Immingham Green Energy Terminal

Preliminary Environmental Information Report

Appendix 9.C – Habitats Regulations Assessment Stage 1 Screening

Associated British Ports

December 2022

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1 Introduction

1.1.1 The Immingham Green Energy Terminal (hereafter 'the Project') is a proposal by Associated British Ports ('ABP') (hereafter 'the Applicant') to construct and facilitate the operation by multiple users of a multi-user liquid bulk jetty, which would be located on the eastern side of the Port of Immingham (hereafter 'the Port). The Project is a Nationally Significant Infrastructure Project (NSIP) and will therefore require submission of an application for a Development Consent Order (DCO).

1.1.2 This Habitats Regulations Assessment (HRA) Stage 1 Screening report has been prepared to support the Preliminary Environmental Information Report (PEIR) that has been prepared for the Project. This report provides the preliminary findings of Stage 1 Screening. A full HRA report, including screening matrices will be provided as part of the DCO application.

1.1.3 The Site is located in North East Lincolnshire on the south bank of the Humber Estuary to the east of the Port. **Figure 1.1** in (PEI Report, Volume III) illustrates the Project's location, which is approximately centred on National Grid Reference (NGR) E520783 N415271.

1.2 Project background

1.2.1 ABP, the owner and operator of the Port of Immingham, is proposing this Project which comprises the construction, operation and maintenance of a terminal to facilitate the import and export of bulk liquids associated with the energy sector, together with associated development. The terminal consists of a jetty and associated loading/ unloading infrastructure, pipelines and metering systems.

1.2.2 Initially, the terminal would be used for the import and export of green ammonia to be converted to green hydrogen. To facilitate this, an ammonia handling and storage facility and a hydrogen production facility would be constructed as part of the Project. Other proposed uses for the green energy terminal will come forward in due course as separate applications. It is anticipated that future users are likely to include customers in the carbon capture sector.

1.2.3 The Project will involve marine works within the Humber Estuary and landside works on the existing port estate. A detailed description of the works is provided in **Chapter 2:** The Project (PEI Report, Volume I).

1.2.4 **Marine infrastructure works** – The marine works will comprise a number of distinct components, namely:

a. An open piled approach jetty approximately 1km in length;

b. The jetty head would comprise structures including (un)loading platforms, two berthing dolphins with fenders and mooring dolphins (likely 12);

c. Appropriate topside infrastructure installed on the jetty to load and unload vessels;

d. A small capital dredge on the larger western berth;

e. Disposal of dredged material at sea at licensed disposal sites; and

f. Periodic maintenance dredging during operation.

1.2.5 **Landside infrastructure works** – The landside works consist of the following:

a. Pipework and pipelines required to link the jetty and the green hydrogen production operations;

b. A maintenance access track running parallel to the above-ground pipelines connecting the jetty to the East Site;

c. A control building on the landside, at the foot of the jetty, to accommodate personnel operating the jetty;

d. An ammonia storage tank;

e. Up to six converters for hydrogen (H_2) production;

f. Hydrogen liquefaction and storage facilities;

g. Green hydrogen export facilities;

h. New access roads and junctions into the Site; and

i. Grid connection to supply the Site with electricity from the local grid.

1.2.6 **The consenting route** – In view of the proposed capacity of the IGET, which has to be sufficient to service the predicted throughput of wheeled cargo that the Terminal will be required to handle, the Project will be taken forward as a NSIP. In light of this, ABP has prepared a PEIR as part of the DCO application process. Ultimately the DCO application will be submitted to the Secretary of State for Transport for authority to construct and then operate the the Project. Additional consents and approvals that are required for the construction and operation of the Project will, with the agreement of the appropriate consenting bodies, be incorporated within the final DCO.

1.2.7 ABPmer has been commissioned to prepare a report to inform HRA for the IGET project. The information within this report will assist the Competent Authority (in this case the Secretary of State for Transport) with their review under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) (Ref 1) (commonly referred to as the 'Habitats Regulations')[1] in determining the need for Appropriate Assessment (AA).

1.2.8 This report has been informed by the preliminary assessments undertaken in **Chapter 9**: Nature Conservation (Marine Ecology) and **Chapter 10**: Ornithology (PEI Report, Volume I). A description of the Project and details on construction and operational methodologies are provided in **Chapter 2**: The Project (PEI Report, Volume I).

[1] Following the UK leaving the EU, these have been modified by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Ref 2).

