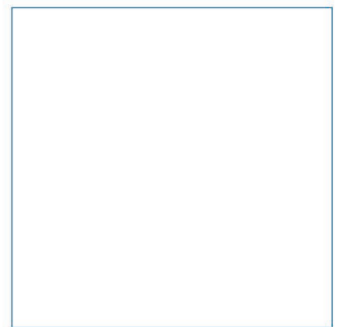
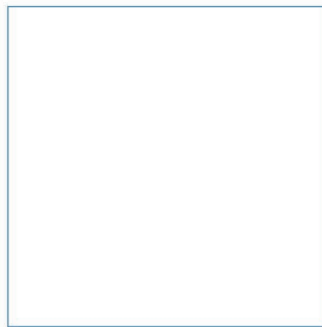


Associated British Ports

Immingham Eastern Ro-Ro Terminal

Preliminary Environmental Information: Non-Technical Summary

January 2022



Innovative Thinking - Sustainable Solutions

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Non-Technical Summary

This Non-Technical Summary (NTS) is designed to act as a summary of the Preliminary Environmental Information Report (PEIR) that has been prepared to inform Associated British Ports' (ABP) application for a Development Consent Order (DCO), which if approved, will authorise the construction and consequent operation of a new roll-on/roll-off (ro-ro) facility within the Port of Immingham. This proposed development will be known as the Immingham Eastern Ro-Ro Terminal (IERRT).

The site for the proposed IERRT lies within the eastern sector of the Port which is situated on the southern bank of the Humber Estuary between North Killingholme and Grimsby. The boundary of the proposed development is shown in Image NTS1.1.

This NTS follows the same structure as the PEIR, providing a summary of each chapter. The full results of the assessments that have been undertaken at this preliminary stage, together with the initial analyses and conclusions that have been used to underpin the preliminary environmental assessment of this proposed development, can be found in the PEIR document itself which is available to download from the project consultation website – <https://www.abports.co.uk/immroro>.

1 Introduction (Chapter 1)

1.1 Project background

- 1.1.1 ABP, the owner and operator of the Port of Immingham, is proposing to construct a new ro-ro facility within the Port. This facility is designed to service the embarkation and disembarkation of principally commercial cargo carried either by accompanied trailer or by lorry or on unaccompanied trailers which will be collected at the port of disembarkation. In addition to this wheeled cargo, the new facility will be designed to accommodate an element of passenger use, albeit only during those periods when the demands of the ro-ro cargo operation allow.
- 1.1.2 The proposed development will involve marine works within the Humber Estuary and landside works on the existing port estate.
- 1.1.3 **Marine infrastructure works** – It is anticipated that the marine works will comprise a number of distinct components, as identified, albeit indicatively at this stage, namely:
- An approach jetty from the shore;
 - A linkspan with bankseat to provide a solid foundation basis;
 - Two secured floating pontoons;
 - Two finger piers to provide up to four berths, one either side of each pier, thereby enabling the vessels to berth alongside with their stern ramps resting upon a floating pontoon;

- A capital dredge of the new berth pocket; and
- Disposal of dredged material at sea if no beneficial alternative can be identified.

1.1.4 **Landside infrastructure works** – The landside works are anticipated to consist of the following:

- The demolition and removal of a number of existing commercial buildings within the site and the improvement of the existing site so that it can accommodate the wheeled cargo – these works including resurfacing and the provision of new pavements and associated infrastructure across the site;
- A terminal building and a small welfare building will be constructed to provide appropriate facilities for terminal operational and administration staff, lorry drivers and passengers. A small workshop, a UK Border Force building and gatehouse may also be required; and
- An internal bridge within the site which will cross over Robinson Road (an existing port road) and an ABP controlled rail track.

1.1.5 In addition, consideration is being given to the provision of an appropriate element of soft landscaping/ecological enhancements albeit within what will be an intensively used operational commercial site.

1.1.6 **The consenting route** – In view of the proposed capacity of the Immingham Eastern Ro-Ro Terminal, which has to be sufficient to service the predicted throughput of wheeled cargo that the Terminal will be required to handle, the proposed development will be taken forward as a Nationally Significant Infrastructure Project (NSIP). In light of this, ABP will be submitting to the Secretary of State for Transport an application for a DCO for authority to construct and then operate the proposed development. Additional consents and approvals that are required for the construction and operation of the proposed development will, with the agreement of the appropriate consenting bodies, be incorporated within the final DCO.

