MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Onshore Biodiversity Benefit Statement

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Glossary

Term	Meaning
400 kV grid connection cables	Cables that will connect the proposed onshore substations to the existing National Grid Penwortham substation.
Applicants	Morgan Offshore Wind Limited (Morgan OWL) and Morecambe Offshore Windfarm Ltd (Morecambe OWL).
Baseline	The status of the environment without the Transmission Assets in place.
Biodiversity benefit	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected. For the Transmission Assets, biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits.
Code of Construction Practice	A document detailing the overarching principles of construction, contractor protocols, construction-related environmental management measures, pollution prevention measures, the selection of appropriate construction techniques and monitoring processes.
Commitment	This term is used interchangeably with mitigation and enhancement measures. The purpose of commitments is to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. Primary and tertiary commitments are taken into account and embedded within the assessment set out in the ES.
Development Consent Order	An order made under the Planning Act 2008, granting development consent.
Environmental Impact Assessment	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.
Environmental Statement	The document presenting the results of the Environmental Impact Assessment process.
Generation Assets	The generation assets associated with the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm include the offshore wind turbines, inter-array cables, offshore substation platforms and platform link (interconnector) cables to connect offshore substations.
Intertidal Infrastructure Area	The temporary and permanent areas between Mean Low Water Springs and Mean High Water Springs.
Landfall	The area in which the offshore export cables make landfall (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Lytham St. Annes between Mean Low Water Springs and the transition joint bays inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).
Mitigation measures	This term is used interchangeably with Commitments. The purpose of such measures is to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects.

Term	Meaning
Morecambe OWL	Morecambe Offshore Windfarm Limited is owned by Copenhagen Infrastructure Partners' (CIP) fifth flagship fund, Copenhagen Infrastructure V (CI V).
Morecambe Offshore Windfarm: Generation Assets	The offshore generation assets and associated activities for the Morecambe Offshore Windfarm.
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The offshore and onshore infrastructure connecting the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm to the national grid. This includes the offshore export cables, landfall site, onshore export cables, onshore substations, 400 kV grid connection cables and associated grid connection infrastructure such as circuit breaker compounds. Also referred to in this report as the Transmission Assets, for ease of reading.
Morgan OWL	Morgan Offshore Wind Limited is a joint venture between JERA Nex bp (JNbp) and Energie Baden-Württemberg AG (EnBW).
Morgan Offshore Wind Project: Generation Assets	The offshore generation assets and associated activities for the Morgan Offshore Wind Project.
Onshore export cables	The cables which would bring electricity from landfall to the onshore substations.
Onshore Order Limits	See Transmission Assets Order Limits: Onshore (below).
Onshore substations	The onshore substations will include a substation for the Morgan Offshore Wind Project: Transmission Assets and a substation for the Morecambe Offshore Windfarm: Transmission Assets. These will each comprise a compound containing the electrical components for transforming the power supplied from the generation assets to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.
Order Limits	See Transmission Assets Order Limits (below).
Transmission Assets	See Morgan and Morecambe Offshore Wind Farms: Transmission Assets (above).
Transmission Assets Order Limits	The area within which all components of the Transmission Assets will be located, including areas required on a temporary basis during construction and/or decommissioning.
Transmission Assets Order Limits: Onshore	The area within which all components of the Transmission Assets landward of Mean High Water Springs will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds).

Acronyms

Acronym	Meaning
BNG	Biodiversity Net Gain
CoCP	Code of Construction Practice
DCO	Development Consent Order
Defra	Department for Environment, Food & Rural Affairs
ES	Environmental Statement
JNCC	Joint Nature Conservation Committee
NSIPs	Nationally Significant Infrastructure Projects

Units

Unit	Description
ha	Hectare
km	Kilometres
kV	Kilovolts
%	Percentage

1 Onshore Biodiversity Benefit Statement

1.1 Background

1.1.1 Introduction

1.1.1.1 This document forms the Onshore Biodiversity Benefit Statement which has been produced as part of the application for a Development Consent Order (DCO) for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to hereafter as 'the Transmission Assets').

1.1.1.2 The Onshore Biodiversity Benefit Statement has been updated for Deadline 4 to include the following:

- Clarification of the biodiversity benefit calculations to include:
  - a re-run of the Biodiversity Net Gain (BNG) metric calculator using the current Statutory Defra metric (version 1.0.4 published July 2025)
  - minor corrections to the baseline habitat mapping for the onshore substations and addition of habitat parcel references
  - inclusion of the habitat condition assessment sheets for habitat parcels subject to UK Habs survey for the BNG assessment.
  - Clarification of habitat parcels where UK Habs and habitat condition assessments were derived from Phase 1 Habitat survey data due to access restrictions.

1.1.2 Structure of this document

1.1.2.1 The structure of this Onshore Biodiversity Benefit Statement is as follows.

- **Section 1.1** provides an introduction to the Onshore Biodiversity Benefit Statement.
- **Section 1.2** provides clarification on the calculation of biodiversity benefit and the justification for the area identified at Lea Marsh
- **Section 1.3** provides the relevant policy and legislation in relation to biodiversity benefit.
- **Section 1.4** provides the approach to the delivery overall biodiversity benefit.
- **Section 1.5** provides the assessment of biodiversity benefit for area based habitats, hedgerows, and watercourses.
- **Section 1.6** provides a summary of the proposals for habitat creation and habitat enhancement.
- **Section 1.7** provides a summary of this Onshore Biodiversity Benefit Statement.

1.1.3 Project overview

1.1.3.1 Morgan Offshore Wind Limited (Morgan OWL), a joint venture between JERA Nex bp (JNbp) and Energie Baden-Württemberg AG (EnBW), is developing the Morgan Offshore Wind Project. The Morgan Offshore Wind Project is a proposed offshore wind farm in the east Irish Sea.

1.1.3.2 Morecambe Offshore Windfarm Ltd (Morecambe OWL), owned by Copenhagen Infrastructure Partners' (CIP) fifth flagship fund, Copenhagen Infrastructure V (CI V), is developing the Morecambe Offshore Windfarm, also located in the east Irish Sea.

1.1.3.3 Morgan OWL and Morecambe OWL (the Applicants) are jointly seeking a single consent for their electrically separate transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substations, and onward connection to the National Grid at Penwortham, Lancashire.

1.1.3.4 The purpose of the Transmission Assets is to connect the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets (collectively known as the 'Generation Assets') to the National Grid. The key components of the Transmission Assets include offshore, landfall and onshore elements. Details of the activities and infrastructure associated with the Transmission Assets are set out in Volume 1, Chapter 3: Project Description of the Environmental Statement (ES) (document reference F1.3).

1.1.4 Purpose of the Onshore Biodiversity Benefit Statement

1.1.4.1 The purpose of this Onshore Biodiversity Benefit Statement is to provide the following information.

- An assessment of the baseline value of habitats related to the permanent above ground infrastructure area for the Transmission Assets.
- An assessment of the potential worst-case impact of construction of the permanent above-ground infrastructure proposed for the Transmission on the value of habitats within the Onshore Infrastructure Area.
- Identify suitable opportunities for habitat creation and/or management principles for enhanced, restored or newly created habitats necessary to deliver biodiversity benefit (above baseline value) in relation to the permanent above ground infrastructure only.

1.1.4.2 As set out in **paragraph 1.3.1.7**, the biodiversity benefit for each project will be delivered within areas at the Morgan and Morecambe onshore substations in addition to the biodiversity benefit area at Lea Marsh Fields. The location and geographic extent of areas proposed for biodiversity benefit are presented in **Figure 1.4**, **Figure 1.5** and **Figure 1.6** of this Statement below. **Figure 1.7** within **Appendix J** provides indicative locations of enhancement measures at Lea Marsh Fields. **Appendix J** also outlines the principles of management measures and monitoring at Lea Marsh Fields.

1.1.4.3 Although there is no statutory requirement for the Applicants to provide biodiversity net gain, and no guidance on how applicants should approach this for linear nationally significant infrastructure projects (or projects directed into the regime under s35 Planning Act 2008 as is the case for the Transmission Assets), the Applicants have adopted a transparent approach to the identification of the areas proposed for biodiversity benefit and the metrics applied. As described in **section 1.4** below, the assessment has utilised the Department for Environment, Food & Rural Affairs (Defra) Statutory Biodiversity Net Gain (BNG) methodology and metric (version 1.0.4, published 3 July 2025), and is discussed separately for area-based habitats, hedgerows, and watercourses.

1.1.4.4 Any biodiversity benefit measures for the Transmission Assets would be implemented separately for the above ground permanent infrastructure associated with Morgan OWL, and the above ground permanent infrastructure associated with Morecambe OWL.

1.1.4.5 This Onshore Biodiversity Benefit Statement should be read in conjunction with the Outline Ecological Management Plan (document reference J6) and the Outline Code of Construction Practice (document reference J1) and its supporting appendices.

1.1.5 Scope of the Onshore Biodiversity Benefit Statement

1.1.5.1 As mentioned above, the scope of the assessment of overall onshore biodiversity benefit is limited to areas of permanent habitat loss associated with permanent above ground infrastructure area for the Transmission Assets. As such, the following onshore elements of the Transmission Assets are considered.

- Onshore substations, including associated landscaping areas where permanent habitat loss would occur.
- Permanent access tracks to the onshore substations.

1.1.5.2 This approach was agreed by relevant stakeholders at the pre-application Expert Working Group (EWG) meetings (Technical Engagement Plan Appendices Part 2 of 3 (APP-191)).

1.1.5.3 In addition, given that biodiversity benefit measures will be implemented separately by the Morgan OWL and Morecambe OWL, biodiversity benefit calculations for area-based habitats, hedgerows, and watercourses have been presented separately for the Morgan onshore substation and Morecambe onshore substation.

1.2 Clarifications to the biodiversity benefit statement

1.2.1 BNG metric calculator

1.2.1.1 A re-run of the Biodiversity Net Gain (BNG) calculation was undertaken to ensure that the most recent version of the Defra metric calculator (the 'Statutory Biodiversity Metric') was used to demonstrate the measurable net gains delivered by the Transmission Assets. This was on the basis that the originally submitted version used a now superseded version of the Defra metric (version 4.1). The use of the Statutory Biodiversity Metric calculator has resulted in some changes to the results of the BNG calculation, which are highlighted in Table 1.1. However, for all habitat types the Transmission Assets are still predicted to deliver a net gain in BNG units through a combination of on-site habitat retention, habitat creation and habitat enhancement measures.

1.2.1.2 The main changes are as a result of the following:

- Habitats at Lea Marsh not being included in Appendix A1.1 and Appendix B1.1 (i.e., the total baseline habitat units, units lost and units created calculations in the original spreadsheet) even though Lea Marsh habitat was included in the summary tables.
- Differences in the way linear watercourse units are calculated in the statutory metric compared to the previous iterations of the spreadsheet, which has resulted in a reduction in the baseline unit value for watercourses and a corresponding proportionately larger uplift for this habitat type.

Table 1.1: Summary of change to biodiversity values reported in the Onshore Biodiversity Benefit Statement F03 (REP2-020) compared to Biodiversity Benefit Statement F04 (document reference J11/F04)

Parameter	F03 (habitat value - units)	F04 (habitat value - units)	Comments
Total baseline habitat units	123.31	158.57	Error in calculation in Table A1.1 in the Onshore Biodiversity Benefit Statement (REP2-020): although habitat at Lea Marsh habitat was included in Table A1.1, it was not added to the total baseline units. Other minor habitat mapping and habitat condition assessment errors corrected.
Baseline habitat units lost	114.94	152.63	Error in calculation in Table A1.1 in the Onshore Biodiversity Benefit Statement (REP2-020): this did

Parameter	F03 (habitat value - units)	F04 (habitat value - units)	Comments
			not include the baseline habitat units lost at Lea Marsh. Other minor habitat mapping and habitat condition assessment errors corrected.
Habitat units – created	118.8	227.00	Error in calculation in Table B1.1 in the Onshore Biodiversity Benefit Statement (REP2-020): this did not add in the habitat units created at Lea Marsh.
Habitat units - enhanced	10.85	9.81	Minor mapping errors corrected
Hedgerow units – retained	12.14	12.16	Minor error corrected.
Hedgerow units – enhanced	0.86	2.21	Minor error corrected.
Hedgerow units – lost	13.52	13.52	No change
Hedgerow units – created	24.50	24.50	No change
Linear watercourse units – baseline	7.98	4.31	Baseline linear watercourse unit value measurement is substantially lower in the Statutory Biodiversity Metric calculator (version 1.0.4) because the embedded calculation has changed significantly since the previous version of the Defra metric calculator (version 4.1). This results in a proportionately larger uplift for watercourse units given the reduced number of baseline units for this habitat type.
Linear watercourse units – retained	2.39	1.88	As above – change in unit value due to changes in metric calculator.
Linear watercourse units – enhanced	0.84	1.33	As above – change in unit value due to changes in metric calculator.
Linear watercourse units – created	5.07	5.07	No change
Total net % change – area habitat units	59.62%	50.36%	Reduction in proposed uplift due to corrections made for Lea Marsh that were not added into the original calculation, and an increase in baseline habitat unit value at Morecambe substation.
Total net % change – hedgerow units	41.37%	44.43%	Slight increase due to correcting minor errors.
Total net % change – linear watercourse units	20%	91.77%	This increase is as a result of the lowering of the baseline unit value of linear watercourse units which is as a result of changes in unit value within the Defra metric calculator (from version 4.1 to Statutory Metric version 1.0.4).

1.2.2 Clarification on approach to biodiversity benefit

1.2.2.1 The principles for the delivery of biodiversity benefit for the Transmission Assets and the site selection rationale, are set out in Section 4.9.7 of Volume 1 Chapter 4: Site selection and consideration of alternatives (APP-030) and Site Selection of the Environmental Mitigation and Biodiversity Benefit Areas (REP2-046).

1.2.2.2 In accordance with policy within National Policy Statement (NPS) EN-1 (**Table 1.2**) and the guidance in the National Planning Policy Framework (NPPF) (**Table 1.3**), the Applicants have committed to delivering no net loss and measurable net gains for biodiversity as part of the delivery of the Transmission Assets.

1.2.2.3 The site selection for Lea Marsh Fields biodiversity benefit area also achieves the aims in paragraph 187(d) of the NPPF for net gains to establish '*...coherent ecological networks that are more resilient to current and future pressures*', and paragraph 192 (b) to '*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species*' for the following reasons:

- It is currently of low ecological value being dominated by a commercial crop monoculture and is therefore able to deliver substantial biodiversity enhancements through habitat creation and management.
- It is also located on land that lies between two existing Biological Heritage Sites (BHSs); Mason's Wood BHS and Lea Marsh BHS. The enhancement of the current low ecological value habitat of the land will result in substantial enhancements to habitat connectivity between the locally designated sites, and its proximity to habitats of higher ecological value will increase the likelihood of colonisation by species such as small mammals and invertebrates (which may include priority species).
- It is proximal to Mason's Wood BHS and Lea Marsh BHS and will create a substantial high ecological value habitat buffer to the existing BHS network to increase its resilience to current and future pressures.
- It is within an area identified in the Lancashire Local Nature Recovery Strategy (LNRS) as "*Areas that Could Become of Particular Importance*", which are locations within the county where there are opportunities to create, connect or improve habitats most likely to provide the greatest benefit for nature and the wider environment. The delivery of biodiversity benefits at this location would contribute to the aims and objectives of the LNRS for appropriate habitat creation, restoration and enhancement of land adjoining BHSs to support nature recovery in the region.

1.2.2.4 The habitat creation and management to be undertaken at the Lea Marsh fields biodiversity benefit area has been designed to occupy the whole field parcels. This is to ensure that the objectives for improving habitat connectivity between Mason's Wood BHS and Lea Marsh BHS are met. Furthermore, the delivery of biodiversity benefit measures within entire field parcels at one location is preferred (and supported by policy) rather than delivering smaller and more scattered/ piecemeal enhancements across the Order Limits, which would be contrary to the LNRS objectives and the Lawton Principles (Lawton, 2010) of bigger, better and more connected habitats.

1.2.2.5 As part of the biodiversity benefit strategy, a calculation of habitat losses and gains associated with the permanent infrastructure and the Lea Marsh biodiversity benefit area has been undertaken using the revised Statutory Biodiversity Metric to quantify the biodiversity benefits to demonstrate that the project is delivering measurable net gains for biodiversity.

1.2.2.6 The calculation has demonstrated that the predicted net gains using the metric would exceed 10%, which is the current minimum uplift required for projects subject to mandatory BNG under the Environment Act 2021. However, the statutory provisions relating to BNG for nationally significant infrastructure projects is not in force (and will not be before the determination of the Transmission Assets application) and in any event there is no upper limit to the net gain that can be delivered by a development.

1.2.3 Habitat condition assessments

1.2.3.1 Habitat condition assessment sheets for habitat parcels that were subject to specific UK Habs survey for the BNG assessment are included as **Appendix L**.

1.2.3.2 Habitat condition assessments for habitat parcels that were converted to UK Habs from Phase 1 Habitat survey data for the purposes of the BNG assessment, due to access restrictions, were determined based on a combination of desk study, aerial photographs, information collected during the Phase 1 Habitat survey and professional judgement, and a precautionary approach applied as appropriate[1].

1.2.3.3 A habitat condition assessment was not undertaken for the arable cropland within the Lea Marsh Fields biodiversity benefit area, as this is not required (cropland is not assigned a habitat condition assessment in the Statutory Biodiversity Metric).

[1] Habitat parcel references: 2685, 2150, 233, 1062 (Morgan Substation) and 1050, 234, 239, 250, 1103, 2114 (Morecambe Substation).

1.3 Policy requirements and legislation

1.3.1 Environment Act 2021

1.3.1.1 Part 6 of the Environment Act 2021 includes provisions for BNG with respect to developers looking to submit DCO applications for Nationally Significant Infrastructure Projects (NSIPs). Specifically, Part 6 of the Environment Act 2021 states that there is an obligation for developers to ensure that all new proposals achieve a minimum of 10% improvement to biodiversity.

1.3.1.2 However, as recently confirmed, there will be no BNG requirement placed on NSIPs (or schemes directed into the Planning Act 2008 regime) until May 2026 (which will then apply to applications submitted from this point onwards) but projects submitting an application before this comes into force could choose to do so voluntarily, with the level of requirement to be detailed within a BNG statement (subject to prior publication and presently expected to be set at a minimum of 10%).

1.3.1.3 As such, the requirements of Part 6 of the Environment Act 2021 are not mandatory for the Transmission Assets and instead have been voluntarily applied.

1.3.1.4 Defra have confirmed that projects which have been accepted for examination prior to the May 2026, would not be required to deliver the minimum BNG target.

