



Annex 4: Natural England response to The Examining Authority's written questions and requests for information (ExQ2) for the Lower Thames Crossing (Issued on 10 October 2023)

As requested, given the number of questions which are relevant to Natural England, we have provided our answers in a table format.

For ease, we have added a row under each question and started the row with 'A' followed by the question number which we hope assists the Examining Authority.

For a number of the questions directed towards the Applicant, once their responses are available, we may make further comments at a subsequent deadline.

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

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ExQ2	Question to:	Question:
1. Project definition		
There are no questions relating to this topic in ExQ2.		
2. Climate change and carbon emissions		
2.1		
Q2.1.1	Applicant	<p>PAS 2080 updates</p> <p>Paragraph 15.3.1 of Chapter 15 of the ES [APP-153] makes reference to PAS 2080: 2016: Carbon Management in Infrastructure. This standard has recently been revised. Please explain whether and if so how the revisions would affect your assessment methodology. Please identify whether any assessment changes would have any consequent climate impact.</p>
A2.1.1		Natural England has no comments to make in relation to this question.
Q2.1.2	Applicant	<p>Delay to proposed ban on the sale of new petrol and diesel cars</p> <p>Is the UK Government's recent announcement of a delay to the ban on the sale of new petrol and diesel cars from 2030 to 2035 a matter that will affect the carbon and climate assessments in Chapter 15 of the ES [APP-153], and if so, will any changes to design, mitigation or monitoring be required?</p>
A2.1.2		Natural England has no comments to make in relation to this question.
3. Consideration of alternatives		
There are no questions relating to this topic in ExQ2.		
4. Traffic and transportation		
4.1 Traffic modelling		
Q4.1.1	Thurrock Council/Applicant	<p>A128 future development</p> <p>References have been made to additional planned developments along the A128 north of the Orsett Cock Junction. To the extent that these are relied upon as providing a basis for the design capacity of the junction as proposed, Thurrock Council is asked to provide a tabulated list of the developments, describing their stage in the development process (eg local plan allocation, planning application submitted, planning permission granted, under construction etc.) and summarising the traffic implications for the junction arising from them. The Applicant is requested provide observations on this table at Deadline 7.</p>

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ExQ2	Question to:	Question:
A4.1.1		Natural England has no comments to make in relation to this question.
Q4.1.2	Applicant	<p>NTEM 8 sensitivity test</p> <p>In the NTEM 8 and Common Analytical Scenarios [REP3-145] document submitted at D3, the Applicant chose to compare the 2030 v7.2 flows with 2032 v8 flows. Can the Applicant explain the rationale for this and whether there would have been a materially different result if a 2030 assessment year had been used?</p>
A4.1.2		Natural England has no comments to make in relation to this question.
Q4.1.3	Applicant	<p>HGV bans</p> <p>In its Deadline 4 Submission ‘Comments on Applicant’s submissions at D3’ Thurrock Council has raised concerns regarding the use of HGV bans in the Applicant’s modelling [REP4-354], paras 11.2.16-23]. Can the Applicant please respond to these comments?</p>
A4.1.3		Natural England has no comments to make in relation to this question.
Q4.1.4	Thurrock Council	<p>Orsett Cock: local traffic</p> <p>While there are likely to be impacts on queuing and delay at the Orsett Cock Roundabout, Tables A.2 and A.3 in the Applicant’s Deadline 4 post-event submissions [REP4-180] suggest that the majority of the affected movements would be accessing local routes (for example 75/80% in the 2030 AM/PM peak respectively) rather than accessing the A1089.</p> <ul style="list-style-type: none"> • Having considered this position, does Thurrock Council agree and if not, please explain it’s outstanding reservations? • To what extent has Thurrock Council balanced adverse effects at Orsett Cock against the benefits to local people and businesses in terms of convenient access to the LTC?
A4.1.4		Natural England has no comments to make in relation to this question.
Q4.1.5	DP World London Gateway Port Ltd (DPWLG)	<p>Orsett Cock: U-turns</p> <p>In light of the position described in [REP4-180], does DPWLG still stand by its position as set out in the DTA Report submitted at D1 [REP1-333 Annex A] which appears to suggest that the majority of U-turning vehicles were those trying to access the A1089? If so, which elements of the position as described in [REP4-180] are disputed by DPWLG and why?</p>
A4.1.5		Natural England has no comments to make in relation to this question.
Q4.1.6	Applicant	Engagement Update

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ExQ2	Question to:	Question:
		Can the Applicant please provide an updated Table A.1 (Traffic Modelling Workshops) [REP3-126] to reflect meetings and/or workshops held since November 2022?
A4.1.6		Natural England has no comments to make in relation to this question.
5.	Air quality	
5.1	Effects on human receptors	
Q5.1.1	Applicant	<p>Delay to proposed ban on the sale of new petrol and diesel cars</p> <p>The ExA is unclear on what estimates have been used by the Applicant on the proportion of vehicle fleet that will be electric after 2030 and how those estimates may have been used in the air quality modelling.</p> <ul style="list-style-type: none"> • Can the Applicant provide this information and explain if there are any significant implications for the air quality modelling and assessment that arise from the UK Government's recent announcement of a delay to the ban on the sale of new petrol and diesel cars from 2030 to 2035? • If the delay to the ban appears likely to give rise to a significant increase in the duration and/or extent of adverse air quality effects: <ul style="list-style-type: none"> ○ Can the Applicant please identify whether any additional air quality monitoring would be required as a consequence of the change to the ban; and ○ Can the Applicant please identify whether any changes to the design, extent and/or duration of mitigation measures would be required? ○ If changes to mitigation measures are proposed, the Applicant is asked to set the changes out in a summary table, describing the location and nature of the additional measures.
A5.1.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q5.1.2	Applicant	<p>Methodology: air quality and junctions</p> <p>In response to ExQ1 Q5.1.4, which related to speed banding assessments around junctions, the Applicant advised as follows:</p> <p><i>"In accordance with DMRB, a review was undertaken of the predicted annual mean nitrogen dioxide (NO₂) concentrations at human health and compliance risk receptors in the opening year Do-Minimum and Do-Something scenarios to determine if there were any locations close to junctions that were above 36µg/m³ and therefore close to exceeding the annual mean Air Quality Strategy (AQS)</i></p>

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ExQ2	Question to:	Question:
		<p><i>objective/Limit Value (40µg/m³). The review indicated that there were receptors close to junctions that met these criteria and in these instances the speed bands were reviewed to ensure that they were consistent with the advice in DMRB.</i></p> <p><i>It should be noted that the receptors were selected at worst-case locations where total pollutant concentrations were expected to be greatest, which included the closest locations to junctions where the annual mean AQS objective and Limit Values would apply.</i></p> <p><i>The speed banding process has been undertaken in line with the advice of DMRB LA 105 ...”</i></p> <p>Can the Applicant please identify the location of the receptors in question in list and map form?</p>
A5.1.2		Natural England has no comments to make in relation to this question.
Q5.1.3	Applicant	<p>Clarity on PM_{2.5} monitoring stations</p> <p>In response to ExQ1 Q5.1.6, which related to the new interim target of PM_{2.5} not exceeding 12 µg/m³ by 31 January 2028, the Applicant advised that there are no relevant monitoring stations within 200m of the Affected Road Network (ARN) of the construction phase and the only relevant monitoring station within 200m of the ARN for the operational phase is Thurrock (Station ID: UKA00272), which started to monitor PM_{2.5} since January 2023.</p> <p>However, Paragraph 5.4.20 of the Air Quality Assessment [APP-143] advises that there are two continuous monitoring stations within the assessment study area which monitor PM_{2.5} – Havering HV1 and Greenwich GR8.</p> <p>For the avoidance of doubt, can the Applicant clarify that the Thurrock Station is the only relevant monitoring station for the new PM_{2.5} Regulation?</p>
A5.1.3		Natural England has no comments to make in relation to this question.
Q5.1.4	Applicant	<p>Air Quality Strategy 2007</p> <p>Can the Applicant confirm its position on the relevance of the Air Quality Strategy 2007 in its Air Quality assessment in ES Chapter 5 [APP-143], in light of its replacement by Air Quality Strategy 2023? The Department for Environment, Food and Rural Affairs states that the revised 2023 Strategy supersedes the Air Quality Strategy 2007 in England, so the ExA would like to understand whether any parts of ES Chapter 5 (and its associated appendices) require updating in light of the fact that the Air Quality Strategy 2007 ‘Objective’ for PM_{2.5} of 25µg/m³ is no longer applicable?</p>
A5.1.4		Natural England has no comments to make in relation to this question.
Q5.1.5	Applicant	<p>Draft National Policy Statement National Networks (dNPSNN): Paragraph 5.18 – Air Quality</p> <p>dNPSNN Paragraph 5.18 – Air Quality states:</p>

ExQ2	Question to:	Question:
		<p><i>“The Secretary of State should give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area or leads to a new area where air quality breaches any national air quality limits or statutory air quality objectives. However, air quality considerations will also be important where substantial changes in air quality levels are expected, <u>even if this does not lead to any breaches of national air quality limits or statutory air quality objectives.</u>”</i> [Underlining is ExA emphasis]</p> <p>The ExA acknowledges that the Applicant has provided a Policy Accordance Assessment of the Project against the dNPSNN [REP4-209], however, the Applicant has sought to rely upon the response it gave to Paragraph 5.12 of the existing NPSNN (2014) in [APP-496]. Given that Paragraph 5.12 of the existing NPSNN (2014) has been re-drafted and expanded with the underlined text above to give more importance to changes in air quality where legal limits are not exceeded, a more pertinent and detailed response from the Applicant is required. While the ExA notes that the dNPSNN does not suggest the Secretary of State should refuse consent where there is any deterioration in air quality, it does state at Paragraph 5.21 that “...any deterioration in air quality should be given appropriate weight in coming to the decision.” For this purpose, the ExA needs to understand how deterioration has been taken into account and what steps have been taken to confine its extent, duration or both.</p>
A5.1.5		Natural England has no comments to make in relation to this question.
5.2 Effects on ecological receptors and designated habitats		
Q5.2.1	The Applicant	<p>Delay to proposed ban on the sale of new petrol and diesel cars</p> <p>Further to question 5.1.1 on this matter in relation to human receptors, air emissions and change in assumptions about the timing of the proposed ban on the sale of new petrol and diesel cars are relevant to consideration of effects on ecological receptors and designated habitats.</p> <ul style="list-style-type: none"> • Can the Applicant explain if there are any significant implications for the air quality modelling and assessment that arise from the UK Government’s recent announcement of a delay to the ban on the sale of new petrol and diesel cars from 2030 to 2035? • If the delay to the ban appears likely to give rise to a significant increase in the duration and/or extent of adverse air quality effects: <ul style="list-style-type: none"> ○ Can the Applicant please identify whether any additional air quality monitoring would be required as a consequence of the change to the ban; and ○ Can the Applicant please identify whether any changes to the design, extent and/or duration of mitigation or compensation measures would be required?

