

**A57 Link Roads**

**TR010034**

**9.7 Applicant's response to Examining  
Authority's First Written Questions**

Rule 8 (1)(b)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

Volume 9

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# Infrastructure Planning

## Planning Act 2008

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

### A57 Link Roads Development Consent Order 202[x ]

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#### 9.7 Applicant's response to Examining Authority's First Written Questions

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<b>Author:</b>	A57 Link Roads Project Team, National Highways and Atkins

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## 1. Introduction

- 1.1.1. This document sets out National Highways' response to the Examining Authority's first round of Written Questions (ExAQs). Where the ExAQs have requested that National Highways provide new documents, the response specifies which deadline they will be submitted at.

## 2. The draft Development Consent Order (dDCO) and other consents

No	Question to	Reference	Question	National Highways' response
1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
	<b>General matters and other consents</b>			
1.1.	Applicant	dDCO updates	To help the ExA understand and keep track of the Applicant's progress in developing the dDCO, please could it provide: <ul style="list-style-type: none"> <li>a) regular updates, including when the submission of updates is identified in the Examination Timetable;</li> <li>b) a unique revision number for each submitted version, clearly indicated in the filename and within the body of the document;</li> <li>c) a clean .pdf version of the latest dDCO;</li> <li>d) a tracked change .pdf version of the dDCO, showing all changes since the previous submitted version;</li> <li>e) a tracked change .pdf version of the dDCO, showing all changes since the Application version; and</li> <li>f) a "<i>Schedule of dDCO Changes</i>" report setting out the reasons for the changes included in each update submitted since the Application version.</li> </ul>	Noted
1.2.	Applicant	The Applicant's final dDCO	To help the ExA to prepare the recommended DCO that will be included with the ExA's report to the Secretary of State, please could the Applicant provide the following at the Deadline identified in the Examination Timetable for the Applicant's final dDCO: <ul style="list-style-type: none"> <li>a) .pdf versions (clean, tracked changes since the last submitted version, and tracked changes since the Application version) of its final dDCO, together with a "<i>Schedule of dDCO Changes</i>" report;</li> <li>b) a clean version of its final dDCO in Microsoft Word; and</li> <li>c) a report validating that its final dDCO is in the Statutory Instrument template, obtained from the publishing section of the legislation.gov.uk website.</li> </ul>	Noted
1.3.	Applicant	Model Provisions	The ExA notes that many model provisions from The Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 have been included in the dDCO and that a number have been either amended or omitted.	The reason for any variation was provided for in the Explanatory Memorandum.

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b>			
	Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
			Please could the Applicant set out it's reasoning for amending or omitting model provisions where this has not already been provided in the Explanatory Memorandum [APP-021]?	
1.4.	Applicant Environment Agency Natural England Local planning authorities	Other consents Updates	<p>a) Please provide an up-to-date position in respect of obtaining the necessary consents, licenses, and agreements.</p> <p>b) Is there any reason to believe that any relevant necessary consents, licenses, and agreements will not subsequently be granted?</p> <p>c) Where appropriate, can letters of no impediment be provided by the Environment Agency and Natural England?</p> <p>d) Please could a summary of progress in securing other consents be provided at each relevant Examination deadline?</p>	<p>a) An updated Consents and Agreements Position Statement was provided for Deadline 1 (REP1-009) and a further update will be provided at Deadline 3 as per the examination timetable.</p> <p>b) From the Applicant's perspective there is no reason to believe that any relevant necessary consents, licenses, and agreements will not subsequently be granted.</p> <p>The appropriateness of letters of no impediment is being discussed with the Environment Agency and Natural England. As requested, the Applicant will provide a summary of progress in securing other consents be provided at each relevant Examination deadline.</p>
	<b>Preamble</b>			
1.5.	Applicant	[single appointed person]	Please could the preamble be updated to reflect the appointment of a two person, rather than a single appointed person?	This will be updated in the updated draft DCO submitted at Deadline 3 (TR010034/APP/3.1(2)).
1.6.	Applicant	Powers conferred by the Planning Act 2008 (PA2008)	<p>The final paragraph of the preamble refers to power conferred to the Secretary of State by specified sections of the PA2008, but not by others.</p> <p>Please could the Applicant explain its rationale for which powers of the PA2008 conferred to the Secretary of State are listed in the last paragraph of the preamble?</p>	<p>The sections quoted of the PA2008 are consistent with other Highways England/National Highways Development Consent Orders that have been made. The sections of the PA2008 quoted provide:</p> <ul style="list-style-type: none"> <li>• for the Secretary of State's decision making process (section 114);</li> <li>• the development for which development consent may be granted by the Secretary of State (section 115);</li> <li>• the Secretary of State formalities around granting development consent (section 117);</li> <li>• what may be included in an order granting development consent (section 120);</li> <li>• where an order granting development consent order authorises compulsory acquisition of land the Secretary of State being satisfied that the conditions in section 122(2) and (3) have been met.</li> </ul> <p>Schedule 5 deals with the content of Development Consent Orders and the paragraphs quoted are relevant to the matters included in the draft DCO.</p>
	<b>Part 1 – Preliminary</b>			
1.7.	Applicant	Article 2(1) Interpretation "commence"	The effect of this definition is to permit certain pre-commencement operations to take place before the discharge of requirements that require compliance before development commences. The ExA is	a) Certain actions have been excluded from the definition of "commence" in Article 2(1). This means that certain more minor operations, can be carried prior to the discharge of the 'pre-commencement' requirements. The items that are excluded are either de minimis or have minimal potential for adverse effects. In some cases they may need to be carried out

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1.	<b>The draft Development Consent Order (dDCO) and other consents</b>		Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].	
			<p>seeking to understand the nature and potential effects of these operations and to ensure that appropriate controls are in place.</p> <p>Some pre-commencement operations appear to have the potential to result in significant adverse effects. These include, but are not limited to, various mitigation works, remedial work in respect of any contamination or other adverse ground conditions; the erection of construction plant and equipment; diversion and laying of underground apparatus and site clearance.</p> <p>Some pre-commencement operations appear to be for the discharging of mitigation measures that would involve the development of detailed proposals requiring consultation and approval by relevant parties. These include, but are not limited to, archaeological and ecological investigations and mitigation works.</p> <p>Please could the Applicant clarify:</p> <ol style="list-style-type: none"> <li>the potential effects arising from the pre-commencement operations, any mitigation measures required to limit adverse effects, and how those mitigation measures are secured;</li> <li>the mechanisms for relevant parties to be consulted on and approve any mitigation measures that are included in the pre-commencement operations, and how those mechanisms are secured;</li> <li>whether, in a similar manner to that included for the A38 Derby Junctions project, the pre-commencement activities should be identified as preliminary works in the dDCO and Environmental Management Plan (EMP) to allow relevant mitigation measures to be secured.</li> </ol>	<p>in order to comply with pre-commencement requirements (for approval). It will also ensure that the construction timetable is managed appropriately.</p> <p>The activities that may be undertaken include:</p> <ul style="list-style-type: none"> <li>Ecological surveys including Phase 1 Habitat Survey, tree, bat, badger otter and Great Crested Newt surveys. These surveys comprise updates to surveys previously undertaken and will re-validate/update previous surveys results, inform any subsequent licence applications and inform the detailed design process. None of the ecological surveys are intrusive and some are seasonally dependent. Following these surveys, it is anticipated that it will be necessary to obtain protected species licences and implement mitigation in accordance with those licences. The mitigation works undertaken in accordance with these licences would be controlled by the appropriate conditions.</li> <li>Archaeological investigations comprising trial trenching that would inform the preparation of the Archaeological Fieldwork Strategy which forms part of Requirement 9 of Schedule 2 of the draft DCO (REP1-041). The investigation works themselves will be undertaken in accordance with the Written Scheme of Investigation (REP1-034) which has been consulted on and agreed with the archaeological officers of the Greater Manchester Archaeology Advisory Service and Derbyshire County Council. The works, whilst being intrusive, would be reversible and on completion the land would be restored to the original condition. This investigation work forms part of the assessment and mitigation design process for the Scheme, and it is typical for such investigations to be undertaken prior to requirements being discharged.</li> <li>A soil survey using a hand soil auger would be completed to inform the preparation of the Soil Management Plan forming part of Requirement 4 of Schedule 2 of the draft DCO. The works associated with this survey would be reversible and the land fully restored upon completion.</li> <li>Statutory undertaker surveys and investigations would include the use of Ground Penetrating Radar surveys (non-intrusive) and targeted slit trenches. These works would all be reversible.</li> <li>The definition of commence adopted is appropriate for the requirements of this authorised development and also has precedent in recent schemes such as the M20 Junction 10A Development Consent Order 2017 and the Silvertown Tunnel Order 2018.</li> </ul> <p>None of the operations need to be covered by requirements as they are all routine activities associated with the assessment, mitigation and detailed design of a scheme of this scale, and all are reversible.</p> <p>b) The EMP (First Iteration) (APP-183) and the Register of Environmental Actions and Commitments (REAC) (REP1-037) sets out the pre-construction and pre-commencement surveys and operations, including details of how the actions will be implemented so that</p>



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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				they can be secured. Where necessary, the REAC sets out what consultations are required to agree monitoring and reporting arrangements. c) For the reasons given in a) above the Applicant does not consider that the type of preliminary works envisaged will result in likely significant effects. Any consents and consultations that may be required for such pre-commencement activities will also be governed by other regulatory requirements such as ecological licences with Natural England under the Wildlife and Countryside Act 1981 or notice to the local planning authority in respect of noise under the Control of Pollution Act 1974. As a result, the Applicant does not consider a further definition of preliminary works is required for this Scheme.
1.8.	Applicant	Article 2(1) "cycle track"	Please could it be clarified whether a "cycle track" is a way over which the public have a right of way on foot?	There are no proposed routes within the scheme for which cycle access is provided and a shared or adjacent provision for access by foot is not. The definition of cycle track in the Highways Act 1980 provides for "with or without a right of way on foot" and the definition of cycle track in the draft DCO can be modified to make it clear that all cycle tracks authorised by the Order are with a right of way on foot as envisaged by the Explanatory Memorandum. We will make this change in the next draft of the draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).
1.9.	Applicant	Article 2(1) "first iteration EMP"	<p>a) Should this definition be moved to Schedule 2, Part 1, Requirement 1 and combined with the definition provided there of the "Environmental Management Plan"?</p> <p>b) Is the submitted Outline EMP [APP-183] the First Iteration EMP, or is the Applicant is intending to submit the First Iteration EMP to the Examination?</p> <p>c) The submitted document appears to be titled Outline Environmental Management Plan [APP-183] and is inconsistently described throughout the ES (Environmental Statement). Please could the dDCO and/ or ES be updated to ensure consistency?</p> <p>d) Many of the mitigation measures that would be expected to be secured in the EMP are set out in the separate Register of Environmental Actions and Commitments (REAC) [REP1-037], which is included in Schedule 10. Should it be clarified in the dDCO that the REAC is either part of the EMP and/ or that it is subject to the same provisions?</p>	<p>a) Yes given the definition is only used in Schedule 2 and we will update this in the next draft of the draft DCO, to be submitted at Deadline 3 (TR010034/APP/3.1(2)).</p> <p>b) Yes, the EMP (First iteration) has been submitted and this is APP-183. The filename of the pdf is titled 'Outline EMP' in error, which has caused confusion.</p> <p>c) All the DCO documents consistently refer to the EMP (First iteration), which is APP-183. It is only the file name of the pdf document that is incorrect. This has resulted in the document being referred to as an OEMP incorrectly in the examination library.</p> <p>d) The REAC does form part of the EMP. Section 3.1.2-3 f the EMP (First Iteration) (APP-183) states: <i>'In accordance with the DMRB LA 120, the REAC forms part of this EMP (First iteration), and therefore the two documents should be read in conjunction with each other. When the EMP (Second iteration) is prepared by the Principal Contractor in advance of construction, the REAC table will be incorporated into this section (Section 3) of the EMP (Second iteration). It will reflect all mitigation for the consented Scheme.'</i> The draft DCO will be amended at Deadline 3 (TR010034/APP/3.1(2)) to make this clarification.</p>
1.10.	Applicant	Article 2(1) "hedgerow and protected tree plans"	Slightly different document names are provided in Schedule 10. In each case, please could the same names be used, or please could it be clarified which certified document is referred to?	This will be updated in the updated draft DCO submitted at Deadline 3 (TR010034/APP/3.1(2)).



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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b>			
			Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].	
		<i>"speed limits and traffic regulations plans"</i>		
1.11.	Applicant	Article 2(3) <i>"rights over land"</i>	The extent and phrase of <i>"rights over land"</i> appear to be clarified by Article 2(2). Article 2(3) seems to go further than Article 2(2), but it is not clear to the ExA why this is necessary.  Please could the Applicant explain why Article 2(3) is required?	Article 2(3) does go further than Article 2(2) as it deals with the grant of rights to third parties or statutory undertakers. Rights will need to be granted to statutory undertakers in relation to their works.
	<b>Part 2 – Principal Powers</b>			
1.12.	Applicant	Article 3(3) Development consent etc. granted by the Order	This Article appears to be included for the avoidance of doubt. Please could the Applicant further justify why it is required? Is it consistent with the securing of mitigation measures for pre-commencement activities referred to in the above questions about Article 2(1) <i>"commence"</i> ?	We believe the question is directed at Article 3(3). These are activities which relate to the survey and investigation of land (consistent with Article 21) and otherwise the erection of the temporary means of enclosure or the temporary display of site notices which do not ordinarily constitute development for which planning permission would be required and therefore would not be the subject of further control.
1.13.	Applicant	Article 5(1) Maintenance of drainage works	Who would have responsibility for maintaining the drainage of any land while the Applicant holds it in temporary possession and how is it secured that they would have the rights needed to maintain it?	The purpose of this article is to make it clear that any realignment of drains or other works to them that are carried out as part of the Scheme do not affect the existing allocation of responsibility for maintenance of those drains, unless this is agreed between National Highways the responsible party. It is not intended to deal with responsibility for maintaining the drainage of any land while the Applicant holds it in temporary possession. Responsibility would remain with the landowner unless otherwise agreed and in the unlikely event that National Highways temporary possession prevents that the responsible party would be able to claim compensation for any loss.
1.14.	Applicant	Article 7(a) Limits of deviation	The Work Plans [REP1-002] would appear to allow the main carriageway to deviate by several metres from their drawn position. a) To ensure consistency with the positions of the Works considered in the ES, for example for the noise and vibration assessment, should a lateral limit of deviation of the main carriageway of a maximum of 1 metre be secured? b) The Engineering Drawing and Sections Plans [REP1-005] are annotated <i>"Do not scale"</i> , so it is not possible to identify a definitive height, and therefore vertical limit of deviation, along the full length of the works. Tables 2-1 and 2-2 of ES Chapter 2 [REP1-014] describe the cutting and embankment slopes required, together with maximum slope height from existing ground level. Should a limit of deviation for slopes be secured in the dDCO?	a) As outlined in section 2.5.39 of Chapter 2: The Scheme of the ES, the Scheme as shown in the Work Plans (REP1-002) has been assessed. In addition, the limits of deviation have been taken into consideration using the Rochdale Envelope approach.  The Applicant considers that the limits of deviation requested are proportionate and necessary to avoid constraining and potentially delaying the Scheme in the event of emerging issues such as adverse ground conditions during construction and to allow for refinements to be made during the detailed design stage and therefore National Highways does not consider that a 1m limit of deviation to be appropriate.  In practice the limits of deviation will be further constrained because the location of the highway works will naturally be limited by the need to tie into the existing network of highways. Similarly other linear works are delineated by the approximate commencement and termination points of those works on the Works Plans (REP1-002) and descriptions of their approximate length are included in Schedule 1 to the draft DCO (REP1-041). The indicative position of the non-linear works is shown on the Works Plans. These works

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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				<p>cannot be moved anywhere within the Order limits as the works are geographically constrained by reference to the description of the works in Schedule 1 and what can actually be built in any particular location is also governed by Requirement 3 of Schedule 2 to the draft DCO, which requires the authorised development to be compatible with the preliminary design depicted on the Works Plans and Engineering Drawings and Sections Plans (REP1-005). Departures from the preliminary scheme design require approval from the Secretary of State, acting in consultation with relevant planning and highway authorities, and must not give rise to materially new or materially worse environmental effects to those reported in the Environmental Statement. Article 7 of the draft DCO similarly prohibits changes beyond the stated limits of deviation unless it is demonstrated to the Secretary of State's satisfaction, that such changes do not result in materially new or materially worse environmental effects.</p> <p>b) The heights of the proposed road works including those for the bunds, verges, carriageway and other features are shown on the Engineering Drawings and Sections Plans (REP1-005). Article 7(b) of the draft DCO (REP1-041) provides for a vertical limit of deviation of 0.5 metres from those stated heights.</p>
<b>Part 3 – Streets</b>				
1.15.	Applicant Local highway authorities	Article 10 Street Works	Are provisions required to resolve a potential conflict between the Applicant's ability to enter any street within the Order Limits with the ability of a local highway authority to perform its duties?	No the drafting in the DCO does not disapply the requirements of the New Roads and Street Works Act for the undertaker to co-operate with the street authority. Article 10 mirrors the drafting used on other National Highways/Highways England Development Consent Orders. .
1.16.	Applicant	Article 12 Construction and maintenance of new, altered or diverted streets and other structures "street", "highway", "local highway authority", "local street authority",	Please could the Applicant review the references to "street", "highway", "local highway authority", "local street authority" and "street authority" and make any necessary corrections?	The references should be consistent with recently made Highways England/National Highways Development Consent Orders. Any updates required will, however, be included in the updated draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
		<i>"street authority"</i>		
1.17.	Applicant Local highway authorities	Article 12(5) Construction and maintenance of new, altered or diverted streets and other structures Responsibility for maintenance	a) Is each relevant local highway authority content to maintain the listed works at their expense? b) Are the definitions of <i>"works above the structure"</i> and <i>"the structure"</i> in Article 12(5)(b) clear and unambiguous?	a) No response required from National Highways. b) The structure is shown on the Works Plans (REP1-002) and so the definitions are considered to be clear and unambiguous.
1.18.	Applicant	Article 13(9) Classification of roads etc. Public rights of way	This Article appears to provide a wide-ranging power for the locations of public rights of way to be constructed in alternative locations if that is agreed with the local highway authority. Is that the intention and, if so, how is that consistent with the assessment?	These public rights of way are to be constructed in the specified location shown on the Works Plans (REP1-002) unless agreed with the local highway authority. Any variation to the preliminary scheme as shown on the Works Plans, needs to have the agreement of the Secretary of State in writing (Requirement 3 (Detailed Design) of the dDCO (REP1-041)). The Environmental Assessment has been based on the alignment as shown in the Works Plans. Any future changes to the locations of the public rights of way would need to be evaluated to determine that they would not give rise to any materially new or materially worse adverse environmental effects to those assessed in the Environmental Statement by the Secretary of State.
1.19.	Applicant Street authorities	Article 14(6) Temporary alteration, diversion, prohibition and restriction of the use of streets Deemed consent	This provision confers deemed consent if the street authority does not respond within 28 days (a <i>"guillotine"</i> ). The ExA would like to find the right balance between avoiding unnecessary delay to the Proposed Development and ensuring that appropriate regard is given to the interests and advice of other parties. a) Please could the Applicant provide evidence that the guillotine has been discussed with each relevant street authority and provide any comments that they have made on their ability to comply. b) Please could the street authorities comment? c) The ExA is minded that a provision be added for any application for consent to contain a statement drawing the street authority's attention to the guillotine. Please could the Applicant and the street authorities comment?	Article 14(6) states that where a street authority fails to notify National Highways of its decision in respect of an application for consent within 28 days of the application being made, it is deemed to have given its consent. a) Whilst the guillotine has not been specifically discussed, it is considered necessary to remove the possibility for delay and provide certainty that the authorised development can be delivered by National Highways in a timely fashion. Moreover, the article is a standard provision in highways development consent orders (see for example, article 11 of the Coast Road Order, article 14(6) of the A14 Order and article 12 of the A19 / A184 Testos Junction Improvement Order and article 15 of The A30 Chiverton to Carland Cross Development Consent Order 2020). b) No response required from National Highways. c) In relation to ExA being minded to add for any application for consent to contain a statement drawing the street authority's attention to the guillotine, we would only comment that it was not considered necessary in the case of the article 11 of the Coast Road Order, article 14(6) of the A14 Order and article 12 of the A19 / A184 Testos Junction

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				Improvement Order and article 15 of The A30 Chiverton to Carland Cross Development Consent Order 2020.
1.20.	Applicant	Article 15(2)(b) Permanent stopping up and restriction of use of highways, streets and private means of access Temporary alternative routes for private means of access	<p>a) Should it be clarified that the undertaker will maintain a temporary alternative route for traffic that could have used a private means of access that is stopped up and can the standard to which it would be maintained be clarified?</p> <p>b) Are there any circumstances in which a temporary alternative route would not be required?</p>	<p>This article allows streets and private means of access named in Parts 1 and 2 in Schedule 4 to be stopped up (i.e. the legal right of way along them to be extinguished) and for the private means of access in Part 3 to be altered or diverted.</p> <p>For the streets and private means of access to be stopped up, however, the street or private means of access may not be stopped up unless the conditions referred to in paragraph (2) are met (i.e. the substitute is completed and open for use, or a temporary alternative route is available). We acknowledge that the Explanatory Memorandum needs to be updated in this regard.</p>
1.21.	Applicant Traffic authorities	Article 18(11) Traffic regulation Deemed consent	<p>This provision confers deemed consent if the traffic authority does not respond within 28 days (a “guillotine”). The ExA would like to find the right balance between not unnecessarily delaying the Proposed Development and ensuring that appropriate regard is given to the interests and advice of other parties.</p> <p>a) Please could the Applicant provide evidence that the guillotine has been discussed with each relevant street authority and provide any comments that they have made on their ability to comply.</p> <p>b) Please could the traffic authorities comment?</p> <p>c) The ExA is minded that a provision be added for any application for consent to contain a statement drawing the traffic authority’s attention to the guillotine. Please could the Applicant and the traffic authorities comment?</p>	<p>The purpose of this article is to provide National Highways with powers to make traffic regulation orders in relation to roads for which it is not the highway authority, so that it can implement traffic management measures (e.g. restrictions on the use of roads) necessary to construct the authorised development. This draws on the approach taken in article 37 of the A556 (Knutsford to Bowdon Improvement) Development Consent Order 2014 and article 43 of the M4 Junctions 3 to 12 Smart Motorway Order and in the A19 / A184 Testos Junction Improvement Order (see article 16).</p> <p>a) The draft DCO has been shared with the relevant traffic authorities as part of the pre-application consultation. Whilst the guillotine has not been specifically discussed this article draws on the approach taken in article 43 of the M4 Junctions 3 to 12 Smart Motorway Order and in the A19 / A184 Testos Junction Improvement Order (see article 16).</p> <p>b) No response required from National Highways.</p> <p>c) In relation to ExA being minded to add for any application for consent to contain a statement drawing the traffic authority’s attention to the guillotine, we would only comment that it was not considered necessary in the case of article 37 of the A556 (Knutsford to Bowdon Improvement) Development Consent Order 2014 and article 43 of the M4 Junctions 3 to 12 Smart Motorway Order and in the A19 / A184 Testos Junction Improvement Order (see article 16).</p>



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	<b>Part 4 – Supplemental Powers</b>			
1.22.	Applicant	Article 19(8) Discharge of water Deemed consent	<p>This provision confers deemed consent or approval if a person who receives an application for consent does not respond within 28 days (a “guillotine”). The ExA would like to find the right balance between not unnecessarily delaying the Proposed Development and ensuring that appropriate regard is given to the interests and advice of other parties.</p> <p>a) Please could the Applicant provide evidence that the guillotine has been discussed with each person who would receive an application for consent or approval and provide any comments that they have made on their ability to comply?</p> <p>b) The ExA is minded that a provision be added for any application for consent or approval to contain a statement drawing the person who would receive the application’s attention to the guillotine. Please could the Applicant comment?</p>	<p>a) The guillotine has not been specifically discussed. This article draws on the approach taken in article 17 of the M4 Junctions 3 to 12 Smart Motorway Order and in the A19 / A184 Testos Junction Improvement Order (see article 17).</p> <p>b) In relation to ExA being minded to add for any application for consent to contain a statement drawing the traffic authority’s attention to the guillotine, we would only comment that it was not considered necessary in the case of article 17 of the M4 Junctions 3 to 12 Smart Motorway Order and in the A19 / A184 Testos Junction Improvement Order (see article 17).</p>
1.23.	Applicant Environment Agency	Article 19 Discharge of water Works to main rivers	<p>Should the following provision be added: “<i>The undertaker must not, in carrying out or maintaining works under this article, damage or interfere with the bed or banks of any watercourse forming part of a main river</i>”?</p>	<p>We note that such a provision was included in the A19 Downhill Lane Junction Development Consent Order 2020. There is no objection to the inclusion of this provision and it will be included in the updated draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).</p>
1.24.	Applicant Local highway authorities Street authorities	Article 21(6) Authority to survey and investigate the land Deemed consent	<p>This provision confers deemed consent if an authority does not respond within 28 days (a “guillotine”). The ExA would like to find the right balance between not unnecessarily delaying the Proposed Development and ensuring that appropriate regard is given to the interests and advice of other parties.</p> <p>a) Please could the Applicant provide evidence that the guillotine has been discussed with each relevant authority and provide any comments that they have made on their ability to comply.</p> <p>b) Please could the authorities comment?</p> <p>c) The ExA is minded that a provision be added for any application for consent to contain a statement drawing the authority’s attention to the guillotine. Please could the Applicant and the authorities comment?</p>	<p>a) The draft DCO has been shared with the relevant highway and street authorities as part of the pre-application consultation. Whilst the guillotine has not been specifically discussed, it is considered necessary to remove the possibility for delay and provide certainty that the authorised development can be delivered by National Highways in a timely fashion. Moreover the article is a standard provision in highways development consent orders (see for example article 20 of the M20 junction 10A Order and article 19 of the A19 / A184 Testos Junction Improvement Order).</p> <p>b) No response required from National Highways.</p> <p>c) In relation to ExA being minded to add a provision for any application for consent to contain a statement drawing the street authority’s attention to the guillotine, we would only comment that it was not considered necessary in the case of article 20 of the M20 junction 10A Order and article 19 of the A19 / A184 Testos Junction Improvement Order.</p>

No	Question to	Reference	Question	National Highways' response
1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
<b>Part 5 – Powers of Acquisition and Possession</b>				
1.25.	Applicant	<p>Article 25 Compulsory acquisition of rights and restrictive covenants</p> <p>Article 28 Application of the 1981 Act</p> <p>Article 29 Modification of the 2017 Regulations</p>	<p>Article 25 seeks powers to acquire rights or impose restrictive covenants for the benefit of a third party.</p> <p>Article 28 seeks to permit land/ rights acquired by the undertaker to vest directly in third parties.</p> <p>Article 29 appears to seek to enable land to vest directly in third parties rather than firstly being acquired by the undertaker then transferred to a third party.</p> <p>The ExA needs to be satisfied that the compulsory acquisition tests are met in relation to these rights. It therefore needs to understand what the rights are, why they are required for the Proposed Development, and who they would be vested in.</p> <p>Please could the Applicant:</p> <ol style="list-style-type: none"> <li>set out exactly what land / rights / restrictions they intend to vest directly in which third parties;</li> <li>explain why they do not need these land / rights to vest in the undertaker;</li> <li>set on the legal basis for the inclusion of these powers; and</li> <li>provide detailed justification for them.</li> </ol>	<p>Article 25 provides for such rights as may be required to be acquired by National Highways over land which it is authorised to acquire under article 22. The public benefit of this is that it would allow National Highways, if possible, to reduce the area of outright acquisition and rely on rights instead.</p> <p>The presumption and the basis for the ExA assessment for the compulsory acquisition tests is that land will be acquired save for the land described in Schedule 5, where National Highways' powers of compulsory acquisition are limited to the acquisition of such rights as may be required for the purposes set out in Schedule 5. Article 25 provides for a lesser interest to be acquired not an additional or increased interest. A provision of this kind is usual in Transport and Works Act orders and Hybrid Bills and has been followed in a number of DCOs for example article 23 of the A14 Cambridge to Huntingdon Improvement Scheme Order and article 23 of the A19 / A184 Testos Junction Improvement Order.</p> <p>In relation to restrictive covenants, Article 25(3) provides that the power to impose restrictive covenants under sub-article (1) is exercisable only in respect of plots specified in column (1) of Schedule 5. The power to impose restrictive covenants is provided principally to protect the plant and equipment of statutory undertakers. The Applicant envisages installing such works under temporary powers then securing or procuring permanent easements for the use maintenance and retention of the relevant apparatus installed. Where apparatus is installed underground it is considered necessary to obtain appropriate covenants from the relevant landowner to protect the installed apparatus.</p> <p>National Highways will update Schedule 5 in the updated draft DCO submitted at Deadline 3 (TR010034/APP/3.1(2)) to set out the restrictive covenants required where utility works are referenced namely "To include restrictive covenants for protecting the installed apparatus from excavation and to prevent access to the installed apparatus being made materially more difficult". On this basis the Applicant believes it is fully considered the need for the power to impose restrictive covenants and that there is a compelling case for such powers on the basis that it is needed to protect the apparatus of statutory undertakers after it has been installed.</p> <p>a) Re Article 28 the land / rights / restrictions that National Highways intends to vest directly in third parties relate to the statutory undertakers where their apparatus is being relocated to enable the construction of the authorised development.</p> <p>b) National Highways does not need the above land or rights to vest in them where the statutory undertakes are undertaking the diversion/relocation works for existing apparatus. Details of the diversion/relocation works have been set out in Schedule 1 of the draft DCO. In some cases it will be for the statutory undertakers to undertake those works subject to</p>

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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				<p>further agreement, but certainly the statutory undertakers will need the rights to maintain any diverted or relocated apparatus and restrictive covenants to safeguard certain apparatus such as gas pipelines.</p> <p>c) The legal basis is explained above.</p> <p>d) The detailed justification is explained above.</p>
1.26.	Applicant	Article 32(9) Temporary use of land for carrying out the authorised development Deemed consent	<p>a) Please could the Applicant justify the inclusion of sub-paragraphs (a) and (b)?</p> <p>b) Is there any intention to acquire permanent rights to land listed in Schedule 7?</p> <p>c) Is there any intention to acquire permanent rights to land that is not listed in Schedule 5?</p>	<p>a) In relation to the justification for Article 32(9(a), Article 32(1)(a)(i) allows the land set out in Schedule 7 and any other Order Land where a notice to treat has not been served to be occupied temporarily while the works are carried out. The latter category of land would be land that is authorised for permanent acquisition under Article 22 or the acquisition of new rights under Article 25 but no notice to treat has been served. It is not possible to acquire new rights over land authorised for temporary possession only. That is because Article 32(1)(a) authorises the temporary possession of land which is identified in Schedule 7 and can only be used as such. Where no notice to treat has been served (Article 40(1)(a)(ii)) does permit acquiring new rights over that land if those new rights are authorised pursuant to Article 25.</p> <p>In relation to the justification for Article 32(9(b) the acquisition of subsoil/ airspace only is not prevented and is required in respect of certain parcels (save where land below the surface or the airspace above the surface is excluded from the Order Limits). This enables accommodation works to be installed and structures to oversail third party land without needing to acquire the surface.</p> <p>b) for the reasons stated above Article 39(9) does not permit permanent rights over the land in Schedule 7 unless the land is also captured in Schedule 5. There is no land listed in Schedule 7 which is included in Schedule 5.</p> <p>c). Yes potentially. Schedule 5 lists the land over which only rights may be acquired. In relation to land which is authorised to be acquired permanently National Highways could decide to take a lesser interest in the form of rights.</p>
1.27.	Applicant	Article 32(12) Temporary use of land for carrying out the authorised development  Article 33(12) Temporary use of land for	<p>a) Please could the Applicant provide justification of the disapplication of the Neighbourhood Planning Act 2017 in relation to the temporary possession of land?</p> <p>b) The ExA needs to be satisfied that the proposed interference with human rights is proportionate and justified. To assist with this, should a total period for which land may be subject to Temporary Possession be specified?</p>	<p>a) As the provisions relating to temporary possession in the Neighbourhood Planning Act 2017 (NPA 2017) have not yet come into force and the regulations required to provide more detail on the operation of the regime have not yet been made it is not considered appropriate to follow that approach. Due to the uncertainty in relation to the detail around that regime, the Applicant has chosen to adopt the process available under the 2008 Act and has adopted the wording set out in the model provisions. The Applicant considers that if Parliament wished to apply the NPA 2017 temporary possession regime to DCO projects, it could have done so by effecting amendments to Part VII of the Planning Act 2008. It has not done so, and in the absence of the clarity this would provide, the Applicant proposes to proceed under the existing 2008 Act procedure.</p>



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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
		maintaining the authorised development		<p>b) This is envisaged by the NPA 2017. As above the NPA 2017 provisions have been disapplied and the existing 2008 process does not provide for this nor do the Model Provisions. Article 32(3) of the dDCO (APP-041) provides that:</p> <p>The undertaker must not, without the agreement of the owners of the land: (a) remain in possession of any land listed in Schedule 7 after the end of the period of one year beginning with the date of completion of the part of the authorised development specified in relation to that land in column (3) of Schedule 7; or (b) in the case of other land that could be acquired permanently at the end of the period of one year beginning with the date of completion of the work for which temporary possession of the land was taken unless the undertaker has, by the end of that period, served a notice of entry under section 11 of the 1965 Act or made a declaration under section (4) of the 1981 Act in relation to that land.</p> <p>National Highways will only remain in possession of land for such period as is reasonably necessary so it is not considered necessary to include a notice period. Compensation is payable for any loss suffered as a consequence of temporary possession ensuring an interference with human rights is proportionate.</p>
<b>Part 7 – Miscellaneous and General</b>				
1.28.	Applicant Local planning authorities	Article 39 Trees subject to tree preservation orders	Should the undertaker be required to consult with the relevant planning authority prior to felling, lopping and/ or replacing any tree subject to a tree preservation order?	<p>Any works permitted as part of the DCO application are exempt from Part VIII of the Town and Country Planning Act 1990 as amended and the Town and Country Planning (Tree Preservation) (England) Regulations 2012.</p> <p>The submitted Arboricultural Impact Assessment (APP-168), section 3.4 (page 17-18) details the TPO trees within the DCO boundary. Section 4.4 (page 21-22) details the impacts on the cited TPOs within the DCO boundary.</p> <p>The TPOs are also illustrated on the TPOs and Hedgerow Plans (APP-018). These drawings also show where TPOs are to be removed.</p> <p>Schedule 8 of the dDCO (APP-020) also covers the TPOs within the DCO Boundary and those impacted upon by the Scheme.</p> <p>During the detailed design and construction stages of the Scheme as part of the Environmental Management Plan (EMP) (APP-183) and the Register of Environmental Actions and Commitments (REAC) (APP-184), secured through Requirement 4(d)(xii) of the dDCO (APP-020) a final Arboricultural Method Statement (AMS) shall be prepared that includes the tree removals for the Scheme. In discharging Requirement 4, this AMS and associated Tree Protection Plans (TPPs) shall be consulted upon with the local planning authority.</p>

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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
<b>Schedule 1 – Authorised Development</b>				
1.29.	Applicant	<p><i>“Further development”</i> Locations and consistency with the assessment</p>	<p>A list of <i>“further development”</i> is identified, for which no location is identified, and which therefore has the potential to lack precision.</p> <p>a) Is each the extent and location of each <i>“further development”</i> item (a) – (p) sufficiently certain and justified?</p> <p>b) Does the ES assume a location for any of these activities and, if so, should their location be identified to ensure consistency between what has been assessed and what is secured?</p> <p>c) Can any of these items be reallocated to the relevant Works? If not, why not?</p> <p>d) Should the provision that the activities would <i>“not give rise to any materially new or materially worse adverse environmental effects to those assessed in the environmental statement”</i> apply to all the activities listed, not just activity (p)?</p>	<p>The use of the list of further associated development within the dDCO (REP1-041) is an approach adopted by many made Orders. The approach ensures that the dDCO contains the necessary powers for all the works required to carry out the Authorised Development without resulting in a more complicated and repetitive Works Description in Schedule 1.</p> <p>Using the further list at the end of the Works Descriptions also ensures the authorised development can be constructed efficiently and without impediment.</p> <p>a) The first point to note is that the list of powers in paragraph (a) – (p) are limited by the sentence proceeding the list which makes it clear that this list of works can only be carried out "in connection with the authorised development... within the Order limits". As such, the ability for the Applicant to carry out any works within the Order limits is limited to the extent that it can be shown that the work is necessary in connection with a numbered work in Schedule 1 to the dDCO.</p> <p>b) Following on from the response to (a) above, the ES does not specifically identify the locations of these activities as the detail was not available at the time of assessment, but they have been assessed as activities in connection with works and as such are outlined within the 'potential impacts' section of each technical chapter of the ES. The 'further development' identified in paragraphs (a) – (p) in Schedule 1 to the dDCO (REP1-041) would be covered under the requirements identified in the EMP (Second iteration) which will outline Best Practice Measures (BPM) as well as the appropriate mitigation measures for the Scheme. A number of the further developments identified in Schedule 1 of the dDCO would also be covered under the relevant permits/licences that will be obtained prior to the start of works. Should these permits/licences require updating as a result of the further development this will be done so in consultation with the relevant stakeholders. Furthermore, should any of the 'further development' not be covered under the aforementioned mechanisms, then further, targeted environmental assessment would be considered and undertaken, if required, so that necessary mitigation measures can be put in place.</p> <p>c) all of the works listed in paragraphs (a) – (p) in Schedule 1 to the dDCO (REP1-041) comply with guidance on associated development issued by the Secretary of State for Communities and Local Government dated April 2013. Given the nature of a highways scheme and the complex nature of the works it is appropriate that the description of the numbered works does not list every minor work that could be carried out in connection with them. To do so would result in an overly repetitive list of works and would arguably also need to show this detail on the works plans when some of the elements in the list of further associated development are subject to more detailed design</p> <p>d) Item (p) is a catch-all and therefore, it is appropriate for this item only to include the wording <i>“not give rise to any materially new or materially worse adverse environmental effects to those assessed in the environmental statement”</i>. This is considered reasonable</p>

No	Question to	Reference	Question	National Highways' response
<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b>			
	Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				and reflects the same approach taken in other DCOs including the A19 / A184 Testos Junction Improvement Order.
1.30.	Applicant	Associated and Ancillary Development	<p>DCLG guidance<sup>1</sup> sets out the core principles for Associated Development and states that “<i>As far as practicable, Applicants should explain in their explanatory memorandum which parts (if any) of their proposal are associated development and why</i>”.</p> <p>The Explanatory Memorandum [APP-021] sets out the generic examples of Associated Development provided in the DCLG guidance, but does not explain which parts of this specific Proposed Development are Associated Development.</p> <p>To assure the ExA that the dDCO is legally sound and that relevant guidance had been responded to, please could the Applicant prepare a table that identifies those parts of Works Nos. 1 – 65 and “<i>further development</i>” items (a) – (p) that constitute:</p> <ul style="list-style-type: none"> <li>• Principal Development;</li> <li>• Associated Development; or</li> <li>• Ancillary Development</li> </ul> <p>and explains why each of the Works and “<i>further development</i>” items should be classified accordingly.</p>	<p>There may be some overlap, or the absence of the clear boundary, between associated development and works which form part of the NSIP. There is a danger that separating it out in the dDCO could potentially lead to an error defining it one way or another incorrectly, given this potential for overlap between the two categories. For instance, there may be some on-highway, and some off-highway, diversion of the same piece of statutory undertaker equipment.</p> <p>For this reason, and noting that there is no requirement for a development consent order to distinguish between these two categories, National Highways has chosen not to differentiate the NSIP and associated development works in Schedule 1 to the Order. Ultimately, all elements of the proposed development either constitute part of the NSIP or are “associated development” within the meaning of section 115(2) of the Act, and so can properly be authorised by the Order.</p> <p>However, to assist examination of the application there is a table in Annex 1 of this document and which will also be included in the next draft of the Explanatory Memorandum which sets out whether the works (as set out in Schedule 1 to the Order) are considered to be principal development, associated development, ancillary development or composite development (i.e., the works include more than one of the aforementioned categories). This is consistent with the approach in the A19/A184 Testos Junction Improvement Explanatory Memorandum.</p>
<b>Schedule 2 – Requirements</b>				
1.31.	Applicant	Interpretation Time limits Detailed design Second Iteration EMP, etc..	For clarity, should the format of these headings be the same as that used for the title of each Article?	The format is consistent with other Development Consent Orders made and we see no reason to depart from that form here.

<sup>1</sup> Planning Act 2008, Guidance on associated development applications for major infrastructure projects, DCLG, April 2013

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
1.32.	Local planning authorities Local highway authorities Environment Agency Natural England Historic England	Requirements 3-11 Provisions for consultation and agreement	a) Please identify where it would be helpful, for example to bring clarity or to help avoid any later misunderstandings, for specific provisions to be included in any Requirement for consultation or agreement to be required with relevant bodies. b) In each case, please explain why the provisions should be included.	No response required from National Highways.
1.33.	Applicant Local planning authorities Local highway authorities Environment Agency	Requirement 4(1) and (2) Second Iteration EMP	a) Should there be a requirement for consultation on the second iteration EMP with the local highway authorities and the Environment Agency, as well as with the relevant planning authority? b) To give certainty that the measures identified in the ES are secured, should the second iteration EMP be required to incorporate the measures for the construction stage referred to in the ES as being incorporated in the EMP? c) Should there be a requirement for the second iteration EMP to contain a record of the consents, commitments and permissions resulting from liaison with statutory bodies? d) Should there be a requirement for the second iteration EMP to be kept up to date with any material changes during construction and for consultation to be required on those changes?	a) National Highways has no objection to the relevant local highway authority and the Environment Agency being added as consultees should they require this and to the extent that it relates to matters relevant to their function. b) Yes. In accordance with DMRB LA 120, all mitigation measures recommended in the ES are incorporated in the EMP (First iteration) (APP-183). The EMP (Second iteration) will be a refinement of the First iteration to take account of detailed design and construction planning. The EMP will then be maintained and refined throughout the construction period. It should incorporate the measures for the construction stage referred to in the ES, or any refinement to these for the consented Scheme. The REAC (which is currently separate (REP1-037), be read alongside the EMP) will be combined with the EMP (Second iteration) and will form section 3 of the document. c) Yes, section 4 of the EMP (Second iteration) will be refined to include a record of relevant consents and permissions from statutory bodies, in accordance with DMRB LA 120. d) The Environmental Management Plan is a live document that must be maintained and updated throughout the construction of the Scheme, up until the end of the construction stage when the second iteration is refined to become the third iteration. By following the EMP content and structure provided in Table A.3 of DMRB LA 120 it will be largely in accordance, but refined where necessary, with the first iteration. Preparation of all iterations of the EMP will be in accordance with DMRB LA 120 and secured through DCO Requirement 4.
1.34.	Applicant Local planning authorities	Requirement 4(2)(c) Second Iteration EMP Working hours	a) Please could the Applicant provide an explanation as to why each activity (i) to (ix) cannot be carried out during the specified working hours? b) Should the following be added after Requirement 4(2)(c):	a) The following activities are listed in Requirement 4 as exceptions to the core work hours. National Highways has provided a justification for each below: i. <i>Deliveries, movements to work, maintenance and general preparation works but not including running plant and machinery for a period of one hour either side of the above times</i>



No	Question to	Reference	Question	National Highways' response
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			<p><i>“Provided that written notification of the extent, timing and duration of each activity is given to relevant local authorities in advance of any works that are to be undertaken outside of the specified hours, except for any emergency works, which are to be notified to the relevant local authorities as soon as is practicable.”</i></p> <p><i>“Any other work carried out outside the specified working hours or any extension to the working hours will only be permitted if there has been prior written agreement of the relevant environmental health officer and provided that the activity does not give rise to any materially new or materially worse environmental effects in comparison with those reported in the environmental statement.”</i></p>	<ul style="list-style-type: none"> <li>• Deliveries such as asphalt for tie in works to the site are required</li> <li>• Maintenance activities such as repairing of potholes or damaged assets which are safety critical to the travelling public.</li> </ul> <p>ii. <i>Night-time closures including for road crossing and final surfacing tie ins</i></p> <ul style="list-style-type: none"> <li>• It would be disruptive to undertake lane closures adhoc to complete trenching works across the existing carriageway to install elements such as cabling and drainage when traffic flows are high. It is therefore proposed to complete these works outside of working hours to minimise disruption.</li> <li>• Surfacing tie in works are required out of hours to enable lane closures to be in place. These lane closures will provide safe areas of work for the workforce however are disruptive to the travelling public.</li> </ul> <p>iii. <i>Any oversize deliveries or deliveries where daytime working would be excessively disruptive to normal traffic operations.</i></p> <ul style="list-style-type: none"> <li>• Relates to activities such as bridge beam deliveries where large loads turning can cause disruption. Any oversized loads will be subject to usual abnormal load practices and notification and approval with the relevant bodies.</li> </ul> <p>iv. <i>Junction Tie-in works</i></p> <ul style="list-style-type: none"> <li>• These are required when the permanent works are too close to the travelling public to construct safely. Examples exist at the M67 roundabout, the Mottram Moor Junction and the junction at Woolley Bridge where these tie in works will be required.</li> </ul> <p>v. <i>Repair or maintenance of construction equipment.</i></p> <ul style="list-style-type: none"> <li>• It may be that out of hours repair/ maintenance/ removal of equipment from site is required to keep the site productive to ensure programme is achieved, ultimately reducing the overall impact on the local community in terms of time. It should be noted that it is not expected to be a regular occurrence.</li> </ul> <p>vi. <i>Removal of overhead power lines</i></p> <ul style="list-style-type: none"> <li>• Overhead powerlines across the existing A57 require removal. This is to be undertaken by the relevant Statutory Undertaker. The sequencing of works over live traffic requires careful planning and consideration. For safety reasons these works are planned for out of hours working.</li> </ul> <p>vii. <i>Overnight traffic management measures</i></p>

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1.	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				<ul style="list-style-type: none"> <li>• Relates to changes to traffic management restrictions where relining or narrow lanes are required to create safety zones for the travelling public and the workforce.</li> </ul> viii. <i>Case of emergency</i> <ul style="list-style-type: none"> <li>• As described where there is an imminent risk Health and Safety</li> </ul> ix. <i>As otherwise agreed by the relevant planning authority in advance.</i> <ul style="list-style-type: none"> <li>• In the event a scenario has not been considered above.</li> </ul> b) National Highways is not aware of where such wording has been added to another highways scheme Order and would be concerned about the restriction of flexibility in this regard.
1.35.	Applicant Local planning authorities Local highway authorities Environment Agency	Requirement 4(4) and 4(5) Third Iteration EMP	a) Should there be a requirement for the third iteration EMP to be submitted to and approved in writing by the Secretary of State? b) Should there be a requirement for consultation on the third iteration EMP with relevant planning authorities, the local highway authorities and the Environment Agency? c) To give certainty that the measures identified in the ES are secured, should the third iteration EMP be required to: <ul style="list-style-type: none"> <li>• be substantially in accordance with the measures for the management and operation stage first iteration EMP; and to</li> <li>• incorporate the measures for the management and operation stage referred to in the ES as being incorporated in the EMP?</li> </ul>	a) It is intended that the second iteration EMP will set out the procedure for the development and approval of the third iteration EMP. b) As above it is intended that the second iteration EMP will set out the procedure for the development and approval of the third iteration EMP. c) The Environmental Management Plan is a live document that must be maintained and updated throughout the construction of the Scheme, up until the end of the construction stage when the second iteration is refined to become the third iteration. By following the EMP content and structure provided in Table A.3 of DMRB LA 120 it will be largely in accordance, but refined where necessary, with the first iteration. Preparation of all iterations of the EMP will be in accordance with LA 120 and secured through DCO Requirement 4.  The third iteration builds on the second iteration EMP refined at the end of the construction stage to support future management and operation. In particular, in accordance with LA 120, section 6 (Details of maintenance and EMP monitoring activities) will include: <ul style="list-style-type: none"> <li>• a description of post construction maintenance requirements</li> <li>• assessment criteria to identify success</li> <li>• procedures for monitoring and reviewing the EMP.</li> </ul>
1.36.	Applicant Local planning authorities	Requirement Landscaping Landscaping scheme	a) Please could the Applicant advise whether “ <i>otherwise</i> ” should be deleted from the first sentence of requirement 5(1)? b) Should it be required for the landscaping scheme to be approved before any part of the authorised development commences?	a) Yes, “ <i>otherwise</i> ” should be deleted from the first sentence of requirement 5(1). This will be amended in the next iteration of the dDCO at Deadline 3 (TR010034/APP/3.1(2)).  b) National Highways considers that the requirement contained in paragraph 5 of Schedule 2 to the dDCO (REP-041) clearly implies that any scheme of landscaping must be submitted relatively early within the construction programme. This is because paragraph

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
			c) With reference to Requirement 5(3), should the landscaping scheme be required to include details of hard surfacing materials?	6(1) sets out that the authorised development must be landscaped in accordance with an approved scheme. As a result, no landscaping can take place until a scheme has been approved. The drafting has not 'regulated' the submission of approved details prior to the commencement of development on the basis that landscaping is not considered by National Highways to be a fundamental point that needs to be confirmed prior to any works being carried out. By its very nature, landscaping will take place later in the construction programme and there is therefore flexibility as to precisely when the scheme should be submitted for approval. This is considered reasonable and reflects the same approach taken in other DCOs.
1.37.	Applicant Local planning authorities	Requirement 5 Landscaping "Illustrative environmental masterplan"	Requirement 5(2) refers to an "illustrative environmental masterplan". a) Please could that document be submitted to the Examination? b) Should a definition be added to Requirement 1? c) Should it be added to Schedule 10?	The reference to illustrative environmental masterplan is an error. It should refer to the environmental masterplan which is Figure 2.4 of the Environmental Statement (APP-074). a) there is no illustrative document that requires to be submitted b) we do not consider this necessary c) the Environmental Statement is a document to be certified and the individual figure does not need to be.
1.38.	Applicant Local planning authorities	Requirement 5 Landscaping "other recognised codes of good practice"	Requirement 5(4) refers to "other recognised codes of good practice". Should this be made more precise, to ensure that the appropriate standard of landscaping is delivered?	The Applicant can confirm that an up-to-date list of recognised standards and codes will be provided in the Landscape and Ecological Management and Monitoring Plan. An Outline LEMP will be submitted for the Examination, which will include this list in section 6.20. The Requirement 5(4) will be reworded in the dDCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)) to add text as follows "other recognised standards and codes of good practice, as specified in the Landscape and Ecological Management and Monitoring Plan for the Scheme".
1.39.	Environment Agency	Requirement 6 Contaminated land and groundwater	Should this requirement include: a) for no part of the authorised development to commence until a contamination risk assessment has been produced for that part; b) details of what is to be included in a contamination risk assessment and in a written scheme and programme; c) for contamination risk assessments to be submitted to and approved by the Secretary of State in consultation with the Environment Agency; and d) for construction to cease in the vicinity of any contaminated material that is found until a risk assessment and written scheme and programme have been submitted and approved? Does the Environment Agency have any other comments?	No response required from National Highways.
1.40.	Natural England	Requirement 7	Should the requirement for "relevant parts of the relevant works must cease" include identification of the extent of works that must	No response required from National Highways.



No	Question to	Reference	Question	National Highways' response
<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
		Protected Species	cease relative to the location, or likely location, of the protected species? Does Natural England have any other comments?	
1.41.	Local planning authorities Local highway authorities Environment Agency	Requirement 8 Surface and foul water drainage	Should there be a requirement for the relevant planning authority, local highway authority and/ or the Environment Agency to be consulted on written details of the surface and foul water drainage system?	No response required from National Highways.
1.42.	Environment Agency Lead local flood authorities	Requirement 9(2) Flood risk assessment	a) Should any works otherwise in accordance with the flood risk assessment require the relevant lead local flood authority to be satisfied, as well as the Environment Agency? b) Are the Environment Agency and lead local flood authorities content that works do not need to be carried out in accordance with the flood risk assessment if all affected landowners accept the predicted exceedances of flood levels?	No response required from National Highways.
1.43.	Applicant Local planning authorities Heritage England	Requirement 10 Archaeological Remains	Should requirements be added for: a) any matters to be consulted and/ or agreed in writing with the Secretary of State or the County Archaeologist; b) any programme of archaeological reporting, post excavation and publication to be consulted on and/ or agreed in writing; and/ or for c) suitable resources and provisions for long term storage of any archaeological archives to be consulted on and/ or agreed in writing?	a) It is for the Secretary of State to approve but there is no objection to there being consultation with the County Archaeologist. b) As stated in the REAC (REP1-037), the proposed Archaeological Fieldwork Strategy would be issued alongside the EMP (Second iteration). The requirements for archaeological reporting, post excavation and publication will be set out in this document. More detailed requirements will be set out in the Written Scheme of Investigation identified at requirement 10(1). No specific reference to these matters is required in the DCO. c) The requirements for archiving set out in the proposed Archaeological Fieldwork Strategy and covered in greater detail in the Written Scheme of Investigation identified at requirement 10(1). No specific reference to this is required in the DCO.
1.44.	Applicant Local planning authorities Local highway authorities Environment Agency	Requirement 12(1) Details of consultation Minimum period	Should a minimum period be specified for the “consultation with another party” and, if so, what period would be reasonable?	Requirement 12(1) makes reference to a period of not less than 14 days and this is considered reasonable.

