

H2Teesside Project

Planning Inspectorate Reference: EN070009

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

The H2 Teesside Order

Document Reference: 8.11.4 Response to ExQ1 HRA and Ecology

Planning Act 2008



Applicant: H2 Teesside Ltd

Date: October 2024

H2 Teesside Ltd

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



DOCUMENT HISTORY

DOCUMENT REF	8.11.4		
REVISION	0		
AUTHOR	DWD		
SIGNED	NC	DATE	03.10.24
APPROVED BY	GB		·
SIGNED	GB	DATE	
DOCUMENT OWNER	DWD	•	

H2 Teesside Ltd

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



TABLE OF CONTENTS

1.0	INTRODUCTION	2
	Overview	
1.2	The Purpose and Structure of this document	2
TAB	BLES	
Table	e 1-1 Applicant's Responses to ExQ1 HRA and Ecology	1

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



1.0 INTRODUCTION

1.1 Overview

- 1.1.1 This document has been prepared on behalf of H2 Teesside Limited (the 'Applicant'). It relates to an application (the 'Application') for a Development Consent Order (a 'DCO'), that was submitted to the Secretary of State for Energy Security and Net Zero ('DESNZ') on 25 March 2024, under Section 37 of 'The Planning Act 2008' (the 'PA 2008') in respect of the H2Teesside Project (the 'Proposed Development').
- 1.1.2 The Application has been accepted for examination. The Examination commenced on 29 August 2024.

1.2 The Purpose and Structure of this document

1.2.1 The purpose of this document is to set out the Applicant's responses to the Examining Authority's ExQ1 Response to ExQ1 HRA and Ecology, which were issued on 4 September 2024 [PD-008]. This document contains a table which includes the reference number for each relevant question, the ExA's comments and questions and the Applicant's responses to each of those questions.

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



Table 1-1 Applicant's Responses to ExQ1 HRA and Ecology

EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q.1.4.1	Applicant	Clarification. Please explain the implications (if any) of the updated bird survey work that was undertaken at Greenabella Marsh (Sector 22), Navigator Terminals foreshore (Sector 25), Dabholm Gut (Section 18) and Tank Farm (Sectors G13, G13a and B25) up to March 2024 (and due to be submitted as an Addendum to the ES) for the assessment and conclusions of the Report to Inform HRA [AS-016].	The updated survey work will be incorporated into an updated Report to Inform HRA (Document reference 5.10) [AS-016] to be submitted alongside the Proposed Change Application. Additional surveys were not required or undertaken at the Tank Farm Sectors G13, G13a and B25 as these sectors were adequately surveyed. These areas were removed from the study area as optionality was reduced during the iterative design process. This will be corrected in an Ornithology Supplementary Baseline Report (Document reference 6.4.25), submitted alongside the Proposed Change Application. The Applicant confirms that updated survey work was undertaken at count sectors 22 and 23 (Greenabella Marsh); Navigator Terminals foreshore (Sector 25) and Dabholm Gut (Sector 18), as set out in Table 13-3 within ES Chapter 13: Ornithology (Document reference 6.2.13) [APP-065]. The Applicant can confirm at an early stage however, that although there have been some changes to the numbers of birds recorded, this will not change the overall conclusion of the Report to Inform HRA [AS-016], which is that there will be no adverse effects on the integrity of the European designated sites, alone or in combination with other plans or projects.
Q.1.4.2	Applicants	Clarification. Paragraph 4.4.3 of the Report to Inform HRA [AS-016] states that the pathway of effects on foraging resources which support qualifying bird species would be considered further at appropriate assessment stage for the decommissioning phase of the Proposed Development. This impact pathway is not referred to again in the Report. The Applicant is requested to clarify what is meant by this reference.	The Applicant wishes to clarify that this was included erroneously. The Applicant confirms that 'Effects on Foraging Resources' during decommissioning is not considered as a pathway of effect, and this bullet point will be removed from the updated Report to Inform HRA [AS-016] to be submitted alongside the Proposed Change Application.
Q.1.4.3	Applicants	Clarification. Please confirm your approach to assessment of the Ramsar sites screened in for Likely Significant Effect(s) (LSE) (Teesmouth and Cleveland Coast and Northumbria Coast) in the absence of conservation objectives.	As there are no published conservation objectives for the Teesmouth and Cleveland Coast Ramsar or the Northumbria Coast Ramsar, the Applicant has assessed on the basis that the conservation objectives would be the same as for the Teesmouth and Cleveland Coast SPA and the Northumbria Coast SPA respectively. Natural England have not questioned the approach to the assessment of Ramsar sites at this stage.
Q.1.4.4	Applicant	Clarification. Paragraphs 6.1.3 to 6.1.12 of the Report to Inform HRA [AS-016] describe the potential for direct habitat loss at the Teesmouth and Cleveland Coast SPA and Ramsar site from horizontal directional drilling collapse during construction. Please confirm the potential area of habitat that could be lost as a result of this impact, in the absence of mitigation	The Applicant considers the risk of HDD collapse to be minimal, and a number of mitigation measures have already been proposed and presented in the ES to ensure this does not occur. These are contained and secured in Table 7-2 of the Framework CEMP [APP-043]. The Final CEMP will be produced in substantial accordance with the Framework prior to construction, this is secured by Requirement of the draft DCO (document reference 4.1) [AS-013].

