

# 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: 8.11.11 Response to ExQ1 Landscape, Visual Amenity and Design

Planning Act 2008



**Applicant: H2 Teesside Ltd**

Date: October 2024

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## DOCUMENT HISTORY

<b>DOCUMENT REF</b>	8.11.11		
<b>REVISION</b>	0		
<b>AUTHOR</b>	DWD		
<b>SIGNED</b>	NC	<b>DATE</b>	03.10.24
<b>APPROVED BY</b>	GB		
<b>SIGNED</b>	GB	<b>DATE</b>	03.10.24
<b>DOCUMENT OWNER</b>	DWD		

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## **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 on Landscape, Visual Amenity and Design, 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.

**Table 1-1 Applicant’s Responses to ExQ1 Landscape, Visual Amenity and Design**

EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q1.11.1	Applicant	<p>Clarification.</p> <p>Paragraph 1.1.23 of the DAS [APP-034] states that the approach to design has also been influenced by technical, engineering, environmental and safety considerations. However, functional design can represent ‘good design’ and in developing the design of the Proposed Development the Applicant has taken account of the Teesworks Design Guide and the relevant plot typology and sought to minimise impacts upon the surrounding area.</p> <p>Paragraph 4.7.1 and 4.7.2 of the same document:</p> <ul style="list-style-type: none"> <li>• states that STDC has published a design guide for Teesworks (‘Teesworks - Design Guide for Development’) in December 2020 and that the intended aim of the document is to guide the development of Teesworks, including the major development proposals that are being brought forward within the area; and</li> <li>• refers to the South Tees Regeneration Master Plan and Teesworks Design Guide, noting they do not form part of the local Development Plan and have no formal planning status, but that regard has been given to these documents.</li> </ul> <p>Considering the above, please:</p> <ol style="list-style-type: none"> <li>i. Provide a detailed explanation of how the design of the Proposed Development is consistent with the aims of the South Tees Regeneration Master Plan and Teesworks Design Guide (having regard to paragraphs 4.7.6 - 4.7.7 and 4.7.12 - 4.7.13 of the DAS [APP-034])?</li> <li>ii. Provide a summary of how the design process to date was undertaken and reviewed to ensure the buildings and structures comprising the Proposed Development achieve a high quality in terms of design and enhancement to the environmental quality of the surrounding area?</li> <li>iii. Clarify what design principles and proposals will be used in future design work to the Proposed Development?</li> </ol>	<p>The South Tees Regeneration Master Plan (the ‘Master Plan’) was produced by the South Tees Development Corporation (‘STDC’) to provide a flexible framework for the regeneration of the South Tees Area. The Master Plan was prepared throughout 2017 (and later updated in November 2019) as a supporting vision and development strategy document to inform the preparation of a Supplementary Planning Document (‘SPD’) by Redcar and Cleveland Borough Council (‘RCBC’), the statutory planning authority, for the South Tees Area. The Master Plan was launched by STDC, alongside the South Tees Area SPD, which was formally adopted by RCBC in May 2018. It is important to note that the Master Plan has no formal planning status for development control or other planning purposes. It is a background study to the South Tees Area SPD,</p> <p>The Master Plan area is also now referred to as Teesworks.</p> <p>The Master Plan states (page 10) that it endeavours to provide a flexible framework for realising the successful socio-economic regeneration of the South Tees Area across a necessarily long timeframe, while at the same time augmenting economic growth across the wider Tees Valley area. It goes onto state that:</p> <p><i>“It should be viewed in the context of being a live document that may be subject to revision in response to: changing policy, economic and market conditions; reflect consultation feedback; and accommodate firm investor interest aligned to the strategy.”</i></p> <p>The ‘Vision’ set out in the Master Plan (page 16) sees the creation of up to 20,000 new jobs across the Tees Valley with a focus on higher skilled sectors and occupations, centred on manufacturing innovation and advanced technologies. The vision is underpinned by the aspiration for new development to deliver a high value, low carbon, diverse and inclusive circular economy for the Tees Valley.</p> <p>The Proposed Development is consistent with this vision. The Hydrogen Production Facility at the Main Site, which is located within the Master Plan area, will employ innovative and advanced technology to produce low carbon hydrogen that will contribute to the decarbonisation of industry on Teesside, while generating employment opportunities, including highly skilled jobs, in line with the aspiration to deliver high value, low carbon development and a circular economy within the Tees Valley.</p>

