position in respect of the RIS2 programme in respect of the Proposed Development? b) How does RIS2 affect Highways England Delivery Plans?	<p>The Road Investment Strategy 2020-2025 (RIS2) was published on 11th March 2020. The paper presents:</p> <ul style="list-style-type: none"> the strategic vision, our long-term vision for what the strategic road network should look like in 2050, and the steps to help realise this the performance specification setting out the expectations for Highways England and the strategic road network, including metrics and indicators measuring the performance of both Highways England and the network against outcomes the investment plan of how money will be invested in operations, maintenance, renewals and enhancements of the road areas affected a statement of funds confirming that £27.4 billion will be provided over the period to Highways England to do this work <p>The M54 to M6 Link Road scheme is categorised as committed for the Second Road Period (RP2). This means construction of this project is expected to start by 1 April 2025. Highways England Delivery Plan 2020-2025 was published on 21st August 2020 following the publication of RIS2 and gives details of specific funding, activities and projects Highways England will deliver over the five years from 2020 to 2025. It also explains how Highways England approaches efficiency and risk management. It includes Highways England's performance framework, which brings together its delivery aims for the second road period (2020-2025). The Delivery Plan further states that the M54 to M6 Link Road scheme is currently aiming for a Start of Works no later than Q4 2021/22 with an Open for Traffic no later than 2024/25.</p>
1.0.2	SSC	Development Plan a) Could SSC please provide a copy of both the South Staffordshire Core Strategy and the South Staffordshire Site Allocations Document together with the Policies Map for the area, along with any Supplementary Planning Documents which affect consideration of the Proposed Development? b) Is this plan subject to review? c) If so at what stage has it reached? d) Does this have any implications for the Proposed Development?	N/A
1.0.3	SCC Parish Councils	Neighbourhood Plans a) Could SSC and the Parish Councils please provide details of any designated Neighbourhood planning areas, along with current details of progress towards any such Neighbourhood Plans being made. b) Where documents have been published for consultation, or later, purposes could copies please be provided.	N/A
1.0.4	SCC	Development Plan a) Could SCC please provide all minerals and waste plans applicable to the Application site along with any relevant plans necessary for interpretation. b) Are any of these plans subject to review? c) If so, at what stage has it/have they reached? d) Does this have any implications for the Proposed Development?	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.0.6	The Applicant	<p>Legal compliance</p> <p>In the Case for the Scheme [APP-220] paragraph 2.2.4 the Applicant asserts that “<i>The other exceptions in sub Sections (4) to (8) of Section 104 [of the PA2008] are not relevant in this case</i>”. Could the Applicant please set out why it believes this to be the case.</p>	<p>The Planning Act (2008) Section 104 (3) states that ‘<i>The Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies.</i>’</p> <p>Subsections (4) to (8) apply if the Secretary of State is satisfied that:</p> <p>(4) ‘<i>deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations.</i>’</p> <p>The Applicant is not aware that any international obligations would be breached in deciding the application in accordance with the NPSNN. In particular, the ES describes how international environmental legislation has been complied with.</p> <p>(5) ‘<i>deciding the application in accordance with any relevant national policy statement would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment.</i>’</p> <p>The Applicant is not aware that there would be a breach of any duty imposed on the SoS by or under any enactment in determining the application in accordance with the NPSNN.</p> <p>(6) ‘<i>deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment</i>’</p> <p>The Applicant has been careful to ensure all processes are carried out in a lawful manner and is not aware that determining the application would be unlawful.</p> <p>(7) ‘<i>the adverse impact of the proposed development would outweigh the benefits</i>’</p> <p>The Case for the Scheme [APP-220] sets out the benefits and the adverse impacts of the Scheme, these are summarised below.</p> <p>The main benefits of the Scheme are:</p> <ol style="list-style-type: none"> 1. Reduction in congestion on local and regional routes, particularly the A460 and A449; 2. Reduction in traffic along the A460 would improve the attractiveness and perceived safety of the A460 to walkers, cyclists and horse riders through a significant reduction in traffic along the route and an associated reduction in severance, air pollution and noise. The reduction in traffic <u>could</u> also facilitate future improvements to pedestrian and cycle routes that could not be delivered with the current use of the road. 3. Significant reduction in noise levels for 37 residential properties close to the existing A460 and 11 properties located on Old Stafford Road. 4. Improvement in journey times for road users 5. Improvement in road safety along existing routes where there are currently above average accident rates. 6. Supporting economic development in the West Midlands and particularly supporting delivery and efficient operation of employment sites in the area, including the allocated Strategic Employment Sites at i54 and ROF Featherstone. <p>The main adverse impacts of the Scheme are:</p> <ol style="list-style-type: none"> a) Impacts on habitats and ecology- although it should be noted that these are all being mitigated as far as possible so that the Scheme delivers no net loss in biodiversity. b) Adverse effect on the openness and 5 purposes of the Green Belt c) Moderate adverse effect on locally designated Hilton Park d) Adverse visual effects from select receptors close to the Scheme e) Loss of grade 2, grade 3a and 3b agricultural land f) Significant adverse noise effect on five residential properties on Hilton Lane and one property at Brookfield Farm g) Temporary effects during the construction period

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>It should be noted that the above adverse impacts have all been reduced, mitigated or, as a last resort, compensated for wherever possible as part of the Scheme.</p> <p>The Scheme changes accepted on 29 October 2020 reduce the adverse impacts associated with a, b, d and e. The Applicant considers that the benefits of the Scheme significantly and demonstrably outweigh the adverse impacts.</p> <p><i>(8) 'any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met'</i></p> <p>The Applicant does not believe any such condition is met.</p>
1.0.7	The Applicant	<p>Design Manual for Roads and Bridges (DMRB) DMRB has recently been re-organised, and some parts updated. Could the Applicant please set out any changes that are necessary as a result of these amendments. This may be easier to be shown in tabular form.</p>	<p>Updated methodologies for the environmental assessment of road schemes as outlined in the DMRB were published between July and November 2019.</p> <p>Appendix 4.5 of the ES [APP-164/6.3] outlines the key changes in methodology between the superseded methodologies reported in the scoping opinion and those used to undertake the environmental impact assessment as reported in the ES. Despite the timing of publication of the updated DMRB, the majority of the assessments reported in the ES were undertaken using the updated methodology.</p> <p>The new DMRB standards for air quality and noise and vibration assessment were published on the 28 November 2019. Due to the complexity of these assessments and the timing of the published changes, it was not possible to update the assessment to take into consideration the updated methodology prior to submission of the DCO application, without incurring a substantial delay to the Scheme.</p> <p>In order to test whether the results of the air quality and noise and vibration assessment (as reported in the ES) would alter when assessed using the new DMRB methodology (LA 105 and LA 111), sensitivity tests, and where appropriate further assessment, have been undertaken. Due to the changes to the Noise and Vibration methodology the assessment has been updated in line with the new standard LA 111 and Version 2 of ES Chapter 11: Noise and Vibration [AS-046/6.1] was submitted to the Planning Inspectorate 30 July 2020.</p> <p>A report, 'DMRB updates and the impact on the DCO application' [AS-059/8.2] has been produced to summarise the results of the noise and vibration assessment and air quality sensitivity testing and report where changes to these assessments would result in alterations to other aspects of the ES and DCO application. The report concluded that the changes to air quality methodology would not have resulted in the reporting of significant effects for human health or compliance with air quality limit values. However, the revised methodology would have resulted in differences in the reporting of operational impacts on ecological sites due to the application of the new conversion rates for nitrogen deposition outlined in LA 105. The changes to the noise and vibration assessment would only alter the results of Chapter 11: Noise and Vibration and would not alter the effects reported in other ES chapters. This report [AS-059/8.2] was submitted to the Planning Inspectorate in July 2020 alongside Version 2 of ES Chapter 11: Noise and Vibration [AS-046/6.1] and an updated Appendix 4.5 of the ES [AS-047/6.3] which sets out the change in scope of the noise and vibration assessment resulting from new guidance, DMRB LA 111.</p> <p>A number of design changes were submitted to the Examining Authority on 9 October 2020. An updated Chapter 11: Noise and Vibration (Version 3) was submitted alongside the proposed design changes. This updated assessment also utilises DMRB LA 111. Following the sensitivity testing set out in the DMRB updates report, AS-059/8.2 - which identified that the change in methodology would not alter the conclusions of the air quality assessment as reported in Chapter 5: Air Quality of the ES - the impacts of the design changes were assessed in line with the methodology set out in Chapter 5: Air Quality rather than DMRB LA105. However, the impact of nitrogen deposition on ecological receptors was undertaken in line with DMRB LA 105.</p> <p>A number of design standards have been revised since the commencement of the design of the M54 to M6 Link Road. Design standards are periodically reviewed to determine the impact of these new standards on the scheme, including whether they should be implemented now or in future stages of the</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			scheme's development. Currently it is anticipated that there are a number of changes to design standards that will either result in minor changes to the scheme or will require agreement of departures from standard with the overseeing organisation. These will continue to be discussed with Highways England Safe Roads team as part of detailed design.
1.0.8	The Applicant	Equality Impact Assessment a) In Table 1 in the Equality Impact Assessment [APP-214] under Ethnicity and Nationality' it is stated: " <i>The population of Featherstone and Shareshill has increased by 1.9% between 2001 and 2011, significantly higher than the national average (7.2%)</i> ". Similarly, under 'Car Ownership' it is stated: " <i>15.7% of households in Featherstone and Shareshill have no access to a car or van, which is lower than the wider South Staffordshire at 13.2%</i> ". Both of these statements appear inconsistent. Could they be clarified. b) Are there any implications from any changes?	a) The following corrections will be made in an updated EQIA submitted at Deadline 3: Under 'Ethnicity and Nationality' it should state: " <i>The population of Featherstone and Shareshill has increased by 1.9% between 2001 and 2011, significantly <u>lower</u> than the national average (7.2%)</i> " Under 'Car Ownership' it should state: " <i>15.7% of households in Featherstone and Shareshill have no access to a car or van, which is <u>higher</u> than the wider South Staffordshire area at 13.2%</i> ". b) There are no implications arising from these typographical corrections.
1.0.9	The Applicant	Outline Environmental Management Plan Can any revised version of this document [APP-218] please be provided in 'tracked change' as well as 'clean'?	Yes, all revised versions of the OEMP will be provided in track changes. Version 2 of the revised Outline Environmental Management Plan was submitted on 29 May 2020 [AS-042/6.11] alongside a 'tracked changes' version [AS-041/6.11]. This was published on the Planning Inspectorate website on 20 July 2020. Version 3 of the OEMP was submitted to the Examining Authority as part of the submission of the proposed design changes in October 2020. Two versions of the document were submitted, 'clean' [AS-112/6.11] and with 'tracked changes' [no examination library reference provided/6.11].
1.0.10	The Applicant	Outline Environmental Management Plan Paragraph 1.1.12 of the OEMP [APP-218] indicates the main approval is by Highways England. However, footnote 1 makes clear that this is not the case, being for the Secretary of State. While it is appreciated that the mechanism set out in the OEMP is that all matters need to be internally (that is within the overall project team) agreed by Highways England before being submitted to the SoS for approval, the current drafting could be misunderstood by somebody who is not aware of the full process. Could the OEMP please be redrafted to ensure clarity.	Version 3 of the OEMP [AS-112/6.11] submitted to the Planning Inspectorate on 9 October 2020 as part of the submission of design changes includes an alteration to Paragraph 1.1.12 to clarify that the OEMP will be approved by the Secretary of State. The OEMP Version 3 was accepted by the Examining Authority on 29 October 2020. The latest version of the OEMP reads as follows: <i>"The Secretary of State is the Secretary of State for Transport. Unless otherwise stated within the OEMP, the Secretary of State will approve the CEMP and other management plans to be appended to the CEMP defined within this OEMP following their acceptance by the Authority.</i> <i>The Authority is Highways England. The Authority, in consultation with the relevant stakeholders as set out in this OEMP, will determine whether to accept the CEMP, other management plans defined within this OEMP, detailed method statements required by the OEMP, and variations to these and other matters as stated within this OEMP, prior to, where relevant, their final approval by the body responsible for approving the relevant document as set out in the OEMP."</i> The Applicant is currently in liaison with Staffordshire County Council (SCC) to define the maintenance boundary for highways infrastructure assets, these boundaries are broadly agreed, however once confirmed the Applicant is happy to share this information with the Examining Authority where required.
1.0.11	The Applicant SCC WCC	Outline Environmental Management Plan a) Paragraph 1.1.12 of the OEMP [APP-218] states that once the Proposed Development has been completed some its components may be maintained by SCC or WCC. It is not explained which components this might be or whether this approach has been agreed with these Councils. Can the Applicant identify the likely relevant components of the Proposed Development and confirm the level of agreement to this approach to-date with SCC and WCC? b) Can the Applicant explain if these components relate to the proposed environmental mitigation? c) If so, could the Applicant explain how?	a) As explained in the response to WQ 1.0.10, the Applicant is currently in liaison with SCC to define the maintenance boundary for SCC highways infrastructure assets and these boundaries are broadly agreed. The elements proposed to be maintained by SCC include new and amended parts of the local highway network, attenuation pond(s) that drain the local highway network and ancillary highways infrastructure such as street lighting and signage. No discussion has taken place with City of Wolverhampton Council (CWC) to date to define the maintenance boundary for CWC highways infrastructure assets, however this is likely to be limited to a single directional sign on the A449 to the south of M54 J2 (which is to be provided as part of the Scheme (Work No. 1D)). Once details are confirmed with SCC and CWC the Applicant is happy to share this information with the Examining Authority where required. b) No, the components being discussed as being maintained by SCC and CWC do not include areas of environmental mitigation.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		d) Could SCC and WCC provide their response to this approach?	c) N/A d) N/A
1.0.12	The Applicant SCC SSC EA Natural England Forestry Commission	Outline Environmental Management Plan a) Table 4.1 of the OEMP [App-218] set out Consents and permissions that may be required as at January 2020. Is this Table up to date? b) If not, could it please be amended as necessary. c) Could those bodies referred to in the table, that is Natural England, SCC, the EA, SSDC and The Forestry Commission please advise as to their current understandings of the various situations?	a) Version 3 of the OEMP [AS-112/6.11] was submitted to the Planning Inspectorate on 9 October 2020, as part of the submission of design changes. The revised OEMP includes minor updates to Table 4.1 of the OEMP. b) N/A c) N/A
1.0.13	The Applicant	Environmental Masterplan The Environmental Masterplan [APP-057] to [APP-063] is titled 'Draft' and is described as illustrative in the dDCO R5 (Landscaping). On this basis can the Applicant explain its status, its relationship to proposed mitigation measures and how these will be secured through the DCO.	The Environmental Masterplans submitted in January 2020 [APP-057 to 063/6.2] illustrate the environmental mitigation proposed to mitigate adverse impacts as assessed and reported within the ES [APP-040 to 056/6.1] and as documented in the OEMP [APP-218/6.11]. It was titled as 'Draft' as there were a number of factors which could result in minor amendments to the current design, including additional survey information, ongoing discussions with landowners and design revisions as documented in [AS-043]. The revised Environmental Masterplan (Version 2) [AS-086/6.2 to AS-092/6.2] submitted to the Planning Inspectorate on 09 October 2020 as part of the proposed design changes has taken into consideration the findings of the 2020 ecology surveys as well as continued consultation with landowners and statutory environmental bodies. 'Draft' has been removed from the title of this document. The mitigation measures shown on the Environmental Masterplans will be further refined at the detailed design stage with consideration given to the detailed design of watercourse realignments, species mixes, pond size and enhancement measures, however revisions to the Environmental Masterplan will continue to reflect the commitments made in the OEMP [AS-112 and future iterations] as secured through Requirement 5 of the draft DCO [APP-018/3.1 and subsequent revisions].
1.0.14	The Applicant	Environmental Masterplan/Works Plans a) Can the Applicant clarify why certain areas of the Proposed Development as represented in the Works Plans red line boundary (within Sheets 1-3, and 6-10) [APP-057] to [APP-063], which include Works 1, 35, 41, 42, 51, 52, 53, 54, 55, 55A, 55B, and 55C) have not been fully represented in the Environmental Masterplan or in the Construction Works (ES Figure 2.9, [APP-065]) for the ES. b) Can the Applicant explain why these works are not represented on the Environmental Masterplan and the Construction Works plans and confirm that these works have been fully considered as part of the ES.	These works numbers refer to the replacement and relocation of signs. Paragraph 4.2.3 of the ES [APP-043/6.1] states "As stated in Chapter 2: The Scheme, the Order limits include the boundary of the main works (the Scheme boundary) and a number of isolated pockets of land required to update existing highway signs only. Figure 2.8 [AS-026/6.2] illustrates Order limits and Scheme boundary. The study area assessed for the EIA for each environmental topic is described in the relevant topic chapter (Chapters 5 to 15). These study areas are given from the Scheme boundary rather than the Order limits, as the replacement of existing signs within the highway boundary would not result in a significant effect on environmental receptors alone or in-combination with the works included in the Scheme boundary." The Environmental Masterplans illustrate the design of environmental mitigation and compensation measures within the Order Limits. No specific mitigation measures are proposed for the construction of or alteration to existing signs over and above standard construction mitigation measures outlined in the OEMP [AS-112/6.11]. Those areas disturbed during the construction works to the signs will be returned to the existing condition within the highway verge on completion of the works. The construction works figure, Figure 2.9 [APP-065/6.2 and the revised version [AS-093/6.2] is intended to illustrate the location of the main haul route, construction compounds and soil storage areas. The construction works plan is not intended to show the location of individual construction activities and therefore does not include the sign locations.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.0.15	The Applicant	<p>Environmental Mitigation</p> <p>a) The Environmental Mitigation Schedule (EMS) in ES Appendix 2.1 [APP-157] provides a summary of the proposed 'embedded' operational mitigation measures (Table 2.1). Paragraph 2.5.80 of ES Chapter 2 [APP-041] states that the EMS lists measures that are not included in the OEMP, however it is stated in the EMS that Table 2.1 replicates Table 3.4 of the OEMP, which it appears to do. Can the Applicant explain and clarify the purpose of the EMS and confirm its status?</p> <p>b) As recommended by the Inspectorate's Advisory Note 7 can the Applicant provide a table which includes all mitigation measures relied on in the ES and the mechanism by which that mitigation is secured for the DCO.</p>	<p>a) The Examining Authority is correct, Appendix 2.1: Environmental Mitigation Schedule, does not include any measures which are not already outlined in Table 3.4 of the OEMP.</p> <p>Appendix 2.1 [APP-157/6.3] is intended to be informative only, setting out the embedded mitigation measures designed to minimise the operational impact of the Scheme as illustrated on the Environmental Masterplans [APP-057 to 063/6.2]. This Appendix is a duplication of Table 3.4 of the OEMP.</p> <p>Any required alterations to the embedded mitigation measures will be set out in a revision of the Environmental Masterplan and OEMP rather than a revision of Appendix 2.1. The revised OEMP [AS-112/6.11] therefore supersedes Appendix 2.1. Appendix 2.1 is now shown as superseded (strikethrough) in the Guide to the Application to confirm that it is no longer an application document.</p> <p>b) Tables 3.2 to 3.4 of the OEMP [APP-218/6.11 and future revisions] include all of the mitigation measures relied on in the ES as summarised in the 'Design, Mitigation and Enhancement' section of Chapters 5 to 15 of the ES.</p> <p>Version 3 of the OEMP [AS-112/6.11] was submitted to the Examining Authority on 9 October 2020, as part of the submission of design changes. The revised OEMP includes minor updates to Tables 3.2 to 3.4 to include a cross reference to the relevant Requirement, as set out in the draft DCO, required to secure each mitigation measure.</p>
1.0.16	The Applicant	<p>Construction Compounds</p> <p>Additional locations have been identified for small scale satellite office and welfare facilities. These would be located close to work areas within the Proposed Development boundary, sited on the roundabout at the M54 Junction 1 and along the mainline of the Proposed Development to service the construction of Hilton Lane bridge and the accommodation bridge east of Brookfield Farm. Satellite compounds would be lit with temporary lighting, with security measures in place. Plant and equipment would be stored at the satellite compound during the works (para 2.6.16 of Chapter 2 of the ES [APP-041]). Can the Applicant indicate where these sites will be located on relevant plans and explain how any likely significant effects have been assessed?</p>	<p>Version 2 of Figure 2.9: Construction works [AS-093/6.2] of the ES was submitted to the Examining Authority on 9 October 2020, as part of the submission of design changes. The revised figure includes the location of the proposed satellite compounds.</p> <p>The location and potential impacts of the satellite compounds have been taken into account during the review and assessment of the design changes as set out in application document 'Environmental Statement Addendum: Proposed Scheme Changes October 2020' [AS-118/8.6].</p> <p>The design changes have been assessed in line with the methodologies set out in the ES [APP-043/6.1]. Chapter 4: Environmental Assessment Report of the ES outlines the overarching process for the assessment of environmental impacts whilst the topic specific methodologies are set out in chapters 5 to 15 of the ES. Details of the methodology for the noise and vibration assessment are provided in Version 2 of Chapter 11: Noise and Vibration [AS-046/6.1]. The location of the satellite compounds as presented in Figure 2.9 was considered as part of the design changes and it is confirmed that they do not alter the conclusions of the Environmental Statement.</p>
1.0.17	The Applicant	<p>Guide to the Application</p> <p>In the Guide to the Application [AS-037], the Applicant has set out the various versions of the documents. Could future versions of this document please mark superseded documents with strikethrough, so it is clear which documents are so considered and which are to remain part of the substantive application and accompanying documents. Partial superseding of documents can lead to confusion as to which parts are superseded and which are extant.</p> <p>In relation to drawings, where there are a series which make a whole, for example the Land Plans, the original submission is entitled Revision P01, but the individual drawings have different revisions (that is a mix of P03 and P06). This mixture, and difference to the revision version to the title of the document, could lead to confusion. Could the Applicant please seek a way of resolving this.</p>	<p>Highways England has added the strikethrough to superseded documents in the Guide to the Application. This approach was adopted for the version submitted on 30/07/2020 [AS-044/1.5] and will continue for all subsequent versions.</p> <p>To provide additional clarity on drawing numbers, Tables 2-12 have been added to the Guide to the Application [AS-064/1.5 and subsequent revisions] to provide a list of drawing numbers for the sheets in each plan set. The list of individual sheet numbers in each plan set (e.g. Works Plans) is also provided in the Schedule at the front of each set.</p> <p>The reason the numbers on the individual plans in each set are different is that some sections of the project have been revised more than others. If a change is made to the Hilton Lane part of the scheme, for example, the Works Plan drawing showing this area would be updated (e.g. P02 to P03) but other sheets would remain unchanged. The version numbers reflect the version control system used and ensure that the correct version of each plan is used in every set. A change to plan numbering systems would introduce inconsistency between the plans created by the design team and those submitted to the ExA, increasing the risk that incorrect plans are used and the potential for confusion. The approach to plan numbering used in the M54 to M6 link road application is commonly used for Highways England DCO applications, including in the West Midlands, the M42 Junction 6 Improvement scheme (consented on 21 May 2020) and the A38 Derby Junctions scheme (Examination closed on 9 July 2020).</p>

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1.1	Green Belt																																																			
1.1.1	The Applicant	<p>General</p> <p>Can the Applicant please confirm whether it takes the position that the Proposed Development would represent inappropriate development in the Green Belt? This is somewhat ambiguous in Case for the Scheme [APP-220].</p>	<p>The Applicant considers that the Scheme would represent inappropriate development in the Green Belt, as stated in the Case for the Scheme (CfS) [APP-220/7.2 and subsequent revisions] paragraph 9.1.12 which states: <i>‘The Scheme would be inappropriate development as it would affect the openness of the Green Belt’</i>.</p> <p>The NPSNN refers the reader to the NPPF for the definition of inappropriate development. The NPPF paragraph 146 sets out six categories of development that are not inappropriate in the Green Belt <i>‘provided they preserve its openness and do not conflict with the purposes of including land within it.’</i></p> <p>Regardless of the applicability of these exceptions, the Scheme would not preserve the openness of the Green Belt so none of the exceptions apply. As recognised in paragraph 8.6.22 of the CfS, the Scheme would also conflict with purpose c) of the Green Belt <i>‘to assist in safeguarding the countryside from encroachment’</i>. Given that none of the exceptions apply to the proposed development, the Applicant considers the Scheme to be ‘inappropriate’ in the Green Belt.</p> <p>As explored in paragraphs 8.6.26-8.6.31 in the CfS, the Applicant considers that Very Special Circumstances exist that significantly and clearly outweigh the harm to the Green Belt by reason of inappropriateness, and all other harm resulting from the Scheme.</p>																																																	
1.1.2	The Applicant	<p>Areas affected</p> <p>a) Paragraph 8.6.1 of the Case for the Scheme [APP-220] discusses the effect on openness and permeance of the Green Belt. Could the Applicant please set out precisely the areas (in hectares and/or square metres) which would be covered by engineering development – i.e. carriageways, highways, PRoWs. This should be done in tabular form setting out the quanta before and after the Proposed Development.</p> <p>b) In addition, could equivalent figures for associated infrastructure, such as drainage attenuation ponds, and for ‘soft’ areas, i.e. agricultural land, grassland and woodland/forestry also be provided.</p> <p>c) Could details of the proposed signage in the Green Belt be set out, in particular locations, heights and widths.</p>	<p>a/b) A summary of the area measurements of each habitat within the Order Limits before and after works are set out in Table 3.13 of the Environmental Statement Appendix 8.2 Biodiversity Metric Calculations [AS-103031/6.3]. The Scheme is wholly located within the green belt area (with the exception of the sign in CWC area and a very small area to the south west of M54 Junction 1) as defined by South Staffordshire Council Local Plan Policies Map, therefore the figures stated in Table 3.13 are applicable. A summary of which has been provided below. The hardstanding figure includes all paved carriageway areas and all associated infrastructure areas are identified. Public Rights of Way have not been included as these are permissive routes are over different land use areas (e.g. Woodland or Arable) therefore are included already.</p> <table><tr><th rowspan="2">Phase 1 habitat category</th><th colspan="4">Area (ha)</th></tr><tr><th>Before works</th><th>After works (Retained)</th><th>After works (Created)</th><th>After works (Total)</th></tr><tr><td>Woodland</td><td>67.27</td><td>46.75</td><td>25.66</td><td>72.41</td></tr><tr><td>Recently felled woodland</td><td>0.45</td><td>0.32</td><td>0</td><td>0.32</td></tr><tr><td>Bare ground</td><td>0.01</td><td>0.01</td><td>0</td><td>0.01</td></tr><tr><td>Grassland</td><td>44.4</td><td>16.45</td><td>43.42</td><td>59.87</td></tr><tr><td>Tall ruderal</td><td>0.36</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Standing water</td><td>2.32</td><td>1.1</td><td>2.4</td><td>3.5</td></tr><tr><td>Buildings or hardstanding</td><td>37.58</td><td>24.7</td><td>22.69</td><td>47.39</td></tr><tr><td>Arable</td><td>44.53</td><td>13.78</td><td>0</td><td>13.78</td></tr></table> <p>c) It is proposed that new gantry mounted advance direction signage will be installed along the M54 between Junctions 1 and 2 as indicated on the works plans. Similarly, new gantry mounted lane destination signage will be installed at M6 Junction 11 to reduce the risk of driver confusion. Works 49, 50, 51, 52, 53, 54, 55A, 55B and 55C relate to existing sign gantries on the M6 which are to be amended, with no anticipated amendment to the size of existing sign faces. Along the new link road, in the Green</p>	Phase 1 habitat category	Area (ha)				Before works	After works (Retained)	After works (Created)	After works (Total)	Woodland	67.27	46.75	25.66	72.41	Recently felled woodland	0.45	0.32	0	0.32	Bare ground	0.01	0.01	0	0.01	Grassland	44.4	16.45	43.42	59.87	Tall ruderal	0.36	0	0	0	Standing water	2.32	1.1	2.4	3.5	Buildings or hardstanding	37.58	24.7	22.69	47.39	Arable	44.53	13.78	0	13.78
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WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			Belt area, it is anticipated that all advance directional signage will be verge mounted. The final location and dimensions of proposed signage is subject to detailed design.
1.1.3	The Applicant Nigel Simkin Paul Simkin Vodafone Limited	Structures a) Although paragraph 2.6.33 of Chapter 2 of the ES [APP-041] indicates that no other demolitions than the bridges at M6 Junction 11 and a stable/store to the west of that junction, the drawings indicate a building or structure is to be demolished off Dark Lane (see Plot Ref 5/6 on the Land Plans [APP-007]). What is this and what are its dimensions? b) While it would not be the responsibility of the Applicant to replace it, would it be the intention of the landowner or any other party to replace it, either on that site or elsewhere? c) If the proposal is that it is replaced elsewhere, could this be explained, along with what progress, if any, has taken place to identify that alternative location and ensure any necessary consents?	a) The exact purpose of the building within plot 5/6 is not known to the Applicant, however, this plot is under the ownership of the adjacent farm and it is assumed that the use of the building is related to the farming operations. Notwithstanding this, it is not proposed to demolish this building. Plot 5/6 is required temporarily to provide adequate working space for construction of the works and there would be no impact on this building. b) N/A c) N/A
1.1.4	SSC Interested Parties	Woodland Planting In paragraph 8.6.14 of the Case for the Scheme [APP-220] the Applicant indicates that it considers 'Where woodland planting is proposed, it is considered that the environmental benefits of the planting outweigh the impact to the openness of the Green Belt in that location.' Do other interested parties agree with this analysis and if not, could they explain why they take that view.	N/A
1.1.5	The Applicant	Purpose of Green Belt Paragraph 7.6.23 of Chapter 7 in the ES [APP-046] states that the Green Belt designation is one of landscape value. Could the Applicant please explain this statement with reference to the five purposes for the Green Belt set out in paragraph 134 of the NPPF?	The Green Belt is a planning designation rather than a landscape designation and the compliance of the Scheme with planning policy on the Green Belt, including the five purposes of the Green Belt, is therefore covered in the CftS (section 8.6 of [APP-220/7.2 and subsequent revisions]) rather than in the Environmental Statement. Paragraph 7.6.23 in Chapter 7 of the ES [APP-046] states ' <i>Much of the study area is designated as Green Belt. Green Belt is a designation of landscape value, related primarily to openness between settlements rather than an indication of landscape quality.</i> ' This paragraph is not intended to state that the Green Belt is a landscape designation, but that the Green Belt designation itself has landscape value because of its role in preserving openness. Para 133 of the NPPF states "The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence." It is the openness that adds to landscape value rather than delivery of the 5 purposes set out in para 134 of the NPPF. People typically value undeveloped land as open space and hence our reference to that as an element (amongst other elements) of landscape value of the baseline. Openness is not in itself a reflection of quality – hence our use of the term landscape value.
1.2	Air Quality and Emissions		
1.2.1	The Applicant	Clarification In respect of Natural England's comments in its Relevant Representation [RR-037] can you confirm how the Affected Road Network was identified and the rationale for other roads being included in the model and associated air quality assessment?	The methodology for defining the ARN is set out in Section 5.5 'Study Area' of the Environmental Statement [APP-044/ 6.1]. Paragraph 5.5.2 of the ES states "Affected road links (individually modelled sections of road) have been identified by comparing opening year (2024) traffic data with the Scheme (Do-Something) and without the Scheme (Do-Minimum) against the local air quality screening criteria presented in DMRB, which are as follows: 1) road alignment would change by 5 m or more; or 2) annual average daily traffic (AADT) flows would change by 1,000 or more; or

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>3) heavy duty vehicles (HDV) (vehicles greater than 3.5 tonnes, including buses and coaches) flows would change by 200 AADT or more; or</p> <p>4) daily average speeds would change by 10 km/hr or more; or</p> <p>5) peak hour speed would change by 20 km/hr or more."</p> <p>In addition to the ARN, other roads are included within the air quality model to ensure the total pollutant concentrations predicted at sensitive receptors located along the ARN include contributions from all road sources within at least 200m. These are the 'Other Roads Modelled' illustrated on Figure 5.1: Air Quality Study Area [APP-068/6.2]. This is described in Paragraph 5.5.6 of Chapter 5 of the ES [TR010054/APP/6.1].</p> <p>A new DMRB methodology for air quality assessment was published on the 28 November 2019. Due to the complexity of these assessments and the timing of the published changes, it was not possible to update the air quality assessment to take into consideration the latest updated methodology prior to submission of the DCO application, without incurring a substantial delay to the Scheme.</p> <p>In order to test whether the results of the air quality assessment (as reported in the ES) would alter when assessed using the new DMRB methodology LA 105: Air quality, sensitivity testing has been undertaken. A new application document, "DMRB updates and the impact on the DCO application" [AS-059/8.2] has been produced to summarise the results of the air quality sensitivity testing work and report where changes to the assessment would result in alterations to other aspects of the ES and DCO application.</p> <p>Taking into consideration the screening criteria set out in LA 105, the sensitivity test of the operational study area demonstrated that the operational air quality study area would have been slightly larger, with two extra road links included in the ARN. This enlargement of the study area is not expected to result in any significant effects as emission concentrations at receptors modelled in the vicinity of these links suggest concentrations of NO₂ will be below the air quality objective, 40 µg/m³.</p>
1.2.2	The Applicant	<p>Cumulative air quality effects</p> <p>a) Have the air quality effects been modelled at the M6 Junction 11 if the proposed works were to be at a similar time to construction at M54 junction 1?</p> <p>b) Paragraph 5.4.6 of Chapter 5 of the ES [APP-044] suggests it is not known what traffic management procedures would be put in place elsewhere. Does this include M6 junction 11 and if so, why has it not been modelled?</p>	<p>a) At the time of assessment, traffic management measures associated with the construction of M6 Junction 11 were unknown and could not be modelled.</p> <p>The design proposals as submitted to the Planning Inspectorate in January 2020 would have required lane closures and the contraflow of traffic through M54 Junction 1 for a period of 2 years. The contraflow would have included the diversion of lane 1 traffic down the off-slip-roads at Junction 1 and back up the on-slip-roads at Junction 1, back onto the M54. The contraflow would also require narrow lanes and a reduced speed limits through and either side of the junction. No other traffic management measures were anticipated for M54 Junction 1.</p> <p>Over the 2 years of Traffic Management at M54 Junction 1, various traffic management measures would have been implemented at M6 Junction 11, including a number of short-term closures (night-time and weekends), but also longer-term measures, including the closure of Mill Lane at the Junction with the A460 (for a period of 13 months), with a diversion route via Church Road and School Lane, then onto Saredon Road and back on to Mill Lane, and the use of narrow lanes and reduced speed limit on the M6 through and either side of the junction (for a period of 9 months).</p> <p>Whilst the Traffic Management measures previously planned at M54 Junction 1 were anticipated to be in place for an extended period, they were to be localised in nature and were only likely to effect pollutant concentrations at receptors closest to the junction and not those remote from it, including receptors impacted by the traffic management measures implemented at M6 Junction 11. The highest annual mean NO₂ concentrations and impacts close M54 Junction 1 during the construction phase occur at receptor R383, located approximately 90 m from the Scheme, with a construction phase do-minimum (without Scheme) concentration of 30.5 µg/m³, a construction phase do-something (with Scheme) of 31.0 µg/m³ and an increase in concentration of 0.5 µg/m³. The construction phase air quality assessment remains as reported in the Environmental Statement [APP-044/6.1].</p> <p>As the design changes submitted to the Examining Authority on 9 October 2020 have been accepted the construction of the Scheme would require the closure and associated traffic management relating</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>to construction works at M54 Junction 1 reducing the main period of traffic management from 2 years to up to three weeks. During this three-week period, works would be ongoing at M6 Junction 11. However, at this time, works relating to the construction of M6 Junction 11 would be offline and traffic management would be restricted to the closure of the M6 hard shoulder at Junction 11.</p> <p>During the three week closure of the M54, the limited traffic management associated with the M6 Junction 11 would not further affect traffic flows on the motorway and surrounding roads. Therefore, the conclusions of the construction phase air quality assessment remain as reported in the Environmental Statement Addendum [AS-118/8.6] submitted to the Examining Authority on 9 October 2020 and Chapter 5: Air Quality of the Environmental Statement [APP-044/6.1], no significant effects on air quality.</p> <p>b) At the time of assessment, traffic management measures associated with the construction of M6 Junction 11 were unknown and could not be modelled.</p> <p>The construction works at M6 Junction 11 are summarised below as set out in the Outline Traffic Management Plan [AS-116/7.5]</p> <p>Phase 1:</p> <ul style="list-style-type: none"> The geometric design of M6 Junction 11 allows the majority of the junction to be constructed offline, these include each corner quadrant of the circulatory carriageway and the realigned M6 slip roads. The junction is anticipated to function as per the existing scenario in this phase with only localised traffic management to allow access and egress from works and provide protection to the work force adjacent to the carriageway. Tie in works of slip roads and entry arms to be completed under lane closures and / or carriageway closures as required. Mill Lane to be closed at the Junction with the A460, diversion route will be Church Rd & School Lane then onto Saredon Road and back on to Mill Lane. <p>Phase 1A:</p> <ul style="list-style-type: none"> In order to provide sufficient buffer to the work zone, hard shoulder closures will be implemented on the northbound and southbound carriageway of approximate 700 m in length. There will be no change in Speed limit or lane markings along the M6. <p>Phase 2:</p> <ul style="list-style-type: none"> Traffic diverted onto the newly constructed slip roads and a temporary road construction to allow all movements to be retained. The existing circulatory carriageway will still be used during the construction of the new structures over the M6. In order to provide sufficient buffer to the work zone for the construction of the new structures over the M6, narrow lanes will be implemented on the northbound and southbound carriageway of approximate 2.0 km and 2.3 km in length respectively. The speed limit will also be reduced temporarily to 60 mph. In the southbound direction the narrow lanes system will start at the end of hard shoulder hatched area after split with M6/M6 Toll, this system with no impact to the M6Toll traffic and terminate at the M6 Junction 11 southbound slip road merge. In the northbound direction the narrow lanes system will start between exit and entry slip of Hilton Park services and terminate at the M6 Junction 11 northbound slip road merge. It is anticipated that overnight road closure of the M6 will be required for the installation of the new bridge deck with traffic being diverted up and over M6 Junction 11. <p>Phase 3:</p> <ul style="list-style-type: none"> Once the new structures over the M6 are completed traffic will be diverted onto these to make the new interchange now fully operational minus the link road. Small pockets of work to be carried out under localised traffic management.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<ul style="list-style-type: none"> Narrow lanes along the M6 will be removed and returned to existing alignment, hard shoulder closure will be re-implemented on the northbound and southbound carriageway. The M6 will be returned to the permanent speed limit. Demolition of the existing structures at M6 Junction 11 is anticipated to require a full weekend closure on both carriageways. Diversion route for M6 traffic is to be confirmed. <p>Traffic management measures that involve local and/or short-term closures and diversions will not affect traffic flows to an extent or duration that will impact on the conclusions of the air quality assessment. This includes all of phases 1A and 3 and some aspects of phases 1 and 2.</p> <p>Longer term traffic management measures included within phases 1 and 2 could have the potential to affect traffic flows and have a more perceptible impact on air quality.</p> <p>The closure of Mill Lane and diversion via Church Road, School Lane and Saredon Road, during Phase 1, could be in place for up to 13 months. However, Mill Lane itself is a minor road that is one of four routes that services the village of Little Saredon. Diverted traffic flows from Mill Lane are therefore likely to be low. On the diversion route, annualised nitrogen dioxide monitoring data provides baseline data to represent conditions in 2017 at the junction of Church Lane adjacent to Cannock Road (A460) (HE diffusion tube M54M6TL_010_0813). Projected annual mean concentrations for 2017 were 18.4 µg/m³. The air quality assessment also considered pollutant concentrations at a receptor located close to the same junction (R307). Modelled nitrogen dioxide concentrations at receptor R307 in the 2017 baseline scenario were 25.9 µg/m³ and in the 2024 Do-Minimum scenario were 21.4 µg/m³. It is therefore considered highly unlikely that the additional flows associated with the closure of Mill Lane and subsequent diversion would increase concentrations to the extent that there would an exceedance of a relevant air quality objective.</p> <p>In Phase 2 the reduction in speed limit on the M6 at Junction 11 (northbound and southbound carriageway, for approximately 2.0 km and 2.3 km in length respectively), for a period of up to nine months, would reduce average traffic speeds (and potential speed band) along this stretch of motorway. This would likely have a beneficial effect on nearby air quality sensitive receptors.</p>
1.2.3	The Applicant	South Staffordshire AQMA No. 1 What is the current status of the South Staffordshire AQMA No. 1 which table 5.5 in AQ chapter of ES [APP-044] suggests may soon be revoked?	South Staffordshire AQMA No.1 (Woodbank, Penkridge) has now been revoked. South Staffordshire's 2019 Air Quality Annual Status Report (ASR) states that this AQMA was revoked in early 2019 due to "prolonged data gathering demonstrating levels comfortably below [the] objective".
1.2.4	The Applicant	Analysis of Monitoring Data a) Paragraph 5.6.5 of Chapter 5 of the ES [APP-044] states that monitored concentrations can be considered at risk of an exceedance of the annual mean objective value for NO ₂ , where concentrations are within 10% of the objective value and have given various examples. For each of the following sites, which are within 10% of the 40 µg-m ³ criterion, could the Applicant provide an analysis of the effects of the Proposed Development, which do not appear to have been analysed to date. <ul style="list-style-type: none"> Table 5.6: Site ID A4 gives a monitored annual mean concentration of 36 µg-m³. Table 5.7: Site ID M54M6TL_023_0813, shows a monitored annual mean concentration of 38.3 µgm-3 b) Paragraph 5.6.11 indicates that there are 128 Defra links present in the ARN but 12 would be greater than 40 µgm-3 objective. How many of the 128 are ≥36 µgm-3? Where are these (shown on a map)? Could an analysis be undertaken of the effect of the Proposed Development on these?	a) Paragraph 5.5.2 of the ES [APP-044/6.1], concerning local authority gathered monitoring data, states: <i>"The data shows two exceedances to the annual mean objective value of NO₂ across the sites listed in Table 5.6. These exceedances occurred at roadside locations on the approach to the Muckley Corner roundabout in the Lichfield Council area (MUC1abc and MUC3). Elsewhere, monitored concentrations can be considered at risk of an exceedance of the annual mean objective value for NO₂, where concentrations are within 10% of the objective value (40 µg/m³). This includes two other locations on the approach to the Muckley Corner roundabout (MUC1 and MUC2), and at two locations in the Cannock Chase Council area, adjacent to the A5 north-west of Junction T7 of the M6 Toll (54WS) and adjacent to the M6 Toll south-east of Junction T7 (268WS)."</i> This discussion omits two local authority monitoring sites that are listed in Table 5.6 of the ES [APP-044/6.1] that are within 10% of the objective value in the base year of 2017, MUC6 (37.5 µg/m ³) and A4 (36.0 µg/m ³). MUC6 is also on the approach to Muckley Corner roundabout. A4 is within the City of Wolverhampton Council area, on Stafford Road on the junction with Church Road. Furthermore, of the Highways England monitoring sites that are listed in Table 5.7 of the ES [APP-044/6.1], one is within 10% of the objective value in the base year of 2017, M54M6TL_023_0813 (38.3 µg/m ³). This tube is located within the Walsall Council area, on Lichfield Road close to the M6. However, in the preparation of this written response we have identified that an earlier set of processed