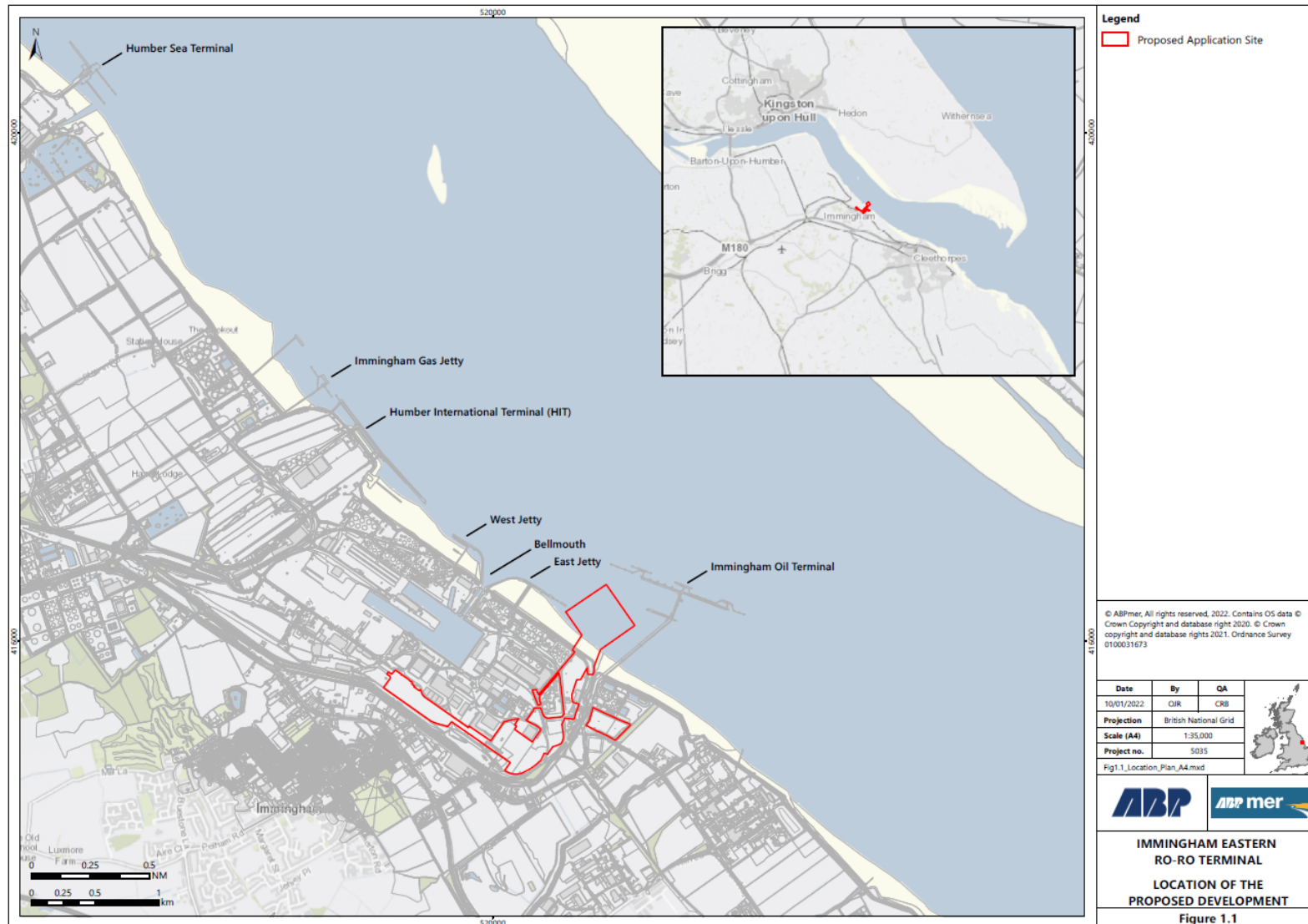


Image NTS1. Location of the proposed development

1.1.7 **Environmental impact assessment (EIA)** – The IERRT constitutes what is known as Schedule 1 development and as a consequence has to be taken forward as “*EIA development*” as defined by Schedule 1 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the EIA Regulations).

1.1.8 For NSIPs, the EIA process is undertaken in two principal stages:

- Consultation on the preliminary environmental information, the principal written element of which is the PEIR; and
- The preparation of the final Environmental Statement (ES), which will accompany the application for the DCO, which will include, as far as this particular project is concerned, a number of related environmental reports and documents.

1.1.9 A formal request asking the Secretary of State for a Scoping Opinion was submitted to the Planning Inspectorate (PINS) in September 2021. PINS provided their Scoping Opinion on 25 October 2021. The comments received in the Scoping Opinion from PINS have been taken into account insofar as is practicable at this preliminary stage in the preparation of the PEIR.

1.2 The PEIR

1.2.1 The PEIR provides the preliminary environmental information gathered to date in relation to the various elements of the proposed development which may have a significant environmental effect, as identified in the Scoping Opinion.

1.2.1 The information presented in this PEIR will be further developed as the project evolves both as a result of the continuing scheme design work, investigations and assessments and as a result of comments and representations received as part of the statutory consultation process.

1.2.2 ABPmer has co-ordinated the preparation of this PEIR with the assistance of various other topic specialist consultants.

1.3 Statutory and public consultation

1.3.1 As part of the NSIP pre-application process, ABP is required to undertake a statutory consultation with amongst others, local authorities, statutory regulators, stakeholders and the local community.

1.3.2 A five week statutory and public consultation period commenced on Wednesday 19 January 2022 and will end at 23:59 on Wednesday 23 February 2021 – subject to any adjustments that may be required as a result principally of the Covid pandemic. All comments submitted in writing and received within the consultation period will be taken into account as work progresses to finalise the DCO application. It should be noted, however, that whilst every effort will be made, it may not be possible to take into account comments received after the end of the consultation period.

- 1.3.3 A Statement of Community Consultation (SoCC) has been prepared setting out how ABP intends to undertake the statutory and public consultation for this stage. The SoCC is available on the project website – <https://www.abports.co.uk/immrro>.
- 1.3.4 **Document availability** – The PEIR can be downloaded from the project consultation website – <https://www.abports.co.uk/immrro>. This Non-Technical Summary of the PEIR is also available for download.
- 1.3.5 Further details on document availability and how to make comments are outlined in the SoCC.

2 Proposed Development (Chapter 2)

- 2.1.1 **Marine works** - at this stage, it is anticipated that the proposed marine works will consist of:

- An open piled approach jetty which will be approximately 105 m in length and will extend from the shore spanning the existing pipelines and the sea wall, and terminate at a newly created bankseat (foundation for linkspan);
- The new bankseat will be designed to act as a strong fixed point within the entire structure held in place by a nest of piles and will act as a foundation for a hinged linkspan (link bridge);
- The linkspan will be a single structure which will span the distance between the bankseat and the first pontoon, with its free end resting upon the edge of this pontoon. The linkspan length will be optimised to ensure that vehicular accessibility from and to the berthed ro-ro vessels via the pontoons can be maintained at all states of the tide;
- The floating pontoons (two in number) will be approximately 40 m x 90 m with an overall depth of 7 m and will each be secured in place by two restraint dolphins which will ensure that they can range up and down freely with the tide;
- Positioned centrally to each floating pontoon and extending away in a north westerly direction it is currently anticipated will be an open piled finger pier approximately 260 m in length. These will be lined with fender panels on both sides and equipped with mooring infrastructure (fixed bollards and/or quick-release hooks) so that vessels can berth on either side of each pier (i.e. providing up to two berths per pier, four in total);
- The two pontoons will be linked with another linkspan which will hinge on one of the pontoons with the free end resting on the other;
- A capital dredge will be required to ensure accessibility and safe mooring for vessels at all states of the tide. The berthing area will be dredged to a maximum of 9 m below Chart Datum (CD), including allowance for overdredge. The dredge berth pocket will be optimised to include side slopes so as to ensure its stability. The area beneath the floating pontoon will be dredged to 5 m below CD; and
- Subject to no beneficial alternative option being identified and the dredge material being deemed suitable for disposal at sea, it is estimated that

about 20,000 m³ of boulder clay and 310,000 m³ of sand/silt (alluvium) will require disposal at the existing licensed disposal sites HU056 (Holme Channel) and HU060 (Clay Huts) respectively.

2.1.2 **Landside works** - the proposed landside works are anticipated at this preliminary stage to include the following:

- The demolition and removal of a number of existing commercial buildings within the development site and the improvement of that part of the application site – these works including resurfacing and the provision of new pavements and associated infrastructure. This will provide a suitable area to accommodate wheeled cargo and heavy goods vehicles (HGVs) either awaiting embarkation or collection, together with essential storage. Some peripheral parts of the areas which will be used for waiting vehicles/cargo trailers are likely to require additional ground works;
- The terminal areas will be fully fenced and will also require adequate lighting and security provision, which in most areas will simply represent a replication of lighting and infrastructure already present within the port estate
- A terminal building, approximately 1,200 m² in size, together with a small welfare building will be constructed on the site. In addition, a small workshop, a UK Border Force building and gatehouse may also be required. The buildings themselves will not exceed two storeys in height and will generally resemble the style of buildings that already exist within the port estate; and
- A bridge will be required to ensure contiguous terminal operations between the currently separate north and central storage areas. The bridge will cross over Robinson Road – an existing dock road - and an ABP controlled railway line;
- The provision of remotely operated barriers to provide access to and from the proposed development; and
- Appropriate drainage and services infrastructure will also be provided throughout the new terminal area as necessary.

2.1.3 **Environmental enhancements** – Consideration is being given to any soft landscaping/ecological enhancements which might be capable of delivery in what is already an intensively used operational environment. Further details of any environmental enhancements that are proposed will be included in the ES.

3 Project Methodology (Chapter 3)

3.1 Construction phase

3.1.1 A preliminary description of the construction methodology is presented based on the development as is currently proposed and described above. The methodology will be further refined following ongoing detailed design and assessment work taking account also of any comments received during the statutory consultation process.

