

# Immingham Green Energy Terminal

Environmental Impact Assessment

Preliminary Environmental Information Report

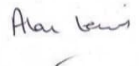
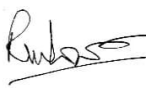
Volume II – Main Report

Chapter 13: Landscape and Visual Impact

Associated British Ports



## Document History

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## 13 Landscape and Visual Impact

### 13.1 Introduction

13.1.1 This chapter presents the preliminary findings of the assessment of the likely effects of the Project on landscape/ seascape character (as a resource in its own right) and visual amenity.

13.1.2 There may be interrelationships related to the potential effects on landscape and visual impacts and other disciplines. Therefore, also refer to the following chapters:

a. **Chapter 8: Terrestrial Ecology**

13.1.3 This chapter is supported by the following figures and appendices:

*Figures*

- a. **Figure 13.1:** Project Location and Study Area (PEI Report, Volume III).
- b. **Figure 13.2:** Zone of Theoretical Visibility – Bare Earth (PEI Report, Volume III).
- c. **Figure 13.3:** Zone of Theoretical Visibility – Visual Screening (PEI Report, Volume III).
- d. **Figure 13.4:** Landscape Character Areas – National and Regional (PEI Report, Volume III).
- e. **Figure 13.5:** Landscape Character Areas – Local (PEI Report, Volume III).
- f. **Figure 13.6:** Designations (PEI Report, Volume III).
- g. **Figure 13.7:** Viewpoint Locations (PEI Report, Volume III).
- h. **Figure 13.8.1 - 13.8.10:** Viewpoint Photographs (PEI Report, Volume III).

*Appendix*

- a. **Appendix 13.A** Landscape and Visual Proposed Methodology (PEI Report, Volume IV)

### 13.2 Approach to Assessment

#### **Scope and Methods**

13.2.1 A scoping exercise was undertaken in August 2022 to establish the form and nature of the landscape/ seascape and visual impact assessment, and the approach and methods to be followed.

13.2.2 The Scoping Report (**Appendix 1.A** of PEI Report Volume IV) records the findings of the scoping exercise and details the technical guidance, standards, best practice and criteria being applied in the assessment to identify and evaluate the likely significant effects of the Project on landscape/ seascape character and visual amenity.

13.2.3 Having regard to the information presented within the Scoping Report (**Appendix 1.A** of PEI Report Volume IV), the Planning Inspectorate's Scoping Opinion

(**Appendix 1.B** of the PEI Report Volume IV) states that the Planning Inspectorate disagrees that significant effects on landscape character and visual amenity during operation are unlikely. Accordingly, this matter is to be scoped back in for consideration in the Environmental Statement (ES); therefore, there are no identified elements to be scoped out of the assessment on landscape and visual impact.

13.2.4 **Table 13.1** summarises the consultation undertaken to date for landscape and visual impact, as well as where comments have been addressed within the chapter.

**Table 13.1: Scoping Opinion comments on landscape/ seascape and visual impact assessment**

Consultee	Summary of Response	How comments have been addressed in this chapter
Planning Inspectorate	<p>The Scoping Report seeks to scope out this matter on the grounds that because of the existing industrial character of the area and the immediate surrounding area, landscape and seascape effects during the operational phase would be insignificant. The Inspectorate does not agree that this matter can be scoped out of further assessment and advises the Applicant to provide a comprehensive project description in the ES which includes the maximum dimensions of all the structures associated with the Proposed Development and visual representations to give the Examining Authority confidence that no significant environmental effects would arise.</p>	<p>Noted: will be included within the assessment</p>
	<p>Design measures to reduce the landscape and visual impacts of the Proposed Development are to be considered, such as lighting design. The ES should include a night-time character assessment prepared in co-ordination with a lighting assessment, demonstrating how the lighting design has been developed to minimise impacts.</p>	<p>A lighting assessment will be undertaken and included in the ES.</p>
	<p>The ES should include photomontages from representative viewpoints to support the visual impact assessment, including from Immingham Town. Photomontages should be prepared in line with relevant Landscape Institute guidance and viewpoints should be agreed with consultation bodies where possible.</p>	<p>Noted: Consultation will be undertaken to identify viewpoints. Photomontages will be prepared and included in the ES.</p>
Natural England	<p>Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography.</p>	<p>Noted. This will be included in the landscape and visual assessment of the ES.</p>

Consultee	Summary of Response	How comments have been addressed in this chapter
	<p>The England Coast Path (ECP) is a new National Trail that will extend around all of England's coast with an associated margin of land predominantly seawards of this, for the public to access and enjoy. Natural England takes great care in considering the interests of both land owners/occupiers and users of the ECP, aiming to strike a fair balance when working to open a new stretch. We follow an approach set out in the approved Coastal Access Scheme and all proposals have to be approved by the Secretary of State. We would encourage any proposed development to include provision for the England Coast Path, where appropriate, to maximise the benefits this can bring to the area. This should not be to the detriment of nature conservation, historic environment, landscape character or affect natural coastal change. Consideration for how best this could be achieved should be made within the Environmental Statement.</p>	<p>Noted. This will be considered with the landscape enhancement plan and all environmental factors considered.</p>

### 13.3 Legislation, Policy and Guidance

13.3.1 **Table 13.2** presents the legislation, policy and guidance relevant to the landscape/ seascape and visual impact assessment and details how their requirements will be met by the Project.

**Table 13.2: Relevant legislation, policy and guidance regarding the landscape/seascape and visual impact assessment**

Legislation/ Policy/ Guidance	Consideration within the PEI Report
<b>European Landscape Convention (ELC)</b> (Ref 13-1)	
<p>The ELC recognises landscape in law. It focuses specifically on landscape issues and highlights the importance of integration of landscape into areas of policy to promote protection, management and planning of all landscapes including the assessment of landscape and analysis of landscape change.</p>	<p>The assessment aims to comply with the overarching aims of the ELC and considers relevant policies. These policies are outlined within this table. Landscape change is assessed using the landscape and visual baseline as described with <b>Section 13.5</b>.</p>
<b>National Policy Statement for Ports (NPSfP)</b> (Ref 13-2)	
<p>This is a National Policy Statement for Ports (NPSfP) and provides the framework for decisions on proposals for new port development. The Project is considered to be a Nationally Significant Infrastructure Project (NSIP) within the ports industry.</p> <p>Section 5.11.3 sets out that a landscape and visual assessment should be undertaken and reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project. The assessment should take into account any relevant policies based on these assessments in local development documents.</p> <p>Section 5.11.4 states that the effects during construction on the project and the effects of the completed development and its operation components and landscape character should be included.</p> <p>Section 5.11.5 states that the visibility and conspicuousness of the project during construction and the presence and operation of the project and potential impacts on views and visual amenity. This should include any light pollution effects including on local amenity, rural tranquility and nature conservation.</p>	<p>Published national, regional, and local landscape and seascape character assessments have assisted to determine the landscape baseline and the Project is being assessed against the existing landscape context in terms of landscape character. The published character assessments are included in <b>Section 13.3</b>.</p> <p>The assessment considers the landscape and visual impacts of the Project during its construction and operation.</p>
<b>The National Planning Policy Framework</b> (Ref 13-3)	
<p>The revised National Planning Policy Framework (NPPF) was published in July 2021 and includes policies that ensure that these types of developments are:</p>	<p>The NPPF sets out national planning policies that reflect priorities of the Government for operation of the planning system</p>



Legislation/ Policy/ Guidance	Consideration within the PEI Report
<p><i>‘sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change’.</i></p> <p><b>Policy 15:</b> Conserving and enhancing the natural environment recognises that the environment should be enhanced by:</p> <ul style="list-style-type: none"> <li>a) <i>‘protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);</i></li> <li>b) <i>recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;</i></li> <li>c) <i>maintaining the character of the undeveloped coast, while improving public access to it where appropriate;</i></li> <li>d) <i>minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;</i></li> <li>e) <i>preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and</i></li> <li>f) <i>remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate’.</i></li> </ul>	<p>and the economic, social, and environmental aspects of the development and use of land.</p> <p>The NPPF has a strong emphasis on sustainable development, with a presumption in favour of such development.</p> <p><b>Section 13.3</b> outlines the published national, regional, and local landscape and seascape character assessments that have assisted to determine the landscape and seascape baseline.</p> <p><b>Section 13.8</b> describes the likely effects of The Project against the existing landscape context in terms of landscape character.</p>
<p><b>The National Planning Practice Guidance (NPPG): National Design Guide (Ref 13-4)</b></p>	
<p>NPPG paragraphs 52 and 53 outline the requirement to consider and respond to existing local character and identity.</p> <p>The guidance states that development should consider characteristics of local built form, height, scale, massing and relationships between buildings. Proposals should also consider the scale and proportions of new buildings within the existing landscape context.</p>	<p>This guidance has been taken into account in <b>Section 13.7</b> when defining the Project design and proposed mitigation measures.</p>
<p><b>North Lincolnshire Local Plan Publication Draft Addendum Plan (Ref 13-5)</b></p>	
<p>The following Policies are relevant to the Project:</p> <p><b>DQE1</b> – Protection of landscape, townscape and views requires that development proposals do not cause unacceptable harm and protect the distinctive character and quality of the landscape. Development proposals should also take account of, views in to and out of development areas and preserve local views and vistas.</p>	<p>The assessment considers landscape character and considers the effects of the Project on views.</p> <p><b>Section 13.7</b> describes the mitigation approach and considers</p>

Legislation/ Policy/ Guidance	Consideration within the PEI Report
<p><b>DQE12</b> – Protection of Trees, Woodland and Hedgerows states that trees, woodland, and hedgerows will be retained and protected, and planting schemes will be required to accompany applications for development.</p>	<p>the requirement to protect and retain existing trees, woodland and hedgerows located within the Site boundary.</p>
<p><b>North East Lincolnshire Local Plan (adopted March 2018)</b> (Ref 13-6)</p>	
<p>The following Policies are relevant to the Project:</p> <p><b>Policy 22</b> - Good design in new developments, outlines North East Lincolnshire County's (NELC) expectations in terms of the design approach for new development. The policy states the requirement for thorough consideration of the site's context, informed by the relevant published landscape character assessments and design guidance for NELC.</p> <p><b>Policy 42</b> - Landscape states the requirement to refer to the published landscape character assessment to determine the local context of the proposed development. It states the requirement for a proportional and site-specific landscape appraisal.</p> <p>It also identifies the requirement for responsive design and mitigation by incorporating landscape buffers by way of suitable landscape planting if appropriate.</p>	<p><b>Section 13.8</b> considers the published landscape character assessment and the landscape context in which the Project is to be located.</p>
<p><b>East Riding Local Plan</b> (Ref 13-7)</p>	
<p>The following Policy is relevant to the Project:</p> <p><b>Policy ENV2:</b> Promoting a high quality landscape</p> <p><i>“Development proposals should be sensitively integrated into the existing landscape, demonstrate an understanding of the intrinsic qualities of the landscape setting and, where possible, seek to make the most of the opportunities to protect and enhance landscape characteristics and features. To achieve this, development should:</i></p> <p><i>Protect and enhance views across valued landscape features, including flood meadows, chalk grassland, lowland heath, mudflats and salt marsh, sand dunes and chalk cliffs.”</i></p>	<p>Views from the East Riding of Yorkshire administrative boundary are considered as part of the assessment at Viewpoint 1 and included within <b>Table 13.4</b>.</p>
<p><b>The North Lincolnshire Local Development Framework Development Plan Documents (DPDs) – Core Strategy (adopted June 2011)</b> (Ref 13-8)</p>	
<p>The following Policies are relevant to the Project.</p> <p><b>Policy CS5</b> - Delivering quality design in North Lincolnshire notes that all new design in North Lincolnshire should be well designed and appropriate for its context. It notes that developments should incorporate appropriate landscaping and planting that enhances biodiversity and contributes to green infrastructure.</p> <p><b>Policy CS12</b> - Biodiversity and landscape character of the Humber Estuary should be protected and enhanced by harmonising the landscape with port related development activities. The policy</p>	<p><b>Section 13.3</b> considers the surrounding landscape context through the use of published landscape character assessments. <b>Section 13.7</b> describes the mitigation approach and considers the requirement to protect and retain existing trees, woodland and hedgerows located within the Site boundary and</p>

Legislation/ Policy/ Guidance	Consideration within the PEI Report
states that the South Humber Gateway Conservation Mitigation Strategy Delivery Plan will develop new green infrastructure directly linked to the Green Infrastructure Strategy for North Lincolnshire.	summarises how these have been addressed in the Project design (this will be considered in more detail in the ES).

## 13.4 Assessment Scope

13.4.1 The methodology used within this assessment is set out within **Appendix 13.A** (PEI Report, Volume IV).

13.4.2 The LVIA has been undertaken taking into account the following best practice guidance:

- a. Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition. (GLVIA3) (Ref 13-9).
- b. Landscape Institute (2019). Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals. (Ref 13-10).
- c. Landscape Institute (2021). Assessing landscape value outside national designations, Technical Guidance Note 02/21. (Ref 13-11).
- d. Landscape Institute (2020). Infrastructure, Technical Guidance Note 04/2020 Limitations and Assumptions. (Ref 13-12).

13.4.3 In the Landscape and Visual Impact Assessment (LVIA), effects are formulated as a function of the value, susceptibility and sensitivity of the receptor, and the nature of effect/magnitude of impact (or change) predicted. A combination of professional judgement, defined thresholds, established criteria and standards will be used in their definition.

The identification of effect significance typically requires the application of professional judgement; however, the overarching significance matrix used in the EIA is shown in **Table 5.3 in Chapter 5: EIA Approach** and provides a guide for that process. For the purpose of the LVIA, effects which are major are significant, effects which are moderate may be significant/non-significant based on reasoned explanation/judgement and effects which are minor or negligible are non-significant.

### Study Area

13.4.4 The extent of the study area is determined by the potential visibility of the Project in the surrounding landscape and is proportionate to the size and scale of the proposals and nature of the surrounding landscape. Guidance GLVIA3 (Ref 13-9) states that the study area should include *'the full extent of the wider landscape around it which the Proposed Development may influence in a significant manner'*.

13.4.5 For the purposes of this LVIA, the study area has been defined by a combination of Zone of Theoretical Visibility (ZTV) analysis and professional judgement. The

ZTV was produced on a worse-case scenario with the largest element (in terms of massing) of the Project being the ammonia storage tank (up to 45m above ground level (AGL)). Heights of structures were taken from confirmed information at the time of assessment. A study area of 2.5km was identified within the Scoping Report (**Appendix 1.A** of PEI Report Volume IV), however, this has been increased to 3km to include locations on the north-coast of the Humber Estuary within the East Riding of Yorkshire. It is considered that views from locations further than 3km are unlikely to result in significant effects. Viewpoint 10 was added as requested by North Lincolnshire Council (NLC) which represents views from the England Coast Path – this viewpoint falls outside the defined study area (refer to **Paragraph 13.1.13**).

