

2 EIA Process and Methodology

2.1 Introduction

- 2.1.1 This chapter of the ES sets out the legislative framework, key guidance, process and methodology that has been followed when undertaking the EIA for the proposed development. In addition, the scoping and consultation process adopted to identify key environmental topics for inclusion in the EIA is outlined. Whilst the overall approach and methodology is described in this chapter, further detail on how the methodology was tailored to each environmental topic of the EIA is presented in the relevant technical assessment chapters of the ES.
- 2.1.2 This chapter is accompanied by the following technical appendices within ES Volume 2:
- Technical Appendix 2.1: Description of EIA Stages;
 - Technical Appendix 2.2: EIA Scoping Report;
 - Technical Appendix 2.3: CC EIA Scoping Opinion;
 - Technical Appendix 2.4: MMO EIA Scoping Opinion;
 - Technical Appendix 2.5: Summary of EIA Scoping Opinions;
 - Technical Appendix 2.6: Applicant's EIA Scoping Opinion Response and Revised Opinions;
 - Technical Appendix 2.7: Definition of Intra- and Inter-Project Cumulative Effects;
 - Technical Appendix 2.8: Consideration of Potentially Cumulative Schemes;
 - Technical Appendix 2.9: Navigation Risk Assessment;
 - Technical Appendix 2.10: Flood Risk Assessment;
 - Technical Appendix 2.11: Ecological Impact Assessment; and
 - Technical Appendix 2.12: Habitats Regulations Assessment.

2.2 EIA Regulations and Guidance

- 2.2.1 The European Parliament adopted a fully updated version of the EIA Directive (2014/52/EU) in 2014. This Directive was transposed into law through The Town and Country Planning (Environmental Impact Assessment) Regulations, 2017¹ on 16 May 2017, which supersede all previous EIA Regulations.
- 2.2.2 The EIA Directive was also transposed into law through The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)². These Regulations require EIA to be carried out prior to the granting of consent for certain regulated activities in UK waters and UK controlled waters.
- 2.2.3 This ES has been prepared pursuant to (and in accordance with) The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 and The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended), referred to in this ES as 'the EIA Regulations'.
- 2.2.4 The EIA Regulations set out the statutory process and minimum requirements for EIA and the contents of the ES. Specifically, they prohibit the grant of planning permission for developments likely to have significant effects on the environment, defined in the EIA Regulations as 'EIA development', unless information on those effects is considered by the relevant planning authority in reaching its decision on a planning application. That information includes both the ES, which is the Applicant's own

assessment, and any other information provided by consultees, the public, and any other persons about the proposal's environmental effects.

- 2.2.5 In addition to the EIA Regulations, there is guidance available on EIA and the application of the EIA Regulations, which has been considered in undertaking this EIA including:
- IEMA Guidelines for Environmental Impact Assessment³;
 - IEMA Special Report into the State Environmental Impact Assessment Practice in the UK⁴;
 - NPPF, 2024⁵;
 - PPG⁶;
 - Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government (MHCLG) Online Resource - Guidance for Environmental Impact Assessment⁷;
 - IEMA Guidelines for Environmental Assessment of Traffic and Movement⁸;
 - IEMA Environmental Impact Assessment Guide to: Shaping Quality Development⁹;
 - IEMA Environmental Impact Assessment Guide to: Delivering Quality Development¹⁰;
- 2.2.6 Guidance of relevance to individual technical assessments have been set out in Chapters 6-19.

2.3 EIA Process

- 2.3.1 EIA is a process that identifies the likely significant environmental effects (both beneficial and adverse) of a proposed development. The process aims to avoid, off-set and/or reduce any significant adverse environmental effects, where these are identified, and to enhance any beneficial effects. Proposed developments to which EIA is applied are those that are likely to have significant effects on the environment by virtue of factors such as their nature, size or location.
- 2.3.2 The following sections describe the EIA screening, scoping and impact assessment stages in relation to the proposed development. Further detail is provided in Technical Appendix 2.1.

