Morven Offshore Wind Farm



Morven Hawthorn Pit Grid Connection Project

Preliminary Environmental Information Report

Volume 1, Chapter 3: Site Selection & Consideration of Alternatives

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Annexes

Annex number	Annex title
3.1	Selection and Refinement of Landfall
3.2	Selection and Refinement of the Offshore Infrastructure
3.3	Selection and Refinement of the Onshore Infrastructure

Glossary

Term	Meaning
Alternating Current (AC) connection cable corridor	The corridor within which the AC connection cables will be located, from the onshore land substation to the National Grid Hawthorn Pit Substation.
AC connection cables	Alternating Current (AC) cables that will connect the proposed onshore land substation to the National Grid Hawthorn Pit Substation.
the Applicant	The legal entity making the applications for consent; Morven Offshore Wind Limited (MvOWL).
Biodiversity Net Gain (BNG)	Biodiversity Net Gain (BNG) is a process whereby development leaves biodiversity in a measurably better state and is a planning policy requirement in England under the National Planning Policy Framework (2025). BNG is a statutory requirement under the Environment Act (2021) for certain Town and Country Planning Act (TCPA) developments setting out a mandatory 10 percent (%) net gain in biodiversity. At the time of writing, the 10% statutory requirement is not in force for Nationally Significant Infrastructure Projects (NSIPs) or projects treated as development for which development consent is required, although is expected in November 2026. Guidance has been provided by the Department for Environment, Food and Rural Affairs (Defra).
Cable protection	Measures used to protect subsea cables where burial is not possible, due to seabed conditions or at cable crossings, to ensure cable stability and reduce risks from anchors, fishing gear and environmental forces.
Commitments	Measures (embedded mitigation and secondary) to be adopted during the construction, operation and maintenance and decommissioning phases of the MHPGC Project.
Cumulative effect	The combined effect of the MHPGC Project in combination with the effects from other proposed developments, on the same receptor or resource.
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Development Consent Order (DCO)	An order made under the Planning Act 2008, as amended, granting development consent.
Draft Development Consent Order and deemed Marine Licences	The draft order submitted by the Applicant to the Planning Inspectorate (PINS) as part of its application for development consent under the Planning Act 2008, including any deemed Marine Licence(s) in English Waters.
Environment Agency (EA)	The EA is the public body responsible for protecting and improving the environment in England, including regulating activities that affect land, water, and

	biodiversity. For a DCO, the EA acts as a statutory consultee, advising on flood risk, water quality and ecological impacts.
Environmental Impact Assessment (EIA)	The process of identifying and assessing the significant effects likely to arise from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions.
Habitats Regulations Appraisal/Habitats Regulations Assessment (HRA)	The Habitats Regulations Appraisal (for Scotland)/Habitats Regulation Assessment (for England) is a process that determines whether development plans could adversely affect sites within the National Site Network and their qualifying features.
Inshore waters	Marine waters from mean high water springs extending seaward to 12 nautical miles (nm).
Intertidal area	The area between Mean High Water Springs (MHWS) and the Mean Low Water Springs (MLWS).
Landfall	The area in which the offshore export cables make landfall (come onshore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area between the trenchless technique exit pits and the transition joint bay inclusive of all construction works.
Local Authority	The Local Authority is a body empowered by law to exercise various statutory functions for a particular geographic area of the United Kingdom. This includes District Councils and County Borough Councils. For a DCO, the Local Authority acts as a statutory consultee, advising on local planning matters, environmental impacts and compliance with relevant policies and community considerations.
Marine Conservation Zone (MCZ)	An area designated under the Marine and Coastal Access Act 2009 in English waters for the purpose of conserving marine flora, fauna, habitats or features of geological or geomorphological interest.
Marine Directorate Licensing Operations Team (MD-LOT)	The part of the Scottish Government's Marine Directorate responsible for assessing and administering applications for marine licences and Section 36 consent (offshore) in Scotland.
Marine Licence	A marine licence permits the undertaking of different activities in the marine environment, including construction, the deposition or removal of substances or objects from the seabed and dredging. The Marine and Coastal Access Act 2009 requires a marine licence to be obtained for licensable marine activities within the Scottish offshore region (12nm – 200nm) and in English offshore and inshore regions (noting that deemed

	marine licences will be included within the Development Consent Order application).
Marine Management Organisation (MMO)	The MMO, as a UK government body, is responsible for licensing, regulating and overseeing activities in the marine environment for English waters. For a DCO and deemed marine licence, the MMO acts as a statutory consultee, advising on marine planning, environmental impacts, habitats and compliance with marine licensing regulations.
Marine Protected Area (MPA)	Areas within the United Kingdom's seas designated for the protection of marine life and habitats against damage caused by human activities.
MHPGC PEIR Red Line Boundary: Onshore	Spatial extent used to define the environmental assessment within the PEIR. The area within which all onshore components of the MHPGC Project will be located landward of MHWS, including areas required on a temporary basis during construction and/or decommissioning (e.g. construction compounds).
MHPGC Project Environmental Statement (ES)	The document presenting the results of the Environmental Impact Assessment process.
MHPGC Project Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach to, and information to support, the EIA and Habitats Regulations Assessment processes for certain topics.
MHPGC Project Habitats Regulations Appraisal/ Habitats Regulations Assessment (HRA) Screening Report	A HRA Screening Report is Stage 1 of the HRA process and screens in sites within the National Site Network, and qualifying features, for consideration within Stage 2 of the HRA process. The HRA Screening Report for the MHPGC Project will be submitted to PINS and MD-LOT to obtain an opinion on which sites within the National Site Network, and qualifying features, should be screened in for consideration within the MHPGC Project Report to Inform the Appropriate Assessment (RIAA).
MHPGC Project PEIR Red Line Boundary	The area within which all components of the MHPGC Project will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds).
MHPGC Project Marine Protected Area (MPA) and Marine Conservation Zone (MCZ) Assessment	The MPA and MCZ Assessment is a process used to evaluate whether a proposed activity could have a significant impact on designated nature conservation MPAs (in Scotland) or MCZs and HPMAs (in England). It ensures that the development does not hinder the conservation objectives of the protected features of these sites, as required under the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009. The MPA and MCZ Assessment for the MHPGC Project will consider whether the activities subject to

	the relevant application (i.e. activities subject to a marine licence application and DCO consent) can hinder the conservation objectives of a protected feature in a nature conservation MPA, MCZ or HPMA.
MHPGC Project Preliminary Environmental Information Report (PEIR)	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project and which helps to inform consultation responses.
MHPGC Project Report to Inform Appropriate Assessment (RIAA)	A report prepared by the Applicant containing information that the Competent Authority needs to inform an Appropriate Assessment at Stage 2 of the HRA process. The MHPGC Project will consider whether the MHPGC Project could have adverse effects, either alone or in-combination with other plans or projects, on the integrity of the National Site Network for which the likely significant effects has been previously established.
MHPGC Project Scoping Boundary	The spatial extent of the area used to define the environmental baseline to inform impact assessments at the time the MHPGC Project Scoping Report was submitted.
MHPGC Project Scoping Opinions	Separate scoping opinions received from PINS (on behalf of the Secretary of State) and MD-LOT (on behalf of the Scottish Ministers) in response to the MHPGC Project Scoping Report. The MHPGC Project Scoping Opinions contain the range of issues that PINS, and MD-LOT in consultation with statutory stakeholders, have identified should be considered within the EIA process.
MHPGC Project Scoping Report	A Scoping Report for the MHPGC Project, scoping the likely significant effects of the project on the environment, was submitted and accepted by Planning Inspectorate (PINS) and submitted to the Scottish Ministers, via the Marine Directorate – Licencing Operations Team (MD-LOT) in February 2025.
Morven Branxton Area Grid Connection Project (hereafter 'MBAGC Project')	The Morven Branxton Area Grid Connection Project will be comprised of the offshore export cable in Scottish waters from the Morven North or the Morven South Offshore Substation Platforms, the onshore export cable and the onshore land substation in the vicinity of Branxton in East Lothian, Scotland.
Morven Hawthorn Pit Grid Connection Project	The MHPGC Project is comprised of the offshore export cables in Scottish and English waters from the Morven North or the Morven South offshore substation platform(s) (OSP), landfall, onshore

	export cables, the onshore land substation (LSS) and AC connection cables. Also referred to in this report as the MHPGC Project, for ease of reading.
Morven North Offshore Wind Array Project (hereafter 'Morven North')	The Morven North Offshore Wind Array Project which includes the wind turbines and foundations, Offshore Substation Platforms and foundations, inter-array and interconnector cables and associated infrastructure located within the Morven North Boundary.
Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project	Morven North and Morven South comprises the Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project, collectively.
Morven Option Lease Agreement Site (hereafter 'Morven Site')	The 859km2 area awarded to the Applicant, identified as a result of the ScotWind leasing round and located in Plan Option (PO) area E1 in Scottish waters. Morven North and Morven South are two distinct projects, located within the Morven Option Lease Agreement Site.
Morven Programme	The Morven Programme comprises the MHPGC Project, Morven North, Morven South and the MBAGC Project collectively.
Morven South Offshore Wind Array Project	The Morven South Offshore Wind Array Project, which includes the wind turbines and foundations, Offshore Substation Platforms and foundations, inter-array and interconnector cables and associated infrastructure located within the Morven South Boundary.
National Grid Hawthorn Pit Substation	The National Grid substation at Hawthorn Pit, County Durham, which the AC connection cables will connect into from the Onshore Land Substation.
National Planning Policy Framework (NPPF)	The NPPF sets out the core planning principles for England. It provides a framework within which locally-prepared plans can provide for housing and other development in a sustainable manner.
National Policy Statement (NPS)	Policy statements published by the Department for Energy Security and Net Zero and designated under the Planning Act 2008, setting out national policy for Nationally Significant Infrastructure Projects.
Natural England (NE)	NE is the UK Government's statutory adviser on the natural environment in England, focusing on conserving biodiversity, landscapes, and access to nature. For a DCO and marine licence, NE provides statutory and technical advice to competent authorities on potential effects on designated sites, habitats and protected species, supporting environmental assessment and decision-making.

NatureScot (NS)	NS is the Scottish Government's nature agency responsible for protecting and promoting Scotland's natural heritage. For a marine licence in Scottish waters, NS advises on impacts to Scottish habitats, species and designated sites.
Offshore export cable corridor	The proposed corridor in which the offshore export cables will be located, from either the Morven North or Morven South offshore substation platform to the transition joint bay (TJB) at landfall.
Offshore export cables	HVDC cables which bring electricity from either the Morven North or Morven South offshore substation platform to the TJB at landfall.
Onshore components	Infrastructure landward of the transition joint bay at landfall, comprising onshore export cable, onshore export cable corridor, onshore land substation (LSS) AC connection cable and AC connection cable corridor and associated temporary and permanent infrastructure including temporary and permanent compound areas and accesses.
Onshore export cable corridor	The proposed corridor within which onshore export cables and associated infrastructure will be laid and located, from the TJB to the onshore land substation.
Onshore export cables	HVDC cables which bring electricity from the TJB to the onshore land substation.
Onshore Land Substation (LSS)	A purpose-built site comprising a compound containing the electrical components for converting the HVDC to HVAC power. The LSS site associated with the MHPGC Project adjusts the power quality and power factor to meet the requirements of power supply being fed to the National Grid Hawthorn Pit Substation.
Planning Inspectorate (PINS)	The PINS is an executive agency of the UK Government responsible for administering and examining DCO applications for NSIPs in England. PINS manages the application process, oversees consultation and examination, and makes a recommendation to the relevant Secretary of State on whether consent should be granted.
Scottish Offshore Waters	The sea area beyond Scotland's territorial waters (12 nautical miles from the coast) out to the limits of the UK Exclusive Economic Zone adjacent to Scotland.
Special Area of Conservation (SAC)	A site designation specified in the Habitats Directive (Council Directive 92/43/EEC) and protected in the UK under the Conservation (Natural Habitats, &c.) Regulations 1994 (in Scotland), the Conservation of Habitats and Species Regulations 2017 (in England) and Conservation of Offshore Marine Habitats and Species Regulations 2017 (in Scotland and England). Each site is designated for one or more of the habitats and species listed in the Directive. The Habitats Directive requires the necessary

	conservation measures to be established involving, if need be, appropriate management plans for each SAC to ensure the favourable conservation status of the habitats or species for which it was designated.
Unexploded Ordnance (UXO)	Unexploded ordnance are explosive weapons (e.g. bombs, shells, grenades, land mines and naval mines etc.) that did not explode when they were employed and still pose a risk of detonation, potentially many decades after they were used or discarded.

Acronyms

Unit	Meaning
AC	Alternating Current
AfL	Agreement for Lease
ALARP	As Low As Reasonably Practicable
ASFA	Anglo Scottish Fishermen's Association
BNG	Biodiversity Net Gain
CCUS	Carbon Capture, Usage and Storage
CFLO	Company Fisheries Liaison Officer
CoT	Commitment
CRIA	Cable Route Impact Assessment
CRP	Cable Route Protocol
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
EA	Environment Agency
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
ES	Environmental Statement
ETDP	Electricity Transmission Design Principles
EWG	Expert Working Group
FLCP	Fisheries Liaison and Coexistence Plan
FMMCP	Fisheries Management and Mitigation Coexistence Plan
HND	Holistic Network Design
HND FUE	Holistic Network Design Follow-Up Exercise
HPMA	Highly Protected Marine Area

HRA	Habitats Regulations Assessment
HVDC	High Voltage Direct Current
HVAC	High Voltage Alternating Current
LSS	Onshore Land Substation
LEMP	Landscape and Ecological Management Plan
MCAA	Marine and Coastal Access Act 2009
MBAGC	Morven Branxton Area Grid Connection Project
MCZ	Marine Conservation Zone
MD-LOT	Marine Directorate Licensing Operations Team
MHPGC	Morven Hawthorn Pit Grid Connection
MMO	Marine Management Organisation
MPA	Marine Protected Area
MPS	Marine Policy Statement
NE	Natural England
NESO	National Energy System Operator
NGET	National Grid Electricity Transmission
NGESO	National Grid Electricity System Operator
NPPF	National Planning Policy Framework
NPS	National Policy Statement
OHA	Offshore Hybrid Asset
O&M	Operation and Maintenance
OSP	Offshore Substation Platform
OTNR	Offshore Transmission Network Review
PDE	Project Design Envelope
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PoI	Point of Interconnection
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SFF	Scottish Fishermen’s Federation
SNCB	Statutory Nature Conservation Body
SoS	Secretary of State
SPA	Special Protection Area
SMP	Sectoral Marine Plan
SPFA	Scottish Pelagic Fishermen’s Association
SSSI	Site of Special Scientific Interest
SWFPA	Scottish White Fish Producers Association

TCPA	Town and Country Planning Act
TJB	Transition Joint Bay
UXO	Unexploded Ordnance

Units

Unit	Meaning
GW	Gigawatt
kV	Kilovolt
km	Kilometre
m	Metre
%	Precent

3 Site Selection and Consideration of Alternatives

3.1 Introduction

3.1.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) reports the site selection process and consideration of alternatives undertaken for the offshore, landfall and onshore components necessary for the construction, operation and maintenance (O&M) and eventual decommissioning of the Morven Hawthorn Pit Grid Connection Project (hereafter referred to as the MHPGC Project).

3.1.1.2 The Planning and Infrastructure Act 2025 has removed the statutory duty to undertake pre-application consultation with local communities. Nevertheless, Morven Offshore Wind Limited (MvOWL) has elected to undertake a further round of consultation and produce a PEIR and associated documentation, irrespective of statutory requirements as engagement with local communities remains a key part of the MHPGC Project's consultation approach and ambitions.

3.1.1.3 The MHPGC Project will connect the offshore substation platform (OSPs) of the Morven North Offshore Wind Array Project or the Morven South Offshore Wind Array Project (hereafter Morven North or Morven South) located in Scottish waters to the National Grid Hawthorn Pit Substation located west of Seaham, County Durham, England. It should be noted that the OSPs are included as part of Morven North and Morven South and, as such, do not form part of the MHPGC Project.

3.1.1.4 The MHPGC Project will traverse Scottish offshore, English offshore and inshore waters to landfall in England and will comprise the HVDC offshore export cables, landfall site, onshore export cables, onshore land substation (LSS), alternating current (AC) connection cables and associated grid connection infrastructure. Further details of the components of the MHPGC Project are provided in **Volume 1, Chapter 2: Project Description, of the PEIR**.

3.1.1.5 In particular, this PEIR chapter:

- provides the background to the MHPGC Project application for development consent (**section 3.2**) and Marine Licence application(s) to the Scottish Ministers;
- summarises the legislative and policy context concerning site selection and consideration of alternatives (**section 3.3**);
- summarises consultation and engagement relevant to site selection (**section 3.4**);
- outlines the approach taken to defining the spatial boundaries and constituent components of the MHPGC Project (**section 3.6**);
- summarises the siting decisions taken to date by the Applicant and provides an indication of main reasons for chosen option(s) (**sections 3.7 - 3.10**); and
- summarises the reasonable alternatives considered for the MHPGC Project, including location and infrastructure options (**sections 3.7 - 3.10**).

3.1.1.6 This chapter draws upon more detailed information around the site selection process and consideration of alternatives as presented in the following annexes and shown in **Figure 3.1**.

- **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR**;
- **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and
- **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.

3.1.1.7 Further details will be provided within the Site Selection and Consideration of Alternatives chapter and annexes forming part of the Environmental Statement (ES) upon submission of the application for development consent and Marine Licence application(s) to the Scottish Ministers.

340000 360000 380000 400000 420000 440000 460000 480000 500000 520000

780000 760000 740000 720000 700000 680000 660000 640000 620000 600000 580000 560000 540000

N

Dundee

Edinburgh

nton-le-Spring

Seaham

Hetton-le-Hole

A3.1

A3.2

A3.3

Carlisle

Newcastle upon Tyne

Sunderland

Durham

Morven Offshore Wind Farm	**Drawing Number:** MV-CON-REG-0026
Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122
Drawing Title: MHPGC PROJECT SITE SELECTION ANNEXES	**Service Layer Credits:** GB Light Grey: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack GB Background: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack
0 5 10 15 20 25 30 km Scale@A3:1:750,000	
Geodetic Information: Datum: OSGB 1936 Projection: British National Grid	

VER	DATE	DETAILS	BY	CHECK
01	16/07/26	Initial issue	GM	PRW
02	20/08/26	Extent Update	GM	MP
03	23/09/26	Layer Update	GM	MP

LEGEND

- MHPGC Project PEIR Red Line Boundary
- Site Selection Annexes within the PEIR

3.2 Overview of the MHPGC Project

3.2.1.1 Morven Offshore Wind Limited (MvOWL), a joint venture between JERA Nex bp Limited (JNBP) and EnBW Energie Baden-Württemberg (EnBW) (hereafter 'the Applicant'), was awarded a seabed option under the 2021/22 ScotWind Leasing Round for the Morven Option Lease Agreement Site (hereafter Morven Site), located wholly within Plan Option Area E1, identified in the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy (the SMP) (Scottish Government, 2020).

3.2.1.2 In the 2020 Progress Report to the Parliament on Reducing UK emissions, the Committee on Climate Change called for the UK Government to "develop a strategy to coordinate interconnectors and offshore networks for wind farms and their connections to the onshore network and bring forward any legislation necessary to enable coordination" (Committee on Climate Change, 2020). Following this, the UK Government announced the OTNR to identify near-term actions and opportunities for offshore windfarm projects to coordinate and thereby address the barriers of the then existing offshore transmission regime to the deployment of offshore wind; the intention being to develop an offshore transmission network that facilitates coordination between offshore wind developments.

3.2.1.3 Prior to this, NESO (previously known as National Grid Electricity System Operator, NGESO) used the Connection and Infrastructure Operations Note (CION) process to coordinate changes needed to the electricity network to accommodate new connections from offshore energy infrastructure.

3.2.1.4 The OTNR led to the publication of the Holistic Design Network (HND) (NGESO, 2022); which established an integrated approach to connecting new offshore wind generation to the electricity transmission network. Half of the generating capacity of the Morven Site was included within the HND assessment alongside other offshore wind developments in the East Coast Region. The remaining capacity was not included due to limitations on the total ScotWind generation considered within the HND.

3.2.1.5 The output of HND recommended that half of the generating capacity of the Morven Site is connected to the grid network at the National Grid Hawthorn Pit Substation in County Durham, England (NESO, 2022 and Ofgem 2022).

3.2.1.6 The HND Follow Up Exercise (HND FUE) (Neso, 2024 and Ofgem, 2024) subsequently was undertaken which considered the additional ScotWind projects and generating capacity that had not formed part of HND. This included the remaining half of the Morven Site generating capacity. The HND FUE recommended a second grid connection, for up to 1.5 GW, at a Point of Interconnection (PoI) within the Branxton area in East Lothian, Scotland.

3.2.1.7 The HND (and HND FUE) assessments both considered an interconnected offshore wind network, where a coordinated connection between other offshore assets was initially proposed and classified as non-radial assets under Asset Classification recommendation published by Ofgem.

3.2.1.8 On the basis of the 2022 HND outcome the Applicant also commenced the site selection process for the Morven Hawthorn Pit Grid Connection Project (MHPGC Project), based on the recommended PoI at the National Gird Hawthorn Pit Substation identified through the HND. The alternatives considered for the MHPGC Project therefore relate to the feasible means of connecting Morven North or Morven South to the National Grid Hawthorn Pit Substation including the identification of offshore cable routes, landfall locations, onshore cable routes and onshore LSS.

3.2.1.9 Against this strategic grid connection context, in 2024 the Applicant decided to progress the Morven Site as two distinct projects: the Morven North Offshore Wind Array Project (hereafter 'Morven North') and the Morven South Offshore Wind Array Project (hereafter 'Morven South'). Both projects would be located off the coast of Aberdeenshire in the North Sea, within Scottish waters.

3.2.1.10 In April 2025, NESO subsequently confirmed that the original proposal of a coordinated connection design was discounted and a radial connection for half of the generating capacity of the Morven Site would be connected to the grid network at National Grid Hawthorn Pit Substation in County Durham (see **Figure 3.3**). This decision is evidenced in the outcome of the HND North Cluster 2 Impact Assessment published by NESO (NESO, 2025) and Asset Classification published by Ofgem (Ofgem, 2025).

3.2.1.11 In March 2024, following the recommendations of the HND FUE, NESO also confirmed that the remaining half of the Morven Site generating capacity would connect to the electricity transmission network within the Branxton area. In September 2025, NESO subsequently confirmed that the original proposal of a coordinated connection design was discounted and a radial connection for the remaining half of the generating capacity of the Morven Site would be connected to the grid network at Branxton area (NESO, 2025 and Ofgem, 2025).

3.2.1.12 The transmission infrastructure associated with the Branxton connection is planned to be progressed separately through the MBAGC Project and does not form part of the application for the MHPGC Project.

3.2.1.13 The following **Sections 3.9-3.10** below present the site selection stages the Applicant followed for the MHPGC Project and the process to define the siting of the components of the MHPGC Project to connect Morven North or Morven South to the PoI

Consenting context

3.2.1.14 As a result of the HND and HND FUE (see **Section 3.7** for further detail) and in order to progress the MHPGC Project, the Applicant seeks to consent Morven North, Morven South and the two grid connection assets, i.e. the MHPGC Project and the Morven Branxton Area Grid Connection Project (hereafter, the MBAGC Project), separately. The section 36 applications for Morven North and Morven South were submitted to the Scottish Ministers in May 2026 and are undergoing a separate consultation process. The MHPGC Project will seek development consent and Marine Licence(s) as part of this application, and a further application will be required for the MBAGC Project, which will act as the second grid connection to the Branxton Area in East Lothian, Scotland.

3.2.1.15 The MHPGC Project will comprise the offshore export cables traversing through Scottish offshore waters, English offshore waters and English inshore waters, to landfall in County Durham where the offshore cables will connect to the onshore export cables in the transition joint bay (TJB), and onshore export cables connecting to the onshore LSS with AC connection cables connecting to the National Grid substation.

3.2.1.16 For assets located in England, the Applicant sought a direction from the Secretary of State (SoS) for Energy Security and Net Zero under section 35 of the Planning Act 2008 to confirm that the onshore and offshore assets in England (including English waters) should be treated as development for which development consent is required under the Planning Act 2008.

3.2.1.17 A direction from the SoS for Energy Security and Net Zero was duly made on 05 March 2024 confirming that the MHPGC Project should be treated as a development for which development consent is required. The Applicant is now pursuing a single Development Consent Order (DCO) for the onshore and offshore components of the MHPGC Project in England.

3.2.1.18 In respect of the MHPGC Project assets located within Scottish waters (specifically, Scottish Offshore Waters), Marine Licence(s) will be applied for from the Marine Directorate - Licensing Operations Team (MD-LOT), in accordance with the provisions of the Marine and Coastal Access Act 2009 (MCAA 2009).

3.2.1.19 Full detail on the background of the MHPGC Project is provided in **Volume 1, Chapter 1: Introduction, of the PEIR**. Further details of the relevant planning policy context are provided in **Volume 1, Chapter 5: Policy and Legislation, of the PEIR.**

3.3 Legislative and policy context

3.3.1 Overview

3.3.1.1 The MHPGC Project will be located within the Scottish and English jurisdictions, specifically within Scottish offshore waters, English offshore waters, English territorial (inshore) waters and onshore in England. As such, this section summarises the relevant UK, English and Scottish legislations and policies concerning site selection and consideration of alternatives, and how they have been considered in the PEIR.

3.3.2 Legislation

3.3.2.1 As set out in **Volume 1, Chapter 1: Introduction, of the PEIR**, the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (hereafter referred to as the EIA Regulations) set out the requirements for EIA under the Planning Act 2008. Schedule 4 (paragraph 2) of the EIA Regulations requires that the Environmental Statement includes a description of the reasonable alternatives studied by an applicant and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3.3.2.2 The Marine Works (Environmental Impact Assessment) Regulations 2007 and Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 also make provisions for an applicant to provide information on their consideration of alternatives. Schedule 3, paragraph 2 of the Marine Works (Environmental Impact Assessment) Regulations 2007 requires an EIA Report to include: "A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the Applicant, which are relevant to the proposed project, the regulated activity and their specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects". Similar provisions are made in Schedule 4, paragraph 2, of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

3.3.2.3 The need for offshore wind development within UK waters is set out in **Volume 1, Chapter 5: Policy and Legislation, of the PEIR**.

3.3.3 National Policy Statements

3.3.3.1 National planning policy in relation to site selection and consideration of alternatives for offshore wind development and associated transmission infrastructure in England is contained in the Overarching National Policy Statement (NPS) for Energy (EN-1; DESNZ, 2025a), the NPS for Renewable Energy Infrastructure (EN3; DESNZ, 2025b) and the NPS for Electricity Networks Infrastructure (EN-5; DESNZ, 2025c).

3.3.3.2 **Table 3-1** provides details on how the relevant policies in NPS EN-1, NPS EN-3 and NPS-5 were complied with in the site selection and design refinement process and where they were considered in the PEIR.

Table 3-1: Summary of the NPS EN-1, NPS EN-3 and NPS EN-5 provisions relevant to site selection and consideration of alternatives

Summary of NPS provisions	How and where considered in the PEIR
EN-1	
NPS EN-1 paragraph 4.3.9 *As in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the proposed development is, in the first instance, a matter of law. This NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective. Although there are specific requirements in relation to compulsory acquisition and habitats sites, the NPS does not change requirements in relation to compulsory acquisition and habitats sites.*	The approach to alternatives is summarised within **Section 3.5** of this chapter and detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
NPS EN-1 paragraphs 4.3.15 to 4.3.17 *Applicants are obliged to include information about the reasonable alternatives they have studied in their ES. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility.* *In some circumstances, the NPSs may impose a policy requirement to consider alternatives.* *Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements.*	The approach to alternatives is summarised within **Section 3.5** of this chapter. **Sections 3.8-3.10** of this chapter also summarise the comparison of the technical, commercial, environmental and human constraints between the spatial and geographical alternatives considered during the site selection process. The Applicant's proportionate and reasonable consideration of alternatives, environmental and human constraints, and reasoning behind the siting of infrastructure is detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
NPS EN-1 paragraphs 4.3.22 to 4.3.29 *Given the level and urgency of need for new energy infrastructure, the Secretary of State should, subject to any relevant legal requirements (e.g. under the Habitats Regulations) which indicate otherwise, be guided by the following principles when deciding what weight should be given to alternatives:* • *The consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and* • *Only alternatives that can meet the objectives of the proposed development need to be considered.* *The Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy*	The approach to alternatives is summarised within **Section 3.5** of this chapter. The consideration of reasonable spatial and geographical alternatives has been underpinned by the primary objective of the MHPGC Project, which is to connect Morven North or Morven South to the National Grid Hawthorn Pit Substation. As highlighted in **Section 3.7**, the Applicant was notified by the National Energy System Operator (NESO) as part of the HND process that the National Grid Hawthorn Pit Substation will be the Point of Interconnection (PoI) for either Morven North or Morven South. As such, any routing and siting decisions for the MHPGC Project components, including the consideration of alternatives, must be reasonably confined within the identified search areas between Morven

Summary of NPS provisions	How and where considered in the PEIR
security, climate change, and other environmental benefits) in the same timescale as the proposed development. *The Secretary of State should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, and should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals.* *Alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the Secretary of State thinks they are both important and relevant to the decision.* *As the Secretary of State must assess an application in accordance with the relevant NPS (subject to the exceptions set out in section 104 of the Planning Act 2008), if the Secretary of State concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the Secretary of State's decision.* *Alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision.* *Alternative proposals which are vague or immature can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision.* *It is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made to the Secretary of State (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Therefore, where an alternative is first put forward by a third party after an application has been made, the Secretary of State may place the onus on the person proposing the alternative to provide the evidence for its suitability as such and the Secretary of State should not necessarily expect the applicant to have assessed it.*	North or Morven South and the PoI at National Grid Hawthorn Pit Substation. It should be noted that the MHPGC Project is considered nationally significant low carbon energy infrastructure pursuant to NPS EN-1, as it fits within the normal definition of "low carbon" and has received a direction under section 35 of the Planning Act 2008. It is therefore a critical national priority (CNP) to progress the MHPGC Project to decarbonise the UK's electricity system and achieve net zero. The MHPGC Project is also a constituent component of the wider Morven Offshore Wind Farm development and is essential to the realisation of low carbon energy generated from Morven North or Morven South. **Section 2.8** of **Volume 1, Chapter 2: Project Description, of the PEIR** provides further details of the MHPGC Project construction programme. The Applicant's proportionate and reasonable consideration of alternatives, environmental and human constraints, and reasoning behind the siting of infrastructure is detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
NPS EN-1 paragraph 4.5.9 *Applicants are encouraged to refer to Marine Plans at an early stage, such as in preapplication, to inform project planning, for example to avoid less favourable locations as a result of other uses or environmental constraints.*	Relevant Marine Plans are identified in **Table 3-3**, and site selection relevant to Marine Plan areas are considered in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**.
NPS EN-1 paragraph 5.8.23 *Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.3. All projects should apply the Sequential Test to locating development within the site.*	Consideration of policies on alternatives as set out in NPS EN-1 is detailed in the above entries of this table. The Sequential Test aims to steer development to areas with the lowest probability of flooding. The permanent onshore infrastructure of the MHPGC Project is located predominantly within Flood Zone 1 and with a low chance of surface water flooding. Whilst there are a small area of Flood Zone 2 onshore and an area Flood Zone 3 associated with tidal

Summary of NPS provisions	How and where considered in the PEIR
	flooding, the Applicant has made a commitment (CoT17 of **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the siting of the temporary and permanent footprint of the MHPGC Project infrastructure will avoid areas of Flood Risk Zone 2 and 3 where practicable during the site selection process. As such, in line with section 5.8 of NPS EN-1 and national planning practice guidance, the Sequential Test is not required to be applied in this instance for the onshore infrastructure of the MHPGC Project, which is primarily located within Flood Zone 1. This is further discussed in **Volume 3, Annex 2.2: Flood Risk Assessment, of the PEIR.**
EN-3	
NPS EN-3 paragraphs 2.8.11 to 2.8.15 *General factors influencing site selection by applicants are set out at Section 2.3 of this NPS.* *Specific considerations involved in the siting of an offshore wind development are additionally likely to be influenced by factors set out in the following paragraphs.* *The specific criteria considered by applicants, and the role that they play in site selection, will vary from project to project.* *In proposing sites for offshore wind and/or offshore transmission infrastructure, NSIP applicants should demonstrate that their choice of site takes into account the government's Offshore Energy SEA 4 and any successors to it.* *The government is undertaking a rolling Offshore Energy SEA programme, including a research programme and data collection to facilitate future strategic and project specific assessments to achieve the Clean Power 2030 Mission.*	The Applicant's proportionate and reasonable consideration of alternatives, environmental and human constraints, and reasoning behind the siting of infrastructure is detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. The need for offshore wind development within UK waters is set out in **Volume 1, Chapter 5: Policy and Legislation, of this PEIR**.
NPS EN-3 paragraphs 2.8.16 to 2.8.19 *Marine planning currently enables the increasing demands for use of the marine area to be balanced and managed in an integrated way that protects the marine environment, incorporates social considerations and supports sustainable development.* *Marine plans provide a transparent framework for consistent, evidence-based decision making and should be used by applicants to guide site selection.* *Marine plans will help applicants understand generic potential impacts of their proposal at an early stage e.g., in relation to other activities, or where there are MPAs. Further information is provided in Section 4.5 of EN-1.* *The cross- Government Marine Spatial Prioritisation programme continues to develop a more strategic way of considering the use of the seabed, and is also supporting the de-risking of future offshore wind.*	As described in **Section 3.7,** the Morven Option Lease Agreement Site is located wholly within Plan Option Area E1 identified in the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020). The Applicant has considered nearby activities in the marine environment and Marine Plan areas when undertaking the site selection process, which is detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. **Table 3-3** sets out a summary of the specific policies set out in Scotland's National Marine Plan and North East Inshore and North East

Summary of NPS provisions	How and where considered in the PEIR
	Offshore Marine Plan relevant to site selection and consideration of alternatives.
NPS EN-3 paragraphs 2.8.20 to 2.8.23 *The Crown Estate grants seabed leases for offshore wind farms through competitive leasing rounds. Applicants must obtain a lease prior to placing an offshore wind structure or associated transmission export cables, on the seabed and its foreshore (see paragraphs 2.3.14 - 2.3.16 of this NPS for information on seabed leasing, extensions and capacity increases).* *To date, each offshore wind leasing round has been supported by a plan-level HRA, which assesses the impact of the leasing round on protected sites. It should also be noted that aspects of plan level HRAs that remain relevant at the project-level, might be able to be relied upon to inform the project-level HRA, reducing the project-level effort and reducing duplication.* *The assessment serves to provide a better understanding of the potential significant effects and to identify measures which can be put in place to avoid, mitigate, or reduce those significant effects at a plan level.* *Where an assessment concludes that there will still be an adverse impact on the integrity of a protected site, a case for derogation can be considered. This must meet strict legal tests, which includes identifying compensatory measures.*	The Applicant has secured a ScotWind lease for the Morven Site and is engaging with The Crown Estate on an Agreement for Lease (AfL) for the MHPGC Project. A plan-level HRA (pHRA) was undertaken for the ScotWind leasing round, but it did not extend to transmission assets. A pHRA was undertaken for the Draft HND Implementation Plan (NESO, 2026). Consideration for MHPGC Project specific compliance with the HRA is provided within: • **Habitats Regulations Assessment/Habitats Regulations Appraisal Screening Report, of the PEIR**; and • **Habitats Regulations Appraisal/Habitats Regulations Assessment RIAA, of the PEIR**.
NPS EN-3 paragraphs 2.8.34 to 2.8.39 and 2.8.43 *As identified in Section 3.3 and Section 4.11 of EN-1, and Section 2.12 of EN-5, a more co-ordinated approach to offshore-onshore transmission is required.* *The previous standard approach to offshore-onshore connection involved a radial connection between single wind farm projects and the shore. A coordinated approach will involve the connection of multiple, spatially close, offshore wind farms and other offshore infrastructure, wherever possible, as relevant to onshore networks.* *This will include connections via Offshore Hybrid Assets (OHA), which combine the connection of offshore wind with the function of point-to-point interconnectors.* *Co-ordinated transmission proposals have principally been developed through, and as a consequence of, a process of ongoing reform including through strategic network planning, such as the Holistic Network Design for onshore-offshore transmission, as outlined in EN-5. Further details are provided in EN-5, Section 2.12-2.15.* *As part of the transition to more co-ordinated transmission, it is anticipated that some proposals for transmission could be consented separately to those for the wind farm (array) application.* *For this to occur, an applicant will need to make a request to the Secretary of State. The Secretary of State would then decide whether to give direction under section 35 of the Planning Act 2008.* *The design of wind farms, and offshore transmission (including interconnection and OHAs) projects should seek to be sufficiently flexible so that they are future-proofed as far as possible to enable future connections with different types of offshore transmission or wind farms respectively, where these are*	As described in **Section 3.7**, as a result of the HND and HND FUE and in order to progress the MHPGC Project, the Applicant will seek to consent Morven North, Morven South, the MHPGC Project and the MBAGC Project separately. Separate applications have been submitted for the array assets, located solely within Scottish offshore waters. This application is in respect of the MHPGC Project transiting Scottish offshore waters, English offshore and English inshore waters and onshore in England. The MBAGC Project, which is anticipated to be located in Scottish waters and onshore in Scotland, is still in an early development phase. The Applicant accounted for room for flexibility when undertaking the site selection process, which is detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. The Offshore Infrastructure Search Area for the MHPGC Project detailed in **section 3.9.2** reflected the potential option for an offshore connection hub to allow for the coordinated network design being proposed by NESO as part of the Holistic Network Design (HND) during early stages

