

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 9

9.17 Applicant's Comments on Responses to the Examining Authority's First Written Questions (ExQ1)

Infrastructure Planning (Examination Procedure) Rules 2010
Rule 8(1)(c)

Planning Act 2008

March 2022

Deadline 3

Infrastructure Planning

Planning Act 2008

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

**A47 Wansford to Sutton
Development Consent Order 202[x]**

**9.17 APPLICANT'S COMMENTS ON RESPONSES TO
THE EXAMINING AUTHORITY'S FIRST WRITTEN
QUESTIONS (ExQ1)**

Rule Number	Rule 8(1)(c)
Planning Inspectorate Scheme Reference	TR010039
Application Document Reference	TR010039/EXAM/9.17
BIM Document Reference	PCF STAGE 4
Author	A47 Wansford to Sutton Project Team, National Highways

Version	Date	Status of Version
Rev 0	March 2022	Deadline 3

CONTENTS

1	INTRODUCTION.....	4
2	PETERBOROUGH CITY COUNCIL (REP2-067)	5
3	HISTORIC ENGLAND (REP2-075)	22
4	UK HEALTH SECURITY AGENCY (REP2-077)	24
5	ENVIRONMENT AGENCY (REP2-078)	36
6	ROBERT W REID (REP2-081)	40

1 INTRODUCTION

- 1.1.1 The Development Consent Order (DCO) application for the A47 Wansford to Sutton Scheme was submitted on 05 July 2021 and accepted for examination on 02 August 2021.
- 1.1.2 The purpose of this document is to set out National Highways' (the Applicant) Comments on Responses to the Examining Authority's First Written Questions (ExQ1). Only responses requiring a comment by the Applicant have been included in this document.

2 PETERBOROUGH CITY COUNCIL (REP2-067)

Ex1	Question:	Response	Applicant's Comment
1.2.2	<p>Assessment criteria Paragraph 8.4.21 of the ES [AS-015] sets out the assessment criteria for biodiversity.</p> <p>a) Given the location of the application site close to the boundary with Cambridgeshire and Northamptonshire, the latter being in a different English Region, could the Applicant explain why the relative biodiversity resource importance were not considered in relation to the East Midlands Region, and Cambridgeshire and Northamptonshire.</p> <p>b) Do IPs agree with the Applicant's approach, or do they consider other geographic areas should be considered?</p> <p>c) If IPs consider other geographic areas should be considered, then could they please explain what that area should be and why they hold that view.</p> <p>d) Could the Applicant please undertake a sensitivity analysis on the assessment based on comparisons with the East Midlands Region, and Cambridgeshire and Northamptonshire.</p>	<p>Yes PCC agrees that the applicant's approach takes into account the relevance of biodiversity resource importance in relation to other regions. It is accepted that within paragraph 8.4.21 that Peterborough appears to be being singled out as the only county where the importance of a biodiversity resource will be considered. Upon closer inspection of paragraphs within section 8.7 (E.G. 8.7.25, 8.7.43 & 8.7.51) it appears that wider Cambridgeshire and even Norfolk has been considered. The only correction to be made is ensuing that it is made clear that other regions have been considered already.</p>	<p>The Applicant is grateful for PCC's agreement with the Applicant's approach. The Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035) sets out that approach and the Applicant considers that the position has been made sufficiently clear.</p>
1.2.3	<p>Surveys a) Table 8-3 in Chapter 8 of the ES [AS-015]</p>	<p>Yes PCC agrees that as of the 21st of January 2022 the surveys are still in date. The survey reports either state within them a specific date</p>	<p>The Applicant acknowledges the requirement for additional surveys in 2022 to account for the two-year span.</p>

Ex1	Question:	Response	Applicant's Comment
	<p>b) indicates that a number of the ecological surveys that were undertaken are three or more years old. Please can the Applicant explain why it considers the surveys remain current and whether the age of the survey data introduces any uncertainty into the biodiversity assessment?</p> <p>c) b) Do any IPs consider that any of the surveys are no longer current? If so, could these please be specifically identified, with a reason given for the view held.</p>	<p>to which the survey will be valid too (generally within the limitations or at the start of the document) or do not make reference to length of validity at all.</p> <p>It is worth noting however that several of the specified dates are rapidly approaching and will most likely require a re-survey before works can begin.</p> <p>The following species are listed with the following dates when a refresher survey will be required.</p> <p>Great Crested Newts – March 2022 Reptiles – March 2022 Wintering Birds - March 2022 Water vole and Otter – March 2022 Bat Emergence and re-Entry – July 2022 Bat Activity – September 2022</p> <p>The other reports either did not state the date the data was valid until or I was not able to locate the date within the document. The reports that did not state a date upon which a refresher survey will be required to ensure validity of the results will be assumed to have a two year span from the date upon which the survey was first undertaken before a refresher survey is required. As such many of the surveys are going to require resurvey in the year 2022.</p>	<p>These are currently being undertaken for all required species as set out in the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035).</p>
1.2.7	<p>Construction and operational ecological mitigation</p> <p>a) Do IPs agree that the Applicant's approach to ecological design and</p>	<p>PCC agrees in principle with all proposed mitigation measures as set out within table 8-11 and 8-12, however below are further specific comments organised by ecological receptor:</p>	<p>The Applicant acknowledges this comment.</p> <p>Reptiles – This location will be defined in</p>

Ex1	Question:	Response	Applicant's Comment
	<p>mitigation measures during construction and operation as set out in Tables 8-11 and 8-12 of Chapter 8 of the ES [AS-015] are appropriate?</p> <p>b) b) If not, could you explain why not and what needs to be amended?</p>	<p>Sutton Meadows North and South Dismantled Railway CWS – While the quantity of habitat appears to be suitable for replacement of the habitat lost to the CWS, replication of the ecosystem that is present within the CWS will be a deciding factor to whether this compensation is suitable. The success of this replication is dependent on the Habitat Management Plan which has not yet been published. It is paramount that this document is reviewed as soon as possible and that it achieves realistic goals. Establishment of biodiverse habitat is an extended operation often lasting many years, and even longer for required ongoing management. The HMP will need to be created with a minimum 30 year time frame. Care should be taken so that no single habitat is completely wiped out from the CWSs before compensation habitat is produced that can accept “refugee” species.</p> <p>Botanical – Opportunities to transfer the existing seed base to the newly created site should be taken where ever possible I.E. if species rich grassland is to be disturbed, before disturbance starts a very high cut should be performed and seed heads/pods collected from the arisings before being transferred to the new site. There opportunities are opportunistic as many seeds do not remain viable unless properly stored which may be unpractical. As such this seed transferal will only be possible if receptor habitat is available at the time of cutting. This is only one example however, all opportunities to transfer the existing species base should be taken where possible.</p>	<p>the second iteration of the Environmental Management Plan (EMP) (REP2-027).</p> <p>Otters - Potential Otter holts are identified in Environmental Statement (ES) Figures 8.1 to 8.4 (APP-072). No potential Otter Holts were identified within the construction compounds.</p>