No	Question to	Reference	Question	National Highways' response
<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b>			
	Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
1.45.	Applicant	Requirement 12(4) Details of consultation Missing text	Requirement 12(4) appears to be incomplete.	Yes 12(4) is incomplete and should go on to read: <i>"paragraph (1) the reasons why the consultation responses have not been reflected in the submitted details"</i> . This will be updated in the next draft of the dDCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).
1.46.	Applicant	Requirement 13 Amendments to approved details	For clarity, should the end of this Requirement read "... approved in writing by the Secretary of State."?	Yes. This will be updated in the next draft of the dDCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).
<b>Schedule 3 – Classification of Roads, etc.</b>				
1.47.	Applicant	Consultation and outstanding matters	Please could the Applicant advise whether it: a) has consulted local planning authorities and local highway authorities on the detailed contents of Parts 1-9 of Schedule 3; b) is awaiting any responses from local planning authorities or local highway authorities and/ or is aware of any matters that have not been agreed with them; c) considers that Parts 1-9 of Schedule 3 require consultation or review before they can be finalised?  Please could the Applicant please summarise any outstanding matters and the next steps to be taken.	a) discussion has been undertaken with local planning and/or local highway authorities relevant to their respective remits as follows: Parts 1 and 2 relate to the strategic road network under the control of National Highways. The local highways authorities are aware of the Scheme proposals. Part 3 Classified Roads – Consultation has taken place with Tameside MBC over the design of the classified roads with input such as cross section of A57 Link Road incorporated into the design submitted for DCO. Further consultation will be carried out with Tameside MBC when the detailed design is completed. Part 4 Road to be detrunked - Consultation has taken place with Tameside MBC over the design of the road to be detrunked and an agreed set of criteria for the design is laid out in the statement of common ground. Further consultation will be carried out with Tameside MBC when the detailed design is completed. Part 5 Speed Limits – The proposed speed limits on the local road network were discussed with both Tameside MBC and Derbyshire County Council prior to submission of the DCO. Part 6 New Traffic Regulation Orders Sought – The proposed clearway relates to the strategic road network under the control of National Highways. Part 7 Revocations and Variations of Existing Traffic Regulation Orders – The alterations to Hyde Road have been discussed and agreed with Tameside MBC in relation to changing the speed limit to 20mph as detailed in the Statement of Common Ground. Part 8 Public rights of way – The new public rights of way have been discussed with, TfGM, Derbyshire CC and Tameside MBC. In addition local user groups including Sustrans, British Horse Society and a footway association have been consulted.

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				<p>Part 9 Private Means of Access – these have been discussed with the landowners and, where appropriate, tenants of the land concerned.</p> <p>b) The status of discussions with local authorities on all matters is set out in the relevant Statement of Common Ground.</p> <p>Part 4 is being discussed further with Tameside MBC in respect of design, but these discussions do not affect the length of road to be detrunked set out in the dDCO.</p>
1.48.	Local planning authorities Local highway authorities	Review and outstanding matters	<p>Please could the local planning authorities and local highway authorities advise whether they:</p> <p>a) have reviewed the detailed contents of Parts 1-9 of Schedule 3 and provided their comments to the Applicant;</p> <p>b) are awaiting any responses from the Applicant and/ or is aware of any matters that have not been agreed with it;</p> <p>c) have any concerns about Parts 1-9 of Schedule 3?</p>	No response required from National Highways.
<b>Schedule 4 – Permanent Stopping Up and Alteration of Highways, Streets and Private Means of Access</b>				
1.49.	Applicant	Consultation and outstanding matters	<p>Please could the Applicant advise whether it:</p> <p>a) has consulted local planning authorities and local highway authorities on the detailed contents of Parts 1-3 of Schedule 4;</p> <p>b) is awaiting any responses from local planning authorities or local highway authorities and/ or is aware of any matters that have not been agreed with them;</p> <p>c) considers that Parts 1-3 of Schedule 4 require consultation or review before they can be finalised?</p> <p>Please could the Applicant summarise any outstanding matters and the next steps to be taken.</p>	<p>Discussion has been undertaken with local planning and/or local highway authorities relevant to their respective remits as follows:</p> <p>Part 1 Public rights of way or highway to be stopped up and for which a substitute is to be provided – Consultation has taken place with Tameside MBC over the design of the public rights of way to be stopped up. In addition, private landowners and tenants have been consulted. Further consultation will be carried out with Tameside MBC and private landowners when the detailed design is completed.</p> <p>Part 2 Private means of access to be stopped up and for which a substitute is to be provided – Private means of access to be stopped up have been discussed with Tameside MBC specifically in relation to Carrhouse Lane and the access requirements for the maintenance of the proposed Carrhouse Lane Underpass, as detailed in the Statement of Common Ground. In addition, private landowners have been consulted. Further consultation will be carried out with Tameside MBC and private landowners when the detailed design is completed.</p> <p>Part 3 Alterations to private means of access – Consultation has taken place with Tameside MBC and Derbyshire County Council over the alterations of private means of access. Specific discussions have been held with Tameside in relation to the alternative access to Hope Farm and with Derbyshire County Council in relation to the gated access to the land to the east of the River Etherow. In addition, private landowners have been consulted on the proposed access arrangements. Further consultation will be carried out</p>

No	Question to	Reference	Question	National Highways' response
<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				with Tameside MBC and Derbyshire County Council and private landowners when the detailed design is completed.
1.50.	Local planning authorities Local highway authorities	Review and outstanding matters	Please could the local planning authorities and local highway authorities Applicant advise whether they: a) have reviewed the detailed contents of Parts 1-3 of Schedule 4 and provided their comments to the Applicant; b) are awaiting any responses from the Applicant and/ or is aware of any matters that have not been agreed with it; c) have any concerns about Parts 1-3 of Schedule 4?	No response required from National Highways.
<b>Schedule 5 – Land in which only New Rights etc. may be Acquired</b>				
1.51.	Applicant	Consistency	a) Please confirm whether this Schedule has been cross-checked with and is consistent with Schedule 1, and with the Book of Reference [REP1-011], Statement of Reasons [REP1-010], Land Plans [APP-007] and Work Plans [REP1-002]. b) Please set out the anticipated scope and timing of any reviews or audits and when any updates will be provided.	A review of these documents has been undertaken as requested. As a result of the review some minor amendments have been made to the descriptions in Schedule 5 of the dDCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).
<b>Schedule 6 – Modification of Compensation and Compulsory Purchase Enactments for Creation of new Rights and Imposition of Restrictive Covenants</b>				
1.52.	Applicant	Consistency with s126 the PA2008	Please could the Applicant: a) explain why the provisions are necessary; and b) advise whether their effect is to exclude the application of a compensation provision?	Article 25(5) and Schedule 6 imposes modifications to the compulsory purchase and compensation provisions under general legislation. They do not affect the entitlement to compensation, but generally ensure that the compensation procedure applies to the additional categories of acquisition covered by the Order – the creation of new rights and the imposition of restrictive covenants in particular. This is a consequence of the extension of land acquisition powers to these categories (done to allow lesser land interests to be acquired).  For the purpose of section 126(2) of the Act, the relevant compensation provisions are modified only to the extent necessary to ensure that they apply properly to the acquisition of rights, and not to affect the amount of compensation to which landowners would be entitled. Furthermore, the provisions have been amended so that the time limits are consistent with the Order (five years as opposed to three years) and the appropriate references to the Act).  The modifications are based on changes made consistently in most schemes granted under the Act (see, for example, Schedule 6 of the A14 Cambridge to Huntingdon Improvement Scheme Order and Schedule 6 to the A19 / A184 Testos Junction

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<b>1.</b>	<b>The draft Development Consent Order (dDCO) and other consents</b> Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].			
				Improvement Order). As a result of changes contained in the Housing and Planning Act 2016, the Order has been updated to ensure that the correct provisions are modified.
<b>Schedule 7 – Land for which Temporary Possession may be Taken</b>				
1.53.	Applicant	Consistency	<p>a) Please confirm whether this Schedule has been cross-checked with and is consistent with Schedule 1, and with the Book of Reference [REP1-011], Statement of Reasons [REP1-010], Land Plans [APP-007] and Work Plans [REP1-002].</p> <p>b) Please set out the anticipated scope and timing of any reviews or audits and when any updates will be provided.</p>	A review of these documents has been undertaken as requested. As a result of the review some minor amendments have been made to the descriptions in Schedule 7 of the dDCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)) and the Statement of Reasons submitted at Deadline 2 (TR010034/APP/4.1(3)).
<b>Schedule 8 – Hedgerows and Trees</b>				
1.54.	Applicant	Part 2 – Trees subject to tree preservation orders	<p>a) Please could the acronym “TPO” used in the heading of the fourth column of the table be defined?</p> <p>b) With reference to paragraph 22.3 of Advice Note 152, please confirm that each tree subject to a tree preservation order is specifically identified in Schedule 8 and on the TPO and Hedgerows Plans?</p>	<p>a) The first reference to TPO in the fourth column has been updated to refer to ‘Tree Preservation Order (TPO)’. This change will be included in the revised draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).</p> <p>b) Each tree subject to a TPO is specifically identified within Schedule 8 of the dDCO (APP-020). This includes individual citations and those cited as groups. The TPOs are also illustrated on the TPOs and Hedgerow Plans (APP-018). These drawings also show where TPOs are to be removed.</p>
1.55.	Local planning authorities	Part 1 - Hedgerows Part 2 – Trees subject to tree preservation orders	Are the local planning authorities aware of any hedgerows or trees subject to a tree preservation order that are missing or incorrectly referenced in Schedule 8 and / or on the TPO and Hedgerows Plans?	No response required from National Highways.
<b>Schedule 9 – Protective Provisions</b>				
1.56.	Applicant	Serious detriment	Section 127 of the PA2008 requires the ExA to consider the potential for serious detriment to Statutory Undertakers for the carrying on of their undertakings. As part of that consideration the ExA seeks written confirmation from the Applicant and from the Statutory Undertakers that all necessary matters, including the protective provisions and any relevant side agreements have been agreed. If written confirmation is not received by all relevant parties before the close of the Examination, then the ExA will be minded to recommend to the Secretary of State that it does not make a	a) For completeness the Applicant has listed all affected statutory undertakers that benefit from protective provisions within the draft DCO (REP-041) at Schedule 9, including parts 1 and 2:

<sup>2</sup> Advice note 15: Drafting Development Consent Orders, The Planning Inspectorate, July 2018



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1.	<b>The draft Development Consent Order (dDCO) and other consents</b>		Reference is made to the dDCO submitted by the Applicant for Deadline 1 [REP1-041].																																									
			<p>decision until it has satisfied itself that the protective provisions and any relevant side agreements have been agreed with between the Applicant and any Statutory Undertakers that are named in Schedule 9 and/ or have raised relevant matters requiring agreement during the Examination.</p> <p>Please could the Applicant:</p> <ol style="list-style-type: none"> <li>identify the name of each Statutory Undertaker that Parts 1 and 2 of Schedule 9 apply to;</li> <li>identify all relevant side agreements;</li> <li>confirm whether each relevant Part and side agreement has been agreed with each Statutory Undertaker and with the Environment Agency;</li> <li>provide written evidence from each party of any agreement;</li> <li>identify any matters that are still subject to agreement with each party, the steps being taken to resolve them and when any updates will be provided?</li> </ol>	<table border="1"> <thead> <tr> <th>Statutory Undertaker</th> <th>Relevant Schedule 9 Part</th> </tr> </thead> <tbody> <tr> <td>Cadent Gas Limited</td> <td>Part 6*</td> </tr> <tr> <td>Cornerstone Telecommunications Infrastructure Limited</td> <td>Part 2</td> </tr> <tr> <td>Electricity North West Limited</td> <td>Part 1</td> </tr> <tr> <td>Environment Agency</td> <td>Part 7*</td> </tr> <tr> <td>National Grid Electricity Transmission plc</td> <td>Part 4</td> </tr> <tr> <td>Openreach Limited</td> <td>Part 2</td> </tr> <tr> <td>United Utilities plc</td> <td>Part 1</td> </tr> </tbody> </table> <p>*Please note that this part is subject to re-numbering in accordance with the response to question 1.58 below.</p> <p>b) Please see table for part c) below.</p> <p>c) As of Deadline 2, the status of agreement of the Protective Provisions is as follows:</p> <table border="1"> <thead> <tr> <th>Statutory Undertaker</th> <th>Status of Protective Provisions</th> <th>Status of side agreement</th> </tr> </thead> <tbody> <tr> <td>Cadent Gas Limited</td> <td>Agreed [subject to legal agreement being signed]</td> <td>Draft</td> </tr> <tr> <td>Cornerstone Telecommunications Infrastructure Limited</td> <td>Under discussion</td> <td>None</td> </tr> <tr> <td>Electricity North West Limited</td> <td>Agreed</td> <td>None</td> </tr> <tr> <td>Environment Agency</td> <td>Under discussion</td> <td>None</td> </tr> <tr> <td>National Grid Electricity Transmission plc</td> <td>Under discussion</td> <td>Draft</td> </tr> <tr> <td>Openreach Limited</td> <td>Agreed</td> <td>None</td> </tr> <tr> <td>United Utilities plc</td> <td>Under discussion</td> <td>None</td> </tr> </tbody> </table> <p>d) Please see the draft SoCGs submitted at Deadline 2</p>	Statutory Undertaker	Relevant Schedule 9 Part	Cadent Gas Limited	Part 6*	Cornerstone Telecommunications Infrastructure Limited	Part 2	Electricity North West Limited	Part 1	Environment Agency	Part 7*	National Grid Electricity Transmission plc	Part 4	Openreach Limited	Part 2	United Utilities plc	Part 1	Statutory Undertaker	Status of Protective Provisions	Status of side agreement	Cadent Gas Limited	Agreed [subject to legal agreement being signed]	Draft	Cornerstone Telecommunications Infrastructure Limited	Under discussion	None	Electricity North West Limited	Agreed	None	Environment Agency	Under discussion	None	National Grid Electricity Transmission plc	Under discussion	Draft	Openreach Limited	Agreed	None	United Utilities plc	Under discussion	None
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				e) Please see the draft SoCGs submitted at Deadline 2.
1.57.	Statutory Undertakers Environment Agency	Parts 1 and 2	Please could each Statutory Undertaker and the Environment Agency: a) confirm whether it agrees with the provisions of the relevant Part of Schedule 9; b) identify all relevant side agreements; c) identify any matters that are still subject to agreement.	No response required from National Highways.
1.58.	Applicant	Parts 3 and 5	Parts 3 and 5 are missing from Schedule 9. Please could the Applicant advise whether it anticipates that more Parts will be added and, if so, when and which parties they will apply to?	The Applicant has reviewed Schedule 9. No parts were missing but the numbering skipped Part 5. This will be corrected in the updated draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)). The Applicant can confirm that no additional parts are anticipated at this stage.
<b>Schedule 10 – Documents to be Certified</b>				
1.59.	Applicant	Document updates	To help ensure that Schedule 10 is up to date, identifies the latest versions of documents and to help the ExA to keep track of any updates, please could the Applicant: a) identify a unique revision number and date for the latest submitted version of each document, clearly indicated within the body of the document, in each electronic filename and in Schedule 10; b) provide any changes to documents as both clean and tracked changes .pdf versions; c) provide any new documents as .pdf versions; d) ensure that Schedule 10 in each submitted version of the dDCO is fully up to date to minimise any confusion during the Examination and to reduce the risk of any errors in the Applicant's final dDCO.	The Applicant has noted this request and will update Schedule 10 in the draft DCO to be submitted at Deadline 3 (TR010034/APP/3.1(2)).



### 3. General matters

No	Question to	Reference	Question	National Highways' response						
<b>2.</b>	<b>General matters</b>									
	<b>Legislation and policy</b>									
2.1.	Local planning authorities Local highway authorities	ES Chapters 1-4 [REP1-014]	ES paragraph 1.3.10 sets out the Applicant's list of relevant adopted plans. a) Does this constitute the full list of development plans and policies relevant to the Proposed Development? Please explain their relevance. b) Are there any emerging development plans? If so, please supply copies of any emerging development plans? If so, at what stage are these proposed plans? c) If there are emerging development plans, are there any policies in them which may be relevant? If so, please supply copies. d) Are there any non-statutory local policies which may be relevant? If so, please supply copies.	No response required from National Highways.						
2.2.	Applicant Local planning authorities Local highway authorities	The National Planning Policy Framework (2021) (NPPF)	The NPPF has been updated since the application was submitted. a) How do the revisions of the NPPF affect the Proposed Development and the ES? b) To what degree do you consider those development plan policies which you consider most relevant to the Proposed Development accord with the aims of the NPPF? c) Please could the Applicant comment on the implication of the following changes to the NPPF for the assessment of the Proposed Development: <ul style="list-style-type: none"> <li>Chapter 9 Promoting Sustainable Development – design of streets and transport elements should reflect current national guidance, including the National Design Guide and National Model Design Code.</li> <li>Chapter 12 Achieving Well-designed Places – increased focus on making beautiful and sustainable places.</li> </ul>	<p>Whilst it is recognised that there have been amendments to the NPPF since the application was submitted, we would note that the NN NPS still remains the primary policy framework against which the application should be assessed.</p> <p>The biggest change to the NPPF is that the updated version places greater emphasis on beauty. The revised policy also demonstrates a focus on place-making, the environment, sustainable development and the importance of design codes. The key changes are set out below, together with a commentary on whether the Scheme complies with the changes, and whether any aspects of the Scheme need to be updated.</p> <p>The Applicant has also checked the assessments that have been undertaken as part of the Environmental Impact Assessment to ascertain whether methodologies from the NPPF have been relied upon. We are satisfied that we do not need to make any changes to the assessments as a result of the changes made to the NPPF.</p> <table border="1"> <thead> <tr> <th>Changes Between 2019 NPPF and recently published 2021 NPPF</th> <th>Does the Scheme accord with this Change?</th> <th>Are any updates to the DCO Application required because of the revision to the NPPF?</th> </tr> </thead> <tbody> <tr> <td>Chapter 2: Achieving Sustainable Development</td> <td>Among the Sustainable Development Goals are building resilient infrastructure and promoting</td> <td>No</td> </tr> </tbody> </table>	Changes Between 2019 NPPF and recently published 2021 NPPF	Does the Scheme accord with this Change?	Are any updates to the DCO Application required because of the revision to the NPPF?	Chapter 2: Achieving Sustainable Development	Among the Sustainable Development Goals are building resilient infrastructure and promoting	No
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Chapter 2: Achieving Sustainable Development	Among the Sustainable Development Goals are building resilient infrastructure and promoting	No								

No	Question to	Reference	Question	National Highways' response		
				Paragraph 7 includes reference to the UK Government's signing up to the 2030 Agenda for Sustainable Development and achieving the 17 Sustainable Development Goals.	sustained, inclusive and sustainable economic growth. The Scheme does not conflict with this.	
				<b>Chapter 2: Achieving Sustainable Development</b> Paragraph 8(b) introduces a reference to fostering well-designed, beautiful and safe places	Yes	No, the Scheme already includes appropriate landscape mitigation measures
				<b>Chapter 4: Decision Making</b> <b>Tailoring Planning Controls to Local Circumstances.</b>  Details within Paragraphs 53 and 54 of the updated NPPF in respect of the use of Article 4 directions to remove national permitted development rights have been expanded slightly.	Not relevant	No
				<b>Chapter 8 Promoting Healthy and Safe Communities.</b> The 2021 NPPF introduces a new paragraph (new Paragraph number 96) which states that local planning authorities should work proactively with public infrastructure providers including further education colleges, hospitals and criminal justice accommodation to resolve	Although the new paragraph is not relevant to the Scheme, it should be noted that the Applicant has undertaken extensive consultation on the development of the Scheme. This is reported in full in the Consultation Report (APP-026) and its appendices (APP-027-APP-052).	No

No	Question to	Reference	Question	National Highways' response		
				key planning issues before applications are submitted.		
				<p><b>Chapter 9. Promoting Sustainable Transport. Considering Development Proposals.</b></p> <p>The 2021 NPPF introduces a new requirement in paragraph 110, in relation to assessing sites that may be allocated in plans, or specific applications for development. That is (c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code.</p>	<p>The National Design Guide and National Model Design Codes are for use by local planning authorities as a basis for the production of design codes and guides and in decision making, so are not relevant to National Highways, as Applicant for the Scheme.</p> <p>However, similar principles have been adopted for the design of the Scheme as it follows the guidance set out in the National Highways publication "The Road to Good Design". This document contains a series of principles for good road design which are centred on the themes of connecting people, places and processes. The principles from the Road to Good Design are embedded in the National Highways Design Manual for Roads and Bridges (DMRB) which is the standard to which the scheme has been designed.</p> <p>Similar themes of the Road to Good Design and the National Design Guide include:</p> <ul style="list-style-type: none"> <li>• The importance of context, that is ensuring that road design its sensitive to the landscape, heritage and the local community.</li> <li>• The need to achieve an environmentally sustainable design.</li> <li>• Bringing lasting value.</li> </ul> <p>Other principles embedded in the Road to Good Design include the need to make roads safe and useful, the need to make roads inclusive and making roads understandable. It's worth noting that road design has to</p>	No

No	Question to	Reference	Question	National Highways' response	
					<p>adhere to specific technical design and safety demands. Since aesthetic considerations must accept these demands, the potential for variation is more challenging, but still possible for many elements such as signs and lighting for example.</p> <p>Furthermore, the Scheme has been designed in accordance with the National Highways Design Manual for Roads and Bridges (DMRB) and so other design guides and codes, retrospectively fitted to the application are not necessary.</p> <p>Therefore, the Applicant considers that this updated section of the NPPF is not applicable or relevant to the Examination of the Scheme and/or has been addressed by compliance with National Highways policy.</p>
				<p><b>Chapter 11. Making Effective Use of Land. Achieving Appropriate Densities.</b></p> <p>The 2021 NPPF introduces a new requirement in paragraph 125. This states that area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places</p>	<p>As this paragraph falls under the sub-title "Achieving Appropriate Densities", it is not considered to be relevant to nationally significant infrastructure projects. The term "appropriate densities" is taken to be in reference to housing and other forms of built development rather than road projects such as the Scheme.</p> <p>No</p>
				<p><b>Chapter 12. Achieving Well Designed Places.</b></p>	<p>As set out in paragraph 1.5.8 of the Case for the Scheme (REP1-036) whilst there are defined Neighbourhood Plan Areas within the</p> <p>No</p>

No	Question to	Reference	Question	National Highways' response		
				<p>Paragraph 127 of the 2021 NPPF includes an amendment to state that Neighbourhood planning groups can play an important role in identifying the special qualities of each area.</p>	<p>relevant local authorities, none of these are impacted by the Scheme.</p> <p>Details of consultation are set out in the consultation report (APP-026) and its appendices (APP-027-APP-052). This includes extensive Local Authority and Parish Council engagement.</p> <p>No Neighbourhood Planning groups were identified within the Scheme area</p>	
				<p><b>Chapter 12. Achieving Well Designed Places.</b></p> <p>Paragraph 128 of the 2021 NPPF introduces a requirement that all local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide and National Model Design Code, and which reflect local character and design preferences.</p> <p>Paragraph 129 adds new text to explain further detail on the use of design codes.</p>	<p>The National Design Guide and National Model Design Codes are for use by local planning authorities as a basis for the production of design codes and guides and in decision making, so are not relevant to National Highways, as the Applicant for the Scheme. Paragraph 129 explains that landowners and developers may contribute to design guides and codes in support of a planning application. However, this is not mandatory.</p> <p>The Scheme takes into account the National Highways publication, 'The Road to Good Design' which contains a series of principles for good road design which are centred on the themes of connecting people, places and processes. Furthermore, the Scheme has been designed in accordance with the National Highways Design Manual for Roads and Bridges (DMRB) and so other design guides and codes, retrospectively fitted to the application are not necessary. Therefore, the Applicant considers that this updated section of the NPPF is not applicable or relevant to the Examination of the Scheme.</p>	<p>No</p>

No	Question to	Reference	Question	National Highways' response		
				<p><b>Chapter 12. Achieving Well Designed Places.</b></p> <p>Paragraph 131 of the 2021 NPPF introduces new requirements around new streets and trees.</p>	<p>This new paragraph specifically addresses new streets in urban environments. The Scheme does not create any “new streets” in urban environments. Notwithstanding this, Chapter 7, Landscape and Visual Effects of the Environmental Statement (ES) (APP -063) explains that the design of the Scheme include a comprehensive landscape strategy including mitigation tree and hedgerow planting.</p>	<p>No</p>
				<p><b>Chapter 12. Achieving Well Designed Places.</b></p> <p>Paragraph 134 of the 2021 NPPF (replacing the previous NPPF paragraph 130) introduces the requirement for planning authorities to refuse development that is not well designed, especially where it fails to reflect local design policies and government guidance on design. It adds the requirement for significant weight to be given to development which reflects local design policies and government guidance or local design guidance; and outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit with the overall form and layout of their surroundings.</p>	<p>Whilst the 2021 NPPF introduces changes in regards to design it is the NN NPS that remains the primary policy framework for the determination of the Application. Table 2 In Appendix B of the Case for the Scheme (REP1-036) sets out how the Scheme complies with the NN NPS' requirements around good design.</p>	<p>No</p>
				<p><b>Chapter 14. Meeting the challenge of climate</b></p>	<p>A Flood Risk Assessment (FRA) (TR100134/APP/5.5(2)) has been</p>	<p>No</p>



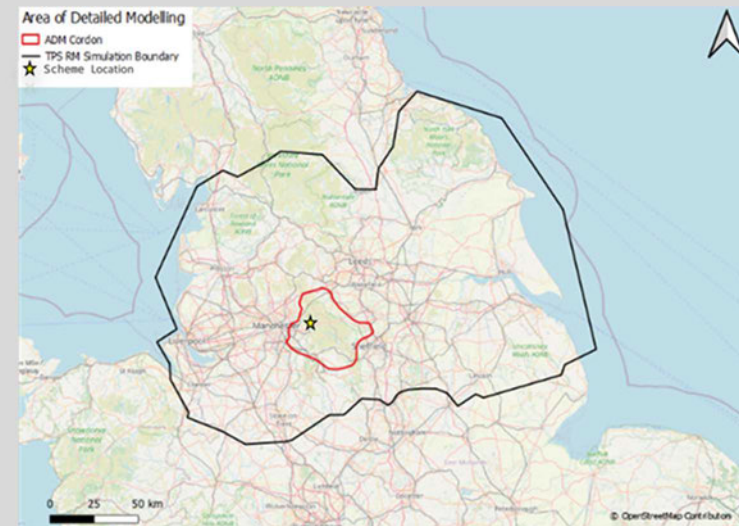
No	Question to	Reference	Question	National Highways' response		
				<p><b>change, flooding and coastal change.</b></p> <p>Paragraph 161 of the 2021 NPPF changes the previous paragraph 157 to state that opportunities provided by new development and improvements in green and other infrastructure should be used to reduce the causes and impacts of flooding making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management.</p>	<p>submitted as part of the DCO application for the Scheme.</p> <p>The FRA draws on a range of disciplines and designs, including, drainage, earthworks, culverts, and previous hydrological and hydraulic modelling to ensure all sources of flood risk are assessed as part of the FRA. The FRA describes the existing flood risks for all flood risk sources, followed by an assessment of flood risks to the Scheme, mitigation measures and lastly residual flood risk.</p> <p>The Drainage Design Strategy Report (APP-188) provides the drainage strategy for the Scheme. Section 6.1 describes the basis of the drainage design.</p>	
				<p><b>Chapter 15, Conserving and Enhancing the Natural Environment.</b></p> <p>Paragraph 176 introduces new text to explain that development within the setting of National Parks, the Broads and Areas of Outstanding Natural Beauty should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas</p>	<p>The Scheme does not fall within any AONBs, National Parks or the Broads but lies within the setting of the Peak District National Park so the text is not strictly relevant. The study area for landscape impact is, however, 1km as set out in the methodology and shown in the relevant figures. Therefore, the landscape receptor has been assessed to that extent. The Landscape and Visual Effects (Chapter 7) of the ES (TR010034/APP/6.3.(2)) includes the effect on visual receptors at select locations within the PDNP as this was specifically requested, and the locations agreed, by the PDNPA. The effect on the landscape setting of the PDNP was not a specific request of the PDNPA. However, the Zone of Theoretical Visibility (ES Figure 7.6 (APP-095)) indicates limited theoretical visibility between 1km and 2km i.e. theoretical visibility is limited in this area (just outside the PDNP)</p>	<p>No.</p>



No	Question to	Reference	Question	National Highways' response		
					and more extensive within 1km and in the open areas beyond 2km.	
				<p><b>Chapter 16. Conserving and Enhancing the Historic Environment.</b></p> <p>The 2021 NPPF introduces a new paragraph, paragraph 198, stating that <i>"in considering any applications to remove or alter a historic statue, plaque, memorial or monument (whether listed or not), local planning authorities should have regard to the importance of their retention in situ and, where appropriate, of explaining their historic and social context rather than removal."</i></p>	<p>The Scheme does not propose to remove or alter a historic statue, plaque, memorial or monument and so this is not considered to be relevant.</p>	No
<b>Other general matters</b>						
2.3.	Local authorities Environment Agency	Pollution control	<p>Paragraph 4.48 of the National Policy Statement for National Networks (NN NPS) refers to discharges or emissions which affect air quality, water quality, land quality or include noise and vibration. It notes that these may be subject to separate regulation under a pollution control framework or other consenting and licensing regime. Paragraph 4.55 refers to a need to ensure that the relevant pollution control authority is satisfied that potential releases can be adequately regulated and that the pollution effects would not be unacceptable.</p> <p>Are the relevant authorities satisfied that:</p> <p>a) the potential discharges and emissions from the Proposed Development would be adequately regulated under the appropriate regime; and that</p>	No response required from National Highways.		

No	Question to	Reference	Question	National Highways' response
			<p>b) the effects of existing sources of pollution are not such that the cumulative effects of pollution when the Proposed Development is added would make the development unacceptable, particularly in relation to statutory environmental quality limits?</p>	
2.4.	Applicant	<p>Outline management plans            Outline EMP [APP-183]</p>	<p>The Outline EMP refers to several management plans at paragraph 1.4.8, including a soil resource plan, noise and vibration management plan, construction management plan, nuisance management plan, materials management plan, site waste management plan, community engagement plan and a landscape and environmental management plan, that would only be prepared post-consent.</p> <p>Please provide outline versions of each of these plans to the Examination.</p>	<p>Outline versions of the following management plans requested have been prepared with the intention of submitting them at Deadline 3:</p> <ul style="list-style-type: none"> <li>• Outline Soil Handling Management Plan</li> <li>• Outline Site Waste Management Plan</li> <li>• Outline Materials Management Plan</li> <li>• Outline Nuisance Management Plan</li> <li>• Outline Landscape and Ecology Management Plan</li> <li>• Outline Noise and Vibration Management Plan</li> <li>• Outline Community Engagement Plan</li> <li>• Outline Construction Water Management Plan</li> </ul>

## 4. Transport networks and traffic, alternatives, access, severance, walkers, cyclists, and horse riders

No	Question to	Reference	Question	National Highways' response
3.	Transport networks and traffic, alternatives, access, severance, walkers, cyclists, and horse riders			
	Congestion and journey times			
3.1.	Applicant	ES Non-Technical Summary [APP-059] Page 2 The Scheme Objectives Various Relevant Representations (RRs) and Deadline 1 submissions	The scheme objectives identified include reducing congestion and improving reliability of people's journeys through Mottram-in Longdendale, Hollingworth and Tintwistle, and also between Manchester and Sheffield city regions. What contribution to this aim does the Proposed Development make, outside of the DCO boundary?	<p>The forecasting of journey times, delays and reliability which has informed the economic assessment has not been constrained to the area within the DCO boundary but has been based on a strategic traffic model which considers a much wider area as shown below.</p>  <p>TPS RM = Trans-Pennine South Regional Model          ADM = Area of Detailed Modelling</p> <p>The model uses a high level of detail around the region affected by the scheme, from Manchester to Sheffield, (ADM) with reduced detail beyond this area. However, it retains the ability to capture impacts on longer distance trips which pass through the Scheme area or which are affected by traffic rerouting.</p> <p>Benefits and disbenefits across this wider area have been considered and all trips within the traffic model contribute to the total. This ensures that any potential delays which the proposed scheme may cause on other parts of the road network are considered with equal value to journey time savings within the DCO boundary. Similarly, if high levels of congestion within the DCO boundary would cause trips to divert without the Scheme, but the proposed Scheme relieves this congestion, then both the preferred and the diversion route will be considered in the benefit calculation.</p>
3.2.	Applicant	ES Non-Technical Summary [APP-059] Page 2	The Applicant has identified journey time savings within the limits of the scheme works. What effect, if any, would the Proposed Development have on journey times on the wider network outside the limits of	See response to 3.1 above. Consequently, the forecast effects the Proposed Scheme will have on journey times over the wider road network outside the limits of the DCO, i.e. within the traffic modelled area, have already been accounted for in the assessment of the benefits of the Scheme.

No	Question to	Reference	Question	National Highways' response
		The Scheme Objectives Various RRs Stephen Bagshaw's Deadline 1 submission [REP1-053]	the DCO works and, if these effects increase delays, to what degree would these delays offset the benefits identified by the Applicant?	
3.3.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036] Section 2.1	<p>The Proposed Development is intended to provide benefits to the Strategic Route Network. The link road works are limited in extent and the length of new trunk road restricted to the dual carriageway section of the Proposed Development.</p> <p>a) What contribution, if any, would the Proposed Development make to achieving the wider benefits identified in the Road Investment Strategy (RIS) for the strategic road network between Manchester, Sheffield and the M1?</p> <p>b) Which other schemes, if any, identified in the RIS are needed to achieve the benefits identified for the scheme?</p> <p>c) What delivery method has been identified for these schemes and how will they be secured?</p>	<p>a) The second Road Investment Strategy (RIS2) does not, as such, set out wider benefits that schemes need to achieve. Instead, it sets a long-term strategic vision for the Strategic Road Network (SRN). With that vision in mind, it then specifies the performance standards National Highways must meet. The key elements of the vision for the SRN in 2050 set out in RIS2 are:</p> <ul style="list-style-type: none"> <li>- A network that supports the economy</li> <li>- A greener network</li> <li>- A safer and more reliable network</li> <li>- A more integrated network</li> <li>- A smarter network</li> </ul> <p>This performance specification sets out the Government's high-level expectations for National Highways and the SRN during the second Road Period (RP2), which are:</p> <ul style="list-style-type: none"> <li>- Improving safety for all;</li> <li>- Fast and reliable journeys;</li> <li>- A well maintained and resilient network;</li> <li>- Being environmentally responsible;</li> <li>- Meeting the needs of all users;</li> <li>- Achieving real efficiency</li> </ul> <p>The Scheme makes the following contributions to achieving the RIS2 performance specification for the strategic road network on the section between Manchester, Sheffield and the M1:</p> <ul style="list-style-type: none"> <li>- <b>Improving safety for all</b> - The new link road is designed in accordance with the latest design standards and bypasses conurbations. It will therefore be safer than the exiting route that it bypasses. The proposed traffic calming measures on the de-trunked section of the A57 and improved facilities for non-motorised users will also improve road safety for all. The Scheme could, however, result in an increase in road traffic accidents on roads where traffic flows are forecast to increase compared to without the Scheme, particularly on the A57 Snake Road. Consequently, National Highways will support Derbyshire County Council in identifying and implementing appropriate measures to improve road safety on the A57 Snake Road.</li> </ul>

No	Question to	Reference	Question	National Highways' response
				<ul style="list-style-type: none"> <li>- <b>Fast and reliable journeys</b> - The Scheme reduces traffic congestion and is forecast to deliver improved journey times overall. It also provides additional capacity to accommodate forecast future demand. It will thereby improve journey time reliability as well.</li> <li>- <b>A well maintained and resilient network</b> - The new link road is designed to the latest standards and with the aim of minimising maintenance requirements. It has also been designed to cope with climate change, e.g. road drainage that can cope with higher rainfall events, to ensure that the Scheme is resilient to the projected effects of climate change. The additional road capacity provide by the Scheme also improves the resilience of the road network to traffic congestion caused by increased future demand or due to road maintenance.</li> <li>- <b>Being environmentally responsible</b> -The Scheme has been designed to minimise its environmental impact, with appropriate measures incorporated into proposals to mitigate unavoidable adverse environmental effects.</li> <li>- <b>Meeting the needs of all users</b> - The Scheme incorporates substantial improvements in facilities and connectivity for non-motorised users. It will also reduce congestion on the de-trunked sections of the A57 which will benefit bus services in terms of both journey times and journey time reliability. Consequently, the Scheme has been designed to meet the needs of all users.</li> <li>- <b>Achieving real efficiency</b> – The design of the Scheme and the proposed method of its construction have been developed in tandem to ensure delivery will be as efficient as possible. The efficiency with which National Highways delivers its RIS2 schemes is independently challenged and monitored by the Office of Rail and Road (ORR).</li> </ul> <p>b) No other schemes identified in the RIS are needed to achieve the benefits of the Scheme.</p> <p>c) No further response – see b) above.</p>
3.4.	Applicant		<p>a) Please provide capacity assessments of the proposed M67 Junction 4 and the Wooley Bridge junctions.</p> <p>b) Please provide assessments of delay at the junction, with comparison between Do-Minimum and Do-Something Schemes.</p>	<p>In the Do-minimum scenario the M67 junction 4 is a roundabout without traffic signals. In the Do-something scenario (i.e. with the Scheme) full traffic signal control will be introduced on the roundabout, along with other alterations necessary to connect the new link road into the junction. The comparison of the demand to capacity ratio, delay per vehicle and queue lengths between the 2025 Do-something and Do-minimum scenarios is provided below.</p> <p>The junction of the link road with the A57 Woolley Bridge (Woolley Bridge junction) will be a new signal-controlled junction where no junction currently exists. Therefore, there is no Do-minimum junction for comparison with the Do-something scenario. Consequently, only the demand to capacity ratio, delay per vehicle and queue lengths for the Do-something scenario are provided below.</p>



No	Question to	Reference	Question	National Highways' response																																																																																																																																																							
				<p><b>M67 Junction 4 2025 Do-minimum</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Entry Arm</th> <th colspan="3">AM</th> <th colspan="3">PM</th> </tr> <tr> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per pcu (secs)</th> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per pcu (secs)</th> </tr> </thead> <tbody> <tr> <td>A560 NS La</td> <td>18</td> <td>0</td> <td>4</td> <td>11</td> <td>0</td> <td>4</td> </tr> <tr> <td>A560 OS La</td> <td>64</td> <td>1</td> <td>8</td> <td>30</td> <td>0</td> <td>5</td> </tr> <tr> <td>Mottram Rd</td> <td>15</td> <td>0</td> <td>3</td> <td>13</td> <td>0</td> <td>3</td> </tr> <tr> <td>M67</td> <td>62</td> <td>0</td> <td>7</td> <td>68</td> <td>0</td> <td>7</td> </tr> <tr> <td>Hyde Rd</td> <td>58</td> <td>0</td> <td>5</td> <td>46</td> <td>0</td> <td>5</td> </tr> </tbody> </table> <p><b>M67 Junction 4 2025 Do-something</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Entry Arm</th> <th colspan="3">AM</th> <th colspan="3">PM</th> </tr> <tr> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per pcu (secs)</th> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per pcu (secs)</th> </tr> </thead> <tbody> <tr> <td>A560 NS La</td> <td>11</td> <td>0</td> <td>4</td> <td>10</td> <td>0</td> <td>4</td> </tr> <tr> <td>A560 OS La</td> <td>29</td> <td>1</td> <td>4</td> <td>19</td> <td>0</td> <td>4</td> </tr> <tr> <td>Mottram Rd</td> <td>11</td> <td>0</td> <td>3</td> <td>15</td> <td>0</td> <td>3</td> </tr> <tr> <td>M67</td> <td>51</td> <td>4</td> <td>13</td> <td>57</td> <td>4</td> <td>11</td> </tr> <tr> <td>Link Rd to R'bo</td> <td>21</td> <td>0</td> <td>6</td> <td>21</td> <td>0</td> <td>10</td> </tr> <tr> <td>Link Rd to M67</td> <td>49</td> <td>1</td> <td>6</td> <td>49</td> <td>2</td> <td>10</td> </tr> <tr> <td>Hyde Rd</td> <td>10</td> <td>0</td> <td>21</td> <td>8</td> <td>0</td> <td>25</td> </tr> </tbody> </table> <p><b>Bypass/A57 Woolley Bridge 2025 Do-something</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Entry Arm</th> <th colspan="3">AM</th> <th colspan="3">PM</th> </tr> <tr> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per PCU (seconds)</th> <th>Volume/ Capacity Ratio</th> <th>Mean Max Queue (pcu)</th> <th>Average Delay per PCU (seconds)</th> </tr> </thead> <tbody> <tr> <td>A57 Brookside (N)</td> <td>62.1%</td> <td>4</td> <td>36.8</td> <td>77.1%</td> <td>5</td> <td>44.4</td> </tr> <tr> <td>Development</td> <td>26.8%</td> <td>1</td> <td>-*</td> <td>15.3%</td> <td>1</td> <td>-*</td> </tr> <tr> <td>A57 Brookside (S)</td> <td>66.5%</td> <td>14</td> <td>18.2</td> <td>53.8%</td> <td>10</td> <td>16.0</td> </tr> <tr> <td>A57 Bypass</td> <td>60.7%</td> <td>7</td> <td>28.9</td> <td>81.9%</td> <td>12</td> <td>39.8</td> </tr> </tbody> </table> <p>* Development arm green stage will be called on demand. Traffic modelling assumes that the green stage for Development arm is called once every 3 cycle to replicate demand dependency (once every 180 seconds). It is therefore unrepresentative to report delays from the traffic model for development arm.</p>	Entry Arm	AM			PM			Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per pcu (secs)	Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per pcu (secs)	A560 NS La	18	0	4	11	0	4	A560 OS La	64	1	8	30	0	5	Mottram Rd	15	0	3	13	0	3	M67	62	0	7	68	0	7	Hyde Rd	58	0	5	46	0	5	Entry Arm	AM			PM			Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per pcu (secs)	Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per pcu (secs)	A560 NS La	11	0	4	10	0	4	A560 OS La	29	1	4	19	0	4	Mottram Rd	11	0	3	15	0	3	M67	51	4	13	57	4	11	Link Rd to R'bo	21	0	6	21	0	10	Link Rd to M67	49	1	6	49	2	10	Hyde Rd	10	0	21	8	0	25	Entry Arm	AM			PM			Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per PCU (seconds)	Volume/ Capacity Ratio	Mean Max Queue (pcu)	Average Delay per PCU (seconds)	A57 Brookside (N)	62.1%	4	36.8	77.1%	5	44.4	Development	26.8%	1	-*	15.3%	1	-*	A57 Brookside (S)	66.5%	14	18.2	53.8%	10	16.0	A57 Bypass	60.7%	7	28.9	81.9%	12	39.8
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A57 Bypass	60.7%	7	28.9	81.9%	12	39.8																																																																																																																																																					
	<b>Modelling</b>																																																																																																																																																										
3.5.	Local authorities Local highway authorities	Study areas and road sections Transport Assessment	The traffic data used within the modelling must be robust to properly assess the Proposed Development.  Are the local authorities and local highway authorities content with the study area used in relation to transport networks and traffic?	No response required from National Highways.																																																																																																																																																							

No	Question to	Reference	Question	National Highways' response
		Report [APP-185]		
3.6.	Local authorities Local highway authorities Applicant	Baseline conditions, surveys and growth assumptions Transport Assessment Report [APP-185] Section 1.1 Peter Simon's submissions [AS-004] and [PDL-011]	The traffic data used within the modelling must be robust in order to properly assess the Proposed Development. a) Are the local authorities and local highway authorities satisfied that the input data used in the modelling is appropriate to provide a basis for predicting future traffic flows, with particular regard to the assessment of committed development and future traffic growth? b) Are the local authorities and local highway authorities satisfied that the effects of other works on the network have been suitably addressed within the model? c) Please comment on the potential for additional trips to be attracted to the route in the "Do-Something" scenario compared with the "Do-Minimum" scenario and the implications for the assessment. d) Do the local authorities and local highway authorities have any more comments regarding the Applicant's consideration of baseline conditions and surveys?	a) No response required from National Highways. b) No response required from National Highways. c) The traffic modelling undertaken to assess the Scheme uses a strategic reassignment traffic model covering a large area, as shown in response 3.1 above, that includes all potential alternative routes to the A57 across the Pennines. It therefore captures the additional traffic attracted from alternative routes to the new link road due to the improvements in relative journey times that it provides. Consequently, the assessment of the Scheme accurately accounts for the additional traffic forecast to be attracted to the new link road from alternatives routes. d) No response required from National Highways..
3.7.	Applicant	Growth assumptions Transport Assessment Report [APP-185] Section 4. NN NPS Annex A	NN NPS considers low demand, central traffic, and high demand forecasts, over which there is a large range of predicted changes in congestion. What range of forecasts have been considered by the Applicant and what is the justification for the chosen level?	The do-minimum scenario reflects a central or core traffic forecast, with both high and low traffic growth forecasts also modelled as sensitivity tests. Department for Transport's (DfT) Transport Analysis Guidance (TAG) states " <i>that the core scenario is intended to be the best basis for decision-making given current evidence. However, there is no guarantee that the outturn will match the assumptions. A single core scenario cannot reflect the uncertainty in national trends such as GDP and demographic growth, fuel price trends and vehicle efficiency changes. Therefore, it is suggested to test the impact of this uncertainty through sensitivity tests.</i> " Two alternative growth scenarios have been run as sensitivity tests, using the core growth scenario as a basis. The following uncertainty status assumptions have been made for the two alternative growth scenarios: <ul style="list-style-type: none"> <li>• Low growth: 'near certain' and 'more than likely' developments, constrained to low growth national uncertainty.</li> <li>• Optimistic growth: 'near certain', 'more than likely' and 'reasonably foreseeable' developments, constrained to high growth national uncertainty.</li> </ul> National uncertainty has been considered by following the guidance provided in TAG, which states " <i>that the alternative growth scenarios should consist of forecasts based on a proportion of the base year demand being added to (optimistic growth) or subtracted from (low growth) the core growth scenario.</i> "

No	Question to	Reference	Question	National Highways' response
				<p>The proportion of base year demand to be added (or subtracted) is based on a parameter 'p' which varies by mode. The proportion is calculated as follows:</p> <ul style="list-style-type: none"> <li>For 1 year after the base year, proportion p of base year demand added (or subtracted) to the core scenario.</li> <li>For 36 or more years after the base year, proportion 6 x p of base year demand added to the core scenario.</li> <li>Between 1 and 36 years after the base year, the proportion of base year demand should rise from p to 6 x p in proportion with the square root of the years. For example, 16 years after the base year, the proportion is 4 x p.</li> </ul> <p>For highway demand at the national level, the value of p is 2.5%, reflecting uncertainty around annual forecasts from the National Transport Model (NTM), based on the macro-economic variables that influence the main drivers of travel demand. The indicative TAG value of p for rail travel is 2%, which has been adopted for the public transport demand.</p>
3.8.	Local authorities Local highway authorities	Local plans, other transport modes and other networks NN NPS paragraphs 5.203, 5.205-6, 5.211-2, 5.215-7	<p>a) Have impacts on local transport networks and policies set out in local plans, including local policies on demand management been addressed sufficiently?</p> <p>b) Has enough account has been taken of local models?</p> <p>c) Have reasonable opportunities been taken to support other transport modes?</p> <p>d) Is the detail in the local transport model for the assessment of impacts proportionate to the scale and consideration of the impact of uncertainty on project impacts?</p> <p>e) Has there been a proportionate assessment of the transport impacts on other networks?</p>	No response required from National Highways.
3.9.	Local authorities Local highway authorities	Overall assessment methodology	Do the local authorities and local highway authorities have any more comments regarding the Applicant's overall assessment methodology, growth assumptions or modelling techniques?	No response required from National Highways.
3.10.	Applicant	Case for the Scheme [REP1-036] Section 6.5	Has any allowance been made in the modelling for modal shift resultant from the Transport and Works Order schemes referenced?	<p>Section 6.5 of The Case for the Scheme (TR10034/APP/7.1(3)) refers to two Transport and Works Act Order (TWAo) schemes near the Scheme. These are:</p> <ol style="list-style-type: none"> <li>A TWAo was submitted on 31 March 2021 for the Transpennine Route Upgrade of the rail corridor between Huddersfield and Westtown (Dewsbury) including upgrading of an eight-mile section of the route comprising major station upgrades, electrification, doubling the number of tracks from two to four and a proposed grade separation.</li> <li>A TWAo was approved in February 2018 for new passing facilities on the Hope Valley rail line at Bamford and Dore.</li> </ol>

No	Question to	Reference	Question	National Highways' response
				<p>The traffic forecasts used for the traffic modelling of the Scheme has not accounted for any modal shift that these two TWAO schemes may deliver. However, any forecast modal shift due to these two TWAO schemes would need to be accounted for in both the Do-minimum and Do-something scenarios used for the Scheme assessment. Consequently, the difference in the forecast traffic flows between the Do-something (with the Scheme) and Do-minimum (without the Scheme), would not change.</p> <p>In addition, any forecast modal shift would most likely only make a marginal difference to the traffic forecasts used for assessment of the Scheme, since the absolute numbers of people switching from car to rail will be very small relative to traffic volumes along the trans Pennine corridor.</p> <p>Furthermore, the Huddersfield to Westtown upgrade is on a section of the rail network which is not part of the rail service choice for movements between Sheffield and Manchester and even very significant rail investment on this line is unlikely to make this route via Huddersfield preferable to the Hope Valley Route.</p> <p>The Hope Valley improvements will improve resilience and reliability but not materially improve journey times, which is the basis of the rail cost formulation in the model. Therefore, inclusion of this TWAO scheme in the modelling is unlikely to affect movements between Manchester and Sheffield.</p>
3.11.	Applicant	Transport Assessment Report [APP-185] Table 7.1	Link 6 (B6174 Market Street) appears to experience an isolated very significant increase in flow in the Do-Something scenario. Can the Applicant clarify why this is?	<p>The Scheme significantly reduces traffic flow along the section of the A57 through Mottram that will be de-trunked and means that additional capacity is created at the junction of the B6174 Market Street with the A57 Hyde Road/Mottram Moor. Consequently, additional local traffic is likely to be attracted to the B6174 Market Street from alternative routes because of the reduction in delays at the junction with the A57. This is the reason for the forecast increase in traffic flow on the B6174 Market Street due to the Scheme.</p>
<b>Alternatives</b>				
3.12.	Interested Parties	National Highways Deadline 1 Submission [REP1-042] Comments on Relevant Representations  Various Relevant Representations	Various parties have suggested that an alternative to the Proposed Development would be a ban on heavy commercial vehicles on the A628 Woodhead Road and A57 Snake Road. The Applicant has provide further comments on this alternative scheme.  Do you have any further comments in regard to National Highways' comments?	No response required from National Highways.
<b>Public transport</b>				

No	Question to	Reference	Question	National Highways' response																																																																																																																						
3.13.	Applicant	Transport Assessment Report [APP-185] Section 3.4	Please confirm that the information provided regarding bus and train services are up to date. If the information has been superseded, please provide updated information.	<p>A review of the public transport information presented in Section 3.4 of the Transport Assessment Report (TAR) (APP-185) has revealed that there have been some minor changes to train timetables and provision of school bus services since the assessment was undertaken. The updated public transport information for Tables 3.1, 3.2 and 3.4 of the TAR are provided below.</p> <p><b>Table 3.1</b> Trans-pennine Rail Timetable Information</p> <table border="1"> <thead> <tr> <th rowspan="2">Operator</th> <th colspan="3">Eastbound*</th> <th colspan="3">Westbound*</th> </tr> <tr> <th>First Service (hh:mm)</th> <th>Last Service (hh:mm)</th> <th>Trains per Hour (tph)</th> <th>First Service (hh:mm)</th> <th>Last Service (hh:mm)</th> <th>Trains per Hour (tph)</th> </tr> </thead> <tbody> <tr> <td>Trans Pennine</td> <td>06:15</td> <td>23:50</td> <td>1</td> <td>03:25</td> <td>21:11</td> <td>1</td> </tr> <tr> <td>East Midlands</td> <td>08:43</td> <td>22:28</td> <td>1, 2 tph during midday period</td> <td>06:18</td> <td>07:39</td> <td>1, 2tph during midday period</td> </tr> <tr> <td>Arriva</td> <td>05:46</td> <td>21:22</td> <td>1</td> <td>07:10</td> <td>23:27</td> <td>1</td> </tr> </tbody> </table> <p>*Between Manchester Piccadilly and Sheffield</p> <p><b>Table 3.2</b> Indicative Journey Times by Rail between Manchester and Sheffield</p> <table border="1"> <thead> <tr> <th rowspan="2">Operator</th> <th colspan="2">Eastbound (hh:mm)</th> <th colspan="2">Westbound (hh:mm)</th> </tr> <tr> <th>Off-peak</th> <th>Peak</th> <th>Off-peak</th> <th>Peak</th> </tr> </thead> <tbody> <tr> <td>Arriva</td> <td>01:17</td> <td>01:17</td> <td>1:17</td> <td>1:16</td> </tr> <tr> <td>TransPennine</td> <td>00:53</td> <td>00:51</td> <td>00:55</td> <td>00:54</td> </tr> <tr> <td>East Midlands</td> <td>01:00</td> <td>00:59</td> <td>00:59</td> <td>01:00</td> </tr> </tbody> </table> <p><b>Table 3.4</b> Local Bus Services</p> <table border="1"> <thead> <tr> <th>Service</th> <th>Route</th> <th>Frequency (each way)</th> </tr> </thead> <tbody> <tr> <td>125</td> <td>Mottram – Oldham Mumps</td> <td>1 service per day (school bus)</td> </tr> <tr> <td>201</td> <td>Hattersley – Manchester City Centre</td> <td>Up to 6 per hour</td> </tr> <tr> <td>219</td> <td>Glossop – Manchester City Centre</td> <td>1 service per day</td> </tr> <tr> <td>237</td> <td>Glossop – Ashton-under-Lyne</td> <td>Up to 3 per hour</td> </tr> <tr> <td>341</td> <td>Glossop – Hyde</td> <td>1 service per hour</td> </tr> <tr> <td>387</td> <td>Ashton-under-Lyne - 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3.14.	Applicant		Please provide details of the effect of the Proposed Development on public transport journey times across, and within, the study area. If possible, this information should include a Figure summarising changes in journey times.	No specific assessment of the effect of the Proposed Scheme on public transport journey times across, and within, the study area has been undertaken. The number of bus services affected by the Scheme, and the service frequencies, is relatively low and buses will be subject to similar journey time changes arising from the Scheme to that for other traffic.
<b>Walkers, cyclists, and horse riders</b>				
3.15.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036] Para 4.6.15	<p>The intention is stated to restrict use of the main carriageway of the scheme by walkers, cyclists, and horse riders.</p> <p>a) Would the Applicant please confirm the stretches of carriageway over which cycling will be prohibited and provide justification for the proposed restrictions.</p> <p>b) Would the Applicant explain how these restrictions will be delivered?</p> <p>c) If cycling provision is to be made outside the main carriageway, would the Applicant please explain what assessment has been made of likely levels of usage and potential for modal conflict.</p> <p>d) Please explain what design parameters, including, but not restricted to, width of route and design speed, have been used for off-carriageway routes and reasons for selecting those parameters.</p> <p>e) Do the local authorities and local highway authorities have any comments on the adequacy of this level of provision to cater for cycling demand on the local network and the support it provides for alternative modes of transport to the private car?</p>	<p>a) Dual carriageway section from M67 J4 to Mottram Moor Junction. This is required for the safety of road users.</p> <p>b) Signs will be placed at the start of the dual carriageway section to indicate the restriction.</p> <p>c) An integrated cycleway network is being delivered as part of this scheme which provides safer facilities for cyclists away from the trunk road network. These proposals have been integrated with other cycling schemes being delivered by Tameside MBC and existing facilities. A Walking Cycling and Horseriding Assessment Report is completed as part of the National Highways design approach to assess the facilities provided for all Non-Motorised users</p> <p>d) For cycling design the guidance contained within Local Transport Note 1/20 has been followed apart from where a conflict exists with Greater Manchester Active Travel Design Guide in which case the GM Active Travel Design Guide has been used (it should be noted the GM guidance leads to larger and better designed facilities). The design speed and widths used vary throughout the scheme but at least the minimum criteria contained in these two guides are used throughout. For walking and horse riding the criteria in CD 143 "Designing for walking, cycling and horse-riding" is used.</p> <p>e) No response required from National Highways.</p>
3.16.	Applicant Local authorities Local highway authorities	Scheme Layout Plans [APP-011] Sheet 4 of 10	<p>The footway/bridleway link in the north-west quadrant of the junction provides a route to a controlled crossing point on the western arm of the proposed junction. A controlled crossing point is also provided on this arm closer to the junction, which would provide a shorter route for many journeys.</p> <p>a) Would the Applicant clarify the reasoning for the provision of both crossing points?</p> <p>b) Would the Applicant clarify what measures, if any, would prevent the establishment of an informal short cut to the crossing close to the junction from the new link road to the North?</p> <p>c) If such a route were established, do you foresee any implications for highway safety?</p>	<p>a) The equestrian crossing is required away from the junction to safely allow the passage for horse riders across the highway. Following consultation with the British Horse Society it was established that at least 15m width is required for an equestrian crossing within a traffic island which would significantly increase the footprint of the junction. Crossing at a junction is less than desirable due to the safety risk caused by vehicles passing behind a horse. The crossing point near the junction is for pedestrians and cyclist to better link up their journeys around the junction. As the junction is fully signalised and has controlled crossings on all other arms these crossings have no impact on the traffic performance to place these crossings.</p> <p>b) Fencing will be provided to the south of the bridleway link to deter an informal short cut being established; the area will also be landscaped.</p> <p>c) No safety implications are foreseen due to the measures outlined in b) above.</p> <p>d) No response required from National Highways.</p>