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			<p>Section 02 ‘South Tees Existing Conditions’ of the Master Plan focuses on identifying the land use, environmental and other constraints within the South Tees Area, in addition to the available infrastructure and utilities.</p> <p>Section 03 ‘Master Planning Process and Guiding Principles’ outlines the master planning process that was followed and the guiding principles that were used to shape the Master Plan. These principles include the aspiration for the area to become a world-class example of a modern, large-scale industrial park; focusing on uses that will not conflict with neighbouring industrial areas; capitalising on the rare opportunity to redevelop large, well-serviced areas that can accommodate major space users; and the area becoming an exemplar for energy innovation, providing a broad array of energy generation and energy storage typologies, embracing the latest and emerging technologies.</p> <p>The Proposed Development is consistent with the aspiration of delivering a modern, large-scale industrial park within the South Tees Area. It will support neighbouring industrial areas by producing low carbon hydrogen, providing the opportunity to decarbonise their operations. Being a major space user, the Proposed Development will capitalise on the land that is available within the South Tees Area, while it is clearly consistent with the aspiration for the area to become an exemplar for energy innovation.</p> <p>The Master Plan is based on a number of distinct development zones. This includes (Section 05 of the Master Plan) the ‘North Industrial Zone, within which the Main Site is located. The North Industrial Zone (‘NIZ’) extends to approximately 375 hectares. The Master Plan identifies a number of target industries for the NIZ, including major space users/large scale manufacturing; energy innovation; energy storage; bulk materials and minerals processing. A large-scale hydrogen production facility is clearly consistent with the target industries identified for the NIZ.</p> <p>The NIZ Illustrative Plan (page 5.05) is a conceptual plan of how the NIZ may be developed. The Illustrative Plan shows the NIZ arranged as a number of large plots suitable for accommodating major space users such as the Proposed Development. The Illustrative Plan, as its name suggests, is not intended to be prescriptive and the following page of Section 05 (page 5.06) is clear that there is land use and parcel flexibility to take account of market demand and technology changes. The indicative layout of the Hydrogen Production Facility [APP- 012] is broadly in accordance with the NIZ Illustrative Plan and the plot sub-division envisaged.</p> <p>As is the case with the Master Plan, the Teesworks Design Guide, which has also been produced by STDC to help guide development within Teesworks, has no</p>

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			<p>formal planning status. However, the Proposed Development is considered to be consistent with the aims of the Teesworks Design Guide as set out below.</p> <p>The Hydrogen Production Facility has been located within the Northern Industrial Zone ('NIZ') of Teesworks (Figure 4 of the Design Guide), which is the zone identified as being suitable for bulk materials handling, mineral processing, energy innovation and large-scale manufacturing.</p> <p>In view of its large-scale, industrial nature and functional appearance, the Proposed Development has not been sited on one of the more sensitive 'Gateway Plots' within Teesworks. A Gateway Plot is defined as a development plot that has a significant visible frontage on the infrastructure corridor or other primary route within Teesworks.</p> <p>The design of the Proposed Development, which is functional, is consistent with its location (not on a Gateway Plot) and also the Design Guide's 'Large Scale Industrial Operations' typology, which recognises that such developments will primarily be driven by the functional requirements of their industrial processes.</p> <p>The main buildings and structures at the Main Site will be grouped where possible and set back from the site boundaries consistent with the Large-Scale Industrial Operations typology. Furthermore, internal access roads will be routed around the perimeter of the plot and around the main built elements and process area to make the Site accessible and easy to move around.</p> <p>The buildings and structures at the Main Site will be simple and functional in form and detailing, predominantly comprising steel framed enclosures that will be clad in appropriate materials. While the buildings and structures are functional, reflective of their industrial setting and the fact they do not sit on a Gateway Plot, the main infrastructure corridor or a primary route within Teesworks, the Applicant will consider enclosing the main items of plant and equipment in line with Design Guide recommendations having regard to the fact these will be visible from South Gare and Coatham Dunes.</p> <p>The perimeter of the Main Site will offer opportunities for some planting and biodiversity enhancement.</p> <p>Section 7.0 of the Design and Access Statement [APP-034] describes the key design components of the Proposed Development (e.g. use, layout, amount, scale, appearance and landscaping) and sets out in more detail how these, where relevant, have taken account of and responded to the Teesworks Design Guide.</p>