1.3.1.5 Furthermore, following a request from the Applicants, on 4 October 2022 the Secretary of State issued a direction under section 35 of the Planning Act 2008 that the Transmission Assets should be treated as development for which a DCO is required. As such the Transmission Assets application is not subject to the mandatory BNG requirements for developments consented via the Town and Country Planning Act 1990.

1.3.1.6 Therefore, in accordance with existing legislation at the time application, there is no legal requirement for the Transmission Assets to deliver BNG.

1.3.1.7 The Applicants are proposing to make a voluntary commitment to achieve an overall biodiversity benefit for areas of permanent habitat loss associated with the permanent above-ground infrastructure of the Transmission Assets, as set out in **paragraph 1.1.5.1**.

1.3.1.8 In addition, as explained in the Outline Ecological Management Plan (document reference J6), the Applicants are pursuing additional opportunities for enhancement via engagement with projects in the wider area. Any enhancement mentions will form part of the detailed Ecological Management Plan(s).

1.3.2 National Policy Statements

1.3.2.1 There are currently six energy National Policy Statements (NPSs), three of which contain policy relevant to offshore wind development and the Transmission Assets, specifically:

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero 2023a).

1.3.2.2 **Table 1.2** sets out a summary of the policies within these this NPS, relevant to biodiversity benefit.

1.3.2.3 The policies within the current NPSs relevant to all topics in the ES can be viewed in the National Policy Statement tracker (document reference J26) and Planning Statement (document reference J28), submitted with the Application.

Table 1.2: Summary of NPS requirements relevant to biodiversity benefit

Summary of NPS provision	How and where considered
NPS EN-1	
Although achieving biodiversity net gain is not currently an obligation on applicants, Schedule 15 of the Environment Act 2021 contains provisions which, when commenced, mean the Secretary of State may not grant an application for a Development Consent Order unless satisfied that a biodiversity gain objective is met in relation to the onshore development in England to which the application relates. [Paragraph 4.6.1 of NPS EN-1]	As set out in **section 1.3.1** above, the Transmission Assets are not subject to a mandatory net gain requirement under the Environment Act 2021. Nevertheless, the Applicants have worked with statutory consultees to discuss the approach, and to develop the design, to allow the maximum benefit to biodiversity within the parameters of the Transmission Assets. This document (**section 1.6**) provides potential habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets. The results of the calculation of biodiversity benefit are shown in **section 1.4.3** of this document. As set out in **paragraph 1.1.5.1**, the biodiversity benefit approach taken for the Transmission Assets considers the permanent above-ground infrastructure of the Transmission Assets and ensures that biodiversity benefit will be delivered for these areas of permanent habitat loss. This approach seeks to provide biodiversity benefit whilst balancing other socio-economic and land use considerations.
The Secretary of State should give appropriate weight to environmental and biodiversity net gain, although any weight given to gains provided to meet a legal requirement (for example under the Environment Act 2021) is likely to be limited. [Paragraph 4.6.3 of NPS EN-1]	Information to inform this decision is provided within this document and Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3).
Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by	The Transmission Assets do not fall under the definition of an NSIP set out in the Planning Act 2008. However, as stated in **paragraph 1.3.1.4**, following a request from the Applicants, on 4 October 2022 the Secretary of State

Summary of NPS provision	How and where considered
providing net gains for biodiversity, and the wider environment where possible. [Paragraph 4.6.6 of NPS EN-1]	issued a direction under section 35 of the Planning Act 2008 that the Transmission Assets should be treated as a 'development for which development consent is required'. Commitments made as part of the Transmission Assets relevant to ecology are set out in section 3.8 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This includes measures to conserve biodiversity in terms of ecological interests. It also includes opportunities for biodiversity benefit. Habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets are set out in **section 1.6** of this document. The results of the calculation of biodiversity benefit are shown in **section 1.4.3** of this document.
In England applicants for onshore elements of any development are encouraged to use the latest version of the biodiversity metric to calculate their biodiversity baseline and present planned biodiversity net gain outcomes. This calculation data should be presented in full as part of their application. [Paragraph 4.6.7 of NPS EN-1]	The calculation undertaken for biodiversity benefit (**section 1.4.3** of this document) utilises the latest Defra Biodiversity Metric (version 1.0.4).
Where possible, this data should be shared, alongside a completed biodiversity metric calculation, with the Local Authority and Natural England for discussion at the pre-application stage as it can help to highlight biodiversity and wider environmental issues which may later cause delays if not addressed. [Paragraph 4.6.8 pf NPS EN-1]	Details regarding stakeholder consultation in relation to biodiversity benefit are set out in Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3) and the consultation report (document reference E1).
Biodiversity net gain should be applied after compliance with the mitigation hierarchy and does not change or replace existing environmental obligations, although compliance with those obligations will be relevant to the question of the baseline for assessing net gain and if they deliver an additional enhancement beyond meeting the existing obligation, that enhancement will count towards net gain. [Paragraph 4.6.10 of NPS EN-1]	Commitments made as part of the Transmission Assets relevant to ecology are set out in section 3.8 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This includes measures to conserve biodiversity in terms of ecological interests and complies with the mitigation hierarchy, with measures to avoid and minimise impacts as far as is possible. Habitat creation and enhancement measures proposed to achieve biodiversity benefit for the Transmission Assets are set out in **section 1.6** below. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).
Biodiversity net gain can be delivered onsite or wholly or partially off-site. We encourage details of any off-site delivery of biodiversity net gain to be set out within the application for development consent. [Paragraph 4.6.11 of NPS EN-1]	Biodiversity benefit for the permanent above ground infrastructure of the Transmission Assets is proposed to be provided within the Onshore Order Limits, as shown in **Figure 1.4** and **Figure 1.5**.

1.3.3 The National Planning Policy Framework

1.3.3.1 The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2018, 2019, 2021,023 and 2024 (Ministry of Housing Communities & Local Government, 2024) (formerly Department for Levelling Up, Housing and Communities). The NPPF sets out the Government's planning policies for England. **Table 1.3** sets out a summary of the NPPF policies relevant to this Biodiversity Benefit Statement.

Table 1.3: Summary of NPPF requirements relevant to biodiversity benefit

Policy	Key provisions	How and where considered
Conserving and enhancing the natural environment. (NPPF Section 15)	Planning policies and decisions should contribute to and enhance the natural and local environment by: … d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; …. (Paragraph 187 (d)).	Impacts on habitats and species, alongside Commitments proposed to avoid and/or reduce potential impacts are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This document (**section 1.6**) sets out habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets. The results of the calculations of biodiversity benefit are shown in **section 1.4.3** of this document. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).
Habitats and biodiversity (NPPF section 15)	To protect and enhance biodiversity and geodiversity, plans should: … b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity. (Paragraph 192 (b))	

1.3.4 Local planning policy

1.3.4.1 The onshore elements of the Transmission Assets are located within the administrative areas of Fylde Council, Blackpool Council, South Ribble Borough Council and Preston City Council (and Lancashire County Council at the County level). The relevant local planning policies applicable to biodiversity benefit are summarised in **Table 1.4**.

Table 1.4: Summary of local policy relevant to biodiversity benefit

Policy	Key provisions	How and where considered
Fylde Local Plan to 2032 (incorporating Partial Review) (Adopted December 2021)		
Strategic Policy ENV2	**Section 1. Nature Conservation Sites and Ecological networks** The Council is committed to ensuring the protection and enhancement of	All relevant designated sites and areas for wildlife conservation and species afforded extra protections under The Conservation of Habitats and Species Regulations 2017 and Schedule 5 of the Wildlife and Countryside Act 1981 and ecological networks are identified in Volume 3,

Policy	Key provisions	How and where considered
	Fylde's biodiversity and geological assets and interests. Proposals which primarily seek to enhance or conserve biodiversity will be supported in principle, subject to the consideration of other Local Plan policies Where development is considered necessary, adequate mitigation measures and compensatory habitat creation will be required through planning conditions and / or obligations, in order to secure measurable net gains for biodiversity. Measures should be put in place for the ongoing management of such features. **Section 2 Priority Species Protection** Planning permission will not be granted for development which would have an adverse effect on a priority species or its habitat, unless the benefits of the development outweigh the need to maintain the population of the species in situ. Should development be permitted that might have an adverse effect on a priority species or its habitat, planning conditions or agreements will be used to: • … • Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.	Annex 3.1: Onshore ecology desk study technical report (document reference F3.3.1) and Volume 3, Annex 3.3: Phase 1 habitat survey, national vegetation classification and hedgerow survey technical report of the ES (document reference F3.3.3). Assessment of the potential impacts and subsequent effects of the Transmission Assets, alongside Commitments, are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This document (**section 1.6**) sets out habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the above ground permanent infrastructure proposed for the Transmission Assets. The results of the calculations of biodiversity benefit are shown in **section 1.4.3** of this document. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).
South Ribble Local Plan 2012-2026 (Adopted July 2021)		
Policy G16 – Biodiversity and nature conservation	The borough's Biodiversity and Ecological Network resources will be protected, conserved and enhanced. The level of protection will be commensurate with the site's status and proposals will be assessed having regard to the site's importance and the contribution it makes to wider ecological networks. … In addition development should have regard to the provisions set out below: a. The need to minimise impacts on biodiversity and providing net gains in biodiversity where possible by designing in wildlife and by ensuring that significant harm is avoided or, if	Assessment of the potential impacts and subsequent effects of the Transmission Assets, alongside Commitments, are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This document (**section 1.6**) sets out habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets. The results of the calculation of biodiversity benefit are shown in **section 1.4.3** of this document. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).

Policy	Key provisions	How and where considered
	unavoidable, is reduced or appropriately mitigated and/or, as a last resort, compensated;	
Blackpool Local Plan Part 2: Site Allocations and Development Management Policies (Adopted 2023)		
Policy DM35 – Biodiversity	1. Development proposals will be required to: a. result in no loss or harm to biodiversity through avoidance, adequate mitigation either on site or off site or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement; b. minimise the impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist in line with relevant legislation and guidance.	Assessment of the potential impacts and subsequent effects of the Transmission Assets, alongside Commitments, are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This document (**section 1.6**) sets out habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets. The results of the calculations of biodiversity benefit are shown in **section 1.4.3** of this document. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).
Preston Local Plan 2012-2026 Site Allocations and Development Management Policies (Adopted July 2015)		
Policy EN10 – Biodiversity and nature conservation	In Preston, Biodiversity and Ecological Network resources will be protected, conserved, restored and enhanced. … In addition development must adhere to the provisions set out below: a. The production of a net gain in biodiversity where possible by designing in wildlife and by ensuring that any adverse impacts are avoided or if unavoidable are reduced or appropriately mitigated and/or compensated …	Assessment of the potential impacts and subsequent effects of the Transmission Assets, alongside Commitments, are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document referenceF3.3). This document (**section 1.6**) sets out habitat creation and enhancement measures proposed to achieve measurable biodiversity benefit for the Transmission Assets. The results of the calculations of biodiversity benefit are shown in **section 1.4.3** of this document. Wider ecological enhancement measures are set out in the Outline Ecological Management Plan (document reference J6).

1.4 Delivering biodiversity benefit

1.4.1 Overview

1.4.1.1 As explained above, the Applicants intend to deliver biodiversity benefit for areas of permanent habitat loss associated with the permanent above-ground infrastructure of the Transmission Assets, as set out in **paragraph 1.1.5.1**.

1.4.2 Approach

1.4.2.1 In order to demonstrate and quantify the biodiversity benefit of the development associated with the Transmission Assets the following steps were undertaken.

- Step 1: baseline habitat types, extent and condition were determined via Phase 1 habitat and National Vegetation Classification surveys undertaken in 2023 and 2024. Results of these surveys can be found in Volume 3, Annex 3.3: Phase 1 habitat, national vegetation classification and hedgerow survey technical report of the ES (document reference F3.3.3).
- Step 2: Identified habitats were then converted to the UK Habitat Classification system using the translation guidance in the Defra Statutory Biodiversity Metric 1.0.4. To facilitate assessment of habitats against the UK Habitat Classification habitat types used in the Statutory Biodiversity Metric with reference to botanical species composition and indicator species as presented in the manual (UKHab Ltd, 2023).
- Step 3: The condition of each habitat parcel was defined using the relevant condition criteria for the habitat types as presented in The Statutory Biodiversity Metric Technical Annex 1: Condition Assessment Sheets and Methodology (Defra, 2023).
- Step 4: The geographic extent (or lengths) of identified habitats was then quantified using ArcGIS software, with the habitat type, extent and condition entered into the Statutory Defra Biodiversity Metric 1.0.4 to obtain baseline biodiversity unit values (referred to hereafter as ‘baseline habitat value’).
- Step 5: The post construction geographic extent (or lengths) of identified habitats, taking into account the onshore substations, including landscaping, permanent access and biodiversity benefit area at Lea Marsh Fields was then calculated and entered into the Defra Statutory Biodiversity Metric 1.0.4 to obtain biodiversity unit values post construction (referred to hereafter as ‘post-construction habitat value’).

1.4.2.2 It should be noted that the habitat proposals to be created at Lea Marsh Fields have been designed to achieve biodiversity benefit units in conjunction with landscaping associated with the Morgan and Morecambe onshore substations.

1.4.3 Survey methods

1.4.3.1 In order to inform the biodiversity benefit calculations for the baseline assessment, the following provides a summary of the survey methods used. Refer to Volume 3, Annex 3.3: Phase 1 habitat, hedgerow and national vegetation classification survey technical report of the ES (document reference F3.3.3) and, Volume 3, Annex 3.2: Onshore ecology and nature conservation survey methodologies of the ES (document reference F3.3.2) for further details.

1.4.3.2 Phase 1 habitat surveys were undertaken in accordance with the standard methodology set out in the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey - a technique for environmental audit (JNCC, 2010).

1.4.3.3 Habitats that could support notable plant communities, or diverse assemblages of plant species, including rare or scarce species associated with Sites of Special Scientific Interest (SSSI) were scoped in for NVC surveys.

1.4.3.4 Where access could not be obtained, information on protected and notable habitats within the survey area was collected from existing studies and datasets and aerial photographs (viewed via Google maps and Google Earth Pro). These are summarised in **Table 1.5** below.

Table 1.5: Summary of key desktop sources for Transmission Assets relevant to phase 1 habitat, hedgerow and NVC surveys

Title	Source	Year	Author
Multi-Agency Geographic Information for the Countryside (MAGIC)	Department for the Environment, Food & Rural Affairs (Defra)	2023	Defra
UK Protected Area Joint Nature Conservation Committee (JNCC)	JNCC website	2023	JNCC
A vegetation survey of the Fylde Sand Dunes and Saltmarshes	Fylde Sand Dune Project	2016	Graeme Skelcher

1.4.3.5 Hedgerow surveys, including condition assessment, were undertaken using the methodology detailed in the most up to date Natural England Biodiversity Metric (4.1 at the time of assessment).

1.4.3.6 Surveys of river habitats followed the guidelines set out in The Modular River Physical (MoRPh) Survey (Modular River Survey, 2022) and the Guide to Assessing River Condition (Gurnell *et al.*, 2022), which include many components of the Environment Agency's River Habitat Survey (2003).

1.5 Onshore biodiversity benefit

1.5.1 Overview

1.5.1.1 In accordance with the Defra BNG methodology and statutory metric (which was first published in February 2024, last updated 3 July 2025 when BNG became mandatory for some developments), the following sections of this Onshore Biodiversity Benefit Statement provide an assessment of the onshore biodiversity benefit for area-based habitats and linear hedgerows and watercourses.

1.5.1.2 The location and geographic extent of baseline habitat types identified at the Morgan and Morecambe onshore substation areas, including the permanent access tracks are presented in **Figure 1.1**. Baseline habitat types identified at the biodiversity benefit area at Lea Marsh Fields are presented in **Figure 1.3**.

1.5.1.3 Sections **1.5.2, 1.5.3** and **1.5.4** below summarise the results of steps 1 to 4 of paragraph **1.4.2.1**, for area-based habitats and linear hedgerows and watercourses respectively. **Appendix A** to **Appendix I** of this Statement provide the full results of steps 1 to 4.

1.5.2 Area-based habitats

1.5.2.1 A summary of the habitat value (units) used to calculate the net change and biodiversity benefit for area-based habitat types is provided in **Table 1.6** below. This includes the baseline, retained, enhanced, created and overall habitat value of area-based habitat types.

1.5.2.2 The calculations provided in **Table 1.6** are based on the apportionment of land within the biodiversity benefit area at Lea Marsh Fields between Morgan and Morecambe. Specifically:

- 67% (or approximately 8.0 ha) of the biodiversity benefit area at Lea Marsh Fields would be required for the Morgan Offshore Wind Farm: Transmission Assets; and
- 33% (or approximately 4.0 ha) of the biodiversity benefit area at Lea Marsh Fields would be required for the Morecambe Offshore Wind Farm: Transmission Assets.

1.5.2.3 The apportionment of land within the biodiversity benefit area at Lea Marsh Fields is based on the areas needed for the permanent above-ground infrastructure for Morgan and Morecambe respectively.

1.5.2.4 Further detailed information, including the baseline assessment of habitat value, assessment of biodiversity value of post-construction habitat creation and assessment of biodiversity value of post-construction habitat enhancement are presented in **Appendix A**, **Appendix B** and **Appendix C** of this Onshore Biodiversity Benefit Statement respectively.

Table 1.6: Summary of area-based habitat biodiversity values[2]

Location	Baseline habitat value	Retained habitat value	Enhanced habitat value	Created habitat value	Overall habitat value	Net change in habitat value	Change Biodiversity benefit
Morgan*							
Morgan onshore substation	80.60 units	1.38 units	9.81 units	84.22 units	95.41 units	+ 14.81 units	+ 18.37 %
Biodiversity benefit area at Lea Marsh Fields	16.00 units	0.00 units	0.00 units	65.41 units	65.41 units	+ 49.41units	+ 308.81%
Total	**96.6 units**	**1.38 units**	**9.81 units**	**149.63 units**	**160.82 units**	**+ 64.22 units**	**+ 66.48 %**
Morecambe							
Morecambe onshore substation	53.97 units	0.24 units	0.00 units	44.66 units	44.9 units	- 9.07 units	- 16.80 %
Biodiversity benefit area at Lea Marsh Fields	8.00 units	0.00 units	0.00 units	32.7 units	32.7 units	+ 24.7 units	+ 308.75%
Total	**61.97 units**	**0.24 units**	**0 units**	**77.36 units**	**77.60 units**	**+ 15.63 units**	**+ 25.22 %**
Transmission Assets							
Total	**158.57 units**	**1.62 units**	**9.81 units**	**227.00 units**	**238.42 units**	**+ 79.85 units**	**+ 50.36%**

*total % change is calculated as a percentage of the total Morgan / Morecambe onshore substation units

1.5.2.5 As shown in **Table 1.6** above, the baseline value of habitat types within the area of permanent above-ground infrastructure for the Transmission Assets and biodiversity benefit area at Lea Marsh Fields is 158.57 units. Within the area of permanent above-ground infrastructure for the Transmission Assets, a total of 152.63 units would be permanently lost during construction (see **Appendix A**). The habitat loss within the biodiversity benefit area at Lea Marsh Fields relates to the arable cropland (24.00 units) that will be removed to facilitate the proposed habitat creation measures.