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>Highways England air quality data has been presented in Table 5.7 of the ES. This data was not used in the air quality assessment for the scheme as further post processing of this data was undertaken. The data used in the assessment, which replaces Table 5.7 of the ES, is presented in WQ 1.2.4 Appendix A. In the replacement Table 5.7 it can be seen that there are no locations with monitored concentrations within 10% of the NO₂ annual mean objective value, with the concentration at M54M6TL_023_0813 reduced to 34.3 µg/m³.</p> <p>The locations set out in WQ 1.2.4 Appendix A, where concentrations of nitrogen dioxide were within 10% of the air quality objective have been subject to air quality modelling of the future situation with and without the Scheme to consider the risk of likely significant effects in these locations.</p> <p>Four sensitive receptors within 80 m of monitoring site A4 on Stafford Road were explicitly modelled in the local air quality assessment. These receptors (R071-R074) have been predicted to have DS concentrations of 18.9 µg/m³ to 25.8 µg/m³, with changes due to the Scheme of +0.2 µg/m³ to +0.4 µg/m³. These receptors are shown on Page 6 of Figure 5.3 in the ES [APP-070/6.2].</p> <p>At Muckley Corner 12 sensitive receptors have been explicitly modelled in the local air quality assessment. These receptors (R467-R478) have been predicted to have DS concentrations of 22.3 µg/m³ to 33.2 µg/m³, with changes due to the Scheme of <0.1 µg/m³ to +0.1 µg/m³. These receptors are shown on Page 10 of Figure 5.3 in the ES [APP-070/6.2].</p> <p>Sensitive receptor R438, 17 m from monitoring site 54WS on the A5 was explicitly modelled in the local air quality assessment. This receptor was predicted to have DS concentrations of 36.4 µg/m³, with changes due to the Scheme of -0.3 µg/m³. This receptor is shown on Page 7 of Figure 5.3 in the ES [APP-070/6.2].</p> <p>The closest receptor to monitoring site 268WS was explicitly modelled in the local air quality assessment. This receptor (R450) was predicted to have DS concentrations of 35.3 µg/m³, with changes due to the Scheme of +0.4 µg/m³ in both cases. This receptor is shown on Page 7 of Figure 5.3 in the ES [APP-070/6.2].</p> <p>In summary the locations identified with higher concentrations of NO₂ through baseline monitoring have been considered in the air quality modelling undertaken for the Scheme. This has predicted only small to imperceptible changes in annual mean NO₂ concentrations below the air quality objective that are not significant.</p> <p>b) The 128 Defra links (from the 2017-based dataset) present in the ARN correspond to 19 unique census IDs.</p> <p>The 12 links that exceed 40 µg/m³ in the 2017 base year correspond to two census IDs: 16027 (the M6 close to Junction 13) with a concentration of 41.0 µg/m³, and 57118 (the A448 between Oxley Moor Road and Crown Street) with a concentration of 40.2 µg/m³. These are the roads described in Table 5.8 in the ES.</p> <p>There are 15 further links that exceed 36 µg/m³ in the 2017 base year corresponding to five census IDs as follows.</p> <ul style="list-style-type: none"> • Three links of census ID 46022 (the M6 between Junction 9 and 10) have a concentration of 39.4 µg/m³. • One link of census ID 16026 (the M6 between Junction 8 and 9) has a concentration of 38.6 µg/m³. • Three links of census ID 47192 (the A449 between Crown Street and the A4150) have a concentration of 38.3 µg/m³. • Two links of census ID 48346 (the A4150 between the A449 and the A4124) have a concentration of 37.8 µg/m³.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<ul style="list-style-type: none"> Six links of census ID 38071 (the M6 between Junction 10 and 10a) have a concentration of 37.8 µg/m³. <p>In the opening year 2024 there are no links predicted to exceed 36 µg/m³ by the 2017-based Pollution Climate Mapping (PCM) model. The highest concentration predicted in 2024 at PCM links along the ARN is 28.7 µg/m³, on nine links of census ID 57118 (the A449 between Oxley Moor Road and Crown Street). This predicted PCM link concentration is well below the EU limit value for annual mean NO₂ concentrations of 40 µg/m³.</p> <p>Since publication of the ES, Defra have updated the PCM network to a 2018 base year. There are 304 Defra links present in the ARN corresponding to 16 unique census IDs.</p> <p>With the new dataset the highest annual mean concentration of NO₂ in the 2018 base year at PCM links along the ARN is 39.1 µg/m³, on the A449 between Cannock Road and Broadlands (68 links, census ID 802057118).</p> <p>The other PCM links along the ARN that exceed 36 µg/m³ in the 2018 base year are as follows. Three links of census ID 802048346 (the A4150 between the A449 and the A4124) have a concentration of 37.7 µg/m³, and three links of census ID 802047192 (the A449 between Broadlands and the A4150) also have a concentration 37.7 µg/m³ in the 2018 base year dataset.</p> <p>In the opening year 2024 there are no links predicted to exceed 36 µg/m³ by the 2018-based PCM model. The highest concentration predicted in 2024 at PCM links along the ARN is 28.2 µg/m³ on 68 links of census ID 802057118 (the A449 between Cannock Road and Broadlands). This predicted PCM link concentration is well below the EU limit value for annual mean NO₂ concentrations of 40 µg/m³.</p> <p>In conclusion, using either dataset, in the opening year of 2024, concentrations at all PCM links within the ARN are predicted by the PCM model to be well below the EU limit value for annual mean NO₂ concentrations of 40 µg/m³. The results of the local air quality compliance risk assessment are provided in paragraphs 5.9.33 to 5.9.35 in the ES [APP-044/6.1]. Though there are a number of PCM links which exceed 36 µg/m³ in the baseline year, there are no PCM links with an exceedance of concentrations >36 µg/m³ in the year of opening (2024), both with and without the Scheme, therefore no plan has been produced to illustrate this.</p>
1.2.5	The Applicant EA SSC WCC	Base Air Quality Data Paragraph 5.6.12 of Chapter 5 of the ES [APP-044] says that of the 128 Defra links present in the ARN the highest predicted annual mean NO ₂ concentration in 2024 will be 28.7 µgm-3. Could the Applicant advise where this 28.7 µgm-3 figure has been obtained from and could the interested parties confirm that they are content with this analysis?	<p>Paragraph 5.6.12 in Chapter 5 of the ES [APP-044/6.1] describes information from the Department for Environment, Food and Rural Affairs (Defra) Pollution Climate Mapping (PCM) model links. The PCM link information has been obtained from the 2017-based GIS dataset as listed in Reference 5.31 of Chapter 5 of the ES [APP-044/6.1]. The highest predicted annual mean nitrogen dioxide (NO₂) concentration of a PCM link that corresponds with the Affected Road Network (ARN) in 2024 according to this dataset is 28.7 µg/m³. This concentration is predicted at the PCM link with census ID 57118 – the A449 between Oxley Moor Road and Bone Mill Lane. This predicted PCM link concentration is well below the EU limit value for annual mean NO₂ concentrations of 40 µg/m³. The highest predicted NO₂ concentration on a PCM link in 2017 is along the M6 (census ID 16027) with a concentration of 41 µg/m³, however this link is not the highest in the study area in 2024 with a concentration of 27.7 µg/m3 in the 2017-based dataset.</p> <p>Since publication of the ES, Defra have updated the PCM network to a 2018 base year. With the new dataset the highest annual mean concentration of NO₂ in 2024 at PCM links along the ARN is 28.2 µg/m³. This PCM link is census ID 802057118, located on the A449 between Cannock Road and Broadlands (encompassing the length of the old census ID 57118 discussed above). This predicted PCM link concentration is well below the EU limit value for annual mean NO₂ concentrations of 40 µg/m³.</p>
1.3	Biodiversity, Ecology and Natural Environment (including Habitats Regulations Assessment (HRA))		
1.3.1	SSC SCC	Clarification Could SCC and SSC please explain the relationship between them in relation to the provision of advice relating to biodiversity in the determination of planning applications and applications for development consent?	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.3.2	The Applicant	Legal Compliance Regulation 7 of the Infrastructure Planning (Decisions) Regulations 2010 requires the SoS to have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992. Could the Applicant please explain how it considers that the proposal would comply with this obligation.	<p>The objectives of this Convention on Biological Diversity (CBD) are the conservation of biological diversity, the sustainable use of its components and the sharing of benefits arising from utilization of genetic resources. The benefits of use of genetic resources is not applicable to the Scheme. The first two objectives are implemented by the incorporation of relevant provisions into European Directives and into UK legislation and policy, as summarised in ES Appendix 8.1 [APP-175/6.3] the Legislation and Policy Framework relevant to biodiversity. All of the relevant legislation and policy has been taken into account in the environmental assessment of the Scheme and in the Environmental Statement Chapter 8 Biodiversity [APP-047/6.1 and subsequent revisions].</p> <p>Under CBD Article 3 States have the right to exploit their own resources pursuit to their own environmental policies, hence CBD does not preclude development but does provide guidance on the measures to protect biodiversity in subsequent Articles. These have been adopted into UK legislation and policy (ES Appendix 8.1 [APP-175/6.3]).</p> <p>CBD Article 8 deals with in situ conservation and 8(a) requires States to set up protected areas (fulfilled by the Wildlife and Countryside Act (1981) as amended and setting up of statutory designated sites, including Sites of Special Scientific Interest (SSSI). Articles 8(c), (d) and e) address the protection and management of areas for conservation of biodiversity, both within and outside protected areas, which the UK government has done through provisions in the Countryside and Rights of Way Act 2000, the Natural Environment and Rural Communities Act 2006, especially sections 40 on the responsibilities of public authorities and section 41 on the habitats and species of principal importance within and outside protected areas.</p> <p>This protection for biodiversity is further incorporated into the National Policy Statement for National Networks (NPSNN). ES Chapter 8 Biodiversity Table 8.1 [APP-025/6.1] shows how all of the requirements of NPSNN have been addressed by the Scheme.</p> <p>CBD Article 14 requires States to carry out environmental assessment of projects with a view of avoiding or minimizing significant adverse effects. This obligation has been implemented by the environmental assessment of the Scheme and submission of the Environmental Statement. ES Chapter 8 Biodiversity [APP-047/6.1 and subsequent revisions] Section 8.8 'Design, mitigation and enhancement' shows how the Scheme has incorporated the aims of CBD Article 14(a) to avoid and minimize significant effects, through the iterative development of the design and incorporation of measures to protect biodiversity.</p> <p>The SoS can therefore show that the proposed Scheme would comply with the requirement to have regard to the relevant obligations under the United Nations Environmental Programme Convention on Biological Diversity of 1992.</p>
1.3.3	The Applicant	Clarification Paragraph 8.3.16 of Chapter 8 of the ES [APP-047] identifies impacts on ecological features. Under duration the category has been divided into permanent/temporary. However, temporary may be long-term. Could the Applicant please explain the difference in definition and approach between "permanent" and "long-term" in this context?	<p>Paragraph 8.3.16 of the ES [APP-047/6.1 and subsequent revisions] sets out the criteria for how impacts have been characterised. With regards to the terms permanent and temporary, they are intrinsically linked with whether an impact is characterised as reversible or irreversible.</p> <p>A permanent impact is one which is irreversible, and therefore has no specific timescale associated with it other than it occurs forevermore. An example of this is the loss of ancient woodland, which is considered to be an irreplaceable habitat. When such habitat is lost, it can't be replaced and therefore the impact is a permanent one, which can't be reversed once it has occurred.</p> <p>A temporary impact is one which is reversible, and therefore to provide greater clarity of the impact, specific timescales have been assigned to such impacts. An example of this is the loss of broad-leaved plantation woodland that provides habitat for bats. The loss of the woodland can be reversed by planting new broadleaved woodland in the same location as the woodland that is lost, but it may take 30+ years for the new woodland to establish. It can therefore be said that the temporary, reversible loss of woodland could result in a long-term (30 years) impact on the bats using that woodland until the compensatory woodland establishes.</p>
1.3.4	The Applicant	Bats Paragraph 8.6.28 of Chapter 8 of the ES [APP-047] indicates two bat roosts within the boundary of the Proposed Development. However, in Figure 8.14	<p>Paragraph 8.6.28 of the ES Chapter 8 Biodiversity [APP-047 and subsequent revisions] states:</p> <p><i>'The aerial inspection surveys identified two roosts within the Scheme boundary, namely:</i></p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		[APP-118] these two trees (T70 and T112) are given different classifications. Could this discrepancy be explained?	<ul style="list-style-type: none"> • a confirmed noctule (from DNA analysis) day roost within a mature pedunculate oak <i>Quercus robur</i> tree (T112) within Lower Pool SBI; and • a likely <i>Pipistrelle</i> sp. (based on observed droppings size and shape – none could be reached for collection and analysis) day roost within a rowan <i>Sorbus aucuparia</i> tree (T70) within Lower Pool SBI' <p>There is an error in the text. T70 should be T107 as per the Bat Report Appendix 8.7 [APP-179/6.3]. Figure 8.14 [APP-118/6.2] shows a summary of the bat baseline preliminary bat roost assessment of trees, prior to any aerial inspection surveys being undertaken.</p> <p>As per paragraph 8.6.27 of the ES Chapter 8 [APP-047/6.1 and subsequent revisions]:</p> <p><i>'128 trees were identified for aerial inspection surveys (moderate and high potential trees) and aerial surveys were conducted on 92 of these trees, with lack of access preventing surveys of five of them and 31 being unsuitable or unsafe to climb.'</i></p> <ul style="list-style-type: none"> • T112, was initially surveyed as a High roosting potential feature (red circle) and subject to further aerial inspection • T107, was initially surveyed as a Moderate roosting potential feature (yellow circle) and subject to further aerial inspection. <p>T70 was also initially surveyed as a Moderate roosting potential feature (yellow circle) and subject to further aerial inspection. This tree is situated outside of the Scheme boundary south east of Lower Pool SBI.</p>
1.3.5	The Applicant	Bats Figure 8.17 [APP-121] seeks to show confirmed bat roosts and aerial tree inspection survey. However, reference to B5 appears to be missing on this drawing. Can this be resolved.	<p>Figure 8.17 [APP-121/6.2] shows <i>confirmed bat roosts</i> and aerial tree inspection survey results.</p> <p>As per Table 5.2 Roost identification survey results of structures within Appendix 8.7 Bats [APP-179/6.3], Building B5 is <u>not</u> a confirmed bat roost. Building B5 is therefore not shown on Figure 8.17.</p> <p>Building B5 is shown on Figure 8.13 [APP-117/6.2] as a Moderate roosting potential structure. However, this was confirmed by later surveys not to have a roost. Hence, it's absence from Figure 8.17 [APP-121/6.2].</p>
1.3.6	The Applicant	Bats a) Paragraph 8.6.30 of Chapter 8 of the ES [APP-047] indicates that hibernation surveys of trees had not "yet" been conducted. Given this report was completed in January 2020 have any further surveys been undertaken to validate or otherwise the predictions set out in that paragraph? b) If so, what were the results?	<p>Bat hibernation surveys of trees (climb and inspect using rope access and endoscopes where necessary) were undertaken in February 2020, however due to access restrictions only 15 trees were able to be surveyed. No hibernating bats were found in any of the trees inspected. Due to limited survey access our assumptions remain as outlined in Paragraph 8.6.30 of the ES [APP-047/6.1 and subsequent revisions]. <i>"Using the number of summer tree roosts found as a reference guide a precautionary approach is to be taken in respect of hibernation and is to be assumed that a small number of these trees are used for hibernation by bats."</i> Further hibernation surveys are due to be completed in winter 2020/2021 to inform the final bat mitigation licence for the Scheme.</p> <p>For clarity, the results of the 2020/2021 surveys would have no impact on the area of land required for environmental mitigation.</p>
1.3.7	The Applicant	Biodiversity Net Gain Paragraph 8.13.50 of Chapter 8 of the ES [APP-047] states 'Therefore, whilst delivering net gains in biodiversity may be desirable, there is no requirement for NSIPs to deliver overall net gains in the NPSNN and no indication that it will be mandatory in the near future. This reduces the weight applied to policies in the NPPF on net gain as relevant and important matters in decision making on NSIPs' The NPPF does however refer and is a material and important matter. Should Biodiversity Net Gain be a project aim.	<p>Delivery of biodiversity net gain would be a legitimate aspiration for any project and Highways England aims to find ways to deliver biodiversity net gain on all projects wherever possible. However, whilst it can be a desirable 'aim' of any project, it is not a requirement for NSIPs in general nor this project in particular. Policy on net gain in the NPPF has limited relevance to NSIPs and, there is, therefore, no requirement that NSIPs 'should' deliver net gain, although it is obviously desirable. This point is explored further below.</p> <p>Highways England's Biodiversity Report 2018-2019 [HE 2019 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841276/Highways_England_Biodiversity_Report_2018-19.pdf] Action 3.2 Highways England states: As</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>part of normal delivery, network improvement projects will mitigate and compensate their biodiversity impacts to achieve no net loss of biodiversity, as far as the projects are reasonably able. In addition, projects will identify biodiversity opportunities and deliver actions that will achieve net biodiversity gain, wherever possible. The identification of such opportunities should be included within the Environmental Assessment Report. If no such opportunities are found then a clear statement explaining why should be provided instead. This demonstrates that it is part of Highways England's biodiversity strategy to achieve biodiversity net gain where possible, but it also recognises that biodiversity net gain may not be achievable on every Scheme.</p> <p>The majority of the new development for the M54 to M6 link road is on land owned by third parties that is being obtained through compulsory purchase. In order to secure those powers, Highways England must demonstrate that the land subject to compulsory acquisition is required for the Scheme or is required to facilitate or is incidental to the Scheme (section 122 of the Planning Act 2008). This means that, whilst land required to mitigate the impact of the Scheme can be secured through compulsory acquisition, such powers do not extend to the acquisition of land for enhancement or gain.</p> <p>Given the principle above, net gains on the M54 to M6 link road are likely to only be achieved from creation of new habitats where land is required for other essential purposes for a Scheme, such as mitigation for flood risk, for landscape integration, reduction of visual impacts, or protection of the setting of sites of importance for cultural heritage. Highways England has continually looked for opportunities to protect and enhance biodiversity on this project through reduction of impacts, mitigation planting and identifying improvements. The Scheme will achieve a net gain for linear habitats. However, when taken as a whole, it has not been possible to identify a strategy that achieves an area based net gain in biodiversity due to the constraints around land acquisition.</p> <p>Planning policies on biodiversity net gain and their application to this Scheme are explored in more depth in the CftS (paragraphs 8.13.32-8.13.58), which provides more detail than is provided in ES Chapter 8. The NPSNN (paragraph 1.19) states that: <i>'The NPPF is also likely to be an important and relevant consideration in decisions on nationally significant infrastructure projects, but only to the extent relevant to that project. However, the NPPF makes clear that it is not intended to contain specific policies for NSIPs where quite particular considerations can apply.'</i> In this context, whilst the NPPF as a whole is a relevant and important matter, the relevance of NPPF policy text on any given topic will depend on its relevance to NSIPs in general and the specific circumstances of a particular project.</p> <p>In the Spring Statement in 2019, the Government announced it would mandate net gains for biodiversity in the Environment Bill. In July 2019, Defra published Net Gain: Summary of responses and government response to this consultation. This document states on page 5 that: <i>'Consultation proposals for a mandatory requirement did not include nationally significant infrastructure or marine projects... the government believes that further work and engagement with industry and conservation bodies is required to establish approaches to biodiversity net gain for both marine and nationally significant infrastructure projects, which can have fundamentally different characteristics to other development types. Government will continue to work on exploring potential net gain approaches for these types of development, but nationally significant infrastructure and net gain for marine development will remain out of scope of the mandatory requirement in the Environment Bill.'</i> The Environment Bill was reintroduced on 30 January 2020, before its passage was suspended due to the Covid-19 pandemic.</p> <p>Whilst the Government intends to make net gain mandatory for certain forms of development to which the NPPF guidance will apply, this requirement is currently not applicable to NSIPs due to the Government's view that these Schemes can have <i>'fundamentally different characteristics to other development types'</i>.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>The Environment Bill was reintroduced on 30 January 2020, before its passage was suspended due to the Covid-19 pandemic. The Bill currently proposes that this mandatory requirement would be introduced through amendments to the Town and Country Planning Act (TCPA) 1990 so developments authorised under the Planning Act 2008 would not be included.</p> <p>In our view, the above reduces the relevancy and materiality of policies on biodiversity net gain in the NPPF for decision making on NSIPs, and indicates that on this particular topic, decisions should be guided predominantly by policy in the NPSNN rather than the NPPF.</p>
1.3.8	The Applicant	<p>Biodiversity matrix</p> <p>Could the Applicant explain why it has not used the Biodiversity matrix 2.0 which updates and replaces the original Defra biodiversity matrix?</p>	<p>The biodiversity metric calculation undertaken for the application submitted in January 2020 was based on the method published by Defra in Biodiversity Offsetting Pilots Technical Paper: the metric for the biodiversity offsetting pilot in England (Defra, 2012), to determine effects of the Scheme. Version 2.0 of the Defra metric was not available at the time the landscape design was being developed and the impact assessment was being undertaken.</p> <p>A re-calculation using Defra Metric 2.0 has been undertaken by the applicant and submitted to the inspectorate as a revision of Appendix 8.2: Biodiversity Metric Calculations [AS-103/6.3].</p>
1.3.9	The Applicant	<p>Biodiversity off-setting</p> <p>In the Biodiversity off-setting metric study (Appendix 8.2 to Chapter 8 of the ES [APP-176]) in paragraph 2.3.1 second bullet it is indicated that proposed habitats would be managed either by HE or by a separate landowner agreement. Under the dDCO [APP-018]) these areas are mostly land to be utilised under TP. How is this longer-term management to be secured?</p>	<p>All the proposed habitats are in areas which the Applicant is seeking to permanently acquire to ensure the long-term management of these habitats. These maintenance requirements will be set out in the Handover Environmental Management Plan which will be based on the Construction Environmental Management Plan and Landscape and Ecology Management Plan as outlined in the OEMP [APP-218/6.11], Table 3.3, MW-G11 and MW-LAN1 secured by Requirement 4 of the draft DCO [AS-075/3.1]. The exception to this is the improvements to, and ongoing maintenance of, Whitgreaves Wood owned by the National Trust. The works to this site and ongoing maintenance are secured through a legal agreement between the Applicant and the National Trust.</p> <p>Those areas acquired temporarily for construction will be returned to their existing state post construction, as set out in the draft DCO [AS-075/3.1], no further maintenance is proposed.</p> <p>At the request of some affected landowners, consideration has also been given to those areas of land which could be returned to the landowners post construction of the Scheme. Any land returned to landowners would be subject to legal covenants requiring ongoing retention, management and maintenance in line with requirements in the HEMP and to ensure compliance with the DCO if/ when made. Indicative maintenance schedules have been produced for a number of landowners to further progress discussions with landowners on this topic. However, permanent acquisition is being sought over this land, with any disposal to happen after construction.</p>
1.3.10	The Applicant	<p>Biodiversity off-setting</p> <p>The Applicant has indicated in paragraph 4.1.1 of the Biodiversity off-setting metric study (Appendix 8.2 to Chapter 8 of the ES [APP-176]) that there would be a 4.99% net loss in biodiversity units. The Applicant then goes not to indicate that, through Ref 1 that this is considered to be "an overall no net loss of biodiversity". Having looked at the reference in question could the Applicant point out where this is cited?</p>	<p>There is currently very little guidance on what "net loss", "no net loss" and "net gain" of biodiversity constitutes in terms of percentages of biodiversity units.</p> <p>Reference 1 refers to Ciria guidance, 'Biodiversity net gain, Good practice principles for development' (CIRIA, 2019), the guidance provides an example in Table 11.9 of Technical Note T8 of how losses and gains of biodiversity are measured for BREEAM schemes. Table 11.9 states that developments that result in a post development biodiversity baseline within 95-104% of the original biodiversity baseline are considered to result in no net loss of biodiversity.</p> <p>This guidance, as well as the fact that the Scheme will result in gains of habitat suitable for rare and declining species such as great crested newt, has been used to conclude that the Scheme will result in no net loss of biodiversity.</p>
1.3.11	The Applicant	<p>Biodiversity off-setting calculation</p> <p>In looking at the Biodiversity off-setting matrix (Appendix 8.2 to Chapter 8 of the ES [APP-176]) there are a number of minor discrepancies between the figures set out in Tables 3.3, 3.4, 3.6 and 3.8 and those in the</p>	<p>a) Changes to the Scheme accepted on 29 October 2020 reduce the impact of the Scheme on existing habitats and allow for retention and restoration of selected areas. As part of this submission the biodiversity metric has been re-calculated using Defra Metric 2.0 and submitted to the Planning Inspectorate as a revision of Appendix 8.2: Biodiversity Metric Calculations.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>summaries, Tables 3.9 and 3.10 and thus the summaries in Tables 3.11 and 3.12. Could these be checked. The discrepancies appear to be in the following (although some others are clearly rounding issues):</p> <ul style="list-style-type: none"> • Standing water Good condition (extant) • Broad-leaved Moderate condition plantation (created) • Standing water Moderate condition (extant) • Running Water Good condition <p>If the original figures are included, by the ExA's calculation, show that there would only be 94.93% of the value after the Proposed Development when compared with the before. This falls outside the +/-5% asserted to be of 'no significant effect'. This figure, obviously, also omits any consideration of ancient woodland.</p> <p>a) Could the Applicant please check the figures.</p> <p>b) Is the statement in paragraph 8.9.133 of Chapter 8 of the ES [APP-047] therefore justified?</p>	<p>The Biodiversity Metric Calculations Version 3 (Appendix 8.2 [AS-103/6.3]) show that following completion of the Scheme, total biodiversity units would be marginally higher, with an area based gain of 2.21% of units (17.32 units), a linear based gain of 26.27% (8.2 units) and a 2.23% (0.33 units) gain of river habitats. The Scheme is within the range -5 % to +5 % for river and area based habitats (woodland, grassland etc.) which can be classed as no net loss in accordance with Table 11.9 of CIRIA C776a Good practice principles for development (Ref 8), and can be classed as achieving a net gain in linear (hedgerow) habitats.</p> <p>The following raw tables have been updated and/or created within the Biodiversity Metric Calculations Version 3 [AS-103]:</p> <ul style="list-style-type: none"> • Table 3.1: Phase 1 Habitat (area-based): Baseline • Table 3.2: Phase 1 Habitat (area-based): Effects • Table 3.3: Phase 1 Habitat (Linear): Baseline • Table 3.4: Phase 1 Habitat (Linear): Effects • Table 3.5: Phase 1 Habitat (River): Baseline • Table 3.6: Phase 1 Habitat (River): Effects • Table 3.7: Phase 1 Habitat (area-based): Post-development • Table 3.8: Phase 1 Habitat (area-based): After Works Units • Table 3.9: Phase 1 Habitat (Linear): Post-development • Table 3.10: Phase 1 Habitat (Linear): After Works Units • Table 3.11: Phase 1 Habitat (River): Post-development • Table 3.12: Phase 1 Habitat (River): After Works Units <p>An updated summary of the area, linear and river measurements of each habitat before and after works is also set out in Table 3.13, 3.14 and 3.15. A summary of the results of the metric are also presented in Tables 3.16, 3.17 and 3.18.</p> <p>b) It is assumed that this part of the question is referring to paragraph 8.9.183 of the ES Chapter 8 Biodiversity [AS-026/6.1], which states that 'the Scheme delivers no net loss of biodiversity'. Paragraph 8.9.50 in the updated ES Chapter 8 Biodiversity Version 3 [AS-083/6.1], states: 'The Biodiversity Metric Calculations (Appendix 8.2 [AS-103/6.3]) show that following completion of the Scheme, total biodiversity units would be marginally higher, with an area-based gain of 2.21% units, a linear based gain of 29.01% and a gain of 2.23% of river based units (assuming enhancement of 200 m of retained watercourse of river based units). The Scheme is within the range -5% to +5% for river and area based habitats (woodland, grassland etc) which can be classed as no net loss in accordance with Table 11.9 of CIRIA C776a Good practice principles for development (Ref 8.47) and can be classed as achieving a net gain in linear (hedgerow) habitats.'</p>
1.3.12	The Applicant	<p>Habitat creation</p> <p>a) The Applicant's assessment is that the habitat creation will provide mitigation for the development. It can be implied that there will be a time 'gap' between the construction effects and the mitigation becoming effective leading to a, potential, deficit. Is this implication correct?</p> <p>b) What would be effects of this gap in habitat terms?</p> <p>c) Would it be possible to avoid these effects rather than mitigate them by introducing habitat before construction takes place?</p>	<p>a) It is correct that there will be a time 'gap' between construction effects and mitigation by habitat creation becoming effective. As is usual with construction projects the greatest impact of the Scheme will be in the period from site clearance to the start of habitat creation. Habitat creation will occur progressively during the construction period up to opening, as temporary construction finishes in various areas and these become available for restoration, seeding and planting. The construction period was expected to be three years from preliminary works to scheme opening, with site clearance starting in the preliminary works period, to avoid the bird breeding season where possible (ES Chapter 2 Construction Programme paragraphs 2.6.6-2.6.10 [APP-041/6.1]). This construction period is anticipated to reduce to two and a half years with the acceptance of the Scheme changes.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		d) If so, how should this be secured.	<p>b) The losses of habitat are described in Chapter 8: Biodiversity of the ES (Version 1) [APP-047/6.1] paragraphs 8.9.32 to 8.9.49 (and paragraphs 8.9.32 to 8.9.50 in Version 3 [AS-083/6.1]) and shown in Table 8.18 Habitat Losses and Gains. The main losses of semi-natural habitats in the construction period would be broadleaved and mixed plantation, mostly highway planting less than 30 years old, hedges, improved and amenity grassland, poor semi-improved grassland and waterbodies. This would lead to loss of habitat for the species using those habitats and associated localised reductions in the populations as described in the ES Chapter 8, Section 8.9 [AS-083/6.1], in the short to medium term.</p> <p>New grassland and ponds would be established well within 10 years and likely within 5 years from year of opening. New hedges and woodland planting would be at the scrub stage of development by 5 to 15 years, by which time they would be supporting many of the birds, invertebrates and other species recorded in such habitats. The woodland planting would develop to closed canopy with semi-mature to mature trees, depending on species, in 10 to 30 years. Woodland would continue to develop as trees matured beyond 30 years, with reductions in some of the early colonising species especially grasses and increases in shade-tolerant plants and woodland fauna.</p> <p>c) During development of the detailed design based on the Environmental Masterplan (ES Figure 2.1 [APP-057/6.2]) Highways England will minimise the loss of existing habitats - the ES assesses the maximum loss of habitat - and will incorporate habitat creation as early as possible in the construction programme, including planting of woodland and hedges and creating habitat suitable for species present. Most of the land that will be used for permanent habitat creation will be temporarily used during construction, for construction sites, top-soil storage areas and temporary access routes, which will limit the scope to create habitats in advance of construction. There will be scope for temporary habitats within the construction site, for example on topsoil storage mounds, which would have potential as foraging areas for insect pollinators and birds.</p> <p>d) N/A</p>
1.3.13	The Applicant	<p>Clarification- Cannock Extension Canal SAC</p> <p>Can you expand on and clarify the approach taken to assessment and the results informing 'screening out' of the Cannock Extension Canal SAC?</p>	<p>Only receptors up to 200m from the ARN are considered within the local operational air quality assessment as is required by DMRB LA 105. This is because the effect of pollutants from road traffic reduces with distance from the point of release, and beyond 200 m these are likely to have reduced to a concentration equivalent to background concentrations, as set out in paragraph 5.3.5 of the ES [APP-044/6.1]. At its closest point the Cannock Extension Canal SAC is approximately 280m from the ARN (the M6 Toll) and is therefore not considered to be significantly affected by changes in air quality. The A5 and B4154 adjacent to the SAC are identified as 'Other Roads Modelled' on Figure 5.1: Air Quality Study Area [APP-068/6.2]. These roads have only been included within the air quality modelling to ensure total concentrations predicted at receptors within 200m of the ARN include contributions from all relevant sources.</p> <p>The APIS website fits the Cannock Extension Canal SAC into the 'oligotrophic waterbodies' EUNIS classification and thus the critical load range for nitrogen is given as 3 to 10 kgN/ha/yr. This is because (in lieu of providing no critical load range at all) the EUNIS ecosystem class C1.1 is considered the least worst fit, because this is the standard EUNIS ecosystem class used in APIS for sites containing <i>Luronium natans</i>, the most sensitive of which are nutrient starved upland lakes. However, APIS does not tailor its assignment of critical loads to site-specific circumstances and thus caveats the use of these critical loads to account for other types of sites supporting <i>Luronium natans</i>, commenting that: '<i>This critical load only applies if the interest feature is associated with softwater oligotrophic or dystrophic lakes at the site. If the feature is not depending on these lake types, there is no comparable critical load available</i>'. While the water quality in Cannock Extension Canal SAC is good, it cannot be described as an oligotrophic or dystrophic water body (Natural England's Supplementary Advice on the Conservation Objectives describes it as mesotrophic). In these circumstances, according to APIS, '<i>there is no comparable critical load available</i>'. This reinforces the basis for screening out air quality impacts on the site and would match the position of many other freshwater SSSIs and SACs and is the reason why nitrogen deposition is generally not calculated in risk assessments for lowland open freshwater sites.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.3.14	The Applicant	Effect on SSSIs Can you address the concerns of Natural England with regard to the effect on Stowe Pool and Walk Mill Clay Pit SSSI and on White-clawed crayfish and Chasewater and Southern Staffordshire Coalfield Heaths SSSI? Please provide an update on the latest position.	<p>With regard to Natural England's RR concerning potential air quality impacts on the named SSSIs, APIS states that for the white-clawed crayfish interest features of Stowe Pool & Walkmill Claypit SSSI, no critical load has been assigned. This is because the majority of lowland open freshwater bodies are phosphorus limited (i.e. phosphorus is the principal nutrient limiting eutrophication) rather than nitrogen limited. Phosphorus does not come from vehicle exhaust emissions. Moreover, in the absence of any appropriate nitrogen critical load, no modelling assessment can be undertaken.</p> <p>As detailed in paragraph 8.9.127 of the ES [AS-025/6.1], an increase in NOx or nitrogen deposition does not necessarily equate to a significant effect that requires mitigating. Nitrogen deposition would only increase in one of the Chasewater and the Southern Staffordshire Coalfield Heaths SSSI units (unit 8), and this increase is less than 1% of the critical load for dwarf shrub heath and therefore, as stated in DMRB LA 105 this is not considered to result in a significant effect on the SSSI and that no mitigation measures are proposed.</p> <p>All Natural England RRs have been incorporated into the Statement of Common Ground (SoCG) between Highways England and Natural England with detailed responses provided in both the SoCG with Natural England and the Responses to Relevant Representations document (documents 8.8P(B) and 8.9 submitted on 3 November 2020).</p>
1.3.15	The Applicant	Clarification Table 8.3 in Chapter 8 of the ES [APP-047] describes the 'level of impact descriptive criteria' for moderate adverse level of impact/change as '1) Temporary/reversible damage to a biodiversity resource and 2) the extent, magnitude, frequency, and/or timing of an impact negatively affects the integrity or key characteristics of the resource'. However, for minor adverse the effects are described as '1) Permanent/irreversible damage to a biodiversity resource; and 2) the extent, magnitude, frequency, and/or timing of an impact does not affect the integrity or key characteristics of the resource' Can the Applicant explain the rationale for assessing permanent and thus non-reversible effects at a lower level than temporary effects?	<p>In this context, the key differentiator between a moderate or minor impact is whether that impact affects the integrity of the ecological resource or not.</p> <p>Ecological Integrity is defined as the ability of an ecological system to support and maintain a community of organisms that has species composition, diversity, and functional organization comparable to those of natural habitats within a region (Parrish, 2003). For this assessment, although a minor impact is permanent, it does not affect the integrity of the ecological resource. This means that the ecological system and the communities of organisms present would be maintained. In contrast, even though a moderate impact may be temporary, it could affect the integrity of the ecological resource. This means that the ecological system and the communities of organisms would not be maintained. Therefore, the temporary impact is of greater significance than the permanent one.</p> <p>The level of impact <i>may be Minor</i> where there is permanent/ irreversible damage on a resource and does not affect the integrity or key characteristics of the feature. Alternatively, the level of impact <i>may be Moderate</i> where there is a temporary/reversible damage to a resource and does affect the integrity and key characteristics of the feature. Therefore, the level of impact is dependent on the extent, magnitude, frequency and / or timing of an impact (which could be permanent or temporary) and the effect on the integrity or key characteristics of the feature or resource (negative or positive).</p> <p>An example of this could be the difference between installing a permanent piece of infrastructure adjacent to an estuary, and the use of the estuary by dog walkers. Birds feeding at the estuary will quickly habituate to the new infrastructure and the integrity of the estuary hasn't been affected, as the birds will continue to use it as before. In comparison, birds will never habituate to the random temporary nature of dog walkers using the estuary and the disturbance this can cause. Birds may be driven from the estuary at key times and the integrity of the estuary, its ability to support and maintain the populations of bird's dependent upon it has been affected. In this example, the temporary impact is of greater magnitude than the permanent one.</p>
1.3.16	The Applicant	Lighting effects on biodiversity The ES assumes that a lighting strategy has not been required for the Proposed Development to assess the effects of lighting on biodiversity (paragraph 2.5.47 of Chapter 2 of the ES [APP-041]). Can the Applicant	<p>Whilst a full lighting strategy has not been prepared, the principles of lighting during the operation of the Scheme have been agreed and assessed. Measures have also been included in the OEMP to manage lighting during construction. This has enabled a robust assessment of the impacts of lighting and ensures the final lighting design minimises the impact on biodiversity.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		comment on why a lighting strategy was considered unnecessary with respect to any proposed mitigation measures for protected species and other biodiversity interests as part of the proposed CEMP and HEMP.?	<p>Paragraph 2.5.47 of the ES [APP-041/6.1] outlines the operational lighting strategy for the Scheme.</p> <p><i>'A lighting strategy has been developed in consultation with SCC, and the Midlands Asset Area Delivery team (Highways England, Area 9). Lighting would be required at the two junctions, M54 Junction 1 and M6 Junction 11. The lighting used would be appropriate for the Scheme, these would be approximately 15 m high columns at M6 Junction 11 and 12 m high columns on M54 Junction 1, slip roads and mainline of the Scheme up to and through Junction 1. The strategy promotes the Highways England Sustainable Development Plan by reducing CO₂ emissions by using more energy efficient lighting in the form of Light Emitting Diodes (LED). LEDs are more energy efficient than conventional luminaires and also reduce light spill into adjacent areas. It is proposed that the new lighting system shall be capable of being dimmed, trimmed and monitored remotely by a central management system.'</i></p> <p>Construction and operational lighting have been taken into account in Chapter 8: Biodiversity [APP-047/6.1]. Lighting requirements during construction and operation of the scheme are set out in Paragraphs 8.8.5 and 8.8.9 in relation to mitigation measures for bats.</p> <p>Further detail on construction lighting is outlined in Table 3.3 of OEMP [APP-218/6.11], MW-G26 and MW-BIO3, which set out the requirements for lighting during the construction of the Scheme.</p> <p>MW-G26 states: <i>'Site lighting: The main works contractor shall define within the CEMP the proposed approach to site lighting around construction compounds and elsewhere along the route alignment, giving consideration to environmental constraints. Lighting should be at the minimum luminosity necessary and use low energy consumption fittings and should avoid light spillage. Lighting should also be designed, positioned and directed so as not to unnecessarily intrude on adjacent buildings, ecological receptors, structures used by protected species and other land uses to prevent unnecessary disturbance, interference with local residents, or passing motorists. This provision would apply particularly to sites where night working would be required.'</i></p> <p>MW-BIO3 states: <i>'The main works contractor shall, if temporary site lighting is required near Local Wildlife Sites; Sites of Biological Importance, retained ancient woodlands and linear vegetated or water corridors, adjacent to the known bat roost use directional lamps/ hoods/ cowls, to ensure that light-spill to the watercourses and their banks is minimised. LED lights and automatic sensors will be used where appropriate. These features are identified on the Environmental Constraints Plans, at Annex A of this OEMP; the Environmental Masterplans (see Figures 2.1 to 2.7 [APP-057/6.2 to APP-063/6.2]); and Appendix 8.7 of the Environmental Statement [APP-179/6.3], Figure 8.17: Bat Baseline - Confirmed Bat Roosts and Aerial Tree Inspection Survey Results (2018 and 2019) [APP-121/6.2].'</i></p> <p>Species and habitat specific management plans will form part of the LEMP produced at detailed design stage and will be based on the measures set out in the REAC tables (Tables 3.2 to 3.4) of the OEMP. These documents would then inform and be referred to within the EPSL applications. It is therefore considered that this matter is secured through Requirement 4 of the draft DCO [APP-018/3.1] and the OEMP [APP-218/6.11].</p> <p>The key elements of the operational lighting strategy are secured through Table 3.4 of the OEMP [APP-218/ 6.11], D-BIO8 which states: <i>'The Scheme shall provide an appropriate lighting design to minimise impacts on bats. The length of the Scheme would be unlit with new lighting limited to the junctions with the M54 and M6, including the associated slip roads.'</i></p>
1.3.17	The Applicant	<p>External Mitigation</p> <p>Paragraph 8.8.10 of Chapter 8 the ES [APP-047] states 'However, the Scheme would achieve improvements to specific habitats as part of this overall objective and Highways England will seek to achieve further enhancements where possible outside the DCO process.' As this is outside the DCO process what weight do you consider should be afforded to these unsecured and undetailed enhancement measures?</p>	<p>No weight should be given to enhancement measures other than those secured through Requirements 3 and 5 of the draft DCO as set out in Table 3.4 of the OEMP, D-BIO10, D-BIO11 and D-WAT2 to 5.</p> <p>Highways England's project team for the Scheme has submitted an application for funding from the 'designated fund' for an initial feasibility study to identify opportunities and appropriate sites which could be improved to provide biodiversity net gains to be delivered on land outside of the Order limits in partnership with key stakeholders and landowners. This funding application has been successful, and the feasibility study is underway. However, this process is separate from the DCO application and its success or otherwise is not a material consideration for decision making on the DCO application. The</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			measures included in the designated fund application do not form part of the mitigation measures for the Scheme and are not required for the Scheme to be consented.
1.3.18	The Applicant	Ancient Woodland a) Ancient Woodland mitigation: It is stated that a replacement woodland habit at a ratio of 7:1 in area would be provided. While this has apparently been agreed with Natural England, could the rationale for this ratio be fully explained? b) Given that the value of ancient woodland is not just for its trees but the whole range of biodiversity found, what measures are proposed to ensure that the range of biodiversity is maintained? c) How would this be secured in the DCO?	<p>a) Ancient woodland is an irreplaceable habitat and is consequently considered to be of nature conservation importance on a national scale. Its loss has to be compensated for.</p> <p>There is currently no accepted guidance that specifies a set ratio of new planting to loss of ancient woodland. Each impact has to be approached on a case by case basis, and the reason for this is that although all ancient woodland is of national importance, within that broad category of importance each ancient woodland will be different and will warrant different levels of compensation.</p> <p>The size of the woodland, its connections or isolation from other natural or semi-natural habitats, its management regimes, its intrinsic appeal and the diversity and rarity of flora and fauna it supports will all dictate levels of compensation, as will the scale of the impact upon the woodland.</p> <p>In this case, the ancient woodlands are relatively small in scale, are not subject to management, generally inaccessible to the public and do not support important populations of species of flora or fauna that are nationally rare. In the case of Brookfield Farm, the woodland is also isolated by the A460 to the west and the M6 to the north and east.</p> <p>There is no direct loss of woodland following the Scheme changes accepted on 29 October 2020, though some encroachment within 15m of the woodland edge will occur during construction. As such, in liaison with Natural England a ratio of 7:1 new woodland planting to ancient woodland loss is considered appropriate.</p> <p>b) No direct loss of woodland will occur. The impacts to ancient woodland would be potential compaction of soils and damage to roots when working within 15m of the woodland and increased nitrogen deposition during operation.</p> <p>Compensation for these impacts would be provided as ancient woodland is irreplaceable and is of national importance. These impacts are not however considered to result in fundamental changes to the woodland ecosystem and the species of flora and fauna that exist within the woodland. During construction, animals would be able to move away from the woodland edge to areas of unaffected habitat, and during operation the increased nitrogen deposition is likely to result in changes to the species distribution and abundance within the areas affected, but as these areas are small in comparison to the total area of the woodlands, total loss of important floral species is unlikely to occur.</p> <p>In the short to medium term, compensation would include the enhancement of existing woodland and in the long-term new woodland planting would provide habitat for biodiversity such as birds, mammals, amphibians and invertebrates, even if that woodland is not ancient.</p> <p>c) All of the proposed habitats and improvements to existing habitats are in areas which the Applicant is seeking to permanently acquire to ensure the long-term management of these habitats. These maintenance requirements will be set out in the Handover Environmental Management Plan which will be based on the Construction Environmental Management Plan and Landscape and Ecology Management Plan as outlined in the OEMP, Table 3.3, MW-G11 and MW-LAN1 secured by Requirement 4 of the draft DCO. The exception to this, are the improvements to and ongoing maintenance of Whitgreaves Wood owned by the National Trust. The works to this site and ongoing maintenance are secured through a legal agreement between the Applicant and the National Trust. The National Trust is already maintaining Whitgreaves Wood and will continue to do so following completion of the works.</p>
1.3.19	The Applicant	Ancient Woodland a) Could the Applicant explain in detail how ancient woodland enhancement measures in proposed Work 76 of the dDCO can act as "compensation" for ancient woodland habitat loss	<p>a) Natural England states that ancient woodland is an irreplaceable resource. As such, its loss cannot be mitigated for by creating a new woodland – an irreplaceable habitat cannot, by definition, be replaced. Consequently, where it is deemed that there is going to be unavoidable residual damage or loss to</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		b) Ancient Woodland proposals include compensatory planting and conservation led management of both affected ancient woodlands. Can the Applicant confirm the method to secure this on-going maintenance and for what period it will be secured?	<p>ancient woodland, the measures taken to <u>compensate</u> for this must be of a scale and quality commensurate with loss of irreplaceable habitat.</p> <p>Alongside the planting of new woodland, the Applicant will undertake management and enhancement of existing ancient woodland within Brookfield Farm LWS/SBI and Whitgreaves Wood. Management would improve the function of the native woodland ecosystem by removing introduced species of trees, shrubs, and other plants; encouraging the re-establishment of native species; and initiating or enhancing ecological processes which may be absent or damaged.</p> <p>Alongside the planting of new woodland, enhancements of existing woodland would compensate for the loss of existing woodland and is in line with Natural England guidance: https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences. It should be noted that the areas for improvement are part of the compensation package agreed with Natural England and may have contributed to the two parties reaching agreement on the ratio for replacement of 7:1. However, the replacement ratio of 7:1 is met through new planting in compensation areas, not in Whitgreaves Wood.</p> <p>b) The proposed habitats and habitats which will be subject to on-going management are in areas which the Applicant is seeking to permanently acquire to ensure the long-term management of these habitats. These maintenance requirements will be set out in the Handover Environmental Management Plan which will be based on the Construction Environmental Management Plan and Landscape and Ecology Management Plan as outlined in the OEMP, Table 3.3, MW-G11 and MW-LAN1 secured by Requirement 4 of the draft DCO [AS-074/3.1]. The exception to this are the improvements to and ongoing maintenance of, Whitgreaves Wood owned by the National Trust. The works to this site and ongoing maintenance are secured through a legal agreement between the Applicant and the National Trust. The National Trust is already maintaining Whitgreaves Wood and will continue to do so following completion of the works.</p>
1.3.20	The Applicant	<p>Ancient Woodland</p> <p>Can the Applicant clarify what they describe as ancient woodland "compensation" measures (para 8.8.3) would be secured along with any mechanisms or commitments for ensuring that ongoing management of replacement woodland through DCO Requirements or other appropriate means.</p>	<p>Ancient woodland 'compensation' measures include woodland planting at a ratio of 7:1 for the direct loss of ancient woodland and 1:1 for areas impacted by nitrogen deposition. Improvement measures in existing areas of ancient woodland at Whitgreaves Wood and Brookfield Farm SBI are also proposed, these will include measures such as selective scrub clearance and tree clearance where necessary. These improvement measures will be considered in more detail at the detailed design stage in consultation with Natural England. All of the proposed habitats are in areas which the Applicant is seeking to permanently acquire to ensure the long-term management of these habitats. These maintenance requirements will be set out in the Handover Environmental Management Plan which will be based on the Construction Environmental Management Plan and Landscape and Ecology Management Plan as outlined in the OEMP, Table 3.3, MW-G11 and MW-LAN1 secured by Requirement 4 of the draft DCO [AS-073/3.1]. The exception to this, are the improvements to and ongoing maintenance of, Whitgreaves Wood owned by the National Trust. The works to this site and ongoing maintenance are secured through a legal agreement between the Applicant and the National Trust. The National Trust is already maintaining Whitgreaves Wood and will continue to do so following completion of the works.</p>
1.3.21	The Applicant	<p>Ancient Woodland compensation works</p> <p>Schedule 7 land of which temporary possession may be taken includes Plots 3/7a, 3/7b, 3/7c & 4/2, and such land must be returned to the owner within 1 year of completion. These plots are all required to deliver what the Applicant describes as ancient woodland enhancement measures (Work 76). There does not appear to be a mechanism in place to secure the</p>	<p>An agreement has been concluded between the Applicant and the National Trust dated 14 September 2020. In the event the DCO is confirmed, the agreement permits the Applicant to enter onto NT's land at Whitgreaves Wood to undertake works to enhance the woodland and mitigate the impact of the authorised development.</p> <p>The National Trust is already maintaining Whitgreaves Wood and will continue to do so following completion of the works.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		maintenance of these works. Provide an explanation as to how the retention and maintenance of these measures will be secured.	
1.3.22	The Applicant	Long Term maintenance of compensatory habitats Paragraph 8.9.126 of Chapter 8 of the ES [APP-047] states 'This would likely require implementation through the provisions of the DCO and via third party agreements. In reference to retained and newly created habitats and ensuring connectivity. Can the Applicant confirm the provisions proposed to address this and if any third-party agreements have been or are in the process of being concluded/proposed?	Ancient woodland 'compensation' measures include woodland planting at a ratio of 7:1 for the direct loss of ancient woodland and 1:1 for areas impacted by nitrogen deposition. Improvement measures in existing areas of ancient woodland at Whitgreaves Wood and Brookfield Farm SBI are also proposed, these will include measures such as selective scrub clearance and tree clearance where necessary. These improvement measures will be considered in more detail at the detailed design stage in consultation with Natural England. All of the proposed habitats are in areas which the Applicant is seeking to permanently acquire to ensure the long-term management of these habitats. These maintenance requirements will be set out in the Handover Environmental Management Plan which will be based on the Construction Environmental Management Plan and Landscape and Ecology Management Plan as outlined in the OEMP, Table 3.3, MW-G11 and MW-LAN1 secured by Requirement 4 of the draft DCO [AS-073/3.1]. The exception to this are the improvements to and ongoing maintenance of, Whitgreaves Wood owned by the National Trust. The works to this site and ongoing maintenance are secured through a legal agreement between the Applicant and the National Trust. The National Trust is already maintaining Whitgreaves Wood and will continue to do so following completion of the works.
1.3.23	The Applicant Natural England	Correction Natural England in its Relevant Representation [RR-037] has identified some typographical errors. Can the Applicant please liaise with Natural England to correct these.	All Natural England RRs have been incorporated into the latest SoCG between Highways England and Natural England [TR010054/APP/8.8P(B)]. This is not a typographical error, the APIS where the data for baseline deposition rates and critical loads was sourced from updated its baseline background deposition and concentration data sets on the 18 March 2020, after the submission of our DCO application, and so was not included in the HRA submitted with the application. Since the submission of the application further work has been completed to consider the updates to DMRB air quality guidance to LA105. The air quality assessment reported in the ES [APP-044/6.1] was undertaken in line with now superseded air quality guidance. The updated APIS data has been utilised in the sensitivity testing undertaken to consider whether the changes to methodology could alter the conclusions of Chapter 5: Air Quality and Chapter 8: Biodiversity, refer to 'DMRB updates and impacts on the DCO application' [AS-059/8.2]. This document was submitted to the Inspectorate on 30 July 2020. However, see our response to the RR-037ao [TR010054/APP/8.9] which clarifies that according to APIS the critical load range of 3-10 kgN/ha/yr is not appropriate for this site as it is not an oligotrophic or dystrophic waterbody and thus <i>'there is no comparable critical load available'</i> . Cannock Chase and Cannock Extension Canal SACs are not within 200m of the Affected Road Network and therefore the Scheme is not anticipated to result in a significant adverse effect on these sites.
1.3.24	The Applicant	Woodland adjacent to Latherford Brook a) Paragraph 4.1.17 of the Flood Risk Assessment [APP-200] indicates that the flood risk to woodlands adjacent to the Latherford Brook (Watercourse 5) is predicted to be minimal. What analysis has been undertaken of the likely biological implications of the change in the water environment as a result of the Proposed Development? b) Does this have any implications for biodiversity and the overall biodiversity metric? c) If so, what are these?	a) Paragraph 4.17 of Appendix 13.1 Flood Risk Assessment [APP-200/6.3] states: <i>'To assess the impacts of the Scheme on flooding in the woodland from more frequent and lower magnitude flood events, the 50% AEP event was modelled (See Annex B Hydraulic Model Report). Simulations show that there is very little out of bank flooding during this high frequency event, and extents and depths between the baseline and Scheme events are similar, with no new areas experiencing flooding. Therefore, the impacts of the Scheme on flood risk to these woodlands is predicted to be minimal.'</i> As per paragraph 8.9.92 of ES Chapter 8 Biodiversity [APP-047/6.1], the Flood Risk Assessment [APP-200/6.3] has confirmed that there would not be a significant change to the area or duration of flood events on Latherford Brook within the Brookfield Farm LWS.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>As per Table 8.9 of the ES [APP-047], Brookfield Farm LWS is designated as an area of wet woodland comprising alder and willow carr that is drying out in some areas of the site. The impacts of the wider floodplain were considered on the woodland as a receptor in the Flood Risk Assessment. The greatest impact on the woodland would be caused by more frequent distribution to the habitats from storm water (e.g. a 2-year event). This could contribute to anaerobic conditions across rooting environments which could affect trees both structurally and physiologically. However, the flood model showed that there would be no change from current baseline conditions; and the woodland community is drying out and would benefit from any additional flooding.</p> <p>The following baseline ecological surveys were undertaken in relation to watercourses and water dependent habitats, within a specified distance of the Scheme, as per Table 8.7 Study areas applied to field surveys, ES Chapter 8 Biodiversity [APP-047/6.1 and AS-083/6.1]:</p> <ul style="list-style-type: none"> - National Vegetation Classification surveys were undertaken within the site on areas of woodland (including those classified as wet woodland). - Otter and Water Vole – the study area included suitable aquatic and terrestrial habitat within the Scheme boundary and up to a 100m buffer. - Great Crested Newt (GCN) – waterbodies within 500m of the Scheme boundary have been assessed for their potential to support GCN. - Aquatic invertebrates, Fish and Aquatic macrophytes – the study area covered those waterbodies and watercourses likely to be impacted by the Scheme. - Wintering Birds – the study area comprised all suitable habitat (fields and waterbodies) within and adjacent to and up to 250m from the Scheme boundary. <p>The results of the above surveys were analysed and potential impacts, as a result of change in the water environment, on relevant biodiversity features assessed.</p> <p>b) There are no implications on biodiversity and the overall biodiversity metric. A river metric has been undertaken for the Scheme; refer to Appendix 8.2 Biodiversity Metric Version 3 [AS-103/6.3] for further details. It assesses rivers as a linear feature and is primarily habitat based, assigning habitat category, distinctiveness and condition. Flood risk is not taken into consideration.</p> <p>c) N/A</p>
.1.3.25	The Applicant	<p>Ecological receptors in vicinity of Affected Road Network</p> <p>In Table 11.8 of Chapter 11 of the ES on Noise and Vibration [APP-050], in the first row, it is stated “No ecological receptors have been identified which would be potentially sensitive to vibration in the vicinity of the Scheme”. Could the Applicant demonstrate whether the Proposed Development would have an effect through vibration on ecological receptors sensitive to vibration in the vicinity of the Affected Road Network as a result of the Proposed Development.</p>	<p>The noise assessment reported in Chapter 11: Noise and Vibration [APP-050/6.1] considers receptors within 50m of ‘affected routes’. Affected routes are defined in the chapter based on the methodology in DMRB as existing roads that are predicted to be subject to a change in traffic noise level as a result of the Scheme of:</p> <ul style="list-style-type: none"> • 1.0 dB or more in the short-term (DM opening year to DS opening year); or • 3.0 dB or more in the long-term (DM opening year to DS 15 years after Scheme opening), subject to a minimum change of 1.0 dB between the DM and DS 15 years after Scheme opening. <p>The methodology is unchanged in the latest version of DMRB LA111 used in Version 2 [AS-046/6.1] and Version 3 [AS-085/6.1] of Chapter 11. This is different to the Affected Road Network (ARN) identified in Chapter 5: Air Quality [APP-044/6.1].</p> <p>Affected routes are identified on Figure 11.2 [APP-144/6.2], which illustrates that only a small number of road links outside the 600 m detailed calculation area in the vicinity of the Scheme are predicted to</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			experience a potentially significant increase in traffic noise levels. No ecological receptors have been identified in the vicinity of these links, therefore no effects on ecological receptors due to vibration are anticipated along these affected routes. It is noted that consideration of vibration impacts from road traffic is scoped out of the current DMRB guidance LA 111. A well maintained road surface will be free of irregularities which can be a potential source of vibration. Highways England and the local Highway Authorities are responsible for the general maintenance of the road network.
1.3.26	Natural England	Habitats Regulations Assessment Can NE confirm if they are satisfied that the correct sites and features have been identified in the Applicant's Habitats Regulations Assessment No Significant Effects Report [APP-216]?	N/A
1.3.27	The Applicant Natural England	Habitats Regulations Assessment a) Can Natural England expand on their comments over the Applicant's approach to in combination effects on European sites. b) Can the Applicant confirm whether discussions on this matter are or will be taking place between them as part of their SoCG.	a) N/A b) The discussions on the approach to in combination effects on European sites is taking place as part of the draft SoCG [TR010054/APP/8.8P(B)].
1.3.28	The Applicant	Habitats Regulations Assessment Can the Applicant fully explain the approach taken to the air quality assessment and how the Cannock Extension Canal SAC was determined to be screened out as a receptor.	Only receptors up to 200m from the ARN are considered within the local operational air quality assessment as required by DMRB LA105. This is because the effect of pollutants from road traffic reduces with distance from the point of release, and beyond 200 m these are likely to have reduced to a concentration equivalent to background concentrations, as set out in paragraph 5.3.5 of the ES [APP-044/6.1]. At its closest point the Cannock Extension Canal SAC is approximately 280m from the ARN (the M6 Toll) and is therefore not considered to be significantly affected by changes in air quality. The A5 and B4154 adjacent to the SAC are identified as 'Other Roads Modelled' on Figure 5.1: Air Quality Study Area [APP-068/6.2] these have only been included within the air quality modelling to ensure total concentrations predicted at receptors within 200m of the ARN include contributions from all relevant sources. The APIS website fits the Cannock Extension Canal SAC into the 'oligotrophic waterbodies' EUNIS classification and thus the critical load range for nitrogen is given as 3 to 10 kgN/ha/yr. This is because (in lieu of providing no critical load range at all) the EUNIS ecosystem class C1.1 is considered the least worst fit, because this is the standard EUNIS ecosystem class used in APIS for sites containing <i>Luronium natans</i> , the most sensitive of which are nutrient starved upland lakes. However, APIS does not tailor its assignment of critical loads to site-specific circumstances and thus caveats the use of these critical loads to account for other types of sites supporting <i>Luronium natans</i> , commenting that 'This critical load only applies if the interest feature is associated with softwater oligotrophic or dystrophic lakes at the site. If the feature is not depending on these lake types, there is no comparable critical load available'. While the water quality in Cannock Extension Canal SAC is good, it cannot be described as an oligotrophic or dystrophic water body (Natural England's Supplementary Advice on the Conservation Objectives describes it as mesotrophic). In these circumstances, according to APIS, 'there is no comparable critical load available'. This reinforces the basis for screening out air quality impacts on the site and would match the position of many other freshwater SSSIs and SACs and is the reason why nitrogen deposition is generally not calculated in risk assessments for lowland open freshwater sites.
1.3.29	The Applicant	Habitats Regulations Assessment NE's Relevant Representation [RR-037] Section 5.1 notes the current average nitrogen load for Cannock Chase SAC is 21.2 kgN/Ha/Year (Source) while that for Cannock Extension Canal SAC is 17.1 kgN/Ha/Year. NE advise that these current average loads are above and therefore exceed the nitrogen upper critical load thresholds for the SAC habitats.	We acknowledge there is a difference in the figures for average nitrogen deposition load quoted by Natural England and those outlined in the HRA [APP-216/6.9]. APIS, where the data for baseline deposition rates and critical loads was sourced from, updated its baseline background deposition and concentration data sets on the 18 March 2020, after the submission of our DCO application. Since the submission of the application further work has been completed to consider the updates to DMRB air quality guidance to LA105. The air quality assessment reported in the ES [APP-044/6.1] was undertaken in line with now superseded air quality guidance. The updated APIS data has been utilised in the sensitivity testing undertaken to consider whether the changes to methodology could alter the