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			<p>i. The Applicant’s design process is explained at Section 6.0 of the Design and Access Statement [APP-034]. This includes the key design principles that have been applied (climate, environment and safety and place and value), the design approach taken having regard to the type of development, the context within which it will sit and the aims of the South Tees Area SPD and Teesworks Design Guide. In addition, Section 6.0 of the Design and Access Statement [APP-034] provides a summary of how the design has developed and evolved and further information on the design changes is set out in ES Chapter 6 ‘Need, Alternatives and design Evolution’ [APP-058].</p> <p>The design process is ongoing and being kept under review by the Applicant. The Applicant has recently submitted a change notification [PDA-019], identifying a number of changes that it is proposed to make to the Proposed Development. The changes set out within the change notification relate primarily to engineering and design development, changes to construction approach and techniques and reductions in the Order Limits that will deliver improvements to the Proposed Development, remove optionality and complexity and reduce its overall impacts. The Applicant will submit the formal change request to the ExA on 16 October.</p> <p>Section 7.0 of the DAS [APP-034] sets out how the Proposed Development will achieve a high quality of design in terms of use, layout, amount, scale, appearance and landscaping having regard to its function and context and sets out in more detail how these, where relevant, have taken account of and responded to the aims of the South Tees SPD and Teesworks Design Guide.</p> <p>ii. Post-consent, the detailed design of the Proposed Development prior to construction will be the responsibility of the appointed EPC contractor, who will need to bring forward the detailed design for approval by the relevant planning authority pursuant to the DCO. In considering that detailed design, the relevant planning authority will be able to consider how the Proposed Developments fit with the industrial nature of the area, which is the key design context for the Proposed Development set out in the Design and Access Statement</p>
Q1.11.2	<b>Relevant LAs (HBC, RCBC and STBC), together with any other relevant Authority/ Body</b>	<p>Views sought.</p> <p>Section 7.6 of the DAS [APP-034] provides limited information about the external appearance of the Proposed Development. Photomontages illustrating the Proposed Development from a range of viewpoints are provided as part of the ES (Figure(s) 16-7-1a to 16-7-4c Photomontages [APP-172] and Figure(s) 16-7-1a to 16-7-4f Photomontages [AS-019]).</p> <p>Paragraph 9.1.2 of the DAS [APP-034] states the draft DCO [AS-013]), contains a number of controls in the form of articles, schedules and requirements to ensure the detailed design of the Proposed Development will be in accordance with the information contained within the Application and the assessments and principles set</p>	<p>i. The Applicant considers that the articles, schedules and requirements set out at Table 9.1 of the Design and Access Statement [APP-034] are sufficient to secure the detailed design of the buildings and structures within the Proposed Development. These would secure a range of controls over the detailed design of the Proposed Development, including the areas within which works can take place; the maximum dimensions of main buildings/structures; the detailed design of buildings, including siting, layout, scale, external appearance, including colour, materials and surface finishes; landscaping; external lighting; means of enclosure; site security; and surface and foul water drainage, amongst other matters.</p>