2.4 EIA Screening

- 2.4.1 The proposed development falls within Schedule 1 8(2) of The Town Country and Planning EIA Regulations and Schedule A1 (14) of The Marine Works EIA Regulations, as the site is a trading port which can take vessels over 1,350 tonnes. The proposed development is therefore of the scale and nature that may give rise to significant effects on the environment. A formal EIA Screening has not been undertaken as Schedule 1 projects automatically require an EIA.

2.5 EIA Scoping and Consultation

EIA Scoping

- 2.5.1 The Applicant submitted an EIA Scoping Report to CC and the MMO on 09 August 2023 in support of a request for a formal EIA Scoping Opinion pursuant to Regulation 15(1) of the Town and Country Planning EIA Regulations and Regulation 13(1) of The Marine Works EIA Regulations. The EIA Scoping Report is presented in Technical Appendix 2.2 and sets out a description of the then emerging proposed development, the potential environmental impacts and likely effects to be considered as part of the EIA. It also sets out the proposed approach that would be adopted for the EIA including the

¹ UK Government Legislation, 2017. Town and Country Planning (Environmental Impact Assessment) Regulations 2017, as amended, online. Available at: <https://www.legislation.gov.uk/ukxi/2017/571/contents/made>

² UK Government Legislation, 2007. Marine Works (Environmental Impact Assessment) Regulations 2007, as amended, online. Available at: <https://www.legislation.gov.uk/ukxi/2007/1518/contents/made>

³ Institute of Environmental Management and Assessment (IEMA), 2004. Guidelines for Environmental Impact Assessment. IEMA.

⁴ Institute of Environmental Management and Assessment (IEMA), 2011. Special Report into the State Environmental Impact Assessment Practice in the UK. IEMA.

⁵ Department for Levelling Up, Housing and Communities, 2024. The National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁶ Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government (Live Document), Planning Practice Guidance [online] Available: <https://www.gov.uk/government/collections/planning-practice-guidance>

⁷ Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government, 2020. Guidance for Environmental Impact Assessment.

⁸ IEMA, 2023. Guidelines for Environmental Assessment of Road Traffic and Movement.

⁹ IEMA, 2015. Environmental Impact Assessment Guide to Shaping Quality Development.

¹⁰ IEMA, 2016. Environmental Impact Assessment Guide to Delivering Quality Development.

- proposed scopes and assessment methodologies to predict the scale of effects and to assess the significance in each case.
- 2.5.2 Since submission of the Scoping Report, there has been some design development and amendments to the red line boundary to ensure it captures the full extent of the development and construction working area. These changes do not result in any additional or materially different likely significant effects than those set out in the Scoping Report and Scoping Opinions.
- 2.5.3 CC adopted an EIA Scoping Opinion on 6 October 2023 and the MMO adopted an EIA Scoping Opinion on 25 October 2023, which are presented in Technical Appendix 2.3 and Technical Appendix 2.4, respectively.
- 2.5.4 A summary of the general EIA Scoping Opinion comments and requests is presented in Technical Appendix 2.5. The EIA Scoping Opinion comments and requests received in respect of the individual environmental topics and technical assessments scoped into the EIA as technical assessment chapters are summarised and considered in each of the technical assessment chapters and are therefore not repeated in Technical Appendix 2.5.
- 2.5.5 In accordance with Regulation 18(4)(a) of the Town and Country Planning EIA Regulations and Regulation 13(3) of The Marine Works EIA Regulations, the EIA has been undertaken and the ES prepared based on the EIA Scoping Opinions. The Scoping Opinions and subsequent relevant correspondence are included in Technical Appendices 2.3 - 2.6.

Topics Scoped In and Out of the EIA

- 2.5.6 The EIA scoping process identified, based on the proposed development, which environmental topics might give rise to potential significant environmental effects. Those topics not predicted to give rise to potential significant effects have been scoped out and not considered further. Those with potential significant effects are considered within the technical chapters of the ES (refer to ES Chapters 6-19). Table 2.1 provides a summary of topics scoped in and out of the EIA.
- 2.5.7 Full justification for scoping some topic areas out of the ES is provided in Technical Appendices 2.2 - 2.4 and is therefore not repeated here.

