

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 1 Introduction

Ardersier Port Extension

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CONTENTS

1 Introduction	4
1.1 The Development	4
1.2 Background.....	5
1.3 Planning Application & Supporting Documents	9
1.4 The Applicant & Regulatory Authorities.....	10
1.5 The Environmental Impact Assessment (EIA).....	11
1.6 Viewing the Applications.....	13
1.7 Next Steps	14

FIGURES

Figure 1.1: Site Location

Figure 1.2: Site Boundaries

Figure 1.3: Planning Application Submission Structure

Figure 1.4: Environmental Constraint Maps

TABLES

Table 1.1: EIA Team.....	12
Table 1.2: Planning Application Viewing Locations.....	14

1 INTRODUCTION

This chapter introduces the proposals for the extension of Ardersier Port, as part of the Ardersier Energy Transition Facility (ETF) (henceforth referred to as the 'proposed development'). The proposed development is also referred to as the Ardersier Port Extension or the Ardersier Port Expansion interchangeably within this Environmental Impact Assessment Report (EIAR). This chapter also introduces the development, the history of the site, the planning context, the Applicant, the Environmental Impact Assessment (EIA) Team, the EIAR and also how you can view and comment on the Planning Application and Marine Licence applications.

1.1 THE DEVELOPMENT

The proposed development is to expand the already consented Ardersier Port facility by around 198 acres of land. It is described as follows:

“Continued port development and expansion of port related services for energy related uses, including marine dredging within the inner harbour, sea disposal of dredged sands, possible temporary stockpiling of dredged material, quay construction, erection of offices, industrial and storage buildings and associated infrastructure including manufacturing, assembly, storage, delivery and export of port related cargo, parking, infrastructure, services, upfilling and re-grading/surfacing of new landward areas and landscaping.”

The proposed development is located within the Highland Council area with the marine elements located within the jurisdiction of the Marine Directorate¹. The site location is shown in Figure 1.1.

¹ [Marine Directorate - gov.scot](http://marine.gov.scot)

Figure 1.1: Site Location



The proposed development includes additional quay construction, dredging of the inner harbour, woodland clearance and the upfilling and creation of a platform. It also includes drainage, landscaping and the retention of a 15m woodland buffer along the southern edge.

The proposed development area could include port and offshore wind related buildings including manufacturing, workshops, assembly facilities (principally bases), storage, offices, and business units but the design and exact details of these will be confirmed by future tenants.

An indicative site layout has been drafted to give an idea of what could be included on the proposed development site, and this has been used where required for the EIA technical assessments. Further information is provided in EIAR Chapter 3 (Project Description).

1.2 BACKGROUND

Ardersier Port is located on the Moray Firth. The site is bordered by the Moray Firth to the north, Carse of Delnies to the east, Carse Wood to the south, and the sand dunes and tidal sandflats of Whiteness Sands to the west. Fort George's live firing range is to the southwest, and Whiteness Head Spit, which shelters a harbour.

The site is located on the edge of a relatively well settled rural landscape. Settlement within proximity of the site is predominantly farms and rural houses. The closest area of settlement is Ardersier village, which is located approximately 3km southwest of the site. Nairn (5km east) and Rosemarkie (5km west) are relatively close coastal settlements with views towards the site. Other villages and towns within 15km of the site include Fortrose (5.5km west), Cromarty (8.5km north), and Invergordon (13km northwest). Between 15km and 35km, settlement is predominately located at elevations below 200m AOD, leaving the uplands relatively remote and unpopulated. Within the lowlands, the city of Inverness is located approximately 18km southwest of the site, Forres is located approximately 20km east of the site, and Dingwall is located approximately 24km west of the site. The A96 trunk road is the main road through the area. Other larger roads include the A9 (west of Inverness), the A939 (east of the site), and several B

roads in addition to the network of rural lane and tracks which connect individual properties and farmsteads with the main road network. There are three train routes within the study area: the Far North Line, The Highland Main Line, and the Aberdeen–Inverness Line. Inverness Airport is approximately 5km southwest of the site.

The large-scale landscape associated with the site is informed by the high degree of openness, both inland over the port area and seaward over the Moray Firth. Beyond the site, the sense of scale is variable depending on the position in the landscape, but the overall perception is one of a large-scale landscape, informed by the open views over the coastal plains and long-range views towards the uplands north, west and south of the site.

The site has a long industrial history, having been a hub of activity for the energy sector in Scotland. In the 1970s a substantial area of land was reclaimed from the foreshore and utilised for industrial purposes for the fabrication and construction of offshore platforms for the oil and gas industry, employing in the region of 4,500 people.

Activity ceased in early 2000 and it was vacant for approximately 18 years. Once closed, it became one of the largest brownfield sites in the UK and the site has undergone significant decontamination works since operations ceased.

Planning permission in principle (PPiP) was sought and granted in January 2014 (application reference: 13/01689/PIP) for the following:

“Establish a port and port related services for energy related uses, including marine channel dredging, quay realignment, repair and maintenance, erection of offices, industrial and storage buildings and associated infrastructure, delivery and export of port related cargo, associated new road access, parking, infrastructure, services, temporary stockpiling of dredged material, re-grading and upfilling of landward areas and landscaping.”

This PPiP application was renewed on 4 February 2019 (application reference: 18/04552/PIP) and the following components have been constructed on site:

- Access channel
- Quay wall construction
- Main port activity area laydown
- Port support/administrative buildings
- Temporary on-site storage area for dredged material
- Roundabout on B9092 and new security gatehouse

The PPiP can be implemented in conjunction with the extant permitted development rights conferred on the designated port area via The Port of Ardersier Harbour Revision Order 2014 (HRO).

A Marine Dredge License was also obtained in February 2025 (application reference: 00010940)², which allowed dredging to create access to the new quayside. Marine Directorate granted this license, and the associated dredging is now complete.

With the 2019 consent for the port in place, the existing port is considered to be part of the ‘baseline’ scenario for the purposes of this EIA.

Ardersier ETF will provide Scotland’s largest facility on the North Sea coast for deploying and servicing offshore wind installations, offering deployment solutions across the entire value chain, from manufacturing to storage and integration. Increasing the scale of the Ardersier ETF supports the economic growth and net zero ambitions of both the Scottish and UK Governments. The logistical, manufacturing and assembly needs of the offshore wind industry require very large land areas, not least due to development scale and size of components.

² [Marine Licence - Capital Dredging & Sea Deposit - Ardersier Port - 00010940 | marine.gov.scot](#)

The application site is shown in Figure 1.2.

Figure 1.2: Application Site



The site adjoins with the existing port land which extends to some 350 acres. Together the site will comprise some 547 acres of industrial land which in turn will support the economic growth and net zero ambitions of both the Scottish and UK Governments.

The need for the development and the benefits associated with the extension are explained in more detail in EIAR Chapter 3 (Project Description).

Ardersier Port Limited falls under the terms of:

- the Port of Ardersier Harbour Revision Order 2014
- the Port of Ardersier Harbour Revision (Transfer) Order 2017
- the Statutory Harbour Authority ("SHA") under the terms of the Ardersier Port Limited (Pilotage Powers Order 2024) as a Competent Harbour Authority ("CHA") in respect of the Port of Ardersier.

As the SHA, Ardersier Port Limited has responsibility for conservancy and safety, regulation of navigation, undertaking harbour works and development, managing the harbour environment, complying with law, and following and enforcing the Port Marine Safety Code. As the CHA, Ardersier Port Limited also has a duty to provide pilotage where appropriate.

As the SHA, Ardersier Port Limited have powers to (i) make Byelaws for the efficient management and regulation of the harbour and (ii) give General Directions and/or Special Directions for the purposes of securing conditions conducive to the ease, convenience and safety of navigation in the harbour.

Powers to make Byelaws and General and/or Special Directions is wide-ranging and includes regulating the use, operation and superintendence of the harbour and berths through to the regulating the conduct of persons within the harbour and regulating or prohibiting certain activities in the harbour, such as fishing.

In addition to powers to make Byelaws and/or give General and/or Special Directions Ardersier Port Limited's harbour master can issue Notices to Mariners in respect of any temporary matters that may affect the safe use of the harbour.

1.2.1 Site sensitivities and surroundings

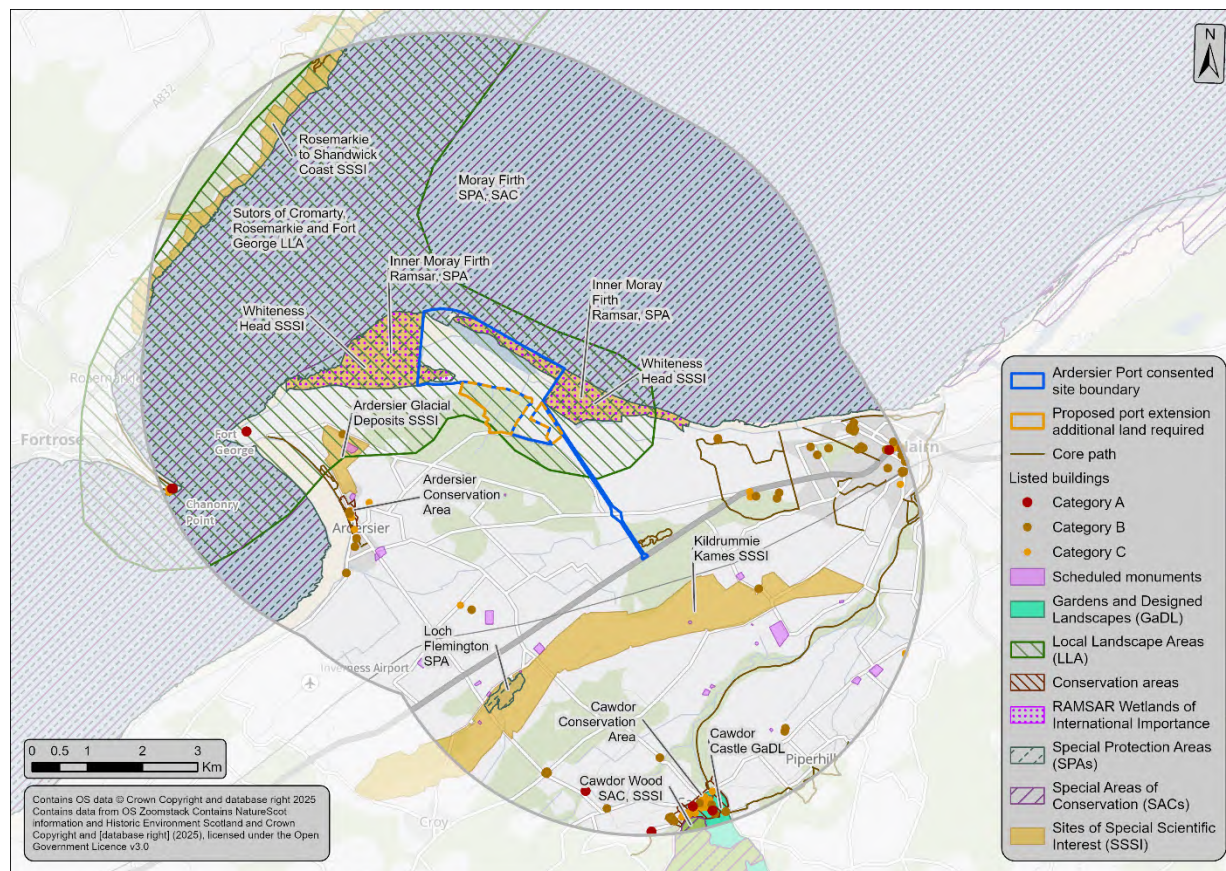
Ardersier Port, located on the Moray Firth, features a rich coastal ecosystem with diverse habitats supporting wildlife, including various bird and mammal species including bottlenose dolphins, seals, and harbour porpoise (and others). Whiteness Head is designated as a Site of Special Scientific Interest (SSSI) and is part of the Inner Moray Firth Special Protection Area (SPA) and a RAMSAR site, while the Moray Firth is a Special Area of Conservation (SAC), and the area encompasses the Sutors of Cromarty, Rosemarkie, and Fort George Special Landscape Area (SLA).

The site is bordered by the Moray Firth to the north, Carse of Delnies to the east, Carse Wood to the south, and the sand dunes and tidal sandflats of Whiteness Sands to the west. Fort George's live firing range is to the southwest, and Whiteness Head Spit, which shelters a harbour, is included in the site boundary.

Nearby, there is the village of Ardersier around 3 km to the south and Nairn approximately 6.5 km to the east. The site is visible from the surrounding coastline, although tree cover, and topography provide some screening to the south and west.

Key environmental considerations include the sensitive marine and terrestrial habitats, potential impacts on landscape and cultural heritage, and the need to minimise water environment, air quality, noise, carbon, and transport impacts during construction and operation, all key designations and areas of sensitivity are shown in Figure 1.3.

Figure 1.3: Environmental Designations & Constraints



1.3 PLANNING APPLICATION & SUPPORTING DOCUMENTS

The Applicant is applying for planning consent under the Town and Country Planning (Scotland) Act 1997 (as amended). The proposed development is classified as a 'major development' as defined in the Schedule of Major developments³ and this sets out requirements. This classification sets out requirements with regards to the level of assessment and public consultation.

Public consultation requirements for the planning application are set out in the Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2009, and The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 for the Marine Works Licence. Further details on the public consultation undertaken and the consultation with the statutory bodies is provided in EIAR Chapter 4 (Consultation).

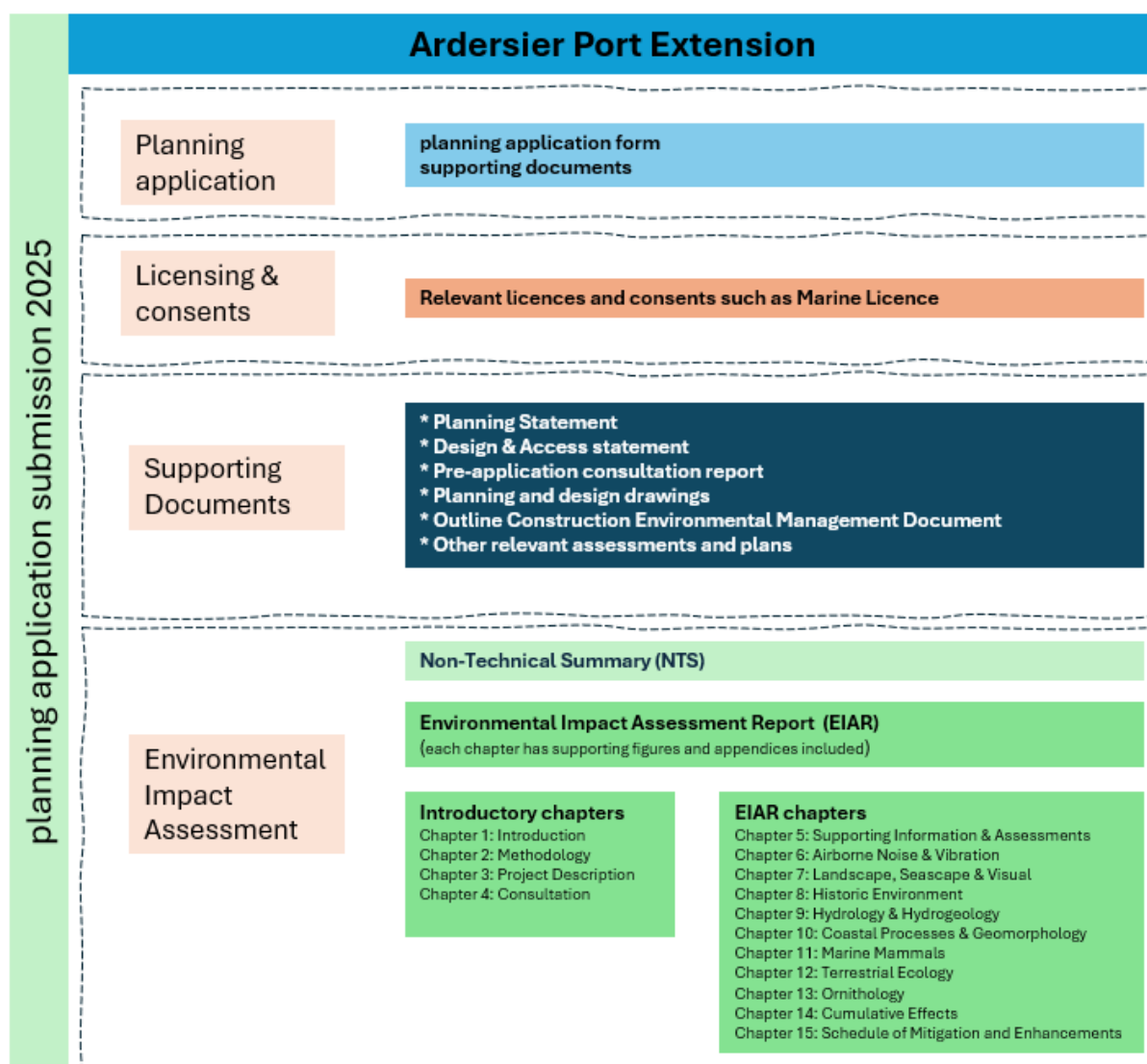
Further information can be found in the Planning Support Statement and EIAR Chapter 4 (Consultation).

³ The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009

The development will also require Marine Licences (Disposal Licence and a Construction Licence) to be issued by Marine Directorate under the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017. This EIAR will be submitted as part of that Marine Licence application.

A diagram showing the format of the planning application, the Marine Licence application, supporting documents and this EIAR is provided below in Figure 1.4.

Figure 1.4: Planning Application Submission



1.4 THE APPLICANT & REGULATORY AUTHORITIES

The EIAR and the planning application will be submitted to the regulatory authorities as part of the planning and marine licence consenting process. Details of the applicant and the regulatory authorities relevant to this proposed development are set out below.

The Applicant for the proposed development is:

Haventus
Ardersier Port
Ardersier Port Approach
Inverness

IV2 7QX
Scotland
enquiries@haventus.com

The Planning Authority for the proposed development (considering all development on land) is:

Planning and building standards.
The Highland Council
Town House
High Street
Inverness
IV1 1JJ

The Regulatory Authority for Marine Works (for all construction work in the marine environment, dredging, and disposal) is:

Marine Directorate (MD-LOT)
Marine Directorate – Licensing Operations Team
Scottish Government
375 Victoria Road
Aberdeen
AB11 9DB
MD.MarineLicensing@gov.scot,

All these applications require an EIA and further details on what that is are provided in the next section.

1.5 THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

1.5.1 What is EIA?

An Environmental Impact Assessment (EIA) is a way of checking what effects a project—like extending a port in Scotland—might have on the local environment, such as marine life, water quality, coastal landscapes, and nearby communities. It helps identify possible problems early on so the design can be adapted to protect nature, reduce risks, and make sure the development is done in a responsible and sustainable way. The general methodology for this EIA is provided in EIAR Chapter 2 (Methodology) with more specific methodologies included in each of the EIAR Chapters (6 – 14) for their individual assessments.

1.5.2 The EIA Regulations

This EIA has been undertaken in accordance with Town and Country Planning (EIA) (Scotland) Regulations 2017 (further referred to as ‘*The EIA Regulations*⁴’). The EIA Regulations categorise developments according to their requirement for an EIA.

Schedule 1 of the Regulations lists the types of developments where EIA is always required, such as large scale and high impact developments (e.g. power stations). Schedule 2 lists developments that may or may not require an EIA depending on the potential for significant effects on the environment based on factors such as their nature, size, or location.

The proposed development is an extension to the consented Ardersier Port, and the previous application was deemed to require EIA. Therefore, this proposed development falls within Schedule 2, Section 13 “*Any change to or extension of development of a description mentioned in paragraphs 1 to 12 of Column 1 of this table where that development is already authorised, executed or in the process of being*

⁴ The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017

executed". An EIA is therefore mandatory for the proposed development, and this document is presented as a formal EIAR prepared in accordance with the relevant EIA Regulations.

1.5.3 Scope of the EIA

The scope of the assessment has been shaped by consultation and to comply with the EIA Scoping Report submitted by Applicant and Scoping Opinions provided by the Highland Council (Ref - 25/00226/SCOP), the Marine Directorate (Ref SCOP-0062), and the various statutory consultees. Further information and a copy of the Scoping Request and Opinions from THC and MDLOT are provided in EIAR Chapter 4 (Consultation).

The EIAR comprises a series of technical chapters, figures and appendices as shown in **Figure 1.4**. A digital version of the Non-Technical Summary can be found – [Public Consultation: Haventus - Montagu Evans](#).

1.5.4 The EIA Team

Regulation 5(5) of the EIA Regulations states that the EIAR must be prepared by competent experts. A summary of the expertise of the technical leads involved in the EIA and its reporting is provided in Table 1.1.

Table 1.1: EIA Team

Company	Individual	Role	Competency
Civic	Becky McLean	EIA Technical Reviewer	Qualifications: BSc(Hons), FIEMA, CEnv Experience: 22+ years experience in leading, managing and advising on EIAs in the fields of infrastructure, urban development and energy. Rebecca also has extensive experience in facilitating environmental design optimisation/mitigation solutions.
Sweco	Helen Makewell	Airborne Noise and Groundborne Vibration	The competent expert has a BSc (Environmental Studies) and has passed the Institute of Acoustics Diploma in Acoustics and Noise Control, is a Member of the Institute of Acoustics (MIOA) and the Institute of Environmental Science (MIEnvSc). The competent expert is an acoustician with over 17 years' experience in delivering and managing environmental noise assessments for challenging projects. This includes EIA and non-EIA projects in a range of sectors, such as industrial facilities, offshore wind farms and transportation.
Sweco	Phillip Black	Landscape, Seascape and Visual	The assessment has been led by a Chartered Member of the Landscape Institute (CMLI) with over 25 years' experience of assessing the landscape and visual effects of large scale infrastructure in all nations of the United Kingdom.
ORCA	Gareth Talbot	Historic Environment	The competent expert has a BSc (Archaeology) and is a full Member of the Chartered Institute for Archaeologists. The competent expert is a heritage consultant with over 25 years of experience in academic and commercial heritage consultancy and since 2003 has delivered and managed historic environment assessments for a range of projects in the UK and Saudi Arabia. This includes EIA and non-EIA projects in a range of sectors including on and offshore wind farms, solar farms, transportation, nuclear and defence.
Envirocentre	Iain Struthers	Hydrology and Hydrogeology	The competent expert has a BSc (Land & Water Management), BEng (Environmental Engineering, Hons) and PhD. The competent expert has over 21 years' experience in hydrological and hydrodynamic model development and application within consultancy and academia in the UK, Australia and Japan,

Company	Individual	Role	Competency
			including expertise in flood risk assessment, surface water management planning, sustainable drainage (SuDS) design, and the development and application of hydraulic models of rivers and sewer networks.
Envirocentre	Martin Nichols	Coastal Processes & Geomorphology	The competent expert has a BSc (Geoscience, Hons) and MSc (Water Resources Engineering) and is a chartered member of The Chartered Institution of Water and Environmental Management (C.WEM, MCIWEM). The competent expert has over 14 years consultancy experience in EIA, coastal processes and geomorphology, geology, hydrology and flood risk, within both the private and public sectors, including expertise in coastal modelling in support of development.
Tetra Tech	Doug Blease	Terrestrial Ecology	The competent expert has a BSc Hons in Sustainable Environmental Management and is a Full Member of the Chartered Institute of Ecology and Environmental Management, with over 20 years' experience in habitat survey and assessment, and particular specialisms in woodland and protected species ecology. This includes input to, authoring and management of EcIA chapters.
SMRU Consulting	Jack Clarkson	Marine Mammals	The competent expert holds an MSc (Marine Mammal Sciences) has over 7 years' experience of in marine mammal sciences. This included two years' experience conducting visual and acoustic marine mammal surveys and marine mammal behaviour studies for non-profit organisations, as well as over 5 years of environmental consulting experience. The competent expert specialises in marine mammal impact assessment and has conducted a wide array of industry-funded project work, including the production of marine mammal Environmental Impact Assessment (EIA) chapters and environmental supporting documents, marine mammal mitigation plans and protocols, and acoustic survey design and coordination.
Sweco	Rebecca McClenaghan	Cumulative Effects Assessment	Rebecca McClenaghan has over 19 years' experience in EIA and environmental planning and is a Technical Manager at Sweco UK. She is a Chartered Environmentalist (CEnv). Rebecca is a full member of the Institute of Environmental Sciences (IES) and the Institute of Sustainability and Environmental Professionals (ISEP).

1.6 VIEWING THE APPLICATIONS

The planning application and supporting documents (including this EIAR) will be submitted to The Highland Council and the Marine Directorate. These will be publicly accessible through the planning authority website ([View planning applications | Planning permission | The Highland Council](#)) and for the Marine Directorate they can be viewed here ([All applications | marine.gov.scot](#)). On these websites you can find all documentation related to the applications.

The development website (www.montagu-evans.co.uk/public-consultation-haventus) will also provide a direct link to the planning application and hard copies will be available for viewing at the following locations during the stated opening hours⁵ (Table 1.2).

⁵ Correct as of November 2025.

Table 1.2: Planning Application Viewing Locations

Location 1	Location 2
Ardersier Library Station Road Ardersier IV2 7SU Opening times Mon 12:00 – 17:00 Wed 10:00 – 13:00 Fri 12:00 – 17:00 Sat 10:00 – 13:00 Closed Tue, Thurs, and Sun	Nairn Library 68 High Street Nairn IV12 4AU Opening times Mon 09.30 – 17:30 Tues 09.30 – 17.30 Wed 09.30 – 14:00 Thurs 09.30 – 19:00 Fri 09.30 – 17.30 Sat 10.00 – 14.00 Closed Sun

Hard copies of the EIAR are available for a charge of £1,000 or electronic copies can be provided for £25 (including VAT). Hard copies of the Non-Technical Summary are also available for free. These can be obtained by writing to: **Montagu Evans LLP, 4th Floor, Exchange Tower, 19 Canning Street, Edinburgh, EH3 8EG** (ardersier@montagu-evans.co.uk)

1.7 NEXT STEPS

Following submission of the planning application and the marine licence, all documents will be publicly available online on the regulator's website and in hard copy at the locations noted above. There will be advertisements in the local press (Inverness Courier) and the national press, and the website will be updated. Details are provided below if you wanted to make a representation to the Highland Council and/or the Marine Directorate.

Making Representation to the Planning Authority

Once the planning application is lodged, if you want to make a representation, you can make a comment, whether to object, to support or make any general comments, within 21 days of the latest date:

- that the application was registered with The Highland Council
- when you were notified as a neighbour
- where it was advertised by The Highland Council

All comments to applications should be made electronically through the [Highland Council Public Access \(external link\)](#) site. You need to [Register \(external link\)](#) your details on the site before you can submit a comment. Full guidance on how to register and comment can be found in our [Guide to Using Highland Council Public Access](#).

Making Representation to the Marine Directorate

For the proposed development Marine Licence Application, the publication requirements of *The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017* also apply. Therefore, a notice has been published on the development website, in *The Edinburgh Gazette*, and in the Inverness Courier.

Anyone wishing to make representations on the EIAR or the marine licence application can do so **within 30 calendar days of the latest publication date of the notice in the newspapers**. Representations can be submitted via email or post, and you should ensure that you quote the application reference

(Ardersier Port Extension) and identify the proposed works that you are writing to them about (i.e. dredging and/or construction works).

Following consideration by the regulatory authorities through the statutory determination period, they will make and publish their decisions on the proposed development application. Notice of the decisions will also be publicly available on the regulatory websites, should you wish to view it.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 2 Methodology

Ardersier Port Extension

Revision Number	Final
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Author	Becky McLean
Technical Reviewer	Campbell Fleming

CONTENTS

2 METHODOLOGY	4
2.1 Introduction	4
2.2 Statutory Requirements and Guidance	4
2.3 EIA Process	6

TABLES

Table 2.1: EIA requirements	4
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2 METHODOLOGY

2.1 INTRODUCTION

This chapter describes the Environmental Impact Assessment (EIA) approach undertaken for the proposed Project in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017, the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and other relevant technical guidance documents¹.

2.2 STATUTORY REQUIREMENTS AND GUIDANCE

This EIA has also been conducted in accordance with the latest Scottish Government Regulations and relevant advice on good practice. A list of which can be found here PAN 1/2013 – Environmental Impact Assessment, August 2013². It has also been carried out taking due consideration of non-statutory guidance where appropriate along with various guidance documents relating to the assessment of individual aspects of the environment (see individual assessment EIAR Chapters).

2.2.1 Requirements of the EIA Regulations

Table 2.1 provides a collated summary of the information required and where this information can be found within this EIAR.

Table 2.1: EIA requirements

Requirement	Location
A description of the development including location, physical characteristics and expected residues and emissions	EIAR Chapter 1: Introduction EIAR Chapter 3: Project Description EIAR Chapter 5: Supporting Information and Assessments
A description of reasonable alternatives	EIAR Chapter 3: Project Description
A description of the baseline conditions	EIAR Chapters 5-14

¹ Specified within each technical chapter.

² <http://www.gov.scot/Publications/2013/08/6471>

Requirement	Location
A description of the factors specified in regulation 4(3) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape	EIAR Chapters 5-14
A description of the likely significant effects of the proposed project on the environment resulting from: (a) the construction and existence of the development, including, where relevant, demolition works. (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources. (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste. (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters). (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources. (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. (g) the technologies and the substances used.	EIAR Chapters 5-14
Description of the methodology used	EIAR Chapter 2: Methodology & Chapters 5 - 14
A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment	Described in each technical EIAR Chapter and summarised in EIAR Chapter 15: Schedule of Mitigation and Enhancements

Requirement	Location
A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned	EIAR Chapter 5: Supporting Information and Assessments
A non-technical summary of the information provided within the EIAR	Non-Technical Summary
A reference list detailing the sources used for the descriptions and assessments included in the EIAR	All EIAR Chapters via footnotes

2.3 EIA PROCESS

2.3.1 Overview & Approach

The Environmental Impact Assessment (EIA) process is a way of considering the environment and identifying potential likely significant effects before a project goes ahead. It begins by deciding whether an EIA is required and, if so, which environmental topics should be studied (known as *screening* and *scoping*). The EIA team then collects information about the existing environment (*the baseline*) and predicts how the project might affect it (*potential effects*). This includes identifying possible problems (such as pollution or loss of habitat) as well as potential opportunities (such as increasing biodiversity, enhancing community facilities, or improving connectivity). Measures are then suggested to avoid or reduce negative effects, while highlighting positive effects.

EIA is an iterative process, with findings fed back into the project design to achieve a “best fit” with the environment. Further information on the iterative design process for this project is provided in EIAR Chapter 3 (Project Description).

The general approach to assessment is based on determining the significance of an effect, which combines the sensitivity or value of the baseline conditions (i.e. the current site and its surroundings, including the sensitivity or value of receptors) with the magnitude of potential impacts. To evaluate this significance, assessment criteria are agreed during the scoping stage of the EIA, drawing on relevant standards and guidance. These criteria, and the methodologies adopted to assess effects, are often matrix- or threshold-based and are described in detail within the individual assessment EIAR Chapters (EIAR Chapters 6–14).

Where it is not possible to reduce or eliminate an identified likely significant effect through sensitive design alone, the EIA process identifies whether mitigation is required and what measures are suitable. A further assessment is then undertaken to confirm the *residual effects* of the project — i.e. those effects that cannot be mitigated, reduced, or removed.

All information gathered during the EIA process is documented in the Environmental Impact Assessment Report (EIAR) (this document), which is submitted as part of the planning or marine licence application. This report is then reviewed by decision-makers, alongside public and stakeholder input, to determine whether the project can proceed and under what conditions. In short, the EIA process ensures that environmental considerations are fully considered before development happens.

This EIAR has followed the process outlined above. The technical methodologies used by each specialist team are provided within EIAR Chapters 6–14. The overall methodology and approach were first set out in the EIA Scoping Report (SCOP-0062) submitted in January 2025 to the Highland Council Planning and Building Standards Department and the Marine Directorate and circulated to key consultees. Further detail on how consultation responses have been incorporated into the assessment is provided in EIAR Chapter 4 (Consultation).

2.3.2 Other Considerations

There are also other specific requirements of the EIA Regs, including:

- considering 'cumulative' effects
- considering 'alternatives' for design

Further information on each is provide below. Best practice also recommends summarising all required mitigation into a Schedule of Mitigation and Enhancements (EIAR Chapter 15) so that anyone reading the EIAR can easily see what is required to manage the potential identified effects. This was also specifically requested by the Highland Council during the Scoping Process, and our approach is set out below.

Cumulative Effects

Cumulative effects occur when environmental impacts from multiple sources combine. These can be **inter-project cumulative effects**, where different projects in the same area contribute to combined impacts, or **intra-project cumulative effects**, where a single receptor is affected by multiple aspects of the same project. The significance of cumulative effects is assessed in a similar manner to individual effects but with additional consideration of potential combined or synergistic impacts on receptors.

The Cumulative Effects Assessment (CEA) is presented in EIAR Chapter 14 (Cumulative Effects), which summarises the inter-project cumulative assessments detailed in EIAR Chapters 6 to 14 and provides a detailed evaluation of intra-project effects. The list of developments considered was agreed with Highland Council and is provided in Appendix 14.3. This assessment also acknowledges that some effects may not be significant individually but could become significant when combined with effects from other projects.

Alternatives

In line with the EIA Regs, an assessment of alternatives must be included as part of the EIA and design process. It requires that reasonable options that were available to the project at different stages of its development were considered. This includes development design, technology, location, size and scale. (depending on the project and what is being proposed). The purpose of this exercise is not to examine every possible option but to demonstrate that the main alternatives have been considered in a proportionate way, and to explain the environmental factors that influenced the choices made. This process helps ensure that environmental considerations are integrated into decision-making from the outset, rather than applied only once a preferred option has been selected.

The methodology for assessing alternatives involves identifying the key environmental constraints and opportunities associated with each option, using the baseline information collected during the EIA process. These are then compared against the project's objectives and technical, economic, and operational requirements. Further information on the alternatives considered for this project are provided in EIAR Chapter 3 (Project Description).

