



Immingham Green Energy Terminal

TR030008

Volume 7

7.1 Planning Statement

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Immingham Green Energy Terminal

Development Consent Order 2023

7.1 Planning Statement

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Executive Summary

Associated British Ports (the “Applicant”) is applying for a Development Consent Order (“DCO”) under section 37 of the Planning Act 2008 (“the 2008 Act”) for the Immingham Green Energy Terminal and associated development (“the Project”).

The Project meets the criteria of a Nationally Significant Infrastructure Project (“NSIP”) under s14 of the 2008 Act.

The Project comprises:

- a. The construction of a jetty in the Humber Estuary, up to 1.2km in length, topside infrastructure, a single berth and related landside infrastructure including, but not limited to, a jetty access ramp, a flood defence access ramp and works to raise the seawall locally under the jetty access ramp, which qualifies as an NSIP.
- b. Associated landside development including a jetty access road and hydrogen production facility, including ammonia storage tank, hydrogen production units and liquefiers, hydrogen fuelling and filling stations and associated buildings, infrastructure and apparatus including pipelines and utilities.

This Planning Statement provides an assessment of the Project against the relevant policy and legislative framework. Where appropriate, it references relevant chapters of the Environmental Statement (“ES”) and other reports and assessments which together form the comprehensive and detailed evidence base produced in support of this Application.

In deciding a DCO application, section 104(2) of the 2008 Act requires the decision maker – in this case the Secretary of State for Transport – to have regard to:

- a. Any national policy statement which has effect.
- b. Appropriate marine policy documents.
- c. Any local impact report.
- d. Any matters prescribed in relation to development of the description to which the application relates.
- e. Any other matters which the secretary of state considers are both important and relevant.

The relevant National Policy Statement (“NPS”) for the determination of the Application for the Project for the purposes of section 104 of the 2008 Act is the National Policy Statement for Ports (“NPSfP”).

The NPSfP identifies that there is a clear and compelling need for substantial additional port capacity over the next 20-30 years to be met by a combination of development already consented and development for which applications have yet to be received. In the Government’s assessment of the need for new port infrastructure contained within the NPSfP it is recognised that the need for port infrastructure depends not only on overall demand for port capacity but also on the need to retain flexibility to ensure facilities are located where required, and the need to ensure effective competition and resilience in port operations.

Given the urgency of need for future capacity for ports infrastructure as provided in the NPSfP which the Project meets, there is a presumption in favour of the development in accordance with the NPSfP.

This Planning Statement provides a detailed assessment of compliance of the Project with the NPSfP and considers the application against the Marine Policy Statement and the East Inshore Marine Plan and demonstrates that the Project is in full compliance.

Relevant local authorities will be invited to submit local impact reports in due course following the acceptance of the application. However, the submitted application, including this Planning Statement, demonstrates the acceptability of the proposed development.

In accordance with Regulation 6(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations), Appendix F of this Planning Statement summarises why the making of the DCO for the Project is desirable in the interests of:

- a. Securing the improvement of the Port of Immingham Statutory Harbour in an efficient and economical manner.
- b. Facilitating the efficient and economic transport of goods and passengers by sea.

In terms of other important and relevant information, the Application contains extensive supporting information.

In respect of section 104(4) to (8) of the 2008 Act, this Planning Statement demonstrates that none of the limited exceptions set out apply. In particular, the adverse impacts that are likely to arise are relatively limited in scale and local in nature and are significantly outweighed by the very substantial benefits that would be generated by the Project.

This Planning Statement and the wider body of evidence presented in support of the application demonstrates that there is a clear and compelling case for the DCO for the Project to be made.

There is an imperative and urgent need for the Project to provide port infrastructure for the import and export of liquid bulk energy products in the Humber to support the transition to net zero and the decarbonisation of the Humber industrial cluster. The Project provides port infrastructure for the first user of the jetty to import green ammonia to produce green hydrogen and with future capacity for future cargoes related to carbon capture and storage or other liquid bulks. The Project will also deliver substantial economic benefits through the provision of jobs and gross value-added during construction and operation.

1 Introduction

1.1 Overview of the Project

1.1.1 This Planning Statement has been prepared to support an application for development consent by Associated British Ports (“ABP”) (“the Applicant”) for the alteration of a harbour facility that consists of the construction, operation and maintenance of a multi-user green energy terminal (“the Terminal”) that will be used for the import and export of liquid bulk products associated with the energy sector, together with associated development including a hydrogen production facility as described below (“collectively the Project”). The Terminal would be located on the eastern side of the Port of Immingham (“the Port”).

1.1.2 Initially, the Terminal would be used for the import and export of green ammonia to be converted to green hydrogen. To facilitate this, a hydrogen production facility, including ammonia storage tank, hydrogen production units and liquefiers, hydrogen fuelling and filling stations and associated buildings, infrastructure and apparatus including pipelines and utilities would also be constructed as part of the Project. The use of the Terminal for other liquid bulk products will come forward in due course and separate applications for landside works for the transfer and/or storage of such liquid bulk products will be submitted as required in future to enable those additional uses to come forward. It is anticipated that, for example, a further future use of the Terminal will be the import and export of liquefied carbon dioxide to connect to adjacent carbon transport and storage networks for sequestration in the North Sea.

1.1.3 The landside works (including the associated hydrogen production facility) would be located on the south bank of the Humber Estuary within the administrative boundary of North East Lincolnshire Council (“NELC”), the host local authority. Those parts of the Project that extend seaward fall beyond the local authority’s boundary and lie within the Humber Estuary. This part of the Humber Estuary is owned by the Crown Estate and ABP has the benefit of a long lease. In its entirety, the Project covers an area of approximately 121 hectares.

1.2 ABP and Air Products

1.2.1 The application (“Application”) for a Development Consent Order (“DCO”) is submitted by ABP, the owner and operator of the Port. ABP operate a network of 21 ports around the UK handling approximately a quarter of the UK’s seaborne trade. On the Humber, ABP owns and operates the four ports Immingham, Hull, Grimsby and Goole, which together constitute the largest ports complex in the UK. The Port is the largest and busiest of ABP’s four Humber ports.

1.2.2 ABP’s statutory undertaking at Immingham, the ‘statutory port estate’, covers some 480 hectares. The majority of the port estate falls within the administrative boundary of NELC, although the western part of the Port (an area unaffected by the Project) falls within the administrative boundary of North Lincolnshire Council.

1.2.3 ABP has entered into an agreement with Air Products (BR) Limited (“Air Products”) for the alteration of the existing harbour facility at the Port. The new Terminal would be constructed and operated by ABP and the associated hydrogen production facility would be constructed and operated by Air Products.

- 1.2.4 Air Products is a world-leading industrial gases company that has been in operation for nearly 80 years, and more than 60 years in the UK and Ireland. Air Products has over 1,000 employees and significant operating facilities including 35 production facilities across the UK and Ireland in addition to a number of hydrogen refuelling stations and hydrogen, nitrogen and oxygen plants. Focused on serving energy, environment and emerging markets, the company provides essential industrial gases, related equipment and applications expertise to customers in dozens of industries, including refining, chemical, metals, electronics, manufacturing, and food and beverage. In terms of the environment market, Air Products' core industrial gases help companies across dozens of industries to improve the environmental performance including yields, reducing energy consumption and lowering emissions – in other words, to make more with less while reducing impact on the environment. For example, Air Products oxygen and hydrogen enable better combustion of fuels that reduces emissions, and our nitrogen is used in food freezing to improve product quality and reduce waste.
- 1.2.5 In 2020, Air Products announced the signing of an agreement for a world-scale green hydrogen-based ammonia production facility powered by renewable energy sited in the Middle East and which will produce green ammonia for export to global markets including to the Project. The ammonia will be converted to green hydrogen at the hydrogen production facility forming part of the Project which will be supported by a downstream distribution network. The green hydrogen will support the decarbonisation of industrial activities and in particular be used to fuel heavy transport, such as Heavy Good Vehicles (“HGVs”) and buses. Heavy goods transportation is one of the most challenging and polluting sectors to decarbonise and a priority for meeting net zero in the UK.
- 1.3 Definition of the Project as a Nationally Significant Infrastructure Project (“NSIP”)
- 1.3.1 The proposed harbour facility (i.e. the Terminal) constitutes an NSIP under s14(1)(j), s24(2) and s24(3)(c) of the Planning Act 2008 (as amended) (“the 2008 Act”) (Ref 1-1) as it comprises the alteration of harbour facilities (i.e. the Port) wholly in England and in waters adjacent to England where the effect of the alteration would be to increase the quantity of material the embarkation or disembarkation of which the facilities are capable of handling by at least the relevant quantity of material per year, which in the case of facilities for cargo ships is 5 million tonnes.
- 1.3.2 The harbour facility (NSIP) comprises the Terminal together with its integral landside access ramps and topside loading and unloading infrastructure, pipes, pipelines and utilities and associated works. The associated development includes the jetty access road connecting the NSIP to the public highway and the hydrogen production facility including the pipelines, pipes and other utilities connecting the NSIP to the hydrogen production facility. Collectively all of these works constitute the Project.

1.3.3 The works which comprise the Project are formally defined and described in Schedule 1: Authorised Project of the **draft DCO [TR030008/APP/2.1]** submitted as part of the Application. The main works are defined as Work No. 1 to Work No. 10. Work No. 1 comprises the NSIP and Work Nos. 2 to 10 comprises the associated development in respect of which the application for development consent is made. The locations of Work No. 1 through to Work No. 10 and the extent of the Project (the “Site”) are shown on the accompanying **Works Plans [TR030008/APP/4.2]** that also form part of the Application.

1.4 Purpose of this Planning Statement

1.4.1 The Planning Statement is submitted as part of a suite of supplementary documents which support the Application, in accordance with regulation 5(2)(q) and regulation 6(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (as amended) (the “APFP Regulations”) (Ref 1-2).

1.4.2 This Planning Statement explains how the Project accords with the relevant national planning statement that ‘has effect’ for the Project, which is the National Policy Statement for Ports (the “NPSfP”) (Ref 1-3), and thus benefits from the presumption in favour of granting development consent pursuant to section 104(3) of the 2008 Act. It also considers other relevant national and local planning policy and other relevant matters and explains why that presumption is not displaced by any relevant matter including the application of subsections (4) to (8) of the 2008 Act.

1.4.3 The Planning Statement is structured as follows:

- a. **Chapter 1** introduces the Project and the purpose of this Planning Statement.
- b. **Chapter 2** sets out the legislative and policy framework for the determination of NSIP applications in the Ports sector.
- c. **Chapter 3** describes the Site and surroundings.
- d. **Chapter 4** provides a description of the Project.
- e. **Chapter 5** sets out the need for and benefits of the Project.
- f. **Chapter 6** explains how the application satisfies certain key legislative requirements.
- g. **Chapter 7** sets out a detailed planning appraisal of the Project against the NPSfP, and other policy where relevant.
- h. **Chapter 8** provides an assessment of the overall planning balance in respect of the Project and the overall conclusion in terms of the Projects compliance with the NPSfP.

1.5 Relationship of the Planning Statement to the Application

1.5.1 In assessing the Project against relevant policy and demonstrating the overall planning case for the Project, this Planning Statement draws upon the conclusions of a number of documents and reports accompanying the application, interpreting them as necessary within the context of relevant policy and planning considerations. This Planning Statement, therefore, draws upon and should be read alongside the:

- a. **Draft DCO [TR030008/APP/2.1].**
- b. **Consultation Report [TR030008/APP/5.1].**
- c. **Environmental Statement (“ES”), Figures and Appendices [TR030008/APP/6.2/6.3/6.4],** which includes a Glossary at Appendix 1E.
- d. **Shadow Habitats Regulations Assessment (“HRA”) [TR030008/APP/7.6].**
- e. **Without Prejudice Shadow HRA Derogation Report [TR030008/APP/7.3].**

2 Legislative and policy framework

2.1.1 This chapter of the Planning Statement sets out the legislative and policy framework for the consideration and determination of applications for NSIPs, such as the Project, while also identifying other relevant legislation and policy that the Secretary of State may have regard to in determining applications for development consent.

2.2 The basis for decision-making

2.2.1 As the proposed harbour facility constitutes an NSIP, it can only be consented to by the granting of a DCO under section 37 of the 2008 Act by the Secretary of State. The relevant Secretary of State to determine the Application for the Project is the Secretary of State for Transport.

2.2.2 The 2008 Act establishes that the primary policy considerations for NSIPs are set out in a series of national policy statements (“NPSs”). The NPSs are produced by the Government pursuant to specific legislative requirements under the 2008 Act to set out policy for nationally significant development in a particular sector and provide the framework for decisions on applications for NSIPs in that sector.

2.2.3 In this case, the NPSfP, designated in 2012, is the relevant national policy statement. Whilst the Government has announced a review of the NPSfP, the NPSfP remains extant national policy.

2.2.4 Section 104(2) of the 2008 Act provides that the Secretary of State must have regard to the following in deciding an application for development consent:

“(a) any national policy statement which has effect in relation to development of the description to which the application relates (a “relevant national policy statement”),

(aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009,

(b) any local impact report (within the meaning given by section 60(3)) submitted to the Secretary of State before the deadline specified in a notice under section 60(2),

(c) any matters prescribed in relation to development of the description to which the application relates, and

(d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.”

2.2.5 Where, as in this case, an NPS has effect, section 104(3) of the 2008 Act requires that the Secretary of State must decide an application for an NSIP in accordance with the relevant NPS, except in a limited number of specified circumstances.

- 2.2.6 These specified circumstances are set out in sections 104(4)-(8) and comprise the following five exceptions to the general rule in section 104(3):
4. *"deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations" (section 104(4));*
 5. *"deciding the application in accordance with any relevant national policy statement would lead to the Secretary of State, being in breach of any duty imposed on the Secretary of State by or under any enactment" (section 104(5));*
 6. *"deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment" (section 104(6));*
 7. *"the adverse impact of the proposed development would outweigh its benefits" (section 104(7));*
 8. *"any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met" (section 104(8))".*
- 2.2.7 Paragraph 3.5.2 of the NPSfP – under the heading ‘Guidance to the decision-maker on assessing the need for additional capacity’ – makes clear that given the level and urgency of need for infrastructure of the types covered in the earlier sections of the policy, the decision maker should start with a presumption in favour of granting consent to applications for ports development. That presumption applies unless any specific or relevant policies set out in the NPSfP or another NPS clearly indicate that consent should be refused. The presumption is also subject to the provisions of the 2008 Act. There are no specific or relevant policies set out in the NPSfP, or any other NPS, that would have this effect.
- 2.2.8 The Project is ports development and would provide the type of infrastructure for which the NPSfP has identified an urgent need. It is an application to which the presumption in favour of the grant of development consent in section 104(3) clearly applies. **Chapter 5** of this Planning Statement considers the need for and benefits of the Project against that clear policy context. **Chapter 7** of this Planning Statement assesses the Project against the policies of the NPSfP and demonstrates that it is in accordance with those policies and that there are no specific or relevant policies in the NPSfP or any other NPS which indicate consent should be refused. **Chapter 8** of this Planning Statement demonstrates that none of the limited exceptions in subsections (4) to (8) are engaged or have effect in this case.
- 2.3 Prescribed matters
- 2.3.1 The Infrastructure Planning (Decisions) Regulations 2010 (as amended) (the “Decisions Regulations”) (Ref 1-4) prescribe certain matters for the purposes of section 104(2) of the 2008 Act. The following are considered relevant to the Project:
- a. Regulation 3 relates to listed buildings, conservation areas and scheduled monuments. When deciding an application which affects a listed building or its setting, the Secretary of State must have regard to the desirability of preserving the listed building or its setting or any features of special

architectural or historic interest which it possesses. When deciding an application relating to a conservation area, the Secretary of State must have regard to the desirability of preserving enhancing the character of appearance of that area. When deciding an application for development consent which affects or is likely to affect a schedule monument or it's setting the Secretary of State must have regard to the desirability of preserving the scheduled monument or its setting;

- b. Regulation 3A relates to deemed consents under the Marine and Coastal Access Act 2009. Where the Secretary of State is considering whether to include in an order granting development consent a provision deeming a marine licence to have been issued, the Secretary of State must have regard to the need to protect the environment and human health and to prevent interference with legitimate uses of the sea. Paragraph 241 of the Explanatory Notes to sections 69 and 70 of the Marine and Coastal Access Act 2009 (Ref 1-5) states that "*Legitimate uses of the sea include (but are not limited to): navigation (including taking any steps for the purpose of navigational safety); fishing; mineral extraction; and amenity use.*"; and
- c. Regulation 7 relates to biodiversity diversity. When deciding an application for development consent the Secretary of State must have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.

2.3.2 Regulation 3A requires the consideration of the need to protect the environment. The ES presented as part of this Application demonstrates how the impact of the Project upon the environment has been minimised with the application of appropriate mitigation **[TR030008/APP/6.2]**.

2.3.3 Regulation 6 relates to hazardous substances. When deciding an application which seeks a deemed hazardous substance consent it requires the decision maker to have regard to the current and contemplated use of land to which the application relates, and land in the vicinity as well as any planning permission or development consent granted on land in the vicinity. A deemed hazardous substance consent is not sought as part of the DCO. Air Products has submitted a Hazardous Substance Consent application to NELC which is pending determination.

2.3.4 Regulation 7 principally relates to sustainable development. This Planning Statement demonstrates how sustainable development has been achieved through the outcomes of the environmental impact assessment, through good design (section 7.2) and delivery of economic benefits (sections 5.3 and 7.16).

2.3.5 **Chapter 7** of this Planning Statement considers these prescribed matters.

2.4 Policy framework

2.4.1 This section provides an overview of national and local planning and other policy, which either has effect in relation to the Project or may be relevant to the determination of the application for development consent. Details of specific policies and the compliance of the Project with these are provided in **Chapter 7** of this Planning Statement.

National Policy Statement for Ports, January 2012

- 2.4.2 As set out above, the NPSfP ‘has effect’ in relation to the Project for the purposes of section 104(2)(a) and provides the framework for decisions on proposals for new nationally significant port infrastructure. Importantly, the NPSfP sets out the Government’s assessment and conclusions on the need for new port infrastructure. It explains the approach that decision makers should take to proposals, including the main issues which will need to be addressed to ensure that port development is sustainable.
- 2.4.3 **Chapter 7** of this Planning Statement provides an overall assessment of the Project against the NPSfP, and **Appendix A** of this Planning Statement identifies where the contents of the NPSfP have been addressed in the Application.
- 2.4.4 The Project is in accordance with the policies set out in the NPSfP.

Marine policy documents

- 2.4.5 As the Project is located in the Humber Estuary, the appropriate marine policy documents for the purposes of section 104(2)(aa) are the UK Marine Policy Statement (“MPS”) (March 2011) (Ref 1-6) and the East Inshore Marine Plan (“EIMP”) (April 2014) (Ref 1-7).
- 2.4.6 The MPS provides the framework for preparing Marine Plans and taking decisions affecting the marine environment. The MPS sets out a series of high-level marine objectives in order to achieve clean, healthy, safe, productive and biologically diverse oceans and seas. Chapter 3 of the MPS sets out the policy objectives for the key activities that take place in the marine environment which have been considered where relevant in **Chapter 7** of this Planning Statement. The Project is in accordance with the MPS.
- 2.4.7 The EIMP sets out, and is underpinned by, a number of strategic objectives and includes policies that guide the regulation, management, use and protection of the marine plan areas. **Appendix B** of this Planning Statement sets out how the Project accords with the EIMP. The Project is in accordance with the policies set out within the EIMP.

Other national policy

- 2.4.8 Other national policy may also be considered ‘relevant’ to the decision-making process by the Secretary of State. In this regard, the overarching NPS for Energy (“EN-1”) (Ref 1-8), the draft Overarching NPS for Energy (“draft EN-1”) (Ref 1-9), the NPS for Renewable Energy Infrastructure (“EN-3”) (Ref 1-10), and the draft NPS for Renewable Energy Infrastructure (“draft EN-3”) (Ref 1-11) are relevant in this case in that they set out the Government’s current and emerging policies as to the need for and benefits of new energy infrastructure, including facilities for hydrogen production and carbon capture and storage (“CCS¹”). **Appendix E** of

¹ This Planning Statement refers to carbon capture and storage (“CCS”) and carbon capture, utilisation and storage (“CCUS”) where appropriate. CCUS is the process of capturing carbon dioxide CO₂ emissions from fossil power generation and industrial processes for storage deep underground or re-use, such as creating synthetic fuel. CCS is the process of capturing carbon before it enters the atmosphere.

this Planning Statement provides a summary of other Government policy documents relating to energy.

- 2.4.9 Reference is also made in chapter 7 of this Planning Statement to the National Planning Practice Guidance (Ref 1-12) in respect of relevant matters.

The local development plan

- 2.4.10 Policies in Local Plans are prepared, examined and adopted for the purpose of guiding decision making on Town and Country Planning Act applications, and not applications made under the 2008 Act. They can nevertheless provide local context and policies that influence the content of local impact reports which the Secretary of State must have regard to in decision making (section 104(2)(b)).
- 2.4.11 The relevant Local Plan is the North East Lincolnshire Local Plan (“NELLP”) (March 2018) (Ref 1-13) which contains land use policies as well as minerals and waste policies. Where relevant, reference is made in this Planning Statement to policies within the NELLP. **Appendix C** of this Planning Statement provides a summary of the extent to which the Project accords with relevant policies contained within the NELLP.

3 The Site and surroundings

3.1.1 This chapter of the Planning Statement provides a summary description of the Site and its surroundings. Planning history and land use designations relating to the Site are set out in **Appendix D** and referred to in this Planning Statement where relevant. Further detail on specific aspects of the Site and surroundings is provided in **Chapter 2: The Project** of the ES [TR030008/APP/6.2].

3.2 Site context

3.2.1 The Site is defined as land and marine areas within the Order Limits (limits within which the development and works may be carried out and also referred to as the “Site Boundary” and shown edged red on the **Works Plans [TR030008/APP/4.2]**). Landside, the Project is located in North East Lincolnshire on the south bank of the Humber Estuary where the landside elements of the Terminal and the hydrogen production facility would be located. The hydrogen production facility would be located across two main sites: the ‘East Site’, and the ‘West Site’, linked via a connection corridor, shown in **Plate 2**. Marine side, the Project is located in the Humber Estuary.

The Port of Immingham & surroundings

- 3.2.2 The Port lies immediately adjacent to the main deep-water shipping channel which serves the Humber Estuary, thereby enabling access to the Port by some of the largest vessels afloat. The marine infrastructure located at the Port is the original enclosed dock basin and lock, linking the dock with the Estuary, and a range of riverside berths and jetties, including the Immingham Oil Terminal (“IOT”), the Eastern and Western Jetties, the Immingham Bulk Terminal, the Outer Harbour (comprising three berths) and the Humber International Terminal with its two berths and the Immingham Gas Jetty. IOT and associated berths are operated by Associated Petroleum Terminals. The IOT extends seawards into the Humber Estuary by approximately 950m from the southern bank of the Humber.
- 3.2.3 The Port has its own rail terminal, with some 25% of all rail freight in the UK originating from the Port. This primarily connects to local power stations and steel works moving approximately 10 million tonnes of cargo per annum by rail.
- 3.2.4 The Site is situated to the east of the Port and largely outside of the existing operational area of the Port. **Plate 1** illustrates the Project’s location and surrounding area, which is approximately centred on National Grid Reference E520783 N415271.
- 3.2.5 The area surrounding the Port is industrial in nature, being dominated by chemical manufacturing, oil processing and power generation facilities. Residential and commercial properties are present to the south of the Port on Queens Road and lie within, and adjacent to, the Site Boundary. Beyond the industrial facilities, are predominantly arable fields interspersed with hedgerows and woodland. The residential area comprising the eastern edge of the town of Immingham, is approximately 460m from the western edge of the Site.

Transport connections

- 3.2.6 The Site is well served by the strategic and local road network. The A160 to South Killingholme and the A180 to Grimsby both form part of the strategic road network, managed by National Highways. From here there is good access to the M1 and the A1, via the M180 and M18 motorways. Key local roads are Queens Road, Kings Road, Laporte Road and Kiln Lane. East Gate, located at the junction of Queens Road and Laporte Road provides access to the eastern entrance of the Port.

Plate 1: Site Location Plan

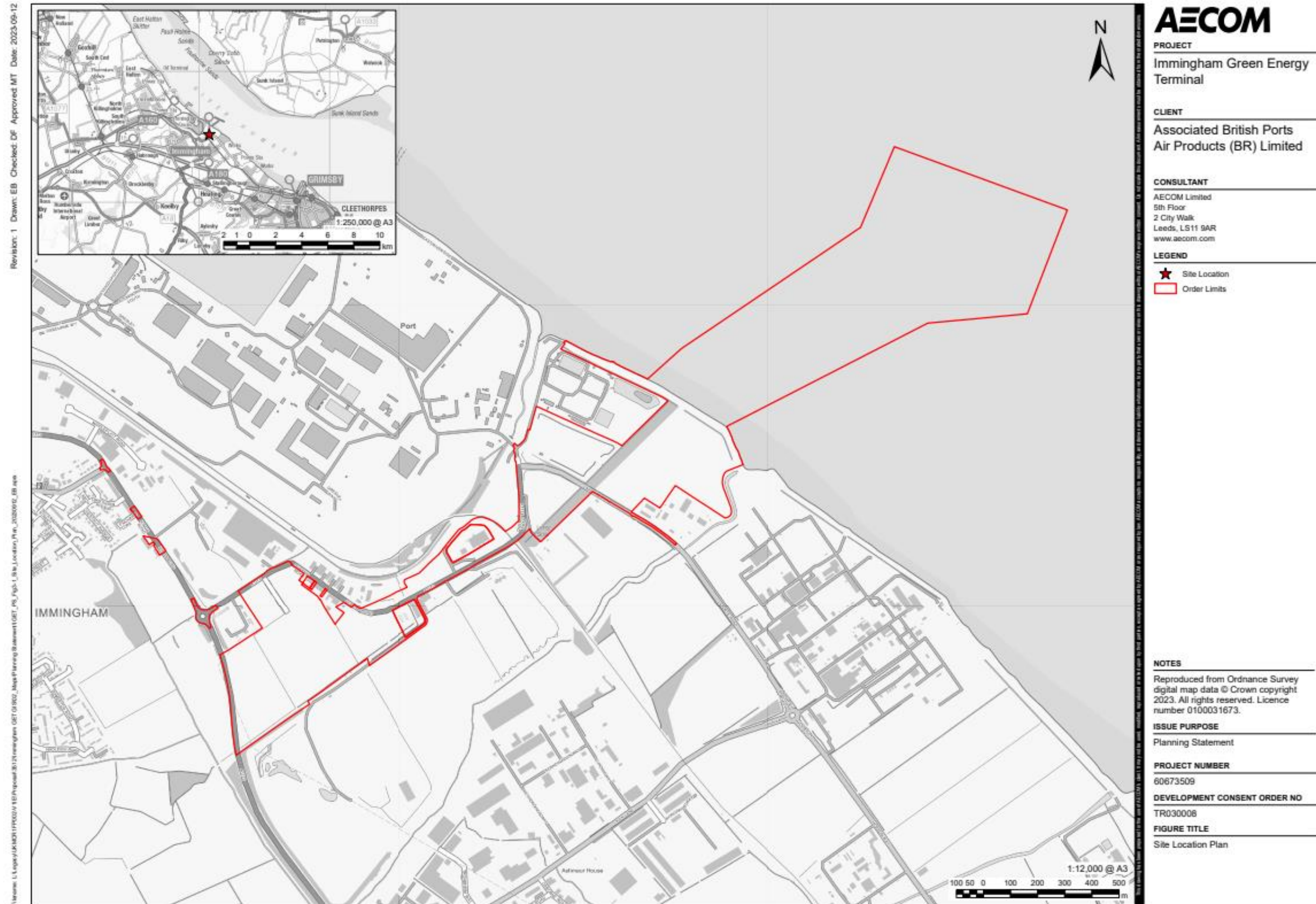
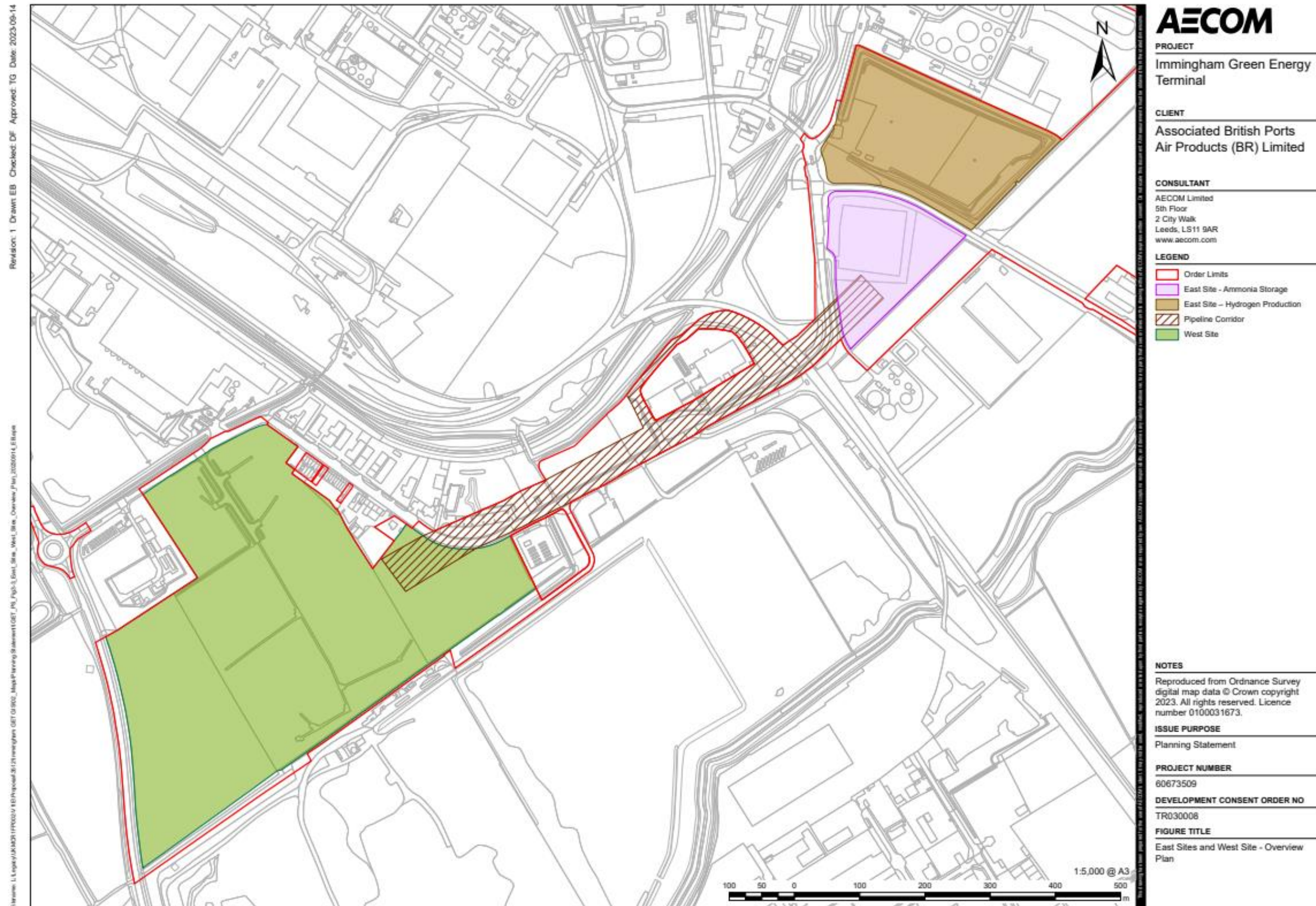


Plate 2: East and West Site Overview



- 3.2.7 The Grimsby to Immingham cycle superhighway runs along the A1173 between Queens Road and Kiln Lane. Pedestrian facilities are provided along one side of Queens Road and along the northern side of the A1173 Kings Road providing a link into Immingham.

Land within and surrounding the Site Boundary

- 3.2.8 The proposed Terminal would extend seawards into the Humber Estuary and the Terminal would be located to the east of the existing IOT jetty, see **Plate 3** which shows the IOT jetty from the sea defence. This area falls within the boundaries of the Humber Estuary Special Area of Conservation (“SAC”), Special Protection Area (“SPA”) and Ramsar Site, which collectively form the Humber European Marine Site (“EMS”).
- 3.2.9 On the south bank of the Humber where the Terminal landfall would be located there is an existing flood defence structure. The flood defence is formed from an earth embankment with a flood wall (constructed in approximately 1957) on top and a revetment/concrete apron in front on the river side (constructed in approximately 1984). A narrow concrete maintenance road runs along the top of the embankment inside of the flood wall. There are two ramps from the maintenance road down to the apron via flood gates in the flood wall. These ramps are located approximately 270m north and 400m south of the proposed Terminal landfall point.