Summary of NPS provisions	How and where considered in the PEIR
proposed to be spatially proximate.	of the MHPGC Project. This was later discounted in the HND process, and a radial connection from the Morven Site to Hawthorn Pit was confirmed by NESO.
NPS EN-3 paragraphs 2.8.44 to 2.8.49 *The UK government has obligations to protect the marine environment with a network of well managed MPAs, which also includes Highly Protected Marine Areas (HPMAs). MCZs together with HPMAs, SACs SPAs, and Ramsar sites and marine elements of SSSIs form an ecologically coherent network of MPAs. The government has set a target for MPA condition under the Environment Act 2021.* *Given the scale of offshore wind deployment required to meet the Clean Power 2030 Mission and net zero 2050 ambitions, applicants will need to give close consideration to impacts on MPAs, either alone or in combination, and employ the mitigation hierarchy and, if necessary, provide compensation (both individually and in combination with other plans or projects) which may be needed to approve their projects.* *It is likely that mitigation may include proactive measures to reduce the impact of deployment e.g., micrositing of offshore transmission routes to avoid vulnerable habitats, alternatives to piling or trenching techniques, noise abatement technology, collision avoidance methods or, if necessary, compensation for habitat or species loss. See paragraphs 2.8.83 – 2.8.85 for OWES.* *Further guidance can be found in Sections 4.3 and 5.4 of EN-1.* *The OWEIP includes a commitment to introduce mechanisms to support strategic compensatory measures, including for projects already in the consenting process (where possible), to offset environmental impacts and reduce delays to individual projects. Only once all feasible alternatives and mitigation measures have been employed, should applicants explore possible compensatory measures to make good any remaining significant adverse effects to site integrity.* *Applicants are expected to seek advice from SNCBs and Defra for projects in England, in conjunction with relevant regulators, LPAs and/or landowners, on potential mitigation and/or compensation requirements at the earliest opportunity and comply with future statutory requirements and/or guidance once available.*	As detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, and Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**, the MHPGC Project PEIR Red Line Boundary is located within Durham Coast Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI), and within 5km of two offshore designated sites, the Farnes East Marine Conservation Zone (MCZ) and the Northeast of Farnes Deep MCZ and Highly Protected Marine Areas (HPMAs). The Applicant has sited infrastructure to avoid direct impacts to these designated sites, including the use of trenchless techniques at landfall where the Durham Coast SAC and SSSI are located, and routing the offshore export cable corridor to avoid the MCZs and HPMA. Further detail of commitments made by the Applicant is provided in **Section 3.5** of this chapter and **Volume 1, Annex 4.1: Commitments Register, of the PEIR**.
NPS EN-3 paragraphs 2.8.50 *Although offshore wind farms themselves will not have a direct impact on green belts, it is possible that some elements of these projects may be proposed on green belt land, such as electricity network infrastructure, and comprise inappropriate development which may impact on the openness of the green belt.*	Onshore infrastructure associated with the MHPGC Project, including the onshore export cable corridor, AC connection cable corridor and both onshore LSS Option Areas avoid areas of Green Belt.
NPS EN-3 paragraph 2.8.112 *Applicant assessments of the effects of installing offshore transmission infrastructure across the intertidal/coastal zone should demonstrate compliance with mitigation measures in any relevant plan-level HRA or MCZ assessment including those prepared by The Crown Estate as part of its leasing round, and include information, where relevant, about:*	Consideration of alternative landfall and cable installation is detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**, while cable installation methods are discussed **in Volume 1, Chapter 2: Project description, of the PEIR**. The Applicant has secured a ScotWind lease for the Morven Site and is

Summary of NPS provisions	How and where considered in the PEIR
• *Any alternative landfall sites that have been considered by the applicant during the design phase and an explanation for the final choice;* • *Any alternative cable installation methods that have been considered by the applicant during the design phase and an explanation for the final choice….*	engaging with The Crown Estate on an AfL for the MHPGC Project. A pHRA was undertaken for the ScotWind leasing round, but it did not extend to transmission assets. A pHRA was undertaken for the Draft HND Implementation Plan (NESO, 2026). Consideration for MHPGC Project specific compliance with the HRA and/or MCZ assessment is provided within: • **Approach to Marine Protected Area/Marine Conservation Zone and Highly Protected Marine Area Assessments, of the PEIR**; • **Habitats Regulations Assessment/Habitats Regulations Appraisal Screening Report, of the PEIR**; and • **Habitats Regulations Appraisal/Habitats Regulations Assessment RIAA, of the PEIR**.
NPS EN-3 paragraphs 2.8.167 to 2.8.168 *There may be constraints imposed on the siting or design of offshore wind farms because of the presence of other offshore infrastructure, such as oil and gas, Carbon Capture, Usage and Storage (CCUS), co-location of electrolysers for hydrogen production, marine aggregate dredging, telecommunications, or activities such as aviation and recreation.* *Given the scale of offshore wind deployment required to meet the Clean Power 2030 Mission and net zero 2050 ambitions, and the importance of the UK Continental Shelf (UKCS) in supporting progress towards net zero commitments there will be increasing demand on the UKCS which could give rise to conflicts. The occurrence of conflict between offshore development projects in the short term could restrict the capacity of the UKCS to support the variety of technologies required for the delivery of the Clean Power 2030 Mission and net zero.*	The Applicant has considered nearby activities in the marine environment and constraints when undertaking the site selection process. Consideration and co-existence with other sea users and existing operational offshore infrastructure and with aviation and recreational activities relevant to site selection and design is detailed in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; and • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. Impacts of the MHPGC Project on other offshore infrastructure and sea users are considered and assessed in **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR**.
NPS EN-3 paragraph 2.8.169 *Applicants should consult the government's Marine Plans (further detailed in Section 4.5 of EN-1) which are a useful information source of existing and known or potential activities and infrastructure.*	The Applicant has considered relevant marine policies as detailed in **Section 3.3.5**.
NPS EN-3 paragraphs 2.8.170 *Prior to the submission of an application involving the development of the seabed, applicants should engage with key stakeholders, such as The Crown Estate and statutory bodies to ensure they are aware of any current or emerging interests on or underneath the seabed which might give rise to a conflict with a specific application. This will ensure adequate opportunity to reduce potential conflicts and increase time to find a resolution.*	The Applicant has been engaging with The Crown Estate and key stakeholders to understand existing infrastructure/projects as well as emerging projects and interest. **Section 3.4** summarises stakeholder engagement that has been undertaken to date relevant to site selection and consideration of alternatives.
NPS EN-3 paragraphs 2.8.171 to 2.8.173 *Applicants should engage with interested parties in the potentially affected offshore sectors early in*	The Applicant has considered nearby activities in the marine environment and constraints when undertaking the site selection

Summary of NPS provisions	How and where considered in the PEIR
the pre-application phase of the proposed offshore wind farm, with an aim to resolve as many issues as possible prior to the submission of an application. *Where a potential offshore wind farm is proposed close to existing operational offshore infrastructure, or has the potential to affect activities for which a licence has been issued by government, the applicant should undertake an assessment of the potential effects of the proposed development on such existing or permitted infrastructure or activities. The assessment should be undertaken for all stages of the lifespan of the proposed wind farm in accordance with the appropriate policy and guidance for offshore wind farm EIAs.* *Applicants are encouraged to work collaboratively with those other developers and sea users on co-existence/co-location opportunities, shared mitigation, compensation and monitoring where appropriate. Where applicable, the creation of statements of common ground between developers is recommended. Work is ongoing between government and industry to support effective collaboration and to find solutions to facilitate greater coexistence/co-location. Such stakeholder engagement should continue throughout the life of the development. As many offshore industries are regulated by government, the relevant Secretary of State should also be a consultee where necessary*.	process. Consideration and co-existence with other sea users and existing operational offshore infrastructure relevant to site selection and design is detailed in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; and • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** The Applicant has undertaken several rounds of engagement through the Evidence Plan Process (EPP) for offshore topics and held topic meetings with relevant stakeholders as detailed in the consultation section of each offshore chapter, in particular: • **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR;** • **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR;** and • **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR**. As the offshore export cable corridor will likely interact with the Farn Deeps nephrops fishing grounds, the Applicant has engaged with commercial fisheries stakeholders. The engagement the Applicant has undertaken to date is presented in **Table 3-8** of this chapter, with further details provided in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** The assessment of cumulative effects between the MHPGC Project and other proposed or planned projects are provided within each of the chapters within **Volume 2, Volume 3** and **Volume 4, of the PEIR**.
NPS EN-3 paragraphs 2.8.174 *As an interested party, The Crown Estate may also provide further supporting information and evidence as part of the examination. This guidance is to encourage early engagement between parties with a potential overlap in their development plans so that a solution can be found that optimises the capacity of the UKCS to enable the Clean Power 2030 Mission and net zero.*	The Applicant has been engaging with The Crown Estate and key stakeholders to understand existing infrastructure/projects as well as emerging projects and interest. **Section 3.4** summarises stakeholder engagement that has been undertaken to date relevant to site selection and consideration of alternatives.
NPS EN-3 paragraphs 2.8.175 *The applicant will also need to consider impacts on civil and military radar and other aviation and defence interests (Section 5.5 of EN-1).*	Impacts to aviation (military and civil) and radar associated with the MHPGC Project are scoped out of assessment in the PEIR as per the MHPGC Project Scoping Opinion in March 2025 (PINS, 2025a). Impacts to military practice areas are considered in **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR**.
NPS EN-3 paragraphs 2.8.254 to 2.8.259 *When considering grid connection issues, the Secretary of State should be mindful of the requirements of the regulatory regime for onshore and offshore electricity networks, and consider how this affects*	As described in **Section 3.7**, as a result of the HND and HND FUE and in order to progress the MHPGC Project, the Applicant will seek to consent Morven North, Morven South, the MHPGC Project and the MBAGC

Summary of NPS provisions	How and where considered in the PEIR
the proposal put forward by the applicant. *A proposed offshore electricity transmission cable connecting the wind farm or wind farms with the onshore electricity network (noting that this may be an offshore transmission connection point), and any offshore electricity substations that may be required, may constitute associated development, depending on their scale and nature in relation to the offshore wind farm(s).* *Where the Secretary of State is satisfied that such offshore infrastructure does constitute associated development and can form part of the application, it should be considered by the Secretary of State in accordance with this NPS.* *However, some proposals for transmission could be consented separately to the wind farm (array), see paragraphs 2.8.38 of this NPS and Section 1.3 in EN-1.* *The Secretary of State should assess the onshore element(s) of the grid connection (e.g. electric lines, substations) in accordance with the guidelines and requirements contained in EN-5.* *Depending upon the scale and type of this onshore development, elements of it could constitute either associated development or an energy NSIP in its own right.*	Project separately. Separate applications have been submitted for the array assets, Morven North and Morven South, located solely within Scottish offshore waters. This assessment is in respect of the MHPGC Project transiting Scottish offshore waters, English offshore and English inshore waters and onshore in England, which will be consented separately for its Scottish and English components. The MBAGC Project is anticipated to be located in Scottish waters and onshore in Scotland and is still in the early development phase and will be consented separately.
NPS EN-3 paragraphs 2.8.261 to 2.8.262 *Where requested by the applicant, any consent granted by the Secretary of State should be flexible enough to allow for such micrositing or microrouting changes as may be advised during and after the application stage. This allows for unforeseen events, such as the discovery of previously unknown marine archaeology that it would be preferable to leave in situ.* *The Secretary of State must also be satisfied that there is sufficient space to microsite/microroute for any proposal to be acceptable as a mitigation (e.g. any feature to avoid must not cover the full width of the assessed cable corridor).*	Consideration of micrositing, where relevant, in the routing of the offshore export cable corridor is provided in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. Further information on micrositing is provided in **Volume 1, Chapter 2: Project Description, of the PEIR**.
NPS EN-3 paragraphs 2.8.285 to 2.8.287, 2.8.289 *The Secretary of State should be satisfied that the site selection process has been undertaken in a way that reasonably minimises adverse effects on fish stocks, including during peak spawning periods and the activity of fishing and aquaculture themselves.* *The Secretary of State should consider the extent to which the proposed development occupies any recognised important fishing and aquaculture grounds, and whether the project would prevent or significantly impede protection of sustainable commercial fisheries, fishing or aquaculture activities.* *Where the Secretary of State considers the wind farm or offshore transmission would significantly impede protection of sustainable fisheries, fishing activity or aquaculture at recognised important fishing or aquaculture grounds, this should be attributed a correspondingly significant weight.* *The Secretary of State should be satisfied that the applicant has sought to design the proposal having consulted the MMO or NRW in Wales, Defra or Welsh Government in Wales and representatives of the fishing and aquaculture industries with the intention of minimising the loss of fishing and aquaculture opportunities taking into account effects on other marine interests. Guidance has been jointly agreed by the renewables and fishing industries on how they should liaise, with the intention of allowing the*	As detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**, the siting of the offshore export cable corridor has avoided interactions with high intensity herring and sandeel spawning grounds. **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR** provides an assessment on fish and shellfish species of ecological value. The offshore export cable corridor does interact with the Farn Deeps nephrops fishing grounds and **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** provides an assessment on species of commercial value. To manage interactions between the MHPGC Project and the fishing industry, the Applicant has made the following commitments: • ongoing liaison with the fishing industry through the appointment of a Company Fisheries Liaison Officer(s) (CFLO)(s) and adherence to good practice guidance with regards to fisheries liaison (e.g. Fishing Liaison with Offshore

Summary of NPS provisions	How and where considered in the PEIR
two industries to co-exist successfully.	Wind and Wet Renewables Group guidance (2025) for English Waters) (CoT19 of **Volume 1, Annex 4.1: Draft Commitments Register of the PEIR**); • an Outline Fisheries Liaison and Coexistence Plan (FLCP) will be produced in relation to English waters and will be submitted with the application for development consent. It will include details of the measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry. A Detailed FLCP will be developed post-consent substantially in accordance with the Outline FLCP (CoT20 of **Volume 1, Annex 4.1: Draft Commitments Register of the PEIR**); and • a draft Fisheries Management and Mitigation Coexistence Plan (FMMCP) will be produced in relation to Scottish waters and submitted as part of the Marine Licence application(s) to the Scottish Ministers. The draft FMMCP will detail measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in Scottish waters. Updates to the FMMCP will be developed post-consent in accordance with the draft FMMCP if required (CoT55 of **Volume 1, Annex 4.1: Draft Commitments Register of the PEIR**).
NPS EN-3 paragraphs 2.8.292 *The Secretary of State should be satisfied that any proposed offshore wind farm and/ or offshore transmission project has appropriately considered and mitigated for any impacts to the historic environment, including both known heritage assets, and discoveries that may be made during the course of development.*	Marine and intertidal archaeology is assessed in **Volume 2, Chapter 9: Marine and Intertidal Archaeology, of the PEIR** and onshore archaeology is assessed in **Volume 3, Chapter 4: Archaeology and Cultural Heritage, of the PEIR**. Consideration of siting to avoid historic environment assets, including following assessment of assets identified in **Volume 2, Annex 9.1: Marine Archaeology Technical Report, of the PEIR** and **Volume 3, Annex 4.1: Onshore Archaeological Desk-based Assessment Report, of the PEIR**, in defining the siting of offshore export cable corridor and onshore cable route is provided in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**;

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	• **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
NPS EN-3 paragraphs 2.8.293 to 2.8.297 *The Secretary of State should not grant development consent in relation to the construction or extension of an offshore wind farm or offshore transmission infrastructure project if it considers that interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the development.* *The use of recognised sea lanes essential to international navigation means:* *a) anything that constitutes the use of such a sea lane for the purposes of article 60(7) of the United Nations Convention on the Law of the Sea (UNCLOS) 1982; and* *b) any use of waters in the territorial sea adjacent to Great Britain that would fall within paragraph (a) if the waters were in a REZ.* *The Secretary of State should be satisfied that the site selection has been made with a view to avoiding or minimising disruption or economic loss to the shipping and navigation industries, with particular regard to approaches to ports and to strategic routes essential to regional, national and international trade, lifeline ferries and recreational users of the sea.* *Where after carrying out a site selection, a proposed development is likely adversely to affect major commercial navigation routes, for instance by causing appreciably longer transit times, the Secretary of State should give these adverse effects substantial weight in its decision making.* *Where a proposed offshore wind farm or offshore transmission infrastructure project is likely to affect less strategically important shipping routes, the Secretary of State should take a pragmatic approach to considering proposals to minimise negative impacts.*	As detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**, the site selection process and refinement of the offshore export cable corridor has considered shipping and navigation. **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR** considers sea lanes and potential disruption to shipping and navigation with no significant effects predicted. **Volume 2, Annex 8.1: Navigation Risk Assessment, of the PEIR** presents a risk assessment for each hazard relating to shipping and navigation. The significance of all hazards has been assessed to be either broadly acceptable or tolerable with mitigation, with all hazards assessed to be As Low As Reasonably Practicable (ALARP), assuming mitigation measures are implemented.
NPS EN-3 paragraph 2.8.312 *As such, the Secretary of State should be satisfied that the site selection and site design of a proposed offshore wind farm and offshore transmission has been made with a view to avoiding or minimising disruption or economic loss or any adverse effect on safety to other offshore industries. Applicants will be required to demonstrate that risks to safety will be reduced to as low as reasonably practicable.*	As detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**, the site selection process and refinement of the offshore export cable corridor has considered shipping and navigation, commercial fisheries and interaction with existing offshore infrastructure and other marine users. **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR** considers sea lanes and potential disruption to shipping and navigation with no significant effects predicted. **Volume 2, Annex 8.1: Navigation Risk Assessment, of the PEIR** presents a risk assessment for each hazard relating to shipping and navigation. The significance of all hazards has been assessed to be either broadly acceptable or tolerable with mitigation, with all hazards assessed to be ALARP, assuming mitigation measures are implemented.

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	Volume 2, Chapter 7: Commercial Fisheries, of the PEIR identifies a likely significant effect for the Farn Deeps nephrops fishing grounds. To manage interactions between the MHPGC Project and the fishing industry, the Applicant has made commitments to ongoing liaison with the fishing industry through the appointment of a CFLO(s) and adherence to good practice guidance with regards to fisheries liaison (CoT19), production of an FLCP in relation to English waters to be submitted with the application for development consent (CoT20), and production of an FMMCP in relation to Scottish waters to be submitted as part of the Marine Licence application(s) to the Scottish Ministers (CoT55). Further detail of these relevant commitments is provided in **Volume 1, Annex 4.1: Draft Commitments Register of the PEIR**. **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR** concluded no significant effects on other offshore infrastructure and sea users as a result of the MHPGC Project.
EN-5	
NPS EN-5 paragraphs 2.2.7 to 2.2.9 *The connection between the initiating and terminating points of a proposed new electricity line will often not be via the most direct route. Siting constraints, such as engineering, environmental or community considerations will be important in determining a feasible route.* *There will usually be a degree of flexibility in the location of the development's associated infrastructure such as substations, and applicants should consider carefully their location, as well as their design.* *In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts (See Sections 2.9 – 2.10 below and Section 5.10 in EN-1.)*	The constraints considered in the routing and siting of the offshore and onshore components of the MHPGC Project from the OSP in either Morven North or Morven South to the PoI at National Grid Hawthorn Pit Substation are presented in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR.** Consideration of local topography and screening around the onshore LSS options is detailed further in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.
NPS EN-5 paragraphs 2.2.10 to 2.2.12 *As well as having duties under section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), applicants must take into account Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and …do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.*	Through the identification of constraints described in the annexes to this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**), the Applicant has refined the landfall, offshore infrastructure, and onshore infrastructure to avoid impacts, in the first instance, and where avoidance is not practicable, to reduce the impact upon environmental and social receptors. Measures adopted as part of the MHPGC Project to mitigate potential impacts are provided in **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR** and considered in the relevant chapters in **Volumes**

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Depending on the location of the proposed development, statutory duties under section 85 of the Countryside and Rights of Way Act 2000, section 11A of the National Parks and Access to the Countryside Act 1949 (as amended by section 62 of the Environment Act 1995), and section 17A of the Norfolk and Suffolk Broads Act 1988 may be relevant. Applicants should note amendments to each of these provisions contained in section 245 of the Levelling Up and Regeneration Act 2023. *Transmission and distribution licence holders are also required under Schedule 9 to the Electricity Act 1989 to produce and publish a statement setting out how they propose to perform this duty generally.*	**2, 3 and 4, of the PEIR**. Legislation relevant to the assessment of land use and recreation, including the Countryside and Rights of Way (CRoW) Act 2000 are set out in section 8.2 of **Volume 3, Chapter 8: Land Use, Tourism and Recreation, of the PEIR.** As the MHPGC PEIR Red Line Boundary: Onshore does not coincide with any National Parks, provisions set out in the National Parks and Access to the Countryside Act 1949 (as amended by section 62 of the Environment Act 1995) have not been considered further.
NPS EN-5 paragraphs 2.4.1 to 2.4.4 *The Planning Act 2008 requires the Secretary of State to have regard, in designating an NPS, and in determining applications for development consent, to the desirability of good design.* *Applicants should consider the criteria for good design set out in EN1 Section 4.7, the Holford and Horlock rules and Electricity Transmission Design Principles (see Section 2.9 below) at an early stage when developing projects.* *However, the Secretary of State should bear in mind that electricity networks infrastructure must in the first instance be safe and secure, and that the functional design constraints of safety and security may limit an applicant's ability to influence the aesthetic appearance of that infrastructure.* *While the above principles should govern the design of an electricity networks infrastructure application to the fullest possible extent – including in its avoidance and/or mitigation of potential adverse impacts (particularly those detailed in Section 2.10 below) – the functional performance of the infrastructure in respect of security of supply and public and occupational safety must not thereby be threatened.*	Details of how good design has been considered throughout the development of the MHPGC Project are presented in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). **Section 3.3.6** also sets out how the principles of the Horlock Rules have been considered in the siting of the onshore LSS. The Applicant has made a commitment (CoT62 **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) that Design Principles will be produced and submitted as part of the application for development consent. It will focus on design elements associated with the onshore LSS fulfilling the requirement for 'good design', as prescribed in the NPSs EN-1, EN-3 and EN-5 and informed by the Planning Inspectorate (PINS)'s Advice Note on Good Design to minimise any potential adverse impacts. The Applicant is in the process of seeking engagement with DCC on the basis of a Design Approach Document to aid development of the Design Principles. The Design Approach Document will be submitted alongside the outline Design Principles.
NPS EN-5 paragraph 2.8.1 *A more strategic approach to network planning is essential to ensure that network development keeps pace with renewable generation and anticipates future system needs. It is imperative that the strategic need for the infrastructure is given the highest priority given the urgency of bringing forward network's infrastructure. The time involved in bringing forward transmission projects underscores the importance of the strategic approach.*	As detailed in **Sections 3.7-3.10**, the Applicant has undertaken a site selection process based on the output of the HND and HND FUE to identify the location and refine the design of the key components of the MHPGC Project infrastructure, including through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable corridor, landfall location, onshore cable corridors and onshore LSS) where locational alignment could be sought. Details of this are presented in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.

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NPS EN-5 paragraphs 2.9.21 to 2.9.23 *Although it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or National Landscape).* *In these areas, and where harm to the landscape, visual amenity and natural beauty (including their special qualities and key characteristics) of these areas cannot feasibly be avoided by re-routing overhead lines, the strong starting presumption will be that the applicant should underground the relevant section of the line.* *However, undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes (see paragraph 2.11.4) is not outweighed by its corresponding landscape, visual amenity and natural beauty benefits. Regardless of the option, the scheme through its design, delivery, and operation, should seek to further the statutory purposes of the designated landscape. These enhancements may go beyond the mitigation measures needed to minimise the adverse effects of the scheme.*	Consideration of whether cables should be underground or be overhead lines is provided in **Section 3.6.3**. The Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. No overhead pylons will be installed as part of the MHPGC Project. Seascape, landscape and visual amenity impacts are considered and assessed in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**. The MHPGC Project is not located within a nationally designated landscape such as National Park, The Broads or National Landscape. Further justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**).
NPS EN-5 paragraphs 2.9.24 to 2.9.25 *Additionally, cases will arise where, though no part of the proposed development crosses a designated landscape, a high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route may result in recommendations to use undergrounding for relevant segments of the line or alternatively consideration of using a route including subsea cabling.* *In these cases, and taking account of the fact that the government has not laid down any further rule on the circumstances requiring use of underground or subsea cables, the Secretary of State must weigh the feasibility, cost, and any harm of the undergrounding or subsea option against:* • *the adverse implications of the overhead line proposal;* • *the cost and feasibility of re-routing overhead lines or mitigation proposals for the relevant line section; and* • *the cost and feasibility of the reconfiguration, rationalisation, and/or use of underground or subsea cabling of proximate existing or proposed electricity networks infrastructure.*	As detailed in Section 2.9.4 of **Volume 1, Chapter 2: Project Description, of the PEIR**, the offshore export cables will be buried or, in instances where burial is not possible, protected, in line with best practice. Further justification for the routing of the offshore export cables, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**.
NPS EN-5 paragraph 2.9.26 *In such cases the Secretary of State should only grant development consent for underground or subsea sections of a proposed line over an overhead alternative if they are satisfied that the benefits accruing from the former proposal clearly outweigh any extra economic, social, or environmental impacts that it presents, the mitigation hierarchy has been followed, and that any technical obstacles associated with it are surmountable. In this context it should consider:* • *the landscape and visual baseline characteristics of the setting of the proposed route, in particular, the impact on high sensitivity visual receptors (as defined in the current edition of the Landscape*	Consideration of whether cables should be underground or be overhead lines is provided in **Section 3.6.3**. It should be noted that the offshore export cables will be buried or protected, and the Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. Impacts on agricultural land and soils are assessed in **Volume 3, Chapter 9: Agriculture and Soils, of the PEIR**. The MHPGC Project avoids peat. To avoid, reduce and mitigate impacts on agricultural land and

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Institute's Guidelines for Landscape and Visual Impact Assessment), residential areas, designated landscapes, valued landscapes, designated heritage assets and Heritage Coasts (including, where relevant, impacts on the setting of designated features and areas), noting the policy in EN-1 paragraphs 5.4.13 – 5.4.14 on regional and local designations; • *the additional cost of the proposed underground or sub-sea alternatives, including their significantly higher lifetime cost of repair and later uprating;* • *the potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage assets, marine environments, soil (including peat soils), hydrology, geology, and, for a substantial time after construction, landscape and visual amenity. (Undergrounding an overhead line will mean digging a trench along the length of the route, and so such works will often be more disruptive – albeit temporarily – to the receptors listed above than would an overhead line of equivalent rating);* • *the potentially very disruptive effects of subsea cables on the seabed and the species that live in and on it, including physical damage to and full loss of seabed habitats. Cable protection can also be required where cables cross each other, or where they cannot be buried deep enough to protect them from becoming exposed. Such protection causes additional impacts that are often greater than those of the cable itself due to the large areas covered. There can also be issues where subsea cables make landfall, as much coastal land is protected habitat with environmental and heritage designations and landfall connections could cause additional disruption to coastal communities and the environment;* • *the applicant's commitment, as set out in their ES, to mitigate the potential detrimental effects of undergrounding works on any relevant agricultural land and soils (including peat soils), particularly regarding Best and Most Versatile land, including development and implementation of a Soil Resources and Management Plan. Such a commitment must guarantee appropriate handling of soil, backfilling, and return of the land to the baseline Agricultural Land Classification (ALC), thus ensuring no loss or degradation of agricultural land. Such a commitment should be based on soil and ALC surveys in line with the 1988 ALC criteria and due consideration of the Defra Construction Code of Practice for Sustainable Use of Soils on Construction Sites.*	soils, the Applicant has made a commitment (CoT40, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Soil Management Plan will be prepared and submitted as part of the application for the development consent. A Detailed SMP will be developed substantially in accordance with the Outline SMP, in order to characterise and manage soil materials during construction. Soil types would be determined via site-specific survey work as set out in the Outline SMP. Further justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in the annexes of this chapter (**Volume 1, Annexes 3.1 and 3.3, of the PEIR**). The effects of buried cables are assessed in the relevant chapters in **Volumes 2, 3 and 4, of the PEIR**.
NPS EN-5 paragraphs 2.10.1 to 2.10.4 *The applicant should consider and address routing and avoidance/minimisation of environmental impacts both onshore and offshore at an early stage in the development process.* *Careful siting of a line away from, or parallel to, but not across, known flight paths can reduce the numbers of birds colliding with overhead lines considerably.* *Making lines more visible by methods such as the fitting of bird flappers and diverters to the earth wire, which swivel in the wind, glow in the dark and use of fluorescent colours designed specifically for bird vision can also reduce the risk of bird collisions and number of potential deaths. The design and colour of the diverters will be specific to the conditions – the line and pylon/transmission tower specifications and the species at risk.*	Further details on consideration of whether cables should be underground or be overhead lines is provided in **Section 3.6.3**. It should be noted that the offshore export cables will be buried or protected, and the Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. As such, impacts to aviation (military and civil) and radar associated with the MHPGC Project are scoped out of assessment in the PEIR, and the MHPGC Project is not anticipated to result in direct impacts on known flight paths and bird collisions with the project infrastructure.

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Electrocution risks can be reduced through the design of lattice steel tower crossarms, insulators and the construction of other parts of high voltage power lines so that birds find no opportunity to perch near energised power lines on which they might electrocute themselves.	Routing and site selection are considered in **Sections 3.7-3.10** of this chapter and annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). The aim was to identify sites and routes that will minimise environmental impacts as far as practicable and can be delivered from a technical and consenting perspective, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to consumers.
NPS EN-5 paragraphs 2.10.5 to 2.10.6 *In addition to good design in accordance with the Holford and Horlock rules (please see paragraphs 2.9.16 - 2.9.19) and the ETDP once published (paragraph 2.9.20), and the consideration of undergrounding or rerouting the line where possible, the principal opportunities for mitigating adverse landscape and visual impacts of electricity networks infrastructure are:* • *Consideration of network reinforcement options (where alternatives exist) which may allow improvements and/or extensions to an existing line rather than the building of an entirely new line;* • *Selection of the most suitable type and design of support structure in order to minimise the overall visual impact on the landscape. In particular, ensuring that towers are of the smallest possible footprint and internal volume; and* • *The rationalisation, reconfiguration, and/or undergrounding of existing electricity networks infrastructure in the vicinity of the proposed development.* *Additionally, there are more specific measures that might be taken, and which the Secretary of State could mandate through DCO requirements if appropriate, as follows:* • *Landscaping schemes, comprising off-site tree and hedgerow planting, are sometimes used for larger new overhead line projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These may be implemented with the agreement of the relevant landowner(s), or the developer may compulsorily acquire the land or land rights in question. Advice from the relevant statutory authority should be sought on the design of such schemes, with particular consideration given to the selection of species mix which is appropriate to the local landscape character; and* • *Screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact from a particular receptor.*	Details of how good design has been considered throughout the development of the MHPGC Project are presented in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). **Section 3.3.6** also sets out how the principles of the Horlock Rules have been considered in the siting of the onshore LSS. The Applicant also notes that the Electricity Transmission Design Principles (ETDP) (NESO, 2026) was published in June 2026. As the site selection and design refinement process up to the publication of the PEIR has largely been undertaken prior to the publication of the ETDP, the Applicant is not expected to apply the ETDP retrospectively. Future stages of the design refinement process will be undertaken with regard to the ETDP, and these will be demonstrated upon the submission of the DCO application where required. Measures adopted as part of the MHPGC Project to mitigate potential impacts on landscape and visual resources are provided in **Volume 1, Annex 4.1: Commitments Register, of the PEIR** and considered in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**. The Applicant has also made a commitment (CoT43, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Landscape and Ecological Management Plan (LEMP) will be prepared and submitted with the application for development consent. It will include details of mitigation planting at the onshore substation site including the number, location, species and details of management and maintenance of planting. A Detailed LEMP will be developed substantially in accordance with the Outline LEMP.
NPS EN-5 paragraphs 2.11.2 to 2.11.6 *The Secretary of State should be satisfied that the development, so far as is reasonably possible, complies with the Holford and Horlock Rules (please see paragraphs 2.9.16 - 2.9.19) or any updates to them and has had regard to the ETDP (please see paragraph 2.9.20) once published.* *The Secretary of State should also be satisfied that all feasible options for mitigation, including the rationalisation, reconfiguration, or undergrounding of existing electricity networks infrastructure, have*	**Section 3.3.6** sets out how the principles of the Horlock Rule have been considered in the siting of the onshore LSS. Further justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is also set out in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**).