3.1.2 **Marine works** – these are currently, at this preliminary stage, anticipated to involve the following stages:

- Dredging and disposal (subject to a beneficial alternative being identified);
- Approach ramp construction;
- Approach jetty construction;
- Linkspan and pontoons construction; and
- Finger piers construction.

3.1.3 **Landside works** – these are currently envisaged to involve the following stages:

- Site clearance and land preparation;
- Soil stabilisation;
- Drainage and services installation;
- Services installation;
- Paving/hardstanding installation;
- Building construction;
- Bridge construction;
- Mechanical and electrical works; and
- Security and systems.

3.1.4 **Construction waste** – As much of the landside construction waste as possible will be re-used as infill within the development to minimise the amount of waste that needs to be removed from site. A site waste management plan will be submitted with the ES which will set out the proposed waste recovery and disposal system for all waste generated by the development. It will also include an assessment of the impact of the waste arising from the proposed development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation.

3.1.5 **Construction programme** - It is envisaged that construction works will start in Quarter 3 2023 and will have been largely completed by mid-2025.

3.2 Operational phase

3.2.1 **Terminal operations** - The Terminal will operate 24 hours a day, seven days a week and 364 days a year (though with lower activity at night compared to the day). It is anticipated that up to four vessels (i.e. one per berth) will arrive at the Terminal per day. Tug vessels will help to manoeuvre the arriving vessel onto the berth. Whilst berthed at the Terminal, it is currently proposed that vessels will be on Ship to Shore power. Accompanied HGVs will roll straight off the vessel and leave the Terminal. Unaccompanied trailers will be unloaded from the vessels and then stored within the Terminal until they are ready to be collected.

3.2.2 **Operational waste** – This will comprise general waste from the Terminal building, the welfare building, the operations team on the ground, the

workshop and the UK Border Force building and gatehouse. A waste management plan will be put in place to manage waste produced within the Terminal during operation. All ship waste will be handled outside of the UK.

- 3.2.3 **Maintenance dredging and disposal** - Maintenance dredging will be required in exactly the same way as occurs at the Port of Immingham currently. The overall volumes of the maintenance dredging associated with the proposed development will be smaller compared to that of the capital dredging. The total future maintenance dredge volume is estimated to be 220,000 m³ annually. Maintenance dredge campaigns will be undertaken throughout the year as required for safe access to the berths. The maintenance dredge arisings will be transported by barge to the existing Clay Huts (HU060) licensed disposal site.

3.3 Environmental management best practice procedures

- 3.3.1 Best practice environmental management techniques which follow appropriate industry guidelines will be implemented by contractors during construction.
- 3.3.2 Adherence to environmental management best practice will be controlled through a Construction Environmental Management Plan (CEMP) in accordance with guidance. The CEMP will be provided as part of the DCO application prior to works commencing and will set out the mitigation measures needed to manage environmental effects.

4 Needs and Alternatives (Chapter 4)

4.1 Need considerations

- 4.1.1 The need identified arises from a number of different national imperatives, objectives and matters including:
- **The need to ensure that the UK has sufficient ro-ro freight capacity** - Trade is of critical importance to the UK economy. The Government's ambition is to strengthen the UK's position as a great trading nation and as an island economy. Ports are an enabler of trade in goods and facilitate the most efficient form of carrying imports and exports to the rest of the world. One of the key means by which trade is handled through UK ports is in the form of ro-ro freight cargo. By 2050 there is forecast to be an approximate 130 % increase in both ro-ro tonnage and units in comparison to the position in 2016. It is clearly, therefore, imperative that the UK has sufficient ro-ro freight capacity to meet both current and future demand.
 - **The need to ensure that sufficient ro-ro freight capacity is in a location where it is required** - The National Policy Statement for Ports (NPSfP) highlights that port capacity must be in the right place if it is to effectively and efficiently serve the needs of import and export markets.

The Humber estuary is a locational 'sweet spot' for the handling of ro-ro freight for a number of reasons, including:

- Its natural deep-water channels and marine accessibility allows ro-ro vessels to be accommodated at all states of the tide meaning that ro-ro services can operate to their own defined timetable ensuring that customers have certainty over the length of time it takes to deliver or receive goods;
 - Its location within an overnight sailing time of key European ports, enabling daily timetabled ro-ro services to operate which is important in terms of journey time reliability and certainty;
 - Its ability to service a large in land area of the UK, in particular the large distribution centres and centres of populations in the Midlands and North of the UK;
 - Its good inland road transport connections;
 - Its position as part of the 'land bridge' that links Northern Ireland and Ireland with Europe; and
 - The existence of necessary support services and expertise within the locality.
-
- **The need to ensure that the UK has resilient and competitive ro-ro freight capacity** - The NPSfP makes clear that in addition to meeting overall demand and ensuring that capacity is located where it is required, the total need for port infrastructure also depends upon the need to ensure effective competition and resilience in port operations. In terms of resilience matters, the NPSfP highlights that spare capacity helps to assure the resilience of the national infrastructure. Recent supply chain events within the UK – in particular the supply chain vulnerabilities exposed by Brexit and COVID – have highlighted the need for the country to have resilient and competitive trading options.
 - **Matters that will influence the demand for ro-ro freight capacity in the future** - There are considered to be a number of matters that will influence the demand for and location of ro-ro freight capacity in the future that are of direct relevance to the future provision of such capacity within the Humber Estuary. These are in addition to the overall predicted increase in UK capacity demand and include:
 - ***The lack of sufficient ro-ro facilities on the Humber to enable the continuation of existing services:*** Stena Line, one of Europe's leading ferry and ro-ro companies, requires a new long-term facility from which to operate services from the Humber to mainland Europe. These existing services are heavily utilised.
 - ***The implementation of the Government's levelling up agenda:*** The 'Levelling Up' agenda is a fundamental policy of the UK Government. This policy aims to reduce the imbalances, primarily economic, between areas and social groups in the UK, without any consequential detriment to existing prosperous parts

of the UK. As a result of the levelling up of the UK economy, it is considered that there will be increased demand for the facilities and infrastructure which enable the UK to trade with the rest of the world within the north of the country.

- ***A move away from reliance upon the Short Straits for the handling of ro-ro freight:*** It is considered that there will be a move away from some ro-ro freight being transported across the short straits corridor to such freight transiting the North Sea routes as a result of:
 - Resilience issues associated with the short strait facilities resulting from the UK's exit from the European Union;
 - The short strait corridor requiring additional HGV miles and driver time for freight to be moved to / from the North and the Midlands in comparison with the North Sea routes, a significant issue having regard to HGV driver shortage issues;
 - The road route to and from the short strait corridor is highly susceptible to disruption and congestion;
 - A move away from a 'just in time' delivery model to a 'just in case' model which incorporates a greater degree of contingency and accepts longer, but potentially more reliable, transport and distribution times;
 - The need to reduce road travel from a greenhouse gas emissions perspective given the UK Government's drive toward net zero;
 - The continuing development of trade with Eastern Europe, which does not necessarily require the short access connection to North-West mainland Europe provided by the short straits corridor; and
 - The continued development of the 'land bridge' system from Europe to Ireland, which is most appropriately served by facilities within the Humber area.