Schedule of Mitigation and Enhancements

To provide a single reference point for all measures identified through the EIA, a Schedule of Mitigation is presented in EIAR Chapter 15 (Schedule of Mitigation and Enhancements) along with proposed

enhancements. This Schedule of Mitigation brings together the full range of mitigation commitments arising from the design process and the technical assessments across all environmental topics.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 3 Project Description

Ardersier Port Extension

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CONTENTS

3 Project Description 5

 3.1 Introduction 5

 3.2 Need for the Proposed Development 5

 3.3 Alternatives 5

 3.4 The Proposed Development 6

 3.5 Operational Activities 16

 3.6 Decommissioning 19

 3.7 Embedded Mitigation 20

IMAGES

Image 3.1: View of Consented Port during Construction 9

Image 3.2: Picture of a Cutter Suction Dredger 10

Image 3.3 Land Raising and Creation of Working Platform 15

FIGURES

Figure 3.1: Marine Works Layout 8

Figure 3.2: Areas of Commercial Scots Pine Plantation Clearance 13

Figure 3.3: Indicative Layout of the Proposed Development 17

3 PROJECT DESCRIPTION

3.1 INTRODUCTION

The proposed development (“Ardersier Port Extension”) lies within the Inner Moray Firth as shown in Figure 1.1 and described in EIAR Chapter 1 (Introduction). Site history and Site constraints are also described in EIAR Chapter 1.

The proposed development comprises two key aspects, additional marine construction works, dredging and sea disposal, and terrestrial (on land) construction with extension of the extant consented activities. The extant consented site and proposed extension areas are shown in Figure 1.2 in EIAR Chapter 1 (Introduction).

With regards to high level timelines, the construction phase is expected to take place between mid 2026 and end 2028. This could take place in discrete phases within that overall time period.

3.2 NEED FOR THE PROPOSED DEVELOPMENT

The proposed development would transform Ardersier Energy Transition Facility (ETF) into one of Europe’s largest facilities dedicated to offshore wind, expanding the developable land acreage of the site to around 500 acres.

The proposed extension (also referred to as expansion) of the Ardersier ETF will create a larger area for the logistics, manufacturing, and assembly needs of the offshore wind industry. Increasing the scale of the Ardersier ETF, supports the economic growth and net zero ambitions of both the Scottish and UK Governments.

Large land areas are needed to fulfil the requirements of offshore wind projects and the supply chain businesses that play a part in assembling and building the equipment needed for the offshore wind turbine. This is due primarily to the size of the components. The existing port and the proposed extension area would be developed and operated by the Applicant with parts of the site leased to tenants to further develop and utilise. The level of potential tenant interest in acreage at the site, both from offshore wind developers and the manufacturing and assembly supply chain, exceeds the existing acreage, therefore indicating that a larger area is required.

The availability of space at ports is recognised as a constraint to the future rollout of offshore wind, and the proposed development would extend an extant consented port to further support offshore wind activity and in turn play a part in supporting energy security, the journey to net zero and create the opportunity for new, high quality jobs at the site.

3.3 ALTERNATIVES

During the outline design of the proposed development and as part of the EIA process, alternatives have been considered with regards to development design, location, size, and scale.

With regards to development design, this application is seeking to create an extension area to the existing port and seeking consent to create an extension to the working platform. The design of this platform and the extended quay wall need to be similar to the ones already created and therefore there is a limit to the potential different designs that could be considered.

With regards to alternative locations (both in a different location or a different location on the same site), this was not possible for the following reasons:

- Different Location
 - The extension of the site is to provide more space to allow for activities such as import of materials, manufacturing, assembly and export. For this reason, the sites need to be connected and contiguous with each other.
 - Activities on the extension will also require access to the deep water quay; and
 - Separating the extension area from the current site logistically would not be practical, economically viable and could result in increased environmental impacts.
- Different Location on Site
 - To the north, west and east there are important environmental designations as described in EIAR Chapter 1 (Introduction) including Whiteness Spit, saltmarsh areas, and Whiteness Sands.
 - To the south-west lie the existing Ministry of Defence (MoD) training areas and firing ranges which are being retained long-term by the MoD; and
 - To the south is the existing Starlight Centre of Excellence facility.

The only areas therefore that were feasible to extend into with the space required are those proposed as shown in Figure 1.2 EIAR Chapter 1 (Introduction).

With regards to alternative sizes and scales, an economic study has been completed to assess what benefits could be generated by the proposed development. According to BIGGAR Economics, Ardersier ETF is forecast to make a nationally important contribution to the development of the offshore wind sector. It is predicted that Scottish organisations are expected to secure contracts worth £16 billion by 2040, based on the deployment that Ardersier ETF (including the proposed development) can support. These benefits are linked to the designed size and scale of the consented and proposed extension of the site.

The consideration of alternatives will continue as tenants come forward to take different areas of the site. Their detailed design process will consider the technology they require, the size, scale, and location of any buildings and associated infrastructure and will be submitted as part of their own planning submissions.

3.4 THE PROPOSED DEVELOPMENT

The proposed development will require construction activities to take place within the marine environment and the terrestrial environment. It is anticipated that construction methods required for all elements of the proposed development could have environmental impacts. As such, the construction phase for the project has been a key consideration in the EIA.

This chapter provides a description of the indicative construction methodologies, which are expected to be employed to build the proposed development. This has drawn from the existing construction process that has taken place for the consented port. The detail provided below covers the following.:

- Description of the works split into marine and terrestrial works.
- Site clearance and demolition requirements.
- Construction methods.
- Working Hours.
- Decommissioning.
- Embedded mitigation.

The proposed development will be constructed by a Contractor(s) who is yet to be appointed. When a Contractor or Contractors are appointed the Outline Construction Environmental Management Document (CEMD) will be finalised. The Contractor(s) and Client will also prepare detailed Construction

Environmental Management Plans (CEMPs) as required in accordance with Highland Council Guidance¹ identifying the techniques and technologies to be adopted. The CEMD will be approved by the planning authority and the relevant environmental bodies prior to works commencing on site.

For the purposes of the EIA, appropriate assumptions have been made regarding some potential aspects of construction where the final detail is not available at this stage. These assumptions are based upon professional experience and knowledge. Where assumptions have been made, these are clearly stated and where possible a reasonable 'worst case' approach has been taken.

Mitigation measures specified in this EIAR are presented in EIAR Chapter 15 (Schedule of Mitigation and Enhancement) and have been designed to avoid, prevent, reduce or, if possible, offset any construction effects on the environment including to people and property.

Further details on all construction activities are described separately below.

3.4.1 Marine Construction Activities

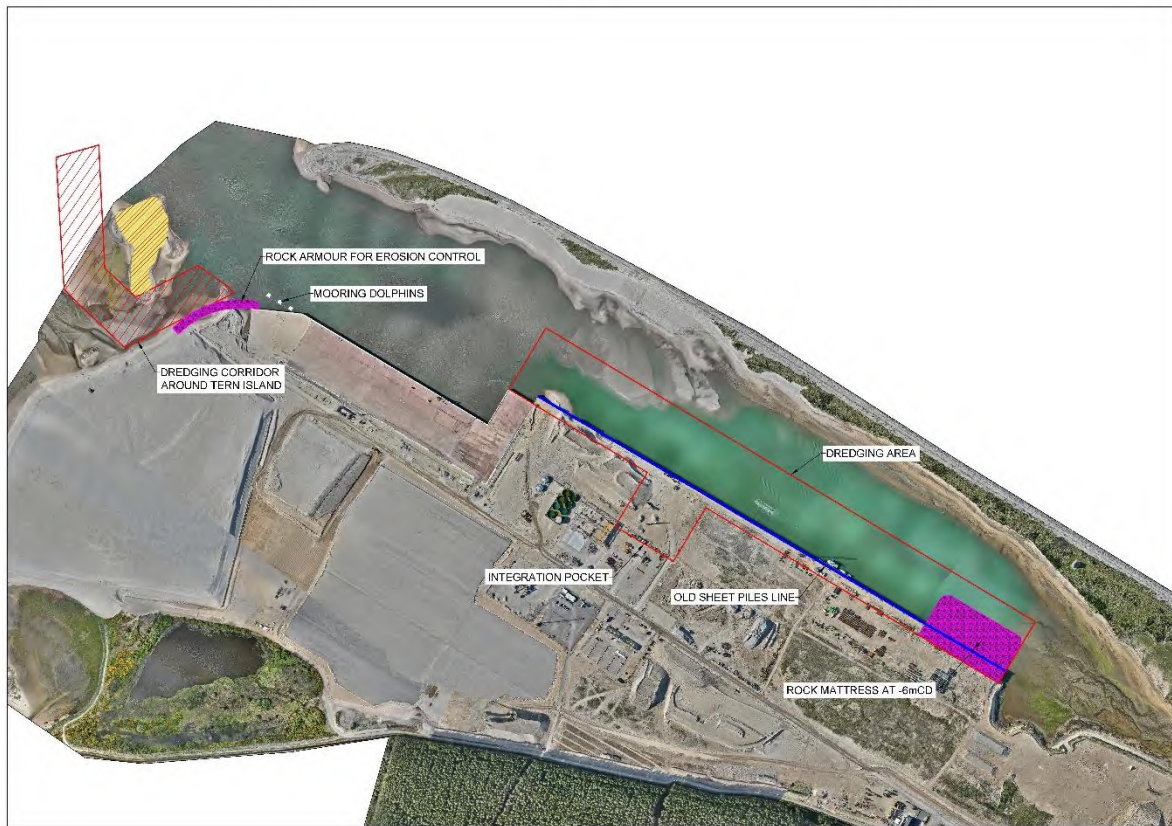
The proposed development will require the following marine infrastructure and construction works components:

- Construction of an integration pocket for wind turbine assembly
- Removal of old sheet piles with possible use of temporary sand berm.
- Dredging to deepen the harbour to generally -12.4m Chart Datum (CD) in the western harbour extension area and to up to -6mCD in the easternmost part of the harbour (up to 2,000,000m³).
- Disposal of dredgings at licenced disposal ground if no beneficial re-use identified.
- Dredging to west of Tern Island.
- Rock armour for erosion control and rock mattress on seabed in -6mCD area.
- Installation of three mooring dolphins (piled berthing structures).

As a general sequence, a section of new quay wall needs to be completed first, followed by old sheet pile removal and finally dredging, although the construction process and dredging can be phased over time. Each of the above project activities are described in principle in the following sections and shown on Figure 3.1.

¹ [General planning guidance | Construction environmental management process for large scale projects](#)

Figure 3.1: Marine Works Layout



New Quay Wall and Integration Pocket

A new quay wall construction is already consented under the Harbour Revision Order (HRO) and is located parallel to the existing old sheet piled wall. This does not require a Marine Licence as it is on land, but is described in this section as it is ultimately a marine structure. The same quay wall construction method will be used as previously to build the integration pocket walls.

The integration pocket would be approximately 150m deep by 150m wide. All excavations and installation works will be carried out through the existing platform without any exposure to the marine environment in the same manner as the previous quay wall construction. All arisings from the quay wall construction will be re-used on site.

The sequence of events to create new walls is as follows:

- Excavate down to 27m to 52m below ground using a specialised excavation rig (crane mounted), to install quay wall and anchor walls;
- Support the open excavation sides with bentonite fluid whilst reinforcing cages are installed.
- Pump concrete into the base of the excavation and fill to the top whilst siphoning off the bentonite fluid for re-use in the next excavation.
- Panels of the new quay wall of approximately 7m lengths are installed one at a time until the whole wall is complete.
- A concrete beam is then cast along the top of the new quay wall to tie the quay panels together.

- Excavations then take place between the anchor wall and quay wall to install tie-rods to join the two walls together.
- Excavations are then backfilled with arisings and capped with clean stone.

A representative image showing the anchor wall, quay wall and tie-rod installation is provided below Image 3.1.

Image 3.1: View of Consented Port during Construction



Removal of Old Sheet Piles

The old sheet piles on the seaward side of the new quay wall needs to be removed to excavate back and expose the new quay wall to the sea. The general method for extraction of the old sheet pile wall would involve the following:

- Excavate a short section down to the tie-rods which hold the old sheet pile wall in place and cut the tie rods.
- This excavation would be to at least just below Mean High Water Springs.
- Re-use excavation arisings on site above MHWS.
- Pull the sheet piles out using a vibratory piling rig and lay on platform.
- Move to adjacent sections.

In areas where the water on the outside of the quay wall is deep, it may be necessary to place a temporary sand bund on the waterside of the quay wall. This is to prevent the piles bending outwards when the tie rods are cut which creates difficulties in extraction. Should a temporary berm be utilised, this would be removed by long reach excavator back onto land when pile removal works in that area were completed.

It is estimated that up to 150,000 m³ of sand would be required to create temporary berms where needed. This sand would be reused in the construction of the platform when no longer needed for this purpose.

Capital Dredging of Main Harbour Area

Capital dredging of the inner harbour will take place approximately 800m to 1800m inside the current harbour entrance. Up to 2,000,000m³ of material is calculated to require to be dredged to provide the -12.4mCD and -6mCD water depths required. Dredge areas are shown in Figure 3.1.

It is envisaged that the following marine plant will be required to carry out the dredging:

- A Cutter Suction Dredger (CSD) would undertake the main dredge (Image 3.2).
- One or two Trailer Suction Hopper Dredgers (TSHD) would support the cutter initially acting as barges for disposal and once the CSD was largely complete a TSHD may then be used to fine tune the dredge shape.
- Two Split Hopper barges would also be expected to assist with disposal.
- Multicat (vessel of left side of Image 3.2) for general assistance.
- Survey vessel to check bathymetry as the dredge progresses

Image 3.2: Picture of a Cutter Suction Dredger



Currently disposal is anticipated as taking place at:

- Main disposal of arisings is planned for Burghead licenced disposal ground only (approximately 32km to the east of the Port).
- Other potential uses for sediment are being explored including enhancements local to the site (EIA Chapter 15 (Schedule of Mitigations and Enhancements)).

Utilising the above marine plant the dredging works would be expected to be complete within approximately 12 weeks of commencement (subject to breakdown or bad weather delays). Dredging

would be scheduled to be mainly outside the wintering bird season, most likely taking place in the window of March to October.

Dredging arisings are not planned to be taken ashore for beneficial re-use on site, although potential beneficial re-use projects off-site are being explored and will be investigated should they arise.

It should be noted that boreholes have been sunk to assess the dredge material in terms of chemical suitability. This investigation information and risk assessments/method statements will be submitted as part of any marine licence application along with a Best Practicable Environmental Options (BPEO) Report which considers the various options for disposal or beneficial re-use. This BPEO is a separate document to the EIAR and is submitted with the Marine Licence application for disposal of dredgings.

Potential Capital Dredge West of Tern Island

Dredging to the West of Tern Island is proposed as part of the overall proposed development, this is not part of the construction of the extension but to protect an ecological enhancement that has already been delivered. Tern Island has become a very successful breeding location for a variety of Tern species, and other birds. This is as a result of the formation of the main port access channel and prior site development providing an island feature that is cut off from potential predators for almost all states of the tide. It is a concern however that the current channel could potentially be at risk of partially filling in due to sand movement during storm events allowing predators greater access to the island. It is therefore proposed that should the current channel feature change significantly such that there became a land bridge at most states of the tide that a small channel be maintained between the current coastline in this area and the island.

Annotated Figure 3.1 shows the approximate location of the potential dredge.

In terms of volumes to be dredged a channel of a metre deep and two metres wide or greater is considered sufficient to provide a reasonable deterrent to most land-based predators. If it was required to dredge a 100m section of the channel which had infilled, this would involve removing approximately 200-500m³ of sand. These are very small volumes in dredging terms. Sand removed could either be removed by conventional land-based plant (excavator and dumper) and taken ashore, or if in less readily accessible areas (further from shore) be excavated by barge mounted backhoe and disposed of at the sea disposal ground. Alternatively, this material could be used to create an extension to Tern Island (i.e. as part of a beneficial off-site re-use project) or be used to replenish it in the future. This “island extension” enhancement option is currently being explored and as an initial step to establish feasibility has been included in the coastal processes and geomorphology modelling and assessment presented in EIAR Chapter 10. Options, including the island extension, will continue to be explored and any necessary licences or permissions obtained as required. This potential enhancement is also noted in EIAR Chapter 15 (Schedule of Mitigation and Enhancements).

Rock Armour and Rock Mattress Construction

The areas proposed for rock armour and rock mattress placement are shown in Figure 3.1.

Rock armour is required to protect the corner of the current harbour to the west of the new quay wall from erosion during northerly/north-easterly storm driven waves. Approximately 150m of rock armour length is required which will extend down to below MLWS. This would be placed in the following manner:

- Grade existing slope to required slope (approx. 1:2) using an excavator working from landside.
- Place crushed rock or recycled concrete founding layer.
- Install geotextile to limit loss of fines (will likely require divers).
- Place rock armour layer using excavator.

The rock mattress construction is a facility to allow barges to ground on the harbour bed without becoming suction bonded to it. This would comprise an approximately 300-500mm crushed rock layer to be placed at -6mCD. The rock mattress area will be approximately 180m by 80m in size located directly adjacent to the quay.

Placement of the rock mattress would take place either by lowering stone filled mats into place in sequence onto the seabed by long reach excavator/crane, or by placing the stone in a layer directly using a long reach excavator. This placement would partially take place from landside and further into the harbour from a barge.

The rock would be sourced from local quarries and delivered to site via lorries, as with the consented port.

Mooring Dolphin Installation

In order to berth two large vessels on the existing westernmost quay area additional mooring dolphins (piled berthing structures) will be required for the ships to tie up against. There are three mooring dolphin structures required in the area shown indicatively in Figure 3.1. The piles are to be installed from the deck of a Jack-Up Barge with a Project Crawler Crane on deck, also working in conjunction with a Flat-Top Barge holding materials.

The installation of these would be carried out as follows:

- Loading of barges (at Ardersier) with crane, piling rig, piles and other materials.
- Transit to site and position barges to install piles.
- Install piles through combination of vibro and impact piling.
- Lift jackets onto piles and install fenders and bollards.
- Lift walkways on to join the mooring dolphins to the quayside for access to assist berthing.

Installation is expected to take place over approximately 19 days with piling occurring for 12 days during that period.

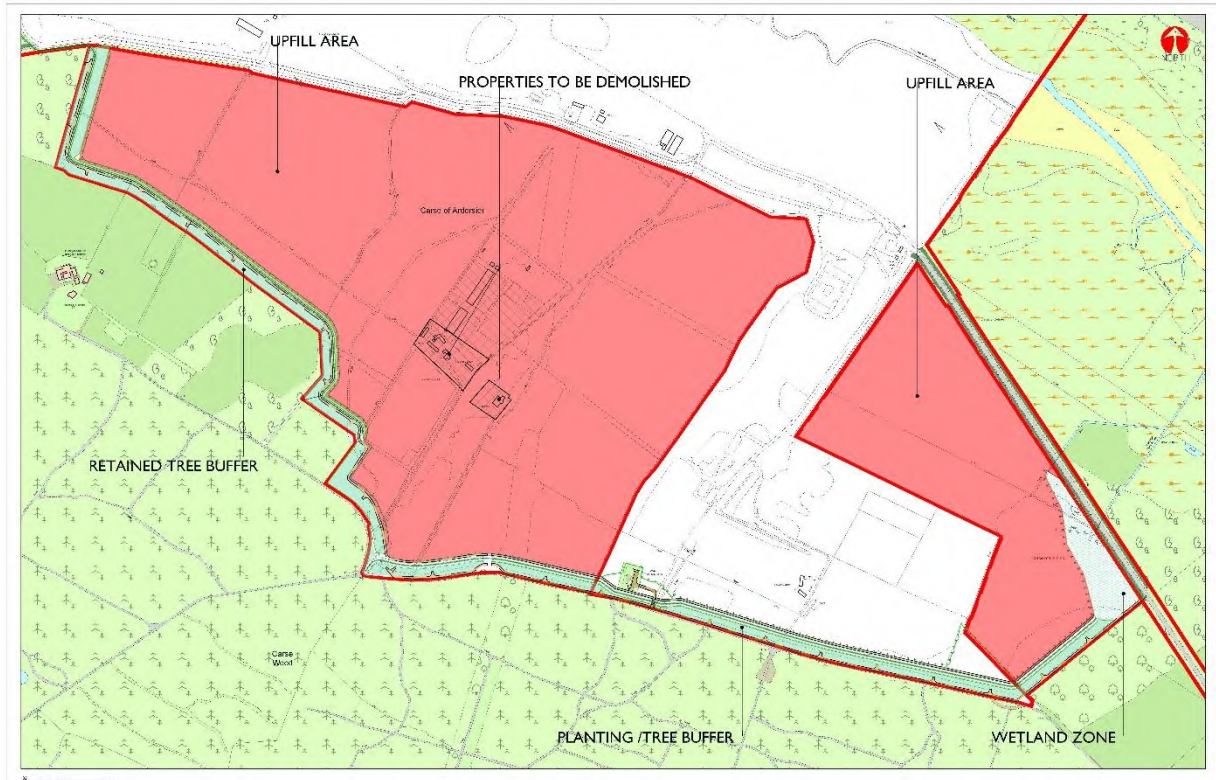
3.4.2 Terrestrial Construction Activities

Within the extension area the following construction activities will be required:

- Site clearance of extension area comprising tree felling and clearing.
- Demolition of existing buildings.
- Land raising (upfill) and levelling of extension area to suitable height with previously dredged sand.
- Creation of working platform through stone placement.
- Surface water management during construction; and
- Installation of new permanent watercourses to extension land southern perimeters.

Figure 3.2 shows the areas of commercial Scots Pine plantation clearance, building demolition locations, and tree buffers to be retained.

Figure 3.2: Site Clearance Areas (West - Scots Pine plantation, East - Scrub and Birch) - Terrestrial Works



3.4.3 Site Clearance (Commercial Plantation Felling and Vegetation Removal)

Within the extension areas the two main activities will be tree removal and demolition of the two existing buildings (Pine Trees, and Juniper Cottage and associated buildings, see Figure 3.2).

Removal of the Scots Pine Plantation will be undertaken as follows:

- Trees would be felled using an excavator mounted tree shear and moved to a handling facility within the existing site area.
- Roots would then be grubbed up and also moved for processing.
- A thin layer of soil would then be mulched, compacted and rolled (all by the mulching machine which includes a roller).
- At the handling facility (located away from the southern boundary to reduce noise impacts to residential receptors) the trees and stumps would be logged and chipped for export from site by either HGV or ship dependent on customer location.

If tree removal is undertaken as one campaign the tree felling is expected to take approximately six months. However, it is more likely that this will be done in phases over a longer time period to ensure sensitive areas and seasonal periods can be avoided. This also prevents a large area being left for a longer period of time, reducing the potential for windblown dust and material.

The phasing of the tree removal would be informed by an Ecological Clerk of Works (ECOW) and/or site environment team, and pre-construction ecological surveys. Further information on this is provided in EIAR Chapter 12 (Terrestrial Ecology) and EIAR Chapter 13 (Ornithology) and will be a key part of the Habitat Management Plan (HMP).

Processing and export of the timber and roots etc would be undertaken over a longer time period to match with the demand of the purchasers. The material would be stored close to the handling area.

The Highland Council confirmed that off-site compensatory commercial woodland planting would be required to offset the loss of the commercial woodland. A suitable location and site for this planting is being identified currently and will be agreed with NatureScot and through approval with Scottish Forestry.

Demolition

The two existing buildings within the extension area; Pine Trees and Juniper Cottage (and associated buildings) will be demolished during the site clearance. This work will be undertaken subject to the necessary ecological mitigation measures (described in EIAR Chapter 12 (Terrestrial Ecology) and EIAR Chapter 13 (Ornithology)).

The materials from the demolition will be sorted and reused on site where possible. Any waste that cannot be used will be segregated and removed from site by a licensed waste contractor. At this stage it is anticipated that the aggregate arising from crushed concrete (for example) would be used in the creation of the working platform.

Land Raising and Creation of Working Platform

When areas of the site have been cleared of trees and/or vegetation down to formation level, land raising and working platform creation will then take place. This will be carried out progressively in sections with ecological constraints considered. The steps in construction will be as follows:

- Placement of sand in compacted layers of around 250mm to build up the platform height.
- On the topmost sand layer, geogrid and/or terram matting would be laid.
- An approximately 300mm layer of clean crushed stone would be placed to form the working platform.

The platform will be constructed in the same manner at the working platform on the currently consented site. Image 3.3 shows broadly how the platform is constructed.

Image 3.3 Land Raising and Creation of Working Platform



The platform height will be the same or higher than the existing site (between approximately 6.4mCD and 7.3mCD). The platform will be graded down to tie into existing ground levels on the perimeter adjacent to the retained buffer strips of trees and planting (southern, western, and eastern boundaries of the overall new site area).

Indicative significant aspects of the construction works are summarised below, including construction working hours, compound locations, phasing / programme, and access.

3.4.4 Working Hours for Construction Activities

The capital dredge works in the main harbour area will be 24 hours and seven days a week, and quay wall construction is likely to have periods of time where 24-hour working is required although noise sensitive activities would be avoided at night time and on weekends whilst 24 hour working.

All other work which may generate significant noise, such as installation of mooring dolphins and tree felling would mainly be carried out during normal working hours of 08:00hrs and 19:00hrs Monday to Friday, 08:00hrs and 13:00hrs on Saturdays. There would be no noisy activity carried out on Bank Holidays.

3.4.5 Lighting

Adequate and appropriate lighting is essential for safe work, facility use, movement, and to minimise eye strain. The proposed lighting strategy for the construction works aims to help achieve a safe, energy efficient and environmentally conscious lighting solution. By proposing modern LED technology paired with shielding fixtures, and smart controls to minimise light pollution and protect local wildlife while enhancing the functionality and safety of the Port. Lighting is discussed further in EIAR Chapter 5 (Additional Information and Assessments).

3.4.6 Materials & Waste

The proposed development will adopt the principles of the waste hierarchy—prevent, reduce, reuse, recycle, and dispose—to minimise waste generation and maximise the efficient use of materials throughout the construction process. Wherever practicable, materials arising from site clearance and excavation will be retained on site for reuse in the works, such as for landscaping, backfilling, or construction aggregates. This approach will reduce the need for importing virgin materials and limit the environmental impact associated with material transport and disposal.

Any waste materials that cannot be reused on site will be segregated at source and managed in accordance with relevant waste management legislation and best practice guidance. Removal of waste from the site will be undertaken by a licensed waste contractor to ensure full compliance with the Duty of Care requirements under the Environmental Protection Act. All waste streams will be directed to appropriate licensed recycling or disposal facilities, with documentation maintained to demonstrate responsible waste handling and traceability.

3.4.7 Transport Movements & Management

The proposed numbers of workers during construction associated with the proposed extension are broadly similar to that which is already consented. All traffic will continue to access the site from the existing site main entrance.

The site access new roundabout onto the B9092 has been built and a roundabout on the A96 will be constructed as soon as practicable under the extant consent (expected to commence Autumn 2025).

There is no predicted significant increase in traffic volumes from what is already consented and with junction upgrades either already constructed or planned under the extant consent, there are no additional significant impacts predicted as a direct result of the proposed extension.

With regards to marine traffic, vessel numbers are generally not predicted to be significantly greater than the previously assessed volume. Possible slight increases in vessel traffic have been assessed with regards to potential impacts upon Marine Mammal, the result of that assessment is provided in EIAR Chapter 11 (Marine Mammals).

3.4.8 Construction Site Compounds and Storage Areas

The exact location of construction compounds and storage areas will be determined by the Contractor(s) who will construct the proposed development; however, it is likely that it will follow a similar approach to the consented port development, which will include a main construction compound (location to be on the extant consented port) with potentially further temporary storage areas for materials.

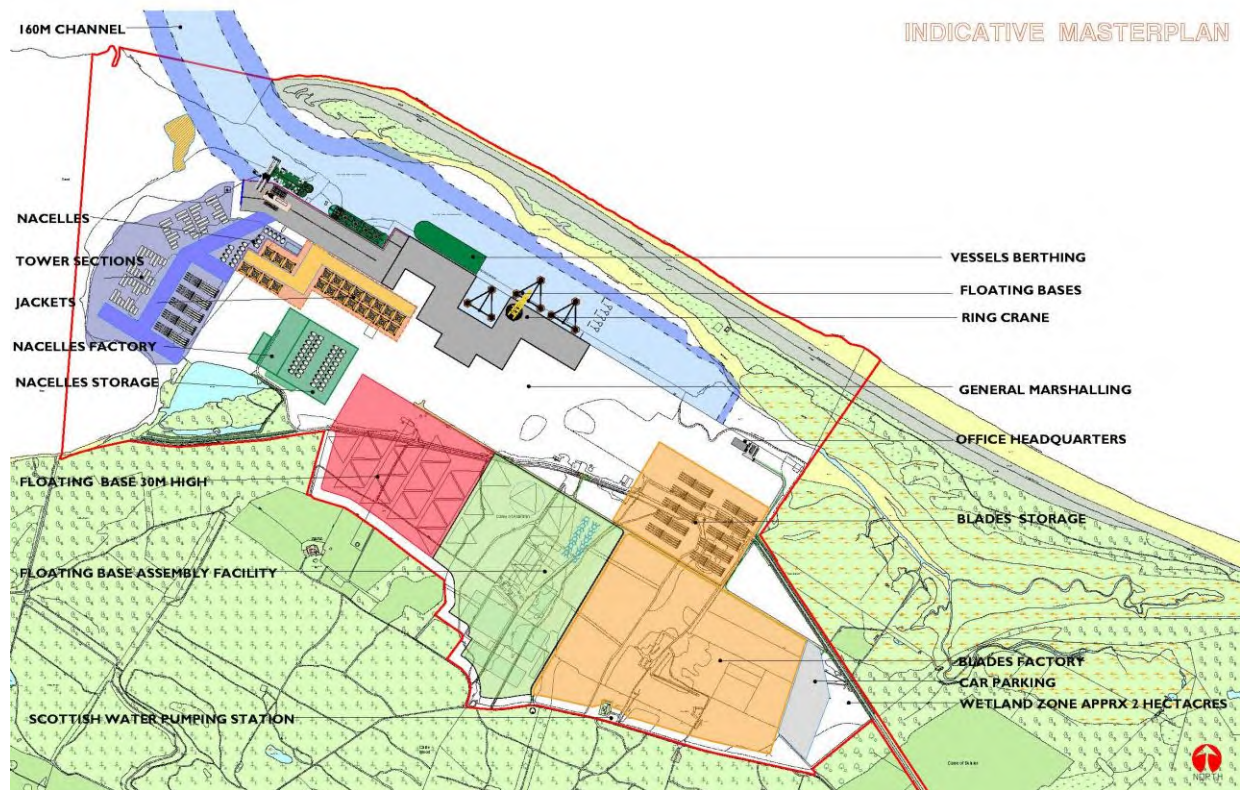
3.5 OPERATIONAL ACTIVITIES

The extension area uses will generally be the same as the extant consented port area, namely port and port related services for energy related uses, the overriding focus being servicing and support to offshore wind development.

Operational infrastructure will include the erection of offices, industrial and storage buildings, manufacturing infrastructure, boundary fencing, lighting and internal roads, assembly, storage, delivery, and export of port related cargo including use of cranes, parking, infrastructure, and provision of services. Vessel movements are of course also essential to the port operations.

A key activity expected to be required on site is full turbine integration. Turbine assembly would be sited in the harbour area within the boundary of the consented existing port. Turbines would not be assembled within the proposed extension area an indicative layout is provided in Figure 3.3 below.

Figure 3.3: Indicative Layout of the Proposed Development



Once constructed the site will require to be maintained, the principal activity in maintaining the port will be maintenance dredging as and when required which is being licenced separately and is not part of this EIA.

The above activities are described in the sections below along with the longer-term utilities strategy.

3.5.1 Turbine Integration

For Floating Offshore Wind (FLOW) developments it is possible that full assembly of turbines will take place either in the water at the quayside, or even on the quayside prior to lifting into the sea as a complete unit.

The process involves mounting tower sections on bases, placing the nacelle on top of the tower sections then attaching the blades. Assembly of one single turbine is expected to take less than a week. Once fully assembled the turbines would be towed out to their relevant destination by tugs. Towing out of the harbour will be at very slow speeds, likely 3-4 knots maximum.

It is envisaged that at any single point in time one turbine may be fully assembled with two further turbines in partial assembly.

Fully assembled turbines are expected to be around 310m tall (above quayside if on the quayside). For the purposes of our assessments, an envelope of 330m for turbines heights has been adopted. The tallest structures on site would generally be close to the quayside, with lower structures and buildings mostly on the southern and eastern boundaries.

3.5.2 Maintenance Dredging

Capital and maintenance dredging within the main access channel was already considered within the 2018 EIA carried out for the planning permission renewal in 2019. The potential environmental effects of maintenance dredging in this area were therefore already considered and is not part of the current application. A maintenance dredging licence application for the existing access channel has already been made separately to MDLOT and does not form part of the proposed development.

3.5.3 Vessel Movements

The current consent was based upon the 2018 EIA Report. This 2018 EIA indicated that approximately 340 vessels a year were anticipated to call at the Port during operations.

Although the extension area would give access to more land it is not expected to generate significantly more marine traffic. The vessel calls to the Port are anticipated to be between 250-350 per annum, comparable to the predicted 340 vessel calls per year in the 2018 application.

There could, in the short term, potentially be 400 vessel calls per year at peak (initial operations are expected be lower in number to the 2018 predictions). These vessels would be a mix of semi-submersible crane vessels, heavy lift vessels, barges, general cargo vessels, and various turbine installation vessels.

3.5.4 Utilities

The current site has sufficient electrical supply, water supply from Scottish Water, and foul drainage is tankered off site. Future development plots would be required to prepare their own wastewater, site specific surface water drainage, and foul water arrangements for approval. The pumping station on site is currently unused and is not formally connected to Scottish Water's system, but dialogue is ongoing about potential future use once site numbers reach a critical mass.

3.5.5 Working Hours for Operational Activities

The working hours will be determined by the future tenants of the site and their operational activities. These could potentially require working 24 hours or normal working hours of 08:00hrs and 19:00hrs Monday to Friday, 08:00hrs and 13:00hrs on Saturdays.

Any activities that would generate significant noise, would generally be carried out during normal working hours of 08:00hrs and 19:00hrs Monday to Friday, 08:00hrs and 13:00hrs on Saturdays. Likewise operational activities at height would generally not be carried out at nighttime for Health and Safety reasons.

Considerations regarding lighting would also be in place for any late night working particularly in the winter darker months.

3.5.6 Landscape Design

The functionality of the port means that there is limited scope to have landscape design features throughout the site, however the tree screening will be retained on the southern and western periphery of the site.

Further opportunities to enhance the wider landscape for local flora and fauna have been explored and incorporated where possible. Further details on the proposed enhancements are provided in EIAR Chapter 15 (Schedule of Mitigation and Enhancements).