Plate 3: Photograph of existing maintenance access road and sea defence looking towards the Immingham Oil Terminal Jetty

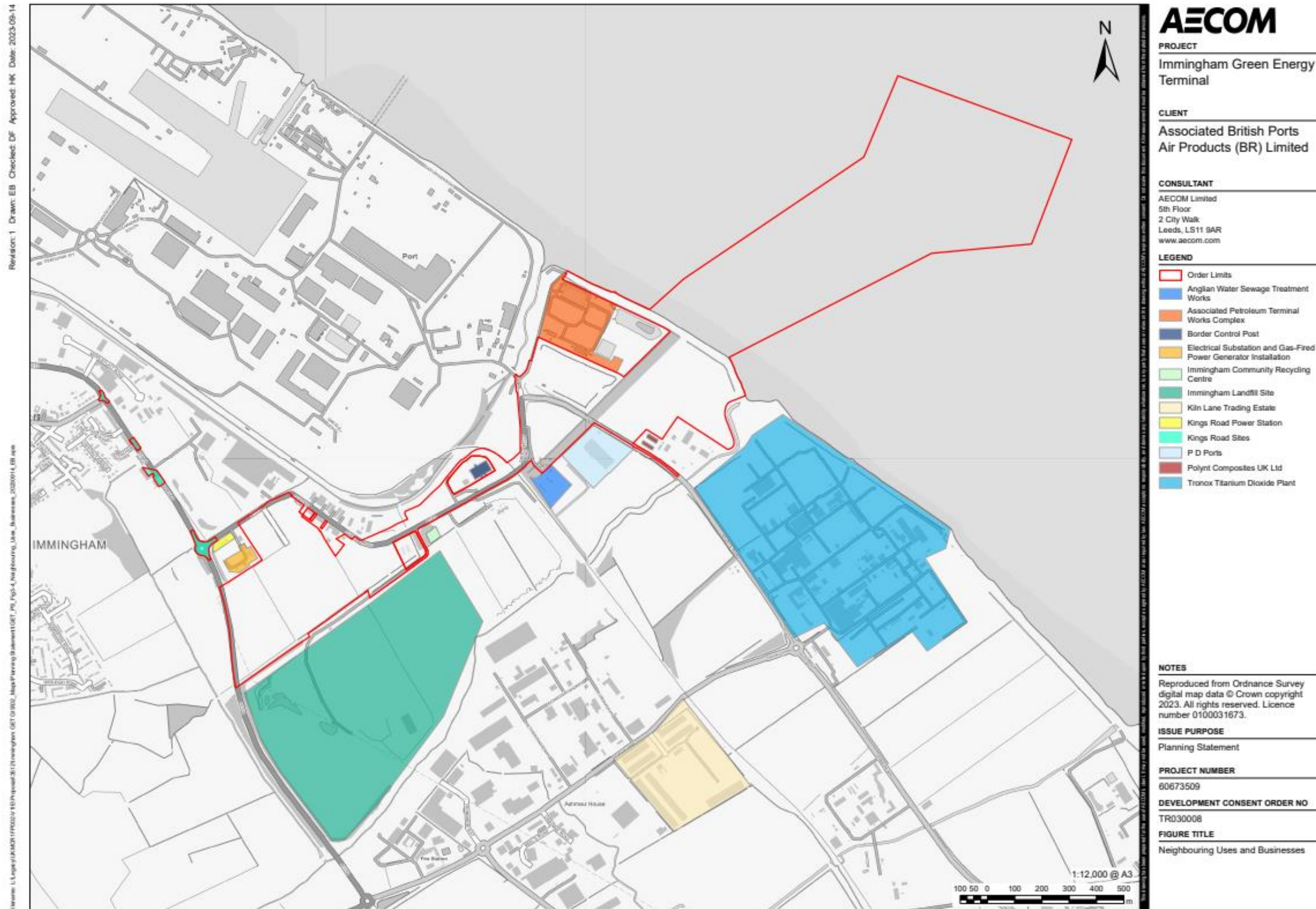


- 3.2.10 On the south bank of the Humber where the Terminal landfall would be located there is an existing flood defence structure. The flood defence is formed from an earth embankment with a flood wall (constructed in approximately 1957) on top and a revetment/concrete apron in front on the river side (constructed in approximately 1984). A narrow concrete maintenance road runs along the top of the embankment inside of the flood wall. There are two ramps from the maintenance road down to the apron via flood gates in the flood wall. These ramps are located approximately 270m north and 400m south of the proposed Terminal landfall point.

- 3.2.11 A public bridleway (No. 36) connects Laporte Road to the England Coast Path along the Humber through an area of woodland referred to as 'Long Strip' that is subject to a Tree Preservation Order ("TPO"). A Public Footpath (No. 32) also runs north-west to south-east connecting Europa Way with Queens Road to the north, although this is not in active use. Adjacent to Bridleway No. 36 lies an agricultural field.
- 3.2.12 Further down Laporte Road, land immediately adjacent to the east of the Site is occupied by Polynt Composites UK Ltd which is a manufacturer of unsaturated polyester and vinyl ester resins, gel coats and bonding pastes as well as industrial cleaners. To the south of the eastern extent of the Site, lies Tronox' Stallingborough Site which is host to a titanium dioxide plant. Their main entrance from Laporte Road lies approximately 384m to the south of the Site Boundary.
- 3.2.13 The East Site comprises two parcels of land, which are bisected by Laporte Road. To the north of Laporte Road the land comprises an area of hardstanding, currently in use by ABP as a storage area. To the south of Laporte road is a triangular shaped area of brownfield land that is currently covered by gravel and various stockpiles, which is accessed via Queens Road. The Associated Petroleum Terminal works complex is situated to the north/north-east of the East Site, whilst to the west and north-west is the Port and associated industrial facilities and the 'Immingham Dock East Gate' Port entry point from Queens Road. Land immediately to the south of East Site is occupied by a PD Ports facility, which is one of the UK's major port groups. Their site comprises warehousing and large open areas for storage. To the south-east of the East Site is the Anglian Water Sewage Treatment Works (accessed by an unnamed private road off Queens Road).
- 3.2.14 The West Site currently comprises three agricultural fields, which are bounded by linear hedgerows and drainage ditches. An electrical sub-station and a gas-fired power generator installation are located adjacent to the boundary of West Site, to the north-west. A landfill is located to the south separated by a landscape buffer strip. Various other uses bound the West Site including a gas fired power generator installation, a community recycling centre (operated by NELC), a large waste gypsum landfill, the Immingham Landfill Site and the Kings Road Power Station. To the south, lies the Kiln Lane Industrial Trading Estate where a number of industrial and storage businesses operate.
- 3.2.15 A short tarmac access road has been constructed from Kings Road into the West Site, associated with an extant planning consent [see application number DM/1027/13/OUT in **Appendix D**]. A series of overhead power cables run across the middle and southern boundaries of the West Site, with a buried mains water and a buried high-pressure gas pipeline present along the southern boundary. The existing utilities, as currently known, are detailed within the **Utilities Statement [TR030008/APP/7.7]**.

- 3.2.16 A number of residential and mixed residential/commercial properties are located on the west side of Queens Road and are included within the Site Boundary. These comprise houses at 1-5 and 31 Queens Road; 6 Queens Road containing two flats; 7-8 and 18 Queens Road with flats at upper floors. These properties have been included within the Site Boundary as their continued residential use is not considered compatible with the operation of the proposed hydrogen production facility and an impediment to the grant of Hazardous Substances Consent. Air Products is in discussions with the owners and occupiers with a view to acquiring the properties by agreement (and has acquired 31 Queens Road at the date of this Planning Statement). Compulsory acquisition powers are sought in respect of these properties in the **draft DCO [TR030008/APP/2.1]**.
- 3.2.17 Other organisations that lie adjacent to the Site Boundary include Graypen on Queens Road and a building recently constructed for a Border Control Post, (not yet operational) which is excluded from the Order Limits. **Plate 4** below shows the key businesses and industrial facilities surrounding the Site which are described above.

Plate 4: Neighbouring land uses and businesses



4 The Project

4.1 Introduction

4.1.1 This chapter of the Planning Statement describes the individual elements that together comprise the Project, explains the need for and extent of flexibility in the definition of the proposed development, and how the **draft DCO [TR030008/APP/2.1]** and the plans together control what would be constructed should development consent be granted.

4.2 Definition of the Project in the DCO

4.2.1 Article 5 of the draft DCO provides that subject to the provisions of the Order, including the requirements in Schedule 2, development consent is granted for the “authorised development” and consent is granted for the “ancillary works”.

4.2.2 For this purpose “authorised development” is defined in Article 2 of the draft DCO to mean “*the development described in Part 1 of Schedule 1 (authorised project) and any other development within the meaning of section 32 (meaning of “development”) of the 2008 Act authorised by this Order*” and “ancillary works” is defined to mean “*the ancillary works described in Part 2 of Schedule 1 (authorised project) and any other works authorised by the Order and which are not development within the meaning of section 32 (meaning of development) of the 2008 Act*”.

4.2.3 Article 47 of the draft DCO provides that a deemed marine licence under Part 4 of the Marine and Coastal Access Act 2009 is granted to carry out the activities specified in Schedule 3 (Deemed Marine Licence), subject to the licence conditions set out in Part 2 of that Schedule.

4.2.4 Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the NSIP (Work No.1), the associated development (Works No.2- Work No.10), further associated development such as site preparation works and establishment of site construction compounds and ancillary works. If consented, the DCO would permit the authorised development defined in Schedule 1 of the draft DCO within the limits shown on the **Works Plans [TR030008/APP/4.2]**. This includes all works required for the construction of the Terminal and the hydrogen production facility.

4.2.5 Part 1 of Schedule 3 (the deemed marine licence) defines “authorised development” at paragraph 3 as the construction, operation and maintenance of a liquid bulk facility on the River Humber comprising various components that are not repeated here. This relates solely to Work No. 1, as well as other works that may be necessary for the purposes of construction of Work No. 1, such as ladders, buoys or dolphins. Part 1 also provides for the capital dredge to create the Terminal berth, at paragraph 4.

4.2.6 The following schedules of the **draft DCO [TR030008/APP/2.1]** and related plans define, and secure works related to streets:

- a. Schedules 4, 5 and 9 of the **draft DCO [TR030008/APP/2.1]** and the **Streets Works and Accesses Plan [TR030008/APP/4.6]** define those streets that are subject to street works.

- b. Schedules 6,7 and 8 of the **draft DCO [TR030008/APP/2.1]** and the **Stopping up and Restriction of Use of Streets and Public Rights of Way Plan [TR030008/APP/4.7]** define those streets and public rights of way that would be permanently stopped up or their use temporarily restricted.
- c. Schedule 10 of the **draft DCO [TR030008/APP/2.1]** and the **Traffic Regulations Measures Plan [TR030008/APP/4.8]** define those streets that would be subject to speed limit changes, parking suspensions and temporary closures.

4.2.7 The plans set out above are certified documents as set out in Schedule 15 of the **draft DCO [TR030008/APP/2.1]**.

4.3 Design Parameters

4.3.1 The approach to the design of the Project allows for flexibility in the dimensions and configurations of buildings and structures, notably in relation to the hydrogen production facility to allow for future detailed design development. This is required because, as is normal for this type of project, until equipment has been purchased, sizes confirmed and all reviews completed, the final design and space requirements cannot be determined. Allowing for flexibility will also ensure that Air Products and their contractors have sufficient scope to undertake value engineering and take account of innovation and technological advancements, given that the hydrogen production facility will be constructed in phases over a number of years.

4.3.2 In contrast, there is less flexibility for the marine elements of the Project, as the proposed alignment, length and pile density of the Terminal has been subject to extensive physical processes modelling to define a preliminary design which minimises the impacts on the protected habitats of the Humber Estuary.

4.3.3 To provide the necessary level of flexibility, whilst also providing sufficient certainty for the purposes of assessment, design parameters, described in **Chapter 2: The Project** of the ES [TR030008/APP/6.2], have been used for the purposes of assessment and are secured as follows:

- a. Lateral parameters comprise the boundary for each of the numbered works defined in Schedule 1 of the draft DCO as shown on the **Works Plans [TR030008/APP/4.2]**, together with the Order limits. Article 6 provides that in carrying out the authorised development the undertaker must, where the Works Plans set out the lateral extent of the area in which the numbered work is to be located, carry out and maintain that work within the lateral extent of the area set out for it on that plan. The Works Plans are certified documents as set out in Schedule 15 of the **draft DCO [TR030008/APP/2.1]**.
- b. Vertical parameters that define an upper limit (or lower limit if applicable) for any permanent building or structure within each of the work areas are secured by Requirement 4 in Schedule 2 of the **draft DCO [TR030008/APP/2.1]**. Part (4) of Requirement 4 sets out that no permanent built feature may exceed the maximum heights set out. Further, a minimum height is set for the hydrogen tank flare stacks (in connection with the air quality assessment set out at **Chapter 6: Air Quality of the ES [TR030008/APP/6.2]**).

c. Additional parameters for the Terminal, such as pile number and pile size are secured in the **Outline Construction Environmental Management Plan** (“Outline CEMP”) [TR030008/APP/6.5]. Condition 8 of the Deemed Marine Licence which forms Schedule 3 of the **draft DCO** [TR030008/APP/2.1] requires that no licensed activities must be commenced until a CEMP has been approved by the Marine Management Organisation. Furthermore, Condition 14 of the Deemed Marine Licence which forms Schedule 3 of the **draft DCO** [TR030008/APP/2.1] requires that all licensed activities must be carried out in accordance with the CEMP. Approval of the final CEMP and its landside implementation would be secured by Requirement 6 of the **draft DCO** [TR030008/APP/2.1].

4.3.4 The level of flexibility sought for the Project is appropriate and reasonable for the reasons summarised above, allowing for the detailed design process to be undertaken following the grant of development consent.

4.3.5 Assessment of the Project based on the above parameters, known as a ‘Rochdale Envelope’, results in a precautionary and robust approach to identifying significant environmental effects, as the assessment is undertaken by reference to the parameter representing the worst case for the relevant topic area. This ensures that the assessment considers the realistic worst case that could result from the implementation of the Project. **Chapter 5: EIA Process** of the ES [TR030008/APP/6.2] describes further the approach taken in respect of the Rochdale Envelope.

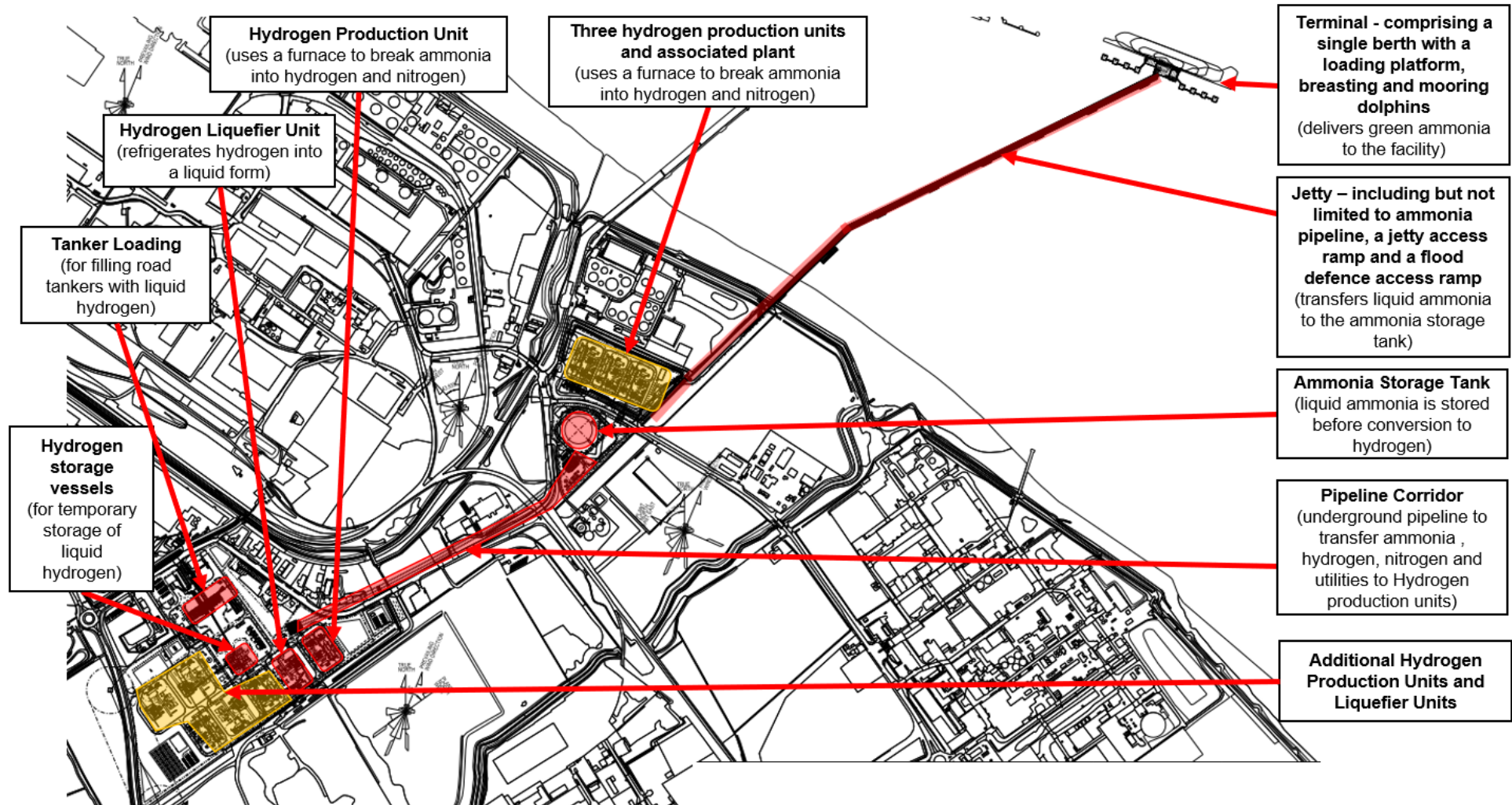
4.4 Overview of the Project

4.4.1 The Project has been subject to an iterative design development process which addresses the key opportunities and constraints of the Site and surrounding context. **Appendix G** to this Planning Statement sets out how the design of the Project has evolved taking account of the process of environmental assessment, comments made during two rounds of statutory consultation and ongoing engagement, and stakeholder input from statutory environmental bodies and NELC.

4.4.2 The Project will be constructed in six phases, which are described in **section 4.17** of this Planning Statement. The Terminal (Work No.1), the pipe rack, jetty access road and pipeline corridors (Work No. 2, 4 and 6), the ammonia storage tank (Work No.3), two hydrogen production units and one liquefier on the West Site (Work No.7) and temporary construction areas (Work Nos 8 and 9) form Phase 1. The remaining parts of the Project (Work No. 5 and further hydrogen production units and liquefiers within Work Nos 7) would be developed in a further five phases. Table 2-11 within **Chapter 2: The Project** of the ES [TR030008/APP/6.2] sets out the infrastructure and principal buildings to be constructed within each phase of construction.

- 4.4.3 **Plate 5** provides an overview of the Project, to aid understanding of how it would operate and how each component is linked. As shown, vessels would moor at the Terminal and offload the liquid bulks which would then be transported to the landside infrastructure via the pipeline on the Terminal. In the case of Air Products, the first users of the Terminal, ammonia would be piped to the ammonia storage tank and onwards to the hydrogen production units via pipelines.

Plate 5: Overview of the Project

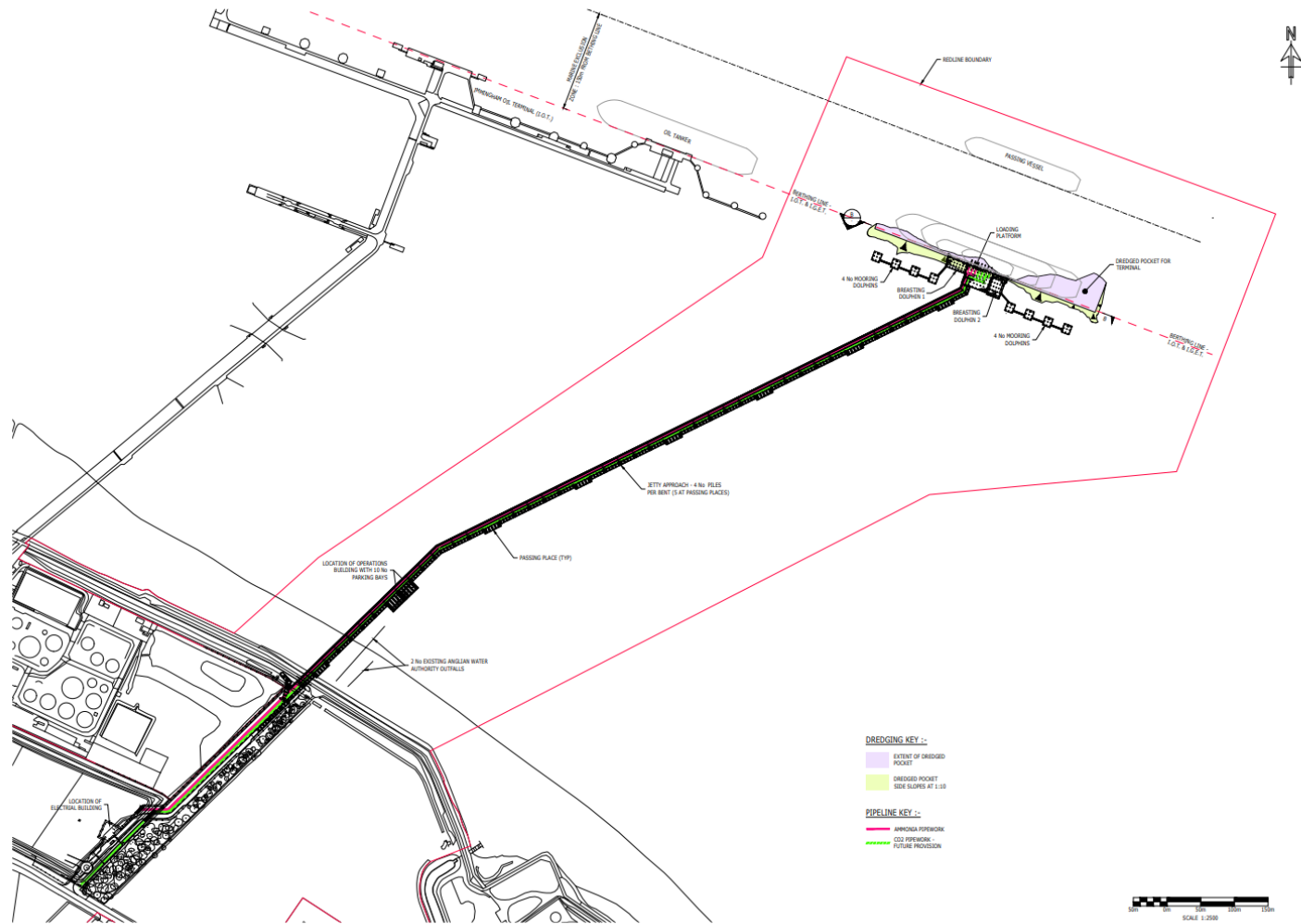


4.5 The Green Energy Terminal (Work No. 1)

- 4.5.1 The Terminal would comprise the construction during Phase 1 of a new in-river jetty, located in the Humber to the east of the existing IOT jetty, with one berth, including topside infrastructure, that would have the capacity to facilitate the import and export of liquid bulks associated with energy.
- 4.5.2 The berth would be capable of handling a variety of vessels, of between 100 - 250m in length with draughts of up to 12.8m. In addition to the import of green ammonia by Air Products to be converted to green hydrogen, other liquid bulks are expected to include products such as liquefied CO₂ for the purpose of carbon capture and storage. For example, it is anticipated that in the future, liquefied CO₂ would be shipped to the Terminal from sites that do not have direct connection to the CCS network and then transferred into a CCS pipeline for onwards connection into CO₂ transport infrastructure proposed to be developed close to the Port. This is explained further in **Chapter 5** of this Planning Statement.
- 4.5.3 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the works that comprise the Green Energy Terminal (Work No.1). The lateral parameters of Work No.1 are shown on sheets 1, 2 and 3 of the **Works Plans [TR030008/APP/4.2]**. The parts of Work No.1 that comprise the approach jetty, the jetty head and loading platform including breasting dolphins and mooring dolphins that lie to the seaward side of the mean high water springs mark will be constructed within the parameters for Work No.1a shown on Sheets 1 to 4 of the **Work Plans [TR030008/APP/4.2]**. Parameters for Work No. 1a are also described in Table 2-1 of **Chapter 2: the Project** of the ES **[TR030008/APP/6.2]**. Additional parameters for the Terminal, such as pile number and pile size are set out in the **Outline CEMP [TR030008/APP/6.5]**.
- 4.5.4 Furthermore, sheets 1, 2 and 3 of the **Illustrative Layout Plans [TR030008/APP/4.3]** show the illustrative layout and configuration of the Terminal. It should be noted that the **Illustrative Layout Plans [TR030008/APP/4.3]** show the layouts within the parameters described but for illustrative purposes only. Approval is not sought for these illustrative layouts. They are included in the application to assist in the understanding of the Site Boundary and the **Works Plans [TR030008/APP/4.2]** and demonstrate that the Project can be delivered within the areas shown on the **Works Plans [TR030008/APP/4.2]** and those areas are needed to construct and operate the Project.
- 4.5.5 Table 2-3 in **Chapter 2: The Project** of the ES **[TR030008/APP/6.2]** sets out the indicative dimensions (not for approval), likely construction type and colour of structures and buildings that form part of Work No. 1. Plate 6 provides an illustrative general arrangement plan for the Terminal.

Immingham Green Energy Terminal
Planning Statement

Plate 6: Illustrative Layout of Work No. 1



DRAWING No 2205097-RAM-03-MG-DR-MA-0129 Rev P01

4.6 Pipe-Rack and Jetty Access Road (Work No. 2)

- 4.6.1 Work No. 2 consists of a corridor between the new Terminal and Laporte Road encompassing a private road (the 'jetty access road') and a pipe-rack supporting utilities including the ammonia import pipeline to the East Site and associated buildings and plant. These works would be constructed in Phase 1 of the development.
- 4.6.2 The ammonia pipelines would deliver refrigerated liquid ammonia from the Terminal to the ammonia storage tank on the East Site (Work No 3). The pipe-rack structure would run along the western side of the jetty access road, which would allow maintenance access to the pipelines from the access road as required.
- 4.6.3 Land adjacent to the jetty access road is required to provide a working site for the construction of the jetty access road and to enable the perimeter fencing to the east of the jetty access road to be installed. This adjacent land will then be reserved for future pipelines for transfer of other liquid products from the Terminal to the public highway. Separate applications for these landside works would be submitted as required.
- 4.6.4 The construction of the jetty access road and pipe rack corridor would lead to tree loss from the Long Strip. The tree loss has been minimised by routing the jetty access road and the pipe rack corridor through the western side of the Long Strip and by routing the southern end of the jetty access road through the East Site. For these works and the approach ramp to the jetty (included as part of Work No. 1), it is predicted that approximately 0.64ha of the Long Strip would need to be cleared (approximately 220 trees). An Arboricultural Impact Assessment and Tree Constraints Plan are provided in **Appendix 8.F [TR030008/APP/6.4]** which provides detail on the type of species and quality of the trees to be removed.
- 4.6.5 The lateral parameters of Work No.2 are shown on sheets 3 and 4 of the **Works Plans [TR030008/APP/4.2]**. Vertical parameters for Work No. 2 (maximum built element height and maximum finished ground level) are secured by Requirement 4 in Schedule 2 of the **draft DCO [TR030008/APP/2.1]**.
- 4.6.6 Table 2-5 within **Chapter 2: The Project [TR030008/APP/6.2]** provides indicative details of the main buildings and structures that form part of Work No. 2, such as approximate dimensions and likely construction type and colour. No indicative details are provided for smaller elements of infrastructure such as gates, fences or lighting columns.
- 4.6.7 An illustrative layout of the jetty access road and pipe rack is shown on Sheet 4 of the **Illustrative Layout Plans [TR030008/APP/4.3]**. As noted above approval is not sought for the illustrative layouts or the indicative details referred to above.

4.7 East Site (Work No. 3 and 5)

4.7.1 Once imported via the Terminal, ammonia would be transferred via the pipelines to the East Site for storage in the ammonia storage tank (Work No. 3) and then transferred to and converted to hydrogen in the hydrogen production units (up to three of which are on the East Site) (Work No.5). The two parts of the East Site would be linked by pipelines through a culvert under Laporte Road (Work No. 4, described below).

Ammonia Storage Tank – Work No. 3

4.7.2 The ammonia storage tank would be linked to the Terminal through the jetty access road and ammonia pipelines and other utilities (which form part of Work No. 2) as described above. Table 2-6 within **Chapter 2: The Project [TR030008/APP/6.2]** provides indicative details (not for approval) of the main structures and buildings that would be constructed in Work No. 3.

4.7.3 Some land-raising is expected to be required to bring the finished ground level up to a maximum of 3.5m where required.

4.7.4 **Plate 7** shows an illustrative layout (not for approval) of the ammonia storage tank alongside an illustrative image of the ammonia storage tank. It should be noted that the colours shown on the image do not reflect the proposed external paint finish for the ammonia tank, which is for approval by NELC under Requirement 4 in the **draft DCO [TR030008/APP/2.1]**.

Hydrogen Production Units – Work No. 5

4.7.5 Initially, no hydrogen production units would be constructed on the East Site, with up to three hydrogen production units at this location being added in future phases of development (Phases 3-6). During Phase 1 of the Project, the area of Work No. 5 would be used for contractor and subcontractor cabins, laydown, storage buildings and car parking related to the ammonia storage tank and Terminal contractors.

4.7.6 Some land-raising is expected to be required to bring the finished ground level up to a maximum of 3.8m where required.

4.7.7 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the works located on East Site (Work Nos 3 and 5). The lateral parameters of Work No.3 are shown on sheets 4 and 5 of the **Works Plans [TR030008/APP/4.2]**. Vertical parameters for Work No. 3 (maximum built element height and maximum finished ground level) are secured by Requirement 4 in Schedule 2 of the **draft DCO [TR030008/APP/2.1]**. The lateral parameters of Work No.5 are shown on sheets 3, 4 and 5 of the **Works Plans [TR030008/APP/4.2]**. Vertical parameters for Work No. 5 (maximum built element height, maximum finished ground level and the minimum built height of the hydrogen production unit flare stack) are secured by Requirement 4 in Schedule 2 of the **draft DCO [TR030008/APP/2.1]**.

4.7.8 Table 2-6 within **Chapter 2: The Project [TR030008/APP/6.2]** provides indicative details (not for approval) of the main structures and buildings that would be constructed in Work No. 5.

- 4.7.9 **Plate 8** shows an illustrative layout (not for approval) of the hydrogen production facility alongside an illustrative section.