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been considered and evaluated appropriately. *In circumstances where it can be demonstrated that a mitigation measure and/or technological approach is appropriate and/or necessary for a project, including to limit landscape and visual impact as set out above, the Secretary of State should take this into account in decision making.* *Nationally designated landscapes have specific statutory purposes. The Secretary of State should have special regard to nationally designated landscapes, where the general presumption in favour of overhead lines should be reversed to favour undergrounding. In addition, the Secretary of State must seek to further the purpose(s) of designated landscapes when making decisions which effect land within the designated area. EN-1 (Section 5.10) and paragraphs 2.9.7 to 2.9.26 above have further guidance on this requirement.* *Away from designated landscapes and in locations where there is a high potential for widespread and significant adverse landscape and/or visual impacts, the Secretary of State should be satisfied that the applicant has provided evidence to support a decision on whether undergrounding is or is not appropriate, having considered this on a case-by-case basis, weighing the considerations in paragraph 2.9.25 above.*	The Applicant also notes that the Electricity Transmission Design Principles (ETDP) (NESO, 2026) was published in June 2026. As the site selection and design refinement process up to the publication of PEIR has largely been undertaken prior to the publication of the ETDP, the Applicant is not expected to apply the ETDP retrospectively. Future stages of the design refinement process will be undertaken with regard to the ETDP, and these will be demonstrated upon the submission of the DCO application where required. Seascape, landscape and visual amenity impacts are considered and assessed in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**. The MHPGC Project is not located within a nationally designated landscape such as a National Park, The Broads or a National Landscape. The MHPGC Project does pass through local landscape designations, notably the Durham Heritage Coast and an Area of Higher Landscape Value at landfall and onshore at both sides of the Durham Coast Railway Line. To limit potential seascape, landscape and visual impacts, the Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. Further details on consideration is provided in **section 3.6.3**. Measures adopted as part of the MHPGC Project to mitigate potential impacts on landscape and visual resources are provided in **Volume 1, Annex 4.1: Commitments Register, of the PEIR** and considered in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.
NPS EN-5 paragraphs 2.13.1 to 2.13.20 *The strategic network designs such as those led or enabled by NESO will usually form the basis for identifying proposals for co-ordinated transmission. This includes the HND and CSNP for offshore-onshore transmission prepared by NESO.* *The HND and subsequent network design and planning exercises identify and establish the transmission capabilities needed, both onshore and offshore, to support offshore wind developments. These include the onshore connection points for offshore transmission and potential future OHA opportunities. Government recognises the work undertaken in the HND; the HND and subsequent network design exercise contain information that is important and relevant in the consideration of applications for infrastructure resulting from those exercises.* *The work of the HND and its subsequent follow up exercises considered the objectives for designs to be economic and efficient, deliverable, operable, minimise impact on the environment and minimise the impact on the local communities for the offshore and onshore transmission aspects. Through this work steps have already been taken to reduce avoidable cumulative impacts. Assessment of projects coming*	The Morven Offshore Wind Farm development was scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. In July 2022, National Grid Electricity System Operator (NGESO) published its HND, with Phase 1 of the HND intended to connect 50GW of offshore wind in Great Britain by 2030, including 1.5GW from the Morven Site. Building on this, the HND and HND FUE refined and expanded the original design of the grid connection network to incorporate updated project data, stakeholder feedback, and evolving policy objectives, ensuring the network remains fit for purpose as offshore wind deployment accelerates. Following the outcome of the HND, the Applicant was notified of the PoI

Summary of NPS provisions	How and where considered in the PEIR
forward from this design should acknowledge these prior steps. *It is recognised that proposed projects which have progressed through strategic network design exercises have been considered for strategic co-ordination through those exercises. However, any opportunities for subsequent local co-ordination between projects, irrespective of whether they have been through those exercises, should be considered in project development. This is in addition to considerations on co-ordinating delivery in construction, see Section 2.14.2.* *In addition, it is recognised that the HND and subsequent network design exercises may identify a radial solution, i.e. a direct route from an offshore wind farm to shore, not proposed to co-ordinate with another project at the time of network design.* *In the case of infrastructure identified through the HND, and subsequent network design exercises, applicants should identify any variations to or developments from that work and justify these in accordance with the same objectives or criteria above, i.e. economic and efficient, deliverable, operable, minimise impact on the environment and minimise the impact on the local communities, weighting these criterial consistently to the applicable network design exercise.* *On occasion, network designs may be amended as necessary as a result of new information or other changes (such as where a project within a coordinated design is no longer being progressed).* *Any such changes approved through an appropriate change control process are likely to result in information that is important and relevant to the Secretary of State's decision.* *Radial offshore transmission options to single windfarms should only be proposed where options assessment work identifies that a co-ordinated solution is not feasible. For projects which had firm connection agreements in place prior to completion of the HND (formerly known as 'Early Opportunities' projects), co-ordinated design work should be brought forward by applicants.* *The identification of co-ordinated solution options, and any radial option, should consider the criteria for designs to be deliverable and operable, economic and efficient, minimise impact on the environment and minimise impact on the local communities. Options should seek to identify the most appropriate balance between these criteria.* *The coordinated solutions assessed should seek to be ambitious in the degree of co-ordination, wherever possible. This includes taking account of geographically proximate projects including opportunities to connect wind farms and OHAs and/or bootstraps with each other that are planned or foreseen in the near future. Evidence should demonstrate that this has been considered in the assessment of options.* *Applicants bringing forward offshore transmission projects are expected to consider future demand when considering the location and route of their proposals. This may involve consenting offshore platforms, converter stations or substations which facilitate future coordination.* *If, through the coordinated options assessment work, a radial route is deemed to be the only feasible solution, applicants should evidence each co-ordination option and the accompanying assessment. These assessments should detail the application of the criteria identified above versus the radial counterfactual. In these instances, the Secretary of State should have regard to the need case set out in Section 3.3 of EN-1.*	by NESO in April 2025, confirming the connection between the Morven Site and National Grid Hawthorn Pit Substation in County Durham, England up to a total capacity of 1.5 GW. It should be noted that a coordinated connection between other offshore assets was initially proposed by NESO as part of the HND during early stages of the MHPGC Project. This was later discounted in the HND process, and a radial connection for the MHPGC Project from the Morven Site to Hawthorn Pit was confirmed by NESO. As detailed in **Sections 3.7-3.10**, the Applicant has undertaken a site selection process based on the output of the HND to identify the location and refine the design of the key components of the MHPGC Project infrastructure, including through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable corridor, landfall location, onshore cable corridors and onshore LSS) where locational alignment could be sought. Details of this are presented in this chapter and its annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). Detailed assessments of the impacts of the MHPGC Project are provided within all technical topic chapters within **Volumes 2, 3 and 4 of the PEIR**. As set out in every chapter, mitigation measures have been developed to primarily avoid, then reduce or offset significant adverse environmental effects. Measures adopted as part of the MHPGC Project are provided in **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.

Summary of NPS provisions	How and where considered in the PEIR
Co-ordinated transmission proposals, including OHA and other types of offshore transmission (see Glossary), are expected to reduce the overall environmental and community impacts associated with bringing offshore transmission onshore compared to an uncoordinated, radial approach. These reduced impacts could, for example, relate to: fewer landing sites and reduced landfall impacts; reduced overall cable length and impacts; and fewer cable corridors and reduced impacts from these. *Similarly, the related onshore infrastructure required in conjunction with the offshore transmission to enable offshore wind to be connected at its onshore grid connection point is expected to reduce the overall environmental and community impacts. This is in comparison with that which would be required for radial connections from single offshore windfarms to the shore.* *For onshore infrastructure, reduced impacts could, for example, relate to fewer or co-located substations and converter stations and transmission lines as well as demonstrating how environmental and community impacts have been avoided as far as possible.* *Applicants are expected to be able to indicate how co-ordination including reduction in impacts have been considered drawing on work of others, including that led or enabled by NESO.* *For those projects not covered by the strategic network planning undertaken by NESO and which have received a connection agreement, applicants should seek to demonstrate the reduced overall impacts from co-ordination (as identified at Section 2.13.14 above) and how the onshore connection locations have been identified. These projects are expected to demonstrate the reductions in environmental and community impact achieved through co-ordination compared with radial solutions.* *There may be exceptional circumstances where multiple co-ordinated solutions have been explored and all those solutions would lead to adverse impacts (for example adverse effects on an environmentally protected site) and where these could be avoided through radial connections. In these circumstances radial connections may be more appropriate. Evidence of the co-ordinated solutions assessed and likely adverse impacts would need to be provided by the applicant to clearly substantiate this. This includes demonstration of consideration of alternative co-ordination solutions which may not be in proximate locations.* *Applicants should refer to policy text in EN-3 (including Section 2.8) and EN-1 (including Sections 4.6 and 5.4) regarding consideration of impacts and cumulative impacts in the environment, as well as policy text in the remainder of this policy statement regarding consideration of impacts onshore.*	
NPS EN-5 paragraphs 2.13.21 to 2.13.23 *The sensitivities of many coastal locations and of the marine environment as well as the potential environmental, community and other impacts in neighbouring onshore areas must be considered in the identification of onshore connection points.* *Onshore connection points for offshore transmission bringing power from offshore wind farms must be considered as part of the overall offshore transmission network design and in conjunction with the onshore network by the body responsible for the design.* *Onshore connection locations for offshore transmission must seek to minimise environmental and other impacts, both onshore and in the marine environment and including to local communities.*	Justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). **Sections 3.8 and 3.10** also summarises the site selection and design refinement process of the landfall location, onshore cable routing and onshore LSS siting to bring power from the array assets to the PoI at National Grid Hawthorn Pit Substation.

Summary of NPS provisions	How and where considered in the PEIR
NPS EN-5 paragraph 2.14.1 *Adverse impacts on Marine Protected Areas (MPAs) have caused consenting delays, and in some cases a need for compensatory measures under the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Habitats and Species Regulations 2017, or measures of equivalent environmental benefit under the Marine and Coastal Access Act 2009. Therefore, applicants should consider and address routing and avoidance/minimisation of environmental impacts both onshore and offshore at an early stage in the development process. Applicants should also facilitate delivery of strategic compensation measures where appropriate (see paragraphs 2.8.245 - 2.8.252 of EN-3).*	Justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is also set out in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). As detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure,** and **Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR,** the MHPGC Project PEIR Red Line Boundary is located within 5km of two offshore designated sites, the Farnes East MCZ and the Northeast of Farnes Deep MCZ and HPMA. The Applicant has sited infrastructure to avoid direct impacts on these designated sites, such as routing the offshore export cable corridor to avoid the MCZs and HPMA. The approach for the assessment of the MPAs is set out in **Approach to Marine Protected Area/Marine Conservation Zone and Highly Protected Marine Area Assessments, of the PEIR** and a MCZ/MPA and HPMA Assessment will be produced and submitted with the application for development consent and Marine Licence application(s) to the Scottish Minsters where applicable.
NPS EN-5 paragraph 2.14.2 In the assessments of their designs, applicants should demonstrate: • How environmental, community and other impacts have been considered and how adverse impacts have followed the mitigation hierarchy i.e. avoidance, reduction and mitigation of adverse impacts through good design; • How enhancements to the environment will be achieved including demonstrating consideration of how terrestrial and intertidal components of project proposals can contribute towards biodiversity net gain (as set out in Section 4.6 of EN-1 and the Environment Act 2021), as well as wider environmental improvements in line with the Environmental Improvement Plan and environmental targets (paragraph 4.3.20 of EN-1); • How the construction planning for the proposals has been co-ordinated with that for other similar projects in the area on a similar timeline; For designated landscapes the principal mitigation measure, as established by the Holford Rules, should be to seek to avoid landfall in these areas. • How enhancements to the landscape and environmental assets may contribute to overall landscape, seascape and townscape quality as set out in EN-1 paragraphs 4.6.13 and 5.10.24; • How the mitigation hierarchy has been followed, in particular to avoid the need for	Justification for the location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is also set out in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). As detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, and Annex 3.1: Selection and Refinement of the Cable Landfall of the PEIR,** the MHPGC Project PEIR Red Line Boundary is located within Durham Coast SAC and SSSI and within 5km of two offshore designated sites, the Farnes East MCZ and the Northeast of Farnes Deep MCZ and HPMAs. The Applicant has sited infrastructure to avoid direct impacts to these designated sites, including the use of trenchless techniques at landfall where the Durham Coast SAC and SSSI is located, and routing the offshore export cable corridor to avoid the MCZs and HPMA. **Section 3.10.4** of this chapter demonstrates the Applicant has identified an area of search for habitat management including potential biodiversity net gain, enhancement and/or mitigation within the MHPGC Project PEIR Red Line Boundary. The Applicant has made a commitment

Summary of NPS provisions	How and where considered in the PEIR
compensatory measures for coastal, inshore and offshore developments affecting SACs SPAs, and Ramsar sites and MCZs as set out in EN-3 Section 2.8;…. • For designated landscapes the principal mitigation measure, as established by the Holford Rules, should be to seek to avoid landfall in these areas.	(CoT57, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Biodiversity Gain Plan will be prepared and submitted with the application for development consent. It will include details of the measures proposed to secure and deliver the MHPGC Project's statutory Biodiversity Gain objective. A Detailed Biodiversity Gain Plan will be developed substantially in accordance with the Outline Biodiversity Gain Plan. Opportunities to deliver wider environmental gains, including landscape and ecological enhancements, will also be considered as part of the Outline LEMP, which will be submitted as part of the application for development consent (CoT43, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**). Technical topic chapters in **Volumes 2, 3 and 4 of the PEIR** catalogue the wide and thorough assessment undertaken across environmental, social and economic receptors. Measures adopted as part of the MHPGC Project to avoid, reduce, mitigate or compensate for any adverse effects are provided in **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**. As demonstrated in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**, the mitigation hierarchy has been applied in developing mitigation and enhancement measures throughout the EIA process of the MHPGC Project.
NPS EN-5 paragraph 2.15.1 *Coordinated approaches to delivering offshore and onshore transmission to minimise overall environmental, community, and other impacts, as set out above, must be considered. The Secretary of State must be satisfied that applicants have explained the steps they have taken to do this, the options that have been considered and the approach they have taken to coordination as set out in above at Section 2.13. This evidence is expected to draw substantially on the work enabled by the Offshore Transmission Network Review and relevant strategic network design exercises, together with any additional supporting evidence applicants consider relevant. The Secretary of State should also be satisfied that options for coordination have been considered and evaluated appropriately.*	The Morven Offshore Wind Farm development was scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. In July 2022, NGESO published its HND, with Phase 1 of the HND intended to connect 50GW of offshore wind in Great Britain by 2030, including 1.5GW from the Morven Site. Building on this, the HND and HND FUE refined and expanded the original design of the grid connection network to incorporate updated project data, stakeholder feedback, and evolving policy objectives, ensuring the network remains fit for purpose as offshore wind deployment accelerates. Following the outcome of the HND, the Applicant was notified of the PoI by NESO in April 2025, confirming the connection between the Morven Site and National Grid Hawthorn Pit Substation in County Durham, England up to a total capacity of 1.5 GW. As detailed in **Sections 3.7-3.10**, the Applicant has undertaken a site

Summary of NPS provisions	How and where considered in the PEIR
	selection process based on the output of the 2022 HND to identify the location and refine the design of the key components of the MHPGC Project infrastructure, including through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable corridor, landfall location, onshore cable corridors and onshore LSS) where locational alignment could be sought. Details of this are presented in this chapter and its annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). Technical topic chapters in **Volumes 2, 3 and 4 of the PEIR** catalogues the wide and thorough assessment undertaken across environmental, social and economic receptors, which can be used to allow weighing of impacts and benefits in the Secretary of State's decision-making process.

3.3.4 The National Planning Policy Framework

3.3.4.1 The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2018, 2019, 2021, 2023, 2024 and 2026 (Ministry of Housing, Communities and Local Government, 2026). The NPPF sets out the Government's policies for England. A summary of the NPPF policies relevant to this chapter is presented in **Table 3-2**.

Table 3-2: Summary of NPPF policies relevant to site selection and consideration of alternatives

Principle	NPPF policies	How and where considered for site selection in the PEIR
Facilitating the sustainable use of minerals (section 11)	**Policy M6: Safeguarding mineral resources and infrastructure through decision-making** Proposals for non-mineral development should not constrain potential future use for mineral working in a Mineral Safeguarding Area. Where proposals for non-mineral development are located within a Minerals Consultation Area, the decision-making authority should consult the mineral planning authority and take account of the local minerals plan before determining the planning application.	The site selection process of landfall and the onshore infrastructure considered Mineral Safeguarding Areas as part of the environmental constraints analysis, as set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Siting and routing decisions have been made to avoid impacting Mineral Safeguarding Areas.
Making effective use of land (section 12)	**Policy L2: Making effective use of land** Substantial weight should be given to the benefits where a development proposal would achieve one or more of the following: • Remediating despoiled, degraded, derelict, contaminated or unstable land; • Making better use of vacant and underutilised land and buildings [….].	The site selection process for landfall and the onshore infrastructure considered known contaminated land, land use impacts and site conditions, as set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**, and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR.** The Applicant has made a commitment (CoT33, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) that an Outline Contaminated Land and Groundwater Discovery Strategy will be prepared and submitted with the application for development consent, to identify any suspected areas of contamination and any remedial measures which may be required. A Detailed Strategy will be developed substantially in accordance with the Outline Strategy and will identify the construction protocol for discovery of any currently unknown contamination and any remedial measures that may be required.
Protecting Green Belt land (section 13)	**Policy GB6: Control of development in the Green Belt** Development in the Green Belt is inappropriate unless it falls within one of the categories in policy GB7 (development which is not inappropriate in the Green Belt). Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. Such circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness and any other harm resulting from the proposed development, is clearly outweighed by other considerations. In making this assessment, substantial weight should be	Onshore elements of the MHPGC Project, including the onshore cable corridor and both onshore LSS Option Areas, do not run through any areas of Green Belt.

Principle	NPPF policies	How and where considered for site selection in the PEIR
	given to the harm to the Green Belt which would be caused, including harm to its openness. In the case of proposals for renewable and low carbon energy development, very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.	
Achieving well-designed places (section 14)	**Policy DP3: Key principles for well-designed places** Development proposals should respond to their context (the history, character and features of their site and its setting), so that they integrate with and enhance their surroundings; such as through the arrangement of development plots and buildings, the use of materials and architectural features, and the restoration, reuse and integration of heritage assets.	Details of how good design has been considered throughout the development of the MHPGC Project, taking into account relevant local and national design policies and guidance, are presented in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). For example, to ensure the development is sympathetic to the local character, the Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. No overhead pylons will be installed as part of the MHPGC Project. The Applicant has also made a commitment (CoT62 **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) that Design Principles will be produced and submitted as part of the application for development consent. It will focus on design elements associated with the onshore LSS fulfilling the requirement for 'good design', as prescribed in the NPSs EN-1, EN-3 and EN-5 to minimise adverse impacts and informed by the PINS's Advice Note on Good Design to ensure well-designed places responding to the local context could be achieved.
Promoting sustainable transport (section 15)	**Policy TR6: Assessing transport impacts** Development proposals that are likely to generate significant amounts of movement should be supported by: • a transport statement or transport assessment so that the likely impacts of the proposal for transport can be assessed and monitored; and • a travel plan, which indicates how sustainable transport objectives will be delivered, monitored and managed over time. Transport assessments and statements, and travel plans, should reflect the transport vision for the development and the transport strategy for the area in which it is located, and how these are intended to be achieved.	The site selection process for the onshore LSS considered traffic and transport factors, as set out in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Potential impacts of the MHPGC Project on traffic and transport are considered and assessed in **Volume 3, Chapter 5: Traffic and Transport, of the PEIR**. The Applicant has made a commitment (CoT41, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Construction Traffic Management Plan (CTMP) will be prepared and submitted with the application for development consent. A Detailed CTMP, which includes details of any necessary traffic management measures and localised road improvements, will be developed substantially in accordance with the Outline CTMP prior to construction.
Promoting healthy	**Policy HC7: Development affecting existing recreational land and facilities**	The site selection process of landfall and the onshore infrastructure has considered environmental receptors, including recreational amenity, and is detailed in **Volume 1, Annex**

Principle	NPPF policies	How and where considered for site selection in the PEIR
communities (section 16)	Development proposals should not result in the loss of existing open space, sports and recreational buildings and land, including playing fields, other formal and informal play space and allotments.	**3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Potential impacts of the MHPGC Project on recreational land and facilities are considered and assessed in **Volume 3, Chapter 8: Land Use, Tourism and Recreation, of the PEIR**.
Pollution, public protection and security (section 17)	**Policy P2: Ground conditions** Sites proposed for development should be suitable for their proposed use taking into account: Ground conditions, including any risks arising from land instability or contamination; and the extent to which any such risks can be mitigated, and the potential impacts on the natural environment arising from remediation. **Policy P3: Living conditions and pollution** Development proposals should be appropriate for their location, taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, whether these effects are on or off-site; and whether this is as a result of the development itself or the product of preexisting conditions in its vicinity. In assessing the potential effects of pollution, consideration should be given to the potential sensitivity of the site, and its intended occupiers and users, as well as that of the environment and population in the surrounding area (including where certain groups could be particularly vulnerable to its effects, such as children and older people).	The site selection process of landfall and the onshore infrastructure has considered environmental receptors, including ground conditions and main settlements, and is detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Potential impacts of the MHPGC Project on ground conditions are considered and assessed in **Volume 3, Chapter 1: Geology, Hydrogeology and Ground Conditions, of the PEIR**, and potential human health impacts from pollution are considered and assessed in **Volume 4, Chapter 2: Human Health, of the PEIR**.
Managing flood risk and coastal change (section 18)	**Policy F4: Assessing flood risk for decision-making** To inform the assessment of flood risk and, where relevant, appropriate mitigation, a site-specific flood risk assessment should accompany all development proposals in Flood Zones 2, 3a, and 3b. **Policy F7: Ensuring development is safe from flooding** Development proposals should not present a risk from flooding to potential occupiers, users, or visitors, and should not increase flood risk elsewhere. Where development is proposed in a location known to be at risk from any form of flooding, now or in the future, it should be refused unless within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons which justify a different arrangement.	The site selection process for the onshore infrastructure which has taken into consideration flood risk is described within **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. A Flood Risk Assessment has been undertaken and is set out in **Volume 3, Annex 2.2: Flood Risk Assessment, of the PEIR.** The permanent onshore infrastructure of the MHPGC Project is located predominantly within Flood Zone 1 and with a low chance of surface water flooding. Whilst there are areas of Flood Zone 2 and Flood Zone 3, the Applicant has made a commitment (CoT17 of **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the siting of the temporary and permanent footprint of the MHPGC Project will avoid areas of Flood Risk Zone 2 and 3 where practicable during the site selection process.
Conserving and enhancing the natural environment (section 19)	**Policy N2: Improving the natural environment** To contribute positively to the natural environment, and support nature's recovery, development proposals should: • consider the environmental qualities of land proposed for development, including	The site selection process of landfall and the onshore infrastructure has considered environmental receptors, and is detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of**

Principle	NPPF policies	How and where considered for site selection in the PEIR
	habitats, landscape character and the natural beauty of the countryside, and identify opportunities for those qualities to be conserved or enhanced (including through requirements for biodiversity net gain where these apply); • take into account the quality of agricultural land (including that classified as best and most versatile agricultural land, and its grade), and if significant development of agricultural land is necessary, use areas of poorer quality land where possible; • conserve and enhance existing natural features of visual, historic or nature conservation value (such as established trees and hedgerows) where possible; and use appropriate landscaping to help create a well-designed place and integrate the development into its surroundings; • use green infrastructure provided as part of the scheme and nature-based solutions to secure multiple benefits: such as for biodiversity; surface water and pollution management (including maintaining flow rates and water quality); climate change mitigation and adaptation, and recreation; and • minimise any adverse impacts on biodiversity and include features which support priority or threatened species such as swifts, bats and hedgehogs. If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated or, as a last resort, compensated for, then the development should be refused. **Policy N5: Maintaining the character of the coast** Development proposals should maintain the character of undeveloped areas of coast, including land designated for its landscape, habitat or heritage value, while improving public access to it where appropriate. Development proposals in areas defined as Heritage Coast (and which do not already fall within a Protected Landscape) should be consistent with the special character of the area and the importance of its conservation. a)	**the PEIR**. Potential impacts of the MHPGC Project on receptors relevant to policy N2 are considered and assessed in: • **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR;** • **Volume 3, Chapter 3: Terrestrial Ecology and Terrestrial and Intertidal Ornithology, of the PEIR;** • **Volume 3, Chapter 4: Onshore Archaeology and Cultural Heritage, of the PEIR**; • **Volume 3, Chapter 9: Agriculture and Soils, of the PEIR;** and • **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for the effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**. **Section 3.10.4** of this chapter demonstrates the Applicant has identified an area of search for habitat management including potential biodiversity net gain, enhancement and/or mitigation within the MHPGC Project PEIR Red Line Boundary. The Applicant has made a commitment (CoT57, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Biodiversity Gain Plan will be prepared and submitted with the application for development consent. It will include details of the measures proposed to secure and deliver the project's statutory Biodiversity Gain objective. A Detailed Biodiversity Gain Plan will be developed substantially in accordance with the Outline Biodiversity Gain Plan. The MHPGC Project does pass through the Durham Heritage Coast at landfall. To limit potential seascape, landscape and visual impacts and ecological impacts, the Applicant has made a commitment (CoT13, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that the installation of the offshore export cables under Durham Coast SSSI and SAC will use trenchless technologies (CoT13, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**). The trenchless installation will pass beneath the intertidal area, and no works and construction vehicle access are proposed on Blast Beach.
Conserving and enhancing the historic environment (section 20)	**Policy HE5: Assessing effects on heritage assets** Development proposals affecting heritage assets should be accompanied by an assessment of the significance of the assets affected (including any contribution made by	The site selection process of landfall and the onshore infrastructure has considered environmental receptors, including historic environment assets, and is detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the**

Principle	NPPF policies	How and where considered for site selection in the PEIR
	their setting) and of the potential effect of the proposal on their significance. The level of detail should be proportionate to the assets' importance and no more than is necessary to understand the potential effect of the proposal on their significance. Where a development proposal involves, or has the potential to involve, a heritage asset with archaeological interest, an appropriate desk-based assessment should be undertaken and, where necessary, a field evaluation. These should be used to help understand the asset's significance and the potential effect of the proposal on this, which should inform the design, mitigation and implementation of the development. **Policy HE6: Proposals affecting designated heritage assets** When considering the potential effect of a development proposal on the significance of a designated heritage asset, substantial weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be).	**Onshore Infrastructure, of the PEIR**. Potential impacts of the MHPGC Project on historic environment assets are considered and assessed in **Volume 3, Chapter 4: Onshore Archaeology and Cultural Heritage, of the PEIR**.

3.3.5 Marine policies

UK Marine Policy Statement

3.3.5.1 The UK-wide Marine Policy Statement (MPS) was published in March 2011, under the Marine and Coastal Access Act 2009 (MCAA), in order to provide a framework for marine spatial planning, specifically for the preparation of Marine Plans and taking decisions that affect the marine environment (Defra, 2011). The Marine Management Organisation (MMO) has taken a regional approach to the development of marine plans in English waters.

Scotland's National Marine Plan and North East Inshore and North East Offshore Marine Plan

3.3.5.2 The MCAA requires all public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area to do so in accordance with the MPS and the relevant Marine Plans. The Marine Plans relevant to the Marine Licences required for the MHPGC Project are as follows:

- the Scottish National Marine Plan (Scottish Government, 2015); and
- the North East Inshore and North East Offshore Marine Plan (HM Government, 2021).

3.3.5.3 This site selection chapter has given consideration to the specific policies set out in the Scottish Marine Plan and North East Inshore and North East Offshore Marine Plan, with a summary of relevant policies set out in **Table 3-3**.

Table 3-3: Summary of marine plan policies relevant to site selection and consideration of alternatives

Policy	Key provisions	How and where considered for site selection in the PEIR
Scotland's National Marine Plan		
GEN 4 Co-existence	Proposals which enable coexistence with other development sectors and activities within the Scottish marine area are encouraged in planning and decision-	Justification for the location of the MHPGC Project in the Scottish marine area, and how it enables coexistence with other development sectors and activities within

Policy	Key provisions	How and where considered for site selection in the PEIR
	making processes, when consistent with policies and objectives of this Plan.	the Scottish marine area is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.**
GEN 6 Historic environment	Development and use of the marine environment should protect and, where appropriate, enhance heritage assets in a manner proportionate to their significance.	Justification for the location of the MHPGC Project in the Scottish marine area, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Constraints specific to marine archaeology are considered and assessed in **Volume 2, Chapter 9: Marine and Intertidal Archaeology, of the PEIR**.
GEN 7 Landscape/ seascape	Marine planners and decision makers should ensure that development and use of the marine environment take seascape, landscape and visual impacts into account.	Justification for the location of the MHPGC Project in the Scottish marine area, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Seascape, landscape and visual amenity impacts are considered and assessed in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.
GEN 8 Coastal process and flooding	Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have unacceptable adverse impact on coastal processes or contribute to coastal flooding.	Justification for the location of the MHPGC Project in the Scottish marine area, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Potential impacts on physical processes are considered and assessed in **Volume 2, Chapter 1: Physical Processes, of the PEIR**. Potential impacts on flooding are considered and assessed in **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR.**
GEN 9 Natural heritage	Development and use of the marine environment must: a) comply with legal requirements for protected areas and protected species; b) not result in significant impact on the national status of Priority Marine Features; and c) protect and, where appropriate, enhance the health of the marine area.	Justification for the location of the MHPGC Project in the Scottish marine area, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Constraints specific to the marine environment are considered and assessed in the relevant chapters contained in **Volume 2 of the PEIR**.
FISHERIES 2	The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on fishing:	The site selection process has considered how the offshore infrastructure of the MHPGC Project has been situated in the Scottish marine area. To date, the MHPGC Project has engaged with Scottish

Policy	Key provisions	How and where considered for site selection in the PEIR
	• the cultural and economic importance of fishing, in particular to vulnerable coastal communities; • the potential impact (positive and negative) of marine developments on the sustainability of fish and shellfish stocks and resultant fishing opportunities in any given area; • the environmental impact on fishing grounds (such as nursery, spawning areas), commercially fished species, habitats and species more generally; and • the potential effect of displacement on: fish stocks; the wider environment; use of fuel; socio-economic costs to fishers and their communities and other marine users.	commercial fisheries stakeholders on potential issues such as co-existence and details are presented in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Constraints specific to the commercial fishing activities are considered and assessed in **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR**.
RENEWABLES 1	Proposals for commercial scale offshore wind and marine renewable energy development should be sited in the Plan Option areas identified through the Sectoral Marine Plan process. Plan Options are considered the preferred strategic locations for the sustainable development of offshore wind and marine renewables. This preference should be taken into account by marine planners and decision makers if alternative development or use of these areas is being considered. Proposals are subject to licensing and consenting processes.	As described in **Section 3.2**, the Morven Site, including Morven North and Morven South, are situated in Plan Option area E1 identified in the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020). The purpose of the MHPGC Project is to connect Morven North or Moven South to the PoI at National Grid Hawthorn Pit Substation as notified by NESO following the outcome of the 2022 and 2025 HND and 2025 HND FUE.
REC & TOURISM 2	The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on recreation and tourism: • the extent to which the proposal is likely to adversely affect the qualities important to recreational users, including the extent to which proposals may interfere with the physical infrastructure that underpins a recreational activity; • the extent to which any proposal interferes with access to and along the shore, to the water, use of the resource for recreation or tourism purposes and existing navigational routes or navigational safety; • where significant impacts are likely, whether reasonable alternatives can be identified for the proposed activity or development; and • where significant impacts are likely and there are no reasonable alternatives, whether mitigation, through recognised and effective measures, can be achieved at no significant cost to the marine recreation or tourism sector interests.	Justification for the location of the MHPGC Project in the Scottish marine area, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** The MHPGC Project's potential effects on tourism are set out in **Volume 4 Chapter 3: Socio-economics, of the PEIR**, and the extent to which the MHPGC Project is likely to affect recreational users in the marine environment and access to and use of the water is considered in **Volume 2 Chapter 10: Infrastructure and Other Seat Users, of the PEIR**. Furthermore, **Volume 2 Chapter 8: Shipping and Navigation, of the PEIR,** considers potential impacts to navigational routes and safety.
TRANSPORT 1	Navigational safety in relevant areas used by shipping now and in the future will be protected, adhering to the rights of innocent passage and freedom of navigation contained in UN Convention on the Law of the Sea (UNCLOS). The following factors will be taken into account when reaching decisions regarding development and use:	Navigational and shipping routes, proximity to ports and harbours and anchorages have been considered when siting the offshore infrastructure for the MHPGC Project, as outlined in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR. Volume 2 Chapter 8: Shipping and Navigation, of the**

Policy	Key provisions	How and where considered for site selection in the PEIR
	• the extent to which the locational decision interferes with existing or planned routes used by shipping, access to ports and harbours and navigational safety. This includes commercial anchorages and defined approaches to ports; • where interference is likely, whether reasonable alternatives can be identified; and • where there are no reasonable alternatives, whether mitigation through measures adopted in accordance with the principles and procedures established by the International Maritime Organization can be achieved at no significant cost to the shipping or ports sector.	**PEIR** outlines the assessments undertaken to understand potential implications of the MHPGC Project on shipping and navigation receptors, and how the MHPGC Project has reduced potential impacts.
CABLES 2	The following factors will be taken into account on a case-by-case basis when reaching decisions regarding submarine cable development and activities: • cables should be suitably routed to provide sufficient requirements for installation and cable protection; • new cables should implement methods to minimise impacts on the environment, seabed and other users, where operationally possible and in accordance with relevant industry practice; • cables should be buried to maximise protection where there are safety or seabed stability risks and to reduce conflict with other marine users and to protect the assets and infrastructure; • where burial is demonstrated not to be feasible, cables may be suitably protected through recognised and approved measures (such as rock or mattress placement or cable armouring) where practicable and cost-effective and as risk assessments direct; and • consideration of the need to reinstate the seabed, undertake post-lay surveys and monitoring and carry out remedial action where required.	The site selection process for the offshore export cable corridor considered environmental and safety risks as part of the environmental constraints analysis, as set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Section 2.9.4 of **Volume 1, Chapter 2: Project Description, of the PEIR** sets out the design parameters for cable installation and protection, and Section 2.16.1 of the same chapter outlines the operations and maintenance activities anticipated for the offshore export cable corridor. Further detail on cable protection requirements, including burial depths based on assessed seabed conditions, is set out in **Volume 2, Annex 8.2: Cable Burial Risk Assessment (CBRA), of the PEIR**.
CABLES 4	When selecting locations for landfall of power and telecommunications equipment and cabling, developers and decision makers should consider the policies pertaining to flooding and coastal protection in Chapter 4, and align with those in Scottish Planning Policy and Local Development Plans.	Justification for the landfall location of the MHPGC Project, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**. It should be noted that all landfall options considered are located onshore in England. Potential impacts on physical processes are considered and assessed in **Volume 2, Chapter 1: Physical Processes, of the PEIR**. Potential impacts on flooding are considered and assessed in **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR.**

Policy	Key provisions	How and where considered for site selection in the PEIR
North East Inshore and North East Offshore Marine Plan		
NE-CO-1	Proposals that optimise the use of space and incorporate opportunities for co-existence and co-operation with existing activities will be supported. Proposals that may have significant adverse impacts on, or displace, existing activities must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.	Justification for the location of the MHPGC Project, and how it enables co-existence and co-operation with other development sectors and activities in the marine environment, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR.** Constraints specific to existing marine activities (e.g. shipping and navigation, commercial fisheries and infrastructure and other users) are considered and assessed in the relevant chapters within **Volume 2 of the PEIR.** The Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for the effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-AGG-1	Proposals in areas where a licence for extraction of aggregates has been granted or formally applied for should not be authorised, unless it is demonstrated that the proposal is compatible with aggregate extraction.	There is no overlap between the MHPGC Project PEIR Red Line Boundary and any marine aggregate extraction or disposal sites.
NE-CAB-1	Preference should be given to proposals for cable installation where the method of protection is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant. Where burial or protection measures are not appropriate, proposals should state the case for proceeding without those measures.	The site selection and design refinement process for the offshore export cable corridor is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Section 2.9.4 of **Volume 1, Chapter 2: Project Description, of the PEIR**, also sets out that the offshore export cables will be buried or in instances where burial is not possible, protected, in line with best practice. The Applicant has made a commitment (CoT08 of **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Offshore Cable Specification and Installation Plan (CSIP) will be prepared and submitted with the application for development consent and as part of the Marine Licence application(s) to the Scottish Ministers. The Outline Offshore CSIP will also include a CBRA, which will define burial depths and safeguards to keep the offshore export cables protected and compliant through all project phases while upholding navigational and environmental safety.
NE-CAB-2	Proposals demonstrating compatibility with existing landfall sites and incorporating measures to enable development of future landfall opportunities should be supported. Where this is not possible proposals will, in order of preference: a) avoid;	The site selection process for landfall is set out in **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR.** Consideration has been given to avoiding existing project landfalls and proposed projects based on publicly available

Policy	Key provisions	How and where considered for site selection in the PEIR
	b) minimise; c) mitigate - adverse impacts on existing and potential future landfall sites so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	information as detailed in **Volume 1, Annex 4.4: Cumulative Screening Matrix and Location Plan, of the PEIR**. The Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for the effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-CAB-3	Where seeking to locate close to existing subsea cables, proposals should demonstrate compatibility with ongoing function, maintenance and decommissioning activities relating to the cable.	The MHPGC Project has considered the location of existing cable infrastructure within the site selection process as detailed in **Volume 1, Annex 4.2: Selection and refinement of offshore infrastructure, of the PEIR**. Proximity to other infrastructure, including subsea cables is also considered in **Volume 2 Chapter 10: Infrastructure and Other Seat Users, of the PEIR**, while crossing details and considerations are outlined in **Volume 1 Chapter 2: Project Description, of the PEIR.**
NE-PS-1	In line with the National Policy Statement for Ports, sustainable port and harbour development should be supported. Only proposals demonstrating compatibility with current port and harbour activities will be supported. Proposals within statutory harbour authority areas or their approaches that detrimentally and materially affect safety of navigation, or the compliance by statutory harbour authorities with the Open Port Duty or the Port Marine Safety Code, will not be authorised unless there are exceptional circumstances. Proposals that may have a significant adverse impact upon future opportunity for sustainable expansion of port and harbour activities, must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate – adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	As detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**, the site selection process of the MHPGC Project has considered shipping and navigation activity and receptors. **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR** did not identify any significant effects upon access to ports or harbours as a result of the MHPGC Project. **Volume 2, Annex 8.1: Navigation Risk Assessment, of the PEIR** presents a risk assessment for each hazard relating to shipping and navigation. The significance of all hazards has been assessed to be either broadly acceptable or tolerable with mitigation, with all hazards assessed to be ALARP, assuming mitigation measures are implemented.
NE-REN-1	Proposals that enable the provision of renewable energy technologies and associated supply chains, will be supported.	The MHPGC Project enables the transmission of renewable energy generated from the array assets.
NE-REN-2	Proposals for new activity within areas held under a lease or an agreement for lease for renewable energy generation should not be authorised, unless it is demonstrated that the proposed development or activity will not reduce the ability to construct, operate or decommission the existing or planned energy generation project.	No other renewable energy generation leases beyond the Morven Site are present within the MHPGC Project PEIR Red Line Boundary. The MHPGC Project has considered the location of existing infrastructure within site selection as detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2:**

Policy	Key provisions	How and where considered for site selection in the PEIR
		Selection and Refinement of the Offshore Infrastructure, of the PEIR.
NE-REN-3	Proposals for the installation of infrastructure to generate offshore renewable energy, inside areas of identified potential and subject to relevant assessments, will be supported.	As described in **Section 3.2**, the Morven Site, including Morven North and Morven South, is situated in Plan Option area E1 identified in the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020). The purpose of the MHPGC Project is to connect Morven North or Moven South to the PoI at National Grid Hawthorn Pit Substation, as notified by NESO following the outcome of the 2022 and 2025 HND.
NE-HER-1	Proposals that demonstrate they will conserve and enhance the significance of heritage assets will be supported. Where proposals may cause harm to the significance of heritage assets, proponents must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - any harm to the significance of heritage assets. If it is not possible to mitigate, then public benefits for proceeding with the proposal must outweigh the harm to the significance of heritage assets.	Justification for the location of the MHPGC Project in the marine environment, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Constraints specific to marine archaeology are considered and assessed in **Volume 2, Chapter 9: Marine and Intertidal Archaeology, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for those effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-SCP-1	Proposals should ensure they are compatible with their surroundings and should not have a significant adverse impact on the character and visual resource of the seascape and landscape of the area. The location, scale and design of proposals should take account of the character, quality and distinctiveness of the seascape and landscape. Proposals that may have a significant adverse impact on the seascape and landscape of the area should demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant. If it is not possible to mitigate, the public benefits for proceeding with the proposal must outweigh significant adverse impacts to the seascape and landscape of the area. Proposals within or relatively close to nationally designated areas should have regard to the specific statutory purposes of the designated area. Great weight should be given to conserving and enhancing	Justification for the location of the MHPGC Project in the marine environment, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Seascape, landscape and visual amenity potential impacts are considered and assessed in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for those effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.