3.5.7 Infrastructure, parking, EV charging

The main access road, security office and all other facilities that are already in place for the consented port will be used for the proposed development. In accordance with best practice, EV charging points are already available at the site office for the consented port and future tenants will also be expected to consider if the need to provide additional spaces as part of their operation if demand increases. Further detail is provided in EIAR Chapter 5 (Additional Information and Assessments) relating to the Travel Plan.

3.5.8 Fencing and Security

The existing site has boundary fencing and suitable security in place for health and safety reasons to protect the operational port and the public.

New security fencing will be installed on the western, southern and eastern boundaries. This will generally be on the site boundary except where the site faces towards the Starlight Wellness Centre where the security fence will be inside the tree buffer.

3.5.9 Wider Access

Parts of the proposed extension will include land over which access rights apply and which are not currently restricted by the Land Reform (Scotland) Act 2003. The proposed extension will exclude the public from areas where access rights apply but where little or no public access is exercised. No likely significant negative impacts predicted.

Access to Whiteness Head Fishing Bothy and Nairn Cove will remain and will not change as a result of the proposed extension.

The existing primary access route would continue to serve the site with the added benefit of the completion of the new roundabout junction on the A96 to be completed early in 2026.

3.6 DECOMMISSIONING

The prospect of decommissioning has two aspects. The first would relate to above ground infrastructure created on the site by tenants. The second the concept of decommissioning the port facility itself. The proposals for each are documented in turn below.

3.6.1 Transient Tenant Infrastructure

Various areas of the site, yet to be confirmed, will be leased to tenant occupiers over years or decades. These occupiers will have to prepare detailed proposals for their development which should include their proposals for decommissioning their infrastructure. On completion of any lease at the Site, the former tenants will be required to leave a clean, vacant site suitable for use by others in the future.

3.6.2 The Extension Areas

Once constructed the extension areas would become part of the Port. Port infrastructure is not a development type that has ever generally been decommissioned in the UK (for ports of any reasonable size). The Port at Ardersier has been in place for around 50 years and is anticipated to be in gainful use for a significant time period into the future. Even if decommissioning were ever to be considered it would be so far in the future that the Regulatory regime or policy will have changed significantly from the current day. Therefore, no decommissioning plans are in place or expected for the Port facility, which is of course a type of facility that in the UK is considered Critical National Infrastructure (CNI).

3.7 EMBEDDED MITIGATION

The design evolution has incorporated decisions to avoid, minimise or reduce potential perceived impacts. This is embedded mitigation incorporated into the proposed development. Three items of fundamental highest level embedded mitigation are described below. These were embedded before any technical assessments were undertaken. Embedded mitigation is also reported in the technical chapters where design has evolved as a result of their assessments.

The high-level design or management led mitigation comprises:

- Adoption of the approach described in The Highland Council Guidance Note on the Construction Environmental Management Process for Large Scale Projects, August 2010. To initiate this process, an Outline Construction Environmental Management Document (CEMD) has been prepared; and
- Designing a channel width and dredge pocket to avoid any encroachment into the intertidal area of the Whiteness Spit (described below).
- Compensatory planting of 120 acres of Scots Pine at an off site location (also described below).

3.7.1 Dredge Design

The Inner Moray Firth Ramsar site and Whiteness Head SSSI both lie to the north of the planned dredge area. Avoiding any direct impact on the intertidal sandflats on the south side of the Whiteness Spit (part of those designated sites) was therefore considered of paramount importance and design progressed on that basis.

Depth, width and stable side slope angles define the footprint of the dredge and where the side slopes will reach and therefore impact area. Each of these factors are described below:

- Depth, these are fixed due to the nature of craft that will require to utilise different parts of the quay. These are fixed at -12.4mCD and -6mCD ;
- Stable side slopes were previously calculated (for previous applications) as being a 1:6 slope. Following the 2025 dredge campaign Fairhurst were commissioned to review existing ground investigation information, create a site-specific ground model and undertake a stability assessment of the dredge pocket and proposed side slopes to Whiteness Head. The full report is included as EIA Appendix 3.1. The work by Fairhurst confirmed that a 1:6 side slope would be considered a stable slope in natural deposits.
- Width of channel, this was initially proposed to be 160m in width to be consistent with the approach channel.

When the above factors were applied there was identified the risk that the side slope could encroach onto the edge of the intertidal area of the designated sites. Given the side slope angle and depths are fixed the

design decision was made to reduce the channel width. By reducing the channel width to 140m instead of 160m width no direct impact on the intertidal areas to the north will arise.

3.7.2 Compensatory Planting

During early consultation with The Highland Council (EIAR Chapter 4 (Consultation)), it was advised that the 120 acres of Scots Pine plantation proposed to be felled should be compensated with an equivalent area of Scots Pine plantation offsite. A suitable site is being identified and legal agreements put in place to confirm this. This off-site compensatory planting is intended to be supplemented with approximately 10% broadleaf planting and other biodiversity enhancement measures such as:

- Badger gates in fencing if required.
- Pole (tall strainer post) mounted bat and bird boxes where existing trees are not present.
- Tall fence posts with raptor perches.
- Stone piles for reptile refugia.
- Log and brash piles where existing vegetation may need to be cleared for fencing.
- Glades in areas where tree establishment may not be likely (i.e. shallow soils); and
- Created depressions (similar to wader scrapes) to hold surface water and provide aquatic habitats or wet tolerant vegetation.

The final selection of enhancement measures within the compensatory planting area will be agreed with Forestry Scotland.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 4 Consultation

Ardersier Port Extension

Revision Number	FINAL
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CONTENTS

4 Consultation.....	4
4.1 Introduction	4
4.2 Purpose of Consultation	4
4.3 Proposal of Application Notice (PoAN).....	4
4.4 Public Events	5
4.5 Pre-application discussions	7
4.6 The Scoping Process	9
4.7 Scoping Opinion	9
4.8 Scoping Conclusion & Environmental Assessments Required	19

IMAGES

Image 4.1: Public Consultation Event 1	6
Image 4.2: Public Consultation Event 2	6
Image 4.3: You Said / We Did	7

TABLES

Table 4.1: Scoping Opinion Response	10
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4 CONSULTATION

4.1 INTRODUCTION

This chapter sets out the consultation that has been undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 to scope this EIA.

It also provides information on the consultation that has been undertaken with the local community and key stakeholders, detailing how their thoughts and views have been considered in the design of the proposed development and the assessments in this EIA. This is in accordance with the Town and Country Planning (Pre-Application Consultation) (Scotland) Amendment Regulations 2021 and the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013. Full details are provided in the Pre-Application Consultation report that has been submitted in support of the planning application.

All consultation relevant to technical aspects of the EIA has been reported in the respective chapters (**EIA Chapters 5-12**). This chapter has been prepared throughout the EIA process to keep a complete record of all relevant consultation that has been undertaken to inform the EIA and the design of the proposed development.

4.2 PURPOSE OF CONSULTATION

The consultation process has been undertaken to inform the Project team's understanding of the potential environmental sensitivities associated with the area of the proposed development. It has also:

- Sought feedback and comments from Statutory and Non-Statutory Consultees on environmental aspects of the proposed development.
- Provided Statutory Consultees, other non-statutory bodies and the public with information about the proposed development and provided them with an opportunity to comment on the proposals.
- Obtained information relevant to inform the environmental assessments.
- Agreed survey and assessment methodologies, where relevant.

4.3 PROPOSAL OF APPLICATION NOTICE (POAN)

Under the Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006, all National developments, as designated within the revised National Planning Framework, require a formal PoAN). The purpose of the PoAN is to give notice that a planning application is intended to be submitted following a formal period of statutory Pre-Application Consultation and to set out what consultation is to be undertaken during that period.

In accordance with these regulations, a PoAN was submitted to The Highland Council on 16th May 2025. A copy of the PoAN is attached to the Pre-Application Consultation (PAC) Report in Appendix 1 and it was shared with the following parties by email on 16th May 2025: -

- Cllr Glynis Campbell Sinclair
- Cllr Morven Reid
- Cllr Trish Robertson
- Cllr Laurie Fraser
- Cllr Michael Green

- Cllr Barbara Jarvie
- Cllr Paul Oldham
- Fergus Ewing (MSP)
- Ariane Burgess (MSP)
- Tim Eagle (MSP)
- Rhoda Grant (MSP)
- Jamie Halcro Johnston (MSP)
- Edward Mountain (MSP)
- Emma Roddick (MSP)
- Douglas Ross (MSP)
- Graeme Leadbitter (MP)

A period of at least 12 weeks has elapsed between the submission of the PoAN to THC and the submission of the application for planning permission

In accordance with the regulations, two public exhibitions were held in June and August 2025 and were advertised in the Inverness Courier at least seven days beforehand.

4.4 PUBLIC EVENTS

The purpose of the first consultation event was to provide the public with a chance to view the plans, ask any questions and give their views on the design. The second exhibition provided an update on how the design had developed since the last consultation event following further discussions with key stakeholders (e.g. the Council's internal teams etc.), and taking on board feedback received at the first consultation event.

A public notice in relation to the first public consultation event appeared in the Inverness Courier on 3rd June 2025, confirming the details of the first consultation event. A public notice for the second consultation event appeared in the Inverness Courier on 19th August 2025.

Copies of the adverts are provided in Appendix 3 and 4 of the PAC Report that has been submitted as part of the wider planning application.

A free, publicly accessible project website was also created to host information relating to the proposals: <https://www.montagu-evans.co.uk/public-consultation-haventus/>. The website went live to coincide with the PAC advert appearing in the press and remained live to allow for sufficient time before and after the events for third parties to make comments.

The documents and materials associated with the public events are available on the project website ([Public Consultation: Haventus - Montagu Evans](#)). These were uploaded as soon as possible during and after each event to enable the public and stakeholder groups to view them at their leisure.

Following each public event the main questions and concerns were reviewed by the wider team and considered in terms of changes to design or approach. This resulted in a You Said/We Did table that was shared at the second event and can be found in Image 3.

4.4.1 Event 1 – June 2025

The first public consultation event (**Image 1**) took place on 11th June 2025 between 3pm and 7pm at Ardersier War Memorial Hall, Station Road, Ardersier, Inverness, IV2 7SU. During this time attendees were invited to view the presentation boards, which were displayed within the venue. The project team were also in attendance to answer any questions raised. The event was attended by 66 visitors.

Image 4.1: Public Consultation Event 1



4.4.2 Event 2 – August 2025

The second public consultation event (**Image 2**) took place on 27th August 2025 between 3pm and 7pm at Ardersier War Memorial Hall, Station Road, Ardersier, Inverness, IV2 7SU. During this time attendees were invited to view the presentation boards, which were displayed within the venue. The project team were also in attendance to answer any questions raised and specifically to feedback on the comments received from the first event which was summarised on one of the boards in a You Said/We Did approach (**Image 3**). The second event was attended by 41 visitors.

Image 4.2: Public Consultation Event 2



Image 4.3: You Said / We Did

You said/We did	
YOUR FEEDBACK	OUR RESPONSE
Digital Interactive Map would be useful to understand the site location.	We have brought an Interactive map to this event.
Concerned about lighting impacts from the site particularly during winter.	We have commissioned a lighting specialist to advise on lighting design and suitable mitigation.
Worried about noise impacts from the proposed extension.	We have undertaken a full noise assessment and the results will be included in the EIA.
Worried about the loss of woodland and the screening it provides.	We have designed a buffer strip of woodland along the southern boundary of the site where the woodland will be retained.
Worried about the junction interventions and traffic impacts.	• We have confirmed that traffic levels will not exceed that already consented in 2018. • We are also preparing a Travel Framework to manage traffic from the site that will consider all modes of transport and also consider sustainable options. • The roundabouts that are associated with the 2018 consent are designed and approved to meet current standards and are not a part of the proposed extension.
You wanted further information about the potential layout of the site.	We are developing an Indicative layout for assessment purposes for the EIA. Important to note that this is indicative and future detailed proposals will undertake a full design process as required and further applications will come forward with the details on what is proposed.
You wanted confirmation of the proposed manufacturing that could take place on the site.	We confirmed that the extension site will provide additional space for laydown areas or renewables related manufacturing. This could potentially include turbine blade manufacturing, nacelle manufacturing, amongst other things.

4.5 PRE-APPLICATION DISCUSSIONS

In addition to the PoAN and the public events, several pre-application meetings and discussions have taken place with relevant stakeholders and regulators.

4.5.1 Pre-application meeting

An initial Pre-Application meeting was held between the Applicant, their project team, and relevant Council officials on 13th March 2025. A formal Pre-Application Enquiry response was received from THC on 24th March 2025. This response concluded that the development was welcomed, “particularly given its potential for the realisation of the significant benefits anticipated to be delivered as part of the Inverness & Cromarty Firth Green Freeport consortium.” It also noted that the principle of development has “potential to be consistent with the development plan.” The Council noted several issues that the Applicant should

address in any future planning application, including flood risk, woodland removal, landscape and visual, and biodiversity.

The discussion within the Pre-Application Enquiry response includes the following topics: -

- Principle of Development
- Design and Sustainability
- Natural Heritage
- Amenity
- Transport and Wider Access
- Water Environment
- Marine Environment
- Built and Cultural Heritage

The formal response also provided further detail on the supporting documents required for the application of the proposed development.

4.5.2 Additional pre-application meetings

Following the receipt of the feedback response, a further four pre-application meetings were scheduled to cover various technical areas. These meetings were intended to provide a project update to the Council officials, and to discuss specific topics within the initial pre-application feedback. These meetings are outlined as below: -

- 9th April 2025 – Landscape and Visual
- 27th May 2025 – Flooding
- 28th May 2025 – Woodland Mitigation and Ecology
- 23rd July 2025 – Transport and Planning Policy

4.5.3 Community Liaison Group

In accordance with the terms of the existing planning permission, a Community Liaison Group (CLG) was established. This meets on a regular basis and provides an update on the current situation and proposed development opportunities. The most recent CLG meeting described the proposed extension area, its purpose and the scope of development it would involve. The comments from the CLG were supportive of the principle of the development, expressing an understanding of the need for the additional land and its long-term purpose for the development of the port.

Some concerns were expressed about the access to the site and attendees were reassured that the existing primary route would continue to serve the site with the added benefit of the completion of the new roundabout junction on the A96. It was explained this would commence construction in late autumn 2025 and would be completed early in 2026.

4.5.4 Higher Education / School Engagement

The details of the public event were shared with the University of Highlands and Islands (UHI), Inverness College, Culloden Academy and Ardersier Primary School.

The UHI noted that they had shared the information on their Student Portal so that all UHI Inverness staff and students would be able to view when logging into their systems.

This additional engagement helped inform the EIA and the design of the proposed development.

4.6 THE SCOPING PROCESS

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 make provision for the Developer to write to a relevant competent authority (the Council's Planning Authority) and request a formal opinion, in writing, of the information to be provided in the EIAR. This is called a Scoping Opinion. A Scoping Request from the Developer, as a minimum, must include a description of the location of the development, a plan to identify the land, a description of the nature and purpose of the development and of its likely significant effects on the environment, and other information or representations that the Developer may wish to provide.

The principal aim of the EIA scoping exercise for the proposed development was to establish the key issues to be considered as part of the EIA. This exercise has also informed the evaluation of the significance of the predicted environmental effects of the proposals and has identified key issues for the assessment.

The scoping exercise formally opened the lines of communication with consultees on EIA and planning, however, there has been ongoing consultation throughout the outline design process (refer to the PAC Report submitted alongside this planning application for further information).

4.7 SCOPING OPINION

A Scoping Request was prepared by the EIA team to identify the proposed 'scope' and information requirements for the EIA and content of this EIAR.

A formal request for a Scoping Opinion was made to the Highland Council's Planning and Building Standards department and the Marine Directorate in January 2025.

The Highland Council's Planning Officer provided their Scoping Opinion on 24th March 2025 (EIAR Appendix 4.1) and the Marine Directorate in June 2025 (EIAR Appendix 4.2). A summary of the key points is provided in **Error! Reference source not found.** These points have been included and assessed in this EIAR, and the table provides information on where further information on each can be found.

The requirements outlined in Table 4.1 were discussed within the relevant technical chapter authors and the key issues from the Scoping Opinion incorporated within the assessments and reporting.

Table 4.1: Scoping Opinion Response

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
HIGHLAND COUNCIL RESPONSE			
1.1	The Highland Council (THC)	Full description of physical characteristics of the site, the proposed development, the risks, residual effects, any predicted emissions and the cumulative impacts. .	Please refer to EIAR Chapter 3 (Project Description), the individual chapters and also EIAR Chapter 14 (Cumulative Effects).
2.1	THC	Provide a statement of alternatives – consider design evolution, site selection, technology, access. The alternatives assessment should also provide information on the different environment effects of the options and highlight sustainable development attributes including information on any carbon savings for example of choices made.	Please refer to Section 3.3 in EIAR Chapter 3.
3.1–3.14	THC Development Plans Team	Provide a land use and policy chapter – identify and summarise relevant national, regional, and local planning policies (NPF4, HwLDP, IMFLDP2). Provide information separate to the EIA on what has been discussed and agreed with regards to community wealth building as per the relevant Highland Councils remit and the 'Social Values Charter for Renewable Investment'	The land use of the site is set out in the project description and the relevant planning policies are set out in detail in the Planning Support Statement. Those that are relevant to the individual chapters are also included in EIAR Chapters 5 – 14.
3.15	THC	The Council's Sustainable Design Guide SG provides advice and guidance on a range of sustainability topics, including design, building materials, and minimising environmental impacts of development. A Sustainable Design Statement is required, which may form part of a supporting Planning Statement, or Climate Change section of an EIA.	Please refer to the Sustainable Design Guide that has been submitted as part of the Planning Support Statement.
3.16 – 3.22	THC / NatureScot	The EIAR must address the likely impacts on the nature conservation interests of all the designated sites in the vicinity of the proposed development. It must provide proposals for any mitigation that is required to avoid these impacts or to reduce them to a level where they are not significant.	Please refer to EIAR Appendix 5.8, EIAR Chapter 11 (Marine Mammals), EIAR Appendix 11.6, EIAR Chapter 12 (Terrestrial Ecology), EIAR Chapter 13 (Ornithology) and EIAR Appendix 13.9.
3.23	THC / NatureScot	As part of an EIA, a full assessment of the ecology of the site and a suitable buffer around the site needs to be undertaken to determine if there are any ecological/environmental constraints associated with the proposed development. The Ecology Officer agreed with the list of proposed species to be considered as part of the assessment.	Please refer to EIAR Chapters 12 (Terrestrial Ecology) and EIAR Chapter 13 (Ornithology).

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIA or other supporting documents?
3.24	THC / NatureScot	If applicable, any relevant Species Protection Plans (SPPs) should be made available as part of the EIA. It is expected that all survey information submitted with the application will be up to date (as per NatureScot professional guidance) and will include all areas of proposed construction, including areas considered temporary (e.g. site compounds).	Details in EIA Chapter 12 (Terrestrial Ecology) – Table 7.
3.25	THC / NatureScot	The EIA should include a cumulative assessment for the proposal, taken into account any larger projects which may impact upon the same ecological receptors.	Please refer to EIA Chapter 12 (Terrestrial Ecology), Section 12.10.
3.29	THC / NatureScot	It is expected that a full report, detailing methodologies, results, assessment and any mitigation/compensation measures for the identified ecological constraints. This should include any mapping.	Please refer to EIA Chapters 11 (Marine Mammals), 12 (Terrestrial Ecology), and 13 (Ornithology) and accompanying appendices.
3.30	THC / NatureScot	The Council's Ecology Officer agrees with the species and impacts to be included within the EIA. It would be expected that any potential barriers to salmon migration to be considered. The cumulative impacts should be considered, particularly those within the Cromarty and Moray Firth.	Please refer to EIA Chapter 5, Section 5.9 and EIA Appendix 5.8.
3.31	THC / NatureScot	The EIA should demonstrate how the proposed development has met the requirements of NPF4 Policy 3. Guidance on the information required for fulfilling this policy can be found in Highland Council 'Biodiversity Enhancement Planning Guidance', May 2024. Please provide details of the biodiversity enhancements within the application, with clear depiction of what is considered compensatory and what is enhancement.	Please refer to EIA Chapter 15 (Schedule of Mitigation and Enhancements).
3.33 – 3.41	THC / Forestry Scotland	Forestry will need to be 'scoped in' to the EIA and the applicant will need to provide a Forestry Chapter in the EIA prepared by a professional forester. The Forestry Chapter would need to include scope of assessment, methodology, baseline conditions (woodland location, type, condition, etc of all woodland areas on and around the site), mitigation, monitoring and assessment of effects. The EIA should provide a baseline survey of the trees and plants present on the site to determine the presence of any rare or threatened species.	Details on the proposed tree removal are provided in EIA Chapter 3 (Project Description) Section 3.5.3 - Site Clearance (Commercial Plantation Felling and Vegetation Removal) and baseline survey information is provided in EIA Chapter 12 (Terrestrial Ecology) - EIA Appendix 12.13, EIA Appendix 12.14, EIA Appendix 12.15 Detail of the Tree Constraints Plan and buffer zones is provided in EIA Chapter 5 (Supporting Information and Assessments) and EIA Appendix 5.4.

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
3.42	THC / Forestry Scotland	The EIA should include Tree Constraints Plans and Tree Protection Plans to BS 5837:2012 to show how retained trees/woodland would be safeguarded from construction activity as well as a tree/woodland removal drawing which shows the extent of woodland that would need to be removed to accommodate new development. Where woodland is proposed to be removed, compliance with the Scottish Government's Control of Woodland Removal policy is required to be demonstrated. The applicant will therefore need to submit the following in support of any application: • what significant and clearly defined additional public benefits would be associated with the proposals. • what area of tree cover would realistically need to be removed in order to accommodate all of the proposals. • how the area of commercial woodland proposed to be removed could be adequately compensated for with an area of equivalent size and quality of commercial woodland. This would most likely need to be off-site	Detail of the Tree Constraints Plan, compensation and policy compliance is provided in EIAR Chapter 5 (Supporting Information and Assessments) and EIAR Appendix 5.4.
3.46	THC / Landscape	For all analysis of Seascape, Landscape and Visual Effects, the pattern of use of the site should be considered, and conclusions should make clear the degree to which such patterns may be variable. Pattern would include consideration of which parts of the site would be occupied by taller elements, how many turbines might be under partial construction at any given time and how seasonal the presence of taller elements may be, including any permanent structures such as ring cranes, and what effects such seasonality may have on the presence of working and aviation lights.	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual).
3.47	THC / Landscape	Please present the visual material used for the landscape and visual impact in different ways. In addition to panoramic images, the Council requires single frame images with different focal lengths of 50mm and 75mm taken with a 35mm format full frame sensor camera – not an 'equivalent'. These images are specifically required to assist with the visual impact assessment of the proposal's visual effects whereby the 50mm focal length gives an indication of field of view and the 75mm focal length best represents the scale and distance in the landscape i.e. a most realistic impression of what we see from the viewpoint when assessing the proposed 'in the field'.	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual).
3.48	THC / Landscape	The applicant must provide visualisations prepared in accordance with both The Highland Council's Visualisation Standards (available at THC Visualisation Standards) and are subject to an independent verification check upon submission and comparison with NatureScot guidance.	Noted. Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual) and an A3 lever arch folder of all visualisations will be provided.

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
		A request has also been made for an A3 lever arch folder hard copy set of visualisations for ease of reference and use by the Case Officer during site assessments.	
3.49	THC / Landscape	All elements of the proposed development must be rendered into photomontages, showing: - The current baseline view, - The proposed development on completion (Year 0), and - The anticipated view at Year 5 and Year 10 post-completion, illustrating landscape establishment over time. - Where no meaningful visual change is expected between Years 5 and 10, later photomontages may be omitted.	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual).
3.50 – 3.52	THC / Landscape	The final list of viewpoints and wireframes must be agreed with The Highland Council (THC) in advance, and each viewpoint's purpose (e.g. landscape, cumulative, or community assessment) must be clearly stated in the supporting information. Where viewpoints are inaccessible or screened, visualisations should be supplemented by 3D renderings to demonstrate how the facility will sit within the site and surrounding landscape.	Viewpoints were agreed with THC – further information in EIAR Chapter 7 (Landscape, Seascape and Visual).
3.53	THC / Landscape	The LVIA should clearly set out the methodology of the assessment, which should include consideration of access roads, fencing, security measures including CCTV, lighting, along with the principal structures.	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual).
3.54	THC / Landscape	Although the proposal is understood to be for turbine component assembly and deployment, it is expected that the LVIA refers to the Council's Onshore Wind Energy Supplementary Guidance and takes account of the key views, gateways and identified sensitive receptors in the locality.	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual).
3.57	THC Historic Environment Team / Historic Environment Scotland (HES)	It is recommended that the applicant refers to the EIA Handbook for best practice advice on assessing cultural heritage impacts. Decisions that affect the historic environment should take the Historic Environment Policy for Scotland (HEPS) into account as a material consideration. HEPS is supported by HES's Managing Change guidance series. In this case, it is recommended that you consider the advice in the Managing Change in the Historic Environment: Setting guidance note.	Please refer to EIAR Chapter 8 (Historic Environment).
3.58–3.62	THC Historic Environment Team / Historic Environment Scotland (HES)	Cultural Heritage assessment following HEPS and Managing Change guidance. Include ZTV, walkover survey, setting assessment, mitigation for impacts on assets (e.g., Fort George).	Please refer to EIAR Chapter 7 (Landscape, Seascape and Visual) and EIAR Chapter 8 (Historic Environment).

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
3.63	SEPA	SEPA have advised that they would welcome further pre-application engagement once initial habitat and water survey work has been completed and proposals for the development platform, related watercourse engineering and flood risk works have been undertaken.	Completed and reported in EIAR Chapter 9 (Hydrology and Hydrogeology).
3.63–3.67	SEPA / NatureScot	Water environment survey – map all water features, culverts, drainage, invasive species, rerouting proposals, and wetland compensation.	Please refer to EIAR Chapter 9 (Hydrology and Hydrogeology).
3.68–3.77	SEPA / THC Flood Risk Team	Flood Risk Assessment covering coastal and fluvial risk (inc. climate change), rerouted channels, 1-in-200-year design flow, FRA outputs integrated into design.	Please refer to EIAR Appendix 9.3.
3.78–3.81	SEPA	Groundwater Dependent Terrestrial Ecosystems (GWDTE) survey and assessment, NVC mapping, risk assessment, and mitigation/monitoring.	Please refer to EIAR Appendix 12.13, EIAR Appendix 12.14, EIAR Appendix 12.15 and EIAR Chapter 9 (Hydrology and Hydrogeology), Section 9.4.7.
3.82–3.83	SEPA	Assessment of impacts on groundwater abstractions and outline of any new abstractions.	Please refer to EIAR Chapter 9, Section 9.4.6.
3.84	SEPA	The submission must include a schedule of mitigation, which includes reference to best practice pollution prevention and construction techniques (for example, limiting the maximum area to be stripped of soils and peat at any one time) and regulatory requirements.	Please refer to EIAR Chapter 15 (Schedule of Mitigation and Enhancements).
3.85–3.86	SEPA	Waste and materials management plan, including use of dredged sand, timber reuse, and compliance with forestry waste guidance. Include information on the approach to be taken to tree felling and forest waste.	Please refer to EIAR Chapter 3 (project Description) and EIAR Appendix 5.3.
3.88	Scottish Water	Identify potential conflicts with Scottish Water assets; consult Asset Impact Team.	No new Scottish Water assets needed on site or required by the proposed development.
3.89–3.91	THC Contaminated Land	Further information is required to demonstrate this area of the site is suitable for use. As a minimum a detailed site history and walkover survey, intrusive Phase 2 Investigation works may be deemed necessary. Early consultation with the Council Contaminated Land Team on the findings of the history/walkover survey and any proposed investigation strategy is recommended prior to undertaking any intrusive works onsite.	Please refer to EIAR Chapter 5, Section 5.5 and EIAR Appendix 5.4.
3.93–3.98	THC Environmental Health	Construction and operational noise assessments (BS5228, BS4142), dust risk assessment, inclusion in CEMP.	Please refer to EIAR Chapter 6 (Airborne Noise and Groundborne Vibration).

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
3.99	THC Environmental Health	Air quality assessment required if manufacturing or processing activities generate significant emissions.	This application is not applying for manufacturing or processes activities – therefore air quality assessment not required. Construction Dust impacts considered in EIAR Chapter 5, Section 5.2 and EIAR Appendix 5.1.
3.100–3.104	THC Transport Planning	Updated Travel Plan required that incorporates previously suggested measures) and Operational Traffic Management Plan. Confirm new A96 junction still planned, parking, EV charging, and bus service measures.	Please refer to EIAR Chapter 5, Section 5.7 and EIAR Appendix 5.6.
3.105–3.107	THC Access Officer	Access management plan update, identifying changes to land where access rights will be restricted but that as set out in the scoping report - <i>“Proposed extension will exclude the public from areas where access rights apply but where little or no public access is exercised. No likely significant negative impacts predicted.”</i>	Please refer to EIAR Chapter 3 (Project Description).
3.108–3.109	THC / Socio-economics	Socio-economic statement required - The application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development. This should set out the impact on the local, regional and national economy. Any mitigation proposed should also address impacts on the regional and local economy.	Please refer to EIAR Chapter 3 (Project Description) and EIAR Appendix 3.3.
4.0	THC	EIAR needs to describe the likely significant effects of the development on the environment (direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative). Methodology used to assess significance required.	Please refer to EIAR Chapter 2 for the Methodology and all technical chapters (5–14) that include specific sections on significance methodology supported by appendices.
5.1–5.3	THC / SEPA	Draft Schedule of Mitigation table to be included in EIAR; specify implementation and monitoring (CEMP, CMS, community liaison).	Please refer to EIAR Chapter 15 (Schedule of Mitigation and Enhancements).
MARINE SCOTLAND RESPONSE			
2.4.1	Marine Directorate (MD-LOT)	Provide full Best Practicable Environmental Option (BPEO) assessment for dredged material, including all disposal/reuse options and worst-case scenarios.	This is being prepared for all proposed Marine Works and has been submitted as a supporting document to the Marine Licence Application.
2.4.2	MD-LOT	Include clear timeframes for each work element. If exact timeframes are not known, then worst case scenarios should be provided "Design Envelope"	Please refer to EIAR Chapter 3 (Project Description).
2.4.3–2.4.6	MD-LOT	Apply a Design Envelope approach – define parameters, justify flexibility, assess worst-case and most-likely scenarios, and ensure consistency between EIA and licence applications.	Please refer to EIAR Chapter 3 (Project Description).

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIA or other supporting documents?
2.4.7–2.4.8	MD-LOT	Include a description of reasonable alternatives (design, technology, scale, location) and reasons for selection, comparing environmental effects.	Please refer to Section 3.3 in EIA Chapter 3 (Project Description).
3.2	MD-LOT	Clearly list topics scoped in/out; justify exclusions and document in the EIA Report.	Please see section 4.8 below this table.
3.3	MD-LOT	Include an integrated Mitigation and Monitoring Table linked to each EIA topic. Explain efficacy and any monitoring/remedial actions.	Please refer to EIA Chapter 15 (Schedule of Mitigation and Enhancements).
5.2	MD-LOT	Landscape, Seascape & Visual Effects scoped in for construction and operation. Prepare LVIA following NatureScot/THC standards.	Please refer to EIA Chapter 7 (Landscape, Seascape and Visual).
5.3 / MCA	MCA	Update Navigational Risk Assessment (NRA) per Port Marine Safety Code. Scope out navigation only if covered in updated NRA.	The Port Navigational Risk Assessment is continually updated as the port evolves, should the applications be successful this would be carried out prior to completion of quay and dredging. This is not part of the EIA.
5.3 / MOD	MOD	Assess impacts of tall structures (≥50m) on military low flying and radar (RAF Lossiemouth). Include mitigation if needed.	In progress with Ministry of Defence
5.4	MD-LOT	Air Quality may be scoped out if Construction Dust Risk Assessment and Dust Management Plan are included in the CEMP.	Please refer to EIA Chapter 5, Section 5.2 and EIA Appendix 5.1.
5.5	MD-LOT	Airborne noise scoped in for both phases; assess impacts on residential and ecological receptors.	Please refer to EIA Chapter 6 (Airborne Noise and Groundborne Vibration) for assessment of residential receptors and EIA Chapter 12 (Terrestrial Ecology) for impacts on ecological receptors.
5.6 / HES	Historic Environment Scotland	Historic Environment scoped in; prepare ZTVs, setting assessments, and consult HES and Aberdeenshire Council Archaeology.	Please refer to EIA Chapter 8 (Historic Environment).
5.7	MD-LOT	Population & Human Health scoped out if covered under cultural heritage, air, and hydrology chapters.	Covered under EIA Chapters 8 (Historic Environment) and EIA Chapter 9 (Hydrology and Hydrogeology) and EIA Chapter 5 (Appendix 5.1).
5.8	MD-LOT / NatureScot	Climate and Resilience scoped in. Include full GHG Life Cycle Assessment (IEMA guidance) and assess long-term coastal change and sea-level rise.	Please refer to EIA Chapter 5, Section 5.6, Section 5.12 and also the Sustainability Design Statement that is part of the Planning Statement.

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
5.9	MD-LOT	Hydrology & Hydrogeology scoped in; include flood risk, drainage, topography, water quality.	Please refer to EIAR Chapter 9 (Hydrology and Hydrogeology) including EIAR Appendix 9.3 and EIAR Appendix 9.4.
5.10	MD-LOT / NatureScot	Coastal Processes & Geomorphology scoped in. Assess impacts of rock armour, deepened dredge, sedimentation, hydrology, and tidal volume changes. Submit draft modelling method pre-application.	Please refer to EIAR Chapter 10 (Coastal Processes & Geomorphology).
5.11	MD-LOT	Geology, Soils & Contaminated Land may be scoped out if supported by a completed BPEO and ground investigation.	Please refer to EIAR Chapter 5, Section 5.5 and EIAR Appendix 5.4.
5.12	MD-LOT	Material Assets & Waste may be scoped out if a Site Waste Management Plan is submitted.	Please refer to EIAR Chapter 5, Section 5.4 and EIAR Appendix 5.3.
5.13	MD-LOT	Terrestrial Ecology scoped in for relevant marine-related effects; address invasive species and designated sites.	Please refer to EIAR Chapter 12 (Terrestrial Ecology).
5.14 / NatureScot	NatureScot	Marine Mammals scoped in; assess underwater noise, disturbance, displacement, vessel impacts, and indirect prey effects (bottlenose dolphin SAC).	Please refer to EIAR Chapter 11 (Marine Mammals).
5.15	MD-Lot	The Scottish Ministers agree that heat and radiation be scoped out of further assessment within the EIA for the construction and operational phases.	Noted.
5.16	MD-Lot	The Scottish Ministers agree with the Applicant's proposal to scope out major hazards and accidents provided the risk of flooding, storms and potential storm surges is assessed through the hydrology chapter in the EIA and the above plans are adhered to.	Flooding covered in EIAR Appendix 9.3. Major Accidents and Hazards is covered in EIAR Chapter 5, Section 5.11.
5.17	MD-Lot	The Scottish Ministers agree that electric and magnetic fields be scoped out of further assessment within the EIA Report for the construction and operational phases.	Noted.
5.18	MD-Lot	The Scottish Ministers agree that transboundary effects be scoped out of further assessment within the EIA Report for the construction and operational phases.	Noted.
5.19	MD-LOT	Cumulative Effects scoped in. Include combined impacts with licensed works and future offshore wind activity in Cromarty & Inverness Green Freeports.	Please refer to EIAR Chapter 14 (Cumulative Effects) and EIAR Chapters 5 to 13.
5.20 / NatureScot	NatureScot	Ornithology scoped in. Assess disturbance/displacement of SPA birds, timing of works, and potential for enhancement of Tern Island.	Please refer to EIAR Chapter 13 (Ornithology) and EIAR Appendix 13.9.