Ex1	Question:	Response	Applicant's Comment
		<p>Reptiles – It is stated that reptiles found during habitat clearance will be moved to a suitable safe area. This safe area needs to be defined before works begin. It is hoped that this definition will be within the Environmental Management Plan however it should be included within this document as well.</p> <p>Otter – No reference is made to if a holt is identified within the construction area to be fenced off. This potential should be addressed somewhere either in this document or the EMP.</p>	
1.4.3	<p>Identification of heritage assets</p> <p>a) Do the IPs agree with the list of heritage assets identified in Appendix 6.1 [APP-085]?</p> <p>b) If not,</p> <p>(i) if the party considers any heritage asset has been omitted could they please set out a table of such assets and why they consider each to be of heritage significance;</p> <p>(ii) if the party considers that any identified assets should not be considered to be a heritage asset or has been incorrectly attributed (for example to an incorrect list), again could they be set out in a table and explain why they hold the view they do?</p>	<p>Yes with reference to heritage assets of archaeological interest, provided that it is stated that:</p> <ol style="list-style-type: none"> 1. The list reflects the status quo of knowledge prior to the implementation of the programmes of field evaluations undertaken between 2018 and 2020 (Appendix 6.1, 6.2.112 [APP-085]); 2. Potential heritage assets of archaeological interest identified in the course of such programmes may be recognised as having archaeological significance as fieldwork progresses. <p>It should be noted that several of the heritage assets identified are not noted having a designation when they are in fact Listed. These include Sacrewell Lodge and Mill, various building on Bridge End, Sutton and Old North Road and St Johns the Baptist. It is noted however that some assets have been included twice.</p>	<p>The asset is replicated in the Peterborough City Council (PCC) Historic Environment Record (HER). Where replicated designated assets are present, the HER record is not amalgamated with the designated asset, as the list description is definitive. This is explained in section 6.4.19 of the ES Chapter 6 Cultural Heritage (REP2-010). The HER asset is none-the less assessed as of the same value as the designated asset in all cases.</p> <p>In Table 4 of ES Appendix 6.1 Cultural heritage information (APP-085):</p> <ul style="list-style-type: none"> • Sacrewell Lodge and Mill is identified as grade II listed building 1331233 as well as HER ref 50790. • Buildings on Bridge End are listed buildings 1127443,

Ex1	Question:	Response	Applicant's Comment
			<p>1127444 1225917, 1331288, 1225934, 1225937 and 1225965 and HER refs 50868 through 50875.</p> <p>A full cross-reference can be provided if requested however, the replicated assets are brought together in Table 5 of ES Appendix 6.1 Cultural heritage Information (APP-085).</p> <p>This approach was chosen to allow easier searching and indexing of the document, as there are differences in the asset names provided by each data source, and this preserves both.</p>
1.4.4	<p>Identification of heritage assets It is not clear from paragraph 6.6.67 of Chapter 6 of the ES [APP-044] whether the Stamford to Wansford railway line is being considered as a non-designated heritage asset in its own right or as part of the "group".</p> <p>a) Could the Applicant please clarify and could Ips give their opinions as to how it should be considered?</p> <p>b) If the Applicant or any IP considers that the railway line should be considered to be a non-designated heritage asset in its own right, could they please provide a plan showing the geographic extent.</p>	<p>Wansford railway line may be considered as a non-designated heritage which is part of a 'group' for group value. The railway line has been largely dismantled with only the layout surviving as an earthwork visible on remote imaging (below). It retains local historic significance in its own rights regardless of the loss of features and the loss of group value.</p> <p>a) PCC considers the Stamford to Wansford railway line a non-designated heritage asset in its own right, and as part of the current Local List Project has been assessed by a panel and is proposed for the Local List in its own right.</p> <p>b) Plan attached separately.</p>	<p>The former railway line is included as non-designated heritage asset 53529. The section of the asset in the vicinity is discussed in terms of its group relationship with the other former railway structures in section 6.6.61 of the ES Chapter 6 Cultural Heritage (REP2-010). Section 6.6.67 refers to the whole asset group and so the railway line is included.</p> <p>Should the railway be locally listed, this would not alter the assessment, as the change would come post-submission and the asset would remain a non-designated heritage asset in any case.</p> <p>For the avoidance of doubt, the Stanford to Wansford Railway Line (53529) was considered part of the group. The</p>

Ex1	Question:	Response	Applicant's Comment
			<p>section in the vicinity of the Former Wansford Road Railway Station (WAN1) was, along with the other non-locally listed structures, considered part of the curtilage of the building in terms of assessing value/sensitivity and impacts.</p> <p>Here, "curtilage" is used in its natural language sense rather than referring to any particular policy.</p>
1.4.5	<p>Assessment of non-designated heritage assets</p> <p>a) Could the Applicant and IPs give their view as to whether in the light of the decision of the High Court in <i>Save Stonehenge World Heritage Site Limited v Secretary of State for Transport</i> [2021] EWHC 2161 (Admin) the effect on each non-designated heritage asset should be considered individually rather than as a group?</p> <p>b) If the Applicant takes the view that each nondesignated heritage asset should be considered individually could it please undertake such an assessment for all assets which have been considered as a group.</p>	<p>a) With reference to the archaeology, the heritage assets identified as a group may be retained as a group.</p> <p>b) The effect on the three Locally Listed Heritage Assets (former railway station, Heath House, Sutton Bridge) and the two proposed Locally Listed Assets (Milestone on A47 and Stamford to Wansford Railway Line) need to be assessed individually. This is due to the direct impact of the proposals on each of the heritage assets.</p>	<p>See Applicant's response to question Ex Q1.4.5 in the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035) for general agreement and Ex Q1.4.19 for the mile marker in particular.</p>
1.4.15	<p>Archaeology</p> <p>a) Paragraph 6.5.9 of Chapter 6 of the ES [APP044] indicates some areas have not been archaeologically tested. How can the SoS assess the particular significance of any heritage asset that may be affected (NPSNN, paragraph</p>	<p>a) The areas which have not been investigated are part of the new proposed route. The archaeological investigations conducted to date have been targeted on the original route.</p> <p>b) The same applies to Zones 8 and 9.</p> <p>c) A programme of field work to include all</p>	<p>Mitigation fieldwork cannot be undertaken pre-determination as, should consent not be granted, the works would constitute unnecessary damage to archaeological remains.</p> <p>Assessment of archaeological potential is</p>

Ex1	Question:	Response	Applicant's Comment
	<p>5.128) if there is no available evidence on this?</p> <p>b) Similarly, paragraph 6.6.73 of Chapter 6 of the ES [APP-044] sets out the various zones of Archaeological interest. Neither Zone 8 nor Zone 9 has been surveyed.</p> <p>c) Is it intended to undertake any further survey work?</p> <p>d) If so, when will those results be reported?</p>	<p>additions/changes to the route, as well as areas formerly unavailable, has been agreed.</p> <p>d) As with the remaining investigations along the whole of the route, this programme of fieldwork should be carried out pre-application unless otherwise agreed with PCC and HMBCE (for work affecting the Scheduled Monument). The applicant should provide a preliminary assessment of potential using the available baseline information and a timescale</p>	<p>given in section 6.6.72 through 6.6.79 of ES Chapter 6 Cultural Heritage (REP2-010)</p>
1.4.17	<p>a) Do the IPs agree with the Applicant's approach to assessing effects by grouping assets into zones of archaeological potential?</p> <p>b) If not, could they provide a view as to how they should be assessed?</p>	<p>With reference to the archaeology, the Applicant's approach to assessing effects by grouping assets into zones of archaeological potential is acceptable in principle. However, in the absence of a georeferenced map showing the location of the 'zones' referred to in Chapter 6 of the ES [APP-044], it is not possible to comment. A map clearly showing the aforementioned 'zones' in relation to the archaeological features identified to date (e.g., trial trenching plans and geophysical survey plots) should be provided. In addition, revisions and amendments may be required upon submission of the Written Schemes of Investigations, and in consideration of further details and ongoing fieldwork results.</p>	<p>Zones of potential are shown georeferenced on ES Figure 6.4 (APP-058). Comparison maps will be provided with the detailed heritage mitigation strategy.</p> <p>However, for technical reasons, it may be more appropriate to provide GIS shapefile layers to PCC and Historic England in order to facilitate understanding and interpretation.</p> <p>An iterative approach to the mitigation works is set out in Commitments CH2, 5, 6, 7 and 8 of the Record of Environmental Actions and Commitments (REAC) within the Environmental Management Plan (EMP) (REP2-027), Table 1.4.</p>
1.4.17	<p>Archaeology</p> <p>a) Do the IPs agree with the Applicant's approach to assessing effects by</p>	<p>With reference to the archaeology, the Applicant's approach to assessing effects by grouping assets into zones of archaeological</p>	<p>See above.</p>