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ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> If changes to mitigation measures are proposed, the Applicant is asked to set the changes out in a summary table, describing the location and nature of the additional measures.
A5.2.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q5.2.2	The Applicant	<p>Reduction in the extent of nitrogen deposition sites: Kent Downs AONB</p> <p>The ExA remains unclear about the effects of the reduction in the extent of the land proposed to be acquired and managed to address the effects of nitrogen deposition on the Kent AONB. Please explain the assessment of the change for this designated area, specifically addressing the mitigation provided for effects of nitrogen deposition on habitat quality.</p>
A5.2.2		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
<p>6. Geology and soils</p>		
Q6.1.1	Applicant	<p>Ground water effects on designated sites</p> <p>The Ramsar Advanced Grouting Tunnel and Main Tunnels Numerical Model – Technical Report and Groundwater Methodology Report included in 9.89 Responses to the Examining Authority's ExQ1 Appendix G – 11. Biodiversity (Part 2 of 6) [REP4-195] provides the output from the model considering the flows for the main and grouting tunnels concluding that inflow rates are expected to be low, however the drawdown has the potential to affect land that is a reasonable distance to the east of the line of the tunnels (1,500m), albeit it is concluded that there is limited possibility of a significant direct effect.</p> <ul style="list-style-type: none"> What difference would be likely if a perched water table is encountered? What is the probability of saline water being encountered and drawn into the tunnelling area that requires to be dealt with? Disposal of water drawn into the tunnelling area is suggested to be to watercourses that feed into the Medway Estuary and Marshes SPA and Ramsar Site area. <ul style="list-style-type: none"> What is considered to be the effect of such a discharge on the designated site? Are there circumstances in which other means of disposal would be required in order to avoid adverse effects on the designated site? What monitoring measures are in place to address the disposal of water drawn into the tunnelling area?

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ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> Should monitoring show that the discharge of water is causing an adverse effect, can the Applicant confirm what alternative methods exist to dispose of the water and how these are secured?
A6.1.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q6.1.2	Applicant Environment Agency Local Authorities	<p>Limitations of existing survey</p> <p>The wording of GS001 in 6.3 Environmental Statement Appendices Appendix 2.2 – Code of Construction Practice, First Iteration of Environmental Management Plan [REP5-049] REAC table (Table 7.1) suggests that “... <i>Supplementary ground investigations would be undertaken to assess residual contamination risks</i> ...”. This infers that the position analysed within the ES and supporting documentation may not accurately reflect what is found on site as further ground investigations are deemed necessary.</p> <ul style="list-style-type: none"> What is being proposed for intrusive ground investigations where contaminated soils are present without drilling being required? How has this been secured? Should a programme of instrumentation and monitoring, such as suggested in GS003, be appropriate with respect to all cases where contaminated land is present? If so, where would this be secured and appropriately managed?
A6.1.2		Natural England has no comments to make in relation to this question.
Q6.1.3	Applicant	<p>Contamination verification</p> <p>GS017 in 6.3 Environmental Statement Appendices Appendix 2.2 – Code of Construction Practice, First Iteration of Environmental Management Plan [REP5-049] REAC table (Table 7.1) uses the terminology “...<i>would be available</i> ...”. This suggests that there is an option not to provide the information. If the Health and Safety File noted is the legal document required under The Construction (Design and Management) Regulations, why would this information not be provided?</p> <p>Are there any other instances where this terminology is used where the inference of flexibility could be considered inappropriate?</p>
A6.1.3		Natural England has no comments to make in relation to this question.
7.	Tunnelling considerations	
7.1	Tunnelling control measures	

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ExQ2	Question to:	Question:
Q7.1.1	Port of London Authority, Port of Tilbury London Ltd, Environment Agency, Marine Management Organisation, Local Authorities	<p>Tunnelling techniques</p> <p>Do you consider that the additional controls/commitments in RDWE059 to only utilise closed face tunnelling techniques in the Code of Construction Practice [REP5-049] would be adequate? If not, please provide details and suggest updated wording for a form of tunnelling method security that you would consider to be adequate.</p>
A7.1.1		Natural England has no comments to make in relation to this question.
Q7.1.2	Management Organisation, Local Authorities, Environment Agency	<p>Vibration</p> <p>Do you consider that the controls in the Deemed Marine Licence in the dDCO [REP5-024] and the associated controls in the Code of Construction Practice [REP5-049] in respect of vibration for the tunnelling and associated works are adequate? If not, please provide details and suggested updated wording that you would consider to be adequate.</p>
A7.1.2		Natural England has no comments to make in relation to this question.
Q7.1.3	Applicant, Port of London Authority, Port of Tilbury London Ltd, Environment Agency, Marine Management Organisation, Local Authorities	<p>Tunnel Depth Report</p> <p>Please provide an update on any further discussions in respect of the Tunnel Depth Report [REP3-146]. Please set out any outstanding areas of disagreement and what, if any additional or updated controls you would consider to be necessary.</p>
A7.1.3		Natural England has no comments to make in relation to this question.
Q7.1.4	Port of London Authority, Port of Tilbury London Ltd, Environment Agency, Marine Management Organisation, Local Authorities	<p>Ground protection tunnel</p> <p>Do you consider that the additional controls/commitments in GS024, RDWE017, 018a and 018b of the Code of Construction Practice [REP5-049] are sufficient? If not, please provide reasoning and suggested wording for additions/updates.</p>
A7.1.4		Natural England has no comments to make in relation to this question.
Q7.1.5	Port of London Authority, Port of Tilbury London Ltd, Environment Agency, Marine Management Organisation, Local Authorities	<p>Tunnelling controls</p> <p>Do you consider that any additional or updated controls are necessary in respect of the tunnelling works? If so, please provide details and suggested wording.</p>
A7.1.5		Natural England has no comments to make in relation to this question.
8.	Waste and materials	

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ExQ2	Question to:	Question:
Q8.1.1	Gravesham Borough Council	<p>Southern tunnel compound</p> <p>Please provide comments on the updated/additional commitments (MW009 and MW017) in the Code of Construction Practice [REP5-049]. Do you consider that, with these additions, the commitments are sufficient? If not, please provide details and suggestions for additional/updated commitments.</p>
A8.1.1		Natural England has no comments to make in relation to this question.
Q8.1.2	Thurrock Council	<p>Northern tunnel compound</p> <p>Please provide comments on the commitments in the Code of Construction Practice [REP5-049] in respect of the Northern Tunnel Compound. Do you consider that, with these additions, the commitments are sufficient? If not, please provide details and suggestions for additional/updated commitments.</p>
A8.1.2		Natural England has no comments to make in relation to this question.
Q8.1.3	Applicant, Local Authorities, Port of London Authority	<p>Transportation of materials and waste</p> <p>Please provide an update on any further discussions/agreement in respect of using river transportation for the delivery of materials and removal of waste? In responding, please provide information in respect of:</p> <ul style="list-style-type: none"> • How river transportation could be maximised where it is appropriate; and • Where other transportation would be more efficient given the linear nature of the project? <p>As a result of the responses provided on these points, are there any updates to the Code of Construction Practice (or other control documents) that should be made?</p>
A8.1.3		Natural England has no comments to make in relation to this question.
Q8.1.4	Applicant, Local Authorities and Environment Agency	<p>Excavated materials</p> <p>With regard to the Outline Materials Handling Plan [REP5-051], the Excavated Materials Assessment [APP-435] and the Code of Construction Practice [REP5-049]:</p> <ul style="list-style-type: none"> • Could greater certainty be provided that the quantities of excavated materials would not exceed the estimates? • In the event that quantities did exceed the estimates, what remediation/mitigation could be secured?