[2] Minor errors in additive numbers may have occured due to rounding from the BNG metric spreadsheet

1.5.2.6 **Table 1.6** indicates that a total of 1.62 units (see **Appendix A**) would be retained and proposed habitat enhancements associated with the onshore substations would provide 9.81 units (see **Appendix C**).

1.5.2.7 **Table 1.6** demonstrates that proposed habitat creation associated with the onshore substations would provide a total of 227.00 units (see **Appendix B**).

1.5.2.8 Based on these figures, the onshore biodiversity benefit for area-based habitats would be 238.42 units (227.00 + 1.62 + 9.81 = 238.42, accounting for rounding to two decimal places of the original numbers provided in the BNG metric). This represents a net increase of +79.85 units (227.00 – 158.57 = 79.85) and an overall net biodiversity benefit of **+50.36**%.

1.5.2.9 Further details on the habitat enhancement and creation measures proposed to achieve this net biodiversity benefit are set out in **sections 1.6.2** and **1.6.3** below.

1.5.3 Hedgerows

1.5.3.1 A summary of the habitat value (units) used to calculate the net change and biodiversity benefit for hedgerows is provided in **Table 1.7** below. This includes the baseline, retained, enhanced, created and overall habitat value of hedgerows.

1.5.3.2 Further detailed information, including the baseline assessment of habitat value, assessment of biodiversity value of hedgerow creation and assessment of biodiversity value of hedgerow enhancement assessment are presented in **Appendix D**, **Appendix E** and **Appendix F** at the end of this Onshore Biodiversity Benefit Statement respectively.

Table 1.7: Summary of hedgerow biodiversity values

Location	Baseline habitat value	Retained habitat value	Enhanced habitat value	Created habitat value	Overall habitat value	Net change in habitat value	Change Biodiversity benefit
Morgan							
Morgan onshore substation	17.01 units	7.56 units	2.21 units	16.52 units	26.29 units	+ 9.28 units	+ 54.56%
Morecambe							
Morecambe onshore substation	9.53 units	4.60 units	0.00 units	7.98 units	12.57 units	+ 3.04 units	+ 31.93%
Transmission Assets							
Total	**26.54 units**	**12.16 units**	**2.21 units**	**24.50 units**	**38.86 units**	**12.32units**	**+ 44.43%**

1.5.3.3 As shown in **Table 1.7** above, the baseline value of hedgerows within the onshore substations, including landscaping, permanent access and biodiversity benefit area at Lea Marsh Fields is 26.54 units (see **Appendix D**).

1.5.3.4 **Table 1.7** indicates that a total of 12.16 units would be retained (see **Appendix D**) and proposed habitat enhancements associated with the onshore substation would provide 2.21 units (see **Appendix F**).

1.5.3.5 **Table 1.7** demonstrates that that proposed hedgerow creation associated with the onshore substations would provide a total of 24.50 units (see **Appendix E**).

1.5.3.6 Based on these figures, the onshore biodiversity benefit for hedgerows would be 38.86 units (12.16 + 2.21 + 24.50 = 38.86). This represents a net increase of + 12.32 units (38.86 - 26.54 = 12.32) and an overall net biodiversity benefit of + 44.43%.

1.5.3.7 Further details on the hedgerow enhancement and creation measures proposed to achieve this net biodiversity benefit are set out in **sections 1.6.2** and **1.6.3** below.

1.5.4 Watercourses

1.5.4.1 A summary of the habitat value (units) used to calculate the net change and biodiversity benefit for watercourses is provided in **Table 1.8** below. This includes the baseline, retained, enhanced, created and overall habitat value of watercourses.

1.5.4.2 Further detailed information, including the baseline assessment of watercourse value, assessment of biodiversity value of watercourse creation and assessment of biodiversity value of watercourse enhancement assessment are presented in **Appendix G, Appendix H** and **Appendix I** at the end of this Onshore Biodiversity Benefit Statement respectively.

Table 1.8: Summary of watercourse biodiversity values

Location	Baseline habitat value	Retained habitat value	Enhanced habitat value	Created habitat value	Overall habitat value	Net change in habitat value	Change Biodiversity benefit
Morgan							
Morgan onshore substation	4.31 units	1.88 units	1.33 units	0 units	3.21 units	-1.0 units	+91.77%
Biodiversity benefit area at Lea Marsh Fields	0 units	0 units	0 units	5.07 units	5.07 units	+ 5.07 units	
Morecambe							
Morecambe onshore substation	0 units	0 units	0 units	0 units	0 units	0 units	0%
Transmission Assets							
Total	**4.31 units**	**1.88 units**	**1.33 units**	**5.07 units**	**8.27 units**	**+ 4.07 units**	**+ 91.77%**

1.5.4.3 As shown in **Table 1.8** above, the baseline value of watercourses within the onshore substations, including landscaping, permanent access and biodiversity benefit area at Lea Marsh Fields is 4.31 units (see **Appendix G**).

1.5.4.4 **Table 1.8** indicates that a total of 1.88 units would be retained (see **Appendix G**) and proposed habitat enhancements associated with the onshore substation would provide 1.33 units (see **Appendix I).**

1.5.4.5 **Table 1.8** demonstrates that that proposed watercourse creation associated with the onshore substations (at Lea Marsh Biodiversity benefit area) would provide a total of 5.07 units (see **Appendix H**).

1.5.4.6 Based on these figures, the onshore biodiversity benefit for watercourses would be 8.27 units (1.88 + 1.33 + 5.07 = 8.27). This represents a net increase of + 3.96 units (78.27 - 4.31 = 3963) and an overall net biodiversity benefit of + 91.77%.

1.5.4.7 Further details on the watercourse enhancement and creation measures proposed to achieve this net biodiversity benefit are set out in **sections 1.6.2** and **1.6.3** below.

1.6 Habitat creation and enhancement

1.6.1 Overview

1.6.1.1 This section of the Onshore Biodiversity Benefit Statement provides a summary of the indicative habitat creation and enhancement measures proposed to achieve biodiversity benefit for the permanent habitat loss associated with the permanent above ground infrastructure area for the Transmission Assets.

1.6.1.2 The measures for habitat creation and enhancement have been informed using the outcome of the biodiversity benefit assessments for area-based habitats and linear hedgerows, and watercourses presented in **section 1.4.2** of this Onshore Biodiversity Benefit Statement above.

1.6.1.3 However, the habitat creation and enhancement proposals remain indicative at this stage in the DCO application process. The final habitat creation and enhancement proposals, will be based on detailed landscaping designs for the onshore substations and biodiversity benefit area at Lea Marsh Fields.

1.6.1.4 The location and geographic extent of the habitat creation and enhancement proposals at the onshore substations and biodiversity benefit area at Lea Marsh Fields is presented in **Figure 1.4** and **Figure 1.5** of this Onshore Biodiversity Benefit Statement respectively. Where habitat creation and enhancement has been proposed on temporary working areas (e.g. the onshore substation temporary areas), final proposals will be subject to landowner agreement.

1.6.2 Habitat enhancements

1.6.2.1 No habitat enhancements are proposed at the Morecambe onshore substation. All existing habitats at the Morecambe onshore substation are proposed to be replaced by newly created high-value habitats (i.e. habitat creation). Therefore, this section only describes enhancements of existing habitats at the Morgan onshore substation.

Area-based habitats

1.6.2.2 Grassland habitat enhancement is proposed for areas of grassland retained at the Morgan substation site (see **Figure 1.4** and **Figure 1.5**).

1.6.2.3 The existing grassland habitat at this location comprises modified grassland in poor condition and “other neutral grassland” in poor condition. It is proposed to enhance these areas and establish an area of “other neutral grassland” in good condition.

Hedgerows

1.6.2.4 Hedgerow enhancement is proposed for a length of retained native species-rich hedgerow at the Morgan substation site (see **Figure 1.4** and **Figure 1.5**). Where hedgerows have been proposed on temporary working areas (e.g. the onshore substation temporary area), final proposals will be subject to landowner agreement.

1.6.2.5 The existing hedgerow at this location comprises species-rich hedgerow in poor condition. It is proposed to enhance this length of hedgerow and establish a species rich hedgerow in good condition.

1.6.2.6 To establish a length of species rich hedgerow in good condition at the Morgan substation site, the following indicative habitat management measures are proposed.

- Planting up any gaps in the existing species rich hedgerow with native species appropriate to the local area and soil conditions.
- Introduction of a management regime to improve shape of hedgerow in line with criteria for good condition as set out in Defra BNG condition assessment sheets.

Watercourses

1.6.2.7 Habitat enhancements along a section of Dow Brook at the Morgan substation site could be undertaken to provide biodiversity benefit.

1.6.2.8 Given the status of Dow Brook as a main watercourse, any measures proposed to improve the condition of the watercourse from poor to good condition would be agreed with the Environment Agency prior to the commencement of works, and would be contingent on obtaining any relevant permissions, consents and/or licenses.

1.6.3 Habitat creation

Area-based habitats

Grassland

1.6.3.1 Areas of grassland creation are proposed at the Morgan and Morecambe onshore substations and biodiversity benefit area at Lea Marsh Fields. These areas will comprise the creation of other neutral grassland and lowland meadow grassland using seed mixes appropriate to the area and local soil conditions (see **Figure 1.4** and **Figure 1.5**). Where grassland has been proposed on temporary working areas (e.g. the onshore substation temporary area), final proposals will be subject to landowner agreement.

1.6.3.2 The specific areas of grassland creation within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**) will be provided as part of the detailed design stage. **Figure 1.7** within **Appendix J** provides indicative locations of proposed enhancement measures at Lea Marsh Fields.

Woodland and scrub

1.6.3.3 Both woodland and potentially scrub planting is proposed at the Morgan and Morecambe onshore substations (see **Figure 1.4** and **Figure 1.5**). In addition, scrub planting will also be undertaken within the biodiversity benefit area at Lea Marsh Fields.

1.6.3.4 The specific areas of woodland and scrub creation within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**) will be provided as part of the detailed design stage. **Figure 1.7** within **Appendix J** provides indicative locations of proposed enhancement measures at Lea Marsh Fields.

1.6.3.5 To achieve good condition for the newly created areas of scrub and moderate condition for area of woodland, the following indicative management measures are proposed.

- Planting of species mixes characteristic of communities appropriate to the local area and soil conditions.
- Management to encourage a varied age structure of woody species and a diverse ground flora.
- For larger areas of trees and scrub, rides/glades would be created within planting areas to provide diversity of habitat structure.
- Management to provide transition zones between scrub and adjacent grassland (rather than an abrupt transition between habitat types).

Ponds

1.6.3.6 No additional ponds are proposed at the Morgan or Morecambe onshore substations (beyond those provided to compensate for the permanent loss of ponds during the construction of the Morgan onshore substation and the onshore export cable corridor for Morecambe OWL – refer to the Outline Ecological Management Plan (document reference J6)). However, additional attenuation ponds are proposed at the onshore substations. Although primarily to manage and control excess rainwater, these attenuation ponds could be managed to provide ecological benefits.

1.6.3.7 In addition, further ponds could be created within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**).

1.6.3.8 The specific areas for pond creation within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**) will be provided as part of the detailed design stage. **Figure 1.7** within **Appendix J** provides indicative locations of proposed enhancement measures at Lea Marsh Fields.

1.6.3.9 To achieve good condition for the newly created ponds, the following indicative management measures are proposed.

- Digging of ponds at the appropriate depth to ensure ponds do not dry out.
- Planting of aquatic, emergent and marginal native species of plants at the newly created ponds.

Hedgerows

1.6.3.10 Additional hedgerows could be created at the Morgan and Morecambe onshore substations and adjacent sections of permanent access tracks (see **Figure 1.4** and **Figure 1.5**). No additional hedgerows are proposed within the biodiversity benefit area at Lea Marsh Fields.

1.6.3.11 To achieve moderate condition for the newly created hedgerows planting up any gaps in the newly created hedgerow with native species appropriate to the local area and soil conditions could be undertaken.

Watercourses

1.6.3.12 No additional watercourses are proposed at the Morgan or Morecambe onshore substations. However, additional ditches could be created within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**).

1.6.3.13 The specific areas for watercourse creation within the biodiversity benefit area at Lea Marsh Fields (see **Figure 1.6**) will be provided as part of the detailed design stage. **Figure 1.7** within **Appendix J** provides indicative locations of proposed enhancement measures at Lea Marsh Fields

1.6.3.14 To achieve good condition for the newly created ditches, the following indicative management measures are proposed.

- Creation of ditches with appropriate profile to encourage growth of aquatic, emergent and marginal species.
- Regular management to prevent ditches from becoming choked and to maintain water flows, and removal of arisings.
- Planting of the newly created ditches with appropriate native plant species.