Ex1	Question:	Response	Applicant's Comment
	<p>grouping assets into zones of archaeological potential?</p> <p>b) If not, could they provide a view as to how they should be assessed?</p>	<p>potential is acceptable in principle. However, in the absence of a georeferenced map showing the location of the 'zones' referred to in Chapter 6 of the ES [APP-044], it is not possible to comment. A map clearly showing the aforementioned 'zones' in relation to the archaeological features identified to date (e.g., trial trenching plans and geophysical survey plots) should be provided. In addition, revisions and amendments may be required upon submission of the Written Schemes of Investigations, and in consideration of further details and ongoing fieldwork results.</p>	
1.4.18	<p>Archaeology</p> <p>Paragraph 6.8.19 of Chapter 6 the ES [APP-044] indicates that PCC "usually requires archaeological WSIs to be written by the appointed archaeological contractor undertaking the work". However, this paragraph continues "government policy may require an agreed scope of works in order to undertake appropriate procurement".</p> <p>Do HBMCE and PCC have any views on this approach?</p>	<p>No issues. A Scope of Work (SoW) in this context has the meaning of what is sometimes referred to as a 'Statement of Work', i.e., a working agreement of common understanding between two or more parties on project objectives. In this instance, the document would also be used to undertake appropriate procurement (e.g., tendering and recruitment). A Written Scheme of Investigation (WSI) is a method statement that details the approach to undertaking an agreed programme of archaeological work (which may or may not have been preliminarily agreed through a SoW). It specifies how the work will be undertaken against set objectives and in compliance with both national and local policies, guidelines and standards. Typically, a WSI will specify the methods of work, research aims, the legal requirements and other obligations, health and safety, staffing, timing. It is written to fulfil the requirements specified in a brief issued by the LPA. In synthesis, the WSI is a subset of the</p>	<p>The role of the "Statement of Work" will be fulfilled by the heritage mitigation strategy as set out in commitment CH2 of the REAC within the EMP (REP2-027).</p>

Ex1	Question:	Response	Applicant's Comment
		SoW which describes how the project objectives will be achieved. Both the SoW and the WSIs must be submitted to and approved by PCC LPA.	
1.4.19	Mile Marker a) PCC has identified the Mile Marker on the north verge of the A47 to the east of the petrol station. Could the Applicant please clarify how protection of this is to be ensured during any construction operations and thereafter? b) Does PCC consider the mile marker to be a nondesignated heritage asset?	<p>Yes, the Mile Marker is a non-designated heritage asset of local, if not national importance. Many milestones are on Historic England's National List.</p> <p>Mile Marker as a NDHA and as part of the current Local List Project has been assessed by a panel and is proposed for the Local List.</p>	The Applicant agrees, as set out in the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035).
1.4.20	Wansford Road Railway Station a) The Applicant has indicated that it considers that the loss of the Wansford Road Railway Station would result in a moderate adverse significance of effect. Do IPs agree with this analysis? b) If not, could the party please explain why they hold that view? c) Could the Applicant please explain how its approach is reconciled with the advice in the PPG Reference ID: 18a-018-20190723 relating to substantial harm and less than substantial harm. d) Could the parties please set out the level of harm that they consider would be caused by the Proposed Development for the Wansford Road Railway Station in all its elements, both individually and cumulatively?	<p>a) PCC does not agree with this assessment</p> <p>b) There is agreement that the initial impact of the proposal is 'Major Adverse' but there is disagreement that the proposed mitigation reduces this to 'Moderate Adverse'. The recording of a heritage asset does not reduce the impact of its demolition on its significance. Recording as per NPPF 205 is required where there is a loss of significance however whether recording can or cannot be implemented is not a factor in considering whether the proposals are acceptable. The only mitigation that could reduce the harm is its relocation. Although this is being considered, and there is no reason at this stage to suggest that it won't be relocated, it does not at this stage</p>	<p>The Applicant is surprised at this apparent change in position. The impacts as assessed are in line with the methodology as agreed with PCC in February of 2021, as well as the approach to mitigation. In PCC's Local Impact Report (REP2-068 page 6, paragraph 8), PCC agree with the proposed mitigation in principle.</p> <p>Substantial harm is predicted for the Former Wansford Road Railway Station (WAN1). The NPSNN is the relevant basis of assessment for the Proposed Scheme. Substantial harm is addressed in section 5.131 of the NPSNN and relates only to designated heritage assets. As a locally listed building, the asset is a non-designated heritage asset</p>

Ex1	Question:	Response	Applicant's Comment
	<p>e) Could the Applicant please explain what its proposals are for the recording of the asset, and how they would be secured?</p> <p>f) It is suggested by PCC that the Station Building may be dismantled and reerected in another location. Could the Applicant please give its response to this suggestion and if it is agreeable, explain where it would be located and how this would be secured?</p> <p>g) Could the Applicant please explain further its proposals for the gate piers at the station?</p>	<p>form part of the proposals. There is therefore disagreement that the mitigation proposed would reduce the impact from major adverse to moderate adverse. The retention of other elements are considered separate heritage assets to the former station and there retention should not be included within the benefit of Locally Listed station.</p> <p>c) Wansford Road Railway Station, The proposals would result in its total loss of significance. As such there is agreement with the applicant that its impact would be 'Major Adverse'</p> <p>The loss of the station will also impact on the below heritage assets.</p> <p>Heath House, Heath House as the former Station Masters house, was built in tandem with and for the former station. A such it has a substantial relationship with the former station and railway line. Although there is no direct impact to the Locally Listed building, the loss of the former station will detrimentally impact upon this important relationship and also its setting. The impact is therefore considered to be 'minor adverse'</p> <p>Stamford to Wansford Railway Line, It should be noted that the line is considered a non-designated heritage asset in its own right and is in the process of being placed on the Local List. Although the railway line has been decommissioned, its earthworks are still visible along its entire route and with the exception of one small section is traversable. Two of its three stations have been retained (one being Wansford Road), albeit both</p>	<p>(NPPF annex 2) and so the application does not require to meet the tests set out in the NPPF. However, the effect on the asset has been taken very seriously in the assessment and in the development of the proposed design. PCC have been included in discussions throughout the assessment process.</p> <p>The Applicant's assessment of impacts on each asset before mitigation is in line with PCC's assessment and can be found in ES Appendix 6.1 (APP-085), Table 5.</p> <p>The Applicant's understanding is that Heath House, the former Station Building and bridge are locally listed. The platform, gate and gate piers, linesman's hut and track/cutting are not described specifically in the local list descriptions however, the assessment uses the precautionary principle that they are part of the curtilage (natural language usage) of the locally listed assets and therefore benefit from the same consideration.</p> <p>The mitigation proposals set out in ES Chapter 6 Cultural Heritage (REP2-010) (section 6.8.6 to 6.8.9 and Table 6.6) include all parts of the removed structures, including the gate piers this is echoed in commitments CH3 and 4 of the REAC within the EMP (REP2-027), Table 1.4.</p>