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ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> Should/could the controls in the Code of Construction Practice be updated to deal with a situation where the quantities were exceeded?
A8.1.4		Natural England has no comments to make in relation to this question.
Q8.1.5	Applicant, Local Authorities and Environment Agency	<p>Waste hierarchy</p> <p>Could/should the wording in MW007 of the Code of Construction Practice [REP5-049] be strengthened to provide greater certainty that the waste hierarchy will be followed appropriately? Would the use of individual targets for different materials be an appropriate approach?</p>
A8.1.5		Natural England has no comments to make in relation to this question.
9. Noise and vibration		
9.1 Noise and vibration: general questions		
Q9.1.1	Local Authorities	<p>Noise Insulation Regulations</p> <p>Do you consider the additional commitment (NV018) in the Code of Construction Practice [REP5-049] would be sufficient to address potential eligibility under the Noise Insulation Regulations 1975? If not, please provide details and any suggested additional wording/commitments that you consider to be necessary.</p>
A9.1.1		Natural England has no comments to make in relation to this question.
Q9.1.2	Applicant and Local Planning Authorities	<p>Noise Insulation Regulations</p> <p>Should the commitment in NV018 of the Code of Construction Practice [REP5-049] be updated to provide a positive commitment to secure the provision of noise insulation in the event that any property/ies are found to be eligible?</p>
A9.1.2		Natural England has no comments to make in relation to this question.
Q9.1.3	Local Planning Authorities	<p>Construction</p> <p>Do you consider that the package of commitments is sufficient to monitor and, if necessary, mitigate noise and vibration impacts during the construction phase? If not, please provide details and any suggested additional wording/commitments that you consider to be necessary.</p>
A9.1.3		Natural England has no comments to make in relation to this question.
Q9.1.4	Local Authorities	Operational noise and vibration monitoring and mitigation

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ExQ2	Question to:	Question:
		Please provide any comments in respect of the updated/additional commitments in the Code of Construction Practice [REP5-049], such as NV013 and NV019. Do you consider that the package of commitments is sufficient to monitor and, if necessary, mitigate noise and vibration impacts during the operational phase? If not, please provide details and any suggested additional wording/commitments that you consider to be necessary.
A9.1.4		Natural England has no comments to make in relation to this question.
Q9.1.5	Local Authorities	<p>Construction vibration monitoring: heritage assets</p> <p>Are the controls in the dDCO [REP5-024] and the associated controls in the Code of Construction Practice [REP5-049] sufficient to adequately monitor the impact of vibration on heritage assets which could be potentially vulnerable to vibration relating to construction traffic/operations?</p> <ul style="list-style-type: none"> • Please provide details of any heritage assets which you consider need to be specifically considered.
A9.1.5		Natural England has no comments to make in relation to this question.
Q9.1.6	Applicant	<p>Construction vibration monitoring: heritage assets</p> <p>With reference to the matter raised in Q9.1.5 above:</p> <ul style="list-style-type: none"> • Please provide details of any heritage assets which you consider need to be specifically considered. • Please provide details of how mitigation/avoidance of harm would be carried out in the event that monitoring indicated a potential unacceptable impact was likely to occur. • Please set out any particular monitoring and mitigation for vibration effects that would take place to avoid harm to the gate arch structure at Grove Barn House, South Ockendon (close to The Wilderness).
A9.1.6		Natural England has no comments to make in relation to this question.
Q9.1.7	Applicant	<p>Whitecroft Care Home: construction noise</p> <p>What additional measures do you consider could/should be put in place to minimise the impact of construction noise on the care home residents? In responding please:</p> <ul style="list-style-type: none"> • Have specific regard to the submissions from Whitecroft Care Home (including [REP4-382]). • Have regard to any potential negative effects of mitigation methods on the residents, such as the physical effect of acoustic screening.

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ExQ2	Question to:	Question:
		Set out how any additional monitoring and mitigation could/would be secured (ie via the Code of Construction Practice).
A9.1.7		Natural England has no comments to make in relation to this question.
Q9.1.8	Applicant	<p>Whitecroft Care Home: operational noise</p> <p>The submissions from Whitecroft Care Home (including [REP4-382]) indicates that operational noise levels may increase beyond those currently experienced, particularly in respect of the south façade of the building. Please provide commentary on this matter and indicate how monitoring and mitigation could be put in place to avoid this?</p>
A9.1.8		Natural England has no comments to make in relation to this question.
Q9.1.9	Applicant and Whitecroft Care Home (Kathryn Homes Ltd, Runwood Homes Ltd and Runwood Properties Ltd)	<p>Whitecroft Care Home: construction vibration</p> <p>Can these parties liaise together to provide details of additional information that could/should be provided to inform vibration mitigation and how this could/would be secured in the Code of Construction Practice (or other control document)?</p>
A9.1.9		Natural England has no comments to make in relation to this question.
10. Road drainage, water environment and flooding		
10.1 Managing surface water		
Q10.1.1	Applicant	<p>Surface water flood risk</p> <p>The Applicant's response to ExQ1 Q10.2.1 is noted, particularly the point that " <i>mitigation measures will be developed during detailed design in conjunction with the highway drainage design</i>": however Gravesham Borough Council, in their submission [REP4-291], suggests that there are significant issues to be dealt with at detailed design stage, particularly, as the Council notes, "...<i>the Works Plan shows two new sub-stations to be built south of the Cobham roundabout in this location (Works Plan REP2-037 shown as SS4 + SS5 and Work MU13 in the dDCO REP3-077) which appear to conflict with the position of the existing drainage culvert under HS1 ...</i>". The Council suggests that the consequences could include a reduction in landscaping area opening the view from the south. This could also have biodiversity and flood risk consequences.</p> <p>Using the above as an example, can the Applicant provide sufficient detail to allow confidence that the conflict issue could be satisfactorily resolved at the detailed design stage, without compromising the design parameters, and within existing Order Limits? An outline design solution will suffice.</p>

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ExQ2	Question to:	Question:
A10.1.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q10.1.2	Applicant Lead Local Food Authorities (LLFAs)	<p>Infiltration ponds</p> <p>In the Applicant's response to ExQ1 Q10.2.3, it is suggested that "<i>the overtopped flows would be guided towards existing (pre-development) exceedance flow paths. Any civil works required to establish the flow paths would be within the Order Limits but overtopped flows would eventually be discharged to areas where existing exceedance flows naturally gather which may be beyond the Order Limits.</i>" Can the Applicant provide further information to demonstrate that the situation 'outside the Order Limits' is no worse after implementation of the scheme than is currently the case?</p> <p>Where is this secured in the dDCO and do the LLFAs agree that sufficient provision is secured within the DCO?</p>
A10.1.2		Natural England has no comments to make in relation to this question.
Q10.1.3	Applicant	<p>Whitecroft Care Home: drainage</p> <p>In Document 9.123, Whitecroft Care Home Cross-sections [REP5-092], the Applicant provides an indication of the locations and sizing of drainage ditches. Section A indicates a ditch approximately 5 metres wide on both sides of the landscaped mound, one immediately adjacent to the Care Home boundary and one adjacent to woodland edge planting. Section B suggests the ditch is some 25 metres wide with the A1013 on one side and vegetation on the other.</p> <ul style="list-style-type: none"> • Can the Applicant confirm if these representations have been determined utilising hydraulic analysis of the expected design flows as a result of the proposed scheme and potential discharge along interrupted overland flow routes? • Using these cross sections as an example, could the Applicant confirm which ditches they will be retaining maintenance responsibility for and those that are being gifted/returned to adjacent landowners? Where is this secured? • Using the ditches shown in the two sections as an example, can the Applicant provide an indication of the future maintenance operation on the ditches, particularly the one adjacent to the Care Home? • Is the methodology described above consistent across the whole project, or could other approaches be described with their locations being highlighted?
A10.1.3		Natural England has no comments to make in relation to this question.
10.2	Managing foul water	

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ExQ2	Question to:	Question:
Q10.2.1	Applicant	<p>Foul water systems</p> <p>In its D4 submission, Anglian Water Services [REP4-360] has suggested that previous potential capacity may not be available. The Applicant has acknowledged in its answer to Q10.3.1 [REP4-193], that further discussions may be required with the Sewage Undertakers to provide suitable discharge arrangements. However, should alternative arrangements be required, these are normally administered by the Environment Agency through its permitting system. Can the Applicant confirm that such discharges into a watercourse or infiltration receptor within/adjacent to the Order Limits have been Included in the EIA and other supporting information as to the potential effects on both biodiversity and flood risk?</p>
A10.2.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
10.3	Managing Water Supply	
Q10.3.1	Applicant	<p>Water supply</p> <p>The Applicant's response to ExQ1 Q10.4.1 is noted; however, could it be extended to make comment upon the proposed two-year rephasing of the start of the construction alongside the possible use of a single TBM as opposed to two?</p> <ul style="list-style-type: none"> • What effects does this have on the analysis contained within documentation? • Does this have consequential effects on the Value for Money considerations or the ability of the project to be delivered, particularly if the alternative has a consequential cost increase? The Applicant should provide sufficient information to justify the answer.
A10.3.1		Natural England has no comments to make in relation to this question.
Q10.3.2	Applicant	<p>Calculation of flows and volumes</p> <p>The Applicant's response to ExQ1 Q10.4.3 is noted. There are a number of watercourses shown within the Order Limits that simply 'disappear'. They do not seem to have an upstream nor downstream catchment. The defining of catchment boundaries appears to have been a 'desktop' exercise, utilising various techniques; however, during the recent Accompanied Site Inspections (ASI), it was suggested that some watercourses disappeared to resurface at other locations.</p> <ul style="list-style-type: none"> • Can the underground element of these watercourses be determined through a 'desktop' exercise? • How are any and all changes noted following subsequent 'detailed design' review being accommodated within the structure of the submitted documentation?

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
A10.3.2		Natural England has no comments to make in relation to this question.
Q10.3.3	Applicant	<p>Site information</p> <p>The Applicant's answer to ExQ1 Q10.4.5 is noted. There have been comments from a number of IPs with regard to the current uncertainty of watercourse connectivity and concern has been raised on the ability to protect the watercourses, ground water and the associated biodiversity without a full understanding of connectivity with the associated cause and effect relationships. In ES Appendix 2.2: Code of Construction Practice [REP5-049] there are a number of instances where the Commitment states that '.... during detailed design' '.... would be assessed and, if confirmed to be necessary, the detail of such measures would be agreed by the Secretary of State following consultation with ...'.</p> <p>What measures are in place to audit the various assessments that are suggested may be necessary, who is to act as the auditor, and how is the audit mechanism and the subsequent detailed measures secured?</p>
A10.3.3		Natural England has no comments to make in relation to this question.
10.4	Water quality and discharges	
Q10.4.1	Applicant LLFAs IDB	<p>Operational surface water drainage pollution risk assessment</p> <p>The Applicant's response is noted for question ExQ1 Q10.6.2; however, in relation to the proposed locations of outfalls it is stated that they are "subject to confirmation during the detailed design of operational drainage networks".</p> <ul style="list-style-type: none"> • How is this flexibility secured within the DCO in order that any changes during the detailed design stage can be accommodated in flood risk terms in addition to the pollution risk on which has been commented? • Are the appropriate Drainage Authorities content with the arrangements?
A10.4.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
11.	Biodiversity	
11.1	Environmental mitigation	
Q11.1.1	Natural England Applicant	<p>Species surveys limitations</p> <p>The Applicant's response to ExQ1 Q11.2.1 suggests that the mitigation proposals are based upon a "precautionary" approach. In the example, the Water Vole receptor site for the translocation of the</p>

