

The Lighthouse Green Fuels Order

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Contents

Abbreviations	1
13 Landscape and Visual Amenity	3
13.1 Introduction.....	3
Proposed Development.....	5
13.2 Legislation and planning policy context.....	5
Guidance	12
13.3 Assessment methodology and significance criteria	13
Study area	14
Site visit	15
Scope of the assessment	15
Statutory consultation responses to Preliminary Environmental Information Report (PEIR)	19
Assumptions and limitations	21
13.4 Baseline conditions.....	22
Landscape and visual context across the study area	22
Topography and hydrology	22
Landcover and vegetation patterns	22
Land use and settlement	23
Movement and connectivity	23
Infrastructure	24
Landscape and other relevant designations	24
Landscape baseline.....	26
Introduction.....	26
Published landscape character assessments	26
National Character Areas	26
Marine Character Areas	27
Local Planning Authority Landscape Character Assessment.....	28
Local Landscape Character Areas	29
Summary of landscape baseline	30
Visual baseline	30
Introduction.....	30
Zones of Theoretical Visibility.....	30
Visual receptors and representative viewpoints	30
Overview of the visual baseline	32
Summary of visual baseline	32

Future baseline	33
13.5 Development design and impact avoidance.....	34
Construction	35
Operation.....	35
13.6 Likely impacts and effects of the Proposed Development	36
Landscape impacts and effects	36
Potential landscape impacts of construction	36
Summary of landscape effects of construction	37
Potential landscape impacts during operation	38
Summary of landscape effects during operation	39
Visual impacts and effects.....	40
Potential visual impacts of construction	40
Summary of visual effects of construction	40
Potential visual impacts during operation.....	42
Summary of visual effects during operation	43
13.7 Mitigation and enhancement measures	45
Construction phase.....	45
Operational phase	45
13.8 Residual effects and conclusions.....	46
13.9 Summary of significant effects	46
Potential Impact.....	47
Receptor	47
Importance (Sensitivity).....	47
Magnitude of Impacts	47
Likely Significant Effects.....	47
Proposed Mitigation.....	47
Residual Effects.....	47
References	48
.....	53

Tables

Table 13.1 Legislation	6
Table 13.2 Policy	7
Table 13.3 Guidance.....	12
Table 13.4 Landscape and visual matters raised in the PINS Scoping Opinion....	15

Table 13.5	Landscape and visual matters raised in the NE Scoping Opinion	16
Table 13.6	Consultation with Stockton-on-Tees Borough Council and the relevant landscape and visual matters raised	19
Table 13.7	Natural England PEIR response and the relevant landscape and visual matters raised	20
Table 13.8	Relevant designations within the study area	25
Table 13.9	Landscape receptors.....	29
Table 13.10	Representative viewpoints and visual receptors	32
Table 13.11	Summary of landscape effects of construction.....	38
Table 13.12	Summary of landscape effects during operation	40
Table 13.13	Summary of visual effects of construction (significant effects shown in bold)	41
Table 13.14	Summary of visual effects during operation (significant effects shown in bold).....	44
Table 13.15	Summary of significant landscape and visual effects during construction.....	47
Table 13.16	Summary of significant landscape and visual effects during operation	47

Abbreviations

Abbreviation	In Full / Term
CHP	Combined Heat and Power
CSU	Continuous Ship Unloaders (CSU)
DCO	Development Consent Order
ELC	European Landscape Convention
ES	Environmental Statement
GLVIA	Guidelines for Landscape and Visual Assessment
km	kilometre
LI	Landscape Institute
LCA	Landscape Character Areas
LGF	Lighthouse Green Fuels
LLCA	Local Landscape Character Areas
LCT	Landscape Character Types
LNR	Local Nature Reserve
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
MCA	Marine Character Area
MMO	Marine Management Organisation
NE	Natural England
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
NPS	National Policy Statement
PINS	Planning Inspectorate
PRoW	Public Right of Ways
PPG	Planning Practice Guidance
RCBC	Redcar and Cleveland Borough Council
Ref	Reference
RSPB	Royal Society for the Protection of Birds
SAF	Sustainable Aviation Fuel
SoS	Secretary of State
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Special Site of Scientific Interest
STBC	Stockton-on-Tees Borough Council

Abbreviation	In Full / Term
TGN	Technical Guidance Note
VP	Viewpoint
ZTV	Zone of Theoretical Visibility

13 Landscape and Visual Amenity

13.1 Introduction

- 13.1.1 This chapter of the Environmental Statement (ES) presents the assessment of likely significant effects on landscape and visual amenity arising from construction and operation of the Proposed Development. This chapter sets out the relevant legislation, policy, standards and guidance applied to the assessment process; consultation undertaken to inform the assessment; assessment methodology; the relevant baseline conditions upon which the assessment is based; embedded mitigation considered in place before the assessment is undertaken; the likely significant effects that may arise as a result of the Proposed Development considering embedded mitigation; further mitigation proposals to reduce or remove identified likely significant effects wherever possible; likely remaining residual effects following further mitigation; and any monitoring proposals.
- 13.1.2 This chapter ES has been prepared by landscape architects with experience of the assessment of similar developments, with reference to current planning policy and best practice guidance. It presents the results of a Landscape and Visual Impact Assessment (LVIA) for the Proposed Development described in **Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1)**, on the character of the landscape and on people's views and visual amenity.
- 13.1.3 The purpose of undertaking a LVIA is to express clearly to decision-makers the landscape professional's judgement about changes to the landscape and views and to explain which aspects of landscape and visual change are relevant in planning terms. This chapter should be read in conjunction with the following appendices (contained in **ES Volume III, Application Document Ref. 6.3**):
- **Appendix 13A: Landscape Baseline and Effects** - comprises tables setting out descriptions of the baseline, sensitivity, magnitude of impact and significance of effects for each landscape receptor;
 - **Appendix 13B: Visual Baseline and Effects** - comprises tables setting out descriptions of the baseline, sensitivity, magnitude of impact and significance of effects for each visual receptor group;
 - **Appendix 13C: Framework Lighting Strategy** – sets out the proposed lighting strategy for the Proposed Development; and
 - **Appendix 13D: Landscape and Visual Impact Assessment Methodology** - sets out the methodology for the LVIA.

13.1.4 This chapter is supported by the following figures (contained in **ES Volume II, Application Document Ref. 6.2**):

- **Figure 13.1: Site Location and Study Area;**
- **Figure 13.2: Topography and Hydrology;**
- **Figure 13.3: Landcover;**
- **Figure 13.4: Relevant Designations;**
- **Figure 13.5: Published Landscape Character Areas;**
- **Figure 13.6: Project Specific Landscape Character Areas;**
- **Figure 13.7: Zone of Theoretical Visibility and Proposed Viewpoints; and**
- **Figures 13.8 – 13.17: Photos of representative viewpoints and photomontages from agreed viewpoint locations.**

13.1.5 There are clear differences between landscape effects and visual effects, and the following distinctions have been made:

- landscape effects relate to changes to the landscape as a resource, including physical changes to the fabric or individual elements of the landscape, its aesthetic or perceptual qualities, and landscape character; and
- visual effects relate to changes to existing views of identified visual receptors ('people'), from the loss or addition of landscape features within their view due to the Proposed Development.

- 13.1.6 Landscape effects and visual effects have therefore been assessed and reported separately.

Proposed Development

- 13.1.7 The Proposed Development is described in **Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1)**, with the design parameters set out in Section 4.5 and presented in Table 4.1.
- 13.1.8 **Figure 4.1: Indicative Proposed Development Layout (ES Volume III, Application Document Ref. 6.3)** shows the indicative layout of the Proposed Development.

13.2 Legislation and planning policy context

- 13.2.1 This section summarises the relevant legislation and key national and local planning policies relevant to landscape and visual amenity and explains, where relevant, how they have informed the assessment and design of the Proposed Development.
- 13.2.2 Table 13.1 outlines relevant legislation and Table 13.2 outlines relevant policy. The National Policy Statements (NPSs) are the primary policy used by the relevant Secretary of State (SoS) to determine applications for projects requiring a Development Consent Order (DCO). Whilst the Secretary of State must decide this Application in accordance with any relevant NPSs, other relevant materials, such as national policies like the National Planning Policy Framework (NPPF) [Ref 11] and local planning policy are matters the Secretary of State may have regard to where it is important and relevant to their decision.

Table 13.1 Legislation

Legislation	Relevance to assessment
European Landscape Convention (ELC) 2000 [Ref 3]	Paragraph 2.1 of Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) [1a.i.1.a.i.1.a.Ref 1] states that: <i>“The UK has signed and ratified the European Landscape Convention (ELC) since 2002, when the last edition of this guidance was published. The recognition that government has thus given to landscape matters raises the profile of this important area and emphasises the role that landscape can play as an integrating framework for many areas of policy. The ELC is designed to achieve improved approaches to the planning, management and protection of landscapes throughout Europe and to put people at the heart of this process.”</i> European Union treaty signed by the UK to include planning, protection and management of landscape within policy. The ELC defines landscape as: “...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.” (Article 1, ELC) [Ref 3]
National Parks and Access to the Countryside Act 1949 [Ref 4]	Sets the founding purposes of National Parks to conserve natural beauty, protect wildlife and cultural heritage, and promote public enjoyment.
Countryside and Rights of Way Act 2000 [Ref 5]	Sets out the legislative framework relating to access to the countryside including recreational routes.
Planning Act 2008 [Ref 6]	Sets out the legislative planning framework relating to projects which require development consent, by virtue of being a nationally significant infrastructure projects or as otherwise determined under the Planning Act 2008.