Table 2.1: Summary of Topics Scoped in and Out of the EIA

Topics	Topic Scoped In (Yes/No)	ES Chapter Number
Coastal Processes and Sediment Regime	Yes	Chapter 6*
Underwater Noise	Yes	Chapter 7*
Marine Water and Sediment Quality	Yes	Chapter 8
Ground Conditions	No	Not applicable
Flood Risk	Yes	Not applicable (standalone assessment included)
Marine Ecology	Yes	Chapter 9
Commercial Fisheries and Shellfisheries	Yes	Chapter 10
Terrestrial Ecology and Ornithology	Yes	Not applicable (standalone assessment included)
Marine Archaeology	Yes	Chapter 11
Heritage	Yes	Chapter 12
Navigation and Recreation	Yes	Not applicable (standalone assessment included)
Transport	Yes	Chapter 13
Noise and Vibration	Yes	Chapter 14
Air Quality	Yes	Chapter 15
Climate Change	Yes	Chapter 16
Material Resources and Waste	Yes	Chapter 17
Landscape, Seascape and Visual Amenity	Yes	Chapter 18
Socioeconomics	Yes	Chapter 19
Population and Human Health	No	Not applicable
Major Accidents and Disasters	No	Not applicable

*these ES chapters report on the magnitude of change, rather than the resultant effects on receptors of that change, which are reported on in other chapters based on the outputs of these chapters.

- 2.5.8 Whilst not required for inclusion as discrete chapters within the ES, the following environmental technical reports were prepared and are included as Technical Appendices to the ES:
- Navigation Risk Assessment (NRA) (Technical Appendix 2.9);
 - Flood Risk Assessment (FRA) (Technical Appendix 2.10);
 - Ecological Impact Assessment (EcIA) (Technical Appendix 2.11); and
 - Habitats Regulations Assessment (HRA), including over-wintering bird survey report (Technical Appendix 2.12).
- 2.5.9 In addition, whilst not required for inclusion in the ES, the following environmental technical reports were prepared and are included as part of the planning application package for the proposed development:
- Contaminated Land Desk Study (Ramboll, 2024); and
 - Biodiversity Net Gain (BNG) Assessment (Ramboll, 2024).

Consultation

2.5.10 As part of the EIA Scoping Process, the following technical consultations were undertaken:

- A HAZID workshop and consultation with local stakeholders regarding navigation risk have been conducted, the details of which are presented in the NRA (Technical Appendix 2.9).
- The scope of the benthic survey, which informs ES Chapter 9: Marine Ecology, was agreed through consultation with Natural England, the MMO and Cefas.
- The sampling plan was approved by the MMO and Cefas in advance of the ground investigation.
- Consultation with CIFCA, CC and other relevant local stakeholders (such as Falfish) regarding commercial fisheries and shellfisheries (ES Chapter 10: Commercial Fisheries and Shellfisheries) was undertaken.
- With regards to Marine Archaeology (ES Chapter 11: Marine Archaeology), the scope of the walkover survey of the study area was agreed through consultation with the Archaeological Curator, Historic England, and the Regulator, the MMO. Additional consultation was also undertaken with Historic England to agree the scope of both the marine archaeology and heritage assessments.
- Technical consultation was undertaken with the MMO and CC regarding the scope of the baseline noise survey, which informs ES Chapter 14: Noise and Vibration. No specific response was received.
- Technical Consultation was undertaken with CC to agree the scope of Transport (ES Chapter 13: Transport).
- Consultation with AONB Partnership, CC and Historic England was undertaken on viewpoint locations for the purposes of Seascape, Landscape and Visual Assessment and Archaeology and Built Heritage.
- Regular engagement has been undertaken throughout the EIA process with the MMO and Natural England.

2.5.11 Scoping for the Transport Assessment (TA) was conducted in parallel to the EIA formal Scoping process. Details of the TA scoping are detailed within the TA, appended to the ES (Technical Appendix 13.1).