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

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ExQ2	Question to:	Question:
		<p>mammals will only be used if there is a sufficient number to warrant its use and maintain a viable population.</p> <ul style="list-style-type: none"> • Can the Applicant set out how mitigation will be achieved if numbers are not sufficient? • Is Natural England content that this alternative proposition can be accommodated within the construction phase without causing undue distress to the translocated population, particularly as there is a suggestion that it could involve multiple captures and releases?
A11.1.1		<p>Natural England has worked closely with the Applicant to agree an approach that will deliver the project whilst minimising the impacts on the existing water vole population and providing a conservation benefit to water voles in the wider area. Natural England’s advice is that there should not be multiple capture and releases carried out at the site.</p> <p>We understand that water vole trapping will commence, and ideally be completed, during the preferred trapping window in the spring. Additional trapping will only be carried out in the autumn if required as a ‘mop up’ exercise for low numbers of animals where spring trapping was found to not be 100% successful.</p> <p>Two possible release sites have been identified by the Applicant. Should 50 or more water voles be captured, these will be released on the River Pant/Blackwater at a suitable location along a 9 kilometre stretch. Should the numbers of water voles caught be lower than 50, they will be released in vacant territories along the Mardyke.</p> <p>The River Pant/Blackwater release site has already been subject to a summer survey. Natural England understands the Applicant is currently proposing to undertake surveys in April/May 2024 with a view to translocation in Spring 2025 to ensure it will be suitable for a spring release of the captured water voles. The Mardyke will be subject to mink trapping, commencing next year, to ensure the site will be mink free at the time of release.</p> <p>To reduce stress, captured water voles will be held for the minimum time possible. Those caught in spring will be held until the trapping is completed and disease screening of the captured cohort is carried out. Autumn trapping will only be carried out when weather conditions are still suitable for water voles to be released.</p>
Q11.1.2	<p>Natural England IPs with an interest in the natural environment Applicant</p>	<p>Monitoring of success</p> <ul style="list-style-type: none"> • Do Natural England and other IPs agree that the proposals suggested in the Applicant’s response to question Q11.5.2 provide a robust method of monitoring the success of species mitigation proposals?

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> • Should aspects of the monitoring of the success of the proposed Green Bridges in relation to the use by the design species be undertaken alongside any monitoring required to meet Licence Applications? • In the document [REP4-182] the Applicant suggests that the oLEMP [REP3-106] refers to monitoring target habitats. Should the oLEMP be more specific in relation to species monitoring? • Over what time period should monitoring and subsequent mitigation and remedial action of different species, take place and are there natural, extreme weather events that justify extensions to the periods of assessment and replacement suggested? Can the Applicant set this information out in a table. • How could such be secured in the documentation?
A11.1.2		<p>Natural England welcomes confirmation that the Applicant will undertake the monitoring required as part of their protected species licences in their response to ExQ1 Q11.5.2 (Examination Document REP4-194). The project is however impacting populations and assemblages of species of conservation importance which are not subject to protected species licensing requirements including, for example, breeding birds, nationally important invertebrate assemblages, widespread reptiles and amphibians. Natural England therefore considers that a more holistic approach to monitoring the establishment of habitats and their functioning should be undertaken by the Applicant, using other schemes undertaken by National Highways such as the A21, Pembury to Tonbridge, as a model of good practice. We have suggested such an approach to the Applicant during the pre-application period and is detailed in Section 10 of our Written Representation (Examination Document REP1-262), during our oral evidence at Issue Specific Hearing 6 and in our response to the Applicant's answer to ExQ1 Q11.5.2 provided in our Deadline 5 Response (Examination Document REP5-109).</p> <p>In relation to the Green Bridges, as Natural England explained in our evidence during Issue Specific Hearing 6 (confirmed in our Deadline 5 response, Examination Document REP5-109), we consider that the much broader indicators of success approach looking at the target species within the submitted Design Principles (Examination Document APP-516) which include additional species to those which will be subject to protected species mitigation licenses. As such, we recommend the Applicant provides further clarity on how the monitoring of the effectiveness of the Green Bridges for all of the target species within the Design Principles is to be undertaken. This is particularly important given the lack of habitat connectivity provided by the Thong Lane and Brewers Road Green Bridges.</p> <p>Natural England would welcome greater clarity being provided within the oLEMP (Examination Document REP3-106) as to how the effectiveness of the mitigation measures proposed for species, for</p>

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
		<p>which protected species licenses are not required, will be monitored. The oLEMP refers to which habitats are proposed to support specific species/species groups but does not provide details of how their success for these species/groups will be monitored. Key to the success of any mitigation and compensation programme is a robust monitoring and feedback loop to take remedial action as required. As such, Natural England strongly supports the need to a more holistic monitoring programme for species and habitats to ensure the ecological and landscape mitigation achieves its stated aims.</p> <p>Natural England will provide our comments in relation to the time period during which species monitoring and remedial actions should be undertaken and how best this can be secured once the Applicant has provided their response.</p>
Q11.1.3	Applicant	<p>Habitat creation, compensation and mitigation</p> <p>The ExA recognise that mitigation and compensation measures will take time to develop and be effective. Can the Applicant explain how the proposed programming of the mitigation/compensation and enhancement works has been taken into account and relied upon in the assessments?</p> <p>The Applicant is suggesting an approach to allow the detailed design phase flexibility. If the land-take currently highlighted as being necessary from designated sites and other habitats may be reduced at the detailed design stage, can the Applicant confirm that this would not result in mitigation as currently set out in the ES being reduced?</p>
A11.1.3		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q11.1.4	Applicant	<p>Vegetation reinstatement</p> <p>In 6.1 Environmental Statement - Chapter 14 - Road Drainage and the Water Environment [APP-152], paragraph 14.5.10 j suggests that " ... <i>Bankside vegetation would be reinstated at culvert entries and exits following the completion of construction works as soon as conditions are suitable for planting (RDWE009)</i> ". Can the Applicant confirm if the policy is to reinstate as soon as practicable following construction of the work or is there likely to be an end of contract 'catch-up' and that this was considered as the basis for the EIA?</p>
A11.1.4		Natural England has no comments to make in relation to this question.
11.2	Structures	
Q11.2.1	Applicant	West Tilbury Main Culvert

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

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ExQ2	Question to:	Question:
	Environmental Statutory Authorities LLFAs	<p>The comment provided within the Applicant’s response to ExQ1 Q10.6.5 is noted; however Badgers are nocturnal animals who do not require good vision, being dependent on hearing and smell. It has been suggested that species that are more reliant on sight require to see the ‘other’ end of culverts etc, to give them the assurance they require to enter the darker confines. It is recognised that culverting can affect the ecological value of the watercourse, while inhibiting the migration of some species and consequently it is suggested in industry guidance documentation that the length of culverts etc should be as short as possible. While it is acknowledged that within the answer to ExQ1 Q11.6.1 the Applicant is proposing many features to minimise detrimental effects, can the Applicant, and other IP, provide documented evidence that a culvert length of the 46 metres proposed will not act as a migration barrier?</p> <ul style="list-style-type: none"> • If no guidance is available, are there examples where such a length of culvert of similar diameter etc has been proven not to act as a barrier or are there options to further reduce the length of culvert? If this is the case, what amendment will be required to be made to the submitted documentation? • What is the maximum length of culvert for the diameter proposed that will not act as a barrier to species migration thereby isolating upstream catchments etc? • It is suggested that the number of culverts being highlighted within 7.5 Design Principles Document [REP4-146] as being designed to allow mammal passage and to be as short a length as possible is only one. It is the West Tilbury Main Culvert and is listed in Table 5.5 Clause No. S9.10. Can the Applicant confirm if this is the only location for such mitigation to be introduced?
A11.2.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q11.2.2	Applicant Environment Agency and other IPs with interests in environmental performance and outcomes	<p>Culverting general</p> <p>Table 4.10 Structural form of water crossings in Document 6.3 Environmental Statement - Appendix 14.6 - Flood Risk Assessment - Part 10 [APP-477] provides a list of various proposed culverts.</p> <ul style="list-style-type: none"> • Can the Applicant confirm what are being introduced to prevent these culverts being ‘environmental blackspots’ through acting as barriers, reducing species movement, migration etc? How are relevant design measures being secured? • Can the Environment Agency, or other IPs, confirm that the proposed culverts listed in Table 4.10, referenced above, alongside the proposed mitigation, will not decrease the ecological value of the watercourses upstream from the culverts or that the Applicant has provided

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

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ExQ2	Question to:	Question:
		<p>sufficient mitigation or alternative routes that minimises the risk of the upstream catchments becoming disjointed and isolated?</p> <ul style="list-style-type: none"> Where there is limited or no opportunity to provide sufficient mitigation or alternative routes that minimises the risk of the upstream catchments becoming disjointed and isolated due to the location of the watercourses to be culverted, can the Applicant explain why the modification of the surface water body should be accepted?
A11.2.2		Natural England has no comments to make in relation to this question.
Q11.2.3	Applicant	<p>Culverting general In the DMRB, CD 529 - Design of outfall and culvert details suggests in section 3.5.1 that ‘... <i>The minimum culvert diameter should be 450 mm as smaller sizes are prone to blockage</i> ...’, however twin 300 mm diameter culverts are proposed at Crossing Reference X-EFR-5-01. The decision is based upon hydraulic requirements to reduce their length to 87 metres. Where are the measures that are proposed to reduce the potential for blockage and where are these listed and secured?</p>
A11.2.3		Natural England has no comments to make in relation to this question.
Q11.2.4	Applicant	<p>Definitions Within 3.1 Draft Development Consent Order [REP5-024], in the section ‘Interpretation’ clause 2 the definition of “<i>watercourse</i>” the term includes all ‘drains’ excepting a public sewer or ‘drain’. In Schedule 14, Part 3 clause 19 an “... <i>ordinary watercourse</i>” has the meaning given by section 72 (interpretation) of the Land Drainage Act 1991 ...”, yet in Part 9 of that same schedule clause 117 defines a “<i>watercourse</i>” in a similar manner to the definition in clause 2 yet only the public sewer is excepted.</p> <ul style="list-style-type: none"> Why is the definition of a “watercourse, ordinary watercourse, main river and culvert etc” not referred to the definition contained in section 72(1) of the Land Drainage Act 1991? What differences would it make to the submitted documentation? Additionally, Local Authority, Internal Drainage Boards and The Environment Agency can operate under permissive powers with respect to watercourses without necessarily owning the watercourses etc. What changes are required in the Development Consent Order [REP5-024], in order to reflect this position?
A11.2.4		Natural England has no comments to make in relation to this question.
Q11.2.5	Applicant	<p>Green bridges In the response at Deadline 4, Natural England [REP4-324] has provided the following table:</p>