Table 13.2 Policy

Policy	Relevance to assessment
Overarching NPS for Energy (EN-1) 2025 [Ref 7]	Section 4.6 of NPS EN-1 sets out policies with respect to environment and Biodiversity Net Gain. It requires applicants to submit a statement with applications for development consent, demonstrating how opportunities for delivering wider environmental net gains have been considered, and where appropriate, incorporated into proposals as part of good design of the project. In paragraph 5.10.1 the policy recognises that <i>“effects of energy projects will vary on a case-by-case basis according to the type of development, its location and the landscape setting of the proposed development.”</i> Paragraph 5.10.2 recognises that landscape and visual impact can also come from visible steam plumes from cooling towers. Paragraph 5.10.4 describes that <i>“landscape effects arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the development, whose specific siting and design make the assessment a case-by-case judgement.”</i> Paragraph 5.10.5 recognises that virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape and paragraph 5.10.13 recognises that <i>“all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.”</i> Paragraph 5.10.6 states that <i>“projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.”</i> Paragraph 5.10.12 outlines that there are landscapes outside nationally designated areas which are highly valued locally. It states further that if there are local plan policies <i>“based on landscape or waterscape character assessment, these should be paid particular attention. However, locally valued landscapes should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.”</i> Paragraph 5.10.16 It sets out the requirements for applicants to carry out a landscape and visual impact assessment, including cumulative effects in accordance with relevant guidance. Paragraph 5.10.17 requires the landscape and visual assessment to include reference to any landscape character assessment and associated studies. Paragraph 5.10.19 notes the need to consider landscape and visual matters in the early stages of siting and design in order to minimise negative effects and recognising opportunities for enhancement.

Policy	Relevance to assessment
	Paragraphs 5.10.20 – 5.10.21 states that the assessment should include effects on landscape character, landscape components, views and visual amenity during construction and operation. Paragraphs 5.10.21 – 5.10.22 states that the assessment should address <i>“the landscape and visual effects of light pollution and other emissions.”</i> Paragraph 5.10.27 notes that <i>“adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within its development site and wider setting. The careful consideration of colours and materials will support the delivery of a well-designed scheme, as will sympathetic landscaping and management of its immediate surroundings.”</i>
NPS for Renewable Energy Infrastructure (EN-3) [Ref 8]	Sets out the needs case for renewable energy and secondly to establish the specific criteria by which applications for development consent for such schemes are to be assessed. Paragraph 2.5.2 states that proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage. Paragraph 2.7.45 states that an assessment of the landscape and visual effects of the proposed infrastructure should be undertaken in accordance with the guidance set out in Section 5.10 of EN-1.
NPS for Natural Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) [Ref 9]	Paragraphs 2.21.23-2.21.29 outlines possible constructions and operational impacts. 2.21.29 states that long term impacts upon the landscape for pipelines are likely to be limited. 2.21.31 and 2.21.32 state that pipeline routes should be reinstated as close to its original state as possible and that where reinstatement is unlikely to be possible, there should be <i>“measures to avoid, mitigate, or employ other landscape measures to compensate for, any adverse effect on the landscape.”</i>
NPS for electricity Networks Infrastructure (EN-5) [Ref 10]	Section 2.10 (paragraph 2.10.5) states that the principal opportunities for mitigating adverse landscape and visual impact of electricity network infrastructure including <i>“selection of the most suitable type and design of support structure in order to minimise the overall visual impact on the landscape. In particular, ensuring that towers are of the smallest possible footprint and internal volume”.</i> Sections 2.9 and 2.10 consider rerouting and undergrounding of cables as a way to minimise landscape and visual effects.
National Planning Policy Framework, 2026, Department	Chapter 14 of the NPPF covers the achievement of well-designed places. It promotes high quality....

Policy	Relevance to assessment
for Levelling Up, Housing & Communities [Ref 11]	<i>“Development proposals should respond to their context (the history, character and features of their site and its setting), so that they integrate with and enhance their surroundings; such as through the arrangement of development plots and buildings, the use of materials and architectural features...”. “This should not preclude innovation or change where appropriate, especially where an increased scale or density of development is justified in accordance with policies L2 and L3” of the NPPF.</i> Development proposals should also reflect principles such as Nature and Identity <i>“as appropriate to the nature of the development and its location...”. Development proposals should “incorporate and/or connect to a network of high quality, accessible, multifunctional green infrastructure...”. “This should include maintaining and enhancing tree cover...”. Development proposals should “create visually attractive, distinctive and characterful development to establish or maintain a strong sense of place and pride, including through the use of a coherent palette of materials, design features and planting.”</i> Chapter 19 of the NPPF deals with the conserving and enhancing the natural environment . National decision-making Policy N2 requires that developments <i>“contribute positively to the natural environment, and support nature’s recovery”</i>. This is to be achieved by inter alia <i>“considering the environmental qualities of land proposed for development”</i> such as <i>“landscape character and the natural beauty of the countryside”</i> and identifying <i>“opportunities for those qualities to be conserved or enhanced.”</i> The policy also expects development proposals to <i>“conserve and enhance existing natural features of visual, historic or nature conservation value (such as established trees and hedgerows) where possible; and use appropriate landscaping to help create a well-designed place and integrate the development into its surroundings.”</i> The policy further expects development proposals to use green infrastructure and nature-based solutions to provide inter alia recreation. Policy N3 deals with trees in new development including incorporation, species selection and long term maintenance. It also recognises benefit of trees such as the character and quality of the built environment. Policy N4 addresses development proposals within and within the setting of Protected Landscapes. Policy N5 deals with maintaining the character of the coast. <i>“Development proposals should maintain the character of undeveloped areas of coast, including land designated for its landscape, habitat or heritage value, while improving public access to it where appropriate. They should not</i>

Policy	Relevance to assessment
	<i>hinder the completion and maintenance of a continuous signed and managed route around the coast (the King Charles III England Coast Path National Trail)."</i>
UK Marine Policy Statement (MPS), 2011 [Ref 12]	Chapter 2 of the MPS outlines the vision for the UK marine area, the high-level approach to marine planning and general principles for decision making covering inter alia environmental considerations. Amongst others it covers detailed considerations relevant to seascape such as the impact of an activity or development on seascape to take into account existing character and quality, how highly it is valued and its capacity to accommodate change specific to any development. Section 2.6.5 recognises that effects <i>"will vary on a case-by-case basis according to the type of activity, its location and its setting."</i> The MPS defines seascapes as <i>"landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other."</i>
North East Inshore and North East Offshore Marine Plan, 2021 [Ref 13]	Policy NE-SCP-1 requires proposals to be <i>'compatible with their surroundings and should not have a significant adverse impact on the character and visual resource of the seascape and landscape of the area.'</i> <i>'The location, scale and design of proposals should take account of the character, quality and distinctiveness of the seascape and landscape.'</i>
Stockton-on-Tees Borough Council (STBC) – Local Plan 2019 [Ref 14]	Policy SD5 requires that that development proposals are responsive to the landscape, mitigating their visual impact where necessary. Developments will not be permitted where they would lead to unacceptable impacts on the character and distinctiveness of the Borough's landscape unless the benefits of the development clearly outweigh any harm. Wherever possible, developments should include measures to enhance, restore and create special features of the landscape. • Policy SD8: sets out broad design criteria for new developments, requiring them to consider the surrounding environment, heritage, building separation, privacy, green infrastructure, and appropriate access and waste facilities; and • Policy ENV6: Green Infrastructure, Open Space, Green Wedges and Agricultural Land: focuses on protecting the environment by encouraging the use of sustainable transport, promoting integrated public transport, safeguarding cycleways and footways, and ensuring appropriate infrastructure for sustainable freight movement.

Policy	Relevance to assessment
Redcar and Cleveland Borough Council (RCBC) - Local Plan 2018 [Ref 20]	Policy N1 states that: <i>‘Development proposals will be considered within the context of the Landscape Character Assessment, the Landscape Character Supplementary Planning Document and the Historic Landscape Characterisation. Developments will not be permitted where they would lead to the loss of features important to the character of the landscape, its quality and distinctiveness, unless the benefits of development clearly outweigh landscape considerations. In such cases appropriate mitigation will be required. Protection will be commensurate to the status of the landscape within the hierarchy.’</i> Policy SD4: pertains to Sustainable Development and is likely a policy that aims to ensure that development within the borough is sustainable, considering environmental, social, and economic factors to create a framework for future development.
Hartlepool Local Plan 2018 [Ref 15]	• Policy LS1: refers to the Local Spatial Strategy within Hartlepool Borough Council's local planning documents, which guide development and land use in the area; • Policy NE1: Natural Environment recognises the important role that Hartlepool's natural environment plays in enhancing people's quality of life and improving quality of place; and • Policy NE2: Green Infrastructure: The Borough Council will safeguard green infrastructure within the Borough from inappropriate development and will work actively with partners to improve the quantity, quality, management and accessibility of green infrastructure and recreation and leisure facilities.
Middlesbrough Council Publication Local Plan 2025 [Ref 16]	Middlesbrough Council Publication Local Plan (2025) sets out a strategy, vision and planning framework for the future development of Middlesbrough between 2022 – 2041. The Publication Local Plan has been submitted to the Secretary of State for examination. The emerging Local Plan includes the following policies relevant to the landscape and visual assessment: • Policy CR1: requires proposals to achieve well designed buildings and places; • Policy CR3: requires developments to be of high-quality design, which inter alia contributes to the identity, character and appearance of the area; • Policy CR6: requires developments to be of highest quality design; • Policy NE1 seeks to protect and enhance Green and Blue Infrastructure network in accordance with the Green and Blue Infrastructure Strategy and Action Plan; and