Plate 1. Location of the Project

1.3 Need for a Habitats Regulations Assessment

1.3.1 The requirements of Council Directive 92/43/EEC (as amended) on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') (Ref 1) and Council Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive') (Ref 4) have been transposed into UK legislation through the Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the 'Habitats Regulations') ((Ref 1).[2].

1.3.2 The Habitats Regulations provide for the protection of European designated sites including Special Areas of Conservation (SACs), Sites of Community Importance (SCIs), candidate SACs (cSACs) and Special Protection Areas (SPAs). According to Paragraph 181 of the National Planning Policy Framework (NPPF) (Ref 5), in England these regulations also apply to Ramsar sites (designated under the 1971 Ramsar Convention for their internationally important wetlands), possible SACs (pSAC), potential Special Protection Areas (pSPA), and proposed Ramsar sites and any sites identified, or required, as compensatory measures for adverse effects on any of the aforementioned sites. Collectively, these sites are referred to as European/Ramsar sites in this HRA (unless they are referring specifically only to European sites and/or Ramsar sites alone).

1.3.3 As Competent Authority, the Secretary of State for Transport is required to take account of the Habitats Regulations and produce an AA for any plans or projects that have the potential to directly and/or indirectly affect European/Ramsar sites. As summarised above, Regulation 63 of the Habitats Regulations states that:

> *"A competent authority, before deciding to undertake, or give any consent, permission, or other authorisation for a plan or project which:*
>
> *a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and*
>
> *b) is not directly connected with or necessary to the management of the site*
>
> *must make an appropriate assessment of the implications for the site in view of that site's conservation objectives".*

1.3.4 The decision as to whether an AA is required is based on an assessment of likely significant effect (LSE) (see Plate 2). LSE is recognised as being a 'coarse filter' judgement or a statement that the anticipated effects of the proposal will be more than trivial (i.e. that the anticipated changes resulting from a proposal have the potential to impact on an interest feature of a European/Ramsar site). If a project (or plan) could have an LSE on a European/Ramsar site, it does not automatically follow that an impact will occur. The decision of LSE is purely an indication of the need for an AA.

1.3.5 In an AA, it is necessary to determine whether the project or plan would result in an adverse effect on the integrity (AEOI) of the European/Ramsar site(s) in view

[2] Following the UK leaving the EU, these have been modified by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Ref 2).

of the site's conservation objectives. The integrity of a site has been defined as the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified (Ref 6).

1.3.6 Where it cannot be demonstrated that a project will not have an AEOI, or there is insufficient certainty of an avoidance of an adverse effect, the activities can only proceed if it can be demonstrated that there are no more suitable (less damaging) alternatives, and that there are Imperative Reasons of Overriding Public Interest (IROPI) sufficient to justify the proposed project. In certain circumstances, the Secretary of State may be required to ensure that adequate compensation, usually in the form of replacement habitat, has been provided to protect the overall coherence of the Natura 2000 network (i.e. European/Ramsar sites).

1.3.7 The decision as to whether the integrity of the site is adversely affected will be made by the Secretary of State for Transport as Competent Authority, in consultation with Natural England.