Ref (in Scoping Opinion)	Organisation	Response	Where can you find this information in the EIAR or other supporting documents?
5.21 / NatureScot / MD-SEDD	NatureScot & MD-SEDD	Coastal & Marine Ecology scoped in; include effects on SAC sandbanks, benthic habitats, invasive species (slipper limpet), and include Port Interim Biosecurity Plan.	Please refer to EIAR Chapter 11 (Marine Mammals), EIAR Appendix 5.8 and EIAR Appendix 5.9.
5.22 / Nairn DSFB	Nairn District Salmon Fisheries Board	Assessment of impacts upon Diadromous Fish scoped in; assess noise, dredging, and deposition impacts on salmonids; avoid smolt migration period; consult DSFBs.	Please refer to EIAR Chapter 5, Section 5.9 and EIAR Appendix 5.7.
5.23 / MD-SEDD / SFF	MD-SEDD & Scottish Fishermen's Federation	Assessment of impacts upon Commercial Fisheries scoped in; identify fishing grounds, engage with local fishers, include creel and shellfish species data.	Please refer to EIAR Chapter 5, Section 5.8 and EIAR Appendix 5.7.
6.1.1	MD-LOT	Ensure EIA Report complies with Marine Works (EIA) Regulations 2017 and aligns with this Scoping Opinion.	Noted and this table provides references to where each requirement has been addressed.
6.1.2	MD-LOT	Coordinate Habitats Regulations Assessment (HRA) with EIA.	Please refer to EIAR Chapter 11 (Marine Mammals) and EIAR Appendix 11.6.
6.1.3	MD-LOT	Complete and submit Gap Analysis Template (Appendix II) showing how Scoping Opinion issues are addressed.	This is this table.

4.8 SCOPING CONCLUSION & ENVIRONMENTAL ASSESSMENTS REQUIRED

Following receipt of the formal scoping opinions from THC and MD-LOT, the following environmental assessments were **‘scoped in’** to this EIA.

- EIAR Chapter 6 - Airborne Noise and Vibration
- EIAR Chapter 7 - Landscape, Seascape and Visual
- EIAR Chapter 8 - Historic Environment
- EIAR Chapter 9 - Hydrology and Hydrogeology
- EIAR Chapter 10 - Coastal Processes and Geomorphology
- EIAR Chapter 11 - Marine Mammals
- EIAR Chapter 12 - Terrestrial Ecology
- EIAR Chapter 13 - Ornithology
- EIAR Chapter 14 - Cumulative

In addition to the formally ‘scoped in’ assessments, EIAR Chapter 5 has also been included to provide information on other **key environmental considerations, that didn’t require a formal EIA chapter** but that did require consideration with regards to strategies, plans and mitigation to remove or reduce impacts upon the environment. EIAR Chapter 5 therefore includes information on the following

- Section 5.2 – Dust
- Section 5.3 – Lighting Strategy
- Section 5.4 – Waste Management
- Section 5.5 – Tree Constraints Plan
- Section 5.6 – Carbon
- Section 5.7 – Travel Plan
- Section 5.8 – Commercial Fisheries
- Section 5.9 – Marine/Coastal Habitats & Diadromous Fish
- Section 5.10 – Interim Biosecurity Plan
- Section 5.11 – Major Accidents & Hazards
- Section 5.12 – Climate Resilience & Adaptation
- Section 5.13 – Contaminated Land

The following assessments were formally **‘scoped out’** from the EIA

- Transport & Access – *revised travel plan provided in Section 5.7*
- Air Quality – *revised dust management plan provided in Section 5.2*
- Population & Human Health – *elements covered under cultural heritage and hydrology chapters and the dust management plan*
- Climate & Resilience – *GHG Assessment based on a Life Cycle Assessment (“LCA”) approach with reference to ISEP Guidance is provided in Section 5.6*
- Geology, Soils & Contaminated Land – *required information provided in Section 5.5*
- Material Assets & Waste - *waste management proposals provided in Section 5.4*
- Heat and radiation
- Major Hazards & Accidents – *covered in Section 5.11*
- Electric and magnetic fields
- Transboundary effects

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 5 Supporting Information and Assessments

Ardersier Port Extension

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CONTENTS

5 Supporting Information & Assessments 5

5.1 Introduction 5

5.2 Construction Dust 5

5.3 Lighting Strategy 6

5.4 Waste Management 6

5.5 Forestry 7

5.6 Carbon Management 8

5.7 Travel Plan 9

5.8 Commercial Fisheries 10

5.9 Marine and Coastal Ecology 10

5.10 Interim Biosecurity Plan 11

5.11 Major Accidents & Hazards 11

5.12 Climate Resilience & Adaption 12

5.13 Contaminated Land 13

5 SUPPORTING INFORMATION & ASSESSMENTS

5.1 INTRODUCTION

This chapter presents a collection of supporting information and assessments for topics that didn't require a full environmental impact assessment to be undertaken but where further information or details had been requested either through the EIA scoping process, specific consultation with regulatory bodies or through the public consultation process.

Each topic has its own heading, and a proportionate approach has been taken to ensure that sufficient information is provided for each. Where required the supporting information and or the assessments maybe supported by a technical figure and or appendix, clear references to these are provided within each section. The topics covered within this chapter include the following

- Construction Dust
- Lighting Strategy
- Waste Management
- Forestry
- Carbon
- Travel Plan
- Commercial Fisheries
- Marine and Coastal Ecology
- Interim Biosecurity Plan
- Major accidents and hazards
- Climate resilience and adaptation
- Contaminated Land

The approach varies from topic-to-topic dependant on the information that has been included. Where an assessment has been carried out, information on any specific methodology or data used has been provided. For some of the topics, they may also include relevant information about consultation, policies/regulations or planning requirements. For some topics (e.g. Dust, Waste Management, Travel Plan etc), the main focus has been a review and update to an existing management plan that has been operating on the extant consented port during construction. A summary of the update undertaken and the revised plan is provided for these topics.

5.2 CONSTRUCTION DUST

The proposed development proposes large-scale earthworks involving excavation, movement and stockpiling of sands and aggregates to enable the extension of the former fabrication yard. Works are scheduled to run from March 2026 to July 2028 and have the potential to generate fugitive dust and particulate matter (PM) if suitable mitigation measures are not employed on site.

In paragraph 3.28 of the EIA Scoping Report, it stated "*Dust: The Scoping Report proposes to complete construction dust risk assessment to determine the appropriate construction phase dust mitigation measures, and this will be included in the draft CEMP with an update to the existing dust management plan. The Environmental Health Officer confirms that they have no objections to the proposal*".

The Construction Dust Management Plan that has been in place throughout the construction of the existing site has been reviewed. The Construction Dust Management Plan (DMP) includes a dust risk

assessment and outlines the control measures and monitoring protocols for mitigating construction dust emissions. The plan aligns with IAQM guidance and Scottish legislation, focusing on high-risk activities such as earthworks, aggregate stockpiling, and internal haulage. Key controls include water suppression, crusting agents, real-time PM monitoring, and strict work stoppage criteria. The plan also provides detail on how often it will be reviewed (quarterly or after 3 breaches of the limits in a week) and who any breaches need to be reported to (HSEQ manager).

A copy of this Construction Dust Management Plan is provided in EIAR Appendix 5.1.

5.3 LIGHTING STRATEGY

During public consultation, local residents requested further information be included on the proposed lighting strategy for the proposed development. They had concerns regarding impacts from operational during the winter months, when sunset can be as early as 3.30pm in December.

The proposed lighting strategy for the proposed development aims to help achieve a safe, energy efficient and environmentally conscious lighting solution. By proposing modern LED technology paired with shielding fixtures, and smart controls to minimise light pollution and protect local wildlife while enhancing the functionality and safety of the Port.

To achieve these aims this report sets out a clear set of design guidelines and relevant documentation and standards to follow to provide a compliant lighting design with suitable mitigation against the effects of obtrusive light.

It should be noted that specific lighting designs will be the responsibility of future tenants but this strategy provides guidance about how to minimise light pollution and limit impacts upon the surrounding residents but also biodiversity. With regards to potential impacts during the winter months, it is unlikely that the main construction of wind turbines will be taking place with regards to the weather during these months, which will also help to limit the potential light pollution effects.

A copy of the Lighting Strategy is provided in EIAR Appendix 5.2.

5.4 WASTE MANAGEMENT

With regards to waste management, the scoping response from Highland Council stated

“In view of the proposal to use dredged sand to raise the platform we presume that no site clearance materials (with the exception of wood material, more below) will need to be removed from the site. If this is not the case then the application should be supported by a site clearance materials balance so that the fate and use of clearance material is clearly understood and assessed.

The submission should confirm the approach to be taken to tree felling and forest waste which should accord with our Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS. We note that the scoping report suggests that timber will be removed from the site as product and other forest waste will be chipped for use as biomass; we would support this approach. Details of general regulatory requirements and good practice advice, for example in relation to engineering works in the water environment and waste management, can be found on the regulations section of SEPA’s website.”

The proposed development has the potential to generate different types of waste including

- Forestry waste from the plantation woodland clearance

- Aggregate and other materials from the proposed demolition of the farmhouses and outbuildings
- Waste generated during the construction process.

Each potential waste stream has been considered individually and the proposals for their management is proposed below.

The trees would be felled using an excavator mounted tree shear and moved to a handling facility within the existing site area. Roots would then be grubbed up and also moved for processing. At the handling facility (located away from the southern boundary to reduce noise) the trees and stumps would be logged and chipped for export from site by either HGV or ship dependent on customer location.

The two existing buildings on site, Pine Trees and Juniper Cottage (and associated buildings) will be demolished during the site clearance. The material sourced from this demolition, will be crushed and also used in the construction of the working platform or as part of the wider construction. It is not proposed that any material from this demolition will be taken off site.

With regards to other waste that could be generated during the construction process, the waste management plan that has been in place for the extant consented port has been reviewed and updated for the proposed development. This Waste Management Plan (WMP) has been developed to ensure that waste generated is managed responsibly, sustainably, and in accordance with relevant legislation and best practices. The goal is to reduce environmental impact, promote resource efficiency, and maintain compliance with the Waste Framework Directive and national waste regulations. The plan considers three main waste types (inert waste, non-hazardous waste and hazardous waste) and works in conjunction with the CEMP and the construction phase plan.

A copy of the Waste Management Plan is available in EIAR Appendix 5.3.

5.5 FORESTRY

Within the THC scoping response the following was documented:

“Forestry will need to be ‘scoped in’ to the EIA and the applicant will need to provide a Forestry Chapter in the EIAR prepared by a professional forester. The Forestry Chapter would need to include scope of assessment, methodology, baseline conditions (woodland location, type, condition, etc of all woodland areas on and around the site), mitigation, monitoring and assessment of effects. The EIA should provide a baseline survey of the trees and plants present on the site to determine the presence of any rare or threatened species.”

When commencing drafting of the EIAR and considering its structure, having a forestry chapter was considered to be inappropriate for the following reasons:

- Tree loss is predominantly commercial Scots Pine plantation;
- There is no opportunity for significant compensatory planting on site; and
- Advice from THC during the pre-application process was that the loss of Scots Pine plantation should be compensated off site to an equivalent scale.

Given the above a forestry chapter would have been very one dimensional and the mitigation required by THC for the plantation loss had already broadly been established. Notwithstanding that decision on structure, assessment of impacts on trees and plants is subsumed into EIAR Chapter 12 Terrestrial Ecology. Also within the THC scoping response was the following statement:

“The EIA should include Tree Constraints Plans and Tree Protection Plans to BS 5837:2012 to show how retained trees/woodland would be safeguarded from construction activity as well as a tree/woodland removal drawing which shows the extent of woodland that would need to be removed to accommodate

new development. Where woodland is proposed to be removed, compliance with the Scottish Government's Control of Woodland Removal policy is required to be demonstrated. The applicant will therefore need to submit the following in support of any application:

- what significant and clearly defined additional public benefits would be associated with the proposals.*
- what area of tree cover would realistically need to be removed in order to accommodate all of the proposals.*
- how the area of commercial woodland proposed to be removed could be adequately compensated for with an area of equivalent size and quality of commercial woodland. This would most likely need to be off-site"*

To understand the nature of the woodland a tree survey of the extension areas was carried out in 2024 which generated a Tree Constraints Plan describing woodland type, location and condition. This is included in EIAR Appendix 5.4. Given the proposals are to remove all of the commercial woodland with the exception of a 20m southern buffer strip (Figures contained with EIAR Appendix 5.4), a Tree Protection Plan (TPP) has not been prepared at this time. However, TPP will be prepared specifically for the northern margin of the tree buffer prior to installation of security fencing and the perimeter security access track behind the tree buffer strips.

Over and above the retention of the southern tree buffer zones, the intention is to enhance the quality of these areas by, planting native broadleaf species, selective felling or deadwood creation to increase light, introduction of bird/bat boxes or bat barn amongst other initiatives (see EIAR Appendix 15.1 Proposed Enhancements). With regard to woodland removal, the response below is provided to demonstrate compliance with the Scottish Government's Control of Woodland Removal policy:

- what significant and clearly defined additional public benefits would be associated with the proposals.
- The primary public benefits associated with the extension relate to employment and the socio-economic impacts as described in EIAR Chapter 3 (Project Description).
- what area of tree cover would realistically need to be removed in order to accommodate all of the proposals.
- The extension is to provide the further industrial land needed by the Port. Offshore wind components and the facilities required to also manufacture them require a large amount of space. Therefore the space proposed for platform creation is the minimum required.
- how the area of commercial woodland proposed to be removed could be adequately compensated for with an area of equivalent size and quality of commercial woodland. This would most likely need to be off-site.

The total area of existing commercial woodland is 120 acres. These 120 acres includes the buffer strip which will be retained on site, however clearly the proposals are removing 120 acres of woodland available for felling. A compensatory site is being identified which will have 120 acres of commercial Scots Pine forestry, with an additional 10% (12 acres) of broadleaf woodland to enhance biodiversity.

Compensatory woodland planting is also discussed in section 3.7.2 (Compensatory Planting) of EIAR Chapter 3 (Project Description). Terrestrial ecology assessments are reported in EIAR Chapter 12 (Terrestrial Ecology) supported by appendices that identify any rare or threatened species.

5.6 CARBON MANAGEMENT

The EIA Scoping Response from the Marine Directorate stated:

“an environmental effect that is approaching a scientifically defined environmental limit, as a such any GHG emissions or reductions from a project might be considered significant.” The Scottish Ministers have considered this together with the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 and the requirement of the EIA Regulations to assess significant effects from the Proposed Works on climate. The Scottish Ministers therefore advise that the EIA Report must include a GHG Assessment which should be based on a Life Cycle Assessment (“LCA”) approach and note that the IEMA GHG Guidance provides further insight on this matter. The Scottish Ministers highlight however that this should include the pre-construction, construction, operation and decommissioning phases, including consideration of the supply chain as well as benefits beyond the life cycle of the Proposed Works.

The Estimated Greenhouse Gas (GHG) Emissions and Carbon Management Report presents a focused assessment of the project’s GHG emissions: it sets the scope by defining assessment boundaries and the lifecycle stages considered (per PAS 2080). Data sources, emission sources and any exclusions are explained. The calculation approach and standards used include the PAS 2080 and GHG Protocol. Results are reported as GHG totals by lifecycle stage with commentary on key findings and the largest emission contributors, and the appendix concludes with proposed carbon reduction and mitigation opportunities for both the design and construction phases.

When assessing the significance of greenhouse gas (GHG) emissions, it is essential to evaluate how a project aligns with the UK’s legally binding net zero commitments and science-based emission reduction trajectories. The level of potential effect—ranging from major adverse to beneficial—is determined by the extent to which a project contributes to, or diverges from, the 1.5°C-compatible transition pathway.

Projects that follow a ‘business-as-usual’ or ‘do-minimum’ approach are likely to result in significant adverse effects, while those that actively incorporate mitigation measures aligned with national and local decarbonisation policies can reduce these effects to a non-significant level. Conversely, projects that substantially exceed current policy and deliver genuine emissions removal or avoidance can achieve a beneficial effect, demonstrating leadership in climate action and supporting the UK’s transition to net zero by 2050. For the avoidance of doubt, the overriding position in the guidance is that all emissions contribute to climate change. The guidance does however provide examples of how to distinguish different levels of significance. Major or moderate adverse effects and beneficial effects are considered to be significant. Minor adverse and negligible effects are not considered to be significant.

With regards to the Proposed Development, it is considered that the project’s GHG impacts are partially mitigated, through design, integration with nature and green networks and that the development supports the economic growth and net zero ambitions of both the Scottish and UK Governments. Therefore, it will partially meet the applicable existing and emerging policy requirements but will generate some carbon emissions so would not fully contribute to decarbonisation in line with local and national policy goals for projects of this type. On balance, this would therefore result in a moderate adverse effect. During detailed design phase and for each of the future tenants, carbon will be a key consideration to try and reduce the baseline figures as far as possible.

A copy of the Estimated GHG Emissions and Carbon Management Report is available in EIAR Appendix 5.5 that presents all projected carbon figures.

5.7 TRAVEL PLAN

The EIA scoping response from the Highland Council stated that an updated Travel Plan is required that incorporates previously suggested measures and an Operational Traffic Management Plan.

The Travel Plan has been updated to reflect the proposed extension to the port. Although the overall site area will be larger than consented, the proposed numbers of workers during construction and operation associated with the proposed extension are broadly similar to that which is already consented.

Given the small number of employees currently on site in Phase 1A, no specific Travel Plan measures are currently in place. The Travel Plan therefore focuses on the provision of a comprehensive 'Framework' and recommended actions for later phases of development when the site is likely to be occupied by a number of different companies. It is recommended that each of these companies signs up to the overall site Travel Plan, which will contain 'collective' site-wide initiatives (such as a bus service), as well as measures which will need to be delivered by each specific company (e.g. changing facilities for cyclists). The Travel Plan will be reviewed on an annual basis and ahead of each major phase of development.

The revised Travel Plan Framework can be found in EIAR Appendix 5.6.

5.8 COMMERCIAL FISHERIES

This technical appendix assesses the potential impacts of the proposed development on commercial fisheries, as part of the wider EIAR. The assessment has been undertaken in response to consultation received during the scoping process and is informed by relevant legislation, policy and ecological guidance.

The assessment considers how construction and operation and maintenance (O&M) activities may affect local fishing operations, including static and mobile gear use, vessel transit routes and seasonal fishing patterns. The study area predominantly supports inshore fisheries comprised of vessels <15 m in length deploying creels, pots and demersal trawls to target whelk, brown crab, lobster and Nephrops with finfish representing a low proportion of average annual catch. Baseline conditions were established using a combination of Marine Management Organisation (MMO) landings statistics, Vessel Monitoring System (VMS) and Automatic Identification System (AIS) data.

Key findings indicate that activities associated with the construction phase of the proposed development are expected to cause minor, short-term disruption to nearby commercial fisheries receptors as fishing is already prohibited within the port limits and any spatial restrictions resulting in reduced access to fishing grounds and displacement are expected to be limited and temporary in nature. The overall impact is considered minor and not significant in EIA terms. O&M phase activities have been scoped out of the assessment.

Cumulative effects from nearby dredging and marine developments may temporarily restrict access to fishing grounds, particularly for small inshore vessels, resulting in displacement. However, due to the localised and short-term nature of these activities, combined with the spatial separation between projects, the overall impact is considered minor and not significant in EIA terms.

With the implementation of embedded mitigation measures, including advance notification to vessel operators through Notice to Mariners (NtMs), and the existing prohibition of fishing activity within the port limits, the proposed development is unlikely to result in significant adverse effects on the commercial fisheries fleet matters identified during baseline characterisation. Ongoing stakeholder engagement will be key to ensuring adaptive management and minimising disruption throughout the Project lifecycle.

A copy of the Commercial Fisheries Report is available in EIAR Appendix 5.7.

5.9 MARINE AND COASTAL ECOLOGY

This technical appendix assesses the potential impacts of the proposed development on Marine and Coastal Ecology (including marine and coastal habitats, and diadromous fish), as part of the wider EIAR. The assessment has been undertaken in response to consultation received during the scoping process and is informed by relevant legislation, policy and ecological guidance.

The assessment considers both the construction and operation and maintenance (O&M) phases of the proposed development. Study areas were defined based on tidal ellipses (to encapsulate the greatest

potential range of influence from sediment plumes) and the greatest potential range of effect of UWN on sensitive diadromous fish. The assessment methodology follows guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Marine Life Information Network (MarLIN), applying sensitivity and magnitude criteria to determine the significance of effects.

For marine and coastal habitats, the assessment concludes that all potential impacts during construction (including loss of habitat from capital dredging, temporary habitat loss/disturbance, temporary increases in suspended sediment concentration (SSC) and sediment deposition, seabed disturbance leading to release of sediment contaminants and increased risk of introduction and/or spread of marine Invasive Non-Native Species (INNS)), are not significant in Environmental Impact Assessment (EIA) terms. Similarly, potential impacts during the O&M phase (including permanent and/or long-term habitat loss/alteration, changes in physical processes and increased risk of introduction and/or spread of marine INNS), are also predicted to be not significant in EIA terms.

For diadromous fish, the assessment finds that impacts from temporary increases in SSC and sediment deposition, seabed disturbance leading to release of sediment contaminants and disturbance from UWN are not significant in EIA terms. O&M phase impacts on diadromous fish have been scoped out of the assessment.

The potential for cumulative effects from other developments within the region were also assessed including temporary increases in SSC and sediment deposition and UWN, which were found to be not significant in EIA terms, due to the lack of spatial and temporal interactions between the developments. With the implementation of embedded mitigation measures, such as the development of a suitable dredge strategy/method to prevent the spread and disposal of elevated concentrations of contaminants, implementation of a marine INNS biosecurity management plan and the use of soft start piling procedures as secured in the Marine Mammal Mitigation Plan (MMMP); the proposed development is unlikely to result in significant adverse effects on marine and coastal habitats, and diadromous fish.

A copy of the Marine and Coastal Ecology Report is available in EIAR Appendix 5.8

5.10 INTERIM BIOSECURITY PLAN

The marine Invasive Non-Native Species (INNS) Biosecurity Management Plan provides guidance for reducing the risk of introduction and spread of marine INNS. The plan covers operational activities and the proposed development project. The development of this plan constitutes an embedded mitigation measure within the broader EIAR.

The plan includes: a summary of marine INNS recorded in the Moray Firth; an overview of activities undertaken / to be undertaken at Ardersier Port; and an assessment of the risk of marine INNS introduction and spread via these activities. It provides best practice guidance in the form of practical and feasible measures for port users and development contractors. For completeness, it also includes recommendations for awareness raising, monitoring and reporting, and contingency planning.

A copy of the Interim Biosecurity Plan is available in EIAR Appendix 5.9.

5.11 MAJOR ACCIDENTS & HAZARDS

The proposed development has been designed with due consideration of potential risks associated with major accidents and natural disasters, in accordance with relevant UK legislation and guidance, including the Environmental Impact Assessment Regulations and the Control of Major Accident Hazards (COMAH) Regulations where applicable. The project will incorporate robust design standards, operational procedures, and emergency planning measures to minimise the likelihood and potential consequences of such events. Key risk factors considered include marine incidents, hazardous material spills, fire,

explosion, flooding, and extreme weather events. The potential for storm related flooding effects has been fully assessed and can be found in EIAR Chapter 9 (Hydrology and Hydrogeology).

During both construction and operational phases, the project will implement comprehensive risk management systems to ensure that all foreseeable hazards are identified, assessed, and appropriately mitigated. Infrastructure will be designed to withstand adverse climatic and coastal conditions, including storm surges and sea-level fluctuations, and emergency response protocols will be established in coordination with relevant statutory bodies, the local authority, and the port's emergency services.

In the unlikely event of a major accident or disaster, site-specific contingency and emergency response plans (the Port Facility Security Plan approved by the Department of Transport, and the Port Emergency Response Plan) will be in place to ensure a swift and coordinated response, minimising harm to people, property, and the environment. Regular training, drills, and reviews will be undertaken to ensure preparedness and continuous improvement of safety systems. These measures will collectively ensure that the port development is resilient, safe, and aligned with recognised best practice in risk prevention and disaster management.

5.12 CLIMATE RESILIENCE & ADAPTION

The resilience of the proposed development to climate change relates to the effects that climate change may have on the proposed development such as increased risk and severity of flooding, rainfall events and other extreme weather conditions.

The climate of the study area is projected to change significantly over the lifetime of the proposed development. Present day extreme weather events are increasing in frequency and there is a risk that the proposed development may be affected during construction and operation. A flood risk assessment has been produced (EIAR Appendix 9.3) and a drainage impact assessment (EIAR Appendix 9.4) which assess the impact of increased sea levels and precipitation on the site.

During construction, impacts can occur from increased precipitation, temperatures and wind. This can increase the risk to earthworks stability and ground stability such as through waterlogging. During construction, risks will be managed through daily weather checking, dynamic risk assessments and construction HSEQ procedures (such as signing up for flood warnings, coastal surge alerts/extreme weather warnings). Other measures include locating the construction compound away from flood risk areas but also have emergency pumps on site, sandbags, carefully programming works at risk of flooding in the summer/autumn months. These various measures have worked well for the existing site construction phase.

During operation increased precipitation and temperatures may affect directly impact structures, drainage and earthworks. Maintenance and mitigation planting may also be impacted by changes. During extreme weather maintenance activities may be affected. Prolonged and extreme heat can pose a risk to the workforce and damage to machinery during both construction and operation. Regular maintenance checks on structures and the environment that surrounds the site will be undertaken as part of the port operational processes to identify any specific risks and mitigate them.

Resilience to climate change has been built into the design of the extension areas with the design of the Sustainable Drainage and the designed height of the platform (to the height of the currently consented land platform). Further information on the assessment of the potential impacts from flooding and changes to the water environment are provided in Chapter 9 (Hydrology and Hydrogeology) and EIAR Appendix 9.3.

As the Statutory Harbour Authority (SHA) Ardersier Port Limited also has extensive HSEQ procedures which are regularly reviewed and updated and will incorporate operational adaptations for climate resilience

over the longer term. In the context of the vulnerability of the proposed development projected climate change is not anticipated to have a significant effect.

5.13 CONTAMINATED LAND

The EIA scoping response from the Highland Council stated

Contaminated land records indicate that part of the expansion area has an historic/current use as farm/agricultural buildings (approx. 3.5ha near Juniper Cottage, Lower Carse and surrounding area). Such land uses can include the storage and use of chemicals including sheep dip and hydrocarbon fuels, storage of (animal) waste, vehicle maintenance and buildings or structures containing asbestos, which can result in land contamination.

Further information is required to demonstrate this area of the site is suitable for use. As a minimum a detailed site history and walkover survey, intrusive Phase 2 Investigation works may be deemed necessary. Early consultation with the Council Contaminated Land Team on the findings of the history/walkover survey and any proposed investigation strategy is recommended prior to undertaking any intrusive works onsite.

It is noted that contaminated land is scoped out of the EIA which is accepted as the above survey requirement is localised and easily addressed. However, early action is recommended.

To meet this requirement an initial geo-environmental desk study of the extension areas was carried out and submitted to the Highland Council. The content of the desk study was agreed in writing by the Contaminated Land Officer.

On the basis of the desk study a geo-environmental ground investigation has been designed and has been undertaken to assess the potential for land contamination at the areas described above.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 6 Airborne Noise and Groundborne Vibration

Ardersier Port Extension

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CONTENTS

6 Airborne noise and groundborne vibration	4
6.1 Introduction	4
6.2 Consultation.....	5
6.3 Methodology	5
6.4 Baseline Conditions	6
6.5 Potential Impacts	9
6.6 Mitigation and Enhancement	14
6.7 Assessment of Significant Effects	16
6.8 Statement of Significance.....	17
6.9 Cumulative Effects.....	17

FIGURES

Figure 6.1: Location of NSR and Monitoring Location in context of the Ardersier Port boundary (including the extension area)	7
Figure 6.2: Operational Noise Levels	12

TABLES

Table 6.1: Receptor Sensitivity Criteria (Traffic Noise)	6
Table 6.2: Summary of the Measured Noise Levels	8
Table 6.3: Noise Levels utilised within the Assessment presented below (assessment timebase indicated in brackets)	9
Table 6.4: Summary of impact magnitude per indicative activity – without mitigation	9
Table 6.5: Noise Sources Included in the Assessment	10
Table 6.6: Derivation of Receptor Sensitivity	12
Table 6.7: Assessment of Noise Impact Magnitude	13
Table 6.8: Summary of assessment of significance of effect during construction	16
Table 6.9: Summary of assessment of significance of effect during operation	17

6 AIRBORNE NOISE AND GROUNDBORNE VIBRATION

6.1 INTRODUCTION

This chapter presents information required by the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 to be provided in the Environmental Impact Assessment Report (EIAR) to enable the identification and assessment of likely significant effects on airborne noise and groundborne vibration

The approach to this assessment follows the methodology set out in the EIA Scoping Report (SCOP-0062) and is in accordance with the Scoping Opinion (25/00226/SCOP) produced by The Highland Council. EIAR Chapter 4 (Consultation) contains further information on how each of the matters raised in the Scoping Opinion have been addressed.

The overarching legislation, policy and guidance relating to airborne noise and groundborne vibration (hereafter referred to as 'noise') in Scotland and relevant to this assessment of the proposed development are presented in EIAR Appendix 6.1.

The assessment has been undertaken in accordance with Planning Advice Note (PAN) 1/2011: Planning and Noise which includes references to:

- British Standard (BS) 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound (BS 4142)¹
- British Standard (BS) 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1)²
- British Standard (BS) 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (BS 5228-2)³

In addition to the above, the following guidance will be referenced for the assessment of changes in noise level due to road traffic noise:

- Design Manual for Roads and Bridges (DMRB) LA 111 Noise and vibration, Revision 2, 2020⁴
- Calculation of Road Traffic Noise (CRTN), 1988⁵

The methodology used in the assessment is presented in EIAR Appendix 6.2, which includes the study area, data sources used and the assumptions and limitations of the assessment. EIAR Chapter 3 (Project Description) contains a detailed description of the proposed development. This chapter is supported by the following EIAR Appendices:

- EIAR Appendix 6.1: Legislation, policy and guidance
- EIAR Appendix 6.2: Assessment Methodology
- EIAR Appendix 6.3: Construction Noise and Vibration Assessment
- EIAR Appendix 6.4: Road Traffic Noise Assessment

¹ British Standards Institution, 2019. BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound. BSI.

² British Standards Institution, 2014. BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise. BSI.

³ British Standards Institution, 2014. BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration. BSI.

⁴ Highways England, 2020. Design Manual for Roads and Bridges LA 111 Noise and Vibration Revision 2. Highways England

⁵ Department of Transport, 1988. Calculation of Road Traffic Noise. HMSO

- EIAR Appendix 6.5: Noise Glossary of Terms

6.2 CONSULTATION

Responses in relation to the statutory consultation undertaken are presented in the EIAR Chapter 4 (Consultation). Following production of the EIA Scoping Report the following consultation has been undertaken.

Environmental Health Officers at The Highland Council (THC) were contacted to propose an adjustment to the noise survey methodology set out in the EIA Scoping Report. At the time of writing no response had been received.

6.3 METHODOLOGY

This section provides a summary of the assessment methodology. Further detail is provided in EIAR Appendix 6.2.

The assessment of potential significant noise and/or vibration impacts was undertaken based on the following steps:

- Identification of noise sensitive receptors in the vicinity of the proposed development and identify their level of sensitivity.
- Using noise measurements, establish the baseline noise conditions at the selected noise sensitive receptors.
- Assessment of potential noise impacts due to construction works or operational activities (including changes in traffic) associated with the development.
- Determination of design noise limits for external fixed plant associated with the development
- Recommendations for noise mitigation measures where appropriate
- Assessment of residual effects

Legislation and Guidance

In addition to the documents cited in Section 6.1, additional documents have been considered during the production of this technical chapter, a more detailed summary of all documents is presented in EIAR Appendix 6.1.

Assessment Limitations and Assumptions

The assessments presented within this technical chapter follow the methodologies of previous assessments undertaken to support the development of Ardersier Port ^{6 7}, this includes utilising the same source data. This approach has been undertaken to ensure consistency in approach and will enable easy comparison of the three assessments.

The assessment presented within the chapter has been undertaken based on indicative information regarding the proposed construction and operation of the extension of Ardersier Port and so considers a conservative 'worst-case' noise levels in regard to these phases.

It is anticipated that the final design and build of any permitted developments will incorporate the findings of this assessment to refine and reduce the likelihood of any potential impacts identified from occurring. Calculations have been undertaken based on areas of the site where the works are anticipated to occur and in the absence of mitigation – this approach to assessment is considered to be a conservative worst-

⁶ EIA Volume 2 Chapter 9 Air Borne Noise and Ground Borne Vibration (October 2013) Planning Ref 13/01689/PIP

⁷ EIA Volume 2 Chapter 9 Airborne Noise and Groundborne Vibration (September 2018) Document Ref KMcG/2017/11/0234 Planning Ref 18/04552/PIP

case. In reality, each of the identified activities will not occur simultaneously over the individual works areas and so noise levels would be lower due to differences in separation distance, local screening and plant working 'on-times'. Assessments will be undertaken by the developers of the various activities to ensure the outcomes indicated within this report are consistent with the final developed site.