Plate 7: Illustrative Layout and Section of Work No. 3 on East Site, south of Laporte Road

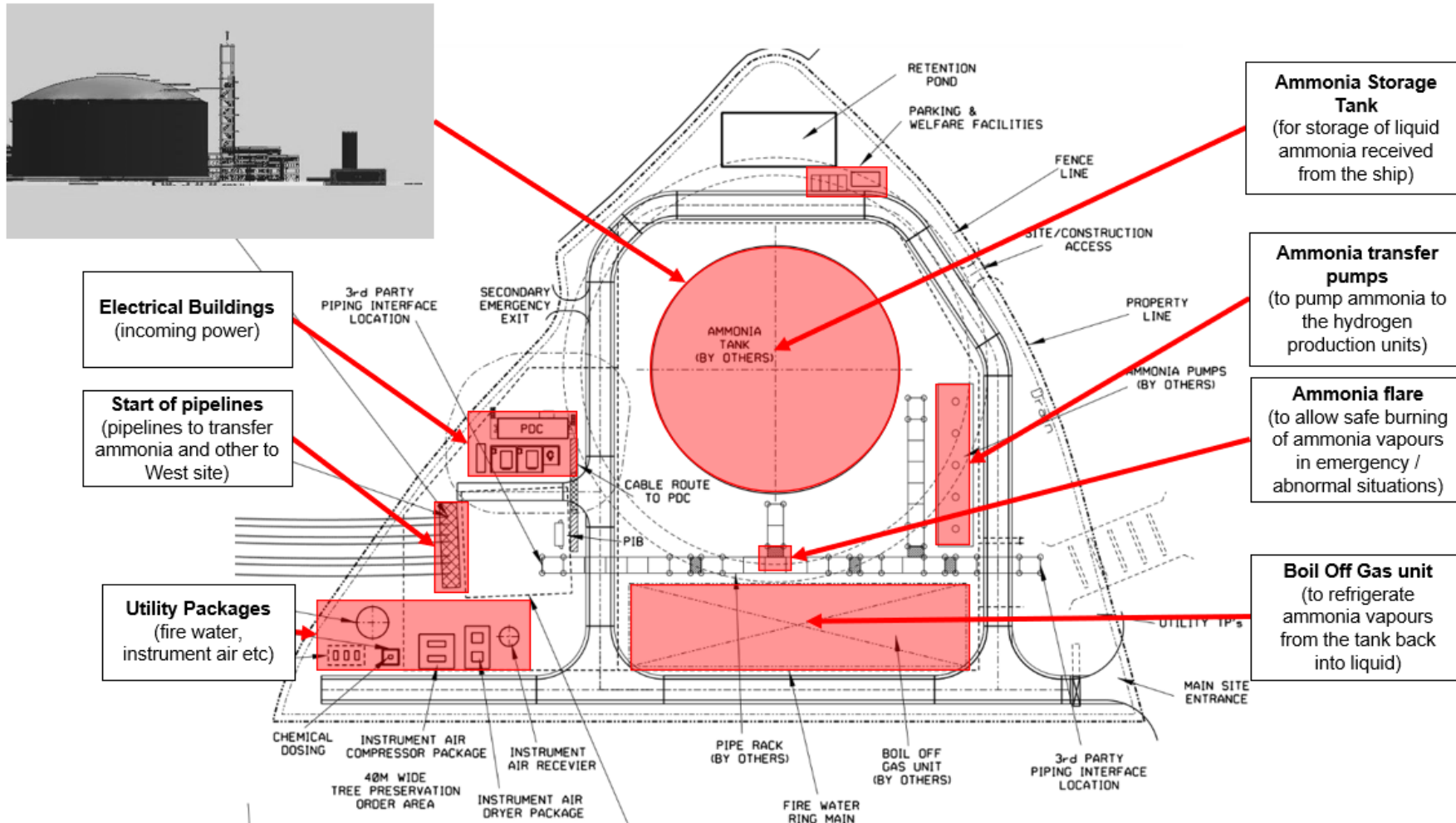
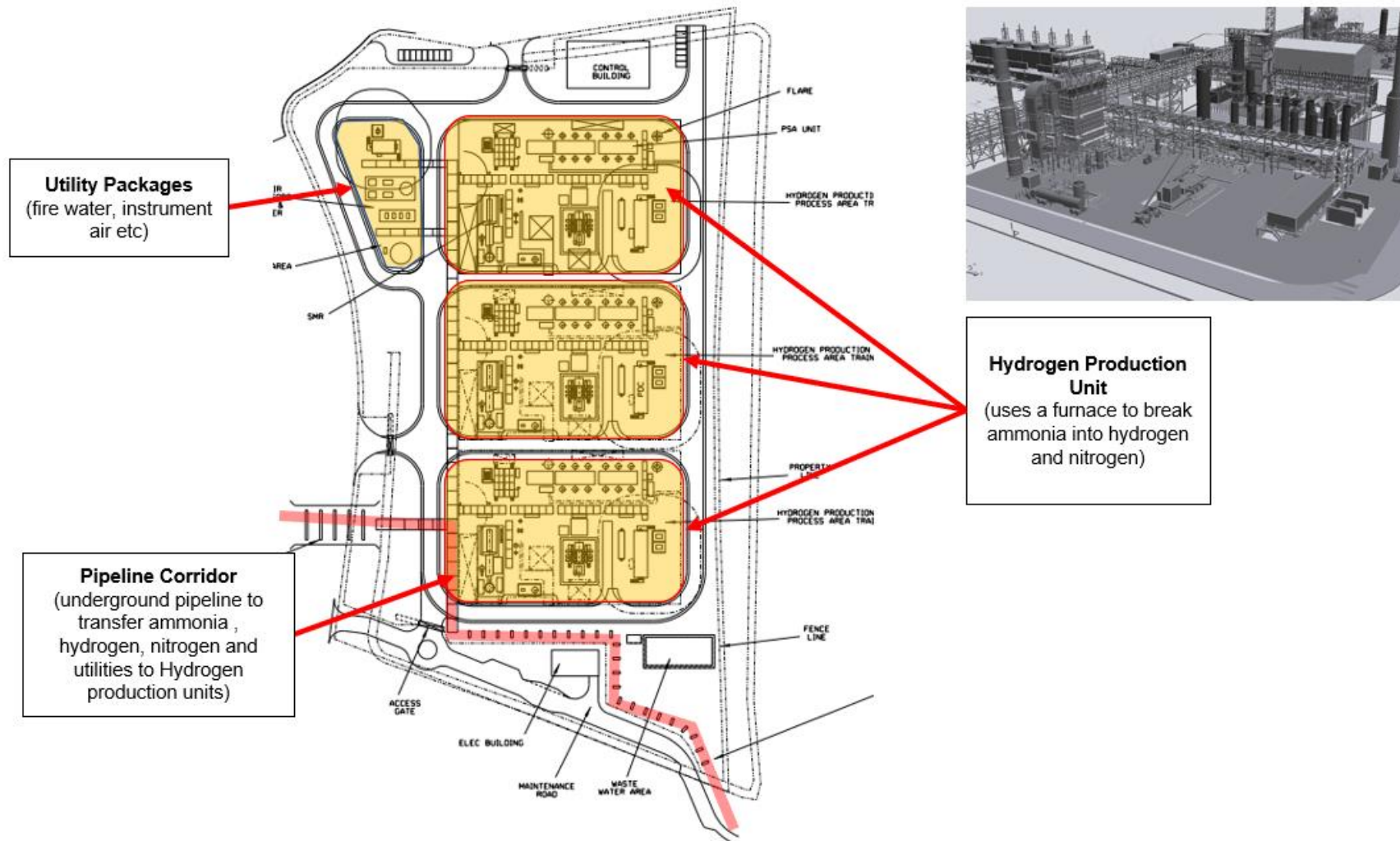


Plate 8: Illustrative Layout and Section of Work No. 5 on East Site, north of Laporte Road



4.8 Laporte Road culvert (Work No. 4)

- 4.8.1 The Laporte Road culvert involves the construction in Phase 1 of an underground culvert, containing pipelines and cables and other conducting media, under Laporte Road, to link the ammonia storage tank (Work No. 3) to the hydrogen production facility (Work No. 5).
- 4.8.2 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the works that comprise the Laporte Road culvert (Work No.4). The lateral parameters of Work No.4 are shown on sheet 4 of the **Works Plans [TR030008/APP/4.2]**.

4.9 Pipeline corridor (Work No. 6)

- 4.9.1 The Pipeline Corridor would contain a series of underground pipelines, linking the East and West Sites. These are expected to be parallel pipelines and would be installed underground at an expected depth of 5-16m below the existing ground level. The pipeline installation would involve clearing of areas, preparation for pipeline installation and either Horizontal Directional Drilling (“HDD”) or micro tunnelling techniques. The **Outline CEMP [TR030008/APP/6.5]** states that construction methods would “do no harm” which specifically refers to the use of HDD. This is confirmed in the **Schedule of Mitigation and Monitoring [TR030008/APP/7.2]**.
- 4.9.2 Part 1 of Schedule 1 of **the draft DCO [TR030008/APP/2.1]** defines the works that comprise the pipeline corridor (Work No.6). The lateral parameters of Work No.4 are shown on sheet 4, 5 and 6 of the **Works Plans [TR030008/APP/4.2]**.

4.10 West Site (Work No. 7)

- 4.10.1 Initially two hydrogen production units would be constructed on the West Site in Phase 1, whilst one further unit would be added in future phases of the Project making a total of six hydrogen production units across the West and East Sites when fully built out.
- 4.10.2 The part of the Project to be constructed on the West Site would include up to four hydrogen liquefiers and vessels for the temporary storage of the liquid hydrogen. A cooling water system and cooling towers would be installed on the West Site. In addition, the West Site would accommodate a control room and workshop building, warehouse, security and visitor building and other administration facilities associated with the operation of the facility, as well as trailer filling and vehicle refuelling bays associated with the bulk distribution of the green hydrogen.
- 4.10.3 Access to the West Site is proposed via the construction of two new permanent entrances from Kings Road and one from the A1173 as shown on the **Streets Works and Accesses Plan [TR030008/APP/4.6]**. Some land-raising is expected to be required to bring the finished ground level up to a maximum of 2.5m where required.
- 4.10.4 During Phases 1-4 of the construction of the Project, an area within the West Site would be used for contractor and subcontractor cabins, laydown, storage and car parking related to the construction of the buildings and structures within the West Site.

- 4.10.5 Table 2-8 within **Chapter 2: The Project [TR030008/APP/6.2]** provides indicative details (not for approval) of the main buildings and structures that would be constructed on the West Site such as the indicative dimensions, construction type and colour.
- 4.10.6 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the works located on West Site (Work No. 7). The lateral parameters of Work No.7 are shown on sheets 5, 6 and 7 of the **Works Plans [TR030008/APP/4.2]**. Vertical parameters for Work No. 7 (maximum built element height, maximum finished ground level and the minimum built height of the hydrogen production unit flare stack) are secured by Requirement 4 in Schedule 2 of the **draft DCO [TR030008/APP/2.1]**.
- 4.10.7 An illustrative layout of the West Site shown on Sheets 5, 6 and 7 of the **Illustrative Layout Plans [TR030008/APP/4.3]**. As noted above approval is not sought for the illustrative layouts or the indicative details referred to above.
- 4.10.8 **Plate 9** shows the illustrative layout of the hydrogen production facility on West Site and **Plate 10** shows images of the typical structures that would be constructed on West Site.

Plate 9: Illustrative Layout of Work No. 7 on West Site

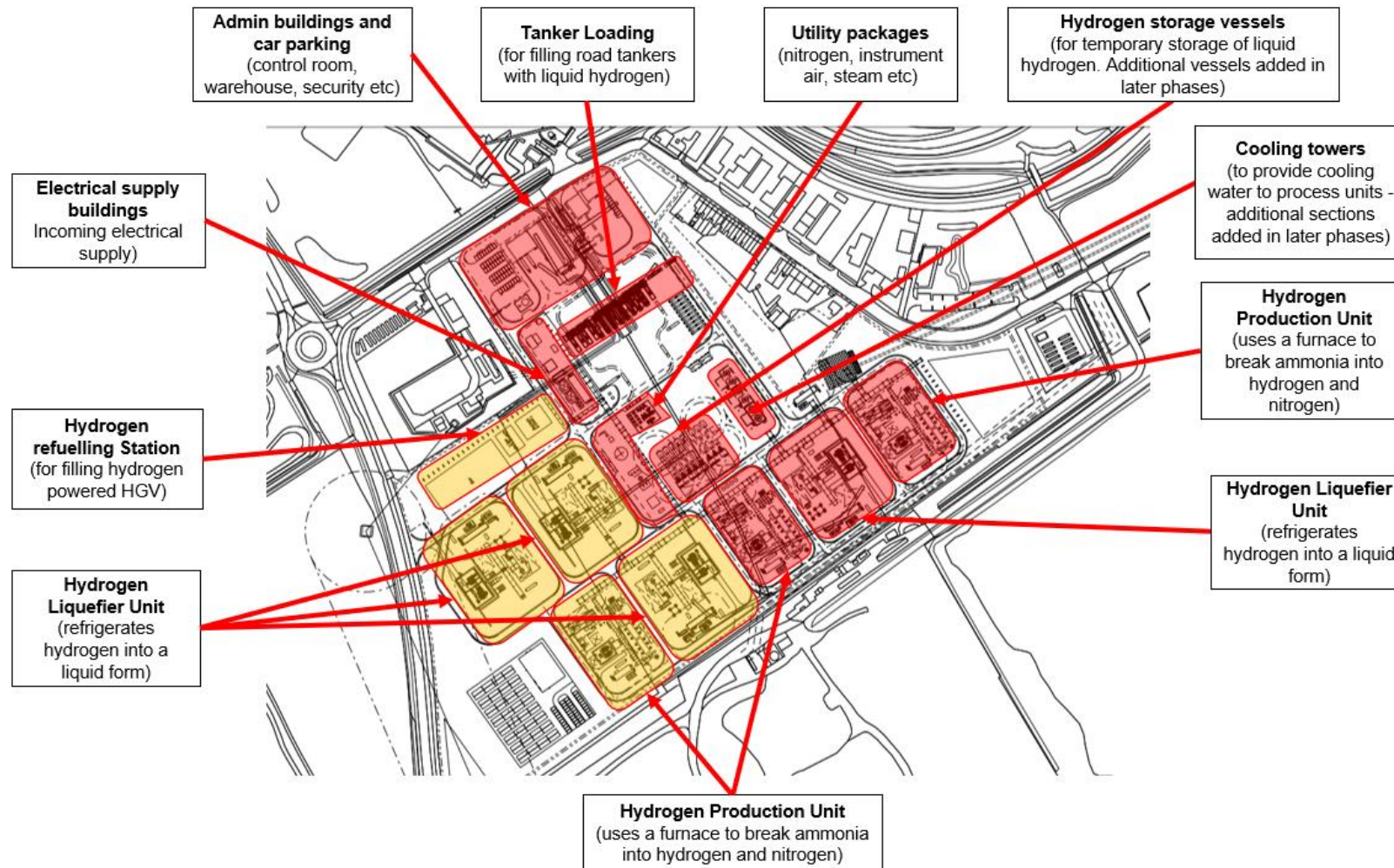
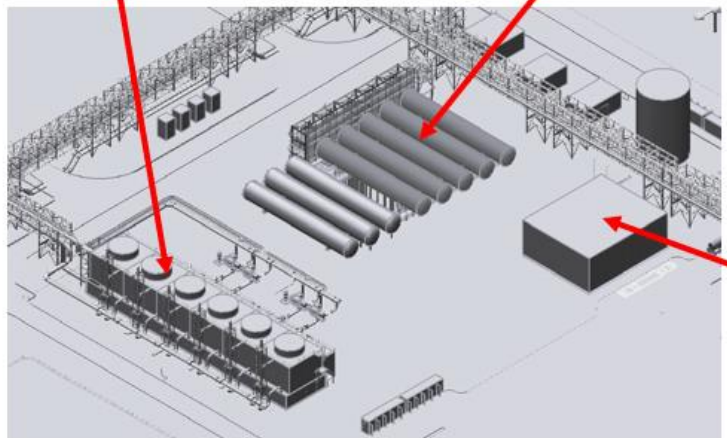


Plate 10: Images showing typical structures, West Site

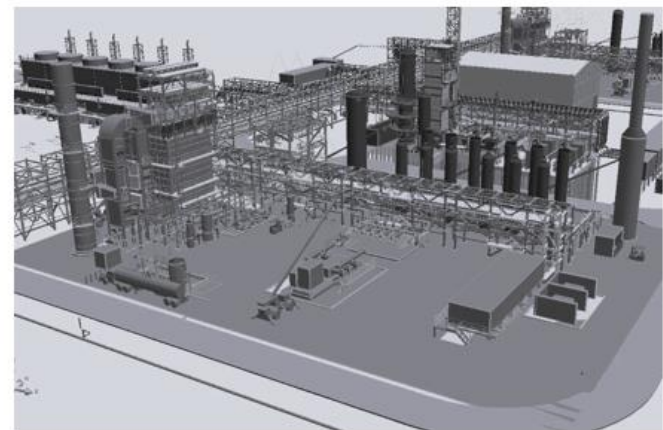
Cooling towers
(to provide cooling water to process units - additional sections added in later phases)

Hydrogen storage vessels
(for temporary storage of liquid hydrogen. Additional vessels added in later phases)

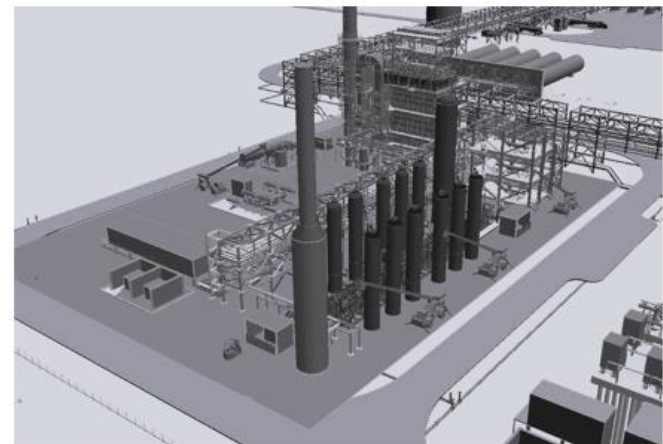
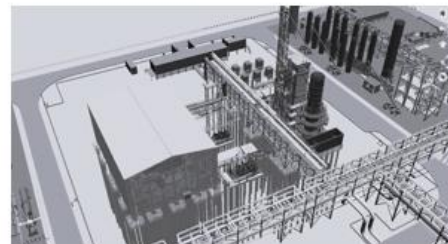
Hydrogen Production Unit
(uses a furnace to break ammonia into hydrogen and nitrogen)



Utility packages
(nitrogen, instrument air, steam etc)



Hydrogen Liquefier Unit
(refrigerates hydrogen into a liquid form)



4.11 Queens Road temporary construction area (Work No. 8)

4.11.1 The temporary construction area located on Queens Road will provide a temporary site facilities area to accommodate temporary contractor compound and staff welfare facilities, car parking and storage buildings during Phase 1 of the construction phase. Access to the construction area would require the formation of a temporary road access from Queens Road in addition to the existing road access.

4.11.2 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the Queens Road temporary construction area (Work No. 8). The lateral parameters of Work No.8 are shown on sheets 5 and 6 of the **Works Plans [TR030008/APP/4.2]**.

4.12 Laporte Road temporary construction area (Work No. 9)

4.12.1 The temporary construction area at Laporte Road will provide a temporary laydown area for the storage of equipment and materials and the formation of a temporary road access, including storage buildings. This construction area would be located in the large arable field to the east of the Long Strip woodland.

4.12.2 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the Laporte Road temporary construction area (Work No. 9). The lateral parameters of Work No.9 are shown on sheets 3 and 4 of the **Works Plans [TR030008/APP/4.2]**.

4.13 Temporary removal of Kings Road street furniture and overhead cables (Work No. 10)

4.13.1 The Project is expected to use modularisation to reduce on-site works and maximise the works completed in specialised fabrication facilities off-site where practicable. This would require the use of abnormal loads from the Port to the relevant parts of the Site.

4.13.2 To facilitate this, the works involve the temporary removal of street furniture and modification of overhead cables in four locations to allow the passage of these loads along Kings Road to the Site. It is likely there would be up to 30 abnormal load movements over a six-month period during Phase 1 of construction. A similar approach is likely to be required for subsequent phases.

4.13.3 The overhead lines would be either raised or lowered to allow passage of the abnormal loads and then reinstated. Street furniture would be taken down to accommodate the abnormal loads and reinstated as soon as possible.

4.13.4 Part 1 of Schedule 1 of the **draft DCO [TR030008/APP/2.1]** defines the temporary removal of street furniture and overhead cables at Kings Road (Work No. 10). The lateral parameters of Work No.10 are shown on sheets 6 and 7 of the **Works Plans [TR030008/APP/4.2]**.

4.14 Public Rights of Way

- 4.14.1 Public Bridleway 36 would be diverted during Phase 1 of construction around the eastern perimeter of the Laporte Road temporary construction area and reconnected with the retained bridleway further to the east on the sea wall. Once the first phase of construction is completed, the bridleway would be re-instated on its current alignment and the temporary diversion would be closed.
- 4.14.2 The Project also proposes:
- The permanent removal of informal access between the IOT and the point at which Public Bridleway 36 meets the sea wall – access would need to be removed permanently to enable construction and operation of the Terminal and continued informal access west of the Terminal would be incompatible with this.
 - Temporary closure of informal access through the southern part of the Long Strip woodland, south of Laporte Road. Access would need to be removed temporarily during the construction of the Project so limiting the number of walkers crossing Laporte Road in close proximity to the construction works in this area.
- 4.14.3 The diversion of Bridleway 36, the permanent removal of informal access and the temporary closure of informal access is shown on the **Stopping Up and Restriction of Use of Streets and Public Rights of Way Plan [TR030008/APP/4.7]**.

4.15 Landscape and Biodiversity

- 4.15.1 An **Outline Landscape and Ecology Management Plan [TR030008/APP/6.9]** sets out a strategy for the establishment and future management of proposed landscape and ecological works associated with the main landside elements of the Project. It sets out the short and longer-term measures and practices that will be implemented to establish, monitor and manage the areas of new planting. Approval of the detailed landscape and ecological works and their implementation would be secured by Requirement 10 of the **draft DCO [TR030008/APP/2.1]**.
- 4.15.2 An **Outline Woodland Compensation Strategy [TR030008/APP/6.8]** sets out the approach which will be used to compensate for the tree loss from the Long Strip woodland. The **Outline Woodland Compensation Strategy [TR030008/APP/6.8]** proposes two approaches; the management and enhancement of retained woodland in the northern section of the Long Strip woodland and the creation and long-term management of replacement woodland in an area of land owned by ABP on the southern edge of the Port of Immingham. Approval of the final strategy and its implementation would be secured by Requirement 11 of the **draft DCO [TR030008/APP/2.1]**.

4.16 Surface Water Drainage

- 4.16.1 A Drainage Strategy, **Appendix 18.B [TR030008/APP/6.4]** sets out a surface water drainage system for the terrestrial parts of the Site. This has been designed to intercept and attenuate all runoff generated by the Site to be

conveyed to attenuation ponds prior to discharging to nearby surface watercourses. The drainage design includes the appropriate allowances for climate change. The discharge rates would be restricted to site greenfield rates ensuring no detriment with regard to flood risk. Approval of the final drainage strategy and its implementation would be secured by Requirement 12 of the **draft DCO [TR030008/APP/2.1]**. ABP has been in discussion with Anglian Water about the water requirements of the Project. A commercial offer has been submitted by Anglian Water for a non-potable water supply from an existing non-potable source meeting the full requirements of the Project. The **Utilities Statement [TR030008/APP/7.7]** contains further details about the status of agreements with Anglian Water.

4.17 Construction and Operational Phasing of the Project

- 4.17.1 The Project would be constructed on a phased basis. The first phase of construction includes the Terminal and first phase of the hydrogen production facility on the West Site and East Site. It is anticipated that subject to the DCO being granted and the securing of other relevant consents, Phase 1 will start in early 2025 with a construction programme of between two and a half and three years.
- 4.17.2 Following completion of the first phase, a further five phases of hydrogen production would be constructed incrementally (adding hydrogen production units, liquefiers and associated equipment) to increase the processing capacity as the market for green hydrogen increases.
- 4.17.3 As set out in Requirement 5 of the **draft DCO [TR030008/APP/2.1]** the ammonia tank within Work No. 3a and any hydrogen production units within Work No. 5 and Work No. 7 must not be brought into operational use until the Terminal (Work No. 1) is operational. The hydrogen production facility will use imported green ammonia and this Requirement provides certainty that it will not be constructed other than in connection with the associated import and export facility. Requirement 5 also set outs that before more than two hydrogen production units and one hydrogen liquefier are commenced, a plan setting out the phase of works relating to the additional hydrogen production unit or liquefier must be submitted to and approved by the relevant planning authority. As explained below, Phase 1 represents the impact peak of construction activity and this Requirement ensures that NELC has oversight of construction phasing beyond Phase 1.
- 4.17.4 Based on a six-phase construction timeline, full completion of the Project would be at year 11. This programme duration is anticipated to be a worst case as market demand could accelerate the programme. The Phase 1 works represent the peak of construction activity, irrespective of the subsequent programme. Phasing is illustrated in **Table 1** and assumes that each phase of the hydrogen production facility would become operational following its construction.

Table 1: Indicative Construction Phasing Timeline for the Project

Phase	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Phase 1											
Phase 2											
Phase 3											
Phase 4											
Phase 5											
Phase 6											

4.17.5 The start of construction of Phase 2 (here shown in Year 4), would depend on a number of factors including market demand for hydrogen at that point in time, whilst the timing of subsequent phases would be subject to the same tests. Construction of Phases 2 – 6 may take up to eight years.

4.17.6 Table 2-11 of **Chapter 2: The Project [TR030008/APP/6.2]** provides details of which components of the Project would be built out in each phase of development.

4.18 Decommissioning

4.18.1 The Project does not make any provision for the decommissioning of the main elements of the Terminal. This is because the jetty, jetty head, loading platforms and access ramps would, once constructed, become part of the fabric of the Port estate and would, in simple terms, continue to be maintained so that they could be used for port-related activities to meet a long-term need.

4.18.2 The landside elements of the Project have a design life of up to approximately 25 years, although the operational life could be longer, depending on its integrity and market conditions at that time. When appropriate, this infrastructure would be decommissioned.

4.18.3 An **Outline Decommissioning Environmental Management Plan** (“DEMP”) [TR030008/APP/6.6] is submitted as part of the Application. A Final DEMP would be produced prior to decommissioning works being undertaken, which would detail measures to be implemented to avoid or reduce environmental impacts during the decommissioning of the landside elements. The provision of a final DEMP will be secured by Requirement 18 of the **draft DCO** [TR030008/APP/2.1].

4.18.4 Section 2.7 of **Chapter 2: The Project [TR030008/APP/2.1]** provides further information regarding decommissioning of the Project.

5 The need for and benefits of the Project

5.1 Introduction

- 5.1.1 This Chapter of the Planning Statement explains the compelling need for the Project to provide port infrastructure for the import and export of liquid bulk energy products in the Humber, to support the transition to net zero and the decarbonisation of the Humber industrial cluster and other locations. Need is established by the NPSfP (Ref 1-3) which states that there is a “*compelling need for substantial additional port capacity*” over the next 20–30 years (i.e. to 2032 – 2042), to be met by a combination of consented and new development.
- 5.1.2 The NPSfP establishes the need for the development of port infrastructure such as the Project, and therefore there is no requirement for ABP to demonstrate need for the Project. Nonetheless, there is ample evidence which establishes an urgent need for the specific infrastructure that the Project would deliver, as explained below.
- 5.1.3 This Chapter is set out in three parts:
- a. Part 1 describes the need for the specific infrastructure that comprises the Project, and the benefits that it will generate.
 - b. Part 2 considers the need for ports development to deliver future capacity which is identified in section 3.4 of the NPSfP and how this relates to the need for the specific infrastructure that the Project would deliver.
 - c. Part 3 draws together the conclusions from Parts 1 and 2 in addressing the guidance given to the decision maker in relation to the need for additional capacity in section 3.5 of the NPSfP.
- 5.2 Part 1 – Need for the specific infrastructure comprising the Project
- 5.2.1 The need for the specific infrastructure comprising the Project derives from the following inter-related factors:
- a. The national need to provide port capacity.
 - b. The need for port capacity to serve the energy sector in the Humber.
 - c. The need to achieve energy security through a diversity of technologies.
 - d. The urgent need to scale up hydrogen production capability.
 - e. The urgent need for carbon capture and storage technologies.
- 5.2.2 The need for the Project is explained further below, commencing with consideration of the national need, then regional need and then specific technologies related to net zero.

The national need to provide port capacity

- 5.2.3 As explained in more detail by reference to the NPSfP in Part 2 below, there is an established national need for port operators and developers such as ABP to bring forward new port infrastructure in locations where it is required and in response to market demand, to provide additional capacity, create competition and build resilience in the sector and deliver wider economic benefits in the public interest.
- 5.2.4 The NPSfP recognises the essential role that ports play in the growth of the UK economy and further notes that shipping will continue to provide the only effective way to move the vast majority of freight in and out of the UK, and the provision of sufficient sea port capacity will remain an essential element in ensuring sustainable growth in the UK economy (paragraph 3.1.4 of the NPSfP).
- 5.2.5 The Government seeks to encourage sustainable port development to cater for long-term forecast growth in volumes of imports and exports by sea with a competitive and efficient port industry capable of meeting the needs of importers and exporters cost effectively and in a timely manner, thus contributing to long-term economic growth and prosperity (paragraph 3.3.1 of the NPSfP).
- 5.2.6 A commercial decision has been taken to bring forward the Project in response to market demand at the Port of Immingham for the import and export of liquid bulks. This will increase port capacity and develop resilience, core objectives of the NPSfP.

The need for port capacity to serve the energy sector in the Humber

- 5.2.7 There is an imperative need for port infrastructure to provide capacity to serve the energy sector, for the import and export of liquid bulks relating to hydrogen and CO₂, to help achieve the 2050 legally binding net zero target. To avoid repetition, hydrogen is addressed at **paragraphs 5.2.27 to 5.2.39** below.
- 5.2.8 There is a particular need for port infrastructure on the Humber, (one of the major industrial areas in the country, an important contributor to the national and regional economy and the industrial cluster emitting more CO₂ than any other industrial cluster in the country) to support decarbonisation in the region and elsewhere, to support the provision of alternative sources of clean energy locally (and to contribute to the national need) and to contribute to the regional and local economy. As shipping provides the most effective way to move hydrogen in the form of refrigerated ammonia in and out of the UK, sufficient port and landside infrastructure is required for ammonia storage and processing. Shipping of CO₂ also helps maximise the use of carbon capture and storage infrastructure.
- 5.2.9 The role that ports play in the energy market is recognised at paragraph 3.1.5 of the NPSfP which states that ‘*Ports have a vital role in the import and export of energy supplies*’ and that ‘*port handling needs for energy can be expected to change as the mix of our energy supplies changes and particularly as renewables play an increasingly important part as an energy source*’. The NPSfP explains that the Government wishes to see port developments supporting sustainable development by providing additional capacity for the development of renewable energy (paragraph 3.3.5 of the NPSfP).

- 5.2.10 As at the time of writing of the NPSfP in 2012, there was a strong emphasis on port development supporting offshore wind developments, considering the Government's renewables targets and policies set out in the Renewable Energy NPS (EN-3). Since 2012, legislation and policy has advanced rapidly, alongside the development of technologies. In 2019, the Government adopted legally binding targets requiring the UK to bring all greenhouse gas emissions to net zero by 2050. Net zero means that any emissions should be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage. The target reflects the urgency of tackling climate change.
- 5.2.11 There are a number of important Government documents that set out the Government's strategy to decarbonise industry to achieve net zero and the 2050 target. 'Powering Up Britain' (March 2023) (9Ref 1-14) sets out the Government's approach to energy security and net zero and acts as an introduction to 'Powering Up Britain: Energy Security Plan' (March 2023) (Ref 1-15), and 'Powering Up Britain: Net Zero Growth Plan' (March 2023) (Ref 1-16)), both of which are complementary and should be read alongside each other. Appendix E of this Planning Statement provides a summary of these documents and other relevant Government policy documents relating to net zero.
- 5.2.12 The Humber is one of the UK's main industrial clusters and home to well-established industries including oil refineries, steelworks, chemicals clusters and other manufacturing plants. The Humber industrial cluster emits more CO₂ than any other industrial cluster in the country and therefore decarbonising this region is essential to achieve net zero. At the same time, the region is a significant contributor to the UK's economy; £18bn is generated in the Humber each year with 360,000 jobs supported in industries such as refining, petrochemicals, manufacturing and power generation and through their associated supply chains. The Humber also contains one of the UK's largest port complexes, comprising Immingham, Grimsby, Hull and Goole. The Port of Immingham is the UK's largest port by tonnage, handling over 46 million tonnes of cargo every year.
- 5.2.13 The importance of tackling decarbonisation of the Humber is recognised in Government policy related to net zero. In Powering Up Britain: Energy Security Plan the Government has proposed to select additional CCS projects to connect into the East Coast Cluster, including the Humber and their associated stores, as they become viable. The East Coast Cluster is one of the first two CCS clusters taken forward by the Government. It is a collaboration between Zero Carbon Humber, Net Zero Teesside and Northern Endurance Partnership with the aim of removing 50% of the UK's industrial cluster CO₂ emissions, protecting thousands of jobs and establishing the region as a globally competitive climate-friendly hub for industry and innovation. The Cluster includes a diverse mix of low carbon projects including industrial carbon capture, low-carbon hydrogen production, negative emissions power, and power with carbon capture.