Ex1	Question:	Response	Applicant's Comment
		<p>converted to residential. It also has two significant bridges, one at Wansford Road and other at Ufford which are both considered heritage assets within their own right. The bridge at Ufford is in the process of being put on the Local List.</p> <p>The loss of one of the two remaining stations is considered detrimental to the significance of the line. The retention of Heath House, parts of the platform and some of the peripheral buildings will retain some impression of the former station site however this will be substantially diminished by the loss of the station but also the construction of the road over the former site. Overall the impact of the loss of the Wansford Road Railway Station on the former railway lie is considered to be 'moderate adverse'</p> <p>A47 Bridge, This is utilitarian structure whose significance is tied to the railway line, its construction and its use as a crossing by on the historic Leicester to Peterborough Road. It does form part of a group of railway assets however it does not have a strong relationship with the former station beyond forming part of a group. The loss of the station and no longer being the principal crossing for the A47 will impact upon the significance of the asset, with the impact considered to be 'minor adverse'</p> <p>g) If the Station is demolished, PCC would expect the pillars to either be retained and incorporated somehow within the existing line/location or moved to a sustainable related railways setting. If the station is relocated, the</p>	<p>Relocation of the structure(s) is a third party action. It is not considered in the assessment of impact as this would be a separate project. Although the Environment Designated Fund (EDF) funding decision rests with National Highways, the responsibility for delivery would rest with the successful third party and not National Highways.</p> <p>The EDF decision-making process is not yet concluded and so, cannot be commented on in detail at this time. However, the Applicant can state that a preferred party has been identified to take the application forward, pending clarification of details and conditions.</p> <p>Should no EDF funded project be approved, the recording and demolition would progress as proposed. The materials would still be offered for salvage to appropriate groups or disposed of in line with ES Appendix 10.2 Outline site waste management plan (APP-121) if no such group is identified.</p> <p>The Applicant believes that the differences in approach can be reconciled and will pursue this through the Statement of Common Ground with PCC.</p>

Ex1	Question:	Response	Applicant's Comment
		related railway setting should be with the station	
1.4.24	<p>Assessment Table 5 in Appendix 6.1 (Cultural heritage information) [APP-085] sets out the Applicant's assessment of impacts prior to mitigation. a) Do the IPs agree with the Applicant's assessment of impacts as set out in this Table? b) If not, could the IP please set out their view, giving a reasoned explanation for the view that they hold?</p>	<p>a) No. Although the scheme will have a negligible impact on the setting of the non-designated heritage assets of archaeological interest, groundwork associated with the scheme will have an adverse physical impact which could potentially lead to total loss of significance. b) Therefore, direct physical impact on non-designated heritage assets of archaeological interest should be reassessed taking the following points into consideration:</p> <ul style="list-style-type: none"> - Value/Sensitivity of non-designated heritage assets to be directly impacted upon by the scheme should be reassessed as 'local/regional significance' does not necessarily equate to 'low' value/sensitivity - Magnitude of Impact and Significance (of Effect(s)) do not correlate in the table. A 'Major Adverse' magnitude of impact is unlikely to have only a 'Slight Adverse' significance in terms of effect (s). <p>Built Environment: a) No. As section 1.4.20 above</p> <p>There is agreement that the initial impact of the proposal is 'Major Adverse' but there is disagreement that the proposed mitigation reduces this to 'Moderate Adverse'. The recording of a heritage asset does not reduce the impact of its demolition on its significance. Recording as per NPPF 205 is required where</p>	<p>The Applicant has stated that groundwork associated with the Scheme may have an adverse physical impact that includes total removal and has assumed the worst case in the assessment of impacts within ES Chapter 6 Cultural Heritage (REP2-010 section 6.7.21).</p> <p>ES Chapter 6 Cultural Heritage (REP2-010), Table 6.2 and section 6.3 of ES Appendix 6.1 (APP-085) set out the criteria for determining value/sensitivity, which was agreed with PCC. This does not equate local/regional significance to low value/sensitivity.</p> <p>Local/Regional significance is not specifically equated to any particular value/sensitivity. Instead, the merits of the assets are assessed individually (or in the case of previously unknown remains in the zones of archaeological potential, in appropriate groups).</p> <p>Assuming "the Table" is in reference to Table 6.34 of ES Chapter 6 Cultural Heritage (REP2-010), this formula is required by DMRB LA104 and cannot be changed.</p> <p>As above, the Applicant will seek to address the issue of mitigation through</p>

Ex1	Question:	Response	Applicant's Comment
		<p>there is a loss of significance however whether recording can or cannot be implemented is not a factor in considering whether the proposals are acceptable. The only mitigation that could reduce the harm is its relocation.</p> <p>Although this is being considered, and there is no reason at this stage to suggest that it won't be relocated, it does not at this stage form part of the proposals. There is therefore disagreement that the mitigation proposed would reduce the impact from major adverse to moderate adverse. The retention of other elements are considered separate heritage assets to the former station and there retention should not be included within the benefit of Locally Listed station.</p>	the Statement of Common Ground with PCC.
1.4.25	<p>Recording of heritage assets Do PCC and HMBCE agree that the methods of recording heritage assets when there are interventions/demolition as set out in Section 8.3 of Chapter 8 of the ES [APP-046] are appropriate?</p>	<p>Section 8.3 of Chapter 8 of the ES does not refer to methods of recording heritage assets.</p> <p>There is agreement regarding the framework however as no specific details have been submitted PCC can't advise on this.</p>	This is noted.
1.6.10	<p>Article 2 -Definition of "commence" a) The current definition of "commence" excludes operations of archaeological investigations. If this is the case, how is the archaeological investigation and mitigation work to be secured, if it falls outside the point at which the development is commenced and thus the dDCO becomes operative? b) Subject to this resolution, are the IPs content with this drafting?</p>	<p>Archaeological investigations can be undertaken presubmission to mitigate risk and are secured by approval of a Written Scheme of Investigation (WSI).</p> <p>A WSI may be submitted as part of the planning submission or secured by a pre-commencement condition.</p>	The detailed Heritage Written Scheme of investigation (DHWSI) will be carried out as part of the Second Iteration of the EMP (REP2-010).

Ex1	Question:	Response	Applicant's Comment
1.9.5	<p>Road surfacing Paragraph 2.5.38 of Chapter 2 of the ES [AS-013] gives two potential road surfaces, Thin Surface Course System and Hot Rolled Asphalt.</p> <p>a) Could the Applicant please set out the differences in noise levels expected with these two surfaces?</p> <p>b) Could PCC confirm whether or not it generally uses Hot Rolled Asphalt for roads which it maintains, and if not, what surfacing is used (along with details of the noise profile expected).</p>	<p>HRA is a noisy material because of its positive texture. It is also a more complicated material to lay with the pre-coated chippings etc.</p> <p>TSM is essentially a proprietary BBA HAPAS approved material similar to CASC or CASC plus. I would suggest either a TSM or CASC+ (negative textured material) will be a better surface course product for road noise and durability.</p>	<p>These suggestions are noted and will be taken into consideration at detailed design.</p>
1.11.1	<p>Traffic Model</p> <p>a) Do the Councils agree that the use of the South East Regional Transport Model (SERTM) for traffic modelling is appropriate in all the circumstances of the proposal?</p> <p>b) If not, what other model or geographic area should be utilised?</p>	<p>It is understood that the model for the scheme WTM (Wansford Transport Model) does not specifically use the SERTM model as built. It has been derived by using mobile phone data from SERTM along with data from the Peterborough Transport Model (PTM), surveys from the Trafficmaster database and further Turning count and link count surveys. This is considered to be an acceptable approach at a schemewide level. However it is unclear from the assessment whether the model has been validated at individual junction level and if not, whether further analysis is proposed in this respect.</p>	<p>The Applicant can confirm that, as discussed in TA Section 6.2 (REP2-025), the Wansford Traffic Model (WTM) used for the strategic assessment of scheme is a separate model from SERTM. The WTM has been calibrated to represent a 2015 base year, the model network data from the PTM and mobile phone demand data from SERTM.</p> <p>The WTM has been developed utilising the local data reported on in Section 5 of the TA. In summary, the traffic surveys undertaken in 2014, 2015 and 2016 provide the input traffic flow data for the development of the base year strategic highway model. This includes local study area link and turning movement calibration. The locations of these surveys are presented in:</p>