No	Question to	Reference	Question	National Highways' response
			d) What would these be, and would it be possible to design these out?	
3.17.	Applicant	Scheme Layout Plans [APP-011] Sheet 4 of 10	On the A57(T) north-eastern (Mottram Moor) arm, the layout indicates a single north-eastbound traffic lane running alongside a new length of footway, or footway cycleway. This, however, appears to terminate, decanting users onto carriageway. Further, there is no connectivity indicated between the proposed footway or footway/cycleway and the existing footway serving 103-133 Mottram Moor.  Would the Applicant clarify what is intended in terms of footway or footway/cycleway provision at this point?	Scheme layouts currently do not show full details of the proposed footway connection. Segregated cycleway facilities will be detailed along Mottram Moor up to the Gunn Inn Junction. The footway/cycleway will decant pedestrians to the existing footway and cyclists to this new facility.
<b>Public Rights of Way</b>				
3.18.	Applicant Local authorities Local highway authorities	Flood Risk Assessment [REP1-013] Insert 4-7 and Engineering Drawings and Sections Plans [APP-012]	These documents provide conflicting information in regard to minimum overhead clearances.  a) Would the Applicant please clarify which information is correct?  b) Is the proposed overhead clearance to the Public Right of Way appropriate?	a) The Engineering Drawings and Sections (REP1-005) are correct i.e. the headroom should be stated as 2300mm and 2100mm in the west and east banks respectively. b) No cycle or horse riding provision is proposed on this PRow therefore the headroom provided is appropriate for safe pedestrian use.
3.19.	Applicant Local authorities Local highway authorities Interested Parties	<u>Various Relevant Representations</u>	Traffic flows crossing the Peak District on the A628 Woodhead Road and A57 Snake Road are anticipated to increase if the development proposal is implemented. Several Public Rights of Way cross these motor traffic routes.  a) Has any statistical or other analysis of the comparison between the "Do-Minimum" and "Do Something" options of the distribution of acceptable gaps for pedestrians to cross the road been made?  b) Do the local authorities and local highway authorities have any comments?	a) The traffic flow on the A57 Snake Road in the do-minimum scenario is forecast to be up to 126 vehicles per hour in each direction. This equates to approximately an average of 2 to 3 vehicles per minute in each direction which means that the average gap between vehicles is up to approximately 30 seconds. The Scheme is forecast to increase the traffic flow on the A57 Snake Road to up to 192 vehicles per hour in each direction. This equates to approximately an average of 3 to 4 vehicles per minute in each direction which means that the Scheme will reduce the average gap between vehicles to approximately 20 seconds. Nonetheless, 20 seconds is a sufficiently long gap in the traffic flow to enable pedestrians to safely cross the road. It is, however, recognising that the forecast increase in traffic on the A57 Snake Road due to the Scheme is likely to reduce the frequency of gaps in the traffic flow when pedestrians will be able to safely cross the road and therefore result in some increase in waiting time for pedestrians wanting to cross the A57 Snake Road. b) No response required from National Highways..
<b>Design – transport networks, traffic, walkers, cyclists, and horse riders</b>				
3.20.	Applicant Local authorities	Case for the Scheme [REP1-036] Para 1.3.4	The Applicant proposes that Hyde Road will be detrunked from the M67 Junction 4 to Mottram Back Moor Junction and traffic management and safety measures, including a	a) The aims of the proposed works on Woolley Lane are as follows: <ul style="list-style-type: none"> <li>To discourage through traffic so that such traffic is encouraged to use the new link road.</li> </ul>

No	Question to	Reference	Question	National Highways' response
	Local highway authorities	Speed Limits and Traffic Regulations Plans [REP1-004] Sheet 1 of 2	<p>reduced speed limit, will be introduced to encourage the use of the route by non-motorised users and improve connectivity. The route would remain open to through traffic.</p> <p>a) Please clarify any identified aims, if any, of such works?  b) What discussion has there been regarding the feasibility of delivery of works, including any Traffic Regulation Orders (TROs) to achieve the above aims?  c) How would the proposed speed limit be enforced?  d) Would enforcement be effective?  e) Would there be remain any perceived benefit to using this route for motorised vehicle journeys between the M67 Junction 4 and Mottram Back Moor Junction, rather than the route provided by the proposed link road?</p>	<ul style="list-style-type: none"> <li>To reduce traffic speeds.</li> <li>To improve road safety.</li> <li>To improve the environment for non-motorised users.</li> <li>To make the reduced speed limit self-enforcing.</li> <li>To reduce the dominance of vehicular traffic.</li> <li>To reduce severance for non-motorised users and thus improve connectivity.</li> <li>To encourage local trips to be made on foot or by bicycle, rather than by car.</li> </ul> <p>b) The aims and the feasibility of delivering the works have been discussed and agreed with Tameside MBC and included in the Statement of Common Ground ((TR010034/APP/8.2(2)). Further discussion and agreement will be reached during detailed design.</p> <p>c) The measures proposed will be designed to ensure that the proposed speed limit would be self-enforcing as far as possible. As with any other road, it will ultimately be responsibility of the Greater Manchester Police to enforce the speed limit.</p> <p>d) See c) above.</p> <p>e) The proposed measures will be designed to remove any benefit for through traffic to use the route instead of the new link road.</p>
3.21.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036] Para 1.3.4 Speed Limits and Traffic Regulations Plans [REP1-004] Sheet 2 of 2	<p>The Applicant proposes that safety measures and improvements, including a reduced speed limit, new cycling facilities and improved pedestrian crossings will be introduced on Wooley Lane to improve connectivity. The route would remain open to through traffic.</p> <p>a) Please clarify any identified aims, if any, of such works?  b) What discussion has there been regarding the feasibility of delivery of works, including any Traffic Regulation Orders (TROs) to achieve the above aims?  c) How would the proposed speed limit be enforced?  d) Would enforcement be effective?  e) Would there be remain any perceived benefit to using this route for motorised vehicle journeys between the Mottram Back Moor Junction and the junction of Wooley Lane with Wooley Bridge and Hadfield Road, rather than the route provided by the proposed link road.</p>	<p>a) The aims of the proposed works on Wooley Lane are as follows:</p> <ul style="list-style-type: none"> <li>To discourage through traffic so that such traffic is encouraged to use the new link road.</li> <li>To reduce traffic speeds.</li> <li>To improve road safety.</li> <li>To improve the environment for non-motorised users.</li> <li>To make the reduced speed limit self-enforcing.</li> <li>To reduce the dominance of vehicular traffic.</li> <li>To reduce severance for non-motorised users and thus improve connectivity.</li> <li>To encourage local trips to be made on foot or by bicycle, rather than by car.</li> </ul> <p>b) Initial discussion has been carried out with Tameside MBC but proposals will be finalised and agreed during detailed design.</p> <p>c) Proposed measures will be designed to ensure that the proposed speed limit would be self-enforcing as far as possible. As with any other road, it will ultimately be responsibility of the Greater Manchester Police to enforce the speed limit.</p> <p>d) See c) above.</p> <p>e) The proposed measures have been designed to remove any benefit for through traffic to use the route instead of the new link road.</p>
3.22.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036]	<p>One of the stated aims of the scheme relates to reconnecting communities along the Trans-Pennine Route. The Case for the scheme refers to increased pedestrian and cycle provision at the Gunn Inn Junction (Market Street/Wooley Lane/Mottram Moor) and traffic management measures on Market Street and Mottram Moor to increase pedestrian safety and connectivity.</p> <p>a) Are any details of these proposals available?</p>	<p>a) Not at the preliminary design stage the detailed proposals for the Gun Inn Junction are in development in consultation with Transport for Greater Manchester (TfGM), the proposed crossing provision at the Gun Inn junction is pedestrian only, however advanced stop lines will be provided to improve safety for cyclists passing through the junction. These proposals will be considered as part of the Stage 2 Road Safety Audit undertaken on completion of the detailed design.</p> <p>b) No</p> <p>c) No response required from National Highways..</p>



No	Question to	Reference	Question	National Highways' response
			<p>b) Have these been subject to safety audit, if so, at what stage?</p> <p>c) Do the local authorities and local highway authorities have any comments on the deliverability and effect of such proposals?</p>	
3.23.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036] Section 3.5 Outline EMP [APP-183] Table 6.1	<p>Appropriate arrangements will need to be in place to make provision for the future maintenance of the works. It is proposed that Carrhouse Lane Underpass and River Etherow Bridge are to be maintained in their entirety by Tameside Metropolitan Borough Council, and that the surface of Roe Cross Road overbridge and the surface and surrounding landscaping of Mottram Underpass will be maintained by Tameside Metropolitan Borough Council. Other maintenance responsibilities are identified in the Outline EMP at Table 6.1</p> <p>a) How would the future maintenance arrangements be secured?</p> <p>b) Would the local authorities and local highway authorities please confirm that these arrangements are acceptable or, if not, what is needed to make them acceptable?</p>	<p>a) Article 12 (<i>construction and maintenance of new, altered or diverted streets and other structures</i>) of the draft DCO identifies the maintenance responsibilities for the Applicant and relevant local highway authority, which will include Tameside Metropolitan Borough Council. Maintenance of the specific structures referred to in this question by Tameside Metropolitan Borough Council is secured by Article 12(5) of the draft DCO (REP1-041).</p> <p>The SoCG with TMBC confirms that the proposed maintenance and highway boundary have been shared with Tameside MBC and agreed. and that TMBC agreed to the DCO definition of maintenance proposed. Also TMBC has stated that it is satisfied with the agreement that it will take ownership of the River Etherow Bridge and the Carrhouse Lane Underpass.</p> <p>b) No response required from National Highways.</p>
3.24.	Applicant Local authorities Local highway authorities		<p>Congestion on roads to either side of the development proposal may engender driver frustration, and this may encourage drivers to try to overtake if presented with free-flow.</p> <p>a) Would the two Link Roads provide safe overtaking opportunities?</p> <p>b) If not, what measures would be appropriate to prevent unsafe overtaking?</p> <p>c) How would these be delivered?</p>	<p>a) The potential inclusion of a double white line on the single carriageway section has been discussed with Tameside MBC and as a Highway Authority they will support its inclusion. Further consultation required is with the Greater Manchester Police to determine if this design update is taken forward. Overtaking opportunity is provided on dual carriageway section.</p> <p>b) The geometry of the single carriageway section is in accordance with CD 109 of the DMRB to reduce the risks of unsafe overtaking by providing correct horizontal and vertical geometry. This is in addition to the possibility of a double white line.</p> <p>c) Please see answers immediately above.</p>
3.25.	Applicant Local authorities Local highway authorities	Case for the Scheme [REP1-036] Section 4.5 Transport Assessment Report [APP-185] Paragraphs 7.2.22 – 7.2.14.	<p>The Proposed Development identifies an increase in accidents and casualties over the appraisal period. Reference is made to the pursuit of measures to minimise these impacts, with particular reference to Snake Pass.</p> <p>a) Have any measures to address this increase been identified, either on Snake Pass or elsewhere?</p> <p>b) Have any discussions taken place with the local authorities and/or local highway authorities with regard to the implementation of such schemes?</p> <p>c) Do the local authorities and local highway authorities have any comment on the likely success of any such schemes in delivering accident savings on a scale</p>	<p>a) No specific measures to improve road safety on Snake Road/Pass have been proposed. However, National Highways will support Derbyshire County Council in identifying appropriate measures.</p> <p>b) National Highways will undertake further engagement with DCC on this matter. National Highways will collaborate with Derbyshire County Council to investigate what road safety improvements could be introduced on the A57 Snake Road through the Peak District National Park to reduce the potential for accidents in the future. However, any proposed improvements will not be included in the DCO for the Scheme since the A57 through the Peak District National Park is not a National Highways' road.</p> <p>c) No response required from National Highways.</p>

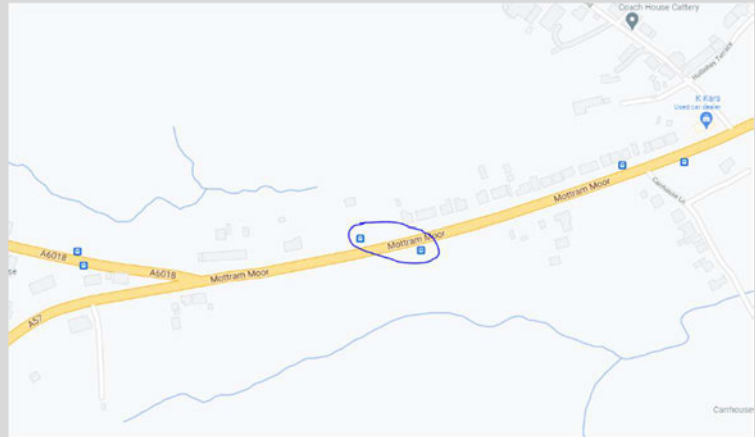
No	Question to	Reference	Question	National Highways' response																																																				
			<p>equivalent to the identified disbenefit resultant from the scheme?</p> <p>d) What delivery methods, if any, have been identified to secure any proposals?</p>	<p>d) A delivery method to secure the implementation of any proposed road safety improvements on Snake Road/Pass cannot be determined until the specific type of measures have been identified. As stated above any proposed improvements will not be included in the DCO for the Scheme since the A57 through the Peak District National Park is not a National Highways road.</p>																																																				
3.26.	Applicant Local authorities Local highway authorities	Scheme Layout Plans [APP-011] Sheet 6 of 10	<p>The Wooley Bridge junction at the eastern end of the scheme has been designed as a signal-controlled crossroads. The main traffic flows appear to be on the western and southern arms of the junction, with lower flows on the eastern and northern arms.</p> <p>a) Would the Applicant please provide a proposed turning flow summary and staging diagram for the proposed junction.</p> <p>b) Would the Applicant please explain what alternatives were considered for this junction and why was the solution proposed considered the correct one?</p> <p>c) Have the local authorities and local highway authorities any comments to make on the proposed layout of the junction?</p>	<p>a) The forecast turning flows and signal staging diagram for Woolley Bridge junctions are shown below.</p> <table border="1"> <caption>Woolley Bridge New Junction 2025 Do-Something</caption> <thead> <tr> <th>From</th> <th>To</th> <th>AM Flows (pcus/hr)</th> <th>PM Flows (pcus/hr)</th> </tr> </thead> <tbody> <tr><td>Bypass</td><td>A57 North</td><td>192</td><td>354</td></tr> <tr><td>Bypass</td><td>A57 Brookfield</td><td>619</td><td>838</td></tr> <tr><td>Bypass</td><td>Housing Development</td><td>4</td><td>7</td></tr> <tr><td>A57 North</td><td>Bypass</td><td>87</td><td>179</td></tr> <tr><td>A57 North</td><td>A57 Brookfield</td><td>154</td><td>123</td></tr> <tr><td>A57 North</td><td>Housing Development</td><td>4</td><td>7</td></tr> <tr><td>A57 Brookfield</td><td>Bypass</td><td>655</td><td>530</td></tr> <tr><td>A57 Brookfield</td><td>A57 North</td><td>103</td><td>79</td></tr> <tr><td>A57 Brookfield</td><td>Housing Development</td><td>4</td><td>7</td></tr> <tr><td>Housing Development</td><td>A57 North</td><td>7</td><td>4</td></tr> <tr><td>Housing Development</td><td>A57 Brookfield</td><td>7</td><td>4</td></tr> <tr><td>Housing Development</td><td>Bypass</td><td>7</td><td>4</td></tr> </tbody> </table>	From	To	AM Flows (pcus/hr)	PM Flows (pcus/hr)	Bypass	A57 North	192	354	Bypass	A57 Brookfield	619	838	Bypass	Housing Development	4	7	A57 North	Bypass	87	179	A57 North	A57 Brookfield	154	123	A57 North	Housing Development	4	7	A57 Brookfield	Bypass	655	530	A57 Brookfield	A57 North	103	79	A57 Brookfield	Housing Development	4	7	Housing Development	A57 North	7	4	Housing Development	A57 Brookfield	7	4	Housing Development	Bypass	7	4
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No	Question to	Reference	Question	National Highways' response
				<p>b) Previously rejected options include a roundabout. An un-signalised roundabout will not perform as well as a signal controlled junction and will result in a much increased footprint further impacting the flood plain for the River Etherow. A signalised roundabout would have a similar impact on the floodplain and, due to the short stacking space that would be available on the circulatory carriageway, would not be as effective at managing the traffic flows.</p> <p>c) No response required from National Highways.</p>
<b>Construction traffic and temporary closures and diversions</b>				
3.27.	Applicant	Length of Construction Programme ES Chapters 1-4 [REP1-014] (Introductory) Chapter 2 Section 2.6 Outline Traffic Management Plan [REP1-038]	<p>a) What confidence is there that the length of the construction programme will not be exceeded?</p> <p>b) What are the principal risks of delay and what contingencies have been included?</p> <p>c) What allowances for variations in the construction programme have been included in the assessments? Please provide references.</p> <p>d) What is the potential for a longer construction programme to occur and for that to give rise to any materially new or materially worse adverse environmental effects in comparison with those reported in the ES?</p>	<p>a) The programme is dependent on the construction team being able to start on site in March 2023 to ensure seasonal constraints are aligned. We are looking at the opportunity of being able to commence/mobilise in advance of March 2023 to further improve confidence.</p> <p>b) The principal risk of delay to the construction programme is the potential for a delay to the Secretary of State decision which, in turn, would result in a delay to the proposed March 2023 start of works. If there is significant delay to the start of work the first earthworks season in the summer of 2023 would be missed. The earthworks phasing is critical to the proposed 2-year construction programme and missing an earthworks season could delay completion by up to 12 months.</p> <p>c) The assessed overall construction programme is based on best estimate timings, which are subject to modification as the Detailed Design progresses. As stated in section 2.6.1 of Chapter 2 of the ES, the timings indicated are based on the present situation and a worst-case scenario, meaning that they are reasonably conservative. The programme will be kept to a minimum practicable time to reduce any environmental impacts. Also, the construction programme will be informed by various ecological seasonal constraints.</p> <p>d) As stated above, the draft programme that was assessed is considered to be conservative. There is also a 6 week float included on the contract programme at present. However, the reality is that unforeseen circumstances do occur that could result in delays leading to e.g. adverse environmental effects such as missing the window for ecological works. This potential scenario is captured in the project risk register, however it is difficult to predict all scenarios. Should such events arise they would be dealt with through the usual procedures, and in full consultation with all relevant stakeholders to ensure that an acceptable solution is achieved to minimise potential adverse environmental effects.</p>
3.28.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	<p>a) Please could the Applicant summarise how travel patterns have been modelled during construction?</p> <p>b) What feedback from local authorities and local highway authorities has been incorporated?</p> <p>c) Please could the local authorities and local highway authorities comment?</p>	<p>a) Construction of the Scheme will mostly take place off-line of the existing road network. This will limit the temporary impacts that construction of the Scheme will have on the operational performance of the existing road network. Notwithstanding this, the following proposed temporary traffic management arrangements necessary for the construction of the scheme have been modelled using the strategic traffic model:</p> <ul style="list-style-type: none"> <li>• Temporary inter-peak period shuttle working on A57 at the Woolley Bridge junction at the eastern end of the scheme.</li> </ul>

No	Question to	Reference	Question	National Highways' response
				<ul style="list-style-type: none"> <li>• Temporary signal-controlled junction on the A57 to enable the transportation of excavated material across the A57 for re-use in construction of the Scheme.</li> </ul> <p>The additional traffic delay caused by these arrangements (user dis-benefits) has been accounted for in the economic assessment of the scheme.</p> <p>b) Initial discussions have been held with Tameside and feedback incorporated, particularly in relation of the plant crossing on the existing A57. Other areas of the site were discussed with no concerns raised. The detailed Temporary Traffic Management proposals will be further developed during detailed design.</p> <p>The Traffic Management Plan will be updated and submitted to the SoS for approval within the second iteration Environmental Management Plan (following consultation with local authorities) as detailed in the draft DCO (REP1-041), Requirement 4.</p> <p>It should also be noted that there is a requirement to submit roadspace applications describing detail/limits of specific temporary traffic management for Local Authority approval as well as an application process for specific Temporary Traffic Regulation Orders for any restrictions on the highways.</p> <p>It should be noted that for this scheme most of the works will be completed offline and away from existing carriageways.</p> <p>c) No response required from National Highways..</p>
3.29.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	<p>It is stated that operations of limited durations might take place outside of the core working hours, as defined in the dDCO due to safety requirements.</p> <p>a) Please could the Applicant:</p> <ul style="list-style-type: none"> <li>• justify the need for such working;</li> <li>• summarise the predicted impacts; and</li> <li>• clarify the mechanism for agreement of such exceptional working how this is secured through the dDCO?</li> </ul> <p>b) Please could the local authorities and local highway authorities comment?</p>	<p>a) The activities which would be required to take place outside of the core working hours include activities such as 1) Pavement Overlays and tie ins where equipment would be required in places which could disrupt the travelling public 2) Installation of lighting columns adjacent to existing live carriageway where it would be unsafe to install close to existing traffic. These instances will predominantly be for the construction of the new Mottram Moor cross roads in the middle of the scheme.</p> <ul style="list-style-type: none"> <li>• The impacts of these works would result in a diversion route as agreed with the relevant Local Authority. There would be no closure implemented without the prior approval of the Local Authority depending on the route.</li> <li>• All works would be subject to a Section 61 agreement in advance of the works with the relevant Local Authority to manage the effects of any out of hours working.</li> </ul> <p>Further details are provided in our answer to 1.34.</p> <p>b) No response required from National Highways.</p>
3.30.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	<p>It is stated that the A57 Trunk Road may, during the works, be used as a diversion route during other operations.</p> <p>a) What consultation would take place with local authorities, local highway authorities and other Interested Parties regarding such proposals?</p>	<p>a) If the A57 trunk route is to be used as a diversion route it would be caused by another scheme in the area utilising the A57. For this to occur the relevant Local Highway Authority would be required to approve the diversions under the Department for Transport NRSWA 1991: Code of Practice for the Co-ordination of Streetworks. And failure to notify as part of this CoP could result in a fixed penalty notice being issued by the Local Highway Authority.</p>

No	Question to	Reference	Question	National Highways' response
			b) Please could the local authorities and local highway authorities comment?	b) No response required from National Highways..
3.31.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	a) How will the needs of vulnerable users traversing the works be assessed? b) Please could the local authorities and local highway authorities comment	a) A needs analysis of the local area will be completed to identify the demographics of users and their needs and measures will be put in place to address these. Referring to Temporary Work plans (REP1-006), the scheme also plans to divert footpaths as indicated ensuring footpath users safety during construction. Security will be employed on the scheme to ensure a visible safety presence, over and above existing security arrangements in the area. b) No response required from National Highways..
3.32.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	a) Is any review process proposed to assess the effectiveness and safety of traffic management measures during the construction phase? b) If so, what arrangements will be put in place to amend traffic management? c) Please could the local authorities and local highway authorities comment?	a) Yes. As part of the National Highways governance process, a fully detailed Traffic Management Plan (secured through Requirement 4) is required to be checked and approved before the contractor can commence construction works. During construction a Technical Advisor will be appointed as a third party of act on behalf of National Highways who will undertake drive through assessments and monitor safety and effectiveness of the traffic management arrangement from a customers' perspective. National Highways also undertakes continuous audits of schemes during construction. b) Within the draft DCO (REP1-041), Schedule 2 Part 1 Requirement 4(2)(d)(xvi) stipulates that a second iteration of the Traffic Management Plan is to be submitted and approved in writing by the Secretary of State in writing following consultation with the relevant planning authority. c) No response required from National Highways..
3.33.	Applicant	Environmental Statement Appendix 11.2 [APP-175]	Clarification is needed regarding the expected number of daily Heavy Duty Vehicle movements during construction. ES Appendix 11.2 includes construction vehicle movement, but movements are described as total movements over a period of construction rather than daily numbers, which is the basis of screening out using Design Manual for Roads and Bridges (DMRB) criteria.  Please could the Applicant provide information about the expected number of daily Heavy Duty Vehicle movements during the construction period?	The route for construction traffic to and from the main construction compound adjacent to junction 4 of the M67 will be via the M67. Construction of the Scheme is forecast to generate up to approximately 90 construction vehicles trips per day during the busiest periods of construction activity, which equates to up to around 14 vehicle trips per hour. This represents less than a 0.4% increase in traffic on the M67 and consequently, the additional construction traffic generated by the Scheme will have a negligible impact on the operational performance of the road network.
3.34.	Applicant Local authorities Local highway authorities	Outline Traffic Management Plan [REP1-038]	a) Has any assessment been made of the impact of the proposed Outline Traffic Management Plan on bus services? b) Please could the local authorities and local highway authorities comment?	a) A specific assessment of the impact of the proposed Outline Traffic Management Plan on bus services has not been undertaken since the majority of the works will be undertaken offline. It would also be premature to do this prior to the details of the proposed temporary traffic management arrangements being discussed with stakeholders and confirmed in the final Traffic Management Plan. b) No response required from National Highways..
3.35.	Local authorities Local highway authorities	Outline Traffic Management	Have the local authorities or local highway authorities any comments on: a) the practicability of the Outline Traffic Management Plan;	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
		Plan [REP1-038]	b) measures that should be included in the Detailed Traffic Management Plan; c) the timing of the issue of the Detailed Traffic Management Plan; or d) the need for the Detailed Traffic Management Plan to be consulted on and/ or agreed with them?	
3.36.	Local authorities Local highway authorities	dDCO [REP1-041] Outline Traffic Management Plan [REP1-038] Outline EMP [APP-183]	Do the local authorities have any more comments regarding the Applicant's assessment of construction traffic and temporary closures and diversions, including: a) the nature of likely effects on receptors; b) relevant mitigation measures secured by the dDCO, Outline Traffic Management Plan, and Outline EMP; c) whether any potential to worsen accessibility would be mitigated so far as reasonably possible; d) the sufficiency of consideration given to mitigation by way of the design, lay-out or construction methods for the Proposed Development; e) whether the mitigation measures are proportionate, reasonable and focussed on promoting sustainable development; f) whether the mitigation measures are enforceable, precise, sufficiently secured and likely to result in the identified residual impacts; g) the identification of all significant impacts; and h) road safety during construction?	No response required from National Highways.
3.37.	Applicant Local authorities Local highway authorities	Public transport Bus stops	a) Where a bus stop is to be removed, relocated or replaced would the applicant please provide a Figure showing: <ul style="list-style-type: none"> <li>• the location of the bus stop to be removed, relocated, or replaced;</li> <li>• where a bus stop will be relocated or replaced, the proposed location of the bus stop and the distance between that and the position of the existing stop; and</li> <li>• where a bus stop is to be removed, the location of the nearest alternative bus stop and the distance between that and the position of the stop to be removed.</li> </ul> b) What local requirements for public consultation or approvals (if any) exist to remove, relocate or replace a bus stop?	a) Two bus stops will be removed shown in the map below:  We have agreed the removal of these stops (EH4858 and EH4859) with TfGM, who has additionally consulted with the operator Stagecoach.



No	Question to	Reference	Question	National Highways' response
			c) Do the local authorities or local highway authorities have any comments on proposed changes to bus stop locations?	<p>There is an existing bus stop within the footprint of Woolley Bridge Junction which will require relocation or removal. This is currently being discussed with Derbyshire County Council to agree a resolution and will be included in the detailed design.</p> <p>b) The removal or relocation of bus stops does not require a traffic regulation order meaning there is no requirement to follow the consultation procedures ordinarily required for such orders. As indicated in a) above, the Applicant has however engaged with the relevant authorities who consult bus operators.</p>
3.38.	Applicant Local authorities Local highway authorities	Walkers, cyclists and horse riders Draft Statement of Common Ground with Tameside Metropolitan Borough Council [APP-190]	<p>Table 3.6 identifies a request by the British Horse Society for the inclusion of a Pegasus crossing at M67 Junction 4. The applicant has reviewed the request and concluded that they are unable to accommodate the request due to land constraints.</p> <p>a) What modifications to the layout have been considered in seeking to provide for the crossing facility?</p> <p>b) What additional land would be required to provide the facility?</p> <p>c) Is this land in private ownership and, if so, is the landowner known?</p> <p>d) What would be the effect of the omission of such a facility on:</p> <ul style="list-style-type: none"> <li>• Safety?</li> <li>• Connectivity?</li> </ul>	<p>a) To provide a facility with a sufficient waiting area for equestrians within the central reserve of the M67 the central reserve would need to be widened by approximately 13m. This would move the three lanes on the approach to the junction to the north and also introduce a geometric departure from standard due to the insufficient deflection which would result on the approach to the roundabout. If a departure from standard is deemed not to be acceptable then the roundabout circulatory carriageway would also have to move north by a similar amount.</p> <p>b) The northern verge would have to be widened by at least 8m to safely house a waiting area for equestrians. With earthwork tie-ins and additional fencing, the proposed scheme boundary would be moved north by a minimum of 25m.</p> <p>c) This would require Harop Edge Farm to be compulsorily purchased and would result in significant redesign of the connecting roads.</p> <p>d) Instead, an equestrian crossing point has been provided across the roundabout which links to a new bridleway facility provided adjacent to the new link road with onward connectivity to existing bridleway facilities.</p>



## 5. Green Belt

No	Question to	Reference	Question	National Highways' response
4.	Green Belt			
4.1.	Applicant Tameside Metropolitan Borough Council	Case for the Scheme [REP1- 036]	<p>Section 7.5 of the Case for the Scheme sets out the Applicants position regarding Green Belt policy implications of the Proposed Development.</p> <p>a) Please set out whether you consider that all elements of the scheme (for both the construction and operational phases) do not constitute inappropriate development in the Green Belt. If this is not the case, please list all the elements that are considered inappropriate development.</p> <p>b) Paragraphs 7.5.6 and 7.5.9 of the Case for the Scheme refer to paragraph 150 of the NPPF which sets out that certain developments are not inappropriate in the Green Belt provided they preserve its openness. Please explain in further detail the effect of the scheme on the openness of the Green Belt having regard to both visual and spatial aspects as well as submissions received that the scheme would cut the Green Belt in half.</p> <p>c) Tameside Metropolitan Borough Council's comments are requested on the Applicant's Green Belt assessment. Where there are areas of disagreement, please explain why.</p>	<p>a) The Applicant considers that, taken as a whole, the Scheme does not represent inappropriate development in the Green Belt. The impact of the Scheme on the Green Belt should be considered in its final form as neither the NPPF nor the NN NPS make a distinction between a development and the works required to construct that development.</p> <p>The Scheme consists of permanent and temporary works. The submitted Temporary Works Plans (REP1-006) show the full extent of the temporary works planned as part of the Scheme. There will be one main temporary construction compound area, located on agricultural land to the east of the M67 Junction 4.</p> <p>The construction compound is expected to accommodate office and welfare facilities, plant and machinery parking, storage facilities, maintenance areas and workshops. Even though it is a temporary facility, care has been taken to minimise its impact. For example, light spill from temporary lighting at the construction compound and at other locations would be minimised beyond the compounds and working areas by the use of directionally controlled lighting to avoid, minimise or reduce the risk of occurrence or potential negative environmental effects during construction. Topsoil from the compound area would be used to make a 3 m high bund around the compound area to separate the compound from the back gardens of the residential properties on Hyde Road, Littlefields, Meadowcroft, Ash Close and Four Lanes. The 3 m bund would be made up of 1 m fill material with 2 m of topsoil on top to ensure the compound office building is sufficiently screened.</p> <p>If the temporary compound was divorced from the Scheme which it serves, then it could potentially be considered inappropriate development. However, as the temporary compound is intrinsically linked to the construction of the Scheme (it would have no need to exist if it was not servicing the Scheme) and will be dismantled following completion. All temporary land taken for construction purposes would be reinstated and restored to its original condition.</p> <p>Paragraph 150 makes clear that engineering operations, such as those that would be required to construct the Scheme, are not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. Given the engineering operations associated with the Scheme are only temporary, they would preserve the openness of the Green Belt and would not conflict with the purposes of including land within the Green Belt.</p> <p>b) Paragraph 150 of the NPPF states that "certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. This includes <i>local transport infrastructure which can demonstrate a requirement for a Green Belt location</i>".</p>

No	Question to	Reference	Question	National Highways' response
				<p>Planning Practice Guidance sets out some of the factors that can be taken into account when considering the potential impact of development on the openness of the Green Belt (Planning Practice Guidance Paragraph: 001 Reference ID: 64-001-20190722<sup>3</sup>). These include but are not limited to:</p> <ul style="list-style-type: none"> <li>• openness is capable of having both spatial and visual aspects</li> <li>• the duration of the development, and its remediability</li> <li>• the degree of activity likely to be generated, such as traffic generation</li> </ul> <p>These are considered in turn below:</p> <p><u>Spatial and Visual Aspects</u></p> <p>ES Chapter 7 Landscape and Visual Effects (TR010034/APP/6.3(2)) provides a full assessment of landscape and visual effects of the Scheme during both construction and operational phases. It finds that during the operational phase the overall openness and function of the Tameside Greenbelt would remain mostly unaffected. The Scheme has been carefully designed and includes extensive mitigation to minimise visual impact on surrounding receptors and limit the impact on the openness of the Green Belt. Mitigation has considered the balance between visual screening (EFA) and landscape integration (EFB) as demonstrated by the Environmental Functions illustrated in Figure 2.4 (Environmental Masterplan) (APP-074). There are areas which will be planted and others which will remain more open with grassland vegetation and scattered trees. The Green Belt in Tameside is predominantly agricultural in nature. Where planting is proposed, it generally follows the pattern of the elements of the agricultural landscape character wherever possible.</p> <p>It is recognised that during the operational phase, and following mitigation, effects on the Green Belt would include the new highway, and its traffic, and associated structural features. These would introduce new built elements on land which currently does not have them.</p> <p>However, as set out in Table 7.21 in Chapter 7 of the ES (TR010034/APP/6.3(2)), considering the wider context the Scheme will not introduce completely new types of features within the overall landscape of the Dark Peak Western Fringe Landscape Character Area (DPWF), as there is existing highway infrastructure and development within the relevant landscape character area and following mitigation, the magnitude of change is considered Negligible Adverse.</p> <p>The area required for the Scheme is very small in comparison to the much wider area of land designated as Green Belt, and as such the Scheme is not capable of cutting the Green Belt in two. Furthermore many roads in the area already cross the Green Belt.</p> <p>The Scheme's Green Belt location is supported by local planning policy through Policy T2: Trunk Road Developments of the Tameside Unitary Development Plan (UDP), which</p>

No	Question to	Reference	Question	National Highways' response
				<p>safeguards the route of the Scheme across the Green Belt.</p> <p><u>Duration of the development, and its Remediability</u></p> <p>Once complete the Scheme will be in place permanently, but as noted above in answer to 4.1, there are a number of temporary elements of the Scheme, such as the temporary construction compound, temporary works areas and haul roads that form part of the construction phase of the Scheme. These would be removed following completion of the Scheme and temporary land taken for construction purposes would be reinstated and restored to its original condition. The temporary works, in situ only for the duration of the construction works, would therefore have no permanent effects on the openness of the Green Belt.</p> <p><u>Degree of activity likely to be generated</u></p> <p>Total vehicle kilometres across the appraised road network are effectively the same with the Scheme as without it. This indicates that the Scheme is not forecast to induce additional traffic on to the road network and that increases in traffic flows on some roads due to the Scheme are balanced out by reductions on other roads because of rerouting or redistribution of some journeys</p> <p>The Scheme does not represent inappropriate development in the Green Belt, as the openness of the Green Belt would be preserved.</p> <p>Paragraph 5.178 of the NN NPS states that “<i>when located in the Green Belt national networks infrastructure projects may comprise inappropriate development</i>” and “<i>The Secretary of State will need to assess whether there are very special circumstances to justify inappropriate development. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations</i>”. Paragraphs 7.5.17 - 7.5.38 of the Case For The Scheme (TR010034/APP/7.1(3)) sets out the justification for very special circumstances applying to the Scheme.</p>
4.2.	Applicant	Case for the Scheme [REP1-036]	<p>In the context of the Green Belt assessment, paragraphs 7.5.22 to 7.5.31 of the Case for the Scheme deal with harm to the Green Belt.</p> <p>The Court of Appeal judgment in SSCLG &amp; Others v Redhill Aerodrome Ltd [2014] EWCA Civ 1386 confirmed that the interpretation given to “<i>any other harm</i>” in paragraph 88 of the original National Planning Policy Framework (revised Framework paragraph 148) is such that it is not restricted to harm to the Green Belt.</p>	<p>An important consideration for this Scheme is that, in the first instance, the Applicant contends that the Scheme does not represent inappropriate development in the Green Belt. Paragraphs 7.5.9 to 7.5.15 of the Case for the Scheme (TR010034/APP/7.1(3)) and paragraph 150 c) of the National Planning Policy Framework refer. Development which is not inappropriate in the Green Belt is not burdened by the presumption against inappropriate development and need not demonstrate very special circumstances nor engage in a weighing exercise of harm against such circumstances and any other considerations in favour of granting permission.</p> <p>The paragraphs cited by the Examining Authority from sub-section 7.5 of the Case for the Scheme are directed towards an assessment of harm to the Green Belt. The Redhill case,</p>

No	Question to	Reference	Question	National Highways' response
			<p>In this context, is it necessary to update the Case for the Scheme to appropriately reflect the position regarding “<i>other harm</i>”?</p>	<p>which pre-dates the NN NPS, confirmed that when considering inappropriate development in the Green Belt, the term “any other harm” permits a decision maker to include non-Green Belt factors in a weighing exercise against the “very special circumstances” and “other considerations” in favour of granting permission. The Applicant considers that to the extent it may be necessary, an assessment of “other harm” is already included in the Case for the Scheme (see sub-sections 7.6 to 7.20 of the Case for the Scheme) and when appropriately assessed, the benefits of the Scheme outweigh any adverse effects.</p>

## 6. Landscape and visual

No	Question to	Reference	Question	National Highways' response
<b>5.</b>	<b>Landscape and visual</b>			
	<b>Study area, baseline conditions and overall assessment methodology</b>			
5.1.	Applicant	NPPF update Question 2.2 ES Chapter 7 [APP-063]	<p>Table 7.1 references the February 2019 version of the NPPF. An update to the NPPF was published in July 2021, which included changes that may be of relevance to the Proposed Development, including in respect of:</p> <ul style="list-style-type: none"> <li>Chapter 9 Promoting Sustainable Development – design of streets and transport elements should reflect current national guidance, including the National Design Guide and National Model Design Code.</li> <li>Chapter 12 Achieving Well-designed Places – increased focus on making beautiful and sustainable places.</li> </ul> <p>Please could the Applicant provide commentary on the implication of the changes to the NPPF with respect to landscape and visual effects?</p>	<p>Whilst it is recognised that there have been amendments to the NPPF since the application was submitted, we would note that the NN NPS still remains the primary policy framework against which the application should be assessed.</p> <p>The biggest change to the NPPF is that the updated version places greater emphasis on beauty. The revised policy also demonstrates a focus on place-making, the environment, sustainable development and the importance of design codes. The key changes are set out below, together with a commentary on how the Scheme complies with the changes.</p> <p>The Applicant has also checked the assessments that have been undertaken as part of the Environmental Impact Assessment to ascertain whether methodologies from the NPPF have been relied upon. We are satisfied that no further changes to the assessments are required as a result of the changes made to the NPPF.</p> <p>The National Design Guide and National Model Design Codes are for use by local planning authorities as a basis for the production of design codes and guides and in decision making, so are not mandatory for National Highways, as Applicant for the Scheme.</p> <p>However, similar principles have been adopted for the design of the Scheme as it follows the guidance set out in the National Highways publication “The Road to Good Design”. This document contains a series of principles for good road design which are centred on the themes of connecting people, places and processes. The principles from the Road to Good Design are embedded in the Design Manual for Roads and Bridges (DMRB) which is the standard to which the Scheme has been designed. Similar themes of the Road to Good Design and the National Design Guide include:</p> <ul style="list-style-type: none"> <li>The importance of context, that is ensuring that road design its sensitive to the landscape, heritage and the local community.</li> <li>The need to achieve an environmentally sustainable design</li> <li>Bringing lasting value</li> </ul> <p>Furthermore, the Scheme has been designed in accordance with the DMRB and so other design guides and codes, retrospectively fitted to the application are not necessary. Therefore, the Applicant considers that this updated section of the NPPF is not applicable or relevant to the Examination of the Scheme. However, the Scheme design demonstrates alignment with the guidance which is detailed in the section below titled Design - Landscape and Visual.</p>
5.2.	Applicant	Peak District National Park Study area	Please could the Applicant explain the extent of the study areas used for the assessment of indirect landscape and visual effects in relation to the Peak District National Park, in terms of	The Peak District National Park (PDNP) lies outside the assessment study area. The assessment is localised and relates to the representative viewpoints agreed with the Peak District National Park Authority (PDNPA) in advance of the assessment and the localised



No	Question to	Reference	Question	National Highways' response
		Indirect effects	distance from the A628, A57 and A624, as well as length of each route and the rationale for it?	<p>landscape character. The visual assessment and associated viewpoints comprise assessment of indirect effects on the PDNP which was a result of a request from the PDNPA as the PDNP lies outside of the study area. The viewpoints represent users of the Pennine Bridleway and Trans Pennine Trail in locations that have visibility of the existing road network and that may experience indirect effects from a change in traffic flow.</p> <p>The methodology within ES Chapter 7 (TR010034/APP/6.3(2)) explains the indirect visual assessment, and includes the following information:</p> <ul style="list-style-type: none"> <li>Distance from the viewpoint to the nearest point of the existing road centreline is listed in the second column of the assessment Table 7.32: Indirect Visual Effects on Representative Viewpoints within the PDNP</li> <li>7.3.34 'the individual section of the wider Affected Road Network (ARN) and its associated flows has been considered'</li> <li>7.3.35 AADT traffic data covers sections of the ARN which potentially would be visible from viewpoints locations. For each route the traffic model is divided into links and, for each, the total vehicle movements per day is recorded. Reference should be made to traffic data within Appendix 2.1 (APP-151).</li> <li>7.3.37 This has considered the traffic model route link which is visible from the specific viewpoint.</li> <li>7.3.44 The assessment of indirect visual effects has been undertaken from the agreed viewpoint locations (Figure 7.5).</li> </ul>
5.3.	Peak District National Park Authority	Peak District National Park Dark skies ES Chapter 7 [APP-063]	<p>Paragraph 7.6.20 notes that consideration has been given to three areas within the Peak District National Park as "dark skies", but these have been excluded from further assessment as the Proposed Development is unlikely to be visible from the sites.</p> <p>Is Peak District National Park Authority content that no further assessment is required?</p>	No response required from National Highways.
5.4.	Local authorities Peak District National Park Authority	Viewpoints Night-time assessment ES Chapter 7 [APP-063]	<p>Paragraph 7.3.66 sets out viewpoints used to aid the assessment of night-time effects arising from operational lighting.</p> <p>Are the local authorities and Peak District National Park Authority content that the chosen viewpoints are representative?</p>	No response required from National Highways.
5.5.	Applicant	Visibility Levels and limits of deviation Height and density of planting ES Chapter 7 [APP-063]	<p>Paragraphs 7.5.7 and 7.5.8 sets out adjustments made to the digital terrain model. Paragraph 7.5.7 refers to 15m woodland heights being considered for the Zone of Theoretical Visibility. Paragraph 7.9.20 states that "...screening is often delivered by vegetation of sufficient depth to ensure that screening would be maintained in winter months."</p> <p>Please clarify the assumptions used in the assessment for:</p>	<p>a) Changes to existing ground levels due to the proposed development have not been taken into account for this assessment and will be modelled in detail at Detailed Design stage. This assessment was predominantly informed through site visits, together with a zone of theoretical visibility (ZTV) where the 2D proposed alignment was overlaid on existing ground level from the digital terrain model with an additional height across the whole Scheme of 4.5 metres to simulate HGV traffic visibility. Although the limits of deviation were not applied to the ZTV, these were assessed as outlined in the response to (d) below.</p> <p>b) Table 2.8 in Chapter 2 of the ES (REP1-014) sets out the plant equipment.</p>

No	Question to	Reference	Question	National Highways' response
			<p>a) changes to existing ground levels due to the Proposed Development;</p> <p>b) the heights of any construction activity above ground level;</p> <p>c) carriageway or structures above ground level;</p> <p>d) limits of deviation;</p> <p>e) the heights of mitigation planting;</p> <p>f) the screening provided by vegetation during winter months; and</p> <p>g) the maturity of any replacement trees to fill any voids during operation.</p>	<p>c) To model the carriageway above ground level for this assessment the 2D proposed alignment was overlaid on existing ground level from the digital terrain model with an additional height across the whole Scheme of 4.5 metres to simulate HGV traffic visibility. Existing building structures (except those being affected by the Scheme) were extracted from licenced OS base mapping and modelled at 8m high to simulate screening.</p> <p>d) Limits to deviation are set out in the Draft DCO and for the mainline are not greater than 0.5m increase or decrease in vertical deviation. Deviation for structural elements will not be greater than 1m increase or decrease in vertical deviation. This is not considered likely to result in changes in levels of significance for landscape or visual receptors.</p> <p>e) With regards to the heights of mitigation planting, this will be determined at Detailed Design stage but the proposed planting will likely range from 45-90cm high for mass understorey shrub planting, typically planted at 1.5m centres with feathered trees typically 1.8 - 2.5m high typically planted at 3m centres, with occasional standard and heavy standard trees ranging from 3.5 - 6m in height.</p> <p>f) Screening during winter months will vary depending on the particular planting proposed at any given location with a range of evergreen and deciduous vegetation planted at the heights stated above. An indication of the winter screening effects can be derived from the montages provided, for example Viewpoint 1 Fig 7.9 Winter year 1. Even in the winter, deciduous trees and shrubs will deliver a degree of screening provided by their dense stems and tracery which will improve with every year of growth.</p> <p>g) The maturity of any replacement trees to fill voids during operation will be determined at Detailed Design stage. Smaller nursery stock will tend to grow faster. Good practice for planting determines a range of planting material is employed throughout, where smaller stock is easier to establish, less liable to failure and often leads to quicker growth rates as they will be more attuned and able to adopt to local soil and climatic conditions. Larger stock will be used for instant impact, but it is more prone to failure in adapting to site conditions during the critical establishment phase. Overall, it will be a combination of sizes for maximum effect regarding growth and visual screening properties. Species choices also play a key role in the proposed plant mixes, with differing growth rates for different species. For example, Willow, Birch, Poplar, Sycamore and Alder are faster growing but less long lived and the larger climax species trees such as Oak and Beech are slower growers.</p>
5.6.	Local authorities	Significant effect duration ES Chapter 7 [APP-063] ES Chapter 16 [APP-072]	Table 7.20 of ES Chapter 7 sets out criteria for different durations of change. Durations are not set out in the ES Chapter 7 summary in Section 7.12. The term " <i>Temporary</i> " is used for some significant effects in ES Chapter 16, but no durations are identified for other significant effects.  Please could the duration of all significant effects be clarified in Section 7.12 of Chapter 7 and in ES Chapter 16?	No response required from National Highways.
5.7.	Local authorities	Outstanding study area, baseline conditions and	a) Are the local authorities, Peak District National Park Authority and Natural England satisfied with the approach for landscape and visual with respect to:	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
	Peak District National Park Authority Natural England	overall assessment methodology concerns	<ul style="list-style-type: none"> <li>the study area and visibility;</li> <li>the receptors selected for the assessment and whether they are representative;</li> <li>the definitions of value, significance, sensitivity and magnitude of impact; and</li> <li>the criteria used to define significant effect?</li> </ul> <p>b) How should any outstanding concerns be addressed?</p>	
<b>Landscape</b>				
5.8.	Applicant	Landscape value ES Chapter 7 [APP-063]	Please could the Applicant explain what role the outcome of the survey on public perception of landscape value has had in assigning sensitivity to receptors identified in the survey, eg those listed in Table 7.4 and 7.5 of ES Chapter 7, and in determining the overall significance of effects for landscape and visual impacts that affect those receptors.	<p>The landscape and visual receptors were assigned sensitivity based on the DMRB LA 107 criteria. The value (which partially informs sensitivity) is informed by GLVIA3. This is set out in the methodology section of Chapter 7: Landscape and Visual Effects of the ES (TR010034/APP/6.3(2)).</p> <p>The receptors were sense checked against the responses relating to the public perception of landscape value which was part of the Statutory Consultation.</p> <p>Para 7.2.16 of Chapter 7 states '<i>The Statutory Consultation resulted in over 1,500 returned Consultation Response Forms. In summary, most responses were from people who considered the open moorland hills, open fields, greenbelt, landscape/scenery, farmland, nature/wildlife and the River Etherow to be important to them.</i></p> <p>Many people also mentioned cycle routes, trees/woodland, and views.</p> <p>Although responses were considered within the assessment, they did not in themselves directly influence the outcomes when determining the overall significance, as that is based on the criteria set out in LA 107 and GLVIA3.</p> <p>Generally public concerns raised during the consultation, including some around ecology, would be addressed through the mitigation, which in turn determines the overall significance of effect.</p>
5.9.	Applicant Local authorities Natural England	National Character Area 54 ES Chapter 7 [APP-063]	<p>Table 7.21 refers to National Character Area 54 having local importance and medium value, leading to it having medium value. Medium sensitivity is used in Table 7.26, whereas Table 7.27 considers it to have high sensitivity.</p> <p>Please clarify the sensitivity used in the assessment, explain how it is in accordance with the methodology set out in paragraphs 7.3.49 to 7.3.53. and update ES Chapter 7 as appropriate.</p>	<p>A clarification has been added to the ES Chapter 7: Landscape and visual effects and has been resubmitted with the Deadline 2 submission (TR010034/APP/6.3(2)).</p> <p>The clarification was to Table 7.27, National Character Area 54, has been assessed as medium as per the construction Table 7.26.</p> <p>The description for landscape receptor sensitivity used within the assessment are contained within Table 7.11 Landscape Sensitivity and Typical Descriptions. The landscape receptor sensitivity was assessed using the methodology, which sets out that landscape receptor sensitivity is or based on assessing both the value and susceptibility of the receptor. Value and susceptibility criteria are set out in the methodology (Table 7.9 and 7.10).</p>
5.10.	Applicant	Significant effects Night-time	There appear to be several examples significant effects being identified for night-time in Table 7.27 that are not included in the summary in Section 7.12 of ES Chapter 7, or in ES Chapter 16.	The methodology for night-time effects is as per 7.3.65 - 7.3.69 in ES Chapter 7 (TR010034/APP/6.3(2)).