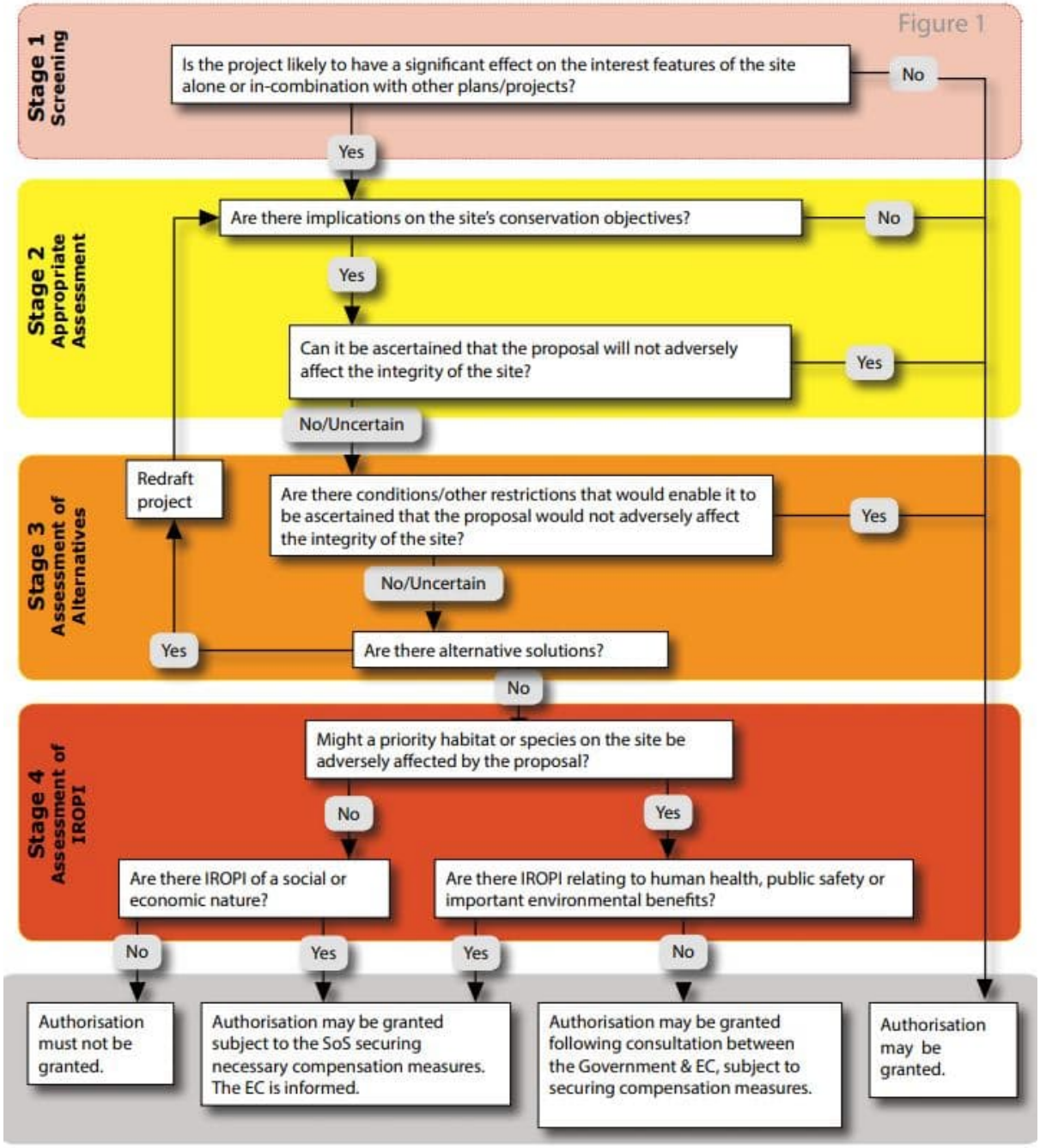
1.3.8 An outline of the HRA process for NSIPs is shown in Plate 2 and comprises the following four key stages, as detailed in the PINS Advice Note 10 (Ref 7):

a. **Stage 1 Screening**: The process of identifying potentially relevant European/Ramsar sites, and whether the Project is likely to have a significant effect on the qualifying features of the site, either alone or in-combination with other plans and projects. If it is concluded at this stage that there is no potential for LSE, there will be no requirement to carry out subsequent stages of the HRA;

b. **Stage 2 Appropriate Assessment**: Where LSE for a European/Ramsar site(s) cannot be ruled out, either alone or in-combination with other plans and projects, assessment of the potential effects on the integrity of the site(s), again either alone or in-combination with other plans and projects, in view of its qualifying features and conservation objectives is required. Where there are potential adverse effects, an assessment of mitigation options has to be carried out and mitigation measures (where available) are proposed to address the effects. If, despite the identified measures of mitigation, there still remains a potential AEOI, the HRA must progress to Stages 3 and 4;

c. **Stage 3 Assessment of Alternative Solutions**: Identifying and examining whether there are any alternative solutions which would offer a means to achieve the objectives of the project but which would also avoid or have a lesser effect on the site(s); and

d. **Stage 4 Imperative reasons of overriding public interest**: Where no alternative solution exists and where an AEOI remains, the next stage of the process is to assess whether the development is necessary for IROPI and, if so, to identify the compensatory measures needed to maintain site integrity or the overall coherence of the designated site network.