- 5.2.14 In the Levelling Up White Paper (February 2022) (Ref 1-17), the Government proposes the creation of a private sector board to provide strategic leadership and drive development and delivery of the Humber economic priorities including the Humber Net Zero Cluster. The White Paper further states that “*The Humber is the UK’s largest trading estuary and has the capacity to make significant inroads into decarbonisation and the application of new and related technologies.*” The Levelling Up White Paper also states “*The Humber is playing a key role in energy. Through its natural geography and emerging cluster, the Humber will help to ensure that offshore wind, industrial decarbonisation, carbon capture, and other technologies will sustain key industries and create high quality jobs at scale for years to come.*”
- 5.2.15 The Levelling Up White Paper also proposed the creation of a freeport for Yorkshire and the Humber to build on existing regional strengths, including renewable energy, clean growth and advanced manufacturing, to deliver thousands of jobs and new investment. On 3 March 2023, the Chancellor of the Exchequer announced that the Humber had gained Freeport status. Normal tax and customs do not apply in the Humber Freeport with the key intentions being to attract inward investment and stimulate economic activity in the designated area.
- 5.2.16 The importance of tackling decarbonisation of the Humber is also recognised locally. The Humber Industrial Cluster plan (Ref 1-18) was set up in January 2021 with local industry partners to plan for decarbonisation of the Humber Cluster by 2040. The Humber Energy Board was convened by two Local Enterprise Partnerships across the region (the Hull and East Yorkshire Local Enterprise Partnership (“LEP”) and the Greater Lincolnshire LEP) to act as a single voice on climate change matters and to deliver decarbonisation.
- 5.2.17 The creation of additional capacity at the Port of Immingham, within the Humber industrial cluster, will enable it to support wider decarbonisation initiatives, and in particular the delivery of CCS projects. In terms of the port capacity created by the Project, as set out in **Chapter 19: Climate Change [TR030008/APP/6.2]** it is assumed that 660,000 tonnes would be used for the import of green hydrogen for the hydrogen production facility (based on 12 ships each transporting 55,000 tonnes from the Middle East and the Netherlands) and there would be approximately 9,800,000 tonnes for CO₂. It is also assumed that re-export is likely to occur, for example there is likely to be 100,000 tonnes of exports relating to the shipping of ammonia.
- 5.2.18 In October 2022 Harbour Energy, the UK’s largest independent oil and gas producer, and ABP announced an exclusive commercial relationship to develop a CO₂ import terminal (utilising the marine infrastructure that forms the Project) at the Port of Immingham which will link to the Viking CCS CO₂ transport and storage network (“the Viking CCS Project”). The Viking CCS Project proposes a 55km pipeline that will transport up to 10 million tonnes of CO₂ a year from Rosper Road in Immingham (just to the west of the Port) to the former Theddlethorpe Gas Terminal and then on to join an existing offshore pipeline to the former Viking gas fields in the UK southern North Sea. Here, the CO₂ will be stored in depleted gas reservoirs 2.7km beneath the seabed where it is planned to permanently store 10 million tonnes of CO₂ a year by 2030. The Viking CCS Project has been selected as a Track 2 development within the UK Government’s

cluster sequencing process, which aims to establish two additional Carbon Capture, Utilisation and Storage (“CCUS”) clusters, that combined with the two Track 1 clusters, intends to deliver 30 million tonnes per annum of CO₂ storage by 2030 (Ref 1-19).

- 5.2.19 The construction of the Project provides an opportunity for the discharge of liquefied CO₂ cargoes from vessels at the Terminal into the Viking CCS transport and storage network since it is in close proximity. The Viking CCS pipeline is approximately 4.5km due south west from the sea wall (where the jetty meets the land) to just south of the A180 at Roxton Road where the pipeline crosses. This would provide a method of transporting CO₂ captured at other dispersed industrial and power generation locations by ship to Immingham for onwards transport by pipeline and sequestration, thereby assisting in decarbonisation at locations beyond the Humber and facilitating use of the Viking CCS network.
- 5.2.20 Harbour Energy is expected to submit its DCO for the 55km pipeline referred to above in late 2023. The facilities for the connection of the Project to the Viking CCS storage sites would require separate future consents as necessary.
- 5.2.21 The Viking CCS Project is anticipated to provide opportunities for shipped CO₂ from dispersed emitters elsewhere in the UK and internationally to be transported for permanent storage within the Viking gas fields, via the Project.

The need to achieve energy security through a diversity of technologies, fuels and supply routes

- 5.2.22 There is an urgent need to achieve energy security through a diversity of technologies, fuels and supply routes. The UK is vulnerable to international energy prices and dependent on imported oil and gas. Government policy including that set out in the NPSfP, the energy NPSs, the draft energy NPSs and Powering up Britain ‘Energy Security Plan’, demonstrates the need for new energy infrastructure including necessary import and export facilities at ports, responding to market demand and new technologies, in order to develop competition and diversity of supplies, and to help in the net zero transition. The need for energy security means that energy from a range of reliable renewable sources is required. The Government’s 2050 net zero target underpins the urgency of bringing forward necessary infrastructure to facilitate the availability of clean energy as soon as possible in order to tackle climate change. In line with national policy, a range of technologies is required to be developed on the Humber to facilitate the production of low carbon hydrogen and the use of CCUS which has a wide range of applications which will support the transition to net zero. CCUS is likely to predominantly utilise renewable sources of energy and is complemented by other technologies such as gas-fired generation, which assists in maintaining a diversity of sources, and hence energy security.
- 5.2.23 The NPSfP recognises the importance of ensuring security of energy supplies through ports and provides that ports will need to be responsive to changes in the different types of energy supplies needed (paragraph 3.1.5) and further at paragraph 3.3.3, the NPSfP reiterates the need to ensure that new port infrastructure should ensure security of supply.

- 5.2.24 The British Energy Security Strategy (Ref 1-20) (April 2022) addresses the UK's vulnerability to international energy prices and highlights the importance of reducing the UK's dependence on imported oil and gas. Powering up Britain 'Energy Security Plan' builds upon the British Energy Security Strategy and sets out the steps the Government is taking to ensure the UK is more energy independent, secure and resilient. It recognises that enhanced infrastructure is required setting out that the Government's strategy to increase the supply of low-carbon energy *"is dependent on enhancing our strengths on wind, solar and nuclear power generation alongside hydrogen production and carbon capture, usage and storage. This includes the infrastructure to produce, store and transport low-carbon energy around the country and to capture, transport and store carbon dioxide."*
- 5.2.25 EN-1 highlights how critical it is that the UK continues to have secure and reliable supplies of energy to make the transition to a low carbon economy. EN-1 paragraph 2.2.20 provides that achieving security of supply includes the use and import of *"a diverse mix of technologies and fuels, so that we do not rely on any one technology or fuel. Diversity can be achieved through the use of different technologies and multiple supply routes (for example, primary fuels imported from a wide range of countries"*. Paragraph 2.2.21 states that *"Developing our infrastructure ... will help us maintain and improve our security and access to competitive supplies, particularly for electricity generation and gas importation and storage"*. Draft EN-1 sets out emerging Government policy on energy and energy infrastructure development and considers the large-scale infrastructure required for the UK to provide a secure, reliable and affordable supply of energy while also meeting decarbonisation targets. Section 2.5 of Draft EN-1 provides further detail on the security of energy supplies, stating that *"as global energy costs rise due to demand soaring as the economy reopened after COVID-19 and the Russian invasion of Ukraine, security of supply requires a greater focus on domestic energy production."*
- 5.2.26 The Project would facilitate the development of a diverse range of technologies, fuels and supply routes to support decarbonisation, including through an established opportunity to produce low carbon hydrogen, an opportunity to maximise the potential of emerging CCS infrastructure across the UK by CO₂ shipping and by providing capacity for future projects and energy supply routes. This Project will therefore help to secure the UK's energy security.

The urgent need to scale up hydrogen production capability

- 5.2.27 As part of the need to deliver energy security and decarbonisation, there is an urgent national need to scale up low carbon hydrogen production capability as an established alternative "clean" source of energy. Low-carbon hydrogen includes "green hydrogen" (hydrogen from renewable electricity) and "blue hydrogen" (hydrogen from fossil fuels with CO₂ emissions reduced by the use of CCS).

- 5.2.28 Hydrogen can be efficiently converted into energy for transportation and industrial uses without emissions of CO₂. The hydrogen energy industry chain includes upstream hydrogen production, midstream storage and transportation, and downstream application. Hydrogen can be produced from many different renewable and non-renewable sources. Traditionally, these include conversion of fossil fuels, such as steam reforming of natural gas, resulting in a large amount of CO₂.
- 5.2.29 The December 2020 Energy White Paper (Ref 1-21) recognises the critical role of hydrogen in reducing emissions from heavy industry and commits the Government to publishing a dedicated Hydrogen Strategy to position the UK as a world leader in the production and use of clean hydrogen.
- 5.2.30 The UK Hydrogen Strategy (August 2021) (Ref 1-22) recognises the scale of the challenge to increase green hydrogen production, stating in Chapter 1 *“With virtually no low carbon hydrogen produced or used currently, particularly to supply energy, this will require rapid and significant scale up from where we are today”*. Paragraph 1.2 of the Hydrogen Strategy emphasises the need for hydrogen infrastructure recognising that hydrogen can only be considered as a decarbonisation option if it is readily available. Paragraph 1.3 builds on this, stating *“as a result of its geography, geology, infrastructure and capabilities, the UK has an important opportunity to demonstrate global leadership in low carbon hydrogen”*. Section 2.2 of the Hydrogen Strategy outlines how hydrogen development can be delivered and scaled up, and states *“Investors, developers and companies across the length and breadth of the UK are ready to build if the policy environment is in place”*, further stating at 2.4.2 that *“developing and scaling hydrogen power during the 2020s can reduce the burden on other technologies such as renewables, CCUS and nuclear”*.
- 5.2.31 The British Energy Security Strategy (April 2022) notes that the UK is well-placed to exploit all forms of low carbon hydrogen production and commits to 10GW of hydrogen production by 2030. The Energy Security Strategy seeks up to 1GW electrolytic ‘green’ hydrogen and up to 1GW of CCS-enabled ‘blue’ hydrogen to be operational or in construction by 2025. It recognises that to accelerate our supply of low carbon hydrogen, it requires *“designing, by 2025, new business models for hydrogen transport and storage infrastructure, which will be essential to grow the hydrogen economy”*.
- 5.2.32 As set out in the Government’s notice titled “Cluster sequencing Phase-2: Track-1 project negotiation list, March 2023” (30 March 2023) (Ref 1-23), only 2 blue hydrogen projects (bpH2Teesside (600 MW) and HyNet hydrogen production plan (330 MW)) are in final negotiations with the Department for Energy Security and Net Zero. These two projects are the first blue hydrogen projects to benefit from the Hydrogen Production Business Model and potentially would achieve 9.3% of the targeted 10 GW. However, these projects are still not guaranteed to come forward.

- 5.2.33 In terms of green electrolytic hydrogen registered for the Government's first electrolytic allocation round (referred to as Hydrogen Allocation Round 1), the average green hydrogen potential project is on average 10MW in installed capacity, which, given the availability of solar and wind power in the UK, will only yield at best 5MW of hydrogen. As confirmed in the Government notice "Hydrogen Business Model/Net Zero Hydrogen Fund: negotiations list for allocation round 2022" (16 August 2023) (Ref 1-24) one of the largest projects, Gigastack (100 MW), has withdrawn from Hydrogen Allocation Round 1. The average remaining projects will produce 2MW each resulting in 40 MW in total, for 20 projects. This represents only 0.4% of the Government target to reach 10GW by 2030.
- 5.2.34 Powering Up Britain 'The Net Zero Growth Plan' further emphasises the key role that low carbon hydrogen can play in delivering a net zero economy as a versatile replacement for the high-carbon fuels used today.
- 5.2.35 Draft EN-1 addresses the need for low carbon hydrogen infrastructure stating at paragraph 3.4.12 that *"There is an urgent need for all types of low carbon hydrogen infrastructure to allow hydrogen to play its role in the transition to net zero."* Paragraph 3.4.18 highlights the wider opportunities provided by hydrogen infrastructure stating that *"in the future, low carbon hydrogen may become an internationally traded energy vector, piped or shipped from areas of low-cost production to areas of demand. While the development of this market is uncertain, the UK could become both an exporter and importer of low carbon hydrogen, potentially necessitating current gas infrastructure to be configured or for new infrastructure to be put in place"*.
- 5.2.36 The Project would play an important part in helping to meet the urgent need to scale up hydrogen production capability as it provides an opportunity for the production of green hydrogen from green ammonia planned to be available in Europe in 2027, also helping to establish a reliable supply of hydrogen from a variety of sources and achieve energy security.
- 5.2.37 Once fully constructed and operational, anticipated in 2027 significantly in advance of net zero deadlines, the Project could deliver 3% of the Government's 2030 10GW target for green hydrogen (300MW) and help meet the need for decarbonisation of industry including the heavy transportation sector. The significant but nevertheless single figure contribution that the Project makes to the Government target for hydrogen production demonstrates the scale of the task. To meet the Government's target, it is likely that approximately 30 further schemes of the same scale are needed. There are some further projects in development, such as H2 Saltend promoted by Equinor, with planned production of 600MW, and a 100MW green hydrogen facility to be built at Port of Felixstowe, promoted by Scottish Power, but it is clear that this Project and many more need to be developed urgently to meet the Government's target.

- 5.2.38 In order to facilitate the import and export of liquid bulk energy products including ammonia, the Project would be capable of receiving and discharging vessels of a variety of sizes. The dimensions of the largest vessel, very large gas carriers (“VLGC”), expected to be used to transport ammonia to and from the terminal would be approximately 250m in length, 45m beam and 12.8m draught. Accordingly, access to a deep-water port is required. These larger ships are required to optimise the shipping logistics and reduce the environmental impact of shipping. The Port of Immingham is a deep-water port and therefore suitable for the very large gas carriers that are required.
- 5.2.39 Furthermore, while some low carbon hydrogen production is being facilitated through UK production, the opportunity exists to import green hydrogen (transported in the form of ammonia) from other countries where surplus renewable energy can be harnessed. The production of low carbon hydrogen in the UK relies on locally produced renewable energy including solar and wind, which is weather dependant and therefore intermittent, and competes with other demands for that energy. The production of green ammonia in, and its import from, countries with abundant sources of renewable energy helps meet the need for a range of energy supplies and technologies to achieve energy security.

The urgent need for carbon capture and storage technologies

- 5.2.40 There is an urgent national need for CCS technologies to support decarbonisation and therefore a need for CCS infrastructure, particularly in industrial areas such as the Humber where the need for decarbonisation is the greatest. CCS technology captures carbon dioxide from power generation, low carbon hydrogen production and industrial processes, storing it underground where it cannot enter the atmosphere. The Project would help maximise the potential of emerging CCS infrastructure in the Humber, particularly in relation to the Viking CCS Project.
- 5.2.41 The Energy White Paper notes that the deployment of CCS is “fundamental to the decarbonisation of *energy intensive industries such as steel, cement, oil refining and chemicals. CCUS² can help secure the long-term future of these industries and enable production of clean hydrogen at scale.*” The Energy White Paper is clear on the level of the challenge, stating that “*Developing carbon transport and storage infrastructure will require large upfront capital expenditure, to construct offshore and onshore pipelines and develop storage sites and wells. We will help to put in place this critical network, as the foundation for the scaling up of CCUS across the UK.*”
- 5.2.42 The Government’s Net Zero Strategy Build Back Greener (October 2021) (Ref 1-25) sets out the Government’s ambition to capture 20-30 Mt of carbon dioxide per year by 2030 and at least 50Mt by the mid 2030’s. The Project can facilitate the import of up to nearly 10 Mt of Carbon dioxide (see **paragraph 5.2.17** of this section), or one third of this objective.

- 5.2.43 Powering Up Britain ‘Energy Security Plan’ explains that CCS technologies are of central importance to decarbonising the UK economy, and a central pillar of the Government’s plan to deliver net zero stating that *“It is the key to unlocking decarbonisation of industrial sectors, delivering engineered greenhouse gas removals, and enabling low-carbon hydrogen production and flexible low-carbon electricity generation to complement renewables.”*
- 5.2.44 Draft EN-1 identifies the urgent need for new nationally significant CCS infrastructure for the transition to a net zero economy (paragraph 3.5.1). In paragraph 3.5.2, Draft EN-1 explains that the Government’s Climate Change Committee has advised that new CCS infrastructure is a *“necessity not an option”* and that *“CCS infrastructure will also be needed to capture and store carbon dioxide from hydrogen production from natural gas, industrial processes, the use of bioenergy and from the air”*.
- 5.2.45 Draft EN-1 recognises the importance of ports to enable the transfer of carbon dioxide from onshore infrastructure onto ships and that the need for CCS infrastructure set out in Draft EN-1 is likely to be a relevant consideration.
- 5.2.46 The Project provides an opportunity to facilitate the use of CCS infrastructure, including in industrial locations which do not have direct access to CCS systems, and develop wider economic opportunities, including inward investment related projects that will utilise the hydrogen and CCS infrastructure.

5.3 Part 1 - Project benefits

- 5.3.1 Construction and operation of the Project will deliver very substantial national, regional and local benefits that weigh heavily in favour of the granting of development consent. These benefits are set out below.

Substantial new port capacity on the Humber designed and located to support the energy sector

- 5.3.2 The Terminal would create a substantial amount of additional capacity to meet the demands of current, expected and emerging users and markets in the energy sector. In doing so, it will help meet the national need for port capacity and help provide resilience and promote competition in the ports sector. Furthermore, other benefits, such as job creation and economic growth, as set out below, would be realised as well as the inherent benefits as stated in the NPSfP, particularly those related to the wider economy at paragraph 3.1.7.
- 5.3.3 The Terminal would have a liquid bulk handling capacity of approximately 11 million tonnes per annum and so be able to accommodate up to 292 vessel calls per year, operating 24-7, meeting the national and regional need for capacity and enabling the Port to compete with other ports for suitable customers.
- 5.3.4 With a deep-water berth and space for manoeuvring large vessels, the Terminal would be able to accommodate very large gas carriers, used for transporting ammonia, with the flexibility to accommodate a range of other vessel sizes.

- 5.3.5 Up to 12 vessel calls would be associated with the hydrogen production facility. The construction of the Terminal would therefore result in substantial additional available capacity. Whilst a second use of the Terminal may be the transport of liquified CO₂ (see below), there could also be capacity and flexibility to support other energy projects or technologies, including new liquid bulk energy product markets that may emerge.

A significant contribution to achieving net zero by 2050

- 5.3.6 The Project would provide bespoke infrastructure to support decarbonisation of the Humber industrial cluster, one of the heaviest emitters of CO₂ in the country, as well as other locations. This is of national and regional importance given the need for urgent action to tackle climate change.
- 5.3.7 Meeting the net zero targets identified in Government policy is extremely challenging as all infrastructure projects have a considerable lead in time and face uncertainty of delivery, until consents are in place and there is sufficient certainty of market user to make them viable. In that context, there is a need to take urgent steps now to facilitate delivery of the infrastructure that the country needs to support the net zero transition. The Project is at sufficient maturity to seek consent for construction and operation, therefore the Project is well-positioned to make a significant contribution to net zero by 2027 while other projects and infrastructure are still being planned. Furthermore, agreements are in place between the first user of the Project (Air Products) and ABP, the port owner, operator and developer who has taken the view that the Project is commercially viable. The NPSfP makes clear at paragraphs 3.4.7, 3.4.9 and 3.4.12 that the Government expects developers to bring forward applications for port developments where they consider them to be commercially viable. If development consent is granted for the Project in 2024/2025, the Terminal could be operational in 2027.
- 5.3.8 Having the certainty of development consent in 2024/25 would also be likely to act as a catalyst, enabling other users to come forward and projects to be developed, which could include other carbon capture projects if they have a route to storage by ship via the Project. This could also assist in meeting the 2050 net zero target.

A reliable supply of green hydrogen providing access nationally and locally to a low carbon fuel and contributing to national energy security

- 5.3.9 The Project is anticipated to produce up to 300 MW of hydrogen per annum once fully constructed and operating at full capacity, the equivalent of up to 9.5 billion MJ per annum. This could meet up to 3% of Government's 2030 hydrogen production capacity target.
- 5.3.10 The opportunity arises to commence green hydrogen production from 2027. This is when hydrogen produced using renewable energy in the Middle East is anticipated to be available in Europe. The facility that will produce that ammonia, which is partly funded by Air Products, is currently under construction, see **Plate 11**. There is therefore an urgency in obtaining consents for and constructing the Project, in order that the benefits presented by green hydrogen can be realised on the Humber and nationally as soon as possible.

**Plate 11: Green Hydrogen and Ammonia Production Facility in NEOM
(Plate provided by NEOM Green Hydrogen Company)**



- 5.3.11 Similar facilities are being planned in other ports in Europe, to accept and benefit from the green hydrogen imports. For example, Air Products is also developing two similar import terminals, one in the port of Rotterdam and the other one in Hamburg to receive the ammonia carrying the green hydrogen produced in the Middle East. The Terminal and associated development will help enable the Port to compete effectively with other ports in Europe and, in doing so, contribute to the UK economy.
- 5.3.12 Producing green hydrogen in the Middle East, where there is a reliable source of solar energy, means that there can be a reliable supply of green ammonia for processing in Immingham. In addition, Air Products is exploring other opportunities for production of green hydrogen in locations where renewable energy is readily and reliably available.
- 5.3.13 The availability of green hydrogen from imported ammonia would complement other types of green hydrogen reliant upon locally produced renewable energy, providing diversity of energy sources and supply routes. Wind and solar energy in the UK is weather dependant and therefore intermittent. The need for renewable energy to create green hydrogen in the UK also increases renewable energy demand in the UK (about 40 times more than that needed to produce an equivalent amount of green hydrogen from green ammonia), and also creates a higher demand for water. Producing hydrogen from ammonia requires smaller quantities of non-potable water whereas local electrolysis requires 11,000 to 30,000 tonnes of higher quality, potable water per day. The land required is also greater; the hydrogen production facility would be twice the size of the Project, aside from the land required for the dedicated renewable power generating capacity.

- 5.3.14 The ammonia and hydrogen storage facilities forming part of the Project would enable a reliable supply of hydrogen to be maintained both locally through supply to local industries and future hydrogen refuelling stations, as well as nationally.

Benefits from fuel switching

- 5.3.15 The hydrogen produced by the Project is intended to be used in the decarbonisation of industry in the UK, including in the heavy transport sector.
- 14.1.1 The use of diesel in road transport results in the emission of approximately 94g CO₂ per MJ. By way of example, if all of the green hydrogen produced by the Project (once fully built out and operational) was to be used in road transport, it could facilitate a reduction in annual emissions of CO₂ from road traffic emissions by up to 704,634 tonnes per annum (totalling a 21,757,414 tCO₂e emission reduction over 25 years) as a result of fuel switching from diesel to hydrogen. This is equivalent to 22,000 diesel lorries, or 5% of the CO₂ emitted by the industries in the Humber.
- 5.3.16 The Project includes hydrogen loading facilities to facilitate the filling of road tankers for onward distribution. It is located to enable easy access to the strategic road network for national distribution. **Plate 12** shows the distance of major cities from the Port of Immingham via the strategic road network.

Immingham Green Energy Terminal
Planning Statement

Plate 12: Distance of major cities from the Port of Immingham



- 5.3.17 An additional benefit of this switch in fuel would be a reduction in emissions of other atmospheric pollutants. Based on the example above, fuel switching to hydrogen could cut emissions of particulate (PM₁₀) (26 tonnes/year) and NO_x emissions (1,050 tonnes/year), based on replacement vehicles complying with the latest Euro VI standards. In practice the actual savings could be substantially greater as cleaner engine technologies are developed.
- 5.3.18 Alternative uses of hydrogen by local industry are likely to have similar or better savings in CO₂ emissions. The main opportunity is to substitute hydrogen for natural gas in combustion processes which then emits zero CO₂. Reduction processes using hydrogen or ammonia instead of natural gas or coal in the steel manufacturing sector also has a potential to reduce or eliminate CO₂ emissions.

Contribution to the regional and local economy

- 5.3.19 The Project is anticipated to provide an average of 627 net jobs during the construction period, with the likely peak workforce anticipated to be 1,012 jobs during Phase 1 (792 landside jobs and 220 marine jobs). During operation, the total net employment is anticipated to be 207 jobs.
- 5.3.20 The gross value added (growth added through employment opportunities) during the construction period is £35 million, of which over £24 million is projected to remain in North East Lincolnshire.
- 5.3.21 The construction and operation of the Terminal will therefore result in a substantial number of new roles and associated opportunities for those living locally to receive training and develop their skills.
- 5.3.22 Post consent, ABP and Air Products will identify opportunities to partner with the supply chain and provide training and recruitment opportunities working with local organisations such as CATCH, an industry led partnership who develop and deliver skills and qualifications programmes in support of the process, energy, engineering and renewable industries in the Humber region. Jobcentre Plus has also offered to support with employability and skills training to maximise the local community benefits of the Project.
- 5.3.23 The capacity available in the Terminal (taking account of the land allocated for development in the local area) could be a catalyst for further projects, creating further jobs and economic benefits.
- 5.4 **Part 2 - The need for port development as set out in Section 3.4 of the NPSfP**
- 5.4.1 Section 3.4 of the NPSfP sets out the Government's assessment of the need for new port infrastructure. In summary, the NPSfP recognises that as well as catering for overall demand, the total need for port infrastructure also depends on the need to retain the flexibility that ensures that port capacity is located where it is required, and on the need to ensure effective competition and resilience in port operations (paragraph 3.4.1). These factors are then considered further in the paragraphs that follow within the NPSfP, as considered further in the following paragraphs of this Planning Statement.

Overall demand

- 5.4.2 The NPSfP highlights that the majority of goods (95%) will move in and out of the UK through ports, with very limited alternatives (paragraph 3.4.2).
- 5.4.3 It is recognised in the NPSfP that although the Government undertakes its own port freight demand forecasts, which are intended to help set the context of overall national capacity need, it is for each port to take its own commercial view and assess its own risks on its particular traffic forecasts (paragraph 3.4.7 of the NPSfP). That is reflected in this case. ABP in conjunction with Air Products has taken a commercial decision to bring forward the Project to meet the existing and expected demand from the energy sector for port development at the Port of Immingham.

Location of development

- 5.4.4 The need for port infrastructure depends not only on overall demand for port capacity but also on the need to retain the flexibility that ensures that it is located where it is required (paragraph 3.4.1 of the NPSfP).
- 5.4.5 Fundamentally, port capacity must be in the right place if it is to effectively and efficiently serve the needs of the market. The NPSfP acknowledges that it is not possible for Government to anticipate future commercial opportunities. New shipping routes and technologies may emerge (paragraph 3.4.11). The needs of trading partners may change as their economic circumstances develop. Capacity needs to be provided at a wide range of facilities and locations, to provide the flexibility to match the changing demands of the market.
- 5.4.6 The NPSfP makes it clear that the Government does not wish to dictate where port development should occur (paragraph 3.4.12) but rather that because port development must be responsive to changing commercial demands, the market is considered the best mechanism for getting this right, with developers bringing forward applications for port developments where they consider them to be commercially viable.
- 5.4.7 This analysis is reflected in the Government's fundamental policy for ports set out in paragraph 3.3.1 of the NPSfP where, amongst other things it is made clear that the Government seeks to allow judgments about when and where new developments might be proposed to be made on the basis of commercial factors by the port industry or port developers operating within a free market environment (paragraph 3.3.1). In other words, it is not the role of the planning system to scrutinise or second guess such commercial judgments by port operators. Its role is rather to assess the acceptability of the impacts of proposed developments by reference to relevant policy (see Chapter 7 of this Planning Statement).
- 5.4.8 The Project would provide capacity in the right place. It is ideally located in the Humber, which is one of the UK's main industrial clusters, emitting more CO₂ than any other industrial cluster in the UK. The Project is well located for hydrogen production, due to its close proximity to the strategic road network to facilitate distribution to the heavy transportation sector and there are potential industrial customers located nearby. The Project is also well located for CCS due to the presence of local customers and since it provides the opportunity to ship

CO₂ from further afield to Immingham. The location of the Project will meet the needs of the first user, and the Terminal would have capacity for future cargoes related to CO₂ and new technologies expected to emerge which require the import and export of liquid bulks and which ports need to stand ready to facilitate. The opportunity to align with other projects in the area is demonstrated by the collaboration agreements made between ABP and Harbour Energy to utilise the proposed terminal at the Port of Immingham to link to the Viking CCS Project.

Competition

- 5.4.9 The Government welcomes and encourages competition between ports, which drives efficiency and lowers costs for industry and consumers, so contributing to the competitiveness of the UK economy. Effective competition is identified as requiring sufficient spare capacity to ensure real choices for port users. It also requires ports to operate at efficient levels, which is not the same as operating at full physical capacity. Demand fluctuates seasonally, weekly and by time of day, and some latitude in physical capacity is needed to accommodate such fluctuations. The Government believes the port industry and port developers are best placed to make judgements about how this is delivered (paragraph 3.4.13 of the NPSfP).
- 5.4.10 CCS and green ammonia importation are new and emerging market sectors and ports will compete with each other to provide services to these sectors. The provision of the Terminal facilitates and stimulates this competition.

Coastal Shipping

- 5.4.11 Paragraph 3.4.14 of the NPSfP underlines the contribution coastal shipping, as a substitute for inland freight transport, can make towards decongestion and decarbonisation and to the environment. It states that coastal shipping is expected to grow and developers are expected to provide suitable facilities on a commercial basis.
- 5.4.12 The proposed Terminal has the flexibility to accommodate a range of vessel sizes, allowing very large gas carriers suitable for deep sea transportation of ammonia through to small coastal vessels allowing cabotage of liquified CO₂. Longer term, larger CO₂ carriers could be deployed for the import of CO₂ from further afield. Should there be more capture projects on the Humber than the Viking CCS Project has the capacity to accept, the Project could be used to export CO₂ to other transport and storage clusters elsewhere in the UK in coastal vessels.

Resilience

- 5.4.13 Spare capacity is also recognised as helping to assure the resilience of the national infrastructure (paragraph 3.4.15). Port capacity is needed at a variety of locations and covering a range of cargo and handling facilities, to enable the sector to meet short-term peaks in demand, the impact of adverse weather conditions, accidents, deliberate disruptive acts and other operational difficulties, without causing economic disruption through impediments to the flow of imports and exports. The Government believes that resilience is provided most effectively as a by-product of a competitive ports sector.

- 5.4.14 The Project will provide additional capacity at the Port of Immingham close to existing industries seeking to decarbonise and customers within the energy sector, thereby increasing the resilience of port infrastructure on the Humber. The need to upscale infrastructure quickly to cater for the changing needs of the energy sector is well recognised in Government policy and the Project is responding directly to this need.

Government's conclusions on the need for new infrastructure

- 5.4.15 Against the background described in section 3.4 of the NPSfP, the Government concludes that there is a compelling need for substantial additional port capacity over the next 20-30 years (up to 2042). Excluding the possibility of providing additional capacity for the movement of goods and commodities through new port development would place limits on economic growth and the price, choice and availability of goods imported to the UK and available to consumers. Moreover, it would limit the local and regional economic benefits that new developments would bring, which would be strongly against the national interest (paragraph 3.4.16).
- 5.4.16 The Project will meet a specific need which exemplifies the Government's assessment of the need for new ports infrastructure:
- a. The Project will provide capacity on the Humber Estuary in response to an urgent need from the energy sector;
 - b. The Project is in the right location, ideally located on the Humber Estuary, one of the UK's main industrial clusters;
 - c. ABP has taken a commercial decision, to bring forward the Project in the form presented in this Application;
 - d. The Project will provide additional resilience for national and regional port infrastructure; and
 - e. The substantial benefits, particularly in terms of regional and local economic benefits that would be derived from construction of the Project.
- 5.4.17 In light of the above, it is clear that there is a compelling need for the Project, the delivery of which is strongly in the public interest.