No	Question to	Reference	Question	National Highways' response
		<p>ES Chapter 7 [APP-063]</p> <p>ES Chapter 16 [APP-072]</p>	<p>Please clarify the criteria for night-time significant effects and update ES Chapters 7 and 16 as appropriate.</p>	<p>Table 7.27 summarises the general effects to Landscape and Townscape receptors and where night-time effects have assessed these are noted within the tables.</p> <p>The following clarifications have been added to the ES Chapter 7: Landscape and visual effects and has been resubmitted with the Deadline 2 submission (TR010034/APP/6.3(2)):</p> <ul style="list-style-type: none"> <li>• Additional line added - (7.9.15) 'Specific night-time effects have been assessed for character areas SLLCA 3: Mottram Moor Pasture and SLLCA 4: Etherow Valley Pasture and for both areas at opening year (Yr.1) these are considered moderate and would not change over time to (Yr.15).</li> <li>• Additional line added to Residual Effects on Landscape and Townscape Character as follows: 'There are generally no significant residual effects on landscape and townscape character areas. Specific residual night-time effects for SLLCA 3: Mottram Moor Pasture at opening year and SLLCA 4: Etherow Valley Pasture are considered moderate in significance and would not change over time. See Table 7.27: Effects on Landscape and Townscape Character Areas, for detail.'</li> </ul> <p>An error has also been corrected within the resubmitted chapter in Table 7.27. For SLLCA 1, night-time magnitude of change has been corrected from moderate to a minor magnitude of change.</p>
5.11.	Applicant	<p>Professional judgement ES Chapter 7 [APP-063]</p>	<p>Please could the Applicant undertake a consistency check of Tables 7.26 and 7.27 of ES Chapter 7, to ensure that where professional judgment is applied an explanation is always provided (e.g. SLTCA4: Old Mottram) or where only one significance of effect category is relevant reference is not made to using professional judgment (e.g. SLTCA 3: Mottram Spout Green), and that information is complete (e.g. SLTCA 10: Hadfield).</p>	<p>The following clarifications explain professional judgement conclusions, and have been added to the ES Chapter 7: Landscape and visual effects, which has been resubmitted with the Deadline 2 submission (TR010034/APP/6.3(2)):</p> <p>Text added to Table 7.26:</p> <ul style="list-style-type: none"> <li>• SLTCA 2 'An assessment of slight adverse rather than neutral significance of effects, reflects that although the construction would mainly impact the periphery of the character area, the construction of the Scheme would introduce conspicuous, although limited in nature, new elements. Generally, the character area has the ability to accommodate this change.</li> <li>• SLTCA 6 'An assessment of slight adverse rather than neutral significance of effects, reflects that although the construction works and activities are short term in nature, limited to the de-trunking and heavily screened there would be conspicuous new elements at a local level for the duration of construction. Generally, the character area has the ability to accommodate this change.</li> <li>• SLTCA 7: 'An assessment of slight adverse rather than neutral significance of effects, reflects that although the construction would mainly impact the periphery of the character area, the de-trunking works would introduce new short-term elements at a local level for the duration of construction. Generally, the character area has the ability to accommodate this change.</li> </ul> <p>SLTCA 10: 'An assessment of slight adverse rather than neutral significance of effects, reflects that although the construction works would be limited to the new junction, the Scheme construction introduces new elements and would remove adjacent built elements at a localised level. Generally, the character area has the ability to accommodate this change.</p> <p>Text added to table 7.27:</p>



No	Question to	Reference	Question	National Highways' response
				<ul style="list-style-type: none"> <li>• Dark Peak Western Fringe (DPWF) LCA: 'At Yr. 1 an assessment of slight adverse rather than neutral significance of effects, reflects the loss of landscape features that would have a perceptible effect on the character of the area. However, at Yr. 15 following the further establishment of screening mitigation an assessment of neutral significance of effect is considered appropriate rather than slight.</li> <li>• DPWF- Valley pastures with Industry LCT 'At Yr. 1 an assessment of slight adverse rather than neutral significance of effects, reflects the loss of landscape features that would have a perceptible effect on the character of the area. However, at Yr. 15 following the further establishment of screening mitigation an assessment of neutral significance of effect is considered appropriate rather than slight.</li> <li>• Settled Valley Pastures LCT: an assessment of slight adverse significance of effect rather than neutral significance of effects, reflects the worst-case perceptible change to the character area by the introduction of a new junction and the Scheme de-trunking of the existing road.</li> <li>• SLTCA 3 removed professional judgement in last para as this was a single option in the methodology matrix.</li> <li>• SLTCA 4: 'An assessment of slight beneficial rather than moderate beneficial significance of effects, reflects that the de-trunking measures would likely improve the character area by removing incongruous highways elements, however, the overall balance of features will remain broadly similar to the baseline.</li> <li>• SLTCA10: add text 'Overall the character area has the ability to accommodate change'.</li> <li>• SLTCA11: add text 'Overall the character area has the ability to accommodate change'.</li> </ul>
5.12.	Applicant	Level of effect ES Chapter 7 [APP-063]	Please clarify an apparent inconsistency between Tables 7.27 and 7.28 regarding the level of effect on SLTCA 5: Mottram Moor at Year 1 winter.	<p>The following corrections remove inconsistencies and have been added to the ES Chapter 7: Landscape and visual effects, which has been resubmitted with the Deadline 2 submission (TR010034/APP/6.3(2)):</p> <ul style="list-style-type: none"> <li>• Table 7.28 - Removed SLTCA 5 (these are slight significance of effect (YR1. &amp; Yr. 15)</li> <li>• Edit to line 7.9.14 'at opening year of the Scheme six of the twenty ...'</li> </ul>
5.13.	Applicant	Peak District National Park	Please could the Applicant explain how it has taken into account the special qualities of the Peak District National Park, including tranquillity and wildness, in the assessment of indirect landscape and visual effects arising from increased traffic flows and associated noise.	<p>Specific considerations in the assessment included how increased traffic flows could affect the Special Qualities of the National Park landscape as outlined within the Peak District National Park Management Plan, 2018-2023, and special qualities of the landscape generally including tranquillity and wildness.</p> <p>Where the 'Special Qualities' of the Peak District National Park (PDNP) are applicable to landscape receptors they have been considered within the assessment tables.</p> <p>For landscape, the Special Qualities have helped determine landscape sensitivity as set out in Table 7.21 and 7.23; Table 7.29: Indirect Effects on Landscape Character within the PDNP of Chapter 7 (TR010034/APP/6.3(2)).</p> <p>For visual, the Special Qualities, including wildness and tranquillity, have helped determine visual effect as set out in Table 7.32: Indirect Visual Effects on Representative Viewpoints within the PDNP.</p>



No	Question to	Reference	Question	National Highways' response
5.14.	Peak District National Park Authority	Peak District National Park Indirect effects	Is the Peak District National Park Authority content with the assessment of indirect effects on the Peak District National Park?	No response required from National Highways.
5.15.	Local authorities Peak District National Park Authority Natural England	Outstanding landscape impact assessment concerns ES Chapter 7 [APP-063] ES Chapter 16 [APP-072] REAC [REP1-037] Figure 2.4 Environmental Masterplan [APP-074]	a) Do the local authorities, Peak District National Park Authority and Natural England have any outstanding concerns regarding: <ul style="list-style-type: none"> <li>the landscape and townscape impact assessment;</li> <li>mitigation measures including the REAC and Environmental Masterplan;</li> <li>whether a draft Landscape and Ecological Management Plan should be submitted to the Examination;</li> <li>the maintenance regime, monitoring and remedial actions during operation; or</li> <li>compliance with policy?</li> </ul> b) Are there any reasons to question that there would be no significant effects on landscape or townscape character, other than the temporary effects identified in ES Chapter 16? c) How should any outstanding concerns be addressed?	No response required from National Highways.
<b>Visual</b>				
5.16.	Applicant	DMRB methodology ES Appendix 7.1 [APP-166]	Please could the Applicant explain how it has complied with the methodology in DMRB LA 104 and 107 in determining significance of effect to viewpoints and visual receptors as presented in ES Appendix 7.1, including how professional judgment has been applied. It is noted that significance of effect has been determined on the less adverse category for viewpoint 13 during construction (where there is a lack of clarity about the extent of vegetation to be retained, and what role it could therefore play in reducing effect) and viewpoints 6, 9 and 11 during operation without a full explanation.	The methodology states that: <ul style="list-style-type: none"> <li>7.3.63 Sensitivity and magnitude of change inform the significance of effect. This is based on the significance matrix within the Environmental assessment methodology section of DMRB LA 104. A level of moderate, large or very large is considered to be significant.</li> <li>7.3.64 The significance of effect is derived from Table 7.19. Where there are two significance categories professional judgement shall be applied to determine the most suitable level of significance. Evidence will be provided to support the reporting of a single significance category wherever possible; this will draw on baseline information and the nature of the described impact.</li> <li>Table Source: DMRB LA104 (table 3.8.1).</li> </ul> The following clarifications have been added to the ES Chapter 7: Appendix 7.1 (APP-166), which has been resubmitted with the Deadline 2 submission: <ul style="list-style-type: none"> <li>Construction (Table 1-1): Viewpoint 13: Final para 'An assessment of Large Adverse rather than Very Large Adverse significance of effect, reflects that although views of the Scheme construction are in close proximity the views are heavily filtered by retained intervening vegetation. Therefore, direct views are somewhat softened or partially obscured.</li> <li>Operation (Table1-2): Viewpoint 6: 'At (Yr. 1) an assessment of moderate adverse rather than large adverse significance of effects, reflects the position of the Scheme</li> </ul>

No	Question to	Reference	Question	National Highways' response
				<p>within cutting and the retention of existing extensive tree blocks which provide some continued visual screening of the Scheme. At (Yr. 15) following the further establishment of screening mitigation an assessment of slight adverse significance of effect is considered appropriate rather than moderate adverse.</p> <ul style="list-style-type: none"> <li>• Viewpoint 9: 'At (Yr. 1) an assessment of slight adverse rather than moderate adverse significance of effects, reflects the position of the Scheme behind false cutting and noise barriers provide some visual screening of the Scheme.</li> <li>• Viewpoint 9 Error in table: Yr.15 significance of effect is Slight not Neutral</li> <li>• Viewpoint 11: Error in table Yr. 15 magnitude is Minor not Moderate</li> </ul>
5.17.	Applicant	Peak District National Park Indirect visual effects Road users	<p>a) Please summarise the consideration given to indirect visual effects on road users in the Peak District National Park.</p> <p>b) With reference to Tables 7.15, 7.16 and 7.17, please clarify the sensitivity of road users to visual effects in the Peak District National Park.</p>	<p>a) The indirect viewpoints are located within the PDNP, as agreed with the PDNPA, on footpaths and leisure routes and therefore the receptors are likely to be walkers or leisure users.</p> <p>b) Table 7.15 and 7.16 have been informed by Guidelines for Landscape and Visual Assessment 3rd edition (GLVIA3). Table 7.17 is taken from the Design Manual for Roads and Bridges (DMRB) LA 107 (table 3.41) 107. There are no road users in these locations therefore sensitivity has not been assigned to road users. There are no road user receptors in these locations.</p>
5.18.	Applicant	ES Chapter 15 [REP1-020]	<p>Several of the properties identified as experiencing cumulative effects will experience adverse effects in regard to views. It is noted that some of these effects will be mitigated, over time, by planting.</p> <p>a) Could mitigation of the adverse effects be ameliorated by provision of planting earlier in the construction phase, rather than later?</p> <p>b) Where tree and shrub planting is proposed, what size of vegetation is proposed?</p> <p>c) Could the mitigation be ameliorated by provision of more mature specimens?</p>	<p>a) The timing of planting is subject to seasonal and operational needs, detailed Scheme phasing and completion of below ground services, drainage features and all earthworks and as such justifiably occurs as the final site operation. Planting will take place on completion of these activities to help ensure successful establishment. This makes early planting difficult to achieve as planting will have to occur in areas which will not be disturbed.</p> <p>b) The sizes of vegetation will be agreed at Detailed Design stage and current plans are at preliminary level. An indication of potential planting sizes is provided in answer to question 5.5 above.</p> <p>c) The maturity of specimens and their impacts is also covered in answer to question 5.5 above. This decision will have to be considered against the fact that smaller nursery stock will have a greater chance of long-term establishment and enjoy faster growth rates compared to larger nursery stock.</p>
5.19.	Local authorities Peak District National Park Authority	Outstanding visual impact assessment concerns ES Chapter 7 [APP-063] ES Chapter 16 [APP-072] REAC [REP1-037]	<p>a) Do the local authorities or Peak District National Park Authority and Natural England have any outstanding concerns regarding:</p> <ul style="list-style-type: none"> <li>• the visual impact assessment;</li> <li>• mitigation measures including the REAC and Environmental Masterplan;</li> <li>• whether a draft Landscape and Ecological Management Plan should be submitted to the Examination;</li> <li>• the maintenance regime, monitoring and remedial actions during operation; or</li> <li>• compliance with policy?</li> </ul>	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
		Figure 2.4 Environmental Masterplan [APP-074]	b) Are there any reasons to question that there would be any significant visual effects other than those summarised in ES Chapter 16? c) How should any outstanding concerns be addressed?	
<b>Design – landscape and visual</b>				
5.20.	Applicant	Good design of key elements NN NPS NPPF Design Principles for National Infrastructure (National Infrastructure Commission, February 2020) National Design Guide (Ministry of Housing, Communities and Local Government, October 2019)	<p>Paragraphs 4.28-4.35 of the NN NPS emphasises the importance placed on ensuring good design in the development of infrastructure projects. Government statements emphasise the importance placed on ensuring good design in development. This matter is cross-cutting in relation to multiple topics identified within the Initial Assessment of Principal Issues.</p> <p>Paragraph 5.160 of the NN NPS refers to the minimisation of adverse landscape and visual effects through appropriate siting of infrastructure, design and landscaping schemes. It states that “<i>materials and designs for infrastructure should always be given careful consideration</i>”.</p> <p>Whilst the NN NPS is the primary source of policy under which the application will be considered, policy within the NPPF advocates for good design as do the Design Principles for National Infrastructure, and the National Design Guide.</p> <p>Please could the Applicant outline their approach to good design in respect of the following key elements, focusing on how each element reflects the principles of development responding to setting/ place and people:</p> <ul style="list-style-type: none"> <li>a) M67 Junction 4, including with reference to artificial lighting, traffic signal installations, and street furniture.</li> <li>b) Old Mill Farm Underpass, including the design of the wingwalls and artificial lighting.</li> <li>c) Roe Cross Road overbridge, including the design of the wingwalls.</li> <li>d) Mottram Underpass, including the design of the wingwalls and artificial lighting.</li> <li>e) Mottram Moor Junction, including the design of artificial lighting, traffic signal installations, and street furniture.</li> <li>f) The Carrhouse Farm Underpass, including the design of the wingwalls and artificial lighting.</li> <li>g) River Etherow Bridge, including the choice of overall layout, its effect on the water environment and the design of the wingwalls.</li> </ul>	<p>Each of the elements listed a) to i) are currently at Preliminary Design stage. All of them will, however, be further developed at the Detailed Design stage and will seek to follow the good design principles outlined in the Design Principles for National Infrastructure and National Design Guide documents (which are primarily to aid the decision-making process) by responding to setting, place and people. The current design aligns with the guidance in a number of ways, through the integration of locally appropriate habitats and water features, including sustainable drainage provision; by creating networks of green spaces and encouraging walking and cycling through a more connected local environment, by promoting safety and security with safe legible and well-lit wayfinding and in responding to local place, character and identity by incorporating natural features which reflect the local context, including landforms, woodlands, scrublands, grasslands and hedgerows which will seek to follow local species and patterns. The design will also reflect local receptors in protecting sensitive views and respecting the local landscape character wherever possible.</p> <p>The following design principles cover the Applicant’s general approach and although this section is focussed on the landscape and visual considerations, these principles have not been developed in isolation, as they take in a much wider brief embracing other key issues such as sustainability, buildability and inclusivity. The engineering solutions / details for each of the structures remain in development and are not currently available but they will take these principles into consideration. Material choices are also currently in review but all bridges and structures will seek to deliver sustainable, low carbon infrastructure elements which are attractive, easy to build and maintain and appear as a family of structures.</p> <p>An indication of the structures and their general siting and integration along the route has been provided in a 3d animated fly through of the entire route. This was available as part of the public consultation exercise. See link below.</p> <p><i>a) M67 Junction 4, including with reference to artificial lighting, traffic signal installations, and street furniture.</i></p> <p>This largely comprises of modifications to an existing large junction where the design principles will be to focus on minimal loss of existing mature vegetation and to provide a legible and safe functioning interchange which is well lit and signed. Junction design principles will ensure that new road spur connections meet the existing road grades within engineered geometry that accounts for safe visibility and legibility, regarding radius and approaches for all vehicles and pedestrians. The landscape design will seek to integrate the junction to achieve a balance between road and pedestrian safety, visual screening and integration of the junction into the landscape, through sympathetic landform and planting, to help reduce its visual prominence. Street furniture lighting and traffic signal installations will be agreed in consultation with the relevant local highway authorities and</p>

No	Question to	Reference	Question	National Highways' response
			<p>h) Woolley Bridge Junction, including the choice of junction and layout, artificial lighting, traffic signal installations, and street furniture.</p> <p>i) Landscape design.</p>	<p>Transport for Greater Manchester (see response to question 5.22 below), however they will be sited and selected to meet appropriate standards. Seating will be set at appropriate distances for pedestrian and vehicular safety and comfort. Seating types have yet to be selected but will be chosen for comfort regarding back and arm rests to cater for all ages and the materials will be selected for visual appropriateness to the context. Artificial lighting and traffic signals and signage will be selected to meet all appropriate standards to ensure safe, visible wayfinding. Lighting will use attractive and sustainable light fittings, using downlighters and appropriately spaced columns to reduce glare and potential adverse impacts on wildlife, for example bat flight paths.</p> <p><i>b) Old Mill Farm Underpass, including the design of the wingwalls and artificial lighting.</i></p> <p>The Old Mill farm underpass wing walls and structural design principles will seek to create simple, legible and welcoming access, blended into the landform and surrounding approach paths. This underpass lies beneath a dualled section of carriageway, under 4 lanes and a wide central reserve. The underpass will be designed to minimise impacts and intrusion into the wider landscape setting through careful elevational profiling to reduce the amount of visible wall in the landscape. Ground modelling and planting around the walls will also aid integration. Final choice of materials is to be determined but the general approach will be to soften the visual impact of any wingwalls within the landscape. Artificial lighting will be designed to provide safe, welcoming and attractive access to encourage repeated use.</p> <p><i>c) Roe Cross Road overbridge, including the design of the wingwalls.</i></p> <p>Roe Cross Road overbridge and wingwalls remain at a preliminary design stage but the principles are to create an overbridge which is sympathetic to its surroundings with simple, elegant and restrained forms to help minimise the impacts and intrusion into the wider landscape setting in order to create a positive feature in the local environment. Wingwalls will be designed to reduce the amount of visible wall with sympathetic ground modelling and planting around the walls to aid integration. Parapets will be selected to appear lightweight wherever possible. Material choices are currently in review, but all bridge structures will seek to deliver sustainable, low carbon infrastructure, which is attractive and help to soften the visual impacts in the landscape, whilst being easy to construct and maintain. The bridges, structures and wingwalls design principles will consider simplicity and elegance to be visually appealing within the landscape with sensitive ground modelling and planting around them to soften impacts and to help integrate them into their wider setting. The desire is to achieve restrained engineering solutions that are also sustainable and easy to build in order to reduce impacts and the amount of time and disruption on site for the local community.</p> <p><i>d) Mottram Underpass, including the design of the wingwalls and artificial lighting.</i></p> <p>Mottram Underpass wingwalls design and lighting remains at preliminary stage but the design principles are to create an underpass which is sympathetic to its surroundings with simple, elegant and restrained forms to help minimise the impacts and intrusion into the wider landscape setting in order to create a positive feature in the local environment for</p>



No	Question to	Reference	Question	National Highways' response
				<p>use by local footpath users and farm access. Wingwalls will be designed to reduce the amount of visible wall with sympathetic ground modelling and planting around the walls to aid integration. Parapets will be selected to appear lighter wherever possible. Material choices are currently in review, but all bridge structures will seek to deliver sustainable, low carbon infrastructure, which are attractive, help to soften the visual impacts in the landscape, whilst being easy to construct and maintain. The roof of the underpass will also deliver a new green space for the local community and the design principles here will be to ensure it is attractive, useful and safe, providing new links for walking and cycling with appropriately detailed soft landscape design, which will reflect its suburban surroundings. In this way it can be a newly integrated place for people within Mottram.</p> <p><i>e) Mottram Moor Junction, including the design of artificial lighting, traffic signal installations, and street furniture.</i></p> <p>The design principles for Mottram Moor Junction are to provide a legible and safe functioning interchange which is well lit and signed and has its own identity as a new gateway. Junction design principles will ensure that all new connections meet the existing road grades within engineered geometry that accounts for safe visibility and legibility, regarding radius and approaches for all vehicles and pedestrians. The landscape / public realm design will seek to integrate the junction to achieve a balance between road and pedestrian safety, visual screening and integration of the junction into the landscape through sympathetic landform and planting, to help reduce its visual prominence. Street furniture, lighting and traffic signal installations will be agreed in consultation with the relevant local authorities (see response to 5.22 below), however they will be sited and selected to meet appropriate standards and with the onus on reducing street clutter wherever possible. Seating will be set at appropriate distances for pedestrian and vehicular safety and comfort. Seating types have yet to be selected but will be chosen for comfort regarding back and arm rests to cater for all ages and the materials will be selected for visual appropriateness to the context. Artificial lighting and traffic signals and signage will be selected to meet all appropriate standards to ensure safe, visible wayfinding. Lighting will use attractive and sustainable light fittings, using downlighters and appropriately spaced columns to reduce glare and potential adverse impacts on wildlife. The planting is likely to contain more mature stock sizes and formal lines to reflect the more urbanised nature of this junction.</p> <p><i>f) The Carrhouse Farm Underpass, including the design of the wingwalls and artificial lighting.</i></p> <p>The Carrhouse Farm Underpass design principles will be to create a simple, legible and welcoming access for local footpath users, blended into the landform and surrounding approach paths. This underpass will be shorter than the Old Mill Farm one as it lies beneath a single carriageway section of the route. The underpass will be designed to minimise impacts and intrusion into the wider landscape setting through careful elevational profiling to reduce the amount of visible wall in the landscape. Ground modelling and planting around the walls will also aid integration. Final choice of materials is to be determined but the general approach will be to soften the visual impact of any wingwalls</p>



No	Question to	Reference	Question	National Highways' response
				<p>within the landscape. Artificial lighting will be designed to provide safe, welcoming and attractive access to encourage repeated use.</p> <p><i>g) River Etherow Bridge, including the choice of overall layout, its effect on the water environment and the design of the wingwalls.</i></p> <p>The River Etherow Bridge design principles will take into account its impact on the river and its wider setting. The design remains at preliminary design stage, but the principles will consider simplicity and elegance to be visually appealing within the landscape with sensitive ground modelling and planting to soften impacts and to help integrate the structure into the wider setting. The desire is to achieve a restrained engineering solution that is also sustainable and easy to construct and maintain. The current design has considered the structural span to avoid impacting directly on the water course improving on a previous iteration. The parapet design will be selected to appear lightweight, wherever possible. Material choices are currently in review, but all bridge structures will seek to deliver sustainable, low carbon infrastructure, which are attractive and appear as a family of structures throughout the scheme.</p> <p><i>h) Woolley Bridge Junction, including the choice of junction and layout, artificial lighting, traffic signal installations, and street furniture.</i></p> <p>The design principles for Woolley Bridge junction are to provide a legible and safe functioning junction which is well lit and signed and has its own identity. Junction design principles will ensure that the new connection meets the existing road grades within engineered geometry that accounts for safe visibility and legibility, regarding radius and approaches for all vehicles and pedestrians. The landscape design will seek to integrate the junction to achieve a balance between road and pedestrian safety. Visual screening and integration of the junction into the landscape will be achieved through sympathetic landform and planting, to help reduce its visual prominence. New lighting, signals and street furniture will be agreed in consultation with the relevant local highway authorities (see response to question 5.22 below), however they will be sited and selected to meet appropriate standards, with the onus on reducing street clutter wherever possible. Seating will be set at appropriate distances for pedestrian and vehicular safety and comfort. Seating types have yet to be selected but will be chosen for comfort regarding back and arm rests to cater for all ages and the materials will be selected for visual appropriateness to the context. Artificial lighting and traffic signals and signage will be selected to meet all appropriate standards to ensure safe, visible wayfinding. Lighting will use attractive and sustainable light fittings, using downlighters and appropriately spaced columns to reduce glare and potential adverse impacts on wildlife. The planting is likely to contain more mature stock sizes and formal lines to reflect the more urbanised nature of this junction.</p> <p><i>i) Landscape design</i></p> <p>The landscape design principles are based on a response to setting, place and people and reflect the specific landscape context in terms of creating sympathetic landform and slope profiles which reflect those found in the locale, which is a Pennine fringe landscape of rising undulating topography, characterised by pastoral farmland, interspersed with</p>

No	Question to	Reference	Question	National Highways' response
				residential settlements and some industry. The planting patterns and species will also be designed to reflect the local context and have been developed to ensure they are appropriate and sensitive to the wider landscape setting to help minimise adverse impacts on landscape character. The landscape design delivers a blend of openness and enclosure to maintain a mix of open views whilst protecting and screening other views from sensitive receptors, via landform, fencing and planting. Planting will also provide habitat for wildlife and contribute towards biodiversity with a range of habitats provided across the scheme, including different types of woodland and grassland as well as scrub and extensive new hedgerows. The road is set in earthworks cuttings or false cuttings along much of the length, which will help to reduce the associated impacts on landscape character as well as noise and visual impacts.
5.21.	Local authorities Local highway authorities	ES Chapter 7 [APP-063] NN NPS Paragraphs 4.28-4.35 NPPF	a) Are the measures set out in Section 7.8 of ES Chapter 7 sufficient to mitigate any adverse effects from the Proposed Development and enable the projects to satisfy the requirements of the NN NPS, the NPPF and local policies for visual amenity and landscape? b) Should any further measures be required?	No response required from National Highways.
5.22.	Applicant Local authorities Local highway authorities	Finishes, street furniture and hard landscaping	As above, the delivery of good design is an aspiration of the NN NPS and government. a) At what stage will details of finishes to the scheme, street furniture and other hard landscaping be provided? b) Should the proposed finishes and street furniture, etc. be agreed with the local authorities and local highway authorities? c) How would such agreement be reached?	a) Details of Scheme finishes; street furniture and hard landscaping proposals will be confirmed through the Detailed Design process. The Detailed Design stage is currently expected to be completed in February 2023 prior to the start of works for the Scheme. b) For those aspects of the Scheme which will be adopted by the local authorities and local highway authorities the finishes and street furniture, etc. will be agreed in consultation with the relevant authority as outlined below. c) The proposed finishes and street furniture will be agreed with the local authorities Tameside MBC and Derbyshire County Councils through the approval process required by Article 12 of the dDCO (REP1-041) which will cover the scheme details. A significant amount of consultation with the local authorities has already been undertaken to inform and update on design progress. These links are well established and will be maintained throughout the consent process to ensure agreement and approvals are gained.
5.23.	Applicant Local authorities Local highway authorities Heritage England Natural England	NN NPS Design Principles for National Infrastructure National Design Guide	In the context of NN NPS Paragraphs 4.28-4.35 and 5.160 please explain how the design of Proposed Development meets the Design Principles for National Infrastructure in respect of Climate, Places, People and Value and the National Design Guide in respect of Climate, Character and Community in during construction and operation. a) Comment on the desirability of implementing the following measures to ensure that good quality sustainable design and integration of the Proposed Development into the landscape is achieved in the detailed design, construction and operation of the Proposed Development.	The design has considered design policy in NN NPS (4.28 - 4.35 and 5.160). In addition, it reflects the aspirations of the National Design Guide and the Road to Good Design 2018 (see response to question 5.1 above around the provision of good quality sustainable design, to help integrate this development into the landscape). This has been achieved through a thorough appreciation of the site context in order to fully understand and appreciate the receiving environment's physical and cultural makeup. This appreciation has helped to inform the design of the route and its associated landform, planting, materials and components to ensure they are sympathetic to the locale and fit into this context as appropriately as possible. A highly experienced design team, with experience from other relevant and comparable schemes, has been involved from the start of the design process. An Environmental Lead has coordinated a multidisciplinary team of specialists and design champions across all the

No	Question to	Reference	Question	National Highways' response
			<p>b) How might they be secured?</p> <p>c) Are any further measures appropriate?</p> <ul style="list-style-type: none"> <li>• A “<i>design champion</i>” to advise on the quality of sustainable design and the spatial integration of the works;</li> <li>• A “<i>design review panel</i>” to provide informed “<i>critical-friend</i>” comment on the developing sustainable design proposals;</li> <li>• An approved “<i>design code</i>” or “<i>design approach document</i>” to set out the approach to delivering the detailed design specifications to achieve good quality sustainable design;</li> <li>• An outline, including timeline, of the proposed design process, including consultation with stakeholders and a list of proposed consultees.</li> </ul> <p>d) In the opinion of the local authorities and other statutory agencies, would the implementation of any or all of the above measures assist in determining post-consent approvals (including the discharge of requirements) in relation to achieving good design?</p>	<p>key disciplines, so that the design has not been driven by the highway design but responds to various important driving influences including landscape design, drainage design, ecology, sustainability and heritage. These disciplines have been in close and regular contact to develop the proposals to date. The appointed Principal Contractor has also been a key part of the project team during the Preliminary Design stage, which is not normal for a major infrastructure project such as this. This has brought additional benefits, such as ensuring buildability and deliverability issues have been considered at an early design stage. This approach will reflect the multifarious aspects of this complex environment to deliver a robust thoughtful and multi-faceted design response.</p> <p>As such, there is no single design champion but a number of highly and relevantly experienced discipline leads working together towards one end.</p> <p>This Scheme was also presented to the Design Council for review at an appropriate stage of the Preliminary Design (July 2020), before the Scheme was put to public consultation later in 2020. The presentation was led by a Chartered Landscape Architect, familiar and experienced with road infrastructure projects, with a focus on the project team’s understanding of place, people and context and how the Scheme sought to reflect this in the emerging design. The Scheme was selected by the Design Panel for review so they could advise on guidance and standards which would aid the wider role of embedding best practice across the design. As part of the feedback received The Design Council stated that “The analysis and appreciation of landscape character along the road corridor was impressive and detailed”.</p> <p>The intention is that a follow up review will occur to present the detailed proposals. The Design Panel provided a summary of their observations and advice in August 2020, and in accordance with paragraph 5.27(d) of the National Highways Licence, the project design has been undertaken with due regard to their advice and general recommendations</p> <p>In accordance with Part 5.26 of the National Highways Licence, the Scheme adopts a design approach that has due regard to relevant principles and guidance on good design, to ensure that the development of the network takes account of the geographical, environmental and socio-economic context. This approach responds to the design principles set out in the Road to Good Design by addressing the different engineering and environmental constraints identified through a wide range of assessment work that has influenced the design. This approach also reflects the principles that are required by National Highways’ DMRB GG103 <i>Introduction and general requirements for sustainable development and design</i> standard.</p> <p>The design principles required by the Road to Good Design and DMRB GG103 comprise the following:</p> <ul style="list-style-type: none"> <li>• Makes roads safe and useful</li> <li>• Is inclusive</li> <li>• Makes roads understandable</li> <li>• Fits its context</li> <li>• Is restrained</li> </ul>

No	Question to	Reference	Question	National Highways' response
				<ul style="list-style-type: none"> <li>• Is thorough</li> <li>• Is environmentally sustainable</li> <li>• Is innovative</li> <li>• Is long-lasting</li> <li>• Is a collaborative process</li> </ul> <p>It is anticipated that the proposed detailed design will be formally signed off for construction in February 2023.</p> <p>As part of the consultation process the Applicant has discussed the Scheme with multiple stakeholder groups to ensure the design provides as much benefit as possible. A significant amount of consultation has been undertaken over the years, either as part of the wider TPU package or for the present A57 Link Roads Scheme, which has been key to its development from the outset. This included a wide range of media and communication methods to ensure it reached as many organisations, groups and individuals as possible including Local Authorities, Councils, and Non-Motorised User groups as well as local residents. For the Statutory Consultation (05 November –17 December 2020) a Stakeholder mapping workshop was held identifying different groups and ensured there was a way of reaching everybody. These consultations have helped to shape the proposals. This is expected to continue as close collaboration is ongoing with external parties, in the Detailed Design and construction phases, working closely with Tameside Metropolitan Borough Council and Derbyshire County Council, for example, to agree Scheme proposals on the single carriageway section and junctions, and also with Transport for Greater Manchester in terms of the new junction design.</p>

## 7. The historic environment

No	Question to	Reference	Question	National Highways' response
<b>6.</b>	<b>The historic environment</b>			
	<b>Policy and methodology</b>			
6.1.	Historic England Local authorities	ES Chapter 6 [REP1-015]	Table 6.2 sets out the criteria to determine the value of heritage assets. Do you have any comments regarding the values placed on the designated heritage assets in this table?	No response required from National Highways.
6.2.	Applicant	ES Chapter 6 [REP1-015]	Please could the Applicant explain how it will ensure that the embedded mitigation identified for effects on cultural heritage assets at paragraph 6.8.1 of ES Chapter 6, including landscape and planting, noise barriers and lighting design, will be secured in a manner to ensure that the design quality assumed within the assessment is achieved.	<p>The embedded mitigation detailed at paragraph 6.8.1 of ES Chapter 6 (REP1-015) is multifaceted. Elements such as restraining the DCO boundary have been incorporated into and are integral to the scheme proposals. Other elements relating to planting and screening form part of the mitigation measures contained in the REAC (REP1-037) and must be incorporated into the final landscaping scheme (secured by Requirement 5 in the draft DCO), which is to be approved by the Secretary of State in consultation with the relevant local planning authority.</p> <p>The noise barriers are shown on the works plans and are expressly recorded in the works packages at Schedule 1 of the draft DCO (REP1-041). Measures to minimise the visual impact of the noise barriers in line with good design principles, are recorded in the REAC and will therefore be incorporated into the detailed design via Requirement 4 of the draft DCO.</p> <p>Measures to ensure the lighting design does not adversely affect heritage assets, residential or ecological receptors are recorded in the REAC and form part of the embedded mitigation where, for example, the Scheme is located in a cutting to minimise light spill. Other measures to minimise sky glow and reduce light spillage are recorded as embedded mitigation within Table 2.5 Embedded environmental design measures of ES Chapter 2: The Scheme (REP1-014), and this is further committed to within the action ref BD1.15 of the REAC. These measures will be incorporated into the detailed design by virtue of Requirement 4 of the draft DCO (REP1-041).</p> <p>Further details setting out how the Scheme has incorporated good design and sought to integrate the design into the surrounding landscape is provided in response to questions 5.20, 5.22 and 5.23 above.</p>
6.3.	Applicant	ES Chapter 6 [REP1-015]	Paragraph 6.9.2 of ES Chapter 6 states that a significance of effect cannot be assigned for five non-designated heritage assets; these comprise four cropmarks and one possible extractive industry. Construction works are assumed to result in their permanent loss or truncation. Paragraph 6.9.3 states that a significance of effect can be assigned when intrusive archaeological investigation has been completed, as secured through REAC [REP1-037] Ref CH1.1 to 1.3 and CH1.4 and	<p>A worst-case scenario is considered to be where the five non-designated heritage assets in question are of high or very high value, and the proposed Scheme would proceed with no archaeological investigation and subsequent mitigation measures in place.</p> <p>If this was to occur and the five non-designated heritage assets in question were uncovered and/or destroyed without the supervision or guidance of a professional archaeologist, then this would be a significant effect.</p>



No	Question to	Reference	Question	National Highways' response
6.	<b>The historic environment</b>			
			<p>dDCO [REP1-041] Requirement 4. Please could the Applicant clarify whether there is potential for a likely significant effect to arise based on a worst-case assessment of the effects on using the worst-case scenario.</p>	<p>Given there is a phased programme of archaeological investigation in progress, comprising archaeological trial trenching and test-pitting, we are confident that the five non-designated heritage assets in question will be characterised, with a value and significance of effect assigned. This in turn will enable the development of an agreed approach to mitigation, be it through avoidance of impacts, preservation of archaeological remains in situ, or through a programme of archaeological investigations resulting in the dissemination and deposition of an ordered archive.</p> <p>Although the significance of effect on the five non-designated heritage assets in question cannot at present be established, the residual significance of effect is unlikely to exceed slight adverse with mitigation in place and would therefore not be significant.</p> <p>The approach to mitigation will be secured through Requirement 10 and undertaken in line with the archaeological management and mitigation strategy that will be agreed with Greater Manchester Archaeological Advisory Service (GMAAS) and Derbyshire County Council (DCC).</p>
6.4.	Applicant Historic England Local authorities	ES Chapter 6 [REP1-015]	<p>When referring to designated heritage assets, the NPPF only identifies two levels of harm, substantial and less than substantial. Table 6.3, which sets out the factors in assessing the magnitude of impact, also identifies limited harm.</p> <p>a) Applicant - Please set out whether limited harm should be qualified as less than substantial in terms of the NPPF tests? If not, please explain how limited harm should be considered against paragraph 199 of the NPPF which states that great weight should be given to an asset's conservation irrespective of whether any potential harm amounts to substantial, total loss or less than substantial harm to its significance.</p> <p>b) Historic England, Derbyshire County Council, High Peak Borough Council and Tameside Metropolitan Borough Council – Do you have any comments on the use of limited harm given the tests sets out in the NPPF?</p>	<p>a) As identified in the recent judgement in the case of R.(oao James Hall and Company Limited) v City of Bradford Metropolitan District Council and Co-Operative Group Limited, it is recognised that a broad spectrum of harm may be covered within the categories of substantial and less than substantial harm.</p> <p>Limited harm, as identified in ES Chapter 6: Cultural Heritage, Table 6-3 (REP1-015), is therefore understood to constitute less than substantial harm.</p> <p>The assessment of limited harm will be a consideration when assessing the weight to be given to conservation of a heritage asset under paragraph 5.132 of the NN NPS and paragraph 199 of the NPPF. In this exercise, limited harm would be considered to fall at the lower end of the spectrum of less than substantial harm.</p> <p>b) No response required from National Highways..</p>
6.5.	Applicant	ES Chapter 6 [REP1-015]	<p>Table 6.5 and table 6.6 identifies a slight adverse effect on a number of designated and non-designated heritage assets. Please can you set out how a slight adverse impact should be considered in relation to the level of harm to the significance of the heritage assets with respect to levels of harm set out in the NPPF.</p>	<p>Assessment of harm to significance is undertaken on an individual asset basis through the examination of the magnitude of impact to each asset in accordance with the criteria set out in Table 6-3 in Chapter 6: Cultural Heritage of the ES (REP1-015).</p> <p>As set out in the table, assessment of major adverse magnitude of impact is understood to equate to substantial harm, whilst lesser magnitudes of impact equate to less than substantial harm.</p> <p>Significance of effect is assessed a function of the magnitude of impact and its relative value or sensitivity. There is no direct correlation between the significance of effect as reported in the ES and the level of harm to significance.</p>

No	Question to	Reference	Question	National Highways' response
<b>6.</b>	<b>The historic environment</b>			
				<p>As such, there are two parallel inter-related assessments of impact on heritage assets. The first is the EIA assessment focused on value, magnitude of impact and significance of effect; and the second on whether the harm is less than substantial or substantial. Whether harm is substantial or less than substantial is considered on an individual asset basis and is not a blanket measure reflected in the significance effect.</p> <p>In accordance with the guidance provided in the Design Manual for Roads and Bridges (DMRB) LA 104 Environmental Assessment and Monitoring, significant effects are typically considered to comprise residual effects of moderate, large or very large significance.</p> <p>Tests under paragraphs 5.133, 5.134 and 5.135 of the NN NPS and paragraphs 200, 201 and 202 of the NPPF relate to substantial harm and less than substantial harm to designated assets. In accordance with the criteria for assessment of value set out in Table 6-2 of the Environmental Statement (REP1-015), this would apply only to assets of medium, high and very high value. In accordance with the matrix set out at Table 6-4, substantial harm to a designated asset would result in a moderate, large or very large adverse significance of effect.</p>
<b>Designated heritage assets</b>				
6.6.	Applicant	Tara Brook Farm	<p>Table 6.5 concludes that the Proposed Development would result in a permanent irreversible moderate adverse effect, equating to less than substantial harm on the setting of Tara Brook Farm. NN NPS paragraph 5.134 and NPPF paragraph 202 require public benefits of the scheme to be considered and weighed against less than substantial harm to heritage assets. NN NPS paragraph 1.2 also requires the adverse impacts of the development to be weighed against its benefits.</p> <p>Please consider the public benefits of the scheme and weigh them against the identified harms as required by these parts of the NN NPS and NPPF.</p>	<p>This is set out in the Case for the Scheme (CfS) (TR010034/APP/7.1(3)) that presents the overall case for why the Scheme is the most appropriate response to delivering the needs identified within Chapter 2 of the NN NPS and the interventions identified in the Department of Transport and Highways England's Road Investment Strategy (RIS).</p> <p>It demonstrates the Scheme's compliance with the NN NPS in Appendix B, including references to where each provision of the NN NPS is addressed further within the DCO application. Policy and legislative matters relevant to each theme are covered in more detail in the Environmental Statement as referenced within the Accordance Tables.</p> <p>The Scheme is also supported by various national transport and planning policies. Investment for the Scheme is confirmed in Road Investment Strategy 1 (RIS1) (published in 2014) and Road Investment Strategy 2 (RIS2) (published in 2020).</p> <p>It is considered that the Scheme will deliver a number of public benefits that clearly outweigh the less than substantial harm to the setting of Tara Brook Farm. During operation the Scheme would reduce community severance through the separation of local and regional traffic resulting in large reductions of traffic on the existing A57. This will allow the opportunity to make this stretch of road much more friendly to cyclists and pedestrians (across all groups) through improved facilities and crossings, public realm improvements and reduction in speed. This is anticipated to lead to positive benefits to health and wellbeing and is therefore associated with a Positive Health Outcome. Traffic congestion issues will be alleviated with significant reductions in traffic predicted at Mottram Moor</p>

No	Question to	Reference	Question	National Highways' response
<b>6.</b>	<b>The historic environment</b>			
				(between Back Moor and Stalybridge Road, Hyde Road and Woolley Lane), therefore providing a safer and more pedestrian friendly environment in the village. The Scheme makes considerable provisions for walkers, cyclists and horse riders WCH, improving connectivity and the new bypass will also provide for more reliable, shorter journey times. The CftS (TR010034/APP/7.1(3)) demonstrates that the Scheme achieves a positive planning balance when weighing up impacts against the public benefits of the Scheme.
6.7.	Historic England Local authorities	Mottram Old Hall	The excavation of the Mottram Underpass cutting would result in the partial truncation of the former grounds of Mottram Old Hall. Do you consider that the parkland contributes to the significance of this designated heritage asset?	No response required from National Highways.
	<b>National Park</b>			
6.8.	Applicant Peak District National Park Authority	Peak District National Park Authority [RR-0677]	<p>The Peak District National Park Authority identified in its RR that heritage assets are a part of the attraction of the PDNP and has raised concerns in relation to the impact on the Tintwistle Conservation Area and several heritage assets and their landscape setting.</p> <p>a) Peak District National Park Authority – please set out whether you consider that the adverse impact on the experience of the TWA arising as a result of increased traffic would cause harm to the significance of the heritage asset. If A Conservation Area Appraisal is available, please can you submit this into the Examination.</p> <p>b) Applicant - please comment on the Peak District National Park Authority's assertion that the increase in traffic within the Tintwistle Conservation Area would have an adverse impact on how the Conservation Area is experienced.</p> <p>Applicant – please set out your position on the likely impact of the scheme on the Ladybower Reservoir and the scheduled monuments Hordron Edge, Bamford Edge, Crook Hill and Bridgend Pasture as identified by Peak District National Park Authority.</p>	<p>In their consultation response on the Scheme, and during consultation undertaken in December 2020, the Peak District National Park Authority (PDNPA) stated that they would like to see Tintwistle Conservation Area included in the assessment due to the potential for impacts as a result of changes in traffic levels. Concern was also raised by PDNPA regarding the impact of changes to traffic flow within the PDNP and the potential for impacts on the settings of designated heritage assets.</p> <p>The conservation area was therefore included as part of the cultural heritage baseline, and the potential for impacts upon its significance as a result of construction and operation of the Scheme assessed.</p> <p>The assessment concluded that the operation of the Scheme would very slightly increase traffic on the A628 through the conservation area (refer to Appendix 2.1: Traffic data (APP-151)). No change would result within the conservation area to the north and south of the A628, with the characteristic millstone grit terraces and long views to the surrounding landscape maintained in their current condition.</p> <p>The A628 was originally constructed as a turnpike road in 1800 and has formed an element of the historic townscape of Tintwistle since this time, shaping the growth and development of the settlement. Conservation Area Appraisals produced by both High Peak District Council and the PDNPA recognise traffic on the A628 to form a prominent existing feature of the conservation area in this area. The predicted negligible increase in traffic along the A628 would not result in any perceptible change to this character, appearance or noise environment of the conservation area, which is a heritage asset of medium value.</p> <p>Considered against the criteria for assessment of magnitude of impact presented at Table 3.4N in the Design Manual for Roads and Bridges (DMRB) LA 104 Environmental Assessment and Monitoring, this would constitute a very minor loss or detrimental alteration to the conservation area, consistent with a negligible adverse impact, as this would not result in a measurable change to the character or appearance of the conservation area.</p>

No	Question to	Reference	Question	National Highways' response
6.	The historic environment			
				<p>In relation to our position on the likely impact of the scheme on the Ladybower Reservoir and the scheduled monuments Hordron Edge, Bamford Edge, Crook Hill and Bridgend Pasture, the following sets out our position on the likely impacts.</p> <p><u>Ladybower Reservoir</u></p> <p>We have assumed this to be the Ladybower Reservoir World War I Memorial Grade II listed building (List Entry Number 1464236).</p> <p>The listed building is located approximately 20km southeast of the Scheme, and 1,800 metres north of Snake Road; and is located on the south-western side of the un-named western access road to Derwent and Howden Dams, about 2km north of the junction with Snake Pass or Snake Rd (A57). The Reservoir is adjacent to Snake Road with the listed building being located 2km from roadway.</p> <p>While this part of the affected road network (ARN) is predicted to see a limited increase in traffic as a result of the Scheme, it is considered that this will not perceptibly alter current traffic and noise levels. These limited changes, considered along with the distance from the ARN, would not result in any impact on the significance or the ability to appreciate the listed building in question, and there will be no potential for impacts on its setting.</p> <p><u>Hordron Edge</u></p> <p>We have assumed this to be the scheduled monument of Hordron Edge stone circle, 540m south east of Cutthroat Bridge (List Entry Number: 1018367).</p> <p>The scheduled monument is located approximately 23km from the Scheme along Snake Road, 1.4km north east of the junction of Snake Road and Ashopton Road; and is located approximately 400 metres from the ARN.</p> <p>While this part of the ARN is predicted to see a limited increase in traffic as a result of the Scheme, it is considered that this will not perceptibly alter current traffic and noise levels. These limited changes, considered along with the distance of the scheduled monument from the ARN, would not result in any impact on the significance or our ability to appreciate the scheduled monument in question, and there will be no potential for impacts on its setting.</p> <p><u>Bamford Edge</u></p> <p>We have assumed this to be the scheduled monument Cairn on Bamford Edge, 570m north east of Clough House (List Entry Number: 1018085).</p> <p>The scheduled monument is located approximately 23km from the Scheme, 600 metres to the east of Ashopton Road, and 1.4 km southeast of the Ladybower Reservoir; and is located approximately 1.6km from the ARN.</p> <p>While this part of the ARN is predicted to see a limited increase in traffic as a result of the Scheme, it is considered that this will not perceptibly alter current traffic and noise levels. These limited changes, considered along with the distance of the scheduled monument from the ARN, would not result in any impact on the significance or the ability to appreciate</p>

No	Question to	Reference	Question	National Highways' response
6.	The historic environment			
				<p>the scheduled monument in question, and there will be no potential for impacts on its setting.</p> <p><u>Crook Hill</u></p> <p>We have assumed this to be the scheduled monument Stone circle 330m north west of Crookhill Farm (List Entry Number: 1019909).</p> <p>The scheduled monument is located approximately 20.5km from the Scheme, and 500m to the north of the ARN at Snake Road.</p> <p>While this part of the ARN is predicted to see a limited increase in traffic as a result of the Scheme, it is considered that this will not perceptibly alter current traffic and noise levels. These limited changes, considered along with the distance of the scheduled monument from the ARN, would not result in any impact on the significance or our ability to appreciate the scheduled monument in question, and there will be no potential for impacts on its setting.</p> <p><u>Bridgend Pasture</u></p> <p>We have assumed this to be the scheduled monument Round cairn on Bridge-end Pasture, 300m north-east of Two Thorne Fields Farm (List Entry Number: 1008072).</p> <p>The scheduled monument is located approximately 18.5km from the Scheme, 750 metres to the north of the ARN at Snake Road.</p> <p>While this part of the ARN is predicted to see a limited increase in traffic as a result of the Scheme, it is considered that this will not perceptibly alter current traffic and noise levels. These limited changes, considered along with the distance of the scheduled monument from the ARN, would not result in any impact on the significance or the ability to appreciate the scheduled monument in question, and there will be no potential for impacts on its setting.</p>



## 8. Air quality

No	Question to	Reference	Question	National Highways' response
7.	Air quality			
	Study area, baseline conditions and overall assessment methodology			
7.1.	Natural England	Thresholds	Does Natural England have any comments on the thresholds used for the assessment of effects on biodiversity receptors?	No response required from National Highways.
7.2.	Applicant	Climate change implications for air quality	What regard has been given to the potential for climate change to influence emissions modelling and the air quality assessment?	<p>The assessment of air quality has been undertaken in accordance with the DMRB standard LA 105 which does not require a consideration of the potential for climate change to influence emissions and air quality, and consequently the potential effect of climate change on air quality has not been included in the air quality assessment for this Scheme.</p> <p>Modelling future air quality is inherently uncertain, as noted in section 5.4 of Chapter 5 of the ES (APP-061), not least in part due to the use of historical meteorological data to estimate future concentrations for an opening year. Climate change is expected to affect meteorology with a likely reduced frequency of poor air quality in winter, but an increase of periods of poorer air quality in summer due to increased summer temperatures and increased solar radiation<sup>4,5</sup>. Changes are expected to vary regionally across the UK.</p> <p>However, the potential effects from climate change are expected over a much longer term than the timeframe for the air quality assessment and will generally affect secondary pollutants with a longer atmospheric lifetime rather than nitrogen dioxide (NO<sub>2</sub>) which has a lifetime of less than a day. The air quality assessment considers effects on sensitive receptors in the opening year (2025) of the Scheme as a worst case, as vehicle emissions and background concentrations of nitrogen dioxide are expected to reduce in future years, as a result of the switch to low and zero tailpipe emission vehicles. The potential effects from climate change are likely to be most apparent after the year of opening, with any changes in concentrations arising from climate change effects outweighed by the future reductions in vehicle emissions. Additionally, the air quality assessment is based on a gap analysis scenario following the method in DMRB LA105 to ensure the future modelled NO<sub>2</sub> concentrations are not too optimistic. The air quality assessment for the opening year of 2025 can still be considered to be a worst case.</p> <p>In any case, any effect from climate change would be similar both without and with Scheme and as such the outcome of the air quality assessment would not be expected to change.</p>
7.3.	Applicant Local authorities	Terrain	Paragraph 5.4.5 of ES Chapter 5 [APP-061] states that the air quality model used in the assessment does not include terrain and that specific conditions such as valleys have been addressed through "localised model validation zones".	a) The dispersion modelling within the assessment has been undertaken in line with the methodology given in the Department for Environment, Food and Rural Affairs (Defra) Local Air Quality Management Technical Guidance (LAQM.TG16).