4.1.2 In addition to the overall growth in the amount of ro-ro freight that is predicted, the above demonstrates that there is specific and on-going demand for further ro-ro freight capacity within the Humber Estuary.

4.2 The statement of need

4.2.1 Against the preceding contextual background, the following statement of need has been defined:

'There is an imperative need to provide additional appropriate ro-ro freight capacity within the Humber Estuary in order to meet the growing and changing nature of demand and thereby retain and strengthen the Estuary's contribution to an effective, efficient, competitive and resilient UK ro-ro freight sector'.

4.3 The objectives which a solution should meet

4.3.1 The objectives – which arise out of the statement of need and the background context to it - have been identified at this preliminary stage as being to provide the Humber estuary with the ability to:

- (i) meet the needs of an existing ro-ro freight operator – Stena Line - with an established customer base;
- (ii) meet predicted 2050 requirements for the ro-ro freight sector;
- (iii) continue to effectively contribute to UK ro-ro port infrastructure flexibility and resilience;
- (iv) continue to provide competitive ro-ro freight services and routes to and from existing and new markets; and
- (v) make efficient and effective use of existing established land and water transport connections and infrastructure.

4.3.2 It is considered, at this preliminary stage, that the solution to meeting the need within the Humber estuary can only be met by the provision of sufficient additional berthing and landside storage capacity in a location that benefits from good landside connectivity.

4.4 Preliminary consideration of alternatives

4.4.1 From the preceding analysis, it can be concluded that the Humber estuary is the only broad option available to meet the need which has been identified.

4.4.2 Furthermore, having regard to the size of vessels needing to be accommodated and the type of services to be accommodated, the solution to meeting the need in the form of additional ro-ro freight capacity has to be in a location that has, or would be able to be provided with, appropriate and unconstrained deep-water marine accessibility.

4.4.3 From the preliminary analysis undertaken, the conclusion reached is that this limits potential locations for the provision of a solution to:

- **A Port of Grimsby river frontage location** - Having regard to the significant extent of dredging within the Humber European Marine site (consisting of the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site) that would be required to provide the necessary marine access, along with the lack of sufficient landside space at the Port of Grimsby needed to support any additional marine capacity, the preliminary conclusion reached is that this general location would not be able to provide a solution to the need which has been identified.
- **A Port of Hull river frontage location** - Whilst it may be possible to provide a new river frontage marine facility at the Port of Hull – albeit with some dredging and construction required within the Humber Estuary European Marine site - there would be insufficient suitable land available in or around the port estate to provide the necessary supporting landside

facilities. Furthermore, the traffic generated by any new capacity at the Port of Hull would need to pass through the City of Hull. The location would also require additional sailing time for vessels. The preliminary conclusion that has been reached is that this location would also not be able to provide a solution to the need which has been identified.

- **A Killingholme / Immingham river frontage location** - Land located between the existing C.Ro Terminal at Killingholme and the Port of Immingham is either in existing port related use or has consent in place to be developed as a marine energy park. Whilst existing ro-ro facilities within the Humber estuary may well secure a proportion of the future growth in the ro-ro freight sector – something which ABP considers is likely to be required in any event – on the basis of current information ABP considers that such facilities do not have sufficient available capacity to be able to meet the specific need which it has identified. In respect of the Port of Immingham, the eastern extent of the port estate is able to provide both the necessary marine infrastructure and landside facilities. It is, therefore, concluded that it would be possible to provide a solution to meeting the need at the Port of Immingham.

4.4.4 In summary, the preliminary conclusion reached by ABP is that the only solution to the need which has been identified is the provision of new ro-ro freight capacity within the eastern extent of the Port of Immingham.

4.4.5 Through the design and assessment work that has been undertaken to date, further details of the proposed solution have been worked up. The solution as it is currently envisaged at this preliminary stage in the pre-application process is the scheme which is described in the PEIR. Through ongoing design and assessment work, and the consultation exercise being undertaken, the solution will be iterated further in advance of the submission of the application for development consent.

5 Legislative and Consenting Framework (Chapter 5)

5.1.1 The proposed development exceeds throughput thresholds set down in the Planning Act 2008 (PA 2008) and, therefore, constitutes an NSIP. As a result, ABP will in early summer 2022, be submitting to the Secretary of State for Transport an application for a DCO under section 37 of the PA 2008 which if granted, will authorise the construction and consequent operation of the IERRT.

5.1.2 In deciding an application for a DCO, the Secretary of State must have regard to, amongst other things, “*any relevant national policy statement to which the application relates*” (section 104 (2) of the PA 2008). For the purpose of this proposed development, the relevant national policy statement is the National Policy Statement for Ports (NPSfP).

- 5.1.3 Whilst the DCO will be ‘all-encompassing’ in terms of granting the necessary authorisations for the construction and operation of the new facility, the proposed development will require a range of consents and approvals in compliance with different enabling and authorising legislative provisions. For example, ABP will be seeking approval for a deemed marine licence, in consultation with the Marine Management Organisation (MMO), which will cover those works that impact upon the marine environment
- 5.1.4 ABP has statutory powers to dredge in the Humber Estuary under the provisions of the Humber Conservancy Act 1905. At this stage, therefore, consideration is being given to the requisite consenting and approval process to be included within the DCO, with Protective Provisions being provided as appropriate.
- 5.1.5 The studies that are likely to be required in support of the necessary consents/approvals include the following:
- An EIA documented initially in the PEIR and then in a final ES;
 - A Marine Plan Conformance Assessment;
 - A Habitats Regulations Assessment (HRA);
 - A Water Framework Directive (WFD) Compliance Assessment;
 - A Waste Hierarchy Assessment (WHA);
 - A Navigational Risk Assessment (NRA); and
 - A Flood Risk Assessment (FRA).
- 5.1.6 The key policies and documents that are relevant to the principle of the proposed development include the following:
- NPSfP;
 - United Kingdom (UK) Marine Policy Statement (MPS);
 - East Inshore and East Offshore Marine Plans;
 - National Planning Policy Framework (NPPF);
 - Maritime 2050 – Navigating the future;
 - North East Lincolnshire Local Plan 2013 - 2032; and
 - Greater Lincolnshire Strategic Economic Plan 2014 - 2030.

6 Impact Assessment Approach (Chapter 6)

6.1 Scope of assessment

- 6.1.1 An application for a Scoping Opinion was made to the PINS in September 2021 to confirm the scope of the EIA for the proposed development (ABPmer, 2021). Based on expert judgement and feedback provided by PINS in their Scoping Opinion, the following EIA topics or receptors have the potential to be affected by the proposed development and have been scoped into this ES:

- Physical processes;
- Water and sediment quality;
- Nature conservation and marine ecology;
- Commercial and recreational navigation;
- Coast protection, flood defence and drainage;
- Ground conditions, including land quality;
- Air quality;
- Airborne noise and vibration;
- Cultural heritage and marine archaeology;
- Socio-economic;
- Traffic and transport;
- Land use planning;
- Climate change; and
- Cumulative and in-combination effects.

6.1.2 The Transboundary Regulation 32 of the Infrastructure Planning (EIA) Regulations 2017 is not considered to apply due to the predicted localised effects of the proposed development and the large distance between the study area and the next nearest Member State.