### Use of Rochdale Envelope

- 13.4.6 The Project is subject to on-going design to allow for choice of technology, dimensions and configuration of structures. Therefore, the LVIA has been undertaken in accordance with the Planning Inspectorate Guidance Note Nine: Using the Rochdale Envelope (Ref 13-13). The anticipated components for the Project and in particular its main buildings and structures are detailed in **Table 2.1 (Chapter 2: The Project)**.
- 13.4.7 The magnitude of visual impacts associated with the Project relates to (amongst other criteria) the size and scale of the structures and geographical extent of the area influenced by them. As such, the assessment is based upon indicative maximum dimensions for buildings and structures (i.e. the widest building footprint and tallest potential height) within the Project. A maximum indicative height for the ammonia tank of up to 45m AGL have been assessed, together with an ammonia tank flare of up to 60m in height. The overall massing of the ammonia tank is considered to have the greatest potential to result in significant landscape and visual effects and represents the worst-case scenario as compared to the structures associated with the hydrogen production units, stacks, flares and cooling towers as these elements individually are lesser in height and massing. Some of the indicative maximum/worst case heights of other structures associated with the Project are as follows:
- a. Hydrogen Production Unit Flare (45m).
  - b. Hydrogen Production Unit Main Stack (35m).
  - c. Hydrogen Liquefier Compressor Building (25m).
  - d. Cooling Towers (20m).
  - e. Hydrogen Liquefier Vent (45m).
  - f. Hydrogen Production Unit (35m).
- 13.4.8 The maximum dimensions of structures, height of stack(s), quantity and location of these elements will be confirmed in the ES (also refer to **Chapter 2: The Project**).
- 13.4.9 Due to the height and massing of the ammonia tank within the prevailing flat landscape, open views would be available from the furthest extents of the study area where there is a lack of intervening features. The ammonia tank

structure would be visible against the skyline and break the horizon from certain viewpoints, recognising this is within a wider backdrop of existing industrial developments and refineries.

### **Baseline Data Collection**

- 13.4.10 The following sources have been consulted in order to establish baseline landscape and visual conditions:
- a. Mapping data from Natural England, including National Character Areas, Country Parks, Local Nature Reserves (Ref 13-14).
  - b. Mapping data from Historic England including Listed Buildings, Registered Parks and Gardens (Ref 13-15).
  - c. Google Earth (Ref 13-16).
  - d. Google Street View (Ref 13-17).
  - e. Open-Source Data including MAGIC (Ref 13-18).
  - f. AECOM Geospatial Information (Ref 13-19).
- 13.4.11 Visits to the study area were conducted on 7 September 2022 and 6 October 2022 in order to further define baseline conditions. The weather during the visits was fair, with sunny intervals and light cloud and good visibility.

### **Stakeholder Engagement**

- 13.4.12 North East Lincolnshire Council (NELC), North Lincolnshire Council (NLC) and East Riding of Yorkshire Council (ERYC) were contacted on 25 August 2022 regarding proposed viewpoint locations.
- 13.4.13 NLC responded on 6 September 2022 with a suggested additional viewpoint location (agreeing with the selection of the other locations) which represents views from the England Coast Path (Public Right of Way (PRoW) SKIL50) located within the administrative boundary of NLC and is referenced as Viewpoint 10. At the time of reporting, responses on viewpoint locations from NELC and ERYC have not been received.
- 13.4.14 Further consultation with relevant council officers and stakeholders will be undertaken during preparation of the ES. This stakeholder consultation will seek to agree key viewpoints, requirements for photomontages and environmental design measures.

### **Limitations and Assumptions**

- 13.4.15 The information presented in this preliminary assessment reflects that obtained and evaluated at the time of reporting and is based on an emerging design for the Project and the maximum likely extents of land and structures required for its construction and operation.
- 13.4.16 At the time of reporting, the ZTVs used the ammonia tank height of up to 45m due to the massing and scale of the tank, however, it is considered that the outcome of the ZTVs is unlikely to change if modelled at a height of up to 60m (to accommodate the flare). Open views from the furthest extents of the study



area, where there is a lack of intervening features, are likely to be available for the ammonia tank and flare. However, significant effects are considered unlikely beyond a study area of 3km as defined within this assessment.

- 13.4.17 Final details of construction methods are being developed alongside the emerging proposals. Assumptions have been made as to the height of the tallest structures above ground level and anticipated construction methods.
- 13.4.18 The findings of this preliminary assessment may be subject to change as the design of the Project is developed and refined further through the assessment and consultation processes, and as further research and investigative surveys are completed to fully understand its potential effects. However, a “worst case” assessment has been presented based on the Rochdale Envelope approach.

## 13.5 Baseline Conditions

### Current Baseline

#### Landscape and Seascape Characterisation

##### National Character Areas

- 13.5.1 At a national scale Natural England provide 159 National Character Area (NCA) profiles. Each profile includes a description of the natural and cultural features that shape the landscape. The study area encompasses two NCA profiles as follows:
- a. NCA 41: Humber Estuary (Ref 13-20).
  - b. NCA 42: Lincolnshire Coast and Marshes (Ref 13-21).
- 13.5.2 Due to the scale of the Project in relation to the NCAs and the lack of intervisibility between the Project and NCA 42, NCA 42 has been discounted as a receptor for the purposes of this assessment, therefore, there will be no further reference to it.
- 13.5.3 The relevant characteristics of NCA 41 are described below and illustrated in **Figure 13.4** (PEI Report Volume III).
- 13.5.4 NCA Profile 41: The Humber Estuary covers some areas of the Project and study area. The character area is broadly split into two components, the largest being the expanse of water associated with the Humber Estuary. The estuary is formed by the confluence of several major rivers, including the Trent, Don, Aire, Ouse and Hull, and discharges into the North Sea. Due to its strategic position, the estuary facilitates important and busy trade routes. The land adjacent to the coast is described as a ‘*low-lying estuarine landscape with extensive stretches of intertidal habitats*’. Due to these elements, the landscape has international significance as a Ramsar site, along with several other designations. The character area provides a varied landscape, with open and extensive views across remote and rural areas, contrasting with heavy industry associated with towns and ports. Due to the factors outlined above, such as the international designations and the influence of the heavy industry, the value of this NCA is assessed to be medium.

### National Seascape Character Assessment

- 13.5.5 At a national scale the study area includes the Marine Character Area (MCA): East described in the National Seascape Character Assessment for England (MM01134) (Ref 13-22) and illustrated on **Figure 13.4** (PEI Report, Volume III).
- 13.5.6 The MCA East is subdivided into distinct areas within the Seascape Character Area Assessment East Inshore and East Offshore marine plan areas (Ref 13-23) and is located within Character Area 6: Humber Waters. The area is illustrated on **Figure 13.4** (PEI Report, Volume III). The relevant characteristics of MCA 6 Humber Waters are summarised below.
- 13.5.7 MCA 6 Humber Waters is the second largest coastal plain estuary in the UK and is bound by intertidal mud and sand flats and saltmarsh. These habitats provide internationally important wildlife corridors. Spurn Head, located to the north of the Humber, is a designated feature for geomorphology and wildlife habitats. The character area contains the UK's largest port complex and views are dominated with an extensive and complex mix of industrial, commercial, agricultural, residential and tourism land uses. Shipping traffic using the local ports provide a dominant animated feature. The value of the MCA is assessed to be medium as there are important designated features located within the character area, however the character is heavily influenced by industrial presence.

### Regional Character Assessment

- 13.5.8 At a national scale the Project and study area is located within the Regional Character Area (RCA) Area 3: The Northern Marshes within The Historic Landscape Characterisation Project for Lincolnshire (English Heritage and Lincolnshire County Council, 2011) (Ref 13-24). The RCA is defined by the industrial features along the coast clustered around the deep-water Port of Immingham. The assessment describes the visual dominance and unique character created by views of the large and tall structures, such as Lindsey Oil Refinery, which are linked with the port and heavy industry. The value of this character areas is assessed to be low as the area is dominated by industrial elements and processes.

### Local Character Assessment

- 13.5.9 The Site and study area is covered by three local Landscape Character Assessments which are discussed in turn in the sections below:
- North East Lincolnshire Landscape Character Assessment Character Assessment (Ref 13-29).
  - East Riding of Yorkshire Landscape Character Assessment (Ref 13-25).
  - North Lincolnshire Landscape Character Assessment and Guidelines (Ref 13-26).

### North East Lincolnshire Council Landscape Character Assessment

- 13.5.10 The NELC Landscape Character Assessment (Ref 13-34) divides the area into three broad Character Areas, with the Project being located within Area A – Humber Estuary.

- 13.5.11 Area A – Humber Estuary is then sub-divided into Local Landscape Types (LLTs), with the Project located within LLT 1 Industrial Landscape. The character of this area is described as *‘Landscapes visually dominated by large or massive structures serving as docks, storage, factories or petrochemical installations. These structures are often separated by extensive open arable land with hedges and groups of trees playing little compositional role in the landscape.’*
- 13.5.12 Other key characteristics applicable to the study area located with LLT 1 are as follows:
- a. Flat and visually open landscape.
  - b. Large scale industrial works including Immingham Power Station and docks set against large skies.
  - c. Detracting features such as heavy industry, pylons and wirescape, and busy roads.
  - d. Established low cut field boundaries and hedgerow trees with taller vegetation along road networks.
- 13.5.13 The NELC Landscape Character Assessment notes that value of LLT 1 is assessed to be very low due to the dominance of detracting features and industry.
- 13.5.14 Parts of the study area fall within LLT 2: Open Farmland which has key characteristics as follows:
- a. Flat landform emphasising large skies with open views towards the industrial areas and docks.
  - b. Medium to large scale arable farmland with limited development.
  - c. Detracting features such as distant views of industry, pylons, and busy road network.
- 13.5.15 The NELC Landscape Character Assessment notes that value of LLT 2 is assessed to be low due to its proximity to the industrial areas and presence of dominating features within the landscape.
- 13.5.16 Parts of the study area also fall within LLT 3: Wooded Open Farmland which has key characteristics as follows:
- a. Virtually flat landform emphasising large skies although gentle undulations are present.
  - b. Medium to large scale open arable farmland with some woodland blocks with tall hedgerows and mature trees along roadside boundaries.
  - c. Some detracting features such as pylons, and busy road network.
- 13.5.17 The NELC Landscape Character Assessment notes that value of LLT 3 is assessed to be medium as the landscape is intact and considered to be in moderate condition. Views of industry are distant and intervening features such as woodland blocks enable detracting features to be accommodated within the character area. Due to the distance from the Project and lack of intervisibility, this character area has been discounted for the purposes of this assessment.



### East Riding of Yorkshire Landscape Character Assessment

- 13.5.18 The eastern part of the study area falls within the ERYC Landscape Character Assessment (Ref 13-25). The area is categorised as Area 21: Drained Farmland Local Landscape Character Type. This landscape character type is then subdivided into four further character areas. Part of the study area falls within area 21B: Sunk Island.
- 13.5.19 Some of the key characteristics of Area 21: Low Lying Drained Farmland are as follows;
- Flat and low-lying flood plain of the River Humber.
  - Sparse tree cover.
  - Open and extensive views across a bleak and featureless landscape.
  - Sky dominates views across the flat open landscape.
- 13.5.20 Area 21B: Sunk Island is a Conservation Area and exists as an area of historic reclaimed land. Tree and vegetation cover is sparse, and the area is described as bleak. Settlements exist as scattered farmsteads.
- 13.5.21 The ERYC Landscape Character Assessment notes that the value of Area 21B: Sunk Island is assessed to be high as this area is a Conservation Area and the lack of landscape elements and built form creates a unique character despite the distant views of industry on the horizon.

### North Lincolnshire Landscape Character Assessment and Guidelines

- 13.5.22 A review of the current North Lincolnshire Landscape Character Assessment was commissioned by JBA Consulting (Ref 13-33) and forms part of the evidence base for the emerging North Lincolnshire Local Plan (Ref 13-5). The assessment subdivided the Landscape Character Areas (LCAs) into Landscape Character Types (LCTs). Parts of the study area fall within the Humber Estuary LCA which has key characteristics as follows:
- Predominantly low-lying estuarine landscape with large skies and open views.
  - Changing character due to tidal influences with low tide revealing extensive areas of mudflats.
  - Limited vegetation cover, although where blocks of woodland occur, these are visually prominent within the view.
  - Urban and industrial influences.
- 13.5.23 The Local Character Type (LCT) within the Humber Estuary LCA is Industrial Landscape. The key characteristics defining the Industrial Landscape are as follows:
- Low lying and flat, however, gently undulates as it extends west.
  - Dominated by heavy industry with remnant pockets of flat open farmland.
  - Detracting features such as heavy industry and urban influences such as fences, signs, and major transport corridors.

- 13.5.24 The assessment states that: *“Landscape infrastructure elements are insignificant within the industrial landscape. Ornamental mitigation planting and amenity trees in grass verges are generally out of scale with the vertical infrastructure and industrial mass.”*
- 13.5.25 The value of this LCA is assessed to be very low due to the dominance and scale of the industry and the inability of landscape elements, as outlined above, to accommodate these detracting features.

#### Vegetation Cover

- 13.5.26 Through analysis of the local landscape character assessments, generally the tree and shrub cover in the study area is described as sparse. Woodland blocks, where existing, are visually prominent within the flat landscape. Field boundaries are identified as predominantly native hedgerows that are generally poorly maintained. Taller hedgerows and hedgerow trees tend to be located along roads, adjacent to settlements, and on the outer extents of the study area, where the landscape features tend to be in better condition.
- 13.5.27 A site visit confirmed that vegetation cover within the study area was consistent to that described within the local character assessments. Due to the low vegetation cover within the Study Area, vegetation within parts of the Site form important landscape features, including an area of woodland known as Long Strip covered by a Tree Preservation Order (TPO). The extent and location are shown on **Figure 2.1** (PEI Report, Volume III).

#### Topography and Drainage

- 13.5.28 The topography of the study area is low lying and flat, with many areas existing as historically reclaimed land. An extensive network of ditches artificially drains the land and divide agricultural land into medium to large scale rectilinear fields.

#### Settlements

- 13.5.29 The study area is characterised by heavy industrial development associated with Immingham and the docks. Immingham is the main settlement and comprises industry and housing. Stallingborough, a smaller settlement, is located to the south of the study area, as well as several scattered farmsteads.

#### Communications

- 13.5.30 The study area is connected to major road networks via the A180 which becomes the M180 and connects to the M18, M62 and A1(M) further to the west (outside the study area). There are two main settlements within the study area (Immingham and Stallingborough) connected by Stallingborough Road (B1210). The Project is connected to the port and the major road network via a series of A and B roads.
- 13.5.31 There are a number of PRoW within the study area, including the proposed route for the improvements to the England Coast Path between the Humber Bridge and Easington (to the north of the Humber) and Mablethorpe to Humber Bridge (to the south of the Humber). Part of the upgraded route is located within the Site

boundary and is illustrated on Map MHB 3I: North Beck Drain to Queens Road (Ref 13-35).