Policy	Relevance to assessment
	Policy NE2 seeks to protect and enhance Green Wedges.
The adopted Middlesbrough Local Plan will remain the Local Plan for the borough until it is replaced by a new Local Plan. The current Local Plan comprises of a number of documents, including Housing Local Plan (2014) [Ref 33], Core Strategy Development Plan Document (DPD) (2008) [Ref 34], and the Middlesbrough Local Plan, Saved Policies (1999) [Ref 32].	
Housing Local Plan 2014 [Ref 17]	CS20 Green Infrastructure seeks to create integrated network of green infrastructure.
Core Strategy DPD Policies 2008 [Ref 18]	CS5 Design requires development to ' <i>demonstrate a high quality of design in terms of layout, form and contribution to the character and appearance of the area.</i> ' DC1 General Development requires development to satisfy ' <i>the visual appearance and layout of the development and its relationship with the surrounding area in terms of scale, design and materials will be of a high quality.</i> '
Saved policies within the Middlesbrough Local Plan 1999 [Ref 19]	E2 Green Wedges seeks to protect inter alia visual amenity and green character of a Green Wedge. E3 Development Adjoining Green Wedges requires adjoining development to complement the character of the Green Wedge. E4 Greenlink Network seeks to protect and enhance open space corridors with foot and cycle paths. E21 Special Landscape Areas seeks to protect and conserve ' <i>scenic quality and character of the landscape in the areas designated as Special Landscape Areas.</i> '
Tees Valley Green Infrastructure Strategy 2008 [Ref 21]	Sets out a vision for a strategic network of Green Infrastructure for the Tees Valley.

Guidance

- 13.2.3 The standards and guidance set out in Table 13.3 have been used to inform the scope and content of the LVIA, and to assist the identification and mitigation of likely significant effects. This builds upon the overarching Environmental Impact Assessment (EIA) methodology and guidance presented in **Chapter 2: Assessment Methodology (ES Volume I, Application Document Ref. 6.1)**.

Table 13.3 Guidance

Guidance	Relevance to assessment
Guideline for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3) 2013 [Ref 2]	Sets out the guidelines for undertaking a landscape/townscape/seascape and visual impact assessment.
An approach to Landscape Character Assessment 2014 [Ref 23]	Informs the methodology for defining and describing the landscape character baseline.

Guidance	Relevance to assessment
Visual Representation of Development Proposals: Landscape Institute Technical Guidance Note 06/19 [Ref 24]	Provides advice on how to capture and represent visual amenity through representative viewpoints as well as how the viewpoints should be presented and photomontages should be produced.
Nationally Significant Infrastructure Projects (NSIP): Advice on Good Design 2025 [Ref 25]	Informs the development of design principles for NSIP.
Assessing landscape value outside national designations, Technical Guidance Note 02/21 [Ref 26]	Informs the methodology for assessing the value attached to the landscape.
Infrastructure, Technical Guidance Note 04/20 [Ref 27]	Background information for the planning and design process for infrastructure projects for landscape.
Planning Practice Guidance, Natural Environment (Landscape) [Ref 28]	Sets out the benefits of landscape character assessments and the importance of considering Green Infrastructure in the early stages of schemes.
Planning Practice Guidance, Renewable and Low-carbon Energy [Ref 29]	Sets out that planning has an important role in the delivery of new renewable and low-carbon energy infrastructure. The Planning Practice Guidance identifies several LVIA considerations, including visual impact, mitigation through screening and glint and glare.

13.3 Assessment methodology and significance criteria

- 13.3.1 The detailed methodology, including the criteria referred to in making judgements on the sensitivity of landscape and visual receptors, the magnitude of impact and the significance of effects is set out in **Appendix 13D: Landscape and Visual Impact Assessment Methodology (ES Volume III, Application Document Ref. 6.3)**.
- 13.3.2 The methodology for the LVIA involved the following stages:
- a review of published landscape character assessments, studies, relevant supporting evidence base documents, aerial photography, mapping and fieldwork to define the baseline and to determine the extent of the study area within which there is potential for landscape and visual effects;
 - define the landscape and visual receptors and describe the landscape and visual baseline;
 - review the design to embed mitigation measures into the Proposed Development to avoid or minimise adverse landscape and visual effects and maximise opportunities for landscape integration and enhancement;

- determine the sensitivity (nature of the receptor) of landscape and visual receptors, by considering the value attached to the landscape or views and susceptibility to change of the receptor;
 - assess the magnitude of impact (nature of effect) of the Proposed Development in relation to size, scale, duration and reversibility; and
 - assess the significance of effects resulting by considering the relationship between the sensitivity of the receptor and the magnitude of impact and determine which effects are significant.
- 13.3.3 The assessment of the likely landscape and visual effects of the Proposed Development has been undertaken for the following scenarios:
- the peak of construction activity; and
 - Year 1 of operation.

Study area

- 13.3.4 The study area for the LVIA includes all land within the Site and the area within which the Proposed Development may give rise to significant landscape and visual effects, as illustrated in **Figure 13.1: Site Location and Study Area (ES Volume II, Application Document Ref. 6.2)**.
- 13.3.5 A review was undertaken to identify landscape and visual receptors that have potential to be affected by the Proposed Development. This analysis determined the study area, defined as the extent in which the Proposed Development may result in significant landscape or visual effects.
- 13.3.6 The Site lies within the extensive industrial landscape along the estuary of the River Tees. Due to the heavily industrialised nature of this landscape of which the Site is part, significant effects on landscape character are not expected beyond 2km from the Site. It is anticipated that beyond 2km the Proposed Development would be perceived as part of the wider industrial landscape. Therefore, a 2km study area is considered to be appropriate for assessing the landscape effects.
- 13.3.7 Visual changes may be perceived within the 10km search area from the Site. Beyond this distance, significant visual effects are not likely as the perceived height and mass of the Proposed Development would diminish with distance. Therefore, a 10km study area is considered appropriate for assessing the visual effects.

Site visit

- 13.3.8 Fieldwork was carried out in March and August 2025 as well as in March 2026 to verify existing information, review boundaries of Landscape Character Area (LCA), confirm viewpoint locations and receptors, and to record seasonal changes in the landscape. Photographic surveys were undertaken during the site visits in August 2025 (representing summer views when deciduous vegetation is in full leaf cover and might provide screening towards the site) and March 2026 (representing winter views when deciduous vegetation is without leaf cover and therefore provide the worst-case scenario regarding visibility of the site).

Scope of the assessment

- 13.3.9 A scoping exercise was undertaken in September 2025 to identify the matters to be covered by the LVIA and agree the approach with relevant statutory bodies, primarily the local planning authorities but also other statutory bodies, Natural England and Historic England. The Scoping Report was submitted to PINS on 1 October 2025 (see **Appendix 2A in ES Volume III, Application Document Ref. 6.3**), and the Scoping Opinion was issued on 11 November 2025 (see **Appendix 2B in ES Volume III, Application Document Ref. 6.3**).
- 13.3.10 The assessment scope was established at that time by comparing available design details for the Proposed Development with data, information and records relating to landscape character and the visual environment.
- 13.3.11 The outcomes of scoping were recorded in the Scoping Report, which included a summary of all assessment work undertaken as part of the design-development of the Proposed Development at that stage.
- 13.3.12 The Scoping Opinion identified several additional overarching EIA and topic-specific matters that were subsequently brought into the overall scope of the LVIA. Table 13.4 and Table 13.5 set out these matters and provides a summary of how the Applicant has responded to the points raised, and where this information is reported.

Table 13.4 Landscape and visual matters raised in the PINS Scoping Opinion

Matters raised	How this is addressed in the LVIA
Photography from a second season (ID 3.6.1): <i>'the Inspectorate considers that a single season of photography is likely to be sufficient, however this should be agreed with the local planning authority and evidence should be provided in the ES to demonstrate that visibility does not differ between summer and winter.'</i>	It was agreed with Stockton-on-Tees Borough Council (STBC) that a single season of photography (winter) is adequate to inform the LVIA presented in this Chapter of the ES. No comments were received from RCBC.

Matters raised	How this is addressed in the LVIA
National landscape character (NCA) receptors (ID 3.6.2): <i>'The Inspectorate notes the commitment to include the national level landscape character area to provide context and agrees with the rationale for scoping this out as a receptor.'</i>	The relevant NCA is included in the baseline description in Section 13.4.25 -27 of this chapter to provide context only.
Seascape Character Assessment for the North-east Inshore (ID 3.6.3): <i>'The Inspectorate agrees with the rationale for scoping this receptor out.'</i>	The relevant Marine Character Area is included in the baseline description to provide context only.
Site specific character (ID 3.6.4): <i>'The Inspectorate agrees with the rationale for scoping this receptor out.'</i>	Scoped out of the LVIA presented in this ES.
Decommissioning (ID 3.6.5): <i>'The Inspectorate agrees to scope out the impacts of this phase on landscape and visual receptors.'</i>	Scoped out of the LVIA presented in this ES.
North York Moors National Park (ID 3.6.6): <i>'The Inspectorate agrees that significant effects are not likely and this receptor can be scoped out.'</i>	Scoped out of the LVIA presented in this ES.
Residential amenity survey (ID 3.6.7): <i>'The Inspectorate agrees given the context of the site, this is not necessary.'</i>	Scoped out of the LVIA presented in this ES.
Impacts to visual amenity resulting from lighting at night (ID 3.6.8): <i>'The Inspectorate agrees with the rationale for scoping this out.'</i>	Scoped out of the LVIA presented in this ES.
Photomontages (ID 3.6.9): <i>'The Applicant should ensure that an adequate number of photomontages are included within the assessment to ensure that the maximum visual envelope is able to be fully understood. The Inspectorate acknowledges the Applicant's intention to agree viewpoint locations with local planning authorities. Evidence of any agreement reached over viewpoint locations and visualisation selection should be provided as part of the application documentation.'</i>	The locations of viewpoints and visualisations have been agreed with STBC.