6.4 BASELINE CONDITIONS

This section describes the noise baseline for the proposed development within the (600m) identified study area.

Existing Noise Sensitive Receptors

The Ardersier Port development site is located to the north of Ardersier in a largely rural area, the extension to the currently permitted site is approximately located centrally to grid reference NH808572.

In the previous noise assessments undertaken to support the Ardersier Port development^{8 9}, the three closest noise receptors were identified and used in the assessments. Since those assessments, two of those receptors (B & C) are no longer occupied and will be demolished prior to proposed development commencement. Therefore the next closest receptor (D) has now been included in the assessments presented in this technical chapter. These location are listed in Table 6.1 and shown indicatively within Figure 6.1 below.

Table 6.1: Receptor Sensitivity Criteria (Traffic Noise)

NSR Ref	NSR	Location	Description
A	Carse of Ardersier (Wellness Centre)	280172, 857207	Residential property approximately 190m from the site boundary
B	Carse of Ardersier	280821, 857104	Former residential property – scoped out of assessment
C	Carse of Ardersier	280909, 857019	Former residential property – scoped out of assessment
D	Carse of Ardersier	280563, 855879	Residential Property approximately 860m from the site boundary

⁸ EIA Volume 2 Chapter 9 Air Borne Noise and Ground Borne Vibration (October 2013) Planning Ref 13/01689/PIP

⁹ EIA Volume 2 Chapter 9 Airborne Noise and Groundborne Vibration (September 2018) Document Ref KMcG/2017/11/0234 Planning Ref 18/04552/PIP

Figure 6.1: Location of NSR and Monitoring Location in context of the Ardersier Port boundary (including the extension area)



Table 2.1 of TAN indicates three levels of receptor sensitivity, 'High', 'Medium' and 'Low'. The ranking is primarily based on the relationship between the amenity associated with the individual noise sensitive receptor (NSR) and its susceptibility to noise based on factors including the measured noise level. The process by which sensitivities have been defined is set out in Table 5 and Table 7 of EIAR Appendix 6.2. The sensitivities of both receptors are defined in Table 6.2 below.

Baseline Noise Survey

Baseline noise data used to support the operational noise assessment was provided by the Applicant from a Casella Guardian noise meter that is installed within the site (indicated by the blue dot in Figure 6.1). The meter has been located in situ since late 2023.

As part of the response to the EIA Scoping report a baseline noise survey was required to be undertaken without the presence of construction works. As the works will not be complete until late 2025 it was not possible to wait, nor was a proxy location considered to be a reasonable alternative due to an anticipated existing low background noise levels and therefore potential propagation of construction noise over long distances. The use of the original survey data was also considered; however, as this was undertaken in 2013¹⁰ it was not considered to be appropriate.

¹⁰ EIA Volume 3 Appendix 9.2 Baseline Noise Monitoring – Planning Ref 13/01689/PIP

Survey data was provided for the period between 1st February 2024 and 28th February 2024, and any conditions considered to be unrepresentative due to high windspeed (>5m/s) or periods of precipitation¹¹ were removed. This date range was chosen as only minimal activities (vehicle movements) were being undertaken onsite as it was prior to any major onsite construction works for the consented proposed development being undertaken.

- $L_{Aeq,T}$ was calculated as the logarithmic average of all the results within the respective time period
- $L_{AMax,F,T}$ was determined through statistical analysis, which in line with guidance reports the value closest to 90% as the highest representative result.
- $L_{A90,T}$ was determined utilising statistical analysis that compared the mode, median and mean of each set of results
- $L_{A10,T}$ was determined as the average result of the values within the respective time period

Table 6.2 below sets out a summary of the overall data, Table 6.3 sets out the noise levels considered representative and used within the assessment.

Table 6.2: Summary of the Measured Noise Levels

Time Period				$L_{Aeq,T}$ (dB)	$L_{AMax,F}$ (dB)	$L_{A10,T}$ (dB)	$L_{A90,T}$ (dB)
Week 1	1 st – 7 th February 2024	Weekday	Day	54.2 (54)	79	53.7 (54)	47
			Night	49.5 (50)	76	48.8 (49)	44
		Weekend	Day	50 (50)	74	50.6 (51)	46
			Night	50.9 (51)	76	52.1 (52)	47
Week 2	8 th – 14 th February 2024	Weekday	Day	51 (51)	78	49.9 (50)	45
			Night	48.2 (48)	76	47.9 (48)	44
		Weekend	Day	49 (49)	74	49.4 (49)	45.5
			Night	48.3 (48)	74	48.7 (49)	45
Week 3	15 th – 21 st February 2024	Weekday	Day	49.9 (50)	77	48.8(49)	45
			Night	48.1 (48)	73	48.0 (48)	44
		Weekend	Day	44.4 (44)	68	45.4 (45)	42
			Night	44.9 (45)	66	45.9 (46)	43
Week 4	22 nd – 28 th February 2024	Weekday	Day	50 (50)	77	49.5 (50)	45
			Night	49.8 (50)	74	49.6 (50)	45
		Weekend	Day	46.1 (46)	69	46.9 (47)	44
			Night	46.5 (47)	66	46.7 (47)	43

¹¹ Archived weather data from station IINVER493 was utilised via www.wunderground.com, this station is located in Ardersier approximately 3.7km south-west of the measurement location.

Table 6.3: Noise Levels utilised within the Assessment presented below (assessment timebase indicated in brackets)

Time Period	L _{Aeq,T} (dB)	L _{AMax,F} (dB)	L _{A90,T} (dB)	L _{A10,T} (dB)
Weekday Daytime (16h)	51	78	45	50
Weekday Night-time (8h)	49	75	44	49
Weekend Daytime (16h)	48	71	45	48
Weekend Night-time (8h)	47.5	70	44	48

6.5 POTENTIAL IMPACTS

6.5.1 Construction

Construction stage impacts of the proposed development would include the following:

Noise

Noise levels generated as a result of construction activities have been predicted using the methodology set out within BS 5228-1. The calculations are provided in full in EIAR Appendix 6.3 and summarised in Table 6.4 below. It should be noted that the predicted impacts represent a worst-case scenario due to the use of the shortest distances between indicative works area and the identified receptors.

The 162 scenarios investigated, indicated below, represent the number of activities indicated to occur during the construction phase of the proposed development.

Table 6.4: Summary of impact magnitude per indicative activity – without mitigation

Predicted Magnitude of Impact	NSR-A		NSR-D	
	Day	Night	Day	Night
Negligible	158	N/A	162	N/A
Minor Adverse	4		0	
Moderate Adverse	0		0	
Major Adverse	0		0	

Based on the above assessment, predicted daytime noise impacts from the construction of the site will be of a magnitude no greater than **Minor Adverse** at either receptor. As a result, no specific mitigation measures above best practicable means (BPM) are proposed for the construction phase of the works.

Vibration

Based on the guidance within BS 5225-2 and as the distance between the receptor and the closest works area that could generate vibration is greater than 100m, it has been considered that, in accordance with Table 3 of EIAR Appendix 6.2, **no vibration impacts due to construction works will occur at the nearest receptors.**

Construction Traffic

In addition to construction plant operating on the site, there would be some movement of materials to and from the Site by road. Condition 9 of Planning Permission In Principle (13/01689/PIP) requires the submission of a Traffic Management Plan in relation to both construction and operation. It is anticipated that a similar conditional requirement would be attached to this application for an extension of the consented site.

In respect to potential noise impacts, as no changes to the alignment of the previously considered access roads are planned, due to the large separation distance between receptors and the access roads it is considered any impacts or resultant effects from traffic related to the construction phase of the development would be **Negligible**.

6.5.2 Operation

As this application is for the extension of the site with only minor changes to proposed activities, the assessments have been considered in context of the previous Planning In Principle applications made in 2013 and renewed in 2018.

Key operational stage impacts of the proposed development on airborne noise and groundborne vibration would include:

Noise

Noise levels have been calculated based upon an indicative layout and assessed against the guidance presented in BS 4142 and TAN. For consistency of approach, the source noise levels presented in the Ardersier Port September 2018 application have been used to support this assessment and are shown in Table 6.5.

Table 6.5: Noise Sources Included in the Assessment

Source	Source Type/ Modelled As	Number of units /movements in assessment period (1 hour)	Description	Sound Power Level (dB(A)) per unit length or area
Concrete batching	Point	1	Noise level from representative measurement as detailed in Noise chapter of September 2018 EIAR	102
Stacking crane (heavy lifting gantry)	Point	1		99
Heavy barge crane (slipway)	Point	1		93
Cable spooling	Point	3		103
Pumping station	Point	1		97
Concrete pump	Point	1	120mm diameter / 50 bar (BS 5228-1)	88.4
Barge crane	Point	2	Noise level from representative measurement as detailed in Noise chapter of September 2018 EIAR	70.9

Source	Source Type/ Modelled As	Number of units /movements in assessment period (1 hour)	Description	Sound Power Level (dB(A)) per unit length or area
Readymix conveyor motor	Point	1	Noise level from representative measurement as detailed in Noise chapter of September 2018 EIAR	84
Readymix lorries	Line	10 movements	Along central access road to indicative concrete batching area	84
Heavy forklifts	Line	10 movements each	Various locations within site	84
Forklift	Line	10 movements	Movement around existing quay area	75
Loading Area	Area	1	Noise level from representative measurement as detailed in Noise chapter of September 2018 EIAR	66.8
Workshop Roof	Area	1 (per building)	From internal noise level of 85dB(A) assuming trapezoidal steel sheet roof	61
Workshop	Vertical area	4 (per building)	Walls of workshop – 85dB internal noise level, trapezoidal steel sheet walls	61
Car park	Area	1	Noise level from representative measurement as detailed in Noise chapter of September 2018 EIAR	105.1

The noise sources indicated in Table 6.5 above have been used within the Cadna/A noise prediction model software. This software incorporates guidance from a range of documents (including ISO 9613-2¹² and BS 5228-1) to calculate the propagation of noise from source to receiver. The model also considers local topography, ground absorption and screening in its calculations where the information is available.

Noise levels were calculated at NSR A and NSR D for a worst-case scenario over a one-hour period, which considers every noise source within the site is operational simultaneously during this period. In reality, although some simultaneous activity might occur, it is unlikely to occur to this extent.

The noise levels have been calculated based on an indicative layout (Figure 3.1 in EIAR Chapter 3 Project Description) which considers potential activities in the main site as well as within the extension area, the assessment has been carried out in accordance with BS 4142 and TAN. The results of this assessment are presented in Table 6.6 and noise contours showing the propagation of noise are presented in Figure 6.2. As stated in the September 2018 report given the potential intermittent and tonal nature of the noise sources a +6 dB acoustic character correction has been applied to all predicted noise levels in line with the guidance provided in BS 4142. The noise model also includes embedded mitigation in the form of an acoustic bund along the site boundary closest to NSR-A, this is shown as a pale blue line within Figure 6.2.

It is understood that the site could operate 24 hours a day, seven days a week. It should be noted that as there is limited information regarding specific operations occurring onsite the same operations have been considered for both the daytime and night-time assessments.

Similar to the presentation of a 'worst-case' assessment due to all activities operating simultaneously, it is considered that utilising the same for the daytime and night-time periods is also worst-case as it is expected that the site would run reduced operations overnight. This would include activities such as the movement of heavy outdoor machinery which are unlikely to be undertaken at night.

¹² British Standard ISO 9613-2:2014, Acoustics – Attenuation of sound during propagation outdoors, Part 2: Engineering method for the prediction of sound pressure levels

Figure 6.2: Operational Noise Levels

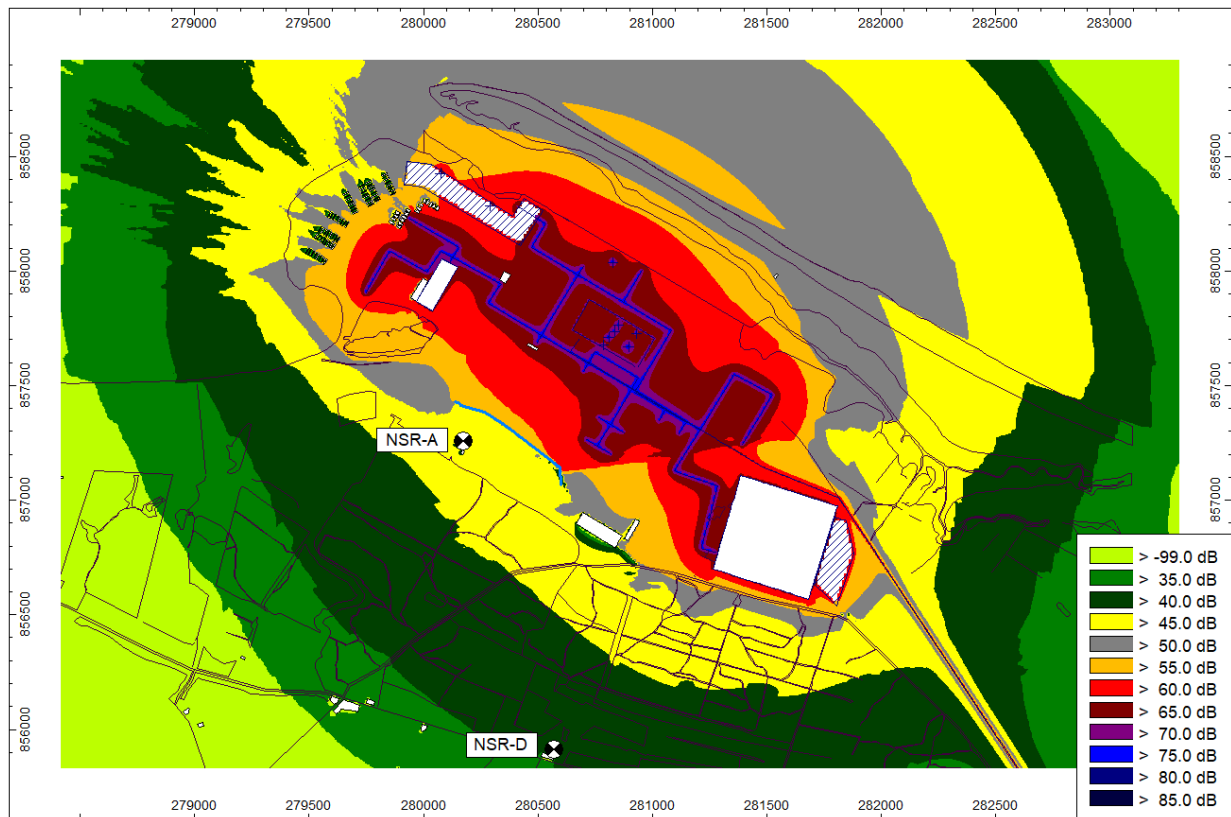


Table 6.6: Derivation of Receptor Sensitivity

	NSR-A		NSR-D	
	Day	Night	Day	Night
Source (Specific) Noise Level (Calculated from Cadna-A model) ($L_{Aeq,T}$)	47.6	47.6	40.2	40.2
Acoustic Character Correction (dB)	6	6	6	6
Rating Noise Level ($L_{Ar,T}$)	53.6	53.6	46.2	46.2
Background Noise Level ($L_{A90,T}$)	45	44	45	44
Difference (rating - background dB)	8.6	9.6	1.2	2.2
Sensitivity of Receptor (based on EIAR Appendix 6.2, Table 1.4)	Medium	Medium	Low	Low

The results in Table 6.6 indicates that NSR-A should be considered as having medium sensitivity and NSR-D low sensitivity. This allows for a quantitative assessment to be carried out based on the estimated change in noise level, $L_{Aeq,T}$ before and after the proposed development is operational.

As in previous assessments, the noise change assessment will be considered externally to receptors. The ambient noise level $L_{Aeq,T}$, (Table 6.3) calculated from the noise measurements will be utilised as the existing noise level as it is considered a reasonable representation of the noise climate that could be affected by the proposed development.

Table 6.7: Assessment of Noise Impact Magnitude

	NSR-A		NSR-D	
	Day	Night	Day	Night
Source Noise Level (calculated from Cadna-A model)	47.6	47.6	40.2	40.2
Prevailing Noise Level ($L_{Aeq,T}$)	48	49	48	49
Predicted + Ambient Noise Level (L_{Total})	50.8	51.4	48.7	49.5
Predicted Change in Noise Level (dB)	2.8	2.4	0.7	0.5
Magnitude of Impact (from EIAR Appendix 6.2, Table 1.5)	Minor Adverse	Minor Adverse	Negligible	Negligible

The assessment shown in Table 6.7 predicts that impact magnitudes of **Negligible** (NSR-A) and **Minor Adverse** (NSR-D) could be experienced at the two closest receptors to the site. Although this is an increase in magnitude from the previous assessments, given the indicative changes to the potential site layout and increase in overall site area it is considered a proportional change.

At this stage in the design process where layouts are still indicative and early enough that suitably quiet and non-tonal plant can be procured it is considered that the predicted magnitudes of impact can be reduced further through design interventions or careful plant choices. Additionally, when considered in line with previous noise assessments undertaken to support the initial Ardersier Port application, the outcome of this operational noise assessment is considered to be in proportion to previous assessments.

As previously stated, it is understood that the operational use of the port site will be determined by a number of individual operators and each of them will need to submit their own noise assessment to ensure their proposed operations are at least inline if not better than the findings of this noise assessment.

Vibration

As with potential construction impacts, due to the distance between the operational areas and the receptors no vibration impacts are anticipated and therefore no assessment has been undertaken.

Operational Road Traffic Noise

As the extension of the site is proposed only to provide more space for the increasing size of offshore windfarm components and not an increase in any previously considered activities¹³, any changes to the road traffic noise assessment presented in the September 2018 report are considered to be negligible.

The majority of operational components will be brought to site via ship which will ensure minimal heavy traffic associated with the site.

Details of the operational road traffic assessment undertaken to support the September 2018 application can be viewed in EIAR Appendix 6.4.

¹³ As part of the original Ardersier Port application.

6.6 MITIGATION AND ENHANCEMENT

6.6.1 Embedded mitigation

The development of the design has been an iterative process. The environment team has worked in close collaboration with the infrastructure design team to avoid or reduce environmental impacts through the design. This is referred to as embedded mitigation (or design interventions). The principles of the design and mitigation hierarchy outlined in EIAR Chapter 2 (Methodology) have been followed. The first principle being to avoid potential adverse effects, if at all practicable, before seeking to minimise or mitigate for any unavoidable impacts. Embedded mitigation for the proposed development is reported in EIAR Chapter 3 (Project Description) which also includes a description of the design alternatives that have been considered, including the environmental factors which have influenced the decision-making. Mitigation measures will seek to reduce impacts during both construction and operation phases. Any effects which cannot be mitigated or reduced are referred to as residual effects.

As detailed in the operational noise assessment, to attenuate noise from onsite operational activities screening in the form of a bund will be located between the site and the nearest noise sensitive receptor (NSR-A). Further detail is provided in EIAR Chapter 3 (Project Description).

6.6.2 Mitigation

Mitigation is included in the Outline Construction Environmental Management Document (CEMD). The Outline CEMD will be developed into the Construction Environmental Management Plan (CEMP) for implementation during construction. Further information on the Outline CEMD is provided within EIAR Chapter 3 (Project Description). EIAR Chapter 15 (Schedule of Mitigation and Enhancements) provides a summary of the mitigations identified within this EIAR.

6.6.3 Construction Mitigation Measures

This section summarises the mitigation required during the construction of the proposed development. Unless stated all mitigation is considered to be embedded as it follows best practice measures and/or is required to achieve compliance with legislation. Mitigation measures of relevance during construction are included within the Outline CEMD.

Introduction of measures to control noise and vibration during the construction phases of the proposed development is recommended, even where negligible impacts are predicted. Disturbance from construction activities can normally be defined as a temporary nuisance to people in the area that can occur at any time between the start of construction works and the opening of the development.

Construction will be carried out using industry best practice and in accordance with implementation of the requirements identified in the Outline CEMD and CEMP. Construction information is presented in EIAR Chapter 3 (Project Description).

In accordance with standard working practices the principles of 'best practicable means' (BPM) as defined in the Control of Pollution Act 1974, would be used to reduce emissions throughout the construction period. This would incorporate the use of measures to control noise and vibration that do not unreasonably inhibit the work and the use of working methods that result in minimum impacts compatible with best working practices.

These control measures would include means of noise control such as the siting of fixed plant away from NSRs, the use of properly silenced plant, and screening / enclosures where appropriate, should ensure that any imposed daytime construction noise limit is not exceeded at NSRs.

The assessment of construction noise presents a reasonable worst-case scenario. When inherent noise attenuating measures such as screening, distance and limited working hours are considered the noise levels could be up to 10dB lower. Based on this it is anticipated that actual noise levels from the construction works will be lower than indicated in the above assessment.

Appropriate conditions to minimise noise and vibration would be imposed on the Contractor as part of their contract requirements. Noise control measures incorporated into the CEMP include (but are not limited to) the following:

- Selecting inherently quiet plant;
- Using, where necessary and practicable, enclosures and screens around any noisy fixed plant;
- Limiting site work hours, where possible; and
- Adhering to relevant British Standards.

6.6.4 Operation Mitigation Measures

Section 6.5.2 sets out the details of the operational noise assessment and the outline details of the proposed screening bund to be positioned along the boundary between the closest noise sensitive receptor (NSR-A) and the site. Based on the outcome of the noise assessment no additional noise mitigation was identified as necessary.

Review of the previous applications for the 'in-principal' permitted Ardersier Port site reveals an existing condition (19) which states

'all plant, machinery and equipment associated with ventilation, air-conditioning, heating and refrigeration or similar mechanical services within the application site, including fans, ducting and external openings shall be installed, maintained and operated such that any operating noise complies with Noise Rating Curve 20 and details of a noise assessment for each installation shall be submitted alongside the relevant application for the AMSIC...'

As this is an outline application the specific information needed to satisfy the condition is not yet available, nor does it currently apply to the extension site. It is however, considered likely that a similar condition will be applied to the extension area.

To ensure that this would be met, any noise assessment reports produced by individual operators to operate within the Ardersier Port site will be required to comply with this condition as appropriate.

The measures set out below are examples of what could be incorporated as operational onsite noise control measures.

Building Services and Fixed Plant

Mitigation for building services and fixed plant include the following measures, which are not exhaustive:

- Procurement of 'quiet' non-tonal plant.
- Locate plant and air vents away from NSRs.
- Acoustic enclosures.
- In-duct attenuators.
- Acoustic louvres.
- Using, where necessary and practicable, enclosures and screens around any noisy fixed plant;
- Plant to be located, as far as is reasonably practicable, away from adjacent occupied buildings or as close as possible to noise barriers/bunds or site hoardings where these are located between the plant and the buildings.
- Isolation of plant from building structure.

On-site Vehicle Movements

As minimal information is available at this stage on vehicle movements within the proposed development, some generic advice can be provided to ensure that noise levels do not adversely affect NSRs.

- Only vehicles conforming to relevant national or international standards, directives and recommendations on noise and vibration emissions will be used.
- Site hoarding and screens will provide acoustic screening where necessary where vehicle movements are in close proximity to NSRs.
- Personnel will be instructed on BPM to reduce noise and vibration as part of their induction including training as required prior to specific work activities.
- When transporter engines are not required to be running, i.e. other than unloading, engines should be turned off so they do not contribute unnecessarily to the prevailing noise climate.
- Where possible, vehicles should be fitted with broadband reversing alarms rather than tonal types.

6.6.5 Enhancements

No specific enhancement measures are proposed.

6.6.6 Monitoring

No specific need for monitoring of noise or vibration has been identified, however it is proposed that the monitoring equipment identified in Section 1.4 of this report will remain on site throughout the construction period of the development.

6.7 ASSESSMENT OF SIGNIFICANT EFFECTS

This section assesses the level and significance of the residual effects of the proposed development on airborne noise and groundborne vibration receptors during both construction and operation with the mitigation described in section 6.6 in place. The residual effects are presented in Table 6.8.

Table 6.8 summarises the assessment of significance of effect of the proposed development upon airborne noise and groundborne vibration receptors during construction. Due to distance, vibration effects due to construction have been scoped out.

Table 6.8: Summary of assessment of significance of effect during construction

Receptor	Value/ Sensitivity/ Importance	Potential impact (in the absence of mitigation)	Mitigation	Residual effect
NSR-A	Category A (Daytime)	Changes in noise level for noisiest activity predicted to be less than 5dB above threshold level	None required other than Best Practicable Means	Minor Adverse, Not Significant
NSR-D	Category A (Daytime)	Changes in noise level for noisiest activity predicted to be less than 0dB above threshold level.	None required other than Best Practicable Means	Negligible Adverse, Not Significant

Table 6.9 summarises the assessment of significance of effect of the proposed development upon airborne noise and groundborne vibration receptors during operation. Due to distance, vibration effects due to operational vibration have been scoped out.

Table 6.9: Summary of assessment of significance of effect during operation

Receptor	Value/ Sensitivity/ Importance	Potential impact (in the absence of mitigation)	Mitigation	Residual effect
NSR-A	Medium (Operational Noise)	Increase in noise levels due to operational works	Screening in the form of a bund between NSR-A and site. (Embedded mitigation)	Minor Adverse magnitude Slight significance of effect Overall effect, Not Significant
NSR-D	Low (Operational Noise)	Increase in noise levels due to operational works	No additional measures of noise control identified	Negligible Adverse magnitude Neutral/Slight significance of effect Overall effect, Not Significant

As stated in Section 6.5 an additional operational road traffic assessment was not undertaken, however as set out in EIAR Appendix 6.4 the impact of the change in vehicle flows is predicted to result in a **neutral / slight significance** of effects on receptors 10m from the respective carriageways and so are not deemed to be of significance in the decision-making process for the proposed development.

6.8 STATEMENT OF SIGNIFICANCE

Based on the results of the above assessment, **no significant** noise or vibration effects have been identified.

6.9 CUMULATIVE EFFECTS

A review of planning applications within 15km of the Ardersier Port extension site was undertaken which considered the potential for cumulative effects either as a result of the construction or operational phases of the development

Of all the applications reviewed, only 08/00080/OUTNA (Mixed use development of 300 houses; tourism and heritage, equestrian and ecological centres; hotel and conference facilities; championship golf course, clubhouse and golf academy; community woodland and country park with associated infrastructure) has potential to have a cumulative effect. It is noted however that none of the environmental assessments that would have been undertaken to support this application are seemingly available. Therefore no determination of possible cumulative noise impact on nearby noise sensitive receptors due to either the construction or operational noise from 08/00080/OUTNA or vice versa has been possible. This development progress will be monitored and should the development go ahead management plans at the site will be reviewed and adapted if necessary.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 7 Landscape Seascape and Visual

Ardersier Port Extension

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CONTENTS

7 Landscape, Seascape & visual	4
7.1 Introduction	4
7.2 Consultation.....	6
7.3 Methodology	6
7.4 Baseline Conditions	8
7.5 Potential Impacts	25
7.6 Mitigation and Enhancement	32
7.7 Assessment of Significant Effects	33
7.8 Statement of Significance.....	40
7.9 Cumulative Effects.....	41
7.10 Overall Conclusion	45

FIGURES

Figure 7.1: Topographical Context	10
Figure 7.2: Landscape Character Context	12
Figure 7.3: Seascape Character Context	17
Figure 7.4: Local Landscape Area	20
Figure 7.5: ZTV to 35km and Representative Viewpoints.....	22

TABLES

Table 7.1: NatureScot LCTs key characteristics.	13
Table 7.2: Coastal character type characteristics and qualities	18
Table 7.3: Sensitivity of the potentially affected landscape, seascape and visual receptors.....	25
Table 7.4: Summary of assessment of significance of landscape and seascape effects during operation	34
Table 7.5: Summary of assessment of significance of visual effect during operation.....	37

7 LANDSCAPE, SEASCAPE & VISUAL

7.1 INTRODUCTION

7.1.1 The assessment of the proposed development

This chapter presents information required by the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 to be provided in the Environmental Impact Assessment Report (EIAR) to enable the identification and assessment of likely significant effects on landscape, seascape and visual.

The approach to this assessment follows the methodology set out in the EIA Scoping Report (SCOP-0062) and is in accordance with the Scoping Opinion (25/00226/SCOP) produced by The Highland Council (THC) and subsequent pre-application meeting with a focus on landscape and visual matters, held between the applicant and THC on 9th April 2025. EIAR Chapter 4 (Consultation) and EIAR Appendix 7.1 contain further information on how each of the matters raised in the Scoping Opinion and subsequent pre-application meeting have been addressed.

The overarching policy relating to landscape, seascape and visual effects in Scotland and relevant to this assessment of the proposed development are presented in EIAR Appendix 7.2.

The assessment has been undertaken using a methodology which is in accordance with the principles contained in the Landscape Institute and the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3¹); and The Landscape Institute (2019) Technical Guidance Note 06/19², visual representation of Development Proposals. The detailed methodology and criteria used in the assessment is presented in EIAR Appendix 7.3 which includes the study area, data sources, the criteria used to determine levels of effect, and the assumptions and limitations of the assessment. EIAR Chapter 3 (Project Description) contains a detailed description of the proposed development. This chapter is supported by the following EIAR Appendices:

- EIAR Appendix 7.1: Landscape and Visual Assessment – statement of agreed scope
- EIAR Appendix 7.2: Policy
- EIAR Appendix 7.3: Assessment Methodology
- EIAR Appendix 7.4: Representative Viewpoint Assessment
- EIAR Appendix 7.5: Figures, Representative Viewpoint Photographs and Visualisations

For this assessment it has been important to acknowledge the current and historic position relative to this site and the extent of development and consenting activity over a period extending to five decades and more. As a large-scale brownfield site (one of the largest in Scotland) the site has a long history of industrial activity including the presence of large-scale industrial structures, buildings and operational activities. The site has operated at various times over the last 30-40 years as a major industrial manufacturing and port operation with the regular presence over many decades of significant structures including cranes.

¹ Landscape Institute and IEMA (2013). Guidelines for Landscape and Visual Impact Assessment (GLVIA3), Abingdon, Routledge

² Landscape Institute (2019) TGN 06/19 Visual Representation of development proposals, https://www.landscapeinstitute.org/wp-content/uploads/2019/09/LI_TGN-06-19_Visual_Representation-1.pdf (Accessed 02/10/2025)

7.1.2 The planning background

The planning history of the site is relevant to the assessment of the landscape, seascape and visual effects of the extension area now proposed. It is important to note at the outset that this proposal, while identifying the existing and proposed site, is concerned with the principle of the change of use of the extended area only. This area will support the development and function of the existing port.

Planning permission for the site was initially granted in 2013 (13/01689/PIP). That application was supported by a detailed Environmental Impact Assessment that included a comprehensive assessment of its landscape and visual effects.

The assessment of the landscape and visual effects included within the original 2013 application included consideration of many of the viewpoints assessed in this chapter for the current proposal. The overall impact of the development proposed in 2013 was assessed as 'significant adverse'. The application was then determined positively by The Highland Council (THC) in the context of the historical use and existing structures that remained on site at that time and the intended operational development on site.

In this regard, the planning assessment in 2013 referenced that turbines would not be stored in the Firth and reinforced that there were no concerns about the siting or storage of turbines on site, noting that these, together with the potential for 'large purpose-built sheds, cranes and storage areas' would introduce prominent new features to what was a relatively quiet area. The impact was read in the context of other industrial and built development within the area including Norbord and Dalcross, both sites which have expanded in the intervening years.

Whilst the most important visual receptors were identified within the 2013 assessment as Fort George/Chanonry, South Sutor, Ardersier and Nairn West beach, evidence of the historical use of the site (McDermotts yard) existed in many of these views and was relevant in the context of the assessment. As a result, the planning assessment of the 2013 proposal considered that the proposal was 'unlikely to directly affect the appreciation of the most important features of the area.'

The subsequent and most recent planning permission was granted in 2019 (18/04552/PIP) and renewed the previous permission. THC confirmed that the assessment of landscape and visual effects should be scoped out of the EIA in 2019 on the basis that it had been fully assessed by the previous application (13/01689/PIP). As there had been no change in policy and taking into consideration any impact of development on the landscape resulting from the original use, while there would undoubtedly be an impact on the landscape, in the assessment of the overall planning balance it was judged to be acceptable.

It is against this background that planning permission was granted for the energy related port facility that now exists on site and continues to develop and expand. There are no height restrictions on buildings or other structure included within the extant permission subject to a requirement to consult with Highlands and Islands Airports Ltd. This underlines that the detailed assessment of landscape and visual effects previously undertaken for the two preceding planning permissions was fully taken into account when it was determined in the overall planning balance that the scale of development proposed was acceptable within the context of the historical use of the site and existing visual impacts.

7.1.3 The approach to the assessment of the extension

This assessment of the landscape, seascape and visual effects of the proposed extension of the site has been cognisant of the existing planning permission for a port and port related services on part of the site (application reference: 18/04552/PIP, 4 February 2019) and has also acknowledged the permitted development rights afforded to the port area through its Harbour Revision Order. As of Summer 2025, (when this assessment of the proposed extension was carried out) construction of the permitted port development had begun, with the replacement harbour wall and extended platform area complete, but its

full landscape and visual effects had yet to substantially manifest. Furthermore, it is not possible to predict with certainty what the exact appearance of the development will eventually be under the current consent, and how this would differ to that of the extension. The effects of the first phase of the port development on the landscape, seascape and views were assessed at the time of the previous application. The approach taken in this assessment of the proposed extension has therefore been to:

- Initially assess the landscape, seascape and visual effects of the proposed extended development against the landscape, seascape and visual baseline as observed on the ground during Summer 2025; and then
- Consider the implications of the extant consent on the level of effects identified.

The approach to the assessment of the extension is based on a worst-case assumption on maximum heights of structures and components likely to be on the site. It should, however, be noted that the presence of the majority of the larger structures anticipated to be associated with future operations will be transient in nature, with their assembly also influenced by seasonal constraints. By way of example, the approach to the assembly and integration of turbines will be based on up to three turbines being assembled, and at any one time a maximum of two would be fully integrated and complete with blades attached. The fully assembled turbines would have the blades locked and in a 'Y' configuration prior to being towed out to their final destination. The approach is predicated on minimising the time when turbines would be fully assembled prior to installation at sea. The integration activities would only be undertaken when there are clear weather windows for installation at sea, resulting in these activities typically taking place for only six to eight months each year.

It should also be noted that with the exception of the introduction of any structures or components on the extension land, the larger scale structures and components identified in this current assessment have previously been assessed and consented through the previous permissions or can be considered under permitted development rights conferred through the HRO. For example, fully assembled turbines will only be sited within the harbour area and boundary of the existing port, and it is not intended that assembly of turbines will occur within the proposed extension area.