<sup>4</sup> Air Quality Expert Group, 2007. Air Quality and Climate Change: A UK Perspective. Available at: [REDACTED]

<sup>5</sup> The Royal Society, 2021. Effects of net-zero policies and climate change on air quality. Available at [REDACTED]

No	Question to	Reference	Question	National Highways' response
7.	Air quality		<p>a) Please could the Applicant provide detail of the methodology and justify why it is appropriate for the terrain in the study area?</p> <p>b) Please could the local authorities comment?</p>	<p>Complex terrain can have an effect on air pollutant dispersion; however, it is ordinarily only considered when modelling point sources rather than road sources, for which it is widely considered unnecessary where there is a less than 10% gradient in slopes (Defra LAQM.TG16 para 7.452). In addition, the nature of air quality modelling for road sources, whereby the receptor points are ordinarily at roadside locations, largely negates any need to consider terrain given the nature of the environment whereby receptor and source are in such close proximity. Given the large air quality study area and the limited number of locations where gradient could affect road traffic emissions, it was therefore considered more pragmatic to address terrain effects through adjustment at specific locations rather than modelling explicitly across the study area. The gradient effect on vehicle emissions has been calculated using the latest available tools at the time of the assessment (Defra Emission Factor Toolkit (EFT) v10.1) and adjustment factors applied to the National Highways speed-band emissions to reflect the gradient effects at specific locations where the road gradient was estimated to be 6% or more:</p> <ul style="list-style-type: none"> <li>• Glossop Road at the Dinting Vale junction.</li> <li>• Mottram Moor and A6018 Back Moor between Carrhouse Lane and A6018 Roe Cross Road.</li> <li>• A6018 Roe Cross Road either side of the junction with Edge Lane.</li> </ul> <p>The method has included verification of the results of the dispersion modelling by comparison with monitoring data to ensure that final modelled concentrations are representative of the monitoring in the local area. Where there are differences greater than 25% between the modelled and monitored concentrations at many sites, or where there is a systematic bias in the comparison then model adjustment is undertaken. This can either be through revisiting model assumptions or adjustment of the model to bring results in line with real world data. Adjustment has been undertaken for "localised model validation zones", i.e. the model area has been split into a number of individual zones to allow localised factors to be accounted for within each zone. The "localised model validation zones" include the sections of roads where gradient effects were accounted for in the emissions calculations as adjustment was still required to further bring the modelling results in line with real world data.</p>
7.4.	Applicant Local highway authorities	Greater Manchester Clean Air Zone	<p>Paragraph 5.12.10 of ES Chapter 5 [APP-061] states that the Greater Manchester Clean Air Zone has not been considered in the traffic or air quality monitoring. It states that not including the assessment is a worst-case as the Clean Air Zone would bring about further improvements in concentration of annual mean NO<sub>2</sub>.</p> <p>a) Please could the Applicant provide further justification that the assessment represents a worst case for all receptors. Is there any potential for the introduction of the Clean Air Zone to result in changes in traffic patterns?</p>	<p>Greater Manchester is progressing implementation of a Clean Air Zone (CAZ) to bring about compliance with air quality limit values and the Air Quality Strategy (AQS) objectives as quickly as possible. It will be a 'category C' CAZ which requires buses, taxis, lorries and vans to meet certain emission standards to drive within the zone. The CAZ is expected to be in place from 30 May 2022 until mid-2026. The CAZ will cover roads that do not form part of the strategic road network within the Greater Manchester Area. Currently It is the Government's objective that the A57 and A628 will also be within the CAZ. The air quality study area is partially located within the CAZ boundary, therefore the implementation of the CAZ has the potential to affect road traffic emissions within the Scheme air quality study area.</p>

No	Question to	Reference	Question	National Highways' response
7.	Air quality		b) Please could the local highway authorities comment?	
				<p>The CAZ has been developed in parallel with the Scheme, so it has not been possible to consider the CAZ within the Scheme traffic and air quality modelling. However, the air quality assessment undertaken, which does not include the CAZ, can be considered a worst case as the expected improvements in road traffic emissions as a result of the CAZ have not been accounted for in the assessment. It is anticipated that the CAZ would bring about further improvements in vehicle emissions and concentrations of annual mean NO<sub>2</sub> across the Greater Manchester Area, as reported in the latest air quality modelling reports published by TfGM in June 2021 (available online at <a href="https://cleanairgm.com/technical-documents/">https://cleanairgm.com/technical-documents/</a>).</p> <p>By the Scheme opening year (2025) Defra projections (EFT v10.1) show that 99% of HDV (heavy duty vehicle, i.e. buses, lorries) and 90% of LDV (light duty vehicle i.e. taxis, vans) will be compliant with the CAZ requirements without the CAZ implementation. The implementation of the CAZ is expected to bring about full compliance, which would reduce emissions compared to the situation without the CAZ implementation and as such bring about further improvements in NO<sub>2</sub> concentrations compared to those presented in ES Chapter 5 Air Quality (TR010034/APP/6.3(2)).</p> <p>Given that the vehicle fleet in the Scheme opening year will already largely compliant with the CAZ requirements, it is a reasonable assumption that there would not be any anticipated change to traffic patterns or traffic rerouting to avoid the charging zone. In addition, given the size of the proposed CAZ, which covers the whole of the Greater Manchester area, the options for rerouting to avoid the charging zone are limited. This is particularly relevant for the types of vehicles impacted (buses, taxis, lorries and vans), which are more restricted in route choice than private vehicles.</p> <p>As the CAZ only affects commercial and public service vehicles and does not affect private cars the outcome of the introduction of the CAZ is likely to be an acceleration in the take up of low emission commercial vehicles and is not anticipated to alter future forecast demand on the road network. Commercial vehicles make up a small proportion of total traffic and due to the acceleration of the take up of low emission vehicles, as only a small proportion of these commercial vehicles are forecast to be non-compliant when the CAZ comes into force, as reported in reports published by TfGM in June 2021 (available online at [REDACTED]). It is likely that some of the remaining older commercial vehicles that do not meet the emission standards for the CAZ will have no alternative to paying the fee for entering the CAZ to reach customers and suppliers. Consequently, it is likely that only a very small proportion of the remaining older commercial vehicles on the road network will have the option of changing their route choice to avoid the CAZ by the time the Scheme is open. Therefore, the introduction of the CAZ is anticipated to have a negligible impact on forecast traffic flows used for the assessment of the Scheme.</p>

No	Question to	Reference	Question	National Highways' response
<b>7. Air quality</b>				
7.5.	Applicant	Cumulative effects	Please could ES Chapter 5 [APP-061] be updated to include a cross reference to the assessment of cumulative effects in ES Chapter 15 [REP1-020]?	Cross reference to ES Chapter 15 (REP1-020) has been added to ES Chapter 5 Air Quality which is included within the Applicant's submission for Deadline 2 (TR010034/APP/6.3(2)).
7.6.	Local authorities	Outstanding concerns	Do the local authorities have any outstanding concerns regarding the study area, baseline conditions or the overall assessment methodology? How should any outstanding concerns be addressed?	No response required from National Highways.
<b>Construction phase</b>				
7.7.	Applicant	Assessment methodology Quantitative assessment	<p>Paragraph 5.3.12 of ES Chapter 5 [APP-061] states that further quantitative assessment of construction phase traffic has not been undertaken because no single phase of construction related traffic management is expected to be in place for more than two years.</p> <p>Please could the Applicant explain how considering the construction programme as five separate phases, rather than an overall construction period of more than two years, is consistent with the approach set out in DMRB LA 105 for construction traffic?</p>	<p>DMRB LA 105 states that "the impact of construction activities on vehicle movements shall be assessed where construction activities are programmed to last for more than 2 years"</p> <p>As stated in the ES Chapter 5 Air Quality (TR010034/APP/6.3(2)), the overall construction programme is expected to be 28 months, which is greater than 2 years. As such the ES Chapter 5 has given further consideration of the construction traffic during the construction phase, by considering whether the additional construction traffic and changes in traffic as a result of traffic management measures for existing traffic during construction met the DMRB LA 105 traffic scoping criteria for assessment, and whether further quantitative assessment was necessary.</p> <p>Construction traffic movements including transport of materials, plant and labour to and from site were considered for the full construction period. Consideration was given to the number of movements generated by construction activities and the duration of the activities. The maximum number of daily movements over the full construction period was screened against DMRB LA 105 traffic scoping criteria. As stated in ES Chapter 5 paragraph 5.7.7. Heavy Duty Vehicle (HDV) movements will not exceed the DMRB LA 105 traffic screening criteria for quantitative assessment of 200 HDV per day, nor will total vehicle movements (HDV, and labour travelling to and from site) exceed 1000 AADT per day. As such quantitative assessment was not undertaken. As such quantitative assessment of construction traffic during the construction phase was scoped out within ES Chapter 5 and quantitative assessment was not undertaken.</p> <p>Substantial traffic management or the need to divert existing traffic during the construction phase is not expected to be required for the construction of the offline bypass, which, being mostly offline, limits the need to disrupt traffic on the existing roads. Each phase of the construction traffic management is no more than 6 months and the location of the traffic management would change with each phase. The impacts are short term in duration and / or limited in the amount of time in any one area (i.e. 2 years or less), even if they were modelled the conclusion would be that the impact is small and temporary and consequently would not trigger a significant effect. As such the consideration of traffic management measures is considered proportionate, which is in keeping with DMRB LA 105.</p>



No	Question to	Reference	Question	National Highways' response
<b>7.</b>	<b>Air quality</b>			
7.8.	Applicant Local authorities	Methodology Quantitative assessment	ES Chapter 5 [APP-061] and ES Appendix 4.1 [APP-152] do not explain whether the scoping out of a quantitative assessment of emissions from construction phase traffic has been discussed with relevant local authority environmental health officers, as requested in the Scoping Opinion [APP-152].  Do the local authorities have any concerns about the scoping out of a quantitative assessment of emissions from construction phase traffic?	As set out in Appendix 4.1 Scoping Opinion and Response (APP-152), consideration of construction phase traffic emissions has been undertaken in accordance with DMRB LA 105. Screening of construction traffic and traffic management measures during the construction phase has been undertaken in accordance with DMRB LA 105 with available construction phase data and there was not a need for any quantitative assessment. Following publication of the Preliminary Environmental Information Report (PEIR) in November 2020 consultation with local authority environmental health officers was undertaken (in December 2020). The local authorities did not raise any concerns on the proposed methodology (in accordance with DMRB LA 105) for the construction phase traffic emissions assessment at this time.
7.9.	Applicant	Dust mitigation and monitoring	a) What level of confidence is there that it will be feasible to develop specific construction dust control measures to the extent required to secure no significant adverse effects, given the lack of certainty about construction methods as noted in paragraph 5.8.1 of ES Chapter 5 [APP-061].  b) In what circumstances would monitoring parameters and a programme be necessary? If required, how would this monitoring, and any additional mitigation that might be identified as a result, be secured in the DCO?	a) The construction dust assessment has been undertaken in accordance with the methodology in DMRB LA 105. This is a risk-based assessment methodology, where the level of risk guides the development of dust control measures. The assessment has determined there would be a "high" construction risk dust potential, and as such the industry best practice control measures will be developed for the highest level of risk, with regard to the likely magnitude of the dust source, the duration of the works, and the proximity to sensitive receptors. These measures will provide adequate mitigation to avoid a significant construction effect arising from the generation of dust. As such there is a high level of confidence that appropriate control measures will be applied to construction works to secure no significant adverse effects. Industry best practice, such as guidance from the Institute of Air Quality Management (IAQM), acknowledges that with appropriately implemented site-specific mitigation measures, significant adverse effects would not be expected.  b) DMRB LA 105 (para 2.108.1) states that " <i>In most cases monitoring for dust deposition / ambient dust would not be required given the nature of work undertaken on the majority of the construction of road projects.</i> " The Nuisance Management Plan, which will form an annex of the Environmental Management Plan (EMP) (Second iteration), will set out whether there are any circumstances under which monitoring would be required. The EMP (Second iteration) will be prepared and implemented by the Appointed Principal Contractor prior to the commencement of construction works, which would include a programme for monitoring should it be required. Mitigation measures will be secured in the EMP through dDCO Requirement 4. An outline version of the Nuisance Management Plan is being prepared to be submitted into the examination at Deadline 3, as requested through Question 2.4 of these First Written Questions.
7.10.	Applicant Local authorities	REAC [REP1-037] Table 2.1 - Pre-Construction	a) To ensure that air quality is managed properly during pre-commencement activities, should Table 2.1 of the REAC include actions for controlling dust during construction and set out a process for dealing with air quality complaints?	a) Please see the response to Written Question 1.7. It is considered that none of the pre-construction activities would give rise to significant effects due to nuisance dust. Item GEM1.2 in Table 2.1 of the Register of Environmental Actions and Commitments (REAC) (REP1-037) states that the complaints response procedures, which would cover all environmental disciplines, would be set out in the EMP (Second iteration), and in the Community Engagement Plan which will be prepared and implemented by the



No	Question to	Reference	Question	National Highways' response
7.	Air quality			
			<p>b) Should reference be made to following Institute of Air Quality Management's Guidance on the Assessment of Dust from Demolition and Construction?</p>	<p>appointed Principal Contractor prior to the commencement of construction works. Procedures specific to air quality complaints will be set out in the Nuisance Management Plan which will form an annex of the EMP (Second iteration). Measures that may be included for controlling dust during construction are given in Table 2.2 of the REAC. Further detail of control measures, including a complaints process to monitor the effectiveness of mitigation, will be set out in the EMP (Nuisance Management Plan which will form an annex of the EMP (Second iteration), which will be subject to consultation with the relevant planning authorities. An outline version of the Nuisance Management Plan is being prepared to be submitted for the examination, as requested through Question 2.4 of these First Written Questions.</p> <p>b) As set out in Appendix 4.1 Scoping Opinion and Response (APP-152), the assessment of construction dust has followed the methodology set out in DMRB LA 105. This was published in 2019 and included an updated methodology for assessing construction dust impacts from that included in the previous guidance (DMRB HA207/07). The methodology in DMRB LA 105 does not follow the IAQM guidance but is a risk-based approach which is in keeping with the IAQM guidance approach. The IAQM approach is not specifically for strategic road network schemes, whereas the DMRB LA 105 was written specifically for the strategic road network. Measures to control dust during construction, (as are given in Table 2.2 of the REAC) to be further developed within the EMP (Second iteration) prior to construction of the Scheme, would however be in keeping with industry best practice and measures provided could include such measures as those given in the IAQM guidance that are suitable for a 'high' construction dust risk site.</p>
7.11.	Applicant Local authorities	REAC [REP1-037] Table 2.2 - Construction	<p>a) Should reference be made to following Institute of Air Quality Management's Guidance on the Assessment of Dust from Demolition and Construction? If not, please could the Applicant set out any differences with its proposed approach?</p> <p>b) The list of dust control measures that may be included is high level and brief. Should more detail be provided to ensure consistency with the Environmental Statement, and should additional measures be identified for high-risk locations, including near sensitive receptors?</p> <p>c) Should actions be added for the control of emissions from construction vehicles and plant?</p> <p>d) Should actions be added for air quality monitoring and for a process for dealing with air quality complaints?</p>	<p>a) As set out in Appendix 4.1 Scoping Opinion and Response (APP-152), the assessment of construction dust has followed the methodology set out in DMRB LA 105. This was published in 2019 and included an updated methodology for assessing construction dust impacts from that included in the previous guidance (DMRB HA207/07). The methodology in DMRB LA 105 does not follow the Institute of Air Quality Management (IAQM) guidance but is a risk-based approach which is in keeping with the IAQM guidance approach. The IAQM approach is not specifically for strategic road network schemes, whereas the DMRB LA 105 was written specifically for the strategic road network. The DMRB LA 105 approach requires:</p> <ul style="list-style-type: none"> <li>• the magnitude of the scheme to be determined;</li> <li>• the sensitivity of the receiving environment to construction dust to be determined based on the presence of sensitive receptors within 0-50m, 50-100m and 100-200m distance bands from the boundary of construction works; and</li> <li>• a matrix is used to determine if the construction dust risk potential is high or low based on magnitude of the scheme and the distance of sensitive receptors from the construction activities.</li> </ul> <p>Measures to control dust during construction, (as are given in Table 2.2 of the REAC (REP1-037) to be further developed within the EMP (Second iteration) prior to</p>

No	Question to	Reference	Question	National Highways' response
<b>7.</b>	<b>Air quality</b>			
				<p>construction of the Scheme, would however be in keeping with industry best practice and measures provided would be from those within the IAQM guidance as that are suitable for a 'high' construction dust risk site.</p> <p>b) Further details of dust control measures will be set out in the EMP (Nuisance Management Plan which will form an annex of the EMP (Second iteration), which will be prepared and implemented by the appointed Principal Contractor prior to the commencement of construction works. An outline version of the Nuisance Management Plan is being prepared to be submitted for the examination, as requested through question 2.4 of these First Written Questions.</p> <p>c) Further details of control of emissions from construction vehicles and plant will be set out in EMP (Second iteration), which will be prepared and implemented by the Principal Contractor prior to the commencement of construction works.</p> <p>d) DMRB LA 105 (para 2.108.1) states that "<i>In most cases monitoring for dust deposition / ambient dust would not be required given the nature of work undertaken on the majority of the construction of road projects.</i>" Further details of the complaints process would be set out in the EMP (Second iteration), which will be prepared and implemented by the Principal Contractor prior to the commencement of construction works.</p> <p>The EMP (Second iteration) will be subject to consultation with the relevant planning authorities and local highway authorities to the extent that it relates to matters relevant to its functions.</p>
7.12.	Local authorities	Outstanding concerns	<p>a) Do the local authorities or Natural England have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring, or compliance with policy for the construction phase? How should any outstanding concerns be addressed?</p> <p>b) With the secured mitigation measures in place, do the local authorities or Natural England consider that it is likely or unlikely that there would be any significant air quality effects during the construction phase?</p>	No response required from National Highways.
<b>Operational phase</b>				
7.13.	Applicant	Methodology Worst-case year	<p>The Applicant identifies that the worst-case scenario is the opening year of 2025, but ES Appendix 2.1 [APP-151] identifies an increase in traffic flows in the design year of 2040 relative to the opening year of 2025, with the Proposed Development.</p> <p>Please explain why an assessment has not been undertaken for the design year of 2040.</p>	<p>The air quality assessment has been undertaken in accordance with DMRB LA 105 which requires assessment of a base year and do minimum (without Scheme) and do something (with Scheme) scenarios in the Scheme opening year only. This reflects the fact that the worst case for air quality is the opening year given both vehicle emissions of oxides of nitrogen (NO<sub>x</sub>) and background concentrations of nitrogen dioxide (NO<sub>2</sub>) are predicted to reduce in future years due to the shift to electric vehicles with the Government's commitment to end the sale of new petrol and diesel cars and vans from 2030, and the plan to end sales of new diesel HGVs from 2040. Electric vehicles do not produce any</p>

No	Question to	Reference	Question	National Highways' response
<b>7.</b>	<b>Air quality</b>			
				<p>tailpipe emissions of NO<sub>x</sub> hence although there may be a projected increase in traffic by 2040, it does not follow that emissions, would increase, as a result of the increased proportion of low and zero emission vehicles in the fleet. This is demonstrated in the Department for Transport (DfT)'s published Road Traffic Forecasts 2018<sup>6</sup>, which show that despite a projected growth in traffic of 51% between 2015 and 2050, there is a decline in tailpipe NO<sub>x</sub> emissions of 95% by 2050 when considering scenario 7, the shift to Zero Emission Vehicles (see Table 3 and paragraph 4.50). Projected reductions in emissions would in fact be even lower than those forecast by the DfT in their scenario 7, which used a date of 2040 for an end to sales of new petrol and diesel cars and vans, rather than the current commitment of 2030.</p> <p>An air quality assessment for the Scheme does therefore not need to be undertaken for the design year of 2040 given that NO<sub>x</sub> emissions and consequently NO<sub>2</sub> concentrations would be much lower in this future year, despite any increase in traffic.</p>
7.14.	Local authorities Natural England	Outstanding concerns	<p>a) Do the local authorities or Natural England have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring, or compliance with policy for the operational phase? How should any outstanding concerns be addressed?</p> <p>b) With the secured mitigation measures in place, do the local authorities or Natural England consider that it is likely or unlikely that there would be any significant air quality effects during the operational phase?</p>	No response required from National Highways.
<b>Air Quality Management Areas and Air Quality Directive compliance</b>				
7.15.	Applicant	Tintwistle Air Quality Management Area (AQMA)	Given the proximity of the Tintwistle AQMA to the air quality study area and the potential for these areas to be sensitive to changes in NO <sub>2</sub> , please could the Applicant provide further explanation as to its rationale for screening the AQMA out of the assessment, including confirmation of the flows on links through the AQMA with and without the Proposed Development in 2025 and 2040.	<p>The air quality study area has been defined in accordance with DMRB LA 105. The DMRB LA 105 guidance defines traffic change criteria for determining whether air quality impacts can be scoped out or require assessment (DMRB LA 105 paragraph 2.1) as:</p> <ul style="list-style-type: none"> <li>• Road alignment will change by 5 m or more; or</li> <li>• Daily traffic flows (two way) will change by 1,000 annual average daily traffic (AADT) or more; or</li> <li>• HDV flows (two-way) will change by 200 AADT or more; or</li> <li>• A change in speed band.</li> </ul> <p>The traffic change criteria were applied to traffic output from the Scheme specific traffic model for the Scheme opening year (2025) to determine the Affected Road Network (ARN) in accordance with DMRB LA 105. The Scheme specific traffic model for the opening year (2025) rather than the design year (2040) is used to define the ARN as the worst case for</p>

<sup>6</sup> Department for Transport, 2018. Road Traffic Forecasts 2018, available at: [REDACTED]

No	Question to	Reference	Question	National Highways' response																								
7.	Air quality			<p>air quality is the opening year given both vehicle emissions and background concentrations are predicted to reduce in future years (see response to question 7.13).</p> <p>The Scheme specific traffic model includes strategic roads, including the A628 through the Tintwistle AQMA. The extent of the ARN is presented in Figure 5.1 of the Environmental Statement (APP-076). The traffic change (in the opening year) due to the Scheme along the A628 meets the DMRB LA 105 traffic scoping criteria between the Junction with Woolley Lane and New Road and receptors have been included in the air quality modelling presented in Environmental Statement Chapter 5: Air Quality (TR010034/APP/6.3(2)). This section of the A628 is not within the Tintwistle AQMA.</p> <p>The DMRB LA 105 traffic scoping criteria are not met on the A628 to the north of New Road through Tintwistle, therefore receptors at these locations, including those within the Tintwistle AQMA, have not been included within the air quality assessment. Where traffic change criteria are not exceeded in the Scheme opening year this indicates that there would not be a significant effect on air quality due to the Scheme in these locations and the need for further quantitative assessment is scoped out.</p> <p>The changes in AADT and HDV on the A628 through the AQMA with the Scheme are shown in the tables below:</p> <table border="1"> <thead> <tr> <th>2025 AADT Do Minimum</th> <th>2025 AADT Do Something</th> <th>2025 AADT Change</th> <th>2040 AADT Do Minimum</th> <th>2040 AADT Do Something</th> <th>2040 AADT Change</th> </tr> </thead> <tbody> <tr> <td>9699</td> <td>10659</td> <td>+960</td> <td>9768</td> <td>10873</td> <td>+1105</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>2025 HDV AADT Do Minimum</th> <th>2025 HDV AADT Do Something</th> <th>2025 HDV AADT Change</th> <th>2040 HDV AADT Do Minimum</th> <th>2040 HDV AADT Do Something</th> <th>2040 HDV Change</th> </tr> </thead> <tbody> <tr> <td>1513</td> <td>1594</td> <td>+81</td> <td>2146</td> <td>2014</td> <td>+132</td> </tr> </tbody> </table> <p>The changes in the opening year 2025 are below the DMRB LA 105 traffic scoping criteria for both AADT and HDV and consequently the AQMA is not included within the air quality study area.</p> <p>In 2040 the change in AADT with the Scheme is higher than the DMRB LA 105 traffic scoping criteria of 1000 AADT, however, as set out in the response to 7.13, the air quality assessment for the Scheme only considers the future opening year, given the projected decrease in emissions from vehicles in 2040 would not result in higher concentrations of nitrogen dioxide (NO<sub>2</sub>) with the Scheme compared to those reported for 2025. The opening year (2025) assessment, as presented in the ES Chapter 5</p>	2025 AADT Do Minimum	2025 AADT Do Something	2025 AADT Change	2040 AADT Do Minimum	2040 AADT Do Something	2040 AADT Change	9699	10659	+960	9768	10873	+1105	2025 HDV AADT Do Minimum	2025 HDV AADT Do Something	2025 HDV AADT Change	2040 HDV AADT Do Minimum	2040 HDV AADT Do Something	2040 HDV Change	1513	1594	+81	2146	2014	+132
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No	Question to	Reference	Question	National Highways' response
7.	Air quality			
				(TR010034/APP/6.3(2), therefore represents the worst case in terms of the effect on air quality.
7.16.	Applicant	Effects on AQMAs	Please could the Applicant explain the outcome of the assessment in terms of any particular effects on the Greater Manchester and Glossop AQMAs, and whether the Proposed Development would impact on any objectives for the AQMAs set out in relevant air quality action plans.	<p>The air quality study area has been determined in accordance with DMRB LA 105. DMRB LA 105 defines traffic change criteria for determining whether air quality impacts can be scoped out or require assessment (DMRB LA 105 paragraph 2.1). The traffic change criteria were applied to output from the Scheme specific traffic model to determine the ARN. The Scheme specific traffic model includes strategic roads, including the A57 through the Glossop AQMA and multiple links through the Greater Manchester AQMA. Both the extent of the ARN and the AQMAs are presented in Figure 5.1 in Environmental Statement (APP-076).</p> <p>For the Glossop AQMA the traffic change criteria are not exceeded for the A57 south of the Dinting Vale junction. The A57 north of the Dinting Vale junction and the A626 Glossop Road do exceed the traffic change criteria and the Dinting Vale junction, which is within the Glossop AQMA has been included in the air quality assessment presented in ES Chapter 5 Air Quality (TR010034/APP/6.3(2)). Where traffic change criteria are not exceeded, such as on the majority of the roads within Glossop AQMA, this indicates that there would not be a significant adverse effect on air quality due to the Scheme at these locations.</p> <p>Evaluation of the significance of the effect of the Scheme on human health has been undertaken in accordance with DMRB LA 105 (paragraph 2.89 to 2.96). Only those receptors where AQS objectives are exceeded with or without the Scheme are included in the evaluation. Of the 76 receptors informing the overall significance of effect of the Scheme on air quality, 67 are located in AQMAs. One receptor located in the Glossop AQMA at Dinting Vale junction (receptor number R319) is expected to have a small worsening in air quality, while 66 receptors located in the Greater Manchester AQMA adjacent to the A57 in Mottram and are expected to have medium and large improvements. The receptors informing the significance of effect are presented in Figure 5.5 in Environmental Statement (REP1-021).</p> <p>It is acknowledged that there would be increases and decreases in air pollutant concentrations due to the new link roads and the resulting redistribution of traffic on existing roads. However, the assessment undertaken for the ES concluded that on balance the Scheme is expected to result in an overall improvement in local air quality for human health receptors, with decreases in concentrations such that there is a reduction in the extent of areas where government AQS objectives are exceeded. Where there are increases in concentrations these are either in areas where government AQS objectives are not exceeded or in the case of receptor number R319 in Glossop AQMA, in a location where government AQS objectives are exceeded both with and without the Scheme. The Scheme does not therefore affect the ability to meet AQS objectives within the Glossop AQMA in the Scheme opening year.</p>



No	Question to	Reference	Question	National Highways' response
7.	Air quality			
				It is understood that an air quality action plan has been prepared in draft by High Peak Borough Council which lists a number of proposed measures, however, the action plan is on hold pending review of the traffic data for this Scheme. The Scheme is expected to lead to improvements in air quality at 66 receptors within the Greater Manchester AQMA, The Scheme does not affect any of the measures within the action plans for either the Greater Manchester or Glossop AQMAs.
7.17.	Applicant	Potential impacts Significant effects	Table 5-14 of ES Chapter 5 [APP-061] refers to large decreases in annual mean NO <sub>2</sub> at 66 human health receptors which exceed the annual mean NO <sub>2</sub> AQS objective, with 57 of these no longer exceeding with the introduction of the Proposed Development. Are those significant effects?	DMRB LA 105 Air quality standard methodology for judgement of significance is only intended to be applied to adverse impacts. Therefore, when using DMRB terminology, it is not possible to conclude whether a beneficial effect is significant or not.
7.18.	Applicant	Air Quality Directive compliance Non-compliant areas achieving compliance	Paragraph 5.7.17 of ES Chapter 5 [APP-061] identifies a receptor (R319) at the Dinting Vale junction exceeding the annual mean NO <sub>2</sub> AQS objective that would experience an increase of 1.7 µg/m <sup>3</sup> with the Proposed Development. Please explain, with detailed justification, whether it should therefore be concluded that the Proposed Development would affect the ability of any non-compliant area to achieve compliance within the most recent timescales reported to the European Commission?	<p>In accordance with DMRB LA 105 (paragraph 2.47 to 2.53) assessment results presented in the ES Chapter 5 (TR010034/APP/6.3(2)) for human health impacts (ES Chapter 5 paragraphs 5.7.10 to 5.7.24) includes a process called gap analysis, whereby National Highways current long term trends projection factors (LTTE6) have been applied to uplift future year modelled roadside NO<sub>2</sub> concentrations to ensure projected concentrations are not too optimistic.</p> <p>As noted in the ES Chapter 5 (TR010034/APP/6.3(2) at paragraphs 5.7.25 to 5.7.30 the assessment of compliance with the Air Quality Directive has been considered using the principles in DMRB LA 105 (paragraph 2.64 – 2.87). The assessment is to be consistent with Defra's reporting on compliance with limit values. As such the compliance assessment has not used the project air quality modelling results with the more conservative gap analysis projection factors applied, as is explained in DMRB LA 105 (paragraph 2.54).</p> <p>The assessment should consider the area where the Defra Pollution Climate Mapping (PCM) model links coincide with the air quality study area. However, for this Scheme, all the human health receptors included in the air quality assessment, including receptor R319 at Dinting Vale junction, have been included in the compliance risk assessment. The results of the compliance assessment show that there are not expected to be any locations either adjacent to the PCM model road network or at any assessed receptor location in the air quality study area which exceed the annual mean NO<sub>2</sub> limit value of 40 µg/m<sup>3</sup> in the Scheme opening year with the Scheme. Consequently, the Scheme is not considered to be a risk to non-compliance with the Air Quality Directive in any area.</p> <p>In any case, qualifying features as defined in DMRB LA 105 include public access (e.g. footpath) and sensitive receptors (e.g. residential properties, schools etc) within 15m of the running lane / kerbside, but not those within 25m of a junction. The location of receptor R319 at the junction of the A57 and Glossop Road would exclude it as a qualifying feature under the prescribed methodology for assessment.</p>

No	Question to	Reference	Question	National Highways' response
<b>7.</b>	<b>Air quality</b>			
7.19.	Applicant	Air Quality Directive compliance Compliant areas becoming non-compliant	Please clarify whether the Proposed Development would, or would not, result in any area which is currently reported as being compliant with the Air Quality Directive becoming non-compliant. What consideration has been given to receptors that are just below the thresholds without the Proposed Development?	<p>The Scheme would not result in any area which is currently reported as being compliant with the Air Quality Directive becoming non-compliant.</p> <p>The compliance assessment modelling results provided in the ES Chapter 5 [APP-061] at paragraphs 5.7.25 to 5.7.30 show that the Scheme would not result in an increase in concentrations of annual mean NO<sub>2</sub> where there are existing exceedances of the annual mean NO<sub>2</sub> limit value, nor would there be any new exceedances of the annual mean NO<sub>2</sub> limit value be introduced by the Scheme. Consequently, the Scheme is not considered to be a risk to non-compliance with the Air Quality Directive in any area.</p> <p>Where public access and qualifying feature receptors are just below the threshold without the Scheme (considered to be annual mean NO<sub>2</sub> concentration of greater than 38 µg/m<sup>3</sup>), the change in concentrations would not be such that there would be any new exceedances. For the majority of receptors there are expected to be improvements in local air quality, with decreases in concentrations with the Scheme.</p>
7.20.	Local authorities	Outstanding concerns Air Quality Directive compliance	<p>The European Union Air Quality Directive implemented through the European Union (Withdrawal Agreement) Act 2020.</p> <p>Do the local authorities:</p> <ol style="list-style-type: none"> <li>have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring or compliance with policy with respect to AQD compliances and AQMAs;</li> <li>consider that the Proposed Development would, or would not, result in any area which is currently reported as being compliant with the Air Quality Directive becoming non-compliant;</li> <li>consider that the Proposed Development would, or would not, affect the ability of any non-compliant area to achieve compliance within the most recent reported timescales?</li> </ol>	No response required from National Highways.

## 9. Climate change

No	Question to	Reference	Question	National Highways' response
8.	Climate change			
	Legislation, policy and international obligations			
8.1.	Applicant Local authorities Environment Agency Interested Parties	Legislation, policy and carbon reduction targets	<p>Section 14.2 of ES Chapter 14 [REP1-019] sets out relevant international, national, and local policies, the UK's carbon reduction targets and carbon budgets, and the Applicant's commentary on the requirements and implications for the Proposed Development.</p> <p>a) Are there any other key matters that should be added to the Applicant's commentaries on the legislation and policies?</p> <p>b) Is there any other important or relevant legislation or policy that the ExA should consider?</p> <p>c) Are there any other carbon reduction targets or carbon budgets that are relevant to the Proposed Development and for which there is a clear legal or policy basis for them to be considered?</p> <p>d) Should any UK case law/ court judgements be identified?</p> <p>e) Do National Highways have any carbon reduction targets that have not been published and/ or that it intends to apply on the Proposed Development?</p> <p>When responding please, where possible, explain why your comments relevant to the Proposed Development and to the ExA's consideration of it.</p>	<p>a) No response required from National Highways.</p> <p>b) In response to the UK's net zero emissions target by 2050, the Department for Transport (DfT) published "Decarbonising Transport: A Better, Greener Britain" – referred to as the Transport Decarbonisation Plan (TDP) on 14 July 2021. The TDP is framed by the Climate Change Act 2008, amended in June 2019 to commit to achieving Net Zero by 2050 for territorial (or "domestic") Greenhouse Gas (GHG) emissions.</p> <p>The TDP outlines a number of commitments by the Government to remove all emissions from road transport to achieve net zero target by 2050. It sets out this vision for decarbonised transport emissions through three strategic priorities:</p> <ul style="list-style-type: none"> <li>• Accelerating modal shift to public and active transport</li> <li>• Decarbonisation of road vehicles</li> <li>• Decarbonising how we get our goods</li> </ul> <p>Commitments that will have a direct impact on road user emissions from the Scheme will include:</p> <ul style="list-style-type: none"> <li>• An end to the sale of new petrol and diesel cars and vans by 2030</li> <li>• All new cars and vans to zero emissions at the tailpipe by 2030</li> <li>• All new L-category vehicles to be fully zero emissions at the tailpipe by 2035</li> </ul> <p>It also reaffirms existing policy direction and DfT's role in implementation, namely:</p> <ul style="list-style-type: none"> <li>• Regulation – to achieve the phased removal of non-zero emissions vehicles and best secure the necessary commitment from the automotive industry; and to ensure future planning of developments to reduce carbon from transport sources</li> <li>• Funding – with implied commitments to extending and adding to the numerous funding streams, including linking funding for local transport to decarbonisation targets</li> <li>• Supporting R&amp;D through funding and guidance of programmes and enabling trials and demonstration projects for potential innovative technologies; and Convening – by bringing stakeholders together to demonstrate leadership and enable public and private sector collaboration to tackle decarbonisation challenges</li> </ul> <p>The TDP also recognises the importance of road improvements as part of the solution to reduce congestion. Page 103 of the TDP states: "<i>Continued high investment in our roads is therefore, and will remain, as necessary as ever to ensure the functioning of the nation and to reduce the congestion which is a major source of carbon.</i>" "<i>In the coming years, our ambitious and accelerating plans to decarbonise all road traffic, described elsewhere in this document [the TDP], will transform roads' impact on greenhouse gas emissions.</i>"</p>

No	Question to	Reference	Question	National Highways' response
8.	Climate change			
				<p>The Applicant's position is therefore that the commitments presented in the TDP do not have any implications for the Scheme or the conclusions on significance presented in the Environmental Statement. Please refer to National Highways' responses to Written Questions 8.6 – 8.14, which show how the Scheme supports the TDP through carbon management of emissions through the construction and operational phases.</p> <p>c) National Highways' position is that, in accordance with the NN NPS, only a comparison with national carbon reduction budgets is relevant. Other carbon budgets, for example Local Carbon Budgets as defined by local or regional, are not defined in the relevant NN NPS, nor in the Climate Change Act or any dependent legislation. These are not therefore considered to have legal force when it comes to examining the suitability of the Scheme for its impact on ability to reduce carbon emissions.</p> <p>d) It was held in the recent case of R (Transport Action Network Limited) v Secretary of State for Transport and Highways England Company Limited (2021) EWHC 2095 (Admin) that in relation to the judgment reached regarding the entirety of the carbon emissions from all schemes within RIS 2 : <i>"I see no reason to question the judgment reached by the DfT that the various measures of carbon emissions from RIS2 were legally insignificant, or de minimis, when related to appropriate comparators for assessing the effect on climate change objectives."</i> (paragraph 159). Since that is the conclusion reached in relation to all schemes within RIS 2, the Scheme is a small part of an overall programme which is de minimis in terms of its impact upon carbon reduction commitments.</p> <p>e) National Highways published its 'Net Zero Highways Plan'<sup>7</sup> ("the Plan") in July 2021, after the submission of this DCO application. The Plan, which is aligned with the TDP, sets out new aspirational greenhouse gas reduction targets, which are distinct from the carbon budgets set at a national level and do not themselves have legal force. The Plan sets out a roadmap with targets to cut corporate emissions (100% of corporate emissions to be net zero without purchased offsetting by 2030), maintenance and construction emissions (40-50% reduction in emissions compared to 2020 by 2030, and 100% of schemes net zero by 2040), and road users (100% of the network will be net zero by 2050).</p> <p>In relation to National Highways' corporate emissions, many areas of action are not relevant at a scheme-specific level. Where there are commitments that a scheme could contribute to, the Scheme is already showing positive action in support. In particular, the planting of woodland and grassland is above requirement, will help manage green space for carbon removal and could contribute meaningfully to National Highways' target to plant 3 million trees by 2030.</p> <p>The construction and maintenance emissions are of most relevance to the Scheme. Here, the Scheme can already show proactive actions that directly contribute to the commitments National Highways has set out. In particular, the commitment to implement PAS 2080 compliant carbon management system throughout detailed design and into</p>



No	Question to	Reference	Question	National Highways' response
8.	Climate change			
				<p>construction is ahead of the commitment to certify a carbon management system by 2022 and could play a role in informing how that system is specified.</p> <p>The commitments relating to road user emissions are less well-defined and at a level removed from any scheme-specific works. Some commitments could have potential application to the Scheme, whereby it could be eligible for some of the technology trialling that National Highways has committed to. Other commitments have broad application across the strategic road network, but it is too soon to tell from the statements made what it would mean specifically for the Scheme. Further detail is required, and at this stage, no further action can be discerned in light of the commitments published in the Net Zero Highways Plan.</p> <p>Although the mitigation commitments that can be found in Section 14.8.4-6 within Chapter 14 (REP1-019) are not easily categorised against the commitments in the Plan, the Scheme will contribute by providing a fit-for-purpose road network with adequate capacity, which is required for successfully implementing the commitments that are set out in that plan. These will affect the whole strategic road network (SRN), for example through supporting a modal shift by improving facilities to promote walking and cycling, working with traffic officers to give them the tools to recover EVs, and implementing a programme to improve public transport on the SRN.</p>
8.2.	Applicant	International obligations	With reference to s104(4) of the PA2008, please could the Applicant set out how it has considered compliance with relevant international obligations.	<p>To support international efforts, and in response to the ambitions of the Paris Agreement, in June 2019 the Climate Change Act 2008 was amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019 to set the overall legal reduction targets by 2050 to at least a 100% reduction in net emissions against 1990 levels, 'net zero carbon'. The carbon assessment presented in Chapter 14: Climate of the ES (REP1-019) provides the required evidence and assessment against targets. The carbon assessment in Chapter 14 of the ES makes a comparison of the overall (net) residual effect of the Scheme with all legislated Carbon Budget periods up to and including the sixth carbon budget (2033-37).</p> <p>No further policy or guidance has been published by Government with regard to how the response to the climate emergency or the recently held COP26 will be met, other than that which is referred to in National Highways' response to Written Question 8.1(b).</p>
8.3.	Applicant	Significant effects	<p>Paragraph 5.17 of the National Policy Statement for National Networks requires the Applicant to "... provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets."</p> <p>Paragraph 5.18 states that "... any increase in carbon emissions is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the proposed scheme are so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets."</p>	<p>a) The approach taken in Chapter 14 of the ES (REP1-019) is in line with DMRB LA 114 which, in context with the NN NPS paragraph 5.18 states it is considered unlikely that projects will in isolation conclude significant effects on climate and that 'the assessment of projects on climate shall only report significant effects where increases in GHG emissions will have a material impact on the ability of Government to meet its carbon reduction targets'. The NN NPS therefore requires assessment against national carbon targets, and the only legislated targets are the carbon budgets. It should also be noted that there are no sectoral targets, for example for transport, that are legislated for and one sector may be balanced against another in the economy, so assessment against sectoral or sub national / local targets is outside targets that are legislated for.</p>



No	Question to	Reference	Question	National Highways' response
8.	Climate change		<p>Paragraph 14.3.20 of ES Chapter 14 [REP1-019] states that effects are only considered significant when increases in greenhouse gas emissions would have a material impact on the ability of Government to meet its carbon reduction targets.</p> <p>a) Please could the Applicant's approach be justified, and not just with reference to precedent?</p> <p>b) Does paragraph 5.18 of the National Policy Statement for National Networks set out the criteria for refusal rather than for what should be considered a significant effect? Should the criteria for significant effect be at a lower threshold than for refusal?</p> <p>c) What effects on receptors from climate change would be considered significant?</p> <p>d) How can the implications of carbon emissions for effects on receptors be considered? Is there a relationship between the Applicant's consideration of meeting carbon reduction targets and significant effects on receptors?</p> <p>e) Are any other definitions of significant effect in relation to climate change set out in any guidance?</p>	<p>b) The NN NPS is clear on setting out the national policy by setting out criteria for refusing or accepting a scheme. Setting significance criteria or defining additional tests is not a matter for individual schemes. There are currently no recognised thresholds for assessing the level of significance in EIA.</p> <p>c) Section 14.3.5 of Chapter 14 states that for the climate assessment, it differs from many topics assessed in the Environmental Statement in that there is a single receptor, the atmosphere (or global climate), on which the Scheme could have a direct impact. The effect, were GHG emission be considered to be significant, would be that the Scheme is not proportionate or comparable with other Schemes from Road Investment Strategy (RIS) 2, and therefore not <i>de minimis</i>, when related to appropriate comparators for assessing the effect on climate change objectives (refer to response to Written Question 8.1(d)). It is not possible to define a link between scheme emissions and climate effects on local receptors. Currently, no road schemes have reported GHG emissions that are so significant that they would have a material impact on the ability of the UK Government to meet its carbon reduction targets. The Scheme assessment is proportionate to the DMRB LA 114 assessments recently undertaken for other schemes within RIS 2. Furthermore, increases in GHG emissions are anticipated to be substantially outweighed by the benefits of electrifying the national fleet which is the focus of government policy in this area. However, DMRB LA 114 sets out the methodology for effects from climate where the Scheme is the receptor for climate impacts and significance criteria are set out. In accordance with this, the climate vulnerability assessment sections of Chapter 14 of the ES provide an assessment of the exposure and resilience of the Scheme to the effects of climate change during construction and operation.</p> <p>d) As stated in the response to 8.3(c), the atmosphere is a single receptor for carbon assessments. The assessment of the effects of the Scheme on climate is therefore limited to quantification of the magnitude of emissions, from individual sources and in total, and comparison of these to the baseline. Only a comparison with national carbon reduction budgets is relevant. The relationship is that through assessing against carbon budgets the Scheme will not compromise the ability to meet net zero as defined in the Climate Change Act. Meeting the sixth carbon budget is aligned with the targets in the Paris Agreement.</p> <p>e) No response required from National Highways.</p>
8.4.	Applicant	Cumulative effects Geographical area	Should the cumulative effects on climate change of the Proposed Development with other projects within a geographical area be considered against a threshold that is set for a similar geographical area?	<p>Road schemes should not be assessed against local targets because the only targets set out in legislation are national, and thus it is not appropriate to measure against local targets.</p> <p>The assessment of greenhouse gases in Chapter 14: Climate of the ES (REP1-019) is inherently cumulative because:</p> <ul style="list-style-type: none"> <li>• it considers embedded construction and maintenance, and user tailpipe emissions</li> <li>• the cumulative assessment of different projects (together with the project being assessed) is inherent within the climate methodology through:</li> </ul>

No	Question to	Reference	Question	National Highways' response
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				<ul style="list-style-type: none"> <li>- inclusion of the project and other locally committed development within the traffic model</li> <li>- consideration of the project against the UK carbon budgets, which are inherently cumulative as they consider and report on the carbon contributions across all sectors</li> </ul> <p>In the case of greenhouse gas (GHG) emissions, whose impacts are not isolated to a single locality or region, there is no agreed benchmark or methodology for disaggregating trips to local authority areas for comparison to local carbon budgets.</p> <p>Additionally, the emissions from the Scheme are considered against the national context of continuing economic activity through the comparison of the resulting emissions from construction and operation of the scheme with the UK carbon budgets, which consider sectors across the economy. Were the Scheme to have a material effect (which it does not), it would be because, acting together with the other economic activity factored into a carbon budget, the target budget would be made significantly harder to achieve.</p> <p>Please refer to National Highways' response to Written Question 8.1(d) on the case of R (Transport Action Network Limited) v Secretary of State for Transport and Highways England Company Limited (2021) EWHC 2095 (Admin). National Highways do not consider GHG emissions from the Scheme alone, or on a cumulative basis, will have a significant effect on the UK's ability to comply with its carbon budgets. Based on these conclusions, the consideration of cumulative impacts across the RIS is therefore a matter for the UK Government.</p> <p>As a result, the increase in GHG emissions associated with the Scheme is not a reason to refuse development consent. The increase would have no material impact on the ability of the UK Government to meet its carbon reduction targets and so the proposed development does not give rise to any conflict with paragraph 5.18 of the NN NPS.</p>
8.5.	Applicant	The Proposed Development in isolation	<p>ES Chapter 14 [REP1-019] concludes that it is unlikely the Proposed Development would in isolation result in significant effects on climate.</p> <p>Please could the Applicant comment on the accuracy of the following matters that are being considered by the ExA and their relevance to the Proposed Development:</p> <ol style="list-style-type: none"> <li>a) whether achieving net zero by 2050 requires reductions to be made to carbon emissions from sources in isolation that are by themselves negligible or <i>de minimis</i>; and</li> <li>b) whether a wide application of the methodology would lead to a conclusion that most carbon emissions in the UK are not significant and if that would lead to a conclusion that the methodology is flawed?</li> </ol>	<ol style="list-style-type: none"> <li>a) DMRB LA 114 states that '<i>projects shall seek to minimise GHG emissions in all cases to contribute to the UK's target for net reduction in carbon emissions</i>'. For this reason, the implementation of PAS 2080 has been embedded into the project team's way of working to embed the carbon reduction hierarchy (see response to 8.10(a) below).</li> <li>b) In relation to RIS 2, in the case of R (Transport Action Network Limited) v Secretary of State for Transport and Highways England Company Limited (2021) EWHC 2095 (Admin), the High Court concluded that the total amount of carbon emissions from the schemes listed in RIS2 programme is <i>de minimis</i> in the context of appropriate comparators for assessing the effect on climate change objectives. Since that is the conclusion reached in relation to all schemes within RIS 2, National Highways considers that the methodology is not flawed, and the Scheme can be seen as a small part of an overall programme which is <i>de minimis</i> in terms of its impact upon carbon reduction commitments.</li> </ol>

No	Question to	Reference	Question	National Highways' response
<b>8.</b>	<b>Climate change</b>			
8.6.	Applicant	Construction materials	<p>The ExA would like to understand the Applicant's commitment to reducing carbon emissions from construction materials, transport and construction processes and the priority given this compared with financial cost.</p> <p>Table 14.8 of ES Chapter 14 [REP1-019] sets out the quantities of materials used for the assessment of carbon emissions.</p> <p>a) Is that assessment based on the use of conventional materials and construction methods?</p> <p>b) Can any examples be provided of the innovative or unusual use of lower carbon materials or construction methods that are included in the Proposed Development?</p> <p>c) Have any of those examples been at a financial cost?</p> <p>d) Is there any evidence that proportionately small increases in financial cost could result in proportionately higher reductions in carbon emissions?</p> <p>e) Can any example be given of climate change policy, or any internal National Highways guidance, that leads to a requirement for carbon emissions to be reduced when this would be at a financial cost?</p>	<p>a) The assessment was based on estimated construction data from the available design information based on the proposals at preliminary design stage. Construction process has been estimated based on previous project data for a similar scope of work and therefore could only be based on conventional materials and methods, as data on alternative low carbon methods are not currently available. The PAS 2080 process will be used to identify opportunities for carbon savings at Detailed Design stage, e.g. design and construction options for the Mottram Underpass will include consideration of carbon performance, and it is the intent that the lowest carbon solution will be progressed as the preferred choice for detailed design. Other design solutions include a heather central reservation, which is being considered over a hard central reserve.</p> <p>b) Point a) directly above highlights two of multiple options, where innovative materials/ engineering/ construction techniques are being considered. Additional to these, use of electric construction equipment is also being considered by the Principal Contractor, including direct liaison with plant suppliers. However, it is highly unlikely such equipment will be available within the timescales for the scheme due to manufacturing limitations. By the start of works, where feasible/ available, the Principal Contractor is committed to solar power on site to generate electricity for office units, battery powered tools, etc, i.e. using a hybrid system using Econet, providing a 91% CO<sub>2</sub> reduction for power consumption for the offices equating to 1614 tCO<sub>2</sub> saving.</p> <p>c) The financial cost of the examples within a) and b) will be quantified during the Detailed Design stage as the requirements for these measures are set at the pre-construction stage. Through the implementation of PAS 2080, carbon emissions will be consistently and transparently quantified at key points during the process to evaluate the use of low emission carbon products and methods against more traditional higher emissions methods. This will demonstrate the reduction in carbon per every additional £ spent so that carbon emissions become a material factor in National Highway's decision-making process. In many cases, costs and carbon will reduce in parallel. However, in some cases small cost increases for lower carbon solutions to occur.</p> <p>d) In addition, National Highways' Principal Contractor has a contractual requirement to report on cost and carbon performance to National Highways, which includes reporting on carbon emissions. As stated in section 14.12.1 of Chapter 14 of the ES (REP1-019), this will be via National Highways' Carbon Tool, which will be populated on a quarterly return basis through the construction process and during maintenance activities through the life of the Scheme, as part of National Highways' existing reporting processes. This reporting is part of the Collaborative Performance Framework (CPF) which scores the contractor on 'tonnes of carbon per £m. The CPF is used to measure contractor performance and has commercial implications if the performance is poor. Overall, to date lower carbon solutions within highways scheme do not have increased costs, as the solutions are generated by efficiency savings, consequently carbon and cost both reduce. A key example of increased cost and reduced carbon is Cemfree concrete; the cost of the concrete increased by approximately £1-2/m<sup>3</sup> compared to conventional materials, but reduce CO<sub>2</sub> emissions by approximately 70% in the engineering elements where it could be applied.,</p>

No	Question to	Reference	Question	National Highways' response
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				<p>e) Cost and carbon reductions have been widely shown to be comparatively closely linked, i.e. the carbon reduction hierarchy specifies 'build nothing' and 'build less' as the two primary carbon reduction mechanisms. These have been extensively achieved across many projects, with the resultant cost reduction. Secondary to build nothing and build less are 'build clever' and 'build efficiently'. These relate to clever use of technology, and alternative materials. These are emerging areas for which there is not extensive best practice, primarily because lower carbon materials and technology relevant to road schemes is only just maturing, or are in development, e.g. warm asphalt and low carbon concrete. However, where prices are not excessive, significant reductions can potentially be achieved, due to the extensive use of relevant materials, i.e. recycled sub-base, warm asphalt, lower carbon concrete through alternative ingredients, and lower carbon steel from energy efficient production.</p> <p>In relation to the Net Zero Highways Plan, the Scheme is on track to be aligned with the net zero construction and maintenance targets for 2040. As the Principal Contractor has committed to adhering to the principles of the PAS 2080 for the Scheme for the construction phase, it is ahead of the commitment for Tier 1 and Tier 2 suppliers have certified carbon management systems by 2025 (please note, although the Scheme will not be PAS 2080 certified, it is an important pilot scheme for implementing the system).</p>
8.7.	Applicant	Whether the carbon footprint is unnecessarily high.  "High"	<p>Paragraph 5.19 of the National Policy Statement for National Networks requires evidence of mitigation measures that are effective in ensuring that, "... <i>in relation to design and construction, the carbon footprint is not unnecessarily high.</i>"</p> <p>In relation to carbon emissions from construction materials, transport and construction processes:</p> <ol style="list-style-type: none"> <li>How has the Applicant defined "high"? What is "high" relative to?</li> <li>How is the definition consistent with climate change policy?</li> <li>Does climate change policy bring an expectation for carbon emissions from construction materials, transport, and construction processes to be reduced? If not, why not?</li> <li>Is it possible to conclude that the carbon footprint is not unnecessarily high if "high" is not defined and if that definition is not consistent with climate change policy?</li> </ol>	<p>Where, in this context "high" is referred to in the National Policy Statement for National Networks, no further definition is provided and there is currently no recognised guidance to evaluate whether an NSIP's carbon footprint is 'high' relative to a carbon budget. However, to provide information with regard to the questions, the following responses have been prepared.</p> <ol style="list-style-type: none"> <li>The Applicant has not referred to 'high', rather the Scheme has been quantified and assessed according to government carbon budgets (which cover the whole UK economy), as required by the National Policy Statement for National Networks. On this basis, the UK carbon budget is taken as the maximum, and in this case 'high' would be taken as a proportion of the carbon budgets. Also, in this context impacts are considered for their potential to disrupt achievement of targets, with smaller emissions far less able to affect the overall strategy for meeting emission targets than large emissions. The scheme is three decimal places below a percentage point and is consequently not considered as 'high'. All road schemes are invariably built to specified standards due to the need for safety, durability, consistency, and cost control and certainty. As such there is virtually no major variation in design and therefore carbon performance between schemes. This is except where there is the need to accommodate topographical features, that would require earth and rock clearance, flood protection, tunnelling, or structures to span level changes. Given these points, the circumstances where a scheme would be considered to have "necessary" high carbon emissions would be where a scheme covers a particularly large distance, and/ or where there is a significantly large topographical feature to cut or tunnel through, where there is a significantly large topographical feature to span, or where extensive flood protection bunds are required.</li> </ol>



No	Question to	Reference	Question	National Highways' response
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				<p>b) The definition of “not unnecessarily high” is considered to be weakly connected to climate change policy. This is because climate change policy focuses on reduction targets, i.e. a specific level of reduction that is to be achieved, regardless of scale. Whereas “not unnecessarily high” focuses on not exceeding a ceiling level, albeit unquantified. Both ultimately set a limit. However, the focus of climate change policy is on reduction, whereas “not unnecessarily high” implicitly focuses on not exceeding an upper limit. It could be argued that these are the same thing, so the definition, whilst not clearly consistent with climate change policy has some alignment with it. Furthermore, as stated in the response to Written Question 8.3a, carbon budgets cover the whole economy and allow for the balancing of emissions in one sector with those of another sector. In this context impacts are considered for their potential to disrupt achievement of targets, with smaller emissions far less able to affect the overall strategy for meeting emission targets than large emissions.</p> <p>c) Climate change policy does bring an expectation for carbon emissions from construction materials, transport, and construction processes to be reduced. Generically, this is because carbon reduction applies to all asset phases. Specifically, this is because the National Policy Statement for National Networks states that ‘road projects applicants should provide evidence of the carbon impact of the project’, and ‘appropriate mitigation measures (incorporating engineering plans on configuration and layout, and use of materials) in both design and construction should be presented’; combined, these statements are taken to directly infer that carbon emissions from construction materials, transport, and construction processes to be reduced. As outlined in the response to query 8.6 a), the scheme has reduced the impact of emissions.</p> <p>d) It is considered possible to conclude that the carbon footprint is not unnecessarily high, if “high” is not defined and the definition is not consistent with climate change policy. This is because engineering judgement (as described in response ‘a’) directly above) can be used as a very effective proxy measure.</p>
8.8.	Applicant	Whether the carbon footprint is unnecessarily high.  “Unnecessarily”	<p>a) In what circumstances does the Applicant consider that it would be “necessary” for carbon emissions from construction materials, transport and construction processes to be “high”?</p> <p>b) In the context of climate change policy and any changes in acceptable emission levels, how should the threshold of “necessary” be defined?</p> <p>c) Should there be a process for it to be demonstrated during detailed design that any design solution resulting in “high” carbon emissions from construction materials, transport and construction processes is “necessary”?</p> <p>d) Similarly, in relation to any decisions about how the Proposed Development would be constructed?</p> <p>e) Can the processes be set out?</p>	<p>a) All road schemes are invariably built to specified standards due to the need for safety, durability, consistency, and cost control and certainty. As such there is virtually no major variation in design and therefore carbon performance between schemes. This is except where there is the need to accommodate topographical features, that would require earth and rock clearance, flood protection, tunnelling, or structures to span level changes. Given these points, the circumstances where a scheme would be considered to have “necessary” high carbon emissions would be where a scheme covers a particularly large distance, and/ or where there is a significantly large topographical feature to cut or tunnel through, where there is a significantly large topographical feature to span, or where extensive flood protection bunds are required.</p> <p>b) It is not the purpose or responsibility of an individual scheme to define emissions thresholds. However, to provide information in response to the question, in the context of infrastructure construction (as per the scope of this question), the threshold of “necessary” would have to firstly be defined in engineering terms rather than carbon, i.e. the cause of any high emissions. In this case, “necessary emissions” would be</p>