Table 13.5 Landscape and visual matters raised in the NE Scoping Opinion

Matters raised	How this is addressed in the LVIA
<i>'The environmental assessment should refer to the relevant National Character Areas.'</i>	The relevant NCA is included in the baseline description in paragraphs 13.4.25 -27 of this chapter to provide context.

Matters raised	How this is addressed in the LVIA
<i>'The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies.'</i>	Local Landscape Character Areas (LLCA) were defined and described in Section 13.4.
<i>'A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area.'</i>	A LVIA was carried out within this chapter and associated appendices.
<i>'The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage.'</i>	A Cumulative Impact Assessment was carried out. Findings are presented in Chapter 22: Cumulative and Combined Effects (ES Volume I, Application Document Ref. 6.1) .
<i>'To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code.'</i> <i>The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.'</i> <i>'The National Infrastructure Commission has also produced Design Principles for National Infrastructure - NIC endorsed by Government in the National Infrastructure Strategy.'</i>	The design of the Proposed Development has been described in the following documents: • Design Approach Document (Application Document Ref. 6.5); • Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1) and secured by Schedule 1 (Authorised development) of the draft DCO (Application Document Ref. 3.1); and • Appendix 13C: Framework Lighting Strategy (ES Volume III, Application Document Ref. 6.3) and secured by Schedule 2 (Requirements) of the draft DCO (Application Document Ref. 3.1).

13.3.13 In addition to the matters raised in the Scoping Opinion, the final assessment scope has also been informed by the following:

- the outcomes of consultation and engagement with STBC, outlined in Table 13.6 below;
- design changes made to the form and extent of the Proposed Development and the area of land required for its construction and operation; and
- the outcomes of further desk-based and field surveys undertaken to establish the landscape and visual baseline, and to inform the identification of the likely significant effects of the Proposed Development.

- 13.3.14 Following the scoping response RCBC, Hartlepool BC and Middlesbrough BC were also consulted in November 2025 regarding location of viewpoints and visualisations as well as the type of proposed visualisations. No response was received from RCBC and Middlesbrough BC. Hartlepool BC responded saying they *“have no issues with the proposed VPs.”*

Table 13.6 Consultation with Stockton-on-Tees Borough Council and the relevant landscape and visual matters raised

Matters raised	How this is addressed in the LVIA
It was suggested that the Applicant should <i>'consider the Proposed Development within a single season for the visual receptors (either summer or winter). Following a visit to the area in winter last year and a full site visit in summer this year the Applicant is confident that a single season would be sufficient due of the openness of the landscape and the lack of screening vegetation within the views. As the visibility of the site and the Proposed Development between winter and summer would not differ noticeably, we scoped out the photography of a second season.'</i>	Approach accepted by STBC (21 November 2025). Winter photography is provided in the ES in accordance with the Scoping Opinion.
The locations of the representative viewpoints to inform the visual assessment and the selected locations for visualisations was presented to Stockton Borough Council. The Applicant proposed <i>'to prepare wireline visualisations of the maximum parameters of the proposed development for two of the viewpoint locations. These would be viewpoints 7 at the Saltholme RSPB and 9 at South Gare.'</i> The viewpoints were selected <i>'based on the likely impact of the development, the sensitivity of the receptor and to show the proposed development from two different angles.'</i> The Applicant also aims <i>'to provide visual presentations of the indicative design.'</i>	The locations of viewpoints and visualisations were agreed with STBC (12 November 2025).

Statutory consultation responses to Preliminary Environmental Information Report (PEIR)

- 13.3.15 A consultation of the Preliminary Environmental Information Report (PEIR) has been undertaken with statutory consultees with responses from the consultation received from December 2025. With the exception of NE, no responses relevant to landscape character and visual amenity have been received from other stakeholders. The outcomes of the consultation with NE is outlined in Table 13.7 below.

Table 13.7 Natural England PEIR response and the relevant landscape and visual matters raised

Matters raised	How this is addressed in the LVIA
<i>"Clearly indicate why the viewpoints have been chosen and what the sensitive receptors for each viewpoint are."</i>	Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3) sets out sensitive receptors for each viewpoint.
NE Ref A10.2: <i>"Reconsideration of the impact from the proposed development on the sensitive wetland landscape viewed from the King Charles III Coast Path based on the maximum parameters and consider if mitigation is required."</i>	Tees Wetlands LLCA: Paragraphs 5.3.1-5.3.6 of Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3) describe the effects of the Proposed Development on the Tees Wetlands LLCA during construction and operation. The impact of the development on the overall character of the Tees Wetland landscape during construction and operation was judged to be negligible due to the context of the existing heavy industry setting. Together with the high sensitivity of the Tees Wetlands the effect was assessed as minor adverse. King Charles III England Coast Path (representative Viewpoint 4): Paragraphs 5.3.1-5.3.6 of Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3) describe the effects of the Proposed Development on users of the King Charles III England Coast Path at Seal Sands car park during construction and operation. The impact of the development on the recreational receptor at this location was assessed as medium during construction and operation as the Proposed Development would be a noticeable part of the wider view. Together with the high sensitivity of the visual receptor the effect was assessed as moderate adverse. Due to the scale of the Proposed Development no additional mitigation is likely to materially reduce the effects of the construction and operational phases on landscape and visual receptors.
NE Ref A10.3: <i>"A consideration of other large-scale projects that could add to the visual impacts of this development and modelling of these in the skyline at sensitive viewpoints."</i>	Cumulative impacts with other projects in the area has been considered in Chapter 22: Cumulative and Combined Effects (ES Volume I, Application Document Ref. 6.1)
NE Ref A10.4: <i>"Re-assess impacts and mitigation required based on maximum parameters or</i>	Section 13.7 of this chapter outlines that due to the scale of the Proposed Development no additional mitigation is likely to materially reduce the effects of the construction and operational phases on landscape and visual receptors.

Matters raised	How this is addressed in the LVIA
<i>when final dimensions are available.”</i>	
NE Ref A10.5: <i>“Re-assess impacts on sensitive receptors based on maximum parameters or when final dimensions are available.”</i>	Impacts on sensitive landscape and visual receptors was assessed and described in detail in Appendices 13A: Landscape Baseline and Effects and 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3).

Assumptions and limitations

13.3.16 This section sets out the assumptions that have been made and the limitations that have informed the scope of the LVIA:

- it is assumed that all land based existing vegetation will be removed from within the Main Site. Some vegetation removal might also be necessary within the utility connection corridors;
- all fieldwork has been undertaken from publicly accessible locations;
- the Landscape Institute published Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3) (Ref 1) (LITGN-2024-01) [Ref 2] in August 2024. This confirmed that *“an LVIA should consider views from local communities focusing on the way that a community currently experiences views from public locations such as streets and open spaces and how those will change.”* It goes on to state that *“views from houses and individual properties are a matter of private amenity, noting that it is an established planning principle that there is no right to a view”*. Views of communities and groups of properties, or in some cases individual properties, have been considered within the LVIA with reference to publicly assessable viewpoints; and
- impacts to visual amenity resulting from lighting at night during construction, operation and decommissioning were scoped out given the industrial context and existing high levels of lighting within the area. For the same reason impacts from lighting during construction, operation and decommissioning are not likely to significantly affect landscape character either. Therefore, impacts to landscape character resulting from lighting was not assessed.

13.4 Baseline conditions

Landscape and visual context across the study area

- 13.4.1 The following sections set out details of the existing landscape and visual context across the wider 10km study area.

Topography and hydrology

- 13.4.2 The topography of the study area (see **Figure 13.2: Hydrography and Topography (ES Volume II, Application Document Ref. 6.2)**) is largely characterised by a flat low-lying landscape along the river valley and estuary of the River Tees, generally lying between 1m Above Ordnance Datum (AOD) and 10m AOD. The land gradually becomes more undulating to the north west of the Site, rising from around 1m AOD near the Site to about 90m AOD at the hills near Elwick, west of Hartlepool. To the south east the land abruptly rises towards Eston Moor with a high point of 242m AOD at Eston Beacon.
- 13.4.3 The River Tees flows through the centre of the study area from the south west towards its estuary within the north eastern part of the study area. The land also drains from the hills to the north west and south east into the River Tees. RSPB Saltholme to the west of the Site comprises large ponds and wet grassland.
- 13.4.4 The Site itself is flat adjoining the River Tees at approximately 5m AOD.

Landcover and vegetation patterns

- 13.4.5 The landcover along the River Tees within the centre of the study area is dominated by large industrial plant, hardstanding, disturbed land of bare earth and aggregate as well as derelict former industrial land which nature started to reclaim with ruderal vegetation including grassland, scattered scrub and isolated trees.
- 13.4.6 Further to the west, the landscape comprises wetlands at RSPB Saltholme, coastal floodplains, intertidal mudflats, reedbeds and saline lagoons. To the north along the coast lies an area of sand dunes. Further to the north west and south east the study area comprises farmland, predominately arable with sparse and gappy hedgerow field boundaries. Woodland cover within the farmland to the north is sparse with isolated woods, including the wooded areas at Cowpen Bewley Woodland Park and Summerhill Country Park as well as tree belts along watercourses. Within the farmland to the south east there are areas of woodlands along the steep slopes of Eston Moor and Errington Woods as well as along water courses and within Flatts Lane Woodland Country Park.