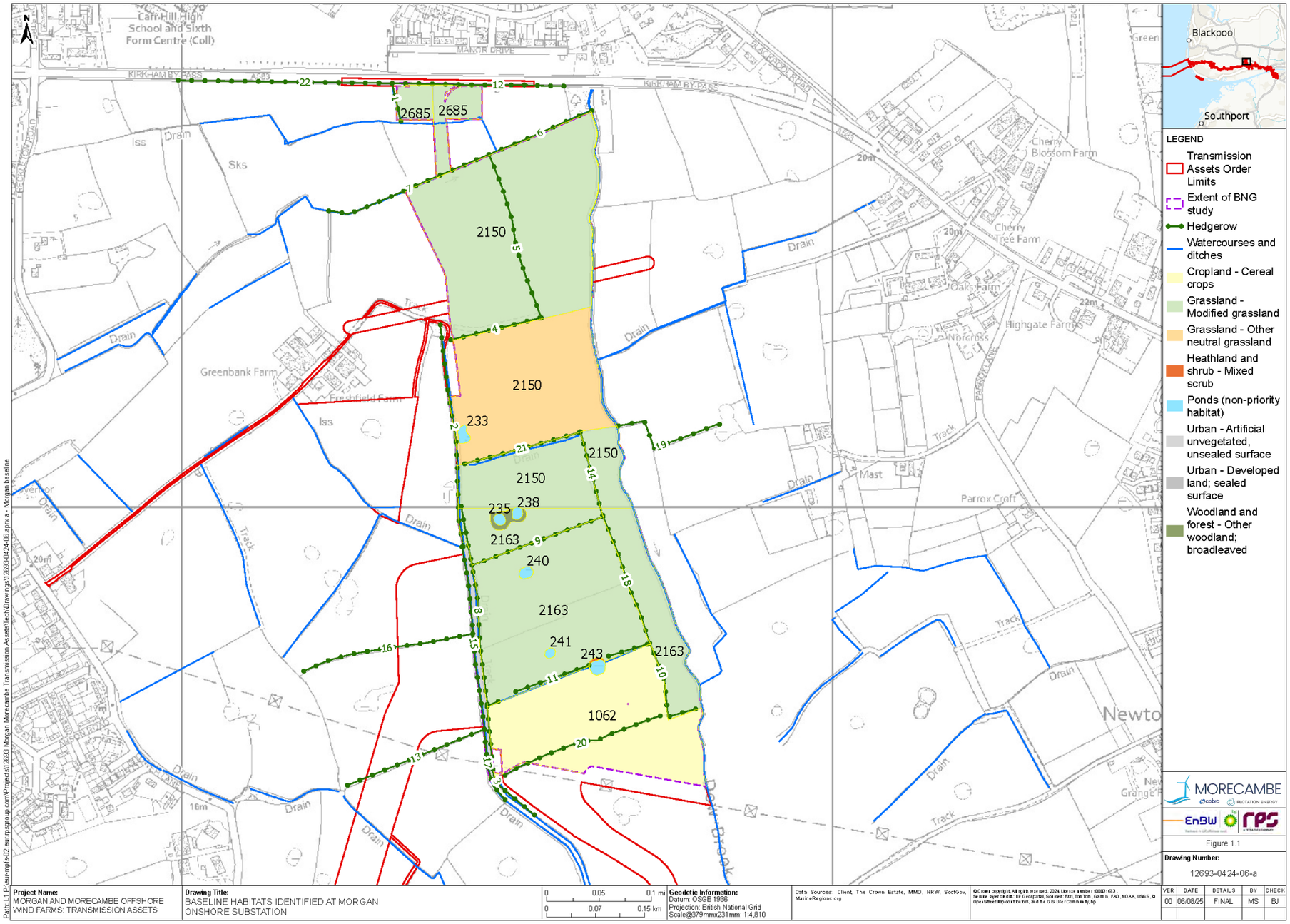


Figure 1.1: Baseline habitats identified at Morgan onshore substation

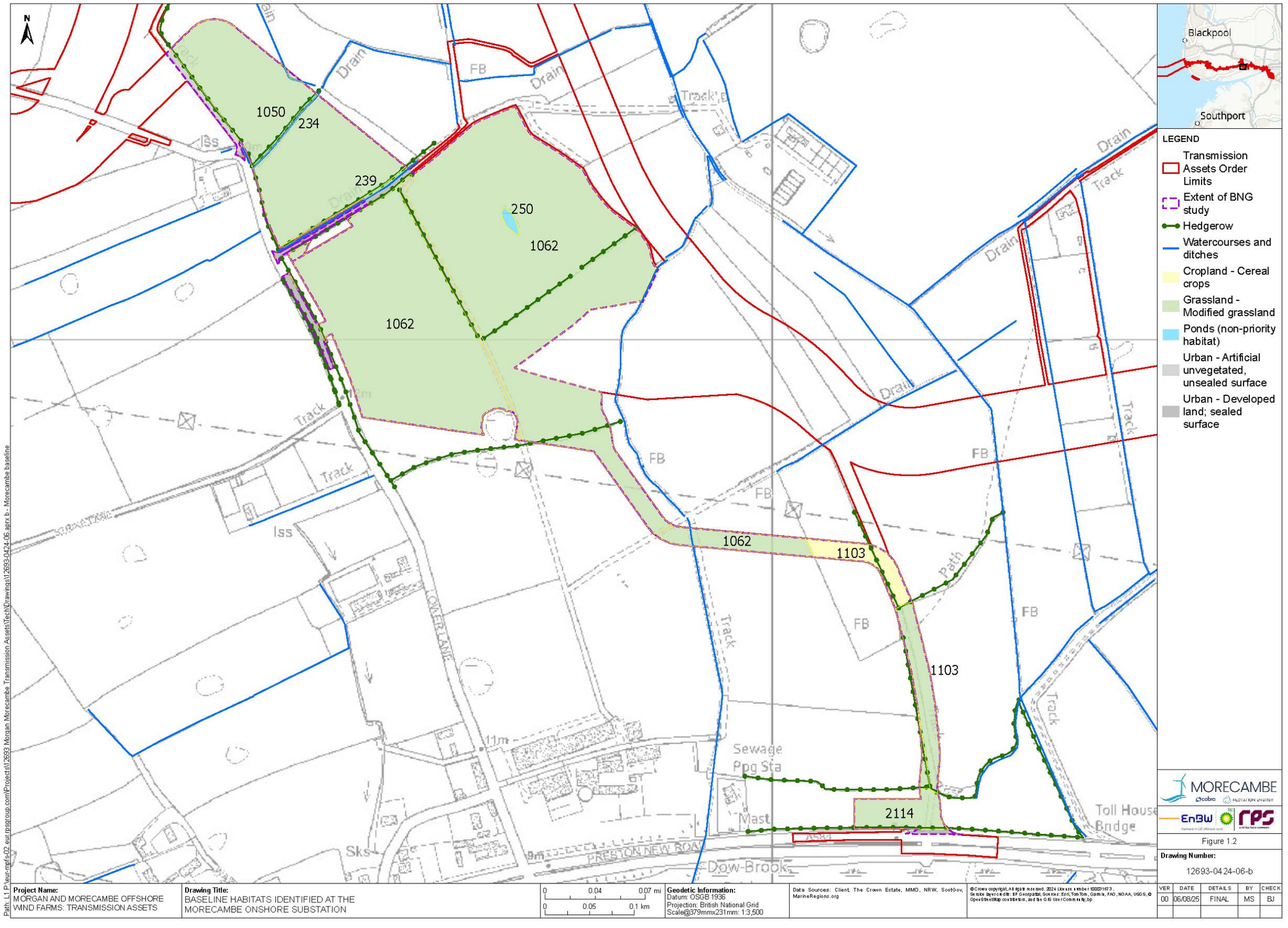


Figure 1.2: Baseline habitats identified at Morecambe onshore substation

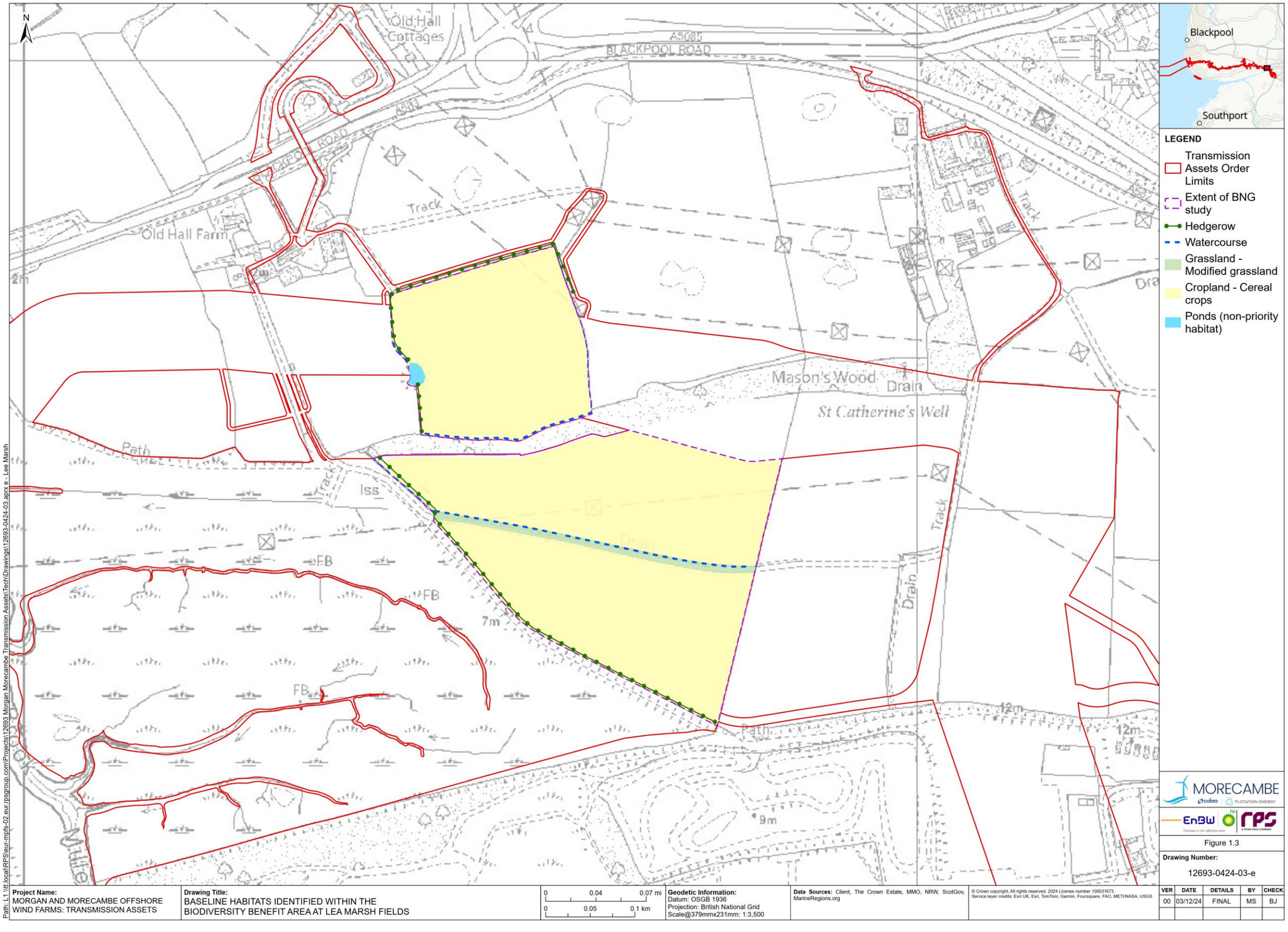


Figure 1.3: Baseline habitats identified within the biodiversity benefit area at Lea Marsh Fields

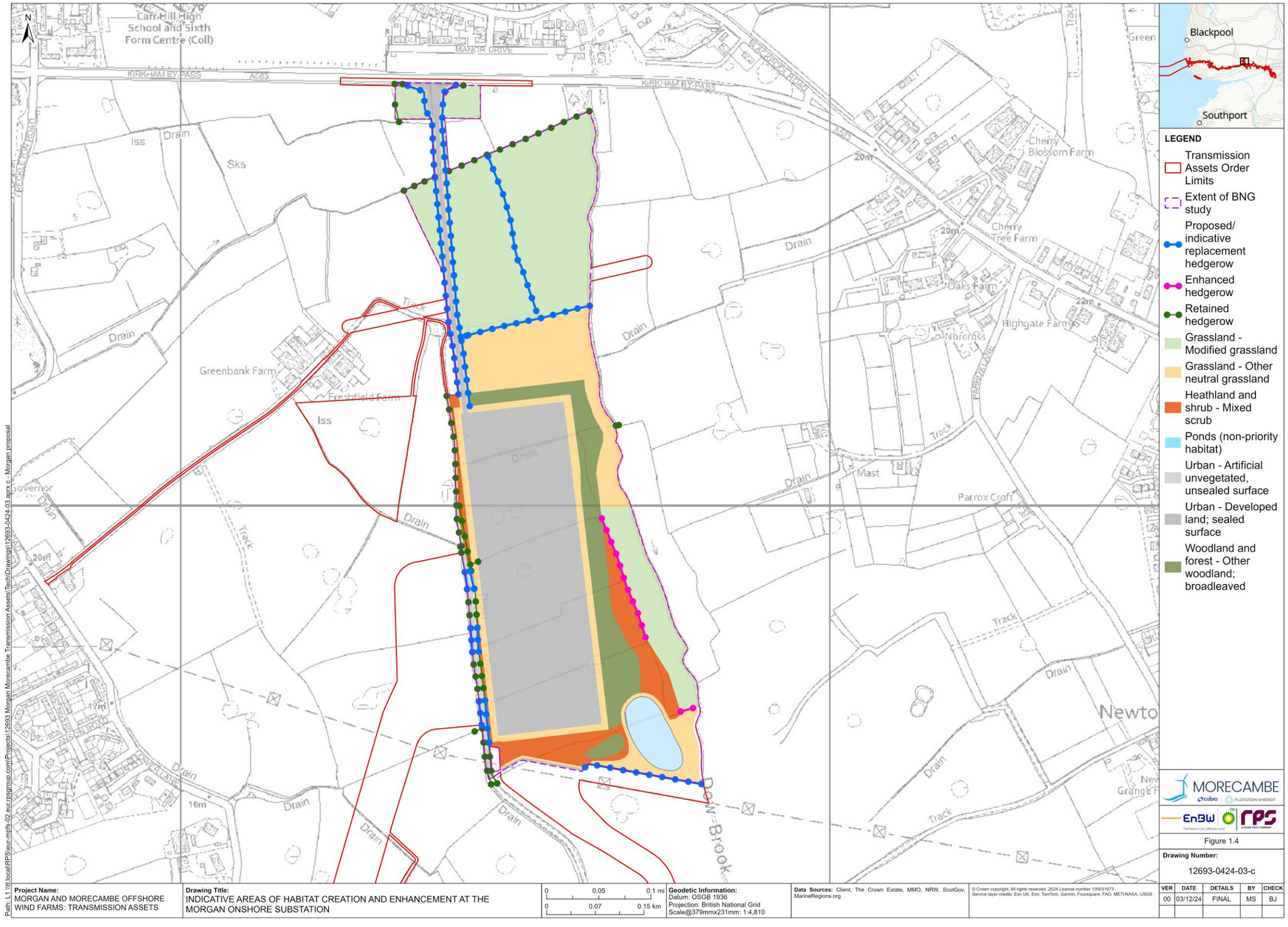


Figure 1.4: Indicative areas of habitat creation and enhancement at the Morgan onshore substation

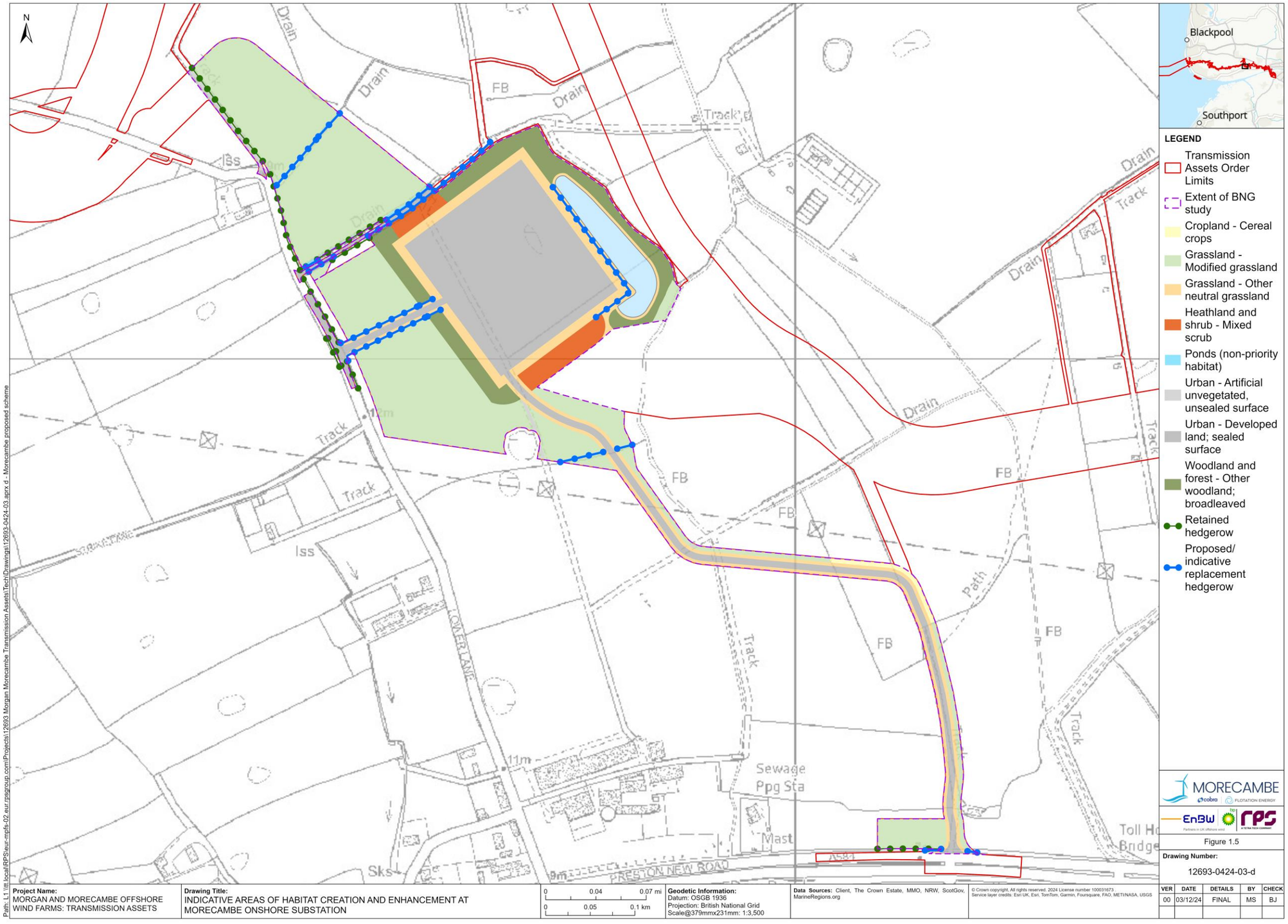


Figure 1.5: Indicative areas of habitat creation and enhancement at Morecambe onshore substation

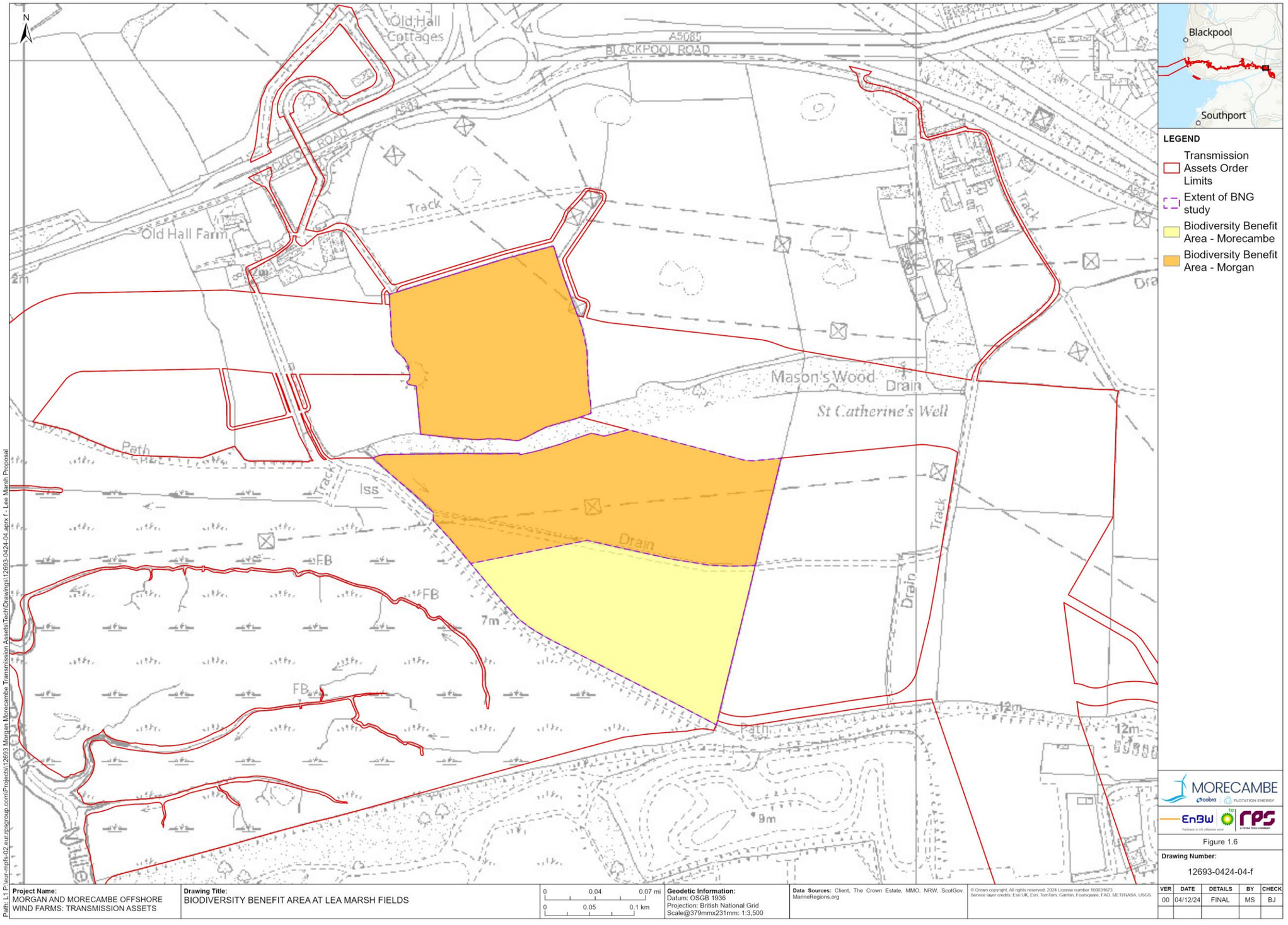


Figure 1.6: Biodiversity benefit area at Lea Marsh Fields

1.7 Summary

1.7.1.1 The Onshore Biodiversity Benefit Statement provides an assessment of the overall benefit to onshore biodiversity associated with the Transmission Assets. Specifically, the onshore substations, associated access tracks and biodiversity benefit area at Lea Marsh Fields.

1.7.1.2 The total predicted biodiversity net gains are **50.36%** for area-based habitat units, **44.43%** for hedgerow units and **91.77%** for linear watercourse units.

1.8 References

Defra (2023) Government response and summary of responses to the consultation on BNG. Available at: Government response and summary of responses - GOV.UK (www.gov.uk). Accessed: July 2024.

Defra (2024, updated 2025) The Statutory Biodiversity Metric User Guide. Available at: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides. Accessed: July 2025.