No	Question to	Reference	Question	National Highways' response
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			f) Is it possible to conclude that the carbon footprint is not unnecessarily high if the processes are not secured?	<p>defined as: an essential construction activity or structure, where the viability of all other engineering solutions, which would have lower carbon have been exhausted.</p> <p>c) As per response 'b)' immediately above, it is not the purpose or responsibility of an individual scheme to define processes. However, to provide information in response to the question, a process already exists for demonstrating where a design solution could result in "high" carbon emissions. Such a process is known as an options carbon assessment, in which the carbon performance of different engineering and construction solutions are qualified or quantified and assessed (covering materials, transportation, construction processes and life span) to determine the best option. Necessity is also already defined through scheme need and engineering justification. For the A57, extensive options assessments have already been completed, e.g. for the Mottram underpass, including consideration of carbon performance, and a lower carbon solution is being selected.</p> <p>d) Construction is already considered in the response to point c).</p> <p>e) Again, it is not the purpose or responsibility of an individual scheme to define processes. However, to provide information in response to the question, the processes of engineering options development and carbon assessment can be set out, and have been for this Scheme. They are specified in the Scheme management plans, including: Scheme Delivery Plan; Design Management Plan; and the Carbon Management Plan.</p> <p>f) Again, it is not the purpose or responsibility of an individual scheme to define processes. However, to provide information in response to the question, like any subject, in order for consistent conclusions to be drawn a predefined process is required. Notwithstanding this, based on a judgement of engineering necessity (as discussed in point 'b)' above, it could be concluded whether construction emissions are/ are not unnecessarily high without a secured process. For example, the construction of the Channel Tunnel would have had very high carbon emissions for a rail scheme, but they were not unnecessarily high, as the tunnel was the only feasible option.</p>
8.9.	Applicant	Whether the carbon footprint is unnecessarily high. Benchmarking	<p>a) Should benchmarking of the carbon footprint be a necessary element of demonstrating that the carbon footprint of the Proposed Development is not necessarily high?</p> <p>b) If each project is unique, how could it be ensured that any benchmarking compares like with like?</p> <p>c) Or would it be necessary to benchmark parts of the Proposed Development against parts other projects where a comparison could be made of like with like?</p> <p>d) What allowance should be made for climate change policy and any changes in acceptable emission levels when comparing projects, or parts of projects, constructed at different times?</p>	<p>a), b), and c) As discussed in the response to question 8.7, how 'high' a carbon footprint is dependent on the engineering demands of the location concerned, as the core highways engineering is largely dictated by standards. As such there is no necessity for benchmarking to demonstrate that a carbon footprint is not necessarily high. However, the carbon performance of a scheme may require additional engineering for a shorter route to minimise vehicle emissions. It is therefore most important to consider whole life emissions and demonstrate that the overall scheme carbon balance is a low as possible. It should be noted that LA 114 - Design Manual for Roads and Bridges – Climate, section 3.21 does require that benchmarking of project performance against other highways projects in undertaken, although this is not required to demonstrate that a scheme would have an unnecessarily high carbon footprint.</p> <p>There is currently not enough high-quality data available to confirm whether benchmarking across schemes would be representative. However, to determine if this is or is not the case all projects should be clearly modelled (as required by LA114) to an agreed structure</p>

No	Question to	Reference	Question	National Highways' response
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				<p>that enables a benchmarking approach to be developed, including how to compare standard and scheme specific elements.</p> <p>Chapter 14: Climate of the ES (REP1-019) has provided benchmarking against published data from other highways schemes, to help demonstrate that the carbon footprint of the Scheme is not unnecessarily high. This assumes that emissions from the operation and maintenance of similar highways is broadly consistent across the UK road network. This is necessary because no project-specific data is available for operational energy use, or maintenance and refurbishment during the Scheme's operational life, so Scheme specific emissions cannot be calculated.</p> <p>The published data used for three other highways schemes to benchmark operational energy use, maintenance and refurbishment during the Scheme's operational life are of a similar scale to this Scheme and are therefore considered to be appropriate highway schemes to compare against. However, it is acknowledged that operational emissions are variable, driven largely by regional differences, therefore a reasonable worst-case operation and maintenance figure was selected, based on the limited data set.</p> <p>d) The comparison of parts of, or whole projects constructed at different times will be based on absolute emissions data, and should reflect the climate change policy of the time at which they were designed and constructed. It is therefore not considered necessary to make any allowances for climate change policy and any changes in acceptable emissions levels, rather the policy and emissions levels should simply be reflected in the models concerned.</p>
8.10.	Applicant	Mitigation measures PAS 2080: 2016	<p>Item C1.8 of the REAC [REP1-037] states that The Principal Contractor has committed to adhering to the principles of PAS 2080:2016 – Carbon Management in Infrastructure Verification technical standard.</p> <p>In relation to carbon emissions from construction materials, transport and construction processes:</p> <p>a) Please could a detailed description be provided of PAS 2080:16 including what it is intended to achieve and how, and which parties any measures apply to?</p> <p>b) To what extent does the Applicant commit to comply with PAS 2080:2016? Is the use of the terms “<i>Verification technical standard</i>” and “<i>adhering to the principles</i>” intended to qualify the extent that it will be complied with? Are there any parts of PAS 2080: 2016 that the Applicant is not committing to comply with?</p> <p>c) To what extent does PAS 2080:2016 require the engagement of the different parties involved in the design and construction process? Should mitigation measures in</p>	<p>a) PAS 2080:2016 is a technical standard setting out the carbon management requirements for all stakeholders in a value chain, defined as: asset owner/ manager, designer, constructor, and product/ materials supplier. The carbon management requirements are presented in 9 sections covering:</p> <ul style="list-style-type: none"> <li>• General Principles</li> <li>• Leadership and Governance.</li> <li>• Carbon Management.</li> <li>• Quantification.</li> <li>• Target setting, baselines and monitoring</li> <li>• Reporting</li> <li>• Continual improvement</li> <li>• Assessment of carbon reduction</li> <li>• Claims of conformity</li> </ul> <p>The technical details of the standard are extensive and to provide a detailed description would be excessive in this context. The key premise of PAS 2080 is that it requires a full value chain to pro-actively participate in identifying and delivering carbon reduction</p>

No	Question to	Reference	Question	National Highways' response
8.	Climate change		<p>relation to PAS 2080:2016 be required for parties in addition to The Principal Contractor?</p> <p>d) Should any PAS 2080:2016 measures be secured for the undertaker?</p>	<p>solutions, driven by a strategy defined and communicated by the asset owner/ manager. This must be done by implementing the carbon reduction hierarchy (covering build nothing, build less, build clever and build efficiently) using a carbon management plan, that follow the requirements of the standard. Further, the carbon performance of a project must be quantified and reported to assist in driving carbon reduction and demonstrating the achievement made. There are an extensive range of measures that apply to each of the parties listed above, again, which are too excessive to detail here. However, the key elements are that all parties are required to implement the carbon reduction hierarchy and support the quantification, which is largely carried out by the designers and constructor, to progress toward designing and constructing lower carbon infrastructure.</p> <p>b) PAS 2080 does not set any specific performance or mandatory compliance requirements, instead it requires that performance is understood through quantification, that it is reduced through application of the carbon reduction hierarchy, and that it is managed via a carbon management plan. Given this, a project could have a fully certified PAS 2080 carbon management plan but achieve less in reduction terms than a project that only follows the principles of PAS 2080. Use of the terms "<i>Verification technical standard</i>" and "<i>adhering to the principles</i>" is not intended to qualify the extent that PAS 2080 will be complied with. The applicant is complying with the technical standard, but only at a project level. Consequently, the strategic elements of the standard will not be fulfilled, e.g. setting an organisational policy and strategy for carbon management. However, this has no bearing on the extent of carbon reductions that are being achieved, as discussed in the response to question 8.11 below. Self-compliance is currently planned to be used to determine the effectiveness of implementation, as allowed for by PAS 2080.</p> <p>c) PAS 2080 requires that all parties in a value chain participate in the design and construction processes for carbon reduction and management of an asset. However, there are no detailed requirements for this, and all involvement would be at the discretion, and according to the carbon management strategies and plans, of the specific asset owner/ manager, designer, or contractor.</p> <p>d) PAS 2080 does not exclusively specify that mitigation measures are defined by the principal contractor. Rather, the key principle of PAS 2080 is that all parties contribute to development of lower carbon solutions, which translate as mitigation measures. However, in implementing PAS 2080 the project team will ensure that carbon emissions are mitigated by all parties in a value chain by fully embedding the carbon reduction hierarchy as well as the mitigation hierarchy set out in DMRB LA 114 - Avoid / Prevent, Reduce, Remediate - into their way of working.</p> <p>e) As confirmed in paragraph 2.2.9 of ES Chapter 2: The Scheme (REP1-014), supporting reductions in carbon emissions by adhering to the principles of PAS 2080 is a target that has been set for the Scheme by the appointed Principal Designer and Contractor. It is the Applicant's opinion that appropriate measures to secure PAS 2080 cannot be specifically secured for the undertaker, as the 'Net Zero Highways Plan', as the Plan sets out aspirational greenhouse gas reduction targets, which do not themselves have</p>

No	Question to	Reference	Question	National Highways' response
8.	Climate change			
8.11.	Applicant Local authorities Environment Agency	Mitigation measures PAS 2080: 2016	<p>Item C1.8 of the REAC [REP1-037] states that:  <i>"A comprehensive Carbon Management Plan would be implemented from the Detailed Design stage and through construction. This would follow a data collection and analysis methodology which adheres to the requirements of the PAS 2080. This would assess carbon use for the whole lifecycle of the project and promote embodied carbon management and commit to achieving carbon reductions."</i></p> <p>The ExA wishes to ensure that the mitigation measures are enforceable and precise and will result in mitigation being delivered.</p> <p>a) Please could more detail be provided on the Carbon Management Plan and how it would be enforced?  b) How can the precision be improved to clarify that carbon emissions would be reduced?  c) To be precise, should the reduction be quantified?  d) How will the mitigation ensure that the carbon footprint is not unnecessarily high?  e) Who should be consulted with, how should it be approved, and what monitoring measures are appropriate?</p> <p>Please could the local authorities and the Environment Agency comment?</p>	<p>legal force. However, it is a commitment within the REAC (REP1-037) which would be secured by Requirement 4(c) of the draft DCO (REP1-041).</p> <p>a) The Scheme carbon management plan has been specified to fully integrate carbon reduction, quantification and management into the design process. The key principles are that:  - the carbon reduction hierarchy is considered as a central part of both Method Led Construction, and detail design and construction planning processes  - the carbon performance of all options is assessed using a tiered approach according to the engineering complexity and the size of the carbon reduction potential  - the carbon performance of all options is considered during weekly review meetings, and performance decision making is undertaken according to the scheme carbon reduction objectives, which is to reduce the scheme carbon emissions as much as possible.</p> <p>The plan also specifies roles and responsibilities integrated with core project roles to ensure that the carbon management is correctly carried out, and training is provided to ensure that the project team has the skills necessary effectively implement the plan. A carbon model of the base design has been produced from which to identify carbon hotspots and an output model will be produced to demonstrate all the emissions reductions that have been achieved and report the final performance of the scheme. Enforcement of the carbon management plan is not a specific necessity. Rather, commitments have been made for the Scheme, and it is therefore the responsibility of the project team to implement the carbon management plan. The only real enforcement is that the Principal Contractor explicitly requests that a carbon management plan is developed and implemented, which has been done.</p> <p>b) Improvement in the precision of the carbon reductions is achieved by using more accurate project data, and the most relevant carbon conversion factors. For the A57 it is planned the engineering data will be obtained directly from the BIM model, and detailed construction plant plans will be generated defining fuel consumption for the construction activities, etc, for all the relevant life cycle stages. For the carbon conversion factors, supplier specific data will be obtained, where it is available. All carbon modelling is being carried out using the Atkins Carbon Knowledgebase tool, which allows the use of such data and carbon factors.</p> <p>c) It is entirely necessary to quantify carbon reductions to be precise about the reductions that have been achieved. However, it is important to recognise that this is not necessary at all project stages. For example, during design where a structure has been designed out, or designed with reduced dimensions is entirely unnecessary to quantify this to know that a reduction has been achieved, i.e. building nothing or less will mean less carbon emissions. However, at the end of design or construction a carbon model must be produced for the baseline options and final designs to enable the emissions reductions to be correctly quantified.</p> <p>d) See explanation in the response to question 8.7.</p>



No	Question to	Reference	Question	National Highways' response
<b>8.</b>	<b>Climate change</b>			
				<p>e) It is the Principal Contractor's technical role to ensure that the carbon management, low carbon design solutions, and carbon performance of the scheme meets with National Highways requirements. See the response to 8.10(a), which explains how all stakeholders in a value chain should be consulted. The A57 is a unique project for the level of asset owner integration with the carbon management and design process. They are therefore as embedded as possible in the scheme development, and this provides all necessary policing and approval.</p> <p>Highway engineering is a highly specialised industry in which the foremost engineering and construction expertise, including low carbon solutions, is contained within National Highways and their design, construction and materials supply chain. As such, it is not considered relevant for local authorities and the Environment Agency to be a specific consultee regarding carbon performance.</p>
8.12.	Applicant	Construction vehicles and plant emissions	Please could the Applicant confirm whether the modelling of climate effects from construction vehicle and plant emissions as presented in ES Chapter 14 [REP1-019] have assumed the use of electric and hybrid vehicles and plant, and if so what number or proportion would be required to be electric or hybrid to restrict emissions to the levels identified in Table 14.13 of ES Chapter 14 [REP1-019]? Should mitigation measures be secured for the use of electric and hybrid vehicles and plant?	<p>The modelling of climate effects from construction vehicle and plant emissions did not assume the use of electric and hybrid vehicles and plant, and therefore they represent a conservative assessment of emissions. Construction plant with electric engines are new to the UK market and at the time of preparing the ES the availability was considered to be low. However, it is anticipated that by the start of works they will be more common, as supply and demand increases. The Principal Contractor is therefore pursuing the availability of this type of plant to the fullest extent possible for the Scheme. The Principal Contractor has already made enquiries around an electric powered piling rig and crane for the Mottram Underpass. The REAC (REP1-037) has commitments (NV2.4 and C2.2) to use electric and hybrid vehicles and construction plant where feasible, and EV charging points will be provided at the compound area to support this. Securing measures to use electric and hybrid vehicles and plant would need to reflect availability within the market at the time.</p>
<b>Operational Phase</b>				
8.13.	Applicant	Future changes in vehicle emissions	What future changes in vehicle emissions are anticipated and what are the implications for the assessment? Can this be quantified?	<p>The assessment of operational road traffic related carbon emissions presented in the ES Chapter 14: Climate (REP1-019) is based on National Highways speed band emission rates which use the Defra Emissions Factors Toolkit (EFT v10.1). These emission rates were published in August 2020 and were the latest available at the time the emissions modelling was undertaken and included assumptions about future fleet mixes assumed at that time. EFT v10.1 included emission factors up to and including 2030.</p> <p>Future year assumptions on the vehicle fleet within Defra EFT v10.1 predate the announcement by the Government to end the sale of new petrol and diesel petrol and diesel vehicles by 2030, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035. They also do not take account of the Transport Decarbonisation Plan (TDP) published in July 2021, which will lead to a substantive decrease in carbon emissions from road transport between now and 2050. The assessment of operational road traffic related carbon emissions presented in the ES Chapter 14: Climate (REP1-019) is therefore conservative.</p>



No	Question to	Reference	Question	National Highways' response
8.	Climate change			
				<p>Government policy would likely have a positive effect on customer purchasing choices if properly supported by electric charging point infrastructure, which could reduce the operational greenhouse gas emissions. Conversely, it could result in motorists delaying the purchase of a new vehicle and continue to drive an older petrol/diesel/hybrid vehicle. However, these changes in absolute emissions would occur with or without the Scheme and it is important to note that the ES reports the change in emissions due to the Scheme. Also, as emission rates included in EFT v10.1 were for the period to 2030 an assumption of no change in emission factors beyond 2030 was made. The assessment of design year (2040) emissions is therefore particularly conservative given the average emissions of the fleet are likely to change substantially beyond 2030.</p> <p>Defra published an updated Emissions Factors Toolkit in November 2021 (v11), which extended emission factors for carbon to 2050. However, this update has not reflected the changes to fleet emissions for the accelerated move to zero emissions, nor has it reflected fleet growth assumptions for post Covid-19. National Highways' speed band emission rates have yet to be updated to reflect Defra Emissions Factors Toolkit v11. Further analysis to fully understand the impact of the changing vehicle fleet after 2030 would require more time and could not be achieved within the timescale for responses to the Examining Authority's first written questions.</p>
8.14.	Applicant Local authorities Environment Agency	Mitigation	<p>Paragraph 14.13.1 of ES Chapter 14 [REP1-019] states that "...mitigation measures have been embedded into the Scheme design (Section 14.9) to reduce emissions as far as possible."</p> <p>Have appropriate carbon-reduction measures been secured for the operational phase, including but not limited to:</p> <ul style="list-style-type: none"> <li>• reducing traffic;</li> <li>• increasing the use of other transport modes;</li> <li>• behavioural change;</li> <li>• the use of energy, including for lighting;</li> <li>• the use of trees or other plants in the soft landscaping to absorb carbon dioxide;</li> <li>• carbon offsetting;</li> <li>• any other measures.</li> </ul>	<p>The carbon reduction measures identified to limit carbon emissions during operation were considered appropriate at the time of the assessment as the Scheme was at the Preliminary Design stage.</p> <p>The following Operation phase measures, which are secured via Requirement 4 of the dDCO (REP1-041), via the REAC (REP1-037) are considered appropriate.</p> <p>Reducing traffic</p> <ul style="list-style-type: none"> <li>• The addition of signals and land widening within the circulatory carriageway will reduce congestion. This allows vehicle engines to operate more efficiently and reduces emissions.</li> </ul> <p>Increasing the use of other transport modes</p> <ul style="list-style-type: none"> <li>• The Scheme will provide new and improved facilities for pedestrians, cyclists and horse riders throughout the route, including: <ul style="list-style-type: none"> <li>➢ Improved pedestrian and cyclist crossing facilities at the M67 junction 4, and all new junctions created by the scheme</li> <li>➢ Crossing at the Mottram Moor junction will now be quicker and easier with the new crossroads design. We're also adding more cycling and pedestrian crossings</li> <li>➢ Replacement connections for the existing footpaths severed by the scheme</li> </ul> </li> </ul>

No	Question to	Reference	Question	National Highways' response
8.	Climate change			<ul style="list-style-type: none"> <li>➤ A combined footway and cycleway along the new A57 Link Road between Mottram Moor and Woolley Bridge, creating a route to link Mottram to the Trans-Pennine Trail (National Cycle Network route 62)</li> <li>➤ The Applicant is continuing to work with Local Authorities to improve connections on the existing A57 route</li> </ul> <ul style="list-style-type: none"> <li>• The Scheme is also expected to help public transport to be more reliable where it currently gets delayed, making its use a more attractive option to the public</li> <li>• The main pathway element recommended by the Committee on Climate Change (CCC) for transport and transport infrastructure is electrification of the national fleet. This will require a fit-for-purpose road network with adequate capacity. The CCC's 'core' and 'further ambition' scenarios both include an element of modal shift to non-road transport. However, road transport remains the central focus of policy and will continue to require appropriate infrastructure.</li> </ul> <p>Behavioural change</p> <ul style="list-style-type: none"> <li>• Behavioural changes are anticipated due to improved social cohesion as the Scheme makes considerable provisions for walkers, cyclists and horse riders. During operation the Scheme would reduce community severance through the separation of local and regional traffic resulting in large reductions of traffic on the existing A57. This presents the opportunity to make this stretch of road much more friendly to cyclists and pedestrians (across all groups) through improved facilities and crossings, public realm improvements and reduction in speed. Traffic congestion issues will be alleviated with significant reductions in traffic predicted at Mottram Moor (between Back Moor and Stalybridge Road, Hyde Road and Woolley Lane), therefore providing a safer and more pedestrian friendly environment in the village.</li> </ul> <p>The use of energy, including for lighting</p> <ul style="list-style-type: none"> <li>• During design development the extent of proposed lighting has been reduced following consultation with the relevant local authorities. This would reduce emissions from electricity generation</li> <li>• The Carbon Tool will be updated by the Area Management Team and shared with National Highways during maintenance works in the operation phase. This will be included as a specific requirement in the EMP.</li> </ul> <p>The use of trees or other plants in the soft landscaping to absorb carbon dioxide</p> <ul style="list-style-type: none"> <li>• The sizes of planted areas within the DCO boundary have been increased, which will lead to increased removal and sequestration of greenhouse gases (GHGs) from the atmosphere. However, it is not considered that this element will have a significant impact on overall Scheme emissions and has not been quantified in this assessment</li> <li>• The DMRB LA114 states that '<i>A proportionate approach shall be applied to calculating and reporting GHG emissions from changes in land use and forestry (i.e. reporting only where there is likely to be a substantial change).</i>' Depending on the type of vegetation and landscaping around the Scheme, the land itself may emit or</li> </ul>

No	Question to	Reference	Question	National Highways' response
<b>8.</b>	<b>Climate change</b>			
				<p>sequester greenhouse gases. The sizes of planted areas within the DCO boundary have been increased, which will lead to increased removal and sequestration of GHGs from the atmosphere. However, it is not considered that this element will have a significant impact on overall Scheme emissions and has not been quantified in this assessment. Professional judgment was used over quantification in Chapter 14: Climate insofar as it relates to land use change. The DMRB guidance in LA 114 prescribes that a proportionate approach should be taken to this area of the assessment, and our professional judgment was taken according to this proportionate approach. It should be noted as stated in the ES, Chapter 8: Biodiversity (TR010034/APP/6.3(2)), the existing land use is largely improved grassland, with limited inherent carbon stocks and limited sequestration potential; the Scheme will focus on maximising biodiversity delivery, targeting a net increase of 5.35ha of lowland mixed deciduous woodland which would provide an increased rate of sequestration against the existing baseline of improved grassland.</p> <p>Carbon offsetting</p> <ul style="list-style-type: none"> <li>No specific measures to further reduce carbon through on or off-site offsetting have currently been identified for the Scheme</li> </ul> <p>Other measures</p> <ul style="list-style-type: none"> <li>As the Scheme progresses through detailed design stage, the PAS 2080 process will be used to identify further opportunities for carbon savings. These will be implemented via future iterations of the Environmental Management Plan.</li> </ul>
<b>Adaptation and Resilience</b>				
8.15.	Applicant	Climate change and adaptation updates	With reference to s10(3) of the PA2008 and paragraphs 4.38 to 4.47 of the National Policy Statement for National Networks, does the Applicant consider that any updates are required with respect to climate change and adaptation?	<p>No changes required. In the Vulnerability of the Scheme to climate change assessment in Chapter 14 of the ES (REP1-019), the following is explained:</p> <ul style="list-style-type: none"> <li>The Scheme is planned to avoid increased vulnerability to the range of impacts arising from climate change.</li> <li>impacts of climate change have been considered when planning location, design, build and operation</li> <li>The latest climate projection data is used in the assessment</li> <li>The design includes embedded adaptation</li> </ul> <p>The design seeks to contribute to the achievement of sustainable development</p>
8.16.	Local authorities Environment Agency	Outstanding concerns	Do the local authorities or the Environment Agency have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring, or compliance with policy with respect to climate change?	No response required from National Highways.

## 10. Noise and vibration

No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
	<b>Study area, baseline conditions and overall assessment methodology</b>			
9.1.	Applicant Local authorities	Noise Important Areas ES Chapter 11 [REP1-017] Paragraph 5.200 of the NN NPS	What existing noise issues associated with Noise Important Areas have been identified and has the Proposed Development taken opportunities to address them?	No specific existing noise issues were identified at any of the noise important areas within the Scheme study area.  As Stated in the Environmental Statement Chapter 11 Noise and Vibration (REP1-017), 228 properties within NIAs are predicted to experience significant decreases in noise.
9.2.	Applicant	Footpaths	<p>a) Please summarise the consideration given to noise effects and changes in acoustic character on footpaths, including those in the vicinity of the new carriageway.</p> <p>b) How are changes to the landscape or setting of those footpaths considered to influence the perception of noise level changes at those locations?</p>	<p>a) During the construction phase, changes to noise levels and the acoustic character may occur at footpath sections close to the Scheme, such as Public Rights of Way (PRoWs) 50, 51, 52, 87, 88, 90 and 108 as shown in Figure 12.1 (APP-147). The change to noise levels and acoustic character would vary throughout the construction phase, depending on the activities undertaken near footpaths and the distance from those works, with construction noise being more distinctive closer to the works. Table 11.21 in ES Chapter 11 Noise and Vibration (REP1-017) can be used to determine how noise levels from construction would vary along different sections of footpath. As footpaths are transitory spaces, no significant effects would occur to footpath users as the exposure to construction noise would be brief and temporary. No significant effects or changes to the acoustic character would occur on footpaths located further away from the Scheme, such as the Trans-Pennine Trail and Pennine Way.</p> <p>During operation, a range of noise changes are predicted at PRoWs 50, 51, and 52. These are characterised as being mostly major road noise increases in areas that bisect the new Scheme road. Major road noise decreases are predicted to occur on PRoWs 50 and 51 when these routes are in proximity to the bypassed section of A57.</p> <p>PRoWs 87 and 88 are predicted to experience major increases where they bisect the new Scheme road, and negligible to minor decreases in road noise as the routes progress away from the new Scheme road towards the bypassed section of A57.</p> <p>PRoW 90 is predicted to experience major decreases in road noise in proximity to the bypassed section of A57 Woolley Lane. As one progresses south of Woolley Lane and closer towards the A57 Link Road, this PRoW can be characterised as being subject to major and moderate increases in road noise. North of Woolley Lane, a range of noise changes are predicted to occur on PRoW 90, ranging from major decreases in road noise to minor increases in road noise.</p>

No	Question to	Reference	Question	National Highways' response
9.	Noise and vibration			
				<p>PRoW 108 can be characterised as typically experiencing a minor increase in road noise along its route, with some moderate adverse road noise changes and some negligible decreases in road noise along its route.</p> <p>The acoustic character of some sections of footpaths close to the Scheme would change. For footpaths close to new carriageway, road traffic noise would become more distinctive (such as PRoWs 50, 51 and 52 which intersect the Mottram Moor Link Road west of the Mottram Underpass as shown in Figure 12.1). Noise levels at footpaths close to the existing A57 Hyde Road and Mottram Moor would decrease with the Scheme and the character of the soundscape may change due to reduced congestion and the traffic calming measures proposed in this area.</p> <p>Paragraphs 11.9.90 to 11.9.97 of the ES Chapter 11 Noise and Vibration (REP1-017) describe noise impacts further away from the Scheme. Negligible impacts were predicted for the Trans-Pennine Trail and Pennine Way in proximity to the A628. Minor short-term noise increases were predicted on the A57 (Sheffield Road, Woodcock Road, Snake Pass and Snake Road). Noise changes at sections of footpath close to these roads would be perceptible but no changes to acoustic character would occur.</p> <p>b) The perception of noise level changes for footpath users is linked to changes in the landscape or setting of footpaths which are considered in Chapter 7: Landscape and Visual Effects (TR010034/APP/6.3(2)). The assessment recognises the NN NPS which states that the assessment of visual effects should include noise in relation to local amenity and tranquillity.</p> <p>Cross reference is made to Chapter 11 Noise and Vibration (REP1-017) summarising traffic flow in relation to key long distance walking routes in the PDNP. The effects of noise (in relation to amenity and tranquillity) on specific receptors within the PDNP has been undertaken as part of the indirect effects of the Scheme on the PDNP. Specific viewpoints were agreed with the PDNPA which represented footpaths including the Transpennine Trail and the Pennine Way. This is detailed in Chapter 7 of the ES, Table 7.29 (TR010034/APP/6.3(2)).</p> <p>Appendix 7.1 of the ES (APP-166) details the effect of noise barriers on visual receptors in the study area including those using a wider range of footpaths during both construction and operation.</p> <p>In Chapter 7 of the ES (TR010034/APP/6.3(2)), Table 7.25 Essential Mitigation E.12 includes a commitment that noise barriers shall be screened with local native planting to help reduce visual impact.</p>
9.3.	Applicant	Baseline noise levels Table 11.15 of ES Chapter 11 [REP1-017]	Baseline noise levels at 18 and 54 Wooley Bridge appear to be substantially higher than identified elsewhere. a) Please could the Applicant explain the differences? b) Should noise monitoring be undertaken at those locations?	a) The baseline noise levels reported in Table 11.15 in ES Chapter 11 Noise and Vibration (REP1-017) for 18 and 54 Woolley Bridge were derived from strategic noise mapping issued by Defra. The road traffic noise contours from the strategic noise maps were processed as described in paragraph 11.6.18 of Chapter 11 to provide baseline noise levels for different time periods (daytime, evening, night-time and weekend).



No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
				<p>As shown in Figures 11.1 (APP-130) and 11.2 (APP-131) of the ES, 18 and 54 Woolley Bridge are located within Noise Important Area ID 10993, which recognises that both properties are exposed to high levels of road traffic noise. The building facades that would be most affected by the Scheme during the construction and operation phases would be those overlooking the existing route of the A57, which in this case are also exposed to the highest road traffic noise levels. Therefore higher baseline noise levels can be expected at these two properties.</p> <p>The only other property reported in Table 11.15 that is within a Noise Important Area is 103 Mottram Moor, where baseline data was obtained from continuous noise monitoring. The equipment was sited to represent a quieter façade that would be most affected by the construction works and future operational noise from the Scheme. This has resulted in reporting lower baseline noise levels for 103 Mottram Moor and provides a more conservative assessment of impacts at this location.</p> <p>b) Noise monitoring will be undertaken in the area of 18 and 54 Woolley Bridge that is representative of these properties.</p>
9.4.	Local authorities	Outstanding concerns	<p>Are the local authorities satisfied with the approach with respect to:</p> <ul style="list-style-type: none"> <li>a) the study area;</li> <li>b) the receptors selected for the assessment and whether they are considered representative;</li> <li>c) the baseline noise surveys;</li> <li>d) the definitions of LOAEL and SOAEL;</li> <li>e) the definitions of magnitudes of impact; and</li> <li>f) the criteria used to define significance of impact?</li> </ul> <p>How should any outstanding concerns be addressed?</p>	No response required from National Highways.
<b>Construction phase</b>				
9.5.	Applicant	Construction vehicles ES Chapter 11 <a href="#">[REP1-017]</a>	Please could the Applicant confirm that noise impacts associated with movement of construction vehicles to and from the temporary welfare and storage sites (excluding the main construction compound) has been considered in the noise assessment in the ES?	<p>The movement of construction vehicles to and from the temporary welfare and storage sites (excluding the main construction compound) has not been considered in the noise assessment <i>individually</i>. This is because details of such locations and movements remain unavailable.</p> <p>As per the assessment methodology provided in ES Chapter 11 Noise and Vibration (REP1-017), noise levels were predicted per construction activity at noise sensitive receptors. The noise predictions were based on the permutation of all plant required for a given activity operating in unison at the shortest distance between works and receptor.</p>

No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
				<p>This approach was designed to ensure that only the worst-case noise levels were reported in Section 11.9 of ES Chapter 11 Noise and Vibration (REP1-017).</p> <p>At detailed design stage, consideration will be given to this topic in the Noise and Vibration Management Plan, and the Traffic Management Plan, an Outline version of which has been submitted with the application (REP1-038).</p>
9.6.	Applicant	Noise sources with distinctive characteristics Paragraph 5.189 of the NN NPS	Please summarise the consideration given to any noise sources with distinctive tonal, impulsive, or low frequency characteristics.	<p>Paragraph 5.189 of the NN NPS states “<i>For any associated fixed structures, such as ventilation fans for tunnels, information about the noise sources including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise.</i>”</p> <p>As the Scheme would not introduce any associated fixed structures as described in the NN NPS, identification of distinctive tonal, impulsive or low frequency characteristics of such noise sources was not required.</p>
9.7.	Applicant Local authorities	Section 61 of the Control of Pollution Act 1974 ES Chapter 11 [REP1-017] REAC [REP1-037]	<p>ES Chapter 11 and the REAC refer to the potential for later seeking Section 61 consent for some or all the construction works.</p> <p>a) How can it be ensured that this will not give rise to any materially new or materially worse environmental effects in comparison with those reported in the environmental statement?</p> <p>b) The assessment states that “<i>no night works are anticipated with the exception of traffic management</i>”. Should Section 61 consent be required for any night time works apart from traffic management?</p> <p>Please refer to question 1.34 regarding working hours.</p>	<p>a) An application for Section 61 consent under the Control of Pollution Act 1974 is independent of the environmental impact predicted in ES Chapter 11 Noise and Vibration (REP1-017) and commitments stated in the REAC (REP1-037). However, as part of the Section 61 application process the Principal Contractor will engage with the relevant local authorities and agree appropriate mitigation measures and monitoring requirements to minimise impacts during construction.</p> <p>b) A Section 61 application would encompass all construction activities for the Scheme, including any night-time construction activities. Where any night-time works in addition to those reported in ES Chapter 11 Noise and Vibration (REP1-017) are identified, such as those mentioned in Question 1.34 or additional activities identified during the Detailed Design, a revised construction noise impact assessment would be undertaken to minimise impacts, and this would also be provided in support of the Section 61 application.</p>
9.8.	Applicant	Rotary bored piling ES Chapter 11 [REP1-017]	Please could the Applicant clarify whether vibration effects identified in Table 11.24 of ES Chapter 11 are significant adverse effects, as the information presented at paragraphs 11.9.35 to 11.9.50 suggests that there will be no significant adverse effects.	The values presented in Table 11.24 of ES Chapter 11 Noise and Vibration (REP1-017) are for adverse effects only. No significant adverse effects for construction vibration were predicted.
9.9.	Applicant	Percussive piling ES Chapter 11 [REP1-017] REAC [REP1-037]	<p>The assessment states that rotary bored piling is recommended but that percussive piling may be required due to considerations of a geological fault line in the vicinity of the Mottram Underpass. Percussive piling appears to cause substantially higher levels of noise and vibration compared with rotary bored piling.</p> <p>Please could the Applicant set out:</p>	<p>a) For a conservative assessment, the construction noise assessment assumed that a percussive piling method is used in all locations as shown in Appendix 11.2 of the ES (APP-175). The construction vibration assessment considers the impacts of both methods, which are discussed in paragraphs 11.9.35 to 11.9.37 and 11.9.42 to 11.9.47.</p> <p>b) Where an alternative method to percussive piling is not feasible, noise and vibration impacts could be reduced as follows:</p> <ul style="list-style-type: none"> <li>• Pre-boring to reduce the duration of impulsive sounds and vibration</li> <li>• Enclosing the pile driving system in an acoustic shroud,</li> </ul>

No	Question to	Reference	Question	National Highways' response
9.	Noise and vibration			
			<p>a) whether the noise and vibration assessment assumes the use of percussive piling at all locations where piling is likely to be required;</p> <p>b) any measures that can be used to reduce noise and vibration effects from percussive piling;</p> <p>c) detail of the engineering reasons why percussive piling may be required in the vicinity of the Mottram Underpass;</p> <p>d) whether the piling method can be finalised before the end of the Examination and, if not why not;</p> <p>e) the extent to which percussive piling may be required if rotary bored piling is used to the maximum extent that can be specified with confidence at this stage;</p> <p>f) the differences in effect arising from different types of percussive piling, vibratory and "Giken method" piling; and</p> <p>g) the extent to which restrictions of the types or extent of piling could be secured as mitigation?</p>	<ul style="list-style-type: none"> <li>• Preventing metal-to-metal contact during hammer strikes by introducing a non-metal dolly between the hammer and the driving helmet</li> <li>• Appropriate measures to minimise disturbance from 'other' sources of piling noise, such as the screeching of pulleys or guides, clanking of locking kelly bars and ringing of piles</li> <li>• Consideration of working hours required for piling and the acceptability of these to local residents</li> <li>• Reducing the energy input per hammer strike, which would decrease vibration but increase the duration of the piling</li> </ul> <p>Setting noise and vibration control targets, accompanied by monitoring for compliance</p> <p>Where percussive piling is required, these mitigation measures would be included in the Noise and Vibration Management Plan.</p> <p>c) Supplementary Ground Investigation reporting is currently being prepared to inform the Detailed Design of the Scheme and is supporting the Contractor's preference to use rotary bored piling as stated in the Noise chapter of the ES. This has enabled the design to be sufficiently progressed to provide confidence that the majority of the piles can be installed using a rotary bored method. However, minimal percussive piling may be required at the south west corner of the Mottram Underpass.</p> <p>d) The emerging detailed design is being progressed based on piling works being undertaken using the rotary bored method. As the detailed design is ongoing, it will continue beyond the end of the examination phase of this DCO (May 2022), and it is not possible to finalise the piling method before end of the Examination.</p> <p>e) Where percussive piling is required, the Contractor will use Best Practicable Means to reduce noise and vibration impacts, as stated in the REAC (REP1-037) and the Noise and Vibration Management Plan. The method described (rotary boring to the maximum extent then percussive piling the remainder) is an example of Best Practicable Means that can be used at any percussive piling sites subject to ground conditions and site constraints.</p> <p>f) As stated in paragraph 11.3.20 of ES Chapter 11 Noise and Vibration (REP1-017), the effect of vibration is linked to the impact magnitude (Table 11.5) and the duration of the impact. Information about impacts from percussive piling are provided in Table 11.23 and paragraphs 11.9.45 to 11.9.46 of the Noise chapter of the ES (REP1-017). Vibration from percussive piling would exceed the SOAEL within 110m of the piling sites. If a vibratory piling method is used, the SOAEL would be exceeded within 55m of the piling site. Moderate or major impacts would occur within these distances according to DMRB criteria. As vibration levels of these magnitudes are unlikely to occur at sensitive receptors for the durations stated in paragraph 11.3.20 of the Noise chapter (REP1-017), no significant vibration effects would occur. Pressed-in piling methods, such as the Giken method, are recognised as producing low levels of vibration. A negligible or minor impact magnitude may occur depending on the distance of the sensitive receptor to the piling sites and no significant vibration effects would occur if this method is used for the Scheme.</p>

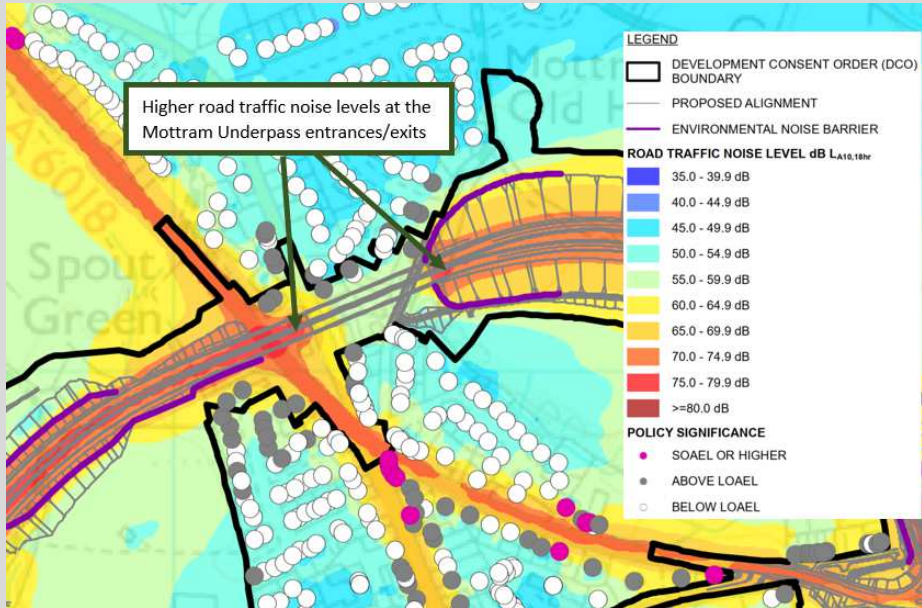
No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
				g) The Noise and Vibration Management Plan will provide details relating to the piling method, including potential locations where percussive piling would be required and how noise and vibration impacts would be mitigated and managed. The requirement to develop, implement and adhere to a Noise and Vibration Management Plan is secured in the REAC (REP1-037) (for example, NV1.1 and NV1.2). An Outline NVMP is being prepared and will be submitted for the Examination at a later deadline.
9.10.	Applicant	Mitigation measures ES Chapter 11 [REP1-017] REAC [REP1-037]	Should it be ensured that mitigation relied on for the assessment is included in the REAC? Examples include, but are not limited to, some of the measures included in ES Chapter 11 paragraphs 11.7.7, 11.8.12-14, 11.8.18-27, 11.9.55 and Table 11.16.	The Applicant can confirm that all mitigation relied on for the assessment has been included in the REAC (REP1-037).
9.11.	Applicant Local authorities	Question 1.7, above. REAC [REP1-037] Table 2.1 - Pre-Construction	To ensure that noise and vibration are managed properly during pre-commencement activities, should Table 2.1 of the REAC include for: a) a pre-commencement noise and vibration plan; b) Best Practicable Means, noise insulation and temporary re-housing; c) the application of vibration management guidance and protection of buildings from disturbance or damage; d) noise and vibration monitoring; and e) a noise and vibration complaints process?	Please refer to the Applicant's response to Question 1.7 which explains that the pre commencement works will not give rise to likely significant effects and so changes to Table 2.1 of the REAC (REP1-037) are not considered necessary.
9.12.	Applicant Local authorities	REAC [REP1-037] Table 2.2 - Construction	To ensure that noise and vibration are managed properly during the construction phase, should Table 2.1 of the REAC include for: a) the application of vibration management guidance and protection of buildings from disturbance or damage; b) noise and vibration monitoring; and c) a noise and vibration complaints process?	a) Table 1.2 of the REAC (REP1-037) includes in NV1.2 that the requirements for managing and controlling noise and vibration will be agreed. The NVMP will include assessing buildings for disturbance or damage and include appropriate controls should there be a risk of disturbance or damage to buildings. b) Table 2.2 of the REAC includes in NV2.8 a commitment that construction noise and vibration levels will be monitored. c) Table 2.2 of the REAC includes in NV2.2 a commitment for a noise and vibration complaints process.
9.13.	Applicant	REAC [REP1-037] Noise insulation and temporary rehousing	REAC reference NV1.5 states that "...the Applicant may be required to implement a noise insulation or temporary rehousing as last resort." Please could the process and triggers for noise insulation or temporary rehousing be clarified and the terms "may be" and "as a last resort" replaced by more precise wording?	Where noise insulation and temporary rehousing are required, the process and triggers set out in Section E.4 of BS 5228:2009 + A1:2014 'Code of practice for noise and vibration control on construction and open sites, Part 1: Noise' would be followed. These trigger values are stated in paragraphs 11.8.23 to 11.8.24 and Table 11.17 in ES Chapter 11 Noise and Vibration (REP1-017). Where the trigger levels are exceeded offers of noise insulation or temporary re-housing will be made, however the residents may not choose to accept those offers.



No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
				The phrase "last resort" is used from the hierarchy of noise control where the first control step is to identify if the works must take place. Secondly quiet plant, equipment and processes are used. Thirdly noise attenuation measures at source is used. Fourthly noise attenuation between the source and the receptor is used, and the consideration of noise attenuation at the receptor is a last resort when all other Best Practicable Means have been exhausted.
9.14.	Applicant	REAC [REP1-037] Noise insulation and temporary rehousing	REAC reference NV2.3 states that temporary noise barriers will be installed "...to reduce construction noise as far as possible". That suggests a substantial level of noise reduction. Should this be made more precise?	The assessment of construction noise uses the method given in BS 5228. This allows a 5dB attenuation where a noise barrier when the top of the plant is just visible over the barrier and a 10dB attenuation when the noise barrier completely screens the sources from the receiver. It is not considered that this needs to be made more precise.
9.15.	Applicant United Utilities	Mottram Longdendale Aqueduct REAC [REP1-037]	a) Should measures be included in the REAC for the protection of the Mottram Longdendale Aqueduct from damage due to vibration? b) Please could United Utilities comment?	ES Chapter 11 Noise and Vibration (REP1-017) states that the Aqueduct is estimated to be some 160 m from piling works (paragraph 11.9.47). Assessment criteria for vibration affecting underground services is provided in paragraph 11.3.22 of the Noise chapter, indicating that maximum vibration levels for piling are 30mm/s.  The predicted construction vibration levels provided in Table 11.23 of ES Chapter 11 Noise and Vibration (REP1-017) show that vibration levels from any type of piling would be below 30 mm/s beyond 10 m from piling activities, and that vibration from any type of piling is below 1 mm/s when 150 m from such activities. On this basis, no impacts to the Mottram Longdendale Aqueduct were predicted.  It is considered that no specific measures need to be included in the REAC (REP1-037) for the aqueduct unless United Utilities can demonstrate that a lower maximum vibration level should be considered, or unless the precise location of the aqueduct is shown to be within 25m of piling activities.
9.16.	Local authorities	Outstanding concerns	Do the local authorities have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring, or compliance with policy for the construction phase? How should any outstanding concerns be addressed?	No response required from National Highways.
<b>Operational phase</b>				
9.17.	Applicant	Limits of deviation ES Chapter 11 [REP1-017]	Paragraph 11.4.15 of ES Chapter 11 states that the height and widths of the Proposed Development used in the noise model for operational traffic were modelled based on scheme drawings.  Do the design parameters of the Proposed Development inputted into the noise model also make allowance for the proposed vertical limits of deviation sought within the dDCO.	The draft DCO (REP1-041) states in Article 7 that the vertical limits of deviation are +/- 0.5 m, and increase to +/- 1 m at Work No. 23 (Carrhouse Lane access road), 31 (Old Mill Underpass), 32 (Roe Cross Bridge), 33 (Mottram Underpass), 34 (Carrhouse Lane underpass) and 35 (River Etherow bridge). The operation phase noise model predicted noise levels using the vertical alignment shown in the design drawings (0 m deviation) rather than the maximum height increases or decreases stated in the vertical limits of deviation.



No	Question to	Reference	Question	National Highways' response
9.	Noise and vibration			
				<p>The significance of noise impacts from the Scheme at the limits of deviation are considered to be similar to those reported in ES Chapter 11 Noise and Vibration (REP1-017) although the predicted noise levels at individual sensitive receptors would be slightly different.</p> <p>How the limits of deviation would change the reported noise levels at each sensitive receptor would depend on the cumulative effect of the vertical deviations for each relevant design element (mainly roads, cuttings and embankments) shown in the Works Plans (REP1-002) compared with those used in the noise model. Noise sensitive receptors in proximity to the Mottram Moor Link Road (such as Four Lanes, Tollemache Close and Old Hall Lane) are more likely to be affected by vertical alignments differing from those used in the noise model, which may have a positive or negative outcome on the number of significant adverse effects reported in ES Chapter 11 Noise and vibration (REP1-017) in this area.</p> <p>The design elements with the greatest vertical limits of deviation refer to bridges, underpasses and access roads. Noise impacts arising from height changes to these design elements are considered to be negligible and would not be expected to change the operation phase significance reported in Table 11.35 of ES Chapter 11 Noise and Vibration (REP1-017).</p>
9.18.	Applicant	Mottram underpass	<p>a) Could the new Mottram underpass create any amplification of airborne road noise? If so, how has that been considered?</p> <p>b) What consideration has been given to the potential for ground borne vibration or ground borne noise effects from vehicles using the new Mottram underpass?</p> <p>Please provided supporting data and evidence.</p>	<p>a) There is potential for the reverberation of noise within the Mottram Underpass to increase airborne noise levels at the entrances/exits of the design element. The road traffic noise modelling predictions take this into account by modelling the areas at the entrances/exits as a retained cut using the methodology in the Calculation of Road Traffic Noise (1988). The airborne noise impacts from the Mottram Underpass are visible in Figures 11.8 and 11.10 (REP1-023 and REP1-025), which show the following:</p> <ul style="list-style-type: none"> <li>• For most of the length of the Mottram Underpass, the noise emissions from the Scheme are reduced because the roof of the underpass blocks sound travelling outside.</li> <li>• Noise levels at the underpass entrances/exits are slightly higher than at other locations equally close to the A57 Mottram Moor Link Road but further away from the Mottram Underpass. This can be seen in the annotated extract of Figure 11.8 (REP1-023) below.</li> <li>• The Scheme incorporates the embedded and essential mitigation measures described in Table 11.16 of ES Chapter 11 Noise and vibration (REP1-017) at the Mottram Underpass to reduce noise levels at properties either side of the entrances/exits.</li> </ul>

No	Question to	Reference	Question	National Highways' response
9.	Noise and vibration			
				 <p>The noise emissions from the Scheme at sensitive receptors in proximity to the Mottram Underpass were predicted to result in significant adverse effects in EIA terms due to the magnitude of the noise change in this area (see Figure 11.11, (REP1-026)).</p> <p>b) The roads in the study area are considered representative of normal conditions. Groundborne noise and vibration was scoped out of the assessment (ES Chapter 11 Noise and vibration (REP1-017)), in line with the DMRB LA 111 Rev 2 (2020).</p> <p>The DMRB LA 111 advises that the Applicant can scope out operation phase vibration based on the findings of a recent literature review and vibration measurements at tunnels [Atkins and CH2M (2018); <i>Effects of vibration from road traffic</i>. SPATS Task 457, Highways England]. The research found that traffic vibration is mainly caused by heavy vehicles, and rarely by small vehicles (cars), if at all. It also confirmed that vibrations are induced as a result of the presence of irregularities in the road surface, for instance potholes or cracks. The research concluded that operation vibration impacts are negligible in normal conditions and that “<i>there is sufficient evidence to scope out assessment of groundborne vibration for receptors; located above road traffic tunnels and located adjacent to the carriageway</i>”.</p> <p>As the roads would be well-maintained, the occurrences of surface irregularities that lead to groundborne vibration would be low and rectified when they occur. The smooth road surfacing inside the Mottram Underpass would not cause any adverse or significant adverse effects from groundborne vibration.</p>

No	Question to	Reference	Question	National Highways' response
<b>9.</b>	<b>Noise and vibration</b>			
				The design of the Scheme no longer retains existing buildings on the Mottram Underpass, therefore there are no vibration-sensitive receptors on top of the Mottram Underpass to assess. Based on measured data reported in research conducted by Highways England (Atkins and CH2M, 2018) the impacts to any future vibration-sensitive receptors on top of the Mottram Underpass would not be significant. Therefore, there are no groundborne noise or vibration impacts resulting from the proposed Mottram Underpass.
9.19.	Applicant	Noise barriers ES Chapter 11 <a href="#">[REP1-017]</a>	<p>a) How have level differences between the roads, noise barriers and sensitive receptors been considered for the effectiveness of noise barriers?</p> <p>b) Paragraph 11.8.29 of ES Chapter 11 refers to the use of reflective noise barriers. What consideration has been given to absorptive noise barriers and are there any locations where using absorptive instead of reflective noise barriers would bring a perceptible reduction in noise for sensitive receptors?</p>	<p>a) The noise model for the Scheme is a three dimensional noise model. It includes the heights of the roads, the height of the ground, the heights of the top of all noise barriers, and calculation points at the heights of the ground and first floor of different facades for all receptors. The calculation software implements the procedures given in Calculation of Road Traffic Noise. The barrier correction for each barrier for each segment of road (and where necessary the effects of multiple barriers) is used to ensure that the calculated noise levels include the expected effectiveness of the noise barriers.</p> <p>b) The assessment of the noise barriers included consideration of visual impact of the barriers, and this was a factor in the selection of reflective barriers.</p> <p>The use of absorbent noise barriers has potential to give more beneficial results in locations where there are receptors on the opposite side of the road to the noise barrier and where the noise barrier is close to the road. For receptors directly behind noise barriers there is no difference in performance between absorbent and reflective noise barriers.</p> <p>There are two locations where there is potential to improve noise levels.</p> <ul style="list-style-type: none"> <li>• There are parallel roadside noise barriers at Mottram Moor Junction (Barriers ID3 in Table 11.18 in ES Chapter 11 Noise and vibration (REP1-017). It is considered that there is some potential for absorbent barriers to improve noise levels at properties on the existing Mottram Moor Road close to the barriers.</li> <li>• There are parallel barriers close to the alignment west of the underpass (Barriers ID1 in Table 11.18 in ES Chapter 11 Noise and vibration (REP1-017). It is considered that there is limited potential for improvement at receptors on Edge Lane if the westbound barrier were absorbent, however the potential is limited due to the distance between the link road and the barrier, and the distance between the properties and the barrier.</li> </ul> <p>It is considered that differences between absorbent and reflective barriers would be negligible for Barriers ID 2, 4, 5 and eastbound Barrier 1 in Table 11.18 in ES Chapter 11 Noise and vibration (REP1-017).</p>
9.20.	Applicant	Speed control measures	What consideration has been given to noise or vibration from any speed control measures on bypassed sections of the A57?	The traffic calming measures on the bypassed sections of the A57 are included within the Rochdale Envelope as no specific measures have been agreed with the Local Authorities other than a speed limit reduction to 20 mph, which is included in the traffic model and operation phase noise modelling for the Scheme. The impacts of the specific speed control

No	Question to	Reference	Question	National Highways' response
9.	<b>Noise and vibration</b>			
				<p>measures that are agreed with the Local Authorities will be considered further once the designs are finalised.</p> <p>As stated in ES Chapter 2 The Scheme (REP1-014), it is assumed that the traffic calming measures would include speed cushions and priority give way systems to slow local traffic and discourage through traffic from using this route. The reduced traffic flows and speeds were included in the traffic model and predicted to result in significant noise level decreases, as shown in Figure 11.11 (REP1-026). There are no assessment methods within DMRB to consider specific noise and vibration impacts from speed cushions or other similar traffic calming measures.</p> <p>The combination of new traffic calming measures and lower road traffic noise levels may result in a change in character of sound on the detrunked parts of the A57. With traffic using the Scheme roads, the reduction of congested traffic on the detrunked sections would reduce engine noise from idling vehicles and occurrences of brake squeal from vehicles. Occasional instances of vehicles braking may become more distinctive due to less masking from road traffic noise. Body rattle from vehicles passing over speed cushions may be perceptible and a source of transient maximum noise levels at noise sensitive receptors located close to the speed cushions.</p> <p>Additionally, the use of traffic calming measures may result in traffic using other local roads to avoid them. For example, paragraph 11.9.96 of the ES Noise and vibration chapter (REP1-017) identifies perceptible noise increases at New Road (Tintwistle) and Waterside (Hadfield) linked to the avoidance of traffic calming measures proposed at Woolley Lane.</p>
9.21.	Local authorities	Outstanding concerns	Do the local authorities have any outstanding concerns regarding the assessment methodology, potential impacts, mitigation measures, monitoring, or compliance with policy for the operational phase? How should any outstanding concerns be addressed?	No response required from National Highways.