Source: 2.1.2 PINS Advice Note 10 (Ref 7)

Plate 2. Summary of the key stages comprising an HRA

1.4 Report structure

1.4.1 This report has been structured as follows:

a. **Section 1: Introduction** provides a brief description of the IGET project and an overview of the need for an HRA;

b. **Section 2: Consultation** presents the outcome of the consultation that has been undertaken to date, along with how it has influenced the HRA;

c. **Section 3: Stage 1 - Screening** reviews the location of the Project in relation to European/Ramsar sites and the potential for the it to result in an LSE on the interest features of these sites;

d. **Section 4: Summary** presents a brief summary of the preliminary findings of this report and next steps.

2 Consultation

2.1.1 A scoping exercise was undertaken in August 2022 in line with the requirements of Section 42 of the Planning Act 2008 (Ref 8). Feedback was requested from the Planning Inspectorate and a range of stakeholders including statutory bodies and local authorities. Consultation responses specific to the assessment of effects on European/Ramsar sites and interest features as a result of the construction and operation of the IGET project are outlined in **Table 1**.

2.1.2 Any feedback received in response to the publication of the Preliminary Environmental Information Report (PEIR) including this HRA Stage 1 Screening report, will be taken into account and will inform the final HRA report which will submitted as part of the DCO application.

Table 1. Summary of consultation responses relating to HRA

Consultee	Reference, Date	Summary of Response	How comments have been addressed
Natural England	Scoping opinion, Chapter 5: Air Quality 10th October 2022	We note and welcome the report's reference to the assessment of air quality issues arising from traffic generation during the construction and operational lifetime of the scheme (para 5.2.1). Natural England has produced guidance for public bodies to help assess the impacts of road traffic emissions to air quality capable of affecting European Sites. Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations -NEA001	The air quality assessment does quantify the impact of onsite emissions, including those from docked vessels, on air quality sensitive habitats, including nearby saltmarsh habitat within the SAC.
Natural England	Scoping opinion, Chapter 5: Air Quality 10th October 2022	With regard to the construction phase the focus onPM10,set out in this para (5.6.2) should be reviewed with regard to its suitability for ecological receptors including designated sites in the context of the APIS information (site relevant critical loads).NO2 and PM2.5 should also be included in this assessment.	The construction phase assessment reported in the PEIR has been undertaken in line with relevant IAQM guidance and includes consideration of relevant impacts at sensitive habitats.
Planning Inspectorate	Scoping opinion, Chapter 7: Nature Conservation (Terrestrial Ecology) 10th October 2022	Impacts on designated marine ecology features would be assessed in accordance with ES Chapter 8 and impacts on designated ornithology features would be assessed in accordance with Chapter 9. The Inspectorate agrees that this matter can be scoped from terrestrial ecology assessment on the basis that no impacts are anticipated on the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar and Site of Special Scientific Interest (SSSI), collectively referred to as the Humber EMS, and as impacts on marine ecology and ornithology for these designated sites will be assessed elsewhere in the ES.	Scoping opinion noted. The effects on European designated sites are considered in Chapter 9: Nature Conservation (Marine Ecology) and in the HRA Screening report (this report).

Consultee	Reference, Date	Summary of Response	How comments have been addressed
Natural England	Scoping opinion, Chapter 9: Nature Conservation (Marine Ecology) 10th October 2022	" The development site is within or may impact on the following European/internationally designated nature conservation site(s): •Humber Estuary Special Area of Conservation (SAC); •Humber Estuary Special Protection Area (SPA); •Humber Estuary Ramsar site. •Greater Wash Special Protection Area (SPA) Natural England broadly agrees with this section of the Scoping Report which detail the potential impact pathways on the designated sites during both construction and operation phases of the proposed development.	Scoping opinion noted. These sites are considered within the HRA Screening report (this report).
Planning Inspectorate	Scoping opinion, Chapter 9: Nature Conservation (Marine Ecology) 10th October 2022	In addition to the Humber Estuary European sites, the Proposed Development may also impact on the Greater Wash SPA and this should be considered within the ES.	Noted. The SPA is included in Chapter 9 and Chapter 10 of the PEIR and is also considered in the HRA Screening report (this report).

3 Stage 1 - Screening

3.1 Screening review

3.1.1 In accordance with PINS Advice Note 10 (Ref 7), the first stage of the HRA involves considering if the plan or project is likely to have a significant effect on interest features of a European/Ramsar site either alone or in-combination with other plans or projects (**Plate 2**).