Ex1	Question:	Response	Applicant's Comment
			<ul style="list-style-type: none"> • Figure 5-1: 2015 traffic survey sites • Figure 5-2: 2016 traffic survey sites • Figure 5-3: PCC MCC data <p>As discussed in TA Section 6.3 the WTM base model was developed in accordance with the Department for Transport's (DfT) TAG Unit M3.1: Highway Assignment Modelling (2020).</p> <p>Furthermore, as detailed in Section 6.6 of the TA, an operational VISSIM model has been developed based on local observed 2019 traffic count data. The 2019 VISSIM base year model achieved the DfT required validation criteria and is therefore considered fit for undertaking operational modelling.</p>
1.11.2	<p>WCH surveys</p> <p>a) Paragraph 5.125 of the TA indicates the location for WCH surveys. Was there a particular reason why no surveys were undertaken at the junction of:</p> <p>(i) Sutton Heath Road with the A47;</p> <p>(ii) The Drift with the A47; and</p> <p>(iii) the junction of Wansford 4 with the A47;</p> <p>in relation to crossing of the A47 by WCHs.</p> <p>b) Do IPs have any information as to the extent of use of these junctions by WCHs.</p> <p>c) Paragraph 5.1.28 indicates that the</p>	<p>It is understood that the location of the WCH surveys were informed by the current network of permissive cycleways shown on the extract from the Peterborough rural cycleways map (Figure 5-6 in the Transport Assessment). It is possible that WCH movements may have been picked up in the turning counts carried out in the locations queried under subsection a) and b) although this is not made clear in the assessment so clarification on this point should be sought. Turning to point c) it is noted that the surveys were carried out in a period that contained a Bank Holiday. This is not considered to be an issue as more leisure trips</p>	<p>As indicated in paragraph 12.4.10 of ES Chapter 12 Population and Human Health Rev 2 (REP2-016), WCH surveys were undertaken in 2018 at 12 locations in the study area, as shown in Figure 12.3 (REP2-021). These surveys provided usage information for the PRow and permissive routes and for key locations where WCH activity could occur on the local highways. The PRow and permissive routes were identified using Peterborough City Council's interactive PRow mapping tool and reference was also made to the</p>

Ex1	Question:	Response	Applicant's Comment
	<p>survey period included a Bank Holiday. Does any party consider this effects way the consideration of the results and, if they do, could they explain why they take the view?</p>	<p>may have been captured which will give a robust assessment.</p>	<p>Peterborough Rural Cycle Network Map to inform the Applicant's understanding of WCH user activity on other routes in the vicinity of the existing A47. Figure 5.6 of the Transport Assessment (REP2-025) provides the relevant extract from the Cycle Network Map.</p> <p>The Automatic Traffic Counter (ATC) data collected for Sutton Heath Road and The Drift in 2019 was not used to inform the WCH Assessment. However, examination of the collected data reveals very low levels of usage of these routes by cyclists. For Sutton Heath Road, the highest recorded two-way movement during the 3 day survey period was 13 cyclists on a Tuesday. For The Drift, the highest recorded two-way movement was 2 cyclists also on a Tuesday. On the Wednesday and Thursday, no cyclists were recorded using The Drift. Although ATC surveys do not record pedestrian movements, pedestrian activity in the vicinity of the junctions of the existing A47 with Sutton Heath Road and The Drift is anticipated to be negligible given the fact that no pedestrian facilities are provided at these locations.</p> <p>Examination of the Manual Turning Count data collected for the junctions of the existing A47 with Sutton Heath Road and The Drift, on a weekday in June 2015, reveals a similar level of cyclist</p>

Ex1	Question:	Response	Applicant's Comment
			<p>usage of these routes to that recorded in the 2019 ATC surveys.</p> <p>Regarding the reasons for not undertaking WCH surveys at the locations identified, reference should be made to the response provided on pages 147 and 148 of the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035).</p>

3 HISTORIC ENGLAND (REP2-075)

Ex1	Question:	Response	Applicant's Response
1.4.5	<p>Assessment of non-designated heritage assets</p> <p>a) Could the Applicant and IPs give their view as to whether in the light of the decision of the High Court in <i>Save Stonehenge World Heritage Site Limited v Secretary of State for Transport</i> (2021] EWHC 2161 (Admin) the effect on each non- designated heritage asset should be considered individually rather than as a group?</p> <p>b) If the Applicant takes the view that each non-designated heritage asset should be considered individually could it please undertake such an assessment for all assets which have been considered as a group</p>	<p>As set out in para 5.122 and 5.123 of the NPSNN, "those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called "heritage assets" ... Some heritage assets have a level of significance that justifies official designation." Paragraph 5.124 and 5.125 go on to note how these should be considered, with paragraph 5.127 making it clear that the applicant should describe the significance of any heritage assets affected, including any contribution made by their setting.</p> <p>It is therefore important that the applicant assesses heritage assets appropriately and presents that evidence in accordance with policy.</p>	<p>The relevant assessment is set out in ES Chapter 6 Cultural Heritage (REP2-010) and ES Appendix 6.1 (APP-085)</p>
1.4.15	<p>Archaeology</p> <p>a) Paragraph 6.5.9 of Chapter 6 of the ES [APP-044] indicates some areas have not been archaeologically tested. How can the Sos assess the particular significance of any heritage asset that may be affected (NPSNN, paragraph 5.128) if there is no available evidence on this?</p> <p>b) Similarly, paragraph 6.6.73 of Chapter 6 of the ES[APP-044] sets out the various zones of archaeological interest. Neither Zone 8 nor Zone 9 has been surveyed.</p>	<p>Historic England considers it is best practise to undertake assessments, surveys and evaluation prior to the examination, however we are aware this is not always possible for a number of reasons; therefore, this remains a matter for the applicant and for the LPA archaeological advisors to agree the timetable and approach for further work.</p>	<p>This comment is noted.</p>

Ex1	Question:	Response	Applicant's Response
	c) Is it intended to undertake any further survey work? d) If so, when will those results be reported?		