5.5 Part 3 –The approach to need in decision-making set by Section 3.5 of the NPSfP

- 5.5.1 Paragraph 3.5.1 of the NPSfP provides guidance for the decision maker on assessing the need for additional capacity. It states that, for the reasons set out in section 3.4 of the NPSfP, when determining an application for a development consent order in relation to ports, the decision-maker should accept the need for future capacity to:
- *“cater for long-term forecast growth in volumes of imports and exports by sea for all commodities indicated by the demand forecast figures set out in the MDST forecasting report accepted by Government, taking into account capacity already consented. The Government expects that ultimately all of the*

demand forecast in the 2006 ports policy review is likely to arise, though, in the light of the recession that began in 2008, not necessarily by 2030;

- *support the development of offshore sources of renewable energy;*
- *offer a sufficiently wide range of facilities at a variety of locations to match existing and expected trade, ship call and inland distribution patterns and to facilitate and encourage coastal shipping;*
- *ensure effective competition among ports and provide resilience in the national infrastructure; and*
- *take full account of both the potential contribution port developments might make to regional and local economies”.*

5.5.2 For the reasons set out in Parts 1 and 2 above, it is clear that the future capacity to be created by the Project would:

- a. Provide facilities on the Humber to match existing and expected trade and ship call (based on the existing port and industrial cluster) and will facilitate and encourage coastal shipping through the transport of liquid bulk energy products.
- b. Ensure competition with other ports for customers in the energy sector and thereby provide resilience, including through spare capacity.
- c. Contribute to the Humber regional and local economies, including through helping industry decarbonise and stay viable, providing jobs and acting as a catalyst for further projects to come forward.

5.5.3 The Project would also provide capacity to cater for the expected growth in the import and export of liquid bulk products likely to be handled by the Terminal and directly support the development of renewable energy, related to hydrogen and CCS technologies associated with achieving the Government’s net zero target. Whilst these points are not directly referenced in paragraph 3.5.1 of the NPSfP, they reflect the wider underlying objectives of the first two bullet points, and also reflect the changing nature of demand from the energy market since the NPSfP was designated in 2012 and emerging energy policy, as set out in paragraph 5.2.25.

5.5.4 The Project therefore involves port development that would make an important contribution to meeting the need identified by the NPSfP and summarised in paragraph 3.5.1. The need for the Project is established for the purpose of decision-making by the NPSfP, but it is further reinforced by the evidence of the need for the particular infrastructure proposed, and the substantial benefits the Project would deliver, as described in Parts 1 and 2 of this chapter of the Planning Statement.

5.5.5 Given the level and urgency of the established need for port infrastructure which the NPSfP identifies, the decision maker is required to start with a presumption in favour of granting consent to applications for ports development unless any more specific and relevant policies set out in the NPSfP or any other NPS, clearly indicate that consent should be refused and subject to the provisions of the 2008 Act (paragraph 3.5.2). The Project exemplifies the type of infrastructure for which the NPSfP has identified an urgent need. This is an application to which the

presumption applies, and there are no policies in the NPSfP, or any other NPS that clearly indicate consent should be refused.

Marine Policy Statement

- 5.5.6 The MPS also provides advice to the decision maker when determining an application for an order granting development consent in relation to ports setting out that the decision maker should take into account the contribution that the development would make to the national, regional or more local need for the infrastructure, against expected adverse effects including cumulative impacts and that in considering the need for port developments in England and Wales, reference should be made to interpretations of need as set out in the Ports National Policy Statement (paragraph 3.4.11).
- 5.5.7 As set out above, there is a clear national need for the Project, to provide port capacity, and a regional need to provide port facilities to serve the energy sector in the Humber. As explained in chapter 8 of this Planning Statement, the adverse impacts of the Project are relatively limited in scale and local in nature, and do not give rise to a conflict with the NPSfP. The benefits are substantial and important at a national and regional level, leading to an overwhelming balance in favour of the grant of consent.
- 5.6 **Summary**
- 5.6.1 In summary, there is an imperative and urgent need for the Project to provide port infrastructure for the import and export of liquid bulk energy products in the Humber to support the transition to net zero and the decarbonisation of the Humber industrial cluster. The Project provides port infrastructure for the first user of the Terminal to import green ammonia to produce green hydrogen and with future capacity for future cargoes related to carbon capture and storage or other liquid bulks. The Project will also deliver substantial economic benefits in the local area through the provision of jobs and gross value-added during construction and operation.
- 5.6.2 The need for the Project is established by the NPSfP. The presumption in favour of granting consent to applications for ports development provided by the NPSfP applies to the Project.
- 5.6.3 The need for the Project arises out of the national need (as set out in the NPSfP) for port operators and developers such as ABP to bring forward infrastructure in the right place, responding to market demand, providing additional capacity, competition and resilience in the sector and delivering wider economic benefits in the public interest.

6 Application formalities

6.1 Introduction

- 6.1.1 This chapter of the Planning Statement introduces certain key documents produced as part of the Application and explains how the Application satisfies the relevant requirements of legislation concerning the preparation, assessment and submission of applications.
- 6.1.2 It should be noted that this chapter covers certain key documents only. For a full schedule of application documents, and a comprehensive account of compliance with the legislative requirements for the acceptance of applications, refer to the **Section 55 checklist**, appended to the **Application Cover Letter [TR030008/APP/1.4]**.
- 6.1.3 Section 37 of the 2008 Act makes provision for applications for DCOs. It specifies to whom the application must be made, how it must be made, and provides the Secretary of State with the power to set relevant standards and give guidance to applicants.
- 6.1.4 The Application has been submitted in the form required by section 37(3)(b) of the 2008 Act and the Application documents comply with the requirements in section 37 of the 2008 Act and those set out in relevant regulations and guidance, including:
- The APFP Regulations;
 - The Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (Ref 1-26);
 - The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the “EIA Regulations”) (Ref 1-27);
 - The Decisions Regulations (Ref 1-4);
 - The Department for Communities and Local Government’s Planning Act 2008: Application form guidance (2013) (Ref 1-28);
 - The Planning Inspectorate’s Advice Note Six: Preparation and submission of application documents (2022) (Ref 1-29);

6.2 Pre-application consultation and publicity

- 6.2.1 Under the 2008 Act, applicants are required to undertake Statutory Consultation on proposals and to have due regard to any responses received. Sections 42 and 47 of the 2008 Act sets out the duty to consult. Section 48 sets out the duty to publicise the proposed application and section 49 sets out the duty to take account of responses to the consultation and publicity when deciding the terms in which to apply for development consent.
- 6.2.2 A Statutory Consultation was undertaken for the Project for a period of six weeks from 9 January 2023 to 20 February 2023. The Statutory Consultation was undertaken in accordance with a published Statement of Community Consultation in accordance with section 47 of the 2008 Act.

- 6.2.3 The Statutory Consultation included six face-to-face consultation events held in Immingham and a range of online mechanisms including the use of a virtual consultation room with online links to the consultation documents. Hard copies of the consultation documents were available for inspection in person at the Immingham Civic Centre and the offices of NELC.
- 6.2.4 A second Statutory Consultation was undertaken for the Project from 24 May 2023 to 20 July 2023 in relation to a number of proposed changes. The second Statutory Consultation was undertaken in accordance with a second Statement of Community Consultation which was prepared and consulted upon in accordance with section 47 of the 2008 Act.
- 6.2.5 The second Statutory Consultation included two face-to-face consultation events held in Immingham and a range of online mechanisms including the use of a virtual consultation room with online links to the consultation documents. Hard copies of the consultation documents were available for inspection in person at the Immingham Civic Centre and the offices of NELC.
- 6.2.6 In addition to two rounds of Statutory Consultation, ABP has undertaken ongoing non-statutory engagement with other key stakeholders from an early stage of the Project and throughout including:
- a. Natural England;
 - b. Environment Agency;
 - c. Historic England;
 - d. Planning Inspectorate;
 - e. Officers at NELC;
 - f. Members of NELC (project briefing);
 - g. Immingham Town Council;
 - h. Landowners; and
 - i. Local residents.
- 6.2.7 In accordance with section 48 of the 2008 Act, for both rounds of Statutory Consultation a notice was published in the prescribed manner, in accordance with the APFP Regulations. The section 48 notices were published for at least two successive weeks in the Grimsby Telegraph and Lincolnite, local newspapers that circulate in the vicinity of the Project site, and once in the Times, the London Gazette, Lloyd's List and Fishing News. Sections 4.1 and 5.1 of the **Consultation Report [TR030008/APP/5.1]** provide further detail about the section 48 notices and the notices themselves are appended at Appendix D2 and D4 of the **Consultation Report [TR030008/APP/5.1]**.

- 6.2.8 A **Consultation Report [TR030008/APP/5.1]**, required by section 37(3)(c) of the 2008 Act, demonstrates how ABP has complied with the pre-application consultation and publicity requirements set out in sections 42, 47, 48 and 49 of the 2008 Act. The Consultation Report also provides evidence about how and when the Project was publicised, who was consulted and how the consultation was undertaken and how due regard has been made to comments received during two rounds of Statutory Consultation, and in response to ongoing non-statutory engagement.
- 6.3 **Draft Development Consent Order**
- 6.3.1 The Application is accompanied by a **draft DCO [TR030008/APP/2.1]** which provides the proposed form of statutory consent. It also takes account of comments received from the Planning Inspectorate, who has reviewed a draft version.
- 6.3.2 The **draft DCO [TR030008/APP/2.1]** is accompanied by an **Explanatory Memorandum [TR030008/APP/2.2]** which explains the purpose and the effect of the various provisions set out in the **draft DCO [TR030008/APP/2.1]**.
- 6.3.3 The **draft DCO [TR030008/APP/2.1]** and **Explanatory Memorandum [TR030008/APP/2.2]** are supported by **Works Plans [TR030008/APP/4.2]** which show the limits within which the development and works may be carried out.
- 6.3.4 The **draft DCO [TR030008/APP/2.1]** also incorporates provisions deeming a marine licence to have been issued under Part 4 of the Marine and Coastal Access Act 2009. A marine licence is required due to the works extending into the Humber Estuary.
- 6.3.5 The various documents listed above, therefore, meet the requirements of Regulations 5(2)(b), (c) and (j) of the APFP Regulations.
- 6.4 **Environmental Impact Assessment**
- 6.4.1 The Project is subject to mandatory Environmental Impact Assessment (“EIA”) procedures, as set out within paragraph 8(2) of Schedule 1 of EIA Regulations (Ref 1-27), as it comprises *‘Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes’*.
- 6.4.2 An Environmental Statement has therefore been prepared and is submitted with the Application in accordance with Regulation 5(2)(a) of the APFP Regulations.
- 6.4.3 The conclusions of the EIA where they relate to the ‘Assessment principles’ set out in the NPSfP are summarised in **Chapter 7** of this Planning Statement.

6.5 Habitats Regulation Assessment

- 6.5.1 The Application includes a **Shadow HRA [TR030008/APP/7.6]** which identifies all relevant European sites and provides sufficient information for the competent authority to determine whether the Project is likely to have an adverse effect on the integrity of any European site. The **Shadow HRA [TR030008/APP/7.6]** has been prepared in accordance with the Planning Inspectorate's 'Advice Note 10: Habitats Regulations Assessments (August 2022) (Ref 1-30) and regulation 5(2)(g) of the APFP Regulations.
- 6.5.2 The **Shadow HRA [TR030008/APP/7.6]** has concluded that the construction and consequent operation of the Project (either alone or in combination with other plans or projects) will not have an adverse effect on the integrity of any European sites in view of those sites' conservation objectives.
- 6.5.3 Notwithstanding the conclusion of the **Shadow HRA [TR030008/APP/7.6]** that the Project will not have an adverse effect on integrity of the European sites either alone or in combination with other plans or projects, at the point of finalising this Planning Statement no view has been received from Natural England on this conclusion. In those circumstances a **Without Prejudice Shadow HRA Derogation Report [TR030008/APP/7.3]** has been submitted to demonstrate that were the Secretary of State to conclude that an adverse effect on integrity of the European sites cannot be ruled out:
- There is no alternative to the Project as proposed.
 - There are Imperative Reasons of Overriding Public Interest ("IROPI") for the Project to proceed.
 - Compensation has been identified and can be secured to ensure that any adverse effect on integrity is compensated for and the overall coherence of the National Site Network is maintained.

6.6 Water Framework Directive

- 6.6.1 The Water Framework Directive ("WFD") (Ref 1-31) aims to protect and enhance the quality of the water environment. The WFD takes a holistic approach to the sustainable management of water by considering the interactions between surface water, groundwater and water-dependent ecosystems. Ecosystem quality is evaluated according to interactions between biological, physio-chemical and hydromorphological elements.
- 6.6.2 A WFD Compliance Assessment for the Project is provided in **Appendix 17.A [TR030008/APP/6.4]**. The assessment concludes that the Project is not likely to have a permanent effect on the status of WFD parameters that are significant at water body level. Furthermore, it is not predicted that the water bodies assessed would be prevented from achieving future WFD status objectives.

6.7 Compulsory Acquisition

- 6.7.1 The land over which ABP is seeking powers of compulsory acquisition of land, rights and interests and powers of temporary possession is set out in the **Book of Reference [TR030008/APP/3.1]** and shown on the **Land Plans [TR030008/APP/4.5]**.

- 6.7.2 The **Book of Reference [TR030008/APP/3.1]** has been prepared and submitted in compliance with regulation 5(2)(d) of the APFP Regulations, and in accordance with the Department for Communities and Local Government guidance 'Planning Act 2008: Guidance related to procedures for compulsory acquisition of land' (September 2013).
- 6.7.3 **The Statement of Reasons [TR030008/APP/3.2]** provides details of the powers sought and the negotiations with affected parties to date and sets out why there is a compelling case in the public interest for the powers to be granted. **The Funding Statement [TR030008/APP/3.3]** explains how the Project, including any compulsory acquisition of land or rights, will be funded. The Statement of Reasons and Funding Statement are submitted in compliance with regulation 5(2)(h) of the APFP Regulations.
- 6.8 **Statutory Nuisance**
- 6.8.1 As required by regulation 5(2)(f) of the APFP Regulations, the Application is accompanied by a statement setting out whether the proposed development engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and how any such matters are proposed to be mitigated or limited.
- 6.8.2 With proposed mitigation in place, as described in the **Statutory Nuisance Statement [TR030008/APP/7.5]**, it is not anticipated that there will be a breach of section 79(1) of the Environmental Protection Act 1990 during either the construction or operation of the Project.
- 6.9 **Harbour Improvement Statement**
- 6.9.1 In accordance with regulation 6(3) of the APFP Regulations, the Application is accompanied by a harbour improvement statement, which is set out at Appendix F of this Planning Statement.
- 6.10 **Other Consents**
- 6.10.1 If granted, the DCO would have the effect of providing development consent for the Project, in addition to a range of other consents and authorisations. Details of the consents and authorisations included in the DCO are provided in the **Explanatory Memorandum [TR030008/APP/2.2]**. The **draft DCO [TR030008/APP/2.1]** also contains provisions for the disapplication of certain relevant consenting requirements under section 150 of the 2008 Act. Details of the consents to be disapplied are contained within the **Consents and Agreements Position Statement [TR030008/APP/7.4]**.
- 6.10.2 In addition to the **draft DCO [TR030008/APP/2.1]** a range of other consents, licences and permits may/are expected to be required including:
- a. Protected species licenses (The Conservation of Habitats and Species Regulations 2017), for bats and water voles;
 - b. Hazardous Substances Consent (The Planning (Hazardous Substances) Regulations 2015);

- c. An Environmental Permit for the processing facilities (The Environmental Permitting (England and Wales) Regulations 2016);
 - d. Prior consent to carry out noise generating activities during construction/Construction Noise Consent (section 61 of the Control of Pollution Act 1974);
 - e. Transport of Abnormal Loads Permit (The Road Vehicles (Authorisation of Special Types) (General) Order 2003; The Road Traffic Act 1988);
 - f. Building Regulations Approval (The Building Regulations 2010 (as amended)); and
 - g. Discharge of trade effluent consent (Water Industry Act 1991)
- 6.10.3 The provisions of the Control of Major Accident Hazardous Regulations 2015 (the “COMAH Regulations”) (Ref 1-32) must also be complied with, including notifications and the provision of safety reports before construction and before operation of the hazardous substance facility.
- 6.10.4 Full details of the consents, licences and permits that will be required are set out in the **Consents and Agreements Position Statement [TR030008/APP/7.4]**. The **Statement of Reasons [TR030008/APP/3.2]** addresses the need for powers to acquire residential properties at Queens Road to secure the permanent cessation of their residential use (which is an impediment to the grant of Hazardous Substances Consent). ABP is not aware of any further impediment to obtaining these consents.

7 Planning Appraisal

7.1 Introduction

7.1.1 This chapter of the Planning Statement demonstrates that the Project accords with the relevant policy requirements in Section 4 ‘Assessment Principles’ and in Section 5 ‘Generic Impacts’ of the NPSfP. In assessing compliance, consideration is given, where relevant, to mitigation proposed within the ES to reduce environmental impacts. Appendix A of this Planning Statement sets out an explanation of how the Project accords with the NPSfP and/or identifies where the contents of the NPSfP have been addressed in the Application.

7.1.2 Each topic-based chapter within the ES (**Chapters 6-25**) [TR030008/APP/6.2] contains a section which explains the legislation, policy and guidance relevant to that topic. Section 3 within each ES chapter identifies the relevant NPSfP paragraphs relating to that particular topic and explains how consideration has been given to what is said in the NPSfP, and how the requirements relating to assessment for that particular topic have been satisfied. That information is not reproduced here.

7.2 Good Design

Requirements of the NPSfP

7.2.1 Section 4.10 of the NPSfP provides criteria for the good design of port infrastructure. It states at paragraph 4.10.1 that good design should “*produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible*”.

7.2.2 Paragraph 4.10.1 acknowledges that “*the nature of much port infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area*”. In terms of good design, paragraph 4.10.3 states that the decision maker needs to be satisfied that port infrastructure developments are sustainably designed and are as “*attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be*”. Furthermore, the decision maker should satisfy itself that the applicant “*has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may have no or very limited choice in the physical appearance of some port infrastructure, there may be opportunities for the applicant to demonstrate good design relative to existing landscape character, landform and vegetation.*”

7.2.3 Paragraph 4.10.4 of the NPSfP provides that applicants should be able to demonstrate how the design process was conducted and how the design evolved.

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- 7.2.4 Given the nature of the Project comprising a Terminal and hydrogen production facility, it must be fit for purpose from an engineering perspective. ABP and Air Products are also required to design the Project in accordance with the applicable legislative requirements and adhere to industry codes to ensure that statutory operational and safety requirements are met. **Chapter 22: Major Accidents and Disasters [TR030008/APP/6.2]**, at Section 22.7, provides further information on the design requirements for the hydrogen production facility.
- 7.2.5 Given these strict safety and operational requirements, there are limited opportunities to influence the layout and visual appearance of the Project. However, opportunities have been taken to provide landscaping where appropriate, as shown on Figure 1: Indicative Landscape and Biodiversity Plan within the **Outline Landscape and Ecology Management Plan [TR030008/APP/6.9]**, which illustrates potential areas of landscape works to help integrate the Project into the landscape and provide biodiversity benefits so far as practicable. The approval of details of landscape and ecology measures and their provision is secured by Requirement 10 of the **draft DCO [TR030008/APP/2.1]**.
- 7.2.6 The sustainability performance of the Project has been an active consideration throughout the design development process. The Project has been located and designed as far as possible to avoid and minimise impacts and effects through the process of design development, and by embedding mitigation measures into the design. Sustainable measures that are included in the design include the use of Sustainable Drainage Systems (“SuDS”), sustainable use of materials during construction, set out in a Site Waste Management Plan and the sustainable use of resources and waste management following decommissioning (refer to the **Schedule of Mitigation and Monitoring [TR030008/APP/7.2]** for further detail on these measures).
- 7.2.7 Furthermore, as set out in **Chapter 6: Air Quality [TR030008/APP/6.2]** the Project proposes additional mitigation measures to reduce emissions from construction phase vessel and road traffic emissions. This includes proposals to:
- Prohibit unnecessary vehicle or vessel movements, as specified in the **Outline CEMP [TR030008/APP/6.5]**;
 - Prohibit unnecessary idling of vehicle and vessel engines as specified in the **Outline CEMP [TR030008/APP/6.5]**;
 - Encourage/promote the use of cleaner engines and fuels; and
 - During construction discourage single-user car journeys through the implementation of the Construction Worker Travel Plan appended to the **Construction Traffic Management Plan [TR030008/APP/6.7]** secured by Requirement 7 of the **draft DCO [TR030008/APP/2.1]**. Proposed measures include providing minibuses for construction workers, setting up a car share scheme and encouraging cycling.
- 7.2.8 During the operational phase, best practice mitigation measures set out in **Chapter 6: Air Quality [TR030008/APP/6.2]** to reduce operational phase sources include the management control and monitoring of emissions that will be a requirement of the Environmental Permit.

- 7.2.9 **Chapter 19: Climate Change [TR030008/APP/6.2]** also explains that best available techniques for energy management will be adopted as part of compliance with the Environmental Permit required from the Environment Agency to operate the hydrogen production facility including:
- a. Plant advanced control and optimisation;
 - b. Use of insulation and superinsulation to minimise heat leak into the system;
 - c. Predictive maintenance systems to ensure optimal compressor and equipment running;
 - d. All plant at the installation would be subject to the preventative maintenance programme which ensures that operational efficiency is maintained;
 - e. High integrity plan to minimise fugitive emissions;
 - f. High plant reliability for optimal plant performance reducing start up and shut down; and
 - g. Use of energy efficient lighting.
- 7.2.10 An explanation of the evolution of the design has been provided at **Appendix G** of this Planning Statement. This demonstrates that the Project has evolved as a result of an iterative design development process which commenced at an early stage. The design addresses the key opportunities and constraints associated with the implementation of the Project at the Port of Immingham and takes into account comments received during two rounds of statutory consultation. Appendix G also illustrates that the Project has balanced the operational requirements of the Project alongside environmental considerations.
- 7.2.11 As demonstrated above, the Project delivers good design in compliance with section 4.10 of the NPSfP by providing a development that is fit for purpose and sustainable. The design of the Project is appropriate given the industrial context of the Site. Whilst there are limited opportunities to influence the visual appearance of the Project, opportunities have been taken to provide landscaping where appropriate, which is secured within the **draft DCO [TR030008/APP/2.1]**. Accordingly, the Project accords with the policy requirements for good design in the NPSfP, which weighs in favour of the making of the Order.

7.3 Climate Change

Requirements of the NPSfP – Climate change mitigation

- 7.3.1 Paragraph 4.12.1 of the NPSfP recognises that port developments may have an effect on greenhouse gases, particularly through their impact on sea and road transport, which may be positive. However, in providing guidance to the decision maker, the NPSfP at paragraph 4.12.3 states that *“The decision-maker does not need to consider the impact of a new port development on greenhouse gas emissions from ships transiting to and from the port.”*

- 7.3.2 Paragraph 4.12.4 of the NPSfP states that *“Emissions from ships in ports are unlikely to be significant contributors to climate change but, where an Environmental Statement is required, it should set out any measures taken to minimise the local effect of emissions and how these are likely to affect greenhouse gases.”*

Requirements of the NPSfP – Climate change adaption

- 7.3.3 Section 4.13 of the NPSfP requires the ES to describe the likely aspects of the environment that would be significantly affected by the Project and to set out how the proposal would take account of the projected impacts of climate change.
- 7.3.4 Paragraph 4.13.9 of the NPSfP which provides guidance for the decision-maker states that the *“latest set of UK Climate Projections”* should be used to identify appropriate adaption measures.
- 7.3.5 Paragraph 4.13.10 of the NPSfP states that, *“If any adaptation measures give rise to consequential impacts, the decision maker should consider the impact of those in relation to the application as a whole and the impacts guidance set out elsewhere in this NPS...”*
- 7.3.6 Paragraph 4.13.11 of the NPSfP states that, *“The decision-maker should satisfy itself that there are not critical features of the design of new ports infrastructure which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK Climate Projections, taking account of the latest credible scientific evidence... and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.”*

Assessment conclusions

- 7.3.7 **Chapter 19: Climate Change [TR030008/APP/6.2]** presents the findings of the likely significant effects of the Project in relation to climate change. There are three assessments set out in **Chapter 19: Climate Change [TR030008/APP/6.2]**:
- a. lifecycle greenhouse gas (“GHG”) impact assessment.
 - b. a climate change resilience (“CCR”) assessment.
 - c. an in-combination climate change impact (“ICCI”) assessment.
- 7.3.8 In terms of the GHG impact assessment, **Chapter 19: Climate Change [TR030008/APP/6.2]** concludes that the Project has a beneficial effect. The hydrogen could be used in alternative ways such as displacing natural gas used in industrial processes, all of which are likely to result in similar or higher carbon savings. The ultimate carbon saving will depend on the fossil fuel being displaced. This would mean there is a significant benefit to the Project.
- 7.3.9 In terms of the CCR impact assessment, **Chapter 19: Climate Change [TR030008/APP/6.2]** concludes that with mitigation measures in place, the likely effects of climate change on the Project during construction and operation are not significant.
- 7.3.10 In terms of the ICCI impact assessment, **Chapter 19: Climate Change [TR030008/APP/6.2]** concludes that with mitigation and good practice measures

embedded in the Project, no significant ICCI's are identified during construction and operation.

Appraisal

Climate change mitigation

- 7.3.11 Emissions from ships are considered in **Chapter 19: Climate Change [TR030008/APP/6.2]** as part of the GHG assessment. Chapter 19 notes that it is expected that shipping will decarbonise with net-zero and low-carbon shipping fuels in the near future, as the International Maritime Organization, the UN body responsible for shipping, has set a target to reduce emissions per transport work by 40% by 2030, compared to 2008 baseline. In their Fourth Greenhouse Gas Study, they found that a 29.4% reduction had already been made, meaning a further 10.6% reduction will need to be made by 2030. Further to that, the UK has committed to including shipping in its sixth carbon budget and set a target of net zero shipping by 2050. Table 19-20 in **Chapter 19: Climate Change [TR030008/APP/6.2]** provides the estimated emissions from operational energy use. Overall, the impact from the Project in terms of the GHG assessment is beneficial as the Project's residual emissions will be outweighed by the savings of emissions resulting from the use of low carbon hydrogen energy produced by the Project, and the Project aligns with and will contribute to the UK net zero transition scenario. Additional benefits will arise from the shipping of CO₂ and its sequestration, rather than emission to the atmosphere.

Climate change adaption

- 7.3.12 Section 19.6 of **Chapter 19: Climate Change [TR030008/APP/6.2]** confirms that the future UK Climate Projection 2018 (UKCP18) data from the Met Office has been used in the assessment, which is the latest set of UK Climate projections.
- 7.3.13 **Chapter 19: Climate Change [TR030008/APP/6.2]**, includes a climate change resilience assessment at Appendix 19.B which assesses the impact of greenhouse gas emissions arising from the Project on the climate, and the resilience of the Project to climate change impacts. Section 19.7 of **Chapter 19: Climate Change [TR030008/APP/6.2]** explains that there are embedded mitigation measures in the Project to avoid and minimise impacts and effects of climate change. These include having a flood resistant/resilient design, raising external ground levels and elevating critical plant and equipment and/or internal finished floor levels above the peak flood inundation level.
- 7.3.14 The Applicant has taken account of climate change mitigation and adaption in its assessment as set out in **Chapter 19: Climate Change [TR030008/APP/6.2]** using the latest UK Climate Projections available at the time. It has also been demonstrated that the impact of the Project in respect of climate change is beneficial. As demonstrated above and within **Chapter 19: Climate Change [TR030008/APP/6.2]** of the ES the Project is in accordance with the NPSfP in relation to climate change mitigation and adaption and provides significant benefits in terms of the use of hydrogen to displace fossil fuels and the potential for facilitating future CO₂ sequestration. Accordingly, the Project accords with relevant policy relating to climate change in the NPSfP and this weighs in favour of the making of the Order.

7.4 Hazardous Substances

Requirements of the NPSfP

- 7.4.1 Paragraph 4.15.1 of the NPSfP states that all establishments wishing to hold stocks of certain hazardous substances above a threshold quantity need Hazardous Substances Consent and that Applicants should consult the Health and Safety Executive at pre-application stage.
- 7.4.2 Paragraph 4.15.3 of the NPSfP states that applicants should consult the local planning authority at preapplication stage to identify whether their proposed site is within the consultation distance of any site with hazardous substances consent and, if so, should consult HSE for its advice on locating the particular development there.

Assessment conclusions

- 7.4.3 The findings of an assessment of the likely significant effects of the Project with respect to hazardous substances is contained within **Chapter 22: Major Accidents and Disasters [TR030008/APP/6.2]**. **Chapter 22: Major Accidents and Disasters [TR030008/APP/6.2]** explains that ten potential risk events were identified which must be managed by a comprehensive safety and environmental protection programme implemented via engineering design, operational measures and management to achieve a level as low as reasonably practicable, as required by the COMAH Regulations. The Project must comply with all relevant safety and environmental legislation for the management of risks on industrial facilities, from the design and construction phase, through operation and eventual decommissioning.

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- 7.4.4 The Project will involve the storage and processing of hydrogen and ammonia and the storage of Aqueous Ammonia, and small amounts of P2 Flammable gases and P4 Oxidising gases liquefied petroleum gas, acetylene, petroleum products. Therefore, an application for Hazardous Substance Consent has been submitted to NELC (reference: DM/0088/23/HS) with respect to the proposed hydrogen production facility and is currently pending determination. Further details in respect of timescales for the Hazardous Substance Consent are set out in the **Consents and Agreements Position Statement [TR030008/APP/7.4]**.
- 7.4.5 There are residential and part residential properties located on Queens Road which would be incompatible with the hydrogen production facility once operational. As such, the properties are proposed to be compulsorily acquired to secure cessation of the residential use. There are also existing commercial premises on Queens Road but the continued operation of the existing commercial businesses is not expected to be affected by the proposed hydrogen production facility. Any safety planning measures required in the area would be addressed through the separate regime established by the COMAH Regulations.

- 7.4.6 The Applicant has consulted with the Health and Safety Executive (“HSE”) in both rounds of statutory consultation. In its response to the first statutory consultation, the HSE stated that it would provide its statutory advice through the hazardous substance consent application submitted to NELC. The Applicant has engaged directly with the HSE along with NELC and neighbouring operators about the existing land use planning zones.
- 7.4.7 The Applicant has submitted an application for Hazardous Substances Consent to NELC, and engaged with the relevant parties, as required by the NPSfP. As such, the Project is in accordance with paragraphs in the NPSfP relating to hazardous substances. Accordingly, the Project accords with relevant policy relating to hazardous substances in the NPSfP and this weighs in favour of the making of the Order.
- 7.4.8 Regulation 6 of the Decision Regulations is not engaged in this case, as a deemed Hazardous Substance Consent is not being sought as part of the Application.

7.5 Biodiversity

Requirements of the NPSfP, the MPS, EIMP and local policy

- 7.5.1 Section 5.1 of the NPSfP specifies the matters for consideration in relation to biodiversity and geological conservation for the assessment of the Project. The NPSfP recognises at paragraph 5.1.2 that *“Sea ports are necessarily located on coasts and estuaries. These areas are often of fundamental importance to biodiversity, particularly to bird and fish life, acting as the prime nursery grounds for a range of commercial species and as critical migration pathways for other species.”*
- 7.5.2 In providing guidance to the decision-maker, the NPSfP states at paragraph 5.1.8, *“As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. Where significant harm cannot be avoided, then appropriate compensation measures should be sought.”*
- 7.5.3 Paragraph 5.1.12 of the NPSfP states that *“Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site’s notified special interest features is likely, an exception should only be made where the benefits (including need) of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.”*

- 7.5.4 Paragraph 5.1.13 of the NPSfP states that *“As a public authority, the decision-maker is bound by the duties in relation to MCZs imposed by sections 125 and 126 of the Marine and Coastal Access Act 2009”*. Sections 125 and 126 of the Marine and Coastal Access Act relate to the duties of the decision-maker in respects of MCZ’s where there is a significant risk to the conservation objectives stated for an MCZ.
- 7.5.5 Paragraph 5.1.14 of the NPSfP states that *“Sites of regional and local biodiversity and geological interest, which include Regionally Important Geological Sites, Local Nature Reserves and Local Sites, have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education. The decision-maker should give due consideration to such regional or local designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent.”*
- 7.5.6 Paragraph 5.1.15 of the NPSfP states that ancient woodland is a valuable resource and once lost it cannot be recreated and states *“the decision-maker should not grant development consent for any development that result in its loss or deterioration, unless the benefits (including need) of the development, in that location, outweigh the loss of the woodland habitat. Aged or ‘veteran’ trees found outside ancient woodland are also particularly valuable and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why”*.
- 7.5.7 Paragraph 5.1.18 of the NPSfP refers to the protection of habitats and species, stating that, *“Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The decision-maker should ensure that these species and habitats are protected from the adverse effects of development, where appropriate, by using requirements or planning agreements. The decision-maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development clearly outweigh that harm.”*
- 7.5.8 This section considers the impacts of the Project upon marine ecology and ornithology, and therefore the MPS (Paragraphs 3.1.7 and 3.1.8), the EIMP (Policy BIO1, BIO2 and MPA1) and other relevant local planning policy are also considered.
- 7.5.9 The MPS at paragraph 3.4.1 reaffirms the need for decision-makers to take account of the national need for new infrastructure when weighed against potential adverse effects. Paragraphs 3.6.7 and 3.6.9 of the MPS set out the issues for consideration in respect of dredging. Paragraph 3.6.7 states that, *“In considering an application, decision makers should undertake a detailed evaluation of the potential adverse effects of any dredging activity or deposit on the marine ecosystem and others using the sea.”* Paragraph 3.6.9 states that, *“Decision makers should consider the potential adverse effects on the marine environment, habitats and wildlife from dredging activity. Particular recognition should be given to the implementation and use of the maintenance dredge protocol to minimise impacts on habitats and wildlife and help meet statutory*

obligations in relation to European Sites. There also needs to be compliance with requirements of the WFD and other EU Directives.”