2.5.12 Details of these technical consultations are included in the relevant technical assessments, as appropriate. Engagement with the following local stakeholders and consultees was also undertaken throughout 2023 - 2024:

- All A&P Employees;
- Interested individuals;
- Harbour Pilots;
- Pendennis Shipyard;
- Falmouth Harbour Commissioners (FHC);
- World Fuels;
- Royal Navy Liaison Officer;
- Port Agents;
- FDEC Port User Group;
- SAC Management Group;
- Falmouth Cruise Ambassadors;
- Cornwall Council;
- Cornwall and Isles of Scilly Local Enterprise Partnership (LEP);
- Local MPs & Councillors;
- Customers;
- Celtic Sea Power;
- A&P Careers fair; and

- Coastal Partnerships Group.

2.6 Impact Assessment

2.6.1 In accordance with the EIA Regulations, the EIA has been undertaken based on the:

- site as shown and described in Chapter 1: Introduction, as well as the individual technical assessments (ES Chapters 6-19); and
- proposed development as shown and described in ES Chapter 4: Proposed Development Description and Chapter 5: Demolition and Construction.

2.6.2 Where detailed information on the proposed development has not been available, reasonable assumptions have been made, and have been clearly set out, based on experience of developments of a similar type and scale to enable a robust assessment of likely significant effects.

2.6.3 The general approach to impact assessment is described in Technical Appendix 2.1.

2.6.4 Detailed methodologies for each environmental topic are provided within the respective chapters of this ES. This includes details of any mathematical models, simulation models, or recognised specific predictive models, where applicable. Where such models are not available or appropriate, the technical chapters describe how the assessment methodology uses other sources of information, experience, literature and professional judgement. Any assumptions or limitations to knowledge are stated. In all cases the thought process leading to the conclusions is based on reasonably reliable data and so is considered to be prudent and robust.

Assessment Scenarios

2.6.5 The EIA considers the following stages of the proposed development:

- Demolition and Construction Stage; and
- Operational Stage.

2.6.6 For the operational stage, the EIA has assessed and reported on the environmental effects of the proposed development as a whole.

2.6.7 For the demolition and construction stage assessment, the exact phasing and delivery timescales for the construction stage is not currently known, and will be influenced by funding streams and end user programme, as well as detailed consideration of construction methods once a contractor is on board. However, for the purposes of the EIA, a worst-case programme has been assessed, based on the most efficient and intense use of plant and equipment deemed practicable, whereby the works at each wharf are undertaken in parallel and demolition and construction activities occurring in different areas of the site overlap. This is set out in Chapter 5: Demolition and Construction, and is considered a worst-case scenario in terms of likely environmental effects due to a more intense period of construction. It is considered that an elongation of the construction period, or delays between phases would reduce likely environmental effects.

2.6.8 The assessment of the proposed development has been carried out against the existing baseline conditions. However, in accordance with standard practice ES Chapter 13: Transport, ES Chapter 14: Noise and Vibration, ES Chapter 15: Air Quality, and ES Chapter 16: Climate Change have carried out their assessments against 'future baseline' scenarios for the demolition and construction stage and operational stage.

2.6.9 The future baseline for the demolition and construction stage is the year of the most intensive demolition and construction works (2026), in terms of the number of traffic flows, as set out in ES Chapter 5: Demolition and Construction. Accordingly, the following assessments scenarios have been considered:

- **Scenario 1:** Existing Baseline (2023)¹¹; and

¹¹ Updated following EIA Scoping Process.

- **Scenario 2:** Future Baseline (2026) + proposed development demolition and construction traffic flows.
- 2.6.10 The future baseline for the operational stage comprises the year in which the proposed development would be operational, at the earliest (2027).
- 2.6.11 Accordingly, the following assessment scenarios have been considered:
- **Scenario 1:** Existing Baseline (2023);
 - **Scenario 2:** Future Baseline (2027)²⁰ (do nothing¹²); and
 - **Scenario 3:** Future Baseline (2027) + proposed development (do something¹³).