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:																
		<p>The Design Principles also provide details of the minimum width of the green elements to be provided on each bridge which are as follows:</p> <table border="1" data-bbox="772 355 1926 943"> <thead> <tr> <th data-bbox="772 355 1077 392">Bridge</th> <th data-bbox="1077 355 1926 392">Total width of green element</th> </tr> </thead> <tbody> <tr> <td data-bbox="772 392 1077 461">Brewers Road (Clause S1.17)</td> <td data-bbox="1077 392 1926 461">11.5 metres (10 metres planting zone to the east, 1.5 metres to the west)</td> </tr> <tr> <td data-bbox="772 461 1077 529">Thong Lane South (Clause S2.12)</td> <td data-bbox="1077 461 1926 529">21.5 metres (20 metres planting zone to the east, 1.5 metres to the west)</td> </tr> <tr> <td data-bbox="772 529 1077 667">Thong Lane North (Clause S3.18)</td> <td data-bbox="1077 529 1926 667">Unknown 'The planting green zones shall be maximised. Their width shall vary across the length of the bridge but shall have a 7m minimum width at pinch points. The WCH routes may be located within the planting zones'</td> </tr> <tr> <td data-bbox="772 667 1077 735">Muckingford Road (Clause S10.10)</td> <td data-bbox="1077 667 1926 735">14 metres (7 metres planting zone to the east, 7 metres to the west)</td> </tr> <tr> <td data-bbox="772 735 1077 804">Hoford Road (Clause S10.11)</td> <td data-bbox="1077 735 1926 804">6 metres (3 metres planting zone to the north, 7 metres to the south)</td> </tr> <tr> <td data-bbox="772 804 1077 873">Green Lane (Clause S11.11)</td> <td data-bbox="1077 804 1926 873">6 metres (3 metres planting zone to the east, 3 metres to the west)</td> </tr> <tr> <td data-bbox="772 873 1077 943">North Road (Clause S12.18)</td> <td data-bbox="1077 873 1926 943">14 metres (7 metres planting zone to the east, 7 metres to the west)</td> </tr> </tbody> </table> <p>Natural England also suggests that for mixed use bridges, their width should be determined by adding up the widths required to meet various needs. Within the 'DMRB CD 127 Cross-sections and headrooms' the standard verge width shown for rural all-purpose roads, alongside others, where noted, lies between 1.5 and 2.5 metres. This width can be augmented by the need for additional drainage provision etc. These are similar widths to the green elements to be provided on sections of the bridges.</p> <ul data-bbox="817 1145 2101 1401" style="list-style-type: none"> • While it is accepted that roadside verges can be sanctuaries for wildflowers, pollinating insects, reptiles, amphibians and small mammals, can the Applicant confirm how the bridges are to satisfy the biodiversity outcomes expected, and not become utilised as verges? • Can the Applicant provide examples of similar arrangements for other schemes and information regarding the success or failure of the design? • What will be the Advisory Group's role in scrutinising the potential contractors to ensure that they have the appropriate experience and where is this secured? 	Bridge	Total width of green element	Brewers Road (Clause S1.17)	11.5 metres (10 metres planting zone to the east, 1.5 metres to the west)	Thong Lane South (Clause S2.12)	21.5 metres (20 metres planting zone to the east, 1.5 metres to the west)	Thong Lane North (Clause S3.18)	Unknown 'The planting green zones shall be maximised. Their width shall vary across the length of the bridge but shall have a 7m minimum width at pinch points. The WCH routes may be located within the planting zones'	Muckingford Road (Clause S10.10)	14 metres (7 metres planting zone to the east, 7 metres to the west)	Hoford Road (Clause S10.11)	6 metres (3 metres planting zone to the north, 7 metres to the south)	Green Lane (Clause S11.11)	6 metres (3 metres planting zone to the east, 3 metres to the west)	North Road (Clause S12.18)	14 metres (7 metres planting zone to the east, 7 metres to the west)
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Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> Should more clarity be contained in the oLEMP, with respect to the establishment and management of the green elements? What changes would be required to the documentation and Order Limits in order to meet the current good practice recommendations suggested by Natural England [REP4-324]?
A11.2.5		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q11.2.6	Applicant	<p>Green bridges</p> <p>The Applicant stated during the ISH6 Hearing that the green bridges' locations were selected where evidence of species crossing was noted during the surveys. Can the Applicant provide more detail on the background to this statement, and/or signpost the location(s) in the existing document set where this information is set out?</p>
A11.2.6		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
11.3	Surveys	
Q11.3.1	Applicant	<p>Post-consent surveys</p> <p>If it is accepted that the species surveys have been limited but provide a basis on which the worst-case scenario may be assessed, it must therefore be accepted that, as many IPs have suggested, revised surveys are required to validate previous surveys etc prior to detailed design and construction phases of the project.</p> <p>It is noted that within Document 6.3 ES Appx 2.2 - CoCP, First iteration of Environmental Management Plan v4.0 [REP5-049] there are a number of updates being specifically offered; however there appears to be no reference to species surveys.</p> <ul style="list-style-type: none"> Can the Applicant confirm that all necessary protected species assessments are updated where appropriate prior to any site clearance or construction works commencing and identify where this commitment is secured in the control documents? What risk exists that, when further surveys are undertaken, further mitigation works are required, and in which areas? Are there any potential risks to the need to increase the Order Limits?
A11.3.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
Q11.3.2	Applicant	<p>Offsetting</p> <p>The document reference 9.90 Mitigation Route Map [REP4-203] is noted, but the ExA would like to see a simple graphical representation / location plan to understand which area(s) of habitat are being created for particular impacts; such an approach will help provide clarity that the impacts are fully mitigated or compensated for. The detail provided in Tables 8.31 (south of the River Thames) and 8.35 (north of the River Thames) of Chapter 8 Terrestrial Biodiversity of the Environmental Statement [APP-146] are noted, but it continues to be difficult to track where the individual areas of habitat impacted are mitigated or compensated for on the ground within the submitted documents.</p>
A11.3.2		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q11.3.3	Applicant	<p>Biodiversity Net Gain (BNG)</p> <p>In a similar manner to ExQ2 Q11.3.2 of this set of questions, the ExA requests the Applicant provide a graphical representation / location plan in addition to that detailed above showing all areas of environmental improvement included in the BNG metric.</p>
A11.3.3		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q11.3.4	Applicant Natural England	<p>BNG</p> <p>The Applicant's response to Written Representations [REP2-046] states that it will require significant work to apply the classifications to update the BNG calculator. It is agreed that, although it is likely that a shift from version 3.1 to 4.0 will not require new field surveys, it may require additional desk-based work.</p> <p>The Applicant is asked to agree with Natural England the version of the BNG calculator that should be used.</p>
A11.3.4		Natural England would support the use of Metric 4.0 being used at this stage but we acknowledge that Metric 3.1 was the current metric at the time the application was submitted. Given the two-year delay to the project following the Ministerial Announcement of the 9 March 2023 ¹ , Natural England continues to support the Applicant re-running their calculations using the latest version of the Metric available at the detailed design stage.

¹ https://questions-statements.parliament.uk/written-statements/detail/2023-03-09/hcws625?utm_source=POLITICO.EU&utm_campaign=bfb46d9660-EMAIL_CAMPAIGN_2023_03_10_05_54&utm_medium=email&utm_term=0_10959edeb5-bfb46d9660-%5BLIST_EMAIL_ID%5D

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
Q11.3.5	Environment Agency	<p>Rephrasing</p> <p>It is noted in the Environment Agency's Deadline 3 submission [REP3-158] that " <i>The two year rephrasing is unlikely to change the aquatic aspects within our remit significantly but if it slips further to three- five years then we may need resurveys</i>". Given the earlier comments as to what constitutes commencement, ie the Applicant is suggesting that undertaking survey work etc may be sufficient to discharge that requirement, can the Environment Agency define their expectations of limitations in respect to approximate dates?</p>
A11.3.5		Natural England has no comments to make in relation to this question.
11.4	Shorne Woods Country Park	
Q11.4.1	<p>Applicant Natural England Kent Downs AONB Unit Kent County Council Gravesham Borough Council Shorne Parish Council</p>	<p>Retention of construction compound as a car park: AONB considerations</p> <p>It is suggested that the intention is for part of the construction compound in this location (Work No. CA2) to be repurposed as a car park.</p> <ul style="list-style-type: none"> • Is an additional car park in this location necessary? • Should this facility be viewed as necessary, can its location be justified in AONB terms? <p>To the extent that additional visitors to this part of the AONB potentially could have negative implications from overuse on particular trees/paths, but additional parking provision may encourage additional visitor use and pressure;</p> <ul style="list-style-type: none"> • Can the Applicant signpost where the introduction of a new permanent car park is assessed within the submitted documentation and the AONB effects, if any, that are attributed to it? • Is further mitigation required to be provided, or can it be demonstrated that it is accommodated within existing proposals? How is this secured?
A11.4.1		<p>Natural England is not able to provide advice as to whether the car park is necessary.</p> <p>We understand from recent discussions (meeting with Natural England and the Applicant held on 10th October 2023) that the proposed car park at Thong Lane is not required to mitigate impacts resulting from the scheme but is a legacy benefit project. This was also confirmed by the Applicant during Issue Specific Hearing 9.</p> <p>As detailed in response to Q11.4.2 below, Natural England is awaiting an updated assessment from the Applicant of the potential implications of the car park and the need for mitigation and its effectiveness. Once this has been provided, alongside their response to Q11.4.1, Natural England will be pleased to provide further advice to the Examining Authority.</p>