#### The Project Site and Immediate Setting

- 13.5.32 The Project is situated on land that extends from the A1173 (to the east of Immingham) across to the southern coastline of the Humber and to the south of Immingham Docks. The full extent of the Project is shown on **Figure 2.1** (PEI Report, Volume III) and described within **Chapter 2: The Project**.
- 13.5.33 The Project is located on multiple sites with a combination of field boundaries, roads and the coastal path forming the boundaries. The Site on which the Project would be located comprises areas of brownfield land, former arable fields, a bridleway/ PRow and the area of woodland known as Long Strip. There is also existing marine infrastructure located adjacent to the Project within the Humber.

#### Value of the Landscape Receptor

- 13.5.34 **Table 13.3** provides details of the landscape areas and features of relevance to the Project, and their overall landscape value, based on Assessing landscape value outside national designations, Technical Guidance Note 02/21 (Ref 13-11).

**Table 13.3: Non-designated Landscape and Seascape Areas/ Features**

Factor	Study Area	The Project Site
<b>Natural Heritage</b>	There are multiple natural heritage elements including national and international designations such as a Special Area of Conservation (SAC), a Special Protection Area (SPA), Ramsar, RSPB important bird areas. There is also a Local Wildlife Site (LWS) located on Laporte Road, close to the Project.	The Project would be located partly within, and partly on land adjacent to, the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI), collectively referred to as the Humber Estuary European Marine Site (EMS). The woodland belt is also subject to a TPO.
<b>Cultural Heritage</b>	The study area contains cultural heritage assets including: two Scheduled Monuments, and a Heritage Conservation Area. There are twelve Listed Buildings distributed across the study area.	There are no cultural heritage designated interests located within the Site boundary.
<b>Landscape/Seascape Condition</b>	The landscape and seascape of the study area is predominantly open, low-lying land around the coast, influenced by industry, pylons and transport routes. Heavy industry is located around the deep-water Port of Immingham.  Other parts of the study area are low lying open arable land with scattered	Generally poor condition with the East Site comprising brownfield land and influenced by adjacent industrial land use.  The West Site comprises former agricultural fields, however, these are also influenced by Queens Road, an electrical sub-station, with overhead electricity cables.

Factor	Study Area	The Project Site
	<p>buildings/ farmsteads. The landscape to the north of the Humber is described as bleak.</p> <p>Landscape quality is poor where industry and power stations are present, however, more rural areas on the outer limits of the study area have a moderate to good landscape condition.</p> <p>The seascape is influenced by heavy industry and port infrastructure and operations.</p>	<p>Field boundaries, where they exist on the West Site, are poorly managed and comprise overgrown species-poor hawthorn.</p> <p>Within the East Site and adjacent to the boundary is a narrow belt of TPO woodland. Mature trees and vegetation also exist along Laporte Road within the Site boundary.</p> <p>The area located within the Humber is adjacent to, and influenced by, the existing Oil Terminal Jetty.</p>
<b>Scenic quality</b>	<p>Views comprise open flat landscapes with large skies and seascapes with views across intertidal mudflats and open water. The industrial complex associated with the Port has a strong visual influence over the generally flat, low-lying surrounding landscape and seascape creating a dramatic skyline.</p> <p>The more rural areas on the outer limits of the study area, to the south of the railway line and to the north of the Humber (Sunk Island), have fewer detracting features. However, Sunk Island is described as bleak due to its lack of features and sense of remoteness due to its coastal location.</p>	<p>Western parts of the Site have a very low scenic quality. To the east, the landscape is more appealing due to the dynamic qualities expressed by the surrounding industry and port activity.</p> <p>The scenic quality varies across the site and is influenced by the scale of the industry and the expansive views over the Humber Estuary where they exist.</p>
<b>Associations</b>	<p>No literary value, connections with notable people or arts has been identified.</p>	<p>No literary value, connections with notable people or arts has been identified.</p>
<b>Distinctiveness</b>	<p>The study area contains urban features which are distinctive to the location. The Humber Estuary and intertidal habitats create a unique landscape. The strong industrial presence with flat topography and large skies creates a strong sense of place. The industrial influences found within the study area is representative of the identified landscape character at a national, regional, and local level.</p>	<p>The Site contains few rare features, however, there is a narrow woodland belt subject to a TPO and mature trees along Laporte Road in a study area where tree cover is generally low.</p>

Factor	Study Area	The Project Site
<b>Recreational</b>	<p>The landscape within the study area contains PRoW which include both footpaths and bridleways. These generally radiate from Immingham and connect to the surrounding countryside.</p> <p>The England Coast Path is a new National Trail encircling the English coastline. Proposals for the upgrade of sections of the England Coast Path extend along both the north and south coastlines of the Humber within the study area.</p> <p>The recreational value is low, however, a campsite is located within the northern extents of the study area.</p>	<p>Part of the proposed route upgrade to the England Coast Path is located on an existing bridleway within the Site boundary and adjacent to the boundary. There is no other PRoW within the Site and no other recreational uses.</p> <p>There is no open access to the Humber Estuary and coastal areas.</p>
<b>Perceptual (Scenic)</b>	<p>The study area is not a landscape that has evident value through appealing to the senses, primarily the visual sense. The study area contains small areas regarded as tranquil and remote, especially on the northern and southern limits of the study area where detracting features are less prominent.</p> <p>The scenic value of the seascape is influenced by industry along the coastline and shipping activity within the Humber. Tranquillity of the general area is eroded by major transport corridors and imposing industrial presence.</p>	<p>The Site has no particular or notable scenic value, albeit the TPO tree belt adds to value in an otherwise industrial context.</p>
<b>Perceptual (Wildness and tranquillity)</b>	<p>The study area contains small areas regarded as tranquil and remote, especially on the northern and southern limits of the study area. Tranquillity of the general area is eroded by major transport corridors and imposing industrial presence. Wildness is not a key characteristic in the land areas but present in the estuary and seascape.</p>	<p>Tranquillity and wildness are low due to adjacent land use and activity associated with the Port.</p>
<b>Functional</b>	<p>The landscape which performs a clearly identifiable function as a long standing industrial and port influenced area.</p>	<p>Industrial, brown field/undeveloped land, where previous development and land use no longer exists and has left</p>

Factor	Study Area	The Project Site
		areas of the Site without a clear or defined function.
<b>Overall landscape value</b>	<b>Low</b> The study area does not include any areas designated locally for their landscape character and/ or perceptual qualities/ tranquillity. The study area is also heavily influenced by industrial development, port infrastructure, residential areas and transport corridors both on land and within the Humber.	<b>Low</b> The Project is located in an area surrounded by existing industrial development with few important landscape features. The landscape elements within the Site boundary do not contribute to the landscape or seascape value or contribute distinguishing features to the identified landscape or seascape character. Despite the detracting features, the Site boundary contains features such as the England Coast Path route and the TPO woodland.

## Existing Visual Baseline

### Zone of Theoretical Visibility (ZTV) Analysis

- 13.5.35 In order to identify locations with potential views of the Project, a ZTV for bare earth (**Figure 13.2: Zone of Theoretical Visibility – Bare Earth**) and one including visual screening (**Figure 13.3: Zone of Theoretical Visibility – Visual Screening**) have been produced. These identify those areas which have potential for views of the Project and to what extent it is likely to be visible. The ZTVs are illustrated in **Figure 13.2** and **Figure 13.3** (PEI Report, Volume III).
- 13.5.36 The ZTVs were produced on a worse-case scenario with the largest (in terms of massing) element of the Project being the ammonia storage tank (height of 56m above ground level provided for the production of the ZTV). The ZTV was based upon a grid of points spaced 10m apart and along the perimeter of the indicative areas of development as shown on the Overall Site Plan for Permitting Immingham NH<sub>3</sub> terminal Immingham by Air Products and Chemicals Inc and is illustrated within **Figure 2.3** (PEI Report, Volume III).
- 13.5.37 The ZTVs were generated by analysis of a 3D digital terrain model (DTM) of the surrounding terrain and the Project. The bare earth ZTV has been generated using Ordnance Survey (OS) Terrain 5 digital terrain data which does not take into account the screening effects of vegetation, buildings or other structures. The visual screening ZTV has been generated using the same data and uses woodland from the Forestry Commission National Forest Inventory (2018) with an assumed tree height of 15m, building height data from OS Master Map and buildings from OS Open with an assumed height of 7.5m. The ZTVs are based upon an observer eye height of 1.7m.



### Visual Receptors and Viewpoints

- 13.5.38 Visibility within the wider study area is generally widespread due to the low-lying land along the coast and lack of intervening vegetation. There are widespread open views in the north-east looking south across the estuary towards the Project and to the east from the coastline. Where views are available from the south, they are expansive and comprise large skies with vertical features associated with industrial activity on the horizon.
- 13.5.39 Users of the main transport routes and long-distance trails gain dynamic views towards the Project to varying degrees, dependent on intervening structures, screening vegetation, elevation and direction of travel.
- 13.5.40 Users of the railway line between Stallingborough and Habrough would gain transient, dynamic views towards the Project at an oblique angle. Views would include a landscape containing large areas of farmland, industrial structures, overhead power lines and highway infrastructure.
- 13.5.41 Within the study area there are a number of local roads in proximity of the Project which connect Immingham and the Port to major road networks. Generally, views whilst travelling on these roads are dynamic and vary at different points along the road depending on the level of enclosure and intervening features. At locations closer to the Project, views are often restricted by screening vegetation and built form located along the road corridors.
- 13.5.42 Due to the flat landscape, visibility is restricted within closer proximity to the Project by built form and vegetation, thus enabling contrasts between enclosure and expansive views.
- 13.5.43 Through consultation and agreement with the relevant stakeholders, a total of 11 viewpoints have been chosen to represent the typical range of views of the Project within the study area. These viewpoints are listed in **Table 13.4** and illustrated on **Figures 13.8.1 to 13.8.10** (PEI Report, Volume III).

**Table 13.4: Representative Viewpoints**

Viewpoint ID	Name & Location	Receptor Type	Elevation m (AOD)	Grid Reference	View
1	PRoW PAULF06/ Cherry Cobb Sands Road. England Coast Path	Users of PRoW	1.15	523506, 418907	<p>Viewpoint 1 is located on the northern coastline of the Humber Estuary where Cherry Cobb Sands Road meets PRoW PAULF06. The path forms part of the England Coast Route. The view is open and expansive over the flat landscape with distant views to the south. There is a high level of tranquillity and remoteness at this location. The view extends across the mudflat and saltmarsh coastal margin and open water of the r Humber Estuary to the southern coastline of the estuary. The landscape at the viewpoint is characterised by low tussocky vegetation associated with mudflats and open shallow pools connected by tributaries to the Humber. Development in this location comprises occasional isolated dwellings and a number of small fishing boats moored at Stone Creek.</p> <p>The southern coastline and horizon are defined by an almost continuous line of industrial development, including large structures and tall vertical elements. There are also several large shipping vessels located within the estuary, which obscure remaining views of the coastline.</p> <p>The viewpoint is located within close proximity to Scheduled Monument - Stone Creek heavy Anti-aircraft gun site, at Sunk Island Clough.</p> <p><b>Value of the view:</b> The view is not protected by a designation, however, is considered to be locally valued as the PRoW forms part of the proposed England Coast Path. The value of the view is assessed to be medium.</p>
2	PRoW NKIL50 England Coast Path	Users of PRoW	4.79	521630, 415255	<p>Viewpoint 2 is located on the coastal path to the east of the Project and looks west in the direction of where the proposed in-river jetty connects to the river frontage. On land, the view is confined to medium range and enclosed by a narrow woodland belt, Long Strip, which defines the bridleway/ PRoW and the north-western boundary of the Project. These trees are subject to a woodland TPO. The view comprises the coastal path which extends along the flood defences, the coastal margin with mudflats and low vegetation, existing jetty with landside infrastructure associated with the Port, and</p>



Viewpoint ID	Name & Location	Receptor Type	Elevation m (AOD)	Grid Reference	View
					<p>industrial buildings and infrastructure located on Laporte Road. There are also some taller structures visible above the tops of the trees. The view looks towards the East Site.</p> <p><b>Value of the view:</b> The view is not protected by a designation, however, is considered to be locally valued as the bridleway/ PRow forms part of the England Coast Path route. Heavy infrastructure is present within the scene providing detracting features. The value of the view is assessed to be medium.</p>
3	England Coast Path	Users of bridleway/ PRow	5.5	521311, 415505	<p>Viewpoint 3 is located on the coastal path to the west of the Project and looks east along the existing flood defences and path. The view is open and comprises distant views down the River Humber to the south-east. To the south is an existing bridleway/ PRow, which is enclosed by mature trees and vegetation and a small to medium sized field forming part of the Project. More distant features associated with the land comprise structures and buildings associated with industry which include tall vertical elements.</p> <p><b>Value of the view:</b> The view is not protected by a designation, however, is considered to be locally valued as the bridleway/ PRow forms part of the England Coast Path route. Heavy infrastructure is present within the scene providing detracting features. The value of the view is assessed to be medium.</p>
4	Queens Road	Local road users and commercial premises	2.2	521311, 414743	<p>Viewpoint 4 is located on Queens Road. To the north, the road is bound by a pavement and wide grass verge with commercial units adjacent. To the south, the road is bound by a rough grass verge with scattered vegetation. Views are confined to the medium range by intervening scrubby vegetation and small blocks of mature trees. Street lighting, road signs, parked cars, and Queens Road Power Station introduce detracting features into the scene. Overhead pylons and a spoil heap are also visible in the distance to the south.</p> <p><b>Value of the view:</b> The view is heavily influenced by urban development, detracting features and industry. The value of the view is assessed to be low.</p>

Viewpoint ID	Name & Location	Receptor Type	Elevation m (AOD)	Grid Reference	View
5	PRoW to the east of Immingham	Users of the PRoW	2.12	509289, 414779	<p>Viewpoint 5 is located on a PRoW between the eastern edge of Immingham and Kings Road. The view extends over a small to medium sized arable field containing the PRoW. A small footbridge crossing a drain with scrubby vegetation occupies the foreground with mature vegetation enclosing the horizon. Detracting features such as an industrial facility, Queens Road Power Station, overhead pylons and a spoil heap are also visible in the distance to the south. The view looks to the east towards the West Site.</p> <p><b>Value of the view:</b> The view contains many rural elements. However, it is influenced by detracting features and industry and is not protected by a designation. The value of the view is assessed to be low.</p>
6	PRoW to the rear of Ings Lane/ Talbot Road	Residents located to the edge of Immingham and users of the PRoW	1.98	519048, 414526	<p>Viewpoint 6 is located on the eastern edge of Immingham to the rear of residential development on Ings Lane/ Talbot Road. The view extends east across an area used recreationally and comprises rough grass, scrub, and a small area of woodland with a tarmac car parking area in the foreground. Views of industry are available to the north-east where gaps in the vegetation allow for more distant views.</p> <p><b>Value of the view:</b> The view contains some detracting features, however, is considered to be valued locally. The value of the view is assessed to be low.</p>
7	PRoW to the north west of Mauxhall Farm	Users of the PRoW	3.16	519090, 413323	<p>Viewpoint 7 is located on a PRoW to the south-west of the West Site. The view extends over the large arable field in which the footpath is contained. The landscape is open and flat. The horizon is enclosed by mature vegetation and marked by the presence of heavy industry and vertical infrastructure, such as pylons and cranes.</p> <p><b>Value of the view:</b> The view is not protected by a designation and contains some detracting features, however, is considered to be valued locally. The value of the view is assessed to be low.</p>