- 7.5.10 With respect to biodiversity, the EIMP seeks to protect and conserve biodiversity in or dependent upon the East marine plan area. Policy MPA1 of the EIMP seeks to ensure that any impacts on the overall marine protected area network are taken into account in strategic level measures and assessments, with due regard given to any current agreed advice on an ecological network. This requires consideration to coastal waterbird species and supporting habitats.
- 7.5.11 Policy 7: Employment Allocations of the NELLP reflects the need to consider the potential ecological impacts of the Project upon the South Humber SSSI/SAC/SPA and Ramsar. Policy 7 states: “*..proposals for port related use will be supported and, where appropriate, approved by the Council if the submitted scheme accords with the development plan as a whole and subject to the ability to satisfy the requirements of the Habitats Regulations.*”

Requirements of the Decisions Regulations

- 7.5.12 Regulation 3A of the Decisions Regulations (Ref 1-4) sets out that the Secretary of State must have regard to the need to prevent interference with legitimate uses of the sea, including fishing.

Assessment conclusions

- 7.5.13 The ES includes four chapters related to biodiversity: **Chapter 8: Nature Conservation (Terrestrial Ecology); Chapter 9: Nature Conservation (Marine Ecology); Chapter 10: Ornithology and Chapter 17: Marine Water and Sediment Quality [TR030008/APP/6.2]**. A **Shadow HRA [TR030008/APP/7.6]** has also been prepared in respect of the Humber Estuary European Marine Site.
- 7.5.14 **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** concludes that there is limited potential for significant adverse effects on terrestrial ecology features as the Project is located on land with low biodiversity value. However, one significant (moderate adverse) terrestrial ecology effect is predicted. This relates to the permanent loss of UK Priority deciduous woodland habitat during Project construction as a result of the routing of the pipeline and jetty access road (Work No. 2) through the Long Strip woodland. **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** sets out that the permanent loss of woodland of this age and structure can only be compensated over the medium to long term. However, even with compensation in place, given the time taken for the compensatory habitat to mature, the loss of woodland habitat is considered to be permanent and irreversible and therefore the residual effect is significant. There are no other likely significant ecological effects on designated nature conservation sites, habitats or species predicted during construction, operation or decommissioning of the Project.
- 7.5.15 **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]** concludes that during construction with mitigation measures in place to address underwater noise and vibration effects on fish and marine mammals as a result of piling, the residual effect is not significant. All the other potential impacts on nature conservation and marine ecology receptors have been assessed as not significant during construction. Similarly, during operation, all potential impacts on

nature conservation and marine ecology receptors during operation have been assessed as not significant.

- 7.5.16 **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]** of the ES identifies that there are no commercial fishing grounds around the Project and that impacts to commercial fishing grounds are scoped out of the assessment. The chapter considers the potential impacts of the Project on marine ecology including fish. Section 9.8 of **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]** summarises the impacts of the Project during construction and operation on fish and concludes that, with the application of mitigation measures to limit underwater noise impacts, the impacts are insignificant to minor in EIA terms.
- 7.5.17 **Chapter 10: Ornithology [TR030008/APP/6.2]** concludes that during construction with mitigation measures in place potential impacts on ornithology receptors are not significant apart from the loss of the Long Strip woodland which supports breeding non-SPA/Ramsar birds. The permanent loss of woodland of the age and structure of Long Strip providing habitat for nesting birds can only be compensated over the medium to long term and has been assessed as significant. During operation, all other potential impacts on ornithology receptors have been assessed as not significant.
- 7.5.18 **Chapter 17: Marine Water and Sediment Quality [TR030008/APP/6.2]** concludes that there are no potential impacts on marine water and sediment quality receptors, therefore during construction and operation no significant effects have been identified.
- 7.5.19 A **Shadow HRA [TR030008/APP/7.6]** demonstrates that there is no adverse effect on the integrity of the European sites with mitigation measures in place.

Appraisal

International Sites

- 7.5.20 The entire Humber Estuary is designated as a SAC and a SPA under the Habitats and Birds Directives. It is also classified as a 'Ramsar site' under the Ramsar Convention due to the presence of internationally important wetlands. These designated sites together form the Humber Estuary European Marine Site.
- 7.5.21 The Humber Estuary SPA is designated for a range of bird species including Bitterns, Common Shelduck and Marsh Harriers. The Humber Estuary SAC is designated for its habitats including Atlantic salt meadows, sandbanks and coastal lagoons. In addition there is the Greater Wash SPA, which is located approximately 20km from the Project, which is designated for a range of seabird and diving bird species and the Wash and North Norfolk Coast SAC, which has common seals as a qualifying feature. The citations for the Humber Estuary SAC, SPA and Ramsar, the Greater Wash SPA (screened out of the Stage 2 Appropriate Assessment) and the Wash and North Norfolk Coast SAC are set out in Appendix B of the **Shadow HRA [TR030008/APP/7.6]**.
- 7.5.22 The **Shadow HRA [TR030008/APP/7.6]** concluded that for the majority of pathways there is no potential for an adverse effect on site integrity or any potential for the predicted effects to compromise any of the conservation

objectives of the European sites, alone or in-combination with other plans or projects. However, for three impact pathways an effect is anticipated as a result of the Project which has required further consideration in the **Shadow HRA [TR030008/APP/7.6]**. These are:

- a. The potential effects of airborne noise and visual disturbance during construction on qualifying species of coastal waterbirds within the SPA/Ramsar boundary;
- b. The potential effects of underwater noise and vibration during marine piling on qualifying species of fish and marine mammals; and
- c. The potential effects of the direct and indirect loss of qualifying intertidal habitat.

7.5.23 In relation to the first and second impact pathways identified above the **Shadow HRA [TR030008/APP/7.6]** concluded that with the proposed mitigation secured in the deemed marine licence, there will be no adverse effects on integrity from the effects of airborne noise and visual disturbance or the effects of underwater noise on the Humber SAC, Humber SPA, Humber Ramsar and the Wash and North Norfolk Coast SAC.

7.5.24 The third impact pathway identified by the **Shadow HRA [TR030008/APP/7.6]** anticipates potential for a small amount of permanent intertidal habitat loss as a result of the Project and concludes that such a minimal habitat loss would be:

- a. Highly localized.
- b. De minimis in extent.
- c. Considered to be a magnitude that will not change the overall structure or functioning of the nearby mudflats within the Port of Immingham area or more widely in the Humber Estuary European Marine Site.
- d. As such would not result in an adverse effect on integrity at the site level (alone or in-combination with other plans or projects).

7.5.25 The **Shadow HRA [TR030008/APP/7.6]** therefore concludes that there will be no adverse effect on the integrity of the European sites from airborne and underwater noise with the proposed mitigation measures secured in the deemed marine licence, and therefore no harm to biodiversity in accordance with paragraph 5.1.8 of the NPSfP. As explained above, the Project is anticipated to have an effect on the European sites with the loss of a small amount of intertidal habitat which cannot be mitigated. However, given the size of the loss this effect (even assessed on a highly precautionary basis) is not anticipated to have an adverse effect on integrity of the European sites. Natural England have yet to provide their advice in respect of the effect of the Project on the European sites either alone or in combination with other plans or projects.

7.5.26 Despite the Applicant's conclusion in the **Shadow HRA [TR030008/APP/7.6]** it has nevertheless submitted a **Without Prejudice to inform Shadow HRA Derogation Report [TR030008/APP/7.3]** on a without prejudice basis to the finding in the Shadow HRA. The Derogation Report concludes that in the event of a negative assessment by the Secretary of State (i.e. a conclusion that an adverse effect on integrity of the European Sites from the Project cannot be ruled

out), the Project should nevertheless proceed because there are no alternatives to the Project, there are imperative reasons of overriding public interest as to why the Project should be permitted to proceed, and a suitable compensation proposal has been identified and can be secured.

- 7.5.27 Whilst not part of the Application, it should be noted that ABP also intends to allocate to the Project the environmental benefits and enhancements generated by an area of one hectare of intertidal habitat that is being created through an already approved (and currently under construction) realignment scheme known as the Outstrays to Skeffling Managed Realignment Scheme (“OtSMRS”), which is located on the north bank of the Humber Estuary. The OtSMRS as a whole will contribute to the enhancement of the biodiversity and ecological functioning of the wider Humber Estuary and the part of it allocated to the Project is on land owned by ABP.
- 7.5.28 The **Without Prejudice to inform Shadow HRA Derogation Report [TR030008/APP/7.3]** provides that if the Secretary of State concludes in its Appropriate Assessment of the Project that compensation is required because an adverse effect on integrity on the European Sites cannot be ruled out, the compensation will be delivered out of this allocated hectare of intertidal habitat and the amount of enhancement allocated for the Project will be reduced accordingly so that the compensation and enhancement delivered amount to one hectare in total.
- 7.5.29 For the avoidance of doubt, the physical delivery of the OtSMRS, including the one hectare element referred to above, does not form part of the Project as this is occurring under a separate process which has already been consented. An EIA, together with other assessments such as a Habitats Regulations Assessment, were undertaken to support the planning and marine licence applications for the OtSMRS.

Sites of Special Scientific Interest (“SSSI”)

- 7.5.30 The Project is located within the Humber Estuary SSSI which is considered in both **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]** and **Chapter 10: Ornithology [TR030008/APP/6.2]**. The Project is also located approximately 6km from Killingholme Haven Pits SSSI which is considered in **Chapter 10: Ornithology [TR030008/APP/6.2]**.
- 7.5.31 With respect to marine ecology features of Humber Estuary SSSI, no significant effects have been identified. In respect of Ornithology, Section 10.10 of **Chapter 10: Ornithology [TR030008/APP/6.2]** concludes that with mitigation measures in place, the residual effects for noise and visual disturbance during construction on coastal waterbirds are not significant.
- 7.5.32 In respect of likely effects on the Killingholme Haven Pits SSSI, **Chapter 10: Ornithology [TR030008/APP/6.2]** sets out that with mitigation measures in place, the numbers of Black-tailed Godwit and other waterbirds utilising Killingholme Haven Pits would not be expected to change as a result of both direct and indirect effects due to the Project and the impact on this designated site is considered insignificant.

Marine Conservation Zones (“MCZ”)

- 7.5.33 As demonstrated, within **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]**, there is no impact on the Holderness Inshore MCZ (located approximately 20km from the Project), and therefore there is no significant risk to the conservation objectives stated for the MCZ.

Regional and Local Sites

- 7.5.34 **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** explains that there are no statutory designated nature conservation sites within the landside component of the Project, although there is one non-statutory site within 2km of the Project, the Laporte Road Brownfield Site Local Wildlife Site (“LWS”) of County nature conservation value, located approximately 150m south-east of the Site Boundary. No pathways by which this LWS could be affected by the Project have been identified and therefore no further consideration was given to it within the ES.
- 7.5.35 In terms of geological sites, **Chapter 21: Ground Conditions and Land Quality [TR030008/APP6.2]** confirms there are no internationally, nationally or locally designated sites of geological conservation importance present with the Site Boundary, and accordingly no direct or indirect effects on such interests are predicted as a result of the Project.

Ancient Woodland and veteran trees

- 7.5.36 There is no ancient woodland in the Site Boundary.
- 7.5.37 **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** explains that a single veteran ash tree is located in the Long Strip woodland. The route of the jetty access road, pipe-rack and the associated buildings, which comprise the terrestrial part of Work No. 1 and Work No. 2, has been designed to ensure this tree can be retained. During construction the veteran tree would be protected to avoid any accidental damage, as set out in the **Outline CEMP [TR030008/APP/6.5]**.

Protection of other habitats and species

Terrestrial Habitats

- 7.5.38 The pipeline corridor connecting the East Site to the Terminal and the jetty access road, which comprise Work No. 2, would be situated within the Long Strip woodland. Approximately 0.64 hectares of woodland will be removed from the Long Strip woodland, which accounts for 40% of the woodland.
- 7.5.39 Paragraph 8.6.9 within **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** confirms that the Long Strip woodland is a habitat of principal importance as the woodland is representative of the UK Priority Habitat type ‘lowland mixed deciduous woodland’ and the Local Biodiversity Action Plan habitat ‘trees and woodland’. The woodland is also subject to a woodland TPO (Ref: NE:/TPO/107: Long Wood, Laporte Road, Immingham/ Stallingborough) which applies to the whole woodland block (including the area on the south side of Laporte Road, which is outside of the Site).

- 7.5.40 A total of 294 tree features will require removal or part removal to facilitate the Project, 220 of which are located on the Long Strip woodland. Details of these features are described in section 7 of the **Arboricultural Impact Assessment at Appendix 8.F [TR030008/APP/6.4]**.
- 7.5.41 The loss of part of the woodland from the Long Strip, is assessed in **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** which concludes that even with compensation in place the loss of this habitat would be permanent and irreversible, and the residual effect would be moderate adverse, which is significant.
- 7.5.42 To compensate for the loss of trees in the Long Strip, enhancement of the retained parts of the Long Strip woodland north of Laporte Road is proposed, together with off-site woodland creation and management. To secure appropriate compensation, an **Outline Woodland Compensation Strategy [TR030008/APP/6.8]** has been prepared based on preliminary discussions between ABP and NELC. The Strategy seeks to compensate for the permanent and unavoidable tree loss from the Long Strip woodland. Approval of a final Woodland Compensation Plan and compliance with it is secured under Requirement 11 of the **draft DCO [TR030008/APP/2.1]**.

Terrestrial Ecology

- 7.5.43 **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** provides an assessment of the Project's impact on terrestrial ecological receptors and is supported by extensive survey work to confirm the terrestrial ecological habitats and species likely to be affected by the Project. In response to the surveys undertaken, the design of the Project has considered the potential impact on ecological receptors including bats and otter as local importance for nature conservation and water vole as county nature conservation value.
- 7.5.44 **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** concludes that potential construction effects arising from the Project on the loss of bat roosts, noise/ visual disturbance to otter and damage/ loss of habitat supporting water vole and noise/ visual disturbance are not significant. The construction of the Project would be subject to control mechanisms set out within the **Outline CEMP [TR030008/APP/6.5]**. This would include, but not be limited to, the supervision of works to trees within Long Strip to protect bats and the supervision of works to protect water vole.
- 7.5.45 Furthermore, the Lighting Assessment Report at **Appendix 2.B [TR030008/APP/6.4]** states that light spill will be managed through specification of lighting equipment with good optical control and a detailed design which focuses illumination of defined areas. The **Outline CEMP [TR030008/APP/6.5]** states that construction temporary lighting will be arranged so that glare is minimised outside the construction site. Lighting will be designed so as not to cause a nuisance outside of the Site in relation to light disturbance to ecological receptors. In terms of operational lighting, Requirement 16 of the **draft DCO [TR030008/APP/2.1]** sets out that the final lighting scheme must accord with the Lighting Assessment Report. Accordingly, there is no reasonable likelihood of an impact on the conservation status of bats as a result of operational lighting. Mitigation measures for protected species would be secured through protected

species licences for bats and water vole as set out in the Consents and Agreements Position Statement [TR030008/APP/7.4]. With these measures in place, there would be no significant effects on bats, otter or water vole during construction. Please refer to Section 8.10 of **Chapter 8: Nature Conservation (Terrestrial Ecology)** [TR030008/APP/6.2] for further details.

- 7.5.46 The Project therefore includes appropriate mitigation measures which will mean that there are no significant effects on terrestrial ecology, save for the effects on Long Strip woodland discussed above. The application of policy to the effects on the Long Strip woodland is considered further below in **paragraphs 7.5.51 to 7.5.54**.

Marine Ecology

- 7.5.47 In relation to marine ecology, **Chapter 9: Nature Conservation (Marine Ecology)** of the ES [TR030008/APP/6.2] sets out that with mitigation measures, impacts on marine ecology receptors during construction and operation are not significant.

Ornithology

- 7.5.48 **Chapter 10: Ornithology** [TR030008/APP/6.2] confirms that wintering bird surveys undertaken in 2022/23 did not recorded any SPA/Ramsar waterbird species in numbers >1% of the Humber Estuary populations in terrestrial habitats, and therefore it was concluded that land is not functionally linked to the Humber Estuary SPA/Ramsar. As a result, SPA/Ramsar waterbirds were scoped out of the assessment, and also screened out of the **Shadow HRA** [TR030008/APP/7.6] at the Likely Significant Effects screening stage.

Capital and maintenance dredging

- 7.5.49 The capital and maintenance dredge has been assessed in **Chapter 9: Nature Conservation (Marine Ecology), Chapter 12: Marine Transport and Navigation, Chapter 15: Historic Environment (Marine), Chapter 16: Physical Processes, Chapter 17: Marine Water and Sediment Quality** of the ES [TR030008/APP/6.2]. The **Shadow HRA** [TR030008/APP/7.6] considers the potential for adverse effects on integrity on European Sites as a result of the capital and maintenance dredge. Furthermore, the **Water Framework Directive Compliance Assessment** at **Appendix 17.A** [TR030008/APP/6.4] considers the changes in water quality that may occur as a result of the capital and maintenance dredge. In terms of disposal, this would not be on land. **Chapter 2: The Project** [TR030008/APP/6.2] explains that the disposal of dredged material at sea would be fulfilled at licenced disposal sites within the estuary, at Holme Channel disposal site (HU056) to dispose of in-erodible clay material, and Clay Huts disposal site (HU060) to dispose of alluvium material, subject to the dredge material being deemed suitable for disposal at sea by the Marine Management Organisation.
- 7.5.50 Paragraphs 5.1.23 and 5.1.24 of the NPSfP make reference to a Maintenance Dredging Protocol prepared by Defra, however this is no longer available and has been archived. In terms of maintenance dredging, this would be undertaken in accordance with the Deemed Marine Licence at Schedule 3 of the **draft DCO**

[TR030008/APP/2.1]. The assessment described in the ES demonstrates that the Project is in accordance with NPSfP paragraphs 5.1.22-5.1.25.

Appraisal Summary

- 7.5.51 At paragraph 5.1.18 of the NPSfP, the decision-maker is directed to refuse consent where harm to certain habitats or species and their habitats would result, unless the benefits (including need) of the development clearly outweigh that harm. **Chapter 8: Nature Conservation (Terrestrial Ecology)** **[TR030008/APP/6.2]** concludes that the residual effect on the Long Strip woodland habitat would be significant. A balancing exercise is therefore required.
- 7.5.52 The impact to the Long Strip woodland habitat, whilst significant in terms of EIA, is nevertheless limited in scale and localised in nature. It is also relevant to take account of the proposed **Outline Woodland Compensation Strategy [TR030008/APP/6.8]** which would offset this local loss in the long term through off-site planting of trees in the Immingham area.
- 7.5.53 The Woodland Compensation Strategy would also increase nesting opportunities for breeding birds through implementing measures such as installation of bird nest boxes on suitable mature trees, offsetting the assessed loss of breeding bird habitat associated with the loss of the woodland.
- 7.5.54 By contrast with these small-scale local impacts, the very substantial benefits that would be delivered by the Project are of national and regional as well as local significance. These very substantial benefits clearly and decisively outweigh the harm to the Long Strip woodland habitat.
- 7.5.55 There are no adverse effects after mitigation, on the Humber Estuary SSSI's special interest features, nor on the Killingholme Haven Pits SSSI and therefore the Project is in accordance with paragraph 5.1.12 of the NPSfP.
- 7.5.56 The **Shadow HRA [TR030008/APP/7.6]** confirms that the Project would ensure the protection of the integrity of the SAC/SPA/Ramsar in accordance with paragraph 5.1.10 of the NPSfP. This also demonstrates compliance with paragraphs 3.1.7 and 3.1.8 of the MPS, Policies BIO1, BIO2 and MPA1 of the EIMP and Policy 7 of the NELLP.
- 7.5.57 Having regard to the conclusions reached by the ES and the **Shadow HRA [TR030008/APP/7.6]**, and the very substantial benefits of the Project, it is clear that the Project is in accordance with the NPSfP in relation to biodiversity. This weighs in favour of the grant of consent.

7.5.58 Given the above, which demonstrates the extensive work undertaken in respect of biodiversity (terrestrial, marine, ornithology) which has been informed by national targets for biodiversity and nature conservation monitoring and reporting when scoping ecology surveys and undertaking the ecological impact assessment, consideration of the prescribed matters set out in Regulation 3A of the Decisions Regulations (Ref 1-4) does not materially alter the planning balance in this case.

7.6 Flood Risk

Requirements of the NPSfP and the MPS

7.6.1 Section 5.2 of the NPSfP relates to flood risk confirming the need for all Projects located in Flood Zone 3 to be accompanied by a site-specific Flood Risk Assessment (“FRA”) and setting out the requirements of a FRA. Paragraph 5.2.3 of the NPSfP confirms that port development is water-compatible development and therefore acceptable in high flood risk areas.

7.6.2 Paragraph 5.2.9 of the NPSfP provides guidance to the decision-maker on flood risk matters, stating that: *“In determining an application for development consent, the decision-maker should be satisfied that, where relevant:*

- *the application is supported by an appropriate FRA;*
- *the Sequential Test has been applied as part of site-selection, as appropriate;*
- *the proposal is in line with any relevant national and local flood risk management strategy;*
- *a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;*
- *priority has been given to the use of sustainable drainage systems (SuDS) and the requirements set out in the next paragraph on National Standards have been met; and*
- *in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.”*

7.6.3 Paragraph 5.2.9 of the NPSfP states that priority should be given to the use of sustainable drainage systems to ensure that flood risk is not increased elsewhere. Additionally, the MPS paragraph 3.10.7 specifies issues for consideration in respect of water discharge requirements.

7.6.4 The NPSfP states at paragraphs 5.2.17 – 5.2.18 that it is in the interests of port operators to take account of climate change impacts and the increased probability of extreme weather events and that Applicants will be in the best position to make a commercial judgement on the required appropriate adaptation measures to reduce the risk from long-term climate change as it affects their own facilities.

- 7.6.5 The NPSfP states at paragraph 5.2.19 that the decision-maker should ensure that the applicant has considered the impact of the port development on the risk of flooding outside the port area and has taken reasonable measures to reduce this as far as possible. For the purpose of this chapter, “outside the port area” is taken to mean “outside of the Site Boundary”.

Assessment conclusions

- 7.6.6 The FRA, **Appendix 18.A [TR030008/APP/6.4]** assesses all potential sources of flooding both to and from the Project and demonstrates how residual flood risk would be managed over the Project’s lifetime, and how the requirements of the Sequential Test and Exceptions Test are satisfied. **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage [TR030008/APP/6.2]** has been informed by the FRA and concludes that with mitigation measures in place flood risk during construction and operation is not significant.
- 7.6.7 Landside, the Project is entirely located in Flood Zone 3 from tidal flooding, however it benefits from flood defences along the bank of the Humber Estuary. The primary risk of flooding from the Humber Estuary is a residual risk from overtopping and from failure of defences, although the likelihood of either event is considered to be low.

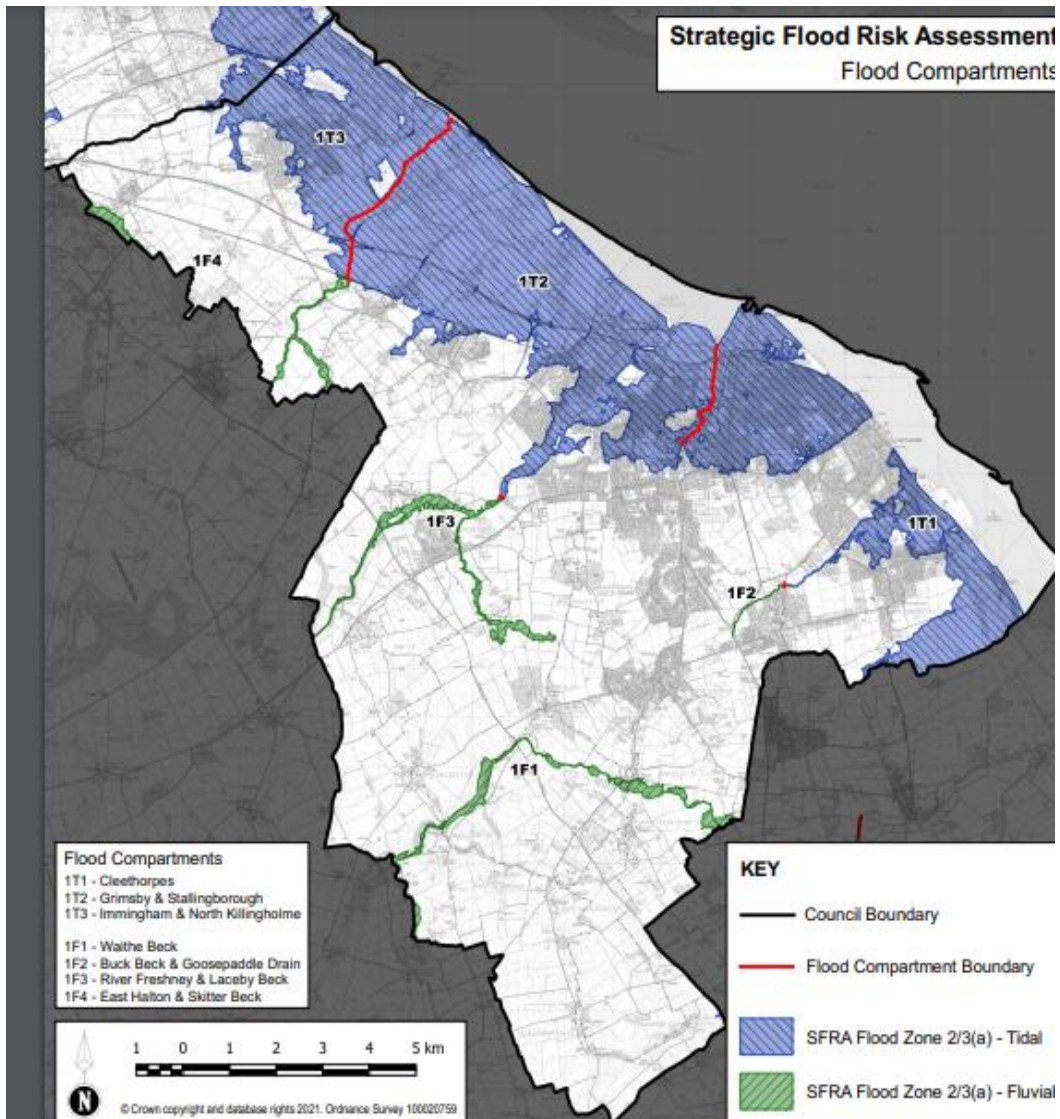
Appraisal

The Sequential Test

- 7.6.8 Paragraph 5.2.13 of the NPSfP explains that preference should be given to locating projects in Flood Zone 1. However, if there are no reasonably available site in Flood Zone 1, then projects can be located in Flood Zone 2. If there are no reasonably available site in Flood Zones 1 or 2, then essential infrastructure (including nationally significant infrastructure) projects can be located in Flood Zone 3 subject to the Exception Test. Where it is not possible to locate development in lower risk areas, reasonably available sites should be compared, within an area of search. Paragraph 5.2.20 relating to associated development, states that land-based facilities should be directed to sites at a lower risk of flooding and that a sequential test should be applied.
- 7.6.9 The NPSfP at paragraph 5.2.6 and 5.2.13 (footnote 49) refers applicants to the further guidance found in the Practice Guide which accompanies Planning Policy Statement 25 or successor documents. Planning Policy Statement 25 was withdrawn on 7 March 2014 and replaced by the National Planning Practice Guidance (NPPG) which was launched on 6 March 2014. The NPPG confirms at paragraph 027 (reference ID: 7-027-20220825) that the Sequential Test would not be required where *“The site has been allocated for development and subject to the test at the plan making stage (provided the proposed development is consistent with the use for which the site was allocated and provided there have been no significant changes to the known level of flood risk to the site, now or in the future which would have affected the outcome of the test)”*.

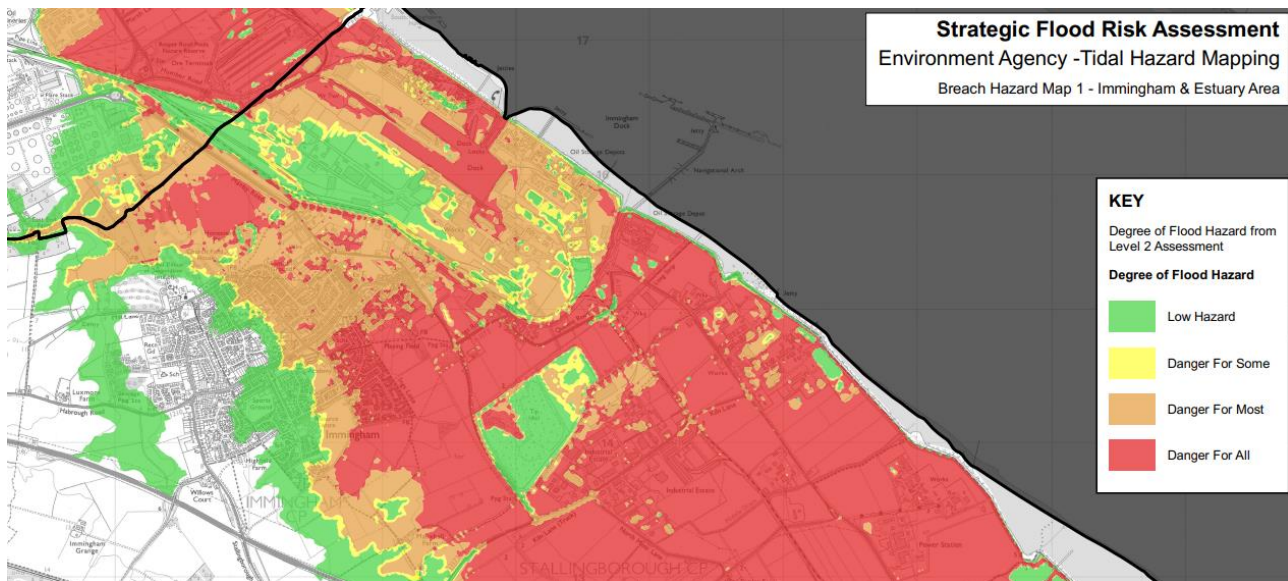
- 7.6.10 **Appendix D: Planning History and Land Use Designations** of the **Planning Statement [TR030008/APP/7.1]**, describes the allocated land for employment development within the NELLP and how the Project does not strictly accord with the allocation in terms of use class, given that the Hydrogen Production Facility is assumed to be Sui Generis. In flood risk terms, this means that the sequential test to site selection is required to be applied to ensure compliance with the NPSfP.
- 7.6.11 NELC has published a Strategic Flood Risk Assessment 2022 (SFRA) (Ref 1-33) that states that the main sources of flood risk within the study area are the Humber Estuary (as evidenced by the large area of flooding on the South Bank of the Humber Estuary and along the River Trent caused by the tidal surge event of December 2013) and the rivers draining to it, particularly the Ancholme and the Trent.
- 7.6.12 The SFRA shows that the Humber Estuary lies within flood compartment 1T3 'Immingham and North Killingholme' and falls within Flood Zone 2/3a. **Plate 13** is an extract from the SFRA (2022) and shows the extent of Flood Zone 2/3a which comprises the whole area of the South Humber comprising existing and proposed employment uses included within the NELLP.