6.1.3 A number of topics/receptors have not been specifically assessed in detail in this PEIR and are proposed to be scoped out of further assessment as they will not be significantly affected by the proposed development, namely:

- Terrestrial ecology; and
- Landscape and seascape.

6.1.4 **Consultation** - ABP has held a number of meetings with regulators and key stakeholders, including the Environment Agency, the Health and Safety Executive (HSE), National Highways, North East Lincolnshire Council, North Lincolnshire Council, PINS and the Royal Society for the Protection of Birds (RSPB). ABP Immingham as the Statutory Harbour Authority (SHA) and other stakeholders with a navigational interest have been consulted through the preliminary NRA process. Trinity House Lighthouse Authority will be consulted regarding the aids to navigation that will be proposed for IERRT development. ABP has consulted those customers and tenants who are located within and next to the proposed development site. Additional consultation with key parties has also been carried out to obtain baseline information and further advice on the environmental assessments where required.

6.2 Impact assessment methodology

6.2.1 All of the preliminary technical aspect assessments have been undertaken on the basis of a common understanding of the proposed development based on current scheme assumptions. The spatial and temporal extent of each specialist assessment varies depending upon the environmental aspect being considered.

6.2.2 For some disciplines, specific guidance on EIA and the approach to assessment is available, while others rely on best practice. Each individual preliminary assessment chapter details whether the assessment methodology is based on published guidance and industry standards, or a specific methodology is followed based on professional judgment.

6.2.3 **EIA team** – The EIA team consists of ABPmer, Clyde & Co LLP, Adams Hendry Consulting Ltd, AECOM, Wessex Archaeology, David Tucker Associates (DTA) and Kent PLC. ABPmer has an Institute of Environmental Management and Assessment (IEMA) Quality Mark (as does AECOM and Adams Hendry Consulting Ltd), demonstrating their commitment to excellence in leading the co-ordination of statutory EIAs in the UK. All members of the project team are suitably experienced in respect of the topics covered.

6.3 Study area

6.3.1 The scope of the study area to be considered is defined on the basis of the current proposed design for the development. It has also taken into account the spatial and temporal extent (zone of influence) of the likely significant effects that could arise from the proposed development, their importance in a geographical context, as well as the sensitivities of the relevant topics/receptors. Areas outside the range of any potential impacts are representative of the wider natural environment and form part of the wider study area.

7 Physical Processes (Chapter 7)

7.1.1 This chapter of the PEIR provides a preliminary assessment of the potential significance of the proposed development on physical processes in the marine environment, specifically hydrodynamics, sediment transport, plume dispersion and waves.

7.1.2 Baseline reviews of the bathymetry and morphology, tides and water levels, extreme water levels, sea level rise, flows, waves, and geology and sediments are presented. The data sources used to characterise the baseline conditions of the study area include various ABPmer reports (prepared over many years of working on the Humber Estuary) covering project work for ABP in and around the Immingham region and guidance documents relevant to the study, including Environment Agency Coastal Flood Boundary datasets for extreme events and UK Climate Projections (UKCP18). A range of site specific surveys have also been undertaken to collect bed elevation, hydrodynamic, wave, water and sediment quality data.

7.1.3 A preliminary assessment of the potential changes in physical processes as a result of the marine activities that are anticipated during the construction and operation of the development, as currently proposed, is presented. A total of nine impact pathways are assessed, including changes in suspended sediment concentrations (SSC) and potential sedimentation, changes in seabed bathymetry and composition, local changes to hydrodynamic and

wave regimes, and associated changes to sediment transport. The exposure to change of all potential impact pathways are assessed, at this preliminary stage, as **low**.

- 7.1.4 The preliminary assessment takes into account the measures that have been included in the design of the proposed development to minimise and/or avoid the potential for effects, namely targeting disposal loads in the central/deeper areas of the existing licensed disposal sites (HU056 (Holme Channel) and HU060 (Clay Huts)) if no beneficial alternative is identified so as to reduce depth reductions and environmental changes.

8 Water and Sediment Quality (Chapter 8)

- 8.1.1 This chapter provides a preliminary assessment of how the proposed development, and in the context of the proposed development, specifically the marine works as currently proposed, may influence water and sediment quality, namely dissolved oxygen and contaminants, within the marine environment.
- 8.1.2 Baseline reviews of the water quality (relevant WFD water bodies, bathing waters, Shellfish Water Protected Areas, Nitrate Vulnerable Zones (NVZs), nitrate sensitive areas and water quality monitoring undertaken by the Environment Agency) and sediment quality (recent site specific sediment sampling) are presented. The main data sources used to characterise the baseline conditions of the study area include Environment Agency web resources and guidance, and available particle size analysis (PSA) and chemical contamination analysis data from recent site specific surveys.
- 8.1.3 The sediments from most of the locations sampled within the proposed dredge area were dominated by silts, with a few samples predominantly comprising sand material and/or a low proportion of gravel. Contaminants analysed from sediment samples were generally at low concentrations, and all results were well below the thresholds that would consider the material unsuitable for disposal at sea. In general, concentrations were typically higher in surface samples compared to those obtained at depth.
- 8.1.4 A preliminary assessment of the potential changes in water and sediment quality as a result of the marine activities associated with the development, as currently proposed, during construction and operation is presented. A total of six impact pathways are assessed, including changes in dissolved oxygen and chemical water quality, and the redistribution of sediment-bound contaminants. All of the potential impacts on water and sediment quality are assessed, at this preliminary stage, as **insignificant to minor adverse** and not significant.
- 8.1.5 The preliminary assessment takes into account the measures that have already been built into the design of the proposed development to minimise and/or avoid the potential for effects, including the application of environmental best practice management measures to minimise the potential risk from any accidents and spillages/leaks during construction.

9 Nature Conservation and Marine Ecology (Chapter 9)

- 9.1.1 This chapter provides a preliminary assessment of how the development, as currently proposed, may impact on nature conservation and marine ecology, specifically nature conservation designations and protected species, benthic habitats and species, fish, marine mammals and coastal waterbirds.
- 9.1.2 Baseline reviews of the nature conservation sites and protected species, benthic habitats and species, fish, marine mammals and coastal waterbirds are presented. The main data sources used to characterise the baseline conditions include site specific intertidal and subtidal benthic sampling, Natural England and Joint Nature Conservation Committee (JNCC) web resources, and available survey and monitoring data on benthic habitats and species, fish and shellfish, marine mammals and coastal waterbirds in the study area.
- 9.1.3 A preliminary assessment of the potential impacts on nature conservation and marine ecology receptors based on the current understanding of the nature and scale of the proposed development during construction and operation is presented. A total of 18 impact pathways are assessed, specifically the direct loss of habitat, direct and indirect changes to habitats and species, changes in water and sediment quality, the potential introduction and spread of non-native species, underwater noise and vibration, and airborne noise and visual disturbance. All of the potential impacts on nature conservation and marine ecology receptors are assessed at this preliminary stage as **insignificant to minor adverse** and not significant apart from the impacts that are likely to arise as a result of the direct loss of intertidal habitat, the effects of underwater noise and vibration during percussive (impact) piling on migratory fish and marine mammals, and the airborne noise and visual disturbance during construction on coastal waterbirds which are assessed as **minor to moderate adverse**.
- 9.1.4 If suitable replacement intertidal habitat is required once the final scheme design has been settled, the potential effects of intertidal habitat loss on benthic habitats and species and coastal waterbirds is assessed at this preliminary stage as **minor adverse**. In order to avoid and/or reduce the remaining significant impacts to **minor adverse**, a range of mitigation measures are proposed during percussive piling, namely soft start procedures, use of vibro piling where possible and ensuring a dedicated marine mammal observer follows the relevant measures outlined in the JNCC protocol for minimising the risk of injury to marine mammals. In addition, the need for piling restrictions during sensitive periods for migratory fish will be discussed and agreed with the Environment Agency. A cold weather construction restriction is also proposed to avoid significant disturbance effects on coastal waterbirds when they are particularly vulnerable during periods of extreme winter weather.