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
		<p>Natural England is not aware that an assessment of impacts to the Kent Down Area of Outstanding Natural Beauty or details of any mitigation measures required has been provided by the Applicant in respect of the proposed car park and enhanced facilities. We may provide further advice in this respect once the Applicant has responded to this question.</p>
Q11.4.2	<p>Applicant Natural England Kent County Council Gravesham Borough Council Shorne Parish Council</p>	<p>Retention of construction compound as a car park: SSSI considerations</p> <p>With reference to the impact of the construction compound retention raised in Q11.4.1, there are potential impacts on the Shorne and Ashenbank Woods SSSI that also arise from this proposal. Natural England currently view these as underassessed.</p> <ul style="list-style-type: none"> • Is an additional car park in this location necessary? • Should this facility be viewed as necessary, can its location be justified in SSSI terms? • If there is a view that a permanent car park is to be created, the Applicant is requested to set out its latest view on the number of vehicles using the car park each day (moving on from the assessment in the ES of one trip each way per carparking space), to a breakdown of modes of access. • A statement of any mitigation measures necessary in respect of the SSSI designation should also be provided. Where would this be secured?
A11.4.2		<p>Natural England is not able to provide advice as to the need for the car park.</p> <p>We understand from recent discussions (meeting with Natural England and the Applicant held on 10th October 2023) that the proposed car park at Thong Lane is not required to mitigate impacts resulting from the scheme but is a legacy benefit project. This was also confirmed by the Applicant during Issue Specific Hearing 9.</p> <p>Following our review of the Applicant’s Environmental Statement Addendum (Examination Document REP1-181) and our detailed advice provided within Natural England’s Deadline 2 response (Examination Document REP2-090), we have continued to discuss the scope of the further work required in relation to both the car park and the cycle route diversion through Ashenbank Woods.</p> <p>As explained during Issue Specific Hearing 9, Natural England are awaiting the Applicant’s updated assessment of impacts including greater clarity on the likely number of vehicles using the car park and the split of users (walkers, cyclists and horse riders) to allow a robust, evidence-based assessment of potential impacts to the Shorne and Ashenbank Woods Site of Special Scientific Interest. Where impacts are likely, we would also expect the Applicant to provide details of the mitigation measures that will be implemented for the car park and the associated infrastructure (including the kiosk and cycle hub). In summary, we consider that the following information is still required:</p>

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ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> • Details of the likely number of vehicles using the car park each day; • Clarity on the number of additional visitors likely to be using the car park and recreating within the SSSI facilitated by the additional parking provision; • An indication of the breakdown of activity users will be undertaking (walking, cycling, horse riding); and • Details of the mitigation measures required for any impacts resulting from the users of the car park. <p>Natural England welcomes the confirmation provided by the Applicant during Issue Specific Hearing 9 that they will be providing a further update to their impact assessment.</p> <p>Once the Applicant has shared this updated assessment, Natural England will be pleased to provide our further advice to the Examining Authority.</p> <p>Notwithstanding our comments above, should mitigation measures be required, Natural England recommends that these could be secured through an additional commitment within the Register of Environmental Actions and Commitments.</p>
11.5 Habitats Regulations Assessment (HRA)		
Q11.5.1	Applicant NE	<p>Preparation of the Report on the Implications on European Sites (RIES)</p> <p>The ExA has noted points raised by NE in its Deadline 5 response relating to the HRA. The Applicant will appreciate the need for the ExA to provide robust evidence to inform its advice to the SoS about the impacts on European Sites as part of the Recommendation Report. To aid this, a Report on the Implications on European Sites (RIES) is proposed to be issued by the ExA as part of the examination, on 14 November 2023. To inform this report, the ExA requests the Applicant liaise with NE, discussing all matters of disagreement as set out in the D5 response, and provide:</p> <ul style="list-style-type: none"> • An updated HRA response, with and without tracked changes. • An updated SoCG covering the points raised by NE in its D5 response. • A review of the methodology and consequent conclusions, including a list (with justifications) of projects included in the in-combination assessment within the HRA. <p>Where matters remain outstanding between the Applicant and NE following these discussions, the Applicant is requested to provide a commentary explaining the plan to resolve them in terms of either a process to undertake further work towards an agreed position; or a reservation of position and a justification for the absence of agreement on a particular matter.</p>

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ExQ2	Question to:	Question:
A11.5.1		<p>The Applicant and Natural England have agreed a joint statement whereby an updated SoCG will not be submitted until Deadline 7 at the latest (we will use best endeavours to submit it as soon as possible).'</p> <p>Due to the time and engagement required to progress these complex technical matters from Deadline 5, both parties agree that submitting an SoCG at Deadline 6 would not allow sufficient time for any significant progress to either party’s position on these matters to be captured.</p> <p>The Applicant continues to actively engage with Natural England with the intention of working towards an agreed position on as many matters as possible before submitting an updated SoCG by Deadline 7. The deferral of the submission of an updated SoCG to Deadline 7 will enable greater technical engagement between the Applicant and Natural England, which will in turn facilitate the development of SoCG matters remaining under discussion, including a technical meeting between the Applicant's and Natural England's relevant specialists on 26th October 2023.</p> <p>The SoCG to be submitted by Deadline 7 will document the progress made at the meeting on 26th October 2023, and will set out a clear, updated position from each party on any matters outstanding. The Applicant and Natural England will then submit a further updated SoCG at Deadline 8, which will summarise whether the issues still outstanding by Deadline 7 have been resolved by that time or provide justifications for the parties reserving their positions if matters remain unresolved.</p> <p>The Applicant and Natural England request that the ExA provide clarity on the meaning of “updated HRA response” within ExQ11.5.1, to inform future submissions.</p>
<p>12. Physical effects of development and operation</p>		
<p>12.1 Historic environment & archaeology</p>		
Q12.1.1	Applicant	<p>Follow up to ExQ1 Q12.1.6 – Methodology: Significance of Effects to Heritage Assets</p> <p>In response to the ExA on ExQ1 Q12.1.6, the Applicant stated that <i>“the significance category and typical descriptions in Table 4.4 of ES Chapter 4: EIA Methodology, do not apply.”</i></p> <p>However, if Table 4.4 is no longer relevant, what replaces it to inform the Significance Matrix in Table 4.3 for the purposes of the EIA heritage assessment?</p> <p>The position is not clear to the ExA because Paragraph 4.5.21 of Chapter 4: EIA Methodology [APP-142] states that descriptions of the significance categories in the matrix in Table 4.3 are provided in</p>

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ExQ2	Question to:	Question:
		<p>Table 4.4. In addition, Paragraph 6.3.74 of ES Chapter 6 – Cultural Heritage v.3 [REP4-116] still states that <i>“the significance of effect is determined in accordance with Table 4.3 of Chapter 4: EIA Methodology. An effect of moderate adverse significance or higher is considered to constitute a significant effect (Table 4.4 of Chapter 4: EIA Methodology).”</i> This leaves a question mark over the description of significance categories for heritage assets and so the Applicant needs to provide clarity if the detail within Table 4.4 is not being applied to Table 4.3.</p>
A12.1.1		<p>Natural England has no comments to make in relation to this question.</p>
Q12.1.2	Applicant	<p>Waterlogged organic deposits</p> <p>In response to ExQ1 Q12.1.10 the Applicant agreed to amend Paragraphs 7.1.14 and 7.3.127 of Appendix 6.9: Draft Archaeological Mitigation Strategy and Outline Written Scheme of Investigation [APP-367] to include the words <i>“a minimum of 10m, where unexpected waterlogged archaeological finds are present”</i>.</p> <p>The ExA notes that the words <i>“a minimum of”</i> have been added into Paragraphs 7.1.14 and 7.3.127 in the amended Appendix 6.9 submitted at Deadline 5 [REP5-053], but the tailpiece words are absent.</p> <p>In addition, the Applicant advised it would also signpost the reader in Paragraphs 7.1.14 and 7.3.127 to Paragraph 7.3.36, which sets out the process for dealing with waterlogged material, and that Paragraph 7.3.36 would be amended to make clear the process set out would also apply to unexpected waterlogged finds. That revision has seemingly not been made in the amended Appendix 6.9 submitted at Deadline 5.</p> <p>The ExA appreciates that not including the tailpiece into Paragraphs 7.1.14 and 7.3.127 means that the stand-off distance applies to all unexpected finds, which is acceptable, however, the suggested adjustment to Paragraph 7.3.36 remains relevant.</p> <p>Several local authorities have also requested additional words and commitments be added to these sections of Appendix 6.9 making it explicit that a stand-off distance greater than 10m may be required, subject to consultation with and advice from the relevant planning authority archaeologist on the appropriate stand-off specific to the find, its location, and the nature of the adjacent work.</p> <p>The Applicant is requested to amend Paragraph 7.3.36 and incorporate the suggestion of the local authorities into Paragraphs 7.1.14 and 7.3.127. The revised document should be submitted at Deadline 6, or a response provided to advise why it does not consider the suggested amendments are necessary.</p>
A12.1.2		<p>Natural England has no comments to make in relation to this question.</p>
<p>12.2 Landscape impacts including riverscapes and visual severance</p>		