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
			If only considering the potential for mobilisation of material above the drill site as a result of HDD collapse during drilling, the linear length of drilling under the SPA for the River Tees and Greatham Greek crossings is approximately 600m and 580m respectively, with a pipeline diameter of 24". A very approximate worst case theoretical area of 708m ² of the SPA could be subject to collapse and therefore direct loss if HDD collapse occurred.
Q.1.4.5	Applicant	Clarification/ view sought Table 7-1 of the Report to Inform HRA [AS-016] lists the plans and projects which could lead to in-combination effects with the Proposed Development. The Applicants' approach to the assessment only considers potential in-combination effects in relation to effects on site integrity and does not address the potential for in-combination LSEs. Please explain this approach. In responding, please also address the comments raised by NE in its RR [RR-026], (NE14) about how projects were identified and discounted from the in-combination assessment.	Table 5-1 of the Report to Inform HRA [AS-016] considers the plans and projects which have been considered within this HRA and whether there is potential for LSE upon the European designated sites in combination with the Proposed Development. The potential for all aspects of the Plans and Projects to have in combination likely significant effects has been considered. This includes ornithology, water quality, air quality and temporal overlaps. Please see the Applicant's response to NE14 in its Comments on Relevant Representations (REP1-007).
Q.1.4.6	Applicant	Clarification. Please confirm that the impact pathway to the Northumbria Coast SPA and Ramsar site as summarised in Table D-5 of Annex D to the Report to Inform HRA [AS-016] should be operational atmospheric pollution and not during construction/ decommissioning.	The Applicant confirms that atmospheric pollution has been considered for construction, operation and decommissioning and likely significant effects can be screened out for all three potential sources. This table will be updated in the updated Report to Inform HRA to be submitted alongside the Proposed Change Application.
Q.1.4.7	Applicant	Review/ Clarification. The Applicant's Additional Submissions published on 30 May 2024 included the Report to Inform HRA [AS-016]. Before its publication, the ExA raised concern as to the level of redaction and asked the Applicant to review the document. However, having reviewed this document, the ExA is concerned as to the level of redaction now undertaken. In accordance with the Environmental Information Regulations, public authorities must make environmental information available proactively. Regulation 12(5)(g) says that a public authority may refuse to disclose information to the extent it would adversely affect protection of the environment to which the information relates but it is a qualified exception. The public interest test in Regulation 12(1)(b) must be considered and Regulation 12(2) states that a presumption in favour of disclosure must be applied. In the light of the above, the ExA is concerned that the current level of redaction in the Report presents an issue for compliance with the duty, as it includes multiple instances of redaction of information that is already publicly available, for example from NE documents or websites. The Applicant is requested to review the report again and provide a version with an appropriate level of redaction. Guidance is available in Assessing and providing access to sensitive data (nbn.org.uk).	The Applicant will review the redactions against the referenced guidance and update the Report to Inform HRA accordingly to be submitted alongside the Proposed Change Application.