- 13.4.7 To the north, south, east and west lie the large urban areas of Hartlepool (nearest residential property about 5km from the Main Site), Stockton-on-Tees (nearest residential property about 2.5km from the Main Site), Middlesbrough (about 2.5km from the Main Site) and Redcar (about 4km from the Main Site).
- 13.4.8 The Site comprises large areas of hard standing and disturbed land as well as grassland with scrub and smaller, self-seeded trees.
- 13.4.9 Refer to **Figure 13.3: Landcover (ES Volume II, Application Document Ref. 6.2)** for an aerial image of the study area which provides an overview of the landcover.

Land use and settlement

- 13.4.10 Within the study area there are large areas of settlement including the urban areas of Hartlepool, Stockton-on-Tees, Middlesbrough and Redcar. Smaller settlements include the seaside resort of Seaton Carew and Marske-by-the-Sea. The study area also comprises small villages such as Cowpen Bewley, Greatham, New Marske and Port Clarence as well as many scattered farmsteads.
- 13.4.11 The Tees Estuary is associated with Teesport and contains large scale, heavy industry including oil refinery, oil depot, container terminal, bulk terminal, chemical industry, power station, maritime oil and gas structure recycling area and offshore wind turbine assembly area. Further inland the River Tees adjoins large areas of business and retail use.
- 13.4.12 The countryside to the north west and south east is mainly used for arable farming with wetland and steeper areas used for recreation and wildlife.
- 13.4.13 Large areas to the north, south and west of the Site are also used for waste management, including landfill and leachate lagoons.
- 13.4.14 The Site lies within the industrial Teesport area and currently comprises a combination of hard standing, disturbed land, bare earth, grassland, scattered scrub and isolated trees.

Movement and connectivity

- 13.4.15 Within the study area there are a number of 'A' roads connecting the various settlements and industrial areas.
- 13.4.16 Two railway lines, to the north and south of the River Tees, connect the larger towns and seaside resorts.
- 13.4.17 The River Tees and Teesport provide an international transport link for global trade.

13.4.18 Recreational routes (such as the National Cycle Network routes 1,14 and 65) and the long-distance paths (including the Teesdale Way and Tees Link as well as King Charles III England Coastal Path) connect the area to the wider landscape. Within the study area there is also a small network of local Public Rights of Ways (PRoW).

Infrastructure

13.4.19 Infrastructure within the wider 10km study area includes the following:

- Teesport within the centre of the study area;
- tall nuclear power plant to the north of the Site;
- Navigator tank farms;
- Tioxide Greatham Works (chemical plant, formerly Venator Materials);
- wind turbines and two small solar panel areas within the north western part of the study area;
- offshore wind turbines off the coast of Redcar within the eastern part of the study area;
- above ground utility corridors; and
- large pylons and overhead power lines which are highly visible infrastructure throughout the study area.

Landscape and other relevant designations

13.4.20 Designations relevant to landscape that coincide with the study area are shown on **Figure 13.4: Relevant Designations (ES Volume II, Application Document Ref. 6.2)**. This shows that the Site itself is not within, or in proximity to, any nationally or locally designated landscapes that identifies landscape value. The edge of the North York Moors National Park is approximately 10km south east of the Site, which is why it is included in Table 13.8.

13.4.21 Other relevant designations within the study area are listed in Table 13.8. Ecological, heritage and policy designations are included because of their contribution to landscape character and visual amenity, in particular their contribution to landscape value. Further detail regarding these designations is provided in **Chapter 3: Site and Surrounding Area** and **Chapter 10: Terrestrial Ecology (ES Volume I, Application Document Ref. 6.1)**.

Table 13.8 Relevant designations within the study area

Designations within the study area	Approximate distance to closest feature from Main Site
Landscape designations	
North York Moors National Park	10km
Country Park such as Cowpen Bewley Woodland Park	3.5km
Registered Park and Garden	4.6km
Ecology Designations	
Teesmouth National Nature Reserve	900m
Ecological designations (SSSI, SPA, SAC, NNR, LWS), Local Nature Reserves (LNR), such as Seaton Dunes and Common and Coatham Marsh LNR, Ancient Woodland	0m
Heritage Designations	
Scheduled Monuments	5.5km
Listed Buildings	2.7km
Conservation Areas such as Cowpen Bewley Conservation Area	3.3km
Access and Public Rights of Way	
Teesdale Way Long Distance Path	3km
Tees Link Long Distance Path	3km
King Charles III England Coast Path	900m
Public Right of Way	2.2km
European Long Distance Path	3km
National Cycle Network Routes 1, 14 and 65	2.8km

Landscape baseline

Introduction

- 13.4.22 This section summarises the information gathered and assessed to describe the landscape baseline, including published landscape character assessments at various scales. It defines which landscape receptors form the basis of the assessment landscape effects and summarises the effects on these receptors. Detailed descriptions of these landscape receptors and effects are reported in **Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Published landscape character assessments

- 13.4.23 Relevant national and district scale published landscape character assessments have been reviewed as part of the LVIA to identify the key features and characteristics of the study area.
- 13.4.24 Landscape character assessment is defined within the glossary of GLVIA3 as the *“process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive”*. Natural England’s ‘An approach to Landscape Character Assessment’ notes the use and purpose of key characteristics, stating:

“Key characteristics are those combinations of elements which help give an area its distinctive sense of place. If these characteristics change, or are lost, there will be significant consequences for the current character of the landscape. Key characteristics are particularly important in the development of planning and management policies. They are important for monitoring change and can provide a useful reference point against which landscape change can be assessed. They can be used as indicators to inform thinking about whether and how the landscape is changing and whether, or not, particular policies – for example - are effective and having the desired effect on landscape character.”

National Character Areas

- 13.4.25 NCAs are broad scale and provide context to more detailed studies of local landscape character.
- 13.4.26 The Site and most of the landscape study area lies within NCA 23: Tees Lowlands [Ref 30], as defined by Natural England and illustrated on **Figure 13.5: Published Landscape Character Areas (ES Volume II, Application Document Ref. 6.2)**.

13.4.27 The character of NCA 23 is summarised as:

- Broad, low-lying and open plain;
- Arable agricultural land, with low woodland cover and large fields;
- Wide views to distant hills;
- Large area of urban and industrial development around the Tees Estuary, much of which is on reclaimed land, contrasts with the quieter rural areas;
- Major industrial installations around Teesmouth form a dramatic skyline, but are juxtaposed with expansive mudflats, sand dunes and salt marshes;
- Transport corridors, power lines and energy infrastructure are conspicuous elements in the landscape; and
- Brownfield sites where semi-natural vegetation has started to regenerate on previously developed land.

Marine Character Areas

13.4.28 The seascape around England's coastline has been divided into several Marine Character Areas (MCA) [Ref 31]. A small part of the Site, namely the site of the proposed quay and the dredging works, lie within the MCA 22: Tyne, Tees and Wear Estuaries and Coastal Waters, which is illustrated on **Figure 13.5: Published Landscape Character Areas (ES Volume II, Application Document Ref. 6.2)**.

13.4.29 MCA 22 extends from Newbiggin Point in the north (north of Newcastle upon Tyne) to Saltburn-by-the-Sea in the south (south of Redcar) and is described within the Seascape Character Assessment for North East, Inshore and Offshore marine plan areas (MMO1134).

13.4.30 The relevant key characteristics of MCA 22 as described within the seascape character assessment are:

- busiest coastal waters off the north-east coast of England, including shipping lanes to the two main ports, Port of Tyne and Teesport, as well as recreational boating areas;
- characterised by proximity to and views of an extensively developed lowland coast, and associated estuaries, rivers and shelving coastal waters;
- tidal rivers extend inland;

- brightly lit at night, particularly as a result of the large industrial area at Middlesbrough;
- relatively industrialised, with a rich heritage of mining, ship building and fishing, and many sections where sea defences or harbour walls provide coastal protection;
- stretches of sandy shore between settlements;
- harbours defended by walls, breakwaters and piers;
- ecologically diverse with internationally and national important habitats and rare species; and
- expansive views across the North Sea, including views of the moving turbines of the Teesside.

Local Planning Authority Landscape Character Assessment

13.4.31 Onshore, the 2km landscape study area is covered by three published Landscape Character Assessments, which are illustrated on **Figure 13.5: Published Landscape Character Areas (ES Volume II, Application Document Ref. 6.2)**:

- Stockton-on-Tees Landscape Character Assessment, which covers the area to the west of the study area and contains the East Billingham to Teesmouth Landscape Character Area (LCA) [Ref 35];
- Redcar and Cleveland Landscape Character Assessment, which covers the area to the east of the River Tees and contains the Redcar Flats LCA [Ref 35]; and
- Hartlepool Landscape Character Assessment, which covers the area north of Greatham Creek; and includes Coastal and Estuarine Landscape Character Types (LCT) [Ref 37], which are relevant to the Site.

13.4.32 The LCTs and LCAs defined in these published studies are listed for information only. They do not cover the whole extent of the study area and are too broad in their description of the baseline and in some cases combine areas of different sensitivities. Whilst these receptors have not been assessed, they have helped to inform the project specific LLCA defined by the Applicant, which are described below.

Local Landscape Character Areas

- 13.4.33 Whilst LLCAs defined at the district level are relatively consistent in scale, they are broad and are not sufficiently detailed to draw distinctions at the local level where permanent above ground infrastructure is proposed to be located.
- 13.4.34 Five LLCAs have been identified to provide a finer level of detail to inform the assessment of landscape effects. These LLCA, the location and extents of which are illustrated on **Figure 13.6: Project Specific Landscape Character Areas (ES Volume II, Application Document Ref. 6.2)**, have been defined through desk study and fieldwork surveys to detail existing landscape character at a more relevant and proportionate scale to the Proposed Development. The LLCA are not subdivisions of the published district LCAs. Baseline descriptions of each LLCA are provided in **Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.
- 13.4.35 Table 13.9 below sets out the landscape receptors that form the basis of the assessment of landscape effects.