9.1.5 The preliminary assessment takes into account the measures that have at this stage been built into the design of the proposed development work to minimise and/or avoid the potential for effects. This includes targeting disposal loads in the central/deeper areas of the existing licensed disposal sites at HU056 (Holme Channel) and HU060 (Clay Huts) (if no beneficial alternative is identified) to reduce depth reductions and environmental changes. This also includes the application of environmental best practice management measures to minimise the potential risk from any accidents and spillages/leaks. In addition, potential biosecurity risks during construction are proposed to be managed by including biosecurity control measures within the CEMP that will be submitted as part of the DCO application and following ABP's existing biosecurity management procedures during operation.

10 Commercial and Recreational Navigation (Chapter 10)

10.1.1 This chapter provides a preliminary assessment of the potential effects of the proposed development on commercial and recreational navigation.

10.1.2 A review of the existing statutory responsibilities and management procedures, commercial and recreation navigation, and marine accidents/incidents is presented. The main data sources used to characterise the baseline conditions include Automatic Identification System (AIS) data, marine accident/incident data and information from nautical charts.

10.1.3 A preliminary assessment of the potential effects on commercial and recreational navigation as a result of the proposed development during construction and operation is presented. A total of 11 impact pathways are assessed, including the possibility of contact of works craft with port infrastructure and contact of commercial vessels with marine works, collision of passing vessels with works craft, collision during navigation and towage operations, payload related incidents, collision due to increased commercial vessel movements and increased maintenance dredging movements, collision with passing traffic, contact with the quay, mooring breakout with vessel alongside. All of the potential impacts on commercial and recreational navigation are assessed as **insignificant to minor adverse** and not significant, apart from the potential collision of passing vessels with works craft during construction which is assessed as **moderate adverse**.

10.1.4 In order to avoid and/or reduce the moderate and significant impact to minor adverse and not significant, a number of mitigation measures are proposed, including communications with the port, agreeing a contractor Risk Assessment Method Statement (RAMS), ensuring the availability of pollution response equipment, provision and maintenance of aids to navigation, updated local instructions on arrival/sailing parameters, all construction craft to have AIS equipment, and a safety boat to be ready on standby during construction activities.

11 Coast Protection, Flood Defence and Drainage (Chapter 11)

- 11.1.1 This chapter provides a preliminary assessment of potential significant effects of the proposed development on coastal protection, flood defence and drainage receptors, namely people, property, infrastructure, flood defence assets, drainage and sewer systems and waterbodies.
- 11.1.2 Baseline reviews of the existing coastal defences, flood risk and drainage receptors are presented. The main data sources used to characterise the baseline conditions included the relevant Shoreline Management Plan (SMP) and Flood Risk Management Strategy for the study area, Environment Agency Flood Risk Maps and datasets, and British Geological Society (BGS) records.
- 11.1.3 A preliminary assessment of the potential impacts on coastal protection, flood defence and drainage receptors as a result of the proposed development during construction and operation is presented. A total of 16 impact pathways are assessed, including the exposure to floodwater, changes in tidal regime, floodplain inundation from flood resources, changes to flow regimes and/or water levels, changes to surface water run-off rates and volumes. The significance of potential impacts on coastal protection, flood defence and drainage receptors, at this preliminary stage, ranges from **neutral to large adverse** in advance of any mitigation.
- 11.1.4 In order to avoid and/or reduce significant adverse impacts to **neutral or slight adverse** and/or ensure impacts are **slight to moderate beneficial**, a number of mitigation measures are proposed. These include ensuring there is a site induction for construction workers and operators, registering the site with the Environment Agency Flood Warnings Direct Service, ensuring there are no visitors or access during periods of inclement weather, adhering to the CEMP and a Flood Response Plan, no work onsite during a flood warning period, implementing temporary drainage facilities to control discharge of surface water run-off during construction, improving the standard of protection provided by the flood defences in line with 'hold the line' management policies, embedding flood resilience and resistant measures in the project design, and improving the design of the drainage infrastructure.

12 Ground Conditions, Including Land Quality (Chapter 12)

- 12.1.1 This chapter provides a preliminary assessment of the potential significant effects of the proposed development on geology, soils and contaminated land. The receptors that have been considered in this assessment are human health, an ecological system or organism within such a system, geology,

property in the form of buildings and services, and controlled waters (surface water courses and groundwater).

- 12.1.2 Baseline reviews of the statutory and non-statutory designated sites, soils, geology, geological features and minerals, hydrogeology, surface waters and historical development in the study area are presented. The main data sources used to characterise the baseline conditions included a Phase 1 Desk Study involving a site walk-over, BGS maps and web resources, Google Maps, Coal Authority Interactive Map Viewer, Public Health England website, UK Radon website and historic soil survey.
- 12.1.3 A preliminary assessment of the potential impacts on relevant receptors as a result of the proposed development during construction and operation is presented. A total of eight impact pathways are assessed, including the direct contact with contamination, the inhalation of dust and/or soil derived vapours, the migration and accumulation of ground gas, the lateral and vertical migration of contamination through groundwater and surface run-off. Potential impacts generally range from **neutral to moderate/large adverse** in advance of any mitigation.
- 12.1.4 A range of mitigation measures are proposed to avoid and/or reduce significant impacts to **neutral to slight adverse**. These include adhering to the CEMP, following environmental good practice and pollution prevention guidance, undertaking a ground investigation (GI) to confirm baseline assumptions, undertaking a foundation works risk assessment for piling operations and measures detailed in piling method statements, adopting safe working practices under relevant health and safety legislation, and implementing ground gas protection measures into design and build structures.

13 Air Quality (Chapter 13)

- 13.1.1 This chapter provides a preliminary assessment of the potential significant effects on local air quality that could result from the proposed development.
- 13.1.2 A baseline review of air quality in the study area is presented. The main data sources used to characterise the baseline conditions include air quality monitoring data gathered by local authorities and Department of Food and Rural Affairs' (Defra's) Automatic Urban and Rural Network (AURN) and Defra background pollutant concentration data, as well as a site specific nitrogen dioxide (NO₂) diffusion tube survey.
- 13.1.3 A preliminary assessment of the potential likely impacts and effects on dust and air quality sensitive receptors as a result of the proposed development during construction and operation is presented. A total of three impact pathways, are assessed, including the impacts to air quality as a result of construction dust and site plant emissions, and traffic and marine vessel emissions during construction and operation. The significance of potential

impacts on relevant receptors, at this preliminary stage, ranges from **negligible to moderate adverse** in advance of any mitigation.