EXQ1	QUESTION TO:	QUESTION:	RESPONSE
		<p>out in ES Chapter 16 (Landscape and Visual Amenity) [APP-069]. Table 9.1 of the DAS [APP-034] sets out the controls over the detailed design with reference to the Articles and Schedules, including Requirements, of the draft DCO (See Requirement 3, which requires submission to and approval by the relevant planning authority of design details including external appearance.)</p> <p>The ExA is concerned there appears to be limited information in the DAS from which the relevant LAs will be able to assess the detailed design. With this in mind the ExA would ask:</p> <ul style="list-style-type: none"> <li>i. Whether you consider the Articles and Schedules, including Requirements, are sufficient to secure the detail design of the buildings and structures within the Proposed Development? If not please provide a detailed explanation of why not?</li> <li>ii. Do you consider the information in the DAS [APP-034], especially at Table 9.1, together with the Articles, Schedules and Requirements contained in the current version of the draft DCO [AS-013], provide a sufficient basis to guide the detailed design of the development?</li> <li>iii. Do the LAs and/ or any other relevant Authority/ Body have the sufficient experience, expertise and/ or resources to process and determine the submissions concerning design post-consent?</li> <li>iv. If the answer to this part of the question is ‘no’, could the relevant LAs, together with any other relevant Authority/ Body indicate what additional support would be necessary/ required, including whom such support should be sought from and how such support should be secured?*</li> <li>v. Do you consider external design review to be required and/ or necessary? If the answer to this part of the question is ‘yes’, could the relevant LAs, together with any other relevant Authority/ Body indicate what such external Design Review should consist of, who should provide such external design review and how it should be secured?*</li> </ul> <p>* For example secured by Article, Requirements or other form of agreement, such as an agreement under Section 111 of the Local Government Act 1972.</p>	<p>The controls set out at Table 9.1 of the Design and Access Statement [APP-034] relating to detailed design, are comparable with those set out within the design and access statement for the Net Zero Teesside Project and the confirmed Order for that Project [REP1-009]. Those controls were considered to be appropriate by the Secretary of State in confirming that Order. The Main Site for the NZT Project is located adjacent to the Main Site for the Proposed Development.</p> <p>Further to the above, neither RCBC or STBC have raised any concern in their respective Local Impact Reports [REP1-043 and REP1-045] that the articles, schedules and requirements are not sufficient to secure the detailed design of the Proposed Development.</p> <ul style="list-style-type: none"> <li>ii. The Applicant would refer the ExA to its response above.</li> <li>iii. The Applicant notes that the submission of post-consent details to discharge requirements is not dissimilar to that for planning conditions attached to a planning permission. The procedure for the discharge of requirements is set out at Schedule 13 of the draft DCO [AS-013].</li> <li>iv. N/A. The Applicant does not consider that it is necessary for any additional support to be secured by the DCO.</li> <li>v. The Applicant considers that use of an external design review would be disproportionate in the case of the Proposed Development given the context within which the buildings/structures proposed for the Main Site would sit. The Applicant has set out in response to Q1.11.1 how the Proposed Development is consistent with the aims of the South Tees Regeneration Master Plan and Teesworks Design Guide. The Main Site is not subject to any national landscape designations and neither are there any within its vicinity, while there are limited heritage assets within the surrounding area. The Main Site is not identified as a ‘Gateway Plot’ within the Teesworks Design Guide and the setting within which it sits is very much an industrial one. The Applicant is not aware of any DCO projects where an external design review was made a requirement for development of a similar nature and in a similar location as the Proposed Development. For instance, neither the Tees CCPP DCO or NZT DCO required an external design review.</li> </ul>
Q1.11.3	<b>Applicant</b>	<p>Clarification.</p> <p>The DAS [APP-034] contains limited information regarding details of the final design of the Proposed Development and the choice of construction materials as these are to be secured by Requirements in the draft DCO [APP- 027]</p> <p>Please explain how the design quality of the proposed buildings and structure, together with the materials to be utilised, has been used to inform the assessment of</p>	<p>The landscape and visual effects assessed within Chapter 16: Landscape and Visual Amenity [APP-069] is based upon the design parameters as set out within Section 4.6 in Chapter 4: Proposed Development [APP-056]. This adopts the Rochdale Envelope approach whereby maximum and minimum parameters inform the assessment based on a “reasonable and appropriate worst-case scenario” and has been undertaken in accordance with the Planning Inspectorate Advice Note 9: Using the Rochdale Envelope.</p>

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		<p>landscape and visual effects in ES Chapter 16 (Landscape and Visual Amenity) [APP-069]?</p>	<p>For the purposes of the landscape and visual assessment, an assumption was made on the likely materials and finishes of visible structures based on likely materials and a similar neutral colour palette to existing infrastructure of a similar type of construction, in accordance with the Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3).</p>
Q1.11.4	<p><b>Applicant, relevant LAs (HBC, RCBC and STBC), together with any other relevant Authority/ Body</b></p>	<p>Clarification/ Views sought.          Can the Applicant please identify what processes will be put in place, or have been put in place, for monitoring the quality of materials and finishes of the Proposed Development, including any buildings/ structures, allowed by the Proposed Development?</p> <p>Additionally, please explain how the construction of the Proposed Development, including buildings and structures, will ensure the design quality envisaged in the DAS [APP-034] is achieved?</p> <p>Do the LAs, together with any other relevant Authority/ Body, have any comments or observations on the DAS in regard to the mechanisms for monitoring design and quality during the construction period or in regard to Schedule 2, Requirement 3 (Detailed Design) of the draft DCO [AS-013]?</p>	<p>The appointed EPC contractor will be responsible for the selection of materials and finishes for the buildings/structures of the Proposed Development, however, the quality of those materials and finishes, and the overall design quality of the Proposed Development, will ultimately be subject to the prior approval of the relevant planning authority. The detailed design of the Proposed Development, including materials and finishes will be controlled by Requirement 3 'Detailed design' of the draft DCO [AS-013]. This requires the undertaker to submit details of the external appearance, including the colour, materials and surface finishes of all new permanent buildings and structures in respect of the Hydrogen Production Facility at the Main Site and the AGIs to the relevant planning authority for approval. Therefore, the relevant planning authority will have a high degree of control over the design quality of the Proposed Development.</p> <p>The Local Impact Reports submitted by RCBC [REP1-043] and Stockton-on-Tees Borough Council [REP1-045] do not raise any concern with regard to the mechanism for monitoring the design and quality of the Proposed Development.</p>
Q1.11.5	<p><b>Applicant</b></p>	<p>Clarification.          Paragraph 5.2.1 of the DAS [APP-034] states that the Proposed Development is a 'First of its Kind' project in terms of scale, while hydrogen production is a developing area and increasing investment in the sector is resulting in technological advancement. Further, it states that is important that the detailed design of the Proposed Development is able to take account of that technological advancement, while there are still some options being considered for certain elements.          Can you provide details of the options under considerations and explain what the implications would be in terms of the overall design of the Proposed Development?</p> <p>Additionally, can you give an indication of and explain the potential future technological advancement envisaged?</p>	<p>As the Applicant stated at ISH1 (REP1-008), Work Nos. 1A.1 (a carbon capture enabled hydrogen unit of 600MW) and 1A.2 (a second carbon capture enabled unit of 600MW) are the 'first of its kind' plant aspects of this development as there is no standard layout for blue hydrogen plant. The exact specification of the final hydrogen plant would be determined during the detailed design phase of the Project by the nominated contractor. The carbon capture equipment for a blue hydrogen plant was also 'first of a kind'. No other parts of the Project are considered by the Applicant to constitute 'first of a kind' infrastructure. Technological advancement could occur for all aspects of those Works Nos and how they relate to each other.</p> <p>In view of this, and the optionality provided for in respect of the potential sharing of infrastructure between phases and accounting for optionality remaining in Connection Corridors which could have a 'knock on' effect on Main Site design, the Applicant has incorporated a degree of flexibility into its design and layout through the adoption of maximum scale parameters and maximum limits of deviation within the Main Site. These parameters have been used to define a maximum 'worst case' envelope for the Proposed Development, which has then been used for the purposes of the environmental assessments, including the landscape and visual impact assessment. The 'Indicative Hydrogen Production Facility and AGI Plans [APP-012] are based on the maximum 'worst case' envelope.</p> <p>Ultimately, the final design for the Main Site will sit within the overall design envelope for the Proposed Development and the design details will be subject to approval by the</p>