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ExQ2	Question to:	Question:
Q12.2.1	Applicant	<p>Landscape character: regrading of sensitivity and effects (sub area Cobham)</p> <p>The Applicant’s response to ExQ1 Q12.2.6 states that “Since the Development Consent Order (DCO) application made in October 2020 was withdrawn, a thorough review of the landscape impact assessment in Environmental Statement (ES) Chapter 7: Landscape and Visual [APP-145] has been undertaken in conjunction with further refinement of the Project design... The assessment of high sensitivity for the West Kent Downs (sub area Cobham) Local Landscape Character Area (LLCA) has regard to the updated assessment of susceptibility to change set out in Table 1.3 of ES Appendix 7.9: Schedule of Landscape Effects [APP-384], which explains that ‘... due to the presence of the existing A2 corridor and HS1 along the northern boundary of this LLCA, the receptor has some ability to accommodate the Project without substantial loss of its overall integrity.’</p> <p>The ExA is unclear in respect of the reasoning behind this explanation for the regrading of sensitivity, noting that the A2 corridor and HS1 were adjacent to the northern boundary of this LLCA when the October 2020 application assigned the Cobham sub-area a ‘very high’ sensitivity.</p> <p>The Applicant’s response does not provide a meaningful justification for the changes in definition of baseline conditions between the two submissions (2020 and 2022) when the landscape baseline has not changed in the intervening period. While visual baseline data may require updating to reflect modifications to the design (ref. GLVIA3), the Applicant does not explain the specific design changes that have resulted in changes to the visual baseline in this location. The ExA requires the reasons for the review and update of baseline conditions by the Applicant to be made clear.</p>
A12.2.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
<p>12.3 Visual Impact</p>		
Q12.3.1	Applicant	<p>Photomontages</p> <p>The ExA requests winter (year 1) and summer (year 15) photomontages of the A2/A122 junction as viewed from Thong Lane South Green Bridge. It is noted that the Applicant has previously provided two cross sections of this junction area [REP2-069 and REP2-070] and Photomontage S22 taken from Henhurst Road Bridge; however, it was noted on the Accompanied Site Inspection that the maximum height of the LTC southbound to A2 westbound viaduct is approximately 17m above the existing ground level (in the vicinity of the former petrol filling station site), which seems quite significant. The visualisation of the impact of this would be aided by photomontages from Thong Lane South Bridge, which are a missing piece of the jigsaw in the visual impact assessment in this location.</p>

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ExQ2	Question to:	Question:
		The photomontages should be submitted by D7 at the latest.
A12.3.1		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q12.3.2	Applicant	<p>Representative viewpoints: regrading of sensitivity and effects</p> <p>In response to ExQ1 Q12.3.2 regarding the downgrading of several representative viewpoints from the highest degree of sensitivity (Very High) with a knock-on downgrading of magnitude and significance of effect, the Applicant advises that the regrading is as a result of a <i>“thorough review of the visual impact assessment in the ES, including a review of sensitivity and further refinement of the Project design.”</i> The ExA notes, however, that no details are provided on what refinements to the Project design have contributed to the change in assessed impacts, either in the Applicant’s written response to ExQ1 Q12.3.2 or the associated ‘Comparison of visual impact assessments from 2020 and 2022’ table provided at Annex B of its response to ExQ1.</p> <p>The Kent Downs AONB Unit have also highlighted that, in respect of the regrading of the sensitivity, they note that the 2020 Assessment used the same criteria as that used in the 2022 version to define visual sensitivities (i.e. DMRB LA 107 Table 3.41). It is therefore still unclear to the ExA and IPs how the visual sensitivity and magnitude of effect has changed for many of the visual receptors in the intervening period.</p> <p>The ExA requires the reasons for the changed conditions from 2020 to 2022 to be made explicitly clear for each affected visual receptor included in Annex B.</p>
A12.3.2		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
13.	Social, economic and land-use considerations	
13.1	Socio-economics, local impacts and health	
Q13.1.1	Applicant	<p>Benefits and outcomes</p> <ul style="list-style-type: none"> In response to ExQ1 Q13.1.6 the Applicant acknowledged that Designated Funds referred to in the Application material as benefits of the Project are not actually benefits of the Project. The Applicant is asked to provide an update to Section 2.9 of ES Chapter 2 – Project Description [APP-140] accordingly, addressing this point. In response to ExQ1 Q13.1.15 relating to the Skills, Education and Employment Strategy, the Applicant has pushed back on local authority requests to secure the Strategy as a control

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ExQ2	Question to:	Question:
		<p>document, in the interest of retaining flexibility for the contractor. The ExA remains concerned that the commitment to ‘make best endeavours’ to deliver the Strategy even by way of s106 Agreement has no force and given that the Strategy is promoted as a benefit of the Project in Document 7.20 - Benefits and Outcomes [APP-553] it should have more security if the ExA is expected to give weight to it in the planning balance. The ExA requests that the Applicant gives further consideration to the status of this Strategy as a claimed social value benefit of the Project and provides the ExA with an update at Deadline 6.</p>
A13.1.1		<p>Natural England has no comments to make in relation to this question.</p>
Q13.1.2	Applicant, LPAs	<p>Green Belt: applicability of ‘inappropriate development’</p> <p>NPSNN paragraph 5.178 addresses development in the Green Belt in the following terms. <i>“When located in the Green Belt national networks infrastructure projects may comprise inappropriate development. Inappropriate development is by definition harmful to the Green Belt and there is a presumption against it except in very special circumstances. 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. In view of the presumption against inappropriate development, the Secretary of State will attach substantial weight to the harm to the Green Belt, when considering any application for such development.”</i></p> <p>Inappropriate development in the Green Belt for the purposes of the NPSNN takes the same meaning as it does in the NPPF (see footnote 108).</p> <p>NPPF paragraph 150 addresses inappropriate development in the Green Belt and makes clear that <i>“[c]ertain 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.”</i> Local transport infrastructure which can demonstrate a requirement for a Green Belt location is included within the description of development that is not inappropriate in these terms.</p> <p>It seems that the Applicant’s Green Belt Assessment [APP-500] has accepted that the project as a whole represents ‘inappropriate development’ in the Green Belt, resulting in ‘definitional harm’ to which significant weight should be attached in the planning balance. However, having regard to the NPSNN and NPPF positions set out above, the ExA is not clear that is the case in policy terms.</p> <ul style="list-style-type: none"> • Is the proposed development (or are any relevant elements of it) ‘local transport infrastructure’ which can demonstrate a requirement for a Green Belt location, and if so,

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ExQ2	Question to:	Question:
		<ul style="list-style-type: none"> what elements of the projects fall within that definition and what are the policy consequences of that? <p>The Applicant is requested to address this matter at Deadline 6 and the LPAs to respond at Deadline 7.</p>
A13.1.2		Natural England has no comments to make in relation to this question.
Q13.1.3	Applicant	<p>Green Belt: ‘inappropriate development’ and harm</p> <p>If the proposed development is deemed to be inappropriate development in the Green Belt, the Applicant’s Green Belt Assessment [APP-500] is considered inadequate because the assessment of the Project against the purposes for including land in the Green Belt and on the impact on the openness of the Green Belt is too simplistic and abbreviated to enable the ExA to establish the extent of harm. Because this is a large-scale linear project, if it (or elements of it) is/are deemed to be inappropriate development, then it is necessary to understand the actual level of harm that may occur across the extent of the project, which may vary between locations and over time.</p> <p>There is no standard methodology for undertaking such an exercise, but a more detailed assessment of the impact of the project on the purposes and openness of the Green Belt using the relevant local authority Strategic Green Belt Assessments as the basis for the categorisation of settlements and identification of parcels to inform the assessment should be used. Thurrock, Gravesham and Havering Councils have provided useful pointers to those assessments and their ‘parcel method’ in their responses to ExQ1.</p> <p>The Applicant’s submission on this point should be provided no later than D7.</p>
A13.1.3		Natural England has no comments to make in relation to this question.
<p>14. The draft Development Consent Order (dDCO), planning obligations, agreements and the adequacy of security for project delivery and mitigation</p> <p>There are no questions relating to this topic in ExQ2. The Examination Timetable provides for the publication of an ExA commentary on the dDCO on 14 November 2023.</p>		
<p>15. The acquisition and temporary possession of land and rights (CA & TP)</p>		
<p>15.1 Additional Land or Rights</p>		
Q15.1.1	The Applicant	<p>Delay to proposed ban on the sale of new petrol and diesel cars</p> <p>The UK Government’s recent announcement of a delay of five years from 2030 to 2035 for the ban on the sale of new petrol and diesel cars. Further to the responses to questions on this matter arising in</p>

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ExQ2	Question to:	Question:
		<p>relation to carbon, climate change, air quality affecting human receptors, biodiversity and Habitats Regulations Assessment (sections 2 and 5) that have been requested from the Applicant above:</p> <ul style="list-style-type: none"> • Is it expected that any additional land or rights not already identified in the Book of Reference and the Land Plans are likely to be required to provide for carbon, climate or air quality mitigation measures that were not anticipated prior to the announcement; or • Can any additional mitigation measures be provided on land or with the benefit of rights already identified in the Book of Reference and the Land Plans; or • In circumstances where it is not proposed that any additional land or rights are needed for this purpose, can that please be confirmed.
A15.1.1		Natural England has no comments to make in relation to this question.
<p>16. General and overarching questions</p>		
<p>16.1</p>		
Q16.1.1	Applicant	<p>Environmental Management Plan (EMP) Q1</p> <p>Paragraph 2.3.1 of Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049] states that <i>“The Contractors responsible for the delivery of construction will each be required to develop an EMP2 (as defined in Section 1.4 above) specific to their part of the Project and in consultation and engagement with relevant stakeholders as listed in Table 2.1 on matters related to their functions.”</i></p> <ul style="list-style-type: none"> • It is noted that Table 2.1 is a closed list; the ExA is concerned that there may be a necessity or indeed a prudent need to seek the advice of and engage with stakeholders that are not identified in Table 2.1, for example the Kent Downs AONB Unit, or the operational Ports. Can the Applicant therefore modify Paragraph 2.3.1 to identify that Table 2.1 is not a closed list and that engagement with other stakeholders may occur as necessary? • It is also noted that there will be multiple EMP2’s (and later EMP3’s) each developed by individual contractors for their part of the Project, and that Paragraphs 2.3.1 and 2.8.5 of the Code of Construction Practice (First iteration of Environmental Management Plan) [REP5-049] add in a provision to enable revisions to be made to EMP2’s as the Project evolves. How are the statutory parties and the general public able to keep track of such documents when the Secretary of State is identified as the approval body for the documents? It is appreciated that consultation with local authorities may occur prior to submission to the Secretary of State for approval, but how can they keep a track of approved documents? Clearly this will be important for enforcement purposes. It is noted that the EMP submitted by National Highways for the A66 Northern Trans-Pennine Project