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		Can the Applicant revise their Habitats Regulations Assessment No Significant Effects Report [APP-216] (HRA NSER) to reflect this and consider how this may affect their conclusions in this report or explain why they consider that the figures in the report are correct.	conclusions of Chapter 5: Air Quality and Chapter 8: Biodiversity, refer to 'DMRB updates and impacts on the DCO application' [AS-059/8.2]. This document was submitted to the Inspectorate on 20 July 2020. This assessment took into account the revised APIS data for baseline deposition rates and critical loads. Refer to the response to WQ 1.3.28, which sets out why Cannock Extension Canal SAC has been screened out of further air quality assessment. Cannock Chase SAC is also screened out of further assessment for being more than 200 m from the ARN.
1.3.30	The Applicant Natural England	Habitats Regulations Assessment NE state in their Relevant Representation [RR-037] that based on the information presented in the Applicant's Habitats Regulations Assessment No Significant Effects Report [APP-216] they would agree that no likely significant effects (LSE) are anticipated. However, with regard to indirect impacts on air quality, having reviewed the ES documents NE advise that they "cannot yet agree no likely significant effects for Cannock Extension Canal SAC and that further discussions are required". Natural England also state that they remain in dialogue with Highways England regarding the assessment of air quality impacts and the need for and scope of mitigation. Can the Applicant confirm the latest position they have reached with respect to the assessment of air quality impacts and any mitigation that may be required, particularly with respect to Cannock Extension Canal SAC.	Only receptors up to 200 m from the ARN are considered within the local operational air quality assessment. This is because the effect of pollutants from road traffic reduces with distance from the point of release, and beyond 200 m these are likely to have reduced to a concentration equivalent to background concentrations, as set out in paragraph 5.3.5 of the ES [APP-044/ 6.1]. At its closest point the Cannock Extension Canal SAC is approximately 280m from the ARN (the M6 Toll) and is therefore not considered to be potentially affected by changes in air quality. The A5 and B4154 are identified as 'Other Roads Modelled' on Figure 5.1: Air Quality Study Area [APP-068/6.2] are in close proximity to the Cannock Extension Canal SAC, these have only been included within the air quality modelling to ensure total concentrations predicted at receptors within 200m of the ARN include contributions from all relevant sources. 'Other Roads Modelled' do not define the air quality study area. The APIS website fits the Cannock Extension Canal SAC into the 'oligotrophic waterbodies' EUNIS classification and thus the critical load range for nitrogen is given as 3 to 10 kgN/ha/yr. This is because (in lieu of providing no critical load range at all) the EUNIS ecosystem class C1.1 is considered the least worst fit, because this is the standard EUNIS ecosystem class used in APIS for sites containing <i>Luronium natans</i> , the most sensitive of which are nutrient starved upland lakes. However, APIS does not tailor its assignment of critical loads to site-specific circumstances and thus caveats the use of these critical loads to account for other types of sites supporting <i>Luronium natans</i> , commenting that: ' <i>This critical load only applies if the interest feature is associated with softwater oligotrophic or dystrophic lakes at the site. If the feature is not depending on these lake types, there is no comparable critical load available</i> '. While the water quality in Cannock Extension Canal SAC is good, it cannot be described as an oligotrophic or dystrophic water body (Natural England's Supplementary Advice on the Conservation Objectives describes it as mesotrophic). In these circumstances, according to APIS, ' <i>there is no comparable critical load available</i> '. This reinforces the basis for screening out air quality impacts on the site and would match the position of many other freshwater SSSIs and SACs and is the reason why nitrogen deposition is generally not calculated in risk assessments for lowland open freshwater sites. All of Natural England RRs have been incorporated into the SoCG between Highways England and Natural England [TR010054/APP/8.8P(B)].
1.4	Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations		
1.4.1	The Applicant	CA and TP Negotiations Can the Applicant please provide an update of the current situation of negotiations with affected landowners and occupiers over potential acquisition by agreement? Please complete Annex A with this information.	Annex B in the Statement of Reasons [AS-079/4.1] includes a Schedule of objections made by landowners and a status of negotiations. The Applicant has updated this Annex with the additional information requested by the Examining Authority and an updated version of the Statement of Reasons is submitted at Deadline 1.updated .
1.4.2	National Trust	Section 130 PA2008 Could the National Trust confirm or otherwise whether the four parcels of land held by it and subject to temporary possession provisions for ancient woodland mitigation (Plots 3/7a, 3/7b, 3/7c and 4/2 on the Lands Plan [APP-007]) are held inalienably?	N/A
1.4.3	The Applicant	Maintenance of Land	a) An agreement was concluded between the Applicant and the National Trust on 14 September 2020. In the event the DCO is confirmed, the agreement permits the Applicant to enter onto the National

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
	National Trust	<p>a) In the event that, as set out in paragraph 7.3.4 of the Statement of Reasons [APP-021], the Applicant and National Trust are able to reach agreement as to the temporary use of Plots 3/7a, 3/7b, 3/7c and 4/2 on the Lands Plan [APP-007] for ecological mitigation, could the Applicant please explain how the mitigation works are to be secured?</p> <p>b) Should this occur, could the National Trust confirm what mechanisms it would need to put in place, for example a Planning Obligation under Section 106 of the Town and County Planning Act 1990 (as amended), to ensure that the relevant works would be maintained in perpetuity and how they would be able to commit and maintain the proposition as maintenance is required for that length of time?</p>	<p>Trust's land at Whitgreaves Wood to undertake works to enhance the woodland and mitigate the impact of the authorised development.</p> <p>b) The National Trust owns Whitgreaves Wood and is already maintaining it. The National Trust will maintain the works undertaken to Whitgreaves Wood following completion of the same.</p>
1.4.4	The Applicant	<p>CA and TP</p> <p>a) Paragraph 12.4.3 of Chapter 12 of the ES [APP-051] deals with the temporary use of land for mitigation, but makes the point:</p> <p><i>"The long-term management strategy for this land has yet to be finalised but the assessment assumes a worst-case basis (from a landowner perspective) that the ownership of the land would remain with the acquiring authority with a land management company being retained to manage the land. Where this occurs, the restored land would not be available to the original landowner and the impact on the holdings affected would not be reduced".</i></p> <p>In this scenario, is the landowner being effectively deprived of the benefit of the land on a permanent basis?</p> <p>b) Therefore, is TP appropriate?</p> <p>c) Could the Applicant explain why, in this scenario, CA is not being sought.</p> <p>d) Could the Applicant please set out those parcels of land which are so affected?</p>	<p>Following a review of the Land Plans ([TR010054/APP/2.2], the plots affected by temporary acquisition for the purpose of mitigation are plots 3/7a, 3/7b, 3/7c & 4/2, all of which are owned by the National Trust.</p> <p>a) In relation to the statement in chapter 12 paragraph 12.4.3 of the Environmental Statement [TR010054/APP/6.1] the land will not be materially affected. The land in question is woodland and will remain so after the enhancement has been undertaken.</p> <p>Land owned by the National Trust is classed Special Category Land [TR010054/APP/2.6], therefore, inalienable without Special Parliamentary measures. However, this Special Category Land is being taken temporarily by agreement, therefore, the worst-case scenario does not apply.</p> <p>An agreement between the landowner and Highways England is near completion. As an inalienable land holding, the woodland will remain in the current landowner's possession to perpetuity (or until they seek to dispose of the land on their own accord).</p> <p>b) Yes. The land will not materially change, the current woodland block would be enhanced as set out in the Environmental Statement (TR010054/APP/6.1 - 12.4.3. An agreement will be in place between the landowner and Highways England to ensure that the land is managed as stated in 12.4.3 of the Environmental Statement [TR010054/APP/6.1].</p> <p>c) The land in question is owned by The National Trust and is classed as Special Category land under section 130 of the Planning Act 2008 requiring special parliamentary measures to dispose of land as an inalienable entity under Section 21 of the National Trust Act 1907. (3/7a, 3/7b, 3/7c and 4/2 - [TR010054/APP/2.6])</p> <p>To avoid special parliamentary measures, an agreement between the landowner and Highways England is near completion to ensure the necessary work is carried and managed as set out in the Environmental Statement, avoiding the need for any compulsory acquisition in aid to undertake the work by agreement.</p> <p>The said agreement is due to be completed before the submission of the first written questions. A copy of said agreement can be issued on request.</p> <p>d) Plots; 3/7a, 3/7b, 3/7c and 4/2 [TR010054/APP/2.6]</p>
1.4.5	The Applicant	<p>Crown Land</p> <p>a) In light of the letter dated 3 June 2020 from the Coal Authority [AS-040] could the Applicant set out what it understands to be the latest position in respect of Crown Land?</p> <p>b) Should the situation have changed since the understanding at the time of the Application, could the Applicant please make any necessary changes to the dDCO and associated documents and explain the rationale for these.</p> <p>c) In Part 4 of the Book of Reference [APP-023] there are a number of plots which do not appear to have a Crown authority associated with them. Could the Applicant please explain why these are identified as Crown Land and make any changes necessary?</p>	<p>a) The only land interests identified by the Applicant as being Crown Land were those held by the Coal Authority. In light of the letter from the Coal Authority, therefore, the Applicant does not believe there to be any Crown Land affected by the Scheme.</p> <p>b) Given that there is now no known Crown Land, the draft DCO and associated documents can be updated to confirm this position and remove any references to Crown Land. The documents submitted with the request for changes to the accepted application submitted by the Applicant on 9 October 2020 include the removal of any references to Crown land in the draft DCO, Statement of Reasons and Book of Reference.</p> <p>c) In the request for changes to the accepted application submitted by the Applicant on 9 October 2020, the entries in Part 4 of the Book of Reference have been deleted as no longer being required.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.4.6	Messrs I and A Simkin	Plot 6/37 In their Relevant Representation [RR-033] Messrs I and A Simkin raise objections in respect of a number of plots, which will be considered. However, it is not clear whether they are raising an objection in respect of Plot 6/37 on the Land Plans [APP-007]. Could Messrs I and A Simkin please clarify this situation and, if objecting, explain their position.	N/A
1.4.7	The Applicant	Statutory Undertakers a) Can the latest position of the Utilities be updated and in particular with regard to the protective provisions? b) Could the Applicant also set out the current progress on Statements of Common Ground?	a) The Applicant is in dialogue with Severn Trent Water, South Staffordshire Water, Western Power Distribution (West Midlands) PLC, Cadent Gas, British Telecom, Vodafone, and Zayo. Draft protective provisions have been shared with each of them and comments are awaited. The Applicant will continue to have a dialogue with each company with a view to agreeing the wording of the protective provisions. b) A draft Statement of Common Ground has been prepared for each of the above-mentioned statutory undertakers. The latest position on Statements of Common Ground is presented in the Statement of Commonality submitted to the Planning Inspectorate on 3 November 2020 [TR010054/APP/8.8].
1.4.8	Severn Trent Water Limited	Operational Land a) In paragraph 7.4.2 of the Statement of Reasons [APP-021] the Applicant indicates that it believes that the land it is seeking to acquire would "not required for [Severn Trent Water Limited's] undertaking" and "would have no serious detriment to [its] undertaking". Could Severn Trent Water Limited please confirm whether this land is "operational land" and whether it agrees with this statement. b) If not, please could you explain why you not take that view.	N/A
1.4.9	The Applicant	Objection Lands a) Plots identified as Land required for mitigation including planting etc is opposed by a number of landowners can the Applicant confirm the detail of why the extent, location, position for each of these parcels of land is needed? b) Some have suggested land swaps or management obligations for the land rather than CA. Have these been explored and, if so, why have they been discounted?	a) A Technical Note has been prepared and submitted to accompany these Written Question responses. See [TR010054/APP/8.11] Environmental Mitigation Approach submitted with this document on 3 November 2020. b) All land swaps suggested by landowners have been considered by the project team and accommodated where possible, including a number accommodated prior to the submission of the Application in January 2020 and more during the Scheme changes accepted on 29 October 2020 (e.g. removal of parcels on Allow's land). The suggestions have been taken into consideration when revising the Environmental Masterplan following a number of design changes and new survey data. Where we have not been able to take on board suggestions for land swaps justification has been provided to landowners in meetings, e-mails and, where relevant, as a response to relevant representations. Statements of Common Ground submitted under document number 8.8 provide a record of these discussions with each landowner. A number of land swaps have been suggested very recently, including some suggested in September 2020. The timing of these requests obviously makes them more difficult to incorporate within the timescales of the Examination, but consideration is being given to whether changes can be incorporated within or outside the DCO. The Applicant notes that to consider a land swap, it is necessary to determine whether the alternative land will be an appropriate substitute given the purposes of the acquisition. For most parcels, acquisition is not solely for mitigation for biodiversity impacts so there are a number of factors to consider. The Applicant is working to consider each suggestion as efficiently as possible and will communicate any agreements reached in future iterations of Statements of Common Ground. Consideration has also been given to those areas of land which could be returned to the landowner post construction and the associated maintenance requirements. Indicative maintenance schedules have been produced and issued to a number of landowners to further progress discussions with on this topic and items are included within each landowner's SoCG.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.5	Draft Development Consent Order (DCO) [APP-018]		
1.5.1	The Applicant	Revisions Can any revised version of this document please be provided in 'tracked change' as well as 'clean'?	The Applicant confirms that it will provide tracked and clean versions of each submission of the dDCO and draft Explanatory Memorandum.
1.5.2	The Applicant	General Could the draft Order and Explanatory Memorandum be checked for typographic errors (there are some) and the relationship with the OEMP confirmed in relation to numbering.	The Applicant has checked the draft DCO (see [AS-075/3.1] with changes also incorporated into the draft submitted on 3 November), draft Explanatory Memorandum (see [AS-077/3.2]), and OEMP for typographical errors. A number of changes have been made to both documents as submitted to the ExA with the request for changes to the accepted application on 9 October 2020.
1.5.3	The Applicant	Preamble a) Page 4: The Proposed development is being examined by a two-member panel rather than single appointed person. Could this please be amended also with the reference to section 83 of the 2008 Act, which should now be to section 74. b) Could you please check the sections of the 2008 Act under which it is proposed that the Order will be utilising and also those paragraphs of Part 1 of Schedule 5? It may be that this is not comprehensive, for example in relation to Crown Land.	a) These changes have been made to the draft DCO submitted with the request to make changes to the accepted application on 9 October 2020 (see [AS-075/3.1] and subsequent revision submitted on 3 November 2020). b) As above.
1.5.4	SCC ShC WCC	Article 2(1) a) Could SCC, ShC and WCC please confirm whether they consider the definition of "maintain" is appropriate in all circumstances and whether it is drawn either too narrowly or too widely. b) Definition of Special Road page 6 requires closing bracket second line.	N/A
1.5.5	The Applicant	Article 2(7) Can the Applicant please explain why the provisions of the Neighbourhood Planning Act 2017, insofar as they relate to temporary possession of land do not apply? The EM provides a double negative.	The temporary possession of land provisions set out in the Neighbourhood Planning Act 2017 have not yet come into force. Given the uncertainty as to when and if the provisions might come into force, the Applicant proposes that they be dis-applied. This follows the approach taken in other consented DCOs, including, for instance, The A585 Windy Harbour to Skippool Improvement Scheme DCO 2020 and The M42 Junction 6 DCO 2020.
1.5.6	The Applicant	Article 3(1) The EM states that this article gives the power to construct the authorised development, which is described in Schedule 1. However, the Article itself does not use the same words. If the intention is to permit the works listed in Schedule 1, could this Schedule be amended to make it more precise.	Article 3(1) gives the power to construct the authorised development. The term 'authorised development' is defined in Article 2(1) as "the development described in Schedule 1 (authorised development) or any part of it, which is development within the meaning of section 32 (meaning of development) of the 2008 Act". Article 3(1) and the draft Explanatory Memorandum [AS-077/3.2] are accordingly consistent and Article 3(1) is precise.
1.5.7	The Applicant SCC SSC ShC WCC NE EA	Article 3(2) This article utilises the term "adjacent land", and this term is used elsewhere. However, this is not defined in the dDCO. a) Should it be so defined? b) If so, what should this definition be?	The term "adjacent land" should be given its every day ordinary meaning i.e. it means next to or contiguous. The Applicant does not consider it necessary to define the term and considers the ordinary meaning of the word to be sufficiently clear to an informed reader. The term has been used without definition in other DCOs made by the Secretary of State.
1.5.8	The Applicant SCC SSC	Article 3(3) This Article caveats various works from the effect of pre-commencement Requirements. However, various Requirements in Schedule 2 require the approval of such schemes (for example R9).	Article 3(3) will permit the carrying out of preliminary works, surveys and investigations prior to discharge of the requirements in Schedule 2 of the dDCO. The carrying out of such works, surveys and investigations are necessary at any early stage to inform the preparation of the schemes to be submitted to discharge the requirements in Schedule 2. The activities listed in article 3(3) are either minor,