Viewpoint ID	Name & Location	Receptor Type	Elevation m (AOD)	Grid Reference	View
8	PRoW to the north western edge of Stallingborough	Residents located to the edge of Stallingborough	1.81	520649, 412061	<p>Viewpoint 8 is located on a PRoW to the rear of houses on Station Road, Stallingborough. The landscape is open and flat and generally rural in character. The view extends over medium to large arable fields with occasional mature trees and small patches of scrub. The horizon is enclosed by mature vegetation. A network of pylons introduces vertical elements and detracting features into the scene. The stacks and flair stack at Lindsey Oil Refinery is just visible on the horizon to the north west.</p> <p><b>Value of the view:</b> The view is not protected by a designation and contains some detracting features, however, is considered to be valued locally. The value of the view is assessed to be low.</p>
9	B1210 (adjacent to the railway line)	Local users of the road	10.54	518447, 412430	<p>Viewpoint 9 is located on the B1210 to the south-west of the Project. The landscape is open and flat and generally rural in character with a recently ploughed field forming the midground. The A1173 is located within the mid-view adding moving vehicles to the scene. The horizon is enclosed by mature vegetation and built form. Tall vertical elements, such as the cranes associated with the Port, stacks, overhead pylons, and street lighting are visible across the horizon.</p> <p><b>Value of the view:</b> The view contains detracting features across the extent of the horizon. The value of the view is assessed to be low.</p>
10	PRoW SKIL50 England Coast Path	Users of the PRoW	3.57	518160, 417989	<p>Viewpoint 10 is located on the England Coast Path approximately 3.5km to the north-west of the Project and falls outside the study area. The view comprises heavy industrial elements associated with the Docks, including the Ore Terminal, associated infrastructure, and jetties. The view is dynamic and tranquillity is low.</p> <p><b>Value of the view:</b> The view is dominated by detracting features, however, is considered to be valued locally due to its location on the England Coast Path route. The value of the view is assessed to be low.</p>

Viewpoint ID	Name & Location	Receptor Type	Elevation m (AOD)	Grid Reference	View
11	Kings Road, Immingham	Residents of houses and commercial receptors	>10m	519676, 414814	<p>Viewpoint 11 is located on Queens Road to the north of the West Site. The residential receptors are located on the west of Queens Road with the rear of the properties orientated to face south-west towards the West Site. Views from the front of the properties are orientated towards Queens Road and commercial buildings located to the east of Queens Road. The main focus of the view from the front of the residential properties is the road, with its associated features such as parked cars along both sides, street lighting and metal fencing. The view is enclosed by commercial development, which includes a series of prefabricated metal and brick buildings containing light industry and offices. These buildings are partially screened by a single row of trees and ornamental planting.</p> <p>To the rear of the residential properties, extends a series of three former agricultural fields which comprise the West Site. The fields are flat and open and allow for views across to Kings Road Power Station (adjacent to the north-western corner of the West Site).</p> <p>Views of tall vertical elements, such as overhead pylons, and structures associated with Kings Road Power Station, street lighting are likely from the rear of the residential properties.</p> <p><b>Value of the view:</b> The view contains detracting features across the horizon and the focus of the view is of the road and commercial/ industrial buildings located along the road. The value of the view is assessed to be low.</p>
NV	St Peter's and St Paul's Church and PRoW	Users of the PRoW and visitors to the church	8.31	519491, 411803	<p>The viewpoint was visited, however, there were no views of the Project from this location due to intervening landform and vegetation. The viewpoint is located at Scheduled Monument – Stallingborough medieval settlement, post medieval manor house and formal gardens and within close proximity to Scheduled Monument – Churchyard cross 20m south of St Peter and St Paul's Church. The Viewpoint is shown on <b>Figure 13.7</b> (PEI Report, Volume III) as 'nv' (no view).</p>

### Summary of Visual Baseline

- 13.5.44 The extent of views of the Project available to receptors range from close proximity views to long distance views. Receptors are located at the edge of villages, along roads and transport networks and on various PRow within the study area.
- 13.5.45 The study area is characterised by low lying arable land, influenced in most parts by industrial development and the Port of Immingham. Large scale pylons and transmission lines transect the landscape and tall cranes within the Port. Due to the low-lying landform within the study area, views of these structures are available where vegetation and built form allow. In localised areas, small, isolated woodlands and boundary vegetation offer a degree of visual enclosure. Much of the vegetation within the study area is deciduous, therefore, there will be varying degrees of visibility depending on the time of year.

### Future Baseline

- 13.5.46 The future baseline is a prediction of baseline conditions in the future, assuming that the Project is not constructed. In the absence of the Project, parts of the Site will continue to be utilised for port activity. As such, the future landscape/ seascape and visual baseline at a site scale is anticipated to be similar to the existing baseline as described above.

## 13.6 Potential Impacts and Effects

### Landscape and Seascape

- 13.6.1 The preliminary assessment has identified that construction, operation and decommissioning of the Project has the potential to result in adverse impacts on landscape/ seascape character.
- 13.6.2 The potential landscape impacts of the Project primarily relate to the visibility of proposed structures (temporary and permanent), including how this affects the perceptual qualities and tranquillity of a character area and the direct loss of landscape features within the Site boundary.
- 13.6.3 With regard to the Project construction phase, potential landscape and seascape impacts relate to the following:
- Construction of the marine infrastructure requiring dredging. Dredging to take place within the sub tidal area.
  - Minor losses of scattered scrub where this coincides with localised areas required for temporary works.
  - Temporary removal of areas of arable farmland for construction laydown activities.
  - Loss of trees within the Long Strip TPO woodland to facilitate the development of the operational access road to the jetty, and pipeline.
  - The introduction of stationary and moving plant including cranes and piling rigs, jack-up barge and other high-level construction machinery and marine construction vessels.

- f. The introduction of low-level construction operations including temporary stockpiling of storage of materials, contractor/ welfare facilities and temporary laydown areas.
- g. Construction vehicles including heavy goods vehicles (HGV) entering and leaving the Site and surrounding area.
- h. The progressive construction of tall structures, including new stacks and the ammonia storage tank.
- i. Construction lighting to illuminate site operations after dark.

13.6.4 With regard to the Project operational and commissioning phase, potential landscape impacts relate to the following:

- a. Introduction of large-scale buildings and structures and marine infrastructure including a jetty with up to two berths, with topside infrastructure.
- b. New access points connecting the Project with local roads (Laporte Road, Kings Road and the A1173).
- c. Introduction of additional site lighting, where required for operational safety.
- d. Movement of additional vehicles and shipping vessels within and around the operational area, jetty and within the Humber.
- e. Potential visibility of plumes and infrequent, flares (in exceptional circumstances, i.e. for emergency use only and during start up and shut down, rather than routinely and flares to be fitted with shroud to minimise visibility of pilot).

13.6.5 **Table 13.5** provides an assessment of the sensitivity of the landscape receptors identified within the study area.

**Table 13.5: Landscape Sensitivity Assessment**

Landscape/ seascape receptor	Sensitivity Assessment		
	Value	Susceptibility	Sensitivity
<b>Natural England National Character Area Profiles (Ref 13-20 and Ref 13-21)</b>			
NCA Profile 41: Humber Estuary	Medium	Very Low	The low-lying open landscape contains some nationally significant conservation features, although is influenced by the presence of existing large-scale infrastructure. Susceptibility to change arising from the Project is therefore considered to be very low due to the scale of the Project in relation to the character area. In addition, the introduction of industrial elements is considered to be consistent with the identified defining characteristics of the NCA.

Landscape/ seascape receptor	Sensitivity Assessment			
	Value	Susceptibility	Sensitivity	
<b>National Seascape Character Assessment for England (MM01134) (Marine Management Organisation, 2018) (Ref 13-22)</b>				
MCA 6: Humber Water  Marine Character Area (MCA): East	Low	Very Low	Bound by intertidal mud and sand flats and saltmarsh, the habitats within this character area provide internationally important wildlife corridors. Spurn Head, located to the north of the Humber, is a designated feature for geomorphology and wildlife habitats. The character area contains the UK's largest port complex and views are dominated with an extensive and complex mix of industrial, commercial, agricultural, residential and tourism land uses. Shipping traffic utilising the ports provide a dominant animated feature. Susceptibility to change arising from the Project is therefore considered to be very low as the introduction of industrial elements is consistent with the defining characteristics as described above.	Low
<b>The Historic Landscape Characterisation Project for Lincolnshire (Ref 13-24)</b>				
RCA Area 3: Northern Marshes	Low	Very Low	The published landscape character assessment states that the landscape is heavily influenced by industrial features and that despite the presence of detracting features, the industry creates a character which is dramatic and unique. The industrial development respects the historic landscape pattern by continuing the existing orientation and rectilinear form.  Susceptibility to change arising from the Project is therefore considered to be very low due to the existing context of the industrial features.	Low
<b>North East Lincolnshire Landscape Character Assessment Sensitivity and capacity Study (FPCR Environment and Design Ltd, 2015) (Ref 13-29)</b>				
LCA Area A – Humber Estuary  LLT 1 – Industrial Landscape	Low	Very Low	The landscape does not contain any designated features and the condition is described as poor within the landscape character assessment. The landscape is heavily influenced by large scale industry and there are many detracting features influencing the landscape character.	Very Low



Landscape/ seascape receptor	Sensitivity Assessment			
	Value	Susceptibility	Sensitivity	
			<p>Tranquillity is further eroded by the network of busy roads, such as the A180 and A1173.</p> <p>The susceptibility to change arising from the Project is considered to be very low as the introduction of industrial elements is consistent with the defining characteristics.</p>	
LCA Area A – Humber Estuary LLT2 – Open Farmland	Low	Low	<p>The area contains Great Coates Conservation Area (outside the study area) and is considered to be in moderate condition as described within the published landscape character assessment. Distant views of industry form part of the identified character.</p> <p>The susceptibility to change arising from the Project is considered to be low.</p>	Low
<b>North Lincolnshire Landscape Character Assessment and Guidelines (Ref 13-30)</b>				
The Humber Estuary LCA Landscape Character Type – Industrial Landscape	Low	Very Low	<p>The landscape is degraded in places containing a high number of detracting features including industrial development along the coastline. Tranquillity is assessed to be low.</p> <p>Susceptibility to change arising from the Project is considered to be very low as the introduction of industrial elements is consistent with the defining characteristics.</p>	Very low
<b>East Riding of Yorkshire Landscape Character Assessment (2018) (Ref 13-25)</b>				
Drained Farmland LCA 21 21B – Sunk Island	High	Very Low	<p>The area is a Conservation Area and contains a number of ecological designations. It is considered to be in reasonable condition. Detracting features are present within the landscape along the horizon on the southern coastline of the Humber.</p> <p>The susceptibility to change arising from the Project is considered to be very low as the area will be able to accommodate the Project without compromising the baseline situation.</p>	Medium



Landscape/ seascape receptor	Sensitivity Assessment			
	Value	Susceptibility	Sensitivity	
<b>Landscape and Seascape Character of the Site and immediate setting</b>				
Humber Estuary	Low	Low	<p>Character influenced by large shipping vessels and existing jetties protruding seawards into the Humber.</p> <p>The susceptibility of the off-shore area to changes arising from the Project is assessed to be low.</p>	Low
Landside Landscape Features - East Site	Low	Low	<p>Character influenced by traffic movements and disturbance associated with Laporte Road. Industrial development, such as the Associated Petroleum Terminal works complex, inform the character of the East Site and its immediate setting and introduces dominant detracting features. The land is currently brownfield land and contains areas of hard-standing, gravel, and various stockpiles. Therefore, the susceptibility of the East Site to changes arising from the Project is assessed to be low.</p>	Low
Landside Landscape Features - West Site	Low	Low	<p>Comprises three former agricultural fields bound by hedgerows and ditches. The West Site has a simple character which is influenced by Queens Road, Kings Road, and the A1173 adjacent to the boundary. Industrial complexes located on Queens Road, two sub-stations, and overhead pylons reduce the West Site's susceptibility to the Project. Therefore, the susceptibility is assessed to be low.</p>	Low
Landside Landscape Features - Pipeline Areas and access road	Low	Medium	<p>Pipeline areas are located alongside Queens Road and Laporte Road, where the character is influenced by the busy roads and associated features such as street lighting and signage.</p> <p>Another pipeline runs from the East Site to the proposed jetty. In addition to the pipeline, a proposed operational access road is located adjacent to the pipeline and connects Laporte Road to the jetty. The pipeline and proposed access road will impact 'Long Strip' woodland (covered by a TPO) and mature trees and vegetation to Laporte Road, however the extent of tree loss is unknown at this</p>	Medium

Landscape/ seascape receptor	Sensitivity Assessment		
	Value	Susceptibility	Sensitivity
			stage (tree loss is considered further in <b>Chapter 8: Terrestrial Ecology</b> ). Due to the presence of mature trees and TPO, the susceptibility of the Pipeline Areas is assessed to be medium.
Landside Landscape Features - Construction Laydown Areas (temporary)	Low	Low	Located adjacent to Laporte Road and Queens Road, these areas are influenced by the adjacent busy road networks and detracting features such as overhead pylons and industrial complexes. The tranquillity within the areas is low. The susceptibility of the temporary Construction Laydown Areas to construction activity associated with the Project is assessed to be low.
Overall character	Low	Low	The pattern of the landscape ranges from degraded to intact and the Site is dominated by industrial complexes and activity. The tranquillity across the Site is low due to adjacent land uses and road networks. Overall, the susceptibility to change arising from the Project is considered to be low due to its location within the surrounding industrial landscape context.

### Visual Amenity

- 13.6.6 The preliminary assessment has identified that construction, operation and decommissioning of the Project has the potential to result in adverse impacts on visual amenity.
- 13.6.7 The potential visual impacts of the Project primarily relate to the visibility of proposed structures (temporary and permanent) to receptors in the surrounding areas. The impact sources are considered to be the same as detailed above for landscape and seascape (refer to **Paragraphs 13.1.3** and **13.1.4**).

### Decommissioning – landside infrastructure

- 13.6.8 The landside elements of the Project have a design life of up to approximately 25 years. The impacts on landscape character and visual amenity arising as a result of Project decommissioning for the landside elements are considered to be similar to those identified at the construction stage of the Project. For landscape, this is as a result of the scale and nature of the development in relation to the existing industrial structures and complexes present in the wider landscape and the large scale of the landscape character areas. For visual amenity, this is as a

result of the visibility of decommissioning and demolition activities being of a similar nature to those during construction for the landside elements.

### **Decommissioning – marine infrastructure**

- 13.6.9 The Project does not make any provision for the decommissioning of the marine facilities of the Project and therefore the impacts on landscape and seascape character and visual amenity have not been assessed for these elements.
- 13.6.10 Once the decommissioning process has been completed, it is anticipated that the resulting conditions would be similar to those that currently exist as detailed in **Chapter 2: The Project** with the exception of the marine infrastructure which will remain operational and used for port-related activities.