3.1.2 The entire Humber Estuary is designated as a SAC and a SPA under the Habitats and Birds Directive. It is also classified as a 'Ramsar site' under the Ramsar Convention due to the presence of internationally important wetlands. These designations form the Humber Estuary European Marine Site (EMS). In addition, following advice from Natural England (**Table 1**), there is the potential for the Greater Wash SPA, which is located approximately 20 km from the Project, to be affected as it is designated for a range of seabird and diving bird species. The location of these sites in relation to the Project is shown on Plate 3. The qualifying interest features and conservation objectives of these European/ Ramsar sites are included in **Table 2**.

3.1.3 At this preliminary stage in the assessment process the judgement of potential LSE on European/Ramsar sites and features has been informed by the available baseline information on the location, ecology and/or behaviour of interest features provided in **Chapter 9**: Nature Conservation (Marine Ecology) and **Chapter 10**: Ornithology (PEI Report Volume I). A detailed description of the proposed development is provided in **Chapter 2:** The Project (PEI Report Volume I) which sets out the activities involved during the construction and operational phase of the Project.

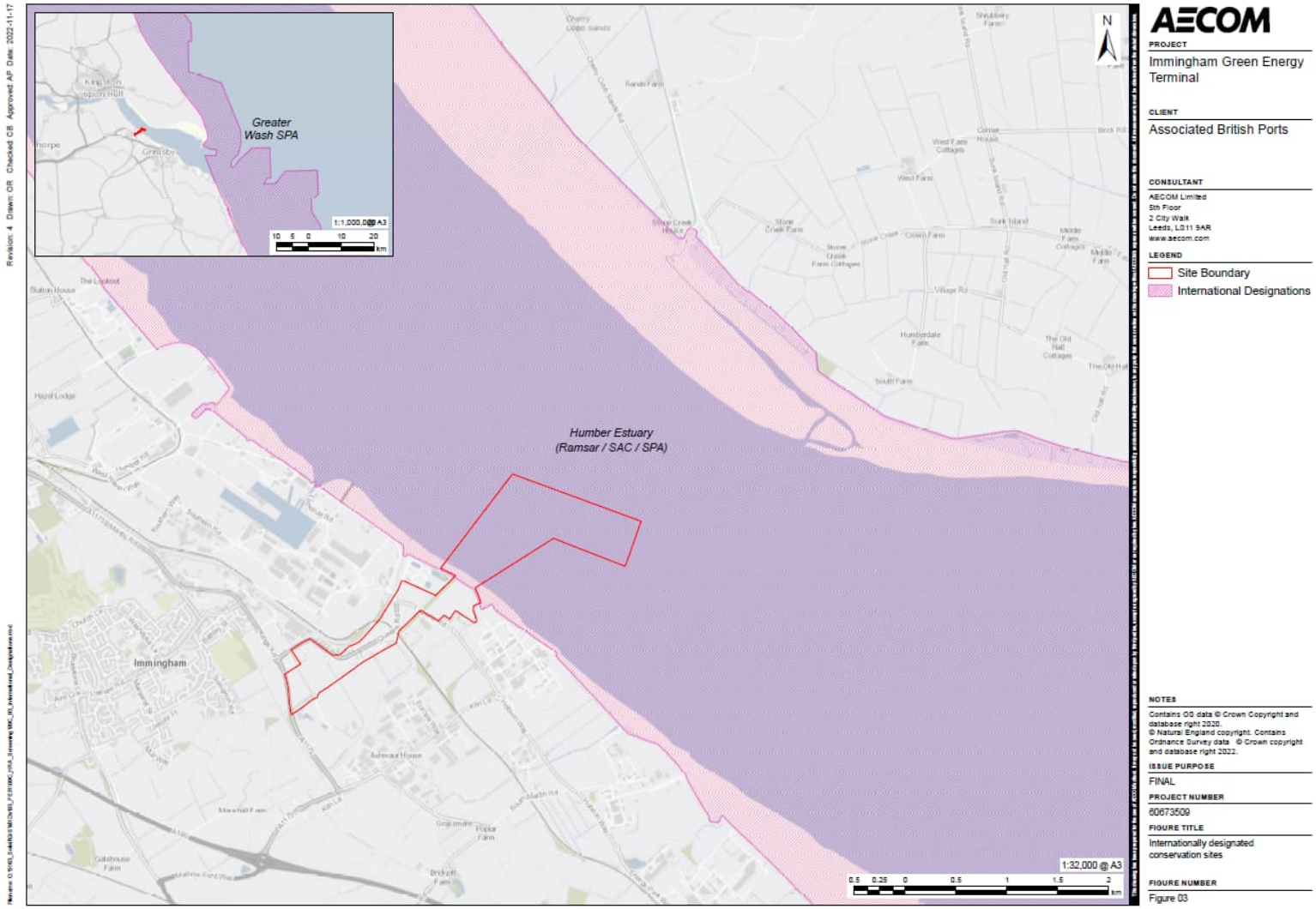


Plate 3. Location of European/Ramsar sites

Table 2. Qualifying interest features and conservation objectives of European/Ramsar sites