7.2 CONSULTATION

Responses in relation to the statutory consultation undertaken are presented in EIAR Chapter 4 (Consultation). Following production of the EIA Scoping Report the following consultation has been undertaken.

Pre-application meeting with a focus on landscape and visual matters, held between the applicant and THC on 9th April 2025. The outcome of this meeting is recorded in EIAR Appendix 7.1.

7.3 METHODOLOGY

This section provides a summary of the assessment methodology. Further detail is provided in EIAR Appendix 7.3.

7.3.1 Scope of the assessment

The assessment considers the effects on landscape and seascape character (the effect on the landscape and seascape resource) and on visual amenity (the effect on people's visual amenity in specific locations).

The assessment also considers the effects of the proposed development during both the construction and operational phases. The assessment considers the operational effects in year 0 immediately after completion of construction. Separate consideration of effects over the longer term (typically residual effects in year 15 after any mitigation planting has begun to mature) has not been undertaken for this

proposed development because, due to the considerable height of the proposed port activities, most potential effects would not be materially reduced by areas of proposed new tree planting to screen the proposed development (proposed new planting is limited to the retention and strengthening of a woodland buffer around the landward side of the site to contain views of ground level activity from close vantage points, none of which were selected as representative viewpoints). An assessment of residual effects in year 15 is not therefore required as there is no proposed planting that will reduce potentially significant landscape and visual effects to not significant.

Cumulative effects are also considered.

7.3.2 Study area

The following study areas have been adopted for the assessment of effects:

- A primary study area encompassing a 15km radius around the proposed development. This reflects the study area used in a previous assessment of the now consented port activity at the site and is considered to capture all areas where potentially significant landscape effects could occur.
- An extended 35km radius for the consideration of visual effects which may occur at greater distances. This responds to a specific request from THC at the pre-application meeting on 9 April 2025 to include consideration of a small number of longer distance viewpoints at nominated position up to 35km from the site (this meeting is recorded by EIAR Appendix 7.1).

7.3.3 Data sources

The desk-based review involved the interrogation of published information (see EIAR Appendix 7.3 for the list of referenced sources). Field surveys, including representative viewpoint photography, were undertaken in December 2024 and July 2025 from public highways, core paths and other publicly accessible areas.

7.3.4 Zone of Theoretical Visibility

A Zone of Theoretical Visibility (ZTV) was generated for the 35km study area to provide an indication of potential visibility. Further detail is provided in EIAR Appendix 7.3.

7.3.5 Representative viewpoints, photography and visualisations

Twenty-four representative viewpoints have been selected and agreed through pre-application discussion with THC (see EIAR Appendix 7.1 and EIAR Appendix 7.3 for further information). The visualisations are consistent with THC's visualisation standards for wind energy development.

7.3.6 Assessment process

This section provides a brief outline of the assessment process. The assessment is based on the principles set out in the Guidelines for Landscape and Visual Impact Assessment (3rd Edition). Detailed assessment criteria are provided in EIAR Appendix 7.3

Landscape and Seascape

The **value** or importance understood to be attached to landscape or seascape areas is combined with the **susceptibility** of the key characteristics of these areas to the type of changes likely to be associated with the proposed development to establish the **sensitivity** of the landscape or seascape receptor. The sensitivity of the landscape or seascape receptor is categorised as either *High*, *Medium*, or *Low* using professional judgement with reference to the criteria set out in EIAR Appendix 7.3.

Assessment of the **magnitude of landscape change** takes account of several factors, and professional judgement is used to determine the relevance and appropriate weighting to be attributed to each factor. The degree of likely change is categorised as either *High*, *Medium*, *Low* or *No Change* with reference to the criteria set out in EIAR Appendix 7.3.

A final judgement on the **overall level of landscape effect** is then made by combining the **sensitivity** with the **magnitude of change** and described using a four-point scale of *Major*, *Moderate*, *Minor* or *Negligible*. The nature of effect will be judged as *Adverse* or *Beneficial*.

Major and moderate landscape and seascape effects are considered to be significant.

Visual

The visual assessment is based on 24 representative viewpoints. The outcome of the visual assessment of these representative viewpoints is then used to inform a more general discussion regarding wider visual receptors.

The **sensitivity** of the representative viewpoints is assessed by combining consideration of visual **susceptibility** of the visual receptors represented by the viewpoint with the **value**, or importance, likely to be attributed to the view. The sensitivity is categorised as either *High*, *Medium*, or *Low* using professional judgement with reference to the criteria set out in EIAR Appendix 7.3.

Assessment of the **magnitude of visual change** takes account of several factors, and professional judgement is used to determine the relevance and appropriate weighting to be attributed to each factor. The degree of likely change is categorised as *High*, *Medium*, *Low* or *Negligible* with reference to the criteria set out in EIAR Appendix 7.3.

A final judgement on the **overall level of visual effect** is then made by combining the **sensitivity** with the **magnitude of change** and described using a four-point scale of *Major*, *Moderate*, *Minor* or *Negligible*. The nature of effect will be judged as *Adverse* or *Beneficial*.

Major and moderate visual effects are considered to be significant.

7.3.7 Criteria tables

The assessment of landscape, seascape and visual effects rests on reasoned professional judgement. The detailed assessment criteria that underpin this professional judgement are provided in in EIAR Appendix 7.3.

7.3.8 Assumptions and limitations

There are no significant assumptions within, or identified limitations to, the assessments of landscape, seascape and visual effects other than the absence of certainty regarding the likely appearance of the port under the extant consent.

7.4 BASELINE CONDITIONS

This section describes the landscape, seascape and visual baseline for the proposed development. As explained in the introduction to this chapter of the EIAR, whilst cognisant of extant consent 18/04552/PIP, the following baseline description initially reflects conditions as observed on the ground in Summer 2025 when implementation of the permitted port development was only in its early stages. For example, whilst cranes associated with construction of the permitted port development were widely visible from surrounding areas while site work was being undertaken, the full landscape, seascape and visual implications of the consented port were not yet apparent. This matter, and its implications for the levels

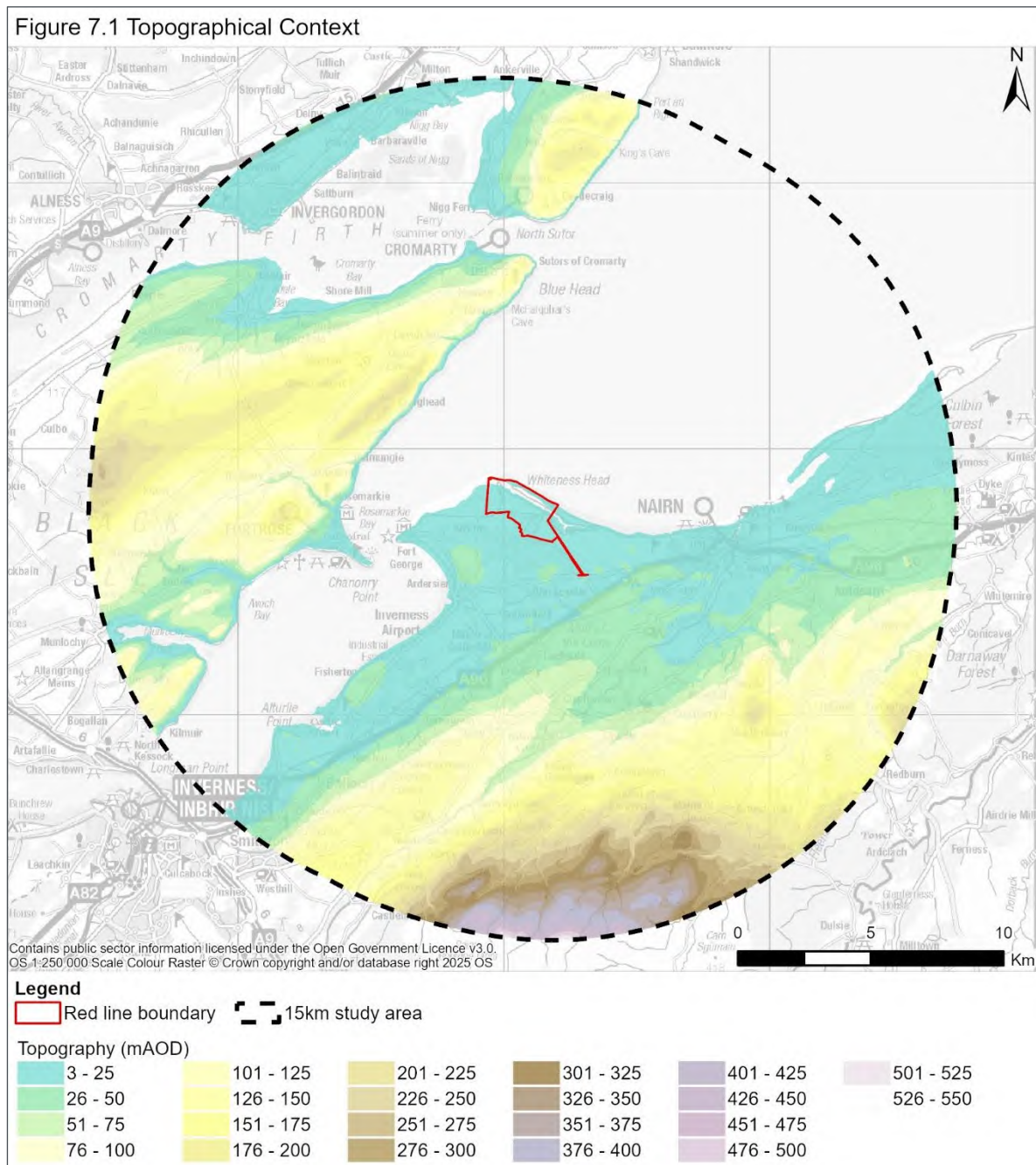
of effect specifically associated with the application to extend, is considered further later in the assessment.

7.4.1 Site Description

Ardersier Port is located on the Moray Firth. The site is bordered by the Moray Firth to the north, Carse of Delnies to the east, Carse Wood to the south, and the sand dunes and tidal sandflats of Whiteness Sands to the west. Fort George's live firing range is to the southwest, and Whiteness Head Spit, which shelters a harbour. The site has an industrial history, having previously been used for the fabrication and construction of oil and gas off-shore platforms until the early 2000s.

The topographical context within 15km is illustrated in Figure 7.1 below and within 35km is illustrated on EIAR Appendix 7.5 Figure 1. Within the site, topographical variation is minimal, and the ground is broadly level except for localised earthwork mounds in the western site extent. Within the main site area (not the access track), ground levels range from approximately 0m above ordnance datum (AOD) at the water's edge to 15m AOD where there are earthwork mounds. The majority of the site is 5m AOD or less. The proposed access road rises in elevation from 5m AOD where it joins the main site to 24m AOD, over a distance of 1.7km, at a junction with the B9092.

Figure 7.1: Topographical Context



Within 15km of the site, elevation ranges from approximately 1m AOD at the shoreline up to 530m AOD within the upland area south of the site. The site is located within a band of 50m AOD or lower, predominantly flat, coastal farmland south of the Moray Firth. There are areas where the land gently undulates and there is a notable increase in elevation at Kirkton between the site and the village of Ardersier. South of the low lying coastal band, the varied landform of rolling, north-facing hill slopes and plateaux rises in elevation from around 100m AOD up to 200m AOD before becoming open rolling upland with rounded, broad, gently sloping hills up to 530m AOD. Beinn Bhuidhe Mhor, at 548m AOD is located approximately 16km south of the site. West of the site, the Black Isle between the Moray Firth and the

Cromarty Firth increases in elevation over a relatively short distance in from the Moray Firth shore line, plateaus, and reaches a high point of 256m AOD at Mount Eagle which is approximately 14km west of the site. North of the site, there is a high point of 205m AOD near the Hill of Nigg approximately 12km north of the site. Between 15km and 35km, the landscape continues to rise in elevation north, west and south of the site up to around 700m AOD south of the site and a high point of 1,046, AOD at Ben Wyvis summit, Glas Leathad Mòr northwest of the site.

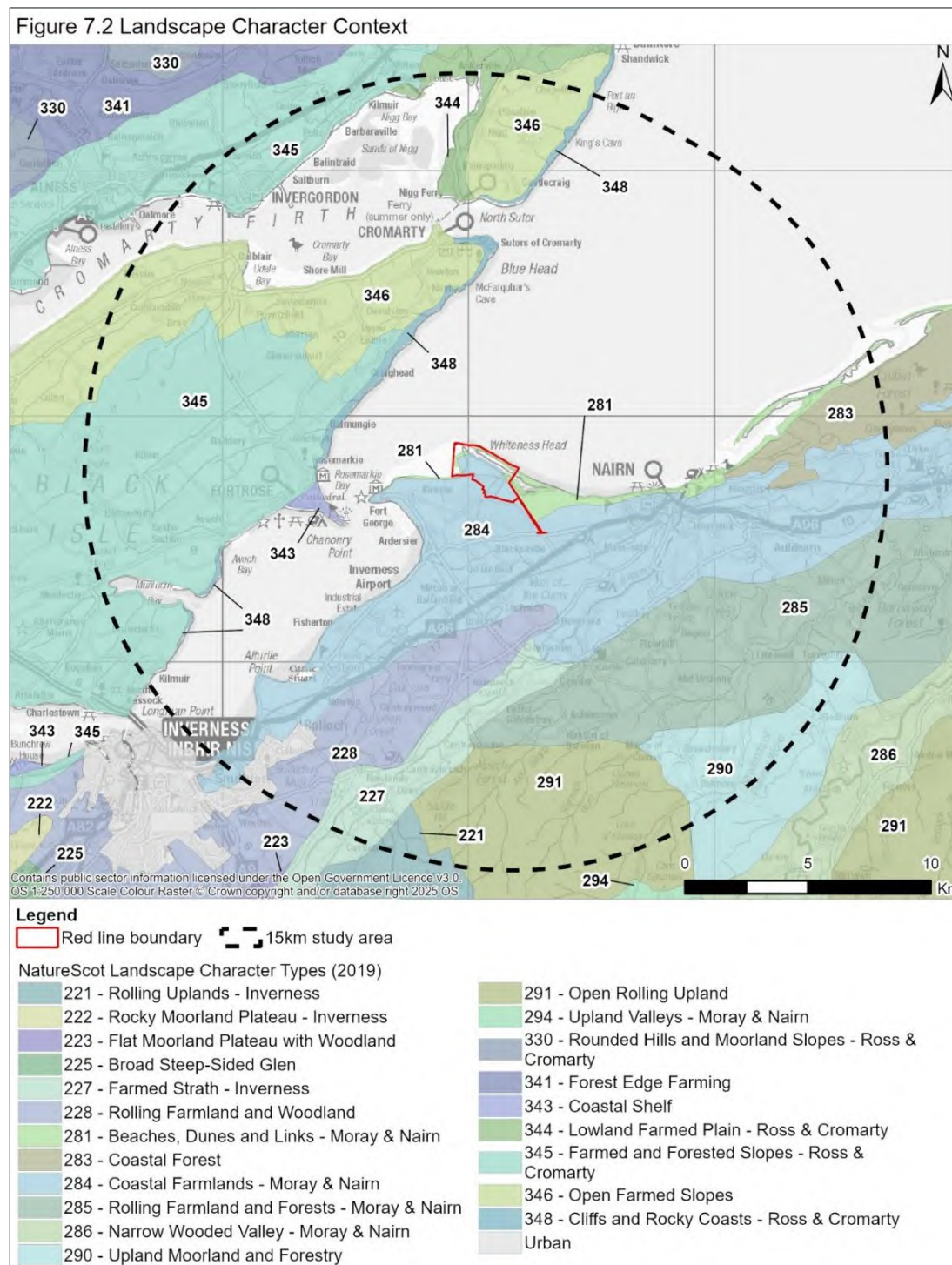
Inland landcover within the site comprises hardstanding, bare earth, trees and shrubs and on the coast, landcover includes littoral rock and sediment, supra-littoral rock and sediment, and saltmarsh. Land use within the site includes industrial activity within the current operational extent of Ardersier port and, outside of this, plantation woodland with stands of mature Scots Pine. Within 15km, the inland landcover is predominantly improved grassland, arable, coniferous woodland and broadleaf woodland. Other inland landcover includes urban areas, waterbodies and upland areas of heather, heather grassland and bog. Coastal landcover includes littoral rock and sediment, supra-littoral rock and sediment, and saltmarsh. Much of the land within 15km of the site is used for farming, both arable and pastoral, other land uses include large to small areas of settlement such as Balloch, Culloden, Nairn, Fortrose, Cromarty and Invergordon and transportation hubs such as Inverness Airport. Coastal areas include areas used for recreational activity such as beaches and golf links, and industrial activity such as the ports at Nigg and Invergordon. Between 15km and 35km the proportions of upland landcover types increase in line with the increase in land elevations at these greater distances from the site and there is a greater number of inland waterbodies which include Loch Ness (eastern extent), Loch Ashie, Loch Duntelchaig, Loch Glass and Loch Morie. Land use between 15km and 35km is similar to land use within 15km but with the addition of windfarms in the uplands.

The site is located on the edge of a relatively well settled rural landscape. Settlement within proximity of the site is predominantly farms and rural houses. The closest area of settlement is Ardersier village, which is located approximately 3km south west of the site. Nairn (5km east) and Rosemarkie (5km west) are relatively close coastal settlements with views towards the site. Other villages and towns within 15km of the site include Fortrose (5.5km west), Cromarty (8.5km north), and Invergordon (13km north west). Between 15km and 35km, settlement is predominately located at elevations below 200m AOD, leaving the uplands relatively remote and unpopulated. Within the lowlands, the city of Inverness is located approximately 18km south west of the site, Forres is located approximately 20km east of the site, and Dingwall is located approximately 24km west of the site. The A96 trunk road is the main road through the area. Other larger roads include the A9 (west of Inverness), the A939 (east of the site), and several B roads in addition to the network of rural lane and tracks which connect individual properties and farmsteads with the main road network. There are three train routes within the study area: the Far North Line, The Highland Main Line, and the Aberdeen–Inverness Line. Inverness Airport is approximately 5km south west of the site.

The large scale landscape associated with the site is informed by the high degree of openness, both inland over the port area and seaward over the Moray Firth. Beyond the site, the sense of scale is variable depending on the position in the landscape, but the overall perception is one of a large-scale landscape, informed by the open views over the coastal plains and long range views towards the uplands north, west and south of the site. Field pattern is variable, lowland fields range in size from small to large and are generally irregular south of the Moray firth. Linear field patterns are found in relation to field drain networks such as the area of land between the Moray Firth and the Cromarty Firth. The intermixing of wooded parcels (woodland and forestry) with the pastoral and arable fields results in a patchwork effect. In the uplands, the large swathes of heather, grassland and bog within few defining boundaries on the whole relatively simple but at a localised level the network of watercourses across the moorland add intricacy and complexity.

7.4.2 Landscape character context

Figure 7.2: Landscape Character Context



NatureScot Scottish Landscape Character Types (2019)

The Scotland-wide digital map-based landscape character assessment (LCA) Landscape Character Type (LCT) boundaries demarcate areas of consistent and recognisable character and is applicable at the local

landscape level. The proposed development is located across two LCTs (See Figure 7.2 above). There is potential for the proposed development to directly impact these host LCTs.

- 281 Beaches, Dunes and Links – Moray & Nairn. Northern, coastal site extent.
- 284 Coastal Farmlands – Moray & Nairn. Central and southern site extents

The LCT dataset was overlaid with the ZTV (see EIAR Appendix 7.5 Figure 2) to assist with identifying the LCT areas most likely to be subject to an effect for inclusion in the assessment. There is potential for the proposed development to alter the setting of the following LCTs where open views across the Moray Firth inform the character of the LCTs.

- 228 Rolling Farmland and Woodland
- 343 Coastal Shelf
- 345 Farmed and Forested Slopes – Ross & Cromarty
- 346 Open Farmed Slopes
- 348 Cliffs and Rocky Coasts – Ross & Cromarty

The following provides a baseline description of each of these areas.

Table 7.1: NatureScot LCTs key characteristics.

Landscape Character Type	Key Characteristics
281 Beaches, Dunes and Links – Moray & Nairn ³	• Low-lying, long, curving sand and pebble beaches, usually backed by low dunes or shingle ridges, and expansive sand and mudflats at low tide. • Large scale, mainly natural landscape dominated by coastal processes, with few sea-defence structures and a low proportion of built coastal development. • Diversity of coastal land forms, including distinctive shifting sand bars, and shingle beach ridges with their sparse, low-level vegetation, that provide evidence of the coastline's recent geological history and transient nature. • Complex, natural patterns of intertidal mudflats and salt marshes. • Infrequent and contained coastal settlements, with historic architectural cores including fishing villages and harbours. • Distance from the area's main arterial road, and lack of a coastal road, combined with the visual inland barrier of coastal forests and dunes, giving a sense of isolation away from settlements. • Contrast of a natural setting with the historical defence structures at Fort George, and the remnants of World War II concrete defences. • Pronounced contrast between the light and openness of the wide horizons, dominance of sky and reflection of light off the sea, light-coloured sand, pebbles and dune vegetation, and the shelter and enclosure provided by adjacent forests. • Long distance views to the outer firth and the firth's north coast, and views along the coast to prominent headlands, settlements and hills, giving an increased perception of scale and the overriding horizontal landform. • Occasional inland views of hills from dune and ridge tops, in places where they are not blocked by coastal forest.
284 Coastal Farmlands – Moray & Nairn ⁴	• Expansive, open, flat to undulating coastal plain landscape with frequent, small landforms of fluvio-glacial sands and gravels, often topped with forests, gorse or rougher grasslands. • Predominantly simple agricultural landscape, punctuated by stone built farms and villages which are connected by an extensive network of rural roads. • Mainly light, sandy soils and yellow seasonal flowers of gorse and broom.

³ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 281 BEACHES DUNES AND LINKS – MORAY & NAIRN, <https://www.nature.scot/sites/default/files/LCA/LCT%20281%20-%20Beaches,%20Dunes%20and%20Links%20-%20Moray%20&%20Nairn%20-%20Final%20pdf.pdf> (Accessed 02/10/2025)

⁴ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 284 COASTAL FARMLANDS – MORAY & NAIRN, <https://www.nature.scot/sites/default/files/LCA/LCT%20284%20-%20Coastal%20Farmlands%20-%20Moray%20&%20Nairn%20-%20Final%20pdf.pdf> (Accessed 02/10/2025)

Landscape Character Type	Key Characteristics
	• Broadly meandering burns and the lower reaches of rivers, often associated with native woodland and wetlands, providing relatively natural features in a highly modified landscape. • Variation in field pattern, forms of enclosure, tree cover, settlement, road patterns and water bodies which illustrate distinctive differences between the flat former wetland and the more undulating, drier soils. • Patchwork of mixed arable and pasture fields, yellow flowering gorse and broom, with shelter belts and plantations on drier land. • Conifer plantations which coalesce to create elongated bands of dark colour contrasting strongly with the paler colours of arable land. • Broadleaf woodlands and shelterbelts associated with gardens and designed landscapes. • Established main communication routes of rail and trunk roads linking the larger settlements, off which run the network of minor rural roads. • Prominence of occasional built elements in a relatively flat, open landscape, particularly large or vertical structures, including grain silos and single and small groups of commercial turbines associated with larger farms. • Expansive, open long-distance views along the farmland belt, up to the moorland hills, and occasional views to the sea, mixed with more intimate views, foreshortened by undulations and folds in the landform, tree groups, small forests and coastal forests.
228 Rolling Farmland and Woodland ⁵	• Varied landform of rolling, north-facing hill slopes and plateaux. • Gently sloping, simple coastal edge with the firths, falling to well-defined raised beaches in places. • Diverse mix of landcover and fairly even balance of open agricultural land and woodlands. • Varying patterns of openness and enclosure created by woodlands and hedgerows mixed with open fields and dense conifer forests with dark linear edges. • Diversity added by open broadleaf woodlands along stream gorges, river banks, small woodlands, trees, hedgerows and designed landscapes. • Settled landscape, mostly of small farms and isolated houses, interconnected by a network of major and minor roads. • Other scattered settlements of old buildings in traditional layout, associated with road junctions and bridging points. • Clusters of farm buildings and open fields are generally set against a wooded backdrop. • Minor roads follow the geometric edges of field enclosures and conifer forests. • Large number of relic prehistoric settlements and burial cairns indicating a continuing focal point of settlement. • Sense of history and tradition around estates, due to stone walls, beech hedging, parkland and wooded policies. • Limited visibility in wooded areas, focusing attention upon foreground detail. • Distant views northwards over the firths in open areas on the upper slopes. • An active, busy landscape, particularly in the vicinity of adjoining urban areas and major transport routes.
343 Coastal Shelf ⁶	• Mainly natural coastal edge consisting of a variety of soft coastal features including dunes, wetlands, salt marshes, grasslands, raised beaches and beaches, demonstrating different geological processes of accretion and erosion. • Range of habitats in stages of natural succession. • General absence of development except where occasionally found on the more stable land. • Variable width of the shelf, from very narrow grassed strips to broad beaches and dunes. • Proximity of some areas of coastal shelf to steeply rising hills, creating a sharp transition in landform from a horizontal to near vertical emphasis.

⁵ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 228 ROLLING FARMLAND AND WOODLAND, <https://www.nature.scot/sites/default/files/LCA/LCT%20228%20-%20Rolling%20Farmland%20and%20Woodland%20-%20Final%20pdf.pdf> (Accessed 02/10/2025)

⁶ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 343 COASTAL SHELF, <https://www.nature.scot/sites/default/files/LCA/LCT%20343%20-%20Coastal%20Shelf%20-%20Final%20pdf.pdf> (Accessed 02/10/2025)

Landscape Character Type	Key Characteristics
	• Presence of coastal transport routes, from where the coastal shelf is usually in the foreground of sea views, with historic train stations, distilleries, lighthouses and RAF airfields connected to these routes. • Clear, physical definition of the shelf and edges of raised beaches, rarely masked by forests or development. • Dynamic, wide and sweeping sandy beaches, spits and salt marshes with natural vegetation and extensive views. • Wet grassland and usually unenclosed or occasionally fenced, rough pastures on the broader coastal shelf in close proximity to the sea, often separated by a very narrow, often pebbly beach. • Open views across the inner and outer Firths, and the interplay of light on water. • Ever-changing line of views along the coast and firths. • Sense of exposure in outer firth areas from near-constant wind, lack of trees and expansiveness of the landscape.
345 Farmed and Forested Slopes – Ross & Cromarty ⁷	• Complex pattern of farmland, tree cover, forests and woodland on sloped, often terraced land rising from firths or river plains to mid-elevations and often backed by large scale forest plantations where there are adjacent hills. • Overall impression of a well-treed landscape, but within which farming is the dominant land use. • Generally higher proportion of trees, woodland and forest plantations in upper slopes, forming a well-connected network within which fields are located. • Terraces of open land, interspersed with forest plantations and woodlands on mid slopes. • Gradual change to more open landscapes at lower levels. • Wide range and distribution of archaeological sites indicating a long history of human settlement. • Occasional large settlements in a predominantly rural landscape. • Views from more open, terraced areas across lowlands or firth to hills or out to sea.
346 Open Farmed Slopes ⁸	• Open, convex, generally north-east facing farmed slopes. • Smooth slopes of arable and pasture fields forming a regular pattern, lined with occasional small trees, fences or gorse hedges. • Mix of crofting, small holdings and large farms giving rise to a patchwork of rectangular fields of different sizes. • Areas of distinctive crofting patterns with generally smaller fields and regularly scattered croft buildings. • Areas of distinctive, large, regular fields of large farms, with occasional small patches of birch woodland and conifer plantations and lines of trees descending the slopes. • Scattered settlement patterns and network of minor roads running along contour lines, with few groupings in villages or towns. • Ever present views which are open, expansive and outward looking.
348 Cliffs and Rocky Coasts – Ross & Cromarty ⁹	• Mainly natural, narrow, rugged coastline of angular rocky cliffs and partially submerged rocky shores, interspersed with pebbly beaches, and steeply eroded glacial till cliffs. • Straight, almost uninterrupted alignment of the rocks signifying the location of the Great Glen Fault. • Abrupt transition to adjacent farmed slopes.

⁷ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 345 FARMED AND FORESTED SLOPES – ROSS & CROMARTY, <https://www.nature.scot/sites/default/files/LCA/LCT%20345%20-%20Farmed%20and%20Forested%20Slopes%20-%20Ross%20&%20Cromarty%20-%20final%20pdf.pdf> (Accessed 02/10/2025)

⁸ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 346 OPEN FARMED SLOPES, <https://www.nature.scot/sites/default/files/LCA/LCT%20346%20-%20Open%20Farmed%20Slopes%20-%20final%20pdf.pdf> (Accessed 02/10/2025)

⁹ NatureScot (2019) SNH National Landscape Character Assessment Landscape Character Type 348 CLIFFS AND ROCKY COASTS - ROSS & CROMARTY, <https://www.nature.scot/sites/default/files/LCA/LCT%20348%20-%20Cliffs%20and%20Rocky%20Coasts%20-%20Ross%20&%20Cromarty%20-%20final%20pdf.pdf> (Accessed 02/10/2025)

Landscape Character Type	Key Characteristics
	• Sharp contrast between the smooth, managed farmland to the north-west and the rough, angular, vertical lines of the cliffs. • Lack of roads, general inaccessibility and low levels of built development, creating a sense of isolation. • Very infrequent, compact, linear settlements of small scale traditional buildings, overlooking inlets or pebble beaches. • Coastal vegetation of grasses, heather and gorse, with characteristic seasonal flowers. • Airy, open cliff tops and summits, with long distance, 360 degree views. • Enclosed sheltered backdrop of cliffs at sea level, contrasting with the dynamic movements and sounds of the sea, and focusing views sea-ward.

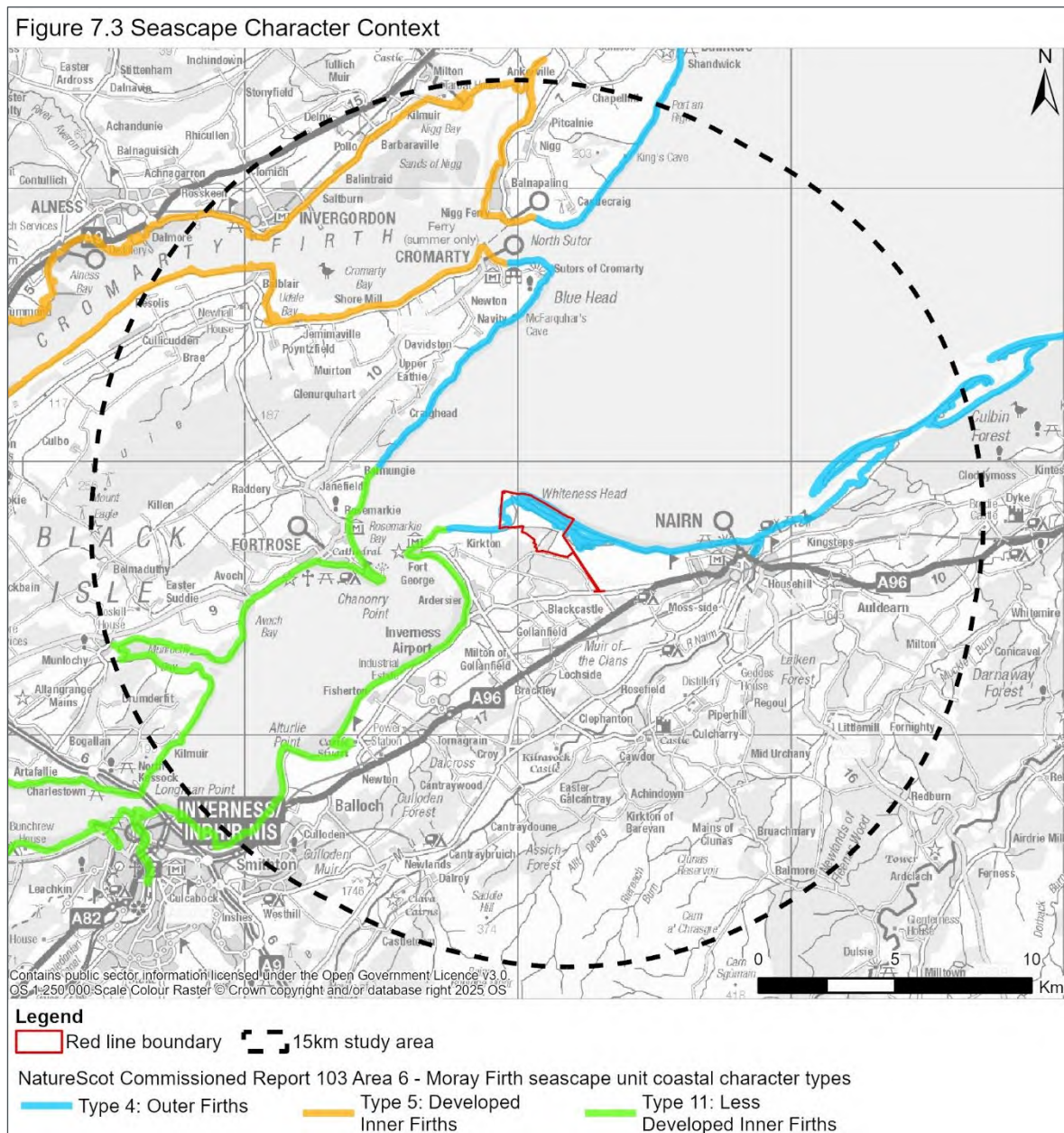
7.4.3 Seascape character context

In 2005 NatureScot commissioned a study to assess the seascape issues surrounding offshore wind energy developments “NatureScot Commissioned Report 103 – An assessment of the sensitivity and capacity of the Scottish Seascape in relation to windfarms”¹⁰. The seascape character information in this report has been used within this baseline as part of the desktop establishment of the seascape character context.

The site is located within the Area 6: Moray Firth seascape unit (See embedded Figure 7.3 and EIAR Appendix 7.5 Figure 2). There is potential for the proposed development to directly impact the host coastal character type “Type 4: Outer Firths” and alter the setting of the adjacent “Type 11: Less Developed Inner Firths”. Coastal character type “Type 5: Developed Inner Firths” does not fall substantially within the ZTV and therefore has not been included in the assessment.