Policy	Key provisions	How and where considered for site selection in the PEIR
	landscape and scenic beauty in National Parks and Areas of Outstanding Natural Beauty.	
NE-FISH-1	Proposals that support a sustainable fishing industry, including the industry's diversification, should be supported.	**Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** considers and assesses effects of the MHPGC Project on fishing activities in the marine environment. To minimise the potential impacts upon the fishing industry, the Applicant has made commitments to ongoing liaison with the fishing industry through the appointment of a CFLO(s) and adherence to good practice guidance with regards to fisheries liaison (CoT19), production of an FLCP in relation to English waters to be submitted with the application for development consent (CoT20), and production of an FMMCP in relation to Scottish waters to be submitted as part of the Marine Licence application(s) to the Scottish Ministers (CoT55). Further detail of these relevant commitments is provided in **Section 3.5** of this chapter and **Volume 1, Annex 4.1: Commitments Register, of the PEIR**.
NE-FISH-2	Proposals that enhance access for fishing activities should be supported. Proposals that may have significant adverse impacts on access for fishing activities must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	Justification for the location of the MHPGC Project in the marine environment, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR.** Potential impacts of the MHPGC Project on commercial fisheries are considered and assessed in **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR.** Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for those effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-FISH-3	Proposals that enhance essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes, should be supported. Proposals that may have significant adverse impacts on essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes, must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant.	**Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** discusses how fish habitats have been avoided, where possible. Consideration of mitigation is provided in **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR** and **Volume 2, Annex 4.1: Herring and Sandeel Assessment Technical Report, of the PEIR**, which did not identify any significant effects from the MHPGC Project, either in isolation or when considered alongside other plans and projects.
NE-CC-1	Proposals that conserve, restore or enhance habitats that provide flood defence or carbon sequestration will be supported. Proposals that may have significant adverse impacts on habitats that provide a flood	As detailed in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**, the Applicant has

Policy	Key provisions	How and where considered for site selection in the PEIR
	defence or carbon sequestration ecosystem service must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate -adverse impacts so they are no longer significant; d) compensate for significant adverse impacts that cannot be mitigated.	sought to minimise interaction with habitats at landfall.
NE-CC-3	Proposals in the north east marine plan areas, and adjacent marine plan areas, that are likely to have significant adverse impacts on coastal change, or on climate change adaptation measures inside and outside of the proposed project areas, should only be supported if they can demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate -adverse impacts so they are no longer significant.	The MHPGC Project is designed to be resilient to the impacts of climate change and ultimately as part of renewable energy developments reduce the rate at which the climate is changing as a result of human activities. **Volume 2, Chapter 1: Physical Processes, of the PEIR** concluded that there will be no significant effects on coastal change arising from the MHPGC Project during the construction, operation and maintenance or decommissioning phases.
NE-ML-2	Proposals that facilitate waste re-use or recycling to reduce or remove marine litter will be supported. Proposals that could potentially increase the amount of marine litter in the marine plan areas must include measures to, in order of preference: a) avoid; b) minimise; c) mitigate -waste entering the marine environment.	The Applicant has made a commitment (CoT37, of **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Marine Pollution Contingency Plan (MPCP) will be prepared and submitted with the application for development consent and as part of the Marine Licence application(s) to the Scottish Ministers. The Outline MPCP will include a description of the hazards, response strategies, and step-by-step actions for handling spills, contaminant releases to the marine environment during construction or operations. A Detailed MPCP will be developed substantially in accordance with the Outline MPCP.
NE-WQ-1	Proposals that protect, enhance and restore water quality will be supported. Proposals that cause deterioration of water quality must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate – deterioration of water quality in the marine environment.	**Volume 2, Annex 2.1: Offshore Water Framework Directive Assessment, of the PEIR** determined that the MHPGC Project will not result in deterioration of the Tyne and Wear Coastal Waterbody. The MHPGC Project will not compromise the delivery of the Northumbria River Basin Management Plan (2022) objectives.
NE-ACC-1	Proposals demonstrating appropriate enhanced and inclusive public access to and within the marine area, including the provision of services for tourism and recreation activities, will be supported. Proposals that may have significant adverse impacts on public access should demonstrate that they will, in order of preference: a) avoid; b) minimise;	The site selection process for landfall and the offshore export cable corridor is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of access of other sea users to the marine environment.

Policy	Key provisions	How and where considered for site selection in the PEIR
	c) mitigate-adverse impacts so they are no longer significant.	Potential impacts of the MHPGC Project on other sea users are considered and assessed in **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for the effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-TR-1	Proposals that promote or facilitate sustainable tourism and recreation activities, or that create appropriate opportunities to expand or diversify the current use of facilities, should be supported. Proposals that may have significant adverse impacts on tourism and recreation activities must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate -adverse impacts so they are no longer significant.	The site selection process for landfall and the offshore export cable corridor is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of tourism and recreational activities in the marine environment. **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR** did not identify any significant effects upon marine recreational or tourism activities. **Volume 4, Chapter 3: Socio-economics, of the PEIR** also did not identify significant effects on tourism economy from changes in visitor behaviour.
NE-DEF-1	Proposals in or affecting Ministry of Defence areas should only be authorised with agreement from the Ministry of Defence.	The site selection process for the offshore export cable corridor is set out **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of areas of military operation in the marine environment. **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR** did not identify significant effects on military practice areas.
NE-MPA-1	Proposals that support the objectives of marine protected areas and the ecological coherence of the marine protected area network will be supported. Proposals that may have adverse impacts on the objectives of marine protected areas must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts, with due regard given to statutory advice on an ecologically coherent network.	As detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure**, the MHPGC Project has considered MPAs in site selection and design. The MHPGC Project PEIR Red Line Boundary is located within 5km of two offshore designated sites, the Farnes East MCZ and the Northeast of Farnes Deep MCZ and HPMA. The Applicant has sited infrastructure to avoid these designated sites, such as by routing the offshore export cable corridor to avoid the MCZs and HPMA. The approach to consideration of the MPAs is set out in **Approach to Marine Protected Area/Marine Conservation Zone and Highly Protected Marine Area Assessments, of the PEIR and a MCZ/MPA and HPMA Assessment will accompany the application for development consent and**

Policy	Key provisions	How and where considered for site selection in the PEIR
		Marine Licence application(s) to the Scottish Ministers.
NE-MPA-3	Where statutory advice states that a marine protected area site condition is deteriorating or that features are moving or changing due to climate change, a suitable boundary change to ensure continued protection of the site and coherence of the overall network should be considered.	The Applicant has sited infrastructure to avoid designated sites including MCZs and HPMAs. Further detail is set out in the above response to NE-MPA-1.
NE-MPA-4	Proposals that may have significant adverse impacts on designated geodiversity must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant.	There are no designated sites or sites of interest due to geological importance within the offshore extent of the MHPGC Project PEIR Red Line Boundary.
NE-BIO-1	Proposals that enhance the distribution of priority habitats and priority species will be supported. Proposals that may have significant adverse impacts on the distribution of priority habitats and priority species must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant; d) compensate for significant adverse impacts that cannot be mitigated.	The site selection process for landfall and the offshore export cable corridor is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of the distribution of priority habitats and priority species. Potential impacts of the MHPGC Project on European sites or designated features are considered and assessed in **Habitats Regulations Appraisal/ Habitats Regulations Assessment RIAA, of the PEIR**. The RIAA concludes that the construction, O&M, and decommissioning of the MHPGC Project will not result in an Adverse Effect on Integrity alone or in-combination for any European sites.
NE-BIO-2	Proposals that enhance or facilitate native species or habitat adaptation or connectivity, or native species migration, will be supported. Proposals that may cause significant adverse impacts on native species or habitat adaptation or connectivity, or native species migration, must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate - adverse impacts so they are no longer significant; d) compensate for significant adverse impacts that cannot be mitigated.	The site selection process for landfall and the offshore export cable corridor is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of the marine and coastal ecosystems including their species and habitats. A detailed characterisation of the marine and coastal ecosystems in the study area and the assessment of potential impacts, with consideration of mitigation measures, on the related receptors is detailed within: • **Volume 2, Chapter 3: Benthic Subtidal and Intertidal Ecology, of the PEIR**; • **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR**; • **Volume 2, Chapter 5: Marine Mammals, of the PEIR**; and

Policy	Key provisions	How and where considered for site selection in the PEIR
		• **Volume 2, Chapter 6: Marine Ornithology, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for those effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.
NE-DIST-1	Proposals that may have significant adverse impacts on highly mobile species through disturbance or displacement must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate -adverse impacts so they are no longer significant.	The site selection process for landfall and the offshore export cable corridor is set out in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. This includes consideration of the high mobile species including marine mammals and fish species. **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR** and **Volume 2, Chapter 5: Marine Mammals, of the PEIR** detail the potential effects upon marine mammals and fish species including measures to minimise and mitigate effects.
NW-UWN-2	Proposals that result in the generation of impulsive or non-impulsive noise must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate -adverse impacts on highly mobile species so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.	To avoid generation of impulsive or non-impulsive noise, unexploded ordnance (UXO) that may be encountered during the installation of the offshore export cables will be avoided through microrouting of the cables. The Applicant has also made a commitment (CoT58 of **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that low order techniques, such as deflagration, will be the preferred method for UXO clearance where practicable and appropriate. Further detail of UXO clearance is provided in section 2.9.3 of **Volume 1, Chapter 2: Project Description, of the PEIR**.

3.3.6 Horlock Rules

3.3.6.1 The relevance of planning and environmental considerations in the siting of onshore substations was set out by the Central Electricity Generating Board and more recently reviewed and adopted by National Grid Electricity Transmission (NGET) in the 'Horlock Rules'. The Horlock Rules are a set of guidelines produced by NGET to assist those responsible for siting and designing substations to mitigate the environmental effects of such developments (National Grid, 2003). They are still referred to and used by National Grid (and endorsed in ministerial decisions and at public inquiry) when undertaking planning studies for new infrastructure although they now have to be considered alongside the relevant policies set out in the NPSs, Development Plan documents and local planning policies, as well as other sources and guidance.

3.3.6.2 The principles embedded in the Horlock Rules are relevant to the onshore LSS for the MHPGC Project.

3.3.6.3 In the Horlock Rules, NGET states that it will encourage generators to adopt the guidelines when working with NGET on proposals for substations, sealing end compounds or line entries. These

guidelines also confirm that consideration must be given to environmental issues at the earliest stage in order to keep adverse effects to a reasonably practical minimum in the planning of new substations.

3.3.6.4 **Table 3-4** summarises the Horlock Rules and the MHPGC Project approach to them.

Table 3-4: MHPGC Project application of the Horlock Rules

Horlock Rules Guidelines	MHPGC Project approach
Overall System Options and Site Selection	
Section III paragraph 1 In the development of system options, including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.	Potential environmental issues have been considered since the commencement of the site selection process as described in: • **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
Amenity, cultural or scientific value of sites	
Section III paragraph 2 The siting of new substations, sealing end compounds and line entries should, as far as reasonably practicable, seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.	The site selection process has considered designated sites, including those designated for ecological, landscape and historic environment. The process has been set out in detail within: • **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. All internationally and nationally designated sites have been avoided as part of onshore LSS site selection.
Section III paragraph 3 Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas should be protected as far as reasonably practicable.	The onshore LSS options have sought to protect areas of local amenity value, important existing habitats and landscape features as far as reasonably possible. Where impacts cannot be avoided, they are addressed through appropriate mitigation and design as described within the relevant topic chapters in **Volumes 3 and 4 of the PEIR** and **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.
Local context, land use and site planning	
Section III paragraph 4 The siting of substations, extensions and associated proposals should take advantage of the screening provided by landform and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.	The stages of siting the onshore LSS are provided in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Potential benefits from screening around the onshore LSS options are detailed in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR.**
Section III paragraph 5 The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.	Potential visual, noise and other environmental effects have been minimised as far as possible through the site selection process. Further mitigation for potential visual impacts is considered in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**, with potential noise and vibration impacts considered in **Volume 3, Chapter 6: Onshore Noise and Vibration, of the PEIR**.

Horlock Rules Guidelines	MHPGC Project approach
	Commitments made by the Applicant to minimise visual, noise and other environmental effects are also set out in **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.
Section III paragraph 6 The land use effects of the proposal should be considered when planning the siting of substations or extensions.	The use of existing land has been considered within the site selection process; further details on the consideration of land use are contained within in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
Design	
Section III paragraph 7 In the design of new substations or line entries, early consideration should be given to the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.	The coordinated approach and consideration to the site selection and refinement of the onshore LSS is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. The effects associated with potential equipment within the onshore LSS have been considered in the development of the onshore LSS design and through the assessment of environmental effects.
Section III paragraph 8 Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation.	The initial footprint of the onshore LSS has been determined based on the current substation designs. The design of the onshore LSS may be subject to further refinement at future stages of the LSS location down-selection and design refinement process, and during the detailed design phase, post consent. Note: the reference to the "future extension of the substation" is related to the future extension of National Grid substations. This is not considered as part of the site selection process for the MHPGC Project.
Section III paragraph 9 The design of access roads, perimeter fencing, earth shaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.	The requirement for access roads, fencing, site levelling, planting and other works (including the need for attenuation ponds) has been taken into account as a part of the Project Design Envelope (PDE) approach as detailed in **Volume 1, Chapter 2: Project Description, of the PEIR**.
Line entry	
Section III paragraph 10 In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance.	Overhead lines are not included in the MHPGC Project PDE. The Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length.
Section III paragraph 11 The inter-relationship between towers and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.	The Applicant has made a commitment (CoT27, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) that the onshore export cables and the AC connection cables will be completely buried underground for the entire length. No overhead pylons will be installed as part of the MHPGC Project.

3.3.7 The Crown Estate Cable Route Protocol

3.3.7.1 The Crown Estate's Cable Route Protocol (CRP) (described within The Crown Estate's Cable Route Identification and Leasing Guidelines, 2025) comprises a set of principles and requirements for offshore wind developers in the planning and siting of offshore export cable routes, with the specific purpose of minimising the direct and indirect impacts of cable routing on the marine environment.

Compliance with the CRP is a requirement for entry into The Crown Estate's transmission assets Agreement for Lease (AfL).

3.3.7.2 The requirements outlined within the CRP have been considered throughout the site selection process of the MHPGC Project to date and will continue to be addressed throughout the EIA phase to ensure the Cable Route Identification and Approval process is undertaken and submitted to The Crown Estate's standards. Relevant requirements to the site selection process and how these principles have been met are described in **Table 3-5**.

Table 3-5: CRP requirements and where addressed in the PEIR

CRP Requirement number	Requirement	Where this requirement has been addressed in the PEIR
1	Where elements of Cable Route planning have taken place before a developer has entered into a Wind Farm AfL with The Crown Estate, these must be clearly set out within the CRIA (since The Crown Estate can only enforce compliance with the requirements of the CRP after the developer has entered into the WF AfL).	The Applicant secured a ScotWind lease for the Morven Site in January 2022 and is engaging with The Crown Estate on an AfL for the MHPGC Project. Prior to submission of the DCO application, the Applicant will submit a Cable Route Impact Assessment (CRIA) document to The Crown Estate, which will include cable route planning details undertaken to date.
2	Under the CRP, developers must undertake consultation with Statutory Nature Conservation Bodies (SNCBs) throughout the route selection and refinement process. The nature of this consultation will vary from project to project, but to be effective the consultation should be ongoing throughout the process, and both parties must provide clear information and advice within the agreed timeframes. Developers must demonstrate […] that clear information on the proposed Cable Route has been provided for SNCBs at appropriate stages in Cable Route planning and that SNCB advice has been sought at appropriate stages (whether through formal or informal consultation). A summary of engagement to date and SNCB views on information shared by the Applicant must be included in the CRIA. It is acknowledged that some elements of the cable planning process are time-constrained and that delays in receiving input from consultees can result in difficulties for developers. Development of an engagement plan is strongly encouraged. If difficulties have been encountered in engagement, these should be clearly stated within the CRIA and taken into consideration by The Crown Estate.	The Applicant has consulted with SNCBs on the routing of the proposed offshore export cable corridor. Details of consultation undertaken is described in **Section 3.4** of this chapter.
3	In planning survey work on potential Cable Routes (or exploratory works within a Cable Route (AoS)), developers must consult with SNCBs to ensure that they have the opportunity to provide feedback on the scope and adequacy of the overarching survey plan. Consultation on the survey plan will be required in order to obtain individual survey licences, and evidence of this consultation is required within the CRIA including a summary of the feedback received, including how SNCB concerns have been addressed.	Consultation on the scope of the offshore export cable surveys with relevant SNCBs formed part of the application for the required Marine Licence(s) for the MHPGC Project surveys. Additional engagement was held on survey specifications and survey coverage following receipt of the MHPGC Project Scoping Opinion. **Section 3.4** presents a summary of consultation undertaken to date. The Applicant will submit a CRIA document to The Crown Estate which

CRP Requirement number	Requirement	Where this requirement has been addressed in the PEIR
		will include a summary of the engagement with the SNCBs to date.
4	Developers must demonstrate […] that planned Cable Routes are in alignment with the relevant policies and, where applicable, the principles within the applicable National Policy Statements and relevant marine plan(s) (including draft marine plans). Particular note should be taken of cable-specific policies within marine plans.	**Sections 3.3.3** and **3.3.5** of this chapter set out how the relevant National Policy Statements and marine plans have been considered within the site selection process of the MHPGC Project.
5	Developers must demonstrate […] that planned cable corridors have taken into account the outcomes of the relevant plan-level HRA (where applicable). This includes any specific requirements on cable planning, any geographically-specific findings and the examples of appropriate project-level cable mitigations.	A pHRA was undertaken for the 2021/22 ScotWind leasing round, but it did not extend to transmission assets. A pHRA was undertaken for the Draft HND Implementation Plan (NESO, 2026). Consideration for project specific compliance with the HRA is provided within: • **Habitats Regulations Assessment/Habitats Regulations Appraisal Screening Report, of the PEIR**; and • **Habitats Regulations Appraisal/Habitats Regulations Assessment RIAA, of the PEIR**.
6	Developers must demonstrate […] that they have had regard to documents and advice produced by SNCBs in relation to offshore export cabling, including current best practice guidance. Developers must also have regard to the outcomes of relevant research programmes which are available at the point of submitting the CRIA. This may include (amongst other things) research into the impacts of cabling, the recovery of habitats and the efficacy of mitigation measures.	The Applicant has consulted with SNCBs on the routing of the proposed offshore export cable corridor. Details of consultation undertaken is described in **Section 3.4** of this chapter**. Table 3-8** also sets out how feedback and advice from SNCBs have been considered in the PEIR.
7	The developer must request a Proximity Check of its proposed AoS and have regard to the findings of this check in Cable Route planning. This includes identification of any requirement for minimum separation distances from existing assets and any potential requirement to negotiate proximity agreements with other tenants. Iterative checks on refinements of the AoS are recommended but are only a requirement where there is a change in location or an increase in size of the AoS.	The Applicant has requested proximity checks to be undertaken by The Crown Estate as part of the CRIA process and the proximity checks undertaken to date have informed the cable corridor down selection process. Marine users identified and considered within the site selection process of the MHPGC Project are detailed in **Volume 1, Annex 3.2: Selection and Refinement of Offshore Infrastructure, of the PEIR**.
8	Within the offshore AoS the developer must identify (and map where possible) the following, which are to be given significant weight in Cable Route planning: • Habitats Regulations sites (SACs, SPAs and Ramsar sites, whether fully designated or not); • MCZs and SSSIs/ASSIs (whether fully designated or not); • features of these Protected Sites (including priority habitats and species), including the sensitivities of each of these to impacts from export cabling (either through consultation with SNCBs or by use of the	The sites referred to within Requirement 8 are considered within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**;

CRP Requirement number	Requirement	Where this requirement has been addressed in the PEIR
	information available from conservation advice packages for sites); • Protected Sites with conservation objectives to recover features to favourable condition; • areas of known Annex I habitat outside protected areas but within the AoS; and • habitats that are known to be irreplaceable unique, rare, and/or fragile (either through consultation with SNCBs or by using the information available within SNCB reports). Having completed this exercise the developer must consult with SNCBs (and, where appropriate, other relevant non-statutory consultees) to ensure that the best available evidence about the environment and specific sensitivities have been incorporated into the AoS mapping, and that the consultees have the opportunity to provide additional narrative about particularly sensitive areas or areas of concern to them. Evidence of this consultation, including a summary of the outcomes and the way in which SNCB concerns have been addressed, must be provided in the CRIA.	• **Approach to Marine Protected Area/Marine Conservation Zone and Highly Protected Marine Area Assessments, of the PEIR**; • **Habitats Regulations Assessment/Habitats Regulations Appraisal Screening Report, of the PEIR**; and • **Habitats Regulations Appraisal/Habitats Regulations Assessment RIAA, of the PEIR**. The Applicant has been engaging with SNCBs through the Evidence Plan Process (EPP) and Expert Working Groups (EWGs) to ensure the most recent evidence around designated sites was taken into assessments and that SNCBs had an opportunity to flag any concerns regarding the site selection process of the MHPGC Project which have been given weight within the offshore cable corridor down selection as detailed in **Section 3.4.**
9	Developers must prepare an outline view of the possible cabling infrastructure requirements (acknowledging that this may change as the design of the project evolves). The outline should include the potential number and capacities of the export cables with their indicative spacing requirements and the additional structures (e.g. offshore substations and converter stations) which the project is likely to require. Where there are uncertainties in the required infrastructure these should be set out (with reasons). Within the AoS, developers must identify (and where possible, map) hard engineering constraints such as existing infrastructure or licence areas, challenging ground conditions and sections of the coast where landfall is not possible. Developers should also form an initial view on the likely areas within the AoS where cable preparation works and/or cable protection may be needed (noting that this information is likely to change as survey work is undertaken). Where possible, this information should be presented alongside the environmental information from Requirement 8. The developer must consult with SNCBs (and, where appropriate, non-statutory consultees) to ensure they understand the likely infrastructure requirements and constraints and that they have the opportunity to raise any areas of concern about placement of infrastructure (including cable protection) and any specific Protected Sites or habitats outside of the Protected Sites network. Evidence of this consultation, including a summary of the outcomes and the way in which SNCB concerns have been addressed, must be provided in the CRIA.	**Volume 1, Chapter 2: Project Description, of the PEIR** identifies the design parameters for cable infrastructure requirements for the MHPGC Project. This includes, for example, the maximum number of offshore export cables, spacing requirements and anticipated extent of off offshore export cable protection. Engineering constraints have been considered throughout the site selection process of the MHPGC Project and are described within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Discussions with SNCBs to date on offshore infrastructure requirements, cable preparation works and/or cable protection and any impacts on designated sites are summarised in **Section 3.4** of this chapter.
10	Developers must demonstrate…. that they have undertaken regular consultation with SNCBs as the Cable Route selection process progresses. In line with the	Stakeholder engagement undertaken to date for the MHPGC Project, including where consultees have been given the

CRP Requirement number	Requirement	Where this requirement has been addressed in the PEIR
	requirements for pre-application consultation, communication should be comprehensively documented but need not take the form of formal reporting. The frequency of communication is a matter for agreement between developers and consultees, taking into account consultee resource constraints. The consultation must encompass the entire process from AoS to final route selection and should include communication of the evolving understanding of cabling infrastructure requirements (including cable protection) as well as the evolving understanding of environmental and technical constraints on the Cable Route. Evidence of this consultation, including a summary of the outcomes and the way in which SNCB concerns have been addressed, must be provided in the CRIA.	opportunity to comment on proposals is described within **Section 3.4** of this chapter.
11	Where SNCBs provide advice and guidance during the Cable Route planning process this must be clearly documented and considered in Cable Route decision-making. The way in which SNCB advice has been incorporated into the Cable Route plan must be documented in the CRIA. If a developer chooses not to follow SNCB advice, or where a developer disagrees with the conclusions of the SNCB, it must provide clear and detailed justification of this in the CRIA. The level of justification should be similar to that which will ultimately be required within Statements of Common Ground with the SNCB(s). Developers must include within the CRIA, copies of any formal advice on the Cable Route received from SNCBs or non-statutory consultees. Where such advice is not yet available (for example where the CRIA is submitted in advance of formal consultation on the Cable Route), developers must either request that SNCBs provide a letter to accompany the CRIA which sets out their position on the Cable Route or develop a joint statement with SNCBs for inclusion in the CRIA, setting out the areas of agreement and disagreement over the Cable Route.	The Applicant has engaged with SNCBs throughout the site selection process of the MHPGC Project. Details of consultation undertaken is described in **Section 3.4** of this chapter. Feedback and advice from SNCBs has been given weight within the offshore cable corridor down selection, and this will be documented in the CRIA to be submitted to The Crown Estate.
12	Where applicable, the expectation is that the Cable Route should avoid the risk of harm to Habitats Regulations sites and other Protected Sites. Where this is not possible and a developer seeks to rely on mitigation measures and / or compensatory measures for engineering or commercial reasons, the developer must be able to demonstrate within the CRIA that appropriate weight has been given to environmental considerations in the Cable Route evaluation process. In practice, this means that within the CRIA the developer must demonstrate that careful consideration has been applied to the potential impact of the route on Protected Sites throughout the process and that all reasonable efforts have been made to avoid environmental impacts and adverse effects on the integrity of sites. If avoidance is not possible, this must be clearly justified (including reasons why alternative Cable Routes are unsuitable); only then can mitigation be considered. If mitigation is included in a Cable Route option, the CRIA must present sufficient evidence to The Crown Estate that suitable mitigation approaches have been	The Applicants have considered designated and protected sites within the site selection process of the MHPGC Project, as detailed in: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**; • **Approach to Marine Protected Area/Marine Conservation Zone and Highly Protected Marine Area Assessments, of the PEIR**; • **Habitats Regulations Assessment/Habitats Regulations**

CRP Requirement number	Requirement	Where this requirement has been addressed in the PEIR
	considered and can be employed on the project to avoid environmental impacts and adverse effects on the integrity of Habitats Regulations sites. Advice given by SNCBs on the efficacy of proposed mitigations and compensatory measures should be provided where available and the mitigation and / or compensation must be capable of being secured in project consents.	**Appraisal Screening Report, of the PEIR**; and • **Habitats Regulations Appraisal/Habitats Regulations Assessment RIAA, of the PEIR**. Proposed offshore mitigation is referenced within the annexes and detailed in full within **Volume 1: Annex 4.1: Draft Commitments Register, of the PEIR**.
13	Within the CRIA the developer must either demonstrate that the following activities have been undertaken, or present a coherent programme for their completion: • consultation on a Preliminary Environmental Information Report which includes the Cable Route or wider Area of Search; and • a full assessment of the environmental impacts of the Cable Route within an Environmental Statement and/or separate report to inform the HRA.	The PEIR for the MHPGC Project has been published with consultation on a defined offshore export cable corridor. A full assessment of the effects of the MHPGC Project will be undertaken as part of the ES to be submitted to support the application for development consent and Scottish Marine Licence application(s).

3.3.8 Local planning policy

3.3.8.1 The onshore components of the MHPGC Project and the TJB(s) at the onshore side of the landfall are located within the administrative areas of Durham County Council (unitary authority).

3.3.8.2 **Table 3-6** outlines the main local planning policy documents that are under consideration in the onshore site selection process. Local development plans may be considered by the Secretary of State under section 104(2)(d) of the Planning Act 2008 as "important and relevant" matters.

Table 3-6: Summary of local planning policy relevant to this chapter

Local development plans	Key provisions	How and where considered for site selection in the PEIR
County Durham Plan 2020-2035 (adopted 2020)	Policy 33 (Renewable and Low Carbon Energy) provides that renewable and low carbon energy development in appropriate locations will be supported. In determining planning applications for such projects significant weight will be given to the achievement of wider social, environmental and economic benefits. Policy 20 (Green Belt) sets out that development proposals within the Green Belt will be determined in accordance with national planning policy. Policies 37 (Durham Heritage Coast and Wider Coastal Zone), 39 (Landscape), 40 (Trees, Woodlands and Hedges), 41 (Biodiversity and Geodiversity), 42 (Internationally Designated Sites), 43 (Protected Species and Nationally and Locally Protected Sites) and 44 (Historic Environment) set out some policies relevant to the Council's approach to conserving and enhancing the natural and historic environment.	The site selection process has considered how the offshore, landfall and onshore components of the MHPGC Project have been sited to avoid (where practicable) areas of sensitive designations and to minimise or reduce potential environmental impacts. It also considers the presence of safeguarded minerals sites and related infrastructure to avoid impacting these areas. The site process has been set out in detail within: • **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. The MHPGC Project does not interact with any land designated as Green Belt. Further assessment of ecology is considered in **Volume 3, Chapter 3: Terrestrial Ecology and**

Local development plans	Key provisions	How and where considered for site selection in the PEIR
	Policy 48 (Safeguarding Minerals Sites, Minerals Related Infrastructure and Waste Management Sites) also sets out the provision that planning permission will not be granted for non-minerals/non-waste related development that would result in the loss of existing/allocated minerals sites and minerals related infrastructure, or where the development is next to these safeguarded sites.	**Terrestrial and Intertidal Ornithology, of the PEIR**, and potential impacts on the historic environment is considered in **Volume 3, Chapter 4: Onshore Archaeology and Cultural Heritage, of the PEIR**. Assessment of potential landscape impacts and commentary on seascape visual amenity are also provided in **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.
County Durham Minerals and Waste Policies and Allocations Document (adopted 2024)	In relation to supply of minerals, the strategic objective of the document is to meet society's need and ensure a steady and adequate supply of both energy and non-energy minerals, in accordance with the principles of sustainable development; while also protecting the environment, amenity and health of local communities; and the safeguarding of economically important mineral resources, mineral sites and minerals related infrastructure from incompatible development.	The site selection process has identified safeguarded minerals sites and related infrastructure, and how the MHPGC Project has been sited to avoid such areas where practicable as described within: • **Volume 1, Annex 3.1: Selection and Refinement of Cable Landfall, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Further assessment of geological assets is considered in **Volume 3, Chapter 1: Geology, Hydrogeology and Ground Conditions, of the PEIR**.
Biodiversity Supplementary Planning Document (SPD) (adopted 2025)	The Biodiversity SPD sets out that consideration of biodiversity at site selection and pre-development design can be critical to delivering successful on-site plans. All proposals should adhere to the biodiversity mitigation hierarchy (Avoid, Mitigate, Compensate, Enhance).	The site selection process has considered how the MHPGC Project has been sited to avoid (where practicable) areas that are subject to ecological and biodiversity constraints. This is detailed within **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Further assessment of ecology is considered in **Volume 3, Chapter 3: Terrestrial Ecology and Terrestrial and Intertidal Ornithology, of the PEIR**. Where adverse effects are identified, the Applicant has applied the mitigation hierarchy in developing measures to avoid, reduce, mitigate or compensate for those effects, as set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**. **Section 3.10.4** of this chapter demonstrates that the Applicant has identified an area of search for potential biodiversity net gain, enhancement and/or mitigation within the MHPGC Project PEIR Red Line Boundary. The Applicant has made a commitment (CoT57, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**) that an Outline Biodiversity Gain Plan will be prepared and submitted with the application for development consent. It will include details of the measures proposed to secure and deliver the project's statutory Biodiversity Gain objective. A Detailed Biodiversity Gain Plan will be developed substantially in accordance with the Outline Biodiversity Gain Plan.

3.4 Consultation and engagement

3.4.1 Overview

3.4.1.1 Stakeholder engagement and public consultation is recognised as vitally important for shaping the approach to development. Engagement has been undertaken with a wide range of stakeholders to refine the siting and design of the MHPGC Project. This has been done in parallel with the consideration of wider spatial constraints and environmental factors. The cable routing and infrastructure locations of the grid connection will continue to be refined following consultation on the PEIR to minimise any potential impacts to key receptor groups.

3.4.1.2 **Figure 3.2** illustrates the down-selection and refinement process undertaken for the MHPGC Project, and the consultation stage that informed the site selection decision-making.

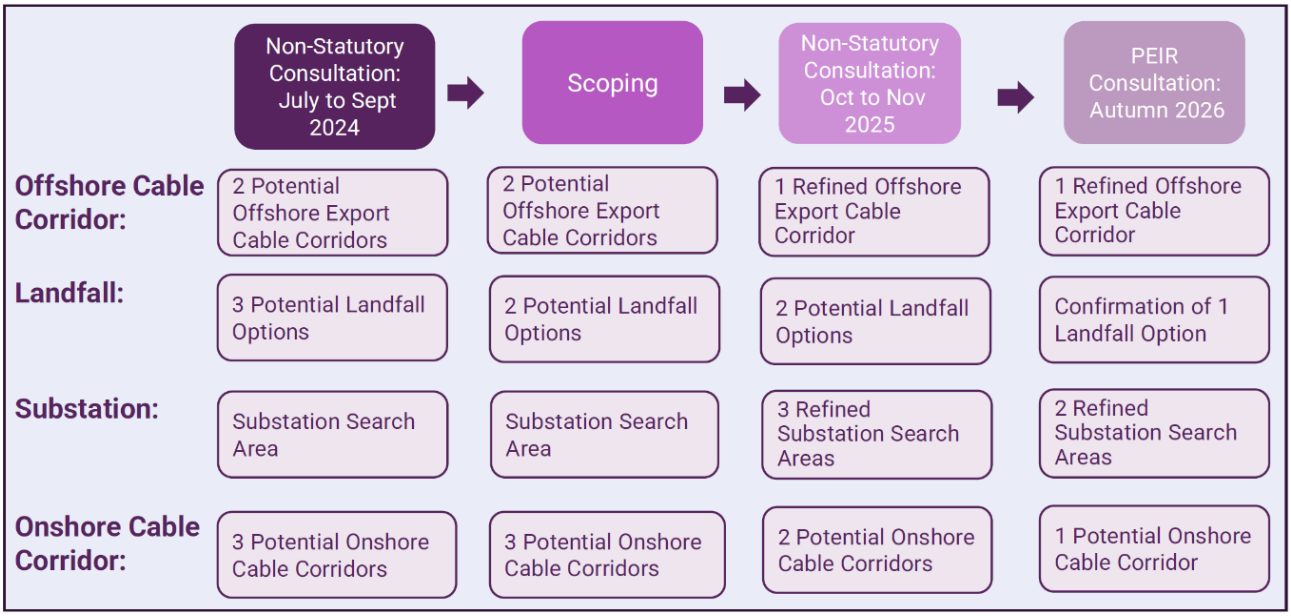


Figure 3.2: Selection and Refinement Process of the MHPGC Project

3.4.2 Consultations

3.4.2.1 Two periods of consultations have been undertaken to date. One ran from July to September 2024 in advance of the Scoping phase and another between October and November 2025. Each consultation period included four public events hosted within the Seaham and Easington area, and an online webinar, where local residents and stakeholders could learn more about the MHPGC Project.