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q.1.4.8	NE	Clarification/ Information. Please confirm that NE is satisfied that the Applicant has identified all relevant European sites and qualifying features in its Report to Inform HRA [AS-016]. If not, confirm which are missing and for what impact pathways.	n/a
Q.1.4.9	NE	Clarification/ View sought. Part II of NE's RR [RR-026] states it agrees there would be no adverse effects on integrity for the North Northumberland Coast, Humber Estuary and The Wash and North Norfolk Coast SACs. However, NE26 raises concerns about noise disturbance to seal qualifying features. Can NE confirm if it is satisfied that there is no adverse effects on integrity to these sites. Can NE also confirm if its concerns relate only to noise, ie that it is satisfied by the Applicant's conclusions in [AS-016] on visual disturbance to seal qualifying features.	The Applicant would note that it provided a detailed response regarding this to NE in Appendix 2 of the Applicant's Responses to Relevant Representations [REP1-007] Ref No. NE26.
Q.1.4.10	Applicant/NE	Clarification/ Views sought. Please confirm if Coastal Dune Grasslands (Grey Dunes) is a qualifying feature of the Durham Coast SAC. It does not appear as a qualifying feature on the citation provided in the Applicant's Report to Inform HRA [AS-016], but it has been modelled in the air quality assessment for nutrient nitrogen deposition, as presented in ES Appendix 8B (Air Quality - Operational Phase) [APP-191], Table 8B-31.	The Applicant has reviewed the citation for the Durham Coast SAC which lists the qualifying features as "H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts". Coastal Dune Grasslands are not a qualifying feature of the Durham Coast SAC and therefore it was not included in the Report to Inform HRA [AS-016]. This was included in the modelled air quality assessment presented in Appendix 8B [APP-191] because it is listed as an interest feature on the Air Pollution Information System (APIS).
Q.1.4.11	NE	Clarification. In NE's RR [RR-026] (NE1) you advised that project commitments should be logged in a Framework Construction Environmental Management Plan (CEMP) and that mitigation plans for horizontal directional drilling collapse should be secured in the DCO. Can NE explain what additional measures it considers are needed in the Framework CEMP [APP-043] in this regard, noting that some measures are included under Surface Water (Table 7-2) and Marine Ecology (Table 7-7).	The Applicant would like to draw the Inspectorate's attention to the Applicant's response to Natural England's Relevant Representation [REP1-007] Ref No. NE1. The Applicant would welcome further discussions on this issue and has submitted an updated Framework CEMP (Document reference 5.12), into the Examination at Deadline 2 which deals with this point.
Q.1.1.12	NE	Views sought. In NE's RR [RR-026] (NE4 and NE5), you advise that you do not support the use of 'Waterbird disturbance mitigation toolkit (Institute of Coastal and Estuarine Studies', 2013) as evidence has not been collected in a rigorous manner and it has not been peer reviewed. Can NE advise of any alternative guidance that would be appropriate to support the establishment of thresholds for noise levels for bird disturbance.	n/a
Q.1.4.13	NE	Clarification. In NE's RR [RR-026] (NE9, NE10, NE11 and NE16), you requested consideration of additional pollutants as part of the screening of construction phase emissions to air to the Teesmouth and Cleveland Coast SPA and Ramsar site and a mitigation plan (monitoring plan for construction dust). The Applicant screened out this impact	n/a