Table 13.9 Landscape receptors

Landscape receptor	Value attached to landscape	Susceptibility to change	Sensitivity
LLCA 1 Tees Industry	Negligible	Negligible	Negligible
LLCA 2 Tees Urban/Residential	Low	High	Medium
LLCA 3 Tees Coast and Estuary	High	High	High
LLCA 4 Tees Wetlands	High	High	High
LLCA 5 Tees Farmland	Medium	High	High

Summary of landscape baseline

- 13.4.36 LLCA 1: Tees Industry, in which the Site is situated, covers most of the 2km landscape study area and is defined by large-scale, heavy industry within the Tees Estuary. The edges of the study area adjoin LLCA 2: Tees Urban/Residential which comprises primarily residential areas of Redcar to the east and Middlesbrough to the south. To the north along the coast lies LLCA 3: Tees Coast and Estuary which is described as low lying landscape of tidal beaches and estuarine water bodies with sand dunes, coastal grasslands, salt marshes, sand and mud flats. To the west of the Site lie areas of LLCA 4: Tees Wetlands which comprises a mosaic of local habitats including woodland, scrub, meadows and wet grassland, ponds, streams and ditches. This area is largely open to the public for recreation. To the far east and west within the study area lies LLCA 5: Tees Farmland which is characterised by small arable fields and pastures, some hedgerows, sparse tree cover and scattered farmsteads with sheds and farm buildings.

Visual baseline

Introduction

- 13.4.37 This section summarises the visual baseline identified within the study area through a review of Zone of Theoretical Visibility (ZTV) and through fieldwork surveys. Detailed descriptions of the baseline and likely visual effects are provided in **Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Zones of Theoretical Visibility

- 13.4.38 A bare-earth ZTV has been prepared to represent the worst-case scenario and this is presented in **Figure 13.7: Zone of Theoretical Visibility and Proposed Viewpoints (ES Volume II, Application Document Ref. 6.2)**. This ZTV has been used to help identify sensitive visual receptor groups and locate representative viewpoints.
- 13.4.39 Fieldwork surveys have shown that buildings as well as vegetation such as scrub, trees and hedges along field boundaries and private gardens which are not modelled into the ZTV, further reduce the extent of visibility indicated on the ZTVs.

Visual receptors and representative viewpoints

- 13.4.40 Visual receptors likely to experience views of the construction or operation of the Proposed Development were identified through interrogation of the ZTVs and fieldwork and they have been subsequently categorised into the following types:

- residential receptors: including local communities of Port Clarence to the south west of the Site, Cowpen Bewley to the north west as well as Seaton Carew and Hartlepool sea front to the north. There are also individual residential houses within the landscape; and
 - recreational receptors: including users of the National Cycle Network routes 1, 14 and 65, long distance paths including King Charles III England Coast Path and Teesdale Way and Tees Link, local PRoW's, Cowpen Bewley Woodland Park (Country Park), RSPB Saltholme, the coastline at North Gare and South Gare as well as Eston Nab local high point to the south of the Site.
- 13.4.41 Where a collection of visual receptors in the same category are located in close proximity and are likely to experience similar views, they have been grouped.
- 13.4.42 Representative viewpoints have been used to inform the assessment of visual effects. These viewpoints, which have been agreed with the local authorities, have been selected to represent a range of close, middle and long-distance views from various receptor groups including residents, recreational users and people travelling through the area.
- 13.4.43 This LVIA does not assess the potential impacts on views from within dwellings, which are a matter of private amenity. This is on the basis that it is an established planning principle that there is no right to a view. Further information is provided in **Appendix 13D: LVIA Methodology (ES Volume III, Application Document Ref. 6.3)**.
- 13.4.44 The value attached to views varies across the study area and is specific to each location. Value has been established when gathering the baseline data, independent of the nature or activity of the receptor and of the Proposed Development. There is some relationship between the value attached to the landscape and people's views of the landscape, and this is explained on a case-by-case basis in **Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**, which sets out in detail the baseline and assessment of effects relating to the visual receptors associated with each viewpoint. The location of these viewpoints is shown in **Figure 13.7: Zone of Theoretical Visibility and Proposed Viewpoints (ES Volume II, Application Document Ref. 6.2)**.

- 13.4.45 Annotated photographs of the existing baseline view are included for each representative viewpoint. Visualisations are presented for viewpoints 7 at RSPB Saltholme and 9 at South Gare. To show the maximum parameters of the Proposed Development wirelines of the Proposed Development have been prepared. Visualisations showing an indicative design have been prepared for the same viewpoints. Baseline photography and visualisations are shown on **Figures 13.8 - 13.17: Photosheets and Visualisations (ES Volume II, Application Document Ref. 6.2)**.

Overview of the visual baseline

- 13.4.46 This section provides an overview of the visual baseline as it relates to the various visual receptor groups identified within the study area.
- 13.4.47 The study area comprises a generally low lying topography with elevated areas at Cowpen Bewley Woodland Park and undulating landscape to the north west as well as Eston Nab to the south east. Therefore, views of tall industrial features such as industrial plant, power station, tall pylons and overhead powerlines, port cranes, stacks, oil storage and refinery, wind turbines as well as Able Seaton dry dock temporarily facilitating structures such as wind turbine towers and oil rigs within the Tees valley, Teesport area and along the coastline are highly visible across the landscape. Views from within the extensive urban areas are restricted due the urban built-up environment.
- 13.4.48 Visual receptors are located at the edge of coastal towns and settlements, along PRoW and cycle routes as well as on land with public access such as Cowpen Bewley Woodland Park, Eston Nab and RSPB Saltholme.

Summary of visual baseline

- 13.4.49 This section provides a summary of the extent and character of views and visual amenity across the study area, determined through desk study and fieldwork. Table 13.10 below sets out the visual receptors that will form the basis of the assessment of visual effects.

Table 13.10 Representative viewpoints and visual receptors

Representative viewpoint	Associated visual receptor groups	Value attached to views
1 Hartlepool seafront	Residents of local communities	High
1 Hartlepool seafront	Recreational	High
2 Seaton Carew, Seaton Sands	Residents of local communities	Medium
2 Seaton Carew, Seaton Sands	Recreational	Medium

Representative viewpoint	Associated visual receptor groups	Value attached to views
3 North Gare Sands	Recreational	Medium
4 Seal Sands car park, hide	Recreational	Low
5 Cowpen Bewley Woodland Park	Recreational	Medium
6 Cowpen Bewley	Residents of local communities	Medium
6 Cowpen Bewley	Recreational	Medium
7 Saltholme RSPB	Recreational	Medium
8 Port Clarence	Residents of local communities	Medium
8 Port Clarence	Recreational	Medium
9 South Gare	Recreational	High
10 Eston Nab	Recreational	High

Future baseline

13.4.50 In the absence of the Proposed Development, the local area is likely to be subject to continued major industrial development due to the strategic location adjacent to the Tees Estuary and the long-established infrastructure which facilitates the dominant industrial land uses. Permitted development which is assumed to form part of the future baseline, and which in full or in parts is of a similar nature or scale to the Proposed Development include:

- Net Zero Teesside Development (application reference: EN010103);
- Foundry Data Centre (application reference: R/2025/0382/ESM);
- Teesside Green Hydrogen (application reference: R/2025/0712/FFM);
- Orsted, South Bank, Teesworks (application reference: R/2025/0607/RMM); and
- York Potash Ltd (application reference: TR030002) / The Woodsmith Project (application reference: R/2024/0098/ESM);

13.4.51 The Proposed Development together with the consented schemes listed above would reinforce the heavy industrial character of this area.

- 13.4.52 The Stockton-on-Tees Local Plan 2019 has identified land at Seal Sands including the areas within the Site as Specialist Use Locations and Specialist Employment Allocations (Policy SD4 and Policy EG4 within the Stockton-on-Tees Local Plan [Ref 12]), which will likely see existing industrial land uses become more intensive. Within Policy SD4 (Economic Growth) the *“Seal Sands, North Tees and Billingham Chemical Complex areas are the main growth locations for hazardous installations including liquid and gas processing; bio-fuels and biorefineries; chemical processing; resource recovery and waste treatment; energy generation; carbon capture and storage; and other activities...”*. *“To safeguard the specialist nature of this area general employment development, which is unrelated to the main cluster, will not be encouraged.”*
- 13.4.53 The numerous statutory ecological designations in the estuary provide a key constraint to new development so it is expected that the expanses of wetland in and around the estuary will be sensitivity managed and retain the same form and character.
- 13.4.54 For the purposes of the LVIA, the future baseline scenario will assume that all permitted schemes within the Specialist Use Locations and the Specialist Employment Allocations in the Stockton-on-Tees Local Plan are fully built out during the operational phase of the Proposed Development.

13.5 Development design and impact avoidance

- 13.5.1 The most effective mitigation for adverse landscape and visual effects is to avoid impacts at source as part of the design process. All landscape mitigation is therefore considered embedded. Embedded mitigations include modifications to the design of a scheme, made during the pre-application phase, which are an inherent part of the design and do not require additional action to be taken.
- 13.5.2 Due to the functional and operational requirements of the Proposed Development as well as the scale of the built structures there is limited scope for avoidance of impacts on landscape and visual receptors through the design. Nevertheless, a design concept has been developed by an architect and design matters have been addressed through a **Design Approach Document (Application Document Ref. 6.5)** that has been prepared to accompany the DCO application. Some points for construction and operation have been listed below.