3.4.2.2 The consultation events focused on introducing the MHPGC Project and the siting and routing options of the offshore and onshore components of the MHPGC Project, enabling the Applicant to seek feedback on the site selection process and obtain local knowledge about the surrounding area. A summary of consultation in relation to site selection is given in **Table 3-8**.

3.4.2.3 A public information day was held in Stonehaven in October 2025 to support the Morven North and Morven South applications and provide Scottish stakeholders with the opportunity to find out more about the MHPGC Project at the same time.

3.4.3 Scoping

3.4.3.1 A Scoping Report for the MHPGC Project was issued to PINS and MD-LOT in February 2025 (RPS, 2025). Following consultation with the appropriate statutory bodies, PINS (on behalf of the SoS) and MD-LOT both provided Scoping Opinions in March 2025 (PINS, 2025a; MD-LOT, 2025, respectively).

3.4.3.2 **Table 3-7** sets out key comments raised during the scoping process that are relevant to site selection and consideration of alternatives, together with details of how these comments have been addressed within the PEIR.

Table 3-7: Summary of scoping responses relevant to site selection and consideration of alternatives

Comment	How and where considered in the PEIR
PINS	
The Scoping Report states that the export cables are likely to be installed through the intertidal zone using trenchless methods (such as Horizontal Directional Drilling (HDD)). It also states that there may be a need for construction vehicles to access the beach and there may be a requirement to have an offshore marine spread. The Inspectorate notes the mitigation measure MM-14, which states that cable installation in the nearshore would be undertaken using trenchless methods. The precise technique at this stage is not clear. The ES should describe and assess any options in this regard, including effects during construction, operation and decommissioning. Impacts associated with the anticipated changes at the landfall site throughout the lifetime of the proposed development should be assessed where significant effects are likely. Where reliance is placed on the use of a specific method to mitigate significant effects, the applicant should ensure that such commitments are appropriately defined and secured. The ES should describe how cable burial and siting of associated infrastructure would be managed throughout the lifespan of the proposed development. The alternatives chapter of the ES should describe the main reasons for the option chosen, including a comparison of the environmental effects.	The MHPGC Project has committed to the installation of the offshore export cables under Durham Coast SSSI and SAC using trenchless technologies. The exit pits associated with the installation technology will be at least 100 m seaward of the eastern boundary of the Durham Coast SSSI and SAC (CoT13, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**). The trenchless installation will pass beneath the intertidal area, and no works and construction vehicle access are proposed on Blast Beach. The site selection chapter has considered how the MHPGC Project infrastructure has been sited to avoid existing marine activities and engaged on co-existence as detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. Assessment and mitigation specific to the marine environment are outlined in the chapters contained in **Volume 2 of the PEIR**. **Volume 1, Chapter 2: Project Description, of the PEIR** identifies cable infrastructure requirements for the MHPGC Project.
The Scoping Report describes three options for landfall, two options for routeing of the offshore cable, and three options for the onshore cable route. The location of the proposed substation is also to be determined, with an area of search shown on paragraph 6.2. The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the proposed development have yet to be finalised. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations. The need and justification to support the level of flexibility sought must be explained in the ES, including how it has been taken into account in the assessments through relevant parameters (temporal and spatial) and a defined worst-case for resulting environmental effects. It will be essential to ensure consistency throughout the ES and any other relevant assessments supporting the application from which the ES draws. It should be noted that if the proposed development materially changes prior to submission of the DCO application, the applicant may wish to consider requesting a new scoping opinion.	The siting and routing of the landfall, offshore and onshore components of the MHPGC Project has been further refined since the Scoping stage. Further assessments and feedback received from stakeholders have informed the following down selection of the project components: • offshore export cable corridor options have been progressed from two during Scoping to one at PEIR; • landfall options have been progressed from three during Scoping to one at PEIR; • the siting of the onshore LSS location has been progressed from an onshore LSS search area during Scoping to two specific onshore LSS site options at PEIR, with the intention for further down selection to one onshore LSS options; and • the onshore cable corridor options have been progressed from three during Scoping to one at PEIR. No material changes have been introduced to the siting, routing and design of the MHPGC Project since Scoping that warrants new Scoping Opinions from the Secretary of State and Scottish Ministers. Details of the site selection and design refinement process are presented in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). **Volume 1, Chapter 2: Project Description, of the PEIR** sets out the PDE approach used by the MHPGC Project to allow meaningful EIA to take place with flexibility allowed for design elements that are yet to be confirmed. Any remaining optionality

Comment	How and where considered in the PEIR
	on the siting and routing of the MHPGC Project components at PEIR falls within the parameters set out in the PDE, which has been developed in line with PINS Advice Note Nine: Rochdale Envelope (PINS, 2025b). As such, the PDE approach provides certainty for the description of the MHPGC Project to comply with the requirements of Regulation 14 of the EIA Regulations. Assessment and mitigation of the defined worst-case for resulting environmental effects specific to the marine environment are outlined in the chapters contained in **Volume 2 of the PEIR**. Assessment and mitigation of the defined worst-case for resulting environmental effects specific to the onshore environment are outlined in the chapters contained in **Volume 3** and **Volume 4 of the PEIR**.
The ES should contain a clear tabulation of the areas of land in each BMV classification to be temporarily or permanently lost as a result of the proposed development, with reference to accompanying map(s) depicting the grades. Specific justification for the use of the land by grade should be provided. The applicant's attention is drawn to the comments from Natural England at appendix 2 of this Scoping Opinion. Consideration should be given to the use of BMV land in the applicant's discussion of alternatives.	Potential areas of land in each BMV classification to be temporarily or permanently lost as result of the MHPGC Project are outlined in **Volume 3, Chapter 9: Agriculture and Soils, of the PEIR**. The use of existing land has been considered within the site selection and consideration of alternatives process; further details on the consideration of land use are contained within in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
MD-LOT	
The Scottish Ministers note that the Scoping Report outlines a broad corridor in respect of the export cable route and references the scoping boundary overlap with the Morven Offshore Wind Farm array are in relation to cables connecting into the OSPs within the site. The Scottish Ministers advise that the EIA Report must include a full and detailed description of the final option chosen in respect of the cable route corridor. The EIA Report should describe the main reasons for selecting the chosen cable route over the alternatives considered and provide a clear robust justification for the option chosen. In considering alternative cable routes, the Scottish Ministers advise the Applicant to engage with stakeholders including the Scottish Fishermen's Federation (SFF) and expect the Applicant to detail how stakeholder knowledge has been used as part of their consideration of alternatives.	The site selection process and design refinement of the offshore export cable corridor is summarised in **Section 3.9** of this chapter and detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. **Table 3-8** sets out the consultations the Applicant has undertaken to date with key stakeholders, including the SFF on matters relevant to site selection. Feedback received has been utilised to further refine the site selection process for the offshore export cable corridor.
The 2007 MW Regulations require that the EIA Report include 'a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the Applicant, which are relevant to the proposed works and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'. The Scottish Ministers acknowledge section 6 of the Applicant's Scoping Report setting out the consideration of alternatives to date together with the planned activities that are proposed to inform the EIA Report further. The Scottish Ministers advise however that these considerations must include how decommissioning has been taken into account within the design options. The Scottish Ministers advise that this must be based on the presumption of as close to full removal as possible of all infrastructure and assets and should consider the methods and processes of doing so.	Details of the approach to decommissioning the offshore export cables along the offshore export cable corridor is provided in **Volume 1, Chapter 2: Project Description, of the PEIR**.

Comment	How and where considered in the PEIR
For the avoidance of doubt, the Scottish Ministers advise that the EIA Report must include an up-to-date consideration of the reasonable alternatives studied as the parameters of the Proposed Works have been refined. The Scottish Ministers expect this to comprise a discrete section in the EIA Report that provides details of the reasonable alternatives studied across all aspects of the Proposed Works and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects. The Scottish Ministers also direct the Applicant to the NatureScot representation with regard to site selection and consideration of alternatives.	The consideration of alternatives, environmental and human constraints, and reasoning behind the siting of all components of the MHPGC Project in line with the refined design parameters is summarised in **Sections 3.7-3.10** and detailed within: • **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**; • **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**; and • **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. The refined design parameters for the MHPGC Project are provided in **Volume 1, Chapter 2: Project Description, of the PEIR**.
Environment Agency	
A1 – Unknown landfall location. Document Reference(s): MHPGC Project EIA Scoping Report, Tables 6.2 and 7.18. Issue: The intended landfall location is currently unknown. Impact: We are unable comment on whether the design principles and construction method are appropriate in this location, especially given the industrial history of the area, and the protected status of the coastline. Solution: Further consultation should be undertaken when further information is available regarding landfall location.	The site selection and design refinement process of the MHPGC Project has progressed since Scoping Opinion and a landfall location option has been confirmed for the PEIR. Justification for the location of the landfall, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in S**ection 3.8** of this chapter and **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**. The Applicant intends to obtain feedback on the selected landfall option as part of the upcoming round of consultation in autumn 2026 following publication of the PEIR. The MHPGC Project has committed to the installation of the offshore export cables under Durham Coast SSSI and SAC using trenchless technologies. The exit pits associated with the installation technology will be at least 100 m seaward of the eastern boundary of the Durham Coast SSSI and SAC (CoT13, **Volume 1, Annex 4.1: Commitments Register, of the PEIR**). The trenchless installation will pass beneath the intertidal area, and no works and construction vehicle access are proposed on Blast Beach. The site selection process has considered how the MHPGC Project infrastructure has been sited to avoid existing marine activities and engaged on co-existence as detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. Assessment and mitigation specific to the marine environment are outlined in the chapters contained in **Volume 2 of the PEIR**. **Volume 1, Chapter 2: Project Description, of the PEIR** identifies cable infrastructure requirements for the MHPGC Project.
C1 – Possible impacts to third parties. Document Reference(s): MHPGC Project EIA Scoping Report, Chapter 6.3, Table 6.1. Issue: Water Framework Directive (WFD) surface waterbodies do not appear to have been considered as constraints currently being considered within the options appraisal. We note that Main Rivers have been included. Impact: There is a risk that the potential importance of these habitats (and functionally-linked tributaries) could	Justification for the location of the MHPGC Project infrastructure, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). Constraints specific to the WFD, water quality, flooding and coastal processes are considered and assessed in:

Comment	How and where considered in the PEIR
be overlooked as part of the site selection process which could mean sites that pose more damage to biodiversity are selected. Solution: The Applicant should consider all WFD surface waterbodies and functionally-linked tributaries as constraints to be assessed as part of the options appraisal. Additional narrative/ explanation (if necessary): It is observed that WFD waterbodies in this locale are not designated as Main Rivers.	• **Volume 2, Chapter 2: Offshore Water and Sediment Quality, of the PEIR**; • **Volume 2, Annex 2.1: Offshore Water Framework Directive Assessment, of the PEIR**; • **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR**; and • **Volume 3, Annex 2.3: Onshore Water Framework Directive Assessment, of the PEIR**.
D1 – Bathing waters. Document Reference(s): MHPGC Project EIA Scoping Report, Chapter 6.3, Tables 6.1 and 6.2; Chapter 7.3, Section 7.3.5.2. Issue: Bathing waters have been omitted from list of key constraints considered, despite being subsequently referred to in Table 6.2. The Proposed Development must not compromise areas protected by WFD (i.e. bathing waters). Impact: Failure to consider bathing waters as part of the site selection process may mean that inappropriate sites are pursued and mean that the Applicant does not comply with WFD. Solution: Include bathing waters in the list of key constraints considered as part of the options appraisal and ensure that bathing waters are given due consideration when assessing impacts from changes in water quality associated with the project. Additional narrative/ explanation (if necessary): Two designated bathing waters are located immediately to the north of Seaham.	Justification for the location of the MHPGC Project infrastructure, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). Constraints specific to the WFD, water quality, designated bathing waters, flooding and coastal processes are considered and assessed in: • **Volume 2, Chapter 2: Offshore Water and Sediment Quality, of the PEIR**; • **Volume 2, Annex 2.1: Offshore Water Framework Directive Assessment, of the PEIR**; • **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR**; and • **Volume 3, Annex 2.3: Onshore Water Framework Directive Assessment, of the PEIR**. Designated bathing waters have been taken into account in the constraints analysis and in the BRAG assessments in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** and **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**.
Natural England	
In order to foster high quality development that respects, maintains, or enhances, local landscape / seascape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the build design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.	Justification for the location of the MHPGC Project infrastructure, including a description of the design, environmental and engineering constraints considered as part of the iterative design process, is set out in chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). Constraints specific to the marine environment are considered and assessed in the chapters contained in **Volume 2 of the PEIR**.
To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code. The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a	Details of how good design has been considered throughout the development of the MHPGC Project, taking into account relevant local and national design policies and guidance are presented in this chapter and the associated annexes (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). **Section 3.3.6** also sets out how the principles of the Horlock Rules have been considered in the siting of the onshore LSS. The Applicant has made a commitment (CoT62 **Volume 1, Annex 4.1: Draft Commitments Register,**

Comment	How and where considered in the PEIR
justification of the selected option in terms of landscape impact and benefit.	**of the PEIR**) that Design Principles will be produced and submitted as part of the application for development consent. It will focus on design elements associated with the onshore LSS fulfilling the requirement for 'good design', as prescribed in the NPSs EN-1, EN-3 and EN-5 and informed by the PINS's Advice Note on Good Design to minimise any potential adverse impacts and ensure high quality development that responds to and enhances local landscape character and distinctiveness.
Paragraph 6.3.2.9. Topic: Land Substation (LSS) Siting Study Area. Comments: The initial LSS siting area was refined to account for some of the constraints. The constraints are listed in Table 6.1. Recommendations: Natural England would advise that the land substation area is refined to entirely avoid Sites of Scientific Interest (SSSIs). Currently the search area directly affects Hesledon East SSSI. Any reduction in the notified habitat at the site would result in the site being classed as being in unfavourable condition, leading to significant impacts to a national site.	The consideration to the site selection and refinement of the onshore LSS is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**. Following Scoping the Applicant refined the onshore LSS search area into eight indicative onshore LSS sites. Options with constraints within and in close proximity to these indicative onshore LSS sites were discontinued and two shortlisted onshore LSS Option Areas were retained and are proposed at PEIR, which avoid direct impacts on Hesledon East SSSI. Constraints specific to onshore ecology, including assessment of any potential effects to Hesledon East SSSI, are considered and assessed in **Volume 3, Chapter 3: Terrestrial Ecology and Terrestrial and Intertidal Ornithology, of the PEIR**.
NatureScot	
Site selection and consideration of alternatives. In relation to the information detailed in the site selection and consideration of reasonable alternatives section (Section 6), we note that in Table 6.1, which presents the constraints currently being considered within the options appraisal, there is mention of Marine Conservation Zones but not nature conservation Marine Protected Areas (ncMPAs). The latter are relevant for Scotland and should have been included here. We welcome the identification of design principles as set out in Table 6.2, which includes avoid/minimise impacts on protected areas and species but omits Priority Marine Features (PMFs). PMFs are habitats and species that we consider to be marine nature conservation priorities in Scottish waters and we advise that consideration of these should have been included.	The principles and constraints considered in the site selection process of the offshore export cable corridor have been refined and are detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. Nature conservation Marine Protected Areas in Scottish waters and protected habitats and species have been considered in the constraints mapping and analysis, as have Priority Marine Features.

3.4.4 Evidence Plan Process

3.4.4.1 The Applicant has an ongoing dialogue with technical stakeholders, comprising the key regulatory bodies and SNCBs, through the EPP to ensure the most recent evidence is being used in assessments and that stakeholders have an opportunity to raise issues and suggestions regarding the site selection process. The process provided an opportunity for stakeholders to advise on proposals at an early stage to help mitigate any potential significant effects.

3.4.4.2 An EPP steering group has been established for the MHPGC Project with technical stakeholders. The steering group will continue to meet at key milestones throughout the EIA process. In addition, EWGs have been established to discuss topic specific issues with relevant stakeholders. EWG meetings have been, and will continue to be, held at key stages in the EIA process or when new information has become available for each topic, to provide the opportunity for stakeholders to provide feedback and advice at an early stage. EWGs have been established for the following topics:

- benthic ecology, physical processes and fish and shellfish ecology;
- marine mammals;
- offshore ornithology;
- marine archaeology;
- onshore heritage;
- onshore ecology and onshore and intertidal ornithology;
- landscape and visual impact assessment;
- hydrology & flood risk;
- traffic and transport; and
- noise and vibration.

3.4.5 Summary of consultation responses received

3.4.5.1 A summary of the key comments raised during consultation activities, including EWGs, targeted stakeholder engagement, including commercial fisheries stakeholders, and during consultation events relevant to site selection is provided in **Table 3-8**, together with how these issues have been considered in the site selection process.

3.4.5.2 Stakeholder consultation will continue throughout the EIA process, ensuring input is incorporated up to the finalisation of application documents for the development consent and Scottish Marine Licence(s).

Table 3-8: Summary of key consultation comments raised during consultation activities undertaken for the MHPGC Project relevant to site selection

Date	Consultee and response type	Comment	How and where considered in the PEIR
July to September 2024	MHPGC Project consultation	An overview of the Morven Programme was provided at public consultation events, providing justification for separate consent applications for the Morven Site and the MHPGC Project. Context was provided on the HND and HND FUE process and the identification of two separate grid connections for the Morven Site, and explanation was provided on how the MHPGC Project will tie in with the Morven Site. The key themes which emerged from the consultation included proximity to neighbouring communities, visual impact of the onshore LSS, flood risk, ornithology, and potential impacts on landowners. The key themes which emerged specific to the onshore cable corridor included potential impacts on landowners, traffic associated with construction, interactions with the new housing developments, proximity to neighbouring communities, flood risk, and ornithology.	The feedback received during this period of consultation has been utilised to further refine the site selection process for the onshore LSS and cable corridor provided in **Section 3.10.2** and **Section 3.10.3**, and for the offshore export cable corridor in **Section 3.9.2.** Further information on assessment with respect to these themes can be found in: • **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR**; • **Volume 3, Chapter 3: Terrestrial Ecology and Terrestrial and Intertidal Ornithology, of the PEIR**; • **Volume 3, Chapter 5: Traffic and Transport, of the PEIR**; • **Volume 3, Chapter 8: Land Use, Tourism and Recreation, of the PEIR**; and • **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.
April 2025	E6 Commercial Fisheries Working Group (Scottish fishing stakeholders): • SFF • Anglo Scottish Fishermen's Association (ASFA) • Scottish White Fish Producers Association (SWFPA) • Scottish Pelagic Fishermen's Association (SPFA)	The MHPGC project Team provided a brief introduction and update to the E6 Commercial Fisheries Working Group, including details on the stage of the MHPGC Project, the Project's red line boundary and anticipated next steps.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.

Date	Consultee and response type	Comment	How and where considered in the PEIR
May 2025	Durham County Council (DCC)	A brief MHPGC Project update was provided, including the site selection undertaken to date.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3**. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2**.
September 2025	Evidence Plan Steering Group Meeting with: • PINS • Natural England • NatureScot • Environment Agency (EA) • MMO • DCC	The first Evidence Plan Steering Group Meeting was held, where an overview of the Morven Programme was provided, covering updates for the Morven Site and for the MHPGC Project. Timelines, project details and the Scoping Boundary were discussed, and it was highlighted that following Scoping Opinions received assessments were ongoing to inform down selection of the offshore export cable corridor, landfall, onshore cable corridor and land substation. The EPP was introduced.	Consideration of the MHPGC Project approach is outlined in **Volume 1 Chapter 1: Introduction, of the PEIR**. Site selection progression from the EIA Scoping stage to PEIR in more detail can be found in the following annexes: **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall of the PEIR, Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure of the PEIR** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure of the PEIR**.
September 2025	The Crown Estate meeting	A brief MHPGC Project update was provided, including the site selection undertaken to date. The CRIA was discussed.	Engagement with The Crown Estate involving the CRIA is outlined in **Section 3.3.7**.
October to November 2025	MHPGC Project consultation	At public consultation events a preferred offshore export cable corridor was presented, with two landfall options, two indicative onshore cable routes and three indicative onshore substation locations. Feedback was requested from stakeholders, local communities and landowners. Key themes from the feedback include general support for the offshore routing; support for the Central Landfall option and associated onshore cable route (however, the northern corridor was considered preferable if co-construction with EGL1 was a possibility); and support for the Jade Business Park onshore LSS option, with concern for the alternatives displayed (adjacent to the A19 and south of Batter Law Hill) due to landscape and visual impacts and residential receptors and potential impacts on farming landowners.	The feedback received during this period of consultation has been utilised to further refine the site selection process for the onshore LSS and cable corridor provided in **Section 3.10.2** and **Section 3.10.3** of this chapter, for the offshore export cable corridor in **Section 3.9.2** and **Section 3.9.3**, and for the landfall in **Section 3.8.2** and **Section 3.8.3**. Further information on assessment with respect to these themes can be found in: • **Volume 3, Chapter 4: Onshore Archaeology and Cultural Heritage, of the PEIR**; • **Volume 3, Chapter 6: Onshore Noise and Vibration, of the PEIR**; • **Volume 3, Chapter 8: Land Use, Tourism and Recreation, of the PEIR**; and • **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR**.

Date	Consultee and response type	Comment	How and where considered in the PEIR
October 2025	Sunderland City Council MHPGC Project consultation	A brief MHPGC Project update was provided, including the site selection undertaken to date where landfall options have been down selected from three to two. Sunderland City Council was engaged during this round of consultation as a small section of the Northern landfall option (north of Seaham) falls within their administrative area.	Further information regarding the landfall option can be found in **Section 3.8.2** and **Section 3.8.3** of this chapter**.** Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
October 2025	MHPGC Project Commercial Fisheries Meeting with English stakeholders: • Northumberland Inshore Fisheries and Conservation Authority (IFCA) • North Eastern IFCA	Introduction to the MHPGC Project was provided, including presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the commercial fisheries baseline was sought.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.
October 2025	MHPGC Project Commercial Fisheries Meeting with the National Federation of Fishermen's Organisations (NFFO)	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the commercial fisheries baseline was sought.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.
October 2025	MHPGC Project Commercial Fisheries Meeting with Scottish stakeholders: • SFF • Anglo Scottish Fishermen's Association	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the commercial fisheries baseline was sought.	The feedback received during this meeting has been taken into consideration during refine the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.

Date	Consultee and response type	Comment	How and where considered in the PEIR
November 2025	MHPGC Project Onshore Heritage EWG Meeting 1	Presentation on the site selection process to date regarding the Red Line Boundary and the three shortlisted onshore LSS site options.	The feedback received during this meeting has been utilised to further refine the site selection process for the onshore LSS and onshore cable corridor, which is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR** and **Sections 3.10.2 - 3.10.3** of this chapter. **Volume 3, Chapter 4: Onshore Archaeology and Cultural Heritage, of the PEIR** presents the onshore heritage baseline and assessment.
November 2025	MHPGC Project Onshore Ecology & Onshore and Intertidal Ornithology EWG Meeting 1	Presentation on the site selection process to date regarding the red line boundary and the three shortlisted onshore LSS site options.	The feedback received during this meeting has been utilised to further refine the site selection process for the onshore LSS and onshore cable corridor, which is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR** and **Sections 3.10.2 - 3.10.3** of this chapter. **Volume 3, Chapter 3: Terrestrial Ecology and Terrestrial and Intertidal Ornithology, of the PEIR** presents the baseline and assessment of onshore ecology and onshore and intertidal ornithology.
November 2025	MHPGC Project Landscape and Visual Impact Assessment EWG Meeting 1	Presentation on the site selection process to date regarding the red line boundary and the three shortlisted onshore LSS site options.	The feedback received during this meeting has been utilised to further refine the site selection process for the onshore LSS and onshore cable corridor, which is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR** and **Sections 3.10.2 - 3.10.3** of this chapter. **Volume 4, Chapter 1: Landscape and Visual Amenity, of the PEIR** presents the landscape and visual baseline and assessment.

Date	Consultee and response type	Comment	How and where considered in the PEIR
November 2025	MHPGC Project Hydrology and Flood Risk EWG Meeting 1	Presentation on the site selection process to date regarding the red line boundary and the three shortlisted onshore LSS site options.	The feedback received during this meeting has been utilised to further refine the site selection process for the onshore LSS and onshore cable corridor, which is detailed in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR** and **Sections 3.10.2 - 3.10.3** of this chapter. **Volume 3, Chapter 2: Water Resources and Flood Risk, of the PEIR** presents the water resources and flood risk baseline and assessment, and **Volume 3, Chapter 1: Geology, Hydrogeology and Ground Conditions, of the PEIR** presents the hydrogeology baseline and assessment.
November 2025	MHPGC Project Benthic Ecology, Physical Processes and Fish and Shellfish EWG Meeting 1	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the benthic ecology, physical processes and fish and shellfish baseline was sought.	The feedback received during this meeting has been utilised to further refine the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 3: Benthic Subtidal and Intertidal Ecology, of the PEIR** presents the benthic ecology baseline and assessment.
November 2025	MHPGC Project Offshore Ornithology EWG Meeting 1	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the offshore ornithology baseline was sought.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 6: Marine Ornithology, of the PEIR** presents the offshore ornithology baseline and assessment.
November 2025	MHPGC Project Marine Mammals EWG Meeting 1	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the marine mammals' baseline was sought.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 5: Marine Mammals, of the PEIR** presents the marine mammals' baseline and assessment.

Date	Consultee and response type	Comment	How and where considered in the PEIR
November 2025	MHPGC Project Marine Archaeology EWG Meeting 1	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors. EIA data sources were presented and additional information for the marine archaeology baseline was sought.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 9: Marine and Intertidal Archaeology, of the PEIR** presents the marine archaeology baseline and assessment.
November 2025	Shipping and Navigation Meeting with: • Maritime Coastguard Agency (MCA) • Trinity House • MMO • Northern Lighthouse Board (NLB) • Royal Yachting Association (RYA) • UK Chamber of Shipping • Port of Seaham	Introduction to the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. A preliminary PEIR Red Line Boundary was introduced, presenting the down selection from two to one offshore export cable corridors.. EIA data sources were presented, and a review was sought for the shipping and navigation baseline and methodology.	The feedback received during this meeting has been taken into consideration during the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 8: Shipping & Navigation, of the PEIR** presents the shipping and navigation baseline and assessment.
December 2025	Durham Wildlife Trust	A brief MHPGC Project update was provided, including the site selection undertaken to date.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
February 2026	DCC	An overview of the route planning and site selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.

Date	Consultee and response type	Comment	How and where considered in the PEIR
March 2026	Commercial fisheries meeting with English stakeholders: • Northumberland IFCA • NFFO	A brief MHPGC Project update was provided, including the site selection undertaken to date. Draft EIA outcomes were presented, and proposed mitigation approaches discussed.	The feedback received during this meeting has been taken into consideration during refine the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.
March 2026	Commercial fisheries meeting with Scottish stakeholders: • SFF • ASFA • SWFPA • SPFA	A brief MHPGC Project update was provided, including the site selection undertaken to date. Draft EIA outcomes were presented, and proposed mitigation approaches discussed.	The feedback received during this meeting has been taken into consideration during refine the site selection process for the offshore export cable corridor, which is detailed in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure of the PEIR** and **Section 3.9** of this chapter. **Volume 2, Chapter 7: Commercial Fisheries, of the PEIR** presents the commercial fisheries baseline and assessment.
April 2026	Natural England	A brief MHPGC Project update was provided, and a discussion was held on survey interactions with designated sites.	Consideration of survey data to refine site selection has been considered in detail in all site selection annexes: **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR; Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR;** and **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.
May 2026	Evidence Plan Steering Group Meeting with: • PINS • Natural England • EA • MMO • DCC	Presentation and discussion on site selection process for offshore cable route including interaction with designated sites.	Consideration of the MHPGC Project offshore export cable route through designated sites is described in **Section 3.9** of this chapter.
July 2026	MHPGC Project Benthic Ecology, Physical Processes and Fish and Shellfish EWG Meeting 2	An update on the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. The PEIR Red Line Boundary was presented. An update on the draft PEIR assessments was provided including the approach to cumulative effects and proposed commitments. Initial feedback on the assessment approach and commitments was sought.	Further information regarding the offshore export cable route site selection and consideration of alternatives can be found in **Section 3.9** and further information regarding the selection and refinement of the landfall and consideration of alternatives can be found in **Section 3.8** of this chapter.

Date	Consultee and response type	Comment	How and where considered in the PEIR
July 2026	MHPGC Project Offshore Ornithology EWG Meeting 2	An update on the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. The PEIR Red Line Boundary was presented. An update on the draft PEIR assessments was provided including the approach to cumulative effects and proposed commitments. Initial feedback on the assessment approach and commitments was sought.	Further information regarding the offshore export cable route site selection and consideration of alternatives can be found in **Section 3.9** of this chapter and further information regarding the selection and refinement of the landfall and consideration of alternatives can be found in **Section 3.8** of this chapter.
July 2026	MHPGC Project Marine Mammals EWG Meeting 2	An update on the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. The PEIR Red Line Boundary was presented. An update on the draft PEIR assessments was provided including the approach to cumulative effects and proposed commitments. Initial feedback on the assessment approach and commitments was sought.	Further information regarding the offshore export cable route site selection and consideration of alternatives can be found in **Section 3.9** of this chapter and further information regarding the selection and refinement of the landfall and consideration of alternatives can be found in **Section 3.8** of this chapter.
July 2026	MHPGC Project Marine Archaeology EWG Meeting 2	An update on the MHPGC Project was provided, including a presentation on the site selection process to date and the evolution of the offshore export cable corridor. The PEIR Red Line Boundary was presented. An update on the draft PEIR assessments was provided including the approach to cumulative effects and proposed commitments. Initial feedback on the assessment approach and commitments was sought.	Further information regarding the offshore export cable route site selection and consideration of alternatives can be found in **Section 3.9** of this chapter and further information regarding the selection and refinement of the landfall and consideration of alternatives can be found in **Section 3.8** of this chapter.
July 2026	MHPGC Project Noise and Vibration EWG Meeting 2	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
July 2026	MHPGC Project Landscape and Visual Impact Assessment EWG Meeting 2	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.

Date	Consultee and response type	Comment	How and where considered in the PEIR
August 2026	MHPGC Project Onshore Heritage EWG Meeting 2	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
August 2026	MHPGC Project Onshore Ecology and Onshore and Intertidal Ornithology EWG Meeting 2	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
August 2026	MHPGC Project Hydrology and Flood Risk EWG Meeting 2	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.
September 2026	MHPGC Project Traffic and Transport EWG Meeting 2 (National Highways only)	An overview of the onshore Route Planning and Site Selection process was presented.	Further information regarding the onshore cable route site selection and consideration of alternatives can be found in **Section 3.10.3** of this chapter. Additional detail regarding the onshore LSS site selection and consideration of the alternatives can be found in **Section 3.10.2** of this chapter.

3.5 Measures adopted as part of the MHPGC Project (Commitments)

3.5.1.1 Throughout the design of the MHPGC Project, a key feature of the process is the implementation of mitigation measures, which are measures to avoid, reduce and, where feasible, remedy significant adverse environmental effects. The environmental assessment and design process has incorporated mitigation measures following a hierarchical approach which is based on IEMA (now ISEP) guidance 'Implementing the Mitigation Hierarchy from Concept to Construction' (IEMA, 2024).

3.5.1.2 All measures to be adopted by the MHPGC Project are called Commitments (CoTs). The CoTs will be used to inform the final design and details for construction, operation and maintenance, and decommissioning phases and will be secured substantively through the DCO by way of requirement.

3.5.1.3 All CoTs directly relevant to the site selection and design refinement process are outlined in **Table 3-9**. A draft version of the Commitments Register is provided with this PEIR in **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**, though it is noted this remains a working document as the EIA process is ongoing.

Table 3-9: Measures (commitments) adopted as part of the MHPGC Project relevant to site selection and design refinement

Commitment (CoT) number	Measure adopted
CoT05	An Operational Noise Management Plan will be developed post-consent prior to entering the operation and maintenance phase. It will detail methods of reducing and managing operational noise to comply with the noise limits established by the assessment, will be prepared and submitted for approval prior to the commencement of operations. It will include limits on noise from operation of the Onshore Land Substation (LSS) associated with the MHPGC Project and an indication of the physical mitigation measures expected to be required and how compliance with these limits would be monitored.
CoT08	An Outline Offshore Cable Specification and Installation Plan (CSIP) will be prepared and submitted with the application for development consent and as part of the Marine Licence application(s) to the Scottish Ministers. It will include cable burial to be the preferred option for cable protection, where practicable. A Detailed CSIP will be developed prior to construction that will be substantially in accordance with the Outline CSIP. The Outline CSIP will include (but is not limited to): - a Cable Burial Risk Assessment (CBRA), which will define burial depths and safeguards, based on seabed conditions and external aggression and climate change hazards, to keep the offshore export cables protected and compliant through all project phases while upholding navigational and environmental safety; - the implementation, management and monitoring of cable protection; - details on the development of the cable installation and protection design within the Farn Deeps Nephrops ground, which will seek to maximise cable burial and minimise the requirement for external cable protection, where technically feasible, taking account of cable stability, integrity and other engineering requirements.
CoT09	An Offshore Crossing Schedule will be prepared and submitted as part of the application for development consent and as part of the Marine Licence application(s) to the Scottish Ministers. Crossing and proximity agreements will be put in place with known existing cable and pipeline infrastructure owners prior to installation of the offshore export cables and associated cable protection.
CoT10	The Outline Highways Access Management Plan will be prepared and submitted with the application for development consent. It will include details regarding temporary access points from the public highway will be installed to facilitate vehicular access to the onshore export cable corridor, AC connection cable corridor and the Onshore Land Substation, during construction. A Detailed Highways Access Management Plan will be developed substantially in accordance with the outline plan.
CoT12	The location of the permanent components of the MHPGC Project, notably Joint Bays, Monitoring and Link Boxes of the onshore export cables and the AC connection cables, will be designed as far as reasonably practicable to avoid severance of fields in agricultural production associated with farm holdings within the application boundary of the Development Consent Order.