Site	Features	Conservation Objectives
Humber Estuary SAC	H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks; H1130. Estuaries; H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats; H1150. Coastal lagoons*; H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand; H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); H2110. Embryonic shifting dunes; H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with Marram; H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*; H2160. Dunes with *Hippophae rhamnoides*; Dunes with sea-buckthorn; S1095. *Petromyzon marinus*; Sea lamprey; S1099. *Lampetra fluviatilis*; River lamprey; and S1364. *Halichoerus grypus*; Grey seal.	With regard to the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of qualifying natural habitats and habitats of qualifying species; • The structure and function (including typical species) of qualifying natural habitats; • The structure and function of the habitats of qualifying species; • The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; • The populations of qualifying species; and • The distribution of qualifying species within the site.

Site	Features	Conservation Objectives
Humber Estuary SPA	A021 *Botaurus stellaris*; Great Bittern (Non-breeding); A021 *Botaurus stellaris*; Great Bittern (Breeding); A048 *Tadorna tadorna*; Common Shelduck (Non-breeding); A081 *Circus aeruginosus*; Eurasian Marsh Harrier (Breeding); A082 *Circus cyaneus*; Hen harrier (Non-breeding); A132 *Recurvirostra avosetta*; Pied Avocet (Non-breeding); A132 *Recurvirostra avosetta*; Pied Avocet (Breeding); A140 *Pluvialis apricaria*; European Golden Plover (Non-breeding); A143 *Calidris canutus*; Red Knot (Non-breeding); A149 *Calidris alpina alpina*; Dunlin (Non-breeding); A151 *Philomachus pugnax*; Ruff (Non-breeding); A156 *Limosa limosa islandica*; Black-tailed Godwit (Non-breeding); A157 *Limosa lapponica*; Bar-tailed Godwit (Non-breeding); A162 *Tringa totanus*; Common Redshank (Non-breeding); A195 *Sterna albifrons*; Little Tern (Breeding); and Waterbird assemblage.	With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The population of each of the qualifying features; and • The distribution of the qualifying features within the site.
Humber Estuary Ramsar site	Criterion 1 – natural wetland habitats that are of international importance: The site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons.	For Ramsar sites, a decision has been made by Defra and Natural England not to produce Conservation Advice packages, instead focussing on the production of High Level Conservation Objectives. As the provisions on the Habitats Regulations relating to HRAs extend to Ramsar sites, Natural England considers the Conservation Advice packages for the overlapping European Marine Site designations to be, in most

Site	Features	Conservation Objectives
	Criterion 3 – supports populations of plants and/or animal species of international importance: The Humber Estuary Ramsar site supports a breeding colony of grey seals *Halichoerus grypus* at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. Criterion 5 – Bird Assemblages of International Importance: Wintering waterfowl - 153,934 waterfowl (5-year peak mean 1998/99-2002/3) Criterion 6 – Bird Species/Populations Occurring at Levels of International Importance: Golden Plover, Red Knot, Dunlin, Black-tailed Godwit, Redshank (passage) Shelduck, Golden Plover, Red Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit (overwintering) Criterion 8 – Internationally important source of food for fishes, spawning grounds, nursery and/or migration path: The Humber Estuary acts as an important migration route for both river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* between coastal waters and their spawning areas.	cases, sufficient to support the management of the Ramsar interests. See the conservation objectives for Ramsar interest features covered by overlapping the Humber Estuary SAC and Humber Estuary SPA.
Greater Wash SPA	A001 *Gavia stellata*; Red-throated diver (Non-breeding); A065 *Melanitta nigra*; Common scoter (Non-breeding); A177 *Hydrocoloeus minutus*; Little gull (Non-breeding); A191 *Sterna sandvicensis*; Sandwich tern (Breeding);	With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Site	Features	Conservation Objectives
	A193 *Sterna hirundo*; Common tern (Breeding); and A195 *Sternula albifrons*; Little tern (Breeding).	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The population of each of the qualifying features; and • The distribution of the qualifying features within the site.
* denotes a priority natural habitat or species		

Source: Ref 9 ; Ref 10 ; Ref 11 ; Ref 12 ; Ref 13 ; Ref 14).