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
	ShC WCC	a) Could the Applicant please reconcile these provisions? b) Are the Councils content with the intention behind these provisions?	reversible or have minimal potential for adverse effects. It is important that they be undertaken at an early stage before the requirements are discharged to ensure that unnecessary delay is not caused to the delivery of an important and strategic infrastructure project. The ability to carry out such activities is usual and has precedent in order consented DCO schemes.
1.5.9	The Applicant	Article 8(4) This provision allows for a transfer of the benefit to certain third parties. However, the work numbers overlap. a) Could this lead to confusion as to who was to implement which parts of the Works? b) Could and should this be re-drafted to avoid any such confusion?	The Applicant does not consider that the wording of article 8(4) will lead to confusion. The persons listed in article 8(4) are all statutory undertakers who are specialised in and will only undertake works on their own apparatus. The reason the work numbers overlap is because the works to apparatus are described collectively. For example, Work No.67 includes "diversion of utilities and associated infrastructure (including electrical, telecommunications and potable water). Western Power Distribution may therefore undertake the works to its electrical apparatus but would not be the appropriate party to undertake works to telecommunications or potable water apparatus.
1.5.10	The Applicant SCC	Article 11(7) a) Is there any particular reason why the PRoWs to be constructed are unlikely not to be open for use by the opening to traffic of the road? b) Are there different considerations in relation to different PRoWs? c) Should there be a backstop? d) Are there any PRoWs which should be completed and open prior to the one it is to replace being closed?	a) The PRoWs will be constructed and made available for use as soon as reasonably practicable. The Applicant expects that they will be available by the time the link road is open to traffic. However, with any large and complex project, there needs to be some flexibility. Article 11(7)(b) secures this flexibility and can operate to enable the PRoWs to be available sooner than opening of the link road to traffic or later but only where agreed with the local highway authority. b) The Scheme has been designed to minimise the impact on the PRoW by including provision for alternative routes. The design of these routes has considered the current and forecast number of users as well as consistency with the existing network. In addition, the design has aimed to keep routes as close to the existing route as possible, and avoid diverting routes alongside the realigned road network where possible. c) The Applicant does not see the need for a backstop. The PRoWs will be constructed and be available for use from the date on which the link road is open for traffic or by some other date agreed with the local highway authority. The local highway authority has the ability therefore to impose their own backstop having regard to their local knowledge as to the need for the PRoWs to be made available. d) PRoW will be maintained throughout the construction period, therefore it is considered that if a PRoW is to be closed prior to its replacement being open then connectivity will be maintained. Some of the PRoWs will require minor diversions, these will be suitable and appropriate where implemented.
1.5.11	SCC WCC	Article 12(6) a) Do SCC and WCC consider that the 28-day period is appropriate? b) If not, what should it be?	N/A
1.5.12	The Applicant	Article 14 The EM states that this Article allows works accesses to public highways to be created and provides an appropriate degree of flexibility. The dDCO is not limited to works accesses. Could the Applicant clarify whether it is intended to limit the power as set out in the EM, and if so, make the necessary alterations? Should this not be the case the EM requires amendment to reflect the Applicant's intention.	The Applicant confirms that the wording in article 14 is correct. The draft Explanatory Memorandum will be amended in line with article 14 and will be submitted at Deadline 2.
1.5.13	The Applicant	Article 15(1) a) This provision refers to lay-bys. Are there any, or is this superfluous? b) Does 'traffic officer' need to be defined?	a) No new laybys are proposed as part of the scheme. This article will be amended in the draft DCO to be submitted at Deadline 2. b) A definition of "traffic officer" will be provided in the draft DCO submitted at Deadline 2.
1.5.14	The Applicant EA	Article 17(5) This provision refers to main rivers. The ExA is not aware that there are any main rivers in the Order lands. Therefore, is this provision superfluous?	The Applicant confirms that there are no main rivers within the Order lands. The provision will be deleted in the draft DCO to be submitted at Deadline 2.
1.5.15	The Applicant EA	Article 17(8) Could this provision be simplified in the circumstances of this case (are all the bodies required)?	The Applicant confirms that, whilst references to Homes England, a joint planning board and an urban development corporation, are not currently applicable in this case, that could change. The wording is consistent with other made DCOs and the Applicant therefore proposes to retain the wording.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
	SCC		
1.5.16	The Applicant HBMCE SSC ShC WCC	Article 18 a) Is there a reasonable chance that this provision could apply to works to a listed building? b) If so, are there any particular provisions that should then follow?	The Applicant has not identified a listed building which will be structurally affected by the works and does not expect to have to rely on this provision for works to a listed building.
1.5.17	The Applicant	Article 19(1) This confers a wide power in relation to "... <i>any land shown within the Order limits or which may be affected by the authorised development.</i> " The EM refers to adjacent land. Could these please be made consistent (see also question 1.5.7 about whether "adjacent land" should be defined)?	The Applicant confirms that the draft Explanatory Memorandum will be updated to be consistent with article 19(1) at Deadline 2.
1.5.18	The Applicant	Article 23 The title "Compulsory acquisition of rights and restrictive covenants" gives the impression it provides for the acquisition of restrictive covenants rather than the imposition of restrictive covenants. Would an alternative title be more appropriate?	The wording is consistent with language used in other made DCOs but the Applicant has no objection to amending the wording to refer to the imposition of restrictive covenants and will update the draft DCO and draft Explanatory Memorandum accordingly at Deadline 2.
1.5.19	The Applicant Statutory undertakers SCC ShC WCC	Article 23(6) This provision allows the undertaker to create right for third parties. However, this appears to be very widely drawn and does not specify which third parties and thus could apply to any legal person. Could the parties consider whether this should be more tightly drawn to specify a limit and/or purpose for those third parties?	The power is restricted by reference to Article 20 to the Order land and the authorised development so will in practice only be capable of being granted to those third parties who require rights as a consequence of the authorised development. The Applicant therefore considers that there is no need for this Article to be more tightly drawn.
1.5.20	The Applicant	Article 25(5)(b) Should the inserted paragraph have a number?	The inserted paragraph should be numbered "30." and this amendment will be made to the draft DCO at Deadline 2.
1.5.21	The Applicant	Article 29(1)(d) a) This provision allows construction of Schedule 1 works on land concerned so the description of the intended works. Should it be more precise, see comments below relating to Schedule 1, and in particular Work 1? b) Paragraph 5.84 of the EM refers to 291 instead of 29(1)	a) The Applicant considers the wording in article 29(1)(d) to be precise and appropriate. It is consistent with the language used in other made DCOs. b) The Applicant will make this amendment to the draft DCO to be submitted at Deadline 2.
1.5.22	The Applicant SCC	Articles 34 and 36 a) Could the Applicant explain why are there two separate provisions? b) Could they be combined? c) Is Article 36 in the correct part (i.e. Part 7) or would it be better located in Part 6?	a) Article 34 relates to unprotected trees and Article 36 relates to trees protected by tree preservation orders. The wording is consistent with the language used in other made DCOs. b) Protected and unprotected trees are separated in Schedule 8 and should be within separate articles. c) The Applicant agrees that Article 36 could be moved into Part 6 of the draft DCO and will incorporate this change in the next draft to be issued at Deadline 2.
1.5.23	The Applicant	Article 34(1) This Article uses the phrase "... <i>any tree or shrub within or overhanging land within the Order limits</i> " but the EM uses "... <i>any tree or shrub that is</i>	The Applicant confirms that the draft Explanatory Memorandum will be updated at Deadline 2 to be consistent.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<i>near the project</i> ". Could these please be made consistent (see also question 1.5.7 about whether "adjacent land" should be defined)?	
1.5.24	The Applicant	Article 34(2) and 36 a) The EM in relation to Article 34(2) seems to suggest a further clause linking to the provisions of the Environmental Statement. This does not appear to be in dDCO. Could this be reconciled. b) There is also a similar omission in Article 36. Could this be reconciled. c) Also, there is reference in the EM to Article 37 and it should be Article 36.	The Applicant confirms that these comments will be reconciled or corrected as appropriate in the draft DCO and draft Explanatory Memorandum to be submitted at Deadline 2.
1.5.25	The Applicant Statutory Undertakers	Article 37 There appears to be a possible difference between the dDCO and the EM. The dDCO states that section 264(3) refers to cases in which land is to be treated as not being operational land for the purposes of that Act. However, the EM suggests that the land within the order limits is operational land. Can this be clarified.	Article 37 provides that the DCO will be treated as a specific planning permission. The effect of treating the DCO as a specific planning permission is that the exemption at section 264(3) applies and land already held by the Applicant will be operational land, such that the Applicant will benefit from its usual permitted development rights in connection with the operation of the road. If the DCO was not a specific planning permission and the exemption was not applicable, the land would not be operational land and the permitted development rights would not apply. The title of section 264 is "Cases in which land is to be treated as not being operational land". This is cited in brackets after the reference in Article 37 in accordance with draft DCO drafting protocols but appears to have caused confusion. The Applicant trusts that this explanation clarifies the position.
1.5.26	The Applicant	Article 40 a) Should the certified drawings and any approvals pursuant to Requirements under Schedule 2 be publicly available? b) If so, how should this be delivered, and for what length of time?	a) The Applicant is content that certified documents and any approvals should be made publicly available. Requirement 16 as set out in Schedule 2 already secures this in respect of the details submitted to discharge the requirements. b) The Applicant proposes to provide copies of the documents on the project website for a period of 3 years following completion of the authorised development.
1.5.27	The Applicant	Potential additional provisions Given there is Crown Land are there any additional provisions required?	There is no Crown land and no additional provisions are required.
1.5.28	The Applicant	Schedule 1, Work 1 Should the "the installation or alteration of verge mounted advance directional signage along the M54 carriageway and A449" (sheets 1 and 2) be separated rather than forming part of the major element? They don't appear to be incidental to "the improvement of the eastbound carriageway of the M54 Motorway at the Junction 1 diverge (approximately 480 metres in length)" (please compare with Works 55A to 55C which are separate).	Work 1 has been sub-divided into Works 1A to 1E to identify the upgraded diverge and alteration of associated verge mounted signage respectively. This change was incorporated into the revised Works Plans submitted to the Planning Inspectorate on 9 October 2020 [AS-066/2.4].
1.5.29	The Applicant	Schedule 1, Work 24 a) It is not clear where the proposed turning head is to be located. Is it just past No 44 Dark Lane? b) Could it be demonstrated how this turning head is to work without excessive reversing or the creation of an unnecessary cul-de-sac?	a) The Applicant has prepared a drawing presented in Appendix 1.5.29 to show how vehicles will be able to turn around at the point where Dark Lane will be stopped up. Local residents on Dark Lane affected by the Scheme proposals have raised concerns in respect to the provision of a turning head after 44 Dark Lane and the risk that this may promote anti-social behaviour or fly tipping in close proximity to residential properties. b) The Applicant proposes that signage is installed to provide clear guidance to motorists that the section Dark Lane past the junction with Park Road will be for access to residents only. Motorists who continue beyond the junction with Park Lane will be able to turn around within the confines of the carriageway remaining, a swept path analysis has been provided on the drawing to demonstrate how these turning manoeuvres can be completed. For larger vehicles, including refuse vehicles, it is proposed that the junction of Dark Lane and Park Road is used to perform this manoeuvre safely.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.5.30	The Applicant	Schedule 1, Works 32, 33, 34 and 35 In each case this includes "including the installation or alteration of verge mounted advance directional signage along the M6 carriageway". However, advance directional signage doesn't appear to be identified (see also comments on Work 1). Could this be clarified?	The proposed changes to the slip roads at Junction 11 will have minimal impact upon the current merge and diverge points from the M6. Consequently, the position of any advance directional signage is expected to remain largely unchanged, with the works being largely limited to changes to in sign information to reflect the changes to destinations introduced by the Scheme.
1.5.31	The Applicant	Schedule 1, Work 38 a) Could it please be confirmed whether there will be a "No right turn" out of this (the exit from the Wolverhampton Road being via Work 40)? b) Should this be shown on a relevant Traffic Regulation Measures drawing?	a) The Applicant proposes to maintain the existing layout, where entry onto the dual carriageway is advised by a blue left arrow sign. It is also proposed to maintain the existing road restraint system strategy on this section of the A460 which will prevent any right turn manoeuvres. It is therefore considered that a traffic regulation order is not required at this location as per the existing scenario. There are existing orders prohibiting "No right turn" into Wolverhampton Road via Work 40 and out of Wolverhampton Road via Work 38 which are proposed to be retained as part of the scheme. b) The Traffic Regulation Measures drawing has been updated to reflect the above.
1.5.32	The Applicant SCC	Schedule 1, Work 61 a) Could the Applicant please clarify the extent and nature of the separation of the (temporary) bridleway from the carriageway during the construction period? b) Is SCC content with this?	a) A temporary diversion will be implemented during the construction of Works 8, this will be approximately 250m in length and will be located immediately adjacent to the works site. It is anticipated that suitable fencing will be installed between the site and footpath during the duration of the works to both protect users and prevent unauthorised access to the works site or motorway. b) Further details regarding the diversion of PROW will be set out in the Traffic Management Plan ahead of the start of works. The local highway authorities will be consulted prior to finalising this Traffic Management Plan.
1.5.33	The Applicant Telecommu nication statutory undertaker s	Schedule 1, Work 67 This refers, among other matters, to "BT". As this is company specific, should it be better referred to generically as "telecommunications"?	This change was incorporated into the revised draft DCO submitted to the Planning Inspectorate on 9 October 2020 [AS-075/3.1]
1.5.34	The Applicant	Schedule 1, Works 83 and 84 Could the Applicant please clarify where the dividing line is between the two sets of works.	The Works Plans have been revised to show greater clarity on the dividing lines between Work Numbers 83 and 84. The boundary between these two works largely follows the extent of the existing woodland in this location. This revision was made to the Works Plans submitted to the Planning Inspectorate on 9 October 2020 [AS-066/2.4].
1.5.35	The Applicant	Schedule 2, Interpretation/ General Comment "REAC" is defined by reference to the OEMP noted as application document 6.11. Would this be better defined by reference to the definition of "the OEMP" set out in Article 2(1)?	The Applicant confirms that this amendment will be made to the draft DCO submitted at Deadline 2.
1.5.36	The Applicant	Schedule 2, General comment on consultation In R5 it is stated: "which has been submitted to and approved in writing by the [SoS], following consultation with the relevant planning authority on matters related to its function". It is not clear whether the consultation is to be undertaken by the undertaker prior to the submission to the SoS, or by the SoS following submission by the undertaker. Could this please be clarified? There are a number of occasions where drafting of this type occurs.	The Applicant confirms that the consultation will be undertaken by the undertaker prior to submission of the details to the Secretary of State. The consultation will be undertaken by the undertaker in accordance with the provisions of Requirement 13 as set out in Schedule 2 of the draft DCO.
1.5.37	The Applicant	Schedule 2, Comment on consultation The Consultation Report [APP-024] in Table 5.5 indicates that engagement will be undertaken with the British Horse Society during the detailed design	As part of the ongoing consultation and engagement with affected parties and stakeholders, the Applicant has agreed to consult with various parties about certain matters at the detailed design stage. It is not necessary or appropriate to refer to each in the requirements set out in Schedule 2 of the draft

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		stage. This does not appear to be explicit in the draft DCO. Could this be clarified.	DCO. Instead, the commitment to consult or engage will be recorded in the REAC contained in the OEMP [APP-218/6.11 and subsequent versions].
1.5.38	The Applicant	Schedule 2, Requirement 4 Sub-paragraph (c) does not include reference to Bank or Public Holidays although this is mentioned at a number of points in supporting documents. Could this be clarified.	This will be clarified in the draft DCO submitted at Deadline 2.
1.5.39	The Applicant NE	Schedule 2, Requirement 4 and 5 Given the comments of NE in [RR-037] should these provisions be amended so as to ensure all reasonable steps have been taken to reconcile the grades of soils moved within a given phase with effective allocation to agricultural, landscaping and priority habitat end uses?	Natural England's relevant representations record the continuing dialogue between Highways England and Natural England and refer to the emerging SoCG. NE acknowledges that Requirement 4 requires a Landscape and Ecology Management Plan and a Soil Management Strategy (including Soil Management Plan and Soil Handling Strategy) and agrees these are essential. The Applicant considers that these documents are already secured by Requirement 4 and adherence to them is secured by Requirement 5. The submitted documents will have to adequately provide for all reasonable steps to be taken before those documents will be approved by the Secretary of State.
1.5.40	The Applicant	Schedule 2, Requirement 6 Paragraph (2) refers to production of a 'written scheme and programme' but (3) requires remediation to be carried out in accordance with the approved scheme. Is this just the written scheme or including the programme? Could the terminology be made more consistent?	The Applicant considers that the terminology clearly requires the undertaker to provide a 'programme', being a timetable for the delivery of the remediation works, as part of the written scheme. The requirement in paragraph (3) to carry out the remediation in accordance with the approved scheme is therefore correct and consistent with other DCO's approved by the Secretary of State.
1.5.41	The Applicant	Schedule 2, Requirement 11 Would this requirement be more appropriate located either as a clause to R1 (interpretation) or at the end of the Requirements?	Insofar as Requirement 11 applies to amendments to approved details and can apply to any requirement, the Applicant agrees that this can be accommodated in a sub-paragraph at Requirement 1 (interpretation) and will incorporate this into the next version of the draft DCO, to be submitted at Deadline 2.
1.5.42	The Applicant	Schedule 2, Requirement 12 It seems that this requirement relates to how the fencing in question is to be installed. Could the reason for this condition be explained in accordance with the tests for requirements set out in paragraph 4.9 of the NPSNN?	Requirement 12 is necessary to ensure that any permanent and temporary fencing is constructed and installed to the appropriate standard to maintain the safety/integrity of the link road. It is therefore directly relevant to this highway scheme and the development to be consented. Requirement 12 clearly identifies the Manual of Contract Documents for Highway Works which contains the standard to which such fencing must adhere. It is therefore drafted with precision and is capable of being enforced and is reasonable in all other respects in order to satisfy both para 4.9 of the NPSNN and section 120 of the PA2008.
1.5.43	The Applicant SCC SSC ShC WCC EA NE Any other interested party	Schedule 2, Requirement 13 a) While the explanation for not complying with the consultees request is given to the SoS, how is the consultee to know that the undertaker has rejected its reasoning? b) Would it be sensible that, at the same time as sending to the SoS the application for approval of the detailed design, the undertaker is required to send to any consultee who made representation a copy of the report explaining why it came to the conclusion that it so did? This would allow the consultee, if it felt that the consultation exercise had been deficient, or there was some matter which the Applicant had not fully appreciated, to make simultaneous representations to the SoS which the SoS would take into account in making the final decision.	a) Requirement 13(2) of Schedule 2 of the draft DCO already provides that the undertaker will provide to each relevant consultee a copy of its summary report setting out the consultation undertaken and the undertaker's response to that consultation. b) As above.
1.5.44	The Applicant	General Arrangement Drawings a) The junction of Cannock Road and The Avenue is shown to be a mini-roundabout on the General Arrangement drawings [APP-010]. However, the Case for the Scheme at paragraph 4.4.14 [APP-220] indicates that this is to be a "new priority T junction". Could this be clarified and, if a T junction, which flow would be the priority?	a) At the junction between the old Cannock Road and The Avenue, the Applicant proposes to retain the existing T-Junction with adequate signage installed to ensure that road users are aware that, beyond the junction, the road will be for access to residential properties only. A mini-roundabout was indicated on the original General Arrangement Plans [APP-010/2.5], however this has been removed in the latest version [AS-067/2.5] following discussion with SCC.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response						
		<p>b) If the proposal is for a roundabout, given that roundabouts are most effective where traffic flows on the individual arms are, approximately, equal would that be the correct junction design given that the cul-de-sac remainder of Cannock Road to the south will only serve ten properties?</p> <p>c) Are there any implications of this to the assessment of environmental effects or any other element of the Proposed Development?</p>	<p>The 'new priority T Junction' referred to in paragraph 4.4.14 of the Case for the Scheme [APP-220/7.2 and subsequent versions] is proposed between the length of Cannock Road to be realigned to tie into the Featherstone Junction west roundabout (Work No. 16, which is the priority route) and the short section of carriageway to connect to the existing Cannock Road (Work No. 17, which is the secondary route).</p> <p>b) It is considered that a mini roundabout at this location would be excessive based on the vehicle flows. as one arm would only serve 10 properties, therefore it is no longer proposed to provide a min roundabout.</p> <p>c) No, the detailed junction arrangement at this location would have no impact on the assignment of traffic flows, because in either layout case the junctions would not impose capacity delays or change route choices. The design year flows between old Cannock Road (North) and The Avenue (West) would be about 5,000 two-way vehicles per day [refer AS-114, Figure 4.12]. The flows on the cul-de-sac (South) arm would likely be less than 100 vehicles per day. Therefore there would be no implications to the assessment of environmental affects or any other element of the Proposed Development</p>						
1.5.45	The Applicant	<p>Engineering Drawings</p> <p>a) Could the Applicant please change the colour of the existing ground level shown on all of the Engineering Drawings so that it can be seen more easily.</p> <p>b) Could the Applicant check the following on the Engineering drawings:</p> <table><tr><td>Drawing</td><td>Chainage/Offset</td></tr><tr><td>Work No. 3, 4 and 26</td><td>1+340 to 1+380</td></tr><tr><td>Section A-A</td><td>-179.013 to -85.956</td></tr></table>	Drawing	Chainage/Offset	Work No. 3, 4 and 26	1+340 to 1+380	Section A-A	-179.013 to -85.956	<p>a) The Engineering Section drawings have been revised to provide greater clarity of the existing ground level. This change was reflected in the Engineering Section drawings submitted on 9 October 2020 [AS-071/2.10].</p> <p>b) The existing ground depicted between chainages 1340m and 1380m is capturing the change in levels between the existing M54 Westbound Merge, the M54 underpass circulatory and the M54 mainline and is considered to be a correct representation of existing levels.</p> <p>Section A-A between offsets -179.013 and -85.956 depicts the proposed dual link road as it passes underneath the Featherstone dumbbell junction and is considered to be a correct representation of existing levels. For clarity the information shown in this region does not detail the tie-in detail between the proposed link road and the proposed abutment walls of Bridge B03 Featherstone Junction Overbridge.</p>
Drawing	Chainage/Offset								
Work No. 3, 4 and 26	1+340 to 1+380								
Section A-A	-179.013 to -85.956								
1.5.46	The Applicant	<p>Schedule 3, Part 5</p> <p>The left-hand column is entitled: "Road name, number and length". However, not all have length. Could this be clarified and/or amended?</p>	<p>The heading for column (1) in Schedule 3, Part 5 can be amended to "Road name and description" in the next draft DCO to be submitted at Deadline 2.</p>						
1.5.47	The Applicant	<p>Schedule 4, Part 6</p> <p>The last two rows have the same text for columns (1) and (2). Would alternative drafting be clearer?</p>	<p>The Applicant will review and clarify as appropriate in the draft DCO to be submitted at Deadline 2.</p>						
1.5.48	The Applicant	<p>Schedule 6</p> <p>In the substitution for Schedule 2A of the 1965 Act there is reference to article 26 of the Compulsory Purchase (Vesting Declarations) Act 1981. Is this correct?</p>	<p>The reference is to Article 26 of the draft DCO.</p>						
1.5.49	The Applicant	<p>Schedule 7, Titles</p> <p>Given that several of the entries apply to more than one sheet, are the titles correct?</p>	<p>The Applicant believes the entries to be correct. Temporary possession of land is to be taken in connection with works shown on a number of the Works Plans.</p>						
1.5.50	The Applicant NE SSC	<p>Schedule 7, Plots 3/7a, 3/7b and 3/7c</p> <p>a) Given that the mitigation is required in perpetuity, why is temporary possession proposed?</p> <p>b) What is there to prevent the mitigation being removed – there is no imposition of rights to require long-term retention and maintenance. Is this the appropriate approach?</p>	<p>a) The land in question is owned by The National Trust and classed as Special Category Land under Section 130 of the Planning Act 2008 requiring special parliamentary measures to dispose of land as an inalienable entity under Section 21 of The National Trust Act 1907. To avoid special parliamentary measures, discussions with National Trust have successfully progressed to the completion of an agreement to undertake the necessary works and future management removing the need to use acquisition powers.</p>						

WQ No	Question to	Reference (in bold) and Question			Applicant's Response																		
					<p>The National Trust understands that Highways England intends to carry out enhancement works to the Property in order to mitigate the impact of the Scheme for which the DCO is sought on the Property.</p> <p>b) A contractual agreement is set to be in place between The National Trust and Highways England. The National Trust will give consent for Highway England to carry out enhancement works on the land and covenant to continue to maintain the woodland following completion of the works.</p>																		
1.5.51	The Applicant SCC	<p>Schedule 7, as set out in following Table</p> <table><tr><td><i>Plot reference Number shown on Land Plans</i></td><td><i>Purpose for temporary possess may be taken</i></td><td><i>Relevant part of authorised development</i></td></tr><tr><td>4/1e and 4/9a</td><td>Required for alignment of the existing A460 into the M54 Junction 1 south roundabout</td><td>Work No. 7 as shown on sheet 4 of the works plans</td></tr><tr><td>4/1i</td><td>Required for the stopping up of the existing A460 and construction of a turning head facility</td><td>Work No. 11 as shown on sheet 4 of the works plans</td></tr><tr><td>4/22</td><td>Required for the modification of an existing junction and removal of a right turn prohibition into Dark Lane</td><td>Work No. 73 as shown on sheets 4 and 5 of the works plans</td></tr><tr><td>5/1</td><td>Required for the modification of an existing junction and removal of a right turn prohibition into Dark Lane</td><td>Work No. 73 as shown on sheets 4 and 5 of the works plans</td></tr><tr><td>6/17h, 6/17i, 6/17j, 6/17k, 6/17m, 6/32a and 6/36</td><td>Required for the realignment and widening by a single lane of the A460 southbound and northbound</td><td>Work No. 39 as shown on sheet 6 of the works plans</td></tr></table> <p>In each case, the land is to be used as highway in perpetuity thereby depriving, effectively the landowner of beneficial use of the land. Is the use of TP powers appropriate in each and every case?</p>			<i>Plot reference Number shown on Land Plans</i>	<i>Purpose for temporary possess may be taken</i>	<i>Relevant part of authorised development</i>	4/1e and 4/9a	Required for alignment of the existing A460 into the M54 Junction 1 south roundabout	Work No. 7 as shown on sheet 4 of the works plans	4/1i	Required for the stopping up of the existing A460 and construction of a turning head facility	Work No. 11 as shown on sheet 4 of the works plans	4/22	Required for the modification of an existing junction and removal of a right turn prohibition into Dark Lane	Work No. 73 as shown on sheets 4 and 5 of the works plans	5/1	Required for the modification of an existing junction and removal of a right turn prohibition into Dark Lane	Work No. 73 as shown on sheets 4 and 5 of the works plans	6/17h, 6/17i, 6/17j, 6/17k, 6/17m, 6/32a and 6/36	Required for the realignment and widening by a single lane of the A460 southbound and northbound	Work No. 39 as shown on sheet 6 of the works plans	<p>The Applicant considers that TP is appropriate in each and every case.</p> <p>There is no benefit to Highways England in owning land which is not operationally required, any additional land is seen as a liability. As a public body, Highways England is bound by the Crichel Down Rules which requires any excess land which has not materially changed, that has been acquired under compulsion, or the threat of compulsion, to be disposed of by offering back to the original landowner or successors in Title. Temporary possession is appropriate in the case of plots 4/1e, 4/9a, 4/22, 5/1, 6/17h, 6/17i, 6/17j, 6/17k and 6/17m, given that Highways England has no operational need for plots and on completion of the works the land will be returned to a pre-works condition.</p> <p>In relation to plots 4/1e, 4/9a, 4/22, 5/1, 6/17h, 6/17i, 6/17j, 6/17k, 6/17m the current use is existing public highway or highway embankment, therefore this use will not materially change because of the works. These plots are required for temporary signage and ancillary works for the facilitation of works to construct the new road.</p> <p>Plots 4/1i, 6/32a and 6/36, are required for the construction and facilitation works only. The land will be returned to its previous use.</p>
<i>Plot reference Number shown on Land Plans</i>	<i>Purpose for temporary possess may be taken</i>	<i>Relevant part of authorised development</i>																					
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1.5.52	Severn Trent PLC Cadent Gas Limited Western Power Distribution (West Midlands) PLC Openreach Limited Virgin Media Limited South Staffordshire Water PLC Zayo Infrastructure (UK) Limited	<p>Schedule 9</p> <p>For each of the statutory undertakers, could they please confirm that they are content with the provisions set out in the draft DCO in relation to their apparatus, the latest situation in relation to resolving these matters, and if not, please explain fully your reasoning?</p>			N/A																		

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.5.53	The Applicant	Schedule 10 'Record of Environmental Actions and Commitments' is identified as a document to be certified but has no document number. It is a document attached to the 'Outline Environmental Management Plan' (OEMP) which is another document to be certified. Is it to be separated as an independent document is that clear in the OEMP, will it be given a reference no?	REAC is defined at paragraph 1 (interpretation) of Schedule 2 Part 1 as being attached to the OEMP. The reference at Schedule 10 will be deleted from the next draft DCO to be submitted at Deadline 2.
1.6	Cultural Heritage		
1.6.1	The Applicant	Legislative Requirements/ General Matters a) Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 requires the SoS to have regard to various matters in respect of heritage in coming to their decision. Could the Applicant please explain how it considers that the proposal would comply with this obligation? b) When assessing the effects reference is made to 'NPPF terms' whilst it is accepted that this is shorthand, and these are in effect included in the NPSNN relevant paragraphs, should this not be acknowledged/referenced given the requirement to have regard to the NPSNN?	<p>a) Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 contains three sub-parts relating to consideration of impacts on listed buildings (3(1)), conservation areas (3(2)) and scheduled monuments (3(3)). As reported in Chapter 6: Cultural Heritage of the ES [APP-045/6,1] paragraph 6.6.3 confirms that the Scheme would not affect either a conservation area or any scheduled monuments. Accordingly, the provisions of Regulations 3(2) and 3(3) are not of relevance to the consideration of this Scheme.</p> <p>For this Scheme consideration of only Regulation 3(1) is necessary. Regulation 3(1) relates to a proposal which affects a listed building or its setting. Where this is the case the SoS must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses.</p> <p>As set out within Table 6.4 of Chapter 6: Cultural Heritage of the ES [APP-045/6.1] the significance of the residual effect on heritage assets is summarised for 13 heritage assets or groups of assets. The residual effect is recorded as either Neutral or Slight Adverse for all but Hilton Park which is considered to be Moderate Adverse. Accordingly, it can be concluded that the Scheme results in less than substantial harm to designated heritage assets, as per paragraph 8.11.35 of the Case for the Scheme [APP-220].</p> <p>It is the Applicant's position that whilst regard should be had to Regulation 3(1), the associated considerations are the same as those of NPSNN and NPPF and as such the adverse effects are not significant and those impacts are outweighed by the benefits of the Scheme.</p> <p>b) NPSNN Para 5.122 states that "Those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'." This is the same criteria as in NPPF, detailed in the glossary: "The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic." However, it is acknowledged that Paragraph 6.3.11 should have cross-referenced to the NPSNN rather than the NPPF.</p>
1.6.2	SSC SCC	Organisational relationship Could SCC and SSC please explain the relationship between them in relation to the provision of cultural heritage services in the determination of planning applications and applications for development consent	N/A
1.6.3	SSC	Heritage Assets a) Does SSC consider that the Table 6.1B set out in Appendix 6.1 to Chapter 6 of the ES [APP-045] is a comprehensive list of Listed buildings, locally listed buildings and non-designated historic assets affected by the Proposed Development?	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		b) If not, could any exceptions be provided, along with which category they fall into, along with a brief explanation of why SSC considers that the heritage asset may be so affected?	
1.6.4	The Applicant	Methodology It is stated in Section 4.3 of ES Chapter 4: Methodology [APP-043] that, depending on the topic, the baseline is considered in the technical chapters for an opening year of 2024 and a future assessment year of 2039. The 2039 future baseline is not addressed in the cultural heritage assessment and no commentary is provided to explain why it has not been considered. Can the Applicant provide either an explanation for the omission or an assessment of the 2039 baseline?	There is no requirement to assess the impacts on cultural heritage in 2039 in line with DMRB LA 106. The only assessment methodologies that require the assessment of impacts at the design year (2039) 15 years after completion of the Scheme, are landscape and visual, noise and vibration, air quality, climate and population and human health in line with the DMRB.
1.6.5	The Applicant	Assessment of Effects The likely significance of effects on the cultural heritage receptors identified in Section 6.9 of ES Chapter 9 [APP-048] prior to the implementation of the proposed essential mitigation is not presented in the ES. Can the Applicant provide the assessment scores for such receptors so that the efficacy of the proposed mitigation can be understood?	<p>The assessment is based on the approach required by DMRB LA 104 for assessing the significance of effects after an assessment of the effectiveness of the design and mitigation measures (i.e. the residual effect). As noted within LA 104, <i>'assigning significance to an effect after an assessment of the effectiveness of design allows for positive contribution of all mitigation that is effective, deliverable and committed'</i>.</p> <p>The assessment is supported by mitigation documented in the OEMP [APP-218/6.11] that has previously been proven successful on other road schemes and has an identified legal mechanism for implementing the measures.</p> <p>Mitigation measures for built heritage and the parkland in this instance are largely embedded in the design, through the positioning of the alignment which allows for retention of the Shrubbery boundary (also known as Lower Pool Site of Biological Importance, the form of the woodland is a feature shown on historic maps forming part of the setting of the listed building). It is not possible to assess the Scheme without these in place. For further information on the alternative alignments considered in this location refer to Appendix 3.2 [APP-159/6.3].</p>
1.6.6	The Applicant HBMCE SCC SSC	Heritage Assessment effects The Planning Practice Guidance (Reference ID: 18a-018-20190723) indicates that within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated. In light of this, are there any nuances that parties would like to make as to the extent of harm that they consider would be occasioned to any heritage asset or their settings.	<p>As detailed in paragraph 6.3.20 there are two levels of harm considered for impacts on designated assets – substantial harm and less than substantial harm. These are included within the impact assessment in the ES chapter (see Paras 6.9.12, 6.9.13, 6.9.17, 6.9.22, 6.9.23, 6.9.25, 6.9.40-42).</p> <p>The PPG does require the extent of harm within each category to be articulated. This has been done through the narrative description of the impacts to each asset. There is currently no guidance or accepted methodology for attributing 'level's' of harm under each category; therefore, this has not been done.</p>
1.6.7	The Applicant	Ground Investigation It is stated in Chapter 7 [APP-046] that ground investigations (GI) were undertaken in July 2019 to establish the existing geological and soils environment and identify any areas of previous disturbance, and that the information relating to these investigations is presented in ES Chapter 9: Geology and Soils [APP-048] and Appendix 6.2: 'Ground Investigation Archaeological Monitoring Report'. However, ES Appendix 6.2 is titled 'Archaeological Monitoring and Recording Report' [APP-170]. A document entitled 'Ground Investigation Report' is contained in ES Appendix 9.1 [APP-187 to APP-191]. Can the Applicant identify and clarify the correct title of the referenced document?	The correct title of the referenced document is "Appendix 6.2: Archaeological Monitoring and Recording Report" [APP-170/6.3].
1.6.8	The Applicant Interested parties	Geophysical surveys a) Paragraph 6.6.36 of Chapter 6 of the ES [APP-045] indicates that three areas originally identified for geophysical survey were not surveyed due to livestock being present. Is the Applicant seeking to undertake the surveys?	Geophysical survey was undertaken across the Scheme boundary in April 2019. There were 19 areas proposed for survey based on draft Order Limits. Three areas were not surveyed due to the presence of livestock in the fields, Areas 4, 10 and 18 as outlined in Appendix 6.3 of the ES [APP-171/6.1]. Since