## **13.7 Development Design and Impact Avoidance**

### **Embedded Mitigation Measures**

- 13.7.1 The Project will be designed, as far as possible, to avoid and minimise impacts and effects to landscape/ seascape and visual receptors through the process of design development, and by embedding mitigation measures into the design.
- 13.7.2 It is considered that the opportunity to mitigate some visual effects associated with the Project are limited due to the size and scale of the Project. The landscape mitigation is not dictated by a need for screening or landscape integration and in most locations trees and woodland would not be effective in reducing effects on visual amenity. Any planting which may be provided is unlikely to mitigate landscape and visual effects.
- 13.7.3 The TPO designation on the Long Strip woodland indicates value/importance at a Site level. Given current uncertainties over construction requirements, it is not possible to quantify the exact scale of woodland loss within the Long Strip at this stage although it is anticipated that some woodland will be retained along the eastern edge. However, given the scale and nature of the industrial context the loss of trees would not materially change the nature of landscape / visual effects.
- 13.7.4 It is considered that an integrated design approach that considers massing and the disposition of taller structures within the Project to minimise potential wall effects has potential to reduce visual impacts of the Project. The finishes of the buildings and exact sizes of component parts are not yet finalised. However, given the nature of the Project, it is anticipated that it would have a close visual relationship with existing nearby structures. Details regarding the Project design will be presented in the ES. Implementation of detailed design parameters would be secured by a requirement in the draft DCO.
- 13.7.5 In order to mitigate for tree loss from the Long Strip and elsewhere, the following approach is proposed:
- a. Tree planting within some peripheral areas around the operational sites of the hydrogen production facility, although these opportunities will be very limited; and

- b. Opportunities to be explored for potential off-site tree-planting within areas to be agreed with local bodies/organisations.

**Table 13.6: Construction Mitigation Measures**

Mitigation Measures
<ul style="list-style-type: none"> <li>• Stripping, handling and management of soils to be in accordance with DEFRA (2009) Construction Code of Practice for the sustainable use of soils on constructions sites (Ref 13-31); and Considerate Construction management.</li> <li>• Perimeter fencing, maintain a tidy site and temporary screen bunding.</li> <li>• Ensuring that valued trees, woodland, existing vegetation and other landscape features are protected and retained wherever possible, in accordance with BS5837:2012. Trees in relation to design, demolition and construction (Ref 13-32). Trees should be clearly marked so that site operatives are in no doubt as to which ones are to be kept and protected.</li> <li>• Where it is unavoidable to site underground services beneath the canopy of trees, it is essential that trenches are dug by hand so that no roots are unnecessarily cut.</li> <li>• Ground Level - Changes required to existing ground levels and the working room required for the installation of the site haul/access roads may adversely affect the adjacent trees.</li> <li>• The route of the underground utilities needs to be considered at an early stage as these often require significant earthworks. Ideally these should be incorporated within the areas affected by the site/access roads.</li> <li>• The layout must take into account the height/root spread of future growth of trees and the necessary steps taken to avoid potential root damage to buildings, roads and underground services.</li> <li>• With regards to the location of existing trees and shrubs, the National House-Building Council (NHBC) sets out guidelines which determine the foundation design of new buildings in relation to existing and proposed vegetation.</li> </ul>

13.7.6 Construction of the Project would be subject to measures and procedures defined within a Construction Environmental Management Plan (CEMP), which would be produced prior to the commencement of construction by the Principal Contractor and would be based on, and incorporate, the contents and requirements of the outline CEMP which will be submitted with the DCO application.

13.7.7 The following mitigation measures are recommended as per **Table 13.7**.

**Table 13.7: Operation Mitigation Measures**

Category	Mitigation Measures
<b>Embedded mitigation measures</b> - developed through the iterative design process, which have become integrated or embedded into the project.	<ul style="list-style-type: none"> <li>• Ensuring that soil structures are protected where land would be used temporarily, such as for compounds, re-grading areas etc. so that when it is returned to the existing land use, it is in a suitable condition; compounds, re-grading areas etc.</li> <li>• Avoid loss or damage to landscape features (e.g. hedges, hedgerows, individual trees and the TPO area) where possible within the constraints of the design.</li> </ul>
<b>Standard mitigation measures</b> - construction and operational management practices for avoiding and reducing environmental effects	<ul style="list-style-type: none"> <li>• Use native species of local provenance wherever possible; and where possible severed hedgerows and treelines will be reconnected using appropriate native species</li> <li>• Existing trees (where retained) would benefit from a buffer zone, where possible and within the constraints of the Project as this would enable associated ground flora and fauna to be protected and make them more effective as a wildlife corridor. This would also help to reduce changes in ground levels close to the trees. Buffers would be fenced off to their full width prior to development.</li> </ul>
<b>Additional mitigation measures</b> - designed to address any residual adverse remaining after primary measures and standard construction practices have been incorporated into the scheme.	<ul style="list-style-type: none"> <li>• Seek to provide tree planting where possible which has a varied spatial/vertical structure and species composition which increases their biodiversity value. Although the opportunity to provide screen planting is likely to be very limited due to the constraints of the project.</li> </ul>
<b>Enhancement measures</b> - improve the landscape resource over and above the landscape setting	<ul style="list-style-type: none"> <li>• Conserve the woodland blocks as far as practicable and apply an appropriate management strategy for continued ecological interest.</li> <li>• Design for maintenance, giving due consideration to the maintenance costs and implications, liabilities and access arrangements for all landscape areas.</li> </ul>

## 13.8 Landscape/ Seascape Effects

13.8.1 The Project would introduce new large-scale industrial development and marine infrastructure into an area where heavy industry and port facilities is an established land-use. Pylons, overhead lines and transport networks, including shipping within the Humber, are dominant and form the landscape and seascape context to the Project. These features inform the landscape and seascape character immediately adjacent to the Project. The existing industry and port facilities have an influence over the extent of the study area.

13.8.2 Taking into account defined embedded mitigation measures, the Project characteristics and the prevailing landscape, **Table 13.8** provides an assessment of the potential landscape and seascape effects associated with the Project construction phase, whilst **Table 13.9** considers effects during Project operation. It is considered that the effects identified associated with Project construction are also applicable to the Project decommissioning phase apart from the marine infrastructure which is to remain in operation beyond the anticipated 25-year design life.

**Table 13.8: Assessment of Landscape and Seascape Effects - Construction**

Landscape / seascape type	Sensitivity of receptor	Description of impact	Predicted magnitude of change	Classification of effect
MCA 6: Humber Water	Low	The Project will introduce construction activities which will directly impact the MCA. This will include dredging to facilitate the construction of the jetty. Other marine and landside construction activity, including marine construction vessels, will add visible disturbance and impact the tranquillity of the MCA. Construction activities will be viewed in context with other large-scale industry and appear in context with the already dynamic landscape and existing large-scale jetties. The size and scale of the construction works in relation to the Project is moderate in relation to the MCA in general and the key characteristics of the landscape will be retained. The impact is assessed as <b>low</b> , over a medium geographical extent, short term and temporary. This will result in a minor adverse not significant effect.	Low	Minor adverse (not significant)
LLT 1 – Industrial Landscape	Very Low	Construction associated with the Project will directly impact the LLT as a result of construction activities and removal of landscape features. Construction activities will be viewed in context with other large-scale industry, however the tranquillity within LLT will be eroded further. Due to the presence of these large-scale structures within this LLT and the nature of construction activities, it is assessed that the Project will have a limited potential to impact the landscape characteristics. Impacts will be <b>very low</b> , over a medium geographical extent, short term and temporary. This will result in a negligible adverse not significant effect.	Very Low	Negligible adverse (not significant)
LLT2 – Open Farmland	Low	The Project lies outside of this LCT but will introduce views of construction activity into it. Distant views of industry to the east, against large skies, is characteristic of this area. Views of industry, together with the network of high voltage pylons, introduce detracting features into the landscape. It is anticipated that the construction of the Project will result in a limited perceptible change to the landscape character and tranquillity. The impact is assessed as <b>very low</b> , over a small geographical extent, short term and temporary. This will result in a negligible adverse not significant effect.	Very Low	Negligible adverse (not significant)



Landscape / seascape type	Sensitivity of receptor	Description of impact	Predicted magnitude of change	Classification of effect
21B – Sunk Island	Low	<p>The Project lies outside of this LCT but will introduce views of construction activity into it. Due to expansive views containing large-scale structures including Killingholme Oil Refineries, Immingham Oil Terminal, Immingham Docks, and other heavy industry, it is considered that the construction of the Project will result in limited perceptible change to the landscape character and tranquillity. The impact is assessed as <b>very low</b>, over a small geographical extent, short term and temporary. This will result in a negligible adverse not significant effect.</p>	Very Low	Negligible adverse (not significant)
The site and its immediate setting	Medium	<p>The Project will require the construction of large-scale marine and landside infrastructure onto a site which is already set within the context of an industrial landscape. Construction methods to include dredging, piling, Horizontal Directional Drilling (HDD) and/or digging of open trenches for pipelines and will include the delivery of construction materials and plant. Construction activity will result in the further erosion of tranquillity and features which will contribute additional disturbance and movement.</p> <p>Temporary construction compound and laydown areas and temporary site access at multiple locations will result in the removal of arable farmland and vegetation. Vegetation removal will also be required to facilitate new entrances connecting to existing roads.</p> <p>Elsewhere, construction will include the clearance of site vegetation and some of the TPO woodland (Long Strip) for the construction of the pipeline and the jetty access road to the east of the East Site.</p> <p>Construction will result in temporary operations to remove and change some of the landscape elements, such as site vegetation, arable farmland, and existing areas of hard standing within the site. Construction will strengthen the industrial character of the landscape of the site and within the immediate setting. There will also be a reduction in tranquillity generally, however, this will be less pronounced due to its location adjacent to existing industrial areas.</p> <p>The impact is assessed as <b>moderate</b>, over a medium geographical extent, short term and temporary. This will result in a moderate adverse significant effect.</p>	Moderate	Moderate adverse (significant)



**Table 13.9: Assessment of Landscape and Seascape Effects - Operation**

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
MCA 6: Humber Water	Low	The Project will introduce marine infrastructure and an industrial presence which will directly impact the MCA. Large shipping vessels are already present within the landscape however the Project will introduce additional movement and further erode the tranquillity of the character area. Large structures, such as the ammonia tank will be viewed in context with other large-scale industry and appear in context with the industrial landscape. The size and scale of the Project is proportionate in relation to the character area in general, and the key characteristics of the landscape will be retained. The impact is assessed as <b>low</b> , over a medium geographical extent, short term and temporary. This will result in a minor adverse not significant effect.	Low	Minor adverse (not significant)
LLT 1 – Industrial Landscape	Very Low	The Project will directly impact the LLT as large new structures, such as the ammonia tank, vent stack, and flare will appear on the skyline and the jetty will encroach into the Humber Estuary. The flat low-lying landscape is heavily influenced by large scale industrial works and the Project will be viewed in context with other large-scale industry. Due to presence of these large-scale structures within this LLT and the nature of the proposals, it is assessed that the Project will have a limited potential to affect the landscape character and perception of the area. Impacts will be <b>low</b> , over a medium geographical extent, long term and reversible. This will result in a minor adverse not significant effect.	Low	Minor adverse (not significant)
LLT2 – Open Farmland	Low	The Project lies outside of this LCT, however, views of the Project from open locations will be available. These will appear as distant views and within the context of existing industry. These views of industry, together with the network of high voltage pylons introduce detracting features into the landscape. It is considered that the visible structures associated with the Project will result in limited perceptible change to the landscape character and tranquillity. The impact is assessed as <b>negligible</b> , over a small geographical extent, short term and reversible. This will result in a negligible adverse not significant effect.	Negligible	Negligible adverse (not significant)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
21B – Sunk Island	Low	<p>The Project lies outside of this LCT but will introduce views of the Project from within. Due to expansive views containing large-scale structures including Killingholme Oil Refineries, Immingham Oil Terminal, Immingham Docks and other heavy industry, it is considered that the Project will result in limited perceptible change to the landscape character and tranquillity. The impact is assessed as <b>negligible</b>, over a small geographical extent, short term and reversible. This will result in a negligible adverse not significant effect.</p>	Negligible	Negligible adverse (not significant)
The site and its immediate setting	Low	<p>The Project will directly impact the site and its immediate setting as large new structures will be present where there is currently an absence of these features. The site is heavily influenced by adjacent large scale industrial works and the Project will be viewed in context with this existing large-scale industry.</p> <p>Due to presence of large-scale structures within this LLT, and the nature of the proposals, it is assessed that the Project will have a limited potential to affect the landscape character and perception of the characteristics. Impacts will be <b>minor</b>, over a medium geographical extent, long term and reversible. This will result in a minor adverse not significant effect.</p>	Minor	Minor adverse (not significant)

### Construction (and Decommissioning)

- 13.8.3 Based on the implementation of the embedded and standard mitigation measures as detailed herein, and due to the existing landscape context assessed within the baseline, the preliminary assessment identifies no significant effects on landscape or seascape receptors out with the Site at Project construction or decommissioning.

### Operation

- 13.8.4 During Project operation, the aesthetic and perceptual qualities would remain similar to the present, with large-scale static structures visible within the wider landscape. Due to the setting of the Project, it is anticipated that there is a low likelihood that the effects would result in an inherent change to the existing landscape character at a local scale and a negligible likelihood at a regional or national scale.
- 13.8.5 Overall, the influence of the Project would be limited to the localised landscape immediately adjacent to the Site boundary and therefore no significant landscape or seascape effects are identified.
- 13.8.6 Given the scale and nature of the Project, there is limited potential for mitigation measures to further reduce operational phase effects, however, where possible and within the constraints of the Project, landscape elements would assist in assimilating the Project into the receiving landscape.

### 13.9 Visual Effects

- 13.9.1 Potential visual effects in relation to the Project in comparison with the future baseline visual context are considered in **Table 13.10** by reference to representative viewpoints – this table considers both Project construction and operation (with construction phase effects also being applicable to the decommissioning phase) and taking embedded mitigation into account. The preliminary assessments contained within **Table 13.10** should be read in conjunction with **Figures 13.1 - 13.8** (PEI Report Volume III) which illustrate the baseline situation at each viewpoint.
- 13.9.2 It is expected that 7 residential properties on the west side of Queens Road will need to be acquired to facilitate the Project (also refer to **Chapter 2: The Project**). For the purposes of this assessment, residential receptors have been assessed as a group within Viewpoint 11. As explained in **Chapter 22: Major Accidents and Disasters**, further assessment is required of the consequences of the operation of the hydrogen production facility on surrounding land uses in terms of major hazard planning. It is currently anticipated that the continued residential use of seven properties on the west side of Queens Road will need to cease, as residential use is unlikely to be compatible with the operation of the hydrogen production facility on the West Site. A number of businesses are also present in the same area on the west side of Queens Road. It is likely that those businesses are compatible with the operation of the hydrogen production facility. Whilst it is possible that powers to compulsorily acquire the properties or undertake appropriate works may be sought as part of the DCO, this is currently

considered unlikely The Applicant is currently in discussions with the landowners / occupiers of the seven residential properties with a view to negotiating their acquisition. Where it is not possible to acquire those properties through negotiation, acquisition powers for these properties will be sought through the DCO.