Environment Agency (2003) River Habitat Survey in Britain and Ireland. Available at: https://www.riverhabitatsurvey.org/manual/rhs-manuals/ Accessed: August 2024

Gurnell, A. and Shuker, L. (eds) (2022) The MoRPh Survey: Technical Reference Manual, 2022 Version. Available at: https://modularriversurvey.org/. Accessed August 2024.

Gurnell, A.M, England, J., Scott, S.J., and Shuker, L.J. (eds) (2022) A GUIDE TO ASSESSING RIVER CONDITION Part of the Rivers and Streams Component of the BioDiversity Net Gain Metric. Available at: https://modularriversurvey.org/. Accessed August 2024.

JNCC (2010) Handbook for Phase 1 Habitat Survey – a technique for environmental audit. Available at: https://jncc.gov.uk/. Accessed: August 2024.

Skelcher, G. (2016). A vegetation survey of the Fylde Sand Dunes and Saltmarshes 2016. Report for the Fylde Sand Dune Steering Group, G. Skelcher

A.1.1 Baseline assessment of biodiversity value of area-based habitats

Habitat type	Area (ha)	Distinctiveness score		Condition score		Strategic significance score		Value (biodiversity units)[1]	Area of habitat retained	Area of habitat enhanced	Baseline value of retained habitats	Baseline value of enhanced habitats	Area of habitat lost (ha)	Value of habitats lost	Location
Cereal crops	4.54	Low	2	Condition Assessment N/A	1	Low Strategic Significance	1	9.07	0.06	0.00	0.11	0.00	4.48	8.96	Morgan Substation
Other neutral grassland	0.12	Medium	4	Moderate	2	Low Strategic Significance	1	0.98		0.12	0.00	0.98	0.00	0.00	Morgan Substation
Modified grassland	1.31	Low	2	Poor	1	Low Strategic Significance	1	2.63		1.31	0.00	2.63	0.00	0.00	Morgan Substation
Modified grassland	0.35	Low	2	Poor	1	Low Strategic Significance	1	0.71		0.35	0.00	0.71	0.00	0.00	Morgan Substation
Modified grassland	6.80	Low	2	Poor	1	Low Strategic Significance	1	13.61	0.00		0.00	0.00	6.80	13.61	Morgan Substation
Modified grassland	8.46	Low	2	Poor	1	Low Strategic Significance	1	16.91	0.23		0.47	0.00	8.22	16.45	Morgan Substation
Modified grassland	0.85	Low	2	Poor	1	Low Strategic Significance	1	1.71	0.00		0.00	0.00	0.85	1.71	Morgan Substation
Other neutral grassland	0.00	Medium	4	Moderate	2	Low Strategic Significance	1	0.00	0.00		0.00	0.00	0.00	0.00	Morgan Substation
Other neutral grassland	4.10	Medium	4	Moderate	2	Low Strategic Significance	1	32.80	0.10		0.80	0.00	4.00	32.00	Morgan Substation
Mixed scrub	0.01	Medium	4	Moderate	2	Low Strategic Significance	1	0.07	0.00		0.00	0.00	0.01	0.07	Morgan Substation
Ponds (non-priority habitat)	0.03	Medium	4	Moderate	2	Low Strategic Significance	1	0.20	0.00		0.00	0.00	0.03	0.20	Morgan Substation

Habitat type	Area (ha)	Distinctiveness score		Condition score		Strategic significance score		Value (biodiversity units)[1]	Area of habitat retained	Area of habitat enhanced	Baseline value of retained habitats	Baseline value of enhanced habitats	Area of habitat lost (ha)	Value of habitats lost	Location
Ponds (non-priority habitat)	0.02	Medium	4	Moderate	2	Low Strategic Significance	1	0.20	0.00		0.00	0.00	0.02	0.20	Morgan Substation
Ponds (non-priority habitat)	0.02	Medium	4	Moderate	2	Low Strategic Significance	1	0.16	0.00		0.00	0.00	0.02	0.16	Morgan Substation
Ponds (non-priority habitat)	0.05	Medium	4	Moderate	2	Low Strategic Significance	1	0.36	0.00		0.00	0.00	0.05	0.36	Morgan Substation
Ponds (non-priority habitat)	0.04	Medium	4	Moderate	2	Low Strategic Significance	1	0.31	0.00		0.00	0.00	0.04	0.31	Morgan Substation
Ponds (non-priority habitat)	0.03	Medium	4	Moderate	2	Low Strategic Significance	1	0.25	0.00		0.00	0.00	0.03	0.25	Morgan Substation
Artificial unvegetated, unsealed surface	0.35	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.34		0.00	0.00	0.01	0.00	Morgan Substation
Developed land; sealed surface	0.02	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.00		0.00	0.00	0.02	0.00	Morgan Substation
Other woodland; broadleaved	0.08	Medium	4	Moderate	2	Low Strategic Significance	1	0.62	0.00		0.00	0.00	0.08	0.62	Morgan Substation
Cereal crops	0.28	Low	2	Condition Assessment N/A	1	Low Strategic Significance	1	0.56	0.00		0.00	0.00	0.28	0.56	Morecambe substation
Modified grassland	0.00	Low	2	Moderate	2	Low Strategic Significance	1	0.00	0.00		0.00	0.00	0.00	0.00	Morecambe substation
Modified grassland	2.81	Low	2	Moderate	2	Low Strategic Significance	1	11.26	0.00		0.00	0.00	2.81	11.25	Morecambe substation
Modified grassland	9.64	Low	2	Moderate	2	Low Strategic Significance	1	38.56	0.05		0.19	0.00	9.59	38.37	Morecambe substation

Habitat type	Area (ha)	Distinctiveness score		Condition score		Strategic significance score		Value (biodiversity units)[1]	Area of habitat retained	Area of habitat enhanced	Baseline value of retained habitats	Baseline value of enhanced habitats	Area of habitat lost (ha)	Value of habitats lost	Location
Modified grassland	0.38	Low	2	Moderate	2	Low Strategic Significance	1	1.54	0.00		0.00	0.00	0.38	1.54	Morecambe substation
Modified grassland	0.01	Low	2	Moderate	2	Low Strategic Significance	1	0.05	0.01		0.05	0.00	0.00	0.00	Morecambe substation
Modified grassland	0.35	Low	2	Moderate	2	Low Strategic Significance	1	1.41	0.00		0.00	0.00	0.35	1.41	Morecambe substation
Ponds (non-priority habitat)	0.03	Medium	4	Moderate	2	Low Strategic Significance	1	0.24	0.00		0.00	0.00	0.03	0.24	Morecambe substation
Ponds (non-priority habitat)	0.02	Medium	4	Moderate	2	Low Strategic Significance	1	0.16	0.00		0.00	0.00	0.02	0.16	Morecambe substation
Ponds (non-priority habitat)	0.03	Medium	4	Moderate	2	Low Strategic Significance	1	0.20	0.00		0.00	0.00	0.03	0.20	Morecambe substation
Artificial unvegetated, unsealed surface	0.09	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.06		0.00	0.00	0.03	0.00	Morecambe substation
Artificial unvegetated, unsealed surface	0.16	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.00		0.00	0.00	0.16	0.00	Morecambe substation
Developed land; sealed surface	0.10	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.01		0.00	0.00	0.09	0.00	Morecambe substation
Developed land; sealed surface	0.02	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.00		0.00	0.00	0.02	0.00	Morecambe substation
Developed land; sealed surface	0.11	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0.00	0.04		0.00	0.00	0.08	0.00	Morecambe substation
Cereal crops	12.00	Low	2	Condition Assessment N/A	1	Low Strategic Significance	1	24.00			0.00	0.00	12.00	24.00	Lee Marsh Fields

Habitat type	Area (ha)	Distinctiveness score		Condition score		Strategic significance score		Value (biodiversity units)[1]	Area of habitat retained	Area of habitat enhanced	Baseline value of retained habitats	Baseline value of enhanced habitats	Area of habitat lost (ha)	Value of habitats lost	Location
Total	**52.23**							**158.57**	**0.90**	**1.79**	**1.62**	**4.32**	**50.54**	**152.63**	

1: Calculated as: area x distinctiveness x condition x strategic significance score

B.1.1 Assessment of biodiversity value of area-based habitat creation

Proposed habitat	Area	Distinctiveness Score		Condition score		Strategic significance score		Final time to target condition (years)	Final time to target multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	Location
Modified grassland	6.945064527	Low	2	Moderate	2	Low Strategic Significance	1	4	0.867180001	Low	Low	1	Morgan Substation
Other neutral grassland	1.158135156	Medium	4	Good	3	Low Strategic Significance	1	10	0.700282274	Low	Low	1	Morgan Substation
Other neutral grassland	3.3596424	Medium	4	Moderate	2	Low Strategic Significance	1	5	0.836828701	Low	Low	1	Morgan Substation
Mixed scrub	1.829022963	Medium	4	Good	3	Low Strategic Significance	1	10	0.700282274	Low	Low	1	Morgan Substation
Developed land; sealed surface	8.522545132	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0	1	Low	Low	1	Morgan Substation
Sustainable drainage system	0.633799508	Low	2	Good	3	Low Strategic Significance	1	5	0.836828701	Medium	Medium	0.67	Morgan Substation
Other woodland; broadleaved	2.219643406	Medium	4	Moderate	2	Low Strategic Significance	1	15	0.586016306	Low	Low	1	Morgan Substation
Cereal crops	0.075963476	Low	2	Condition Assessment N/A	1	Low Strategic Significance	1	1	0.965	Low	Low	1	Morecambe Substation
Modified grassland	6.253931249	Low	2	Moderate	2	Low Strategic Significance	1	4	0.867180001	Low	Low	1	Morecambe Substation
Other neutral grassland	0.923704792	Medium	4	Good	3	Low Strategic Significance	1	10	0.700282274	Low	Low	1	Morecambe Substation
Other neutral grassland	0.70006143	Medium	4	Moderate	2	Low Strategic Significance	1	5	0.836828701	Low	Low	1	Morecambe Substation
Mixed scrub	0.391125406	Medium	4	Good	3	Low Strategic Significance	1	10	0.700282274	Low	Low	1	Morecambe Substation
Ponds (non-priority habitat)	0.044830601	Medium	4	Moderate	2	Low Strategic Significance	1	3	0.898632125	Low	Low	1	Morecambe Substation
Artificial unvegetated, unsealed surface	0.049418708	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0	1	Low	Low	1	Morecambe Substation
Developed land; sealed surface	3.84901735	V.Low	0	N/A - Other	0	Low Strategic Significance	1	0	1	Low	Low	1	Morecambe Substation

Proposed habitat	Area	Distinctiveness Score		Condition score		Strategic significance score		Final time to target condition (years)	Final time to target multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	Location
Sustainable drainage system	0.501326055	Low	2	Good	3	Low Strategic Significance	1	5	0.836828701	Medium	Medium	0.67	Morecambe Substation
Other woodland; broadleaved	1.082555554	Medium	4	Moderate	2	Low Strategic Significance	1	15	0.586016306	Low	Low	1	Morecambe Substation
Other neutral grassland	3.3	Medium	4	Good	3	High strategic significance	1.15	10	0.700282274	Low	Low	1	Biodiversity benefit at Lea Marsh Fields
Lowland meadows	3.3	V.High	8	Good	3	High strategic significance	1.15	15	0.586016306	High	High	0.33	Biodiversity benefit at Lea Marsh Fields
Ponds (priority habitat)	0.5	High	6	Good	3	Low Strategic Significance	1	5	0.836828701	Medium	Medium	0.67	Biodiversity benefit at Lea Marsh Fields
Mixed scrub	3	Medium	4	Good	3	Low Strategic Significance	1	10	0.700282274	Low	Low	1	Biodiversity benefit at Lea Marsh Fields
Other neutral grassland	1.9	Medium	4	Good	3	High strategic significance	1.15	10	0.700282274	Low	Low	1	Biodiversity benefit at Lea Marsh Fields
Total	**50.53**											**227.00**	

C.1.1 Assessment of biodiversity value of area-based habitat enhancement

Baseline habitat	Area (ha)	Baseline condition	Proposed habitat	Proposed distinctiveness	Dist. Score	Proposed condition	Cond. Score	Time to target condition (years)	Temporal multiplier	Difficulty of creation/enhancement	Difficulty multiplier	Habitat units delivered	Location
Grassland - Other neutral grassland	0.12306457	Moderate	Other neutral grassland	Medium	4	Good	3	15	0.700	Low	1	1.33	Morgan Substation
Grassland - Modified grassland	1.314506434	Poor	Modified grassland	Low	2	Good	3	10	0.586	Low	1	5.71	Morgan Substation
Grassland - Modified grassland	0.35287718	Poor	Other neutral grassland	Medium	4	Good	3	15	0.700	Low	1	2.77	Morgan Substation
Total	**1.79**											**9.81**	

D.1.1 Assessment of biodiversity value of hedgerows

Hedgerow type	Length (km)	Distinctiveness score		Condition score		Strategic significance score		Value (hedgerow units)	Length of hedgerow retained	Length of hedgerow enhanced	Baseline value of retained hedgerow	Baseline value of enhanced hedgerow	Length of hedgerow lost (km)	Value of hedgerows lost	Location
Native hedgerow	0.0273781	Low	2	Moderate	2	Low	1	0.11	0.02737808	0	0.0273781	0	0.00	0.00	Morgan Onshore Substation
Native hedgerow	0.2329925	Low	2	Good	3	Low	1	1.40	0.23299253	0	0.2329925	0	0.00	0.00	Morgan Onshore Substation
Species-rich native hedgerow with trees	0.1227358	High	6	Good	3	Low	1	2.21	0.06557123	0	0.0655712	0	0.06	1.03	Morgan Onshore Substation
Native hedgerow	0.1370048	Low	2	Poor	1	Low	1	0.27	0	0	0	0	0.14	0.27	Morgan Onshore Substation
Native hedgerow	0.2647247	Low	2	Poor	1	Low	1	0.53	2.9172E-06	0	0	0	0.26	0.53	Morgan Onshore Substation
Native hedgerow	0.1717378	Low	2	Poor	1	Low	1	0.34	0.1717378	0	0.1717378	0	0.00	0.00	Morgan Onshore Substation
Native hedgerow	0.1395282	Low	2	Poor	1	Low	1	0.28	0.11609615	0	0.1160962	0	0.02	0.05	Morgan Onshore Substation
Native hedgerow	0.3273212	Low	2	Poor	1	Low	1	0.65	0.23830658	0	0.2383066	0	0.09	0.18	Morgan Onshore Substation
Native hedgerow	0.2146743	Low	2	Moderate	2	Low	1	0.86	0.01279477	0	0.0127948	0	0.20	0.81	Morgan Onshore Substation
Native hedgerow	0.2279521	Low	2	Moderate	2	Low	1	0.91	0	0.01990028	0	0.019990028	0.21	0.83	Morgan Onshore Substation
Native hedgerow	0.1199145	Low	2	Poor	1	Low	1	0.24	0	0	0	0	0.12	0.24	Morgan Onshore Substation
Species-rich native hedgerow with trees	0.0125091	High	6	Moderate	2	Low	1	0.15	0.01250906	0	0.0125091	0	0.00	0.00	Morgan Onshore Substation
Native hedgerow	0.1331918	Low	2	Moderate	2	Low	1	0.53	0	0	0	0	0.13	0.53	Morgan Onshore Substation

Hedgerow type	Length (km)	Distinctiveness score		Condition score		Strategic significance score		Value (hedgerow units)	Length of hedgerow retained	Length of hedgerow enhanced	Baseline value of retained hedgerow	Baseline value of enhanced hedgerow	Length of hedgerow lost (km)	Value of hedgerows lost	Location
Species-rich native hedgerow with trees	0.28259	High	6	Good	3	Low	1	5.09	0.17661849	0	0.1766185	0	0.11	1.91	Morgan Onshore Substation
Native hedgerow	0.0072535	Low	2	Poor	1	Low	1	0.01	0	0	0	0	0.01	0.01	Morgan Onshore Substation
Native hedgerow	0.0875783	Low	2	Moderate	2	Low	1	0.35	0.08757828	0	0.0875783	0	0.00	0.00	Morgan Onshore Substation
Species-rich native hedgerow	0.2077186	Medium	4	Poor	1	Low	1	0.83	0	0.19560005	0	0.19560005	0.01	0.05	Morgan Onshore Substation
Native hedgerow	0.0044772	Low	2	Moderate	2	Low	1	0.02	0.0044772	0	0.0044772	0	0.00	0.00	Morgan Onshore Substation
Native hedgerow	0.2139834	Low	2	Poor	1	Low	1	0.43	0	0	0	0	0.21	0.43	Morgan Onshore Substation
Species-rich native hedgerow	0.1821077	Medium	4	Moderate	2	Low	1	1.46	0	0	0	0	0.18	1.46	Morgan Onshore Substation
Native hedgerow	0.0552277	Low	2	Good	3	Low	1	0.33	0.01225128	0	0.0122513	0	0.04	0.26	Morgan Onshore Substation
Species-rich native hedgerow with trees	0.1127305	High	6	Moderate	2	Low	1	1.35	0.11273054	0	0.1127305	0	0.00	0.00	Morecambe Onshore Substation
Native hedgerow with trees	0.1310297	Medium	4	Poor	1	Low	1	0.52	0.1310297	0	0.1310297	0	0.00	0.00	Morecambe Onshore Substation
Native hedgerow	0.0170202	Low	2	Good	3	Low	1	0.10	0	0	0	0	0.02	0.10	Morecambe Onshore Substation
Native hedgerow	0.0804673	Low	2	Moderate	2	Low	1	0.32	0	0	0	0	0.08	0.32	Morecambe Onshore Substation
Native hedgerow	0.1690775	Low	2	Moderate	2	Low	1	0.68	0	0	0	0	0.17	0.68	Morecambe Onshore Substation
Native hedgerow	0.1096337	Low	2	Moderate	2	Low	1	0.44	2.1801E-05	0	0	0	0.11	0.44	Morecambe Onshore Substation
Native hedgerow with trees	0.0348213	Medium	4	Moderate	2	Low	1	0.28	0.03482134	0	0.0348213	0	0.00	0.00	Morecambe Onshore Substation