3.2 Transboundary screening

3.2.1 In accordance with Regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations) and the Convention on EIA in a Transboundary Context (of 25 February 1991 (the Espoo-Convention)), nation states should consult other nation states who may be affected by a plan or project subject to assessment under Article 6(3) of the Habitats Directive[3].

3.2.2 At this stage in the process it is not anticipated that the Project would have any transboundary effects.

3.3 Potential effects

3.3.1 The potential effects on European/Ramsar sites which have been identified at this preliminary stage are outlined in **Table 3**. Consideration of the effect pathways has informed the preliminary conclusions of this screening report.

[3] The UK has made provisions for the transboundary requirements of the EIA and SEA Directives to continue to apply, with suitable modifications, following withdrawl from the European Union (Ref 15).

Table 3. Potential effects on European/Ramsar sites

Site	Potential effects
Humber Estuary SAC	**Habitat loss/damage** • Physical loss of SAC habitat and associated species; • Physical damage through disturbance and/or smothering of SAC habitat; • Physical damage of SAC habitat through alterations in physical processes; • Physical change of SAC habitat and associated species beneath marine infrastructure due to shading; • Physical change of SAC habitat due to dust smothering during construction; and • Physical change to SAC habitats resulting from the deposition of N and NOx from marine vessel and road vehicle emissions.
	Contamination • Non-toxic contamination through elevated suspended sediment concentrations (SSC) resulting in effects on SAC interest features; and • Toxic contamination through release of toxic contaminants bound in sediments, and accidental oil, fuel or chemical releases resulting in effects on SAC interest features, or their prey resources.
	Disturbance • Disturbance of SAC grey seal interest feature through airborne noise and visual disturbance; • Disturbance of SAC grey seal interest feature through collision risk; • Disturbance of SAC grey seal or fish interest features through underwater noise and vibration; and • Biological disturbance due to potential introduction and spread of non-native species.

Site	Potential effects
Humber Estuary SPA	**Habitat loss/damage** • Physical loss and/or removal of supporting habitats and associated prey resources for SPA bird interest features; • Physical damage through disturbance and/or smothering of SPA supporting habitats and associated prey resources for bird interest features; and • Physical damage through alterations in physical processes of SPA supporting habitats and associated prey resources for bird interest features.
	Disturbance • Disturbance of SPA bird interest features through airborne noise and visual disturbance; and • Disturbance of diving SPA bird interest features through underwater noise and vibration.
Humber Estuary Ramsar site	**Habitat loss/damage** • Physical loss and/or removal of habitats, supporting habitats and associated prey resources for Ramsar interest features; • Physical damage through disturbance and/or smothering of Ramsar habitats, supporting habitats and associated prey resources for Ramsar interest features; • Physical damage through alterations in physical processes of Ramsar habitats, supporting habitats and associated prey resources for Ramsar interest features; • Physical change of SAC habitat due to dust smothering during construction; and • Physical change to designated habitats resulting from the deposition of N and NOx from marine vessel and vehicle emissions.
	Contamination • Non-toxic contamination through elevated SSC resulting in effects on Ramsar interest features, or their prey resources; and

Site	Potential effects
	• Toxic contamination through release of toxic contaminants bound in sediments, and accidental oil, fuel or chemical releases resulting in effects on Ramsar interest features, or their prey resources.
	Disturbance • Disturbance of Ramsar interest features through airborne noise and visual disturbance; • Disturbance of Ramsar grey seal interest feature through collision risk; • Disturbance of Ramsar interest features through underwater noise and vibration and • Biological disturbance due to potential introduction and spread of non-native species.
Greater Wash SPA	**Habitat loss/damage** • Physical loss and/or removal of supporting habitats and associated prey resources for SPA bird interest features; • Physical damage through disturbance and/or smothering of SPA supporting habitats and associated prey resources for bird interest features; and • Physical damage through alterations in physical processes of SPA supporting habitats and associated prey resources for bird interest features.
	Disturbance • Disturbance of SPA bird interest features through airborne noise and visual disturbance; and • Disturbance of diving SPA bird interest features through underwater noise and vibration.