CoT13	The Project Description (Volume 1, Chapter 2 of the PEIR) sets out that the installation of the offshore export cables under Durham Coast SSSI and SAC will be undertaken by trenchless technologies. The exit pits associated with the trenchless technologies installation will be at least 100 m seaward of the eastern boundary of the Durham Coast SSSI and SAC.
CoT16	An Onshore Decommissioning Plan will be developed prior to decommissioning. It will include provisions for the removal of all onshore above ground infrastructure and the decommissioning of below ground infrastructure (if and where relevant and practicable), and details relevant to flood risk, pollution prevention, protection of soils and avoidance of ground disturbance. The Onshore Decommissioning Plan will be in line with the latest relevant legislation and available guidance at the time of production, as far as reasonably practicable.
CoT17	Where practicable, the siting of the temporary and permanent footprint of the MHPGC Project will avoid areas of Flood Risk Zone 2 and 3, sensitive historic, cultural, ecological and other environmental receptors, both statutory and non-statutory, during the site selection process for the MHPGC Project.
CoT19	Ongoing liaison with the fishing industry through the appointment of a Company Fisheries Liaison Officer(s) (CFLO)(s) and adherence to good practice guidance with regards to fisheries liaison (e.g. Fishing Liaison with Offshore Wind and Wet Renewables Group FLOWW (2025) guidance for English Waters).
CoT20	An Outline Fisheries Liaison and Coexistence Plan (FLCP) will be produced in relation to English Waters and will be submitted with the application for development consent. It will include details of the measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry. A Detailed FLCP will be developed post-consent substantially in accordance with the Outline FLCP.
CoT22	An Outline Operational Drainage Management Plan (ODMP) for the onshore Land Substation (LSS) will be prepared and submitted with the application for development consent. The Outline ODMP will detail measures to ensure that existing land drainage is reinstated and/or maintained and ensure surface water runoff generated at the chosen onshore LSS option by new impermeable areas is attenuated with an allowance for climate change and discharged from the site to an appropriate location at a restricted discharge rate. A Detailed ODMP will be developed substantially in accordance with the Outline ODMP and in line with the latest relevant drainage guidance notes in consultation with the Environment Agency and the Lead Local Flood Authority.
CoT27	The onshore export cables and the AC connection cables will be completely buried underground for the entire length. No overhead pylons will be installed as part of the MHPGC Project.
CoT33	An Outline Contaminated Land and Groundwater Discovery Strategy will form part of the Outline Code of Construction Practice (CoCP), which will be prepared and submitted with the application for development consent, to identify any suspected areas of contamination and any remedial measures which may be required. A Detailed Strategy will be developed substantially in accordance with the Outline Strategy and will identify the construction protocol for discovery of any currently unknown contamination and any remedial measures that may be required.
CoT40	An Outline Soil Management Plan (SMP) will form part of the Outline Code of Construction Practice (CoCP), which will be prepared and submitted as part of the application for the development consent. A Detailed SMP will be developed substantially in accordance with the Outline SMP, in order to characterise and manage soil materials during construction. Soil types would be determined via site-specific survey work as set out in the Outline SMP.
CoT41	An Outline Construction Traffic Management Plan (CTMP) will be prepared and submitted with the application for development consent. A Detailed CTMP will be developed substantially in accordance with the Outline CTMP prior to construction. The Detailed CTMP will set out measures to include (but not limited to): - managing the numbers, timing and routeing of HGVs during the construction phase; - managing the movement of construction worker traffic during the construction phase; - details of any traffic management measures necessary to ensure the safe passage of construction traffic via the local highway network; - details of localised road improvements if and where these may be necessary to facilitate safe use of the existing road network.
CoT42	Vegetation, including trees, woodland and hedgerows, will be mapped through a Vegetation Retention Plan (or similar) to inform construction activities, with vegetation retained wherever practicable. All

	vegetation works will be undertaken in accordance with BS 5837:2012, including the implementation of appropriate root protection measures. These measures will be consolidated within an Arboricultural Management Plan that will form part of the Outline Landscape and Ecological Management Plan, which will be prepared and submitted with the application for development consent.
CoT43	An Outline Landscape and Ecological Management Plan (LEMP) will be prepared and submitted with the development consent application and will establish the mitigation and management measures relevant to terrestrial and intertidal ecology and conservation. It will include: - mitigation measures relating to protected or notable species and/or sensitive habitats; - appointment of an Ecological Clerk of Works (ECoW) where required; and, - details of mitigation planting at the onshore substation site including the number, location, species and details of management and maintenance of planting. A Detailed LEMP will be developed substantially in accordance with the Outline LEMP.
CoT51	An Onshore Crossing Schedule will be submitted with the application for development consent based on the refined design for the application. The following features will be crossed using trenchless techniques: - A, B and Classified unnumbered roads (known as C roads) (including the A19 and B1432); - all railway lines (including the section of railway line which runs between Seaham and Horden); - the Durham Coast SSSI and SAC; - Hesledon Moor East SSSI.
CoT55	A draft Fisheries Management and Mitigation Coexistence Plan (FMMCP) will be produced in relation to Scottish Waters and submitted as part of the Marine Licence application(s) to the Scottish Ministers. The draft FMMCP will detail measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in Scottish Waters. Updates to the FMMCP will be developed post-consent in accordance with the draft FMMCP if required.
CoT57	An Outline Biodiversity Gain Plan will be prepared and submitted with the application for development consent. It will include details of the MHPGC Project's assessment and the measures proposed to secure and deliver the project's statutory Biodiversity Gain objective. A Detailed Biodiversity Gain Plan will be developed substantially in accordance with the outline plan.
CoT58	UXO hazards will be avoided where practicable and appropriate. Where avoidance is not possible, removal techniques will be considered prior to detonation. Low-order techniques, such as deflagration, will be the preferred method where practicable and appropriate. Should low order not be practicable, relocation will be considered and if no alternatives exist, high order clearance may be required. If high order is required for UXO clearance works, licensing will be subject to a standalone Marine Licence application(s). The application(s) will provide details of measures to seek to minimise impacts on marine mammals where appropriate.
CoT62	A Design Principles will be produced and submitted as part of the application for development consent. It will focus on design elements associated with the onshore Local Substation (LSS) fulfilling the requirement for 'good design', as prescribed in the National Policy Statements EN-1, EN-3 and EN-5.

3.6 Site selection methodology

3.6.1 Overview

3.6.1.1 The Applicant has followed an iterative site selection and design refinement process from inception to the point of publication of the PEIR in order to identify the most suitable route, locations and configuration, based on the criteria outlined below for the MHPGC Project. The process has taken account of environmental, physical, technical, commercial, and social constraints and opportunities as well as engineering requirements.

3.6.1.2 The aim has been to identify sites and routes that will be environmentally acceptable, deliverable and consentable, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to the consumer.

3.6.2 Site selection principles

3.6.2.1 Site selection principles were developed and followed as far as possible throughout the site selection process.

3.6.2.2 A multi-disciplinary team was formed to undertake the site selection process, which included input from engineers, planners, land advisors, legal and EIA/topic consultants whose expertise was drawn upon through the process.

3.6.2.3 Alongside published policies and guidance (see **Section 3.3** for further details), the following site selection principles were developed and applied at the outset of the site selection process for the MHPGC Project. These are drawn from the experience of the Applicant and technical expertise of consultants supporting the process and comprise:

- shortest route preference to reduce environmental impacts by minimising the footprint of the MHPGC Project, as well as minimising electrical transmission losses;
- avoidance of key sensitive features and/or receptors where possible, and where not, to minimise the potential interaction and as required mitigate potential impacts; and
- Be able to accommodate the design envelope at this stage of the MHPGC Project.

3.6.2.4 As detailed in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**), a series of overarching principles and engineering assumptions were identified for the components of the MHPGC Project and governed the decisions made at each stage of the site selection process. These included environmental, physical, technical, commercial and social considerations and opportunities. Each stage of the site selection process involved gathering desktop and survey data, and feedback from stakeholders to define and assess the site and design options. Internal workshops were also held to collate and review the data gathered and feedback received to reach cross discipline decisions about refining the site and design options.

3.6.3 Consideration of alternatives and design commitments

3.6.3.1 This PEIR chapter and corresponding annexes provide a description of the reasonable spatial and geographical alternatives that have been considered by the MHPGC Project and presents a comparison of the technical, commercial, environmental and human constraints between different options.

3.6.3.2 Strategic-level project design alternatives were also considered as part of the site selection and project design decision-making process. The strategic consideration of and decision on project design alternatives informed by the MHPGC Project site selection process as of PEIR results in measures (also known as commitments, CoTs) relevant to project design being adopted. These are summarised in **Table 3-10** and **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.

Table 3-10 Alternative considerations and commitments relevant to site selection

Consideration	Commitment	Justification
Landfall		
Trenchless techniques at landfall or open cut trenching	**Volume 1, Chapter 2: Project Description of the PEIR** sets out that the installation of the offshore export cables under the Durham Coast SSSI and SAC will be undertaken by trenchless technologies. The exit pits associated with the trenchless technologies installation will be at least 100 m seaward of the eastern boundary of the Durham Coast SSSI and SAC. (CoT13, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**) The trenchless installation will pass beneath the intertidal area, and no works and construction vehicle access are proposed on Blast Beach.	The Applicant has sought to use trenchless techniques at landfall for crossing the railway, and avoiding designated sites, specifically the Durham Coast SAC and SSSI. This cable installation method avoids direct impacts to existing physical assets and sensitive receptors and provides a solution to engineering challenges around traversing the steep cliff at Blast Beach.

Offshore		
Cable burial is the preferred option for cable protection, where practicable. The Applicant will seek to maximise cable burial offshore and minimise the requirement for external cable protection, where technically feasible, particularly within the Farn Deeps nephrops ground.	An Outline Offshore Cable Specification and Installation Plan (CSIP) will be prepared and submitted with the application for development consent and as part of the Marine Licence application(s) to the Scottish Ministers. It will include cable burial to be the preferred option for cable protection, where practicable. A Detailed CSIP will be developed prior to construction that will be substantially in accordance with the Outline CSIP. The Outline CSIP will include (but is not limited to): • a Cable Burial Risk Assessment (CBRA), which will define burial depths and safeguards, based on seabed conditions and external aggression and climate change hazards, to keep the offshore export cables protected and compliant through all project phases while upholding navigational and environmental safety; • the implementation, management and monitoring of cable protection; and • details on the development of the cable installation and protection design within the Farn Deeps Nephrops ground, which will seek to maximise cable burial and minimise the requirement for external cable protection, where technically feasible, taking account of cable stability, integrity and other engineering requirements. (CoT08, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	The Applicant has sought to minimise potential environmental effects in the marine environment and impacts on commercial fisheries stakeholders by committing to bury offshore export cables, where practicable, and minimising the requirement for external cable protection, particularly within the Farn Deeps nephrops ground.
A draft FMMCP will be produced and detail measures to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in Scottish waters.	A draft FMMCP will be produced in relation to Scottish Waters and submitted as part of the Marine Licence application(s) to the Scottish Ministers. The draft FMMCP will detail measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in Scottish waters. Updates to the FMMCP will be developed post-consent in accordance with the draft FMMCP if required. (CoT55, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	The Applicant has sought to minimise potential commercial fisheries effects by working with fisheries stakeholders to agree measures to reduce impacts on commercial fishing and to manage interactions between the MHPGC Project and the fishing industry.
An Outline FLCP will be produced and detail measures to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in English waters.	An Outline Fisheries Liaison and Coexistence Plan (FLCP) will be produced in relation to English Waters and will be submitted with the application for development consent. It will include details of the measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry. A Detailed FLCP will be developed post-consent substantially in accordance with the Outline FLCP. (CoT20, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	The Applicant has sought to minimise potential commercial fisheries effects by working with fisheries stakeholders to agree measures to reduce impacts on commercial fishing and to manage interactions between the MHPGC Project and the fishing industry.

Ongoing liaison with the fishing industry through a CFLO and adherence to good practice for fisheries liaison.	Ongoing liaison with the fishing industry through the appointment of a Company Fisheries Liaison Officer(s) (CFLO)(s) and adherence to good practice guidance with regards to fisheries liaison (e.g. Fishing Liaison with Offshore Wind and Wet Renewables Group FLOWW (2025) guidance for English Waters). (CoT19, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	The Applicant has sought to minimise potential commercial fisheries effects by working with fisheries stakeholders to manage interactions between the MHPGC Project and the fishing industry.
Onshore		
Buried onshore cables or overhead lines.	The onshore export cables and the AC connection cable corridor will be completely buried underground for the entire length. No overhead pylons will be installed as part of the MHPGC Project. (CoT27, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	The Applicant has sought to minimise potential environmental effects by burying cables and not having overhead lines.
Cable crossings at existing infrastructure and obstacles including roads, watercourses, railways and designated sites.	The following features will be crossed by trenchless technique, to be set out within an Onshore Crossing Schedule to be submitted with the application for development consent based on the refined design for the application: • A, B and Classified unnumbered roads (known as C roads) (including the A19 and B1432); • all railway lines (including the section of railway line which runs between Seaham and Horden); • the Durham Coast SSSI and SAC; • Hesledon Moor East SSSI. (CoT51, **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**.)	Minimise environmental impact and disruption of key routes.

3.6.4 BRAG Methodology

3.6.4.1 A Black/Red/Amber/Green (BRAG) methodology has been used to inform the different aspects of site selection. This is considered appropriate to compare different locations for the siting and routing of the landfall, offshore and onshore components of the MHPGC Project, given the ability to capture and classify the main differentiating issues into four fundamental categories as detailed in **Table 3-11**. A BRAG analysis of this type enables a clear and direct comparison between areas.

Table 3-11: BRAG Definitions

Rating	Summary
Black	Potential stop to development
Red	High potential to constrain development
Amber	Medium potential to constrain development
Green	Low potential to constrain development

3.6.4.2 Constraints considered within the BRAG Assessment are set out in further detail in the annexes of this chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**). These were defined by a team of specialists comprising engineers, EIA consultants, and technical experts that have experience in undertaking site selection BRAG analysis. The BRAG analysis qualitatively assesses the influence of future developments, either using defined parameters, professional judgement, or assessing the issue relative to other potential options. Key findings were discussed through multidisciplinary workshops involving engineering, environmental, commercial and stakeholder teams.

3.6.5 Site selection process summary

3.6.5.1 The Applicant has followed an iterative site selection and design refinement process, which has been driven by the following key factors:

3.6.5.2 Confirmation from NESO that the Hawthorn Pit National Grid substation will be the grid connection point for Morven North or Morven South, following the outcome of the HND (see **Section 3.7**). This enabled identification of search areas for the MHPGC Project offshore export cable corridors, landfall, onshore cable corridor and onshore LSS location.

- Review of environmental, social and technical constraints and planning policy relevant to the offshore, landfall and onshore search areas and the completion of site selection BRAG analysis, which led to site specific refinement of the MHPGC Project (as detailed in the annexes to this chapter, **Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**).
- Consultation with statutory and non-statutory consultees. As described in **Section 3.4**, the Applicant has engaged with stakeholders, communities and landowners in order to seek input to refine the project design.

3.6.5.3 The iterative site selection and design refinement process followed an iterative approach to ensure the most appropriate and efficient solution was identified with consideration to environmental and engineering constraints. The process has been progressed through three stages to date, incorporating feedback received at each stage to further refine the siting and design of the MHPGC Project:

- Stage 1 – Identification of PoI;
- Stage 2 – Identification of areas of search (inclusive of EIA Scoping); and
- Stage 3 – Refinement of the siting and design of the MHPGC Project for PEIR.

3.6.5.4 Subject to ongoing engineering and environmental assessments as well as consultation feedback, a further stage of the design refinement process will be progressed following subsequent engagement on the PEIR, where the siting and design of the MHPGC Project will be refined for the DCO application and Marine Licence application(s) to the Scottish Ministers.

3.6.5.5 The development timelines of some of these discrete but inter-dependent aspects of the MHPGC Project are summarised in **Sections 3.8 - 3.10** , summarising landfall, offshore infrastructure and onshore infrastructure respectively. As set out in **Table 3-12**, more detailed consideration of each stage of the site selection process is presented in the annexes of this PEIR chapter (**Volume 1, Annexes 3.1, 3.2 and 3.3, of the PEIR**).

Table 3-12 Site selection and refinement stages

Stage	Associated Document
Stage 1 – Identification of PoI	**Volume 1, Chapter 3: Site Selection and Consideration of Alternatives, of the PEIR**
Stage 2 – Identification of areas of search (including EIA Scoping)	
Stage 2a – identification of landfall search area	**Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**
Stage 2b – identification of offshore infrastructure search area	**Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**
Stage 2c – identification of onshore LSS search area	**Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**
Stage 2d – identification of onshore cable route search area	**Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**
Stage 3 – Refinement of the siting and design of the MHPGC Project for PEIR	
Stage 3a – refinement of landfall for PEIR	**Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**

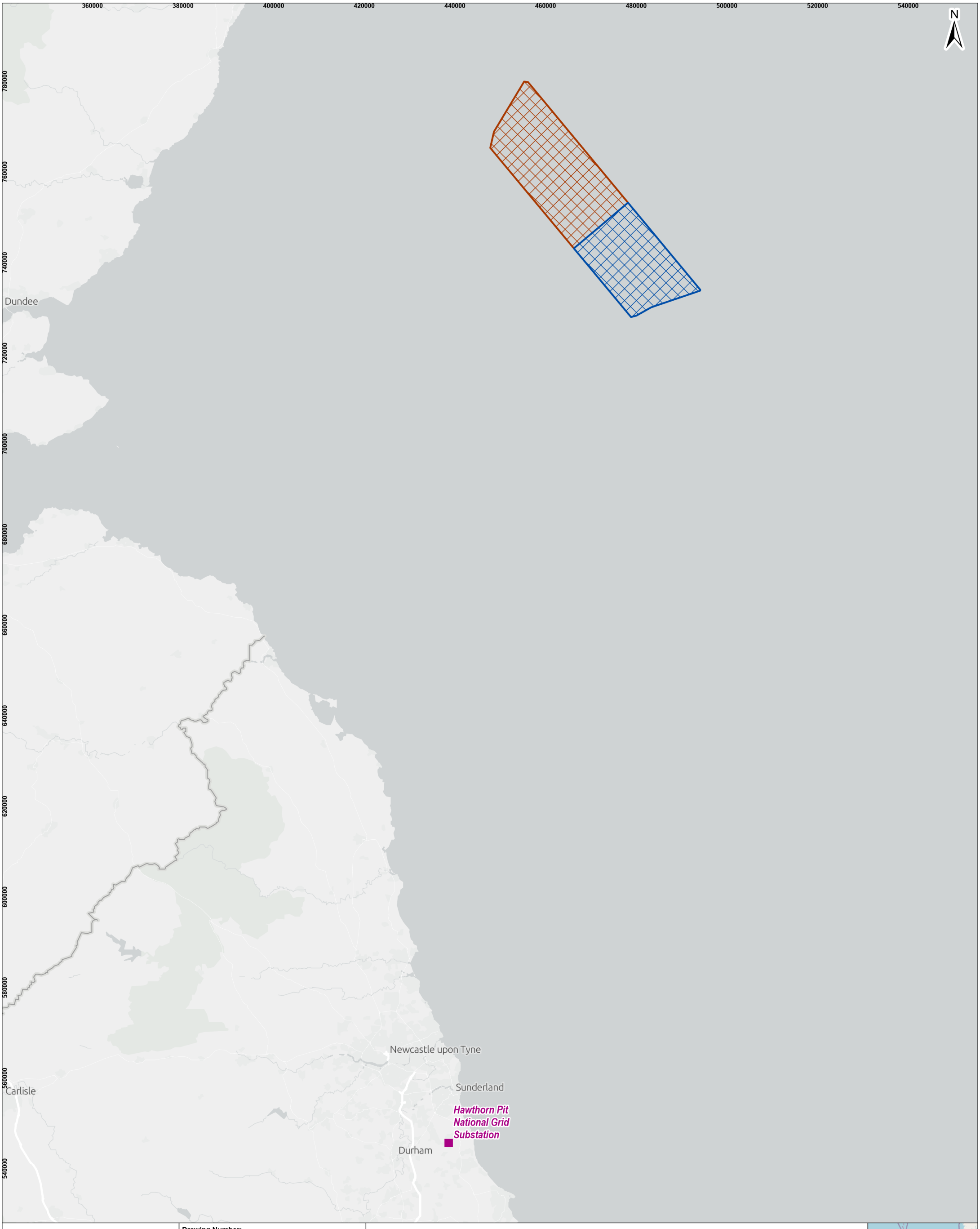
Stage	Associated Document
Stage 3b – refinement of offshore infrastructure options for PEIR	**Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**
Stage 3c – refinement of onshore LSS sites for PEIR	**Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**
Stage 3d – refinement of onshore export cable route options for PEIR	**Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**

3.7 Stage 1 – Identification of Point of Interconnection (PoI)

3.7.1.1 As outlined in further detail above in Section 3.2, HND (NGESO, 2022) recommended National Grid Hawthorn Pit Substation in County Durham as the Point of Interconnection (PoI) for half of the generating capacity of the Morven Site. The remaining generating capacity was subsequently considered through the HND FUE, which identified a separate PoI within the Branxton area in East Lothian, Scotland.

3.7.1.2 On the basis of the 2022 HND outcome, the Applicant made the decision to commence the site selection process for the MHPGC Project. The alternatives considered for the MHPGC Project therefore relate to the feasible means of connecting Morven North or Morven South to the National Grid Hawthorn Pit Substation PoI, including the identification and assessment of offshore cable routes, landfall locations, onshore cable routes and associated onshore infrastructure.

3.7.1.3 In April 2025, NESO subsequently confirmed that the previously proposed coordinated connection design would not be progressed and that a radial connection to Hawthorn Pit would instead be taken forward for half of the Morven Site generating capacity.



Morven Offshore Wind Farm

Project Name:
MORVEN HAWTHORN PIT GRID CONNECTION PEIR

Drawing Title:
MORVEN NORTH MORVEN SOUTH, AND HAWTHORN PIT POINT OF INTERCONNECTION

0 5 10 15 20 25 30 km

Scale@A3:1:750,000

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid

Drawing Number:
MV-CON-REG-0020

Data Sources:
Morven,
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VER	DATE	DETAILS	BY	CHECK
01	16/07/26	Initial Issue	GM	PRW
02	28/08/26	Layer Updates	GM	PRW
03	23/09/26	Layer Updates	GM	PRW

LEGEND

- Morven North
- Morven South
- Hawthorn Pit National Grid Substation



3.8 Landfall (Stages 2 and 3)

3.8.1 Overview

3.8.1.1 The landfall is the area in which the offshore export cables make landfall (come onshore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area between the trenchless technique exit pits (seaward of Mean Low Water Springs) and the transition joint bays (TJBs) inclusive of all construction works, including the offshore and onshore cable routes, and landfall compound(s).

3.8.1.2 **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** contains further details on the site selection process and consideration of alternatives for the landfall which is summarised below.

3.8.2 Stage 2a: Identification of the Landfall Search Area

3.8.2.1 Following the recommended PoI at the National Grid Hawthorn Pit Substation, a Landfall Search Area for the landfall was defined based on the location of Morven North and Morven South and the National Grid substation at Hawthorn Pit.

3.8.2.2 The Landfall Search Area extended from the south of Sunderland to north of Peterlee as shown on **Figure 3.4**, covering approximately 12km of coastline. The northern and southern extents of the Landfall Search Area were defined by urban areas to the north, and nature designations to the south, where extending beyond these constraints would result in substantially longer onshore cable.

3.8.3 Stage 3a: Refinement of landfall for PEIR

Identification of Landfall Zones

3.8.3.1 The process for identifying viable landfall options was to establish sections of the coastline within the Landfall Search Area that could accommodate the design envelope of the landfall infrastructure, avoid / reduce direct interaction with key features and receptors sensitive to development activities, and to seek the shortest offshore cable route from the Morven site to the Landfall Search Area (to reduce environmental impacts by minimising the project footprint minimise electrical transmission losses. Based on consideration of a set of environmental, human and technical considerations and site selection Guiding Principles specific to the selection and refinement of the cable landfall (outlined in **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR**), three options along the coast within the Landfall Search Area were identified as areas where the offshore cables could be brought onshore and connect to the onshore cables:

- Northern landfall (north of Seaham) – located 7km northeast of the recommended PoI at Hawthorn Pit, to the north of Seaham, with the section of the coastline approximately 500m in length;
- Central landfall (Nose's Point) – located to the south/south-east of Seaham approximately 5km east of the recommended PoI at Hawthorn Pit, with the section of the coastline approximately 1km in length stretching from roughly Nose's Point in the north to roughly Chourdon Point in the south; and
- Southern landfall (Beacon Hill) – located approximately 5km east of the recommended PoI at Hawthorn Pit, with the section of the coastline approximately 1km in length stretching from south of Hawthorn Dene into the north-east periphery of the settlement of Easington.

3.8.3.2 These three landfall options were presented as part of the consultation undertaken between July and September 2024 and were incorporated into the MHPGC Project Scoping Boundary (see **Figure 3.4**). Feedback received was for support for the Central landfall option.

Summary BRAG Assessment and Refinement Summary

3.8.3.3 A BRAG constraints analysis, in combination with consultation feedback received from the 2024 consultation events, was then undertaken for the three landfall options based on a list of engineering,

human and environmental criteria in combination with the feedback received from the 2024 consultation (see **Section 3.6.4** for an overview of the methodology and **Volume 1, Annex 3.1: Selection and Refinement of the Cable Landfall, of the PEIR** for further detail).

3.8.3.4 Of the three potential landfall zones identified within the Landfall Search Area, the Southern landfall (Beacon Hill) was discounted as a result of a high potential to constrain development due to engineering constraints associated with establishing landfall within challenging topography (associated with Beacon Hill and the valleys of Hawthorn Dene SSSI). While the offshore approaches to the Southern landfall were less constrained than the other landfall options (Northern and Central), onshore constraints, including interaction with designated sites (Durham Coast SSSI and SAC and the Hawthorn Dene SSSI) and associated landscape, were considered too significant to overcome. The Southern landfall (Beacon Hill) therefore ranks comparatively the worst of all options considered as part of the landfall site selection process.

3.8.3.5 As the Southern landfall (Beacon Hill) was being discounted, the remaining two cable landfall options (Northern and Central) and their associated onshore cable corridors along with indicative onshore LSS sites) were taken forward as part of the consultation undertaken between October and November 2025.

3.8.3.6 The key themes which emerged from the 2025 consultation included, but were not limited to, support for the Central landfall option and associated onshore cable route (however, the Northern landfall option was considered preferable if co-construction with Eastern Green Link 1 (EGL1) was a possibility), potential impacts on landowners (e.g. field boundaries, land severance, productive farmland), concern about the impact on the environment/biodiversity/wildlife/coastline, and concern about cumulative impacts (including with other ongoing projects). The feedback received (see **Section 3.4**) has subsequently been considered alongside the outcome of the BRAG constraints analysis to further refine the site selection process.

3.8.3.7 As a result, the Northern landfall (north of Seaham) was also considered to be a less feasible landfall option. The Northern landfall option interacts with the Northumbria Coast SPA and Ramsar site and Durham Coast SSSI and SAC designations, and to avoid these sites onshore cable routes would need to be longer and less direct compared to other landfall options. The offshore approaches to the Northern landfall were constrained by other consented infrastructure (EGL1), an overlap with the anchorage associated with the Port of Seaham, and areas of Annex I Reef. Coastal constraints associated with the Northern landfall include more potential to interact with populated areas around Sunderland City, and as raised by Seaham Town Council during Scoping, the landfall location at beach cliffs which are rapidly eroding with frequent and recent land slips. This landfall option also presents constraints in relation to the cable alignment with the EGL1 project and with Seaham Solar Park. These constraints result in limited ability to design viable engineering solutions with this landfall option to adequately avoid/ minimise interaction with sensitive features.

3.8.3.8 The Central landfall (Nose's Point) is therefore the only landfall option which is being taken forward for the MHPGC Project at PEIR, taking into account available engineering solutions to potential interaction with environmental designations and solutions to engineering feasibility and constraints (see **Figure 3.5**). The Central landfall option does interact with designated sites but minimises interaction with the Durham Coast SSSI and SAC and Hawthorn Pit SSSI and LNR by committing to a trenchless techniques at the landfall. The trenchless techniques will traverse the Durham Coast Railway Line and the steep cliff face at Blast Beach which also minimises interaction with these existing physical assets and natural features. The Central landfall is located south of the built up urban areas around Seaham, and consequently limits interaction of the MHPGC Project onshore infrastructure with residences and urban development. Through careful routing, the Central landfall also avoids direct impacts on offshore constraints such as Nose's Point marine disposal site, the designated bathing waters of Seaham Beach and Seaham Hall Beach, the Northumbrian outfall pipe and areas of Annex I Reef. The Central landfall location was the landfall option that received the most support from consultation feedback from the community, with recommendations from Seaham Town Council that the onshore cable route make landfall at the Central landfall option (south of Seaham Docks) and follow the old mineral line to Hawthorn Pit (referencing the historic route of mineral export)

3.8.3.9 A series of landowner meetings were also held between the 2025 consultation and the presentation of the landfall for the PEIR to obtain feedback in order to allow the MHPGC Project to incorporate

feedback into the site selection process early, wherever possible. Key changes were made to the Central landfall to refine it down to within the PEIR Red Line Boundary: Onshore as a result of defining key infrastructure parameters and feedback from the 2025 consultation and landowner feedback. These include:

- refinement of any potential interaction with residential developments adjacent to the A182 (i.e the northern extent of the Central landfall), such as refinement around the boundary of Seaham Garden Village following clarity based on its start of construction;
- alignment of the PEIR Red Line Boundary: Onshore along field margins to reduce severance to landowners; and
- addition of access that runs to the Hawthorn Quarry to include an alternative access (to the A182 option) to the proposed landfall location.

Landfall Next Steps

3.8.3.10 Stage 3 of the selection and refinement of the cable landfall has identified the landfall area for the MHPGC Project in accordance with the site selection Guiding Principles (see **Section 3.6.2**).

3.8.3.11 The proposed landfall option presented at PEIR is shown in **Figure 3.5** and has been selected based on balancing environmental, human and technical constraints against engineering feasibility.

3.8.3.12 The Central landfall option is the only landfall option which is being taken forward for assessment for this PEIR as it avoids key infrastructure associated with the corresponding onshore cable corridor and minimises the interaction with designations and sensitive features including the challenging topography of the Durham coastline. This landfall option will continue to be developed and refined, where possible, through further study, survey work and feedback received from stakeholders as part of the EPP (described in **Section 3.4.4**) and the upcoming round of consultation in autumn 2026 following publication of the PEIR.

Northern Landfall Area

Central Landfall Area

Southern Landfall Area

Hawthorn Pit National Grid Substation

LEGEND

- Landfall Search Area
- Indicative Landfall Areas
- MHPGC Project Offshore Infrastructure Search Area
- Hawthorn Pit National Grid Substation

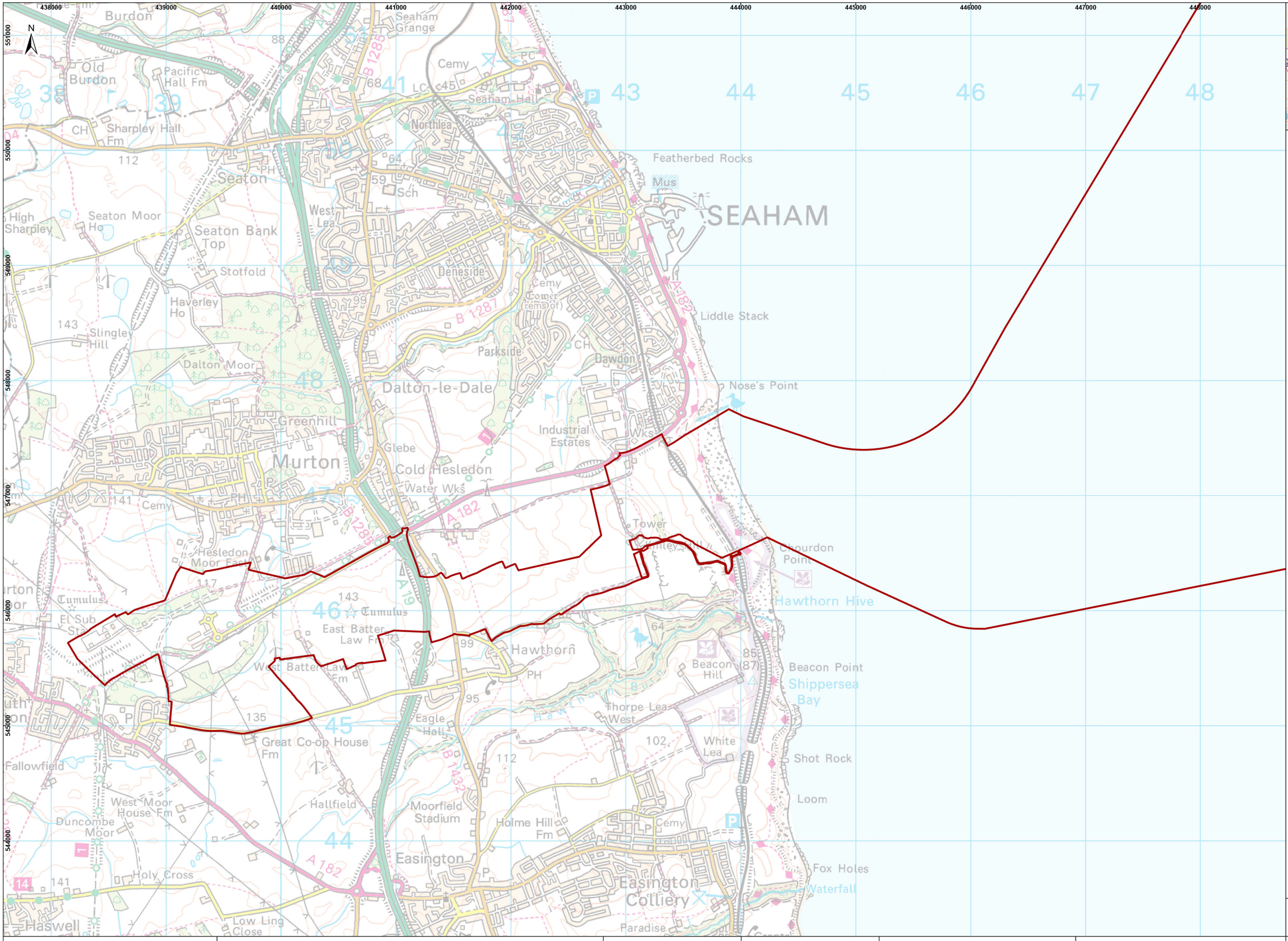
Morven Offshore Wind Farm

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02	23/09/26	Layer Updates	GM	PRW





LEGEND

MHPGC Project PEIR Red Line Boundary

MHPGC Project PEIR Red Line Boundary

Morven Offshore Wind Farm

Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Drawing Title:** PREFERRED LANDFALL OPTION - CENTRAL LANDFALL (NOSE'S POINT) MHPGV PROJECT PEIR REDLINE BOUNDARY	0 500 Meters Scale@A3: 1:30,000	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122

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MV-CON-REG-0025

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02	28/08/26	Update Layers	GM	PRW
03	23/09/26	Update Layers	GM	PRW

3.9 Offshore Infrastructure (Stages 2 and 3)

3.9.1 Overview

3.9.1.1 The permanent offshore infrastructure for the MHPGC Project includes the offshore export cables (up to two HVDC power cores (conductors) and two fibre optic cables forming a single cable circuit installed in up to two trenches) and cable protection between the Morven North or Moven South OSP to the TJB(s) at landfall. **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** contains further details on the site selection process and consideration of alternatives for the offshore components of the MHPGC Project which is summarised below.

3.9.2 Stage 2b: Identification of Offshore Infrastructure Search Area

3.9.2.1 The Offshore Infrastructure Search Area (see **Figure 3.6**) was defined to include the predetermined lease area for the generation assets, Morven North and Morven South, located in Scottish waters, and the proposed Landfall Search Area along the County Durham coast in England. The area of search was designed to be large enough to accommodate for the unknown outcome of the HND assessment. It accounted for additional cable trenches with increased cable separation due to the possibility of having a coordinated offshore network with the potential of exporting more capacity from the offshore generation network to the Hawthorn Pit Substation. The Offshore Infrastructure Search Area was designed to allow flexibility and provide sufficient space for subsequent refinements of offshore export cable corridor options, enabling engineering design to respond to physical and technical constraints and technological advances following the site selection Guiding Principles outlined in **Section 3.6.2**.

3.9.2.2 To guide the identification of potential offshore cable corridor options within the Offshore Infrastructure Search Area, constraints mapping and analysis was undertaken to inform route optioneering. This review was underpinned by the site selection Guiding Principles summarised in **Section 3.6.2**. The output of the constraint mapping and analysis was the identification of several potential offshore export cable corridor options within the wider Offshore Infrastructure Search Area. The route optioneering undertaken at this stage was high level, based on publicly available data only, but with the intention of defining options that would be subject to more detailed reviews and analysis as the site selection process progressed. These are presented in **Figure 3.7**. The exercise identified multiple exit points for the offshore export cable corridor from the Morven Site, where those options exiting to the south and west were grouped under Zone 1, and Zone 2 captured options exiting to the east. Zone 1 options progressed south through the gap between the Farnes East MCZ and North East of Farnes Deep MCZ and HPMA. Zone 2 options were routed further offshore, to the east of the North East of Farnes Deep MCZ and HPMA and through the gap with Swallow Sands MCZ. Zone 2 consolidated all route options south of the gap, providing optionality in the potential export cable corridor routes approaching the Landfall Search Area.