Hedgerow type	Length (km)	Distinctiveness score		Condition score		Strategic significance score		Value (hedgerow units)	Length of hedgerow retained	Length of hedgerow enhanced	Baseline value of retained hedgerow	Baseline value of enhanced hedgerow	Length of hedgerow lost (km)	Value of hedgerows lost	Location
Native hedgerow with trees	0.0342746	Medium	4	Good	3	Low	1	0.41	0.03427462	0	0.0342746	0	0.00	0.00	Morecambe Onshore Substation
Native hedgerow with trees	0.0814087	Medium	4	Moderate	2	Low	1	0.65	0	0	0	0	0.08	0.65	Morecambe Onshore Substation
Native hedgerow with trees	0.1297891	Medium	4	Poor	1	Low	1	0.52	0.07120446	0	0.0712045	0	0.06	0.23	Morecambe Onshore Substation
Native hedgerow	0.1858342	Low	2	Poor	1	Low	1	0.37	0	0	0	0	0.19	0.37	Morecambe Onshore Substation
Native hedgerow	0.0750575	Low	2	Poor	1	Low	1	0.15	0	0	0	0	0.08	0.15	Morecambe Onshore Substation
Species-rich native hedgerow with trees	0.172119	High	6	Moderate	2	Low	1	2.07	0.09132366	0	0.0913237	0	0.08	0.97	Morecambe Onshore Substation
Native hedgerow	0.1367268	Low	2	Moderate	2	Low	1	0.55	0.11345555	0	0.1134556	0	0.02	0.09	Morecambe Onshore Substation
Native hedgerow	0.1604095	Low	2	Moderate	2	Low	1	0.64	0.0484645	0	0.0484645	0	0.11	0.45	Morecambe Onshore Substation
Species-rich native hedgerow	0.1199384	Medium	4	Poor	1	Low	1	0.48	0	0	0	0	0.12	0.48	Morecambe Onshore Substation
Total											**12.164**	**0.86**	**2.91**	**13.52**	

E.1.1 Assessment of biodiversity value of hedgerow creation

Proposed habitat	Length (km)	Distinctiveness score		Condition score		Indicative time to target condition (years)	Temporal multiplier	Difficulty of creation	Difficulty multiplier	Anticipated hedgerow units delivered[1]	Location
Native species-rich hedgerow with trees	1.871	High	6	Good	3	20	0.490	Low	1	16.52	Morgan Onshore Substation
Native species-rich hedgerow with trees	0.904	High	6	Good	3	20	0.490	Low	1	7.98	Morecambe Onshore Substation
Total	**2.775**									**24.5**	

1: Calculated as: area x distinctiveness x condition x strategic significance score x temporal multiplier x difficulty multiplier

F.1.1 Assessment of biodiversity value of hedgerow enhancement

Baseline habitat	Length to be enhanced (km)	Baseline condition	Proposed habitat	Distinctiveness Score		Condition Score		Indicative time to target condition (years)	Temporal multiplier	Difficulty of creation/enhancement	Difficulty multiplier	Anticipated habitat units delivered	Location
Native hedgerow	0.1999	Moderate	Native hedgerow	Low	2	Good	3	2	0.931	Low	1	0.12	Morgan Onshore Substation
Species-rich native hedgerow	0.1956	Poor	Species-rich native hedgerow	Medium	4	Good	3	5	0.837	Low	1	2.09	
	0.4356707											**2.21**	

G.1.1 Assessment of biodiversity value of watercourses

Hedgerow type	Length (km)	Distinctiveness score		Condition score		Strategic significance score		Value (watercourse units)	Anticipated length of watercourse retained	Anticipated length of watercourse enhanced	Baseline value of retained watercourse	Baseline value of enhanced watercourse	Indicative length of watercourse lost (km)	Anticipated value of watercourse lost	Location
Ditches	0.577	Medium	4	Moderate	2	Low	1	1.73			0.00	0.00	0.58	1.73	Morgan onshore substation site (wet ditches)
Other rivers and streams	0.539	High	6	Poor	1	Low	1	2.54	0.399	0.14	1.88	0.66	0.00	0.00	Morgan onshore substation site (Dow Brook east of substation)
Other rivers and streams	0.021	High	6	Poor	1	Low	1	0.55			0.00	0.00	0.02	0.05	Morgan onshore substation site (section of Dow Brook lost for construction of access track)
Total	**1.14**							**4.31**	**0.40**	**0.14**	**1.88**	**0.66**	**0.60**	**1.78**	

H.1.1 Assessment of biodiversity value of watercourse creation

Proposed habitat	Length (km)	Distinctiveness score		Condition score		Indicative time to target condition (years)	Temporal multiplier	Difficulty of creation	Difficulty multiplier	Anticipated watercourse units delivered[1]	Location
Ditches	0.9	Medium	4	Good	3	10	0.700	Medium	0.67	5.07	Biodiversity benefit area at Lea Marsh Fields
Total	**0.9**									**5.07**	

1: Calculated as: area x distinctiveness x condition x strategic significance score x temporal multiplier x difficulty multiplier

I.1.1 Assessment of biodiversity value of watercourse enhancement

Baseline habitat	Length (km)	Baseline condition	Proposed habitat	Proposed distinctiveness	Dist. Score	Proposed condition	Cond. Score	Indicative time to target condition (years)	Temporal multiplier	Difficulty of creation/enhancement	Difficulty multiplier	Anticipated watercourse units delivered	Location
Other rivers and streams	0.539	Poor	Other rivers and streams	High	6	Moderate	4	4	0.867	Medium	0.67	1.33	Morgan onshore substation - Dow Brook east of substation
Total	**0.539**											**1.33**	

Appendix J

J.1 Enhancement Measures for Biodiversity Benefit Area at Lea Marsh Fields

J.1.1 Objectives

The objectives of the Lea Marsh Fields biodiversity benefit area are as follows:

to enhance existing habitats to achieve measurable biodiversity benefits; and

to improve habitat connectivity between Mason's Wood BHS and Lea Marsh BHS to create a resilient habitat network that is bigger, better and more connected.

J.1.2 Principles of Management Measures

The management measures will seek to create the following existing features:

Ponds

The creation of several small ponds is proposed in the indicative locations shown in **Figure 1.7**. The design of the new ponds, including depth and coverage, will be agreed in consultation with Natural England. The ponds will be designed to discourage larger wader species and will be located outside the 400kV grid connection cable corridor.

Grassland management

The grassland areas will be enhanced to reduce nutrient levels in the soil to create areas of species-rich grassland

The grassland areas will be enhanced to create a mosaic of grassland habitats. A mowing regime could be implemented for the first two years to reduce nutrient levels in the soil.

Woodland planting

Indicative locations of woodland planting are shown on **Figure 1.7**. Shallow rooted species will be used where woodland areas are proposed close to the 400kV grid connection cable corridor. The species mix will complement the canopy diversity within the adjacent Mason's Wood BHS to provide a buffer to the edge of the BHS and improve the habitat network.

Ditches

Indicative sections of new ditch are shown on **Figure 1.7** that will be designed to be of high quality for wildlife and to encourage the colonisation of flora and fauna from the interconnected ditch network, including the adjacent Lea Marsh BHS.

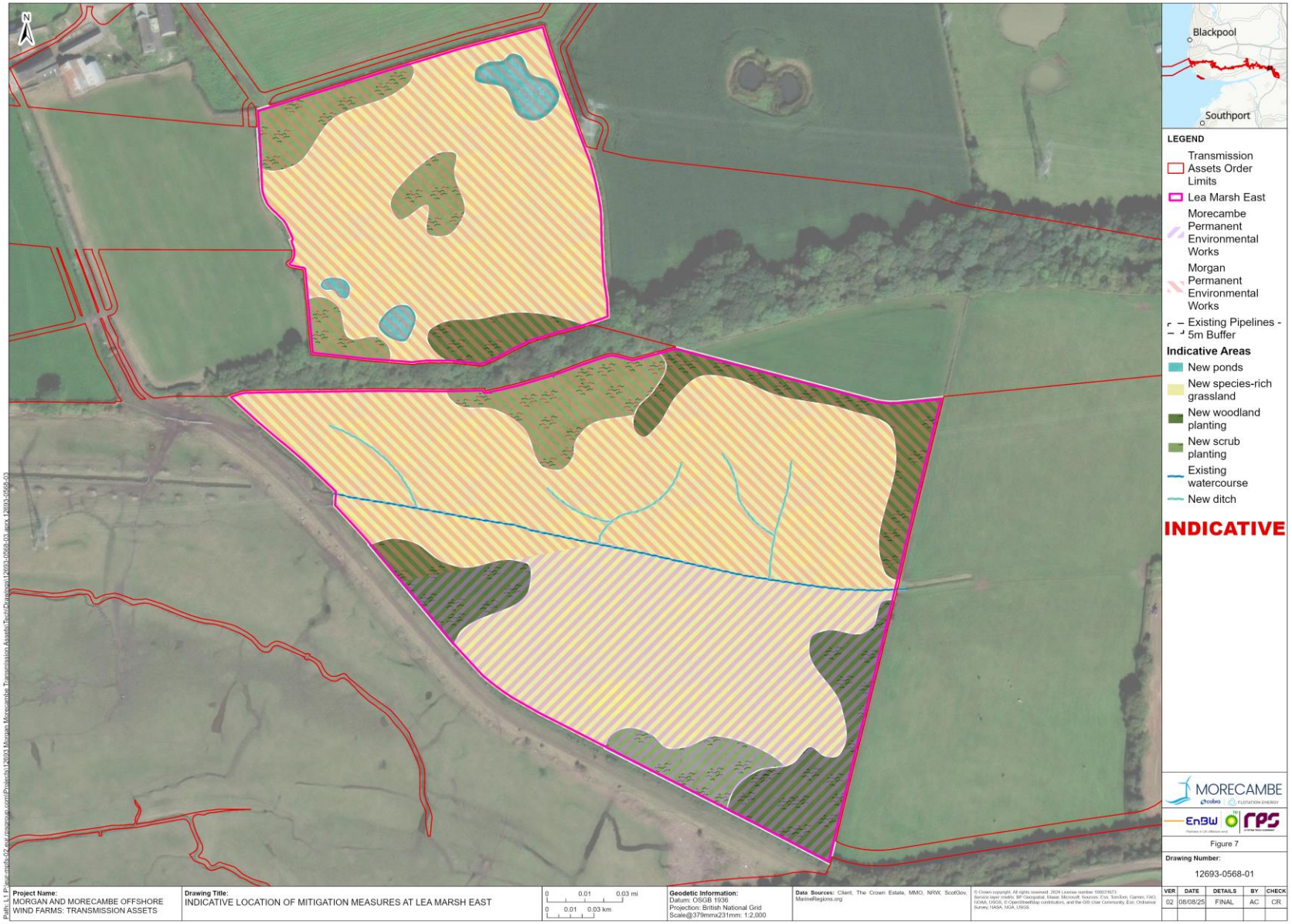


Figure 1.7: Indicative locations of enhancement measures at Lea Marsh Fields

Appendix K: Statutory Defra Metric

The Statutory Biodiversity Metric
Start page

Project details			
Planning authority:	Planning Inspectorate		
Project name:	Morgan and Morecambe Transmission Assets		
Applicant:	M3 Wind		
Application type:	Underground cable connection and new substations		
Planning application reference:			
Completed by:	RPS		
Date of metric completion:	06 August 2025		
Reviewer:			
Calculation iteration:	2		
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	No ✓		
Total site area - including irreplaceable habitat area (hectares):	53.23	**Irreplaceable habitat site area (hectares):**	0.00
Total off-site area - including irreplaceable habitat area (hectares):	N/A	**Irreplaceable habitat area off-site (hectares):**	N/A

Main menu

Results

Cell style conventions	
⚠	Attention required
▲	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

View all

Reset view

On-site baseline map — Insert

On-site baseline map reference number

On-site post intervention map — Insert

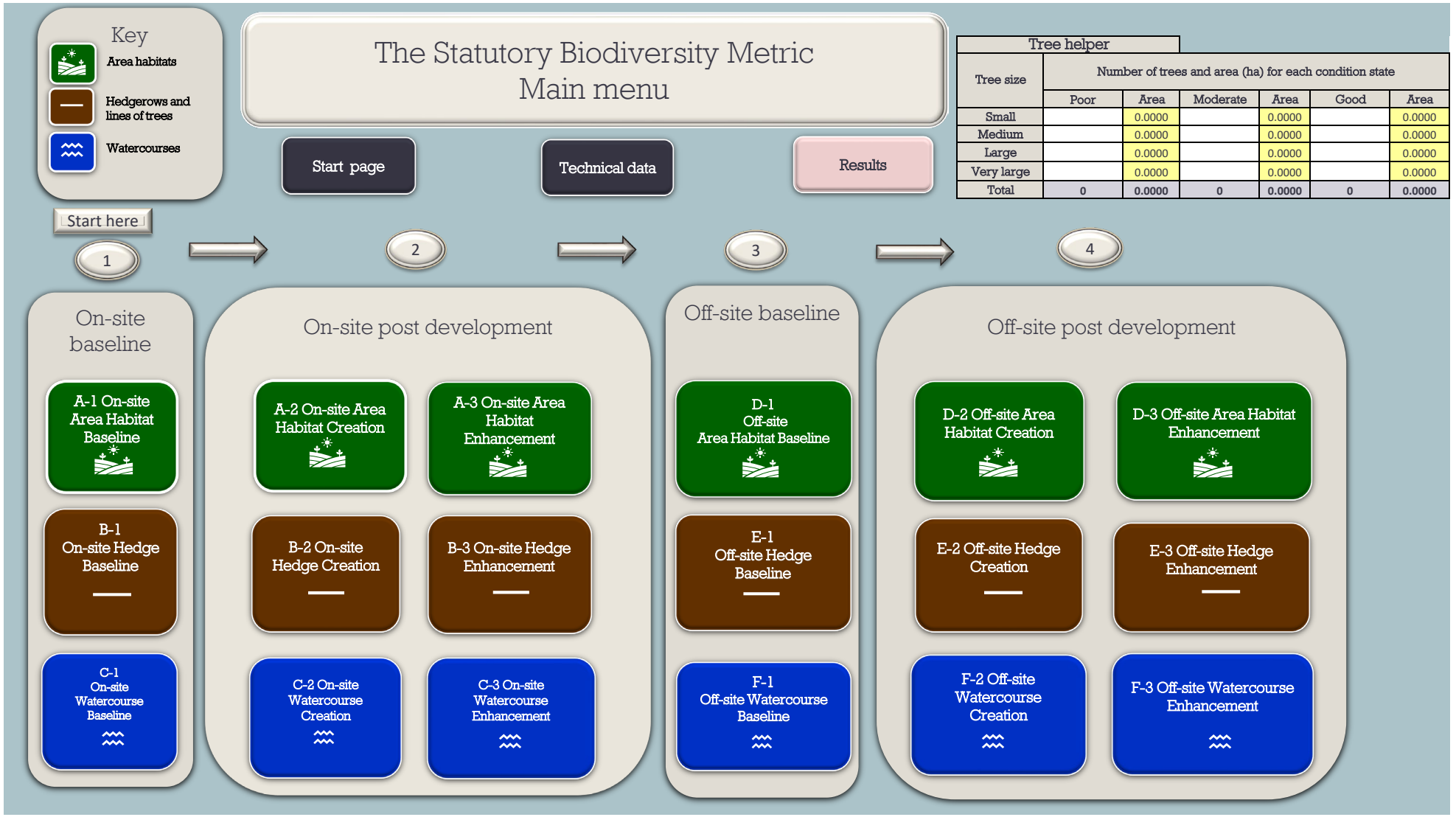
On-site post-intervention map reference number

Off-site baseline map — Insert

Off-site baseline map reference number

Off-site post intervention map — Insert

Off-site post-intervention reference number



Tree helper						
Tree size	Number of trees and area (ha) for each condition state					
	Poor	Area	Moderate	Area	Good	Area
Small		0.0000		0.0000		0.0000
Medium		0.0000		0.0000		0.0000
Large		0.0000		0.0000		0.0000
Very large		0.0000		0.0000		0.0000
Total	0	0.0000	0	0.0000	0	0.0000

The Statutory Biodiversity Metric
Results

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Headline results

Detailed results

Habitat trading summaries

Off-site summary

Irreplaceable habitats summary

Credits Summary

Morgan and Morecambe Transmission Assets

Headline Results

Return to results menu

Scroll down for final results ⚠

On-site baseline	*Area habitat units*	158.57	
	Hedgerow units	26.54	
	Watercourse units	4.31	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	238.44	
	Hedgerow units	38.86	
	Watercourse units	8.27	
On-site net change (units & percentage)	*Area habitat units*	79.87	50.37%
	Hedgerow units	12.32	46.43%
	Watercourse units	3.96	91.77%
Off-site baseline	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Area habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	79.87	
	Hedgerow units	12.32	
	Watercourse units	3.96	
Spatial risk multiplier (SRM) deductions	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	79.87
	Hedgerow units	12.32
	Watercourse units	3.96
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	50.37%
	Hedgerow units	46.43%
	Watercourse units	91.77%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	158.57	174.43	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	26.54	29.19	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	4.31	4.75	0.00	No additional watercourse units required to meet target ✓

Project Name: Morgan and Morecambe Transmission Assets Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	79.87
Total Net % Change	80.81%
Trading Rules Satisfied	Yes ✓