- 13.1.4 A range of mitigation measures are recommended to avoid and/or reduce significant adverse impacts as far as possible. These include standard practice dust mitigation, implementation of a travel plan during construction and operation, use of designated construction routes, onsite speed limits, prohibiting idling engines, and selective catalytic reduction on vessels main engine emissions.

14 Airborne Noise and Vibration (Chapter 14)

- 14.1.1 This chapter provides a preliminary assessment of the potential significant effects of the proposed development on Noise Sensitive Receptors (NSRs) during construction and operation.
- 14.1.2 Baseline reviews of the key sound sources and NSRs relevant in the study area are presented. The main data sources used to characterise the baseline conditions include satellite imagery, Ordnance Survey (OS) mapping and UK environmental noise mapping. In addition, a sound survey has been undertaken to characterise the sound climate.
- 14.1.3 A preliminary assessment of the potential for airborne noise and vibration impacts as a result of the proposed development during construction and operation is presented. A total of four impact pathways are assessed, including potential noise and vibration impacts associated with construction activities on site, potential noise impacts associated with traffic movements during construction and operation, and potential noise impacts associated with vessel movements, other site activities and mechanical plant during operation. All of the potential impacts are assessed, at this preliminary stage, as **insignificant to minor adverse** and not significant apart from the potential construction noise impacts during landside activities which are considered to be potentially **moderate adverse**, and noise impacts due to traffic movements during operation which are assessed as **moderate to major adverse**.
- 14.1.4 In order to avoid and/or reduce these significant impacts to acceptable levels, standard noise mitigation measures are proposed during construction, and additional screening, on site management of traffic movements whilst re-routing traffic during operation are being considered.

15 Cultural Heritage and Marine Archaeology (Chapter 15)

- 15.1.1 This chapter provides a preliminary assessment of the potential significant effects of the proposed development on the marine historic environment.

- 15.1.2 Baseline reviews of the known and potential terrestrial, intertidal and marine cultural heritage, including consideration of their setting and historic seascape character in the study area are presented, including the seabed prehistory, seabed maritime and aviation features, intertidal archaeological sites, and the historic setting of the Port of Immingham. The main data sources used to characterise the baseline conditions include the UK Hydrographic Office (UKHO) wreck database, Historic England's National Record of the Historic Environment (NRHE), the North East Lincolnshire Historic Environment Records (HER), various online resources, including BGS Geology of Britain Viewer, historical maps and OS maps, Admiralty charts, resources held in Wessex Archaeology's library and the Archaeological Data Service.
- 15.1.3 A preliminary assessment of the potential impacts on marine cultural heritage receptors as a result of the proposed development during construction is presented. A total of three impact pathways are assessed, including the direct impacts on known and potential heritage receptors from construction activities, direct impacts on known and potential heritage receptors from dredging, and indirect impacts to heritage receptors due to altered sediment or hydrological processes. Potential direct impacts are assessed, at this preliminary stage, as **moderate to major adverse** and significant and indirect impacts are assessed as **moderate adverse** and not significant.
- 15.1.4 In order to avoid and/or reduce the significant impacts to **negligible** or potentially **major positive**, a number of mitigation measures are proposed including undertaking further investigation by means of geoarchaeological assessment of geotechnical samples, as well as geophysical survey which will be reported in the ES. In addition, Archaeological Exclusion Zones (AEZs) will be implemented as appropriate, an archaeological watching brief will be present during the dredging works, and implementation of the Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD).

16 Socio-economic Receptors (Chapter 16)

- 16.1.1 This chapter provides a preliminary assessment of the potential significant effects of the proposed development on employment, local businesses, and the local population.
- 16.1.2 Baseline reviews of the socio-economic receptors in the study area are presented, including local population and labour market, employment sectors, economic activity and inactivity, and workforce occupations. The main data sources used to characterise the baseline conditions include the 2011 Census data, 2019 English Indices of Deprivation, UK Office of National Statistics (ONS) data, and Travel to Work data.
- 16.1.3 A preliminary assessment of the potential for socio-economic impacts as a result of the proposed development during construction and operation is presented. A total of nine impact pathways are assessed, including the potential impact on employment, local services and infrastructure, existing businesses and activities, and changing influx of works during construction

and operation. In addition, the potential impact on temporary accommodation during construction is also assessed. At this preliminary stage, potential **major beneficial** effects are identified during the construction phase in terms of the creation of the direct, indirect and induced employment. The other potential impacts are assessed, at this preliminary stage, as either **negligible or minor beneficial** and not significant.

17 Traffic and Transport (Chapter 17)

17.1.1 This chapter provides a preliminary assessment of the potential significant effects of the proposed development on traffic and transportation.

17.1.2 Baseline review of the local highway network, existing rail infrastructure, existing traffic flows, road safety, public transport provision, and walking and cycling provision are presented. The main data sources used to characterise the baseline conditions include traffic flow data from the Department for Transport (DfT), Personal Injury Accident data from North East Lincolnshire and from Crashmap.co.uk. In addition, traffic count data has been collected on the local road network at various locations during 2021.

17.1.3 A preliminary assessment of the potential for impacts on traffic and transport receptors as a result of the proposed development during construction and operation is presented. A total of 12 impact pathways are assessed, including impacts associated with potential severance, driver delay, pedestrian delay and amenity, accidents and safety, hazardous or abnormal loads, and fear and intimidation during construction and operation. All of the potential impacts, at this preliminary stage, are assessed as **insignificant to minor adverse** and not significant. As a result, there are no specific mitigation measures considered necessary to ensure the proposed development is acceptable in highway terms at this stage.

18 Land Use Planning (Chapter 18)

18.1.1 This chapter provides a preliminary assessment of the potential significant risks of the proposed development on land use planning and human health.

18.1.2 Baseline reviews of all the current major hazard sites, pipelines and explosives sites where major accidents could impact on the area of the proposed development are presented. The main data sources used to understand the existing sources of risk include the HSE's Land Use Planning Methodology, Planning Practice Guidance (Hazardous Substances), PINS Advice Note 11 Annex G, the latest HSE land use planning zones for all major hazard sites and pipelines in the vicinity, and the safeguarding zones for explosives sites in the vicinity. In addition, the HSE's publicly available land use planning web application has been consulted.

- 18.1.3 The approach used to the preliminary assessment of risk is based on that adopted by the HSE for land use planning, with some additional quantitative risk analysis to provide a better understanding of the risks.
- 18.1.4 The preliminary assessment indicates that, for most of the IERRT, the levels of risk are sufficiently low that HSE would not normally advise against the development on the grounds of safety. A possible exception is related to the small number of workers within the Development Proximity Zone (DPZ). This risk has been discussed with HSE who has advised that what is being proposed would be acceptable, in view of the small number of people (all workers), that will only be present for a short time and will be spread out over a large area. The preliminary assessment also emphasised the importance of limiting the numbers of members of the public present at any one time in the waiting area of the Terminal.
- 18.1.5 The design and layout of the proposed development has been deliberately arranged in order to minimise major accident hazard risks as far as possible, by reducing the number of people in high-risk areas and ensuring that any areas with potentially significant numbers of members of the public are located in areas of the lowest risk.