## 11. Soils, ground conditions, material assets and waste

No	Question to	Reference	Question	National Highways' response
<b>10.</b>	<b>Soils, ground conditions, material assets and waste</b>			
	<b>Earthworks</b>			
10.1.	Applicant	ES Chapters 1-4 [REP1-014] ES Chapter 10 [APP-066] Paragraph 10.9.1	Please could the Applicant explain the discrepancy between the stated volume of soil to be excavated and re-used within the Proposed Development as described at Table 2-7 of ES Chapter 2 (400,000m <sup>3</sup> of cut and 400,000m <sup>3</sup> of fill) and Table 10.8 of ES Chapter 10 (533,686m <sup>3</sup> or 667,108 tonnes of excavated soil).	The data provided in Table 2-7 of ES Chapter 2 (REP1-014) is incorrect and should have been aligned with the data used in the assessment in Chapter 10, which is taken from the Bill of Quantities provided for the assessment.  The section in Chapter 2 has been updated and resubmitted for Deadline 2. The table has been deleted and replaced with a cross reference to the table in Chapter 10 - Material Assets and Waste (APP-066).
10.2.	Applicant		What degree of certainty does the Applicant have regarding the target for 99% of excavated soil to be re-used on site and what alternative scenarios have been assessed in the ES in the event that this target is not achieved.	It is the intention of the appointed Principal Contractor to reuse material in line with the commitments outlined in ES Chapter 10 Material Assets and Waste (APP-066).  Based on the earthworks schedule data available, the target for 99% re-use of excavated material is achievable, and there is currently no reason to believe why this wouldn't be the case.  However, the situation could change, meaning there is always a risk of excess material arising following detailed design or due to unforeseen conditions once the construction stage commences. For example, there is a small risk that suitability of material for reuse will be subject to review in the case of adverse weather, however this is presented as a low risk to the Scheme.  The construction team has completed a classification exercise using geotechnical investigation data which has now been reviewed which gives the team greater certainty of suitability of re-use of material on site.  The assessment in ES Chapter 10 did not look at other scenarios, as there is capacity in local facilities should more soil needs to go off site. If quantities of material above the amount assumed in our assessment do occur that need to be transported offsite, this will be dealt with through the usual procedures, and the EMP (Second iteration) would be refined to reflect any new measures required.
10.3.	Applicant		The Applicant has indicated that further ground investigation would be carried out in February 2021.  Please can the Applicant submit the results of the 2021 supplementary ground investigation, and any consequent updates to the ES?	The supplementary ground investigation (GI) reporting is currently being finalised and is not yet available, however it will be available to submit to the examination at a future deadline.  The assessments in Chapter 9: Geology and soils (APP-065) and Chapter 10: Material assets and waste (APP-066) of the Environmental Statement were based on historical data, and it was the intention of National Highways to use the supplementary GI to validate assumptions and fill any identified data gaps and to support the later stages of design. The results from the supplementary GI have been reviewed and did not identify any new contamination sources, as similar conditions to the previous GI were encountered. As the



No	Question to	Reference	Question	National Highways' response
<b>10.</b>	<b>Soils, ground conditions, material assets and waste</b>			
				<p>risk assessment conclusions were broadly similar to the previous GIR, there are no differences that would alter the conclusions in either Chapter 9 or 10 of the ES.</p> <p>At detailed design, the supplementary GI data and report will be used in further risk assessments to inform the earthworks and piling designs. These will be reported in the earthworks specification and piling risk assessment documents. This is in line with Chapter 9 of the ES "... once (GI data are) available any unforeseen contamination would be dealt with through the design process with appropriate mitigation measures recommended."</p> <p>It is therefore not intended to update these ES chapters, as conclusions on the environmental effects will be the same.</p> <p>Please refer to the response to Written Question 11.5 for details of the Hydrogeological risk assessment that is currently being prepared for submission to the examination, which has been informed by the supplementary GI, and updates to Chapter 13: Road drainage and the water environment of the ES (APP-069).</p>
<b>Material Assets</b>				
10.4.	Applicant Local Authorities	ES Chapter 10 [APP-066] Table 10.4 and Paragraph 10.9.1	<p>Table 10.4 identifies a target for use of recycled aggregates of 30%.</p> <p>a) Have potential sources of recycled aggregates been identified?</p> <p>b) If not, what degree of certainty is there that this proportion of aggregate supply for the scheme can be secured?</p> <p>c) Would the local authorities comment on availability of suitable recycled aggregates?</p>	<p>a) Yes. The cutting to the east of the underpass contains suitable material for recycling/re-processing to create aggregate for the Scheme. It is anticipated that the the 30% target which is stated in Table 10.4 of the ES will be exceeded.</p> <p>b) See answer to a) above.</p>
<b>Waste Management</b>				
10.5.	Local authorities EA	Waste management ES Chapter 10 [APP-066] NN NPS paragraph 5.43	<p>Please comment on:</p> <p>a) The ability of the local waste infrastructure to satisfactorily deal with waste from the Proposed Development?</p> <p>b) Whether any adverse effect is anticipated on the capacity of existing waste management facilities to deal with other waste arisings in the area?</p>	<p>a) No response required from National Highways.</p> <p>b) No response required from National Highways. However, for consideration, the vast majority of waste (excavated material) generated by the Scheme will be reused on site. The remainder, consisting of mixed construction &amp; demolition waste, general office waste, plastic, wood / timber, mixed metals and paper and cardboard is estimated to be under 1,000 tonnes/2,000 m3 which is a fraction of the capacity of local waste facilities or landfill, as shown below:</p> <ul style="list-style-type: none"> <li>- Capacity of Waste infrastructure (tonnes/pa) = 2,416,379</li> <li>- Capacity of Landfill total (m3) = 14,900,456</li> </ul> <p>This local capacity is for the area which covers Greater Manchester and Derbyshire County Council (referred to as the second study area for waste in Chapter 10 of the ES).</p> <p>Therefore, no adverse effect is anticipated on the capacity of existing waste management facilities to deal with other waste arisings in the area.</p>

No	Question to	Reference	Question	National Highways' response
<b>10.</b>	<b>Soils, ground conditions, material assets and waste</b>			
10.6.	Applicant EA NE Local authorities	Pollution control permits and licenses REAC [REP1-037] ES Chapter 10 [APP-066]	<p>a) With reference to the NN NPS, are the relevant pollution control authorities satisfied that potential releases can be adequately regulated under the pollution control framework?</p> <p>b) Is it considered that the effects of existing sources of pollution in and around the project are not such that the cumulative effects of pollution when the Proposed Development is added would make that development unacceptable?</p> <p>c) Is there any good reason to believe that any relevant necessary operational pollution control permits, or licences or other consents will not subsequently be granted?</p>	b) As stated in 10.6.16 of Chapter 10 of the ES (APP-066), the assessment was considered to be cumulative. Where waste is the source of pollution, then the Scheme would not be unacceptable, certainly not in the long term, as waste is only produced in the short-term during construction and is shown to be within the tolerances of local infrastructure. See explanation in the response to 10.5 above for further detail.
10.7.	Applicant	ES Chapter 10 [APP-066]	Please could the Applicant confirm whether it has made any allowances within the waste quantities presented in ES Chapter 10 [APP-066] for the potential presence of hazardous waste?	<p>Chapter 10 of the ES (APP-066) did not make any allowances for the potential presence of hazardous waste based on the information in Chapter 9 Geology and soils (APP-065), and the nature of the land that the Scheme goes through, which is agricultural/ green belt.</p> <p>The geology and soils chapter did not identify any significant potential sources of contamination, which would have given rise to generation of hazardous waste. All effects identified in the geology and soils chapter due to the Scheme were considered to be non-significant.</p> <p>There is no capacity in study area 2 for hazardous landfill but there is annual capacity in waste infrastructure to handle 5,219 tonnes of hazardous waste.</p>
10.8.	Local authorities EA NE	Other policy and factual issues	Are there any other comments with respect to waste management?	No response required from National Highways.

## 12. The water environment, drainage, flood risk assessment, Water Frameworks Directive

No	Question to	Reference	Question	National Highways' response
<b>11.</b>	<b>The water environment, drainage, flood risk assessment, Water Frameworks Directive</b>			
	<b>Baseline information</b>			
11.1.	Applicant	ES Chapter 13 [APP-069] 6.4 ES Appendix 13.1 [APP-178]	To allow comparison of drainage calculations of existing and proposed discharge rates, please provide the drainage calculations used for the drainage strategy along with titles and pipe and node references on any drawings as appropriate.	The drainage design has been completed to match existing greenfield flow rates. These greenfield flows have been calculated using ICP SUDS methodology. The proposed discharge rates have then been designed to not exceed these rates and are being agreed with the relevant discharge approval body during detailed design in accordance with Requirement 8 of the dDCO (REP1-041). No drawings with pipe and node references have been produced for the Scheme.
11.2.	Applicant	ES Chapter 13 [APP-069]	<p>a) Please could the Applicant confirm the design parameters that have been used within the ES to assess the watercourse realignments, culverts and/ or pipes forming part of the Proposed Development and clarify that the parameters used are consistent with the extent of authorised development sought within the dDCO. Please could the Applicant confirm how it proposes to secure the design parameters in the dDCO?</p> <p>b) Please could the Applicant confirm the storage volumes that have been assumed within the ES to assess the three new attenuation ponds forming part of the Proposed Development, and that the parameters used are consistent with the extent of authorised development sought within the dDCO?</p>	<p>a) The design principles and rationale behind the design of watercourse realignments and culvert crossings is presented in Section 5.4 of the submitted Water Framework Directive compliance assessment report (APP-055) and incorporates industry best-practice guidance</p> <p>The design of culverts have been sized using modelled catchment inflows and Culvert Master. The design of the watercourse(s) is based on the same catchment inflow data and from site observations to ensure the design is appropriate for the flow conditions. The design team includes fluvial geomorphologist and aquatic specialists, who are key to ensuring the designs are appropriate for the on-site conditions.</p> <p>As part of the design process, sufficient land has been secured for the watercourse realignments, culverts and other surface water features, such as ponds, located within the extent of the proposed scheme. The works to watercourses are shown on the Works Plans, which are a Schedule 10 dDCO certified document, and are specified in the works packages within Schedule 1 of the dDCO.</p> <p>b) The storage volumes have been calculated to attenuate the proposed outfalls to the previous greenfield flow rate. Up to and including the 100 year RP storm with 40% additional allowance for climate change. The volumes calculated are: Catchment 1: 2965m<sup>3</sup> Catchment 2: 4508m<sup>3</sup> c) Catchment 3: 2160m<sup>3</sup></p>
11.3.	Applicant	ES Chapter 13 [APP-069] paragraph 13.4.2	Please could the Applicant explain the method used to deal with the gap in baseline data for water quality as described at paragraph 13.4.2 of ES Chapter 13?	Although data was not available for individual watercourses, sufficient monitoring has been undertaken within the wider catchment. The Environment Agency routine monitoring data available was suitable for use to determine baseline water quality conditions and undertake the relevant assessments.
11.4.	Environment Agency	ES Chapter 13 [APP-069]	The Applicant, in their assessment, should ascertain whether there are any impacts on water bodies or protected areas under	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
<b>11.</b>	<b>The water environment, drainage, flood risk assessment, Water Frameworks Directive</b>			
			the Water Framework Directive or source protection areas around potable water abstractions. a) Are you satisfied that the effects of the proposal on the water environment are suitable for management within the Environmental Permitting and discharge consent systems? b) Is suitable mitigation proposed and how can this be secured?	
11.5.	Applicant Environment Agency	ES Chapter 13 [APP-069] paragraph 13.6.54	The Applicant refers to additional ground investigation. a) Is the Hydrogeological Risk assessment mentioned available? b) If so, what additional effects of the Proposed Development, if any, does it indicate? c) If not, when will this information be available?	a) The Hydrogeological Risk assessment is not currently available at this time. b) See National Highways' response to 11.5 a). c) The Hydrogeological Risk assessment is currently programmed to be submitted to the ExA as part of the Deadline 3 submission, together with updates to the relevant sections of Chapter 13, the FRA and the WFD.
<b>The Water Framework Directive and The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017</b>				
11.6.	Environment Agency	Water Framework Directive Assessment Compliance Assessment Report [APP-055] paragraph 6.1.8	The Applicant, in their assessment, should ascertain whether there are any impacts on water bodies or protected areas under the Water Framework Directive or source protection areas around potable water abstractions. a) Do you agree with the Applicant's conclusion that the proposal is likely to be Water Framework Directive compliant? b) If not, which effects of the proposal do you have concerns over?	No response required from National Highways.
<b>Flood risk and drainage</b>				
11.7.	Applicant	Drainage Design Strategy Report [APP-188]	Are any additional point discharges likely to appear in the area which have not otherwise been addressed within the drainage strategy. a) What consideration has there been of the potential existence of buried land drains crossing or entering the proposal site? b) If such drains exist, what actions will be taken when they are encountered? c) Has any potential discharge of water from such drains been allowed for in the drainage strategy? d) If not, should such an allowance be made?	a) A Ground Penetrating Radar survey has been undertaken of the area of site within the red line boundary to establish any statutory undertakers equipment or other buried assets. No land drains were found during this search. There are lots of surface water drains and watercourses that cross the site which provide land drainage for the area around the proposed link roads. b) It is a requirement of National Highways' design standards to connect any land drains severed by the works into the proposed highway drainage system. c) No, and it is not common practice to do so. Any land drains will be small diameter pipes with low flow. As they pick up sub surface land drainage they have a very large time of concentration so any peak flows will not likely be coincident with peak surface run off from the impermeable highway. Therefore, these flows can easily be accommodated within the highway drainage system.

No	Question to	Reference	Question	National Highways' response
<b>11.</b>	<b>The water environment, drainage, flood risk assessment, Water Frameworks Directive</b>			
				d) See response to c)
11.8.	Environment Agency	ES Chapter 13 [APP-069] Flood Risk Assessment [REP1-013]	Climate change allowances were anticipated to change in 2021. Are you satisfied that any such changes have been incorporated within on peak river flow and that the compensatory flood storage volume is adequate over the lifetime of the proposed highway structure?	No response required from National Highways.
11.9.	Applicant Tameside Metropolitan Borough Council	Flood Risk Assessment [REP1-013] Insert 4-7 Engineering Drawing and Sections Plans [REP1-005]	These provide conflicting information in regard to minimum overhead clearances. Please clarify which information is correct.	Please refer to National Highways' response to question 3.18.
11.10.	Applicant	Flood Risk Assessment [REP1-013] Drainage Design Strategy Report [APP-188] REAC [REP1-037] Ref. RD1.20 Outline EMP [APP-183]	Flood risk should be managed throughout the life of the Proposed Development. REAC Ref. RD1.20 identifies that construction activity at the River Etherow will require sequencing to ensure that the Proposed Development does not increase flood risk to others. The Outline EMP sets out an overview of construction phasing at section 1.2 but does not deal with this component in detail. a) At what stage during construction will the works providing the floodplain storage mitigation be provided? b) Please could the Applicant explain what construction sequencing has been used as the basis for assessment of flood risk during construction and how any essential criteria within this sequencing will be secured.	a) The construction of the compensatory floodplain storage will be undertaken in the early stages of the ground engineering works prior to the construction of the crossing's embankments. This is to ensure that the flood compensation measures are in place during the works to mitigate flood risk in this area. b) The assumption is that criteria will be assessed through both the REAC (REP1-037), Ref. RD1.20 and the EMP (First Iteration) (APP-183) which are live documents. Primarily, the sequencing enables management of risk through construction by development of the CFSA first to act as mitigation during the development and construction of the road embankments.
11.11.	Applicant	Drainage Design Strategy Report [APP-188] paragraph 6.1.2	The Applicant refers to flooding not extending beyond the highway boundary. a) Please identify where flooding would occur within the highway boundary and quantify the extent. b) What would be the effects of such flooding, including likely duration and whether, or not, this flooding would close the road to through traffic?	a) No flooding occurs on any of the scheme in accordance with the criteria in National Highways' design standards. For storms with longer duration return periods flooding is permitted within the drainage network. b) During detailed design any flooding will be engineered to be away from the highway network to avoid impact on the highway for both motorised and non-motorised users.
11.12.	Natural England	REAC [REP1-037] Table 2.1 Section 10	The REAC identifies a number of permits required, amongst other things, but not limited to, the control the discharge, or extraction of water and control pollution.	No response required from National Highways.



No	Question to	Reference	Question	National Highways' response
<b>11.</b>	<b>The water environment, drainage, flood risk assessment, Water Frameworks Directive</b>			
	Environment Agency Local authorities Local highway authorities	ES Chapter 13 [APP-069] NN NPS paragraphs 4.48 and 4.55-6	<p>d) With reference to the NN NPS, are the relevant pollution control authorities satisfied that potential releases can be adequately regulated under the pollution control framework?</p> <p>e) Is it considered that the effects of existing sources of pollution in and around the project are not such that the cumulative effects of pollution when the Proposed Development is added would make that development unacceptable?</p> <p>f) Is there any good reason to believe that any relevant necessary operational pollution control permits, or licences or other consents will not subsequently be granted?</p>	
11.13.	Applicant Local authorities Local highway authorities	Outline EMP [APP-183] Table 6.1	<p>Appropriate arrangements will need to be in place to make provision for the future maintenance of the works. Maintenance responsibilities, including those for drainage infrastructure, are identified in the Outline EMP at Table 6.1. These include, amongst other things, areas of land which would be planted.</p> <p>How would the future maintenance arrangements be secured? Would the local authorities and local highway authorities please confirm that these arrangements are acceptable or, if not, what is needed to make them acceptable?</p>	Article 12 ( <i>construction and maintenance of new, altered or diverted streets and other structures</i> ) of the draft DCO identifies the maintenance responsibilities for the Applicant and relevant local highway authority, which will include Tameside Metropolitan Borough Council. and Derbyshire County Council. Maintenance of the infrastructure referred to in this question by Tameside Metropolitan Borough Council and Derbyshire County Council is secured by Article 12(1, 2 and 3), the Landscape and Ecological Management and Monitoring Plan to be secured under Requirement 4 and the landscaping scheme to be secured under Requirement 5 of the draft DCO (REP1-041).
	<b>Water habitat</b>			
11.14.	Applicant	Drainage Design Strategy Report [APP-188]	<p>The length of time that the proposed balancing ponds hold standing water will impact upon habitat provided by these structures.</p> <p>a) Please provide details of which, if any, of the proposed balancing ponds are anticipated to permanently hold standing water and the depth.</p> <p>b) Would this be anticipated to change during the life of the scheme?</p> <p>c) Would these water bodies provide a suitable aquatic habitat and, if so, for which species?</p>	<p>a) The attenuation ponds will have a permanent water level of approximately 0.5m and a range of bank profiles/shapes.</p> <p>b) It is not anticipated that this level would change during the life of the scheme.</p> <p>c) As all attenuation ponds will have a permanent water level of approximately 0.5m, and have been designed to promote different aquatic and ephemeral habitats within the features (e.g. deep pools and shallow drawdown zones) to support various marginal and aquatic plant and invertebrate species as well as other wildlife.</p>
11.15.	Applicant Tameside Metropolitan Borough Council	Drainage Design Strategy Report [APP-188]	To what degree will the proposed culvert structures be designed to provide connectivity of water habitat and for which species?	<p>Culverts are designed to have invert levels set below the existing channel bed levels which will facilitate the maintenance of natural channel bed substrates throughout the structures and as such maintain channel continuity for aquatic macroinvertebrates as much as possible. The watercourses on which culverts are proposed are not considered suitable habitat for fish.</p> <p>Culvert lengths have been minimised as far as possible to reduce habitat fragmentation.</p>

No	Question to	Reference	Question	National Highways' response
<b>11.</b>	<b>The water environment, drainage, flood risk assessment, Water Frameworks Directive</b>			
				The piped culverts would be suitable for species well adapted to the aquatic environment (such as amphibians, otters, and water voles). However, would be less suitable for more terrestrial based animals (such as badger, hedgehog, and brown hare). To overcome this, additional piped crossings have been incorporated into Scheme (adjacent to the culverts) to provide connectivity for a wider range of species.
11.16.	Applicant Environment Agency Tameside Metropolitan Borough Council		a) To what degree will the proposed watercourses be subject to runoff containing road salt or grit? b) Will this have any effect on wildlife using these watercourses and, if so, to what degree?	a) Runoff containing road salt or grit, is expected to be short-term and temporary. The drainage design, incorporating SuDS, meets regulatory/ industry requirements, passing all Highways England Water Risk Assessment Tool (HEWRAT) tests and thus indicating low risk to receiving water courses. It is therefore assumed that the drainage design would provide for adequate treatment, attenuation and discharge rates such that there would be no deterioration to hydro-morphology and aquatic ecology. b) No significant effects are expected for watercourse biodiversity (aquatic ecology) from road salt or grit.
	<b>Opportunities for enhancement</b>			
11.17.	Applicant Local authorities Environment Agency	Sustainable Drainage Systems (SuDS) ES Chapter 13 [APP-069] (Road Drainage and the Water Environment)	NN NPS paragraph 5.115 states that " <i>Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities can be taken to lower flood risk by improving flow routes, flood storage capacity and using SuDS.</i> " Does the Proposed Development take the opportunities identified in the NN NPS? Is there anything else that could be reasonably achieved?	Attenuation ponds are being designed to incorporate opportunities for wildlife through the inclusion of appropriate feature profiles (e.g. shallow marginal areas) and associated planting which is considered to be in line with the statements in paragraph 5.115 of the NN NPS. Further ecological mitigation and enhancements are being provided across the Scheme as detailed in ES Chapter 8 Biodiversity (TR010034/APP/6.3(2)). Footpaths throughout will allow access along and around the route, including cycle and bridleway routes. There will be significant planting around the new water courses and attenuation ponds for the benefit of wildlife and visual amenity. Opportunities taken for mitigation and compensation included within the Scheme design demonstrate a strong effort to take opportunities to conserve and advance biodiversity. For example: <ul style="list-style-type: none"> <li>• habitat for non-breeding waders including curlew and lapwing will be created within the east of the Scheme</li> <li>• areas of wet, moderately cattle grazed, rushy grassland will be provided within the proposed flood alleviation area, which consists of a scraped shallow depression that will be seasonally wet</li> <li>• once the three SUDS waterbodies fully establish, there will be a net increase in the area of breeding habitat available for common toad</li> <li>• creation of 13,171 m2 of SuDs ponds will provide additional standing water habitat and will be sensitively designed to encourage ecological diversity</li> <li>• creation of wet woodland, marshy damp grassland adjacent to proposed SUDS within Scheme to create a net increase in these habitats.</li> </ul>

No	Question to	Reference	Question	National Highways' response
11.	The water environment, drainage, flood risk assessment, Water Frameworks Directive			
				<p>As the Detailed Design is progressed riparian planting strategies and/or natural colonisation strategies for along the realigned watercourses shall be determined. However, natural colonisation is the preferred option for new watercourses as it promotes the establishment of species prevalent within the locality.</p> <p>Off-site enhancement opportunities will also be explored during the detailed design.</p>

## 13. Biodiversity, ecological and geological conservation

No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
	<b>Biodiversity</b>			
12.1.	Applicant	Phase 1 Habitat Survey ES Chapter 8 [REP1-016] ES Chapter 13 [APP-069]	The most recent Phase 1 Habitat Survey was completed two years' ago and at the end of the optimal season, in October 2019.  Please could the Applicant explain why the survey represents a suitable basis for establishing the baseline for habitats within the study area and earlier surveys that have not been updated such as the hedgerow survey completed in 2017, including consideration of its age and timing.	At the time of submission, the Phase 1 habitat survey data was just under two years old. In line with Chartered Institute of Ecology and Environmental Management (CIEEM) (April 2019) <i>On the Lifespan of Ecological Reports and Surveys</i> , this survey data would be in-date, but would require updated surveys to ensure the baseline has not changed significantly.  Several surveys and site visits (such as for protected species and monitoring surveys) have, therefore, been undertaken throughout 2020 and 2021 (since the initial Phase 1 habitat survey) to ensure that the original Phase 1 habitat survey baseline is correct. This includes undertaking a UK Habitat Survey to inform the Biodiversity Metric Calculations on the whole site in August/ September 2020. Whilst slightly different than a Phase 1 habitat survey, this did allow for the habitats to be re-assessed and any significant changes to the baseline to be recorded. The results of the UK Habitat Survey was submitted within the Environmental Statement Appendix 8.1 Biodiversity Baseline and Preliminary Assessment section 3.4 (APP-169). The habitats within the Survey Area or land-uses have not changed significantly since the original survey in October 2019, and the updated surveys since, have confirmed this. Therefore, it is considered that the extended Phase 1 habitat survey represents a suitable basis for establishing the ecological baseline.  The initial hedgerow assessment was undertaken in June 2017, however, this survey was updated in October 2020. The hedgerow assessment, as outlined within the ES, is based on the most recent results from October 2020.
12.2.	Applicant	Aquatic Macroinvertebrate Survey ES Chapter 8 [REP1-016] ES Chapter 13 [APP-069]	The spring 2020 window for aquatic macroinvertebrate survey was missed due to Covid-19 restrictions and the assessment is based on a survey completed during autumn 2020.  a) Please could the Applicant provide further explanation as to why it considers that a single sample survey of aquatic macroinvertebrate during a sub-optimal season provides sufficient data to establish the baseline position.  b) Please confirm whether the results of the aquatic macroinvertebrate sampling undertaken in March 2021 and any updated assessment will be submitted for Examination.	a) The macroinvertebrate surveys reported for the Environmental Statement (ES) were undertaken in an appropriate survey season (Autumn) following Environment Agency guidance and therefore are deemed sufficient (particularly in light of additional available background data on the River Etherow) to make an assessment of receptor importance. However, it is recognised that data from multiple seasons provide a greater level of confidence.  b) The results of the Spring 2021 surveys have been added to the ES Appendix 8.3 Aquatic Ecology (APP-171) and the updated version has been submitted to the ExA as part of the Deadline 2 submission to be considered during the Examination.
12.3.	Applicant	Barn Owls ES Figure 8.7 [APP-119]	Please could the Applicant explain the labelling on ES Figure 8.7 [APP-119] and entries in Appendix H of ES Appendix 8.1 [APP-169] for buildings scoped into the detailed barn owl surveys that were not surveyed due to access restrictions, as a	Due to the size of the barn owl survey area (which is all structures within 1.5 km from the DCO boundary), it was challenging to secure access to all suitable structures. This was principally due to difficulties identifying the relevant landowners but was further compounded by the onset of COVID-19 which disrupted the survey schedule and prevented surveys from occurring due to safety concerns.

No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
		Appendix H of ES Appendix 8.1 [APP-169]	number of these are classified as unknown rather than potential nest sites, as indicated at paragraph 2.8.21 of ES Appendix 8.1.	Certain structures were only able to be surveyed from a distance which were classified as "potential nest sites" as a precaution. Other structures were unable to be surveyed at all (including visually), and these were classed as "unknown". Using a precautionary approach, these structures labelled as "unknown", would be treated the same as "potential nesting sites" unless proven otherwise and have been assessed accordingly within the ES. The limitations of the barn owl assessment are provided within Appendix 8.1 – Section 2.8.17 (APP-169). Using a combination of desk study data, incidental sightings, and the confirmed nesting locations of a barn owl pair within the study area, it is considered that the assessment of potential impacts on barn owls is sufficient.
12.4.	Applicant	Badgers ES Chapter 8 [REP1-016]	Please could the Applicant clarify how the negligible adverse significance of effect from noise and vibration disturbance to badger during construction has been determined, as information presented at paragraph 8.8.48 of ES Chapter 8 [APP-064] suggests that there is some uncertainty in the assignment of sensitivity and magnitude of impact.	<p>Badgers are known to tolerate high levels of noise as evidenced by the diverse array of habitats they occupy, including areas subject to high levels of disturbance (such as highway embankments, railway corridors, and dense urban areas). When assessing the requirement for a licence in respect of development, Natural England state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.</p> <p>As a consequence, it is not anticipated that badgers would be significantly impacted by construction or operational noise and would tolerate any changes in the environment. Therefore, whilst badgers have been constituted as a "sensitive receptor" in accordance with DMRB LA 111 which may be subject to moderate to major noise increases, it is considered that badgers are well accustomed and easily adapt to changes in noise; therefore, any noise and vibration impacts have been scoped out and there is no uncertainty in the assessment.</p>
12.5.	Applicant	Air Quality ES Chapter 8 [REP1-016]	<p>No significant residual cumulative effects are predicted for biodiversity with other committed developments (or any other aspects), and therefore no additional mitigation measures are proposed beyond what it is identified in ES Chapter 8 (paragraph 15.7.3).</p> <p>Please could the Applicant explain the approach taken to assessment of operational air quality effects on biodiversity receptors where a planning application or local plan application is not included within the traffic model but there is possibility of overlap between the affected road networks.</p>	<p>Cumulative effects on air quality could occur as a result of traffic changes caused by the Scheme combined with other proposed schemes and developments. The consideration of cumulative effects for the Scheme is driven by the traffic modelling and its assumptions regarding other schemes and developments. It is assumed that all relevant committed developments are included in the traffic model and so inherent in the traffic data used for the air quality assessment.</p> <p>Where developments were not committed or certain these were identified and considered individually within ES Chapter 15 Cumulative Effects (Table 15.4) (REP1-020). If not included within the traffic model, and therefore not inherent in the air quality assessment, they were reviewed to assess the cumulative effects to air quality based on the location of the development and the likely traffic generation by the development.</p> <p>No additional mitigation measures are proposed over and above the measures prescribed in ES Chapter 5 Air Quality (APP-061) and ES Chapter 8 Biodiversity (TR010034/APP/6.3(2)) as a result of different project cumulative effects, as no adverse significant effects were identified within designated habitats.</p>



No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
12.6.	Applicant	ES Chapter 15 <a href="#">[REP1-020]</a>	It is noted that in Table 15-7 of ES Chapter 15 there are a number of entries where wording is incomplete or not clear, e.g., entries 40 and 42. Please could the Applicant undertake a check of the table to complete any missing information and provide an update version.	Check has been undertaken and only Table 15-7, row 40 of 'Biodiversity' column is believed to be incomplete. This sentence should state (see bold text):  <i><u>"Construction</u></i> <i>No adverse effects on any biodiversity receptors are anticipated due to the type of development proposed and the distance from the Scheme. Therefore, it is deemed that the cumulative effect during construction as a result of the other development and the Scheme would be <b>non-significant.</b>"</i>
12.7.	Applicant	Badgers and Barn Owls	Please could the Applicant confirm for the following: a) Badgers – whether it is assumed that temporary closure of badger sett S24 will be required during construction as a worst-case scenario. b) Barn owl – the location and dimensions of continuous screens next to rough grass to mitigate against potential road collision.	a) Under a worst-case scenario, S24 would require temporary closure. This sett is located approximately 10 m from the DCO boundary (from the construction compound area) and using 30 m as a worst-case impact zone, this sett could be subject to damage or disturbance dependent on what is proposed within this 30 m buffer zone. If no significant works are to be undertaken within 30 m of this sett (such as excavations, breaking ground, or storage of large vehicles), then no temporary closure would be required. All effort will be made to avoid any impacts to this sett and avoid the need for any temporary closure of this sett.  b) The locations of the vegetation screens are outlined within the Scheme Layout Plans (TR010034/APP/2.6(2)). Whilst these screens may provide a range of benefits (such as visual screening), these woodland blocks will also provide adequate screens to prevent barn owl road collision. Strategic continuous planting has been provided where barn owls have been recorded nesting and foraging; this is indicated by the woodland block planting such as east of the M67 roundabout (nearby to recorded barn owl roosts) and east of Mottram Moor Road (where barn owls have been recorded foraging). The dimensions differ widely for each block of screen planting, however, all are of sufficient height, depth, and location to provide adequate screens to encourage barn owls to fly higher above the carriageway.
12.8.	Applicant	Pre-commencement surveys ES Chapter 8 <a href="#">[REP1-016]</a> REAC <a href="#">[REP1-037]</a>	ES Chapter 8 and the REAC identify a commitment to pre-commencement surveys to check the baseline position for several species prior to construction, e.g., bats, badgers, breeding birds, kingfisher, otters, priority mammals and common toad. In the REAC it is stated that these surveys would be used to inform the mitigation requirements (and the European Protected Species Licences (EPSL) for bats and badger). Paragraph 8.8.38 of ES Chapter 8 states that if any of the mitigation measures are deemed not necessary following the surveys, they would still be implemented as enhancement. REAC Ref. BD2.16 and 2.18 explain the role of pre-commencement surveys in finalising mitigation for effects to badger.	a) Due to the length of time between preparing the DCO application (including the ES) and the Examination period, it is considered probable that the ecological baseline could change within this timeframe. Furthermore, certain species are very mobile (such as badgers) and may colonise or abandon the Study Area or use areas where they were previously absent. Therefore, on-going monitoring and pre-commencement surveys have been proposed to ensure the ecological baseline is kept up to date at regular intervals. This data would then subsequently inform any changes to the mitigation strategy.  It is not considered that any significant changes to the mitigation strategy would be required in the event that the baseline changes following pre-commencement surveys. The mitigation outlined is provided on a reasonable "worst-case" scenario for many species and therefore, there is certainty that the mitigation identified and assumed within the assessment is sufficient to ensure that the Proposed Development will result in no likely significant effects. This includes providing a dedicated bat roosting structure and an array of artificial boxes for bats, two artificial setts for badgers (including one confirmed

No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
			<p>a) Please could the Applicant explain how the other pre-commencement surveys will be used to inform mitigation and what degree of certainty there is that the mitigation identified and assumed within the assessment is sufficient to ensure that the Proposed Development will result in no significant effects.</p> <p>b) In the event that the surveys identify a change to the baseline requiring further mitigation, what is the Applicant's proposed approach to managing this?</p>	<p>and one if needed, depending on further monitoring surveys), and suitable locations for artificial otter holts (if required).</p> <p>b) Any required changes to the proposed mitigation strategy will be outlined within the Environmental Management Plan (EMP) (Second iteration) and secured via the REAC REP1-037). As a live document, the EMP (Second iteration) will be refined throughout the pre-construction and construction stages to incorporate further mitigation requirements and to ensure it is kept relevant.</p>
12.9.	Applicant	Reptiles ES Chapter 8 [REP1-016] REAC [REP1-037]	Please could the Applicant provide an outline of the management plans identified as being required to manage and monitor the mitigation measures for biodiversity and confirm how the precautionary works method statement for reptiles will be secured.	<p>The management plans and activities identified as being required to manage and monitor the mitigation measures for biodiversity are provided within the EMP (first iteration) (APP-183).</p> <p>A Precautionary Working Method Statement (PWM) will be prepared prior to construction and will detail appropriate mitigation measures to avoid and mitigate any impacts upon widespread species of reptiles during construction. This has been outlined and secured within the REAC (ref: BD1.12).</p> <p>Furthermore, an Outline Landscape and Ecological Management and Monitoring Plan will be submitted into to Examination at Deadline 3.</p>
12.10.	Applicant	Watercourses ES Chapter 8 [REP1-016] REAC [REP1-037]	Please could the Applicant confirm that the mitigation measures located in and around watercourses, e.g., piped culverts and mammal crossing, and fencing at River Etherow Bridge for otter, have been considered as part of the road drainage and water environment assessment.	<p>Mitigation measures specifically related to watercourses (e.g. in-channel working, vegetation clearance, construction best practice related to sediment and water quality, culvert crossings) have been assessed as part of the Road Drainage and Water Environment chapter and also the Water Framework Directive compliance assessment. Other mitigation measures located in the vicinity of watercourses (e.g. mammal crossings, otter fencing) have not been explicitly assessed at the current stage of design, but will be considered further during the detailed design phase.</p>
12.11.	Applicant	Biodiversity mitigation	Please could the Applicant provide details of any discussions and/ or agreement reached with Natural England or the Environment Agency about monitoring arrangements for identified biodiversity mitigation?	<p>Monitoring will be required as part of the licence conditions for the European Protected Species Mitigation (EPSM) licence for bats during the operational stage; this will be agreed with Natural England as part of the licence submission.</p> <p>Monitoring will be required as part of the protected species licence condition for badgers upon completion of the artificial sett during the construction stage. The artificial badger sett will be monitored in accordance with a Method Statement, which will be agreed with Natural England as part of the licence application.</p> <p>All previous correspondence with Natural England has been outlined within the Statement of Common Ground (SoCG) submitted at Deadline 2 (TR010034/EXAM/9.18). All future consultation will also be included within the SoCG, the final version of which will be submitted at Deadline 9.</p> <p>The ES identified the requirement for surface water quality monitoring during construction which may be supplemented by biological quality monitoring using aquatic macroinvertebrate community sampling (see paragraph 8.11.5 in ES Chapter 8</p>

No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
				Biodiversity (TR010034/APP/6.3(2)). Specific monitoring requirements including monitoring methods and schedule will need to be agreed with the Environment Agency. Discussions between the Environment Agency (EA) and the Applicant in relation to this are included within the EA SoCG submitted at Deadline 2 (TR010034/EXAM/9.16).
	<b>Habitat Regulation Assessment</b>			
12.12.	Applicant	Habitats Regulation Assessment [APP-054] Screening matrices	<p>Please can the Applicant update the evidence notes to identify the specific location of the supporting information and supply word versions of the screening matrices.</p> <p>This should include the following updates:</p> <ol style="list-style-type: none"> <li>In Tables B.4 and B.5, cross reference to relevant documents and paragraphs within them that support the conclusion that there would not be construction related disturbance, degradation and reduction in species density impacts.</li> <li>In Table B.4, cross reference to relevant documents and paragraphs within them that support the conclusion about operational noise impacts to qualifying birds in the Peak District Moors (South Pennine Moors Phase 1) Special Protected Area (SPA).</li> <li>In Table B.4, cross reference to relevant documents and paragraphs within them that support the conclusion about mortality from vehicle collision during operation to qualifying birds in the Peak District Moors (South Pennine Moors Phase 1) SPA.</li> <li>In Table B.5, cross reference to the relevant paragraphs of ES Chapter 5 and the Transport Assessment Report and relevant appendices that support the conclusions regarding air quality impacts and features scoped out of the assessment.</li> </ol>	The identified cross references have been added to the Habitats Regulation Assessment (HRA) Screening Matrices (TR010034/APP/5.3(2)) as requested. The updated document has been resubmitted as part of the Deadline 2 submission.
12.13.	Applicant	A628 Habitats Regulation Assessment [APP-054]	Appendix C to the Habitat Regulation Assessment is an extract of traffic data for the affected road network within the two European sites screened into the assessment. This includes flows for the A57 and A628 in the opening year of 2025 and design year of 2040. The data suggests that the A628 would experience a change of greater than 1,000 AADT in 2025 and 2040, which would exceed the screening criteria set out in DMRB LA 105. Please could the Applicant explain why the A628 was screened out when the relevant thresholds appear to have been exceeded.	<p>The air quality study area has been defined in accordance with DMRB LA 105. The DMRB LA 105 guidance defines traffic change criteria for determining whether air quality impacts can be scoped out or require assessment (DMRB LA 105 paragraph 2.1) as:</p> <ul style="list-style-type: none"> <li>Road alignment will change by 5 m or more; or</li> <li>Daily traffic flows (two way) will change by 1,000 annual average daily traffic (AADT) or more; or</li> <li>Heavy Duty Vehicle (HDV) flows (two way) will change by 200 AADT or more; or</li> <li>A change in speed band.</li> </ul> <p>The traffic change criteria were applied to traffic output from the Scheme specific traffic model for the Scheme opening year (2025) to determine the Affected Road Network</p>

No	Question to	Reference	Question	National Highways' response
12.	<b>Biodiversity, ecological and geological conservation</b>			
				<p>(ARN). This Scheme specific traffic model for the opening year (2025) rather than the design year (2040) is used to define the ARN as the worst case for air quality is ordinarily the opening year given the expected reduction vehicle emissions in future years (see response to question 7.13).</p> <p>The Scheme specific traffic model includes strategic roads, including the A628 and the A57 through the European Sites. The extent of the ARN is presented in ES Figure 5.1 (APP-076). The traffic change (in the opening year) due to the Scheme along the A628 meets the traffic scoping criteria between the junction with Woolley Lane and New Road and has been included in the air quality modelling presented in Environmental Statement Chapter 5 Air Quality (TR010034/APP/6.3(2)). The criteria are not met on the A628 to the north of this, therefore European Sites adjacent to the A628 north of New Road have not been included within the air quality assessment. Where traffic change criteria are not exceeded this indicates that there would not be a significant effect on sensitive habitats due to the Scheme in these locations.</p> <p>Table C.1 within the HRA (TR010034/APP/5.3(2)), Appendix C presents outdated traffic data in error and will be resubmitted with the outdated traffic data removed within the Applicant's submission for Deadline 2. Within the European Sites, the A57 is the only road that meets the traffic scoping criteria. The earlier assessment for the Preliminary Environmental Information Report (PEIR) published in November 2020 showed that the A628 met had met the traffic scoping criteria. However, with updated traffic modelling, the A628 does not meet the traffic scoping criteria and has been screened out as described above (with the Scheme traffic change on the A628 between New Road and the A6024 being +960 AADT in the opening year). East of the A6024, where the European Site boundary is roadside, the change reduces further to +846 AADT.</p> <p>By way of further explanation regarding the outdated traffic data, an update to the traffic modelling was undertaken for the environmental assessments reported in the ES to reflect information that became available since the traffic modelling for the PEIR was undertaken. The changes included Scheme design changes, an update to the uncertainty log to reflect latest information on future year development certainty and full rerun of the Variable Demand Response Model. Overall, the updated traffic modelling generally resulted in reduced future traffic flow, resulting in lower total traffic flows both with and without the Scheme in the 2025 opening year compared to the PEIR traffic modelling. In addition to this, the design changes made as a result of the 2020 statutory consultation, generally reduced the impact of the Scheme, resulting in a smaller change in total traffic flows with the Scheme than those expected in the PEIR traffic modelling.</p>
12.14.	Applicant	HGV movements Habitats Regulation Assessment [APP-054]	Please could the Applicant provide confirmation as to whether any HGV movements are planned to be routed on the sections of the A57 and A628 passing through the two European sites during construction, and if so, how many daily movements there would be.	Construction traffic during the construction phase has been considered in accordance with DMRB LA 105 with available construction phase data, as outlined within ES Chapter 5 Air Quality (TR010034/APP/6.3(2)). The construction traffic associated with the transport of materials, plant and labour to and from site is expected to use routes to and from Ashbury Rail Head or Bredbury via the M67. The number of HDV (heavy duty vehicle) movements



No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
				are not anticipated to exceed the DMRB LA 105 traffic screening criteria for quantitative assessment of 200 HDV per day on these routes. Construction traffic is not expected to be routed via the A628 or A57 adjacent to the two European Sites with statutory designations, therefore, there would be no HDV movements passing through the European Sites due to the Scheme construction.
12.15.	Applicant	Habitats Regulation Assessment [APP-054]	Please can the Applicant confirm how the local and sub-regional authority areas were selected for the purpose of identifying plans and projects to form part of the in-combination assessment, as the NSER does not describe how the study area has been defined.	<p>The search area for the in-combination assessment as part of the HRA utilised neighbouring local and county planning authorities (via their respective planning portals) around the European Site and impacted areas (such as the ARN). Therefore, the search area was not strictly defined (such as 2 km around the DCO boundary) but all relevant planning authorities surrounding the Scheme; this included searching the local planning authority websites for information about other plans and projects. The identified relevant authorities were:</p> <ul style="list-style-type: none"> <li>• Barnsley Metropolitan Borough Council</li> <li>• Calderdale Council</li> <li>• Derbyshire County Council</li> <li>• Derbyshire Dales District Council</li> <li>• Greater Manchester Combined Authority</li> <li>• High Peak Borough Council</li> <li>• Kirklees Council</li> <li>• Oldham Council</li> <li>• Peak District National Park Authority</li> <li>• Rochdale Borough Council</li> <li>• Stockport Metropolitan Borough Council</li> <li>• Sheffield City Council</li> <li>• Tameside Metropolitan Borough Council.</li> </ul> <p>The National Infrastructure Planning website was searched for information on other NSIPs in the same and adjoining regions (North West, Yorkshire and Humber and East Midlands) that may have been assessed for impacts on the same European sites under the Habitats Regulations.</p>
12.16.	Applicant	In-combination effects Habitats Regulation Assessment [APP-054]	Please can the Applicant clarify the approach that has been taken in the assessment of in combination effects for those plans and projects for which 1) a Habitat Regulation Assessment has not been prepared; and 2) a Habitat Regulation Assessment has not been located. Where plans and projects have been excluded from assessment, please could the Applicant explain how this decision was taken, i.e. what impact pathways have been considered and how it has concluded that there would not be in combination likely significant effects.	During the in-combination assessment, any plans or projects that did not include an HRA were not considered suitable for inclusion within the in-combination assessment.



No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
12.17.	Applicant	Habitats Regulation Assessment [APP-054] ES Chapter 15 [REP1-020]	Please could the Applicant confirm that the reference made in Tables 5.1 and 5.2 of the Habitat Regulation Assessment Screening Report to committed developments as part of the cumulative assessment relates to the cumulative assessment presented in ES Chapter 15.	The Applicant can confirm that the cumulative assessment presented in ES Chapter 15 Cumulative Effects (REP1-020) corresponds with that outlined within the HRA Screening Report.
12.18.	Applicant	Air quality Habitats Regulation Assessment [APP-054]	Please could the Applicant explain in relation to the two European sites and their qualifying features why the conclusion has been reached that there would be no in-combination effects from changes in air quality with those committed developments that are not within the traffic model and which do have overlapping affected road networks.	<p>The findings of the in-combination assessment and the basis for screening out in combination effects are presented in Section 5.3 of the HRA. No likely significant in-combination effects were identified for either of the two European Sites.</p> <p>In-combination effects on qualifying features within European Sites from changes in air quality could occur as a result of cumulative traffic changes caused by the Scheme combined with other projects or plans.</p> <p>In accordance with the Habitats Regulations, the potential for a likely significant effect (LSE) of the Scheme 'in combination' with other projects and plans has been assessed in the HRA. Details of any project or plan that has been assessed under the Habitats Regulations for potential impacts on the same European Sites were obtained. A search was also undertaken to identify other projects and plans that may have an in-combination effect with the Scheme. This included a search of local authority websites and planning portals. For other projects and plans that were found in the searches the potential for in combination effects was considered based on the location likely to be affected by the project or plan, the likely traffic generation and any air quality impacts identified in the assessment work for the project or plan.</p> <p>The traffic modelling for the Scheme includes assumptions regarding other projects and developments. It is assumed that all relevant committed developments are included in the traffic model and so inherent in the traffic data used for the air quality assessment.</p> <p>A cumulative impact assessment, which identifies other committed development, was undertaken for the ES (Chapter 15 Cumulative Effects (Table 15.4) (REP1-020)) and was reviewed for the HRA. Where development was not included within the traffic model, and therefore not inherent in the air quality assessment, they were reviewed to assess the potential for cumulative effects to air quality based on the location of the development and the likely traffic generation by the development. Following the review of the location and likely traffic generation of developments not included within the Scheme specific traffic modelling, no adverse significant effects were identified as a result of different project cumulative effects.</p>
12.19.	Natural England	Likely Significant Effects Habitats Regulation	As the Habitat Regulation Assessment Screening Report does not identify any mitigation measures required to reach a conclusion of no likely significant effects on the two European sites, please can Natural England clarify its comments regarding the need for sufficient mitigation and confirm whether	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
<b>12.</b>	<b>Biodiversity, ecological and geological conservation</b>			
		Assessment [APP-054]	its Habitats Regulation Assessment pre-examination review TR010034 – A57 Link Roads Page 22 / 32 considers that mitigation is required to address the potential for likely significant effects on the two European sites.	
12.20.	Applicant Local authorities	Biodiversity Mitigation measures ES Chapter 8 [REP1-016] REAC [REP1-037]	<p>Various mitigation measures are proposed by the Applicant. These include, but are not limited to, the provision of structures to shelter bats, a new badger sett, new watercourses, hedgerow and tree planting and crossings of the proposed works for various species.</p> <p>a) At what point during the construction phase would each of these mitigation measures be constructed?</p> <p>b) Please could the Applicant explain how long these measures would take to establish before they would provide mitigation?</p> <p>c) What evidence is there that such measures provide effective mitigation?</p> <p>d) What measures would be provided to mitigate the effects of the scheme should these measures prove ineffective and how would these be secured?</p> <p>e) Do the local authorities have any comments?</p>	<p>a) The dedicated bat structure and artificial badger setts would require construction in advance of any removal/ closure of the confirmed bat roosts and badger setts. Therefore, these features would be constructed early in the construction period prior to the removal of any confirmed bat roosts or badger setts. The new habitat features (such as hedgerow and tree planting) would be planted towards the end of the construction period after the major construction works are completed and land is ready for the landscape elements. The other mitigation measures in relation to protected and priority species would occur throughout the construction period. These measures are outlined within the REAC (REP1-037) and a Precautionary Method of Working (which would be prepared prior to construction and would be secured through the REAC).</p> <p>b) The dedicated bat structure and artificial badger sett would be ready for use by the target species upon completion of the structures. As these features would be completed prior to the removal of any bat roosts or badger setts, the mitigation measures will be ready for use prior to any impacts. The time for the habitats to fully establish (to target condition) would vary but would take between four years (such as grassland habitat) to up to 30 years (such as woodland habitat) to fully establish.</p> <p>c) Artificial badger setts, bat structures, and habitat planting are widely used within developments with high levels of success. These mitigation measures have been proven effective on other highway schemes similar to the A57 Link Road scheme and following post construction monitoring, have been shown to be effective.</p> <p>d) The new habitats and ecological mitigation features will be monitored to ensure they are fulfilling their respective purpose and any remedial action will be undertaken immediately if the habitats and features are proving ineffective; this would include replacing any broken/ failed bat and bird nesting boxes, replacing any loss of tree planting, and fixing the artificial badger sett (if damaged). As part of the mitigation strategy, new habitats and features have been provided above and beyond the minimum requirement, such that if certain elements were to fail, there is sufficient remaining habitats and features left to provide the necessary mitigation. This includes a 10% biodiversity net gain in line with Defra Metric 2.0 which ensures that additional habitat is provided taking into consideration negative factors such as 'difficulty of creation' and 'time to completion'. These measures will be secured via the Outline Landscape and Ecological Management and Monitoring Plan that will be submitted at Deadline 3.</p>

## 14. Land use, social and economic, human health

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
	<b>Agricultural land, soil quality and ground contamination</b>			
13.1.	Applicant Local authorities	ES Chapter 9 [APP-065] NN NPS Development Plans	<p>a) In the context of NN NPS Paragraphs 5.168 to 5.176 please explain how the Applicant has sought to minimise impacts on soil quality.</p> <p>b) Please summarise the consideration given to how current agricultural practices contribute to the quality and character of the environment or the local economy.</p>	<p>a) All land affected by the Scheme is in ALC Grades 4 and 5 (poor and very poor quality) and so there is no best and most versatile (BMV) land requiring special protection. However, it is recognised that all affected soils have local agricultural value.</p> <p>The land temporarily acquired for construction shall be restored to a condition equivalent to its original, following an aftercare period which would typically be five years. During this time problems with compaction, surface stones, drainage and settlement shall be rectified. This would be achieved by means of a Soil Handling and Management Plan following the best practice set out in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.</p> <p>There is no mitigation for the permanent loss of agricultural soils, apart from conserving the soils that are stripped and using them elsewhere on the Scheme. A soil management specialist would be employed by the contractor to ensure soils being stripped, stockpiled and restored are handled correctly.</p> <p>On the flood compensation area beside the River Etherow the topsoil shall be stripped and stockpiled before being replaced on the lowered ground surface. The resulting quality of this land will be poorer than before; the ALC grade being reduced from Grade 4 to Grade 5, making it suitable only for rough grazing and hay making.</p> <p>b) Farms affected by the Scheme are small or very small (in the range of 75 ha to 5 ha) grass-based enterprises that use only family labour and occasional contractors, and so are not significant as local employers. In economic terms, many of these enterprises would be classed as part-time.</p> <p>Farming is based on beef and sheep production for sale either to market or abattoir. Apart from the small livery and animal feed store at Nettle Hall, there is no on-farm processing or farm shops that add value to the farms' output.</p> <p>The agricultural landscape is one of fields of permanent and improved grass, separated by hedges and strips of woodland. The Showground is also under grass, with grazing tenants.</p> <p>Apart from land that is to be acquired for the Scheme, no farmland will be permanently severed from the main farm buildings. This will be achieved by the provision of underpasses, enabling farming to continue on either side of the new road.</p> <p>However, it should be stressed that the present agricultural landscape may soon undergo change as a result of the 2020 Agriculture Act, Defra's Environmental Land Management Scheme (ELMS) and COP26. From now on, farmers will receive government support based not on the amount of land farmed, but on the delivery of environmental benefits such as increased biodiversity, improved soil and water quality and landscape restoration.</p>

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
				<p>New post-Brexit trade deals, particularly with regard to livestock products, may make the small-scale beef and sheep production, such as exists on the A57 corridor, uneconomic in the face of meat imports from large scale producers in Australia and New Zealand.</p> <p>These changes may encourage some older farmers to sell up to enterprises wishing to take advantage of the Landscape Recovery component of ELMS (or, alternatively, the Forestry Commission's Woodland Creation Planning Grant and Woodland Carbon Guarantee scheme), and undertake large-scale tree planting on farmland, as is already happening in similar landscapes in Wales.</p>
	<b>Local social and economic impacts</b>			
13.2.	Applicant Local authorities	Mottram Agricultural Show ES Chapter 12 [REP1-018] Case for the Scheme [REP1- 036]	Concerns have been raised about the loss of the Mottram Agricultural show (e.g. [RR-0259]). Table 3 of The Case for the Scheme states that the Mottram show has acquired a new larger showground to mitigate this effect.  Is the new showground likely to be operational prior to the loss of the former showground?	Conversations with representatives of the Mottram Show Society have confirmed that they are about to vacate the current location off Old Hall Lane and relocate to the new show ground off the A560 Stockport Road early in the summer of 2022, with the first show of the year scheduled to take place at the new show ground in August 2022.
13.3.	Savills	Comments on Relevant Representations [REP1-042] RR [RR-0792] RR [RR-0793]	Please respond to the Applicant's comments on relevant representations regarding:  a) Concerns that the current route alignment would sterilise land with development potential.  b) Consideration of suggested route alignments.	No response required from National Highways.