Construction

- 13.5.3 The **Framework Construction Environmental Management Plan (fCEMP) (Appendix 5A, ES Volume III, Application Document Ref. 6.3)** details the general construction measures that would be implemented during construction of the Proposed Development to mitigate temporary effects. Preparation of a detailed CEMP(s) is secured by a Requirement in Schedule 2 of the **Draft DCO (Application Document Ref. 3.1)**.
- 13.5.4 **Appendix 13C: Framework Lighting Strategy (ES Volume III, Application Document Ref. 6.3)** sets out construction lighting requirements and confirms that lighting will be designed to include shielded and directional luminaires to limit the amount of light spill. Preparation of a detailed lighting strategy is secured by a Requirement in Schedule 2 of the **Draft DCO (Application Document Ref. 3.1)**.

Operation

- 13.5.5 The **Design Approach Document (Application Document Ref. 6.5)** details the use of cladding and finishing materials used for the components of the Proposed Development. The Proposed Development would use visually recessive, non-reflective colours of white and light grey to reduce their visual prominence and to blend in with surrounding industrial features.
- 13.5.6 The maximum parameters for the largest components of the Proposed Development as set out in Table 4.1 of **Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1)** and are secured by the Schedule 2 (Requirements) of the **draft DCO (Application Document Ref. 3.1)**, which also includes a Requirement in Schedule 2 that requires design details including external appearance, colours, materials and finishes to be submitted and approved prior to construction.
- 13.5.7 **Appendix 13C: Framework Lighting Strategy (ES Volume III, Application Document Ref. 6.3)** describes how the operational lighting design will create a safe working environment whilst conserving energy and minimising obtrusive light. This is secured as set out at paragraph 13.5.4.
- 13.5.8 There are also no nearby visual receptors. Planting would not be effective in screening the proposed stacks, columns and tall buildings in medium to long distance views due to their scale. Therefore, no planting is proposed to reduce the landscape and visual effects.

13.6 Likely impacts and effects of the Proposed Development

- 13.6.1 This section presents a summary of the assessment of likely significant effects on landscape and visual amenity resulting from the construction, operation and maintenance of the Proposed Development. A full description of the Proposed Development is provided in **Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1)**. A detailed assessment of all landscape and visual effects, including those that are considered not significant, are reported in **Appendix 13A: Landscape Baseline and Effects** and **Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3)** respectively.
- 13.6.2 The likely significant effects of the Proposed Development have been identified taking into account the embedded design mitigation and control measures. The design incorporates findings from completed surveys and stakeholder engagement carried out in preparation of the LVIA.

Landscape impacts and effects

Potential landscape impacts of construction

- 13.6.3 Impacts on the landscape during construction of the Proposed Development are likely to include the following:
- Site clearance including vegetation removal;
 - establishment of temporary site compound including materials storage, plant and machinery, site office, welfare facilities and parking;
 - earthworks and soil movement, including excavations, grading and reprofiling, and stockpiling of materials;
 - movement and presence of Heavy Goods Vehicles (HGVs) and marine vessels, deliveries and transportation of materials and associated construction traffic and activity in and around the Site;
 - movement and presence of tall cranes;
 - construction of new buildings, process plants and equipment for the Sustainable Aviation Fuel (SAF) Production Facility and Combined Heat and Power (CHP) plant, including the use of piling equipment, cranes, and temporary scaffolding;
 - installation of utility connection corridors, including some above ground pipework;
 - demolition of existing jetties and construction of a new quay; and

- temporary lighting to facilitate nighttime working and as required for security.
- 13.6.4 The overall construction and commissioning period would be approximately 3-4 years in duration, from 2028 to 2031.

Summary of landscape effects of construction

- 13.6.5 The following section provides a summary of the landscape effects that would result from the construction of the Proposed Development.
- 13.6.6 Due to the presence of the existing heavy industry within the Tees Valley, all effects during the construction phase have been judged as **not significant** for all landscape receptors.
- 13.6.7 As the host LLCA 1: Tees Industry would receive a medium magnitude of impact as a result of the intensity and dynamic, temporary, short-term and reversible construction activity within the LLCA. Combined with the negligible sensitivity of this receptor, the level of effect on the character of the whole LLCA is predicted to be **minor adverse (not significant)**.
- 13.6.8 All other landscape receptors will experience **minor adverse (not significant)** effects from construction of the Proposed Development as they are located at distance from the construction activities and due to the existing industrial context of the Tees Valley. See **Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3)** for a detailed assessment of the effects on the landscape receptors.
- 13.6.9 Table 13.11 provides a summary of the assessment of the landscape effects during construction. A detailed assessment of all landscape effects is reported in **Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Table 13.11 Summary of landscape effects of construction

Landscape receptor	Sensitivity	Magnitude of impact	Significance of effect
LLCA 1: Tees Industry	Negligible	Medium	Minor adverse (not significant)
LLCA 2: Tees Urban/Residential	Medium	Negligible	Minor adverse (not significant)
LLCA 3: Tees Coast and Estuary	High	Negligible	Minor adverse (not significant)
LLCA 4: Tees Wetlands	High	Negligible	Minor adverse (not significant)
LLCA 5: Tees Farmland	High	Negligible	Minor adverse (not significant)

Potential landscape impacts during operation

13.6.10 Impacts on the landscape during the operation of the Proposed Development are likely to include the following:

- change of use from hardstanding, grassland and scrub to heavy industry with ancillary structures and elements including associated parking, access roads, and security fencing;
- presence of new built form, process plants and equipment for the SAF Production Facility and CHP plant within the Main Site and associated structures and infrastructure;
- additional above ground pipes and cables within existing pipeline corridors;
- presence of a new quay and moored vessels;
- presence of Continuous Ship Unloaders (CSU) and cranes;
- presence of other associated features, such as administration buildings, kiosks, welfare facilities, vehicle parking and laydown areas, drainage; and
- new hard landscaping.

- 13.6.11 Regarding visible plume, it is concluded within **Annex C of Appendix 8B: Assessment of Construction Phase Effects (ES Volume III, Application Document Ref. 6.3)** of the air quality assessment that there will be no visible plume from the stacks. However, there is potential for visible plumes to occur from the cooling towers. The plume modelling results for the cooling tower indicate *“that the average predicted plume lengths are between 40 – 61m long, and that the percentage of the time when visible plumes would go beyond the Main Site boundary is less than 10%”* (refer to **Annex C of Appendix 8B: Assessment of Construction Phase Effects (ES Volume III, Application Document Ref. 6.3)**). At the scale of the Site and the context of the surrounding heavy industry within the Tees Estuary the potential plume from the cooling towers is not considered to be relevant for the assessment due to its relative short length and limited occurrence.
- 13.6.12 For details of the Proposed Development refer to **Chapter 4: Proposed Development (ES Volume I, Application Document Ref. 6.1)**, with the design parameters set out under Section 4.5 and presented in Table 4.1.

Summary of landscape effects during operation

- 13.6.13 This section provides a summary of the landscape effects that would result from the Proposed Development during operation.
- 13.6.14 Due to the presence of the existing heavy industry within the Tees Valley, all effects during the operational period have been judged as **not significant** for all landscape receptors.
- 13.6.15 As the host LLCA 1: Tees Industry would receive a medium magnitude of impact during operation as the Proposed Development would be integrated within a landscape which is defined by existing heavy industry of a similar scale and appearance. The change to the landscape would be a long-term and reversible. Combined with the negligible sensitivity of this receptor, the level of effect on the character of the whole LLCA is predicted to be **minor adverse** and therefore **not significant**.
- 13.6.16 During operation of the Proposed Development, all other landscape receptors will experience a minor adverse effect which is considered **not significant** as they are located at distance from the Site and due to the existing industrial context of the Tees Valley.
- 13.6.17 Table 13.12 provides a summary of the assessment of the landscape effects during operation. A detailed assessment of all landscape effects is reported in **Appendix 13A: Landscape Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Table 13.12 Summary of landscape effects during operation

Landscape receptor	Sensitivity	Magnitude of impact	Significance of effect
LLCA 1: Tees Industry	Negligible	Medium	Minor adverse (not significant)
LLCA 2: Tees Urban/Residential	Medium	Negligible	Minor adverse (not significant)
LLCA 3: Tees Coast and Estuary	High	Negligible	Minor adverse (not significant)
LLCA 4: Tees Wetlands	High	Negligible	Minor adverse (not significant)
LLCA 5: Tees Farmland	High	Negligible	Minor adverse (not significant)

Visual impacts and effects

Potential visual impacts of construction

- 13.6.18 The sources of impact on visual receptors during construction of the Proposed Development are the same as those identified for landscape, described in paragraphs 13.6.3 and 13.6.4 above.

Summary of visual effects of construction

- 13.6.19 The following section provides a summary of the visual effects that would result from the construction of the Proposed Development.
- 13.6.20 Recreational visual receptors relating to Saltholme RSPB (VP7) are predicted to experience a medium magnitude of impact as the construction works associated with the Proposed Development would affect a noticeable proportion of the panoramic view at relatively close proximity of the receptor. However, the works would be seen in the context of existing large-scale heavy industry surrounding the Site within the Tees Estuary. Combined with the high sensitivity of these receptors, the level of effect on recreational receptors at this location is predicted to be **moderate adverse** and therefore presents a **significant** effect.
- 13.6.21 Recreational visual receptors relating to Seal Sands (Viewpoint (VP) 4) are predicted to experience a medium magnitude of impact during construction. Construction works would be seen in the background of views in the context of extensive, existing large-scale heavy industry surrounding the Site within the Tees Estuary. The level of effect on recreational receptors at this location is predicted to be **minor adverse** and therefore **not significant**.