4 UK HEALTH SECURITY AGENCY (REP2-077)

Ex1	Question:	Response	Applicant's Response
1.1.2	Risk of Poor Air Quality a) Do IPs, particularly the Councils, agree with the Applicant (paragraph 5.4.10 of Chapter 5 of the ES [APP043]) that where the PM10 concentrations are lower than the threshold, it can be assumed there is no risk of the PM2.5 threshold being exceeded and consequently, there is no need to model PM2.5?	Part a) We do not agree with the approach used by the applicant.	<p>The assessment has followed the National Highways DMRB LA105 guidance throughout. This is best practice guidance, and the use of DMRB LA105 has been approved by the Secretary of State in respect of other highway NSIPs. The use of DMRB LA105 ensures that all road schemes are assessed in a consistent manner.</p> <p>This is approved Best Practice and ensures all road schemes are assessed in a consistent manner.</p>
	b) If you do not agree, please explain why you take the view that you do, and what implications this may have.	Part b) Insufficient information has been provided to show that PM10 emissions and concentrations are likely to be similar to PM2.5 concentrations. In view of the different source origins, particulate sizes and strength of evidence regarding the health effects of these particulate matter fractions, UKHSA recommends that any estimates of PM2.5 concentrations be supported with reliable data, including modelling, risk and significance assessment. Reducing public exposures to non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards has potential public health benefits, UKHSA therefore advocates for the principle of minimisation or mitigation of public exposure for non-threshold air pollutants and the air quality intervention hierarchy	<p>ES Chapter 5 Air Quality (APP-043) provides full details of the assessment methodology and conclusions, including use of modelling to demonstrate the potential impact of the Scheme for this pollutant.</p> <p>Para 5.8.12 of ES Chapter 5 Air Quality (APP-043) clarifies this point on the use of PM10 as a surrogate for PM2.5.</p> <p>The levels of PM10 predicted in the model are significantly lower than both the PM10 and PM2.5 air quality objectives of 40ug/m3 and 25 ug/m3 respectively as detailed in Table 5.1 of ES Chapter 5 Air quality (APP-043)</p> <p>The maximum modelled concentration</p>

Ex1	Question:	Response	Applicant's Response
		<p>(https://www.gov.uk/government/publications/improving-outdoor-air-quality-and-health-review-of-interventions). We recommend that the assessment of significance for these pollutants, be driven by a robust methodology, with consideration of sensitivity of populations and magnitude of effects. Further details are provided below for ExQ1.10.23.</p> <p>In support of this, we would like to provide the following additional information for consideration by the Planning Inspectorate which demonstrates that these are a proportionate and evidence-based recommendations and reflective of wider initiatives at the governmental and non-governmental level.</p> <p>The evidence around the role of fine and ultrafine fractions in the health effects of air pollution is growing. The Committee on the Medical Effects of Air Pollutants (COMEAP), an expert committee of the Department of Health and Social Care (DHSC), have provided the following advice in relation to setting PM2.5 targets (https://www.gov.uk/government/publications/fine-particulate-air-pollution-pm25-setting-targets):</p> <ul style="list-style-type: none"> • The newer evidence indicates associations of adverse effects with lower concentrations than were previously studied. The studies have not indicated a threshold of effect below which there is no harm, nor a threshold below which there are decreases in relative risk (for example, the risk per 10 µg/m³ PM2.5) 	<p>was 18.87ug/m³ at Receptor 10 which is located on Great North Road.</p> <p>If it was assumed that all of the PM10 was actually PM2.5, the assessment shows that there would be no exceedances of the PM2.5 objective. The dispersion modelling of the baseline PM10 has shown that the predicted concentrations are significantly below the Air Quality Objective (AQO), and thus following DMRB methodology there is no need to further assess this pollutant. This model has been fully verified following Local Air Quality Management – Technical Guidance (LAQM TG(16)).</p> <p>PM2.5 makes up around 60% of PM10 dependent on the source of the emissions. The ES has shown that there is no risk to the PM10 objective being exceeded even if all of the PM10 was PM2.5. The modelling confirms that there is also no risk to the current PM2.5 AQO and therefore, there is no requirement to undertake further monitoring.</p> <p>The PM10/PM2.5 limit values are due to change in accordance with the new Environment Act 2021. However, these changes have not yet been confirmed, and it is not possible to assess against a potential new standard that may or may not come into force.</p>

Ex1	Question:	Response	Applicant's Response
		<p>associated with long-term average concentrations of PM2.5.</p> <ul style="list-style-type: none"> • PM2.5 (mass concentration) has been regarded as the most appropriate particle metric for use in defining air quality guidelines or health-based targets and assessing the progress and benefits of interventions. • Health evidence continues to suggest that a focus on PM2.5 mass remains appropriate. • PM2.5 has more evidence of causality with health effects than the coarse fractions (PM10-2.5). <p>The World Health Organization's new guideline for PM2.5 has been reduced from 10 ug/m3 to 5 ug/m3, which reflects the strength of the evidence for the health effects associated with PM2.5.</p> <p>In terms of the morbidity and mortality impacts, COMEAP has also undertaken the assessment of the mortality of long-term exposure to the man-made air pollution in the UK based on studies reporting associations of mortality risk with fine particulate matter (PM2.5), and nitrogen dioxide (NO2). The mortality burden of long-term exposure to the air pollution mixture in the UK was an annual effect equivalent to 28,000 to 36,000 deaths at typical ages, associated with a loss of 328,000 – 416,000 life years.</p> <p>https://www.gov.uk/government/publications/nitrogen-dioxide-effects-on-mortality. It is predicted that between 2017 and 2035 in England, 1,327,424 new cases of disease</p>	<p>On that basis, the Applicant's adherence to current DMRB guidance is appropriate. While PM2.5 limit values may reduce in the future the assessment can only be compared against current legislative requirements.</p>

Ex1	Question:	Response	Applicant's Response
		<p>would be attributable to PM2.5, equivalent to 2,248 new cases of disease per 100,000 people. The highest numbers of these cases are predicted to be from coronary heart disease (CHD), diabetes and COPD.</p> <p>https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution.</p> <p>According to modelling reducing fine particulate air pollution in England by 1 µg/m³ could prevent an estimated 50,900 cases of coronary heart disease, 16,500 stroke strokes, 9,300 cases of asthma and 4,200 lung cancers over the next 18 years across England.</p> <p>https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution</p> <p>https://www.gov.uk/government/publications/air-pollution-a-tool-to-estimate-healthcare-costs</p>	
1.1.8	<p>Air Quality Assessment</p> <p>a) Do the Government's policy statements 'Decarbonising transport: a better, greener Britain' and 'Net Zero Strategy: Build Back Greener' have any implications for the air quality assessment on the basis that this would result in an increase in electric vehicles rather than those powered by internal combustion engines, as electric vehicles do not emit gases of combustion? If so, what would be the resultant effects?</p>	<p>Parts a and b)</p> <p>The implementation of Net Zero will likely lead to a decrease in certain primary air pollutants</p> <p>https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2006240802_Impacts_of_Net_Zero_pathways_on_future_air_quality_in_the_UK.pdf. For example, the shift from petrol and diesel vehicles to low emission vehicles could bring significant improvements in air quality and therefore health outcomes</p> <p>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf. It should be</p>	The Applicant acknowledges this comment.