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			relevant planning authority under the DCO requirements, notably Requirement 3 'Detailed design'.
Q1.11.6	<b>Applicant</b>	<p>Clarification.</p> <p>Paragraph 5.2.2 of the DAS [APP-034] states that the design of the Proposed Development allows for its delivery in two separate phases (each of 600 thermal megawatts) and there could be scope to share plant and infrastructure between the two phases. However, it also explains that this may not be possible for technical and commercial reasons and therefore the design needs to allow for different outcomes.</p> <p>Please signpost to where in the Application documentation the explanation of how the different design outcomes, referred to above, have been assessed, in particular with regards to ES Figure 16-3 (Zone of Theoretical Visibility (ZTV) and Potential Viewpoint Locations) [APP-167]. If it is not possible to signpost the information, please provide a full and reasoned explanation.</p>	<p>The Landscape and Visual Impact Assessment (LVIA) is included within Chapter 16: Landscape and Visual Amenity [APP-069] and is based on one worst case scenario, the maximum design scenario dimensions for the Proposed Development as outlined in Paragraphs 16.3.38 to 16.3.41 which accounts for both phases and all of their associated infrastructure. The associated infrastructure required may be affected by different process designs (e.g. allowing for one shared oxygen supply), but that would only lead to <u>less</u> infrastructure (and associated massing) than the scenario assessed.</p> <p>The scope to potentially share plant between the two phases therefore has no bearing on the LVIA, as a worst case scenario, based on maximum design parameters, has already been conservatively assessed.</p> <p>Section 16.3 of the LVIA [APP-069] describes the basis on which the Study Area was defined using a combination of the Zone of Theoretical Visibility (ZTV) analysis professional judgement and states that:</p> <p><i>"The ZTV is based upon a grid of points at 50 m apart within the Proposed Development Site at a worst-case height of 108 m AOD for the Main Site with an observer eye height of 1.6 m."</i></p> <p>Paragraph 16.3.107 [APP-069] states a total of 18 viewpoints were considered following consultation with the relevant stakeholders and 14 viewpoints were taken forward to represent the typical range of views of the Proposed Development from within the Study Area with three viewpoints subsequently discounted through fieldwork observations as described within Table 16C-1: Potential Viewpoints [APP-213] and shown on ES Figure 16-3 [APP-167].</p>
Q1.11.7	<b>Relevant LAs (HBC, RCBC and STBC), together with any other relevant Authority/ Body</b>	<p>Views sought.</p> <p>Paragraph 16.3.2 of ES Chapter 16 (Landscape and Visual Amenity) [APP-069] in relation to significant effects sets the study area at 10 km from the main site. This is based on a combination of the ZTV analysis set out in Figure 16.3 (ZTV and Potential Viewpoint Locations [APP-167]) and professional judgement. Further, paragraph 16.3.3 of ES [APP-069] states that a study area of 2 km for connection corridors has been applied.</p> <p>In relation to the above, please:</p> <p>Confirm whether you consider the information provided by the applicant in ES Chapter 16 (Landscape and Visual Amenity) [APP-069] and Figure 16.3 (ZTV) [APP-167] provides adequate and sufficient basis for the assessment of the study areas and the assessment of significant effect?</p>	n/a