**Table 13.10: Viewpoint Assessment**

<b>Viewpoint 1: PRow PAULF06/ Cherry Cobb Sands Road</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
523506, 418907	Users of the PRow (recreational)	1.15	3.5	South-west
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
Extensive and open view containing many dynamic elements including large shipping vessels. Distant views of heavy industry including large structures and tall elements. View has scenic quality due to the scale of the view and receptors are focused on the surroundings. The susceptibility is assessed to be medium.		Medium		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Distant views of construction activity associated with the Project would be visible across the Humber Estuary. At the time of the survey, a large shipping vessel associated with the Oil Terminal obstructed views of the Site. The Site occupies a narrow field of view within an extensive and almost continuous line of industrial development along the southern coastline and construction activities are unlikely to be obvious within the view.</p> <p>High level construction activity, such as cranes, are likely to be visible within the view and would add additional vertical features and movement into the scene. Construction of the jetty (including dredging) is also likely to be visible, although periodically screened by the vessels. Construction of low-level landside infrastructure and pipelines is anticipated to be partially screened from view by intervening vegetation, built form and shipping activities.</p> <p>Due to the existing context, construction activity is unlikely to be prominent to the casual observer and would not introduce features at odds with the existing landscape character as port cranes already exist within the view. The scale of the impact is small within the view; however, the nature of the impact is adverse.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 (predicted to last a duration of three years). The duration is therefore short term.</p> <p>The overall impact at construction is assessed as a low size/scale of change in the view, over a small geographical extent, short term and reversible and of low magnitude. The sensitivity is assessed as medium and therefore, this would result in a minor adverse effect on visual amenity at this location.</p>				

<b>Viewpoint 1: PRoW PAULF06/ Cherry Cobb Sands Road</b>		
<b>Magnitude of impact at construction</b>		Minor
<b>Significance of effect at construction</b>	Recreational	Minor adverse (not significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>During Project operation, the in-river jetty including the marine infrastructure and the ammonia storage tank (located at the East Site) would be visible on the mid-horizon. Larger structures, including stack(s) and the ammonia storage tank would be visible against the sky. Additional large shipping vessels would be visible; however, these may also screen parts of the Project and would add movement within the Humber Estuary.</p> <p>The Project would increase the industrial prominence along the coastline without altering the balance of the overall view. The addition of the elements as described would not alter the character of the view due to the existing industrial context. The scale of the impact is small within the view; however, the nature of the impact is adverse.</p> <p>The impact of the Project would be long term and reversible for landside infrastructure and long term and permanent for marine infrastructure.</p> <p>The overall impact at operation is assessed as a low size/scale of change in the view, over a small geographical extent, long term and reversible and overall low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a minor adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Minor
<b>Significance of effect at operation</b>	Recreational	Minor adverse (not significant)

<b>Viewpoint 2: PRoW and proposed England Coast Path</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
521648, 415263	Recreational users of PRoW (recreational)	4.7	4.79	West
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
View containing dynamic elements associated with the Port and subject to natural coastal processes. Industrial presence and flood defences influence the view. Views contain an undeveloped arable field and mature woodland		Medium.		Medium

<b>Viewpoint 2: PRow and proposed England Coast Path</b>		
belt, which are located within the Site boundary. The susceptibility is assessed to be medium.		
<b>Size/ scale, duration and reversibility of impact at construction</b>		
<p>Phase 1 construction works for the Project would be visible at close to mid-range. The construction works for the Project would occupy a wide field of view, with the proposed jetty and topside infrastructure extending into the Humber to the north-east and the East Site (including the ammonia tank) located behind the trees to the west.</p> <p>High level construction activity, such as cranes for installations within the East Site are likely to be visible within the view and would add additional vertical features and movement into the scene. Elements such as this are already present within the view, however, these new features would be brought closer to the observer.</p> <p>The construction of the marine infrastructure, including dredging, would be present within the foreground and further erode tranquillity within this localised area. It is anticipated that jack-up barge(s) and other marine construction vessels would be required to facilitate the construction of the jetty and would introduce a working offshore platform and further movement and disturbance into the coastal scene.</p> <p>Construction of the pipelines and operational access road would also be visible from this location and would require removal of a large part of the 'Long Strip' woodland, however, the details are yet to be confirmed. In addition, site fencing and welfare facilities may also be present within the foreground.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. The alterations would result in a pronounced deterioration in the existing view; therefore, the nature of the impact is adverse.</p> <p>The overall impact at construction is assessed as a high size/scale of change in the view, over a large geographical extent, short term and reversible and overall high magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a major adverse effect (which is significant) on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Major
<b>Significance of effect at construction</b>	Recreational	Major adverse (significant)
<b>Size/scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and structures associated with East Site are expected to be visible from this location and form dominant new features across the skyline. A large part of the existing TPO woodland in Long Strip along the bridleway/ PRow is anticipated to be removed to facilitate the operational access route to the jetty, pipelines and maintenance track, however some woodland is expected to be retained which should still provide some screening for views from the east.</p> <p>The jetty would be visible from this location, although would not add a feature not already present or characteristic of the view. Additional shipping vessels would add further movement to the already dynamic coastline.</p> <p>The ammonia pipeline from the jetty to the East Site is proposed to be above ground and stacked vertically. Views of this pipeline are likely to be visible from this location.</p>		

<b>Viewpoint 2: PRow and proposed England Coast Path</b>		
<p>The alterations would result in a noticeable deterioration in the view and therefore the nature of the impact is adverse.</p> <p>The impact could be lessened by introducing planting along the coastal route (such as a native trees, hedge, and/ or woodland belt) where possible and within the constraints of the Project. Users of the PRow would experience transient views whilst using the PRow, where the effects would be less visible along the wider route as a result of distance, intervening features, and direction of view.</p> <p>The overall impact at operation is assessed as a medium size/scale of change in the view, over a medium geographical extent, long term and reversible (landside) and permanent (marine) and hence overall medium magnitude.</p> <p>The sensitivity is assessed as medium and therefore, the Project would result in a moderate adverse effect (which is significant) on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Moderate
<b>Significance of effect at operation</b>	Recreational	Moderate adverse (significant)

<b>Viewpoint 3: Bridleway/ PRow and proposed England Coast Path</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
521311, 415505	Recreational users of the bridleway/ PRow	5.5	Adjacent to the Site boundary	South-east
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
View containing dynamic elements associated with the Port and subject to natural coastal processes. Industrial presence such as the Stallingborough chemical plant and flood defences influence the view. The view has a scenic quality albeit the detracting features. The susceptibility is assessed to be medium.		Medium		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of construction activity associated with the Project would be visible at close to mid-range. The Project would occupy a wide field of vision within this view, with the proposed jetty extending into the Humber to the north-east. The section of the bridleway/ PRow along the east of the East Site is likely to be diverted during the construction phase until the plant is operational.</p> <p>High level construction activity, such as cranes for installations within the East Site are likely to be visible and would add additional vertical features and movement into the scene.</p> <p>The construction of the marine infrastructure, including dredging, would be present within the foreground and further erode tranquillity within this localised area. It is anticipated that jack-up</p>				



<b>Viewpoint 3: Bridleway/ PRoW and proposed England Coast Path</b>		
<p>barge(s) would be required to facilitate the construction of the jetty and would introduce a working offshore platform with further movement and disturbance into the coastal scene.</p> <p>Construction of the pipelines and access road would be visible from this location and include tree loss within 'Long Strip' woodland. The details on the amount of tree loss is yet to be confirmed. Additional impacts arising from the clearance of surface vegetation and digging of open trenches within the field to the foreground. In addition, site fencing and welfare facilities may also be present within the scene.</p> <p>Construction activity is likely to dominate the scene. As described above, the bridleway/ PRoW is likely to be diverted or closed during the construction of the Project for safety reasons and reopened following the completion of Phase 1.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term.</p> <p>The overall impact at construction is assessed as a high size/scale of change in the view, over a large geographical extent, short term and reversible and hence overall high magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a major adverse effect (which is significant) on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Major
<b>Significance of effect at construction</b>	Recreational	Major adverse (significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and structures associated with the East Site are expected to be visible from this location on the periphery of the view. At least some of the existing woodland along the bridleway/ PRoW is expected to be retained which would allow for some screening of the industrial installations.</p> <p>The jetty would be visible from this location, alongside the existing jetty. Additional shipping vessels would add further movement and disturbance to the already dynamic coastline.</p> <p>The field shown within the foreground would be restored following the construction of Phase 1, however, the proposals remain under development.</p> <p>The impact of the Project is long term and reversible for landside infrastructure and long term and permanent for marine infrastructure. The Project would result in a noticeable deterioration in the view and the nature of the impact is assessed as adverse.</p> <p>The impact could be lessened by introducing planting along the coastal route (such as a native trees, hedge, and/ or woodland belt), where possible within the constraints of the Project. The viewpoint represents the worst-case scenario and is located at the closest point to the Project. Recreational receptors would experience transient views whilst using the PRoW, where the effects would be less visible as a result of intervening features and direction of view. The view from this location is likely to be orientated towards the Humber Estuary and activity associated with it.</p> <p>The overall impact at operation is assessed as a medium size/scale of change in the view, over a medium geographical extent, long term and reversible and hence of overall medium magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a moderate adverse effect (which is significant) on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Moderate

<b>Viewpoint 3: Bridleway/ PRow and proposed England Coast Path</b>		
<b>Significance of effect at operation</b>	Recreational	Moderate adverse (significant)

<b>Viewpoint 4: Queen's Road</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
520221, 414743	Motorised users of the road and commercial receptors.	2.2	Less than 0.1km from the Site boundary	Viewpoint 4a – north-east. Viewpoint 4b – south-west.
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
View along Queen's Road containing both rural and urban elements. Detracting features such as Queen's Road Power Station. Receptors assessed as having a low susceptibility to change. The susceptibility is assessed to be low.		Low.		Low
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of construction activity associated with the Project would be visible at close to mid-range. The Project would occupy a wide field of vision within this view to the north-east and south-west.</p> <p>High level construction activity, such as cranes for installations within the East Site would be visible behind the trees and against the skyline. Lower-level construction activity associated with the East Site is likely to be screened by existing intervening vegetation.</p> <p>Construction activity associated with the West Site and hydrogen pipeline is likely to be noticeable within the view with machinery, site welfare cabins, fencing and heavy vehicles present within the foreground. Pipeline construction could include the clearing of surface vegetation and the digging of open trenches within the field to the foreground, however, details are yet to be confirmed.</p> <p>The construction of the marine infrastructure is unlikely to be visible from this location.</p> <p>Construction activities are likely to result in a noticeable deterioration in the view and the nature of the impact is assessed as adverse. Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term.</p> <p>The overall impact at construction is assessed as a medium size/scale of change in the view, over a medium geographical extent, short term and reversible and hence of overall medium magnitude. The sensitivity is assessed as low and therefore, the Project would result in a moderate adverse effect (which is significant) on visual amenity at this location.</p>				
<b>Magnitude of impact at construction</b>				Moderate

<b>Viewpoint 4: Queen's Road</b>		
<b>Significance of effect at construction</b>	Local road users and commercial	Moderate adverse (significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and structures associated with East Site are expected to be visible from this location and would be visible on the skyline.</p> <p>Installations associated with the West Site are also likely to be visible from this location to the south west.</p> <p>The Project would introduce large new structures into the scene which would increase the industrial presence within this localised area. The Project is not out of context within the receiving landscape, however, would introduce built form which would enclose the view to the south-west.</p> <p>The Project is likely to result in a deterioration in the view with the addition of large detracting elements. The impact of the Project is long term, reversible and adverse.</p> <p>The overall impact at operation is assessed as a low size/scale of change in the view, over a medium geographical extent, long term and reversible hence low magnitude. The sensitivity is assessed as low and therefore, the Project would result in a minor adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Minor
<b>Significance of effect at operation</b>	Motorised users and commercial	Minor adverse (not significant)

<b>Viewpoint 5: Public Right of Way to the east of Immingham</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
519289, 414779	Users of the Public Right of Way	2.12	0.5km	East
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
<p>PRoW crosses a medium sized arable field. Detracting features present within the scene include overhead pylons, industrial building and power station. Receptors are assessed as having a medium susceptibility to the changes arising from the Project.</p>		Low		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
Views of high-level construction activity, such as cranes for installations within the East Site and West Site would be visible behind the trees on the horizon. Lower-level construction activity				

<b>Viewpoint 5: Public Right of Way to the east of Immingham</b>		
<p>associated with the West Site is likely to be screened by existing intervening vegetation along King's Road (A1173).</p> <p>Low-level construction activity associated with the East Site, marine infrastructure and pipelines is unlikely to be visible from this location due to the distance of the receptor and intervening vegetation and surface features.</p> <p>The addition of cranes into the landscape would add to the existing vertical and detracting features, however, would remain in context with the landscape character.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activities are likely to result in a limited deterioration of the view, however, the nature of the impact is adverse.</p> <p>The overall impact at construction is assessed as low size/scale of change in the view, over a small geographical extent, short term and reversible and overall low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a minor adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Minor
<b>Significance of effect at construction</b>	Recreational	Minor adverse (not significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and structures associated with East Site are expected to be visible on the skyline. Installations associated with the West Site are also likely to be visible from this location. Together these would extend the existing vertical features across the skyline.</p> <p>The Project would introduce additional large new structures into the scene which would increase the industrial presence within this localised area. The Project is not out of context within the receiving landscape, however, would extend the existing detracting features across the horizon.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a limited deterioration of the view, however, the nature of the impact is adverse.</p> <p>The overall impact at operation is assessed as a low size/scale of change in the view, over a small geographical extent, long term and reversible and hence low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a minor adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Minor
<b>Significance of effect at operation</b>	Recreational	Minor adverse (not significant)

<b>Viewpoint 6: Public Right of Way to the rear of Ings Lane/Talbot Road</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
519048, 414526	Residents	1.98	0.7km	North-east
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
PRoW located to the rear of houses on Ings Lane and Talbot Road. The susceptibility of the receptor is assessed to be medium to high.		Low		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of high-level construction activity, such as cranes for installations within the East Site and West Site may be partially visible behind the trees on the horizon. Lower-level construction activity associated with the East Site and West Site would be screened by existing intervening vegetation including a block of woodland.</p> <p>All construction activity associated with the marine infrastructure and pipeline is unlikely to be visible from this location due to the distance of the receptor and intervening vegetation and surface features.</p> <p>The addition of cranes into the landscape would contribute additional vertical and detracting features into the scene, however, these are in context with the landscape character.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activity is likely to result in a change barely perceptible within the view.</p> <p>The overall impact at construction is assessed as very low size/scale of change in the view, over a very small geographical extent, short term and reversible and hence very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>				
<b>Magnitude of impact at construction</b>				Negligible
<b>Significance of effect at construction</b>		Residential and recreational	Negligible adverse (not significant)	
<b>Size/ scale, duration and reversibility of impact at operation</b>				
<p>Installations, such as the ammonia tank, and taller structures associated with East and West Site would be partially visible on the skyline, however, intervening vegetation would assist in screening some of these elements.</p> <p>The Project would introduce large new structures into the scene, although these may not be immediately apparent to the casual observer due to the proximity of the receptor from these structures. The Project is not out of context within the receiving landscape, however, would increase the presence of detracting features within the horizon where views allow.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a barely perceptible deterioration of the existing view, however, the nature of the impact is assessed as adverse.</p>				