Plate 13: Extract from Strategic Flood Risk Assessment (2022) showing the extent of Flood Zone 2/3a within the Site (IT3)



7.6.13 In applying the sequential test, the SFRA states at paragraph 7.9 that the Environment Agency’s hazard mapping should be referred to. This is replicated at **Plate 14**.

Plate 14: Strategic Flood Risk Assessment - Tidal Hazard Map



- 7.6.14 The SFRA states that the area of search is normally the whole of the council area. However, the alternatives assessment at **Chapter 3: Need and Alternatives [TR030008/APP/6.2]** concludes that the only suitable location for the Terminal is the Port of Immingham on the Humber Estuary. Given the hydrogen production facility needs to be located in close proximity to the Terminal, it is considered that the appropriate area of search can only be sites within close proximity to the Port of Immingham.
- 7.6.15 NPPG defines reasonably available sites as those in a suitable location for the type of development with a reasonable prospect that the site is available to be developed at the point in time envisaged for the development. Reasonably available sites could also include a series of smaller sites (Paragraph: 028 Reference ID: 7-028-20220825).
- 7.6.16 With respect to the West Site and East Site, the Environment Agency hazard map suggests that development could theoretically be located on the Immingham landfill site and some sites located within the operational Port of Immingham where the flood hazard is lower. However, these sites are in use and not considered to be reasonably available as explained below.
- 7.6.17 The Immingham landfill site is in use as a waste site (until December 2023) and is subject to a restoration plan secured by a review of the minerals planning permission (see **Appendix D** of this Planning Statement). The restoration plan would ensure that the site is restored by 31 December 2024 being re-profiled and laid with grassland, native hedgerows, surface water ponds, ditches and lagoons. Furthermore, it would not be possible to redevelop this site for a hydrogen production plant for several reasons:
- a. The landfill generates ground gas and is therefore incompatible with piling, foundations and excavations;
 - b. The ground is not level, is uncompacted and unsuitable for civil foundations;
 - c. The landfill site is likely contaminated; and

d. Taking any material offsite defeats the original purpose of the landfill.

7.6.18 The land located within the operational Port of Immingham is already in use by other users of the Port and not reasonably available. Sites are required outside of the operational area of the Port of Immingham to meet the demand for growth in ports and logistic development, is demonstrated by the allocated sites within the NELLP for this purpose, as set out in **Appendix D** of this Planning Statement.

Summary

7.6.19 The Sequential Test is being considered on a precautionary basis, as the hydrogen production facility does not strictly fall within the use classes for which parts of the Site are allocated due to hazardous substances requirements.

7.6.20 As demonstrated above, no other sites are reasonably available in close proximity to the Port of Immingham. Since all of the South Humber falls within flood zone 2/3a, there are no alternative sites available that would be at a lower risk of flooding than the Site.

The Exception Test

7.6.21 Paragraph 5.2.3 of the NPSfP confirms that port related development is 'water compatible'. This means that the Terminal is appropriate development and does not require the application of the Exception Test.

7.6.22 Annex 3 of the NPPG states that installations requiring hazardous substance consent are highly vulnerable. However, the NPPG further states that where there is a demonstrable need to locate installations for bulk storage of materials with port or other similar facilities, or installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, the facilities should be classified as 'Essential Infrastructure'. As such the hydrogen production facility is considered to be essential infrastructure which is defined as "*Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage and distribution systems; and water treatment works that need to remain operational in times of flood.*" Where essential infrastructure is located in Flood Zone 3, the application of the Exception Test is required.

7.6.23 Paragraph 5.2.16 of the NPSfP states that all the three elements of the Exception Test will have to be passed for development to be consented. Therefore, for the Exception Test to be passed:

- a. It must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk.
- b. The project should be on developable, previously developed land or, if it is not on previously-developed land, that there are no reasonable alternative sites on developable previously-developed land.
- c. An FRA must demonstrate that the project will be safe, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.

7.6.24 These factors are each considered further in the following paragraphs.

Wider Sustainability Benefits

7.6.25 NPPG provides examples of wider sustainability benefits to the community which could include the re-use of suitable brownfield land as part of a local regeneration scheme; an overall reduction in flood risk to the wider community through the provision of, or financial contribution to, flood risk management infrastructure or the provision of multifunctional Sustainable Drainage Systems that integrate with green infrastructure (Paragraph: 036 Reference ID: 7-036-20220825).

7.6.26 The very substantial benefits of the Project are set out in Chapter 5 of this Planning Statement. Those benefits that are closely aligned with community benefit include job creation, the provision of SuDS, which is an integral part of the Project and the contribution the Project makes to meet the Government's net zero target. Given that **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage [TR030008/APP/6.2]** concludes that with mitigation measures in place flood risk during construction and operation is not significant, the wider sustainability benefits delivered overwhelmingly outweigh flood risk, which is negligible in the case of the Project. Therefore, the Project is in accordance with the first part of the Exception Test.

Previously developed land

7.6.27 Landside, the Project is located on areas of both previously developed land and greenfield sites. As set out in **Section 3.2** of this Planning Statement, the East Site comprises two parcels of land, which are bisected by Laporte Road. The area to the north of Laporte Road consists of an area of hardstanding which is currently in use by the ABP as a storage area. The triangular shaped area to the south of Laporte Road consists of brownfield land that is currently covered by gravel and various stockpiles.

7.6.28 The West Site currently comprises three fields formerly in agricultural use. The West Site has an extant planning permission for the development of B1, B2 and B8 uses and is an allocated site for employment uses in the NELLP. In terms of alternative sites on developable previously developed land, these are limited in this location. The only potential alternative site is the Immingham Landfill, however as set out above this is not available, and for the reasons stated above, it is not possible to construct a hydrogen production facility on this site.

7.6.29 The Project is in accordance with the second part of the Exception Test when the uses of the East Site are taken into account as well as the status of the West Site and the lack of reasonably alternative sites.

Demonstration that the Project will be safe

7.6.30 The FRA at **Appendix 18.A [TR030008/APP/6.4]** demonstrates how the Project would be made safe with respect to flood risk. In the event of extreme weather or a flood warning being in place, the hydrogen production facility would be shut down and road tankers present on Site would be relocated. This would be undertaken on a precautionary basis several days in advance of anticipated cases of extreme weather and continue for the duration of the flood warning being in place. The Project can be remotely shut down safely without operator intervention if needed. The Project would also shut down automatically in the

event of power trip or instrument failure. In addition to this, a number of mitigation measures are incorporated into the design of the Project to ensure that it can operate safely and without increasing flood risk. These measures are set out in the FRA at **Appendix 18.A [TR030008/APP/6.4]** and are secured through Requirement 13 of the **draft DCO [TR030008/APP/2.1]** which requires the Project to be carried out and operated in accordance with the approved FRA.

- 7.6.31 The FRA at **Appendix 18.A [TR030008/APP/6.4]** also explains the measures to protect the Project from the residual risk of flooding should the existing tidal defences fail in the vicinity of the Site, or in the event of heavy rainfall that could result in surface water flooding at the Site if the design capacity of the drainage network is exceeded. Requirement 13 of the **draft DCO [TR030008/APP/2.1]** requires the Project to be built in accordance with the mitigation measures set out within the FRA thereby ensuring that the Project would remain safe should a flood event occur.
- 7.6.32 These measures demonstrate compliance with the third part of the Exception Test, in that the development would be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere.
- 7.6.33 The FRA at **Appendix 18.A [TR030008/APP/6.4]** has been completed in accordance with the NPSfP and demonstrates that the Project would not result in an increase in flooding elsewhere.
- 7.6.34 The Project therefore passes the Exception Test demonstrating that flood risk can be managed in accordance with the NPSfP and relevant guidance within the NPPG.

Sustainable Urban Drainage Strategy

- 7.6.35 The FRA at **Appendix 18.A [TR030008/APP/6.4]** concludes that the flood risk to the Project from surface water is considered to be low and the flood risk from groundwater is considered to be medium. The Project would increase the impermeable surface area due to the introduction of new roads, walkways and built infrastructure within the East Site and West Site. The changes to the impermeable surface area may increase runoff and affect the conveyance of surface water, with the potential to impact flood risk from surface water sources.
- 7.6.36 To ensure that the Project addresses this potential risk, the Drainage Strategy at **Appendix 18.B [TR030008/APP/6.4]** explains how SuDs would be utilised to manage and attenuate runoff, to ensure a reduction in flood risk to the Site and elsewhere and to provide water quality benefits. The Drainage Strategy would use a combination of permeable gravel beds and retention basins to provide attenuation storage and suitable water quality management. The permeable gravel beds would capture surface water runoff with the ditch network that carries flow from the Sites acting as a swale and providing further treatment.
- 7.6.37 The Drainage Strategy confirms that surface water runoff rates have been agreed with the Internal Drainage Board to be limited to a Qbar greenfield runoff rate of 49 l/s for the West Site, and 70% of the 'real' brownfield runoff rate for the East Site (Hydrogen Production Facility) and East Site (Ammonia Storage Area), at 12.6 l/s and 7.0 l/s respectively resulting in storage volumes of 4,565m³, 2,470m³ and 18,319m³ respectively. These volumes can only be accommodated by the planned raising of ground levels across all three Sites. The required levels are

3.8mAOD, 3.5mAOD and 2.5 mAOD for the East Site (hydrogen production facility), East Site (ammonia storage area) and the West Site, respectively. Outflow from the drainage system from each Site would be controlled to the agreed discharge rate by several Hydrobrake® units. From here, the outflow would enter the ditch network surrounding the Site and eventually discharge into the Humber Estuary.

- 7.6.38 The Project is in accordance with the NPSfP in view of the SuDS measures proposed as set out in the Drainage Strategy at **Appendix 18.B [TR030008/APP/6.4]**.

Risks within ports

- 7.6.39 **Paragraph 7.6.30** of this Planning Statement describes the measures that would be taken in an extreme weather event.

Flood risk outside the port area

- 7.6.40 **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage [TR030008/APP/6.2]** concludes in its summary (Tables 18-12 and 18-13) that during construction and operation the flood risk to existing off site development is not significant. The decision maker can therefore be assured that the flood risk outside the port area has been considered as part of the assessment of the Project.

Appraisal summary

- 7.6.41 It has been demonstrated that the application is supported by an FRA, the Project passes the Sequential Test and the Exception Test, priority has been given to using SuDS and that the Project is appropriately resilient particularly in extreme weather events. Accordingly, the Project accords with the NPSfP policy for flood risk, which weighs in favour of the making of the Order.

7.7 Coastal Change

Requirements of the NPSfP

- 7.7.1 Section 5.3 of the NPSfP explains that ‘coastal change’ refers to the physical change to the shoreline such as erosion or coastal landslip which can be caused by infrastructure projects located on the coast. This section of the NPSfP is concerned both with the impacts which port infrastructure can have as a driver of coastal change and also how developments are resilient to ongoing and potential future coastal change. Paragraph 5.3.8 provides guidance for the decision-maker which states that, *“The decision-maker should be satisfied that the proposed development will be resilient to coastal change, taking account of climate change, during the project’s operational life and any decommissioning period”*.
- 7.7.2 Paragraph 5.3.9 of the NPSfP states that *“The decision-maker should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an impact on coastal processes at other locations. Impacts on coastal processes must be managed to minimise adverse impacts on other parts of the coast. Where such proposals are brought forward, consent should only be granted where the decision-maker is satisfied that the benefits (including need) of the development outweigh the adverse impacts.”*

- 7.7.3 Paragraph 5.3.10 of the NPSfP states that, *“the decision-maker should ensure that applicants have restoration plans for areas of foreshore disturbed by direct works and will undertake pre- and post-construction coastal monitoring arrangements with defined triggers for intervention and restoration.”*
- 7.7.4 Paragraph 5.3.12 of the NPSfP states that the *“The decision-maker should consult MMO ... on projects which could impact on coastal change, particularly those requiring a marine licence”*.
- 7.7.5 Paragraph 5.3.13 of the NPSfP states that the decision maker should have regard to the MPS, any Shoreline management Plan or Coastal Change Management Area.
- 7.7.6 Paragraph 5.3.14 of the NPSfP states that *“Substantial weight should be attached to the risks of flooding and coastal erosion. The applicant must demonstrate that full account has been taken of the policy on assessment and mitigation in section 5.2 above of this NPS on flood risk, taking account of the potential effects of climate change on these risks as discussed above.”*

Assessment conclusions

- 7.7.7 **Chapter 16: Physical Processes [TR030008/APP/6.2]** presents the findings of an assessment of the Project on physical processes, for the Site and the adjacent Immingham coastline. Chapter 16 concludes that all potential effects during construction and operation have been assessed as not significant. Chapter 16 also confirms that across the wider study area, the marine infrastructure has no impact on the existing (baseline) accretion and erosion rates and the Project will not result in long-term changes to the wider estuary morphology.
- 7.7.8 **Chapter 17: Marine Water and Sediment Quality [TR030008/APP/6.2]** concludes that during construction and operation, the potential impacts of the Project on marine water and sediment quality receptors are assessed as not significant.

Appraisal

- 7.7.9 In response to paragraph 5.3.8 of the NPSfP, **Chapter 16: Physical Processes [TR030008/APP/6.2]** demonstrates that the Project will not impact upon coastal processes, taking into account climate change through adoption of a future baseline scenario relating to rising sea levels. As stated in **Chapter 16: Physical Processes [TR030008/APP/6.2]**, projections of change in water levels for Immingham up to 2100 are 0.99m, based on the UKCP18 climate change scenario. The assessment concludes that with standard and essential mitigation measures in place potential impacts during construction and operation have been assessed as not significant. It can therefore be concluded that the Project is resilient to coastal change, taking account of climate change.
- 7.7.10 The outcome of the assessment of Physical Processes has concluded no significant effects, therefore the Project does not have an impact on coastal processes (paragraph 5.3.9 of the NPSfP).

- 7.7.11 Any change predicted in relation to changes to tidal water levels and the rates of erosion or accretion on the foreshore (above the natural variations) both on-site and off-site (along the frontage of the wider Port of Immingham) would be unlikely to increase above that which would currently occur when climate change is considered. Therefore, a restoration plan has not been proposed as part of this Application (paragraph 5.3.10 of the NPSfP).
- 7.7.12 In response to paragraph 5.3.12 of the NPSfP, the Project would include works below Mean Water High Springs, including a capital dredge and disposal of the arisings from the capital dredge at sea, subject to there being no contamination. Therefore, ABP has sought a deemed marine licence, in consultation with the MMO, as part of the DCO. Schedule 3 of the **draft DCO [TR030008/APP/2.1]** contains the Deemed Marine Licence.
- 7.7.13 The relevant Shoreline Management Plan (“SMP”) is the Flamborough Head to Gibraltar Point SMP. **Chapter 16: Physical Processes [TR030008/APP/6.2]** considers the SMP and confirms that the Project lies adjacent to Policy Unit L ‘East Immingham to Cleethorpes’ where the policy in the short, medium and long term is to ‘Hold the Line’ which will influence current and future baseline conditions (paragraph 5.3.13 of the NPSfP).
- 7.7.14 The Project has considered coastal erosion, and as set out in **Chapter 16: Physical Processes [TR030008/APP/6.2]** there is no impact on the existing (baseline) accretion and erosion rates and the Project will not result in long-term changes to the wider estuary morphology. In relation to flood risk, the FRA at **Appendix 18.A [TR030008/APP/6.4]** confirms that climate change has been considered in the assessment, which is expected to increase the peak rainfall intensity by up to 40%, increase peak river flows by up to 12% and increase sea levels by up to 0.97m over the next 100 years. As a result, it can be demonstrated that ABP has taken full account of the risks and flooding and coastal erosion in its assessments and the impacts are not significant. Therefore, the decision maker should attach limited weight to the risk of flooding and coastal erosion in decision making (paragraph 5.3.14 of the NPSfP).
- 7.7.15 The Applicant has therefore taken into consideration the NPSfP in respect of coastal change. The assessments undertaken within the ES have considered the guidance set out in paragraphs 5.3.4 to 5.3.14 and have identified that there will not be any significant effects as a result of the Project in relation to coastal processes, flood risk and coastal erosion, taking account of climate change. The Project is, therefore in accordance with section 5.3 of the NPSfP in relation to coastal change, which weighs in favour of the making of the Order.

7.8 Traffic and Transport

Requirements of the NPSfP

- 7.8.1 The NPSfP identifies that ports are linked by road, rail and water transport and this combination can have a variety of impacts on the surrounding networks, most likely on the road network. The NPSfP states in paragraph 5.4.9 that “A new nationally significant infrastructure project may give rise to substantial impacts on the surrounding transport infrastructure, and the IPC should therefore ensure that the applicant has sought to mitigate these impacts, including during the

construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the IPC should consider conditions to mitigate adverse impacts on transport networks arising from the development.”

- 7.8.2 Paragraphs 5.4.11 to 5.4.13 of the NPSfP relate to demand management setting out that “*Where mitigation is needed, possible demand management measures must be considered*”. Paragraphs 5.4.14 to 5.4.21 of the NPSfP relate to modal share and state “*The modal share of traffic entering and leaving the port needs to be considered objectively in the context of external congestion and environmental costs*”. Paragraphs 5.4.22 to 5.4.23 relate to mitigation for HGVs, where development is likely to generate or attract substantial HGV traffic. Paragraphs 5.4.24 to 5.4.25 relate to access mitigation where development would worsen accessibility.

Requirements of the Decisions Regulations

- 7.8.3 Regulation 3A of the Decisions Regulations (Ref 1-4) states that the Secretary of State must have regard to the need to prevent interference with legitimate uses of the sea, which includes navigation (including taking any steps for the purpose of navigational safety).

Assessment Conclusions

- 7.8.4 **Chapter 11: Traffic and Transport [TR030008/APP/6.2]** presents the findings of an assessment of the Project on traffic and transport receptors during the construction stage. Due to low volumes of traffic generated during operation, the operational impacts of the Project have been scoped out as significant effects were considered unlikely to arise. Similarly for the decommissioning stage, given that the number of traffic movements associated with this phase are anticipated to be less than the construction phase, no assessment of this phase has been undertaken. During the construction stage, effects on road links, severance, pedestrian amenity, fear and intimidation and road safety have all been assessed as being not significant. Taking into account the above, the preparation of a Transport Assessment using the WebTAG methodology referred to in DfT guidance is not considered necessary in this case (see NPSfP paragraph 5.4.4).
- 7.8.5 **Chapter 12: Marine Transport and Navigation [TR030008/APP/6.2]** presents the baseline analysis and findings of the assessment of the likely significant effects of the Project on marine transport and navigation. The assessment concludes that the residual effects of all the hazard scenarios were assessed to be tolerable and as low as reasonably practicable, and insignificant in EIA terms, based on the mitigation measures already in place and/or that will be put in place as part of the Project, identified in Table 12-6 of **Chapter 12: Marine Transport and Navigation [TR030008/APP/6.2]**.

Appraisal

- 7.8.6 To mitigate the effects of HGVs during the construction stage, an **Outline Construction Traffic Management Plan** (“Outline CTMP”) [TR030008/APP/6.7] has been prepared which includes measures to control HGV routing and impacts, abnormal loads and a programme of monitoring to assess the effectiveness of the measures proposed. The **Outline CTMP [TR030008/APP/6.7]** includes demand management measures to minimise impacts on local roads in

accordance with paragraph 5.4.12 of the NPSfP. This includes providing a designated routing plan aimed at enabling rapid access to the strategic road network from the A1173 for HGVs. The **Outline CTMP [TR030008/APP/6.7]** also describes the measures for the routing of abnormal loads, expected to be pre-constructed landside building components. These will be received at the Port whereby they will be offloaded and transported to the Site using the A1173 and Kings Road. Approval of the final Construction Traffic Management Plan is secured by Requirement 7 of the **draft DCO [TR030008/APP/2.1]**.

- 7.8.7 To mitigate the effects of construction workers traveling to site, an **Outline Construction Workers Travel Plan** (“Outline CTWP”) has been prepared in accordance with paragraph 5.4.5 of the NPSfP and appended to the **Outline CTMP [TR030008/APP/6.7]**. This seeks to promote and encourage the use of sustainable transport modes and reduce the reliance on the private car.
- 7.8.8 In terms of modal share during construction, the **Outline CTWP [TR030008/APP/6.7]** promotes a number of measures including the use of minibuses to transport workers to the construction site, car sharing, secure bicycle storage and the sharing of information with contractors about available forms of public transport, in accordance with paragraphs 5.4.14 to 5.4.21 of the NPSfP. Modal share during operation has not been considered due to low volumes of traffic generated. Approval of the final Construction Workers Travel Plan by the relevant planning authority, NELC, is secured by Requirement 7 of the **draft DCO [TR030008/APP/2.1]** as a part of the Construction Traffic Management Plan.
- 7.8.9 The Project will not worsen accessibility. For the purposes of the Project new permanent entrances are proposed at the West Site and the East Site, in addition to temporary accesses during construction as shown on the **Streets Works and Accesses Plan [TR030008/APP/4.6]**. Requirement 8 of the **draft DCO [TR030008/APP/2.1]** requires the approval of the design and layout of these accesses by NELC. The Project also proposes an access from Laporte Road to the jetty access road, a private road for operational access to the Terminal.
- 7.8.10 In terms of navigation, the Navigational Risk Assessment, at **Appendix 12.A [TR030008/APP/6.4]** concludes that out of 18 unique hazard scenarios associated with the Project covering both the construction and operational phases, the risks were assessed to be tolerable and as low as reasonably practicable based on the mitigation currently in place and/or to be established as part of the Project. Accordingly, the Project is unlikely to result in causing obstruction or a danger to navigation during construction or operation.
- 7.8.11 The Applicant has sought to mitigate traffic impacts during the construction stage of the Project through measures proposed in the **Outline CTMP [TR030008/APP/6.7]**, and in the **Outline CTWP** which seek to reduce traffic impacts to acceptable levels and promote sustainable transport. As also demonstrated above, the Project has proposed demand management measures and measures to mitigate the impact of HGVs in the **Outline CTMP [TR030008/APP/6.7]**. As such, the Project is in accordance with the NPSfP paragraphs 5.4.1 to 5.4.25 in relation to traffic and transport, which weighs in favour of the making of the Order.

7.8.12 Given the above, consideration of the prescribed matters set out in Regulation 3A of the Decisions Regulations does not materially alter the planning balance in this case.

7.9 Materials and Waste

Requirements of the NPSfP

7.9.1 Paragraph 5.5.3 of the NPSfP acknowledges that all large infrastructure projects are likely to generate hazardous waste during the construction, operation and decommissioning phases. Paragraph 5.5.5 provides guidance to the decision maker setting out that they should “*consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. It should be satisfied that:*

- *any such waste will be properly managed, both on-site and off-site;*
- *the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and*
- *adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome.”*

Assessment conclusions

7.9.2 **Chapter 20: Materials and Waste [TR030008/APP/6.2]** presents the findings of an assessment of the Project on materials and waste. The Chapter concludes that in respect of material and waste quantities associated with the Project, no significant effects are anticipated.

Appraisal

7.9.3 In terms of the management of waste, an **Outline Site Waste Management Plan** (“Outline SWMP”) forms part of the **Outline CEMP [TR030008/APP/6.5]** and explains the measures to manage waste generated by construction of the Project. Targets for waste recovery and recycled content are included in the Outline SWMP and include achieving set percentages for the recovery of non-hazardous waste and the materials imported to Site for use within the Project containing alternative (reused, recycled or secondary) content. Prior to commencement of the Project (save enabling works), the contractor will be required to prepare a detailed CEMP in accordance with the **Outline CEMP [TR030008/APP/6.5]**, which is secured by Requirement 6 of the **draft DCO [TR030008/APP/2.1]**.

- 7.9.4 In relation to the capacity of existing waste management facilities, **Chapter 20: Materials and Waste [TR030008/APP/6.2]** considers the waste arising from the construction of the Project, and the impact this will have on the capacity of waste management facilities. In the event that non-hazardous solid wastes are disposed of to landfill, the annual quantity is likely to be a reduction of <1% (0.0003%) of regional non-hazardous waste landfill void capacity which is considered to be of negligible magnitude and not significant. In a worst case scenario where solid wastes are disposed of to landfill, the annual quantity is likely to be a reduction of <0.1% (0.0001%) of national hazardous waste landfill void capacity, is considered to be of negligible magnitude and also not significant.
- 7.9.5 In relation to minimising disposal, **Chapter 20: Materials and Waste [TR030008/APP/6.2]** sets out that the reuse of excavated materials would be covered by a Contaminated Land: Applications in Real Environments (“CL:AIRE”) code of practice which would support the reuse of excavated materials, minimise offsite disposal and demonstrate the necessary evidence to support the proper reuse/ offsite disposal of materials and ensure compliance with regulatory guidance.
- 7.9.6 As demonstrated above, the Applicant has met the requirements of the NPSfP in relation to the management of waste, consideration of the capacity of waste management facilities and in seeking to minimise off site waste disposal during the construction stage. As such, the Project is in accordance with the NPSfP in relation to waste management, which weighs in favour of the making of the Order.
- 7.10 Water Quality and Resources
- Requirements of the NPSfP**
- 7.10.1 Paragraph 5.6.3 of NPSfP states that where a project is likely to have a significant effect on the water environment, the applicant should undertake an assessment of the existing water status of, and impacts of, the proposed project on water quality, water resources and physical characteristics of the water environment as part of the ES. Paragraph 5.6.6 provides guidance to the decision maker stating that they will generally “*need to give impacts on the water environment more weight where a project would have adverse effects on the achievement of the environmental objectives established under the Water Framework Directive*”. Furthermore, at paragraph 5.6.7, the NPSfP provides that the decision maker should “*satisfy itself that a proposal has regard to the River Basin Management Plans and the requirements of the Water Framework Directive (including Article 4.7) and its daughter Directives, including those on priority substances and groundwater. The specific objectives for particular river basins are set out in River Basin Management Plans. The decision-maker should also consider the interactions of the proposed project with other plans such as Marine Plans, Water Resources Management Plans and Shoreline/Estuary Management Plans.*”

Assessment conclusions

- 7.10.2 **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage of the ES [TR030008/APP/6.2]** presents the findings of an assessment of the Project on water use, water quality, coastal protection, flood risk and drainage. The following residual construction and operation effects were identified in relation to water environment receptors:
- No significant effects (negligible/minor adverse) to the water quality of Unnamed Drainage Channels within the Site, North Beck Drain, Middle Drain and Habrough Marsh Drain and local drains during construction and operation.
 - No significant effects (negligible) to the water quality of Coastal and Floodplain Grazing Marsh and good quality semi-improved grassland during construction and operation.
 - No significant effects (minor adverse) for flooding inundation to the Site from tidal, fluvial, surface water, groundwater and drainage sources during construction and operation during construction and operation.
 - No significant effects (negligible/minor adverse) for water levels and changes to flow regimes during construction. No significant effects (minor adverse) at operation.
 - No significant effects (negligible) for surface water run off rates and volumes during construction. During operation, there would likely be a reduction in the surface water runoff from the Site to the surrounding watercourses and land drainage ditches and therefore fluvial flood risk in resulting a minor beneficial effect.
 - No significant effects (minor adverse) for changes to the tidal regime during construction and operation.
 - No significant effects (minor adverse) for exposure to flood water from flooding on human health receptors during construction and operation.
- 7.10.3 **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage [TR030008/APP/6.2]** confirms that the water use needs for all phases of the Project, can be met. The majority of the need for water can be met by non-potable water. Agreement has been reached in principle with Anglian Water for the provision of non-potable water to the required standards.
- 7.10.4 In respect of decommissioning, with the implementation of standard mitigation measures, which would mirror those implemented during the construction phase and would be contained in the final DEMP, an outline for which is included within this Application (the **Outline DEMP [TR030008/APP/6.6]**), effects on the water environment are expected to be similar to the construction phase and would not be significant. Similarly, significant flood risk effects arising from decommissioning are not anticipated as standard flood risk mitigation measures would be effectively implemented.

Appraisal

Water Framework Directive

- 7.10.5 A Water Framework Directive Compliance Assessment is set out at **Appendix 17.A [TR030008/APP/6.4]** (“the WFD Assessment”). The WFD Assessment explains that it is necessary to consider the potential for the Project to impact water bodies with reference to the environmental objectives of the WFD. The WFD Assessment considers two water bodies, the Humber Lower transitional water body and the North Beck Drain River body water catchment.
- 7.10.6 The WFD Assessment concludes that the Project is not likely to have a permanent effect on the status of WFD parameters that are significant at water body level. Therefore, deterioration to the current status of the Humber Lower transitional water body and/or North Beck Drain River water body is not predicted. It is also not predicted that these water bodies will be prevented from achieving future WFD status objectives.

Shoreline Management Plan/ River Basin Management Plan

- 7.10.7 Please refer to **paragraph 7.7.13** above for details in respect of the relevant Shoreline Management Plan. The relevant marine plan is the EIMP and Appendix B of this document explains how the Project accords with those policies that are relevant to the Project. Furthermore, the WFD Assessment takes account of the relevant River Basin Management Plans (“RBMP”) for the sites assessed.

Water Use

- 7.10.8 The NPSfP recognises at paragraph 5.6.1 that infrastructure development can lead to increased demand for water. Once operational, the Project is estimated to require approximately 3,640m³ per day of non-potable water to support the hydrogen production facility, primarily required to provide cooling water makeup. As set out in **Chapter 18: Water Use, Water Quality, Coastal Protection, Flood Risk and Drainage [TR030008/APP/6.2]** agreement has been reached in principle with Anglian Water for the provision of this amount.
- 7.10.9 Once operational, the Project would also require a limited potable water supply for offices (including fire sprinkler systems), welfare facilities, steam boiler and site safety showers. The potable supply is expected to be drawn from the existing mains water supply through a connection in Kings Road (for West Site Work No. 7), Laporte Road (for East Sites and Terminal, Work Nos 1, 3 and 5), as set out in the **Utilities Statement [TR030008/APP/7.7]**. The potable supply would be sized by Anglian Water based on number of future users and subject to a separate agreement (from the non-potable supply).
- 7.10.10 As demonstrated above, there are no adverse effects on water environment receptors. Furthermore, the WFD Assessment concludes that the water bodies assessed would not be prevented from achieving future WFD status objectives. The relevant SMP and RBMP have been taken into account in the assessment of the Project. In terms of water use, in principle agreement has been reached with Anglian Water for the provision of non-potable water to the required standards, sufficient for the full project.

7.10.11 Given the above, the Project is in accordance with the NPSfP in relation to water quality and resources. Accordingly, the Project accords with relevant policy relating to water quality and resources in the NPSfP and this weighs in favour of the making of the Order.

7.11 Air Quality and Emissions

Requirements of the NPSfP

7.11.1 The NPSfP states that ports can contribute to local air pollution problems as they bring together several sources of pollutants, including HGV traffic, emissions from ships and certain cargoes that can cause local dust pollution. Paragraph 5.7.6 provides guidance to the decision-maker which states that they should “*generally give air quality considerations substantial weight where a project would lead to deterioration in air quality in an area, or leads to a new area, where the air quality breaches any national air quality limits. However, air quality considerations will also be important where substantial changes in air quality are expected, even if this does not lead to any breaches of any national air quality limits*”. Furthermore, paragraph 5.7.7 states “*In all cases the decision-maker must take account of relevant statutory air quality limits. Where a project is likely to lead to a breach of such limits, the developers should work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit, the decision-maker should refuse consent.*”

Assessment conclusions

7.11.2 **Chapter 6: Air Quality [TR030008/APP/6.2]** assesses the impacts of the construction and operation of the Project on local air quality. With mitigation measures described in the **Outline CEMP [TR030008/APP/6.5]** in place, **Chapter 6: Air Quality [TR030008/APP/6.2]** confirms that there will be no significant effects on local air quality during construction.

7.11.3 During the operation phase, potential air quality impacts relate to onsite marine-side vessel emissions and landside combustion and process emissions, road traffic emissions and odour emissions. **Chapter 6: Air Quality [TR030008/APP/6.2]** confirms that marine vessel and site plant emissions and road traffic emissions would not contribute to a significant effect on local air quality. An odour impact assessment has been undertaken and is set out in Table 6-21 within **Chapter 6: Air Quality [TR030008/APP/6.2]**. The operation and control measures incorporated into the Project design, would not result in a significant odour effect. Operational site, vessel and road traffic emissions are also assessed to be not significant.