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ExQ2	Question to:	Question:
		<p>NSIP Application TR010062 (Document Ref 2.7 Environmental Management Plan, Revision 5, dated 16/5/23) included procedures following the Secretary of State's determination and record keeping requirements, which are notably absent from the LTC EMP [REP5-049].</p> <ul style="list-style-type: none"> It is also noted that the EMP submitted by National Highways for the A66 Northern Trans-Pennine Project NSIP Application TR010062 (Document Ref 2.7 Environmental Management Plan Revision 5, dated 16/5/23) includes a detailed consultation process that National Highways is required to carry out on a second iteration of the EMP prior to its approval by the Secretary of State, any amendment to a second iteration and prior to the approval of a third iteration. No such consultation procedure is specified in the LTC EMP [REP5-049]; why is that?
A16.1.1		<p>Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.</p>
Q16.1.2	Applicant Local Authorities	<p>Environmental Management Plan (EMP) Q2</p> <p>Paragraph 2.3.9 of Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049] states that <i>"The EMP2 will require that construction phasing plans are made available to the local authorities, prior to works commencement."</i></p> <p>The ExA acknowledges that Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049] includes a communication and community engagement section at Chapter 5, but the ExA seeks the views of the Applicant and the Local Authorities on whether the requirement set out in Paragraph 2.3.9 should have an identified lead period so that local authorities can communicate with their residents sufficiently in advance. The ExA considers that building in a lead time for this information to be shared would reduce complaints to a Local Authority and to National Highways when construction starts.</p>
A16.1.2		<p>Natural England has no comments to make in relation to this question.</p>
Q16.1.3	Applicant	<p>Environmental Management Plan (EMP) Q3</p> <p>Paragraph 2.8.5 of Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049] relates to amendments that are not considered to be materially new or different. It states <i>"If the proposed change does not give rise to a materially new or materially different effect and where the change is progressed, management plans will be amended to reflect the change, where required."</i></p> <p>The ExA would like to understand whether the relevant EMP would need re-approval by the Secretary of State in such circumstances, but, regardless of the answer, the ExA again seeks to understand how</p>

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ExQ2	Question to:	Question:
		the statutory parties and the general public are able to keep track of such amendments to the EMP document(s).
A16.1.3		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.
Q16.1.4	Local Authorities Other Statutory Stakeholders Other Interested Parties	<p>Environmental Management Plan (EMP) Q4</p> <p>Notwithstanding any other questions included in this question set about specific commitments in the Register of Environmental Actions and Commitments Table 7.1 in Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049], the ExA would like to receive a set of dedicated comments from Local Authorities, other Statutory Stakeholders or any other IP on any specific concerns with any of the measures (or their wording) in the Register of Environmental Actions and Commitments in Table 7.1, or indeed on any of the drafting in Document 6.3, Appendix 2.2 Code of Construction Practice (First iteration of Environmental Management Plan) v5 [REP5-049].</p>
A16.1.4		<p>Having reviewed the updated Register of Environment Actions and Commitments (REAC) in Table 7.1, Natural England welcomes the steps that have been taken to address some of the concerns raised within our previous Representations. For example, we welcome the commitment within the REAC (NV013) that ensures that any future 'surface renewal will be undertaken using replacement road pavement on the strategic road network that has a no worse noise emission performance (Highway Authority Product Approval Scheme certification values) than that laid for the Project's opening'; thus ensuring that noise-reduction measures will be maintained in-perpetuity in sensitive areas such as the Kent Downs AONB.</p> <p>Notwithstanding the positive steps that have been taken to address some of our concerns, it remains our view, as detailed within our Written Representation (Examination Document REP1-262) that a significant number of the commitments outlined within the REAC still have clauses contained within them and are ambiguous.</p> <p>This is further compounded by the deferral of much of the detailed information regarding the design and nature of impacts arising from the scheme to the post consent stage. As such, our opinion remains that, commitments which contain clauses such as, but not limited to, 'where reasonably practicable', fail to provide Natural England with a sufficiently high degree of certainty or reassurance as to how environmental impacts will be adequately avoided, mitigated or compensated for.</p>

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ExQ2	Question to:	Question:
		<p>Natural England provided a review of the REAC commitments, including suggested amendments, within Annex E 'Initial list of concerns regarding the clarity within the securing mechanisms' of our Written Representation (Examination Document REP1-262). During a meeting with Natural England on the 31 August 2023, the Applicant confirmed that they would revisit the wording of the commitments within the various control documents to try and address our concern and make them clearer. Unfortunately, no such updates appear to have been provided to date.</p> <p>In addition to the matters identified within Annex E of our Written Representations, Natural England would welcome consideration of the following to be included within the REAC.</p> <p><u>South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI) and the Thames Estuary and Marshes Special Protection Area (SPA) and Ramsar site</u></p> <p>The Thames Estuary and Marshes SPA and Ramsar are underpinned by the South Thames Estuary and Marshes SSSI, but that it is only the SSSI that is also notified for its breeding bird interest features. As such, a number of measures intended to ensure that there is not an adverse effect on the integrity of the SPA or Ramsar site, are proposed by the Applicant to be implemented during the summer months (as identified within the Habitats Regulations Assessment - Screening Report and Statement to Inform an Appropriate Assessment, Examination Document APP-487).</p> <p>Whilst we welcome the inclusion of these mitigation measures, as detailed within our Written Representation (Examination Document REP1-262), it remains our view that the potential impacts on breeding birds (associated with the SSSI) arising from the implementation of these mitigatory measures during the summer months, is yet to be properly assessed. Therefore, with regard to the REAC, it is unclear as to how the applicant intends to address any potential impacts to the breeding features of the SSSI as a result of visual and noise disturbance impacts in the absence of any commitments within the REAC to deliver appropriate avoidance and/or mitigation measures.</p> <p><u>Shorne and Ashenbank Woods SSSI compensation plan</u></p> <p>As detailed during Issue Specific Hearing 9, Natural England would expect the updated plan included within Annex C.16 of our updated Statement of Common Ground at Deadline 5 (Examination Document REP5-038) detailing the areas of SSSI compensation planting to be secured through the control documents. Natural England advise that it may be appropriate for this to be secured through an additional commitment within the REAC.</p>

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31 October 2023

ExQ2	Question to:	Question:
		<p><u>Without prejudice air quality assessment to designated sites</u></p> <p>Natural England has provided advise at numerous Deadlines with regard to the need for the identified mitigation measure (an enforceable speed limit reduction on the M25) to be delivered and secured in order to ensure that there is not an adverse effect on the integrity of the Epping Forest SAC as a result of operational air quality effects.</p> <p>Whilst it is acknowledged that the necessity of such measures is a matter under discussion between Natural England and the applicant, we would nonetheless reiterate our view that, should the Secretary of State consider that mitigation measures are required to avoid an adverse effect on the integrity of a designated site these will need to be robustly secured. In order to provide the required certainty as to the delivery of such measures, we would expect any such requirement to be secured via a REAC commitment.</p> <p><u>Coalhouse Point</u></p> <p>During our Relevant Representations (NE04), we advised that the creation of the wetland habitat and installation of the regulated tidal exchange structure (if pursued in the absence of water secured via the Coalhouse Fort moat), should commit to avoiding the wintering bird season via a REAC commitment. Whilst we welcome the commitments within the REAC to avoid the overwintering bird period for other elements of the work programme, we would reiterate our previous comments insofar that there is currently no REAC commitment ensuring that the overwintering bird period shall be avoided.</p> <p><u>Priority Habitats</u></p> <p>Within Section 7.2 of our Written Representation (Examination Document REP1-262), we provided detailed comments relating to ‘open mosaic habitat’ and our concerns relating to the potential losses of specific high-value habitats, due to the lack of commitments within the REAC to maintain them (with specific suggestions being provided at Section 7.2.18). Having reviewed the REAC, it remains our view that there should be a stronger commitment to the retention of areas of that are of particularly high-quality habitat (and that have been identified as such), in order to preserve the ecological value of these scarce and invaluable habitats.</p> <p><u>Ancient woodland soils translocation</u></p> <p>Natural England welcomed the clarity provided by the Applicant on when it may not be appropriate for ancient woodland soils to be translocation during Issue Specific Hearing 9. Dr Lascelles, for the Applicant, detailed criteria for when it would not be ecologically appropriate to use soil translocation</p>

Annex 4: Natural England response to Lower Thames Crossing Examiner Questions 2 (ExQ2)

31 October 2023

ExQ2	Question to:	Question:
		including, for example, the presence of contaminants or invasive species which could compromise the woodland habitat creation. Such detail and confirmation that ancient woodland soils will be translocated where ecologically feasible (rather than 'where reasonably practicable' as detailed within REAC commitment TB028 of Table 7.1 of Examination Document REP5-049) would be welcomed by Natural England within the updated REAC.
Q16.1.5	Applicant	<p>Register of Environmental Actions and Commitments (REAC)</p> <p>It is noted that within 6.3 ES Appx 2.2 - CoCP, First iteration of Environmental Management Plan v4.0 REP5-049 that the REAC is appended to the Code of Construction Practice (CoCP). The works listed within the REAC extend beyond the Construction phase of the project so can the Applicant justify its inclusion in this document and not have the REAC to be certified as a standalone document in the DCO.</p>
A16.1.5		Natural England has no comments to make in relation to this question at present but may provide advice once the Applicant has provided their response.