¹⁰ NatureScot (2005) SNH Commissioned Report 103: An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms, <https://www.nature.scot/sites/default/files/2017-07/Publication%202005%20-%20SNH%20Commissioned%20Report%20103%20-%20An%20assessment%20of%20the%20sensitivity%20and%20capacity%20of%20the%20Scottish%20seascape%20in%20relation%20to%20windfarms.pdf> (Accessed 02/10/2025)

Figure 7.3: Seascape Character Context



The following provides a baseline description of each of these areas.

Table 7.2: Coastal character type characteristics and qualities

Costal Character Type	Characteristics and Qualities ¹¹
Type 4: Outer Firths	<i>as relevant to the Type 4 location "Moray Firth"</i> Physical Characteristics • Sandy beaches are interspersed with low rocky headlands. • Backed by a farmed plain of varying width with viewshed contained by the Black Isle which considerably restricted by the coastal edge. Broader agricultural plains are present against the coast in Morayshire, although views are often restricted by coastal forestry located on dune systems. • Relatively well populated with small towns and villages set out along the coast, some comprising small holiday resorts. Internationally renowned golf courses on links and dunes backing the coast. • Occasional industry, roads and railways are aligned parallel to the coast. The Outer Firths are major shipping routes. • Focus onto the shores on each side of the Firth, with settlements, and often masts and other infrastructure located on ridges forming significant features in views. • The profile of land on the opposite Firth shore tends to flatten due to both the distance and often subtle topography. Experiential Qualities • The containment of the Firths where land is visible and provides shelter, generally give a less exposed and dramatic seascape. • Sense of enclosure weakens further eastwards in the Moray Firth where the firth suddenly broadens and flattens thereby creating a more open seascape. • The presence of ships, rigs, settlements (particularly visible at night) and other built features and well farmed hinterland given this type a developed character.
Type 11: Less Developed Inner Firths	<i>as relevant to the Type 11 location "Beaully Firth"</i> Physical Characteristics • Generally flat, fertile carselands or coastal deltas contained within 'U' shaped valley and semi-enclosed by steep hills or mountains further inland. • The valley form creates a strong physical and visual connection with surrounding landscape character types and the Firth is therefore less of a dominant feature than in Outer Firth types. • Farmed with large rectangular fields producing a distinct landscape pattern seen against a simple backdrop of rough grazing/moorland on hills and foreground of water. • Estuarine reed beds and mud flats occur and there is a narrow intertidal zone; tides bring dynamic qualities to this type. • A well settled landscape. Roads and railways are aligned along the shore and bridging points and causeways often provide distinctive views. • Historic features create distinct landscape foci. Experiential Qualities • A calm landscape with less marine influence as the firth narrows, with land and landuse dominating views.

¹¹ NatureScot (2005) Description of Coastal Character Types Including Caithness, <https://www.nature.scot/doc/description-coastal-character-types-including-caithness> (Accessed 02/10/2025)

Costal Character Type	Characteristics and Qualities ¹¹
	• The proximity of opposing sides of the firth give clear finite horizons and a feeling of enclosure and shelter.

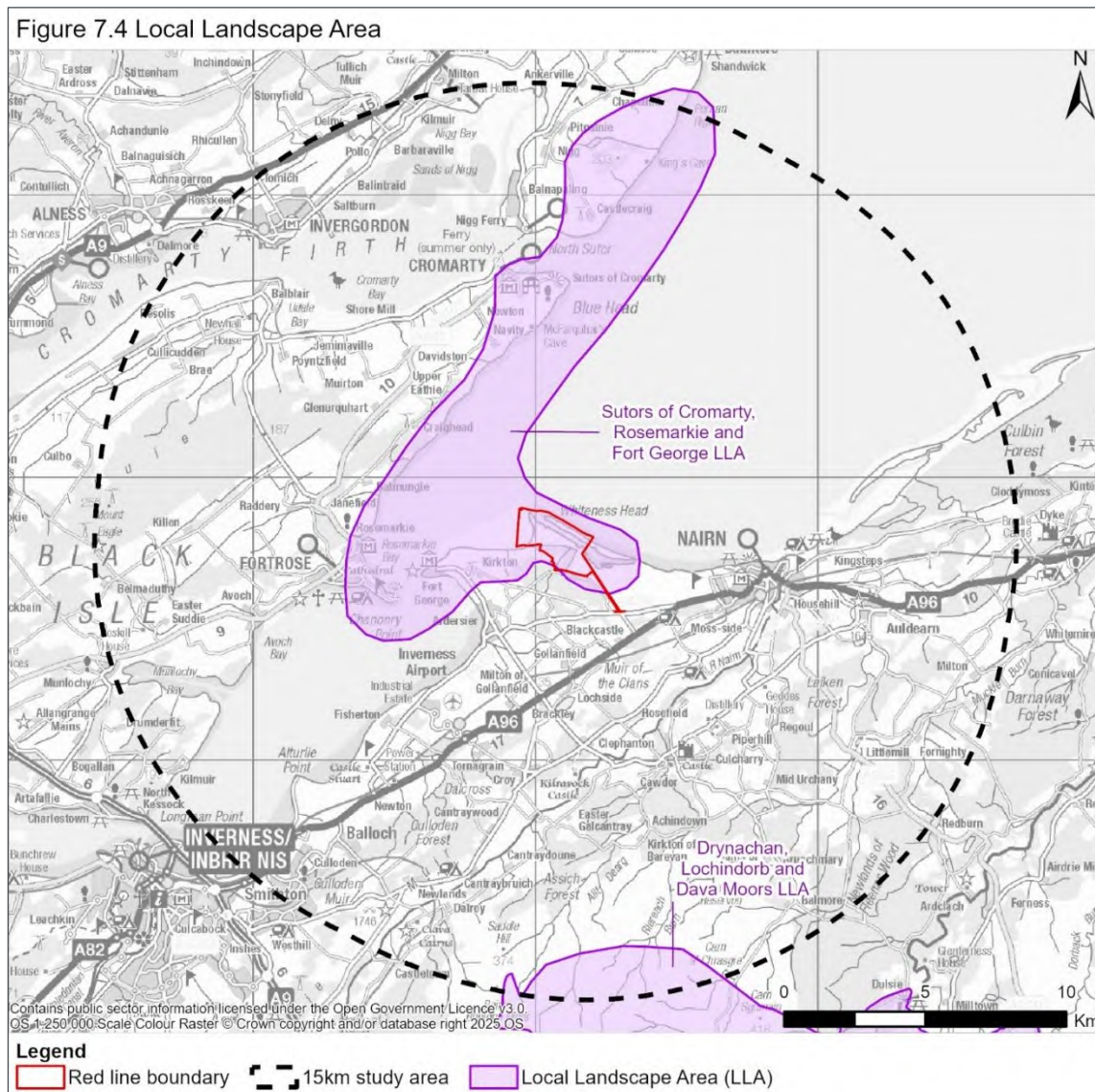
7.4.4 Landscape designations

Sutors of Cromarty, Rosemarkie and Fort George Local Landscape Area

The site is located within the Sutors of Cromarty, Rosemarkie and Fort George locally designated Local Landscape Area (LLA) (formerly Special Landscape Area)¹² (See Figure 7.4 below and EIAR Appendix 7.5 Figure 2). There is potential for the proposed development to directly impact the LLA.

¹² Highland Council (2011) Special Landscape Area Citation: Sutors of Cromarty, Rosemarkie, and Fort George SLA, https://www.highland.gov.uk/download/downloads/id/4790/sutors_of_cromarty_rosemarkie_and_fort_george.pdf (Accessed 02/10/2025)

Figure 7.4: Local Landscape Area



Sutors of Cromarty, Rosemarkie and Fort George LLA key landscape and visual characteristics¹³:

- The diverse coastal edge includes straight and indented geometry, soft shingle bars and hard cliffs, developed and undeveloped land uses and distinctive coastal landforms (including the spits at Chanorny Point, Fort George, and Whiteness, and the headlands of the Cromarty Sutors).
- Contrasting and distinctive visual experiences are provided by the juxtaposition of elevated and sea level viewpoints and views across enclosed and open firths. Contrasting perceptions of exposure and shelter are associated with the open coast and enclosed firth.
- The dominant undeveloped coastal edge is punctuated by the occurrence of settlements, and isolated dwellings and farmsteads dot the higher ground above the cliff tops. Huddled close to the shoreline, and densely packed, settlements retain core historical and cultural integrity and strongly and distinctively reflect their exposed coastal position.

¹³ Highland Council (2011.) Assessment of Highland Special Landscape Areas, https://www.highland.gov.uk/downloads/file/2937/assessment_of_highland_special_landscape_areas (Accessed 02/10/2025)

- Most of the coastline in this LLA – the stretch between Rosemarkie and Port an Righ - is however steep and undeveloped, punctuated only by the occurrence of isolated dwellings and farmsteads dotting the higher ground above the cliff top
- The distant mountain backdrop in many views gives distinctive Highland context to the interplay of views back and forth across the firth.
- The regular pattern of farmland on inland slopes provides an attractive contrast to the more natural shorelines of cliffs, shingle banks and mudflats.
- Unusual contrasts in scale are experienced where huge oil-rigs or large ships are viewed within the enclosed firths in the context of small scale settlement and in contrast to the horizontal arrangement of sea, land and sky.
- The citadel of Fort George is a substantial and distinctive man-made feature in the landscape, which itself offers views of the LLA from a historical 'defended' position. The fort is linked to Ardersier by the B9006, a road that follows the line of the original military road.
- The remains at the South Sutor form part of what is probably one of the most complete coastal batteries surviving in Scotland.
- Some sense of remoteness and tranquillity is obtained in the less accessible areas and the cliffs and thickly wooded gullies on the steep outer edge of the Black Isle are local havens for wildlife. However, with the presence nearby of coastal settlements, ports and an airport, human activity is usually noticeable in this area – on the land, in the sea, or overhead.

Sutors of Cromarty, Rosemarkie and Fort George LLA special qualities:

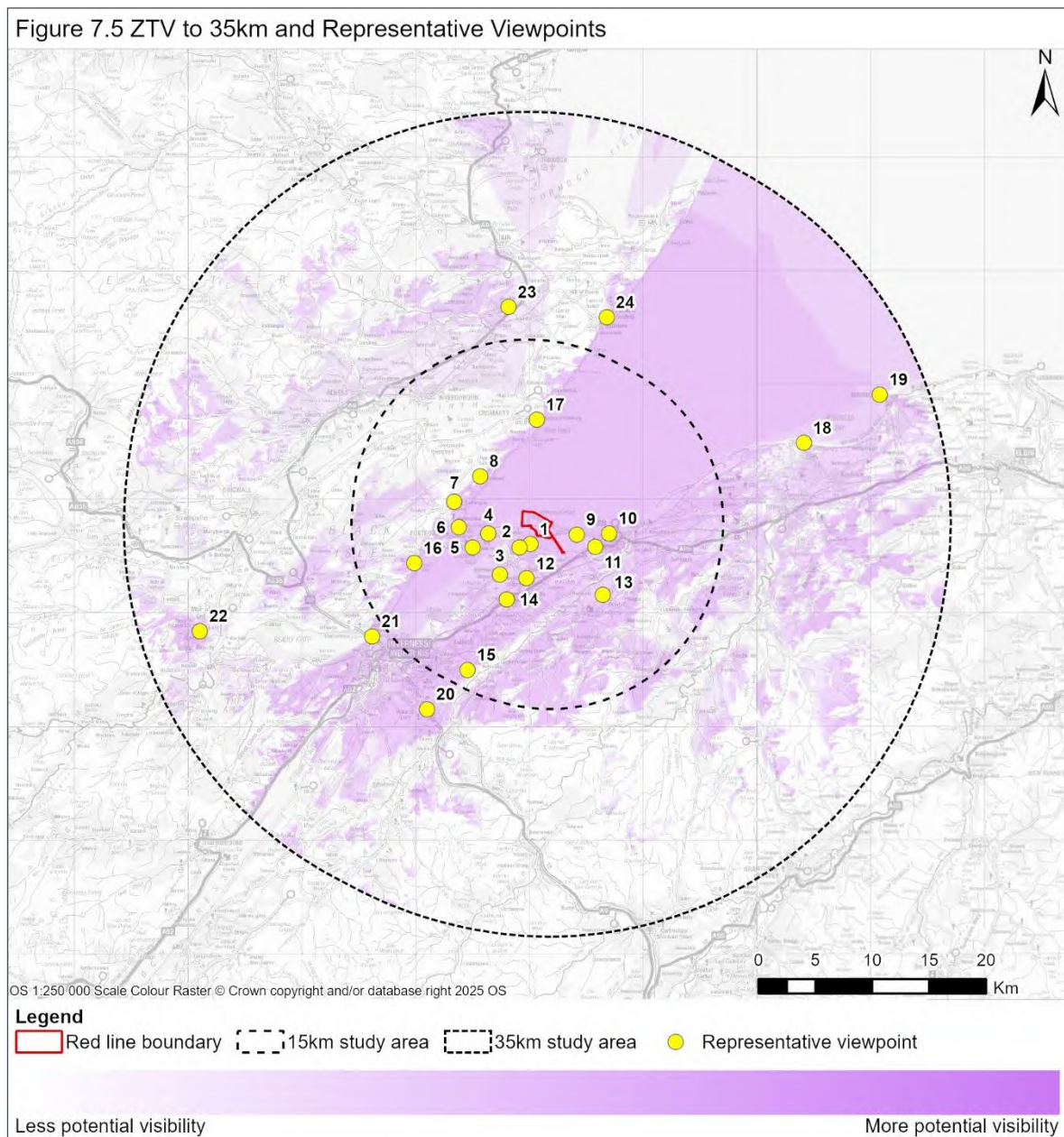
- Distinctive variety of costal scenery
- Expanse and containment
- Strong cultural and military landscape links

7.4.5 Visual Context

Zone of Theoretical Visibility

The ZTV (Figure 7.5 below) run to 35km indicates how topography would typically limit potential visibility beyond 15km. In addition to the influence of topography, areas of plantation woodland would result in localised reductions in potential visibility.

Figure 7.5: ZTV to 35km and Representative Viewpoints



7.4.6 Visual receptors and Selected Viewpoints

Visual receptors were identified through desktop ZTV and site work, and 24 representative viewpoints have been selected for the visual assessment and agreed with THC. Baseline descriptions are included in EIA Appendix 7.4.

Residents

Scattered residential locations lie nearby to the south of the site, though many residential properties are screened from the site by intervening plantations of scots pine woodland. The waterfront village of Ardersier lies approximately 4 km to the south west but intervening topography reduces the potential for views from this closest settlement. There is potential for views from residential properties with open views across the Moray Firth, such as those on the headland north of Rosemarkie and the shoreline at Avoch. Beyond 15km, the ZTV also indicates properties with potential visibility at Aultvaich, west of Beaully Firth and properties at Pitmaduthy, north of Nigg Bay.

Representative viewpoints have been selected at the following residential locations.

- Easter / Wester Bog, south of Carse Wood (1)
- Headland north of Rosemarkie (7)
- Avoch (16)
- Aultvaich (22)
- Pitmaduthy (23)

Visitor locations and recreational routes

The natural environment and historic sites attract visitors to the Moray Firth and adjacent inland areas. Along the coast, beachfront areas, promontories and elevated headlands with potential visibility, include Rosemarkie, Avoch, the Secret beach (Hilton of Delnies), Nairn, Sutors of Cromarty, Findhorn and Burghead. Historic sites include Fort George on the coast and Culloden Battlefield inland. Chanonry Point attracts both nature watchers, for Dolphin spotting, and heritage visitors to the light house. Another site with potential visibility includes Ardersier Cemetery. Walking and cycling routes (see EIA Appendix 7.5 Figure 3) in the area include Core Paths, the Moray Coast Trail which is a Scotland Great Trail (named on OS 1:25,000 with a green hexagon with thistle), and National Cycle Network Route 1.

Representative viewpoints have been selected at the following visitor locations or points on recreational routes.

- Ardersier Cemetery (2)
- Fort George (4)
- Chanonry Point (5)
- Rosemarkie beachfront (6)
- Learnie Red Rocks (8)
- The Secret Beach, Hilton of Delnies (9)
- Nairn beach (10)
- Culloden Battlefield (15)
- Sutors of Cromarty (South Sutor) (17)
- Moray Coast Trail at Findhorn (18)
- Burghead visitor centre (19)
- Kessock Bridge Cycleway (21)
- Balintore (24)

Roads and rail

The A96 and the mainline railway between Aberdeen and Inverness pass approximately 4 km to the south east of the site. There are currently limited opportunities for open views towards the site to the north west from the A96 due to the intervening plantation woodlands. The B9039 follows the coastline west of Ardersier and, whilst topography screens views of the site, there is potential for the taller elements of the proposals (e.g. turbines and cranes) to be visible over the intervening topographical form. Road users within the wider area with potential visibility include those using the Old Military Road at the rail crossing near Flemington, the B9090 near Royal Brackla Distillery and the A9 south of Inverness.

Representative viewpoints have been selected at the following road-side locations.

- B9039 Old Military Road west of Ardersier (3)
- A96 at Delnies (11)
- Rail crossing near Flemington (12)
- B9090, near Royal Brackla Distillery (13)
- A96 layby near Culblair (14)
- A9 south of Inverness (20)

7.5 POTENTIAL IMPACTS

7.5.1 Landscape, seascape and visual receptor sensitivity

The following tables identify the sensitivity of the receptors identified for assessment of the landscape, seascape and visual effects of the proposed port extension. Overall sensitivity is derived by combining consideration of their value and susceptibility. The assessment of sensitivity contained within these tables does not, at this stage, take account of the changed baseline implied by the extant consent.

Table 7.3: Sensitivity of the potentially affected landscape, seascape and visual receptors.

Receptor	Sensitivity	Reasoning
Landscape character areas		
LCT 281 Beaches, Dunes and Links – Moray & Nairn	High	High Value • Western extents of LCT 281 are located within the Sutors of Cromarty, Rosemarkie and Fort George LLA boundary; • Particularly distinctive, unusual, prominent, or valuable landscape components include, Fort George promontory, Whiteness Head spit, and Culbin Sands spits and bars; • Extensive areas recognised as ecologically important through several national and international ecological designations; • Time depth is indicated by the presence of Fort George and Nairn Conservation Areas; • Likely to be generally perceived by most people as unusually scenic and tranquil; and • Important recreation resources include Nairn beach and Culbin Nature Reserve, and the Core path network within proximity of settled areas. High Susceptibility • Distinctive characteristics which would be vulnerable to the types of changes proposed; • The type of development proposed is largely absent from the baseline conditions; • A simple, distinct, and uniform landscape; • Visually open landscape with low levels of tree cover, with the exception of Culbin Forest; • Generally free of built development. Where there is built development, it is not visually prominent; and • Absence of non-domestic large scale or tall buildings and built structures.
LCT 284 Coastal Farmlands – Moray & Nairn	Medium	Medium Value • Majority of LCT 284 is outside the Sutors of Cromarty, Rosemarkie and Fort George LLA designation boundary. Fort George, Kirton, Carse of Ardersier and Carse of Delnies are located within the LLA boundary; • No Particularly distinctive, unusual, prominent or valuable landscape components; • National-level ecological designations limited; • Time depth is indicated by Fort George and Ardersier and Cawdor Conservation Areas; • May be perceived by some people to display a moderate degree of scenic value with potentially greater degrees of scenic value experienced within proximity

Receptor	Sensitivity	Reasoning
		of the coast, away from areas subject to modification through intensive farming practices; and - Recreational resources include National Cycle Network Route 1, Core Paths and local attractions such as Distilleries. Medium Susceptibility - Presence of characteristics with some vulnerability to the type of changes proposed; - The type of development proposed, or similar land uses, are largely absent from the baseline conditions and make only a limited contribution to existing character; - Moderate levels of complexity and variety of features and land uses; - Moderate levels of visual openness; - Moderate contribution by existing built development; and - Occasional presence of non-domestic large scale buildings or built structures includes Inverness Airport, Dalcross Industrial Estate and a factory and anaerobic power station at Morayhill.
LCT 228 Rolling Farmland and Woodland	Medium	Medium Value - No areas subject to LLA designation; - No Particularly distinctive, unusual, prominent or valuable landscape components; - National-level ecological designations limited; - Time depth is indicated by the presence of Culloden Battlefield visitor centre (east of Inverness), Dalcross Castle Garden and Designed Landscape, and Culloden Muir Conservation Area; - May be perceived by some people to display a moderate degree of scenic value with potentially greater degrees of scenic value where open areas on upper slopes afford open views towards the firths; and - Opportunities for recreation include t National Cycle Network Route 1 near Culloden, the Core Path network and woodland trails such as those in Culloden Wood. Medium Susceptibility - Presence of characteristics with some vulnerability to the type of changes proposed; - The type of development proposed is absent from the baseline conditions; - Moderate levels of complexity and variety of features and land uses; - Moderate levels of visual openness, reduced in well-wooded areas; - Moderate contribution by existing built development; and - Occasional presence of non-domestic large scale buildings or built structures includes electricity transmission pylons and lines and a radio tower.
LCT 343 Coastal Shelf	High	High Value - Most of LCT 343 at Rosemarkie falls within the Sutors of Cromarty, Rosemarkie and Fort George LLA designation boundary; - The coastal shelf promontory is a distinctive, unusual, prominent feature in adjacent firth; - National-level ecological designations do not extend over LCT 343 at Rosemarkie;

Receptor	Sensitivity	Reasoning
		- Time depth of LCT at Rosemarkie is indicated by Chanonry lighthouse which is recognised for its heritage value, and Fortrose Conservation Area designation; - Likely to be generally perceived by most people as unusually scenic and tranquil; and - Opportunities for recreation include Fortrose and Rosemarkie Golf Course and dolphin spotting at Chanonry point. Core Paths follow the coastline around the promontory. High Susceptibility - Presence of distinctive characteristics which would be vulnerable to the types of changes proposed; - The type of development proposed is absent from the baseline conditions; - Simple, distinct, and uniform landscape; - Visually open landscape with an absence of a strong landscape framework and low levels of tree cover; - Generally free of built development and where there is built development, it is not visually prominent (with the exception of Chanonry lighthouse); and - Absence of non-domestic large scale or tall buildings and built structures.
LCT 345 Farmed and Forested Slopes – Ross & Cromarty	Medium	Medium Value - Eastern fringes only of LCT 345 on the Black Isle skirt the Sutors of Cromarty, Rosemarkie and Fort George LLA designation boundary; - No Particularly distinctive, unusual, prominent or valuable landscape components; - National-level ecological designations limited; - Time depth is indicated by Rosehaugh and Fairy Glen Gardens and Designed Landscapes and Avoch, Fortrose and Rosemarkie Conservation Areas; - May be perceived by some people to display a moderate degree of scenic value with potentially greater degrees of scenic value where open areas on upper slopes afford open views towards the firths; and - Opportunities for recreation include National Cycle Network Route 1, Learnie Red Rocks mountain biking trails, woodland walking trails, and Core Paths. Medium Susceptibility - Presence of characteristics with some vulnerability to the type of changes proposed; - The type of development proposed is visible at Invergordon and Nigg from open north facing views, but the type of development proposed is absent from open south facing views; - Moderate levels of complexity and variety of features and land uses; - Moderate levels of visual openness; - Moderate contribution by existing built development; and - Occasional presence of non-domestic large scale buildings or built structures includes transmission masts dotted along the central elevated ridge of the Black Isle.
LCT 346 Open Farmed Slopes	Medium	Medium Value - The eastern edges, within the vicinity of the Sutors of Cromarty, fall within the Sutors of Cromarty, Rosemarkie and Fort George LLA designation boundary; - The Sutors of Cromarty are prominent, valued landscape components; - National-level ecological designations limited;

Receptor	Sensitivity	Reasoning
		- Time depth is indicated by the presence of Cromarty House Garden and Designed Landscape and Cromarty Conservation Aea; - Likely to be generally perceived by most people as unusually scenic and tranquil within the vicinity of the Sutors of Cromarty. West of this, the landscape may be perceived by some people to display a moderate degree of scenic value or relative tranquillity; and - Opportunities for recreation include National Cycle Network Route 1 and Core Paths. Medium Susceptibility - Presence of characteristics with some vulnerability to the type of changes proposed; - The type of development proposed is visible at Invergordon and Nigg from open north facing views; - Moderate levels of complexity and variety of features and land uses; - Moderate levels of visual openness; - Moderate contribution by existing built development; and - Occasional presence of non-domestic large scale buildings or built structures includes visibility of the buildings associated with the ports across the firth.
LCT 348 Cliffs and Rocky Coasts – Ross & Cromarty	High	High Value - LCT 348 coastline between Rosemarkie and South Sutor and Norh Sutor and Shandwick falls within the Sutors of Cromarty, Rosemarkie and Fort George LLA boundary; - The Sutors of Cromarty are prominent, valued landscape components and the cliffs include interesting coastal features such as natural arches and waterfalls; - The Rosemarkie to Shandwick Coast Site of Special Scientific Interest designation recognises the cliff geology and biology as nationally important. - Time depth is indicated by the remains of WWI and WWII coastal defences. - Likely to be generally perceived by most people as unusually scenic and tranquil; and - Opportunities for recreation include South Sutor View Point which provides panoramic views out over the Moray Firth and Cromarty Firth and Core Paths which include sections along the coastline. High Susceptibility - Presence of distinctive characteristics which would be vulnerable to the types of changes proposed; - The type of development proposed is largely absent from the baseline conditions, the exception being views of similar development at Invergordon and Nigg; - Simple, distinct, and uniform landscape; - Visually open landscape with an absence of a strong landscape framework and low levels of tree cover; - Generally free of built development, the exception being views of Invergordon and Nigg; and - General absence of non-domestic large scale or tall buildings and built structures, the exception being views of Invergordon and Nigg.
Seascape character areas		

Receptor	Sensitivity	Reasoning
Area 6 Moray Firth Type 4 Outer Firth	High	High Value - The western extents of Type 4 fall within the Sutors of Cromarty, Rosemarkie and Fort George LLA boundary within the vicinity of the Sutors of Cromarty and Whiteness Head spit. - The coastline is notably distinct and unusual. The Sutors of Cromarty are prominent, valued landscape components and the cliffs include interesting coastal features such as natural arches and waterfalls. Whiteness Head spit and Culbin Sand bars are also notable coastline features; - Extensive areas recognised as ecologically important through several national and international ecological designations; - Time depth is indicated by the presence of Nairn Conservation Area and remains of WWI and WWII coastal defences. - Likely to be generally perceived by most people as unusually scenic and tranquil; and - Opportunities for recreation include South Sutor View Point, Rosemarkie beachfront, Nairn beach, Secret Beach, Culbin Nature Reserve, and the Core Path network. High Susceptibility - Presence of distinctive characteristics which would be vulnerable to the types of changes proposed; - The type of development proposed is largely absent from the baseline conditions, the exception being views of similar development at Invergordon and Nigg west of the Sutors of Cromarty; - Simple, distinct, and uniform landscape; - Visually open landscape with an absence of a strong landscape framework and low levels of tree cover, with the exception of Culbin Forest; - Generally free of built development, the exception being where there are views of Invergordon and Nigg west of the Sutors of Cromarty; and - General absence of non-domestic large scale or tall buildings and built structures, the exception being where there are views of Invergordon and Nigg west of the Sutors of Cromarty.
Area 6 Mory Firth Type 11 Less Developed Inner Firths	High	High Value - The eastern extents of Type 11 fall within the Sutors of Cromarty, Rosemarkie and Fort George LLA boundary within the vicinity of the, Rosemarkie, Chanonry Point and Fort George area of the designation; - The coastline is notably distinct and unusual. The Chanonry Point and Fort George promontories are notably distinct, unusual and valued coastal components; - Extensive areas recognised as ecologically important through several national and international ecological designations; - Time depth is indicated by the presence of Conservation Areas which include Rosemarkie, Fortrose and Avoch, Fort George, and remains of WWI and WWII coastal defences; - Likely to be generally perceived by most people as unusually scenic and tranquil; and - Opportunities for recreation include dolphin spotting at Chanonry Point, Fort George visitor centre, and the Core Path network. Medium Susceptibility

Receptor	Sensitivity	Reasoning
		• Presence of distinctive characteristics which would be vulnerable to the types of changes proposed; • The type of development proposed is absent from the baseline conditions; • Moderate levels of complexity and variety of features and land uses; • Moderate levels of visual openness, with greater levels of visual openness experienced from promontory locations; • Moderate contribution by existing built development, particularly within proximity of Inverness; and • Occasional presence of non-domestic large scale buildings or built structures includes visibility of Inverness Airport and Dalcross Industrial Estate.
Landscape designations		
Sutors of Cromarty, Rosemarkie and Fort George Local Landscape Area	High	High Value • The Sutors of Cromarty, Rosemarkie and Fort George Special Landscape Area is a local designation recognised nationally under the umbrella term of Local Landscape Area; • Notably distinct, unusual and valued coastal components include the spits at Chanonry Point, Fort George, and Whiteness, and the headlands of the Cromarty Sutors; • Extensive areas recognised as ecologically important through several national and international ecological designations • Time depth is indicated by the presence of Rosemarkie and Cromarty Areas, Chanonry Point Lighthouse, Fort George, and remains of WWI and WWII coastal defences; • It is likely to be generally perceived by most people as unusually scenic and tranquil. • Opportunities for recreation include dolphin spotting at Chanonry Point, Fortrose and Rosemarkie Golf Course, Fort George visitor centre, South Sutor View Point, Rosemarkie beachfront, Secret Beach and the Core Path network High Susceptibility • Presence of distinctive characteristics which would be vulnerable to the types of changes proposed; • The type of development proposed is largely absent from the baseline conditions, the exception being views of similar development at Invergordon and Nigg, west of the Sutors of Cromarty; • Simple, distinct, and uniform landscape; • Visually open landscape with an absence of a strong landscape framework and low levels of tree cover, with the exception of Carse Wood; • Generally free of built development and where there is built development, it is not visually prominent (with the exception of Chanonry lighthouse); and • Absence of non-domestic large scale or tall buildings and built structures.
Representative viewpoints		
1 Easter / Wester Bog	High	Residents take an interest in the view around them and have prolonged viewing opportunities.
2 Ardersier Cemetery	High	Cemetery visitors take an interest in the views around the cemetery

Receptor	Sensitivity	Reasoning
3 B9039 Old Military Road west of Ardersier	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views along this coastal road when travelling through the area.
4 Fort George – north east bastion	High	Fort George visitors take an interest in the views around the fort.
5 Chanonry Point	High	Chanonry point visitors take an interest in the view across the firth
6 Rosemarkie beachfront	High	Rosemarkie beachfront visitors take an interest in the view across the firth
7 Headland north of Rosemarkie	High	Residents take an interest in the view south across the firth
8 Learnie Red Rocks	High	Cyclists following Sustrans National Cycle Route 1 take an interest in the views from the cycle route
9 Hilton of Delnies / The Secret Beach	High	Hilton of Delnies / The Secret Beach visitors take an interest in the views across the firth and inland landscape.
10 Nairn Beach	High	Nairn beach visitors take an interest in the views across the firth and along the shoreline.
11 A96 at Delnies	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views from the A96 when travelling through the area
12 Rail crossing near Flemington	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views from Old Military Road when travelling through the area.
13 B9090 Near Royal Brackla Distillery	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views from B9090 when travelling through the area.
14 A96 layby near Culblair	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views from A96 when travelling through the area.
15 Culloden battlefield	High	Culloden Battlefield and Visitor Centre visitors take an interest in the view from the centre
16 Avoch	High	Residents are interested in the view across the water and have prolonged viewing opportunities.
17 Sutors of Cromarty (South Sutor)	High	Sutors Of Cromarty (South Sutor) visitors take an interest in the view from the South Sutor.
18 Findhorn	High	Users of the Moray Coast Trail take an interest in the view along the trail.
19 Burghead visitor centre	High	Burghead Visitor Centre visitors take an interest in the view across the Moray Firth
20 A9 south of Inverness	Medium	The focus of vehicular drivers is on the road, but passengers take an interest in the views from A9 when travelling through the area.
21 Kessock Bridge Cycleway	High	Cyclists take an interest in the views from the cycle route

Receptor	Sensitivity	Reasoning
22 Aultvaich	High	Residents take an interest in the view around them and have prolonged viewing opportunities.
23 Pitmaduthy	High	Residents take an interest in the view around them and have prolonged viewing opportunities.
24 Balintore	High	Balintore seafront visitors take an interest in the view across the Moray Firth

7.5.2 Construction

Key construction stage impacts of the proposed development on landscape, seascape and visual receptors would include:

- The removal of woodland; and
- The effect on character and views of construction activity associated with the permanent port infrastructure.

7.5.3 Operation

Key operational stage impacts of the proposed development on landscape, seascape and visual receptors would include:

- The effect on character and views of the proposed permanent port infrastructure over a wider area including the extended quayside and permanent buildings; and
- The effect on character and views of the activities likely to take place across the extended port including the presence of stored components; partly and fully assembled floating off-shore wind turbines; and associated cranes and craft.

The transient presence of fully assembled floating off-shore wind turbines prior to tow-out would principally be associated with summer months.

7.6 MITIGATION AND ENHANCEMENT

7.6.1 Embedded mitigation

The design of the proposed development has been an iterative process. The environment team has worked in close collaboration with the infrastructure design team to avoid or reduce environmental impacts through the proposed development design. This is referred to as embedded mitigation (or design interventions). The principles of the design and mitigation hierarchy outlined in EIAR Chapter 2 (Methodology) have been followed. The first principle being to avoid potential adverse effects, if at all practicable, before seeking to minimise or mitigate for any unavoidable impacts. Embedded mitigation for the proposed development is reported in EIAR Chapter 3 (Project Description) which also includes a description of the design alternatives that have been considered, including the environmental factors which have influenced the decision-making. Mitigation measures will seek to reduce impacts during both construction and operation phases. Any effects which cannot be mitigated or reduced are referred to as residual effects.

Embedded landscape and visual mitigation has included the retention of a buffer of existing woodland cover around the south western edges of the proposed extension. This will provide visual containment of the site at ground level in local views from adjacent areas.

7.6.2 Mitigation

Mitigation is included in the Outline Construction Environmental Management Document (CEMD). The Outline CEMD will be developed into the Construction Environmental Management Plan (CEMP) for implementation during construction. Further information on the Outline CEMD is provided within EIAR Chapter 3 (Project Description). EIAR Chapter 15 (Schedule of Mitigation and Enhancements) provides a summary of the mitigations identified within this EIAR.

A suitably qualified Environmental Clerk of Works (EnvCoW) will monitor as appropriate the construction works to ensure that the CEMP and associated mitigation measures are being implemented effectively.