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
		pathway for LSEs, specifically for construction traffic based on the results presented in ES Chapter 8 (Air Quality) [APP-060]. Can NE clarify if it considers that this impact pathway should be assessed at the appropriate assessment stage.	
Q.1.4.14	NE	Information sought. Can NE provide confirmation of what additional information it requires in relation to the temporal overlap with neighbouring schemes for the purposes of understanding the in-combination assessment in [AS-016], including a list of the schemes the information is required for.	n/a
Q.1.4.15	Applicant	Response sought. The Applicant is requested to submit a detailed response to items NE1 to NE26 in NE's RR [RR-026], Table 1. Comments in response to RRs are required in the current timetable by Deadline 1 (Tuesday 17 September 2024) and the ExA expects your detailed response to NE's RR by that Deadline. In instances where further consultation or assessment work is proposed, the Applicant is requested to submit a timetable confirming the actions proposed and associated timeframes.	The Applicant has submitted responses to Natural England's Relevant Representation items NE1 to NE26 at Deadline 1 [REP1-007]. The Applicant is seeking to deal with NE's concerns either through its updates to its mitigation documents submitted at Deadline 2 or through its updates to the Report to Inform HRA which it aims to submit alongside the proposed Change Request to enable NE matters, and Change related matters, to be dealt with in one consolidated update.
Q.1.4.16	Applicant	Clarification. The Applicant's position on biodiversity net gain is set out in the Outline Landscape and Biodiversity Management Plan (LBMP) [APP-039] and the Planning Statement [APP-031]. Whilst the ExA notes that the Applicant has sought to justify its approach with regard to policy requirements in section 4.6 of the Overarching National Policy Statement (NPS) for Energy (NPS EN-1), which states that opportunities should be sought to provide net gains and that applicants are encouraged to use the latest version of the biodiversity metric to calculate the baseline and planned net gain outcomes, it considers there is a lack of clarity in the information presented. The Applicant is requested to provide the following information: 1. How the biodiversity baseline would be established for the Order Limits in the absence of a completed biodiversity metric. 2. What measures within the outline LBMP would contribute to the Applicant's approach to no net loss or net gain, as distinct from measures required for mitigation or compensation of adverse effects identified in the ES. 3. Expected timescales for development of a s106 agreement and whether it is intended to submit a draft and/ or heads of terms into examination.	 i) The biodiversity baseline for the assessment boundary has been established using a suite of ecology surveys and importance assigned in line with CIEEM guidance as reported in ES Chapter 12 (Ecology and Nature Conservation (including aquatic ecology)) [APP-064]. This baseline has enabled the assessment set out in the ES to be carried out, which is what is required by the EIA Regulations. The baseline has not been established for BNG calculation purposes (which is the focus of the discussion in part 4.6 of the NPS). This should be seen in the context that the Government intends to commence mandatory biodiversity net gain for DCO's accepted for examination from November 2025. It is therefore not a requirement to produce a BNG metric at this time. ii) Mitigation measures for species or habitats identified within the ES, or from species specific mitigation are identified within the ES or will be confirmed within any associated mitigation licences. Habitat reinstatement proposals are set out in the Outline Landscape and Biodiversity Management Plan (EN070009/APP/5.9). The measures in the latter will be developed into a Full LBMP to reflect the detailed design (and impacts) of the Proposed Scheme, in substantial accordance with that outline. This is secured through the DCO. Opportunities to deliver wider biodiversity enhancements and habitat benefits within Teesside are being discussed with a number of parties and will be reported prior to the end of the Examination. These will be targeted to deliver multiple benefits for both habitats and species to achieve strategic biodiversity enhancements. Meetings with the following parties have taken place:



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
			 Teesside Environmental Trust Hospital Of God North York Moors National Park Authority Tees Rivers Trust Industry Nature Conservation Association Tees Valley Combined Authority The Canal and Rivers Trust Natural England The Environment Agency iii) Once suitable opportunities for enhancement have been identified these will be secured through an appropriate legal agreement. The Applicant will endeavour to complete this prior to the end of Examination, but this may not be possible.
Q1.4.17	Applicant, NE, and STBC, together with any other relevant Authority/Body.	Clarification/ Views sought. The ExA has noted the Applicant's 'Change Notification' [PDA-019] submitted on 15 August 2024 and the potential removal of the land at the Northern Gas Networks AGI off the A178 Seaton Carew Road at Saltholme. However, in the absence of a formal Change Request being submitted, the ExA notes ES Chapter 6 (Alternatives and Design Evolution) [APP-058] identifies social and ecological constraints associated with the Cowpen Bewley Woodland Park Local Wildlife Site and Local Nature Reserve (Option A) for the proposed hydrogen distribution network connection and that ES Chapter 12 (Ecology and Nature Conservation (including aquatic ecology) [APP-064] concludes a moderate adverse (significant) effect in regard to the location of Option A arising from loss of woodland habitat, with ES Chapter 22 (Human Health) [APP-075] also identifying a moderate adverse (significant) effect to human health from loss of open space prior to mitigation in the form of replacement open space. Bearing this in mind, the Applicant is requested to provide a clearer explanation of: 1. why Option A is required in addition to the Northern Gas Networks AGI off the A178 Seaton Carew Road at Saltholme (Option B), especially as ES Chapter 6 (Alternatives and Design Evolution) [APP-058] simply states at paragraph 6.7.7 that it is owing to different requirements of transmission and distribution system connections; 2. if any alternative options to Option A were considered and, if so, the environmental reasons as to why these were discounted; 3. how the mitigation hierarchy has been applied to Option A; 4. how the identified mitigation is proposed to be secured through the draft DCO [AS-013]; and 5. what measures are proposed to ensure that the Cowpen Bewley Open Space Replacement Land and associated woodland planting is effective as mitigation for the identified human health effects and compensation for the loss of	In relation to questions 1 and 2, please see the responses to FWQs 1.2.6 to 1.2.8 which explain the benefits of the Proposed Development being able to connect to Project Union, the National Gas Transmission Network and the local natural gas distribution system. Those answers also explain the alternative option at Billingham, and the factors which are affecting the ability for the Applicant to choose between the options to enable these benefits to be realised. In answer to question 3, given the location of the existing AGI at Cowpen Bewley, to realise those benefits of connecting to it, it is not possible to avoid impacts to the Woodland Park to access the AGI. The Applicant has ensured that the connection is underground to avoid impacts as far as possible, but given the technical and safety requirements of a new pipeline and the expansion of the AGI at this location, some tree loss (and which cannot be replaced) means that there are adverse effects. Through its commitments in the DCO (specifically article 29 and the requirement to develop the OLBMP (DCO Requirement 4) which includes the commitment to retain a tree line), mitigation and offsetting will be delivered (thus also answering question 4). In answer to question 5, this is secured through the operation of article 29. Article 29 (1) requires a scheme for the layout of the replacement land to be approved by the local planning authority and paragraph (7) requires the Applicant to lay out the land in accordance with that scheme. The LPA will therefore be able to ensure that the detailed scheme mitigates the effects. Article 29(3) ensures that the replacement land vests in the LPA and NGN, and with the mechanisms in the DCO (Article 29) and/or agreements which are under discussion allowing the LPA to then be able to maintain the land as a replacement open space as they currently do for the existing Woodland Park land.



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
		woodland. What commitments are proposed for ongoing maintenance. In this respect, the ExA notes that no measures are set out in the Outline LBMP [APP-039], with Section 5.0 stating it does not need to be included because it is secured in an article of the draft DCO. Provision of the replacement land is included as Work No. 11 and shown on the Works Plans [AS-005] but the draft DCO does not appear to have any provisions relating to agreement of its final design or ongoing maintenance.	The Applicant is discussing with the LPA the maintenance of the replacement open space land, but considers that this is not required in legal terms, given the above. The Applicant confirms that none of the woodland to be lost at Cowpen Bewley Woodland Park is ancient woodland.
		The Applicant is requested to confirm if any of the woodland habitat to be lost at Cowpen Bewley comprises ancient woodland.	
		NE and STBC are requested to identify any outstanding concerns held about the Applicant's approach to inclusion of Option A for the hydrogen distribution network connection, including how it proposes to secure the detail design and maintenance of the Cowpen Bewley Open Space Replacement Land.	
Q1.4.18	Applicant	Explanation/ Action. In regard to ornithology, it was noted at acceptance stage that bird surveys in selected locations was ongoing until March 2024, and the baseline described in ES Chapter 13 (Ornithology) [APP-065] reflected survey results up to December 2023 in these locations. The Applicant responded to s51 advice on this matter in [AS-002] to confirm that a supplementary Ornithology Baseline Report presenting 2024 data would be submitted prior to the start of the Examination. However, the ExA notes that in your letter titled 'Written Submissions on the Examination Procedure' [PDA-020] you advise that in light of NE's RR [RR-026], you wish to discuss the results of the 2024 surveys with NE first, so they can be considered as part of the wider discussions on their comments relating to matters, and updates that may be required to the Report to Inform HRA [APP-040]. You also state these discussions are on-going and that you are working to submit an updated Report to Inform HRA, with the Supplementary Ornithology Baseline Report, by Deadline 3. The ExA would ask you to explain why these reports cannot be submitted by Deadline 2, allowing a deadline prior to the currently scheduled set of Hearings in November.	The Applicant notes the ExA's position on this matter, but wishes to emphasise that it is having extensive discussions with Natural England on the issue of ornithology. This includes the sharing of the reports to NE and how the results needs to be accounted in the updates to the HRA it is also discussing with NE. The aim of that updated HRA is to resolve as many of NE's concerns as possible, as well as to reflect the Changes Application and the updated baseline report. The Applicant considers that submitting the report without then being able to explain what that means for its assessment would not be helpful and lead to inefficient Examination of these issues. The Applicant therefore continues to propose to submit the updated Report to Inform HRA, as well as the Supplementary Ornithology Baseline Report alongside the Proposed Change Application. For the reasons stated above, the Applicant considers the set of hearings in November may be too soon to discuss these reports and would request this is deferred to the set
		This would allow an intervening Deadline prior to the November Hearings for responses/ comments on these reports to be made/ submitted into the Examination. This is likely to greatly aid the Examination in being able to focus any Issue Specific Hearings that may be needed that encompass ornithology.	of hearings in January, by which time it is hoped that the vast majority of issues, if not all, should have been able to be resolved.
Q1.4.19	NE	View Sought. NE [RR-026] has raised concerns about the assessment of cumulative effects, with regard to uncertainty over timing and temporal overlap of adjacent projects and reliance of the Proposed Development on NZT. It has reserved the right to make	n/a