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		<p>Provide any comments or observation on the assessment and methodology included in Section 16.3 of ES Chapter (16 Landscape and Visual Amenity) [APP-069] and in ES Appendix 16A: (Landscape and Visual Methodology) [APP-211]?</p> <p>Confirm whether ES Chapter 16 (Landscape and Visual Amenity) [APP-069] adequately assesses the relationship between visual sensitivity and magnitude of impacts in determining the effect level and significance, as depicted in 'Plate 16-1: Classification of Landscape and Visual', especially in terms of the assessment of the "worst case scenario"?</p>	
Q1.11.8	<p><b>Relevant LAs (HBC, RCBC and STBC), together with any other relevant Authority/ Body</b></p>	<p>Views sought.</p> <p>The Applicant has listed a range of viewpoints within the ES at Figures 16-6-1a to 16-6-15a: Winter Viewpoint Photography [APP-170]; Figures 16-6-1b to 16-6-14b: Summer Viewpoint Photography [APP-171] and in Appendix 16C: Potential Viewpoints [APP-213].</p> <p>Please confirm whether you:</p> <ul style="list-style-type: none"> <li>i. consider all viewpoints were agreed with you in terms of your jurisdiction prior to the Application being submitted?</li> <li>ii. were satisfied with the list of viewpoints listed in the above mentioned Figures?</li> <li>iii. were satisfied with the quality of the viewpoints and visuals provided?</li> <li>iv. consider the viewpoints specified above are representative of locations for sensitive receptors, including tourists and recreational users?</li> <li>v. consider night-time visuals of certain viewpoints should be provided? If so at which locations should the night-time visuals be provided and why?</li> <li>vi. any additional viewpoints (including any outside of the study area) and/ or amendments to the existing viewpoints are necessary? If so what additional viewpoints or amendments to the existing viewpoints are required and why?</li> </ul> <p>The Applicant has provided Photomontages of the Proposed Development within the ES at Figure 16-7-1a to 16-7-4c [ APP-172].</p> <ul style="list-style-type: none"> <li>vii. Do you have any comments or observation on these Photomontages [APP-172]?</li> <li>viii. Do you have any comments or observation on the ES Indicative Hydrogen Production Facility and above Ground Installation Plan [AS-028]?</li> </ul>	n/a
Q1.11.9	<p><b>Relevant LAs (HBC, RCBC and STBC), together with any other relevant Authority/ Body</b></p>	<p>Views sought.</p> <p>In terms of landscape and visual impacts, do you have any comments/ observations in regard to the assessment of the impacts and LSEs arising from the Proposed Development, as presented in Section 16.5 of ES Chapter 16 (Landscape and Visual Amenity) [APP-069] and as informed by ES Appendix 16A: (Landscape and Visual Methodology) [APP-211]. When responding please bear in mind Table 16A-16 (Categories of Landscape and Visual Significance of Effect) contained in the Appendix document referenced above.</p>	n/a

EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q1.11.10	<b>Applicant</b>	<p>Clarification.</p> <p>Paragraph 16.5.3 of ES Chapter 16 (Landscape and Visual Amenity) [APP-069] refers to the removal/ clearance of vegetation within the Main Site and Connection Corridors during construction. The assessment of the landscape effects is set out in Table 16-5 'Assessment of Landscape Effects – Construction (and Decommissioning)', whilst a summary of significant effects is set out in Table 16-9: 'Summary of Significant Effects During Construction (and Decommissioning) and Operation'.</p> <p>The ExA has noted the content of the above-mentioned tables, especially where Table 16.5 states in the majority of cases 'Impacts will be temporary in nature and reversible'. However, the ExA also notes Table 16-9 identifies no mitigation or enhancement in terms of Significant Effects During Construction (and Decommissioning) and Operation.</p> <p>Can the Applicant confirm whether:</p> <ul style="list-style-type: none"> <li>i. any of the vegetation removed/ cleared within the Main Site and/ or the Connection Corridors during construction is intended to be reinstated and if so how will such reinstatement be secured in the DCO?</li> <li>ii. there are any trees or vegetation within the main site or connection corridors of value or importance (ie Ancient Woodland, Veteran Trees, and/ or Trees covered by TPOs, etc.), especially in terms of being landscape features, proposed to be removed/ cleared.</li> </ul> <p>If the answer to ii) above is yes (ie there are trees/ vegetation within the main site or connection corridors of particular value or importance), please signpost the ExA to where these features have been assessed within the submitted Application documentation or provide such assessments justifying why they should be permitted to be removed/ cleared as part of the Proposed Development.</p>	<p>i) The approach to landscape and biodiversity reinstatement is set out within the Outline Landscape and Biodiversity Management Plan (Outline LBMP) [APP-039]. Section 4.7 of the OLBMP outlines that the broad approach for reinstatement of relevant habitat types within the Main Site and Connection Corridors, with paragraph 4.7.1 stating that habitats temporarily lost or damaged during construction will be reinstated on a like-for-like basis.</p> <p>This is secured by Requirement 4 in Schedule 2 to the draft Development Consent Order (DCO) [AS-013].</p> <p>ii) There are no areas of ancient woodland or veteran trees located within the Proposed Development Site as set out in Environmental Statement Chapter 12: Ecology and Nature Conservation [APP-064].</p> <p>Please see the Applicant's response to WQ1.9.20 above for details of TPOs within the Proposed Development Site, in short the Applicant is not currently aware of any TPOs within the Proposed Development Site.</p> <p>A Minor Adverse (Not Significant) effect has been identified within the heritage assessment for the removal of small sections of two important hedgerows within the Cowpen Bewley Conservation Area. The hedgerows are being temporarily removed in order to construct the Hydrogen Pipeline Corridor and will be reinstated post construction. This is assessed and presented in full within Chapter 17: Cultural Heritage [APP-070].</p> <p>Ecological features have been assigned value in accordance with CIEEM guidance and a summary of habitats found within the Main Site and the Connection Corridors is presented in Section 12.4.</p> <p>Two Moderate Adverse (Significant) effects have been identified in the ecology assessment. The first is due to woodland loss at the Cowpen Bewley Woodland Park, this is intended to be mitigated by the Cowpen Bewley Replacement Land proposals and the commitments to retained trees set out in the OLBMP. The second is due to the temporary loss of Swamp habitat north of Greatham Creek and at Cowpen Bewley Woodland Park, this habitat is intended to be reinstated post construction. In both cases the effect is reduced by the mitigation proposed by the Applicant but remains significant. This is assessed and presented in full within Chapter 12: Ecology and Nature Conservation [APP-064].</p> <p>The Applicant refers the Inspectorate to the Applicant's response to WQ 1.2.6 to 1.2.8 and 1.4.17, which provides justification for the proposed route for the Hydrogen Pipeline Corridor to connect to the AGI at Cowpen Bewley.</p> <p>The Applicant's response to WQ 1.2.5 provides justification for the proposed route for the Hydrogen Pipeline Corridor for the Greatham Creek crossing. The need for the hydrogen pipeline corridors more generally relates to the need for the Proposed Scheme, as set out in the Planning Statement (APP-031) and Need Statement (APP-033).</p>
Q1.11.11	Applicant	Design Clarification.	No significant infrastructure works are anticipated to be required for a connection to Pellet Sinter and hence no assessment was needed to be taken of those works.