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		b) Are the interested parties satisfied that sufficient information exists to allow a proper consideration of the matter without any further survey work?	<p>the geophysical surveys were undertaken the Order Limits of the Scheme have been altered and Areas 4 and 10 are now outside the Order Limits.</p> <p>As reported in Chapter 6: Cultural Heritage [APP-045/6.1] of the ES, nine anomalies were recorded across the geophysical survey areas which were completed. All the anomalies are thought to represent agricultural practices or modern disturbance. Other responses from the survey mainly consisted of strong magnetic disturbances of made ground and modern disturbances, as well as relatively weaker linear responses of agricultural activity. The survey concluded that the majority of the anomalies identified related to modern material, objects related to agricultural activity, or geological variations. No clear patterns were identified indicating relationships between the anomalies.</p> <p>It was therefore agreed with the County Archaeologist, as set out in the SoCG with SCC [TR010054/APP/8.8LA(A)], that based on our current knowledge of the archaeological potential of the proposal site, augmented by detailed desk-based assessment and geophysical survey, that it is unlikely that any groundworks associated with the scheme would impact on previously unrecorded below-ground archaeology of national significance. Therefore, no further geophysical surveys are required.</p>
1.6.9	The Applicant	Drawing clarity Paragraph 6.6.71 of Chapter 6 of the ES [APP-045] indicates two potential buildings referenced B37. A farm building and an outbuilding to the Vicarage in Shareshill. Looking at Appendix 6.1 [APP-169] it would appear that the latter reference is correct. Could the former reference please be checked?	This was an error in the Chapter, the text in paragraph 6.6.71 should be as follows ' <i>The rest of the non-designated built heritage assets include farm buildings that illustrate the agricultural history of the area (B36, B37 and B38)</i> '. B37 should refer to an outbuilding to the vicarage.
1.6.10	The Applicant HBMCE SSC SCC	Archaeology/ Trial Trenching a) Paragraph 6.2.23 of the ES [APP-045] indicates that trial trenching "should be undertaken after the submission of the DCO". It is not clear whether this has now happened, or it programmed for the future. If it has happened could the Applicant, please provide the results? b) If it is for the future, could this precisely be identified when in the process this is to take place and how would it be secured? c) If it is for the future, how can the SoS assess the particular significance of any heritage asset that may be affected (NPSNN, paragraph 5.128) if there is no available evidence on this. d) If it is for the future, could HBMCE, SSC and SCC confirm whether they are content with this approach.	<p>a) As reported in Paragraph 6.3.23 of the ES [APP-045/6.1] it has been agreed with the County Archaeologist that trial trenching will be undertaken once the detailed design of the Scheme has progressed to allow a more focused and appropriate level of evaluation. Detailed design is progressing and the location of trial trenches and a written scheme of investigation is currently being produced in consultation with the County Archaeologist to progress this matter.</p> <p>b) Table 3.2, PW-CH1 of the OEMP states, '<i>Evaluation trenching shall be undertaken prior to the start of construction during the progression of detailed design, as agreed with the County Archaeologist. This should be undertaken early in the programme, to allow the development and implementation of mitigation measures (which will be identified in the Archaeological Management Plan – see PW-CH2), particularly where any additional archaeological features are identified.</i>' As set out in the OEMP this will be secured through Requirement 4 and Requirement 9 of the draft DCO [AS-075/3.1].</p> <p>Trial trenching is currently being planned to take place in Winter/Spring 20/21.</p> <p>c) The risk of finding remains of more than local value is considered to be low. No archaeological features were identified during the archaeological monitoring of the ground investigation, geophysical survey or from analysis of cropmarks, other than those identified in Chapter 6: Cultural Heritage [APP-045/6.1] of the ES. Mitigation measures for unknown archaeological assets will be identified in the Archaeological Management Plan (AMP) following the results of the trial trenching, as set out in PW-CH1 and PW-CH2 of the OEMP [AS-112/6.11].</p> <p>The AMP will detail the procedures required to ensure excavation of any identified features and will be prepared in consultation with the County Archaeologist. Remains of such importance as to require Scheme design changes are not anticipated. Therefore, the Scheme is not anticipated to result in a significant adverse effect on unknown archaeological assets and the results of the trial trenching are not required to reach this conclusion.</p> <p>d) N/A</p>
1.6.11	The Applicant	Archaeology/ Trial Trenching Paragraph 3.3.1 of the AMS [within APP-218] states that the number and layout of the archaeological evaluation trenches will be developed to	Trenching will be undertaken within the Order limits of the Scheme only. Areas outside of this, although in the study area, will not be impacted and mitigation will not be required. Areas located within the

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		appropriately evaluate the land 'within the footprint of the Scheme'. It is unclear to what area this refers and whether it encompasses all the land within the study area. Can the Applicant clarify the extent of the area within which trenching would be undertaken?	highway verges, for signage, will not be evaluated as these areas will have been disturbed by previous road construction.
1.6.12	The Applicant	Archaeology/ Trial Trenching Item PW-CH1 in Table 3.2 of the REAC [within APP-218] states that evaluation trenching would be undertaken prior to the start of construction, as agreed with the County Archaeologist, and should be undertaken early in the programme to allow the development and implementation of mitigation measures (which would be identified in the AMP). Can the Applicant identify the location within the application documents of evidence of the agreement reached in this regard?	Agreement on the approach to evaluation trenching was confirmed in an email from the County Archaeologist on 25 July 2019. This is set out in the SoCG between the Applicant and Staffordshire County Council [TR010054/APP/8.8LA(A)].
1.6.13	The Applicant SCC	Hilton Park a) Paragraph 6.6.82 of Chapter 6 of the ES [APP-045] refers to former areas of the Hilton Hall park being covered by gravel pits. Are these areas subject to restoration, either under planning conditions or ROMP provisions of the Environment Act 1995 (as amended)? b) If so, what restoration, if any, is proposed for these areas? c) Do these provisions have any implications for the consideration of this matter?	a) No. These are historic gravel pits marked on 19th century mapping. They are no longer extant. b&c) N/A
1.6.14	The Applicant	Clarification Paragraph 6.9.42 of Chapter 6 of the ES [APP-045] refers to Tables 6.7 and 6.8 – these tables do not exist. It is assumed that these are references to Table 6.4 and 6.5 respectively. Could this be clarified?	Paragraph 6.9.42 of the ES [APP-045/6.1] states ' <i>A summary of the predicted impacts and residual effects on heritage assets arising from construction of the Scheme is presented in Table 6.7</i> '. This should refer to Table 6.4. There is no reference to Table 6.8 within the main text of the Chapter [APP-045/6.1]. The contents page of Chapter 6 [APP-045/6.1] includes reference to Tables 6.8 and 6.9, this is an error and should refer to Tables 6.4 and 6.5
1.6.15	The Applicant	Hilton Hall, Hilton Park and associated heritage assets a) Could an 'in combination' assessment be carried out in relation to Hilton Hall and its associated heritage assets (that is The Conservatory, Gatepiers, Portobello Tower, Coach house and stable block and Hilton Park)? b) Could the Applicant please set out this in terms of the associated heritage value, magnitude of impact and thus significance of residual effect? This should be undertaken both for construction and operational effects and should be justified. c) Para 6.9.9 of Chapter 6 the ES [APP-045] refers to it being unlikely that there would be any views from Hilton Hall to the scheme at Ground Floor level due to established vegetation. The photographs referenced as evidence were taken in summer are winter views available. Why 'unlikely' and not more definitive? What other evidence has been adduced to reach this conclusion? d) Para 6.9.11 of Chapter 6 the ES [APP-045] suggests the scheme would be 'mostly screened' with only a few glimpses during winter months and refers back to the photographs taken in summer. What views (glimpsed) of the scheme would be available and where would these be from? Are there any photomontages/representations of where elements of the scheme may be visible?	a) A level of effect is assigned on an individual basis, in accordance with DMRB LA 106. When considering each heritage asset, the relationship to other listed buildings and the parkland are considered to contribute to their significance and setting. This is therefore considered as part of the assessment of effects reported in Chapter 6: Cultural Heritage of the ES [APP-045/6.1]. b) All these factors are considered in the assessment of the impact of the Scheme on the assets in Chapter 6 of the ES [APP-045/6.1] and therefore it is considered that the value, magnitude of impact and significance of residual effect reported in the ES take into account 'in combination' effects. c) Due to the timescale of the project and access issues, only summer photography was available. This is why a more definitive conclusion has not been reached. The site was also visited by a heritage specialist and the extent of vegetation between the Hall and the Scheme was visually surveyed. It was concluded that the depth of vegetation was sufficient that no winter view would be possible. A further photomontage has been produced in response to concerns raised by Historic England. This photomontage illustrates the view towards the Scheme from Hilton Hall which shows that the Scheme would not be visible from Hilton Hall (from the ground floor, first floor or second floor) whilst the trees are in full leaf (refer to Appendix WQ1.6.15 Figure 1, 2 and 3 of this report), Due to the timing for this work the photomontage illustrates a summer view. An additional photomontage will be produced to demonstrate winter views once leaf coverage has reduced. d) No winter photomontages were available at the time of assessment. A site visit identified dense vegetation considered to provide screening in both summer and winter time. However, no evidence was available to support this; therefore, a worst-case scenario of glimpsed views has been taken. An additional photomontage will be produced to demonstrate winter views once leaf coverage has reduced.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>e) Why is Hilton Park ascribed a medium value, Para 6.9.40 of Chapter 6 of the ES [APP-045], given it is an undesignated heritage asset? Where is the justification and assessment that leads to this conclusion?</p> <p>f) In respect of Hilton Park, the assessment of effect identifies an effect in a particular part of the Park with key elements of the landscape partially lost but given the extent of the parkland does this equate to a moderate effect on the whole of the asset?</p> <p>g) The Courts, in <i>Steer v Secretary of State for Communities and Local Government, Catesby Estates Limited, Amber Valley Borough Council</i> [2018] EWCA Civ 1697 have indicated that the word 'experienced' has a broad meaning, which is capable of extending beyond the purely visual, and could include, but is not limited to, economic, social and historical relationships, and considerations of noise and smell. Paragraph 8.11.19 of the Case for the Scheme [APP-220] notes the change in noise level at Hilton Hall and Conservatory, but it is not clear whether matters other than visual have been taken into account in assessing the effects. Could the Applicant please clarify the analysis to date, and if necessary, consider other matters as appropriate.</p>	<p>e) DMRB LA104 gives the following criteria for medium value <i>"Medium or high importance and rarity, regional scale, limited potential for substitution."</i></p> <p>Although not designated in heritage terms, it is locally designated by South Staffordshire Council in their Core Strategy. Its significance is described in Para 6.9.37 of the ES and this has been used to justify the 'medium' value.</p> <p>f) The effect on Hilton Park as reported in Chapter 6: Cultural heritage [APP-045/6.1] of the ES has taken into account impacts on individual elements of the asset such as Lower Pool and the Shrubbery as well as lesser impacts on other aspects of the parkland. These elements contribute to the significance of the parkland as a whole. In accordance with the EIA methodology partial loss of/damage to key characteristics, features or elements of an asset equates to a moderate impact. The loss of these key elements to the parkland as a whole would therefore result in a moderate adverse impact on a medium value receptor, resulting in a moderate adverse effect.</p> <p>g) Noise and lighting are considered as part of the operational effects. Please see Chapter 6: Cultural heritage [APP-045/6.1] of the ES paragraphs 6.9.45 to 6.9.49. Setting effects described in paragraphs 6.9.8 to 6.9.17 encompass more than just visual effects, with the effects also taking into account the impact of noise and lighting. NPPF describes setting as "The surroundings in which a heritage asset is experienced" so more than just visual effects are included in assessment of effects caused by changes to setting. This includes any potential impacts on the ability to understand and appreciate the significance of an asset through changes to historic relationships and/ or changes within the wider setting which may not be visible from the asset itself.</p>
1.6.16	The Applicant	<p>Hilton Hall, Hilton Park and associated heritage assets</p> <p>Paragraphs 6.9.8 to 6.9.25 of Chapter 6 of the ES [APP-045] make an assessment of the effects of the Proposed Development on these heritage assets. This is summarised in paragraph 8.11.12 of the Case for the Scheme [APP-220]. However, the views identified in this latter paragraph are all from the heritage asset. Can a similar analysis be undertaken of views from the Proposed Development to the assets, along with an analysis from any public vantage points where both the heritage asset and the Proposed Development can be appreciated together.</p>	<p>LVIA is based on assessment of the effects of development on baseline receptors, that is potential viewers of the development or the landscape. There is no requirement to assess views of users of the highway, although it can be an element which shapes mitigation. In this case there is likely to be no, or very limited, visibility of the hall from the highway due to retained intervening vegetation. There are no public vantage points where Hilton Hall or the parkland and the Scheme would be viewed together in a meaningful way. Trees within the parkland are visible from public vantage points such as the PRoW north of Hilton Lane (Viewpoint (VP) 11) Figure 7.15A – C [APP-098/6.2] however, they are indistinguishable from trees and woodland in the wider landscape. The assessment of impacts on Viewpoint 11 are reported in Chapter 7: Landscape and visual of the ES [APP-046/6.1].</p>
1.6.17	HBMCE	<p>Hilton Hall</p> <p>a) Appendix 6.5 to Chapter 6 of the ES [APP-045] provides further information on Hilton Hall and its parkland. Although not explicitly stated as such this describes its significance. Do the parties consider that it adequately and appropriately sets out its significance?</p> <p>b) Are there any considerations that have been omitted and should thus be further considered?</p>	N/A
1.6.18	The Applicant	<p>Moseley Old Hall</p> <p>Paragraph 8.11.17 of the ES [APP-056] concludes that there would be no impact on the significance of Moseley Hall. It is not clear whether this includes consideration on the effects on the setting of Moseley Hall. Could this be clarified and assessment on the setting be made if necessary.</p>	<p>The assessment of effects on heritage assets reported in Chapter 6: Cultural Heritage of the ES [APP-045/6.1] takes into account the effects on the setting of built heritage assets. Setting effects on Moseley Old Hall during construction are reported in paragraphs 6.9.28 to 31 and for Moseley Hall in paragraph 6.9.36 of the ES. Setting effects on Moseley Old Hall during operation are reported in paragraphs 6.9.45 to 49 of the ES [APP-045/6.1].</p>
1.6.19	The Applicant	<p>Moseley Old Hall and associated heritage assets</p> <p>a) Could an 'in combination' assessment be carried out in relation to Moseley Old Hall and its associated heritage assets (that is Moseley Old Hall Cottage and their grounds)?</p> <p>b) Could the Applicant please set out this in terms of the associated heritage value, magnitude of impact and thus significance of residual effect? This</p>	<p>a) The DMRB LA 106: Cultural Heritage requires assessment of impacts on each asset. As set out in paragraph 6.9.27 of the ES [APP-045/6.1] the setting of Moseley Old Hall includes its relationship with the associated garden, associated outbuildings and Moseley Old Hall Cottage and is therefore considered to be an 'in-combination assessment'.</p> <p>b) The assessment of construction impacts reported in paragraphs 6.9.26 to 6.9.31 and operational impacts reported in paragraphs 6.9.45 to 6.9.49 take into consideration the setting of the asset; therefore, the relationship has been assessed in Chapter 6: Cultural Heritage of the ES [APP-045/6.1].</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>should be undertaken both for construction and operational effects and should be justified.</p> <p>c) As with Hilton Park, could the Applicant please demonstrate that effects other than visual have been assessed in terms of the overall effect on these assets.</p>	<p>c) Setting effects on Moseley Old Hall are reported in paragraphs 6.9.26 to 31, (construction assessment) and paragraphs 6.9.45 to 49 (operational assessment), these refer to noise and lighting.</p>
1.6.20	The Applicant SSC	<p>Heritage Assets in Shareshill and Little Saredon</p> <p>a) In paragraph 6.9.48 of Chapter 6 of the ES [APP-045] reference is made to operational effects on heritage assets in Shareshill and Little Saredon. Given it is stated "traffic movement associated with the Scheme may be visible from historic buildings located in Shareshill and Little Saredon" there is a reasonable prospect that there would be construction effects also visible. Is this assumption likely to be correct?</p> <p>b) Could an assessment be undertaken of construction effects to these heritage assets? Such an approach should be justified</p>	<p>a) Paragraph 6.9.48 of the ES [APP-045/6.1] concludes that there are no operation effects on assets in Little Saredon or Shareshill "Due to traffic movement associated with existing infrastructure in proximity to these assets, and their location within settlements." Similarly, no construction effects are anticipated.</p> <p>b) N/A for the reason above.</p>
1.6.21	The Applicant	<p>Mitigation and Monitoring</p> <p>Within the Register of Environmental Actions and Commitments (REAC) contained in the Outline Environmental Management Plan (OEMP) [APP-218] it is stated against a number of the measures proposed in respect of cultural heritage that they would be implemented through dDCO Requirement 51 (R51) (and R45 for D - CH1) [APP- 018]. However, there are no such requirements in the dDCO, which currently contains only 13 requirements. Can the Applicant correctly identify the relevant dDCO requirements that would control these measures.</p>	<p>This was an error in the original submission. Version 2 of the OEMP submitted to the Inspectorate on 20 July 2020 [AS-041] provided a correction to this error.</p> <p>Requirement 51 should refer to Requirement 9 of the draft DCO. Requirement 45 should refer to Requirement 3.</p>
1.6.22	The Applicant	<p>Mitigation and Monitoring</p> <p>Paragraph 6.8.6 of Chapter 6 [APP-045] states that delivery of the archaeological mitigation strategy during construction would be within the 'Scheme boundary', which is described in ES Chapter 2 [APP-041] as 'the boundary of the main works'. It is depicted on ES Figure 2.8 [APP-064] as corresponding to the Order Limits with the exception of separate parcels of land beyond the main works boundary required to update existing highway signs. This does not address the potential need for mitigation of effects on archaeological features which could be affected by construction works that are outside this boundary but within the defined cultural heritage study area. Can the Applicant explain how it intends to mitigate such effects?</p>	<p>There are no physical impacts on heritage assets outside of the Scheme boundary. No mitigation is required. Areas required for signage within the existing highway verges will not impact any archaeological sites. These areas will have been disturbed by previous road construction and many of the signs are replacement signs for those currently in place on the network.</p> <p>There are no impacts caused by changes to the setting of archaeological features within the study area. No mitigation is required.</p>
1.6.23	The Applicant	<p>Mitigation and Monitoring</p> <p>A number of cultural heritage actions/commitments included in the Register of Environmental Actions and Commitments (REAC) assume that the Archaeological Management Plan (AMP) and Archaeological Mitigation Strategy (AMS) would be certified documents in the DCO, however neither of these are included in the list of documents to be certified contained in Schedule 10 of the dDCO, and the application documents do not include a draft AMP. Apart from the reference to the AMS in dDCO Requirement 4 (Construction Environmental Management Plan) there is no other reference in the dDCO to the AMS, and no requirement in the dDCO that provides that the AMS must be based on the AMP. Can the Applicant explain where it is secured within the dDCO or any other application document that the measures contained within the AMP are to be carried out through the implementation of the AMS?</p>	<p>The AMP will be based on the AMS as set out in PW-CH2. The AMS is Appendix B of the OEMP [AS-118/6.11], which is a certified document. It is therefore certified by virtue of being part of the OEMP. The final AMS and the AMP is secured by Requirement 4 in the draft DCO [AS-075/3.1], which requires that the CEMP be developed substantially in accordance with the OEMP and lists the final AMS and the AMP as being part of the CEMP. Requirement 9 of the draft DCO requires that the written scheme of investigation should reflect the relevant mitigation measures set out in the REAC.</p> <p>The AMP cannot be produced until the evaluation excavation has been completed, with the trenching likely to start in Winter 2020/21. Paragraph 6.8.3 of the ES [APP-045/6.1] the AMP will be developed once the detailed design has progressed. Detailed design is currently ongoing.</p>

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1.6.24	The Applicant	Mitigation and Monitoring It is stated in the AMS [within APP-218] that all archaeological investigations would be carried out in accordance with the strategy contained within it (and with a Written Scheme of Investigation (WSI) for each phase of work). However, as the AMS is not currently a certified document in the dDCO it is not clear that this commitment is adequately secured. Please can the Applicant explain how the measures contained within the AMP and AMS are secured. Can the Applicant explain the hierarchy of these plans and their relationship in more detail?	<p>The AMS at Appendix B of the OEMP [APP-218/6.11 and subsequent versions] is the outline document providing an overview of the archaeological work required at future stages of the project, and provides an outline of the works specification for the archaeological fieldwork. The AMP will be written once the detailed design is further progressed. It will contain the methodologies to be employed for evaluation trenching, any pre-construction works, and any works undertaken during construction, and will need to be prepared before the trial trenching takes place. The detailed design is required to ensure accuracy in the areas to be evaluated. The results of the trenching will be used to determine the requirements for further archaeological work, if required. This will be outlined in an updated AMP. WSIs will be prepared for all required archaeological work.</p> <p>Table 3.2, PW-CH2 of the OEMP [AP-218/6.11] confirms that the AMP will be prepared in consultation with the County Archaeologist and outlines the areas that this document should address.</p> <p>The final AMS and the AMP is secured through Requirement 4 in the draft DCO [AS-075/3.1], which requires that the CEMP be developed substantially in accordance with the OEMP and lists the final AMS and AMP as being part of the CEMP. Requirement 9 of the draft DCO requires that the written scheme of investigation should reflect the relevant mitigation measures set out in the REAC.</p>
1.6.25	The Applicant	Mitigation and Monitoring Many of the cultural heritage-related actions/commitments set out in the REAC flow from the AMS, in addition to the AMP. As the approved AMP would be based on the AMS the purpose and need for the AMS post-consent is unclear. a) Can the Applicant explain what the function of the AMS would be, and its relationship to the AMP once the AMP had been approved? b) Can the Applicant explain the hierarchy of these plans in more detail, how they will be secured and delivered through the DCO?	<p>a) The AMS, Appendix B of the OEMP [APP-218/6.11 and subsequent versions], is the outline document providing an overview of the archaeological work required at future stages of the project and provides an outline of the works specification for the archaeological fieldwork. The AMP will be written once the detailed design is further progressed. It will contain the methodologies to be employed for evaluation trenching, any pre-construction works, and any works undertaken during construction, and will need to be prepared before the trial trenching takes place. The detailed design is required to ensure accuracy in the areas to be evaluated. The results of the trenching will be used to determine the requirements for further archaeological work, if required. This will be outlined in an updated AMP. WSIs will be prepared for all required archaeological work.</p> <p>b) As set out in Table 3.2, PW-CH2 of the OEMP, the AMP shall be prepared in consultation with the SCC Archaeologist. All works will be undertaken in line with the AMP and AMS as set out in Table 3.2, PW-CH3 and Table 3.3, MW-CH1 and CH2 of the ES.</p> <p>The AMP and AMS are secured by Requirement 4.(d) iv) and v) of the draft DCO which stipulates that the CEMP must include an:</p> <p>(iv) Archaeological Management Plan</p> <p>(v) Archaeological Mitigation Strategy</p> <p>Requirement 9 of the draft DCO states that <i>"No part of the authorised development is to commence until for that part a written scheme for the investigation of areas of archaeological interest, reflecting the relevant mitigation measures set out in the REAC, has been submitted to and approved in writing by the Secretary of State"</i></p>
1.7	Landscape and Visual		
1.7.1	SSC SCC	Clarification Could SC and SSC please explain the relationship between them in relation to the provision of advice relating to landscape and visual effects in the determination of planning applications and applications for development consent?	N/A
1.7.2	The Applicant	Assessment criteria Table 7.2 in Chapter 7 of the ES [APP-046] sets out typical criteria for landscape and visual sensitivity. In the column for description (visual) high	The reasoning for the judgments on susceptibility and value are set out in Chapter 7: Landscape and Visual of the ES [APP-046/6.1] and are consistent both with DMRB LA 107 guidance and Guidance for Landscape and Visual Impact Assessment 3rd edition (GLVIA3) (2013). The typical descriptions are

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		sensitivity is given for views by users of nationally important PRoW/ recreational trails. However, no categorisation is given for views by users of other PRoWs. Could this please be explained, along with an assessment of the effects on these users.	taken directly from DMRB LA 107 Landscape and visual effects (Table 3.22 Landscape sensitivity and Table 3.41 Visual sensitivity) and the wording is that provided in the guidance. The tabulation does not give a categorisation for 'other PRoW' (those that are not nationally significant). However, our assessment includes viewpoint locations from at least four PRoW in the vicinity of the Scheme (VP6, VP11, VP13 and VP19) which are typically assessed as high susceptibility and, when combined with value, vary between high and moderate sensitivity, refer to Table 7.12 and 7.15 of the ES [APP-046/6.1].
1.7.3	The Applicant	Baseline – Clarification Although it is explained within ES Chapter 7 that the study area was based on the extent of the Zones of Theoretical Visibility (ZTVs) that were established and a buffer of 1km from the application site boundary, the extent of the resulting study area is not specified and Figures 7.1A – C delineate both a study area and a buffer zone (in addition to the ZTVs). Can the Applicant confirm the extent of the study area and clarify what is depicted on the figures?	Figure 7.1A Vehicle and Lighting Zone of Theoretical Visibility and Viewpoint Locations [APP-082/6.2] shows a combination of the zone of theoretical visibility (ZTV) of cars/HGVs and lighting columns combined into a single ZTV. Figure 7.1B [APP-083/6.2] and Figure 7.1C [APP-084/6.2] show the individual ZTVs which make up Figure 7.1A. The study area is identified by the thick dashed line and is for the most part a 1km offset from the elements of the new highway. The initial starting point of a 1km offset has been based on experience of other road schemes that we have been involved with where significant effects beyond 1km are unlikely due to landform, distance and intervening built form and vegetation. In some areas, namely the western section of the scheme within the existing M54 corridor and areas where the ZTV indicates no visibility (east of the Scheme) the study area has been brought inwards from the 1km buffer. This is justified by the elements within those areas either not being visible or consisting of minor changes within an existing highway boundary such as signage modification, rather than new highway. Figure 7.1A [APP-082/6.2] shows those locations as areas between the buffer and the study area. In addition, some areas of theoretical visibility beyond the 1km buffer are excluded from the study area based on professional judgment and the very low likelihood of significant effects. This includes areas to the west of Featherstone where some theoretical visibility is shown but where buildings or garden trees within the settlement that are not included in the ZTV model would be highly likely to obstruct views.
1.7.4	The Applicant	National Character Areas Could the Applicant please provide a plan, preferably to an Ordnance Survey base, showing the extent of the National Character Areas in the vicinity of the Proposed Development.	The extent of the NCAs within and beyond the study area (to the extent of the mapping within the drawing frame) is shown on Figure 7.3 Landscape Character [APP-086/6.2]. It is not accepted practice and would be disproportionate to the scale of the project, to show the full extent of an NCA – many of which cover very large areas.
1.7.5	The Applicant	Forest of Mercia Community Forest Paragraph 7.6.24 of Chapter 7 the ES [APP-046] indicates that the study area lies within the Forest of Mercia Community Forest. Could the Applicant please explain how the landscaping strategy for the Proposed Development takes this designation into account?	The Environmental Masterplan (Figure 2.1-2.7 of the ES [AS-86 to 92/6.2]) identifies areas of existing woodland for retention, existing ancient woodland for retention and enhancement and substantial areas of proposed woodland planting which compensate for the loss of trees to the Scheme. The landscape strategy for replacement tree planting involves the introduction of larger blocks of trees and woodland than is present in the baseline. This would therefore deliver a more wooded appearance to the context for the Scheme in comparison with the baseline. This is aligned with the aim of the Community Forest to provide well-wooded landscapes close to urban areas. Though our landscape strategy is aligned with the aims of the Community Forest, the Forest of Mercia Community Forest is a community project and is not a formal landscape or ecological designation.. The placing of these blocks of woodland has also taken into consideration the published Landscape Character Types within the study area.
1.7.6	SCC SSC NE Interested Parties	General Approach Is the assessment undertaken against a baseline conclusion that the receiving landscape is of low landscape value – is this reasonable and agreed position by all parties?	N/A
1.7.7	SSC SCC Interested Parties	Representative viewpoints a) The Applicant has set out a series of viewpoints in Figures 7.5 to 7.25 [APP-088 to APP-108] which it sees as representative. Do the parties	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		consider that any additional viewpoints, not covered by the representative viewpoints, should be considered? b) If so, please provide details of the additional viewpoint(s), preferably on an Ordnance Survey base, explain why that viewpoint has not been already represented by one of the existing viewpoints and why it is important. It may be that rather than produce photographs the ExA may be able to visit the viewpoint as part of one of the Site Inspections.	
1.7.8	SCC SSC	Vegetation Growth rates a) Do the parties agree that the vegetation growth rates set out in paragraph 7.4.6 of Chapter 7 of the ES [APP-046] are reasonable? b) If not, what growth rates should be used. Please justify your answer along with evidence to support such a view.	N/A
1.7.9	Cadent Gas Limited	Landscaping Planting In its Relevant Representation [RR-010] Cadent Gas Limited indicates concerns about planting in the vicinity of proposed gas infrastructure (proposed works 68, 75 and 79). Could Cadent Gas Limited explain in detail what wayleaves (in terms of width) it would require, in each case, to allow for maintenance of diverted pipelines, and whether this would be sought over the whole length of the pipeline?	N/A
1.7.10	The Applicant SSC	Valued landscape a) Is the HLA a 'Valued landscape' in the context of the NPPF? b) If yes, then in the landscape section it needs to be clearly brought out and demonstrated how the affect is brought into the overall conclusion and how this sits with the baseline assessment that the area is of low landscape value.	The Historic England website provides Historic Landscape Characterisations (HLC) guidance which "provides a method of identification and interpretation of the varying historic character within an area that looks beyond individual heritage assets as it brigades understanding of the whole landscape", . It notes "that HLC does not attach an expert's ascription of significance or value, recognising that these are not immutable." The Landscape and visual assessment reported in Chapter 7 of the ES [APP-046/6.1] follows GLVIA3 guidance in assessing value by means of the criteria provided in Box 5.1 in the guidelines. Our assessment based on those criteria is provided in Table 7.8: "Factors in determining landscape value of the study area". Under conservation interests (covering both ecological value and historical/conservation value) we reach a conclusion of low landscape value for the study area as a whole, reflecting a balanced view of the Scheme context within the study area. GLVIA3 guidance in Box 5.1 is based on a balance of a range of factors. The Historic Landscape Area (HLA) designation is a local designation and whilst it confers or implies historic value it does not as confirmed by Historic England, on its own, constitute a "valued landscape".
1.7.11	The Applicant	Visual effects of construction compounds What design measures have been employed to reduce effects of construction compounds?	A range of mitigation measures are set out in the OEMP, Table 3.3, MW-G25, MW-G26 and MW-LAN3 and paragraph 7.8.4 of Chapter 7 of the ES [APP-046/6.1]. The OEMP would be developed into a more detailed CCEMP to discharge Requirement 4 on the DCO [TR010054/APP/3.1]. Delivery of the OEMP [TR010054/APP/6.11] is a Requirement in the draft DCO [TR010054/APP/3.1]. Landscape specific measures to reduce effects of construction compounds include retention, strengthening and creation of perimeter hedgerows and tree belts of screening value, and input into fencing and lighting strategy based on our understanding of potential visibility of the compounds or elements within them.
1.7.12	The Applicant	Construction lighting a) What is 'sympathetic' lighting during construction? b) Are there to be limitations on heights, provision of cowls and baffles and levels intensity? c) What about tension with health and safety? d) How is this to be secured?	a) 'Sympathetic lighting' is lighting which is designed to minimise light spill and hence adverse effects on visual amenity. This would include limiting lighting to the minimum for task safety, use of motion sensor lights (if appropriate) and use of low light spill/cowls to minimise visibility. b) A proportionate and minimalistic approach to lighting to minimise light spill is set out Table 3.3, MW-G25, MW-G26 and MW-BIO3 of the OEMP [APP-218/6.1 and subsequent versions]. c) Yes, there is a potential conflict and lighting cannot be limited to such an extent that it would compromise a safe working environment. However, this is a common conflict on large infrastructure projects and lighting needs to be suitable for the safe completion of the task being completed, whilst minimising the impact on nearby residents and biodiversity.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			d) The CEMP will set out measures to be adopted based on those listed in the OEMP [TR010054/APP/6.11], as set out Table 3.3, MW-G25, MW-G26 and MW-BIO3. This is secured through Requirement 4 of the draft DCO [TR010054/APP/6.1].
1.7.13	The Applicant	Operational lighting The ES assumes that a lighting strategy has not been required for the Proposed Development to assess the effects of lighting on the landscape and visual and biodiversity (para 2.5.47 of Chapter 2 of the ES [APP-041]. The ES states that the approach to construction described in Section 2.5 of the ES is indicative and subject to change during detailed design but is representative of the likely approach to be adopted for the Proposed Development. Can the Applicant confirm that the worst case has been considered in the assessment of construction effects, and that alternative construction methods would not result in likely significant effects that are different from those which have already been assessed.	<p>The landscape and visual and biodiversity assessments reported in the ES assume the following approach would be taken to construction lighting, as set out in Section 7.8 'Design, mitigation and enhancement' paragraph 7.8.3 of the ES [APP-046/6.1] "<i>Lighting would be kept to a minimum luminosity necessary and use low energy consumption fittings. Where appropriate, safety lighting would be activated by motion sensors to prevent unnecessary usage. The main site compound would always be occupied for the security of the plant, equipment, and materials within it. As such, the main site compound would be lit as required during hours of darkness. Lighting would be directional, and positioned sympathetically, to minimise light spill and disturbance for highly sensitive receptors.</i>" This has been set out more specifically in relation to bat mitigation in paragraph 8.8.5 of the ES [APP-047/6.1 and subsequent revisions].</p> <p>As set out in response to WQ 1.3.16, further detail on construction lighting is outlined in Table 3.3 of OEMP [APP-218/6.11], MW-G26 and MW-BIO3, which set out the requirements for lighting during the construction of the Scheme. These measures are secured through Requirement 4 of the draft DCO [TR010054/APP/6.1].</p> <p>The Applicant considers that the landscape and visual and biodiversity impact of lighting during construction of the Scheme have been assessed as "worst case" and factors in potential effects from lighting.</p>
1.7.14	The Applicant	Effect on residents off A460 How can there be significant long-term effects on receptors of users and residents located on A460 Cannock Road, Featherstone but not significant short-term effects? Not identified in list on Page 19 of the Non-Technical Summary of the ES [APP-211].	Paragraph 8.3.1 bullet 2 of the Non-Technical Summary [APP-211/6.4] does identify significant permanent short term effects on users and residents of the A460 Cannock Road, Featherstone.
1.7.15	The Applicant	Clarification Table 7.1 in the ES 5.157 refers to Figures 2.1 to 2.1 in the third column can the correct range be inserted please.	This should refer to Figure 2.1 to 2.7 of the ES [TR010054/APP/6.2].
1.7.16	The Applicant	Landscape value a) Table 7.7 Factors in determining landscape value of Chapter 7 of the ES [APP-046]. Can you provide further justification and explanation as to why scenic quality is 'low' when there are significant areas of remnant parkland (an HLA) Woodland TPO and individual TPO's across the site albeit that there are also significant detractors? b) Why is this not medium?	<p>a) Paragraphs 7.6.27 and 7.6.28 coupled with the analysis provided against the GLVIA3 Box 5.1 criteria presented in Table 7.7, provide the reasoning behind the conclusion. Although these elements are present within and contribute to the study area, the balance of factors which influence the value lies with the highway context and urban fringe nature of the locality. Although the study area is assessed as being of low value, primarily due to the highway dominance and urban fringe nature, this is combined in a conservative way with susceptibility to result in moderate sensitivity. In the balancing exercise between susceptibility and value as components of sensitivity the weight attached to the low value is, in effect, discounted in favour of an upwards sensitivity rather than downwards.</p> <p>b) The resultant sensitivity if medium value is adopted would remain moderate and not be elevated into the major category. As explained above we have therefore taken a cautious approach in combining value and susceptibility to determine sensitivity.</p>
1.7.17	The Applicant SSC SCC	Landscape value In Table 7.7 Factors in determining landscape value of Chapter 7 of the ES [APP-046] 'Conservation Interests' again identified as 'low' however there are grade I listed buildings Grade II* listed buildings and numerous Grade II listed buildings as well as a local designated HLA why does this not elevate the value above 'low'?	<p>Whilst the overall landscape value is considered to be low, with regards to conservation interests, the presence of the HLA and other cultural heritage designations, coupled with the ancient woodland ecological designations could be considered to be medium rather than low. However, as this is just one element of a number of criteria, we consider that the overall landscape value remains low.</p> <p>Hilton Park HLA comprises remnant parkland, with some areas of poor condition and has a limited contribution to the character of the surrounding landscape owing to its enclosed nature. The historic parkland has been identified as being of medium significance within the cultural heritage assessment [AS-046/6.1], taking into account the various designated assets within it. However, the HLA takes into</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			consideration other elements such as its condition and its contribution to the character of the surrounding landscape. Taking these factors into consideration, Hilton Park HLA is assessed as low value.
1.7.18	The Applicant	Assessment of Effects – prior to mitigation The likely significance of any effects on individual landscape and visual receptors prior to mitigation is not identified. Can the Applicant provide this assessment in order to understand the efficacy of proposed mitigation?	<p>The assessment is based on the standard approach required by DMRB LA 104 for assessing the significance of effects after an assessment of the effectiveness of the design and mitigation measures (i.e. the residual effect). As noted within LA 104, <i>'assigning significance to an effect after an assessment of the effectiveness of design allows for positive contribution of all mitigation that is effective, deliverable and committed'</i>.</p> <p>The assessment is supported by mitigation documented in the OEMP [APP-218/6.11] which will be delivered through the Requirement 4 of the draft DCO [TR010054/APP/3.1]. Requirement 5 also secures the development and implementation of a landscaping scheme based on the Environmental Masterplan (ES Figures 2.1-2.7 [AS-086 to 92/6.2]).</p> <p>Mitigation measures for built heritage and the parkland in this instance are largely embedded in the design, through the positioning of the alignment which allows for retention of the Shrubbery boundary (also known as Lower Pool SBI, the form of the woodland is a feature shown on historic maps forming part of the setting of the listed building). It is not possible to assess the Scheme without these in place. For further information on the alternative alignments considered in this location refer to ES Appendix 3.2 [APP-159/6.3].</p>
1.7.19	The Applicant	Clarification Within ES Chapter 7 Tables 7.9 – 7.15, 'moderate' has been used a number of times to describe the sensitivity of a receptor, which is not consistent with the methodology described in Section 7.3 and ES Chapter 4. Can the Applicant confirm whether moderate in this context has the same meaning as 'medium'?	<p>We have adopted the terminology in DMRB LA 104 "Environmental assessment and monitoring" guidance in relation to significance (there is no significance matrix in LA107) but LA107 "Landscape and visual effects" terminology for the other elements. There is a conflict in terms between LA104 Table 3.8.1 Significance Matrix and LA107 Table 3.43 Magnitude (change) of visual effect and typical descriptions magnitude categories. The former uses medium for magnitude whilst the latter uses moderate. As a result, both are used and in effect mean the same in this context. The Landscape and Visual Chapter is based on the DMRB LA 107 terminology rather than LA 104 terminology which is reproduced in Chapter 4: Environmental Assessment Methodology [APP-043/6.1] in order to comply more directly with the guidance.</p>
1.7.20	The Applicant	Clarification Table 7.10 of Chapter 7 of the ES [APP-046] dealing with effects on the settled Plateau Farmlands LCT first box final line on page 7-39 refers to 'Settled Plateau Farmlands LCA' why is there a change in term from the 'Settled Plateau Farmlands LCT'?	<p>As set out in paragraph 7.6.11 of the ES [APP-046/6.1] these are two separate LCTs within the study area. The LCT is mistakenly referred to as an LCA, in one usage, within that table and again in the subsequent table relating to the second LCT. The name of the LCT is consistent throughout in each case.</p>
1.7.21	The Applicant	Clarification In Table 7.10 of Chapter 7 of the ES [APP-046] dealing with sensitivity of receptor to specific change for construction can the Applicant explain the phrase 'perceived low landscape value' and insert the appropriate reference as to where this conclusion has been drawn? The medium susceptibility is explained in the previous box.	<p>Paragraphs 7.6.27 and 7.6.28 of the ES [APP-046/6.1] coupled with the analysis provided against the GLVIA3 Box 5.1 criteria presented in Table 7.7 of the ES [APP-046/6.1], provide the reasoning behind the conclusion. Although the study area is assessed as being of low value, primarily due to the highway dominance and urban fringe nature, this is combined in a conservative way with susceptibility to result in moderate sensitivity. In the balancing exercise between susceptibility and value as components of sensitivity the weight attached to the low value is, in effect, discounted in favour of an upwards sensitivity rather than downwards.</p>
1.7.22	The Applicant	Clarification Table 7.11 of Chapter 7 of the ES [APP-046] first box last sentence refers to 'Settled Heathlands LCA' why is there a change in term from the 'Settled Heathlands LCT'?	<p>This is a typographical error – LCT is correct.</p>
1.7.23	The Applicant	Clarification In Table 7.11 of Chapter 7 of the ES [APP-046] at sensitivity of receptor to specific Change for construction you state the 'LCT has a low landscape value' please insert the appropriate reference as to where this conclusion	<p>Paragraphs 7.6.27 and 7.6.28 of the ES [APP-046/6.1] coupled with the analysis provided against the GLVIA3 Box 5.1 criteria presented in Table 7.7 of the ES [APP-046/6.1], provide the reasoning behind the conclusion. As explained in response to WQ 1.7.21, the low value is subsequently not used to downgrade the sensitivity, which is assessed as moderate.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		has been drawn? The medium susceptibility is explained in the previous box.	
1.7.24	The Applicant	Clarification The study area identified in ES Chapter 15 Table 15.1 for the landscape and visual effects of the Proposed Development is 1km from its centreline and up to 2km from its centreline for the cumulative Zone of Influence (ZOI). However, in ES Chapter 7 the study area is identified as 1km from the application site boundary. Can the Applicant clarify the basis of the cumulative ZOI and why they consider this to be representative of the extent of likely impacts and the potential likely significant effects?	<p>The cumulative ZOI is used to identify other development that could have a significant cumulative effect when the impact of the other development is combined with the impacts of the Scheme on the same receptor. The ZOI was based on an assumption that sensitive receptors at the furthest extent of the Scheme study areas could also be at the furthest extent of a theoretical study area for other development of a similar scale. The ZOI for landscape and visual impacts utilised in Chapter 15: Assessment of Cumulative Effects of the ES [APP-054/6.1] uses the study area as outlined in Chapter 7: Landscape and Visual [APP-046/6.1] (1km from the Scheme boundary, subject to localised variations based on the Zone of Theoretical Visibility (ZTV) and on-site verification) and a further 1km buffer to take into consideration the potential landscape and visual impacts of potential 'other development'. The landscape and visual study area and 1 km buffer are combined to form the wider search area in which to identify relevant other development that could have a significant cumulative impact with the Scheme, the ZOI.</p> <p>The text in Table 15.1 of the ES for Landscape and Visual is incorrect and should refer to distances from the Scheme boundary rather than the centreline of the Scheme. The ZOI for Landscape and Visual impacts used in the assessment reported in Chapter 15: Assessment of Cumulative Effects [APP-054/6.1] as shown on Figure 15.1 of the ES [APP-153/6.2] does not use the distance from the centreline of the Scheme and is in line with the landscape and visual assessment reported in Chapter 7 of the ES [APP-046/6.1].</p>
1.7.25	The Applicant	Photographs Viewpoints 16A and 16B as set out in ES Figure 7.1A [APP-082] are said to be from the top floor and roof of Hilton Hall (see Table 7.8 of Chapter 7 of the ES [APP-046]). However, the photographs in Figures 7.20A and B [APP-103], 7.21A and B [APP-104] all appear to be closer to the ground. Could this please be clarified.	<p>Agreed – reference to the upper floors is incorrect in this case. The upper floors were visited and photographs taken but they are not the images shown in VP16A or 16B. For the avoidance of doubt the assessment is based on the ground level images. The ground floor in the immediate vicinity of the hall is used by the majority of people working in or visiting the hall and is therefore the most representative view for the majority of hall users.</p>
1.7.26	The Applicant	Photomontage a) Figure 7.19D [APP-102] is given as a proposed photomontage. Could the precise location of the photograph be shown, since it appears to be further to the northwest of the photography position of Figures 7.19A to C [APP-102]. b) Further, the base vegetation is shown in winter foliage. The proposed vegetation is shown as solid, either being evergreen or incorrectly rendered. Could the Applicant please clarify whether the proposed planting shown is to be evergreen. If not, could the photomontage be redone showing winter vegetation rendering.	<p>a) The position is correct given the limitations of the scale of the mapping. However, the direction of view differs to the previous images (A to C).</p> <p>b) In this instance the woodland planting has been incorrectly rendered, the intention was not to use an evergreen screen to the extent shown. Figure 7.19D (version P03, to replace version P02 7.19D in [APP-102/6.2]) has been updated and the proposed tree planting is now rendered to illustrate foliage in winter form. The revised figure was submitted at Deadline 1 (3 November 2020).</p>
1.7.27	The Applicant	Photomontage The base photograph for the photomontage in Figure 7.22C [APP-105] appears to be taken in winter months. However, the proposed vegetation is shown as solid, either being evergreen or incorrectly rendered. Could the Applicant please clarify whether the proposed planting shown is to be evergreen. If not, could the photomontage be redone showing winter vegetation rendering.	<p>In this instance the woodland planting has been incorrectly rendered, the intention was not to use an evergreen screen to the extent shown. Figure 7.22C (version P03, to replace 7.22C in [APP-105/6.2]) has been updated and the proposed tree planting is now rendered to illustrate foliage in winter form. The revised figure was submitted at Deadline 1 (3 November 2020).</p>
1.7.28	The Applicant	Future baseline Paragraph 7.6.43 of Chapter 7 of the ES [APP-046] aims to predict the baseline conditions for 2039. A DCO has been granted for the West Midlands Interchange to the west and south of Junction 12 of the M6 and can reasonably be assumed to be constructed by 2039.	<p>The West Midlands Interchange lies approximately 2 km from the boundary of the study area. We acknowledge the ERF is visible and influences the character and to a lesser extent visual amenity. However, analysis of topography between the Scheme and the WMI indicates that the Featherstone/Shareshill and Saredon Hill ridgeline will preclude intervisibility between the two. Ground levels at Calf Heath and in the vicinity of Junction 12 of the M6 are in the region of 106 to 108m AOD. The intervening landform occupies land at 154m AOD at Saredon Hill, 136m AOD at Shareshill and</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		Given that the energy to waste plant at Four Ashes can be seen in certain views (and can be seen in representative view VP17 in Figures 7.22A to C [APP-105]) could the effects of the West Midlands Interchange on the future baseline please be explicitly considered.	127m AOD at Featherstone (taken from OS Landranger Sheet 127). The Scheme occupies land typically in the 135m AOD range. Therefore, the extent to which the WMI is likely to be a material factor in changing the future baseline or the outcomes of the assessment is very limited.
1.7.29	The Applicant	Environmental Masterplan Paragraph 7.8.7 of Chapter 7 of the ES [APP-046] indicates that individual trees (plot type LE5.1) will be planted in various locations. These include within reinstated hedgerows at the northern construction compound (west of Junction 11 of the M6) and within proposed hedgerows running parallel to farm access tracks between Hilton Park and Junction 1 of the M54. However, these do not appear to be shown on the Environmental Masterplans [APP-057 to APP-063], but other, similar, examples, appear to be shown. Could this please be clarified?	The intention is to locate individual trees within reinstated hedgerows throughout and the Environmental Masterplan has been reviewed and revised accordingly as part of the alteration to mitigation measures submitted as a design change on 9 October 2020 [see AS-086 to 92/6.2].
1.7.30	The Applicant	Register of Environmental Actions and Commitments Within the Register of Environmental Actions and Commitments (REAC) contained in the Outline Environmental Management Plan (OEMP) it is stated for a number of the landscape and visual measures that they would be implemented through dDCO Requirements 45 or 47, however there are no such requirements in the dDCO, which currently contains only 13 requirements. It is also unclear in respect of item MW-LAN3 in REAC Table 3.3 to which dDCO provision 'DCO Requirement X' is intended to refer. Can the Applicant correctly identify the relevant dDCO requirements that secure mitigation relied upon in the ES.	These were errors in the original submission. Version 3 of the OEMP submitted to the Inspectorate on 9 October 2020 [AS-112/6.11] shows all the correct references. Requirement 45 now refers to Requirement 3 of the draft DCO. Requirement 47 now refers to Requirement 5 of the draft DCO. Reference to DCO 'Requirement X' in the 'Source Ref' column for MW-LAN4 is an error. This now states 'ES Chapter 7, Section 7.8'.
1.7.31	The Applicant	Landscape and Environmental Management Plan The LEMP is described as a 'Landscape and Environmental Management Plan' in ES Chapter 7 [APP-046] whereas it is described as a 'Landscape and Ecological Management Plan' in ES Chapter 8: Biodiversity [APP-047] and a 'Landscape and Ecology Management Plan' in dDCO Requirement 4(2)(d). Can the Applicant clarify the correct title of this document?	The correct title of the document is the 'Landscape and Ecology Management Plan' as set out in the OEMP [APP-218/6.11] and the draft DCO.
1.7.32	The Applicant	Landscape Mitigation Measures dDCO Requirement 5 (Landscaping) requires the production of a landscaping scheme that reflects the mitigation measures set out within the REAC; it does not make any reference to the LEMP. Can the Applicant explain the relationship between the landscaping scheme secured in the DCO and the LEMP and how mitigation measures will be secured through these?	The Environmental Masterplans show all intended environmental mitigation whether ecological, landscape or other discipline driven. The LEMP will set out the objectives and broad detail of the mitigation and then prescribes the long-term management actions required to deliver the successful establishment of these measures. Requirement 4 of the draft DCO will secure the production and implementation of the LEMP in line with the commitments set out in the OEMP [APP-218/6.11], MW, G7, MW-G11 and MW-LAN1. The DCO Requirements will require the scheme to be implemented and managed in accordance with the approved Environmental Masterplans and the LEMP.
1.7.33	The Applicant	Arboricultural Mitigation It is explained in ES Chapter 7 [APP-046] that the implementation and maintenance of the landscape design, including any works to existing or new trees, would be undertaken in accordance with an Arboricultural Mitigation Strategy, which would be produced during the detailed design stage of the Proposed Development, i.e. post-consent. dDCO Requirement 4(2)(d) provides that the CEMP must include an Arboricultural Mitigation Strategy, however there is no provision included in the dDCO for the landscape design to accord with the Arboricultural Mitigation Strategy. Can the Applicant explain how this would be secured?	The purpose of the Arboricultural Mitigation Strategy is primarily to protect trees during the construction period. The landscape design takes into consideration the need to integrate with existing vegetation but more importantly sets out the new landscape to integrate/screen and enhance the highway corridor. The two do accord but are not inter-dependent. An Outline Arboricultural Mitigation Strategy has been submitted with this document for Deadline 1 [TR010054/APP/8.12].
1.7.34	The Applicant	Arboricultural Mitigation It is noted that the application documents do not include a draft of the	An Outline Arboricultural Mitigation Strategy has been submitted with this document for Deadline 1 [TR010054/APP/8.12].