	Existing area habitats				Distinctiveness		Condition		Strategic significance				Ecological baseline						Bespoke compensation agreed for losses of VH/DH or irreplaceable habitat	Comments		
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Required Action to Meet Trading Rules	Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		User comments	Planning authority comments	Habitat reference number
1	Cropland	Cereal crops	No	4.536481826	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	9.07	0.096554	0	0.11	0.00	4.48	8.96		Morgan Substation		parcel 1062
2	Grassland	Other neutral grassland	No	0.12306457	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.98		0.12306457	0.00	0.98	0.00	0.00		Morgan Substation		parcel 2164
3	Grassland	Modified grassland	No	1.314506434	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	2.63		1.314506434	0.00	2.63	0.00	0.00		Morgan Substation		parcel 2163
4	Grassland	Modified grassland	No	0.35387718	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.71		0.35387718	0.00	0.71	0.00	0.00		Morgan Substation		parcel 2163
5	Grassland	Modified grassland	No	6.804082902	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	13.61	1.01E-07		0.00	0.00	6.80	13.61		Morgan Substation		parcel 2150
6	Grassland	Modified grassland	No	8.457445047	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	16.91	0.2345		0.47	0.00	8.22	16.45		Morgan Substation		parcel 2163
7	Grassland	Modified grassland	No	0.854691475	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	1.71	0		0.00	0.00	0.85	1.71		Morgan Substation		parcel 2685
8	Grassland	Other neutral grassland	No	0.00012922	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.00	0.000129		0.00	0.00	0.00	0.00		Morgan Substation		parcel
9	Grassland	Other neutral grassland	No	4.099898769	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	32.80	0.099878		0.80	0.00	4.00	32.00		Morgan Substation		parcel 2164
10	Heathland and shrub	Mixed scrub	No	0.00895094	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (c)	0.07	0		0.00	0.00	0.01	0.07		Morgan Substation		parcel 2163
11	Lakes	Ponds (non-priority habitat)	No	0.025016416	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (c)	0.20	0		0.00	0.00	0.03	0.20		Morgan Substation		ID-235; ukhab - r1g; cond18a-Poor (1)
12	Lakes	Ponds (non-priority habitat)	No	0.024768459	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (c)	0.20	0		0.00	0.00	0.02	0.20		Morgan Substation		ID-238; ukhab - r1g; cond18a-Poor (1)
13	Lakes	Ponds (non-priority habitat)	No	0.020306558	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (c)	0.16	0		0.00	0.00	0.02	0.16		Morgan Substation		ID-241; ukhab - r1g; cond18a-Moderate (2)
14	Lakes	Ponds (non-priority habitat)	No	0.045117561	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (c)	0.36	0		0.00	0.00	0.05	0.36		Morgan Substation		ID-243; ukhab - r1g; cond18a-Moderate (2)
15	Lakes	Ponds (non-priority habitat)	No	0.03879776	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.31	0		0.00	0.00	0.04	0.31		Morgan Substation		ID-233; ukhab - r cond18a-
16	Lakes	Ponds (non-priority habitat)	No	0.031362062	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.25	0		0.00	0.00	0.03	0.25		Morgan Substation		ID-240; ukhab - r cond18a-
17	Urban	Artificial unvegetated, unsealed surface	No	0.352987131	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0.340771		0.00	0.00	0.01	0.00		Morgan Substation		parcel 3209
18	Urban	Developed land; sealed surface	No	0.021630033	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0		0.00	0.00	0.02	0.00		Morgan Substation		parcel 2685
19	Woodland and forest	Other woodland; broadleaved	No	0.078037254	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.62	0		0.00	0.00	0.08	0.62		Morgan Substation		parcel 2163
20	Cropland	Cereal crops	No	2.278670936	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.56	0		0.00	0.00	0.28	0.56		Morecambe substation		parcel 1103
21	Grassland	Modified grassland	No	0.000476988	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.00	0		0.00	0.00	0.00	0.00		Morecambe substation		parcel
22	Grassland	Modified grassland	No	3.814006745	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	11.26	0.000752		0.00	0.00	2.81	11.25		Morecambe substation		parcel 1050
23	Grassland	Modified grassland	No	9.639502957	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	38.56	0.047208		0.19	0.00	9.59	38.37		Morecambe substation		parcel 1066
24	Grassland	Modified grassland	No	0.384674047	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	1.54	0		0.00	0.00	0.38	1.54		Morecambe substation		parcel 1103
25	Grassland	Modified grassland	No	0.011603176	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.05	0.011603		0.05	0.00	0.00	0.00		Morecambe substation		parcel 1797
26	Grassland	Modified grassland	No	0.353633954	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	1.41	3.48E-07		0.00	0.00	0.35	1.41		Morecambe substation		parcel 2114
27	Lakes	Ponds (non-priority habitat)	No	0.02998725	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.24	0		0.00	0.00	0.03	0.24		Morecambe substation		ID-250; ukhab - r1g; cond18a-Moderate (2)
28	Lakes	Ponds (non-priority habitat)	No	0.019710016	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.16	0		0.00	0.00	0.02	0.16		Morecambe substation		ID-234; ukhab - r cond18a-
29	Lakes	Ponds (non-priority habitat)	No	0.025205702	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required (d)	0.20	0		0.00	0.00	0.03	0.20		Morecambe substation		ID-239; ukhab - r cond18a-
30	Urban	Artificial unvegetated, unsealed surface	No	0.091105913	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0.061308		0.00	0.00	0.03	0.00		Morecambe substation		parcel 1050
31	Urban	Artificial unvegetated, unsealed surface	No	0.156801101	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0		0.00	0.00	0.16	0.00		Morecambe substation		parcel 1066
32	Developed land; sealed surface	Developed land; sealed surface	No	0.101171163	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0.010749		0.00	0.00	0.09	0.00		Morecambe substation		parcel 3108
33	Developed land; sealed surface	Developed land; sealed surface	No	0.023267453	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0		0.00	0.00	0.02	0.00		Morecambe substation		parcel 3182
34	Developed land; sealed surface	Developed land; sealed surface	No	0.110635878	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00	0.035083		0.00	0.00	0.08	0.00		Morecambe substation		parcel 3209
35	Cropland	Cereal crops	No	12	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	24.00			0.00	0.00	12.00	24.00		Lee Marsh Fields		
36																							
37																							
38																							
39																							
40																							
			Total habitat area	83.83									159.67	0.80	1.79	1.63	4.33	80.84	159.63				
			Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	83.83																			

Total area lost (excluding area of individual trees, green walls and intertidal hard structures)	80.84

M² to hectares conversion tool:	Select a unit	Hectares	M²

Project Name: Morgan and Morecambe Transmission Assets Map Reference:

A-2 On-Site Habitat Creation

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	70.57
Total Net % Change	85.82%
Trading Rules Satisfied	Yes ✓
Area Check	Area Acceptable ✓

				Distinctiveness		Condition		Post intervention habitats														Comments		
								Strategic significance			Temporal multiplier					Difficulty multiplier				Habitat units delivered			
Ref	Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		User comments	Planning authority comments	Habitat reference number
1	Grassland	Modified grassland	0.945064527	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4	0	0	Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low	1	24.09	Morgan Substation		
2	Grassland	Other neutral grassland	1.158135156	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	9.73	Morgan Substation		
3	Grassland	Other neutral grassland	3.3596424	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	22.49	Morgan Substation		
4	Heathland and shrub	Mixed scrub	1.630022953	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	15.37	Morgan Substation		
5	Urban	Developed land; sealed surface	0.522545132	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00	Morgan Substation		
6	Urban	Sustainable drainage system	0.633739305	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Medium	Standard difficulty applied	Medium	0.67	2.13	Morgan Substation		
7	Woodland and forest	Other woodland; broadleaved	0.219543406	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	10.41	Morgan Substation		
8	Cropland	Cereal crops	0.075963426	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1	0	0	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.15	Morecambe Substation		
9	Grassland	Modified grassland	8.253931249	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4	0	0	Standard time to target condition applied	4	0.867	Low	Standard difficulty applied	Low	1	21.69	Morecambe Substation		
10	Grassland	Other neutral grassland	0.923704792	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	7.76	Morecambe Substation		
11	Grassland	Other neutral grassland	0.70006143	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	4.69	Morecambe Substation		
12	Heathland and shrub	Mixed scrub	0.391125406	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	3.29	Morecambe Substation		
13	Lakes	Ponds (non-priority habitat)	0.044830601	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3	0	0	Standard time to target condition applied	3	0.899	Low	Standard difficulty applied	Low	1	0.32	Morecambe Substation		
14	Urban	Artificial unvegetated, unsealed surface	0.049418706	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00	Morecambe Substation		
15	Urban	Developed land; sealed surface	3.849017735	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	0	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00	Morecambe Substation		
16	Urban	Sustainable drainage system	0.501326955	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Medium	Standard difficulty applied	Medium	0.67	1.69	Morecambe Substation		
17	Woodland and forest	Other woodland; broadleaved	1.082955554	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	5.08	Morecambe Substation		
18	Grassland	Other neutral grassland	3.3	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	31.89	Biodiversity benefit at Lea Marsh fields		
19	Grassland	Lowland meadows	3.3	V.High	8	Good	3	Formally identified in local strategy	High strategic significance	1.15	15	0	0	Standard time to target condition applied	15	0.586	High	Standard difficulty applied	High	0.33	17.61	Biodiversity benefit at Lea Marsh fields		
20	Lakes	Ponds (priority habitat)	0.5	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5	0	0	Standard time to target condition applied	5	0.837	Medium	Standard difficulty applied	Medium	0.67	5.05	Biodiversity benefit at Lea Marsh fields		
21	Heathland and shrub	Mixed scrub	3	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	25.21	Biodiversity benefit at Lea Marsh fields		
22	Grassland	Other neutral grassland	1.9	Medium	4	Good	3	Formally identified in local strategy	High strategic significance	1.15	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	18.35	Biodiversity benefit at Lea Marsh fields		
23																								
24																								
25																								
26																								
27																								
		Total habitat area	60.64																	Total Units	287.00			

Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	60.64

m² to hectares conversion tool:	Select a unit	Hectares	m²

t Name: Morgan and Morecambe Transmission Assets   Map Refer

A-3 On-Site Habitat Enhancement

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	19.81
Total Net % Change	80.37%
Trading Rules Satisfied	Yes ✓

	Baseline habitats									
Baseline ref	Baseline habitat	Total habitat area (hectares)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules
2	Grassland - Other neutral grassland	0.12306457	Medium	4	Moderate	2	Low Strategic Significance	1	0.98	Same broad habitat or a higher distinctiveness habitat required (≥)
3	Grassland - Modified grassland	1.314506434	Low	2	Poor	1	Low Strategic Significance	1	2.63	Same distinctiveness or better habitat required ≥
4	Grassland - Modified grassland	0.35287718	Low	2	Poor	1	Low Strategic Significance	1	0.71	Same distinctiveness or better habitat required ≥

	Post intervention habitats												
	Proposed Habitat (Broad habitat pre-populated but can be overridden)		Change in distinctiveness and condition							Strategic significance			
Baseline ref	Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Condition change	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier
2	Grassland	Other neutral grassland	Medium - Medium	Moderate - Good	0.12306457	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
3	Grassland	Modified grassland	Low - Low	Poor - Good	1.314506434	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
4	Grassland	Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Good	0.35287718	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
				Total habitat area	1.79							

	Temporal risk multiplier						Difficulty risk multipliers				Habitat units delivered	Comments		
Baseline ref	Standard time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied		User comments	Planning authority comments	Habitat reference number
2	10	0	0	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	1.33	Morgan Substation		
3	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	5.71	Morgan Substation		
4	15	0	0	Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	2.77	Morgan Substation		
											9.81			

ject Name: Morgan and Morecambe Transmission Assets Map Referen

B-1 On-Site Hedge Baseline

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Hedgerow summary	
Total Net Unit Change	12.33
Total Net % Change	46.43%
Trading Rules Satisfied	Yes ✓

	Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance				Ecological baseline	Post-intervention					Comments		
Ref	Hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Required Action to Meet Trading Rules	Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning authority comments	Habitat reference number
1		Native hedgerow	0.0273781	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.11	0.02737808	0	0.11	0.00	0.00	0.00	Morgan Substation		
2		Native hedgerow	0.2329925	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.40	0.2329925	0	1.40	0.00	0.00	0.00	Morgan Substation		
3		Species-rich native hedgerow with trees	0.1227358	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.21	0.06557123	0	1.18	0.00	0.06	1.03	Morgan Substation		
4		Native hedgerow	0.1370048	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.27	0	0	0.00	0.00	0.14	0.27	Morgan Substation		
5		Native hedgerow	0.2647247	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.53	0	0	0.00	0.00	0.26	0.53	Morgan Substation		
6		Native hedgerow	0.1717378	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.34	0.1717378	0	0.34	0.00	0.00	0.00	Morgan Substation		
7		Native hedgerow	0.1396282	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.28	0.11609615	0	0.23	0.00	0.02	0.05	Morgan Substation		
8		Native hedgerow	0.3273212	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.65	0.23830658	0	0.48	0.00	0.09	0.18	Morgan Substation		
9		Native hedgerow	0.2146743	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.86	0.01279477	0	0.05	0.00	0.20	0.81	Morgan Substation		
10		Native hedgerow	0.2279521	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.91	0	0.01999003	0.00	0.08	0.21	0.83	Morgan Substation		
11		Native hedgerow	0.1199145	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.24	0	0	0.00	0.00	0.12	0.24	Morgan Substation		
12		Species-rich native hedgerow with trees	0.0125091	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	0.15	0.01250906	0	0.15	0.00	0.00	0.00	Morgan Substation		
13		Native hedgerow	0.1331918	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.53	0	0	0.00	0.00	0.13	0.53	Morgan Substation		
14		Species-rich native hedgerow with trees	0.28259	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	5.09	0.17661849	0	3.18	0.00	0.11	1.91	Morgan Substation		
15		Native hedgerow	0.0072535	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.01	0	0	0.00	0.00	0.01	0.01	Morgan Substation		
16		Native hedgerow	0.0875783	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.35	0.08757828	0	0.35	0.00	0.00	0.00	Morgan Substation		
17		Species-rich native hedgerow	0.2077186	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.83	0	0.19660005	0.00	0.78	0.01	0.05	Morgan Substation		
18		Native hedgerow	0.004772	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.02	0.0044772	0	0.02	0.00	0.00	0.00	Morgan Substation		
19		Native hedgerow	0.2139634	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.43	0	0	0.00	0.00	0.21	0.43	Morgan Substation		
20		Species-rich native hedgerow	0.1821077	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.46	0	0	0.00	0.00	0.18	1.46	Morgan Substation		
21		Native hedgerow	0.0652277	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.33	0.01225128	0	0.07	0.00	0.04	0.26	Morgan Substation		
22		Species-rich native hedgerow with trees	0.1127305	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.35	0.1127305	0	1.35	0.00	0.00	0.00	Morecambe Substation		
23		Native hedgerow with trees	0.1310297	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.52	0.1310297	0	0.52	0.00	0.00	0.00	Morecambe Substation		
24		Native hedgerow	0.0170202	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.10	0	0	0.00	0.00	0.02	0.10	Morecambe Substation		
25		Native hedgerow	0.0804673	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.32	0	0	0.00	0.00	0.08	0.32	Morecambe Substation		
26		Native hedgerow	0.1690775	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.68	0	0	0.00	0.00	0.17	0.68	Morecambe Substation		
27		Native hedgerow	0.1096337	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.44	0	0	0.00	0.00	0.11	0.44	Morecambe Substation		
28		Native hedgerow with trees	0.0348213	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.28	0.0348213	0	0.28	0.00	0.00	0.00	Morecambe Substation		
29		Native hedgerow with trees	0.0342746	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.41	0.0342746	0	0.41	0.00	0.00	0.00	Morecambe Substation		
30		Native hedgerow with trees	0.0814067	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.65	0	0	0.00	0.00	0.08	0.65	Morecambe Substation		
31		Native hedgerow with trees	0.1297891	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.52	0.07120446	0	0.28	0.00	0.06	0.23	Morecambe Substation		
32		Native hedgerow	0.1858342	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.37	0	0	0.00	0.00	0.19	0.37	Morecambe Substation		
33		Native hedgerow	0.0750575	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.15	0	0	0.00	0.00	0.08	0.15	Morecambe Substation		
34		Species-rich native hedgerow with trees	0.172119	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.07	0.09132366	0	1.10	0.00	0.08	0.97	Morecambe Substation		
35		Native hedgerow	0.1367268	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.55	0.11345555	0	0.45	0.00	0.02	0.09	Morecambe Substation		
36		Native hedgerow	0.1604095	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.64	0.0484645	0	0.19	0.00	0.11	0.45	Morecambe Substation		
37		Species-rich native hedgerow	0.1199384	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.48	0	0	0.00	0.00	0.12	0.48	Morecambe Substation		
38																					
39																					
40																					
41																					
42																					
			4.22									38.84	1.80	0.22	12.16	0.88	2.91	13.82			

bject Name: Morgan and Morecambe Transmission Assets Map Referenc

B-2 On-Site Hedge Creation

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Hedgerow summary	
Total Net Unit Change	13.32
Total Net % Change	48.63%
Trading Rules Satisfied	Yes ✓

		Proposed habitats		Distinctiveness		Condition		Strategic significance			Temporal multiplier					Difficulty risk multipliers				Hedge units delivered	Comments		
Ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		User comments	Planning authority comments	Habitat reference number
1		Species-rich native hedgerow with trees	1.871	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	16.52	Morgan Substation		
2		Species-rich native hedgerow with trees	0.904	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	20	0	0	Standard time to target condition applied	20	0.490	Low	Standard difficulty applied	Low	1	7.98	Morecambe Substation		
3																								
4																								
5																								
6																								
7																								
			2.78																		24.50			

me: Morgan and Morecambe Transmission Assets Map

B-3 On-Site Hedge Enhancement

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Hedgerow summary	
Total Net Unit Change	12.32
Total Net % Change	46.43%
Trading Rules Satisfied	Yes ✓

Baseline Habitats

Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules
10	Native hedgerow	0.22795	Low	2	Moderate	2	Low Strategic Significance	1	0.9118084	Same distinctiveness band or better
17	Species-rich native hedgerow	0.20772	Medium	4	Poor	1	Low Strategic Significance	1	0.8308744	Same distinctiveness band or better

Post intervention habitats

Baseline ref	Proposed habitat	Change in distinctiveness and condition: Distinctiveness movement	Change in distinctiveness and condition: Condition movement	Length (km)	Distinctiveness: Distinctiveness	Distinctiveness: Score	Condition: Condition	Condition: Score	Strategic significance: Strategic significance	Strategic significance: Strategic significance	Strategic significance: Strategic significance multiplier
10	Native hedgerow	Low - Low	Moderate - Good	0.01999	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
17	Species-rich native hedgerow	Medium - Medium	Poor - Good	0.1956	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
				0.22							

Baseline ref	Temporal multiplier: Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Difficulty risk multipliers: Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Hedge units delivered	Comments: User comments	Planning authority comments	Habitat reference number
10	2			Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	0.12			
17	5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	2.09			
											2.21			

Project Name: Morgan and Morecambe Transmission
C-1 On-Site WaterC' Baseline

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Watercourse summary	
Total Net Unit Change	5.06
Total Net % Change	81.17%
Trading Rules Satisfied	Yes ✓

Existing watercourse type			Distinctiveness		Condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Required Action to Meet Trading Rules	Ecological baseline						Bespoke compensation agreed for losses of VHDR	Comments		
Ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier		Total watercourse units	Length retained	Length enhanced	Units retained	Units enhanced	Length Lost	Units Lost		User Comments	Planning authority comments	Habitat reference number
1	Ditches	0.577	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Major	0.5	Major/Major	0.75	Same habitat required =	1.73	0	0	0.00	0.00	0.58	1.73		Morgan onshore substation - wet ditches		Parcel 2163
2	Other rivers and streams	0.539	High	6	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Minor	0.8	Minor/ No Encroachment	0.98	Same habitat required =	2.54	0.399	0.14	1.88	0.66	0.00	0.00		Morgan onshore substation - Dow Brook east of substation		
3	Other rivers and streams	0.021	High	6	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Major	0.5	Major/Major	0.75	Same habitat required =	0.05	0	0	0.00	0.00	0.02	0.05		Morgan onshore substation - section of Dow Brook lost for construction of access track		
4																									
5																									
6																									
7																									
8																									
		1.14													4.31	0.40	0.14	1.88	0.66	0.60	1.78				