Ex1	Question:	Response	Applicant's Response
		<p>noted though that tyre and brake wear will continue to emit PM and could even increase if vehicles become heavier or overall vehicle-miles driven were to increase</p> <p>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/917308/COMEAP_Statement_on_the_evidence_for_health_effects_associated_with_exposure_to_non_exhaust_particulate_matter_from_road_transport_-COMEAP-Statement-non-exhaust-PM-health-effects.pdf.</p>	
1.10.23	<p>Socio-economic effects Human Health effects a) Chapter 12 of the ES [AS016] paragraph 1.24.37 indicates that DMRB LA 112 does not define the significance of human health effects. Are IPs satisfied with the assessment methodology for human health effects as set out in the ES?</p>	<p>Part a)</p> <p>UKHSA/OHID is not satisfied with assessment methodology for human health effects as set out in ES.</p>	<p>The assessment methodology in ES Chapter 12 Population and human health (REP2-016) has been undertaken in accordance with DMRB LA 112.</p> <p>The DMRB includes all current standards, advice notes and other documents relating to the design, assessment and operation of motorways and all-purpose trunk roads for which one of the Overseeing Organisations is the highway authority (e.g. the Applicant).</p> <p>The DMRB embodies the collective experience of the Overseeing Organisations, their agents and designers. It provides requirements and advice resulting from research, practical experience of constructing and operating motorway and all purpose trunk roads, and from delivering compliance to legislative requirements. DMRB documents are not statutory or</p>

Ex1	Question:	Response	Applicant's Response
			<p>regulatory documents or training manuals; neither do they cover every point in exhaustive detail. In general, the DMRB does not duplicate National, UK and European legislative requirements.</p> <p>In England, the DMRB forms part of the Applicant's own policy, guidance and standards developed to deliver the Applicant's statutory duty as the Secretary of State's appointed strategic highways company by way of an Order in accordance with section 1 of the Infrastructure Act 2015 (2015 Act). The effect of this appointment is to confer upon the Applicant the legislative functions of a strategic highways company as regards the areas and highways in respect of which it is appointed. As a result, the Applicant is the highway authority, traffic authority and street authority for the strategic road network.</p> <p>The policy documents represent a part of the performance framework to deliver the Applicant's statutory duties as the licence holder, by responding to the Secretary of State's statutory directions and guidance to the Applicant as required by the 2015 Act. The policy documents and standards have evolved from those established and applied over time. This framework makes clear, to both the Applicant and the wider community of road users and</p>

Ex1	Question:	Response	Applicant's Response
			<p>stakeholders, what the Applicant is expected to achieve and how it must behave in discharging its duties and in delivering its vision and plans for the network, set out in the Road Investment Strategy. The Applicant's compliance with its duties is monitored by the Office of Rail and Road.</p> <p>The Highways England Licence document (2015) sets out key requirements which must be complied with by the licence holder as well as statutory guidance. In exercising its functions and complying with its legal duties and obligations, the licence holder must act in such a manner which it considers best calculated to deliver the following, amongst other commitments presented in Section 4.1 of the Case for the Scheme (AS-022):</p> <ul style="list-style-type: none"> • ensure the effective operation of the network • ensure the maintenance, resilience, renewal, and replacement of the network • ensure the improvement, enhancement and long-term development of the network. <p>Although the Applicant is the source of policy, standards and guidance for the strategic highway network, those documents are monitored against the Secretary of State's statutory guidance and directions. On that basis, although</p>

Ex1	Question:	Response	Applicant's Response
			<p>the Applicant understands that it might appear that there is an element of it setting the tests it has to meet, the reality is that the relevant policy, standards and guidance are derived from the Applicant's statutory duties and they cover the whole of the strategic road network in England, not just the areas of the Scheme. On that basis, the Applicant considers that significant weight should be given to its policies.</p> <p>The Applicant has followed the Project Control Framework (PCF) governance for the delivery of major projects. This sets out in detail how to manage and deliver major road improvement projects. Consultation is accordingly mandated and is undertaken throughout scheme development with the defined consultees:</p> <ul style="list-style-type: none"> • Operations directorate • Safety, Engineering and Standards (SES) directorate. • Local authorities • Statutory environmental bodies, including Natural England, Historic England, the Internal Drainage Board and the Environment Agency <p>LA 112 applies LA 104 for land use receptors, advising in the Note at page 17 that significant effects typically comprise effects after consideration of mitigation that are within the moderate,</p>

Ex1	Question:	Response	Applicant's Response
			<p>large or very large categories. However, LA 112 advises a different approach to human health where the focus is on using a qualitative assessment with evidence provided to support conclusions. The purpose of the assessment is to determine whether there is a potential for negative health outcomes arising from the effects of the proposed scheme, including effects that have been identified and assessed in other ES chapters (in particular air quality and visual effects). The methodology for the assessment is clearly set out in LA 112 and has been applied in ES Chapter 12 Population and human health (REP2-016). Table 12-16 (construction human health effects) and Table 12.18 (residual operation effects on human health) identify health determinants, describe predicted impacts of the determinants and assess the residual effect of health outcome. Conclusions in terms of the Environmental Impact Assessment (EIA) Regulations are presented at paragraphs 12.12.6 (no likely significant human health effects during construction) and 12.12.7 (no changes in human health outcomes expected though may be some positive health outcomes for some receptors) of the ES Chapter 12 Population and human health (REP2-016).</p>

Ex1	Question:	Response	Applicant's Response
	b) If not, could you please set out what methodology should be used, justifying your answer.	<p>Part b)</p> <p>In principle, population and human health assessments should provide a conclusion on the assessment of significance. Whilst there is no nationally recognised specific methodological approach, DMRB LA104 provides a generic approach to assessments and the assignment of significance.</p> <p>The assessment should take into account the nature of the impact(s) including whether they are direct and indirect, secondary, cumulative, short, permanent or temporary. A list of factors which should be considered in the assessment of significance of effects is outlined below:</p> <ul style="list-style-type: none"> • identification of spatial and temporal scope of the study area • identification of sensitive populations, general and vulnerable (receptors) • assigning levels of sensitivity to a population, general and vulnerable (receptor) • assigning levels of magnitude of the effect including compliance with any published standards or regulatory thresholds • plausibility and probability that an effect-receptor interaction will occur (source, pathway, receptor model) • determination and (where possible) quantification of the level of effect on the affected population(s) (receptor), considering the probability, the spatial and temporal extents of the interaction and the significance of the resulting impact. 	<p>Please refer to the response above.</p> <p>LA112 provides a specific assessment criterion for Population and human health and is based upon the principles of LA104. Table 3.11 of LA112 assigns environmental value to various different receptor groups and the sensitivity follows a similar approach to what is detailed in LA104.</p> <p>The Introduction to DMRB LA 112 states that the document "<i>provides a framework to be followed for assessing, mitigating and reporting on the effects of motorway and all-purpose trunk road projects on population and health. It introduces significance criteria that aid consistent and proportionate assessment to support the reporting of significant effects of population and human health.</i>" The description of the scope of LA 112 makes clear at paragraph 1.4 that assessments shall describe impacts in accordance with LA 101, LA 102, LA 103 and LA 104. As explained in the answer to a) above, the approach to the LA 112 guidance adopts the approach set out in LA 104 for land use receptors but a different approach is advised for human health for the reasons given in Notes 1 and 2 to LA 112 paragraph 3.28.1.</p> <p>ES Chapter 12 Population and human health (REP2-016) Section 12.4 outlines</p>

Ex1	Question:	Response	Applicant's Response
		<ul style="list-style-type: none"> • A qualitative assessment will usually be the most appropriate, with a structured and evidenced based narrative • identify levels of certainty or limitations <p>It is recommended that any proposed methodological approach to assess significance for population and human health should be discussed and agreed with relevant interested parties, including UKHSA/OHID. An example methodology to establish significance can be found in Appendix C of Human health: Ensuring a high level of protection (IAIA, EUPHA).</p>	<p>other standards and guidance that have been used to inform the assessment, as well as DMRB LA 112, including:</p> <ul style="list-style-type: none"> • Institute of Environmental Management and Assessment (IEMA) Health in EIA: A Primer for a Proportionate Approach • Health Impact Assessment Tools (Department of Health, 2010) <p>In line with DMRB LA 112, the assessment considers the impacts of the Scheme on the following:</p> <ul style="list-style-type: none"> • Land use and accessibility, including: • private property and housing • community land and assets • development land and businesses • agricultural land holdings • walkers, cyclists and horse riders (WCH) <p>Human health, including:</p> <ul style="list-style-type: none"> • existing health profiles of affected communities • existing health determinants, comprising the following: <ul style="list-style-type: none"> - access to healthcare facilities - access to community, recreation and education facilities - access to green and open space - existing and predicted levels of air and noise pollution