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		Arboricultural Mitigation Strategy and limited information is provided in the ES or the REAC on what it would contain. Can the Applicant please submit a draft version of the Arboricultural Mitigation Strategy to the Examination?	
1.7.35	The Applicant	<p>Additional Mitigation</p> <p>The assessment of effects concluded that after the implementation of the essential mitigation the Proposed Development would give rise to a number of significant residual landscape and visual effects during construction and operation.</p> <p>It is not stated in the ES if consideration was given to whether any additional mitigation could be implemented to further reduce or avoid the identified landscape and visual residual effects. Can the Applicant identify any additional mitigation measures that could be implemented or provide justification for not doing so?</p>	<p>The LVIA assessment is based on consideration of embedded mitigation which has been determined iteratively by the integrated project team to incorporate measures to reduce effects where possible. Any major infrastructure project is likely to have significant landscape and visual effects which cannot be mitigated. The landscape mitigation strategy has been developed in parallel with the LVIA assessment and we do not anticipate the need for additional mitigation measures on landscape and visual grounds. It is not considered that additional mitigation measures would contribute to reducing residual significant visual effects further. However, there may be scope for dialogue with people who identify particular concerns and we remain open for discussions on potential solutions.</p>
1.8	Noise and Vibration		
1.8.1	The Applicant	<p>Updates to DMRB</p> <p>a) In paragraph 11.3.4 of Chapter 11 of the ES [APP-050] the Applicant indicates that a sensitivity test will be undertaken to determine whether the methodology outlined in DMRB LA 111, which has superseded the reference documentation referred to in paragraph 11.3.3, would change the result of the assessment of Noise and Vibration. Could the Applicant please confirm whether this sensitivity test has been undertaken?</p> <p>b) If so, could the Applicant provide the document for consideration highlighting any changes by specific reference? That is setting out the assessment criteria in the earlier documentation, that under current consideration, and thus any change.</p> <p>c) If it yet to be completed indicate when it will be available. This should be provided to allow for full consideration by all parties.</p>	<p>a) A review of the changes in the prediction and assessment methodology in the updated version of DMRB, LA 111, has been completed to determine the likely impact on the results of the noise and vibration assessment reported in Chapter 11: Noise and Vibration of the ES [APP-050/6.1] (Version 1). This review identified that while the overall picture in terms of traffic noise changes would be unlikely to be considerably different, the detail of the impacts and residual effects reported in Chapter 11: Noise and Vibration of the ES would potentially alter when utilising the latest methodology. The main reason for reaching this conclusion was the change from the use of banded traffic speeds to pivoted traffic speeds. The previous version of DMRB assigned each link one of a limited number of speeds based on the band within which the pivoted speed fell. The new version of DMRB uses the pivoted speeds directly, which has the potential to slightly change the predicted traffic noise levels. In addition, further clarity on identifying significant operational traffic noise effects is provided in the revised DMRB.</p> <p>The assessment was therefore updated using the new standard and reported in Chapter 11: Noise and Vibration (Version 2) of the ES [AS-046/6.1], DMRB LA 111 Noise and Vibration. However, given the advanced stage of the Scheme a worst-case approach to the reporting of the impacts of the Scheme, which is consistent with all the previous stages of assessment, has been adopted. Therefore, the requirement of LA 111 to report the impact at each receptor based on the façade with the greatest magnitude of noise change, rather than at the worst affected façade as per the previous version of DMRB, was not adopted. Chapter 11: Noise and Vibration (Version 3) also utilises the methodology set out in LA 111.</p> <p>b) In order to test whether the results of the noise and vibration assessment (as reported in the ES) would alter when assessed using the new DMRB standard (LA 111), a sensitivity test, followed by further assessment, has been undertaken. Version 2 of Chapter 11: Noise and Vibration [AS-046/6.1] was submitted to the Planning Inspectorate on 30 July 2020 alongside a summary report 'DMRB updates and the impact on the DCO application' [AS-059/8.2]. This report is intended to summarise the results of this work and report where changes to the noise assessment would result in alterations to other aspects of the ES and DCO application.</p> <p>c) N/A</p> <p>Since the above updates, a range of Scheme changes have been proposed resulting in the submission of Version 3 of Chapter 11: Noise and Vibration on 9 October 2020 [AS-085/6.1] alongside a summary report 'Environmental Statement Addendum Proposed Scheme Changes October 2020' [AS-118/8.6]. Version 3 of Chapter 11 retains the same methodology as Version 2 i.e. using the new DMRB standard LA 111.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.8.2	The Applicant	Clarification a) Figures 11.4 [APP-146] and 11.5 [APP-147] set out to show for illustrative purposes the short-term (opening year) and long-term (design year) noise difference contour plots. The discussion in paragraph 11.9.24 and paragraphs 11.9.25 and 11.9.26 of Chapter 11 of the ES [APP-050] set out the effects on those properties where significant adverse effects are identified. It is not clear whether the contour plots show noise levels with or without the design mitigation such as the 2.5m noise barrier to the south of Brookfield Farm. Could the Applicant please confirm whether these Figures include or not include such mitigation? b) If they do not include such mitigation could the Applicant please provide additional Figures showing this?	<p>The contour plots (Figures 11.4 [APP-146/6.2] and 11.5 [APP-147/6.2]) show the change in traffic noise levels with the mitigation included in the design in place. The locations of the barriers are also indicated on these figures.</p> <p>Note Version 2 of Noise and Vibration chapter and associated figures was submitted to the Planning Inspectorate on 30 July 2020 (Figure 11.4 [AS-057/6.2] and 11.5 [AS-058/6.2]). Version 2 updated the assessment to the new DMRB guidance LA111.</p> <p>Version 3 of the Noise and Vibration chapter and associated figures was submitted to the Planning Inspectorate on 9 October 2020. Version 3 updated the assessment to incorporate a range of proposed scheme design changes (Figure 11.4 [AS-098/6.2] and 11.5 [AS-099/6.2]).</p>
1.8.3	The Applicant	Effects on Offices and Commercial premises Can the Applicant provide justification for the statement in Table 11.8 of ES Chapter 11 [APP-050] that effects on offices and commercial premises were scoped out of the noise and vibration assessment on the basis that they are not potentially sensitive receptors.	<p>Potentially sensitive receptors were identified following the guidance in DMRB, which gives a comprehensive list of examples of receptors which are potentially sensitive to noise. Offices and commercial premises are not listed in either HD213/11 (the version of DMRB used for Version 1 of the noise assessment [APP-050/6.1]) or LA111 (the recently updated version of DMRB used for Version 2 [AS-046/6.1/6.3] and 3 [AS-085/6.1] of the noise and vibration assessment). Moreover, in identifying sensitive receptors within the study area, no offices or commercial premises were identified as having any characteristics that would make them particularly sensitive to noise and vibration.</p>
1.8.4	The Applicant SSC	Wind direction Appendix 11.2 to the ES [APP-195], along with Figure A11.2.2, set out the wind direction during the monitoring period. During this period there was very little wind from the south-west quadrant, which is, of course, the prevailing wind direction in the UK. Does the lack of data of wind from this direction have any implications for the consideration of noise and vibration effects?	<p>As described in paragraphs 11.3.5 and 11.3.6 of the ES [APP-050/6.1 and all subsequent revisions] the purpose of the noise survey was to assist with developing an understanding of the general noise climate along the route of the Scheme. For example, to identify if any other local noise sources (other than road traffic) are present and contribute significantly to the local noise climate. The results of the baseline noise survey have been used to support a validation exercise for the traffic noise prediction modelling. At all the long-term monitoring locations the predicted LA_{10,18h} noise levels match very well with the upper range of the measured levels, within 0.4 dB. The noise prediction methodology as set out in the Calculation of Road Traffic Noise (CRTN) is designed to be conservative, in particular with regard to wind, in that it assumes noise propagation conditions consistent with "moderately adverse wind velocities and directions". Therefore, it is as would be expected that the upper range of measured levels match well with the predicted levels. The assessment of operational traffic noise effects is based on predicted levels, measured baseline levels are not used directly in the assessment. As the measurements support the validity of the prediction model, the limited periods of wind from the south-west quadrant do not have any implications for the consideration of these effects.</p> <p>In line with the current DMRB LA111 vibration effects are only considered for construction and not for the Scheme operation, and wind is not a factor in the propagation of groundborne vibration from construction works, therefore the measured wind direction has no implications on the consideration of vibration effects.</p>
1.8.5	The Applicant	Assessment criteria (daytime) a) The Applicant has set out the SOAEL threshold at 68dB LA _{10, 18 hr} based on the daytime trigger level in the Noise Insulation Regulations (see paragraph 11.3.41 of Chapter 11 of the ES [APP-050]). However, the World Health Organisation Environmental Noise Guidance (ENG) (paragraph 11.3.42) strongly recommends that noise from road traffic should be reduced below 53dB L _{den} . Could the Applicant please explain why it considers the WHO ENG guidance should not be used for the setting of the SOAEL figure?	<p>SOAEL (significant observed adverse effect level) and LOAEL (lowest observed adverse effect level) are defined in paragraph 30-004-20190722 of the Planning Practice Guidance (Noise) (PPG-Noise), as follows:</p> <p><i>"Significant observed adverse effect level: This is the level of noise exposure above which significant adverse effects on health and quality of life occur."</i></p> <p><i>"Lowest observed adverse effect level: this is the level of noise exposure above which adverse effects on health and quality of life can be detected."</i></p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>The 2018 WHO guidelines state they are “<i>not meant to identify effect thresholds</i>”. Instead, they are based on the “<i>smallest relevant risk increase</i>” for various effects. The guidelines also state that “<i>the aim of the current guidelines is to define an exposure level at which effects certainly begin</i>”. The guideline levels therefore lie slightly above the LOAEL and should therefore not be used for the setting of the SOAEL figure.</p> <p>HD213/11, the version of DMRB current at the time of the submission of the ES, does not outline the LOAEL and SOAEL to be adopted in England for the assessment of operational road traffic noise. However, the current version of DMRB LA111 does explicitly define the operational traffic noise SOAEL for the assessment of new road schemes as 68 dB LA_{10,18h} (façade). The adoption of 68 dB LA_{10,18h} (façade) is therefore consistent with the current UK assessment methodology. It is also consistent with the approach adopted for many other road schemes. The principles of determining the SOAEL, as adopted in DMRB LA111, is also consistent with that used for other transport sources including that adopted for rail noise by HS2.</p>
		b) What would be the implications if the WHO ENG figure was to be used?	<p>The standard UK traffic noise prediction method, Calculation of Road Traffic Noise (CRTN), predicts traffic noise levels in terms of LA_{10,18hour}, and the DMRB assessment methodology requires the LA_{10,18hour} (façade) is used. The road traffic L_{den} in the WHO ENG is a free-field level. In addition, it is not possible to directly convert an L_{den} to an LA_{10,18hour} as it depends on the variation in noise levels in the day, evening and night periods which make up the L_{den}, however an LA_{10,18hour} (façade) of 56 dB is approximately equal to an L_{den} (free-field) of 53 dB.</p> <p>Based on the results reported in Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter adopting a daytime SOAEL of LA_{10,18hour} (façade) of 56 dB, around three quarters of residential receptors in the study area would be above the SOAEL in both DM and DS scenarios if the WHO ENG figure was to be used.</p> <p>Based on the results reported in Version 3 [AS-085/6.1] of the Noise and Vibration chapter:</p> <ul style="list-style-type: none"> - 32 properties would go from being above the SOAEL in one or both DM scenarios to below the SOAEL in both DS scenarios. These are located in Featherstone and are predominantly set back from the existing A460 and New Road which undergo a reduction in traffic due to the Scheme. - 26 properties would go from being below the SOAEL in both DM scenarios to above the SOAEL in one or both DS scenarios, due to a negligible increase in traffic noise levels in the opening year. These properties are in Featherstone and Shareshill, remote from both existing main roads and the Scheme, therefore noise mitigation as part of the Scheme design to reduce traffic noise levels at these properties would not be practical or sustainable.
		c) It is stated that the 68dB LA _{10, 18 hr} figure corresponds to the 35dB LA _{10, 16 hr} internally courtesy of the mitigation of a closed single glazed window. However, with Climate Change it may not be desirable or possible to rely on windows being closed. What would be the effect on internal noise levels if the analysis was undertaken on the basis of the 68dB LA _{10, 18 hr} figure but with said windows being open?	<p>The UK standard guidance for assessing the traffic noise impact of road scheme, DMRB, is based on external noise levels.</p> <p>With the windows partially open, noise levels would be approximately 13-18 dB higher inside, than with a closed single glazed window. However, this would be the case both with and without the Scheme. Therefore, the change in noise level due to the Scheme would be the same, as would the number of properties exceeding the SOAEL. The analysis of the results presented in the noise assessment would be unchanged.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			The 'Noise Exposure Hierarchy Table' referred to in Paragraph 30-005-20190722 of the Planning Practice Guidance (Noise) (PPG-Noise), describes "having to keep windows closed <i>most of the time</i> because of the noise" as an outcome of noise levels at or above the SOAEL, whereas for noise levels between the LOAEL and SOAEL the outcome is "having to close windows for <i>some of the time</i> because of the noise". Therefore, adopting a SOAEL which is based on windows closed is in line with current UK planning guidance.
1.8.6	The Applicant	Assessment criteria (night time) For night-time noise the SOAEL is set at 55 dB L _{night, outside} (paragraph 11.3.43 of Chapter 11 of the ES [APP-050]) based again on the attenuation of a closed single glazed window. As with daytime SOAEL, what would be the effect if the analysis was undertaken on the basis of the said windows being open?	<p>The UK standard guidance for assessing the traffic noise impact of road scheme, DMRB, is based on external noise levels.</p> <p>With the windows partially open, noise levels would be approximately 13-18 dB higher inside, than with a closed single glazed window. However, this would be the case both with and without the Scheme. Therefore, the change in noise level due to the Scheme would be the same, as would the number of properties exceeding the SOAEL. The analysis of the results presented in the noise assessment would be unchanged.</p> <p>The 'Noise Exposure Hierarchy Table' referred to in Paragraph 30-005-20190722 of the Planning Practice Guidance (Noise) (PPG-Noise), describes "having to keep windows closed <i>most of the time</i> because of the noise" as an outcome of noise levels at or above the SOAEL, whereas for noise levels between the LOAEL and SOAEL the outcome is "having to close windows for <i>some of the time</i> because of the noise". Therefore, adopting a SOAEL which is based on windows closed is in line with current UK planning guidance.</p>
1.8.7	The Applicant	Assessment Paragraph of Chapter 11 of the ES [APP-050] states in general, construction noise or vibration levels at, or above, the SOAEL would be considered significant, and levels below the SOAEL as not significant, although it then goes on to state "this initial decision on the significance of an effect is then combined with professional judgement". It is not clear whether any "decision" on significance is altered by professional judgement, or whether the decision that the effect is 'significant' remains the same, but the degree of significance may then alter. Could the Applicant please clarify this.	<p>Paragraph 11.3.27 of Version 1 of Chapter 11 Noise and Vibration [APP-050/6.1] identifies that the main factor in identifying significant construction noise and vibration effects is the magnitude of impact relative to the SOAEL. A range of other 'professional judgment' factors are then considered, including the duration of the impact. However, as detailed in paragraph 11.9.5 given that the exact details of construction activities and the duration of the various works are not fully known, a conservative approach has been adopted and all the identified levels at or above the SOAEL are assumed to be at risk of exceeding the duration criteria.</p> <p>To confirm, all the potentially significant adverse effects identified based on the magnitude of impact have been reported as significant. In no cases has professional judgement been used to conclude that an exceedance of the SOAEL is not significant with regard to construction noise and vibration.</p> <p>All effects are identified as either significant or not significant, no degree of significance is applied.</p> <p>As set out in Version 2 [AS-046/6.1] and Version 3 [AS-085/6.1] of Chapter 11 Noise and Vibration, DMRB LA111 clarifies that the factors to be used in identifying significant construction effects are magnitude of impact and duration of impact. Version 2 and Version 3 adopt the same worst-case approach as Version 1 by reporting all the potentially significant adverse effects identified based on the magnitude of impact as significant.</p>
1.8.8	The Applicant	Clarification Table 11.2 in Chapter 11 of the ES [APP-050] indicates threshold levels when rounded to nearest 5dB. Given that a 3dB change is perceived as being noticeable, particularly for night levels, this could be significant. For example, Category A gives a 45dB. This is to allow for the 15dB reduction by construction (see BS8233:2014 – Guidance on sound	The threshold values (LOAEL and SOAEL) in Table 11.2 are based on the ABC Method from BS 5228:2009+A1:2014. This method for establishing the LOAEL and SOAEL is specified in the current version of DMRB LA111, as set out in Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>insulation and noise reduction for buildings) to attenuate the noise level to 30dB to avoid night-time disturbance given WHO guidance. However, if the actual figure is higher this would mean that the internal received results would be above 30dB.</p> <p>Could the Applicant please look again at this utilising a 3dB rounding to see whether this changes any assessments.</p>	<p>BS 5228:2009+A1:2014 does not reference BS 8233:2014 or any WHO guidance with regard to the basis of the criteria in the ABC method.</p> <p>In BS 5228 and DMRB LA111 the 5 dB rounding is only applied to the baseline ambient noise level to determine the SOAEL. Construction noise levels are not rounded to the nearest 5 dB.</p> <p>For example, if the nighttime ambient noise level is $L_{Aeq,8hour}$ 42 dB, this would round to 40 dB (nearest 5 dB). Following Table 11.2, as this is less than the Category A value of 45 dB, the resulting SOAEL would be 45 dB. Nighttime construction noise levels at or above this level of 45 dB would be identified as a potentially significant adverse effect.</p>
1.8.9	The Applicant	<p>Construction effects</p> <p>Paragraph 11.3.27 of Chapter 11 of the ES, first bullet, [APP-050] the duration of the impact is assessed. This gives criteria for when consecutive impacts may be considered significant. Does this analysis take any account of how long in any period the noise or vibration is taking place? In other words, if the noise or vibration effect was taking place continuously for 10 hours for 10 days would this have more of an effect than for 5 minutes for each of 10 days? If so, could it be demonstrated how this has been considered.</p>	<p>The construction noise level predictions do take account of how long in the day, evening/weekend or nighttime period the noise is taking place, by use of the “on-time” of each item of plant provided by the contractor.</p> <p>Construction noise levels by their nature vary over time (T). The thresholds (LOAEL and SOAEL) for the construction noise assessment are therefore set in terms of $L_{Aeq,T}$, which is an average level over the assessment period. e.g. $L_{Aeq,8hour}$ for night.</p> <p>The contractor has provided an indicative programme and schedule of plant, and this indicates the “on time” (what portion of each period (day, evening/weekend, or night) each item of plant will be operating). This information is used to predict the average construction noise level ($L_{Aeq,T}$) for each assessment period (day, evening/weekend, night). An activity which takes place continuously over the entire daytime period would therefore result in a higher overall average daytime construction noise level ($L_{Aeq,T}$) than one which takes place for only 5 minutes each day.</p> <p>Once the overall average construction noise level ($L_{Aeq,T}$) for each period has been determined, the duration criterion, in terms of the number of days, evenings/weekends or nights, the activity is ongoing, as set out in the first bullet of paragraph 11.3.32 of Version 3 (previously paragraph 11.3.32 of Version 1) of Chapter 11 Noise and Vibration [AS-085] can then be considered. If the noise level criteria (SOAEL) and the duration criteria are both exceeded, a significant adverse effect would be identified. However as the exact details of timings and durations of the various works are not known at this stage, a conservative approach has been taken and all cases of the construction noise level exceeding the SOAEL (i.e. all levels where the magnitude of impact is moderate or major) are assumed to be at risk of exceeding the duration criteria and a significant effect identified.</p> <p>For the construction vibration assessment vibration levels are based on peak levels rather than an ‘average’ over a day, evening/weekend or night. As with the construction noise assessment, as exact details of timings and durations of the various works are not known at this stage, a conservative approach has been taken, and all cases of the construction vibration level exceeding the SOAEL are assumed to be at risk of exceeding the duration criteria and a significant effect identified.</p>
1.8.10	The Applicant	<p>Construction effects</p> <p>The assessment of construction vibration effects provided in Section 11.9 of Chapter 11 [APP-050] makes reference only to residential properties. Can the Applicant confirm that no omission has been made and that significant effects were not predicted for any other receptor types?</p>	<p>No omission has been made, non-residential sensitive receptors were considered for the construction vibration assessment. Although Section 11.9 of Version 1 of the Noise and Vibration chapter [APP-050] reports 77 residential properties potentially experiencing construction vibration effects, the total of 77 buildings, does actually include one non-residential building (a place of worship).</p> <p>Version 3 of the Noise and Vibration Chapter [AS-085/6.1] submitted to the ExA on 9 October 2020 reports that as a result of the accepted design changes this number is adjusted to 58 receptors potentially experiencing construction vibration effects, of which one is the place of worship.</p>
1.8.11	The Applicant	<p>Construction effects</p> <p>In respect of effects arising from construction traffic it is stated in paragraph 11.9.15 of ES Chapter 11 [APP-050] that it is assumed that the traffic management scheme for the construction works would provide</p>	<p>The Outline Environmental Management Plan [AS-112/6.11], Table 3.3: “Main works – Scheme construction”, Ref “MW-TRA1” requires the main works contractor to consult with the specified agencies when developing the Traffic Management Plan (TMP). These specified agencies will require that the temporary works have sufficient design capacity so as not to cause “significant re-routing onto</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		sufficient capacity to prevent significant re-routing onto alternative routes. Can the Applicant explain the basis for this assumption?	<p>alternative routes". The assumption stated in paragraph 11.9.15 of ES Chapter 11 [APP-050] is therefore reasonable.</p> <p>The Scheme changes accepted on 29 October 2020 include an alternative method of construction M54 Junction 1 that would avoid long-term, complex traffic management to the M54 motorway, reducing the risk of re-routing over the construction period as a whole. However, to achieve this, the new construction method requires the closure of M54 Junction 1 for up to three weeks, during which there would be significant re-routing of traffic, predominantly to the signed diversion route along the A449 and A5. This change in construction traffic impacts has been considered in the latest version of the noise chapter (Version 3 [AS-085/6.1]), OTMP (Version P04 [AS-116/7.5]) and in the ES Addendum submitted with the request for Scheme changes [AS-118/8.6].</p>
1.8.12	The Applicant	<p>Operational effects</p> <p>Table 11.15 in ES Chapter 11 [APP-050] presents the predicted operational short-term (2024, opening year) change in traffic noise levels between the DM and DS scenarios. Although the night-time threshold is specified within the table, figures are only provided for the daytime and no reference is made to night-time effects in the subsequent explanation below it. No information is provided in respect of evening/weekend effects. Table 11.15 presents predictions for changes in daytime traffic noise levels only and does not include night-time or evening/weekend predictions. Can the Applicant explain the reasons for the omission and describe why significant effects during these times are not anticipated?</p>	<p>Version 1 of the Noise and Vibration chapter [APP-050/6.1] was based on the DMRB guidance current at the time of writing, HD213/11. This guidance required nighttime noise level changes to be assessed for the long-term only, and only when the nighttime noise levels were above a given threshold. On that basis, Table 11.15 and the subsequent discussion did not therefore include figures for, or discussion of, changes in nighttime noise levels. However the row heading did incorrectly include "<i>Night-time $L_{night,outside}$ dB</i>"</p> <p>Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter updated the assessment to the new DMRB guidance LA111. The updated guidance removes the nighttime threshold and requires that the change in nighttime noise levels in the short term be assessed. The equivalent table in Versions 2 and 3 now includes this information.</p> <p>DMRB HD213/11 requires the use of 18hr Annual Average Weekday Traffic Flow (AAWT) traffic data for the calculation of $L_{A10,18h}$, which is the parameter adopted for the assessment of daytime impacts. This parameter is also used in the current version of DMRB LA111. Therefore, weekend traffic noise levels are not normally calculated as part of the standard DMRB assessment methodology.</p> <p>Traffic flows, and therefore noise levels, are likely to be slightly lower at the weekends compared to weekdays, however, the magnitude of change due to the Scheme is unlikely to be substantially different, therefore focussing on weekday traffic noise levels is considered to be a worst case and proportionate approach.</p> <p>The daytime traffic noise levels ($L_{Aeq,18hour}$) are based on the traffic flow from 06:00 hours to 00:00, and therefore include the evening period. No separate information is therefore provided for evening effects. As discussed above nighttime impacts are reported for the short term change in Version 2 and 3 of the chapter.</p>
1.8.13	The Applicant	<p>Operational effects</p> <p>In respect of operational traffic noise, it is indicated in Section 9 of ES Chapter 11 [APP-050] that adverse moderate (significant) short-term effects are predicted at only two residential properties, which is consistent with the information presented in Table 11.15. However, it is also subsequently stated that 197 residential properties were predicted to experience traffic noise levels that exceeded the defined SOAEL and represented significant effects.</p> <p>Can the Applicant explain how this figure relates to the information presented in Table 11.15 and its consistency with the Noise Policy Statement for England?</p>	<p>In Version 1 of the Noise and Vibration chapter [APP-050/6.1], Table 11.15 presents the magnitude of change in the short term (it is not a summary of significant effects). Moderate (3.0 – 4.9 dB) and major (≥ 5 dB) increases are generally identified as significant adverse effects for the purposes of the Environmental Impact Assessment, and minor increases (1.0 to 2.9 dB) are generally identified as not significant. However, as set out in Section 11.3 'Assessment Methodology' of the ES [APP-050/6.1], in some circumstances minor changes can be classed as significant, in particular, when traffic noise levels are very 'high' i.e. above the SOAEL. 197 residential properties on the A460 south of the M54 Junction 1 were identified as experiencing significant adverse noise effects due to minor increases in traffic noise levels, where the Do-Something (With Scheme) level exceeds the SOAEL. The predicted change in traffic noise levels at these 197 properties was just over 1.0 dB, they are therefore included in Table 11.15 under the minor category (1.0 to 2.9 dB). This is discussed in paragraphs 11.9.32-33 of the ES [APP-050/6.1]. A summary of all the significant effects identified in the Environmental Impact Assessment is provided in Table 11.21.</p> <p>The National Policy Statement for National Networks (NPSNN) adopts the concept of SOAEL, as introduced by the Noise Policy Statement for England (NPSE). The use of the SOAEL as one factor in identifying significant adverse effects in the Environmental Impact Assessment is therefore consistent with the NPSNN and NPSE.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter update the assessment to the new DMRB guidance LA111. Using the pivoted speed (as required by LA111) rather than banded speeds (as required by the previous DMRB guidance HD 213/11) the change in traffic noise levels due to the Scheme is now less than 1.0 dB (negligible), and therefore, a significant effect is no longer identified in the Environmental Impact Assessment. The flows on this road due increase to the Scheme, but this is partially offset by a slight reduction in speed, which was not captured in the speed banded speed data used in Version 1 of the Noise and Vibration Chapter [APP-050/6.1].
1.8.14	The Applicant	Operational effects Table 11.16 of Chapter 11 of the ES [APP-050] presents the predicted operational long-term changes in traffic noise levels between the 2024 'Do Minimum' (DM) and the 2039 'Do Something' (DS) scenarios for daytime and night-time but does not include evenings/weekends. Can the Applicant explain the reasons for the omission and provide such information as necessary?	DMRB HD213/11 requires the use of 18hr Annual Average Weekday Traffic Flow (AAWT) traffic data for the calculation of $L_{A10,18h}$, which is the parameter adopted for the assessment of daytime impacts. This parameter is also used in the current version of DMRB LA111. Therefore, weekend traffic noise levels are not normally calculated as part of the standard DMRB assessment methodology. Traffic flows, and therefore noise levels, are likely to be slightly lower at the weekends compared to weekdays, however, the magnitude of change due to the Scheme is unlikely to be substantially different, therefore focussing on weekday traffic noise levels is considered to be a worst case and proportionate approach. The daytime traffic noise levels ($L_{Aeq,18hour}$) are based on the traffic flow from 06:00 hours to 00:00, and therefore include the evening period. No separate information is therefore provided for evening effects. As discussed above nighttime impacts are reported for the short-term change in Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter.
1.8.15	The Applicant	Operational effects Table 11.18 in ES Chapter 11 [APP-050] is described as detailing the number of residential buildings in the 600m study area, for the four scenarios assessed, which would have one or more facades above the daytime or night-time Significant Observed Adverse Effect Level (SOAEL). The relationship of this information to that provided above within Section 9 about the effects on residential properties is unclear, as the amalgamated figures within Table 11.18 do not appear consistent with the separate figures provided above for each type of impact. Can the Applicant clarify this?	The discussion on environmental impacts and effects reported above Table 11.18, within Chapter 11: Noise and Vibration of the ES (Version 1), Section 9 [APP-050/6.1], are based on the magnitude of change in traffic noise levels for various scenarios. The magnitude of the change in traffic noise levels is not affected by whether the noise level is above or below the SOAEL. However, both of these factors are considered in the identification of significant effects for the purposes of the Environmental Impact Assessment. Table 11.18 of the ES [APP-050/6.1] provides counts of the number of properties predicted to experience traffic noise levels at or above the SOAEL for each of the four <i>individual</i> scenarios, for both daytime and night time. The information in this table relates to compliance with policy, which is discussed in Paragraphs 11.9.71 to 11.9.83 of Chapter 11: Noise and Vibration (Version 1) [APP-050/6.1]. In discussing compliance with policy, these paragraphs provide an overview of the number of properties predicted to experience traffic noise levels above the SOAEL in <i>any</i> of the <i>individual</i> scenarios presented in Table 11.18, specifically: <ul style="list-style-type: none"> - Properties predicted to experience traffic noise levels <i>above</i> the SOAEL in <i>any</i> do-minimum (without scheme) scenario but <i>no</i> do-something (with scheme) scenario (71 properties) - Properties predicted to experience traffic noise levels <i>above</i> the SOAEL in <i>any</i> do-minimum scenario and <i>any</i> do-something scenario (339 properties) - Properties predicted to experience traffic noise levels <i>above</i> the SOAEL in <i>no</i> do-minimum scenario but <i>any</i> do-something scenario (33 properties). Therefore, the numbers in the Table 11.18 are not directly referred to in the discussion. In Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration Chapter, the table corresponding to Table 11.18 is Table 11.16. The corresponding discussion is found in Paragraphs 11.9.65 to 11.9.82 of Version 2, and Paragraphs 11.9.69 to 11.9.86 of Version 3.
1.8.16	The Applicant	Base assessment	The majority of the surfacing assumptions came from the Highways England Pavement Management System (HAPMS) database. Discussions were held with the contractor responsible for maintenance in