7.11.4 In relation to air quality limits, the methodology for the assessment of air quality within **Chapter 6: Air Quality [TR030008/APP/6.2]** has been informed by legislation and guidance relating to legally binding limits for air quality. Furthermore, the Project is not located in an Air Quality Management Area.

Appraisal

- 7.11.5 The decision maker is directed to give substantial weight to air quality considerations; however it has been demonstrated that there are no adverse impacts to air quality as a result of the Project. As such, the Project is in accordance with the NPSfP in relation to air quality. Accordingly the Project accords with relevant policy relating to air quality and emissions in the NPSfP and this weighs in favour of the making of the Order.

7.12 Noise and Vibration

Requirements of the NPSfP

- 7.12.1 NPSfP paragraph, 5.10.4 requires a noise assessment to be prepared where noise and vibration impacts are likely to arise and explains the methodology for this assessment. NPSfP paragraph 5.10.6 adds that for operational noise this should be assessed using the principles of the relevant British Standards and other guidance.
- 7.12.2 Paragraph 5.10.9 of the NPSfP states that the decision maker should not grant development consent unless it is satisfied that the proposals would meet the following aims:
- “Avoid significant adverse impacts on the environment, human health and quality of life from noise;*
 - Mitigate and minimise other adverse impacts on health and quality of life from noise; and*
 - Where possible, contribute to improvements to health and quality of life through the effective management and control of noise”.*

Assessment conclusions

- 7.12.3 **Chapter 7: Noise and Vibration [TR030008/APP/6.2]** provides a noise and vibration assessment and considers the impact of noise upon sensitive receptors. With mitigation measures in place, the assessment concludes that residual construction noise effects at residential noise sensitive receptors (“NSRs”) on Queens Road will not be significant from on-site works. For residential NSRs to the west at the eastern edge of Immingham, residual construction noise effects are likely to be negligible.
- 7.12.4 During operation following the implementation of mitigation measures, the assessment concludes that there are no likely significant residual effects on NSRs.

Appraisal

- 7.12.5 During construction, impact avoidance measures have been incorporated in the development of the design of the Project. These include having core landside construction working hours and where on-site works are to be conducted outside these core hours, they would comply with any restrictions agreed with the local planning authority. Paragraph 7.8.3 of **Chapter 7: Noise and Vibration [TR030008/APP/6.2]** describes all the mitigation measures. As explained in the **Statement of Reasons [TR030008/APP/3.2]**, the acquisition of the residential properties on Queens Road is proposed and the permanent cessation of

residential use, as the residential use of the residential properties on the west side of Queens Road is considered incompatible with the operation of the hydrogen production facility. **Chapter 7: Noise and Vibration [TR030008/APP/6.2]** concludes that residual effects at residential NSRs on Queens Road from noise arising from construction works will not be significant.

- 7.12.6 An operational noise management plan will be prepared during the detailed design stage of the Project and its approval and implementation is secured by Requirement 17 of the **draft DCO [TR030008/APP/2.1]**. The detailed scheme would also demonstrate use of best available techniques for the control of noise as will be required to demonstrate compliance with Environment Agency guidance for the Environmental Permit.
- 7.12.7 The NSRs on Queens Road are excluded from the operational noise assessment on the basis that the residents of these properties are not anticipated to be present should the Project obtain development consent and become operational.
- 7.12.8 Significant adverse effects from noise and vibration will therefore be avoided and suitable mitigation measures are proposed to mitigate and minimise effects where required. Therefore, the Project meets the three aims of paragraph 5.10.9 of the NPSfP. The control of noise and vibration effects during construction is set out in the **Outline CEMP [TR030008/APP/6.5]** which is secured by Requirement 6 of the **draft DCO [TR030008/APP/2.1]**. As such, the Project is in accordance with the NPSfP in relation to noise and vibration impacts. Accordingly, the Project accords with relevant policy relating to noise and vibration in the NPSfP and this weighs in favour of the making of the Order.

7.13 Landscape and Visual Impacts

Requirements of the NPSfP and EIMP - Landscape Impact

- 7.13.1 Paragraph 5.11.1 of the NPSfP states that *“landscape and visual effects of proposed projects will vary on a case-by-case basis according to the type of development, its location and the landscape setting of the proposed development. In this context, references to landscape should be taken as covering seascape and townscape, where appropriate.”*
- 7.13.2 Objective 5 of the EIMP seeks to *“conserve nationally protected landscapes and ensure that decisions consider the seascape of the local area.”* The EIMP also describes the scope and application of the Seascape Character Area.
- 7.13.3 In providing guidance for the decision-maker paragraph 5.11.6 of the NPSfP states that *“Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate”.*

Requirements of the NPSfP - Visual Impact

- 7.13.4 In providing guidance for the decision-maker paragraph 5.11.6 of the NPSfP states that *“The decision-maker will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development. Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.”*

Assessment conclusions – Landscape Impact

- 7.13.5 An assessment of the landscape and visual impacts of the Project, including measures incorporated to reduce impacts, is provided in **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]**.
- 7.13.6 **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** explains that the Project is partly located within National Character Area 41 (“NCA” 41): Humber Estuary which has international significance as a Ramsar site, along with several other designations. The Project is also located within Marine Character Area 6 (“MCA” 6) (Humber Waters) of the National Seascape Character Assessment for England. 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.
- 7.13.7 At a regional scale the Project 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). The NELC Landscape Character Assessment (Ref 1-34) divides the landscape of North East Lincolnshire into three broad Character Areas, with the Project being located within Area A - Humber Estuary. Area A - Humber Estuary is sub-divided into Local Landscape Types (LLTs), with the Project located within LLT 1 Industrial Landscape.
- 7.13.8 Table 13-5 of **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** sets out both embedded and standard mitigation measures, with embedded mitigation measures including the protection of trees during construction. Table 13-7 within **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** provides the assessment of landscape and seascape effects during construction. Effects on NCA41, MCA6, LLT1 and LLT2 are not significant during construction. However, effects on the Site and its immediate setting are significant. This is due to construction activity including temporary construction compounds and laydown areas and vegetation removal including at the Long Strip. There will also be a reduction in tranquillity generally, however, this will be less pronounced due to its location adjacent to existing industrial areas. This significant effect is short term and temporary.
- 7.13.9 Table 13-8 within **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** provides the assessment of landscape and seascape effects during operation. Effects on all landscape types (NCA41, MCA6, LLT1 and LLT2), including the Site and its immediate setting are assessed as not significant.

Assessment conclusions – Visual Impact

- 7.13.10 **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** assesses visual effects at 11 viewpoints which represent the likely views experienced by a range of visual receptors, including residential, recreational, commercial, and road users.
- 7.13.11 During construction, major adverse significant effects would be experienced in relation to views from the Public Rights of Way (“PRoW”) Bridleway 36 and the proposed English Coastal Path (Viewpoints 2 and 3) and from the residential properties located on Queens Road (Viewpoint 11). Furthermore, there would be changes in the view through the addition of detracting visual features associated with the construction process, visual disturbance, and the progressive introduction of new large-scale structures at various stages of development. **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** concludes that the visual effects at the construction stage are assessed to be short term and reversible.
- 7.13.12 During operation, **Chapter 13: Landscape Visual Impact [TR030008/APP/6.2]** concludes that there will be significant visual effects on recreational users of the ProW Bridleway 36 and the proposed English Coastal Path (Viewpoints 2 and 3). The opportunity for mitigation of the visual effects of the Project at these viewpoints is limited due to the size and scale of the Project. The addition of landscape features such as trees and woodland would not be effective in reducing these effects on visual amenity. The visual effects during operation are assessed to be long term and reversible for landside infrastructure and permanent for marine infrastructure.

Appraisal

- 7.13.13 The Project has been designed to take account of the existing landscape. The area is characterised by heavy industry and port related development, with associated lighting and infrastructure. The form and nature of the Project would comprise similar characteristics to existing developments, which once constructed would integrate with and form part of the existing industrialised landscape. The loss of woodland within the Long Strip would not inherently change the landscape character of the Site or its immediate surroundings. The landscape impact of the Project is not significant during construction with the exception of adverse effects on the Site and its immediate setting, although this is short term and temporary, nor is it significant at operation.
- 7.13.14 The very substantial benefits of the Project are set out in **Section 5.2** of this Planning Statement. When considered against these very substantial benefits, the residual adverse effects in relation to the viewpoints identified are clearly outweighed.
- 7.13.15 As demonstrated, the Applicant has sought to minimise harm to the landscape through the provision of mitigation measures. Accordingly, the Project accords with relevant policy relating to landscape and visual impacts in the NPSfP and this weighs in favour of the making of the Order.

7.14 Historic Environment

Requirements of the NPSfP

- 7.14.1 Paragraph 5.12.1 of the NPSfP recognises that *“The construction, operation and decommissioning of port infrastructure has the potential to result in adverse impacts on the historic environment.”* Paragraph 5.12.5 of the NPSfP states that *“The decision-maker should also consider the impacts on other non-designated heritage assets, as identified either through the development plan making process (local listing) or through the decision-making process on the basis of clear evidence that the assets have a significance that merits consideration in its decisions, even though those assets are of lesser value than designated heritage assets.”*
- 7.14.2 In providing guidance to the decision-maker, paragraph 5.12.11 of the NPSfP states that *“In considering the impact of a proposed development on any heritage assets, the decision-maker should take into account the particular nature of the significance of the heritage assets and the value that they hold for this as well as future generations. This understanding should be used to avoid or minimise conflict between conservation of the significance and proposals for development.”*
- 7.14.3 Paragraph 5.12.12 states that, *“The decision-maker should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The decision-maker should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The decision-maker should have regard to any relevant local authority development plans or local impact report on the proposed development in respect of the factors”.*
- 7.14.4 Paragraph 5.12.13 expects there to be a presumption in favour of the conservation of designated heritage assets.
- 7.14.5 Furthermore, paragraph 5.12.14 states that, *“Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that, the greater the harm to the significance of the heritage asset, the greater the justification will be needed for any loss. Where the application will lead to substantial harm to or total loss of significance of a designated heritage asset, the decision-maker should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm.”*
- 7.14.6 Paragraph 5.12.16 of the NPSfP guides the decision-maker to treat favourably applications that preserve the setting of a heritage asset, or that better reveal the significance of the asset.

Requirements of the Decision Regulations

- 7.14.7 As noted in section 2.3 of this Planning Statement, Regulation 3 of the Decisions Regulations relates to listed buildings, conservation areas and scheduled monuments. It requires that the decision maker:

“3 (1) When deciding an application which affects a listed building "must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses" (Regulation 3(1))

3 (2) When deciding an application relating to a conservation area "must have regard to the desirability of preserving or enhancing the character or appearance of that area" (Regulation 3(2))

3 (3) when deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting "must have regard to the desirability of preserving the scheduled monument or its setting" (Regulation 3(3))”

Assessment conclusions - Terrestrial Heritage

- 7.14.8 **Chapter 14: Historic Environment (Terrestrial) [TR030008/APP/6.2]** concludes that in terms of the terrestrial historic environment, no designated heritage assets have been identified that would have the potential to experience significant effects as a result of the Project. There are also no significant effects on any designated assets within the 2km study area.

Assessment conclusions - Marine Heritage

- 7.14.9 **Chapter 15: Historic Environment (Marine) [TR030008/APP/6.2]** presents a marine archaeological study of the Site including an assessment of the value and sensitivity of marine or intertidal archaeological receptors within the Site. Within the study area for the assessment, no features have been confirmed as having high archaeological value.
- 7.14.10 With the implementation of the appropriate mitigation measures, marine heritage effects are predicted to be negligible and not significant during the construction and operational phase.

Appraisal

- 7.14.11 There are no significant effects as a result of the Project during construction and operation on designated and non-designated assets. The Project is in fact considered to be beneficial as further analysis of the peat/organic alluvium deposits retained by the evaluation work (as included within the **Outline CEMP [TR030008/APP/6.5]**) will aid understanding of these deposits. This analytical work, on samples which were difficult to gain and would not have been sought if it were not for the Project, will be beneficial to our understanding of past climates, environments, and human use of the land across the Humber region. Accordingly the Project accords with relevant policy relating to historic environment in the NPSfP and this conclusion weighs in favour of the making of the Order.
- 7.14.12 Given the above, consideration of the prescribed matters set out in Regulation 3 of the Decisions Regulations does not materially alter the planning balance in this case.

7.15 Land Use

Requirements of the NPSfP

- 7.15.1 The NPSfP states at paragraph 5.13.1 that *“A port infrastructure project will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of port infrastructure projects, there may be particular effects on open space, including green infrastructure.”* Paragraph 5.13.2 makes reference to quality open spaces and sports and recreational facilities, whilst paragraph 5.13.4 refers to development in the Green Belt.
- 7.15.2 Paragraph 5.13.5 of the NPSfP states that the *“ES should identify existing and proposed land uses near the project, as well as any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing.”*
- 7.15.3 The NPSfP states at paragraph 5.13.8 that *“Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5), except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise impacts on soil quality, taking into account any mitigation measures proposed”.*
- 7.15.4 Paragraph 5.13.9 of the NPSfP states that applicants *“should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.”*
- 7.15.5 Paragraph 5.13.12 states that where a project conflicts with a proposal in a development plan, the decision-maker should take account of the stage which the development plan document in England has reached in deciding what weight to give the plan for the purposes of determining the planning significance of what is replaced, prevented or precluded.
- 7.15.6 Paragraph 5.13.16 of the NPSfP states that *“In considering the impact on maintaining coastal recreation sites and features, the decision-maker should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast.”*
- 7.15.7 The NPSfP states at paragraph 5.13.20 that where *“green infrastructure is affected, the decision-maker should, if necessary, consider imposing requirements to ensure the connectivity of the green infrastructure network is maintained.”*

Requirements of the Decisions Regulations

- 7.15.8 Regulation 3A of the Decisions Regulations sets out that the Secretary of State must have regard to the need to prevent interference with legitimate uses of the sea, including fishing; mineral extraction; and amenity use.

Assessment conclusions

- 7.15.9 In relation to land use, **Chapter 23: Socio-economics [TR030008/APP/6.2]** explains there are a number of fishing bays used by recreational sea anglers along Immingham Sea Wall to the east. During construction, as shown on Sheet 3 of the **Stopping up and Restriction of use of Streets and Public Rights of Way Plan [TR030008/APP/4.7]**, the informal access by recreational sea anglers to the area along the sea wall will be permanently removed. Whilst access to part of the sea wall is prevented, there remain opportunities for sea angling on the rest of the wall. As such, the effect of the Project on sea anglers is considered not significant.

Appraisal

- 7.15.10 In terms of green infrastructure, the Project would result in the removal of approximately 40% of the Long Strip woodland, however, a veteran Ash tree and a strip of woodland would be retained along the eastern boundary of Work No. 1 and Work No. 2. To provide appropriate compensation for the tree loss, an **Outline Woodland Compensation Strategy [TR030008/APP/6.8]** has been prepared. Approval of a final Woodland Compensation Plan and compliance with it is secured under Requirement 11 of the **draft DCO [TR030008/APP/2.1]**. Furthermore, an **Outline Landscape and Ecology Management Plan [TR030008/APP/6.9]** is provided, which defines the opportunities which are available within the Site Boundary to provide landscape and ecological measures. Approval and implementation of details of landscape and ecology measures, to accord with the **Outline Landscape and Ecology Management Plan [TR030008/APP/6.9]**, is secured by Requirement 10 of the **draft DCO [TR030008/APP/2.1]**.
- 7.15.11 The Project is not located on land that is in use for sports and recreation or on land designated as Green Belt.
- 7.15.12 The West Site is located on land with an extant planning permission (DM/1027/13/OUT) for B1, B2 and B8 uses, which is explained in **Appendix D** of the **Planning Statement [TR030008/APP/7.1]**. However, as reported in **Chapter 23: Socio-Economics [TR030008/APP/6.2]** whilst this planning permission has been implemented in relation to the delivery of an access road, reserved matters approval has not been applied for or obtained in respect of any built development under the permission and subject to confirmation of the DCO, ABP do not intend to pursue any reserved matters approvals under this extant planning permission within the Site. Once the DCO is confirmed the Applicant proposes to implement the DCO and the hydrogen production facility will be delivered by Air Products on this land. If this is the case, the development as consented under the extant planning permission at West Site could not come forward.
- 7.15.13 The hydrogen production facility aligns with the formal allocation of parts of the Site for business, general industrial and storage and distribution use as the proposed use of the hydrogen production facility is properly characterised as employment development associated with bringing forward the expansion of the Port of Immingham, making appropriate use of allocated employment sites (please refer to **Appendix D: Planning History and Land Use Designations of the Planning Statement [TR030008/APP/7.1]**). The hydrogen production

process would involve a chemical process to convert the ammonia into green hydrogen and would create jobs during construction and once operational.

- 7.15.14 As confirmed in **Appendix 21.A: Agricultural Land Classification Survey Report [TR030008/APP/6.4]**, the agricultural land quality of the West Site and the temporary construction area has been surveyed and categorised as being subgrade 3b. Therefore, in accordance with the NPSfP, the Project will be constructed on land which is poorer quality (not best and most versatile) and in the case of the temporary construction area, will revert back to its previous use when the Phase 1 construction stage is completed.
- 7.15.15 As confirmed on the NELC policy map for minerals, the Project is not located in a minerals safeguarding area.
- 7.15.16 Public Bridleway 36, which runs north from Laporte Road to the Humber, along the east edge of the Long Strip woodland, will be temporarily closed and diverted during the first construction phase of the Project as shown on the **Stopping Up and Restriction of use of Streets and Public Rights of Way Plan [TR030008/APP/4.7]**, after which it would be reopened. The residual effect is not significant. The temporary diversion would be within the same surroundings, and there is limited existing accessibility and usage. During construction, there will be some temporary and permanent suspension of informal accesses as shown on the **Stopping Up and Restriction of use of streets and Public Rights of Way Plan [TR030008/APP/4.7]**. The effects are assessed as not significant in **Chapter 23: Socio-economics [TR030008/APP/6.2]**. Furthermore, it has been demonstrated that access to the coast has been maintained for users of Public Bridleway 36 and for the sea anglers as there remain opportunities for sea angling on the rest of the wall.
- 7.15.17 Overall, in terms of land use the Project has minimal impact since it has no effect on sports and recreational buildings and land, the countryside, the Green Belt or on agricultural land considered to be best and most versatile. Where adverse effects have been identified, (namely the loss of woodland in the Long Strip) compensation, in the form of off-site compensatory woodland which is secured by Requirement 11 of the **draft DCO [TR030008/APP/2.1]**. The Project is not considered to conflict with any policies within the NELLP in respect of land use (as per paragraph 5.13.12 of the NPSfP). The Project is therefore in accordance with NPSfP paragraphs in relation to land use. Accordingly, the Project accords with relevant policy relating to land use in the NPSfP and this weighs in favour of the making of the Order.
- 7.15.18 Given the above, consideration of the prescribed matters set out in Regulation 3A of the Decisions Regulations relating to fishing, mineral extraction and amenity use does not materially alter the planning balance in this case.

7.16 Socio-economic impacts

Requirements of the NPSfP and local plan policy

- 7.16.1 Paragraph 5.14.1 of NPSfP recognises that the construction, operation and decommissioning of port infrastructure may have socio-economic impacts at local and regional levels. Paragraph 5.14.2 states that *“Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES”*.
- 7.16.2 In guidance to the decision maker, paragraph 5.14.6 of the NPSfP states that *“The decision-maker should have regard to the potential socio-economic impacts of new port infrastructure identified by the applicant and from any other sources that the decision-maker considers to be both relevant and important to its decision.”*
- 7.16.3 In this context, it is relevant to note that the NELLP seeks to secure significant economic growth within the district to deliver 8,800 new jobs during the plan period (2013 and 2032). Policy 11 of the NELLP provides that the council will support development proposals that directly relate to the development of local skills and training opportunities.

Requirements of the Decisions Regulations

- 7.16.4 Regulation 3A of the Decisions Regulations sets out that the Secretary of State must have regard to the need to protect human health.

Assessment conclusions

- 7.16.5 **Chapter 23: Socio-economics, [TR030008/APP/6.2]** presents the findings of an assessment of socio-economic effects including upon employment, the local economy, development land, public rights of way and local amenities and land use. A Human health and Wellbeing Impact Assessment has also been undertaken which is presented at **Chapter 24: Human Health and Wellbeing [TR030008/APP/6.2]**. This has assessed the principal health benefits and disbenefits to residents of the local community of the Project. An **Equality Impact Assessment [TR030008/APP/7.8]** has also been prepared to support the Application which demonstrates the how the Applicant has taken into account the interests of people who share protected characteristics as defined by the Equality Act 2010.
- 7.16.6 **Chapter 23: Socio-economics [TR030008/APP/6.2]** concludes the residual significant beneficial effects associated with the construction period relate to construction employment generation (major beneficial), generation of gross value added (moderate beneficial) and the loss of residential properties (moderate adverse). During operation, residual significant effects relate to operational employment generation (moderate beneficial).

7.16.7 **Chapter 24: Human Health and Wellbeing [TR030008/APP/6.2]** concludes that following the implementation of embedded, standard, and additional mitigation measures (as reported in the other relevant assessments of the ES including implementation of the **Outline CTMP [TR030008/APP/6.7]** and noise specific impact avoidance measures), no significant adverse effects are identified in the construction, operation, or decommissioning phases.

Appraisal

7.16.8 **Chapter 23: Socio-economics [TR030008/APP6.2]** explains that the Project is anticipated to provide an average of 627 net jobs during the construction period, with the likely peak workforce anticipated to be 1,012 jobs during Phase 1 (792 landside jobs and 220 marine jobs). During operation, the total net employment is anticipated to be 207 jobs. The gross value added (growth added through employment opportunities) during the construction period is £35m, of which over £24m is projected to remain within North East Lincolnshire.

7.16.9 **Chapter 23: Socio-economics [TR030008/APP/6.2]** sets out that Bridleway 36 which will be closed from Laporte Road to the sea wall during construction of Phase 1 and temporarily diverted. The additional journey length for users of the PRow as a result of this diversion is short in length and a suitable alternative has been provided, therefore the effect is not significant.

7.16.10 **Chapter 23: Socio-economics [TR030008/APP/6.2]** identifies a significant effect relating to loss of the residential properties on Queens Road which are proposed to be permanently acquired in connection with the Project as explained in the **Statement of Reasons [TR030008/APP/3.2]**. **Chapter 23: Socio-economics [TR030008/APP/6.2]** states that the opportunity for mitigation for the loss of the residential properties and the consequences for development land in the vicinity of the Site is limited due to the nature of the Project, in that certain land uses (such as residential) would not be considered compatible with the proposed hydrogen production facility. However, it explains that this needs to be considered within the context of the existing baseline. The immediate area is industrial in nature and there are a number of other sites in the port which have associated COMAH zones. As also set out in the **Equality Impact Assessment [TR030008/APP/7.8]**, the affected residents on Queens Road are being provided with support in finding alternative accommodation, including the funding of support from specialist valuers, and appropriate compensation payments and relocation costs. Consultation with the residents has been undertaken to understand any protected characteristics they have which may impact their ability to relocate, and to identify any additional support that may be required. This support will continue until appropriate alternative accommodation is identified.

7.16.11 For businesses, the assessment has identified no significant effects during construction and operation.

- 7.16.12 For community facilities, there are no effects during construction. In terms of the impact of a changing influx of workers on primary healthcare and accommodation, this has also been assessed as not significant. **Chapter 23: Socio-economics [TR030008/APP/6.2]** does not identify any further adverse effects for private assets or the influx of workers on primary healthcare with businesses able to continue operating subject to safety planning measures.
- 7.16.13 The Project provides substantial benefits in terms of economic growth and job creation during construction and operation which the decision-maker should consider as per paragraph 5.14.6 and 5.14.8 of the NPSfP. The Project would provide enhancements to both the local and regional economy through direct investment in and around the Port of Immingham by partnering with the supply chain, providing opportunities for training, upskilling, apprenticeships and local employment. Job creation aligns with the strategic objectives of the NELLP which is to secure economic growth and deliver new jobs over the plan period. The decision-maker should give substantial weight to the economic growth benefits of the Project.
- 7.16.14 In conclusion, there are adverse residual effects anticipated in respect of the loss of residential properties, but as demonstrated above the continued residential use of these properties is incompatible with the hydrogen production facility. The opportunities for mitigation are limited, however those affected are being supported to find alternative accommodation where necessary and will be appropriately compensated. There are no impacts to human health as a result of the Project. As set out above in section 7.15 relating to land use, the effect on the PRow, informal accesses and sea anglers has been assessed as not significant. The Project is therefore in accordance with the NPSfP in relation to socio-economic impacts, which weighs in favour of the making of the Order.
- 7.16.15 Given the above, consideration of the prescribed matters set out in Regulation 3A of the Decisions Regulations relating to human health does not materially alter the planning balance in this case.

7.17 Cumulative Impacts

Requirements of the NPSfP and the EIMP

- 7.17.1 Paragraph 4.7.3 of the NPSfP states that when considering cumulative effects: *“the ES should provide information on how the effects of the applicant’s proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence)”*. Paragraph 4.7.4 of the NPSfP requires consideration of how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.
- 7.17.2 Policy ECO1 of the EIMP states that cumulative impacts should be addressed in decision-making.

Assessment conclusions

- 7.17.3 **Chapter 25: Cumulative and In-Combination Effects [TR030008/APP/6.2]** presents an assessment of the cumulative effects derived from a shortlist of schemes, based on a long list of cumulative schemes presented in **Appendix 25.A: Cumulative Effects Assessment Long List [TR030008/APP/6.4]**. The assessment of cumulative effects arising from the Project in combination with other proposed Schemes (inter-project effects) is based upon a review of current submitted planning applications, DCO applications and a study of planning policy documents.
- 7.17.4 **Chapter 25: Cumulative and In-Combination Effects [TR030008/APP/6.2]** identifies that during construction there is the potential for significant beneficial socio-economic effects due to the increase in employment opportunities, and significant adverse effects in relation to landscape effects and visual effects on three viewpoints. During operation, it has been concluded that there are significant beneficial effects relating to the increase in employment opportunities and operational greenhouse gas emissions and significant adverse visual effects on two viewpoints.
- 7.17.5 The assessment also concludes that there would be no significant cumulative effects relating to air quality, noise and vibration, nature conservation (terrestrial), nature conservation (marine ecology), ornithology, marine transport and navigation, historic environment (terrestrial and marine), physical processes, marine water quality, water quality, coastal protection, flood risk and drainage, ground conditions and land quality and major accidents and disasters.

Appraisal

- 7.17.6 For the adverse effects identified, there are no opportunities to provide mitigation over and above that proposed at a project level. The Project is a compatible use located in an established industrial area and utilises allocated employment land. There are significant beneficial effects associated with job creation during construction and operation and greenhouse gas emissions at operation. These factors are beneficial in terms of the economy and community and as such, it is considered that these outweigh the adverse landscape and visual effects. The assessment undertaken accords with the NPSfP at paragraph 4.7.4, and the conclusions reached weigh in favour of the making of the Order.

7.18 Summary

- 7.18.1 As set out within this chapter of the Planning Statement, the Project complies fully with the NPSfP, MPS, EIMP and relevant local policy. This has been achieved through design development, informed by the outcomes of the EIA process, two rounds of statutory consultation and ongoing engagement. This has resulted in a Project with limited adverse effects, which is compliant with planning policy, and which would deliver very substantial public interest benefits.
- 7.18.2 Whilst there are some residual adverse effects in relation to the Long Strip woodland and visual effects for users of the PRoW and residents of Queens Road during construction, these are relatively limited and localised in nature, and clearly outweighed by the very substantial benefits of the Project which are of national and regional as well as local significance.

8 Conclusion

- 8.1.1 The NPSfP provides the policy framework for the decision on the Application. Pursuant to s104(3) of the 2008 Act the Secretary of State must decide the application in accordance with the NPSfP save for in a limited number of circumstances under s104(4) to (8). Chapter 7 and Appendix A of this Planning Statement demonstrate that the Project is in accordance with the NPSfP.
- 8.2 Section 104(2) of the 2008 Act
- 8.2.1 Section 104(2) of the 2008 Act states that in deciding an application for development consent the Secretary of State must have regard to:
- a. The relevant national policy statement;
 - b. The appropriate marine policy documents;
 - c. Local impact reports;
 - d. Prescribed matters; and
 - e. Any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.
- 8.2.2 The relevant national policy statement in respect of the Project is the NPSfP. **Chapter 7** and **Appendix A** of this document demonstrate that the Project is in accordance with the NPSfP.
- 8.2.3 The appropriate marine policy documents are the Marine Policy Statement and the East Inshore Marine Plan. **Chapter 7** and **Appendix B** of this Planning Statement demonstrate that the Project is in accordance with the East Inshore Marine Plan.
- 8.2.4 A Local Impact Report has not been prepared by NELC yet, however the Project is in accordance with local policy to the extent that it is relevant, as demonstrated in **Appendix C** of this Planning Statement.
- 8.2.5 In terms of prescribed matters, it has been demonstrated that a decision to grant consent to the Project would be appropriate having regard to the matters prescribed by regulations 3, 3A, 6 and 7 of the Decisions Regulations. Furthermore, **Appendix F** of this Planning Statement provides a statement in accordance with Regulation 6(3) of the APFP Regulations to demonstrate why the making of the DCO is desirable in the interests of securing the improvement of the Port of Immingham Statutory Harbour in an efficient and economical manner, and why the making of the DCO is desirable in the interests of facilitating the efficient and economic transport of goods and passengers by sea.
- 8.2.6 In terms of other matters this Planning Statement considers other important and relevant matters, including the energy national policy statements which support the need for port infrastructure to meet the needs of the energy sector. These too weigh in favour of the grant of consent.

- 8.3 Section 104(3) to 104(8) of the 2008 Act**
- 8.3.1 Section 104(3) of the 2008 Act requires that applications for development consent must be decided by the Secretary of State in accordance with the relevant national policy statement except to the extent that one or more of subsections 104(4) to 104(8) apply.
- 8.3.2 The Project is compliant with the policies in the NPSfP. It follows that the presumption in favour of the grant of consent in paragraph 3.5.2 of the NPSfP applies in this case.
- 8.3.3 None of the limited exceptions in subsections 104(4) to 104(8) are engaged for the reasons summarised below.
- 8.3.4 Section 104(4) applies if deciding the application in accordance with any relevant national policy would lead to the UK being in breach of any of its international obligations. There is no evidence to suggest that the granting of the DCO would lead to the UK being in breach of any of its international obligations.
- 8.3.5 Section 104(5) applies if deciding the application in accordance with any relevant national policy would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment. There is no evidence to suggest that the granting of the DCO would lead the Secretary of State to be in breach of any such duty.
- 8.3.6 Section 104(6) applies if deciding the application in accordance with any relevant national policy would be unlawful by virtue of any enactment. There is no evidence to suggest that the granting of the DCO would be unlawful by virtue of any enactment.
- 8.3.7 Section 104(7) applies if the adverse impact of the development would outweigh its benefits. As demonstrated in **Chapter 7** of this Planning Statement the adverse impacts of the Project are relatively limited in scale and local in nature, and do not give rise to a conflict with the NPSfP. By contrast, the benefits are very substantial and important at both a national and regional as well as local level, leading to an overwhelming balance in favour. In terms of S104(7), the benefits of the Project clearly and decisively outweigh its adverse impacts.
- 8.3.8 S104(8) applies if any condition prescribed for deciding an application otherwise in accordance with a national policy statement is met. There is no evidence to suggest that any condition is met in relation to the Project.
- 8.4 Conclusion**
- 8.4.1 This Planning Statement has demonstrated that the Project is in accordance with the NPSfP, which contains at paragraph 3.5.2 a presumption in favour of granting consent to applications for port development, a presumption that the Project benefits from.
- 8.4.2 The Project would help to meet an urgent and established need for port infrastructure for the import and export of liquid bulk energy products in the Humber to support the transition to net zero and the decarbonisation of the Humber industrial cluster. Constructing the Project would deliver very substantial public interest benefits at a national and regional, as well as local level.

- 8.4.3 None of the limited exceptions in S104(4)-(8) of the 2008 Act apply. In particular, the adverse impacts that do arise are relatively limited in scale and local in nature and are significantly outweighed by the very substantial public interest benefits.
- 8.4.4 Given the urgent need to provide port infrastructure and the substantial benefits delivered by the Project, there is a clear and compelling case for the DCO for the Project to be made.

9 References

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