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
		further comments about ornithology, air and water quality effects once further information is available. Can NE confirm which neighbouring projects are of particular concern for its understanding of cumulative effects as flagged in [RR-026] and set out the temporal overlap information it needs to understand impacts, noting that construction timescales for shortlisted projects are indicated in ES (Appendix 23C Shortlist of other developments within the Search Area) [APP-223].	
Q1.4.20	Applicant	Clarification. The Applicant is requested to explain how it is proposed to ensure that habitat reinstatement, as secured through the LBMP and Requirement 4 of the draft DCO [AS-013], is provided on a like-for-like basis and how this would be demonstrated to the approving bodies.	The approach to landscape and biodiversity reinstatement and enhancement is set out within the Outline Landscape and Biodiversity Management Plan (Outline LBMP) [APP-039]. Section 4.7 outlines the broad approach for reinstatement of relevant habitat types on a like-for-like basis and crucially Paragraph 4.7.1 sets out the commitment to like-for-like reinstatement. Figure 1 of the Outline LBMP sets out where this would be undertaken with the relevant level of detail available at this stage in project development. A Final LBMP, which will substantially accord with the outline plan, will continue to be updated and refined (where necessary) based on the developing design. It will be updated to include updated plans and planting schedules where required, prior to the commencement of works in accordance with the Requirements contained in Schedule 2 of the Draft DCO [AS-013].
Q1.4.21	Applicant	Clarification/ Amendments sought. The EA in its RR [RR-009] raises concerns regarding ES Chapter 12 (Ecology and Nature Conservation (including aquatic ecology) [APP-064] and the Outline LBMP [APP-039]. These concerns include: Use of Phase 1 rather than UK Habitat Classification System (UKHab). The identification of habitats and/ or insufficient habitat. Habitat and Statutory Site Linkages. Inconsistency between documents & weak assessment of value. invasive nonnative species. Please review and respond to the concerns raised by the EA, as set out above, or signpost the ExA as to where you have provided consideration/ identification in regard to the points made above within the submitted Application Documentation.	The Applicant would like to draw the Inspectorate's attention to The Applicant's response to the Environment Agency's Relevant Representation [REP1-007] Ref No. EA9, EA10, EA11, EA12 and EA13. The Applicant's intention to map habitats using the Phase 1 habitat survey classification was set out in the EIA scoping report and the PEIR. Due to the size, complexity and distribution of habitats within the site, the Applicant followed standard Phase 1 survey guidance. Figure 12-A-5 shows the locations of Habitats of Principal Importance within the Proposed Development Site, based upon the priority habitat inventory and the surveys completed on site. Where habitats had the potential to be of botanical importance (or to meet priority habitat criteria), an additional National Vegetation Classification (NVC) survey was completed during the optimum survey season by an experienced botanist. As NVC surveys are not appropriate for open mosaic habitats, open mosaic areas were assessed against priority habitat criteria. The importance levels have been assigned with reference to the CIEEM guidelines for EcIA. The Applicant has considered the condition of the habitats (including its potential to meet priority habitat criteria) when assigning importance levels. The Applicant considers there would be no material difference in the assessment conclusions because of the use of standard Phase 1 survey guidance rather than the UK Habitat Classification System (UKHab).