EXQ1	QUESTION TO:	QUESTION:	RESPONSE
		<p>The maximum height dimensions for the electrical connection options at Pellet Sinter and the new substation on the NZT site are not presented in ES Chapter 4 (Proposed Development) [APP-056], Table 4-1, nor in Schedule 16 (Design Parameters) of the draft DCO [AS-013].</p> <p>With the above in mind, the Applicant is requested to confirm what has been used as the basis for assessment in the ES and how it is proposed to secure these parameters in the DCO.</p> <p>The Applicant is also requested to clarify the reference made in these documents to a new electrical substation at Tod Point.</p> <p>The Applicant is requested to confirm if it is proposed that only one electrical connection option would ultimately be required and, if so, how this is restricted in the DCO.</p>	<p>Although the NZT substation has not been assessed as a specific element, given the nature of the works, it is not considered that these works would be taller or larger than the other parameters that have been assessed.</p> <p>As such, a substation on the NZT Site is unlikely to influence the overall visibility of the Proposed Development from the representative viewpoints in isolation.</p> <p>The Applicant has provided design parameters for works at Tod Point to allow for it to either be an extension, or a new substation. This will be determined in discussion with National Grid.</p> <p>The Applicant can confirm that there will only be one connection option will be taken forward, which will be driven by the negotiations and discussions with the relevant infrastructure owners. The Applicant considers that there are no environmental (i.e. no option performs environmentally better than the other) or land (as apart from the connection points (which will be controlled through Protective Provisions), the corridors are shared with other connections) reason to restrict this in the DCO.</p>
Q1.11.12	<b>Applicant</b>	<p>Design Clarification.</p> <p>The maximum parameters for the administration control room and stores (Work No. 1D) are not described although the buildings appear to be shown indicatively but not labelled on the Indicative Hydrogen Production Facility and AGIs Plan [AS-028] (not a document to be certified in Schedule 14 of the draft DCO). No widths or lengths are stated but the Works' Plans do define the maximum area within which these components could be constructed by reference to Work No. 1D.</p> <p>The Applicant is requested to confirm the maximum parameters of the administration and control room and stores (Work No. 1D) used as the basis for assessment in the ES and explain how these are secured in the DCO.</p>	<p>Due to the relative anticipated small-scale of the administration, control room, and stores in relation to the other elements in terms of massing and height, these components are unlikely to influence the overall visibility of the Proposed Development from the representative viewpoints in isolation. It is not considered practically likely that the buildings would be extensive in height or mass when compared to the rest of the Proposed Development.</p> <p>As such, no controls are included in the DCO on their parameters.</p>
Q1.11.13	<b>Applicant</b>	<p>Design Clarification.</p> <p>The draft DCO [AS-013] does not specify if the natural gas connection corridor would be underground or overground or a combination. ES Chapter 4 (Proposed Development) [APP-056] at paragraph 4.2.3 describes it as being underground, whilst paragraph 4.3.19 states it will either be above or below ground or a combination. The Applicant is requested to clarify its proposal, and confirm how the <b>worst case assessed in the ES is secured.</b></p>	<p>The natural gas pipeline is designed to be primarily below ground, however, minor sections where this is unlikely to be achieved due to existing and planned infrastructure will be above ground.</p> <p>ES Chapter 16 (Landscape and Visual Amenity) [APP-069] outlines the approach for assessing the Connection Corridors at construction and operation and states that:</p> <ul style="list-style-type: none"> <li>• “The approach to the proposed Connection Corridors is subject to review and may involve installation above and/or below ground or may include reuse of existing pipelines. A worst-case approach is taken for different stages of the assessment, with the operation stage assessment undertaken based on pipelines being above ground.”; and</li> <li>• “... construction stage assessment undertaken based on the installation of underground pipelines due to the higher levels of disturbance resulting from these construction methods, such as vegetation removal across a working corridor, excavations, and trenching.”</li> </ul>

EXQ1	QUESTION TO:	QUESTION:	RESPONSE
Q1.11.14	Applicant	<p>Design Clarification.</p> <p>The Applicant is requested to provide a clearer explanation of its proposed approach to demolition and remediation of the Proposed Development site and how this relates to the powers sought in the draft DCO [AS-013] (particularly the proposed associated development described in Schedule 1, Work No. 11(j)(i) and (j)(iii)) and the provision in Schedule 2, Requirement 12 ((Contaminated land and Groundwater) and <b>what has been assessed in the ES</b>, noting that ES Chapter 5 (Construction Programme and Management) [APP-057] at paragraph 5.2.13 states it would be carried out by STDC.</p>	<p>In short, the DCO, through the Ancillary Works, gives the Applicant permission to undertake remedial activities if this is required. Requirement 12 ensures that the nature and scope of any remedial activities are appropriately approved and controlled. The extent and nature of those activities would be dependent on what STDC has done beforehand – the commensurate level of information would be provided to discharge Requirement 12.</p> <p>From an ES perspective, the demolition and remediation of the Proposed Development Site have been considered where relevant in order to establish a worst case scenario for the purposes of the EIA. The materials and waste assessment presented in Chapter 21: Materials and Waste Management [APP-074] has considered a worst case scenario in relation to the volumes of excavated material where remediation works are not undertaken by STDC and need to be undertaken by the Applicant.</p> <p>However, as per the Applicant’s response to FWQ 1.8.1, these works are fully expected to be undertaken by STDC and are largely complete. ES Chapter 3 [APP-055] Paragraph 3.3.4 states that <i>“Existing structures currently located within the Main Site will be demolished to clear the site (by South Tees Development Corporation (STDC)), prior to and irrespective of the commencement of works associated with the Proposed Development.”</i></p> <p>The Applicant can confirm that the relationship between demolition works and the Proposed Development construction is a simple relationship in which the demolition works will take place irrespective of the Proposed Development going ahead or not, and the Proposed Development will only commence construction following the completion of demolition works. All other topic assessments have been undertaken on this basis.</p>