Spatial Scope

- 2.6.12 The geographical extent of the EIA is referred to as the spatial scope. The site extends to approximately 47.2 ha as defined by the EIA boundary shown in Chapter 1: Introduction, Figure 1.3.
- 2.6.13 The spatial scope (or 'study area') of the assessment in each of the technical chapters varies depending on the type of effect and the sensitivity of the particular receptors potentially present. Many environmental effects extend beyond the site, such as air quality, noise, road traffic and socio-economic influences. The spatial scope of the technical assessments is set out in each of the technical ES chapters.

Assessment Criteria

- 2.6.14 The descriptions in this section provide a general indication of the assessment criteria used, however the specific methodology that has been adopted to determine the significance of effects has been described within individual technical chapters. This can result in difference between the impact assessment methodologies and terminology adopted for each chapter.
- 2.6.15 Although the terms 'effect' and 'impact' can be used interchangeably, it should be noted that in this ES the term 'effect' has generally been used in preference to the term 'impact' when discussing significance. The term 'impact' is generally used to describe the predicted magnitude or extent of environmental or social change as a result of the proposed development. The term 'effect', however, is used to describe the consequences of the impact, taking into consideration the sensitivity of the affected receptor.

Value or Sensitivity of Receptor Criteria

- 2.6.16 Unless otherwise stated in the technical chapter, the value or sensitivity of receptor is described as:
- Low;
 - Medium; or
 - High.

Magnitude of Change Criteria

- 2.6.17 The magnitude of an impact represents the degree by which a particular receptor is compromised. Magnitude is often quantifiable in terms of, for example, the extent of land take, loss of biodiversity or predicted change in noise levels.
- 2.6.18 Unless otherwise stated in the technical chapter, magnitude is described as:
- Low;
 - Medium; or
 - High.

Significance Criteria

- 2.6.19 The EIA Regulations stipulate that an ES should, where possible, identify, describe and assess the likely significant effects of the development on the environment, including a consideration of:
- Beneficial, neutral and adverse effects;
 - Permanent and temporary effects;
 - Direct and indirect effects;
 - Short-term effects (considered in this ES up to 5 years);
 - Medium-term effects (considered in this ES as 5-10 years);
 - Long-term effects (considered in this ES as more than 10 years);
 - Cumulative effects (Inter- and Intra-project effects).
- 2.1.1 The methods of predicting the nature and magnitude of any potential impact vary according to the subject area. Specific conventions have been developed to define significance, wherever possible, defined and structured as transparently as possible based on the following two factors:
- The value or sensitivity of the affected receptor; and
 - The nature, magnitude or severity of the impact (i.e. the predicted change taking place to the environment).
- 2.6.20 As a general rule, the EIA assesses the effects that are likely to arise as a consequence of a potential impact/change to environmental receptors following the application/consideration of embedded mitigation measures.
- 2.6.21 Significant likely environmental effects have been predicted with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, qualitative assessments have been carried out, based on available knowledge and professional judgement. Where uncertainty exists, it has been noted in the relevant assessment and a prudent or conservative approach adopted so that the significance will not be under-estimated.
- 2.6.22 Table 2.2 provides a generic matrix that is typically used to define the level of significance of effects, along with the application of professional judgement. Where specific alternative terminology or alternative assessment criteria exist in recognised topic specific guidance, and this has been used, this is defined in each of the technical chapters.

Table 2.2: Significance Matrix (Significant Effects in Bold)

Sensitivity of Receptor	Magnitude of Change (Impact)		
	Low	Medium	High
Low	Negligible	Minor	Minor
Medium	Minor	Moderate	Moderate
High	Minor	Moderate	Major

- 2.6.23 Each of the technical chapters provides the criteria, including sources and justifications, for quantifying the different levels of impact, and the sensitivities of the identified receptors. Where possible, this has been based upon quantitative and accepted criteria.
- 2.6.24 Throughout the ES, effects have been predicted as either '**significant**' or '**not significant**'. Significant effects are considered material to the planning decision process (highlighted '**bold**' in Table 2.2). Residual effects of moderate and major scale are generally considered '**significant**', however, this is dependent on the technical assessment as well as the existence of published assessment guidance. Where published assessment guidance is not definitive in respect of categorising/determining

¹² The future baseline condition should the proposed development not be delivered.