Ex1	Question:	Response	Applicant's Response
			<ul style="list-style-type: none"> - landscape amenity - sources and pathways of air and noise pollution - local transport network • likely health outcomes <p>The significance of effect for each element of the land use and accessibility subtopic has been derived by combining the assigned value (sensitivity) of the receptor with the magnitude of the change (impact) arising from the Scheme. This is in accordance with the significance matrix set out in DMRB LA 104, Table 3.8.1. The significance matrix is also presented in Table 4-1 of ES Chapter 4 (Environmental assessment methodology) (APP-042).</p> <p>The assessment scope was consulted upon with relevant health bodies including the Health Security Executive (HSE), with no concerns raised about the method at the time (please refer to Environmental Impact Assessment Scoping Report (APP-136) and the Consultation Report APP-023)).</p>

5 ENVIRONMENT AGENCY (REP2-078)

Ex1	Question:	Response	Applicant's Response
1.2.18	<p>Habitats Regulations Assessment – Rutland Water SPA and Ramsar site Paragraph 13.7.13 of Chapter 13 of the ES [AS-017] states that there is an Anglian Water pumping station located on the River Nene south of the Proposed Scheme and that water from the River Nene is transferred to Rutland Water, which is located 21km north-west of the Proposed Development. It is also clear that that there would be outfalls from the drainage systems for the Proposed development which would feed into the River Nene above this intake (see also question ExQError! Reference source not found.).</p> <p>a) Given this quote does the Applicant, NE, the EA or Anglian Water consider that the Rutland Water should be considered to be hydrologically connected?</p> <p>b) If the Applicant considers this to be the case, could the Applicant please explain why it considers (top of page 2 of Appendix H of the NSER) that this Proposed Development does not have a potential hydrological or hydrogeological linkage to a NSN site containing a groundwater dependent terrestrial ecosystem which triggers the assessment of NSN sites in accordance with LA 113?</p>	<p>a) The EA does not consider that Rutland Water should be considered to be hydrogeologically connected to the River Nene.</p> <p>The development would not have an impact on the rates of flow in the River Nene.</p> <p>Therefore, there would be no reason for the application to have an impact on the water transfer scheme.</p>	<p>Please refer to response to EXQ1.2.18 in Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-035).</p>

Ex1	Question:	Response	Applicant's Response
	<p>c) If, on reflection, the Applicant considers that there is a hydrological connection, could the Applicant undertake a screening analysis of potential effects, and if necessary further analysis.</p> <p>d) Does NE, the EA or Anglian Water have any comments on the above?</p>		
1.6.40	<p>Schedule 2 – General</p> <p>Could PCC, NE, EA and HMBCE please check Schedule 2 and confirm whether they are content as regarding consultations prior to discharge of Requirements?</p> <p>If they consider that they should be additionally included or excluded from any particular Requirement could they please explain why they believe that to be appropriate?</p>	<p>As the proposed development includes floodplain compensation, the EA would request that a section is included in Schedule 2 which states that the floodplain compensation works must be carried out prior to any works which would reduce the capacity of the floodplain.</p> <p>The EA are content with the approach detailed in Requirement 6 for the management of risk associated with contaminated land and groundwater.</p>	<p>The Applicant is currently considering this suggestion and will respond at Deadline 4.</p>
1.12.8	<p>Water effects of Climate Change</p> <p>Paragraphs 13.7.86ff of Chapter 13 of the ES [AS-017] sets out the that the effects of the Proposed Development have been based on the location of the site in the East of England.</p> <p>a) Given the proximity to the East Midlands, could the EA explain if there are any implications that should be drawn from the data applicable to that area, particularly as some of the catchments are from that region?</p> <p>b) Could the Applicant please</p>	<p>a) The proposed scheme lies wholly within the River Nene catchment within the Anglian River Basin District. The EA considers it appropriate to use the allowances for this location.</p> <p>In relation to rainfall intensities, the allowance is uniform across the country, but this would be applied to local data when used in design.</p> <p>With regard to river flows, these were previously calculated for the Region (Anglian RBD) but have recently been recalculated on</p>	<p>The Applicant confirms that the assessment is considered conservative vs the 2021 climate change guidance. It is therefore not considered necessary to do further sensitivity assessment on climate change, and that we have satisfied the regulator's (EA) requirements.</p>

Ex1	Question:	Response	Applicant's Response
	undertake a sensitivity assessment based on similar data relating to the East Midlands region?	<p>a catchment-by-catchment basis. The allowances are now lower than previous allowances. The use of previous allowances is therefore considered conservative.</p> <p>Guidance on the use of allowances can be found here Flood risk assessments: climate change allowances - GOV.UK (www.gov.uk)</p>	
1.12.15	Discharges to River Nene Paragraph 4.1.4 of the Drainage Strategy Report [APP-129] indicates that there may be discharges from the existing layout to the River Nene which would be retained. When is it anticipated that this decision will be resolved, and does it have any implications for the drainage strategy?	The onus will be on the applicant to undertake the necessary surveys and carry out detailed design for the surface water drainage arrangements. The EA has no preference at this location as to whether existing outfalls are retained or new ones constructed. The EA would however wish to see the number minimised as far as practicable and the design of new outfalls should follow best practice. New outfalls may require Environmental Permits as a flood risk activity.	Until the survey is received we cannot determine if the existing outfalls will be retained. However, it is encouraging that there is not a preference for existing/new outfalls. The number of outfalls has been limited to only be provided where required. It is anticipated that the outfalls to the River Nene would be subject to the EA application process at detailed design.
1.12.22	Climate Change Allowances It has been noted that the Applicant has utilised different allowances for climate change within the design. For example, in paragraph 13.9.32 of Chapter 13 of the ES [AS-017], different climate change allowances are used where existing drainage is being adapted and where carriageway widening or realignment occurs, and further different allowances in paragraph 13.9.34 for the sizing of the Wittering Brook watercourse culvert, and in paragraph 13.9.36 for the size of compensatory floodplain volume.	<p>a) The EA considers the use of different allowances for climate change for the design of the surface water drainage scheme to be appropriate.</p> <p>b) The updated allowances for river flows are lower in the River Nene catchment. Therefore, the EA considers what has been considered at this stage to be conservative. When the project progresses to detailed design, the EA would expect the allowances in place at the time to be used. We are confident that sufficient land has been made available to accommodate</p>	These comments are noted.

Ex1	Question:	Response	Applicant's Response
	<p>a) Do the EA and PCC as LLFA consider that this approach is appropriate?</p> <p>b) If not, what approach should be followed, providing information to support the allowance(s) of climate change advocated?</p> <p>c) Does the Applicant have any comments to make as to why different allowances have been utilised?</p> <p>d) Does the publication by the EA on 20 July 2021 (and since updated) of revised climate change allowances in Flood Risk Assessments for peak fluvial flow rates and future peak rainfall intensity have any implications for this matter?</p>	<p>climate change.</p>	

6 ROBERT W REID (REP2-081)

Ex1	Question:	Response	Applicant's Response
	No questions have been provided. These comments are dealt with separately in Applicant's Comments on Any Submissions Received by Deadline 2.		No response required.