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>a) Paragraph 11.6.12 of Chapter 11 of the ES [APP-050] indicates that it has been assumed that thin surfacing is in place on the M54, M6, M6 Toll and A449. Has this been confirmed?</p> <p>b) If it is not in place how is this secured in the dDCO so as to allow the assessments to be robust?</p>	<p>this area to confirm these assumptions and/or clarify any inconsistencies. The assumptions in the Paragraph 11.6.12 have therefore been confirmed.</p>
1.8.17	The Applicant	<p>Clarification</p> <p>Paragraph 11.8.16 of Chapter 11 of the ES [APP-050] sets out the locations of the noise barriers. In respect of the 1.5 m high reflective noise barrier on the east side of the existing A460 north of M6 Junction 11 in the vicinity of properties on Wolverhampton Road could the southern extent please be clarified. This is not clear on Figure 2.3 [APP-059] due to the number of overlapping items set out on this section of the drawing.</p>	<p>Version 2 of the Environmental Masterplan was submitted to the Planning Inspectorate on 9 October 2020. The extent of the barrier is now clearly identified on the revised Figure 2.3 [AS-088/6.2]; it extends from the northern end of the Scheme on the existing A460 north of M6 Junction 11, southwards to the access off Wolverhampton Road.</p>
1.8.18	The Applicant	<p>NNNPS Assessment</p> <p>a) In relation to NPSNN paragraph 5.195 the Applicant has set out why it considers the Proposed Development would meet the three aims of policy. In respect of construction activity, in paragraph 11.9.68 of Chapter 11 of the ES [APP-050] the Applicant has referred to factors "including engineering practicality, cost versus benefit etc.". Could the Applicant please expand upon these, setting out these factors in greater detail explicitly setting out the costs versus benefits.</p> <p>b) In respect of operational activity, paragraph 11.9.75 of Chapter 11 of the ES [APP-050] discounts the introduction of noise mitigation measures such as noise barriers along existing roads which already experience high noise levels, to mitigate the effects of the Proposed Development, or to further increase the benefit from re-routing as not sustainable. Could the Applicant please set out in more detail what mitigation measures were considered and explain why they are not considered to represent sustainable development?</p>	<p>a) For the purposes of the Environmental Impact Assessment the construction contractor has provided reasonable worst case assumptions on the construction activities and plant. This ensures that the decision on the DCO application is based on a robust assessment. At this stage, multiple options for the Scheme construction methods have not been assessed, as this would not be a proportionate approach. Therefore, explicit details of costs versus benefits for multiple construction options are not available at this stage.</p> <p>However, as secured by the OEMP [APP-218/6.11 and subsequent revisions] clauses PW- NOI1 for preliminary works, and MW-NOI1 for the main works, the contractor will be required to demonstrate that the final proposed approach employs Best Practicable Means (BPM).</p> <p>Section 72 of the Control of Pollution Act 1974 defines "Best practicable means" as "<i>reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications</i>".</p> <p>As set out in paragraph 11.9.68 of Chapter 11: Noise and Vibration of the ES (Version 1) [APP-050/6.1] as part of the application of BPM the contractor will explicitly consider the costs versus benefits of different working methods. The application of BPM would therefore meet the three aims of the NPSNN, within the context of sustainable development. b) Paragraph 11.9.75 of the Noise and Vibration chapter [APP-050/6.1] (the corresponding paragraph in Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter is 11.9.72 and 11.9.76 respectively) relates to existing roads, which already experience high noise levels (above the SOAEL). WQ1.8.23 Figure 1a, 1b and 1c illustrates the locations of residential buildings which are above the SOAEL based on the assessment in Version 3. These existing roads are lined with residential buildings and other premises, the majority of which include driveways, which front on to the road. The installation of noise barriers in front of such properties would not represent sustainable development due to the risk of other adverse effects, for example the visual impact of the installation of noise barriers in front of the front elevation of residential properties, or the access difficulties created by the installation of noise barriers in front of residential driveways.</p>
1.8.19	The Applicant	<p>Noise Barrier to north of M54</p> <p>On Figure 2.6 [APP- 062] there is a gap between the eastern extent of the 1.5 m high reflective noise barrier on the north side of the M54 eastbound off slip on top of the existing earth bund and the proposed eastern extension of this earth bund and the 3 m high reflective noise barrier east of the proposed earth bund on the north side of the M54 extending to the new western dumbbell roundabout. This would allow a noise path through this gap. What consideration has been given to this, and what would be the implications of providing an overlap?</p>	<p>The 1.5 m high barrier is on top of the new section of earth bund which is created as part of the Scheme design as a continuation of the existing earth bund in this area. The bund continues eastwards from the eastern end of the 1.5 m high barrier, tapering down to meet the existing round level. The western extent of the 3.0 m barrier sits in front (as viewed from the Scheme) of the eastern end of the bund, including the tapered section. There is therefore already some overlap in the combined bund / barrier design.</p> <p>With the proposed barrier alignments, the noise impact in Featherstone is no greater than negligible.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.8.20	The Applicant	Noise during construction It is stated in Table 8.1 of the Transport Assessment Report [APP-222] that the M6 will need to be closed at "weekend/overnight" for the demolition of the existing bridges. What assessment has been undertaken of the effect of the diversion of traffic during this period in relation to noise?	Versions 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter update the assessment to the new DMRB guidance LA111. The diversion of traffic during nighttime closures of the M6 has been assessed using this guidance. Paragraph 11.9.18 of Version 3 [AS-085/6.1] states that " <i>outside of the three week closure of the M54 at Junction 1, the duration of all the expected short-term night-time closures is not anticipated to exceed the duration criteria set out in DMRB of 10 or more nights in any 15 consecutive days; or more than 40 nights in any six consecutive months</i> ", and therefore significant adverse effects due to night-time closures of the M6 are not anticipated.
1.8.21	The Applicant	Vibration during construction a) Paragraph 11.9.11 of Chapter 11 of the ES [APP-050] indicates the numbers of properties that are likely to be affected by vibration during construction. This gives three numbers depending on the equipment being used, 77, 64 and 9. This paragraph concludes that potential significant construction vibration annoyance effects are identified at approximately 77 residential buildings. However, 77 is the largest number and it is not clear whether the 64 and 9 properties are sub-sets of the 77 or in addition to the 77 because the different types of equipment would be used in different locations. Could this be clarified. b) If it is being stated that there is some sort of 'overlap' between sub-sets, possibly leading to 'in combination' effects, could this be set out; this may be made clear through the use of a table.	a) The 64 and 9 receptors reported in Paragraph 11.9.11 of the ES (Version 1 [APP-050] and Version 2 [AS-046/6.1]) are two subsets of the 77 receptors likely to be affected by vibration during construction. Design changes, submitted to the ExA on 9 October 2020 show the slight changes in the Scheme design would alter the number of receptors identified as experiencing potentially significant vibration effects. This is reported in Version 3 of the Noise and Vibration Chapter [AS-085/6.1]. Approximately 58 receptors are located within 50 m of works using a large vibratory roller. Of these, 34 receptors are also within 20 m of works using a medium sized twin drum vibratory roller, and of these, two receptors are also located within 20 m of works using a medium sized towed roller. b) The SOAEL for construction vibration is set using the Peak Particle Velocity (PPV) parameter, which represents peak vibration rather than an average. Whilst there is some overlap between the sets of receptors in proximity to the various types of vibratory roller, it is unlikely that the combined effect would be materially worse than the effect of any individual item of plant. There are a small number of activities, which would result in the simultaneous use of more than one item of vibratory plant in proximity to receptors. For example, for road surfacing, the large vibratory roller would be used for most of the work, with the medium sized twin drum roller used for the final passes. However, as both of these items of plant are mobile, the likelihood of the location, timing and vibratory output of the equipment coinciding in such a way that the PPV at a receptor is higher than it would be for the individual plant is small.
1.8.22	The Applicant	Piling Paragraph 8.10.9 of the Case for the Scheme [APP-220] indicates impact driven piling will not be used for the construction works. How will this be secured?	Clause MW-NOI8 of the OEMP [APP-218/6.11] states ' <i>Non-impact piling methods will be employed during the works</i> '. This is secured through Requirement 4 of the draft DCO [TR010054/APP/3.1].
1.8.23	The Applicant	Operational noise Paragraph 11.9.73 of Chapter 11 of the [APP-220] indicates a total of 33 dwellings would be taken from below SOAEL to above SOAEL. Could the Applicant please identify where these would be, graphically, and the extent of exceedance.	Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter update the operational noise assessment to be in line with the revised DMRB guidance, LA111. Version 3 of the Noise and Vibration assessment [AS-085/6.1] reports a total of 13 dwellings would be taken from below the SOAEL in all Do-minimum scenarios to above the SOAEL in one or more Do-something scenarios. Five are located on Hilton Lane, one is located at Moseley Old Hall (residential flat) and the remaining seven are located on The Avenue in Featherstone, as illustrated on WQ1.8.23 Figure 1a, 1b and 1c. In all cases the exceedance of the SOAEL is predicted to occur in the future year nighttime scenario only. The maximum exceedance is 0.3 dB.
1.8.24	The Applicant	Operational noise a) Paragraph 11.9.74 of Chapter 11 of the [APP-220] indicates 339 residential buildings are above the SOAEL both with and without the Scheme in operation, therefore the exceedance of the SOAEL is not due to the Scheme. Could the Applicant please identify graphically where these are.	a) Version 2 [AS-046/6.1] and 3 [AS-085/6.1] of the Noise and Vibration chapter update the assessment to the new DMRB guidance LA111. Based on the updated assessment reported in Version 3 of the Noise and Vibration assessment [AS-085/6.1] reports a total of 131 residential buildings are equal to or above the SOAEL both with and without the Scheme in operation, as illustrated on WQ1.8.23 Figure 1a, 1b and 1c.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response																											
		<p>b) Further, could the Applicant please set out the noise level increases/reductions due to the Scheme. This should be set out by increase/reduction in bands of >1 dB, 1 dB to 3 dB, and <3 dB. Those <3 dB may need to be categorised further depending on the numbers. It may therefore be easier to set these out in 3 dB 'bands' at this stage.</p>	<p>b) The table below sets out the change in traffic noise level at receptors which are above the SOAEL in one or more scenario based on Version 3 [AS-085/6.1] of Chapter 11: Noise and Vibration of the ES. The data is presented using the banding from DMRB LA 111, and is presented for the short term (2024 Do-minimum to 2024 Do-something) scenario in the daytime, on the façade experiencing the worst case change, as this is the main focus of the DMRB LA111 assessment. Note that the façade experiencing the worst-case change may not necessarily be above the SOAEL itself.</p> <table><tr><th>Short term change in traffic noise level L_{A10,18hour}</th><th colspan="2">No. of receptors</th></tr><tr><th></th><th>Version 2 [AS-046]</th><th>Version 3 [AS-085]</th></tr><tr><td><= -5 dB (major decrease)</td><td>2</td><td>2</td></tr><tr><td>-4.9 dB to -3.0 dB (moderate decrease)</td><td>1</td><td>2</td></tr><tr><td>-2.9 dB to -1.0 dB (minor decrease)</td><td>28</td><td>33</td></tr><tr><td>-0.9 dB to -0.1 dB (negligible decrease)</td><td>13</td><td>12</td></tr><tr><td>0 dB (no change)</td><td>6</td><td>6</td></tr><tr><td>+0.1 to +0.9 dB (negligible increase)</td><td>69</td><td>70</td></tr><tr><td>+1.0 to +2.9 dB (minor increase)</td><td>6</td><td>6</td></tr></table> <p>In summary, based on the updated assessment reported in Version 3 [AS-085/6.1] of the 131 receptors, 88 are predicted to experience negligible or no change in traffic noise levels in the opening year on the façade experiencing the worst case change. 37 are predicted to experience minor to major beneficial impact. Six are predicted to experience a minor adverse impact.</p> <p>Of the six receptors experiencing a minor adverse impact:</p> <ul style="list-style-type: none">- At four receptors the worst case change (i.e. the minor increase in the opening year daytime) is not on a façade which is above the SOAEL in any scenario.- At two receptors the worst case change (minor increase in the opening year daytime) is not on a façade which is above the SOAEL in the opening year.	Short term change in traffic noise level L _{A10,18hour}	No. of receptors			Version 2 [AS-046]	Version 3 [AS-085]	<= -5 dB (major decrease)	2	2	-4.9 dB to -3.0 dB (moderate decrease)	1	2	-2.9 dB to -1.0 dB (minor decrease)	28	33	-0.9 dB to -0.1 dB (negligible decrease)	13	12	0 dB (no change)	6	6	+0.1 to +0.9 dB (negligible increase)	69	70	+1.0 to +2.9 dB (minor increase)	6	6
Short term change in traffic noise level L _{A10,18hour}	No. of receptors																													
	Version 2 [AS-046]	Version 3 [AS-085]																												
<= -5 dB (major decrease)	2	2																												
-4.9 dB to -3.0 dB (moderate decrease)	1	2																												
-2.9 dB to -1.0 dB (minor decrease)	28	33																												
-0.9 dB to -0.1 dB (negligible decrease)	13	12																												
0 dB (no change)	6	6																												
+0.1 to +0.9 dB (negligible increase)	69	70																												
+1.0 to +2.9 dB (minor increase)	6	6																												
1.8.25	The Applicant	<p>Affected area to south of M54 Jct 1</p> <p>Paragraphs 11.9.32 to 11.9.35 of Chapter 11 of the ES [APP-050] assess the increase in noise effects to the south of junction 1 of the M54. Can the Applicant explain what mechanisms are in place to avoid significant adverse impacts on health and quality of life from noise as a result of the new development as set out in paragraph 5.195 of the NPSNN, or explain why it considers that this is not possible in line with the Government's policy for sustainable development. Such an analysis should set out options that were considered and rejected, along with the reasons for that rejection.</p>	<p>Paragraphs 11.9.32 and 33 of Version 1 of Chapter 11 Noise and Vibration [APP-050/6.1] relates to 197 residential buildings identified as experiencing 'high' traffic noise levels (above SOAEL) in the Do-Something scenario and an increase of just over 1.0 dB in the short term, all of which are located on the existing A460 south of the M54. This impact is identified as a significant adverse effect due to the operation of the Scheme.</p> <p>Mechanisms to reduce traffic noise levels on existing roads outside the scheme extents are limited. As the purpose of the Scheme is to improve traffic conditions on the A460 north of the M54 by providing a bypass route, this would result in small increases in traffic on some roads connecting to the Scheme, including the A460 south of the M54. The introduction of noise mitigation measures such as noise barriers along existing roads is not practicable. Roads such as the A460 south of the M54 have residential buildings and other premises fronting onto the road, therefore mitigation measures such as barriers are not a practical engineering option and would have other adverse impacts (including visual impacts) whilst also causing significant access difficulties.</p>																											

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>In Version 2 of Chapter 11 [AS-046/6.1], the change to the new DMRB LA111 methodology using pivoted rather than banded speeds results in the short term increase in traffic noise levels being reduced to less than 1.0 dB, and therefore, a significant adverse effect is no longer identified in this area. The increase in flows on this section of the A460 due to the Scheme is unchanged but is partially offset by a slight reduction in speed, which was not captured in the speed banded speed data. This is unchanged in Version 3 of Chapter 11 [AS-085/6.1].</p> <p>Paragraph 11.9.34 of Version 1 of Chapter 11 Noise and Vibration [APP-050] identifies a negligible change in traffic noise levels at Housing Allocation Site 168 west of Featherstone. A significant adverse effect at this location is not anticipated. This conclusion is unchanged in Version 2 [AS-046] and Version 3 of Chapter 11 [AS-085/6.1].</p> <p>Paragraph 11.9.35 of Version 1 of Chapter 11 Noise and Vibration [APP-050] discusses the impact of the Scheme on non-residential sensitive receptors. No significant effects are identified. This conclusion is unchanged in Version 2 [AS-046/6.1] and Version 3 of Chapter 11 [AS-085/6.1].</p>
1.8.26	The Applicant	<p>Mitigation measures The essential mitigation measures proposed for operational noise effects set out in ES Chapter 9 appear to be the same as the embedded mitigation measures described in ES Chapter 2. Please can the Applicant set out the differentiation between the proposed embedded and essential mitigation.</p>	<p>This response assumes the question relates to Version 1 of Chapter 11 Noise and Vibration [APP-050/6.1]. Embedded mitigation is defined within the DMRB as 'Design measures which are integrated into a project for the purpose of minimising environmental effects.' For this Scheme for operational noise this consists of positioning approximately half of the route in cutting, use of a thin surfacing system (i.e. a low noise surface) and a reduction in the speed limit on the realigned Hilton Lane. Essential mitigation is required in addition to embedded mitigation to reduce and offset likely significant adverse environmental effects. For this Scheme for operational noise this consists of the various proposed noise barriers. Paragraphs 11.8.12 to 11.8.15 under the heading Essential mitigation - Operation provides additional detail on the embedded mitigation, which would have been better placed under the heading 'Embedded mitigation'. Paragraphs 11.16 to 11.8.17 detail the additional operational essential mitigation i.e. the noise barriers.</p>
1.8.27	The Applicant	<p>Register of Environmental Actions and Commitments It is stated against items D-N1 to N6 in the Register of Environmental Actions and Commitments [APP-218] that they would be implemented through DCO Requirement 45, however Schedule 2 of the dDCO contains only 13 Requirements. Please can the Applicant identify the correct Requirement.</p>	<p>This was an error in the original submission. Version 2 of the OEMP submitted to the Inspectorate on 29 May 2020 [AS-042/6.11] provided a correction to this error, which is also reflected in subsequent versions of the OEMP [AS-112/6.11].</p> <p>Requirement 45 has been correct to refer to Requirement 3 of the draft DCO [AS-075]</p>
1.8.28	The Applicant	<p>Potential additional mitigation Paragraph 11.9.79 of Chapter 11 of the ES [APP-050] indicates that "no areas where additional mitigation would be appropriate, within the context of sustainable development, have been identified i.e. considering engineering practicality, cost, other potential impacts such as landscape and visual impacts, ecological considerations, and consultation responses". Could the Applicant please explain in more detail looking at specific geographic areas what mitigation was considered and why it has been rejected?</p>	<p>Paragraphs 11.9.80 to 11.9.84 of Version 1 of Chapter 11 Noise and Vibration [APP-050/6.1] explain the areas in which additional mitigation was considered, and the reasons that these mitigation measures would not be appropriate within the context of sustainable development. The primary reason is that owing to the topography of the Scheme and surrounding area, the possible additional mitigation measures (additional noise barriers) provided minimal additional benefit.</p> <p>The corresponding paragraphs in Version 3 of Chapter 11 Noise and Vibration [AS-085/6.1] are 11.9.81 to 11.9.85.</p>
1.9	Geology and Soils		
1.9.1	The Applicant	<p>Clarification Figure 9.1 of the ES [APP-139] does not show the 'gap' for the West Coast Main Line for the Scheme boundary. Could this please be corrected.</p>	<p>Figure 9.1 of the ES [APP-139/6.2] has been amended. The revised figure has been provided as part of the submission for Deadline 1 on 3 November 2020.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.9.2	The Applicant	Best and Most Versatile Land Can the Applicant confirm the latest position with Natural England and BMV in particular progress with the draft statement of common ground? In particular in respect of Natural England's concern regarding the relationship between BMV soils and species rich grassland creation requirement 4 sub-sections (viii) (LEMP) and requirement 5 'Landscaping' may need to be amended and/or supplemented. This may be necessary to ensure all reasonable steps have been taken to reconcile the grades of soils moved within a given phase with effective allocation to agricultural, landscaping and priority habitat end uses.	<p>Dialogue between Highways England and Natural England around the impacts on best and most versatile agricultural soils is ongoing, correspondence and those aspects agreed and still under discussion are set out in the Statement of Common Ground with Natural England [TR010054/APP/8.8P(B)] submitted for Deadline 1 on 3 November 2020.</p> <p>A technical note on agricultural soils has been produced and submitted to Natural England and minor amendments to the OEMP PW-GEO4, PW-GEO5 and MW-GEO5, have been updated to address concerns raised by Natural England around soil storage practises and the restoration and maintenance of BMV in areas of habitat creation. These are provided in Version 3 of the OEMP submitted to the Planning Inspectorate on 9 October 2020 [AS-112/6.11].</p>
1.9.3	NE SCC SSC ShC WCC	Best and Most Versatile Land a) In considering the loss of the BMV agricultural land the Applicant has assessed this against the quanta of the various categories in the National Character Area of the application site. Do the interested parties consider that this is a valid approach, or should some other metric be utilised? b) If another metric is to be used, what should this be and what would be the value judgement of this loss?	N/A
1.9.4	The Applicant SCC	Land Stability a) Table 9.7 in Chapter 9 of the ES [APP-048] indicates a possible encroachment between the scheme and former underground workings associated with Hilton Main Colliery. Could the Applicant produce a plan showing the extent of known workings with the Proposed Development (including associated development) imposed. b) Could an assessment be undertaken of the risks associated with the proximity of these workings in both the construction and operational periods?	<p>a) The underground mining referred to in Table 9.7 is illustrated on WQ1.9.4 Figure 1, these are deep underground mining and not shallow workings. They are associated with the Hilton Main – No 1 Downcast shaft (583m deep) and the Hilton Main – No 2 upcast shaft (569m deep), both located south of M54 Junction 1.</p> <p>b) The Scheme boundary is not within the area classed as "Development High Risk Area" by the Coal Authority. The Hilton Main Colliery which these workings are associated with, was closed in January 1969. It is considered that underground mining which occurred over 50 years ago at depths greater than 500m bgl do not pose land stability risks at the surface. As shown on WQ 1.9.4 Figure 1 the existing carriageway of the M54 is located over these workings."</p>
1.9.5	SSC	Land Contamination Does SSC consider it likely that by the construction year baseline there are to any classification of lands under Part 2A of the Environmental Protection Act 1990 (as amended).	N/A
1.9.6	The Applicant	Land Contamination (Asbestos) Paragraph 9.8.8 of Chapter 9 of the ES [APP-048] indicates that asbestos would be dealt with if it were found. However, Table 9.7 in the same document indicates that asbestos was found in Trial Pit TP04. Should the CEMP be amended to include positive measures for dealing with asbestos rather than default arrangements in case such measures are needed?	<p>Asbestos was detected in 1 sample out of 39 samples tested in an area of Made Ground in the southern area of the Scheme. Detection of small quantities of asbestos fibres within made ground materials is common. Table 3.3 of the OEMP [APP-218/6.11 and subsequent revisions] includes positive measures for dealing with asbestos, MW-G7, MW-GEO4 and MW-GEO6 ensures that an Asbestos Management Plan will be produced and implemented as part of the CEMP. The Asbestos Management Plan will ensure asbestos can be identified, removed and disposed of in a legally compliant manner. The plan will take into account any known areas of asbestos as appropriate. This is secured through Requirement 4 of the draft DCO [TR010054/APP/3.1].</p> <p>No additional mitigation measures are required above those already outlined in the OEMP.</p>
1.9.7	The Applicant SSC	Borrow Pit a) Paragraph 13.9.37 of Chapter 13 of the ES [APP-052] indicates that no ground investigation has been carried out of the proposed borrow pit.	<p>a) The borrow pit is located in an area of glacial deposits, as shown in Figure 9.2: Geology Baseline of the ES [APP-140/6.2] and Appendix 9.1, Ground Investigation Report [APP-187 to 191/6.3]. These glacial deposits (glacial clay and glacial sand and gravels) have been extensively studied along the length of the Scheme. Though no ground investigation has been undertaken within the area of the proposed borrow pit, similar geology across the Scheme indicates that the glacial deposits would be</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		<p>How, therefore, can it be determined that the material here would be suitable for the proposed purpose?</p> <p>b) Is there any information to confirm that this does not suffer from contamination?</p>	<p>suitable for their intended purpose as 'fill' material. All site-won and imported material will comply with the geotechnical and geo-chemical acceptability criteria that will be specified in a Remediation Strategy produced by the preliminary works contractor as set out in Table 3.2 of the OEMP, PW-GEO2.</p> <p>b) The land which is proposed to be used as a borrow pit historically formed part of Hilton Park as shown in Figure 6.4 [APP-075/6.2] and Figure 6.9 [APP-080/6.2] of the ES and has been used predominantly for recreation and agriculture with a car boot sale currently being held here up to 14 times a year. Therefore, it is not anticipated that the material from the proposed borrow pit would include significant contamination. However, the material from the borrow pit will be subject to chemical testing at the point of excavation and point of placement to ensure compliance with the acceptability criteria as specified in a Remediation Strategy produced by the preliminary works contractor as set out in Table 3.2 of the OEMP, PW-GEO2.</p> <p>As set out in Table 3.2 and 3.3. of the OEMP [APP-218/6.11 and subsequent revisions], PW-GEO3 and MW GEO2:</p> <p><i>"In the event that unexpected soil or groundwater contamination is encountered during construction, the main works contractor is to quantify the extent of the potential risk from the contamination and follow a risk-based approach in accordance with Environment Agency guidance Land Contamination: Risk Management. Where significant risks from soil or groundwater contamination are identified, appropriate mitigation (remediation) to reduce to acceptable levels the potential short and long-term health and safety and environmental risks to sensitive receptors would be identified and implemented.</i></p> <p><i>Any required additional ground investigations would be undertaken in accordance with UK good practice, including BS 5930:2015 Code of Practice for ground investigations (Ref 3.2) and BS 10175:2011 + A2:2017 Investigation of Potentially Contaminated Sites Code of Practice."</i></p> <p><i>This is secured through Requirement 4 of the draft DCO."</i></p>
1.9.8	The Applicant	<p>Soil Disposal</p> <p>Chapter 10 of the ES [APP-049] which provides greater detail on the type and quantity of the materials to be used. Table 10.7 lists potential material use and waste arisings during construction. While some material will be re-used on site, can the Applicant explain how they have assessed the environmental impact and likely effects resulting from the proposed removal and disposal of excavated materials off-site from the construction work?</p>	<p>The environmental impact and likely effects resulting from the proposed removal and disposal of excavated materials offsite from construction work are assessed in the following chapters:</p> <ul style="list-style-type: none"> Impacts on air quality from vehicles removing waste from site are assessed in Chapter 5 – Air Quality, Section 5.9 [APP-044/6.1]; Impacts on the capacity of the region's waste management infrastructure are assessed in Chapter 10 – Material Assets and Waste, Section 10.9 [APP-049/6.1]; Traffic noise impacts of construction traffic are assessed in Chapter 11 – Noise and Vibration, Section 11.9 [APP-050/6.1 and subsequent revisions]; Climate change impacts from construction traffic and disposal of construction waste are assessed in Chapter 14 – Climate, Section 14.9 [APP-053/6.1]. <p>The assessment does not consider the environmental impacts at the receiving waste management facilities. It is assumed that any such issues would have been subject to the applicable environmental assessment/ permitting and planning approval for the relevant facilities.</p>
1.10	Traffic and Transport		
1.10.1	The Applicant	<p>The Case for the Scheme</p> <p>In paragraph 4.5.2 of the Case for the Scheme [APP-220] it is stated that the proposal would reduce traffic along the A5(T)/A449(T) route. Looking at the West Midlands Interchange NSIP proposal what are 'without (that) scheme' and the 'in combination' effects?</p>	<p>The West Midlands Interchange Scheme and its associated traffic has been included as a 'more than likely' development within the M54-M6 Link Scheme's 'core' traffic forecasting scenario. In the 'core scenario' (most likely case), the trips generated by the West Midlands Interchange development are accounted for within both the 'Do-Minimum' (without M54 to M6 Link Scheme) and 'Do-Something' (with M54 to M6 Link Scheme) assessment cases. This follows the Department for Transport's Transport Appraisal Guidance (TAG), which requires us to include 'more than likely' developments as part of the core scenario. Therefore, no assessment is required without the West Midlands Interchange Scheme.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.10.2	The Applicant	Clarification Could paragraph 2.2.3 of the Transport Assessment [APP-222] be looked at, as it not clear what point is trying to be made.	The revised Transport Assessment document [AS-114/7.4] submitted to the Planning Inspectorate on 9 October 2020 as part of the submission of design changes includes an alteration to Paragraphs 2.2.2 and 2.2.3 to clarify the point that majority of the existing vehicles on the A460, passing through Hilton, Featherstone and Shareshill, are travelling to/from the East. Only a small proportion of local vehicles continue on to the M6 North. A consideration of journey distances in Paragraph 2.2.3 explains why this is the case.
1.10.3	The Applicant	Outline Traffic Management Plan Appendices E, F and G of the Outline Traffic Management Plan [APP-223] refer to various drawings. Could these either be provided or individually referenced as existing Examination documents using the Examination Library referencing system. If any other drawings are referred to within the Outline Traffic Management Plan, but have not been provided to date, they should be provided.	The revised Outline Traffic Management Plan [AS-116/7.5] submitted to the Planning Inspectorate on 9 October 2020 as part of the submission of design changes includes the missing Appendices E and F. Appendix G was originally intended to include the Scheme General Arrangement Plans, however this has been replaced with a reference to the application document [TR010054/APP/7.5], latest version [AS-067/7.5].
1.10.4	SSC SCC ShC WCC	Cumulative effects of new development a) Paragraph 4.3.13 of the Transport Assessment [APP-222] indicates that the traffic model for future years only includes additional sites for over 150 dwellings. Do the Councils consider that utilising this threshold is reasonable, particularly taking into account the allocations and housing trajectories in their local plans? b) If not, could the parties please identify why they do not consider that this is reasonable. c) What, if any, alternative threshold should be utilised, explaining why that is appropriate? d) Could the Councils provide details of those sites which they consider should also be included, along with whether they consider that they are committed, more than likely, reasonably foreseeable or hypothetical, explaining why they consider that they should be included.	<p>This written question is addressed to the councils but, as the owner of the traffic model, the Applicant is able to help the ExA and clarify their queries relating to traffic forecasting. We hope that the following clarification helps to ensure the model is understood by all parties.</p> <p>The traffic forecasts of future year highway conditions were derived by applying growth factors for each planning district to the base-year trip ends originating in each of the local traffic model's zones. These growth factors were derived from the National Trip End Model (NTEM), which is produced and issued by the Department for Transport (DfT). The DfT's NTEM growth factors for England and Wales take account of the planning projections made by each planning authority for their district.</p> <p>To improve the robustness of the project's local traffic model forecast, certain local development sites were modelled specifically. This approach was taken to reflect the fact that large development sites might have localised traffic impacts that could distort the traffic growth that would otherwise have been applied globally. Any trip-ends generated by these specifically modelled large development sites were then subtracted from the overall trip-end growth (as predicted by the applied NTEM growth factors) for that planning district. This adjustment was made to avoid the double-counting of the new trips generated by these specifically modelled sites (i.e. once by the district-wide application of the NTEM growth factors and once by specific modelling of these large sites).</p> <p>It follows that the increase in traffic associated with small development sites (less than 150 dwellings) are not ignored by the traffic forecasting method, because these sites are accounted for by the district planning authorities' projections, as included within the NTEM trip-end growth factors for each district, and that were applied to all traffic model zones that fall within each planning district. The threshold of 150 dwellings was agreed with Highways England's Transport Planning Group as a robust figure which enabled the modelling to specifically represent reasonably sized housing developments whilst more minor developments were accounted for within homogeneously applied planning growth.</p> <p>This NTEM growth factor approach also means that development sites located outside of the traffic model's study area were accounted for within the local traffic model's traffic forecasts.</p>
1.10.5	SSC SCC ShC WCC	Cumulative effects of new development a) Do the parties consider that the long list and short list of other developments (applications and allocations) and assessment for potential significant cumulative effects set out in Table 15.1.1 of Appendix 15.1 [APP-210] is appropriate? b) Are there any other applications and allocations that should have been included, and on which list should they have been included? c) Are any applications and allocations identified on the long list that should have been included on the short list?	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		d) Is the Cumulative assessment with other development (applications and allocations) (Stage 4) set out in Table 15.1.2 considered appropriate? e) If not, please explain your reasoning.	
1.10.6	Proprietors of M6 Diesel	Traffic generation of 'M6 Diesel' a) It is indicated in paragraph 4.6.6 of the Transport Assessment Report [APP-222] that at the 'M6 Diesel' fuel filling station the two-way HGV flow is 375 movements per day. Do the proprietors consider that this figure is approximately accurate? b) If not, what figure is correct. Can any alternative figure be justified by evidence please? c) The Applicant indicates that they consider that customers of this facility use the site on the basis for pass-by trips. Does the proprietor have any information on the directions of travel for the customers of this facility or is there any information to show that the site is a destination in its own right. d) Is there information to show that HGVs will continue to use the length of the existing A460, i.e. from M54 Junction 1 to M6 Junction 11, and vice versa, rather than as is implied by the applicant undertake, effectively a U-turn and return from the original direction of travel.	N/A
1.10.7	The Applicant SCC	Traffic on existing Cannock Road a) The Applicant indicates in paragraph 4.6.7 of the Transport Assessment Report [APP-222] that in the event that traffic flows on the existing A460 were to remain high, it would instigate a 'Monitor and Manage' approach. What would this consist of, beyond a generalised "traffic regulation order"? b) How is this to be triggered and secured?	<p>a) In discussions with Highways England, SCC raised concerns that whilst the Scheme would result in a significant reduction in HGVs along the existing A460, the residual HGV traffic could remain significant due to the presence of the M6 Diesel HGV fuelling station on the existing A460. SCC requested that a weight restriction be implemented to increase the effectiveness of the Scheme in reducing HGV traffic on the existing A460. The current proposals do not include any restrictions on HGV movements along the existing A460, nor does Highways England see any justification to do so as the traffic model suggests a restriction would be unnecessary. Highways England's forecast traffic model indicates that HGV flows will be reduced on the existing A460 from 3,114 HGVs (per 12 hour weekday without the scheme) to 279 HGVs (per 12 hour weekday with the scheme): a reduction of 90%. Highways England considers that this enables the project to meet its objectives (refer to Introduction to the Application [APP-001/1.1]) to:</p> <ol style="list-style-type: none"> 1. Relieve traffic congestion on the A460, A449 and A5, this will provide more reliable journey times 2. Keep the right traffic on the right roads and improve safety by separating local community traffic from long distance and business traffic 3. Reduce volumes of through-traffic in villages, improving local community access <p>However, in order to attempt to allay the concerns of SCC, Highways England offered to 'monitor' the post opening HGV flows along the existing A460 and if these were to exceed a certain threshold, Highways England could provide funding to implement proposals to provide traffic management proposals to reduce HGV flows. It is likely that if a threshold was exceeded, such 'manage' proposals could consist of implementation of a weight restriction, for example, subject to such a Traffic Regulation Order.</p> <p>Highways England and SCC have not been able to agree a suitable threshold or potential 'management' works should they be required, and SCC has confirmed (at a meeting on 17/09/20) that it does not wish to proceed with the monitor and manage approach.</p> <p>b) It was intended that such an approach would be secured through a legal agreement, however no such agreement will be made, therefore there is no requirement to trigger or secure a 'manage' approach.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.10.8	The Applicant SCC	Junction 11 of M6 a) Table 4.7 of the Transport Assessment Report [APP-222] sets out the LinSig Assessment Results for 2039. Given that the DoS figures for 2039 are only marginally below 90% (and at 90% if further rounded), this gives little 'margin for error' for the calculations. Given this lack of margin for error, what analysis of alternative approaches was undertaken to ensure that the design approach is robust? b) What alternative strategies, tactics or interventions would be possible should the DoS in practice exceed 90%? c) How would these be secured if necessary?	a) The target degree of saturation of 90% is used as an indicator of an efficient design and using a traffic demand forecasting year that is 15 years post-opening. Designing to a DoS of 90% allows for typical variations in peak hourly flows. If the appraised degree of saturation was less than 90% then this situation might be considered an over-design and not good value for tax-payers' money. The results provided in the Transport Assessment report [AS-114/7.4] indicate that the design is robust. b) Highways England is charged with operating, maintaining and improving England's motorways and major A roads. This includes being responsible for the Strategic Road Network (SRN) long-term strategy, providing economic and strategic insight and taking a comprehensive, consistent and holistic approach to planning. Should the DoS exceed 90% at M6 Junction 11 then future interventions could be considered in future Road Investment Strategy (RIS) periods should there be sound evidence to support this. c) The creation of Highways England in 2015 changed the way road investment happens for England's motorways and major roads. Funding is now determined every five years via a Road Investment Strategy (RIS), which is set by the Secretary of State for Transport.
1.10.9	The Applicant	Traffic on A449(T) Mr Daniel Williams in his Relevant Representation [RR-032] makes the case that for the full benefits of the Proposed Development to be realised, the A449 north of M54 Junction 2 should be de-trunked and traffic calming introduced. Could the Applicant give its response to this, and explain, should it take the position that they should not, why such measures are not necessary if the benefits of the Proposed Development are to be realised.	The M54 to M6 link road will reduce traffic flows on the A449(T). This is indicated in the Transport Assessment [AS-114/7.4] at Table 4.5 and as stated in paragraph 4.6.11. A reduction of daily flows in the traffic forecasting year 2039 is indicated in Figure 4.12. The Scheme will meet its objective of reducing flows on the A449(T). The A449 (T) is not only a trunk road but is also a signed primary route that carries north-south traffic movements from primary origins such as Wolverhampton to primary destinations such as Stafford. The route would therefore not only need to be de-trunked but also declassified by the Department of Transport and adopted by Staffordshire County Council. It is noted that a trip between M54 Junction 2 and M6 junction 12 is 1.6 km shorter following a route via A449(T) and A5(T) than it would be following a route via the new M54 to M6 link road and the M6. Some trips would choose to use the latter route if there are perceived travel time benefits. However, if strategic trips to Primary origins and destinations were to be actively discouraged from using the A449(T) then this would result in longer journey lengths and a less transport economic efficient road network.
1.10.10	The Applicant	Clarification on Time Changes a) The calculations in Tables 4.10 to 4.18 of the Transport Assessment Report [APP-222] clearly involve some rounding of figures. Could the Applicant please identify the criteria for this rounding that have been used. b) Could the figures for the following be checked? • Route 1 Southbound for 2039 – both PM3 and Overnight. • Route 2 Southbound for all predictions – AM1 • Route 4 East and westbound for all predictions – AM1 c) Is there a particular reason why Table 4.18 is presented in a different way to Tables 4.10 to 4.17? In Tables 4.10 to 4.17-time savings are shown as a negative, while in Table 4.18 they are shown as a positive. d) Could the following figures be checked? • EV Eastbound: the 2031 DS figures is given as 19:60, which doesn't exist. • EV Eastbound 2039 DS figure, since all others in their pairs for EV and ON are the same, but this isn't.	a) The values in the tables have been rounded to the nearest second. Hence the difference between the DM and DS timings could be a maximum of one second different due to rounding. b) The specified routes have been checked in terms of the process used to extract the timings and the timings themselves and no anomalies have been identified. If the Examining Authority has any specific concerns, please could these be clarified? c) The timings in Table 4.18 are presented as DM-DS whereas in Tables 4.10-4.17 they are presented as DS-DM. This is because the East-West journey time savings as a result of implementation of the M54 to M6 Link scheme, discussed in section 4.10 (with values shown in Table 4.18) are a measure of the objectives of the Scheme. By contrast, the journey times discussed in section 4.9 (with values shown in Tables 4.10 to 4.18) are measuring the secondary impacts of the Scheme on perpendicular and complimentary routes. d) In Table 4.18, the 2031 DS Eastbound figure should be "20:00" (i.e. 19 minutes plus 60 seconds). this will be corrected in a revised version of the Transport Assessment at Deadline 3. The EV e/b 2039 figure has been checked. As delays on the highway network increase there is a point where a road-users decides to pay a toll and choose a route via the quicker M6 Toll Road. Cars on employers' business are more likely to pay the toll charge to reduce their journey times.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.10.11	The Applicant	Road Safety Audit a) Have the proposals been the subject of a Road Safety Audit? b) If so, to what stage? c) What were the recommendations of any Audit? d) How, if at all, have the recommendations been incorporated in the submitted Proposed Development? e) If any recommendations have been rejected or not accepted, can a full explanation be given as to why this is the case?	<p>a/b) yes, a Stage 1 Road Safety Audit was undertaken during preliminary design based upon the layout submitted for statutory consultation, held between 24 May and 5 July 2019. A Stage 2 Road Safety Audit will be completed once the detailed design is developed and a Stage 3 Road Safety Audit will be undertaken prior to opening the new road.</p> <p>c/d) The recommendations made by the auditor and how these have been incorporated into the M54 to M6 link scheme design included:</p> <ol style="list-style-type: none"> 1. A Polished Stone Value of 68+ or High Friction Surfacing is installed on all approached to roundabouts – this is to be considered during the detailed design stage and would be required in accordance with DMRB 2. Maintenance Access Areas (MAA) are to be provided at M6 J11 roundabout to provide safe hard standing areas for maintenance operatives to safely maintain signal equipment – details of MAAs are to be developed during the detailed design stage, however there is sufficient space within the proposed highway boundary to accommodate the required maintenance accesses in safe locations. 3. Ensure adequate advance signage is provided on the approach to the M54 Junction 1 eastbound diverge slip road to clearly indicate to drivers that lane 1 is to be used to access the local road network – the preliminary sign layout includes gantry signing to indicate lane destinations on the slip road so that users wishing to access the existing A460 should leave the motorway in Lane 1 only 4. Physical measures to be implemented at the southern end of the existing A460 (where it is to be stopped up) to prevent glare from drivers' lights confusing drivers on the M54 J1 layout – it is anticipated that the proposed tree planting and new noise barrier will be sufficient to prevent this glare, however it will be considered further in the detailed design stage 5. Address issues associated with private accesses onto the new alignment of the link to connect Featherstone west roundabout to the existing A460. The original alignment indicated a number of properties on the existing A460, including the fuel station would have long extended driveways to connect to the new link. The road geometry has been modified to be closer to the original alignment of the A460 in order to reduce the length of private means of access to existing properties situated to the north of the existing fuel station on the A460 and access to the fuel station. 6. Ensure sufficient deflection is provided at the westbound entry to the Featherston south roundabout in order to reduce entry speeds – the alignment has been amended to provide improved deflection to encourage reduced vehicle speeds. 7. Re-align the exit from Featherstone east roundabout to the eastbound merge slip road to increase the separation of subsequent roundabout exits – this was addressed in the scheme design and improved further as part of Design Change 6 submitted to the Examining Authority on 09 October 2020. 8. Concern that drivers may mistake the widened central reserve of the new link road (as it passes through Featherstone Junction) as a running lane – the widened central reserve is required to maintain adequate forward visibility for drivers, however providing visual clues, including positioning drainage channels and use of alternative paving colours in the central reserve are to be considered during the detailed design. 9. Ensure sufficient visibility is provided on the approach to the transport yard on Hilton Lane – the design speed has been reduced to 30 mph, including the implementation of a 30 mph speed limit on Hilton Lane and adequate visibility has been provided. 10. Consider passing places and glare protection on the new access route over the proposed accommodation bridge – to be developed during the detailed design stage