No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
13.4.	Applicant Local Authorities	ES Chapter 12 <a href="#">[REP1-018]</a> NN NPS	<p>Paragraphs 5.165 to 5.167 of the NN NPS state that existing open space, sports and recreational buildings and land should not be developed unless the land is surplus to requirements or the loss would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location.</p> <p>a) The Proposed Development would result in the permanent loss of land and amenity impacts on the public park/garden (communal yard behind 2 to 15 Old Road) and open space (Land adjacent to Mottram Moor Farm). Should the loss of this land be considered against paragraphs 5.165 to 5.167 of NNNPS?</p> <p>b) The Councils comments are requested on the loss of this land.</p> <p>c) What certainty is there that the cricket ground is unused, and is there any evidence to demonstrate how long it would be affected?</p>	<p>a) ES Chapter 12: Population and human health (REP1-018) recognises the importance placed by the NN NPS and NPPF on open space through review of Legislation, regulatory and policy framework as reported in Table 12.1, and section 12.10 considers compliance of the Scheme against the NN NPS. The DCO boundary has been designed so as to minimise land take and avoid receptors, where possible. For the ES the 'communal yard behind 2 to 15 Old Road' was identified through the ordnance survey addressbase record. The addressbase classified this area as a public park/garden (communal yard). This area is recorded in the Book of References (REP1-011) and the Special Category Land Plans (APP-019) as 3/30 (open space and paved area in junction of Old Road and Roe Cross Road) and 3/3a (open space and woodland on the north-east side of Roe Cross Road). Upon completion of the Scheme, the area above the Mottram Underpass (where 3/30 and 3/3a are situated) will be replaced by a new amenity green space. The open space (Land adjacent to Mottram Moor Farm) was categorised as open space through the ordnance survey addressbase record. It is understood to be an area of urban fringe, is understood to be within private ownership, and if it were to be used as open space it is not widely used within the community.</p> <p>b) No response from National Highways.</p> <p>c) In respect to the disused cricket ground, this area of land was recorded on 8 February 2007 within the Highways Agency's Compulsory Purchase Order as a disused cricket ground. Research indicates that the pitch within the land plot has been disused for at least 14 years and the Applicant has been informed by the landowner that crops are planted within the area that was once used for cricket, and have been for some time. Further evaluation of the disused cricket pitch confirms that the Tameside Playing Pitch Strategies (2010 and 2015-2025 Strategies) and the TMBC Unitary Development Plan 2004 did not list the site as a cricket pitch or playing field. This is bolstered by evidence in the TMBC Open Space, Sport and Recreation Review 2018 which identifies the sites topography to be natural space and countryside with primary purpose described as wildlife conservation, biodiversity and environmental education and awareness. Historic Google Earth mapping identifies that the cricket pitch was no longer in use by September 2005, with the pitch overgrown at that stage and scrub developing.</p>
13.5.	Applicant	ES Chapter 12 <a href="#">[REP1-018]</a>	<p>Table 12-18 provides details of the public rights of way (PRoW) to be temporarily stopped up and the provision of substitute routes.</p> <p>a) Provide details of the estimated length of time over which each temporary stopping up of a PRoW would occur.</p> <p>b) Please provide details of a safety audit for the proposed diversion routes, with particular regard to any diversions where there may be conflict with vehicular traffic.</p>	<p>a) The PRoWs will be stopped up for the minimum amount of time required to facilitate the programme of works. The current construction programme is over a period of 24 months from Spring 2023 to Spring 2025. These dates may vary as they are dependent on both the timing of any SoS decision and the progression of the detailed design.</p> <p>b) A Stage 1 Road Safety Audit was undertaken during the preparation of the Scheme Preliminary design. While the WCHAR report was not available at the time the audit was undertaken, details of the footpath diversion routes were shown on the Scheme Layout Plans provided to the Audit Team. One audit problem was raised during the audit in relation to the diversion of PRoW 50, 51 and 52. This audit problem specifically associated</p>



No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
			c) Are any affected PRow likely to be used by school children and, if so, what are the implications for journeys to and from school?	<p>with the alignment of the footpath diversion tie-in at the Junction 4 roundabout and will be addressed during detailed design.</p> <p>c) No schools have been identified within the DCO boundary and during the preparation of the Walking, Cycling and Horseriding (WCH) Assessment Report local schools were contacted in December 2020. This included Longdendale High School, Glossopdale School, Hollingworth Primary School, Arundale Community Primary School and Gamesley Primary School. Only Glossopdale School made a response. While comments from Glossopdale School were noted, this school is outside the boundary of the study area and no significant impacts are anticipated.</p> <p>A precautionary approach was taken in terms of receptor sensitivity by working on the basis that respective PRow were regional trails/routes likely to be used for recreation/commuting and have a limited potential for substitution. Magnitude was determined by length of diversion in keeping with DMRB. Where significant effects were identified this is noted in the assessment.</p> <p>Moderate adverse (significant) effects have been identified owing to the temporary diversions required at 10 PRow and unnamed footways. In respect of vulnerable groups including children, adolescents and older people, such diversions are also associated with negative health impacts in line with DMRB reporting.</p>
13.6.	Local Authorities	Chapter 5 of Case for the Scheme [REP1-036]	Do the local authorities have any comments on the Economic Assessment that has been carried out in respect of the Scheme?	No response required from National Highways.
<b>Human health</b>				
13.7.	Applicant Tameside Metropolitan Borough Council UK Health Security Agency	ES Chapter 12 [REP1-018] Paragraphs 12.6.29-12.6.31	<p>a) Is there any evidence of environmental factors that are likely to be affected by the Proposed Development contributing to lower life expectancy due to Cardiovascular Disease, CHD, stroke, diabetes, asthma, Heart Failure, Atrial Fibrillation and Peripheral Arterial Disease in Longdendale ward?</p> <p>b) Please could the Applicant advise how has this been considered in the assessment?</p>	<p>ES Chapter 12: Population and human health (REP1-018) has been written in accordance with DMRB LA 112. DMRB does not require identification of links between individual health concerns and the Proposed Development, rather it is concerned with Vulnerable Groups. These Groups included those with health impairments (see Table 12-13) and it is noted that such Groups are identified in the Study Area, with specific note made of Longdendale Ward. In respect of this ward, it was possible to identify such Groups as the Baseline data (section 13.6.31) noted that the under-75 Cardiovascular Disease (CVD) mortality rate in Longdendale is 75% higher than the Tameside average. The diagnosed prevalence of CHD, stroke, diabetes, asthma, Heart Failure, Atrial Fibrillation and Peripheral Arterial Disease (PAD) are higher than the Tameside average.</p> <p>Health outcomes for each health determinant are identified in the series of tables contained within the Human health section (see from 12.9.20 onwards). Where negative health outcomes for vulnerable groups have been identified, then appropriate mitigation is identified.</p>

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
				It is not within the scope of the Environmental Impact Assessment (EIA) to ascertain likely impact on life expectancy or the Proposed Developments interrelationship with individual health concerns.
13.8.	Applicant High Peak Borough Council Derbyshire County Council UK Health Security Agency	ES Chapter 12 [REP1-018] Paragraphs 12.6.43-12.6.46	a) Is there any evidence of environmental factors that are likely to be affected by the Proposed Development contributing to lower life expectancy in Hadfield North or Hadfield South than for England? b) Please could the Applicant advise how has this been considered in the assessment?	Please see response to question 13.7. Vulnerable groups including those with physically or mentally disadvantaged (elderly people, people with physical disabilities, people with other health problems or impairments) have been identified as being present in Hadfield North and South. It is noted that these wards have generally worse health outcomes than the region and England as a whole.  It is not within the scope of the Environmental Impact Assessment (EIA) to ascertain likely impact on life expectancy or the Scheme's interrelationship with individual health concerns.
13.9.	Applicant Local authorities	ES Chapter 12 [REP1-018] Register of Environmental Actions and Commitments REAC [REP1-037]	The ES identifies several significant adverse effects resulting from the Proposed Development, amongst others the permanent loss/demolition of 25 residential properties and displacement of residents, and effects resulting from construction operations. Such effects have potential to result in stress and affect the wellbeing of persons experiencing them. a) What measures will be put in place for persons to raise concerns about the effects of the works upon them during the lead up to any implementation of the Proposed Development? b) Comment on the desirability of implementing the following measures to provide effective communications between the Applicant and the wider community and to address any items of concern. c) How might they be secured? d) Are any further measures appropriate? <ul style="list-style-type: none"> <li>The early appointment of the proposed Community Relations Manager?</li> <li>The early establishment of the proposed National Highways and/or a Principal Contractor Customer Contact Centre?</li> <li>The development and publication of the Community Engagement Plan and annexing this to the Environmental Management Plan (First iteration)?</li> </ul>	a) A Community Engagement Plan, outlining the methods in which the local and surrounding community will be engaged during construction of the Scheme including contact details for key site management. As outlined in the roles and responsibilities in the Environmental Management Plan (First iteration) (EMP), the Principal Contractor will appoint a Community Liaison Manager to respond to complaints, community liaison, and ensure commitments to stakeholder consultations are delivered. Section 2.8 of the EMP (First iteration) includes communication measures that will be put in place for the construction phase. Table 2.3 of the EMP (First iteration) provides the outline communication processes. b) No response required from National Highways.. c) The measures provided in the response to (a) above will be secured through DCO Requirement 4. d) The Applicant has no issues with implementing these measures which will be included within the Community Engagement Plan.

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
			<ul style="list-style-type: none"> <li>In the opinion of the local authorities, would the implementation of any or all of the above measures assist in addressing community and others' concerns/problems during the pre-construction period?</li> <li>Would there be any benefit in retaining such measures for a period following implementation? If so, for how long?</li> </ul>	
13.10.	Applicant	ES Chapter 12 [REP1-018] Table 12.13	<p>Drivers experiencing congestion and delays are likely to experience stress. Delays are noted in the baseline conditions on the network, and it is anticipated that there will be change resultant from the scheme. Table 12.13 of ES Chapter 12 [APP-068] identifies public transport users and vehicle travellers as an affected group.</p> <p>a) Has any assessment been made of changes to the amount and/or degree of stress experienced by drivers when passing through the study area?</p> <p>b) If so, what, if any, would the level and impact of changes to driver stress be:</p> <ul style="list-style-type: none"> <li>during the construction phase when compared to the baseline conditions; and</li> <li>during the operational phase when compared to the baseline conditions?</li> </ul> <p>c) If no assessment has been made: -</p> <ul style="list-style-type: none"> <li>Should an assessment be made?</li> <li>If not, why not?</li> <li>If yes, will such an assessment be made and submitted to the ES for consideration during the Examination Period?</li> </ul>	<p>a) Consideration of vehicle travellers stress is no longer a requirement of DMRB with this requirement having been withdrawn in October 2019, and superseded by LA 112, which makes no specific note of stress. However, the assessment undertaken notes different groups within the population, and this includes the 'Wider Population'. As noted in Table 12.13 in ES Chapter 12: Population and human health (REP1-018). Public Transport users and vehicle travellers are considered as part of this Wider Group within the Population. The qualitative assessment approach undertaken has noted that there could be potential impacts on health and wellbeing from reduced traffic through Mottram village and it is considered that this represents a beneficial health outcome on the Wider Groups.</p>

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
				<p>b) Consideration of Wider Groups and the potential impacts on health and wellbeing during Construction through loss of access to public transport, as well as temporary closure, modification or diversion of local roads and routes and disruptions to normal activities / journeys is made within Table 12.24 in ES Chapter 12: Population and human health (REP1-018). This notes Wider Groups are considered on medium sensitivity and it notes that there will be a change to the health determinant caused by Loss of access to public transport, temporary closure, modifications or diversions to local roads and disruptions to normal journeys with resulting health and wellbeing outcomes, which will lead to an adverse health outcome. It is noted that this will be temporary, direct and indirect but will be reversible and limited to the construction phase. This table provides further clarity by providing a summary of health outcome as there is potential for the Scheme to have temporary adverse effects on transport options within the DCO Boundary, particularly the highway network and public transport routes during construction.</p> <p>The roads in the study area will need to be modified, diverted or closed temporarily to facilitate the construction works. Motorised vehicle travellers and/or other public transport users in the study area are likely to face temporary disruptions to travel activity, delays and/or increased commuter times due to construction activities, increases in construction vehicles, introduction of restrictions and diversion routes and traffic management. This may result in some wider groups and vulnerable groups having to change their travel patterns or find alternative arrangements. Lower income groups and vulnerable groups could be disproportionately affected by any impacts. This is therefore considered to result in a Negative health outcome.</p> <p>Table 12.24 of the ES also notes embedded mitigation which it is considered will address these issues during the construction phase.</p> <p>During operation the transport assessment noted that traffic congestion issues will be alleviated with significant reductions in traffic predicted at Mottram Moor and that the scheme will provide for more reliable and shorter journey times. This is considered to provide for overall improvements to access with subsequent benefits to wellbeing through reductions in stress (see 12.9.57 in relation to Development Land and Business and 12.9.85 in relation to Transport Options)</p> <p>c) See National Highways' response to question 13.10(a)</p>
13.11.	Applicant	ES Chapter 12 [REP1-018]	<p>The construction industry is identified as a high-risk industry and construction workers are at risk of life changing injury.</p> <p>Has any assessment been made of the effect of the Proposed Development on the health of the construction workforce during:</p> <ul style="list-style-type: none"> <li>the construction phase, resultant from building operations, traffic management or any other source; and</li> <li>the operational phase, resultant from maintenance operations?</li> </ul> <p>If not, would such an assessment be appropriate now?</p>	<p>While it is acknowledged that the term 'Construction Workers' or 'Construction Workforce' are not specifically noted within Table 12.13 (identification of vulnerable groups) this table makes reference to 'Adults / Working People' with the further explanation that the relevant receptors are business owners and users. As such, the assessment considered construction workers as part of the Wider Groups.</p> <p>Effects on the Wider Groups of construction activities was made in Section 12.7 of the ES and through a series of Tables 12-14 to 12-25. Of particular note is Table 12.23 which provides detail of considerations made in respect of construction activities on Safety / Risk of injury and death. This notes for example that the risks of injuries and death for contractors working on the Scheme and the public from unauthorised access and trespass that could result in slips, trips, falls and conflict with plant, vehicles and materials has the</p>

No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
				<p>potential to result in a Negative health outcome. These risks would be temporary, direct and indirect and short-term.</p> <p>Any conflict, damage, leaks and/or blocks to utility network have the potential to result in a negative health outcome. These effects would be temporary, direct, short-term and reversible. There is also a risk of injury or loss of life for construction workers from explosion or asphyxiation or other effects from leaks or damaged utilities.</p> <p>Conflict, damage, leaks and/or blocks to buried services have the potential to result in a Negative health outcome. These effects would be temporary, direct, short-term and reversible. There is also a risk of injury or loss of life for construction workers from explosion or asphyxiation or other effects from leaks or damaged buried services.</p> <p>Mitigation will be noted as such in the Environmental Management Plan (Second iteration). In any case, Risk to construction workers is covered principally through the Construction (Design and Management) Regulations 2015 rather than through the EIA Regulations and will remain the responsibility of the appointed Principal Contractor and Principal Designer to assess and manage. As Construction (Design and Management) Regulations will apply, all threats to workforce health and safety should be addressed during the construction phase.</p>
13.12.	Applicant	ES Chapter 12 [REP1-018] ES Chapter 11 [REP1-017]	<p>Paragraph 12.9.81 states “<i>During the operation phase, there were more perceptible increases than perceptible decreases with the Scheme overall. Significant adverse effects were predicted at 128 noise sensitive receptors due to the Scheme. There were also 366 noise sensitive receptors where significant beneficial effects were predicted due to the Scheme</i>”.</p> <p>a) Please clarify this statement. b) The updated ES Chapter 11 provides updated figures within Paragraph 11.12.4. Please amend ES Chapter 12 for consistency.</p>	This text has been amended in the amended version of Chapter 12 as requested.
13.13.	Local authorities	Other policy and factual issues	Do the local authorities have any comment with regard to the effects of the Proposed Development on human health?	No response required from National Highways.
<b>Mitigation and opportunities for enhancement</b>				
13.14.	Appellant	ES Chapter 12 [REP1-018] Outline EMP [APP-183] REAC [REP1-037]	<p>In respect of the risks prevalent in the construction industry:</p> <p>a) With regard to the Construction (Design and Management) Regulations 2015, please comment on the application of the requirements of that legislation in ensuring that risk to construction workers is minimised during the construction and operational phases of the Proposed Development. b) Are any further measures appropriate?</p>	<p>a) The design process is conducted in accordance with Health and Safety legislation and in particular under Construction (Design and Management) Regulations 2015 (CDM Regulations) (with specific duties under Regulation 11), in preparing designs, the implications of design decisions and design features on the ability to construct, maintain, operate and use the design safely will be considered throughout the design process, including during design review. The approach is aimed at identifying and minimising risks to construction workers during the design phase and includes:</p>



No	Question to	Reference	Question	National Highways' response
<b>13.</b>	<b>Land use, social and economic, human health</b>			
			<p>c) How would any other measures, if deemed appropriate, be secured?</p> <p>d) Would an entry in the REAC be appropriate?</p>	<ul style="list-style-type: none"> <li>Ensuring safety is embedded within the thought process of the designers</li> <li>Actively eliminate or, where elimination is not possible, reduce the risk and promote safe practices and record and review this process with the scheme CDM risk register</li> </ul> <p>Clearly communicate significant residual risks to others</p> <p>b) In addition to the above, off-site manufacture and assembly is promoted as the default construction assumption, this reduces risks to construction workers by maximising the construction activity undertaking within a safe and controlled environment.</p> <p>c) Health and safety measures are secured through the Health and Safety Legislation, and the Health and Safety Executive and are matters outside the Planning Act 2008, and the dDCO.</p> <p>d) An entry within the REAC would not be appropriate.</p>
13.15.	Appellant	ES Chapter 12 <a href="#">[REP1-018]</a>	<p>Several properties and other groups have been identified as experiencing adverse effects in regard to visual amenity, and that this will adversely affect residents' health. It is noted that some of these effects will be mitigated, over time, by planting.</p> <p>a) Could mitigation of the adverse effects be ameliorated by provision of planting earlier in the construction phase, rather than later?</p> <p>b) Where tree and shrub planting are proposed, what size of vegetation is proposed?</p> <p>c) Could the mitigation be ameliorated by provision of more mature specimens?</p>	<p>a) Where planting is required to mitigate visual effects, the approach will be to consider early planting where feasible. However, to allow for successful establishment, consideration of other constraints will need to be prioritised, e.g. optimum planting season and availability of suitable stock.</p> <p>Please refer to the response to questions 5.5 e, f and g (under Landscape and visual design).</p>
<b>Other land use, social and economic, human health matters</b>				
13.16.	Local authorities Local highway authorities EA	Other policy and factual issues	<p>Are there any other comments with respect to:</p> <ul style="list-style-type: none"> <li>agricultural land or soils;</li> <li>local social and economic impacts;</li> <li>human health;</li> <li>mitigation and opportunities for enhancement; and</li> <li>any other policy and factual issues?</li> </ul>	No response required from National Highways.

## 15. Other environmental topics

No	Question to	Reference	Question	National Highways' response
<b>14.</b>	<b>Other environmental topics</b>			
14.1.	Local authorities Local highway authorities Environment Agency	Common law nuisance and statutory nuisance Section 79(1) of the Environmental Protection Act 1990 Statement in Respect of Statutory Nuisance [APP-053] ES Chapter 11 – Noise and Vibration [REP1-017] Outline EMP [APP-183] REAC [REP1-037] Outline Traffic Management Plan [REP1-038] dDCO [REP1-041] Article 41	The Applicant identifies the potential for the Proposed Development to create statutory nuisance in relation to smoke emitted from premises, dust, steam or effluvia arising on business premises, artificial light emitted from premises, noise emitted from premises and noise emitted from or caused by a vehicle, machinery or equipment in a street. It then states that with the mitigation measures secured by the EMP and REAC, Traffic management Plan and DCO, none of the statutory nuisances are predicted to arise. The ES predicts significant noise and vibration effects during construction and operation. a) Are there any comments regarding the assessment of the potential for statutory nuisance? b) Are the dDCO provisions for defence to proceeding in respect of statutory nuisance necessary and appropriate?	No response required from National Highways.
14.2.	Statutory Undertakers Local authorities Local highway authorities	Utility infrastructure ES Chapters 1-4 [REP1-014] Chapter 2 paragraph 2.5.30-34	The Applicant has identified the major utilities works and temporary connections required during construction. a) Are any other major diversion or relocation works anticipated within the boundary of the Proposed Development? b) Are any other works proposed through permitted development rights likely to affect the Proposed Development?	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
<b>14.</b>	<b>Other environmental topics</b>			
			c) Is there any reason to suggest that any of those works would be likely to cause an impediment to the planned delivery of the Proposed Development?	
14.3.	Applicant Local authorities Local highway authorities	Civil and military aviation and defence NN NPS paragraphs 5.55-7	<p>a) With reference to NN NPS, please could the Applicant summarise the steps taken to identify any potential effects on civil or military aviation and/or other defence assets and whether it considers that any are likely to be affected?</p> <p>b) If any may be affected, please could the Applicant summarise the consultations with the Ministry of Defence, Civil Aviation Authority, National Air Traffic Services and any aerodrome – licensed or otherwise – likely to be affected, and the proposed mitigation measures?</p> <p>c) Are the Local Authorities aware of any civil or military aviation and/or other defence assets that might be affected?</p>	<p>As part of the consultation National Highways (then Highways England) undertook between January and March 2018, the Civil Aviation Authority and the Secretary of State for Defence were consulted on the Scheme as set out in Appendix G to the consultation report (APP-033) (table references 26 (Civil Aviation Authority) and 51 (Secretary of State for Defence)). The consultation was undertaken in accordance with the list of prescribed consultees set out in table included in Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended). As set out in section 5.7 of the Consultation Report (APP-026) neither party responded to the consultation.</p> <p>As part of the consultation undertaken in November and December 2020, the Civil Aviation Authority and the Secretary of State for Defence were consulted on the Scheme as set out in Appendix R to the consultation report (APP-044) (table references 25 (Civil Aviation Authority) and 50 (Secretary of State for Defence)). The consultation was also undertaken in accordance with the list of prescribed consultees set out in table included in Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended). As part of this consultation National Air Traffic Services was also consulted (table reference 52). As set out in section 8.8 of the Consultation Report (APP-026) none of these parties responded to the consultation.</p> <p>The Civil Aviation Authority, the Secretary of State for Defence and National Air Traffic Services were also sent a notice under section 56 of the Planning Act 2008 following the acceptance of the DCO application. No further responses have been received from these parties.</p>
14.4.	Local authorities Local highway authorities	Safety, security and major accidents and disasters Safety NN NPS paragraphs 3.10, 4.60	<p>a) Are there any comments about whether enough opportunities been taken to improve road safety, including introducing the most modern and effective safety measures where proportionate?</p> <p>b) Should any other opportunities be considered or taken? If so, what?</p>	No response required from National Highways.
14.5.	Applicant	Safety, security and major accidents and disasters National security considerations	Please provide evidence that the Centre for the Protection of National Infrastructure and the Department for Transport are satisfied that security issues have been adequately addressed in the Proposed Development.	As set out in paragraph 4.76 of the NN NPS, the requirement for consultation with relevant security experts from CPNI and the Department for Transport applies “ <i>Where national security implications have been identified...</i> ”. No national security implications have been identified for this scheme and therefore no consultation has been required.

No	Question to	Reference	Question	National Highways' response
<b>14.</b>	<b>Other environmental topics</b>			
		NN NPS paragraphs 4.74-8		
14.6.	Applicant	ES Chapter 15 [REP1-020]	In considering the different projects summarised in Table 15.7 have any account been taken of the likely levels of construction traffic that these will generate?	<p>Construction traffic generated by the projects listed in Table 15.7 in ES Chapter 15 Cumulative Effects (REP1-020) has not been explicitly accounted for in the traffic modelling used for the assessment of the Scheme, i.e. generated construction traffic has not been added to the Do-minimum traffic flows. This is because information on the amount of construction traffic generated by these projects, its distribution across the road network and temporal profile is not generally available. In addition, most of the projects listed in Table 15.7 are relatively small in scale and will, therefore, generate relatively small amounts of construction traffic. In addition, the construction of these projects will be spread over several years and the construction traffic generated will be dispersed across the road network. Therefore, the construction traffic generated by these proposed developments is likely to have a negligible impact on forecast traffic flows.</p> <p>Furthermore, the number, scale and temporal spread of the projects listed in Table 15.7 in ES Chapter 15 (REP1-020) is likely to be typical of that over preceding periods. Therefore, the volume of construction traffic on the road network at any one time associated with these developments is unlikely to be significantly different in the future from that over preceding periods. Consequently, the baseline traffic data and future traffic forecasts used for the assessment of the Scheme intrinsically accounts for a typical future pipeline of developments being constructed.</p>
14.7.	Local authorities Local highway authorities EA NE Statutory Undertakers	Other policy and factual issues	<p>Are there any other comments with respect to:</p> <ul style="list-style-type: none"> <li>• common law nuisance and statutory nuisance</li> <li>• utility infrastructure</li> <li>• civil and military aviation and defence</li> <li>• safety, security and major accidents and disasters</li> <li>• cumulative and combined effects; and</li> <li>• any other policy and factual issues?</li> </ul>	No response required from National Highways.
14.8.	Applicant	Transport Assessment Report [APP-185] Chapter 9 Various Relevant Representations	<p>a) Do any of the baseline assessments reflect the onset of the Coronavirus (COVID-19) pandemic?</p> <p>b) How has the Applicant considered the effects of any potential long-term impact resultant from the Coronavirus (COVID-19) pandemic on, amongst other things, but not restricted to, changes in economic growth, travel patterns and increased home working?</p>	<p>The traffic forecasting and modelling that has been used for the assessment of the Scheme was undertaken prior to the COVID-19 pandemic. Therefore, any potential long-term changes in travel patterns, economic growth, home working, etc. due to the pandemic are not reflected in the Scheme assessment.</p> <p>The forecast traffic growth used for the assessment of the Scheme has been derived in full accordance with the latest best practice guidance contained in the Department for Transport's (DfT) Transport Analysis Guidance (TAG) and is based on the DfT's National Trip End Model (NTEM). The latest version of which predates the Covid-19</p>

No	Question to	Reference	Question	National Highways' response
14.	Other environmental topics			
14.9.	Applicant		<p>a) Does the ES make any consideration of the effects of potential changes in power trains of motor vehicles during the assessment period of the scheme?</p> <p>b) If so, how has the Applicant assessed such changes and what effect do they consider they will have on, amongst other things, travel patterns, vehicle emissions and carbon?</p>	<p>pandemic. National Highways recognises that the Covid-19 pandemic has, to date, had a significant effect on the people's travel patterns and traffic volumes using the road network. However, it is too early to know what the long-term impacts of the Covid-19 pandemic will be on people's travel patterns and particularly on forecast traffic growth. Until there is evidence of the likely longer-term impacts of the pandemic on peoples travel patterns that will enable revised traffic forecasts to be derived with some certainty, National Highways can only rely on the established method of forecasting traffic growth for the assessment of the Scheme that predates the Covid-19 pandemic. However, as set out in the Case for the Scheme (TR010034/APP/7.1(3)), the Scheme Appraisal does take account of lower forecast economic growth due to Covid-19.</p> <p>A motor vehicle power train comprises the elements of the vehicle which produce power and drive the vehicle forward. Changes in motor vehicle powertrains include hybridization, electrification and improvements in fossil fuel powered vehicle efficiency and emissions. Future improvement in vehicle technology is expected to lead to a reduction in tailpipe emissions in future years and has been considered in the ES through the use of future year projections of vehicle emission rates.</p> <p>Future year vehicle emission rates are produced by Defra within their Emissions Factors Toolkit (EFT), which is based on fleet composition data, European emission standards, projected improvements to the quality of fuel and technology conversions in the national fleet as available from the National Atmospheric Emissions Inventory (NAEI) future emissions projections. Vehicle emission rates are updated by Defra on a periodic basis.</p> <p>The impact of the potential changes in traffic growth on travel patterns has been considered within the Scheme specific traffic modelling which is based on traffic activity projections from the Department for Transport (DfT) (RTF 2018) and DfT car sale projections (April 2019) including the uptake of electric and hybrid electric propulsion systems.</p> <p>The assessment of air quality presented in ES Chapter 5 Air Quality (TR010034/APP/6.3(2)) and the assessment of operational road traffic related carbon emissions presented in the Chapter 14 Climate of the ES [REP1-019] are based on the Scheme specific traffic modelling and National Highways speed band emission rates which use the Defra Emissions Factors Toolkit (EFT v10.1). These emission rates were published in August 2020 and were the latest available at the time the emissions modelling was undertaken and included assumptions about future fleet mixes assumed at that time. EFT v10.1 includes emission factors up to and including 2030.</p> <p>It should be noted that, future year assumptions on the vehicle fleet within Defra EFT v10.1 predate the announcement by the Government to end the sale of new petrol and diesel petrol and diesel vehicles by 2030, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035, nor do they take account of the Transport Decarbonisation Plan (TDP) published in July 2021, which will lead to a</p>



No	Question to	Reference	Question	National Highways' response
14.	Other environmental topics			
				<p>substantive decrease in carbon emissions from road transport between now and 2050. The assessments of operational road traffic related carbon emissions presented in the ES Chapter 14 Climate (REP1-019) is therefore conservative.</p> <p>Also, as emission rates included in EFT v10.1 were for the period to 2030 an assumption of no change in emission factors beyond 2030 was made. The assessment of design year (2040) carbon emissions is therefore particularly conservative given the average emissions of the fleet are likely to change substantially beyond 2030.</p> <p>Defra published an updated Emissions Factors Toolkit in November 2021 (v11), which extended emission factors for carbon to 2050. However, this update has not reflected the changes to fleet emissions for the accelerated move to zero emissions, nor has it reflected fleet growth assumptions for post Covid-19. National Highways' speed band emission rates have yet to be updated to reflect Defra Emissions Factors Toolkit v11. Further analysis to fully understand the impact of the changing vehicle fleet after 2030 would require more time and could not be achieved within the timescale for responses to the Examining Authority's first written questions.</p>

## 16. Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
	<b>The Book of Reference, Statement of Reasons, Land Plans, diligent enquiry and updates</b>			
15.1.	Applicant	Compliance with DCLG Guidance	Please advise whether the Book of Reference [REP1-011] is fully compliant with DCLG Guidance <sup>8</sup> .	The Applicant confirms that the Book of Reference (REP1-011) was prepared in accordance with Guidance as set out in paragraph 1.13 of the Book of Reference (REP1-011).
15.2.	Applicant	Category 3 Parties	<p>Are there any other persons who might be entitled to make a relevant claim if the DCO were to be made and fully implemented and should therefore be added as Category 3 parties to the Book of Reference [REP1-011]? This could include, but not be limited to, those that have provide representations on, or have interests in:</p> <ul style="list-style-type: none"> <li>• noise, vibration, smell, fumes, smoke or artificial lighting;</li> <li>• the effect of the construction or operation of the Proposed Development on property values or rental incomes;</li> <li>• concerns about subsidence/ settlement;</li> <li>• claims that someone will need to be temporarily or permanently relocated;</li> <li>• impacts on a business;</li> <li>• loss of rights, e.g. to a parking space or access to a private property;</li> <li>• concerns about project financing;</li> <li>• claims that there are viable alternatives; or</li> <li>• blight?</li> </ul>	<p>Part 2 of the Book of Reference (REP1-011) includes Category 3 parties. Definition and description of Category 3 parties included in Part 2 of the Book of Reference (REP1-011) are provided in paragraph 2.2 'Part 2 Description' of the Book of Reference (REP1-011) and section 4.6 'Category 3 persons – section 10 of the Compulsory Purchase Act 1965 (CPA 1965) and/or section 152(3) of the 2008 Act' of the Statement of Reasons (TR10034/APP/4.1(3)).</p> <p>As summarised in paragraph 4.6.1 of the Statement of Reasons (TR10034/APP/4.1(3)) 'Category 3 persons are those with potential claims under the above legislation should the Scheme be carried out. They mainly relate to those who land may be injuriously affected (i.e. its value would be diminished) as result of the Scheme, although the land in question is not acquired outright.'</p> <p>Section 4.7 'Assessment of Category 3 persons which fall under Part I of the Land Compensation Act 1973 (LCA 1973)' of the Statement of Reasons (TR10034/APP/4.1(3)) provides an explanation of how an assessment for the identification of Category 3 parties was undertaken. As set out in paragraph 4.7.3, the Applicant applied 'worse-case assessment' criteria for the purposes of identifying Category 3 interests. As such, the Applicant has adopted a cautious approach to ensure that all those interests that could potentially make a relevant claim are included in Part 2 of the Book of Reference (REP1-011).</p> <p>However, the assessment (and the interests' subsequent inclusion in Part 2 of the Book of Reference (REP1-011) does not in any way confirm that a successful claim could be made. Equally, any omission from Part 2 of the Book of Reference (REP1-011) would not prejudice a claim being successful if it satisfied the relevant qualifying criteria.</p> <p>Those items listed as issues in the Examining Authority's Draft Written Questions 15.2 would only result in the inclusion within Part 2 of the Book of Reference (REP1-011) where the assessment identified interests as being able to make a relevant claim in respect of the definition provided in Section 57 of the Planning Act 2008.</p> <p>The Applicant will include any additional Category 3 Parties in updates to the Book of Reference throughout Examination if any additional interests are identified.</p>
15.3.	Affected Persons	Known inaccuracies	Are any Affected Persons or Interested Parties aware of any inaccuracies in the Book of Reference [REP1-011], Statement of Reasons [REP1-010] or Land Plans [APP-007]?	No response required from National Highways.

<sup>8</sup> Planning Act 2008, Guidance related to procedures for the compulsory acquisition of land, DCLG, September 2013

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
	Interested Parties			
15.4.	Applicant	Diligent enquiry into land interests	<p>a) Please could the Applicant summarise where it has not yet been able to identify any persons having an interest in land, including any rights over unregistered land?</p> <p>b) What further steps will the Applicant take to identify any unknown right during the Examination?</p>	<p>a) Table 4.1 'Unknown Ownerships' included in the Statement of Reasons (TR10034/APP/4.1(3)) details unknown ownerships. Sections 4.4. and 4.5 of the Statement of Reasons sets out the approach taken to identifying interests included in the Book of Reference (REP1-011), with paragraph 4.5.3 of the Statement of Reasons (TR10034/APP/4.1(3)) detailing the approach taken where land was unregistered.</p> <p>b) The Applicant will continue with diligent inquiry to ensure unknown rights are identified where possible. This will include further Land Registry searches, discussions with neighbouring landowners and installation of site notices as appropriate.</p>
15.5.	Applicant	Updates	<p>Please will the Applicant ensure that the Book of Reference [REP1-011], Statement of Reasons [REP1-010] or Land Plans [APP-007] and Special Category Land Plans [APP-019] are:</p> <ul style="list-style-type: none"> <li>kept fully up to date with any changes and the latest versions submitted at the Deadlines shown in the Examination timetable together with an explanation of the reasons for each change;</li> <li>supplied in two versions at each Deadline, the first being the up-to-date clean copy and the second showing tracked changes from the previous version; and</li> <li>supplied with unique revision numbers that are updated consecutively from the application versions, clearly indicated within the body of each document and included within the electronic filename; and that</li> <li>the dDCO, including Schedule 10, is updated accordingly?</li> </ul>	Noted.
	<b>How it is intended to use the land, whether reasonable alternatives have been explored and whether the rights sought are legitimate, proportionate and necessary</b>			
15.6.	Local planning authorities Local highway authorities	Options appraisal	<p>Paragraph 4.27 of the NN NPS states that all projects should also be subject to an options appraisal, which should consider viable modal alternatives. It goes on to advise that national road schemes will have been subject to a proportionate options appraisal as part of the investment decision making process. Further, that it is not necessary for the ExA to reconsider that process if it is satisfied that the assessment has been undertaken. Paragraph 2.21 also advises that relying solely on</p>	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
			alternatives such as demand management and modal shift " <i>is not viable or desirable as a means of managing need</i> ". Do the local planning authorities or local highway authorities have any concerns about whether a proportionate options appraisal, including the consideration of viable modal alternatives, has been undertaken?	
15.7.	Local planning authorities Local highway authorities	Reasonable alternatives Necessity	Are the local planning authorities or local highway authorities aware of: a) any reasonable alternatives to any compulsory acquisition or temporary possession sought by the Applicant; or b) any areas of land or rights that the Applicant is seeking the powers to acquire that they consider are not needed?	No response required from National Highways.
15.8.	Applicant	Flexibility	Paragraph 2.5.1 identifies parts of the Proposed Development where some flexibility is proposed. a) What is the potential for the detailed design of those parts to result in a reduction in the need to acquire land or rights? b) What is the potential for different options considered during detailed design to have different human rights implications? c) How would human rights be considered during detailed design?	a) The Applicant has identified the land and rights it requires with appropriate flexibility to ensure the Scheme can be delivered. Should the final detailed design allow a reduction in the land or rights required the Applicant will only seek to take the minimum necessary to deliver the Scheme. A power within the dDCO permitting the Applicant to compulsorily acquire land or rights does not require the Applicant to take such land or rights but is essential to ensure the deliverability of the Scheme. The ExA will appreciate that the development of the detailed design will be required to operate within the defined parameters of the Development Consent Order, if made. The Applicant will constantly review, as the detailed design is developed, whether land and rights proposed to be acquired can be reduced and where appropriate liaise with affected parties. b) The Applicant has considered the proposed acquisition of land and rights necessary to deliver the Scheme on a 'worst case' basis. Should the evolution of the detailed design result in a reduction in the land or rights required and the relevant affected party wishes to retain such land or rights this may result in improvement against that assessment. c) The Applicant will keep human rights considerations under review when formulating the detailed design. For example, the Scheme currently includes the acquisition of residential properties and certain residents are known to have expressed a preference to continue to reside in their property. The detailed design will be carefully considered to establish if it is possible to enable such residents to retain ownership of their property, provided it is safe and appropriate to do so after considering all relevant factors relevant to the construction and operation of the Scheme.
<b>Individual objections, issues and voluntary agreements</b>				
15.9.	Affected Persons	Affected Person's issues and concerns	Does any Affected Person have any concerns that they have not yet raised about the legitimacy, proportionality or necessity of the compulsory acquisition or temporary possession powers sought by the Applicant that would affect their land or their rights in land?	No response required from National Highways.

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
15.10	Applicant	Updates on discussions with Affected Persons	<p>At each of the relevant Deadlines shown in the Examination timetable, please will the Applicant provide a schedule of progress on discussions regarding Compulsory Acquisition and Temporary Possession, voluntary agreements, objections and any progress in respect of blight that:</p> <ul style="list-style-type: none"> <li>a) identifies the Affected Person, their interests in each plot, the powers sought by Applicant; the purpose(s) for which they are sought; and the anticipated duration of any Temporary Possession;</li> <li>b) summarises any objections by the Affected Person to the powers being sought by the Applicant, and the Applicant's responses;</li> <li>c) identifies whether voluntary agreement has been reached;</li> <li>d) sets out the progress made since the last update, any outstanding matters, the next steps to be taken and the progress anticipated by the close of the Examination.</li> </ul> <p>The above information will be published on our website, so commercial and/or confidential details need not be given.</p>	Noted.
<b>Crown interests</b>				
15.11	Applicant	Crown Land	<p>Section 7.1 of the Statement of Reasons [REP1-010] refers to plots that became subject to escheat and fell to be dealt with by the Crown Estate. The Applicant has suggested that those plots should not be considered as Crown Land for the purposes of the PA2008.</p> <p>Please could the Applicant:</p> <ul style="list-style-type: none"> <li>a) provide written evidence from the Crown Estate to support their view, together with an explanation of the legal basis of that position; and</li> <li>b) set out how it suggests proceeding in accordance the PA2008 if those plots were to be considered as Crown Land.</li> </ul>	<p>The Crown Estate has been identified in the Book of Reference (REP1-011)-for the A57 Link Roads scheme as having a potential Category 2 interest with regards to land subject to escheat.</p> <p>The following parcels, shown on the schemes Land Plans (APP-007) have been identified with such a potential interest:</p> <p>3/2k, 3/2o, 3/2p, 3/2q, 3/2s, 3/8, 3/12, 6/2f, 6/2g, 6/2i, 6/2j, 6/2k, 6/2l, 6/2m, 6/2n, 6/2o, 6/2p, 6/2q, 6/2r, and 6/7.</p> <ul style="list-style-type: none"> <li>a) Written confirmation of this matter has been requested from the Crown Estate via its sole legal representatives with regards to escheat, Burges Salmon.</li> </ul> <p>Alongside this the Examining Authority's attention is drawn to the Escheat Guidance note prepared by Burges Salmon. In relation to the Crown Estate's interest in land subject to escheat, the guidance note [REDACTED] states the following:</p> <p><b>Subordinate interests and encumbrances – Liability of the Crown</b></p> <p><i>Escheat does not determine any subordinate interests in the property in question, such as a lease or mortgage, or any other encumbrances to which the property is subject. The Crown will not, by virtue of the property becoming subject to escheat, assume any liabilities in relation to such interests or encumbrances or of any other nature. The Crown is not a successor in title to the freeholder and does not derive title under him. Only if,</i></p>



No	Question to	Reference	Question	National Highways' response				
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>							
				<p><i>exceptionally, the Crown took possession of the property, or committed an act of management in relation to the property, might it assume any liabilities. Where a property may be subject to escheat, the Crown is not the 'owner' in any conventional sense and does not have the ordinary responsibilities of an owner.</i></p> <p>In the unlikely event that these plots were considered Crown land, National Highways would seek the agreement of the Crown Estate that these plots could be subject to acquisition.</p>				
<b>Statutory Undertakers</b>								
15.12	Applicant	Updates on discussions with Statutory Undertakers	<p>At each of the relevant Deadlines shown in the Examination timetable, please will the Applicant provide a schedule of progress in relation to each Statutory Undertaker where s127 and/ or s138 of the PA2008 applies and that sets out:</p> <ul style="list-style-type: none"> <li>a) an up-to-date list of Statutory Undertakers</li> <li>b) the nature of their undertakings;</li> <li>c) the Statutory Undertaker's land, rights or apparatus that would be affected and how it would be affected;</li> <li>d) the progress made in discussions with Statutory Undertakers since the last update in relation to the tests set out in s127(3)(a) or (b), s127(6)(a) or (b) and s138(4) of the PA2008;</li> <li>e) any agreement or differences between the Applicant and the Statutory Undertaker about whether the tests have been met, the next steps to be taken, and the progress anticipated by the close of the Examination.</li> </ul> <p>The above information will be published on our website, so commercial and/or confidential details need not be given.</p>	<p>As this document is not identified on the Examination timetable, National Highways suggests that information is submitted on the same deadlines as the <i>Schedule of progress regarding Compulsory Acquisition and Temporary Possession, voluntary agreements, and objections.</i></p>				
15.13	Statutory Undertakers	Statutory Undertakers land	<p>Paragraph 7.4.4 states that none of the land that is proposed to be acquired is Statutory Undertakers' land for the purposes of s127(3) of the PA2008.</p> <p>Do any Statutory Undertakers disagree? If so, why?</p>	No response required from National Highways.				
<b>Special Category Land</b>								
15.14	Applicant	Open space and replacement land Section 131(3) and (4) and section 132(3) and (4) of the PA2008	<p>Paragraph 7.2.4 of the Statement of Reasons [REP1-010] is not clear whether s131(3), s131(4), s132(3) or s132(4) of the PA2008 apply. Please could this be clarified?</p>	<p>Clarify which of the 4 circumstances means replacement land not required</p> <table border="1"> <thead> <tr> <th>Land plot</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>2/6</td> <td>s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the</td> </tr> </tbody> </table>	Land plot	Reason	2/6	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the
Land plot	Reason							
2/6	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the							

No	Question to	Reference	Question	National Highways' response	
15.	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>				
					persons, if any, entitled to rights of common or other rights or in the interests of the public as this land will be returned to open space on completion of the works
				3/3a	s132(5) - the order right is required in connection with the widening or drainage of an existing highway and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public as this land will be returned to open space on completion of the works
				3/30	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public as this land will be returned to open space on completion of the works
				8/2	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public as this land will be returned to open space on completion of the works
				8/3	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public as this land will be returned to open space on completion of the works
				8/4	s132(5) – the order land does not exceed 200 square metres in extent and the giving of other land in exchange for the order right is unnecessary, whether in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public as

No	Question to	Reference	Question	National Highways' response	
15.	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>				
					this land will be returned to open space on completion of the works
15.15	Applicant Local planning authorities	Open space and replacement land Sections 131(5) and 132(5) of the PA2008	<p>Paragraph 7.2.3 of the Statement of Reasons [REP1-010] states that Special Parliamentary Procedure is not required for the acquisition of six open space plots as the plots “<i>are required for the widening or drainage of an existing highway and the giving of land in exchange is unnecessary</i>”.</p> <p>Please could the Applicant justify that statement with reference to s131(5) and s132(5) of the PA2008:</p> <p>a) what uses are proposed for the plots; b) are there any reasonable alternatives; and c) could the giving of other land in exchange be required “<i>in the interests of the persons, if any, entitled to rights of common or other rights or in the interests of the public</i>”?</p> <p>Please could the local planning authorities comment?</p>	Land plot	Response
				2/6	a) this plot is required for the works to construct the Roe Cross Road bridge and the Mottram underpass b) there is no reasonable alternative to acquisition c) this land will be returned to open space on completion of the works
				3/3a	a) this plot is required for the works to construct the Roe Cross Road bridge and the Mottram underpass b) there is no reasonable alternative to acquisition c) this land will be returned to open space on completion of the works
				3/30	a) this plot is required for the works to construct the Roe Cross Road bridge and the Mottram underpass b) there is no reasonable alternative to acquisition c) this land will be returned to open space on completion of the works
				8/2	a) this plot is required in connection with detrunking of the existing A57 (T), including associated traffic calming measures and signage b) there is no reasonable alternative to acquisition c) this land will be returned to open space on completion of the works
				8/3	a) this plot is required in connection with detrunking of the existing A57 (T), including associated traffic calming measures and signage b) there is no reasonable alternative to acquisition c) this land will be returned to open space on completion of the works
				8/4	a) this plot is required in connection with detrunking of the existing A57 (T), including associated traffic calming measures and signage b) there is no reasonable alternative to acquisition

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
				<div style="border: 1px solid black; padding: 5px; width: fit-content;">c) this land will be returned to open space on completion of the works</div> <p>By way of further explanation for land parcels 8/2, 8/3 and 8/4, the land is currently in the ownership of National Highways. Once the Scheme is complete, and the de-trunking works and associated traffic calming works undertaken, these land parcels will be transferred to Tameside MBC. Therefore National Highways is acquiring the land through the powers in the draft DCO in order to extinguish any rights that may currently exist, prior to the transfer of the land to Tameside MBC.</p>
15.16	Applicant Local planning authorities	Other Special Category land	Table 7.1 of the Statement of Reasons [REP1-010] identifies various land plots within the Order limits as open space.  Does any other land within the Order limits comprise land forming part of a common, open space or fuel or field garden allotment?	National Highways can confirm that no other land within the Order limits comprises land forming part of a common, open space or fuel or field garden allotment.
<b>Compensation provisions and the availability and adequacy of funds</b>				
15.17	Applicant	Availability and adequacy of funds	Paragraph 2.1.1 of the Funding Statement [APP-024] indicates a cost of £180.6 million from the Options stages to opening for traffic.  a) How can the ExA be satisfied as to the reliability of that figure, and what is its degree of accuracy? b) What proportion of that figure can be attributed to compensation payments and potential claims? c) What comfort can be provided of funding being available should the cost be exceeded? d) What comfort can provided that the scope will not be reduced in response to any future changes in funding?	<p>a) The cost estimate has been produced as a bottom-up developing estimate using the scope outlined in the DCO application. There is an allowance risk included for each stage in the project. A final estimate will be produced prior to construction. Within this, the land cost estimate is based on a "most likely" estimate, which sits within a range forecasting methodology to reflect risk and uncertainty. The estimate has been refined periodically to reflect the emergence of new information and is based on market evidence and local data, engagement with landowners, technical scheme information and professional experience. The lands cost estimate has been prepared by an experienced compensation surveyor with local knowledge who has experience of acquiring land and assessing compensation in connection with highways schemes. The estimate has been further cross checked by an experienced in-house compensation specialist to ensure its reliability and accuracy</p> <p>b) National Highways does not consider it appropriate to provide a breakdown of the Scheme budget to identify a figure for compensation and potential claims, nor would it be standard practice to do so.</p> <p>c) National Highways has appointed a principal contractor based on a lump sum offer for delivering the project. The risk associated with changes in development costs lies with the contractor.</p> <p>d) As set out in the Funding Statement (APP-024) the scheme is included in the Roads Investment Strategy 1 for a period 2015 to 2020. Further to this the scheme is included in the Roads Investment Strategy 2 for a period 2020 to 2025. Any changes in funding will be a matter for the Secretary of State for Transport.</p>
<b>Other matters</b>				

No	Question to	Reference	Question	National Highways' response
<b>15.</b>	<b>Compulsory Acquisition, Temporary Possession, Statutory Undertakers, and funding</b>			
15.18	Applicant	Acquisition of other land or rights	Are any land or rights acquisitions required in addition to those sought through the dDCO before the Proposed Development can become operational?	National Highways can confirm that no additional rights in land will be required in addition to those sought through the DCO before the proposed development can become operational.
15.19	Local planning authorities	Potential impediments	a) Have potential impediments to the development been properly identified and addressed? b) Are there concerns that any matters either within or outside the scope of the dDCO for the development to become operational may not be satisfactorily resolved, including acquisitions, consents, resources or other agreements?	No response required from National Highways.
15.20	Applicant	The Equalities Act 2010 and public sector equality duty	a) Please could the Applicant clarify how it has had regard to the Equalities Act 2010 and its public sector equality duty in relation to the powers sought? b) Have any Affected Persons been identified as having protected characteristics? If so, what regard has been given to them?	<p>Under the 2010 Act National Highways is subject to the public sector equality duty under section 149 which requires a public authority to have due regard to the need to</p> <ol style="list-style-type: none"> <li>i. Minimise disadvantages suffered by those with a protected characteristic and</li> <li>ii. Takes steps to meet the needs of persons who share a protected characteristic that are different from the needs of persons who do not share that characteristic.</li> </ol> <p>National Highways has submitted an Equality Impact Assessment (APP-057) that describes the measures taken to screen for, identify and engage with stakeholders with protected characteristics. Paragraph 3.1.11 explains that throughout the option identification stakeholder workshops, Public Awareness events and meetings with home/landowners have taken place. Publicity checklists and Building checklists were carried out on all event venues to ensure inclusion. National Highways also visited homes/ places of work to engage with harder to reach stakeholders.</p> <p>Following the announcement of the Preferred Route alignment National Highways arranged for face-to-face landowner surgeries for owners and occupiers whose land or property will be affected by the Scheme. The surgeries involved the project team, mainly the Project Manager and District Valuer. National Highways visited a number of landowners and held meetings at their properties upon their request. Property owners appreciated the opportunity to discuss their individual concerns with the appropriate people in private. Elderly residents also appreciated visits in their homes, arranged at convenient times so that relatives could also be there for support.</p> <p>It is National Highways' view that affected parties with protected characteristics had been satisfactorily engaged and that National Highways has met its public sector duty under the 2010 Act. National Highways will continue to regularly engage with affected parties with due regard to their protected characteristics in compliance with the 2010 Act.</p>



# Appendix A. Categorisation of Works in Schedule 1 to the draft Development Consent Order

## ANNEX 1

### CATEGORISATION OF WORKS IN SCHEDULE 1 TO THE DRAFT DEVELOPMENT CONSENT ORDER

The table below sets out which of the following categories the numbered works listed in schedule 1 to the draft DCO fall within: Principal Development; Associated Development; Ancillary Development; or Composite Development.

Work No.	Principal Development	Associated Development	Ancillary Development	Composite Development	Explanation
1	✓				New carriageway
2	✓				Carriageway widening
3	✓				Carriageway creation, widening and alteration
4				✓	Existing footway upgrades and creation of new pedestrian/cyclist routes
5	✓				New carriageway
6	✓				New carriageway
7		✓			Creation of new public rights of way
8		✓			Private access track to support maintenance of Pond 1
9		✓			Creation of new access and egress points serving land
10				✓	Realignment of existing highway
11		✓			Creation of new access and

Work No.	Principal Development	Associated Development	Ancillary Development	Composite Development	Explanation
					egress points serving land
12	✓				Junction works including construction of new carriageway
13	✓				Creation of new footway/cycleway and new non-motorised use provision at junction
14		✓			Creation of new bridleway
15	✓				Realignment of carriageway
16	✓				Realignment of carriageway
17		✓			Alteration of carriageway and creation of turning head
18		✓			Alteration of carriageway and creation of turning head
19	✓				Realignment and surface improvement of carriageway
20		✓			Creation of new access track
21				✓	Creation of new footpath
22	✓				New carriageway
23				✓	Realignment of Carriageway and new access track and public footpath
24		✓			Creation of new access track
25		✓		✓	Diversion of footpaths and creation of new access track

Work No.	Principal Development	Associated Development	Ancillary Development	Composite Development	Explanation
26		✓		✓	Creation of new bridleway
27	✓				New carriageway
28	✓				Widening and surfacing
29				✓	Creation of pedestrian/cycle crossings
30				✓	Creation of new access track and creation of highway layby
31				✓	Creation of Underpass and farm access tracks
32	✓				Construction of bridge and walls to underpass
33	✓				Construction of underpass
34	✓				Construction of underpass
35	✓				Construction of bridge
36		✓			Works to culverted watercourses
37		✓			Drainage attenuation pond and works
38		✓			Drainage attenuation pond and works
39		✓			Drainage attenuation pond and works
40		✓			New Drainage ditches
41		✓			New watercourses
42		✓			New Drainage ditch
43		✓			Brook diversion
44		✓			New watercourses

Work No.	Principal Development	Associated Development	Ancillary Development	Composite Development	Explanation
45		✓			Brook diversion
46		✓			New Drainage ditches
47		✓			Earthwork Screening bund
48		✓			Earthwork Screening bund
49		✓			Environmental mitigation works
50		✓			Environmental mitigation works
51				✓	Detrunking works
52	✓				Junction improvements
53				✓	Junction signals and pedestrian facilities
54				✓	Improved facilities non-motorised users and traffic calming
55		✓			Construction of flood compensation area
56		✓			Creation of new access track
57		✓			Environmental mitigation works
58				✓	Diversion of sewer pipes
59				✓	Water main diversion
60				✓	Water main diversion
61				✓	Diversion of power cables
62				✓	Cable and pipe diversion
63				✓	Gas pipe diversion
64				✓	Cable diversion

Work No.	Principal Development	Associated Development	Ancillary Development	Composite Development	Explanation
65				✓	Water main diversion
66				✓	Noise barriers

The lettered works which are set out in schedule 1 to the draft DCO will not always be either principal, associated, ancillary or composite development and it is therefore not possible to categorise them in the same way as the numbered works. The reason for this is that the lettered works can only be used *in connection with* different numbered works as and when appropriate (per the drafting of the DCO) and so will inherit the status of the numbered work which they are being used in connection with.



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