19 Climate Change (Chapter 19)

- 19.1.1 This chapter provides a preliminary assessment of the potentially significant effects of the proposed development in relation to climate change. Consideration of climate change effects is divided into three aspects: Impact of the proposed development on climate (greenhouse gas (GHG) emissions); Climate change resilience (CCR) review of the proposed development to climate change; and in-combination climate change impacts (ICCI).
- 19.1.2 Baseline reviews of the receptors and considerations of relevance to the GHG impact assessment, CCR review and ICCI assessment are presented. The main data sources used to characterise the baseline conditions include historical climate data obtained from the Met Office, UKCP18, Clean Maritime Plan and ABP's Climate Change Adaptation Report.
- 19.1.3 In terms of the GHG impact assessment, a qualitative assessment of the emissions arising from the proposed development is presented at this preliminary stage. The proposed development will likely increase GHG emissions in comparison to the existing baseline. The assessment of GHG emissions in the ES will quantify the magnitude of the proposed development's emissions and put these into context against national and sectoral carbon budgets to assess their significance.
- 19.1.4 In terms of the CCR review and the ICCI assessment, climate change is expected to increase the risk of the proposed development to climate hazards, with the greatest risk present during the operational lifecycle stage. The proposed development has considered a number of mitigation measures, including the implementation of heat and drought through building design and

operational methods. However, as the confidence around the certainty of the climate hazard impact is low, and there is a low probability chance for a catastrophic climate scenario, the significance of the impact following the application of proposed mitigation measures, therefore, remains the same.

20 Cumulative and In-combination Effects (Chapter 20)

20.1 Introduction

20.1.1 This chapter presents the approach to, and initial stages of, the preliminary assessment of the cumulative and in-combination effects of the proposed development.

20.2 Inter-project effects

20.2.1 The assessment of cumulative and/or in-combination effects of the proposed development on other plans, projects and activities, which are referred to as inter-project effects, involve identifying and assessing any potential overlap or interaction of effects arising from other plans, projects and activities with the effects arising from the proposed development on the receptors/topics considered in the PEIR.

20.2.2 In accordance with PINS Advice Note 17, a staged approach to the inter-project effects assessment is proposed. For the purposes of the PEIR, Stage 1 (establishing a long list of other developments) and Stage 2 (establishing a short list of developments from the Stage 1 long list) have been completed. The assessment should, however, be iterative and may need to be updated a number of times so that the ES reflects the latest position of relevant other developments proposed within the vicinity of the IERRT project. Comments received during ongoing consultation will also be taken into account as part of the assessment process.

20.2.3 A long list of developments and activities (Stage 1) is presented in the chapter. The only NSIP within the area of search (10 km) was the Able Marine Energy Park (AMEP) proposal, located approximately 3 km north west of the proposed development. This comprises the development of a new quay and associated development at Killingholme in North Lincolnshire, on the south bank of the Humber Estuary. An application for 'Material Change 2' to the Able Marine Energy Park DCO was submitted to PINS on 25 June 2021. The Examining Body is currently due to complete the examination of that application by 16 March 2022.

20.2.4 The developments and activities that have initially been shortlisted at this preliminary stage (Stage 2 of the process) and are proposed to be scoped into the inter-project effects assessment are presented.

20.3 Intra-project effects

20.3.1 The assessment of cumulative and/or in-combination effects of the proposed development alone, which are referred to as intra-project effects, involve identifying the impact pathways from the individual EIA topic assessments (Chapters 7 to 19) that may have residual adverse impacts and considering whether and to what degree they might have the potential to act on the same receptor.

20.3.2 From a review of the preliminary topic assessments in the PEIR, the following receptors have been identified as having the potential to result in intra-project effects:

- Water and sediment quality;
- Benthic habitats and species;
- Fish;
- Marine mammals;
- Coastal waterbirds;
- Local residents / population;
- Flood defences;
- Soils/groundwater;
- Existing development/property (building and services);
- Existing businesses; and
- Proposed development.

20.3.3 An overview of the residual effects these receptors are predicted to experience as assessed at this preliminary stage are set out. This preliminary work will be kept under review during the assessment process. This review will also take account of any comments received during consultation.

20.3.4 The assessment as to whether any significant intra-project effects could arise as a result of the interaction of the residual effects will be presented in the ES.

21 Summary of Impacts (Chapter 21)

21.1.1 This chapter summarises the key outcomes of the assessment of potential impacts associated with the construction and operation of the proposed development on all relevant (scoped-in) topics/receptors.

21.1.2 Standard best practice procedures and impact reduction measures are identified to avoid and/or minimise significant adverse impacts as far as practicable. With the adoption of appropriate mitigation, it is considered that all significant adverse impacts associated with the proposed development can be avoided and/or minimised to acceptable levels.

Reference

ABPmer. (2021). Immingham Eastern Ro-Ro Terminal, Scoping Report, ABPmer Report No. R.3712. A report produced by ABPmer for Associated British Ports, September 2021.

Abbreviations/Acronyms

Acronym	Definition
ABP	Associated British Ports
AIS	Automated Identification System
AMEP	Able Marine Energy Park
AURN	Automatic Urban and Rural Network
BGS	British Geological Society
CCR	Climate Change Risk
CD	Chart Datum
CEMP	Construction Environmental Management Plan
COVID	Coronavirus
DCO	Development Consent Order
Defra	Department of Food and Rural Affairs
DPZ	Development Proximity Zone
DTA	David Tucker Associates
EIA	Environmental Impact Assessment
ES	Environmental Statement
FRA	Flood Risk Assessment
GHG	Greenhouse Gas
GI	Ground Investigation
HER	Historic Environment Records
HGV	Heavy Goods Vehicle
HRA	Habitats Regulations Assessment
HSE	Health and Safety Executive
ICCI	Greenhouse Gas Emissions
IEMA	Institute of Environmental Management and Assessment
IERTT	Immingham Eastern Ro-Ro Terminal
JNCC	Joint Nature Conservation Committee
LLP	Limited Liability Partnership
MMO	Marine Management Organisation
MPS	Marine Policy Statement

NPPF	National Planning Policy Framework
NPSfP	National Policy Statement for Ports
NRA	Navigational Risk Assessment
NRHE	National Record of the Historic Environment
NSIP	Nationally Significant Infrastructure Projects
NTS	Non-Technical Summary
ONS	Office of National Statistics
OS	Ordnance Survey
PA	Planning Act
PAD	Protocol for Archaeological Discoveries
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PLC	Public Limited Company
PSA	Particle Size Analysis
RAMS	Risk Assessment Method Statement
Ramsar	Wetlands of international importance, designated under The Convention on Wetlands (Ramsar, Iran, 1971)
ro-ro	roll-on/roll-off (ro-ro)
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SHA	Statutory Harbour Authority
SMP	Shoreline Management Plan
SPA	Special Protection Area
SSC	Suspended Sediment Concentrations
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
WFD	Water Framework Directive
WHA	Waste Hierarchy Assessment
WSI	Written Scheme of Investigation

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

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