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q1.4.22	Applicant	Clarification/ Amendments sought. The EA in its RR [RR-009] raises concerns regarding the Framework CEMP [APP-043]. Specifically its concerns related to: No consideration in the document of what would occur if otter are encountered during works outside of a rest site; or otter being trapped in excavations. No identification of measures to protect otter from harm being identified in the document. No consideration in the document in regard to what will occur if water vole are encountered during works not at a burrow; or water vole being trapped in excavations. Please review and respond to the concerns raised by the EA, as set out above, or signpost the ExA as to where you have provided consideration/ identification in regard to the points made above within the submitted Application Documentation.	The Applicant would like to draw the Inspectorate's attention to The Applicant's response to the Environment Agency's Relevant Representation [REP1-007] Ref No. EA14.
Q1.4.23	Applicant	Clarification. The ExA notes ES Chapter 14 (Marine Ecology) [APP-067] and specifically paragraph 14.5.11, concerning a frac-out risk assessment and paragraph 14.5.16 that concerning a Hydraulic Fracture Risk Assessment. Bearing the above in mind, please advise whether the risk of Bentonite Breakout has been assessed within the ES Chapter 14 (Marine Ecology) [APP-067] and whether, as part of the Proposed Development, you intend to submit an Outline Marine and Intertidal Pollution Contingency Plan and an Outline Bentonite Management Plan? If the risk of Bentonite Breakout has been assessed within the ES please signpost the ExA as to where within the submitted Application documentation it can be located.	The Applicant would like to refer the Inspectorate to the Applicant's Comments on Relevant Representations [REP1-007] Ref No. MMO3 The Applicant has proposed a number of mitigation measures to reduce risk of hydraulic fracture (and through this bentonite breakout), set out in Tables 7-2 and 7-5 of the Framework Construction Environmental Management Plan [APP-043]. Final versions of this plan, developed in accordance with this Framework, are required to be produced preconstruction, as secured by Requirement 15 of the draft DCO [APP-027], and construction of the Proposed Development is required by the DCO to be carried out with the full plans. These controls include the requirement for a hydraulic fracture risk assessment to be produced alongside the Final CEMP, undertaking geotechnical investigations in advance of bore profile design, drilling fluid hydrofracture analysis for each drilling operation, maintaining downhole pressures within recommended limits, using appropriate downhole pressure monitoring equipment, using an appropriate drilling fluid, monitoring of illing fluid parameters during drilling and performing regular monitoring of the ground above the bore alignment for drilling fluid leaks. If a leak of drilling fluid is suspected the drilling/boring operation will be suspended, remediation action implemented, and subsequently the methodology for that crossing reevaluated. Monitoring of water bodies during construction works will also be undertaken, pursuant to the requirements of the draft Outline Water Management Plan [APP045], which is also required to be developed into a full plan, and construction carried out in accordance with it, by DCO Requirement 15. These measures have been accounted for in ES Chapter 9: Surface Water, Flood Risk and Water Resources [APP-061] which discusses bentonite management and the mitigation measures for minimising risk of hydraulic fracture. The assessment concluded that with these mitigation measures in place, no significant adverse impact

H2 Teesside Ltd

Response to ExQ1 HRA and Ecology Document Reference: 8.11.4



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
			on water quality of the Tees water body or Greatham Creek resulting from installation of the trenchless crossings is predicted and that with the controls identified above the risk of bentonite breakout is minimal.