3.9.2.3 Following the conclusion of the constraints mapping and analysis, and identification of initial offshore corridor options a series of engineering studies were commissioned to undertake a technical review of optioneering undertaken to date and the viability of identified corridors options. A preliminary Cable Burial Risk Assessment (pCBRA) (Xodus, 2023) was undertaken to review the viability of the route options and determine where further data should be gathered to inform down selection. Route options in Zone 1 and Zone 2 were combined into two corridors, with geophysical, environmental and geotechnical surveys undertaken on a western corridor and an eastern corridor option. The western and eastern corridors formed the basis for the MHPGC Project Scoping Boundary, informed by the outcomes of the constraints analysis, pCBRA and site selection work that had been undertaken to that point. **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR** provides further details of the findings of the constraints analysis.

3.9.2.4 The MHPGC Project Scoping Boundary presented two corridor options (see **Figure 3.8**) which reflected the following:

- a western corridor, exiting the array to the south west, routing between the Farnes East MCZ and the North East of Farnes Deep MCZ and HPMA, and progressing south towards landfall where flexibility was retained to enable a Northern, Central or Southern landfall option; and
- an eastern corridor, exiting the array to the south east, routed to the east of the Farnes Deep MCZ and HPMA through the gap with Swallow Sands MCZ with a more easterly alignment as it progressed south towards landfall.

3.9.3 Stage 3b: Refinement of Offshore Infrastructure Options for PEIR

3.9.3.1 Following the submission of the MHPGC Project EIA Scoping Report in February 2025 and receipt of the EIA Scoping Opinion from PINS and MD-LOT, the MHPGC Project progressed to the next stage of down selection and refinement of the offshore export cable corridor options. Feedback received in the EIA Scoping Opinion encouraged further refinement of the offshore export cable corridor to enable a meaningful assessment and further engagement.

3.9.3.2 To inform the next stage of down selection the Applicant was able to draw on the offshore survey data, updated engineering reports, including updated CBRA (Global Maritime, 2024), and the outputs of the EIA Scoping process. To enable a direct comparison between the eastern and western corridors a BRAG Assessment was undertaken, using BRAG criteria to assess environmental, technical and commercial constraints.

3.9.3.3 A summary of the BRAG assessment is presented in **Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR**. The BRAG assessment identified that both corridor options presented some environmental constraints and interactions with other sea users, noting that both options interact with established commercial fishing grounds. Route selection therefore required consideration of fisheries interactions alongside engineering feasibility, route length, constructability, environmental constraints, cable crossing requirements and overall project deliverability.

3.9.3.4 The BRAG assessment compared both corridor options and concluded that the western corridor was the preferred option from technical (engineering) and commercial perspective, with environmental risks associated with both corridors. Whilst the western corridor resulted in a more significant overlap with commercial fisheries activity associated with the Farnes Deep nephrops ground and therefore greater risk from a human perspective, it offered advantages when compared to the eastern corridor including a shorter route length, reduced cable crossings, lower engineering risk during construction and operation, more favourable seabed conditions and reduced interaction with some environmental receptors.

3.9.3.5 As a result of the BRAG assessment, constraint analysis, survey data, and technical and commercial inputs, the western corridor was presented as the preferred offshore export cable corridor at the consultation events held in October and November 2025. The western corridor presented consolidated refinements made since the Scoping stage. Refinements included; removal of the coordinated connection corridor to a proposed offshore connection hub to the east of the Morven Site, alignment with the boundaries of Morven North and Morven South, removal of the eastern corridor option, a ‘funnel’ exiting the Morven Site to the west to enable flexibility in connecting to Morven North or Morven South, a reduced corridor width of 1,000m to align with project specific survey data, and adequate width in the approaches to landfall to provide optionality in response to challenging ground conditions.

3.9.3.6 Subsequent refinements were made based on feedback from the 2025 consultation, engagement with key stakeholders and engagement through the EPP and EWGs. Final amendments to the MHPGC Project PEIR Red Line Boundary (see **Figure 3.9**) include removal of the northern approaches to landfall and alignment with the Central landfall option.

3.9.3.7 The offshore sections of the MHPGC Project PEIR Red Line Boundary reflect an iterative down selection process that retains sufficient flexibility to accommodate detailed design development and further route optimisation. Through this process, the Applicant has sought to avoid and reduce potential environmental and technical constraints while maintaining a viable connection to the National Grid substation at Hawthorn Pit as the PoI. The offshore export cable corridor will continue to be refined following consultation on the PEIR in autumn 2026 and ongoing engineering and

environmental assessments, with any further refinements to be presented within the Environmental Statement submitted in support of the DCO application.

400000 420000 440000 460000 480000 500000 520000 540000 560000 580000

780000 760000 740000 720000 700000 680000 660000 640000 620000 600000 580000 560000 540000

N

Newcastle upon Tyne

Sunderland

Hawthorn Pit
National Grid
Substation

Durham

Morven
Offshore
Wind Farm

Project Name:
MORVEN HAWTHORN PIT GRID CONNECTION PEIR

Drawing Title:
INITIAL OFFSHORE INFRASTRUCTURE SEARCH AREA FOR THE OFFSHORE EXPORT CABLE CORRIDOR

0 5 10 15 20 25 30 km

Scale@A3:1:750,000

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid

Drawing Number:
M3-MV-PRJ-0037

Data Sources:
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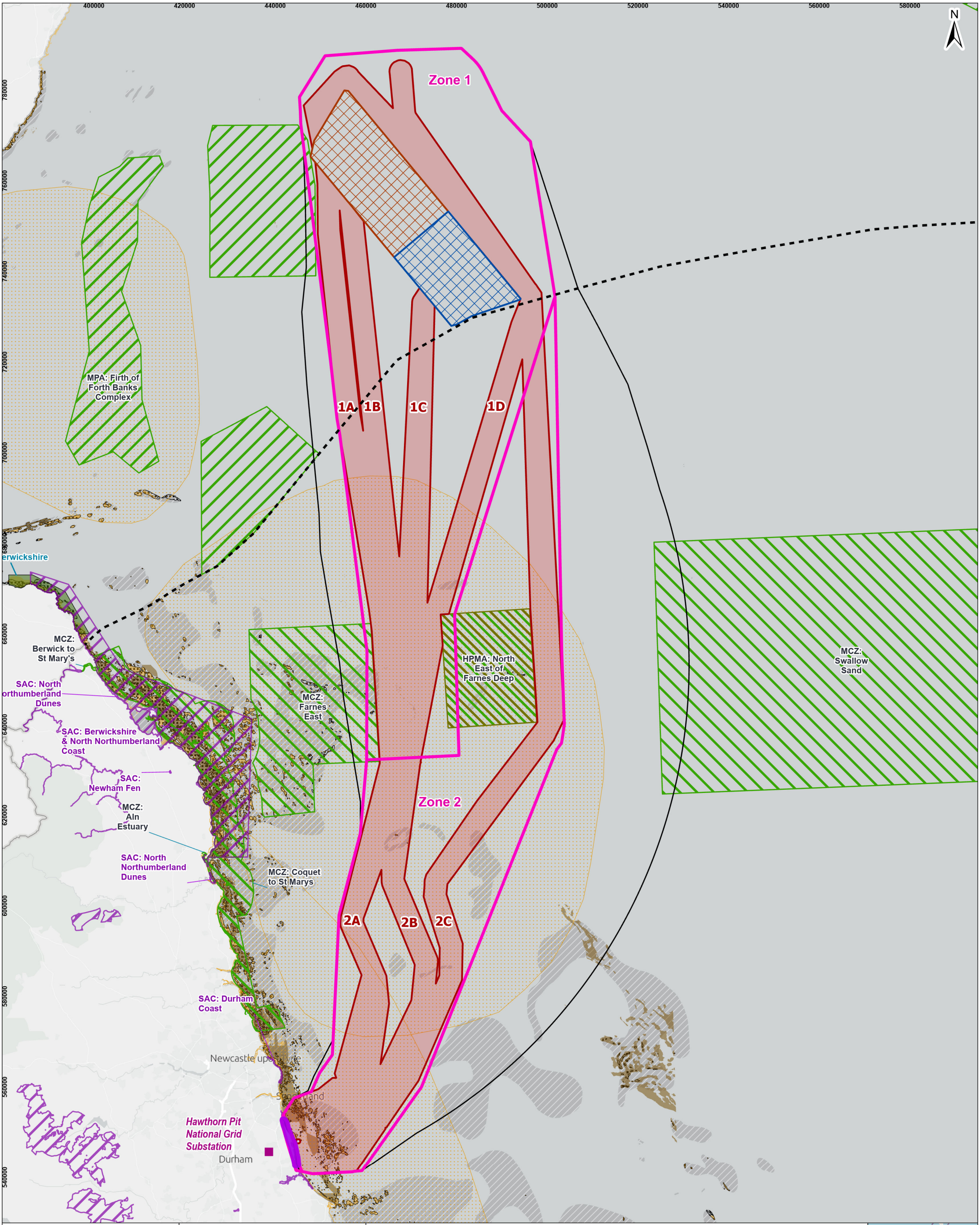
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01	07/08/26	Initial Issue	GM	MP
02	13/08/26	Layer Updates	GM	MP
03	20/08/26	Add HP	GM	MP
04	23/09/26	Layer Updates	GM	MP

LEGEND

- MHPGC Project Offshore Infrastructure Search Area
- Morven North
- Morven South
- Landfall Search Area
- Scottish/ English jurisdictional boundary
- Hawthorn Pit National Grid Substation

United Kingdom
land
London



Morven Offshore Wind Farm

Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Drawing Number:** M3-MV-PRJ-0038
Drawing Title: MHPGC PROJECT POTENTIAL OFFSHORE EXPORT CABLE ROUTE OPTIONS WITH ENVIRONMENTAL CONSTRAINTS	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122
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Geodetic Information: Datum: OSGB 1936 Projection: British National Grid	

VER	DATE	DETAILS	BY	CHECK
01	07/08/26	Initial Issue	GM	MP
02	13/08/26	Layer Updates	GM	MP
03	23/09/26	Layer Updates	GM	MP

LEGEND

- MHPGC Project Offshore Infrastructure Search Area
- Offshore Route Corridor Zones
- Potential Offshore Export Cable Route Route Options
- Morven North
- Morven South
- Landfall Search Area
- Scottish/ English jurisdictional boundary
- Special Areas of Conservation England (Natural England)
- Marine Consultation Areas (MCA) (NatureScot)
- Highly Protected Marine Areas (HMPA)
- Marine Protected Areas (MPA) (NatureScot)
- Marine Conservation Zones (Natural England)
- Eel and Herring Spawning and Nursery 1998 (CEFAS)
- Annex 1 Reefs High Confidence (JNCC)
- Annex 1 Reefs Potential (JNCC)
- Rock and Boulders (EMOD)
- Hard Substrate (BGS)
- Hawthorn Pit National Grid Substation



320000 340000 360000 380000 400000 420000 440000 460000 480000 500000 520000

800000 780000 760000 740000 720000 700000 680000 660000 640000 620000 600000 580000 560000 540000

N

Dundee
Perth
Dunfermline
Houghton-le-Spring
Seaham
Hetton-le-Hole
Carlisle
Newcastle upon Tyne
Sunderland
Hawthorn Pit
Durham

Morven Offshore Wind Farm	**Drawing Number:** MV-CON-REG-0042
Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122
Drawing Title: MHPGC PROJECT EIA SCOPING BOUNDARY	**Service Layer Credits:** GB Light Grey: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack OpenStreetMap: Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

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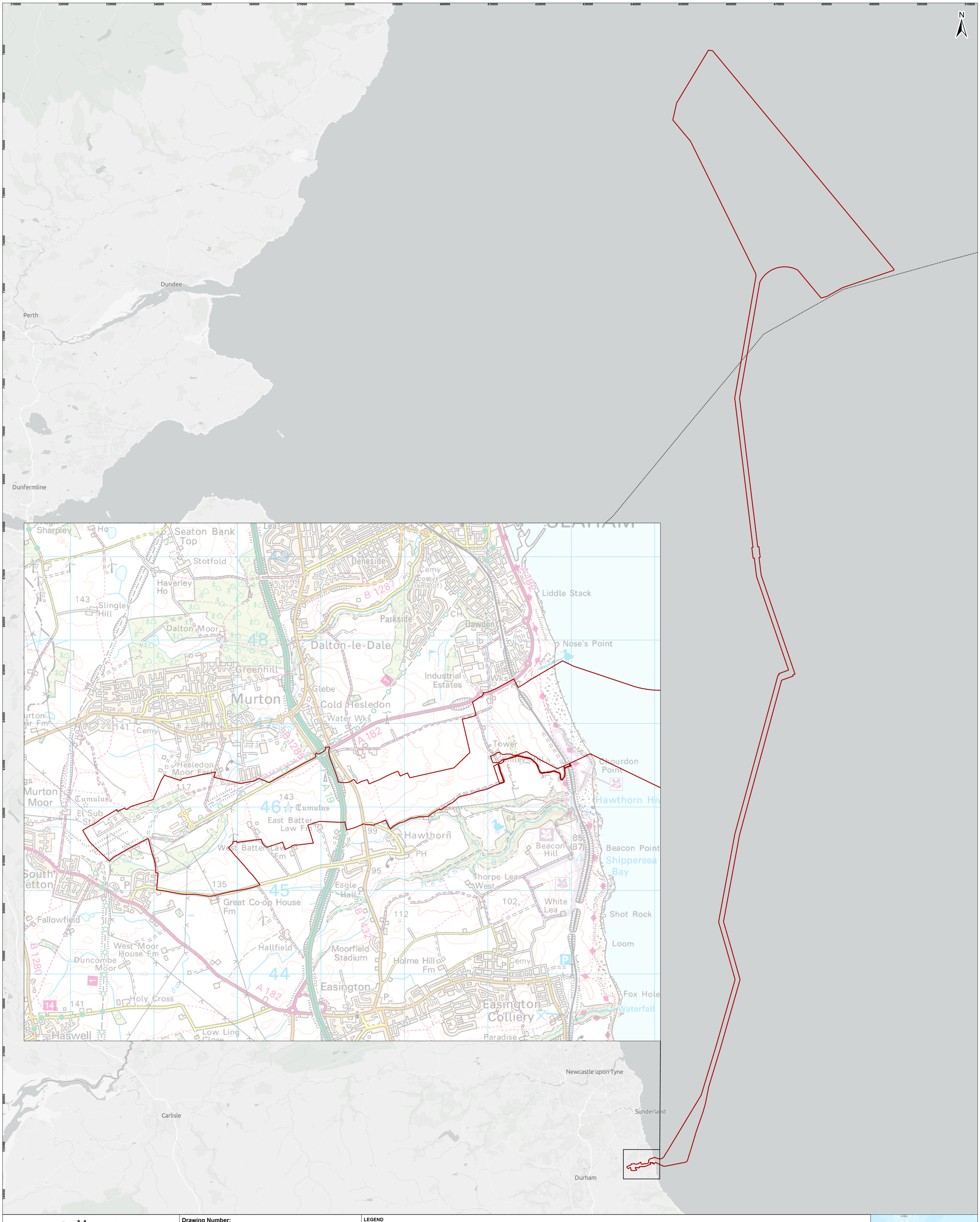
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01	07/08/26	Initial Issue	GM	MP
02	13/08/26	Layer Update	GM	MP

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid

LEGEND

- MHPGC Project EIA Scoping Boundary
- Morven North
- Morven South
- Scottish Adjacent Waters Boundaries Order 1999
- Hawthorn Pit Substation

United Kingdom
land
London



Morven Offshore Wind Farm	**Drawing Number:** MV-CON-REG-0011				
Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PROJECT	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122				
Drawing Title: LOCATION PLAN(S) (ONSHORE AND OFFSHORE)	**Service Layer Credits:** GB Light Grey: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack World Topographic Map: Esri, HERE, Garmin, FAO, NOAA, USGS				
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	01	04/08/26	Initial Issue	GM	LM
	02	23/09/26	Layer Updates	GM	MP
Geodetic Information: Datum: OSGB 1936 Projection: British National Grid					

LEGEND

- MHPGC Project PEIR Red Line Boundary
- Scottish/English Offshore Waters Boundary

3.10 Onshore Infrastructure (Stages 2 and 3)

3.10.1 Overview

3.10.1.1 The permanent onshore infrastructure for the MHPGC Project includes the onshore export cables, onshore LSS and AC connection cables. **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR** contains further details on the site selection process and consideration of alternatives for the onshore components of the MHPGC Project which is summarised below.

3.10.2 Onshore LSS site selection

3.10.2.1 The purpose of the onshore LSS is to transform the power supplied through the onshore export cables into an appropriate voltage and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.

3.10.2.2 **Paragraphs 3.10.2.3 - 3.10.2.21** below describe the site selection process for the onshore LSS undertaken since the identification of the PoI at National Grid Hawthorn Pit Substation. The site selection process has culminated in the selection and refinement of the two onshore LSS sites for PEIR publication.

Stage 2c: Identification of onshore LSS search area

3.10.2.3 To commence site selection, an initial 5 km buffer was drawn around the recommended PoI at the National Grid Hawthorn Pit Substation. This radius formed the initial area of search. A 5 km buffer was used to minimise the length of the AC connection cables that would connect the new onshore LSS to the PoI, to minimise cable reactive power issues, mitigate transmission losses, and to minimise adverse effects on economic efficiency.

3.10.2.4 After establishing the initial area of search, a process of constraints mapping taking into account environmental, physical, technical, commercial, social considerations and engineering requirements was undertaken. Coupled with due consideration to NGET's Horlock Rules (see **Section 3.3.6**) and to the site selection Guiding Principles summarised in **Section 3.6.2**, a number of areas were removed from the initial area of search to avoid environmental designations and the dense commercial and residential areas of Murton, South Hetton and Easington Lane, and to minimise the need for onshore cables crossing existing infrastructure.

3.10.2.5 There was a period of consultation between July to September 2024. This consultation was aimed at seeking feedback on the initial Onshore LSS search area and to obtain local knowledge about the surrounding area.

3.10.2.6 Following the constraints mapping and consultation, the Onshore LSS Search Area was then presented at Scoping, as shown in **Figure 3.10**.

3.10.2.7 The key themes which emerged from the consultation included proximity to neighbouring communities, visual impact of the onshore LSS, flood risk, ornithology, and potential impacts on landowners.

<u>Constraints mapping exercise</u>

3.10.2.8 After establishing the Onshore LSS Search Area at Scoping, a further constraints-based mapping exercise was undertaken, based on environmental, social and technical constraints. The exercise highlighted and overlaid key constraints within the Onshore LSS Search Area to identify search zones for the onshore LSS. These search zones were then refined into onshore LSS indicative sites using the engineering assumptions embedded into the identification of appropriate sites (as outlined in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**) and the key constraints identified in the mapping exercise. This included consideration of:

- Residential receptors;
- Utilities – cables and pipelines;
- Terrain / topography;
- Flood zone data;

- Environmental designated sites / protected areas; and
- Road networks (access).

Creation of onshore LSS sites

3.10.2.9 Subsequently, as shown in **Figure 3.11**, eight indicative onshore LSS sites were identified. The extent of these indicative sites, listed as follows, was determined by reference to existing geographic features such as field boundaries, residential properties, roads, watercourse and other existing highway infrastructure.

- LSS-A: located south of LSS-E on agricultural land to west of the National Grid Substation at Hawthorn Pit;
- LSS-B: northwest of Hawthorn Pit Substation on agricultural land;
- LSS-C: the site of a proposed solar farm immediately northeast of National Grid Substation at Hawthorn Pit;
- LSS-D: agricultural land to the east of National Grid Substation at Hawthorn Pit, immediately west of Hesledon Moor East SSSI;
- LSS-E: agricultural land which forms the north and north eastern slopes of Batter Law Hill, adjacent to the western edge of the A19;
- LSS-F: agricultural land to the east of the A19;
- LSS-G: located within Jade Business Park; and
- LSS-H: agricultural land southeast of Coop House Wood.

BRAG appraisal of sites

3.10.2.10 The eight indicative sites were then analysed for their suitability for siting the onshore LSS through a BRAG appraisal, based on a list of engineering, human and environmental criteria. Development considerations captured within the BRAG appraisal include:

- Ground conditions e.g. topography;
- Other developments e.g. planning applications;
- Traffic and transport – access;
- Ecology and biodiversity;
- Utilities – cables and pipelines;
- Water resources – flood risk, Main Rivers and surface water features, Source Protection Zones; and
- Best and Most Versatile agricultural land.

Outcome of appraisal

3.10.2.11 The BRAG appraisal concluded that LSS-A, LSS-E and LSS-G were to be taken forward for further assessment as the onshore LSS options to be considered against the onshore cable route optioneering (see **Figure 3.12**) within Stage 3d (see **Section 3.10.3**). The other five indicative sites were discounted from further consideration due to the presence of constraints within and in close proximity to the sites. Details of the BRAG appraisal and constraints are presented in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.

Stage 3c: Refinement of onshore LSS sites for PEIR

3.10.2.12 Following the review of the onshore cable route options within Stage 3d (**see Section 3.10.3**), LSS-A was also discounted due to engineering challenges for the MHPGC Project to route a 400 kV cable route from the west of National Grid Hawthorn Pit Substation, primarily due to the required interaction with the consent of the Aura Power Solar Farm and the EGL1 cable corridor and feedback received from the 2025 consultation. It was concluded that LSS-A would be removed from further consideration.

3.10.2.13 The second consultation between October and November 2025 was aimed at seeking feedback on the identified onshore substation sites and to obtain more local knowledge on those specific sites. Due to the removal of LSS-A from further consideration, the Applicant re-introduced LSS-H for the purposes of the consultation so that the next- feasible LSS option closest to Hawthorn Pit could be considered as an alternative. The following colour-coding was used during the 2025 consultation to differentiate between sites (see **Figure 3.13**):

- LSS-E = Blue
- LSS-G = Green
- LSS-H = Pink

3.10.2.14 The key themes which emerged from the 2025 consultation included, but were not limited to, support for the Green onshore LSS option (LSS-G/ Jade Business Park), with concern for the alternatives displayed (Blue/LSS-E/adjacent to the A19 and Pink/LSS-H/south of Batter Law Hill) due to potential for landscape and visual impacts, potential for impacts on residential receptors and potential impacts on farming landowners. In addition, concern was raised specifically in regard to LSS-H relating to impacts arising from the extent of new roadway that would be required to service the site from the public highway.

3.10.2.15. In line with the feedback received, the site selection process for the onshore LSS option LSS-H (Pink/south of Batter Law Hill) considered the undulating topography and potential for the LSS to be visible from visual receptors within South Hetton. The Applicant also considered the landform around LSS-H that could reduce the possibility for landscape and visual impacts and potential impacts to residential receptors via landscape or planting. Due to the topography and land requirements necessary to reduce potential impacts, the Applicant made the decision that it was not feasible to implement a landscaping scheme that could deliver sufficient mitigation to the visibility of the LSS from South Hetton. This has resulted in the discounting of LSS-H from further consideration.

3.10.2.16 The Applicants also made the decision to retain LSS-E / Blue / adjacent to the A19 due to the potential for challenging ground conditions (e.g. contaminated land) at LSS-G / Green / Jade Business Park and the need to retain a potential alternative if this option became infeasible following further site investigation.

3.10.2.17 The feedback received from this period of consultation has subsequently been considered alongside consideration of a broad range of constraints to further refine the site selection process.

3.10.2.18 It is therefore concluded that LSS-E and LSS-G were to be taken forward for further assessment as the onshore LSS options within PEIR.

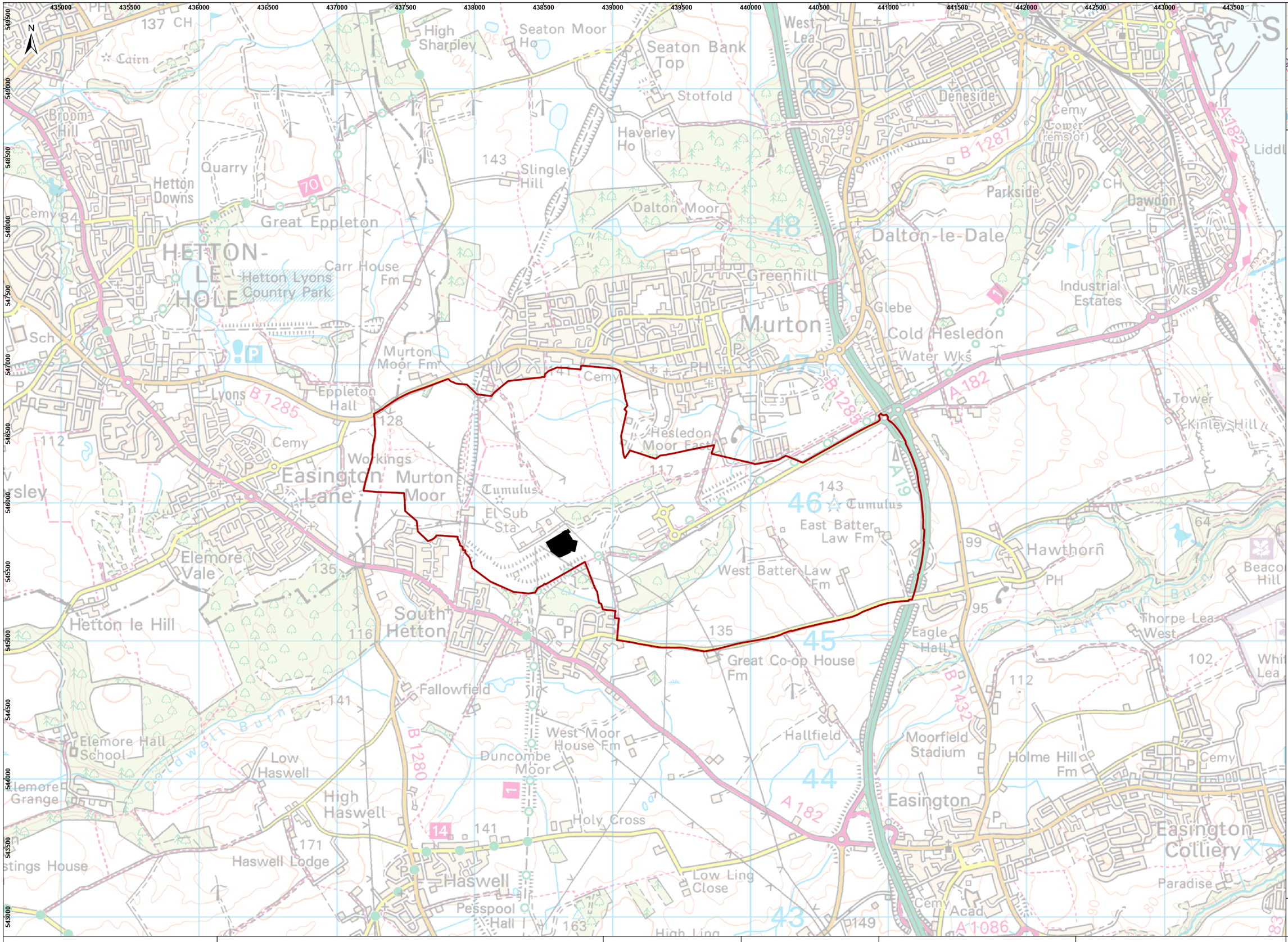
3.10.2.19 A series of landowner meetings were also held between the 2025 consultation and the presentation of the LSS sites for the PEIR to obtain feedback on the selected sites in order to allow the MHPGC Project to incorporate feedback into the site selection process early, wherever possible. Key changes were made to the definition of the LSS site boundaries as a result of defining key infrastructure parameters and feedback from the 2025 consultation and landowner feedback. These include:

- Removal of the western extension of LSS-E along the base of Batter Law Hill due to challenging topography and extension of the boundary to the south into more favourable topography; and
- Alignment of the LSS-E site boundary along field margins to reduce potential severance to landowners.

3.10.2.20 The indicative LSS site boundaries for LSS-E and LSS-G are incorporated into the draft Works Plans and illustrated in detail in **Figure 3.13**.

Onshore LSS site selection next steps

3.10.2.21 The onshore LSS locations will continue to be refined subject to further consultation and stakeholder engagement; and informed by the assessment of potential environmental effects and the results of baseline surveys. The two potential options identified for the onshore LSS are assessed within **Volume 3 and Volume 4 of the PEIR** to aid the determination of the preferred option to connect to the PoI at National Grid Hawthorn Pit Substation. Consultation feedback received during subsequent consultation following PEIR publication in Autumn 2026 will also be considered and feed into the site selection process.

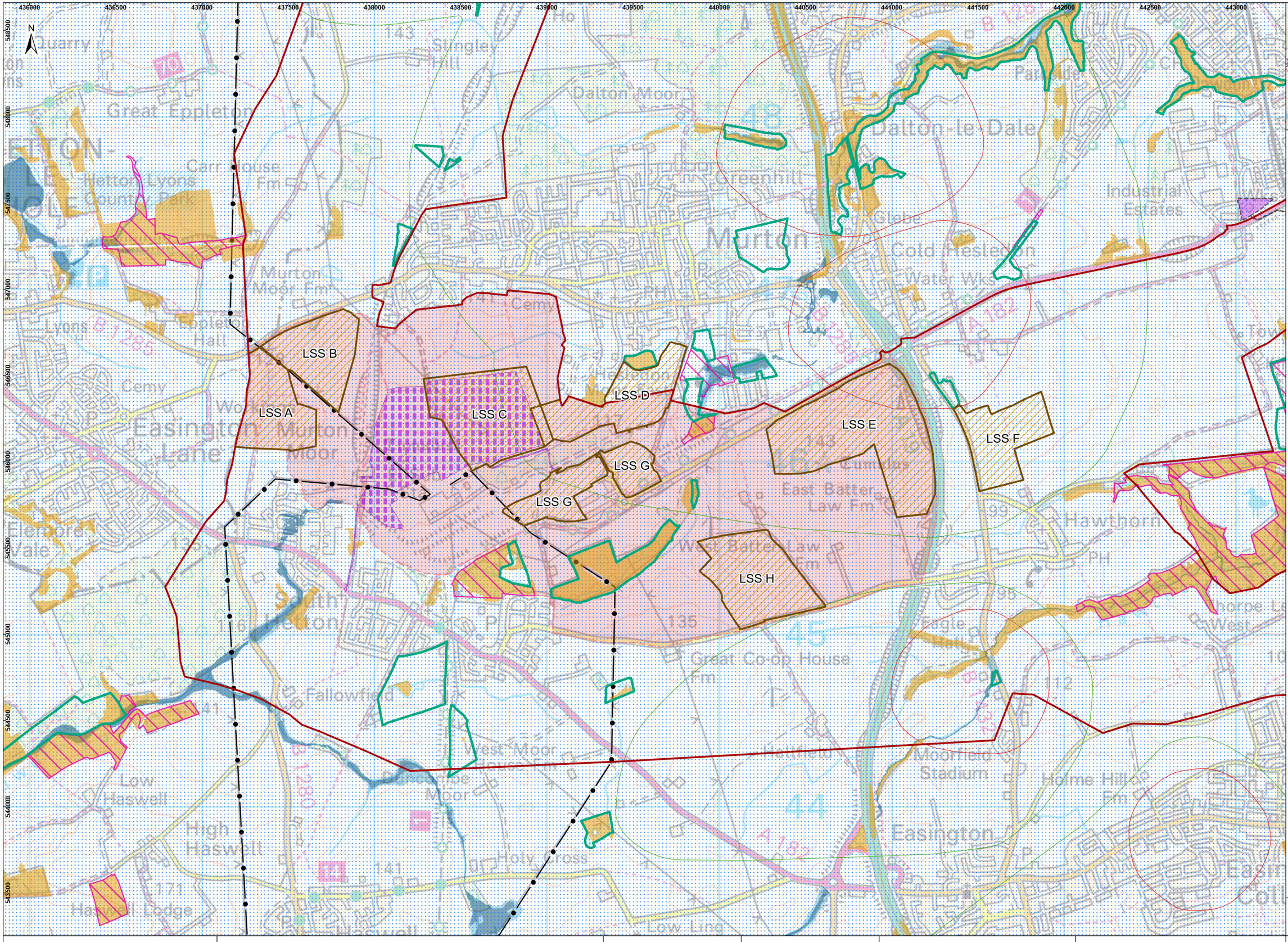


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Morven Offshore Wind Farm

Drawing Number: MV-CON-REG-0032

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01	29/07/26	Initial Issue	GM	PRW



LEGEND

- Morven Transmission Scoping Redline Boundary
- Potential Substation Sites
- Morven Scoping LSS Search Areas
- Local Wildlife Sites (DCC)
- Sites of Special Scientific Interest (Natural England)
- Priority Habitats
- Mine Water Treat Schemes
- Hawthorn Pit Solar Farm (Aura)

Source Protection Zones (Environment Agency)

- 1
- 2
- 3

Flood Zones from River and Sea (Environment Agency)

- FZ2
- FZ3

Morven Offshore Wind Farm

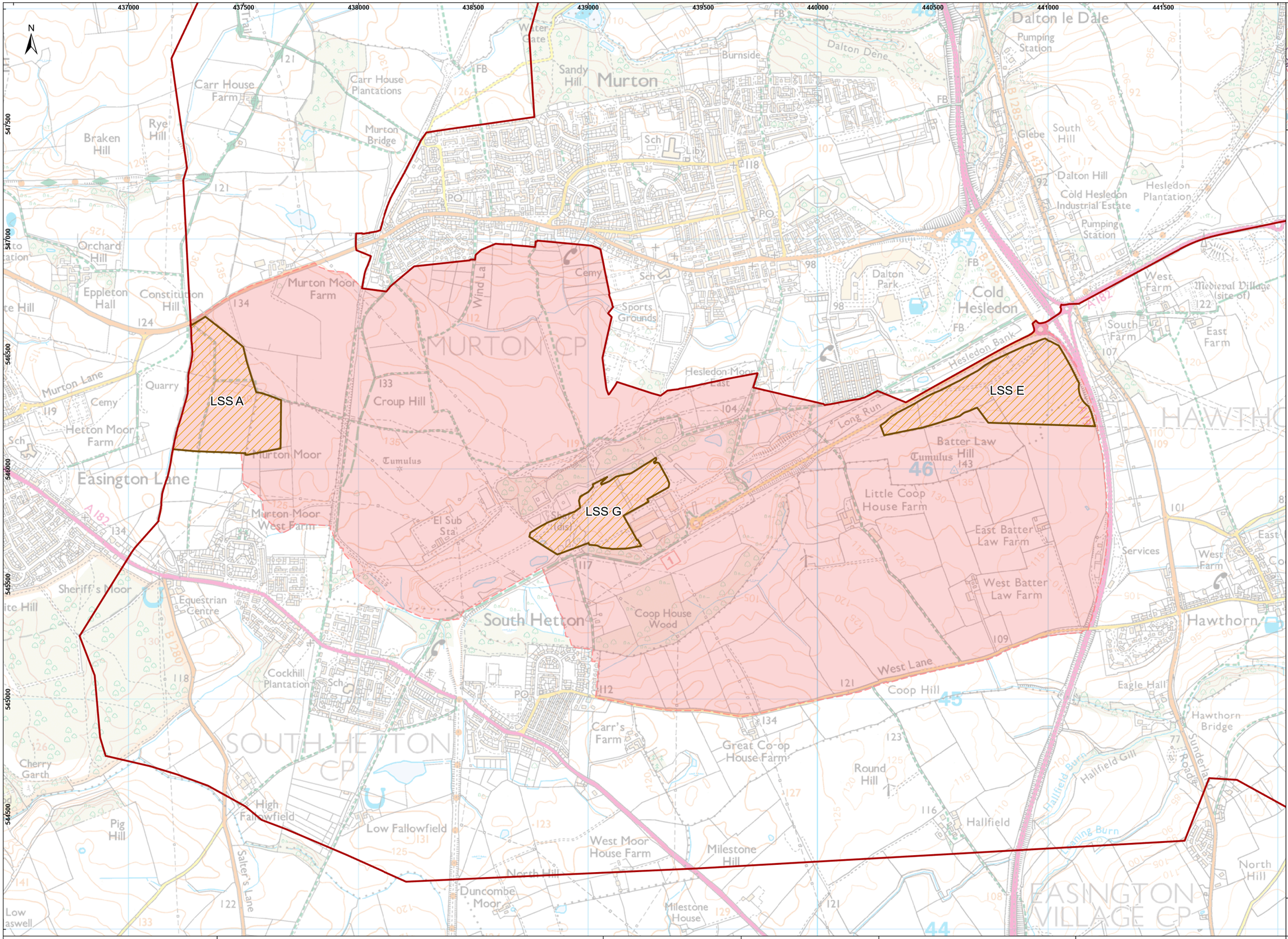
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01	28/07/26	Initial Issue	GM	PRW
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LEGEND