<b>Viewpoint 6: Public Right of Way to the rear of Ings Lane/Talbot Road</b>		
The overall impact at operation is assessed as a very low size/scale of change in the view, over a very small geographical extent, long term and reversible and very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.		
<b>Magnitude of impact at operation</b>		Negligible
<b>Significance of effect at operation</b>	Residential and recreational	Negligible adverse (not significant)

<b>Viewpoint 7: Public Right of Way to the north east of Mauxhall Farm</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
519090, 413323	Users of PRow/recreational	3.2	1.2km	North-east
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
PRow located within large arable fields. The susceptibility of the receptor is assessed to be medium to high as attention is focused on the enjoyment of the countryside.		Low		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of high-level construction activity, such as cranes for installations within the East Site and West Site are likely to be visible within the horizon. Lower-level construction activity associated with the West Site would be screened by existing intervening vegetation and built form.</p> <p>All construction activity associated with the marine infrastructure and pipeline is unlikely to be visible from this location due to the distance of the receptor and intervening vegetation and surface features.</p> <p>The addition of cranes into the landscape would contribute additional vertical and detracting features into the scene, however, these are in context with the landscape character. Within the narrow field of vision, where the Project would be visible, there are existing overhead pylons and vertical features.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activity is likely to result in a change barely perceptible within the view.</p> <p>The overall impact at construction is assessed as a very low size/scale of change in the view, over a very small geographical extent, short term and reversible and very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>				
<b>Magnitude of impact at construction</b>				Negligible

<b>Viewpoint 7: Public Right of Way to the north east of Mauxhall Farm</b>		
<b>Significance of effect at construction</b>	Residential	Negligible adverse (not significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and taller structures associated with East and West Site has the potential to be partially visible on the skyline within a narrow extent along the horizon.</p> <p>The Project would introduce large new structures into the scene, although these may not be immediately apparent to the casual observer due to the proximity of the receptor from these structures. The Project is not out of context within the receiving landscape, however, the presence of detracting features within the horizon would be increased.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a barely perceptible deterioration of the existing view.</p> <p>The overall impact at operation is assessed as a very low size/scale of change in the view, over a very small geographical extent, long term and reversible and hence very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Negligible
<b>Significance of effect at operation</b>	Residential	Negligible adverse (not significant)

<b>Viewpoint 8: Public Right of Way to the north east of Stallingborough</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
520649, 412061	Users of PRow and residents	1.8	2.4km	North
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
PRow located within large arable fields with scattered areas of scrub and some mature trees along boundaries. Receptors have open rural views, however, influenced by pylons and distant industry on the horizon. The susceptibility of the receptor is assessed to be medium to high.		Low		Medium
<b>Size/ scale, duration and reversibility of impact at construction</b>				
Views of high-level construction activity, such as cranes for installations within the East Site and West Site are likely to be visible behind mature vegetation on the horizon. Lower-level construction activity associated with the Project would be screened by existing intervening vegetation and built form.				



<b>Viewpoint 8: Public Right of Way to the north east of Stallingborough</b>		
<p>All construction activity associated with the marine infrastructure and pipeline is unlikely to be visible from this location due to the distance of the receptor and intervening vegetation and surface features.</p> <p>The addition of cranes into the landscape would contribute additional vertical and detracting features into the scene, however, these are in context with the landscape character.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activity is likely to result in a change barely perceptible within the view.</p> <p>The overall impact at construction is assessed as a very low size/scale change in the view, over a very small geographical extent, short term and reversible and hence very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Negligible
<b>Significance of effect at construction</b>	Residential and recreational	Negligible adverse (not significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and taller structures associated with East and West Site has the potential to be partially visible on the skyline although mature intervening vegetation would screen a large proportion of the Project.</p> <p>The Project would introduce large new structures into the scene, although these may not be immediately apparent to the casual observer due to the distance proximity of the receptor from these structures and the scale of other detracting features closer to the receptor. The Project is not out of context within the receiving landscape, however, the presence of detracting features within the horizon would increase.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a barely perceptible deterioration of the existing view.</p> <p>The overall impact at operation is assessed as a very low size/scale of change in the view, over a very small geographical extent, long term and reversible and hence very low magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Negligible
<b>Significance of effect at operation</b>	Residential and recreational	Negligible adverse (not significant)

<b>Viewpoint 9: B1210 adjacent to railway line</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
518447, 412430	Local users of the road/ users of the railway	3.6	2.4km	North
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
Road and railway travelling through a flat landscape with open views across large arable fields. Vegetation cover is generally low. Overhead wires and pylons traverse the landscape and various industrial facilities, and mature trees enclose the horizon. The susceptibility of the receptor is assessed to be low.		Low		Low
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of high-level construction activity, such as cranes for installations within the East Site and West Site are likely to be visible behind mature vegetation and existing structures on the horizon. Lower-level construction activity associated with the Project would be screened by existing intervening vegetation and built form.</p> <p>All construction activity associated with the marine infrastructure and pipeline is unlikely to be visible from this location due to the distance of the receptor and intervening vegetation and surface features.</p> <p>The addition of cranes into the landscape would contribute additional vertical and detracting features into the scene, however, these are in context with the landscape character.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activity is likely to result in a change barely perceptible within the view.</p> <p>The overall impact at construction is assessed as a very low size/scale of change in the view, over a very small geographical extent, short term and reversible and hence low magnitude. The sensitivity is assessed as low and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>				
<b>Magnitude of impact at construction</b>				Negligible
<b>Significance of effect at construction</b>		Road and railway users	Negligible adverse (not significant)	
<b>Size/ scale, duration and reversibility of impact at operation</b>				
Installations, such as the ammonia tank, and taller structures associated with East and West Site has the potential to be partially visible on the skyline although mature intervening vegetation would screen a large proportion of the development.				

<b>Viewpoint 9: B1210 adjacent to railway line</b>		
<p>The Project would introduce large new structures into the scene, although these may not be immediately apparent to the casual observer due to the proximity of the receptor from these structures and the scale of the development in relation to similar developments. The Project is not out of context within the receiving landscape, however, the presence of detracting features within the horizon would increase.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a barely perceptible deterioration of the existing view.</p> <p>The overall impact at operation is assessed as a very low size/scale of change in the view, over a very small geographical extent, long term and reversible and hence very low magnitude. The sensitivity is assessed as low and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Negligible
<b>Significance of effect at operation</b>	Road and railway users	Negligible adverse (not significant)

<b>Viewpoint 10: Public Right of Way and proposed England Coast Path</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
518160, 417989	Users of the PRow	3.6	3.5km	South-east
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
Users of the coastal path travelling south along the flood defences. Views are open and extensive across the Humber Estuary. Industry both marine and landside is dominant and erodes tranquillity. The susceptibility of the receptor is assessed to be medium due to the nature of the views.		Low		Medium to low
<b>Size/ scale, duration and reversibility of impact at construction</b>				
<p>Views of high-level construction activity, such as cranes for installations within the East Site and for the marine infrastructure has the potential to be visible behind the existing structures associated with the Oil Terminal. Lower-level construction activity associated with the Project would be screened by built form and intervening vegetation.</p> <p>Construction activity associated with the pipelines would not be visible due to large intervening surface features.</p> <p>The addition of cranes into the landscape would contribute additional vertical and detracting features into the scene, however, these are in context with the landscape character and would not be discernible within the existing context.</p>				

<b>Viewpoint 10: Public Right of Way and proposed England Coast Path</b>		
<p>Construction activity would be phased over an eleven-year period with the majority of the works described above occurring during Phase 1 over a period of three years. The duration is therefore short term. Construction activity is likely to result in a change barely perceptible within the view.</p> <p>The overall impact at construction is assessed as a very low size/scale of change in the view, over a small geographical extent, short term and reversible and hence very low magnitude. The sensitivity is assessed as medium to low and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Negligible
<b>Significance of effect at construction</b>	Recreational	Negligible adverse (not significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and taller structures associated with the East Site has the potential to be visible on the skyline although existing intervening mature vegetation would screen a large proportion of the Project.</p> <p>The Project would introduce large new structures into the scene, although these may not be immediately apparent to the casual observer due to the presence of similar industrial elements across the view. The Project is not out of context within the receiving landscape.</p> <p>The impact of the Project is long term and reversible. The Project is likely to result in a barely perceptible deterioration of the existing view.</p> <p>The overall impact at operation is assessed as a very low size/scale, over a small geographical extent, long term and reversible and hence very low magnitude. The sensitivity is assessed as medium to low and therefore, the Project would result in a negligible adverse effect on visual amenity at this location.</p>		
<b>Magnitude of impact at operation</b>		Negligible
<b>Significance of effect at operation</b>	Recreational	Negligible adverse (not significant)

<b>Viewpoint 11: Kings Road</b>				
<b>Grid reference</b>	<b>Receptor type</b>	<b>Elevation (m AOD)</b>	<b>Approx. distance from Project (km)</b>	<b>Direction of view</b>
519676 414814	Residents of properties on Queens Road	2	>10m	East
<b>Visual susceptibility to change</b>		<b>Value of view</b>		<b>Sensitivity of receptor</b>
Residential receptors located at close proximity to the West Site. Views of the Project are likely from first floor windows and principle living areas in locations where intervening boundary features do not exist. It is		Low		Medium

<b>Viewpoint 11: Kings Road</b>		
<p>assessed that the susceptibility of the residential receptors is high due to the nature of the receptor and proximity to the Project.</p> <p>It is expected that these residential receptors will be acquired to facilitate the Project.</p>		
<b>Size/ scale, duration and reversibility of impact at construction</b>		
<p>Potential views of construction activity associated with the West Site is expected to be visible at close to mid-range and would extend across the entire view to the rear of the residential receptors. High-level construction activity associated with the East Site may be visible in the distance to the north, and construction activity associated with the pipeline may be visible east where there are no intervening landscape elements or built form.</p> <p>Construction activity associated with the West Site is likely to be noticeable within the view to the rear of the residencies with machinery, site welfare cabins, fencing and heavy vehicles present within the foreground. Pipeline construction may include the clearing of surface vegetation and the digging of open trenches within the field to the foreground, however, details are yet to be confirmed.</p> <p>Construction activity would be phased over an eleven-year period with the majority of the works occurring during Phase 1 over a period of three years. Construction activity during Phases 2 to 6 occur over a seven-year period and include the additions of converters and liquefiers within the East and West Sites. The duration is therefore short term. Construction activities are likely to result in a noticeable deterioration in the view to the west of the residential receptors over a large area and at close proximity to the receptor. The nature of the impact is assessed as adverse.</p> <p>The overall impact at construction is assessed as a high size/scale change in the view, over a large geographical extent, short term and reversible and hence high magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a major adverse effect (which is significant) on visual amenity at this location.</p>		
<b>Magnitude of impact at construction</b>		Major
<b>Significance of effect at construction</b>	Residential	Major adverse (significant)
<b>Size/ scale, duration and reversibility of impact at operation</b>		
<p>Installations, such as the ammonia tank, and taller structures associated with East Site may be visible on the skyline although mature intervening vegetation and built form would screen a large proportion of the development. These structures may not be immediately apparent to the casual observer due to the presence of similar industrial elements across the view.</p> <p>Installations associated with the West Site would be visible to the rear (west) of the residential receptors across the entire view introducing detracting features to the foreground of the view.</p> <p>The impact of the Project is long term and reversible; however, the Project would introduce additional detracting features into an area which is currently largely undeveloped. This is likely to result in a noticeable deterioration of the existing view immediately apparent to the receptor.</p> <p>The overall impact at operation is assessed as a high size/scale of change in the view, over a large geographical extent, long term and reversible and hence high magnitude. The sensitivity is assessed as medium and therefore, the Project would result in a major adverse effect (which is significant) on visual amenity at this location.</p>		

Viewpoint 11: Kings Road		
<b>Magnitude of impact at operation</b>		Major
<b>Significance of effect at operation</b>	Residential	Major adverse (significant)

### Construction (and Decommissioning)

- 13.9.3 It is considered that during Project construction (and decommissioning) there would be changes in the view through the addition of detracting visual features associated with the construction process and the introduction of new large-scale structures at various stages of development. The visual effects at the construction stage are assessed to be short term and reversible.
- 13.9.4 As detailed in **Table 13.7**, the preliminary assessment indicates that potential significant adverse visual amenity effects could be experienced at a number of representative viewpoints as follows in the construction phase:
- Viewpoint 2 (PRoW and proposed English Coastal Path).
  - Viewpoint 3 (PRoW and proposed English Coastal Path).
  - Viewpoint 4 (Queen's Road).
  - Viewpoint 11 (Residential receptors located on Queens Road).

### Operation

- 13.9.5 The visibility of the Project across a large extent of the study area is likely due to limited intervening vegetation and built form within a flat landscape. The Project would introduce new, large structures and vertical elements into a landscape where these features are already present. When viewed from within the landscape, these new structures would be viewed within the context of existing similar structures within relatively close proximity.
- 13.9.6 The introduction of this industrial development within a substantial landscape framework would not be uncharacteristic when set within the existing attributes of the local receiving landscape. This includes the existing development and infrastructure.
- 13.9.7 The visual effects at operation are assessed to be long term and reversible for landside infrastructure and permanent for marine infrastructure.
- ### 13.10 Mitigation and Enhancement Measures
- 13.10.1 The opportunity for mitigation of the significant visual effects of the Project is limited due to the size and scale of the proposed structures. No additional mitigation is proposed at this stage due to the developing design, however, the suggested mitigation measures outlined below may assist in assimilating the Project into the receiving landscape subject to the constraints of the Project.



- 13.10.2 Mitigation will be implemented during construction to ensure the protection of retained trees with appropriate root protection areas, and these will be clearly marked in the CEMP.
- 13.10.3 Suggested mitigation within a 15-year assessment period:
- Planting to reinforce the existing vegetation, where appropriate, would provide denser effective winter visual barrier.
  - Any newly planted tree belts and hedgerow trees would be protected using suitable protection methods to enable successful establishment.
  - External appearance, including colour, materials and surface finishes of permanent buildings and structures to be considered.
- 13.10.4 These mitigation measures would help partially mitigate views of the Project elements and assimilate it into the surrounding landscape. When seen within the context of the wider landscape, for some viewpoints, the proposals would seem less noticeable at year 15 compared to year 1. However, as detailed in **Table 13.7**, the preliminary assessment indicates that given the scale of visible elements potential significant adverse visual amenity effects would persist at year 15 and could be experienced at a number of representative viewpoints during the Project operational phase as follows:
- Viewpoint 2 (PRoW and proposed English Coastal Path).
  - Viewpoint 3 (PRoW and proposed English Coastal Path).
  - Viewpoint 11 (Residential receptors located on Queens Road).
- ### 13.11 Preliminary Assessment of Residual Effects
- 13.11.1 The assessment has determined that receptors at Viewpoints 2, 3, 4 and 11 are likely to experience significant short-term adverse effects during construction as a result of the close distance and limited intervening vegetation.
- 13.11.2 The impact on receptors at Viewpoint 4 (motorised and commercial receptors at Queens Road) would reduce to not significant during operation. Effects are likely to remain significant for the remaining receptors at Viewpoints 2, 3, and 11 due to the sensitivity of these receptors (recreational and residential) and the close distance of these receptors to the Project. Viewpoints 2 and 3 are located within a short distance from each other and represent the worst-case scenario for transient views experienced by recreational receptors using the England Coast Path and bridleway.
- 13.11.3 As the design development evolves for the Project it is recommended that options for mitigation in the form of additional landscape features are to be explored.
- ### 13.12 Summary of Preliminary Assessment
- 13.12.1 **Table 13.11** provides a summary of the likely significant landscape/ seascape and visual effects associated with the Project. This illustrates that the preliminary landscape/ seascape assessment has not identified any significant effects during the construction phase and operation of the Project. The preliminary visual



amenity assessment indicates that some representative viewpoints would experience potential significant effects during Project construction, operation and decommissioning.