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<p>11. Provide suitable facilities for pedestrians and cyclists to safely navigate M6 J11 – the design was amended to provide a shared footway/cycleway, with crossings to enable walkers and cyclists to safely negotiate M6 J11.</p> <p>e) No recommendations of the Stage 1 Road Safety Audit have been rejected.</p>
1.10.12	The Applicant SCC WCC	<p>Effect on NMUs</p> <p>a) It is understood that non-motorised users (NMUs) will not be prevented from using the new link road. Is this correct?</p> <p>b) If this is the case, should they be so prevented (except in an emergency), and how should this be secured?</p> <p>c) Or, should only certain categories of users be prevented?</p> <p>d) In any event, NMUs will not be able to use the slip roads to/from the motorways which does not appear to be the case in Figures 6.1 to 6.7 of the Transport Assessment Report [APP-222]. Could this be clarified.</p>	<p>a) Correct, NMUs will not be prevented from using the new link road.</p> <p>b/c) Highways England does not consider that any prohibitions of NMUs are required for the new link road. Such prohibitions are rare on roads that are not classified as 'Special Roads' i.e. motorways, and tend to be used in situations where there is a history of high levels of NMU use resulting in accidents. If a prohibition was required along the new link road, this would require a Traffic Regulation Order (TRO) and the support of local Police to enforce the restriction. The main origins and destinations of local trips for NMUs are situated on or adjacent to the existing A460 and local road network. There are few Public Rights of Way (PRoW) in the vicinity of the link (which are used rarely) and all existing NMU routes are to be retained in the vicinity of the scheme. Therefore, it is considered that the local roads and PRoWs are more suited to encourage NMU use and the Scheme proposes to provide carriageway edge shared footway/cycleway facilities to facilitate NMU movement across M54 Junction 1 and M6 Junction 11. The reduction in traffic on the existing A460 as a result of the new link road also makes the local road network more attractive to NMUs and therefore there appears to be no specific requirement to implement a TRO to prohibit access to NMUs.</p> <p>d) All slip roads to and from the M54 and M6 motorways are to be classified as 'Special Roads' as indicated on the Classification of Roads Plans [AS-070/2.9], therefore motorway regulations apply and NMUs are prohibited to access them. Access to verges on these slip roads will be prevented by the use of fencing. Figures 6.1 to 6.7 of the Transport Assessment Report [APP-222/7.4 and subsequent revisions] indicate existing NMU routes (i.e. footways and PRoWs) and proposed NMU facilities where these are amended. They are not intended to indicate NMU prohibitions on the motorway slip roads or the permitted NMU access along non 'Special Roads'.</p>
1.10.13	The Applicant	<p>Effect on NMUs</p> <p>a) The Traffic & Transport Report in paragraph 6.2.26 [APP-222] says a legacy package of improved pedestrian and cycle improvements may also be implemented which would further improve benefits to vulnerable WCH in the area. Is this to be delivered, or only under certain criteria?</p> <p>b) If so, what are the criteria and by who?</p> <p>c) What would the benefits be?</p> <p>d) How is it to be secured through the DCO?</p>	<p>a) In the Transport Assessment (TA) report the paragraph 6.2.26 referenced in the question is renumbered in the revised TA report [AS-114/7.4] as paragraph 6.2.28. The Scheme does not include proposals to improve NMU facilities along the existing A460 corridor. However, Highways England has accepted a 'Designated Funds' application for an initial feasibility study to identify opportunities to provide improved NMU routes along the existing A460. This will be developed in partnership with key stakeholders including SCC, separately to this DCO application. To ensure clarity, these works are not committed, do not form part of the DCO application and are not material to decision making on the DCO.</p> <p>b) Highways England manage a ring-fenced pot of designated funds, finding new ways to improve our road network and its surroundings. By doing this we'll make sure that England's motorways and major A roads are fit for future generations. The four funding areas are:</p> <ul style="list-style-type: none"> • Users and communities • Environment and wellbeing • Innovation and modernisation • Safety and congestion <p>If the feasibility study concludes that local cycleway improvements would deliver tangible benefits for the local community, Highways England will undertake a prioritisation process to determine which schemes to apply Designated Funds to.</p> <p>c) The 'legacy package' mentioned in the Transport Assessment Report because such an NMUs improvement scheme would be complimentary to the M54 to M6 Link Scheme. The traffic flow relief to the A460 that will be delivered by the M54 to M6 Link Road scheme will make the A460 legacy pedestrian & cycle improvements simpler to implement.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			d) For avoidance of doubt, the proposals associated with NMU improvements along the existing A460 and other Designated Funds applications are not part of the DCO application and are not material to decision making on this application.
1.10.14	The Applicant SCC	Bus Stops a) Figure 7.3 of the Transport Assessment Report [APP-222] indicates that there would be two new bus stops on Cannock Road. How are these to be secured? b) Have the relevant Bus companies been engaged in any proposed changes to Bus routing? c) Have they indicated no issue? d) Are the applicants funding the new bus stops that could be provided or funding the replacement of those to be lost?	a) It is proposed to provide one new bus stop on the eastern side of Cannock Road. Figure 7.3 of the Transport Assessment Report [APP-222/7.4 and subsequent revisions] indicates two separate diagrams for northbound and southbound bus services, however there is only one new bus stop indicated by a yellow dot which is to be provided as part of the M54 to M6 Link Road scheme's works. b/c) No discussions have been held with bus companies to date, however Arriva (Midlands North) and National Express West Midlands have been issued consultation documents and no response was received. Further discussion will be held with SCC and the relevant bus companies to agree details through the detailed design stage. d) The provision of one new bus stop is included within the budget for the M54 to M6 link road Scheme.
1.10.15	The Applicant SCC	Bus Timings Paragraph 7.2.7 of the Transport Assessment Report [APP-222] makes an assessment of effects on journey times to Bus Route 70 as a result of the Proposed Development. Could this assessment be quantified in terms of minutes and seconds?	Paragraph 7.2.7 of the Transport Assessment Report [AS-114/7.4] states that ' <i>The new bus route through the Scheme would add approximately 550m to the journey distance of Bus Route 70</i> '. Assuming a travel speed of between 20 miles per hour and 30 miles per hour, the total additional time for this journey would be between 41 seconds, and one minute 2 seconds. Notwithstanding this, the journey time saving for buses travelling along the A460 would be similar to the journey time saving for all vehicles on Journey Time Route 1. The journey time savings would vary by time period, as tabulated in the TA report at Tables 4.9 to 4.17. In summary, there would be journey time savings of between 2 to 2.5 minutes in the busy hours on weekdays. In the evening (EV) period the increased journey distance with the Scheme could add up to half-a-minute to the bus service's journey time.
1.10.16	The Applicant	Construction effects a) Paragraph 8.4.5 of the Transport Assessment Report [APP-222] indicates that for the purposes of "traffic management the most impactful arrangement at each junction was considered separately and to be independent of the other sections". How can this be secured? b) Alternatively, what would be the 'in combination' effect?	a) The approach applied a worst-case for traffic impact assessments during construction, based on conservative estimates of construction durations. b) If both ends of the new link road (i.e. at M6 J11 and at M54 J1) were to be affected by roadworks simultaneously then one trip diversion (for example via A449 and A5) would avoid the Works at both locations, therefore it is not anticipated that the 'in-combination' effect would be more significant than the effects of installing traffic management at one of the junctions.
1.10.17	The Applicant	Clarification There are a significant number of locations in the Outline Traffic Management Plan [APP-223] where the legend "Table Error! No text of specified style in document.". Could this be checked, and the document reissued?	The revised Outline Traffic Management Plan [AS-116/7.5] submitted to the Planning Inspectorate on 9 October 2020 as part of the submission of design changes has addressed this typographical issue.
1.10.18	The Applicant	Outline Traffic Management Plan [APP-223] In the Table following paragraph 3.1.3 there is reference to night time working restrictions. However, the hours do not coincide with the working hours set out in the table following paragraph 2.3.1 or paragraph (2)(c) of Requirement 4 of Schedule 2 to the dDCO [APP-018], even allowing for the start-up and close-down hours. Could this be clarified?	It is intended that the core working hours (the hours that the Contractor proposes to the majority of construction works) are to be 08:00 – 18:00 Monday to Friday and 08:00 – 13:00 Saturday with no working on Sundays and Bank Holidays. This is consistent in the Outline Traffic Management Plan [APP-223/7.5] and Outline Environmental Management Plan [AP-218/6.11] submitted with the Application. Exceptions to this are permitted for specific activities. The hours permitted within the draft DCO [APP-018/3.1] allow for slightly longer hours (07:00 – 19:00 Monday to Friday and 08:00 - 16:00 on Saturday), which is to provide some flexibility for the Contractor to carry out the time critical activities, to secure the site or to finalise ongoing operations at the end of each day. Exceptions to this are permitted for specific activities. The Outline Traffic Management Plan [AS-116/7.5] submitted to the ExA on 9 October 2020 has been amended to clarify this, including:

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			<ul style="list-style-type: none"> additional text to paragraph 2.3.2 to clarify the difference between the working hours in Table 2-2 and those indicated in paragraph (2)(c) of Requirement 4 of Schedule 2 to the dDCO Additional paragraphs 2.3.3 to 2.3.5 to explain exceptions to core hours, including night time working Amendment to Paragraph 2.3.7 (2.3.4 in [APP-223/7.5]) to align with the exceptions set out below paragraph (2)(c) of Requirement 4 of Schedule 2 to the dDCO [AS-075/3.1] Removal of the table below paragraph 3.1.3 and removal of paragraphs 3.1.5 to 3.1.7 <p>The draft Development Consent Order [AS-075/3.1] submitted to the ExA on 9 October 2020 included an additional exception below paragraph (2)(c) of Requirement 4 of Schedule 2 to allow for the proposed M54 closure due to Change 4 '(i) 24 hours a day 7 days a week working to carry out the works at the M54 Junction 1 for a period of up to 3 weeks whilst the motorway is closed'</p>
1.10.19	The Applicant	General Clarification a) Reference is made in the Transport Assessment Report [APP-222] regarding the appointment of contractor which may result in review of construction methods and consultation. Has any progress been made on the appointment of a contractor? b) Is there a proposed timetable for this?	<p>The revised Transport Assessment Report [AS-114/7.4] submitted to the Planning Inspectorate on 9 October 2020 as part of the submission of design changes includes amendments at paragraph 8.2.3 to confirm that Highways England appointed a Contractor for the Scheme in winter 2019.</p> <p>The contractor, working with the project team, developed more detail on construction methods and carried out buildability reviews of the design. This work led to the identification of the seven design changes submitted to the Planning Inspectorate on 9 October 2020. The construction methods and phasing are subject to ongoing development during the detailed design stage.</p>
1.11	Water Environment and Flood Risk		
1.11.1	The Applicant EA	Climate Change a) Paragraph 13.6.84 of Chapter 13 of the ES [APP-052] indicates that the EA is updating the assessment of climate change for flood risk to new developments. Has this work been published? b) If so, what are the implications of this for the Proposed Development.	<p>a) The EA's climate change guidance for flood risk assessments was updated on 17 December 2019, and has subsequently been revised on 16 March 2020 and 22 July 2020. In this updated guidance, the Upper End allowance for the Humber River Basin District anticipated for the 2080's has remained the same, at 50%.</p> <p>b) Therefore, the assessment of climate change impacts for the proposed developments remains as outlined in Appendix 13.1 Flood Risk Assessment [APP-200/6.3] and Chapter 13: Road Drainage and the Water Environment [APP-052/6.1].</p>
1.11.2	EA SCC	Fluvial Flood Risk a) Table 3.1 of the Flood Risk Assessment [APP-200] sets out the summary of fluvial flood risk by watercourse. Do the EA and SCC as LLFA agree with the flood risks set out in this Table? b) If not, what should they be? Please justify your answer.	N/A
1.11.3	The Applicant	Lower Pool a) Given the flood risk from a pool relates to the volume of water stored rather than its area, could the Applicant please provide details of volume of the water stored in Lower Pool in the pre- and post-development scenarios? b) Could the Applicant please provide information as to the discharge rates from Lower Pool in the pre- and post-development scenarios?	<p>a) Lower Pool provides online storage for Watercourse 3, therefore it is the rate at which the flows enter and exit the pond which are more significant to flood risk, than the total volume. However, the modelled volume of the pond considering the initial water level and the assumed bed level of the Lower Pool, pre-development approximate volume is 9504m³ and post development is 7240m³. These volumes are as a result of initial model tests undertaken as part of the Flood Risk Assessment [APP-200/6.3]. Final post development volume is dependent on the detailed design of the scheme, which will be model tested to ensure no further detrimental impact than that reported in Appendix 13.1: Flood Risk Assessment [APP-200/6.3].</p> <p>b) The maximum flow rate of discharge at the downstream of Lower Pool during a 1% Annual Exceedance Probability (AEP) event with a 50% climate change allowance in the baseline scenario is 0.01m³/s. Post development the maximum flow rate of discharge during a 1%AEP event with a 50% climate change allowance is 0.23m³/s. Whilst there is an increase in discharge rate from the pool during storm events, the flood risk assessment [APP-200/6.3] has shown that this does not increase flood risk to properties downstream. Final post development flows will be dependent on the detailed design of the</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
			scheme, which will be model tested to ensure no further detrimental impact than that reported in Appendix 13.1: Flood Risk Assessment [APP-200/6.3].
1.11.4	EA	Lower Pool In paragraph 13.8.6 of Chapter 13 of the ES [APP-052] the Applicant sets out some of the difficulties to emptying Lower Pool into Watercourse 3. Is the EA satisfied that appropriate mechanisms can be found so that the relevant part of Lower Pool can be emptied?	N/A
1.11.5	The Applicant	Pond morphology and surface water quality a) Paragraph 13.9.100 of Chapter 13 of the ES [APP-052] indicates that two ponds and two partial ponds would be lost. Paragraph 13.9.101 goes on to consider the loss of the ponds and one of the partial ponds. Has the effect of the second partial pond been considered? b) If so, where can this be seen? c) What implications are there of this on the assessment?	a) This is an error in paragraph 13.9.101 of the ES [APP-052/6.1]. The effect of the second partial pond was considered as part of the assessment reported in Chapter 13: Road Drainage and the Water Environment [APP/0.52/6.1]. This has been corrected as part of the assessment of design changes set out in the 'Environmental Statement Addendum: Proposed Scheme Changes October 2020' submitted to the ExA on 9 October 2020 [AS-118/8.6]. b) The partial loss of both ponds were assessed in Chapter 13: Road Drainage and the Water Environment [APP/0-52/6.1], this was an error within the paragraph 13.9.101. This has been corrected as part of the assessment of design changes set out in the 'Environmental Statement Addendum: Proposed Scheme Changes October 2020' submitted to the ExA on 9 October 2020 [AS-118/8.6]. c) Taking into consideration the mitigation proposed the residual effect is considered to be neutral for all ponds, there is no implication on the assessment.
1.11.6	The Applicant	Groundwater Paragraph 13.9.95 of Chapter 13 of the ES [APP-052] indicates that at the time of writing (January 2020) this was no information on the maximum winter groundwater levels. Could the Applicant please confirm whether knowledge has changed, and, if so, what are the implications of this?	Additional groundwater level data have been collected between November 2019 and May 2020 since the submission of the DCO Application. As anticipated, the data highlights the presence of localised higher groundwater levels between February and April compared with the July - November data used previously. Based on a review of the additional groundwater level monitoring at the site between November 2019 and May 2020, it is clear that the potential groundwater rise during the winter months can be up to 2 m locally (as assumed in Appendix 13.8 of the ES [APP-207/6.3]), however on average the groundwater in the superficial deposits and the bedrock generally rose by approximately 1 m between November 2019 and March 2020 after which the groundwater level across the site began to fall. An anomalous rise of more than 5 m was observed at a single location. However, this is not consistent with the rest of monitoring points and it is therefore likely to be due to an error during data collection. It is therefore concluded that the current assessment including the sensitivity analysis remains valid and no further update is required for the groundwater assessment.
1.11.7	EA SCC	Groundwater Flood Risk Paragraph 3.6.9 of the Flood Risk Assessment [APP-200] in that the results of the borehole for BH12 show groundwater levels higher than the level of construction in close proximity. The Applicant considers that this does not result in a risk to the scheme as Lower Pool, which is nearby, is to be lost. Do the EA and SCC agree with this analysis?	N/A
1.11.8	EA	Borrow Pit Are there any likely impediments to the Applicant obtaining Abstraction Licences and Water Activity Permit for dewatering and discharge of water from the borrow pit from the EA if required?	N/A
1.11.9	The Applicant Severn Trent Water Limited SSC	Foul water Flood Risk a) Paragraph 3.7.2 of the Flood Risk Assessment [APP-200] indicates that there have been three recorded incidents of sewer flooding in the local postcode area. Over what period of time was this? b) In light of this do the parties agree that the risk of sewer flooding is low?	a) South Staffordshire District Council Level 1 SFRA identifies recorded incidents of sewer flooding within the vicinity of the Scheme from Severn Trent Water's DG5 register covering the 20-year period prior to 2014. The DG5 register shows that there are five incidents of flooding from sewers in the postcode area WV10 7, which covers the Featherstone area. Information concerning individual flooding incident dates is not publicly available. b) The Applicant's position is that the risk is low.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.11.10	The Applicant South Staffordshire Water Plc	Potable Water Has the risk of flooding from potable water supplies been assessed? If not, could this be undertaken.	<p>The risk of flooding from potable water supplies has not been expressly assessed as part of the Flood Risk Assessment [APP-200/6.3]. However, utility diversions are being considered in detail as part of the design of the scheme.</p> <p>Water mains do cross the scheme area at two locations. The first is to the south of the scheme around the position of the new M54 Junction 1. The second is to the west of Hilton Park, across the A460 to Dark Lane. The receptors to flood risk in this area are agricultural land, park land, properties on Dark Lane, and the scheme itself. Each of these utility diversions are currently being agreed with Severn Trent Water and South Staffordshire Water as appropriate.</p> <p>During construction, appropriate isolation and diversion of the water supply will be undertaken as part of the utility diversion construction. Therefore, the flood risk from the potable water supply would be low.</p> <p>The flood risk after the construction of the Scheme is considered to be low, given the location and number of water mains crossing the scheme. The newly constructed watermain assets would be the responsibility of the water company, including maintenance regimes.</p> <p>In the event of a watermain pipe burst, the scheme is mainly raised on an embankment at these crossing points, meaning a low risk of flooding the carriageway. Flood risk as a result of watermain failure for areas adjacent to the scheme would remain the same as baseline conditions – which is low risk.</p>
1.11.11	The Applicant	Potable Water In its relevant representation [RR-015] South Staffordshire Water Plc raises concerns over a 24-inch potable water main. Could the Applicant please give its response to these concerns.	<p>The Applicant is holding ongoing discussions with South Staffordshire Water in relation to the diversion of the 24-inch potable water main. A methodology for the diversion is currently in the process of being agreed to ensure the continuity of the service during the diversion works. All the issues that have been raised by South Staffordshire Water have been captured in a SoCG [TR010054/APP/8.8LIU(P)] so that the Applicant can update the Examining Authority on the status of these discussions throughout the examination period.</p>
1.11.12	The Applicant	Compliance with NPSNN Paragraph 5.103 of the NPSNN indicates that the design of linear infrastructure may mean that linear infrastructure can reduce the risk of flooding for the surrounding area. While the ExA notes that the requirement in paragraph 5.99 of the NPSNN is that flood risk will not be increased, can the Applicant please explain why the design of the proposal has not been undertaken in a way to reduce risk in areas of known flooding by reducing the rate of flow from the site in a peak event, for example on the existing A460 (see paragraphs 4.1.4 to 4.1.7 of the Flood Risk Assessment [APP-200])?	<p>Each watercourse crossing has been looked at holistically, considering remote upstream and downstream impacts. Fluvial model extents included reaches over 1km upstream and 1km downstream of where the scheme crosses the watercourses. This decision was made in agreement with the Environment Agency during consultation in July 2019 to ensure that the full impacts of the scheme could be understood on flood risk.</p> <p>On the completion of the hydraulic modelling, it has been shown that the impacts of the scheme on flood risk are within the immediate proximity of the scheme (within 100m). The scheme has been designed to minimise detrimental impact to flood risk in these areas.</p> <p>During consultation, the Environment Agency highlighted an area of concern for known existing flooding as the Featherstone Brook, downstream of Watercourse 2. The Featherstone Brook is 7km downstream of the scheme. This area is outside of the Order limits of the scheme, and the modelling has shown that impacts of the scheme are localised to within less than 100m up or downstream of the scheme. This meant that design of the proposal would have no impact on these flood areas, and therefore there were no opportunities of betterment to flood risk for the Featherstone Brook.</p> <p>Flood Risk to properties along Watercourse 2 (Brookhouse Crescent, South View) was considered carefully as part of the design, as this area was highlighted as a concern by the Lead Local Flood Authority. The baseline model does not show flood risk in this area. However, this area was considered during the development of the option model testing. Development of the option for Watercourse 2 included the potential for a flood mitigation pond upstream of the A460 on Watercourse 2, and capacity improvements to the existing A460 culvert. However as described in paragraph 4.1.6 of the Flood Risk Assessment [APP-200/6.3], testing showed that improvements to the existing A460 culvert would have a detrimental impact to flood risk to the properties along Brookhouse Crescent and South View, as this increased pass forward flows. Therefore, the design has not included modifications to this existing culvert. Testing showed that the upstream flood mitigation pond provided some negligible benefit to flows and levels downstream, however the final design provides a similar result with the configuration of the culverts underneath the carriageway.</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
1.11.13	EA SCC	Greenfield run-off rate a) Can the EA and SCC confirm whether they are content with the 5 l/s/ha for the greenfield run-off rate as set out in paragraph 4.4.6 of the Flood Risk Assessment [APP-200]? b) If not, what rate should be utilised? Can this alternative figure be justified?	N/A
1.11.14	EA SCC	Cutting under Hilton Lane Overbridge a) Paragraphs 4.5.4 to 4.5.8 of the Flood Risk Assessment [APP-200] conclude that the risk of groundwater flooding from the cutting is low? Do the EA and SCC concur with this analysis? b) If not, please explain your reasoning.	N/A
1.11.15	The Applicant	Outfalls to rivers Paragraph 13.9.93 of Chapter 13 of the ES [APP-052] discusses the effect of outfalls on river morphology. It indicates that with good design a negligible magnitude of impact is predicted. Could the Applicant please demonstrate how this good design is to be secured?	Table 3.4, D-WAT6 of the OEMP [AS-112/6.11] sets out the commitments to good design of naturalised ditchcourses which would outfall to the receiving watercourse. D-WAT6 states: <i>"For new highway outfalls the drainage design includes new ditchcourses to convey treated runoff to the receiving watercourses avoiding the need for pipe outfalls supported by concrete headwalls. The design of new ditches would be informed by a geomorphologist and would include where practicable 'natural' features such as a sinuous low flow channel (albeit along a straight corridor) incorporating shallow berms and occasional sections where the channel is narrowed to improve flow."</i> This is secured through Requirement 4 of the draft DCO. This commitment seeks to avoid the need for new engineered structures along watercourses by instead using new ditches. As a more 'natural' option, these ditches do not have the potential for the same types of adverse impacts as engineered outfalls. This commitment will be amended in the next iteration of the OEMP at Deadline 4 to ensure that it explicitly refers to the need to consider the river morphology of the receiving watercourse in the design of these outfalls. A further commitment will be included in the next iteration of the OEMP at Deadline 4 to ensure the good design of engineered outfalls is secured appropriately. With regards to the outfalls to Watercourse 5 (Latherford Brook) paragraph 13.9.93 includes an error. There will be three new engineered outfalls rather than two, as currently it is proposed that Pond 5 will discharge via a conventional pipe due to the steeper topography. Although, this does not affect the outcome of the assessment reported in Chapter 13 of the ES [APP-052/6.1] or Appendix 13:4 Water Framework Directive Assessment [APP-203/6.3], options for a ditchcourse will be reviewed during detailed design and a commitment will be added to the OEMP at the next iteration for submission at Deadline 4.
1.12	Socio-economic effects		
1.12.1	SCC	Minerals a) It is understood that the Proposed Development passes through a Mineral Safeguarding Area (MSA) for Sand and Gravel and part of a MSA for Brick Clay. Does SCC consider that these designations have any implications for the consideration of this matter? b) If so, what are these implications?	N/A
1.12.2	SCC	Hilton Cross Strategic Employment Site a) It is stated in paragraph 4.3.3. of the Statement of Reasons [APP-021] that the Order limits include a sliver of land allocated as the Hilton Cross Strategic Employment Site under SSC Core Strategy Policy CP1 and EV1. Could the SSC please confirm whether this would have any material effect on this allocation or its implementation, including any landscape buffers?	N/A

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		b) And if so, what would be the effect of this?	
1.12.3	The Applicant SSC SCC	M6 Diesel M6 Diesel are concerned that powers sought under Article 16 of the dDCO could be used to introduce restrictions on the current A460 passing their site and that this could result in significant detriment to their business (if for example HGV's were restricted). Can the Applicant confirm its position in respect of potential restrictions on the A460 and whether the host Authorities and Highway Authorities are in agreement with their position?	<p>The current proposals do not include any restrictions on HGVs along the existing A460, nor does Highways England see any justification to do so as the current traffic model suggests a restriction would be unnecessary.</p> <p>Concern has been raised by SCC, SSC and the local Parish Councils (Featherstone and Brinsford, Shareshill and Hilton) that following the opening of the Scheme, the number of HGVs travelling along the existing A460 will be excessive and Highways England has considered the provision of a traffic regulation order to restrict access to HGVs, but does not believe it to be necessary. This would only be considered if HGV traffic along the route significantly exceeds that forecast in the traffic model post construction. The current traffic model suggests a restriction would be unnecessary.</p> <p>It is not Highways England's intention to seek an amendment to the powers sought in the DCO to include a traffic regulation order to restrict HGV traffic. If this position changes and a change is sought to the DCO then M6 Diesel will be notified of this. If, separate to the DCO process, the local highway authority, Staffordshire County Council, choose to seek an order to this effect then this would be done pursuant to the Road Traffic Regulation Act 1984 and would be subject to consultation.</p>
1.12.4	The Applicant	Climate Change Could the Applicant please make any comments it feels appropriate in light of the amendments to the Climate Change Act 2008 made by the Climate Change Act 2008 (2050 Target Amendment) Order 2019.	<p>Paragraphs 14.9.13 to 14.9.15 of Chapter 14 Climate [APP 053/6.1] outline the current carbon budgets, against which the Scheme is assessed, as well as stating the anticipated impact on the carbon budgets over time following the amendment to the Climate Change Act 2008 within the Climate Change Act 2008 (2050 Target Amendment) Order 2019.</p> <p>For example, some tightening of the carbon budgets is likely to occur when the carbon budgets are reviewed and revised, which is anticipated to occur when the Sixth Carbon Budget is published (expected December 2020). The Committee on Climate Change (CCC) has indicated that the trajectory of the carbon budgets will be steeper over time; therefore it is the later carbon budgets rather than near term ones which will see a greater impact. Therefore, it is not anticipated that the near-term carbon budgets will be significantly different to those currently published.</p> <p>Until the revised carbon budgets setting out the pathway for the UK to achieve net zero emissions are published by the CCC, and adopted into law through the Climate Change Act, it is not possible to quantitatively assess the impact of this Scheme on the UK meeting its carbon reduction target.</p> <p>However, Highways England considers that even if the budgets become more stringent in line with the net zero target, it will not result in any risk of the Scheme having a material impact on the ability of the Government to meet its carbon reduction targets. Therefore, the conclusion of the assessment is not anticipated to change in the context of the revised targets.</p>
1.12.5	The Applicant	Climate Change NPSNN paragraph 4.41 refers to the UK Climate Projections 2009. However, these projections were updated in December 2019 and therefore may be more robust. Could the Applicant please reassess the Proposed Development in light of these latest updates?	<p>While the NPSNN refers to the use of the UK Climate Projections 2009 (UKCP09) high emissions scenario, it also states that "<i>The applicant should take into account the potential impacts of climate change using the latest UK Climate Projections available at the time</i>".</p> <p>Therefore, as stated in paragraph 14.3.5 of Chapter 14 Climate [APP-053/6.1], the UKCP18 climate projections have been used for the purposes of the CCR and ICCI assessments. The UKCP18 projections Representative Concentration Pathway (RCP) 8.5 scenario has been used as this represents the closest equivalent to the UKCP09 high emissions scenario.</p> <p>Justification for this is also outlined in Table 14.1 of Chapter 14 Climate [APP 053/6.1].</p>
1.12.6	The Applicant	Clarification Table 5.17 in Chapter 5 of the ES [APP-044] sets out the change between the Do-Something and the Do-Nothing scenarios for the vehicle kilometres travelled in the Opening Year. The Full Traffic Dataset figure change is	Yes, the second figure is a percentage.

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
		given along with a second number in a bracket. Is this second figure a percentage or some other indicator? Could this please be clarified.	
1.12.7	The Applicant	Clarification In Table 12.3 in Chapter 12 of the ES [APP-051] dealing with magnitude of impact and typical descriptions, the wording for Major and Negligible appears to be the same. Could this be clarified?	<p>This is an error, the criteria for 'Negligible' should read as follows, as set out in DMRB LA 112:</p> <p>"Private property and housing, community land and assets, development land and businesses and agricultural land holdings:</p> <p>1) very minor loss or detrimental alteration to one or more characteristics, features or elements. e.g. acquisition of non operational land or buildings not directly affecting the viability of property, businesses, community assets or agricultural holdings; and/or</p> <p>2) very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision.</p> <p>WCH <50m increase (adverse) or decrease (beneficial) in WCH journey length."</p>
1.12.8	The Applicant	Agricultural Holdings a) Paragraph 12.5.1 in Chapter 12 of the ES [APP-051] sets out the Study Area and this includes agricultural holdings within and up to 500m from the Scheme boundary. Does this include the whole of any agricultural holding meeting this criterion, or just that part within that area? b) Table 12.10 sets out in the title "Land from holding (and % of total area)", but the results do not include the percentage figures. Could the Applicant please provide these figures.	<p>a) The assessment is based on the impacts experienced by the agricultural holding within the Scheme boundary as a whole (as far as this is known), rather than just the area of land within the Scheme boundary.</p> <p>b) Table 12.6 sets out the known details of the agricultural land holdings. The total area farmed by six of the holdings was not available from the landowners and is noted in Table 12.6 as 'Unknown'. Further efforts are being made to engage with landowners to obtain this information. Where the total area is known, the percentage of permanent land required from Holding 5 is 12%, and from Holdings 6 and 8 it is 100%. Note also there is a rounding error between Tables 12.6 and 12.10 with respect to Holding 6 (Table 12.6 should have rounded up the total area to 1.5 ha to be consistent with the land-take area).</p>
1.12.9	The Applicant	Agricultural Operations In paragraph 12.9.25 in Chapter 12 of the ES [APP-051] it is indicated that the majority of the agricultural land is farmed remotely on a contract basis. The Applicant therefore states that there would be few consequences for the ongoing viability and operations of the agricultural occupiers. Could the Applicant please provide evidence to support this statement since it may be that the contractor(s) are solely employed in maintaining this land, or it would equate to a Full-Time Equivalent post, which would be lost as a consequence of the Proposed Development.	<p>Further efforts are being made to engage with the agricultural contractors. Gateley Hamer met with the land agent on behalf of the landowners who use agricultural contractors in December 2019, but the agent did not have any further details on the contractors, including the scale of activity. The agent was only able to confirm that it was not viable for the landowners to farm the land themselves due to the cost of machinery.</p> <p>The assessment has been made based on knowledge of the agricultural contracting sector and best professional judgement. The affected land parcels are relatively small, and it is highly unlikely that an agricultural contracting business would be employed solely in maintaining such small areas of land as this would neither be financially viable nor time efficient.</p>
1.12.10	The Applicant	Agricultural Operations Paragraph 12.9.27 in Chapter 12 of the ES [APP-051] makes the statement that the effects "could be reduced if the owner and/or occupier is able, and chooses, to use compensation payments to replace assets". Could the Applicant please provide evidence to support this statement since this would result in another party having their landholding reduced.	<p>This assertion is based on the assumption that if the affected landowners were to use compensation payments to purchase new land parcels, then the newly purchased land parcels would have been voluntarily advertised for sale and sold by the owning party. This is covered by the assumption that the affected party is able to find alternative land available for purchase. The assets referred to within paragraph 12.9.27 are also not limited to replacement land but could also include capital items that render the remaining land parcel more efficient, such as new buildings and equipment and improved land drainage.</p>
1.12.11	The Applicant Mr R Rowe Mr N	Employment a) In paragraphs 12.9.14, 2.9.18 and 12.9.19 of Chapter 12 of the ES [APP-051] the Applicant has assumed that the none of the various fishing lakes or the car boot sales facilities provide permanent employment. By	<p>a) The ExA is correct "permanent employment" does refer to full-time employment.</p> <p>b) N/A</p> <p>c) N/A</p>

WQ No	Question to	Reference (in bold) and Question	Applicant's Response
	Simkin Mr P Simkin Mr M Commins Allow Ltd	<p>"permanent employment" the ExA assumes that the Applicant means full-time employment. Could the Applicant please confirm whether the ExA's assumption of terminology is correct?</p> <p>b) Could the parties affected confirm whether the Applicant's assumption is correct?</p> <p>c) If not, could the parties affected provide evidence to support the contention along with information as to the employment levels.</p>	
1.12.12	The Applicant SCC ShC WCC	<p>Recycled Aggregates</p> <p>a) Paragraph 3.3.68 of Chapter 3 of the ES [APP-042] in it is indicated that a target of 27% of secondary and recycled aggregates had been set, and this is in accordance with Regional Guidelines. Can these Guidelines and the relevant reference be precisely identified?</p> <p>b) Given that the location of the Proposed Development is relatively close to large sources of secondary and recycled aggregate what consideration has been given to setting a higher, realisable, target?</p> <p>c) Could a higher target be reasonably achieved?</p>	<p>a) The relevant reference is as follows: Ministry of Housing, Communities and Local Government (2009) The National and Regional Guidelines for Aggregates Provision in England 2005 to 2020. These national and regional guidelines for aggregates provision are set out in Table 10.6 of the ES [APP-049/6.1].</p> <p>b) The OEMP [APP-218/6.11 and subsequent revisions], Table 3.3, MW-MAT4 specifies a target that 27% of aggregates should be secondary and recycled aggregates for those applications where it is technically and economically feasible to substitute alternative materials for primary aggregates. However, Highways England will liaise with the construction contractor to determine whether they are able to work towards a higher target. The 27% target for assessment of impacts does not preclude Highways England from setting a more demanding target during subsequent design and construction.</p> <p>c) Table 10.8 in the ES [APP-049/6.1] provides a potential recycled content of 30% for aggregates based on the "good practice" recycled content rates from WRAP's Designing Out Waste Tool for Civil Engineering (Ref 10.20) and current estimates of aggregates required for the scheme. A higher target may be reasonably achieved during construction and this will be considered in more detail during detailed design. The actual recycled content achieved during construction will depend on the availability of material containing recycled content and technical suitability.</p>