- Morven Transmission Scoping Redline Boundary
- Potential Substation Sites
- Morven Scoping LSS Search Areas

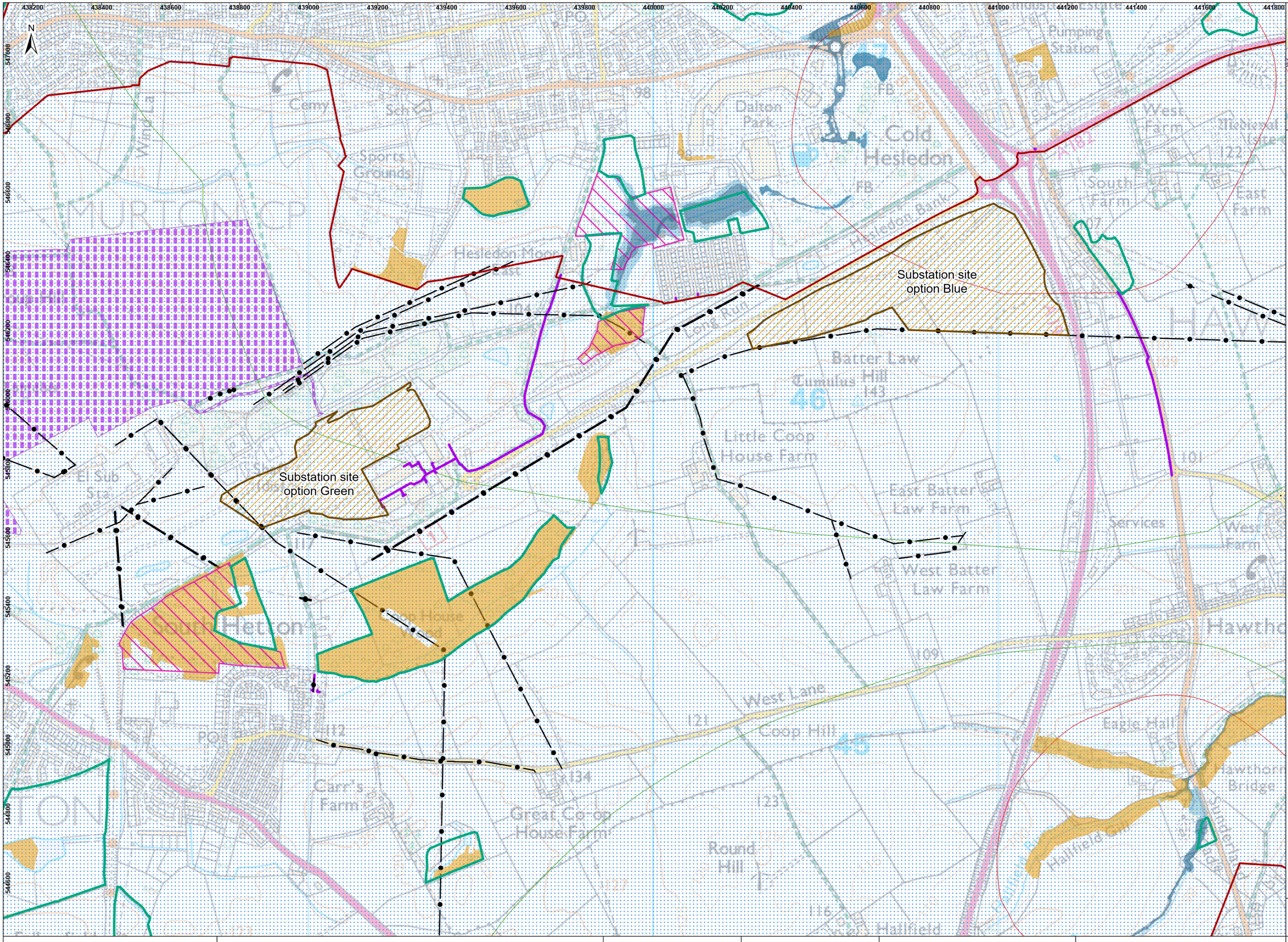
Morven Offshore Wind Farm

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Drawing Number: MV-CON-REG-0029

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01	28/07/26	Initial Issue	GM	PRW



LEGEND

- Morven Transmission Scoping Redline Boundary
- Potential Substation Sites
- Local Wildlife Sites (DCC)
- Sites of Special Scientific Interest (Natural England)
- Priority Habitats
- Electrical Overhead Lines
- Gas Pipeline

Source Protection Zones (Environment Agency)

- 1
- 2
- 3

Flood Zones from River and Sea (Environment Agency)

- FZ2
- FZ3

Morven Offshore Wind Farm

Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Drawing Title:** POTENTIAL SUBSTATION SITES (X2)	0 100 200 Meters Scale@A3: 1:10,000	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid	**Data Sources:** Morven. Crown Copyright and database right [2026] Ordnance Survey AC0000808122

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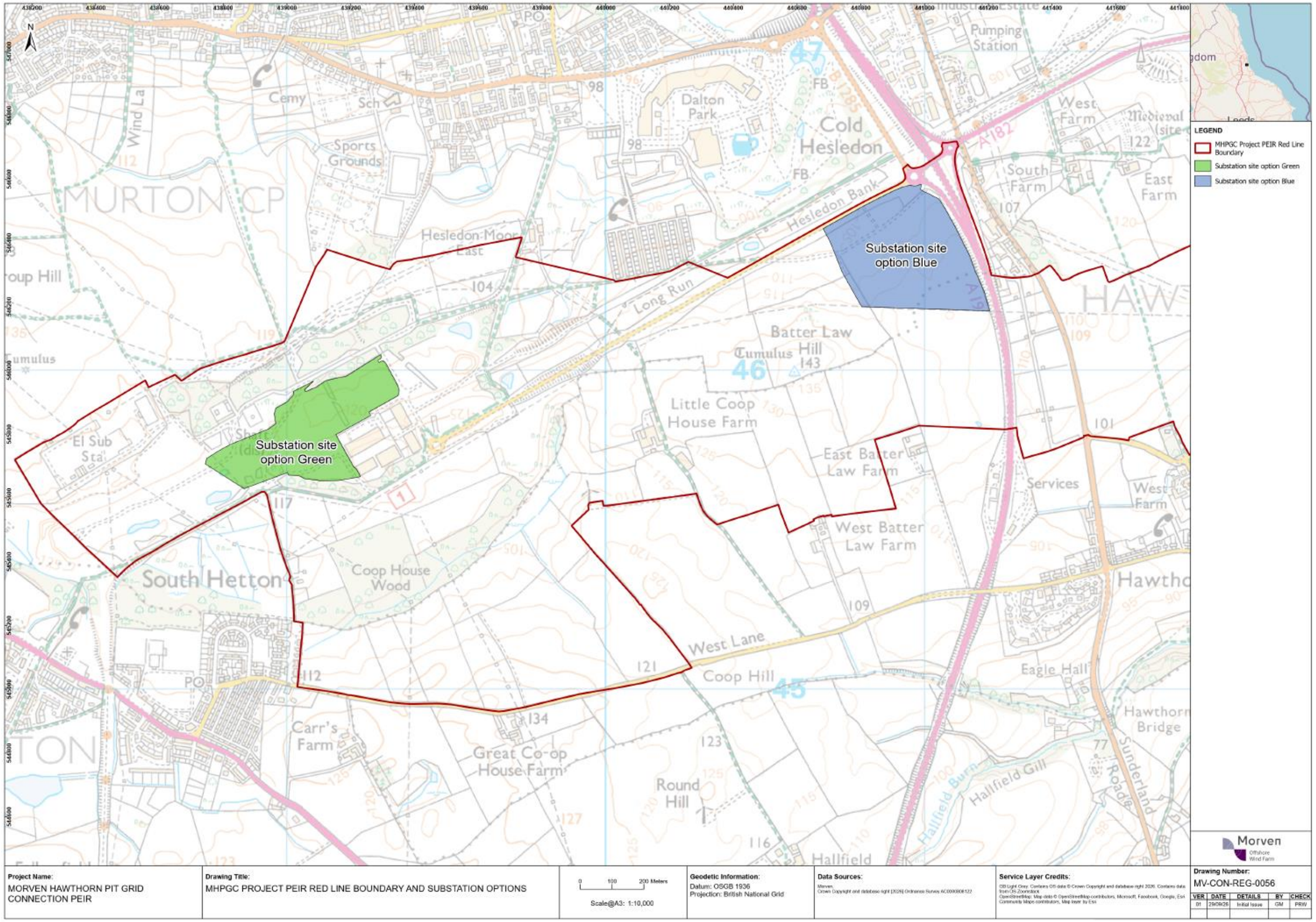


Figure 3.14: Selected LSS sites for PEIR assessment

3.10.3 Onshore cable route site selection

3.10.3.1 The onshore cable route comprises the onshore export cable corridor and the AC connection cable corridor. It provides a cable connection between the TJB(s) at landfall and the PoI at National Grid Hawthorn Pit Substation via the onshore LSS.

3.10.3.2 **Paragraphs 3.10.3.3 - 3.10.3.18** below describe the site selection process for the onshore cable route undertaken. The site selection process has culminated in the selection and refinement of the onshore cable corridor option for PEIR publication.

Stage 2d: Identification of onshore cable route search area

3.10.3.3 The location of the initial onshore cable route search area was driven by the location of the landfall search area between south of Sunderland to north of Peterlee (see **Section 3.8.2**) to the east and the recommended PoI at National Grid Hawthorn Pit Substation to the west. Residential areas of Ryhope, Seaham and Easington Lane were used to create the northern and western extents of the search area, and Easington Colliery, Dawdon and Easington Lane were used to create the southern extent.

3.10.3.4 Once the onshore cable route search area was defined, this became the Scoping Boundary (see **Figure 3.15**) encompassing a broad area to allow subsequent refinement of the onshore cable route and to accommodate feedback received from a first phase of consultation between July and September 2024.

3.10.3.5 The key themes which emerged specific to the onshore cable corridor included potential impacts on landowners, traffic associated with construction, interactions with new housing developments, proximity to neighbouring communities, flood risk, and ornithology.

Stage 3d: Refinement of the onshore cable route options for PEIR

Constraints mapping and engineering feasibility

3.10.3.6 Key infrastructure parameters associated with the site selection and refinement process for the onshore cable route were that the corridor was to be sufficiently wide to accommodate the design envelope and followed a series of guiding principles for the 'line of best fit' route options.

3.10.3.7 The design parameters and Guiding Principles were applied to the MHPGC Project Scoping Boundary (onshore cable route search area) to find the most suitable routing from the landfall search area to the onshore LSS search area (see **Section 3.10.2**) for connection to the recommended PoI at National Grid Hawthorn Pit Substation whilst avoiding residential and environmental constraints, wherever possible, as per the site selection Guiding Principles.

3.10.3.8 A range of known constraints including Local Wildlife Sites, watercourses, other developments, historic environment record data to ponds, agricultural land classification data and more were then reviewed. In parallel with the constraints, an engineering feasibility study considered how cable could, in practice, route around, through or under existing infrastructure to avoid or minimise interactions with sensitive receptors identified during constraints mapping.

3.10.3.9 Based on the three distinct landfall options identified in Stage 3a (see **Section 3.8.3**) the following three distinct onshore cable route options were identified (see **Figure 3.16**):

- Northern Corridor: from north of Seaham, navigating west of Seaham, crossing the A1018 and A19, and heading south into Hawthorn Pit between Murton and Easington Lane;
- Central Corridor: from Nose Point, heading due west crossing the A19 and into Hawthorn Pit south of Murton; and
- Southern Corridor: from Beacon Hill, heading west immediately south of Hawthorn Dene, crossing the A19 and into Hawthorn Pit south of Murton. (This corridor significantly overlaps with the Central corridor at the section west of the A19.)

Onshore cable corridor for PEIR and consultation

3.10.3.10 An onshore cable corridor BRAG appraisal was then undertaken on the three onshore cable route options and included a characterisation and qualitative BRAG rating against a list of individual

criteria within engineering, environment and land use/planning constraints. For the purposes of the constraints review and BRAG appraisal, the onshore cable route options were each split into smaller segments, so that a thorough review and characterisation exercise could be completed. Details of the BRAG appraisal and constraints are presented in **Volume 1, Annex 3.3: Selection and Refinement of the Onshore Infrastructure, of the PEIR**.

3.10.3.11 The BRAG appraisal concluded that the Southern Corridor was primarily discounted due to the engineering constraints associated with the Southern Landfall and the challenging engineering feasibility and potentially significant onshore ecology and water resources effects associated with the requirement to route through Hawthorn Dene SSSI.

3.10.3.12 As part of the consultation undertaken between October and November 2025, two indicative onshore export cable corridors (North and Central) were presented (along with indicative onshore LSS sites). Landowner meetings were also held between January and March 2026 to obtain feedback on the route options in order to allow the MHPGC Project to incorporate feedback into the site selection process early, wherever possible.

3.10.3.13 The key themes which emerged from consultation included, but were not limited to, support for the Central Landfall option and associated onshore cable route (however, the Northern Corridor was considered preferable if co-construction with EGL1 was a possibility), potential impacts on landowners (e.g. field boundaries, land severance, productive farmland), concern about the impact on the environment/biodiversity/wildlife/coastline, and concern about cumulative impacts (including other ongoing projects). The feedback received (see **Section 3.4**) has subsequently been considered alongside a broad range of environmental and engineering constraints to further refine the site selection process.

3.10.3.14 Based on the results of the constraints mapping, engineering feasibility and taking into account feedback from the 2025 consultation, the Northern Corridor was also discounted due to a combination of the grant of planning permission on appeal for the Aura Power Solar Farm and the identified route of the EGL1 cable route and its associated construction timelines, as there would be insufficient space to route the AC connection cables to the north and to the west of Hawthorn Pit. In addition, the Northern Corridor included pinch points created by another consented solar farm and highway infrastructure in the northern extent that would require complex trenchless techniques to traverse these major crossings. It was therefore concluded that only the Central Corridor was to be taken forward for further assessments as the onshore cable route search area within PEIR (see **Figure 3.17**).

3.10.3.15 It should be noted that discounting the Northern Corridor would mean that it would be extremely challenging from an engineering perspective to route the AC connection cables from all onshore LSS options to the west and north of Hawthorn Pit to the recommended PoI at National Grid Hawthorn Pit substation, including LSS-A which was shortlisted after the onshore LSS BRAG appraisal (see **Section 3.10.2**). The potential for these LSS options were therefore also removed.

3.10.3.16 A series of landowner meetings were also held between the 2025 consultation and the presentation of the onshore cable route search area for the PEIR to obtain feedback on the route in order to allow the MHPGC Project to incorporate feedback into the site selection process early, wherever possible. Key changes were made to the onshore cable route search area to refine it down to a PEIR Red Line Boundary: Onshore as a result of defining key infrastructure parameters and feedback from the 2025 consultation and landowner feedback. These include:

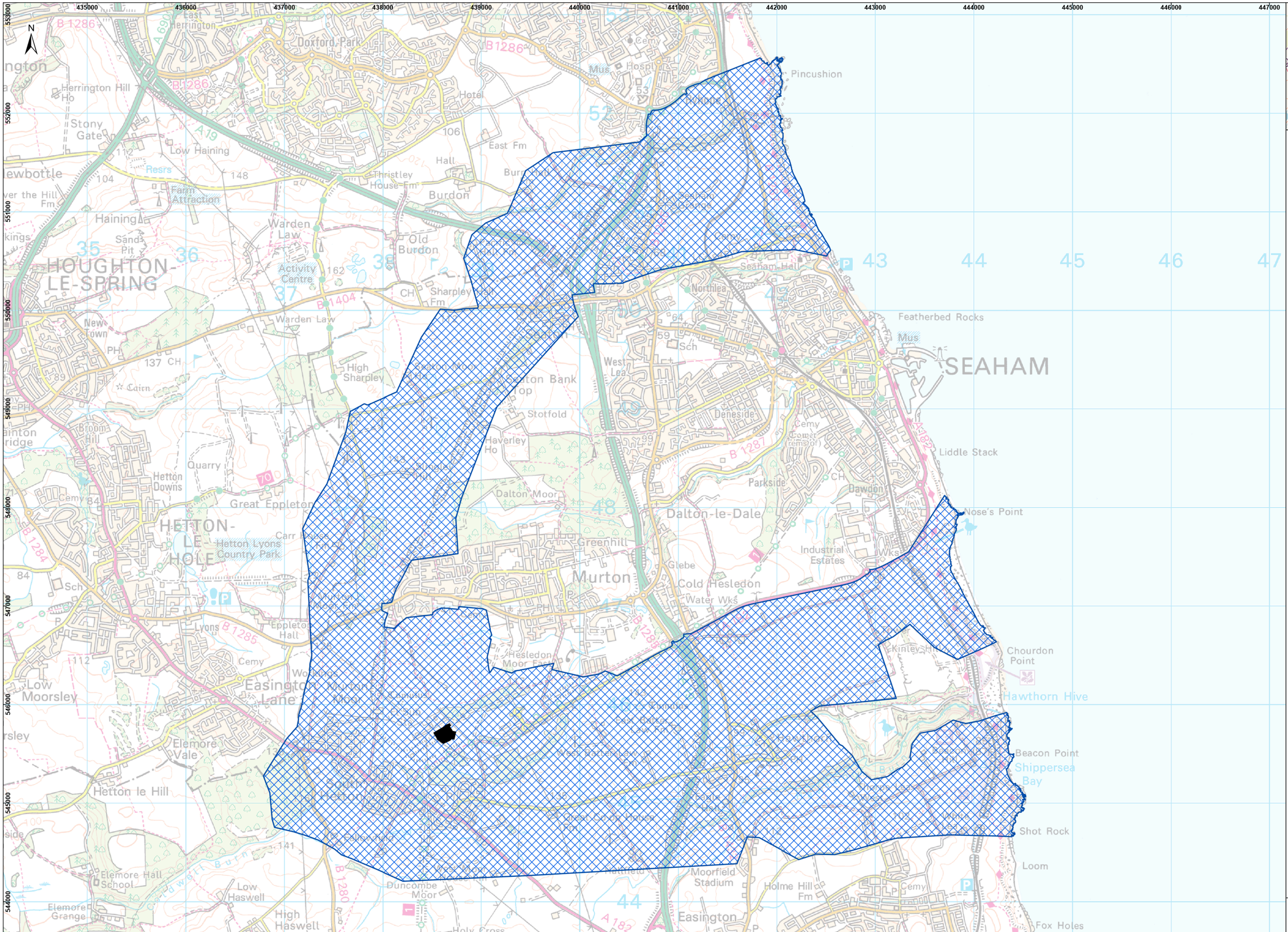
- refinement of any potential interaction with residential developments adjacent to the A182, such as refinement around the boundary of Seaham Garden Village following clarity based on its start of construction;
- alignment of the PEIR Red Line Boundary: Onshore along field margins to reduce severance to landowners; and
- addition of access that runs to the Hawthorn Quarry to include an alternative access (to the A182 option) to the proposed landfall location.

3.10.3.17 Construction activities will need to be supported by a series of temporary construction compounds along the onshore cable route close to the cable corridor. Further development of the onshore cable route search area allowed for the identification of several potential locations. These areas are

incorporated into the draft Works Plans and illustrated in detail in **Volume 1, Chapter 2: Project Description, of the PEIR**.

Onshore cable route selection next steps

3.10.3.18 The onshore export cable route will continue to be refined subject to further assessment of potential environmental effects and the results of ongoing field surveys. The onshore cable corridor is assessed within **Volume 3** and **Volume 4** of the PEIR to aid in the determination of a refined onshore cable corridor. Consultation feedback received during subsequent consultation on the PEIR in Autumn 2026 will also be considered and feed into the site selection process. Further details will be provided within the Environmental Statement that will accompany the application for development consent.



LEGEND

- Hawthorn Pit Substation Area
- Onshore Cable Route Search Area

Morven Offshore Wind Farm

Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Drawing Title:** ONSHORE CABLE ROUTES SEARCH AREA AT SCOPING	0 250 500 Meters Scale@A3: 1:35,000	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid	**Data Sources:** Morven, Crown Copyright and database right [2026] Ordnance Survey AC0000808122	**Service Layer Credits:** GB Light Grey: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack OpenStreetMap: Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri	**Drawing Number:** MV-CON-REG-0033

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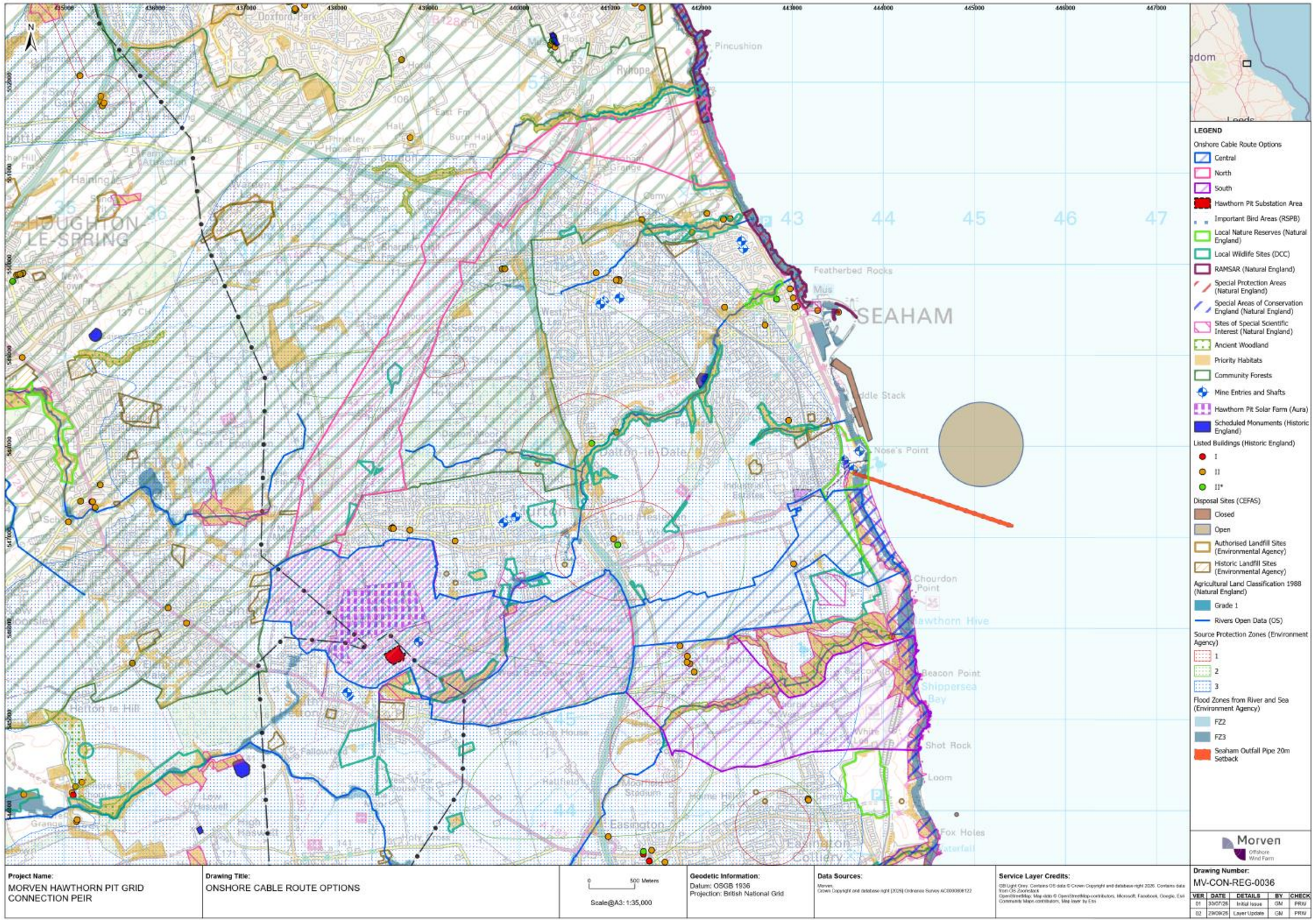
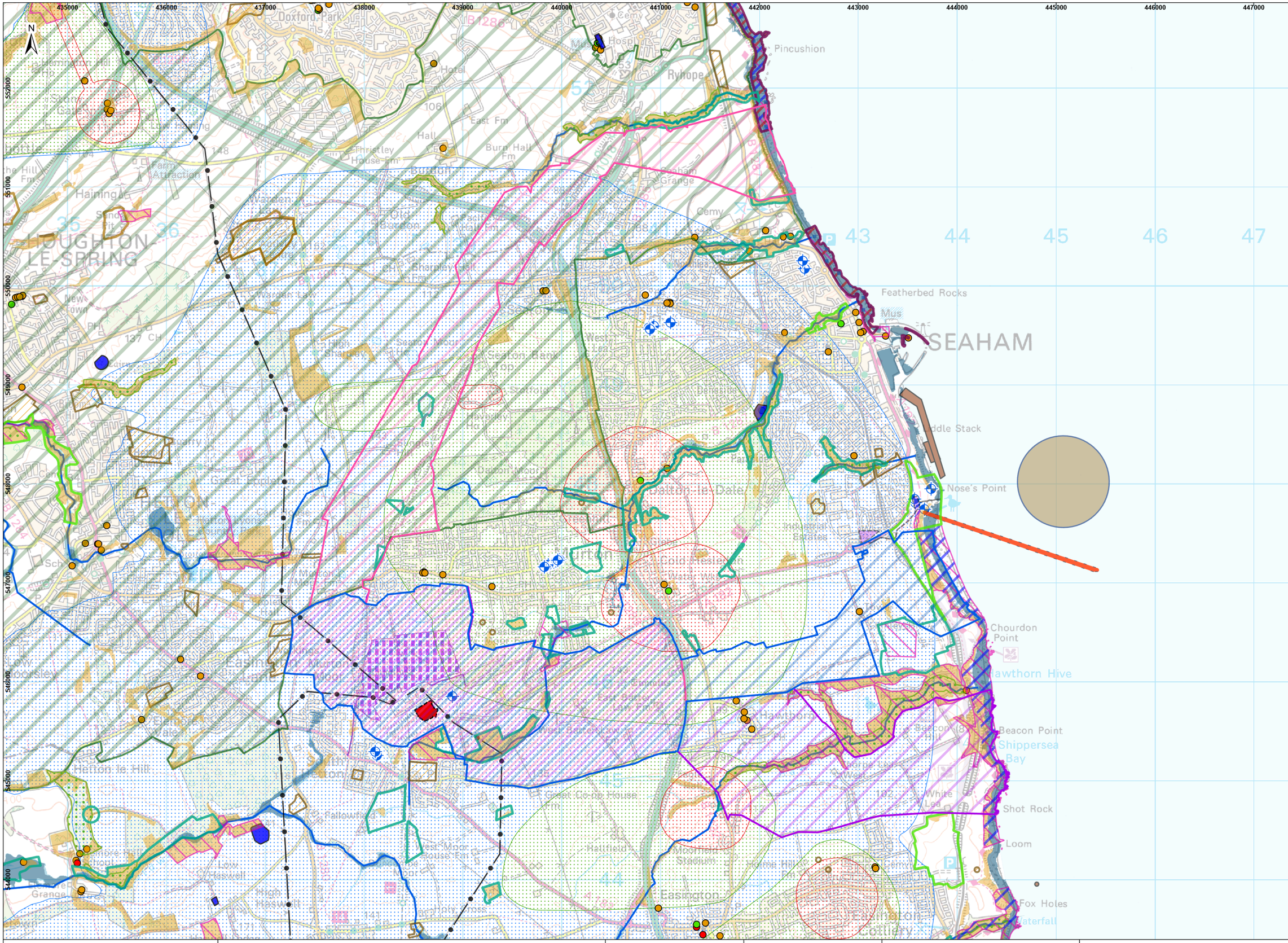


Figure 3.16: Onshore export cable route BRAG mapping at Stage 3d



LEGEND

Onshore Cable Route Options
- Central
- North
- South
- Hawthorn Pit Substation Area
- Important Bird Areas (RSPB)
- Local Nature Reserves (Natural England)
- Local Wildlife Sites (DCC)
- RAMSAR (Natural England)
- Special Protection Areas (Natural England)
- Special Areas of Conservation England (Natural England)
- Sites of Special Scientific Interest (Natural England)
- Ancient Woodland
- Priority Habitats
- Community Forests
- Mine Entries and Shafts
- Hawthorn Pit Solar Farm (Aura)
- Scheduled Monuments (Historic England)

Listed Buildings (Historic England)
- I
- II
- II*

Disposal Sites (CEFAS)
- Closed
- Open
- Authorised Landfill Sites (Environmental Agency)
- Historic Landfill Sites (Environmental Agency)

Agricultural Land Classification 1988 (Natural England)
- Grade 1
- Rivers Open Data (OS)

Source Protection Zones (Environment Agency)
- 1
- 2
- 3

Flood Zones from River and Sea (Environment Agency)
- FZ2
- FZ3

Morven Offshore Wind Farm

Project Name:
MORVEN HAWTHORN PIT GRID CONNECTION PEIR

Drawing Title:
ONSHORE CABLE ROUTE OPTIONS

0 500 Meters

Scale@A3: 1:35,000

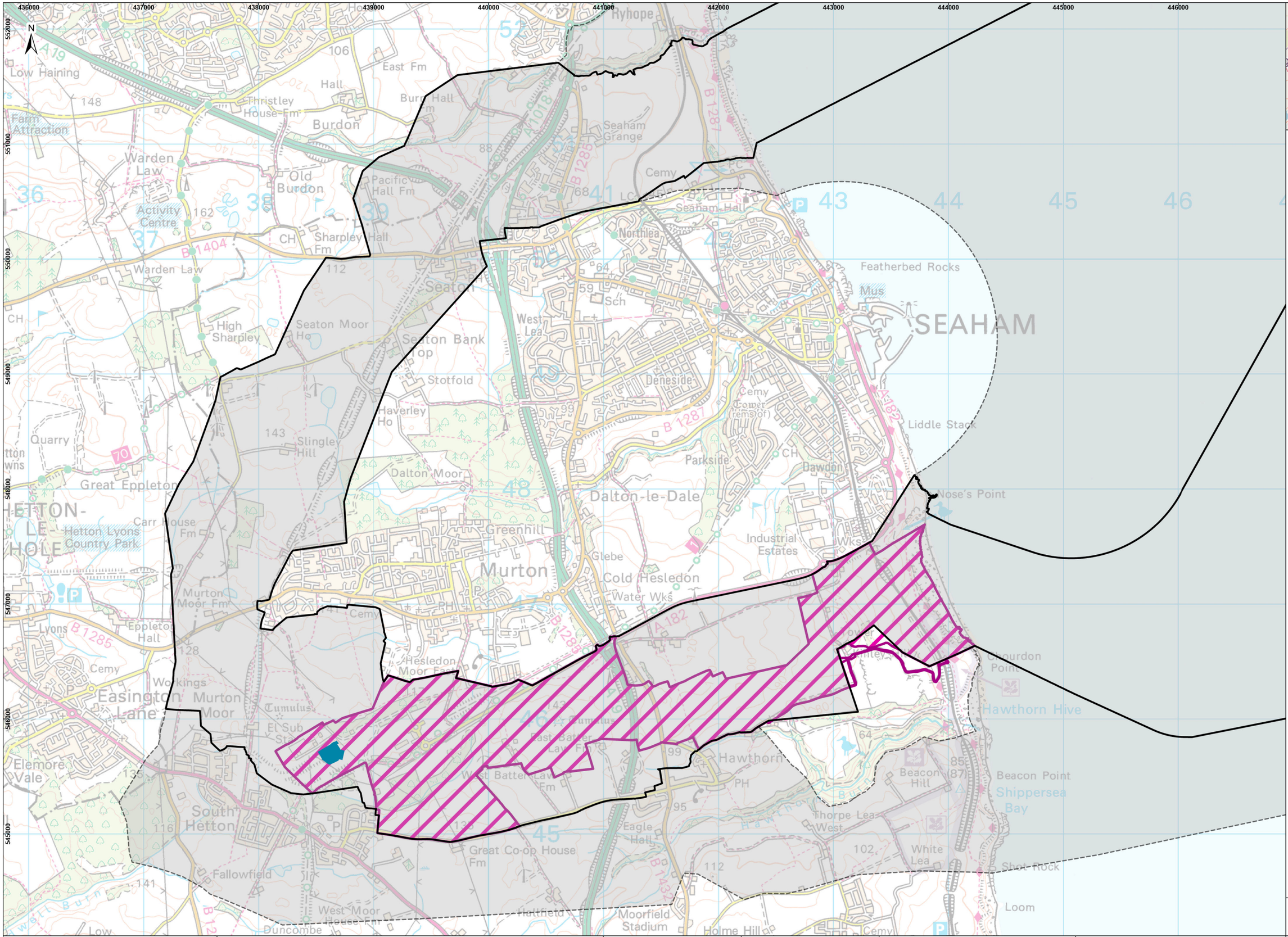
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01	30/07/26	Initial Issue	GM	PRW



LEGEND

- Onshore Infrastructure Boundary
- Morven Hawthorn Pit Grid Connection Red Line Boundary (September 2025)
- Morven Hawthorn Pit Grid Connection Project Scoping Boundary (2024)
- Hawthorn Pit Substation Area

Morven Offshore Wind Farm

Project Name: MORVEN HAWTHORN PIT GRID CONNECTION PEIR	**Drawing Title:** ONSHORE EXPORT CABLE ROUTE SEARCH AREA FOR PEIR	0 250 500 Meters Scale@A3: 1:30,000	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid	**Data Sources:** Morven. Crown Copyright and database right [2026] Ordnance Survey AC0000808122	**Service Layer Credits:** GB Light Grey: Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack OpenStreetMap: Map data © OpenStreetMap contributors, Microsoft, Facebook, Google, Esri Community Maps contributors, Map layer by Esri

Drawing Number: MV-CON-REG-0035

VER	DATE	DETAILS	BY	CHECK
01	29/07/26	Initial Issue	GM	PRW
02	23/09/26	Layer Updates	GM	PRW

3.10.4 Biodiversity benefit and environmental mitigation

3.10.4.1 From 2 November 2026, mandatory Biodiversity Net Gain (BNG) requirements will apply to projects requiring development consent, including the MHPGC Project. The legislative basis for this lies in the Environment Act 2021, which amends the Planning Act 2008 through Schedule 15 to introduce biodiversity net gain requirements for projects requiring development consent. These provisions will require the Secretary of State to be satisfied that the biodiversity gain objective is met before granting a DCO. For a development to meet the biodiversity gain objective, the biodiversity unit value attributable to a development (which may include on-site units, off-site units and statutory biodiversity credits) must exceed the pre-development biodiversity value of the on-site habitat by at least 10%.

3.10.4.2 An area of search for habitat management including potential biodiversity net gain, enhancement and/or mitigation has been identified within the MHPGC Project PEIR Red Line Boundary. This area is illustrated in detail in **Volume 1, Chapter 2: Project Description, of the PEIR.**

3.10.4.3 The area of search, located in close proximity to the Green LSS Option Area (LSS-G), Blue LSS Option Area (LSS-E), and the PoI was identified through positive discussions with the landowner. The location benefits from its proximity to, and connectivity with, Coop House Wood Local Wildlife Site and provides suitable habitat for exploring potential on-site BNG gain options. This area will be refined and further detail provided on proposed BNG options and environmental mitigation, as required, in the ES at the point of application for development consent.

3.11 Conclusion

3.11.1.1 The MHPGC Project site selection and consideration of alternatives as presented within this chapter have evolved through a process of stakeholder engagement and a siting and design process. At this preliminary stage, the selected offshore and onshore cable routes (including landfall) and siting option for the LSS represent a proportionate and justified outcome of the site selection and consideration of alternatives process within the fixed strategic context established by the HND / HND FUE process to connect to the Hawthorn Pit National Grid Substation PoI.

3.11.1.2 The information presented, and the decisions made, were conducted by a multi-disciplinary team, taking into consideration stakeholder feedback and detailed site-specific data.

3.11.1.3 The final MHPGC Project PEIR Red Line Boundary taken forward for this consultation is described in **Volume 1, Chapter 2: Project Description** and shown in **Figure 3.9**.

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