7.6.3 Construction Mitigation Measures

This section summarises the mitigation required during the construction of the proposed development. Unless stated all mitigation is considered to be embedded as it follows best practice measures and/or is required to achieve compliance with legislation. Mitigation measures of relevance during construction are included within the Outline CEMD and EIAR Chapter 15 (Schedule of Mitigation and Enhancements).

Construction will be carried out using industry best practice and in accordance with implementation of the requirements identified in the Outline CEMD. Construction information is presented in EIAR Chapter 3 (Project Description).

7.6.4 Operation Mitigation Measures

Due to the nature of the proposed development and the large-scale activities likely to take place over the extended port, no operational phase landscape, seascape or visual mitigation measures are proposed.

7.6.5 Enhancements

No landscape, seascape or visual enhancement measures are proposed.

7.6.6 Monitoring

No landscape, seascape or visual monitoring is proposed.

7.7 ASSESSMENT OF SIGNIFICANT EFFECTS

This section assesses the level and significance of the residual effects of the proposed development on landscape, seascape and visual receptors during both construction and operation. The residual effects are presented below.

The assessment does not at this stage take account of the changed baseline implied by the extant consent. Furthermore, at this stage, the operational stage assessment focuses on the 'worst case' landscape, seascape and visual conditions more likely to be associated with the transient port related activities likely to be prevalent over summer months.

7.7.1 Construction

EIAR Chapter 3 (Project Description) provides information about the activities to be undertaken during the construction phase of the proposed development. Construction activities with the potential to give rise

to landscape, seascape and visual effects comprise the removal of woodland; and the effect on character and views of construction activity associated with the permanent port infrastructure, particularly buildings.

Construction activities would take place within the existing baseline context of the on-going construction activities associated with the extant consent. The proposed development construction activities would be comparable to the existing construction activities in terms of scale and type, but the proposed site clearance would result in a localised extension to the extent of the construction activities taking place within the local area. Within this additional extent, the landscape alterations due to construction would constitute tree loss and based on the indicative proposals, the construction of buildings, storage areas and assembly areas.

Based on the above, the magnitude of change experienced by each of landscape, seascape or visual receptors identified for assessment would be either “low” or “no change” and the level of effect would be no greater than minor and therefore not significant. In conclusion, none of the landscape, seascape or visual receptors identified for assessment are likely to experience significant effects during construction.

7.7.2 Operation

EIAR Chapter 3 (Project Description) provides information about the proposed development. The operational stage assessment focuses on the ‘worst case’ landscape, seascape and visual conditions most likely to be associated with the transient port related activities which are likely to be prevalent over summer months. Key operational stage impacts of the proposed development on landscape, seascape and visual receptors would include the effect on character and views of the proposed permanent port infrastructure over a wider area including the extended quayside and permanent buildings; and the effect on character and views of the activities likely to take place across the extended port including the presence of stored components; partly and fully assembled floating off-shore wind turbines (before being towed out to sea); and associated cranes and craft. As an indication of potential approximate heights, the taller of the proposed elements comprise (based on indicative layout plan in EIAR Chapter 3 (Project Description)):

- Buildings
- Jackets at 110m
- Crane up to 250m (in tallest configuration)
- Fully assembled offshore wind turbine.

Landscape and Seascape Effects

Table 7.4: Summary of assessment of significance of landscape and seascape effects during operation

Receptor	Sensitivity	Potential impact during operation	Magnitude	Residual effect
LCT 281 Beaches, Dunes and Links – Moray & Nairn	High	There would be a direct alteration to areas of LCT 281 within the site boundary. The extent of landscape features lost or altered would be limited but the height of the proposed buildings, stored components and under-assembly turbines would be at substantial variance to the scale of the existing LCT 281 landscape. Local to the site, the proposed development would become a defining feature of LCT 281. East along the coast, at greater distances, the proposed development would be visible and continue	High	Major adverse (Significant)

Receptor	Sensitivity	Potential impact during operation	Magnitude	Residual effect
		the influence perceptions of landscape character, but to a lesser degree.		
LCT 284 Coastal Farmlands – Moray & Nairn	Medium	There would be a direct alteration to areas of LCT 284 within the site boundary, with the removal of existing trees and introduction of buildings and storage and assembly areas. The extent of alteration would be limited but the height of the proposed buildings, stored turbine components and under-assembly turbines would be at substantial variance to the scale of the LCT 284 landscape. The proposed development would be a contributing feature in the landscape and would alter perceptions of landscape character. The degree of influence on perceptions of landscape character would be reduced at greater distances to a point where it would become a generally unnoticed secondary feature.	Medium	Moderate adverse (Significant)
LCT 228 Rolling Farmland and Woodland	Medium	LCT 228 is located outside the site boundary, and the proposed development would not have direct impacts on LCT 228. LCT 228 is relatively well-wooded, and this would reduce the extent over which the proposed development would be visible and influence perceptions of landscape character. Where visible, the proposed development would not affect understanding of the key defining characteristics of LCT 228.	Low	Minor adverse (Not significant)
LCT 343 Coastal Shelf	High	LCT 343 is located outside the site boundary, and the proposed development would not have direct impacts on LCT 343. LCT 343 is relatively flat and featureless and open views across the firth of the opposite shoreline are a key characteristic. There would be open direct views of the proposed development from LCT 343. The proposed development would constitute a substantial alteration to the setting of LCT 343 and would become a defining feature of the setting, forming a focal point on the horizon as viewed from LCT 343.	High	Major adverse (Significant)
LCT 345 Farmed and Forested Slopes – Ross & Cromarty	Medium	LCT 345 is located outside the site boundary, and the proposed development would not have direct impacts on LCT 345. The proposed development would be visible from open south-facing slopes of LCT 345. The proposed development would be a notable alteration to the setting, at odds with existing landscape features, and in proximity of the coast would become a focal point in views from LCT 345. Away from the coastline,	Medium	Moderate adverse (Significant)

Receptor	Sensitivity	Potential impact during operation	Magnitude	Residual effect
		levels of woodland cover increase and with this, levels of localised screening increase. The degree of influence on perceptions of landscape character would be reduced at greater distances to a point where the proposed development would become a generally unnoticed secondary feature.		
LCT 346 Open Farmed Slopes	Medium	LCT 346 is located outside the site boundary, and the proposed development would not have direct impacts on LCT 346. The proposed development would be visible from the open eastern extents of LCT 346 and screened from view elsewhere in LCT 346 by vegetation and topography. Where visible, the proposed development would be a notable alteration to the southern setting of LCT 346, at odds with existing landscape features in the southern setting of LCT 346. The proposed development would be consistent in character with similar developments in the setting north of LCT 346, such as Invergordon and Nigg, albeit larger in scale.	Low	Minor adverse (Not significant)
LCT 348 Cliffs and Rocky Coasts – Ross & Cromarty	High	LCT 348 is located outside the site boundary, and the proposed development would not have direct impacts on LCT 348. LCT 348 comprises steep, south and southeast facing cliffs and open views across the firth are a key characteristic of LCT 348. There would be open direct views of the proposed development from LCT 348. Within proximity of the site, on the Black Isle the proposed development would constitute a notable alteration to the setting of LCT 348, forming a focal point on opposite shoreline. North of the Sutors of Cromarty, the alteration would continue to be notable but the degree of influence on perceptions of landscape character would be reduced.	Medium	Moderate adverse (Significant)
Area 6 Moray Firth Type 4 Outer Firth	High	There would be a direct alteration to the stretch of Type 4 within the site boundary. The extent of Type 4 coastline altered would be limited but the height of the proposed buildings, stored components and under-assembly turbines would be at substantial variance to the scale of the existing Type 4 coastline features within this area of seascape. Local to the site, the proposed development would become a defining feature of the Type 4 seascape character. At greater distances, the proposed development would be visible and continue	High	Major adverse (Significant)

Receptor	Sensitivity	Potential impact during operation	Magnitude	Residual effect
		to influence perceptions of seascape character, but to a lesser degree.		
Area 6 Mory Firth Type 11 Less Developed Inner Firths	High	Type 11 is located outside the site boundary, and the proposed development would not have direct impacts on Type 11. The site would be clearly visible from Type 11 as far west as Kessock Bridge. The proposed development would constitute a notable alteration to the setting of Type 11 and would form a focal point on the Moray Firth shoreline. At greater distances, the proposed development would be visible and continue to influence perceptions of seascape character, but to a lesser degree.	Medium	Moderate adverse (Significant)
Sutors of Cromarty, Rosemarkie and Fort George Local Landscape Area (Special Landscape Area)	High	There would be a direct alteration to the area of the LLA designation within the site boundary, with the removal of existing trees and introduction of buildings and storage and assembly areas. The extent of alteration would be limited but the height of the proposed buildings, stored turbine components and under-assembly turbines would be at substantial variance to the scale of the LLA landscape and seascape. The proposed development would be a defining feature of the LLA and would alter perceptions of the landscape and seascape within the designation.	High	Major adverse (Significant)

Visual effects

The visual effects of the proposed development at each of the representative viewpoints are set out in detail in EIAR Appendix 7.4. The detailed assessments of representative viewpoints contained in EIAR Appendix 7.4 are supported by visualisations. These are provided in EIAR Appendix 7.5 as Figures 7.5.1a to 7.5.24e. Table 7.5 summarises the assessment of significance of effect of the proposed development upon and each representative viewpoint during operation. This is used to support a more generalised discussion around significance of effects for different types of visual receptors (after the table).

Table 7.5: Summary of assessment of significance of visual effect during operation

Representative Viewpoint	Sensitivity	Potential impact during operation	Residual effect
1 Easter / Wester Bog	High	High	Major adverse (Significant)
2 Ardersier Cemetery	High	High	Major adverse (Significant)
3 B9039 Old Military Road west of Ardersier	Medium	Medium	Moderate adverse (Significant)

Representative Viewpoint	Sensitivity	Potential impact during operation	Residual effect
4 Fort George – north east bastion	High	High	Major adverse (Significant)
5 Chanonry Point	High	High	Major adverse (Significant)
6 Rosemarkie beachfront	High	High	Major adverse (Significant)
7 Headland north of Rosemarkie	High	High	Major adverse (Significant)
8 Learnie Red Rocks	High	High	Major adverse (Significant)
9 Hilton of Delnies / The Secret Beach	High	High	Major adverse (Significant)
10 Nairn Beach	High	High	Major adverse (Significant)
11 A96 at Delnies	Medium	Low	Minor adverse (Not significant)
12 Rail crossing near Flemington	Medium	Medium	Moderate adverse (Significant)
13 B9090 Near Royal Brackla Distillery	Medium	Low	Minor adverse (Not significant)
14 A96 layby near Culblair	Medium	Medium	Moderate adverse (Significant)
15 Culloden battlefield	High	No change	Negligible (Not significant)
16 Avoch	High	Medium	Moderate adverse (Significant)
17 Sutors of Cromarty (South Sutor)	High	Medium	Moderate adverse (Significant)
18 Findhorn	High	No change	Negligible (Not significant)
19 Burghead visitor centre	High	Negligible	Negligible (Not significant)
20 A9 south of Inverness	Medium	No change	Negligible (Not significant)

Representative Viewpoint	Sensitivity	Potential impact during operation	Residual effect
21 Kessock Bridge Cycleway	High	Medium	Moderate adverse (Significant)
22 Aultvaich	High	Negligible	Negligible (Not significant)
23 Pitmaduthy	High	No change	Negligible (Not significant)
24 Balintore	High	Medium	Moderate adverse (Significant)

Residential visual receptors

Whilst the plantation woodlands between the scattered residential locations to the south of the site and the proposed development would provide a degree of screening, it is likely some residential locations close to the site would experience Major adverse (Significant) effects due to the height of the proposed development and the degree to which the under-assembly turbines and stored jackets would be prominent features occupying a large extent of the skyline above the plantation woodlands. Further south, it is likely effects would become Moderate adverse (Significant), as the proposed development becomes part of a wider landscape setting and remaining Significant until such a point layers of intervening vegetation and the effects of distance reduced the magnitude of change to Low and Not significant.

Major adverse (Significant) effects would be experienced by residents in coastal settlements such as those at Rosemarkie, on the Black Isle, with open views south and east over the Moray Firth and those at Nairn with open views west towards Ardersier Port. The level of effect would reduce with distance, but it is likely the visual effects experienced by residents within coastal settlements would remain Moderate adverse (Significant) until such a point where the proposed development would no longer be a notable feature on the horizon across the firth e.g. north of Balintore and east of Findhorn.

Whilst the ZTV indicated potential visibility inland, west of the Moray and Beaulie firths and north of Cromarty Firth, significant effects are unlikely due to the distances between the settlements and the effects of intervening vegetation. Where the proposed development would be visible, it would be a largely unnoticed and barely perceptible feature in the general view from these locations.

Visitor locations and recreational routes visual receptors

Significant effects would be experienced by visual receptors within proximity of the site and at coastal locations with open views across the Moray Firth towards Ardersier Port. Major adverse effects would be experienced at locations such as the Secret Beach, east of the site, and Chanonry Point, west of the site due to the large scale industrial nature of the proposed development which would be inconsistent with the baseline. Ardersier Port is visible in the baseline, but the proposed development would introduce features with greater prominence and presence than those present within the baseline conditions.

Moderate adverse (Significant) effects would be likely where the proposed development would reduce in visual prominence to a notable feature as viewed from visitor locations and recreational routes. This would likely occur where the proposed development would appear to be set into a back drop of hills and no longer constitutes a prominent focal point in the view.

The ZTV indicated visibility for recreational receptors at greater distances but due to the screening effects of vegetation and topography it is likely the visual impact would be low and therefore not significant. The ZTV also indicated potential visibility at inland visitor locations, but vegetation would likely screen visibility of reduce visibility to a point where effects would be not significant.

Roads and rail visual receptors

Moderate adverse (Significant) effects would be experienced by users of routes through scenic areas within proximity of the site, with views towards the site and visibility of the proposed development. The large scale, vertical nature of the proposed development means it is likely there would be clear visibility of the proposed development above intervening vegetation. At greater distances, where the proposed development would be visible from the road and rail network, it would be more visually proportionate to local landscape features and much less visually prominent and vegetation local to the visual receptors would be more effective at screening the proposed development from view.

7.8 STATEMENT OF SIGNIFICANCE

7.8.1 Summary of significant effects

The preceding assessments identify significant landscape, seascape and visual effects as judged:

- Against the Summer 2025 landscape, seascape and visual baseline in the absence of the landscape, seascape and visual implications of the extant consent; and
- With a focus on the 'worst case' conditions likely to be associated with full scale operations of the extended port in the most active summer months.

7.8.2 The extant consent

The significance of the landscape, seascape and visual effects specifically associated with the proposed extension of the port over and above those effects already implied by the extant consent would be less.

The extant consent allows for large scale activities of a similar nature across much of the site. In the absence of any cap on height, and although not reasonably foreseeable when the earlier application was consented, the extant consent can be interpreted as already permitting the assembly of tall floating off-shore wind turbines, subject to a requirement to consult with Highlands and Islands Airports Ltd. As the extant planning permission stands, there is no planning restriction on any height or any activity that is directly related to the application description. Whilst this new application includes the extension land, it is anticipated that assembly (or any significant components of the proposed use involving significant structures, components or cranes at height) would only take place either at the quayside or the adjacent land within the extant port boundary and where there are no planning restrictions on heights or use of equipment, other than that imposed by Highlands and Islands Airports Ltd.

The development and port activities permitted under the extant consent mean that the additional landscape, seascape and visual effects of extending the site would **not be significant**.

7.8.3 The transient and seasonal nature of port activities

The significance of the landscape, seascape and visual effects specifically associated with the proposed extension of the port over and above those effects already implied by the extant consent would be less during periods of low port activity, especially during winter months. Part and fully assembled turbines would not likely be present during winter months.

Turbine assembly to the maximum heights is only expected to be taking place for six to eight months each year. It is possible that bases may have tower sections erected in February which may be as high as 168m, but full turbine assembly is not expected to commence until March/April. During the 'winter' months of October to February/March, turbine components are expected to be on site, bases and fabrication thereof, individual tower sections, nacelles blade etc.

The 'conveyor belt' transient nature of the proposals and that elements would only be assembled for the absolute minimal amount of time before being moved out to sea is an important consideration in assessing any impact.

A maximum of three turbines will be at quayside, and these will be in various stages of the integration process. At any one time, it is anticipated that two turbines could be fully integrated (i.e. with blades fitted); the other being partially assembled ahead of blades being fitted in a 'conveyor belt' type chain.

The fully integrated turbines would be placed into the harbour, or integrated at quayside, after which they would be towed from the facility to the deployment site: current maximum deployment assumption is one turbine towed every 10 days.

Cold testing may take place at quayside; blades are expected to rotate at a speed of no more than 1 rpm. No 'hot' testing will take place where blades rotate much faster. It is envisaged that the turbine and the blades will be fixed in position for the tow-out process through the harbour channel (not rotating). The transient and seasonal nature of the reasonably foreseeable activities likely to be associated with the use of the extended port further supports the overall conclusion that the additional landscape, seascape and visual effects of extending the site would **not be significant**.

7.9 CUMULATIVE EFFECTS

7.9.1 Introduction and approach

This section of the EIAR considers the potential for the proposed development to give rise to cumulative landscape, seascape and visual effects in conjunction with other proposed developments in the vicinity.

Consideration of the potential for significant cumulative landscape, seascape and visual effects begins from the following starting point:

- The reasonably foreseeable port activities likely to be associated with the proposed development have been assessed as likely to give rise to significant (non-cumulative) landscape, seascape and visual effects when judged against the Summer 2025 baseline, but
- The source of the significant landscape, seascape and visual effects is principally the storage of off-shore wind turbine jackets and the assembly of off-shore floating wind turbines which would have only a transient presence on the site; and

The effects are unlikely to be regarded as significant once the permitted activities associated with the extant consent are taken into account.

The purpose of this cumulative assessment is therefore principally to consider two things:

- Whether the transient presence of off-shore wind farm components and turbine assembly could give rise to additional significant cumulative effects with other surrounding developments, possibly over a considerable distance (noting that non-cumulative effects have already been identified as significant); and
- Whether the permanent port infrastructure (including likely buildings) could give rise to significant cumulative effects with other surrounding development, more likely at shorter distances.

Proportionate cumulative assessment (including sequential assessment) requires careful identification of those other developments that have the potential to give rise to potentially significant cumulative effects. These can fall into two broad categories:

- Developments of a similar type over a potentially wide area (for example port or energy related developments across a wide study area); or

- Accumulations of multiple developments of different types within a particular focused location.

This cumulative assessment of the proposed development considers both categories. Because reasonably foreseeable activities likely to be associated with the proposed development include the assembly of wind turbines of a considerable height the assessment considers whether there could be cumulative interaction with wind energy or port related development over a wider area. At the same time, however, it also considers whether different types of development (such as residential) at a more local level might be the source of cumulative effects.

7.9.2 Study area

Consideration of the potential for different aspects of the proposed development to give rise to potentially significant cumulative effects with surrounding development over different distances has led to a tiered approach to the determination of a study area and the sifting of developments considered relevant for inclusion in the cumulative assessment.

The wider context

It is reasonably foreseeable that the proposed development could allow for the assembly on site of off-shore wind turbines. But this 'worst case' circumstance associated with port-related activities would be transient with fully assembled turbines being towed out to sea within days of their complete assembly. Nevertheless, the theoretical potential for cumulative interaction between this transient presence of assembled turbines and both on- and off-shore wind energy developments in the surrounding area is acknowledged.

THC maintains information relating to wind energy development which maps existing and proposed wind energy development at all scales¹⁴. This mapping shows that large scale wind energy development is wholly associated with mountainous areas to the north, west and south of the site at distances in excess of 15 km.

Given the transient nature of the reasonably foreseeable port related activities associated with the proposed development it is judged that there is no potential for significant cumulative effects with wind energy developments (either on- or off-shore) in excess of 15 km from the site. This conclusion is further supported by the ZTV of the proposed development which shows the limited potential for visibility of the proposed development from these surrounding mountainous areas closer to on shore wind developments.

A detailed cumulative assessment including cumulative ZTVs and visualisations of the proposed development and consented wind energy development at distances in excess of 15 km has therefore been judged not to be necessary. Any cumulative effects with proposed on- and off-shore wind energy developments would not be significant.

Cumulative development within a 15 km radius study area

Figure 14.1 in EIAR Chapter 14 (Cumulative Effects) identifies proposed developments within 15 km of the proposed development. Consideration of a 15 km radius study area:

- Reflects the focus of the non-cumulative landscape, seascape and visual assessment including where significant effects have been identified against the Summer 2025 baseline; and
- Specifically includes the similar proposed port development at Invergordon which lies just below 15 km from the site.

Proposed developments across this 15 km radius study area include residential, infrastructure, port and other development and range in scale from the Invergordon Service Base Phase 5 Development that

¹⁴ Highland Council (2024.) Highland Special Landscape Areas Online Map Viewer, <https://highland.maps.arcgis.com/apps/webappviewer/index.html?id=5ec04b13a9b049f798cadbd5055f1787> (Accessed 02/10/2025)

would be associated with off-shore wind turbine assembly of a comparable scale to the activities likely to be associated with the proposed development, to smaller scale developments of a lower potential height with less potential to cumulatively interact with the proposed development due either to their distance from it or dissimilarity to it.

EIAR Appendix 14.2 provides a detailed schedule of the proposed developments within 15 km of the proposed development. With reference to the ZTV of the proposed development, a sieving exercise has been undertaken to identify which of these developments has the potential to cumulatively interact with the proposed development in landscape, seascape and visual terms. For example, port related activities around Nigg and Cromarty (4a, 4b, 4c and 4d) may have the potential to cumulatively interact with the proposed development over longer distances due to their possible scale and similarity. Whereas residential developments are more likely to have the potential to cumulatively interact only where they are contiguous with or close to the site (for example, 1b). Small scale residential developments at greater distances have no potential to give rise to cumulative effects with the proposed development (for example, 1h in Invergordon and 1g on the edge of Inverness).

7.9.3 Relevant projects

The sieving exercise of developments within 15 km of the proposed development identified the following as requiring further consideration to determine the potential to give rise to significant cumulative landscape, seascape or visual effects:

- 1b - Land To North Of A96 Extending From Whiteness Access Road To The Common Good Land Nairn: Mixed use development of 300 houses; tourism and heritage, equestrian and ecological centres; hotel and conference facilities; championship golf course, clubhouse and golf academy; community woodland and country park with associated infrastructure (henceforth referred to as 'Mixed Use Development at Delnies') – although of relatively limited height this proposed development extends over a wide area and its boundaries are contiguous with the site of the proposed development.
- 4e - Invergordon Service Base Phase 5 Development (henceforth referred to as 'Invergordon Service Base') – although at a distance of almost 15 km, port related activities at this site are likely to be similar in nature to the proposed development and would likely include the assembly of off-shore wind turbines of a similar size to those anticipated at the proposed development.

These two developments can be considered separately as there is limited potential for three-way interaction with the proposed development due to their difference in distance and development type.

In undertaking this sieving exercise the cluster of proposed, and in some cases large scale, developments in the vicinity of Inverness Airport was noted. These include large scale residential/new town development (1a) and business park development proposals. Following careful consideration, it was judged that this cluster of proposed developments in the vicinity of the airport has very limited potential to cumulatively interact with the proposed development, including in terms of potential sequential visual effects along key routes such as the A96, because the height and type of development here markedly differs from the proposed development and higher ground to the north east of Ardersier village provides clear perceived separation of the two localities.

Similarly, a proposed energy related development close to Ardersier village (2e) is of a sufficiently small scale (an 11kV overhead line over a relatively short distance) to cumulatively interact with the proposed development to any significant degree.

7.9.4 Cumulative landscape and seascape effects

Interaction with Mixed Use Development at Delnies

This development and the proposed development would be contiguous with one another within the same landscape and seascape character context (Landscape Type 281 Beaches, Dunes and Links – Moray and Nairn and Seascape Coastal Type 4 – Outer Firth). Their contrasting typologies mean that their effects on this landscape and seascape character context would be distinctly different. There would be no significant cumulative landscape or seascape interaction or effect. The presence of the proposed mixed use development at Delnies would not significantly alter the effects of the proposed development.

Both developments would extend to areas within the Sutors of Cromarty, Rosemarkie and Fort George Local Landscape Area. For the reasons given above, there would be no cumulative effect on this designation. The effect of the proposed development on this designation would not significantly differ were this development fully implemented as currently proposed.

Interaction with Invergordon Service Base

Although similar in nature, this development and the proposed development would be located in distinctly different landscape and seascape contexts, with this development lying within the enclosed Cromarty Firth (defined in the seascape assessment as a Developed Inner Firth). Furthermore, the ZTV of the proposed development shows that potential visibility of the proposed development from the vicinity of Invergordon would be very limited in terms of location and extent but also limited to only the tops of the taller transient structures likely to be associated with the extended port activities. This is largely due to the shielding effect that the reasonably high cliffs along the northern side of the Moray Firth would afford meaning that visibility of the proposed development from north of Cromarty Firth (where the development at Invergordon might be more prominent) would be only occasional and limited to glimpses of the upper blades of part-assembled turbines at a great distance over intervening landforms. Co-visibility would be infrequent in intervening areas on the Black Isle and in different directions with each development exerting an effect on the perception of different landscapes and seascapes. There would be no significant cumulative landscape or seascape effect. The presence of the proposed Invergordon Service Base would not alter the effects of the proposed development.

The Invergordon Service Base would not extend to areas within the Sutors of Cromarty, Rosemarkie and Fort George Local Landscape Area. Although there would be some occasions of co-visibility from within the designation, for the reasons given above, there would be no significant cumulative effect on this designation. The effect of the proposed development on this designation would not significantly differ were the development at Invergordon also proceed.

7.9.5 Cumulative visual effects

Interaction with Mixed Use Development at Delnies

Visibility of both developments would likely be limited to locations such as those at representative viewpoints 9: Hilton of Delnies / The Secret Beach, 10: Nairn Beach and 11: A96 at Delnies. Visibility of both would also theoretically be possible in long distance views south across the Moray Firth from locations such as representative viewpoints 8: Learnie Red Rocks, 17: Sutors of Cromarty and 24: Balintore but the distances involved, and with the proposed development in the foreground, mean that the addition of the mixed use at Delnies would not alter the visual effects of the proposed development.

The difference in development type and scale means that there would not be significant cumulative visual effects. The visual effects of the proposed development would not significantly differ were this development fully implemented as currently proposed.

Interaction with Invergordon Service Base

The potential opportunities for visibility of both the proposed development and the proposed development at Invergordon are limited by their distance from one another (approximately 15 km), the intervening high ground along the northern coast of the Moray Firth and along the Black Isle, and the transient nature of

the turbine assembly activities anticipated at both. Potential visibility of port related activities at both would principally arise from locations such as representative viewpoints 9: Hilton of Delnies / The Secret Beach, 10: Nairn Beach, 18: Findhorn and 19: Burghead along the southern coastline of the Moray Firth. However, visibility of the proposed development at Invergordon from such locations would be extremely limited due to the intervening high ground along the northern coastline and at the Black Isle. This, combined with distance, means that only the transient presence of the upper sections and blade tips of part-assembled turbines would be glimpsed in very clear conditions over a considerable distance over the intervening landform. The additional visual effect of this combined visibility, assuming that the part-assembly of turbines coincided at the same time at both sites, would be negligible over and above the appearance of the proposed development.

The limited extent and degree of potential co-visibility means that there would not be significant cumulative visual effects. The visual effects of the proposed development would not significantly differ were this development implemented and the transient presence of part-assembled turbines temporally coincide.

7.9.6 Sequential visual effects

Sequential interaction with Mixed Use Development at Delnies

The contiguous sites of these two developments mean that there is no potential for significant additional sequential visual effects over and above the cumulative visual effects considered above. There would be no journey linking the two developments.

Sequential interaction with Invergordon Service Base

The physical separation of the sites of these two developments mean that there is no potential for significant additional sequential visual effects over and above the cumulative visual effects considered above. There would be no specific route or journey linking the two developments. This is underlined by the complex nature of the intervening coastline with the closest crossing of the Moray Firth some 15 km to the south west of the proposed development followed by the need to pass the western extremity of the Cromarty Firth. Any theoretical route or journey linking the two would be too lengthy to generate a meaningful visual association and insufficiently frequent for there to be any distinct and additional sequential visual effect on any visual receptor.

7.9.7 Conclusion

No potentially significant cumulative landscape, seascape or visual effects with the proposed development have been identified. The non-cumulative landscape, seascape and visual effects of the proposed development identified in this EIAR would not be materially altered or increased as a consequence of any other known proposed development in the vicinity.

7.10 OVERALL CONCLUSION

The assessment of landscape, seascape and visual effects has been heavily influenced by the scope of the extant permissions, associated assessments and positive determinations by The Highland Council, and extant permitted development rights as conferred through the HRO.

The focus of the current application is the proposed extension area, but also requires incorporation of the previous assessments and the conclusions derived from these.

Taking into account the development and port activities permitted under the extant consent, the additional landscape, seascape and visual effects of extending the site would **not be significant**, either individually or cumulatively with other development.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025



Chapter 8 Historic Environment

Ardersier Port Extension

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CONTENTS

8. Historic Environment	4
8.1 Introduction.....	4
8.2 Consultation.....	4
8.3 Methodology	4
8.4 Baseline Conditions.....	6
8.5 Potential Impacts.....	14
8.6 Mitigation and Enhancement.....	15
8.7 Assessment of Significant Effects	17
8.8 Statement of Significance.....	19
8.9 Cumulative Effects.....	20

FIGURES

Figure 8.1: Location of HER assets within 1km of the proposed development.....	7
Figure 8.2: Designated heritage assets subject to setting impact assessment	8

TABLES

Table 8.1: Assessment of significance of effect	5
Table 8.2: Summary of the value of designated receptors short-listed for setting impact assessment ...	12
Table 8.3: Impacts requiring consideration in assessment	14
Table 8.4: Summary of assessment of significant effects during construction	18
Table 8.5: Summary of assessment of significance of effect during operation.....	19

8. HISTORIC ENVIRONMENT

8.1 INTRODUCTION

This chapter presents information required by the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 to be provided in the Environmental Impact Assessment Report (EIAR) to enable the identification and assessment of likely significant effects on the historic environment.

The approach to this assessment follows the methodology set out in the EIA Scoping Report (SCOP-0062) and is in accordance with the Scoping Opinion (25/00226/SCOP) produced by The Highland Council. EIAR Chapter 4 (Consultation) contains further information on how each of the matters raised in the Scoping Opinion have been addressed.

The overarching legislation, policy and guidance relating to the historic environment in Scotland and relevant to this assessment of the proposed development are presented in EIAR Appendix 8.1.

The assessment has been undertaken in accordance with the methodology as set out in Section 8.3 below and in EIAR Appendix 8.2 which includes the study area, data sources used and the assumptions and limitations of the assessment. EIAR Chapter 3 (Project Description) contains a detailed description of the proposed development. This chapter is supported by the following EIAR Appendices:

- EIAR Appendix 8.1: Legislation, Policy and Guidance, Desk-Based Assessment and Assessment of Effects
- EIAR Appendix 8.2: Historic Environment Assessment Methodology

8.2 CONSULTATION

Responses in relation to the statutory consultation undertaken are presented in EIAR Chapter 4 (Consultation).

8.2.1 Historic Environment Scotland (HES)

Consultation was undertaken with HES by email on 15th May 2025, 22nd May 2025, 02nd July 2025, 22nd July 2025 and 25th July 2025 to confirm which heritage assets within their interests should be subject to setting impact assessment. The assessment is based on the agreed list, and the photomontages and wireframe visualisations (EIAR Appendix 7.5: Figure 7.4 Figure 7.4 and Figures 7.5.1 to 7.2.24) used to support the assessment are based on the agreed list.

8.2.2 The Highland Council Historic Environment Team (HET)

Consultation was undertaken with the HET by email on 22nd May 2025 to confirm the approach to the historic environment assessment. To date (4th September 2025), no response has been received.

8.3 METHODOLOGY

This section provides a summary of the assessment methodology. Further detail is provided in EIAR Appendix 8.2.

The impacts identified as requiring consideration are listed in EIAR Appendix 8.2, Table 8.2/1. Information on the nature of the impact (i.e. temporary/permanent direct/indirect physical and setting) is also described.

The assessment covers all potential impacts identified through scoping, as well as any further potential impacts that have been highlighted as the assessment progressed. It should be noted that impacts are not necessarily relevant to all stages of the proposed development.

The assessment of potential effects on the historic environment has been undertaken using a structured methodology consistent with best practice and relevant guidance and is set out in EIAR Appendix 8.2. This approach considers both the nature and extent of potential impacts, including direct physical effects and changes to the setting of heritage assets. The approach to assessment is based on ORCA's bespoke methodology that draws on best practice and guidance set out in the scoping report and in line with the *Environmental Impact Assessment Handbook* (NatureScot and Historic Environment Scotland 2018¹).

Two study areas have been used for this assessment. A 1km study area offset from the site boundary that considers heritage assets that could be directly (physically) impacted by the proposed development; and a study area based on the proposed development's Zone of Theoretical Visibility (ZTV) (as set out in EIAR Chapter 7: Landscape, Seascape and Visual) that considers potential setting impacts on those designated heritage assets that have been short-listed by ORCA and agreed in consultation with Historic Environment Scotland.

A set of topic-specific criteria has been developed to determine the value of heritage assets. These criteria are informed by statutory designations, professional judgement, and the asset's contribution to understanding the past. The value assigned to each asset is then considered alongside the predicted magnitude of impact resulting from the proposed development.

The magnitude of impact is assessed based on the scale, extent, and duration of change (short-term (temporary) and long-term (permanent)), as well as the degree to which the asset's heritage value may be altered. While example criteria are used to guide this process, they are not applied mechanistically. Instead, professional judgement plays a central role in interpreting the likely effects, allowing for flexibility where the context or character of an asset warrants a nuanced approach.

The combination of asset value and impact magnitude informs the assessment of the overall consequence of effect. This consequence is then used to determine the significance of the effect as shown in Table 8.1, taking into account the anticipated effectiveness of embedded design and mitigation measures. The final assessment reflects the residual effect – i.e. the effect remaining after mitigation has been applied.

Table 8.1: Assessment of significance of effect

Effect	Description	Significance of Effect
Positive	Positive – to be encouraged.	Significant
Major	Highly significant and requires immediate action. May be intolerable risk or significance.	Significant
Moderate	Significant – may require additional control measures and/or management where possible.	Not significant
Minor	Not significant – however may require some management to ensure it remains within acceptable levels.	Not significant
Negligible	Not significant	Not significant

¹ Available online: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0> [accessed 02/07/2025]