¹³ The future baseline condition should the proposed development be delivered.

significant environmental effects, professional judgement has been applied, taking into account the duration, extent and context of the effect, to determine significant effects.

- 2.6.25 Where significant effects are identified, if any additional mitigation measures are required, further to those already embedded into the proposed development throughout its evolution, these are proposed, and the proposed development is reassessed to ascertain the likely residual effects and the likely significant environmental effects.

Cumulative Assessment

- 2.6.26 The EIA Regulations require that all likely significant effects of a development are taken into account, including cumulative effects.
- 2.6.27 There is no prescriptive guidance on the methodology for the assessment of cumulative effects. However, the Institute of Environmental Management & Assessment (IEMA) Guidance¹⁴ identifies two types of cumulative effects. These are summarised below and described in more detail in Technical Appendix 2.7:
- **Intra Project Effects:** Combined effects of different types of impact or 'impact interactions', for example the multiplying effects arising from noise, dust and visual impacts during the construction of the proposed development on a particular sensitive receptor; and
 - **Inter Project Effects:** Combined or additive effects generated from the proposed development together with other planned or likely foreseeable developments and also referred to as 'in-combination effects'. These other developments may generate their own individually insignificant effects but when considered together could amount to significant cumulative effects, for example, combined transport and accessibility impacts from two or more (proposed) developments.

Intra Project Effects

- 2.6.28 It should be noted that only residual effects that are minor, moderate or major in scale have been considered within this assessment, as negligible effects are, by definition, imperceptible in their nature.
- 2.6.29 Intra-project cumulative effects are presented holistically within a discrete assessment chapter (ES Chapter 20: Intra-Cumulative Effects).

Inter Project Effects

- 2.6.30 No cumulative schemes that meet the cumulative scheme criteria defined within the scoping report have been identified for inclusion within the ES at the time of ES preparation (see Technical Appendix 2.8). This has been confirmed by both the MMO and CC. Accordingly, the EIA chapters will not consider inter-project effects.

2.7 Assumptions and Limitations

- 2.7.1 The principal assumptions that have been made, and any limitations that have been identified, in undertaking the EIA are set out below. Assumptions specifically relevant to each environmental topic have been set out in each technical chapter of the ES.
- 2.7.2 Baseline conditions have been established from a variety of sources, including historical data, but due to the dynamic nature of certain aspects of the environment, conditions at the site and surrounding land uses may change. It is not expected that there would be any material changes to the baseline conditions which would impact the conclusions of the ES.
- 2.7.3 The assessments contained within each of the technical assessments of ES Volume 1 and within ES Volume 2 are based on the current legislative and policy framework at the time of ES preparation, having regard to emerging policies and legislative changes.
- 2.7.4 It is assumed that information received from third parties is accurate, complete and up to date.

- 2.7.5 The assessments contained within each of the technical assessments of ES Volume 1 and within ES Volume 2 are based upon the application drawings submitted.
- 2.7.6 The assessments contained within each of the ES Volume 1 technical assessments and in ES Volume 2 are based on the assumption that embedded mitigation measures set out in ES Chapter 4: Proposed Development Description and management regimes set out in ES Chapter 5: Demolition and Construction are implemented.
- 2.7.7 Construction works across the site would take place substantially in accordance with the phasing and programme of works described in Chapter 5: Demolition and Construction. However, this is subject to confirmation on appointment of the contractor, funding mechanisms and end user programme. The EIA has been based on a realistic worst-case scenario in terms of construction, and a change or elongation of programme is considered likely to result in reduced environmental effects than those reported in this ES.
- 2.7.8 A review of cumulative schemes was undertaken based on information available at the time of ES preparation. No cumulative schemes that meet the cumulative scheme criteria defined within the scoping report have been identified for inclusion within the ES.
- 2.7.9 Assessments have assessed the existing baseline conditions at the time of ES preparation (2023 and 2024) unless otherwise stated in the technical chapter.

¹⁴ Institute of Environmental Management and Assessment. The State of Environmental Impact Assessment Practice in the UK. 2011.