- 13.6.22 Residential receptors at Hartlepool (VP1) and Seaton Carew (VP2) would experience a negligible impact due to the distance of the construction of the Proposed Development. Residential receptors at Cowpen Bewley (VP6) would experience a negligible impact due to the very small proportion of the view affected and the context of the existing electricity pylons and overhead powerlines in the midground and large-scale heavy industry within the Tees Estuary. Combined with the high sensitivity of these receptors, the level of effect on the residents is predicted to be **minor adverse** and therefore **not significant**.
- 13.6.23 Port Clarence (VP8) would experience a low magnitude of impact as the construction works associated with the Proposed Development would affect a small proportion of the view and be seen in the context of the existing electricity pylons and overhead powerlines as well as the large-scale heavy industry within the Tees Estuary. Combined with the high sensitivity of these receptors, the level of effect on the residents is predicted to be **minor adverse** and therefore **not significant**.
- 13.6.24 All other visual receptors would experience a minor adverse effect resulting from construction, and therefore not significant, due to the distance from the construction activities within the Site and the visual context of the existing large-scale heavy industry within the Tees Estuary. The level of effect on these recreational receptors has been assessed as **minor adverse** and therefore **not significant**.
- 13.6.25 Table 13.13 provides a summary of the assessment of the visual effects during construction. A detailed assessment of all visual effects is reported in **Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Table 13.13 Summary of visual effects of construction (significant effects shown in bold)

Visual receptor group	Visual receptor group type	Sensitivity	Magnitude of impact	Significance of effect
VP1: Hartlepool seafront, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)
VP1: Hartlepool seafront, recreational	Recreational	High	Negligible	Minor adverse (not significant)
VP2: Seaton Carew, Seaton Sands, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)

Visual receptor group	Visual receptor group type	Sensitivity	Magnitude of impact	Significance of effect
VP2: Seaton Carew, Seaton Sands, recreational	Recreational	High	Negligible	Minor adverse (not significant)
VP3: North Gare Sands	Recreational	High	Negligible	Minor adverse (not significant)
VP4: Seal Sands car park, hide	Recreational	Medium	Medium	Minor adverse (not significant)
VP5: Cowpen Bewley Woodland Park	Recreational	High	Negligible	Minor adverse (not significant)
VP6: Cowpen Bewley, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)
VP6: Cowpen Bewley, recreational	Recreational	Medium	Negligible	Minor adverse (not significant)
VP7: Saltholme RSPB	Recreational	High	Medium	Moderate adverse (significant)
VP8: Port Clarence, residential	Residents of local communities	High	Low	Minor adverse (not significant)
VP8: Port Clarence, recreational	Recreational	Medium	Low	Minor adverse (not significant)
VP9: South Gare	Recreational	High	Negligible	Minor adverse (not significant)
VP10: Eston Nab	Recreational	High	Negligible	Minor adverse (not significant)

Potential visual impacts during operation

13.6.26 Impacts on visual receptors during operation of the Proposed Development are likely to include changes to views and visual amenity as a result of the same impacts identified for landscape, described in paragraph 13.6.10 above.

13.6.27 Regarding visible plume, see paragraph 13.6.11 above.

- 13.6.28 There are a small number of existing stacks with visible flares within the Tees Estuary. The proposed flare structures within the Main Site are anticipated to show a visible flare for multiple days during start-up and shut-down operations, during annual routine maintenance and in emergency situations. There will be no visible flare during normal operation of the Site. As the flare will only be visible for a short period of time during a year, it will not change the magnitude of impact on the visual receptors reported in this assessment.

Summary of visual effects during operation

- 13.6.29 The following section provides a summary of the visual effects that would result from the operation of the Proposed Development.
- 13.6.30 Recreational visual receptors relating Saltholme RSPB (VP7) are predicted to experience a medium magnitude of impact during operation as the Proposed Development would affect a noticeable proportion of the panoramic view at relatively close proximity to the receptor. However, the Proposed Development would be seen in context of existing large-scale heavy industry surrounding the Site within the Tees Estuary. Combined with the high sensitivity of these receptors, the level of effect on recreational receptors at this location is predicted to be **moderate adverse** and therefore presents a **significant** effect.
- 13.6.31 Recreational visual receptors relating to Seal Sands (VP4) are predicted to experience medium of impacts during operation. The Proposed Development would be assimilated within a skyline of existing large-scale heavy industry surrounding the Site within the Tees Estuary with low-level parts substantially screened. The level of effect on recreational receptors at this location is predicted to be **minor adverse**, which is **not significant**.
- 13.6.32 Residential receptors at Hartlepool (VP1) and Seaton Carew (VP2) would experience a negligible impact due to the distance from the Proposed Development. Residential receptors at Cowpen Bewley (VP6) would experience a negligible impact due to the very small proportion of the view affected and the context of the existing electricity pylons and overhead powerlines in the midground and large-scale heavy industry within the Tees Estuary. Combined with the high sensitivity of these receptors, the level of effect on the residents is predicted to be **minor adverse** and therefore **not significant**.

13.6.33 Port Clarence (VP8) would experience a low magnitude of impact during operation as the Proposed Development would affect a small proportion of the view and be seen in the context of the existing electricity pylons and overhead powerlines, as well as the large-scale heavy industry within the Tees Estuary. Combined with the high sensitivity of these receptors, the low level of effect on the residents is predicted to be **minor adverse** and therefore **not significant**.

13.6.34 During operation, all other visual receptors would experience a negligible magnitude of impact and therefore only a **minor adverse, not significant** effect due to distance from the operation activities within the Site and the visual context of the existing large-scale heavy industry within the Tees Estuary. Table 13.14 provides a summary of the assessment of the visual effects during operation. A detailed assessment of all visual effects is reported in **Appendix 13B: Visual Baseline and Effects (ES Volume III, Application Document Ref. 6.3)**.

Table 13.14 Summary of visual effects during operation (significant effects shown in bold)

Visual receptor group	Visual receptor group type	Sensitivity	Magnitude of impact	Significance of effect
VP1: Hartlepool seafront, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)
VP1: Hartlepool seafront, recreational	Recreational	High	Negligible	Minor adverse (not significant)
VP2: Seaton Carew, Seaton Sands, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)
VP2: Seaton Carew, Seaton Sands, recreational	Recreational	High	Negligible	Minor adverse (not significant)
VP3: North Gare Sands	Recreational	High	Negligible	Minor adverse (not significant)
VP4: Seal Sands car park, hide	Recreational	Medium	Medium	Minor adverse (not significant)
VP5: Cowpen Bewley Woodland Park	Recreational	High	Negligible	Minor adverse (not significant)
VP6: Cowpen Bewley, residential	Residents of local communities	High	Negligible	Minor adverse (not significant)
VP6: Cowpen Bewley, recreational	Recreational	Medium	Negligible	Minor adverse (not significant)

Visual receptor group	Visual receptor group type	Sensitivity	Magnitude of impact	Significance of effect
VP7: Saltholme RSPB	Recreational	High	Medium	Moderate adverse (significant)
VP8: Port Clarence, residential	Residents of local communities	High	Low	Minor adverse (not significant)
VP8: Port Clarence, recreational	Recreational	Medium	Low	Minor adverse (not significant)
VP9: South Gare	Recreational	High	Negligible	Minor adverse (not significant)
VP10: Eston Nab	Recreational	High	Negligible	Minor adverse (not significant)

13.7 Mitigation and enhancement measures

Construction phase

- 13.7.1 Due to the scale of the Proposed Development, additional planting and bunding would not be effective in mitigating landscape or visual effects during the construction phase. Therefore, no proposals for further mitigation measures are recommended.

Operational phase

- 13.7.2 Due to the scale of the Proposed Development, additional planting would not be effective in further mitigating landscape or visual effects during the operational phase. Therefore, no proposals for further mitigation measures are recommended.

13.8 Residual effects and conclusions

- 13.8.1 The mitigation measures described in Section 13.5 have been embedded into the design of the Proposed Development to reduce the likely landscape and visual effects. No additional mitigation is likely to materially reduce the effects of the construction and operational phases on landscape and visual receptors. Therefore, residual effects for all landscape and visual receptors are the same as those reported in Section 13.6 of this chapter.

13.9 Summary of significant effects

- 13.9.1 Summaries of the potential significant effects associated with the construction and operation of the Proposed Development are presented in Table 13.15 and Table 13.16, respectively.
- 13.9.2 No significant landscape effects were identified during construction and operation of the Proposed Development.
- 13.9.3 Only visual receptors at Viewpoint 7 RSPB Saltholme would receive moderate adverse effects during construction and operation of the Proposed Development.

Table 13.15 Summary of significant landscape and visual effects during construction

Potential Impact	Receptor	Importance (Sensitivity)	Magnitude of Impacts	Likely Significant Effects	Proposed Mitigation	Residual Effects
Landscape character						
No significant effects identified						
Visual amenity						
Loss of openess, Introduction of large scale construction works in views	VP7: Saltholme RSPB	High	Medium	Moderate adverse (significant)	n/a	Moderate adverse (significant)

Table 13.16 Summary of significant landscape and visual effects during operation

Potential Impact	Receptor	Sensitivity	Magnitude of Impacts	Likely Significant Effects	Proposed Mitigation	Residual Effects
Landscape character						
No significant effects identified						
Visual amenity						
Loss of openess, Introduction of new large scale industrial structures (such as stacks and flare structures, large scale buildings and columns) in views	VP7: Saltholme RSPB	High	Medium	Moderate adverse (significant)	n/a	Moderate adverse (significant)

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