- 13.12.2 The landscape and seascape character and visual amenity effects associated with the Project will be re-evaluated and reported within the ES following the confirmation of the Project design details and mitigation features.

**Table 13.11: Summary of Preliminary Assessment – Likely Significant Effects**

Receptor Reference	Receptor Location	Receptor Type	Significance of Effect	
			Construction (and Decommissioning)	Operation
<b>Landscape/ Seascape</b>				
No identified significant effects on landscape and seascape receptors				
<b>Visual Amenity</b>				
2	PRoW and proposed England Coast Path route	Recreational	<b>Major adverse (significant)</b>	<b>Moderate adverse (significant)</b>
3	Bridleway/ PRoW and proposed England Coast Path Route	Recreational	<b>Major adverse (significant)</b>	<b>Moderate adverse (significant)</b>
4	Queens Road	Motorised users and commercial receptors	<b>Moderate adverse (significant)</b>	Minor adverse (not significant)
11	Kings Road, Immingham	Residential receptors located on Queens Road	<b>Major adverse (significant)</b>	<b>Major adverse (significant)</b>

**Table 13.12: Summary of potential impact, mitigation measures and residual effects**

Development Stage	Environmental effect (following development design and impact avoidance measures)	Classification of effect prior to mitigation	Mitigation/ enhancement (if identified)	Classification of residual effect after mitigation	Nature of effect(s) (Long term (Lt)/ Medium term (Mt)/ Short term (St) and Permeant (P)/ Temporary (T))
Construction	Impact on recreational users at viewpoint 2 PRow and proposed England Coast Path Route	Major adverse (significant)	No current proposals for mitigation or enhancement	Major adverse (significant)	St/T
Construction	Impact on recreational users at viewpoint 3 bridleway/ PRow and proposed England Coast Path Route	Major adverse (significant)	Likely diversion or closure of bridleway/ PRow	Moderate adverse (significant)	St/T
Construction	Impact on users of Queens Road and commercial receptors	Moderate adverse (significant)	No current proposals for mitigation or enhancement	Moderate adverse (significant)	St/T
Construction	Impact on residential receptors located on Queens Road	Major adverse (significant)	No current proposals for mitigation or enhancement	Major adverse (significant)	St/T
Operation	Impact on recreational users at viewpoint 2 PRow and proposed England Coast Path Route	Moderate adverse (significant)	No current proposals for mitigation or enhancement	Moderate adverse (significant)	Lt/T

Development Stage	Environmental effect (following development design and impact avoidance measures)	Classification of effect prior to mitigation	Mitigation/ enhancement (if identified)	Classification of residual effect after mitigation	Nature of effect(s) (Long term (Lt)/ Medium term (Mt)/ Short term (St) and Permanent (P)/ Temporary (T))
Operation	Impact on recreational users at viewpoint 3 bridleway/ PRow and proposed England Coast Path Route	Moderate adverse (significant)	No current proposals for mitigation or enhancement	Moderate adverse (significant)	Lt/T
Operation	Impact on residential receptors located on Queens Road	Major adverse (significant)	No current proposals for mitigation or enhancement, however, options for landscape buffer to be explored as intervening landscape features would help to screen the development located on the West Site	Major adverse (significant), however, intervening landscape features may assist in screening the development and reduce significant effects	Lt/T

### 13.13 References

- Ref 13-1 European Landscape Convention (ELC) (2020).
- Ref 13-2 Department for Transport (2012). National Policy Statement for Ports (NPSfP).
- Ref 13-3 Ministry of Housing, Communities and Local Government (updated 2021). National Planning Policy Framework (NPPF).
- Ref 13-4 Ministry of Housing, Communities and Local Government (2021). The National Planning Practice Guidance (NPPG): National Design Guide.
- Ref 13-5 North Lincolnshire Council (2022). North Lincolnshire Local Plan Publication Draft Addendum Plan.
- Ref 13-6 North East Lincolnshire Council (2018). North East Lincolnshire Local Plan.
- Ref 13-7 East Riding of Yorkshire Council (2016). East Riding Local Plan.
- Ref 13-8 North Lincolnshire Council (2011). The North Lincolnshire Local Development Framework Development Plan Document – Core Strategy.
- Ref 13-9 Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment Third Edition.
- Ref 13-10 Landscape Institute (2021). Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals.
- Ref 13-11 Landscape Institute (2021). Technical Guidance Note (TGN) 04/2021: Assessing landscape value outside national designations.
- Ref 13-12 Landscape Institute (2021). Technical Guidance Note (TGN) 04/2020: Infrastructure.
- Ref 13-13 The Planning Inspectorate (2012). Planning Inspectorate Guidance Note Nine: Using the Rochdale Envelope.
- Ref 13-14 Mapping data from Natural England.
- Ref 13-15 Mapping data from Historic England.
- Ref 13-16 Google Earth.
- Ref 13-17 Google Street View.
- Ref 13-18 MAGIC open source data.
- Ref 13-19 AECOM Geospatial Information.
- Ref 13-20 Natural England (2014). National Character Area 41: Humber Estuary.
- Ref 13-21 Natural England (2014). National Character Area 42: Lincolnshire Coast and Marshes.

- Ref 13-22 Marine Management Organisation (2018). National Seascape Character Area Assessment for England (MM01134).
- Ref 13-23 URS Scott Wilson on behalf of Natural England (2012). Seascape Character Area Assessment East Inshore and East Offshore marine plan areas.
- Ref 13-24 English Heritage and Lincolnshire County Council (2011). The Historic Character of The County of Lincolnshire.
- Ref 13-25 East Riding of Yorkshire Council (2018). East Riding of Yorkshire Landscape Character Assessment.
- Ref 13-26 North East Lincolnshire Council(2010). North Lincolnshire Landscape Character Assessment.
- Ref 13-27 North Lincolnshire Council (2022). North Lincolnshire Local Plan: Stage 5: Publication Draft Addendum..
- Ref 13-28 Natural England (2021). England Coast Path Stretch: Mablethorpe to Humber Bridge – Report MHB 3: Humberston to Immingham Docks.
- Ref 13-29 FPCR, Environment and Design Ltd (2015). North East Lincolnshire Landscape Character Assessment Sensitivity and Capacity Study.
- Ref 13-30 Estell Warren Landscape Architects on behalf of North Lincolnshire Council (1999). North Lincolnshire Character Assessment and Guidelines.
- Ref 13-31 DEFRA (2009). Construction Code of practice for the Sustainable Use of Soils.
- Ref 13-32 The British Standard (2012). Trees in Relation to Design, Demolition and Construction to Construction - Recommendations (BS 5837).
- Ref 13-33 JBA Consulting on behalf of North Lincolnshire Council (n.d.). North Lincolnshire Landscape Character Assessment – a review by JBA Consulting on behalf of North Lincolnshire Council (no publication date)
- Ref 13-34 North East Lincolnshire Council (2010). Landscape Character Assessment.
- Ref 13-35 Natural England (2021). England Coast Path Stretch: Mablethorpe to Humber Bridge. Report MHB 3: Humberston to Immingham Docks. Map MHB 3I: North Beck Drain to Queens Road.

## 13.14 Abbreviations and Glossary of Terms

**Table 13.13: Glossary and Abbreviations**

Term	Acronym	Meaning
Above Ground Level	AGL	A measurement of height from the natural grade of a site to the highest point of a structure.
Above Ordnance Datum	AOD	A measurement of height from Ordnance Datum Newlyn to the highest point of a structure.
Construction Environmental Management Plan	CEMP	A Construction Environmental Management Plan describes the specific mitigation measures to be followed by the appointed construction contractor to reduce potential nuisance impacts.
Department for Environment, Food and Rural Affairs	Defra	The Government department responsible for policy and regulations on environmental, food and rural issues. The department's priorities are to grow the rural economy, improve the environment and safeguard animal and plant health.
Development Consent Order	DCO	The consent for a Nationally Significant Infrastructure Project required under the Planning Act 2008.
Development plan documents	DPD	Documentation which seeks to guide development and planning in a local authority area for a set period of time.
Digital Terrain Model	DTM	A digital terrain model is a 3D representation of a terrain's surface.
East Riding of Yorkshire Council	ERYC	The ERYC has administrative control over the East Riding of Yorkshire.
England Coast Path	ECP	The English Coast Path will be the longest coastal path in the world. It will go all the way around the coast of England and will be 2,795 miles long when it is complete.
Environmental Statement	ES	A statutory document which reports the EIA process, produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
European Landscape Convention	ELC	The European Landscape Convention (ELC) promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues
European Marine Site	EMS	European Marine Sites are areas at sea, partly or completely covered by tidal water, which are protected by European law.

Term	Acronym	Meaning
	FPCR	A leading design and environmental practice working extensively in the UK and with projects worldwide.
Guidelines for Landscape and Visual Impact Assessment	GLVIA	Provided advice on assessing the landscape and the visual impacts of development projects.
Heavy Goods Vehicle	HGV	A large truck for transporting goods.
Immingham Eastern Ro-Ro Terminal	IERRT	The proposed ro-ro facility.
Kilometre	km	A unit of measurement equal to 1000 metres.
Landscape and Biodiversity Management and Enhancement Plan	LBMEP	The LBMEP will present proposals for landscape planting, including within the construction laydown areas.
Landscape Character Areas	LCA	Referred to within North Lincolnshire Council administrative boundary
Landscape Character Type	LCT	Referred to within North Lincolnshire Council administrative boundary
Local Landscape Type	LLT	Tracts of land which share similar combinations of soils, land use, field boundaries and tree and woodland cover.
Local Wildlife Site	LWS	Non-statutory sites of nature conservation value that have been designated 'locally'. These sites are referred to differently between counties with common terms including site of importance for nature conservation, county wildlife site, site of biological importance, site of local importance and sites of metropolitan importance.
Long Strip		The triangle area of land off Queens Road and the band of mature deciduous woodland spanning Laporte Road
Long term	Lt	Nature of effect lasting 10+ years.
Marine Management Organisation	MMO	The Marine Management Organisation is an executive non-departmental public body in the United Kingdom established under the Marine and Coastal Access Act 2009, with responsibility for English waters.
Medium term	Mt	Nature of effect lasting 5-10 years.
Metre	m	A unit of measurement



Term	Acronym	Meaning
Ministry of Housing, Communities and Local Government	MHCLG	Ministry of Housing, Communities & Local Government is now called Department for Levelling Up, Housing and Communities which supports communities across the UK to thrive making them great places to live and work.
Multi-Agency Geographic Information Service	MAGIC	A website which provides geographic information about the natural environment.
National Character Area	NCA	There are 159 National Character Areas and they follow natural, rather than administrative, boundaries. They are defined by Natural England, the UK government's advisors on the natural environment.
National House-Building Council	NHBC	The National House Building Council, usually known as the NHBC, states its primary purpose as raising the construction standards of new homes in the United Kingdom
National Planning Policy Framework	NPPF	A planning framework which sets out the Government's planning policies for England and how these are expected to be applied.
National Planning Practice Guidance	NPPG	This is a web-based resource used to support the National Planning Policy Framework.
National Policy Statement	NPS	Statements prepared and designated by the Secretary of State under the Planning Act 2008, which establish national policy for Nationally Significant Infrastructure Projects, including energy, transport and water, waste water and against which applications for Development Consent Orders are assessed.
National Policy Statement for Ports	NPSfP	The National Policy Statement for Ports provides the framework for decisions on proposals for new port development.
Nationally Significant Infrastructure Project	NSIP	A type of project listed in the Planning Act 2008, which must be consented by a Development Consent Order.
No View	nv	No views of The Project from a viewpoint location.
North East Lincolnshire Council NELC	NELC	The site falls within the administrative boundary of the North East Lincolnshire Council.
North Lincolnshire Council	NLC	The site partially falls within the administrative boundary of the North Lincolnshire Council.
Ordnance Survey	OS	The national mapping agency for the UK.

Term	Acronym	Meaning
Permanent	P	A lasted or intending to last or remain unchanged indefinitely.
Preliminary Environmental Information	PEI	The information referred to in Part 1 of Schedule 4 of the EIA Regulations that has been reasonably compiled by the applicant and is reasonably required to assess the environmental effects of a project.
Preliminary Environmental Information Report	PEIR	The information referred to in Part 1 of Schedule 4 of the EIA Regulations that has been reasonably compiled by the applicant and is reasonably required to assess the environmental effects of a project.
Public Right of Way	PRoW	A highway where the public has the right to pass. It can be a footpath (used for walking), a bridleway (used for walking, riding a horse and cycling) or a byway that is open to all traffic (including motor vehicles).
Regional Character Area	RCA	Referred to within the regional character assessment by English Heritage and Lincolnshire County Council
Roll on-roll off	Ro-ro	A design to allow vehicles to drive on and drive off ships.
Royal Society for the Protection of Birds	RSPB	Nature conservation charity for the protection of birds.
Short term	St	Nature of effect lasting 1-5 years.
Site of Special Scientific Interest	SSSI	Area of land notified by Natural England under section 28 of the Wildlife and Countryside Act 1981 as being of special interest due to its flora, fauna or geological or physiological features.
Special Area of Conservation	SAC	Sites designated under EU legislation for the protection of habitats and species considered to be of European interest.
Special Protection Area	SPA	Sites designated under the European Directive on the Conservation of Wild Birds for the protection of birds in member states.
Technical Guidance Note	TGN	Technical Guidance Notes aims to assist professionals with their respective assessments.
Temporary	T	Lasting for only a limited time; not permanent.
Marine Character Area	MCA	A Marine Character Area is a marine geographic area around the Welsh coastline, designated by Natural Resources Wales for the purposes of characterising

Term	Acronym	Meaning
		the key natural, cultural and perceptual influences on the defined area.
Tree Preservation Order	TPO	An order made by a local planning authority, under the Town and Country Planning Act 1990, in respect of trees and woodlands. The principal effect of a tree preservation order is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without the local planning authority's consent.
Zone of Theoretical Visibility	ZTV	Map produced (usually digitally to specific criteria to illustrate the area(s) from which a project can theoretically be visual.