3.4 Screening: preliminary conclusions

3.4.1 A preliminary screening exercise has determined that there is likely to be a significant effect on European/Ramsar sites and qualifying features as a result of the Project, both alone or in combination with other plans or projects and therefore, there is a need to progress to Stage 2 Appropriate Assessment. In summary, the Project has the potential to result in an LSE on the following European/Ramsar sites and features:

a. Humber Estuary SAC:
   i. H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks;
   ii. H1130. Estuaries;
   iii. H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats;
   iv. H1330. Atlantic salt meadows (Glauco-Puccinellietalia maritimae) (air quality effects only);
   v. S1095. *Petromyzon marinus*; Sea lamprey;
   vi. S1099. *Lampetra fluviatilis*; River lamprey; and
   vii. S1364. *Halichoerus grypus*; Grey seal.

b. Humber Estuary SPA:
   i. A048 *Tadorna tadorna*; Common Shelduck (Non-breeding);
   ii. A132 *Recurvirostra avosetta*; Pied Avocet (Non-breeding);
   iii. A140 *Pluvialis apricaria*; European Golden Plover (Non-breeding);
   iv. A143 *Calidris canutus*; Red knot (Non-breeding);
   v. A149 *Calidris alpina alpina*; Dunlin (Non-breeding);
   vi. A156 *Limosa limosa islandica*; Black-tailed Godwit (Non-breeding);
   vii. A157 *Limosa lapponica*; Bar-tailed Godwit (Non-breeding);
   viii. A162 *Tringa totanus*; Common Redshank (Non-breeding); and
   ix. Waterbird assemblage.

c. Humber Estuary Ramsar site:
   i. Criterion 1 – natural wetland habitats that are of international importance;
   ii. Criterion 3 – supports populations of plants and/or animal species of international importance;
   iii. Criterion 5 – Bird Assemblages of International Importance;
   iv. Criterion 6 – Bird Species/Populations Occurring at Levels of International Importance; and
   v. Criterion 8 – Internationally important source of food for fishes, spawning grounds, nursery and/or migration path.

3.4.2 The preliminary findings are that the Project does not have the potential to result in an LSE on the Greater Wash SPA site or qualifying features.

4 Summary

4.1.1 This report provides the preliminary findings of the HRA Stage 1 Screening. It is recognised that further detail is required to provide justification for determination of LSE and this will be provided at the next stage. The HRA report that will accompany the DCO application will be carried out in line with Advice Note 10 (Ref 7) and will include screening and integrity matrices.

5 References

Ref 1 The Stationery Office (2017). Statutory Instrument 2017. No. 1012. The Conservation of Habitats and Species Regulations 2017.

Ref 2 The Stationary Office Limited (2019). Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

Ref 3 European Commission (1992). Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Ref 4 European Commission (2009). Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds.

Ref 5 Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.

Ref 6 HM Government (2019). Appropriate assessment: Guidance on the use of Habitats Regulations Assessment. Available at: https://www.gov.uk/guidance/appropriate-assessment (accessed 18 November 2022).

Ref 7 Planning inspectorate (2022). Advice Note Ten: Habitats Regulations Assessment relevant to nationally significant infrastructure projects. Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-ten/ (accessed November 2022).

Ref 8 The Stationery Office Limited (2008). Planning Act 2008.

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6 Abbreviations/Acronyms

Table 4. Glossary and Abbreviations

Term	Acronym	Meaning
Appropriate Assessment	AA	-
Associated British Ports	ABP	-
Candidate Special Areas of Conservation	cSAC	-
Development Consent Order	DCO	-
Department for Environment, Food and Rural Affairs	Defra	-
European Commission	EC	-
European Economic Community	EEC	-
Environmental Impact Assessment	EIA	-
European Marine Site	EMS	-
Environmental Statement	ES	-
European Union	EU	-
Great Britain	GB	-
Habitats Regulations Assessment	HRA	-
Invasive Non-native Species	INNS	-
Joint Nature Conservation Committee	JNCC	-
Likely Significant Effect	LSE	-
Mean High Water Springs	MHWS	-
Natural England	NE	-
Preliminary Environmental Information Report	PEIR	-
Planning Inspectorate	PINS	-
Potential Special Protection Areas	pSPA	-

Term	Acronym	Meaning
Wetlands of international importance, designated under The Convention on Wetlands (Ramsar, Iran, 1971)	Ramsar	-
Special Area of Conservation	SAC	-
Special Protection Area	SPA	-
Suspended Sediment Concentration	SSC	-
United Kingdom	UK	-

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.