Project Name: Morgan and Morecambe Transmission Assets

Map Reference:

C-2 On-Site WaterC' Creation

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Main Menu

Watercourse summary	
Total Net Unit Change	3.98
Total Net % Change	91.77%
Trading Rules Satisfied	Yes ✓

	Proposed habitats		Distinctiveness		Condition		Strategic significance			Temporal multiplier					Difficulty multipliers				Watercourse encroachment		Riparian encroachment		Watercourse units delivered	Comments		
Ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier		User comments	Planning authority comments	Habitat reference number
1	Ditches	0.9	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0	0	Standard time to target condition applied	10	0.700	Medium	Standard difficulty applied	Medium	0.67	No Encroachment	1	No Encroachment/ No Encroachment	1	5.07	Biodiversity benefit area at Lea Marsh fields		
2																											
3																											
4																											
5																											
6																											
		0.90																						5.07			

ct Name: Morgan and Morecambe Transmission Assets Map Refer

C-3 On-Site WaterC' Enhancement

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Watercourse summary	
Total Net Unit Change	3.96
Total Net % Change	91.77%
Trading Rules Satisfied	Yes ✓

Baseline habitats

Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Strategic significance	Baseline strategic significance Score	Required Action to Meet Trading Rules	Baseline habitat units
2	Other rivers and streams	0.539	High	6	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	2.535456

Post intervention habitats

Baseline ref	Proposed habitat	Change in distinctiveness and condition: Distinctiveness movement	Change in distinctiveness and condition: Condition movement	Length (km)	Habitat distinctiveness: Distinctiveness	Habitat distinctiveness: Score	Habitat condition: Condition	Habitat condition: Score	Strategic significance: Strategic significance	Strategic significance: Strategic significance	Strategic significance: Strategic significance multiplier
2	Other rivers and streams	High - High	Poor - Moderate	0.14	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
				0.14							

Baseline ref	Temporal multiplier: Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Difficulty multipliers: Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied
2	4	0	0	Standard time to target condition applied	4	0.867	Medium	Standard difficulty applied	Medium	0.67

Baseline ref	Watercourse encroachment: Extent of encroachment	Watercourse encroachment: Multiplier	Riparian encroachment: Extent of encroachment for both banks	Riparian encroachment: Multiplier	Watercourse units delivered	Comments: User comments	Planning authority comments	Habitat reference number
2	No Encroachment	1	No Encroachment/ No Encroachment	1	1.33	Morgan onshore substation - Dow Brook east of substation		
					1.33			

Appendix L: Habitat Condition Assessment

Condition Sheet: POND Habitat Type												
Habitat Type(s)												
Lakes - Ponds (priority habitat)												
Habitat Description												
4 farm ponds on site												
ukhab – UK Habitat Classification												
For ponds (non-priority) – see the Biodiversity Metric 4.0 Technical Annex 2.												
Site name and location		**On-site or off-Survey**										
Limitations (if applicable)		**Habitat parcel reference**										
		1066										
		Grid reference										
Condition Assessment Criteria		SD4366 2962	SD436 82985	SD4369 2990	SD4370 3013							
		Criterion passed (Yes or No)										**Notes (such as justification)**
Core Criteria - applicable to all ponds (woodland[1] and non-woodland):												
A	The pond is of good water quality, with clear water (low turbidity)	Y	Y	Y	Y							
B	There is semi-natural habitat (moderate distinctiveness or above)	N	N	N	N							
C	Less than 10% of the water surface is covered with duckweed *Lemna*	Y	Y	Y	Y							
D	The pond is not artificially connected to other waterbodies, e.g.	Y	Y	Y	Y							
E	Pond water levels can fluctuate naturally throughout the year. No	Y	Y	Y	Y							
F	There is an absence of listed non-native plant and animal species[3].	Y	Y	Y	Y							
G	The pond is not artificially stocked with fish. If the pond naturally	Y	Y	Y	Y							
Additional Criteria - must be assessed for all non-woodland ponds:												
H	Emergent, submerged or floating plants (excluding duckweed)[4] cover at	N	N	N	N							
I	The pond surface is no more than 50% shaded by adjacent trees and	Y	N	N	Y							
	Number of criteria passed	7	6	6	7							
Condition Assessment Result	**Condition Assessment Score**	**Score Achieved ×/✓**										
Results for woodland ponds which require assessment of 7 core criteria												
Passes 7 criteria	Good (3)											
Passes 5 or 6 criteria	Moderate (2)											
Passes 4 or fewer criteria	Poor (1)											
Results for non-woodland ponds which require assessment of 9 criteria												
Passes 9 criteria	Good (3)											
Passes 6 to 8 criteria	Moderate (2)	X	X	X	X							
Passes 5 or fewer criteria	Poor (1)											
Suggested enhancement interventions to improve condition score												

Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.

UKTAG classification of alien species working paper v8.pdf (wfduk.org)

• Frequently occurring non-native plant species include water fern *Azolla filiculoides* , Australian swamp stonecrop *Crassula helmsii* , parrot's feather *Myriophyllum aquaticum* , floating

Condition Sheet: LINE OF TREES Habitat Type

Habitat Type(s)											
Line of trees											
Habitat Description											
2 areas of lines of trees with different species and ages present, most trees had veteran features											
See the Biodiversity Metric 4.0 User Guide Section 9.											
Site name and location		**On-site or off-site**									
		Survey reference (if									
Limitations (if applicable)		**Habitat parcel reference**									
		1066									
		Grid reference									
		SD43892 955	SD43912 949								
Condition Assessment Criteria		**Criterion passed (Yes or No)**									**Notes (such as justificati on)**
A	At least 70% of trees	Y	Y								
B	Tree canopy is	Y	Y								
C	One or more trees	Y	Y								
D	There is an	Y	Y								
E	At least 95% of the	Y	Y								
Number of criteria passed		5	5								
Condition	**Condition**	**Score Achieved ×/✓**									
Passes 5 criteria	Good (3)	X	X								
Passes 3 or 4 criteria	Moderate (2)										
Passes 2 or fewer crit	Poor (1)										
Suggested enhancement interventions to improve condition score											

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK.* 2nd ed [online]. Defra, London. PB1195.
Keepers of time: ancient and native woodland and trees policy in England (publishing.servi
and:
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)													
UK Habitat Classification (UKHab) Habitat Type(s)													
Grassland - Modified grassland													
Habitat Description													
Various pasture fields as well as a garden area associated with the old farmhouse													
ukhab – UK Habitat Cl													
Site name and location			**On-site or off-site**										
			Survey reference (if										
Limitations (if applicable)			**Habitat parcel reference**										
			1066										
			Grid reference										
Condition Assessment Criteria			SD43812945 (garden)	SD44012965, SD43802982, SD4372296412, SD435300, SD436301 (species poor pastures)	SD438296, SD436297, SD437299, SD436299 (less grazed pastures)								
			Criterion passed (Yes or No)										**Notes (such as justificati on)**
A	There are 6-8		Y	N	Y								
B	Sward height is		Y	N	Y								
C	Some scattered		N	Y	Y								
D	Physical damage is		Y	N	Y								
E	Cover of bare		Y	N	N								
F	Cover of bracken		Y	Y	Y								
G	There is an absence		Y	Y	Y								
l criterion achieved (Yes or No)			Y	N	Y								
Number of criteria passed			6	3	6								
Condition		**Condition**	**Score Achieved ×/✓**										
Passes 6 or 7		Good (3)	X		X								
Passes 4 or 5		Moderate (2)											
Passes 3 or fewer		Poor (1)		X									
Suggested enhancement interventions to improve condition score													
Footnotes													
Footnote 1 – Creeping thistle *Cirsium arvense* , spear thistle *Cirsium vulgare* , curled dock *Rumex crispus* , broad-leaved dock *Rumex obtusifolius* , common													

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow

Habitat Description

Various hedges - intact and defunct all species poor

See the Biodiversity Metric 4.0 User Guide Section 9.

Site name and location		**On-site or off-site**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	

Condition Assessment Criteria

A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook[1] and Favourable

Hedgerow favourable condition attributes

Attributes and functional groupings (A, B, C, D and E)		**Criteria - the minimum requirements for 'favourable condition'**	**Criteria description**	**Habitat parcel reference** 1066 / **Grid reference** SD435298, SD435301, SD440294, SD437298, SD438294 (intact)	SD440297, SD436298, SD436300, SD437300, SD437301 (defunct)									**Notes (such as justification)**
Core groups - applicable to all hedgerow types				**Criterion passed (Yes or No)**										
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of	Y	Y									
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the	Y	N									
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.	Y	N									
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and	Y	N									
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species.	N	N									
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	N									
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the status of species. For information on invasive non-native	Y	Y									
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or	Y	N									
Additional group - applicable to hedgerows with trees only														
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 -	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Y	N									
E3.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	Y									

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	**Category Requirements**	**Metric Score**
Good	No more than 2 failures in total;	3
Moderate	No more than 4 failures in total;	2
Poor	Fails a total of more than 4	1
	Score achieved:	

Condition categories for hedgerows with trees

Category	**Category Requirements**	**Metric score**
Good	No more than 2 failures in total;	3
Moderate	No more than 5 failures in total;	2
Poor	Fails a total of more than 5	1
	Score achieved:	2, 1

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)

Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.

Footnote 3 – Wildlife and Countryside Act 1981 (as amended).

Footnote 4 – CHEFFINGS, C. M. et al. (2005) *The Vascular Plant Red Data List for Great Britain.* Species Status 7: 1-116. [online] Available on:
The Vascular Plant Red Data List for Great Britain (Species Status No. 7) | JNCC Resourc

Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). *Definitions: wild, native or alien?* [online] Available on:
Definitions: wild, native or alien? – Botanical Society of Britain & Irela

Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) *Online Atlas of the British and Irish Flora.* [online] Available on:
Acknowledgements | Online Atlas of the British and Irish F

Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on:
Home » NNSS (nonnativespecies

Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from:
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Condition Sheet: DITCH Habitat Type			
Habitat Type			
Watercourses - Ditches			
Habitat Description			
See the Biodiversity Metric 4.0 User Guide.			
Freckleton Pool			
Site name and location		**On-site or off-site**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	1066

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity)	Y	
B	A range of emergent, submerged and floating-leaved plants are present.	Y	
C	There is less than 10% cover of filamentous algae and or duckweed	Y	
D	A fringe of aquatic marginal vegetation is present along more than 75% of	Y	
E	Physical damage is evident along less than 5% of the ditch, with	Y	
F	Sufficient water levels are maintained - as a guide a minimum summer	Y	
G	Less than 10% of the ditch is heavily shaded.	N	
H	There is an absence of non-native plant and animal species[1].	Y	
	Number of criteria passed	7	

Condition Assessment	Condition Assessment Score	Score Achieved ×/✓
Passes 8 criteria	Good (3)	
Passes 6 or 7 criteria	Moderate (2)	X
Passes 5 or fewer criteria	Poor (1)	

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – This includes any species listed on the Water Framework Directive UKTAG GB High Impact Species List: Water Framework Directive (WFD) UKTAG classification of alien species working paper v8.pdf (wfduk.org)

• Frequently occurring non-native plant species include water fern *Azolla filiculoides* , Australian swamp stonecrop *Crassula helmsii* , parrot's feather

Condition Sheet: SCRUB Habitat Type			
UK Habitat Classification (UKHab) Habitat Type			
Heathland and shrub - Blackthorn scrub			
Habitat Description			
Mixed scrub patch - mostly dense but some scattered areas, trees and shrubs present			
For Dunes with sea buckthorn see:	Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of		
For other scrub types see:	ukhab – UK Habitat Classification		
Site name and location		**On-site or off-site**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	1066

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The scrub is a good representation of the habitat type it has been identified as,	N	
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[2]) shrubs	N	
C	There is an absence of invasive non-native plant species[3] (as listed on	Y	
D	The scrub has a well-developed edge with scattered scrub and tall grassland	N	
E	There are clearings, glades or rides present within the scrub, providing	Y	
	Number of criteria passed	2	

Condition Assessment Result (out of 5 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	X

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey*
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat,

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type(s)			
Grassland - Modified grassland			
Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163
Habitat Description			
g4 - Pasture field x 2			
ukhab – UK Habitat Classification			

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (this may include	N	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than	Y	
C	Some scattered scrub (including bramble *Rubus fruticosus* agg.) may be present, but scrub	Y	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical	N	Track marks and grazing
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a	N	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Y	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Y	
	Essential criterion achieved (Yes or No)		N
	Number of criteria passed		4

Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding	Poor (1)	X

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – Creeping thistle *Cirsium arvense* , spear thistle *Cirsium vulgare* , curled dock *Rumex crispus* , broad-leaved dock *Rumex obtusifolius* , common nettle *Urtica dioica* , creeping buttercup *Ranunculus repens* , greater plantain *Plantago major* , white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris* .

Condition Sheet: POND Habitat Type

Habitat Type(s)

Lakes - Ponds (priority habitat)

Habitat Description

5 different ponds on site. Pond 2 was dry at the time of the survey.

ukhab – UK Habitat Classification

For ponds (non-priority) – see the Biodiversity Metric 4.0 Technical Annex 2.

Site name and location	Morgan 2163	**On-site or off-**	On-site									
		Survey	Morgan									
Limitations (if applicable)		**Habitat parcel reference**										
		Grid reference										
Condition Assessment Criteria		SD4363 3075	SD435 63077	SD4352 3089	SD4348 3098	SD4351 3099						
		Criterion passed (Yes or No)										**Notes (such as justification)**
Core Criteria - applicable to all ponds (woodland[1] and non-woodland):												
A	The pond is of good water quality, with clear water (low turbidity)	Y	N	Y	N	N						
B	There is semi-natural habitat (moderate distinctiveness or above)	N	N	N	N	N						
C	Less than 10% of the water surface is covered with duckweed *Lemna*	Y	Y	Y	Y	Y						
D	The pond is not artificially connected to other waterbodies, e.g.	Y	Y	Y	Y	Y						
E	Pond water levels can fluctuate naturally throughout the year. No	Y	Y	Y	Y	Y						
F	There is an absence of listed non-native plant and animal species[3].	Y	Y	Y	Y	Y						
G	The pond is not artificially stocked with fish. If the pond naturally	Y	Y	Y	Y	Y						
Additional Criteria - must be assessed for all non-woodland ponds:												
H	Emergent, submerged or floating plants (excluding duckweed)[4] cover at	Y	Y	Y								
I	The pond surface is no more than 50% shaded by adjacent trees and	Y	Y	N								
	Number of criteria passed	8	7	7	5	5						

Condition Assessment Result	**Condition Assessment Score**	**Score Achieved ×/✓**										
Results for woodland ponds which require assessment of 7 core criteria												
Passes 7 criteria	Good (3)											
Passes 5 or 6 criteria	Moderate (2)				X	X						
Passes 4 or fewer criteria	Poor (1)											
Results for non-woodland ponds which require assessment of 9 criteria												
Passes 9 criteria	Good (3)											
Passes 6 to 8 criteria	Moderate (2)	X	X	X								
Passes 5 or fewer criteria	Poor (1)											

Suggested enhancement interventions to improve condition score

Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.

UKTAG classification of alien species working paper v8.pdf (wfduk.org)

• Frequently occurring non-native plant species include water fern *Azolla filiculoides* , Australian swamp stonecrop *Crassula helmsii* , parrot's feather *Myriophyllum aquaticum* , floating

Condition Sheet: POND Habitat Type

Habitat Type(s)

Lakes - Ponds (priority habitat)

Habitat Description

5 different ponds on site. Pond 2 was dry at the time of the survey.

ukhab – UK Habitat Classification

For ponds (non-priority) – see the Biodiversity Metric 4.0 Technical Annex 2.

Site name and location	Morgan 2163	**On-site or off-**	On-site									
		Survey	Morgan									
Limitations (if applicable)		**Habitat parcel reference**										
		Grid reference										
Condition Assessment Criteria		SD4363 3075	SD435 63077	SD4352 3089	SD4348 3098	SD4351 3099						
		Criterion passed (Yes or No)										**Notes (such as justification)**
Core Criteria - applicable to all ponds (woodland[1] and non-woodland):												
A	The pond is of good water quality, with clear water (low turbidity)	Y	N	Y	N	N						
B	There is semi-natural habitat (moderate distinctiveness or above)	N	N	N	N	N						
C	Less than 10% of the water surface is covered with duckweed *Lemna*	Y	Y	Y	Y	Y						
D	The pond is not artificially connected to other waterbodies, e.g.	Y	Y	Y	Y	Y						
E	Pond water levels can fluctuate naturally throughout the year. No	Y	Y	Y	Y	Y						
F	There is an absence of listed non-native plant and animal species[3].	Y	Y	Y	Y	Y						
G	The pond is not artificially stocked with fish. If the pond naturally	Y	Y	Y	Y	Y						
Additional Criteria - must be assessed for all non-woodland ponds:												
H	Emergent, submerged or floating plants (excluding duckweed)[4] cover at	Y	Y	Y								
I	The pond surface is no more than 50% shaded by adjacent trees and	Y	Y	N								
	Number of criteria passed	8	7	7	5	5						

Condition Assessment Result	**Condition Assessment Score**	**Score Achieved ×/✓**										
Results for woodland ponds which require assessment of 7 core criteria												
Passes 7 criteria	Good (3)											
Passes 5 or 6 criteria	Moderate (2)				X	X						
Passes 4 or fewer criteria	Poor (1)											
Results for non-woodland ponds which require assessment of 9 criteria												
Passes 9 criteria	Good (3)											
Passes 6 to 8 criteria	Moderate (2)	X	X	X								
Passes 5 or fewer criteria	Poor (1)											

Suggested enhancement interventions to improve condition score

Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.

UKTAG classification of alien species working paper v8.pdf (wfduk.org)

• Frequently occurring non-native plant species include water fern *Azolla filiculoides* , Australian swamp stonecrop *Crassula helmsii* , parrot's feather *Myriophyllum aquaticum* , floating

Condition Sheet: DITCH Habitat Type			
Habitat Type			
Watercourses - Ditches			
Habitat Description			
See the Biodiversity Metric 4.0 User Guide.			
Ditch along western boundary			
Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The ditch is of good water quality, with clear water (low turbidity)	N	
B	A range of emergent, submerged and floating-leaved plants are present.	N	
C	There is less than 10% cover of filamentous algae and or duckweed	Y	
D	A fringe of aquatic marginal vegetation is present along more than 75% of	N	
E	Physical damage is evident along less than 5% of the ditch, with	Y	
F	Sufficient water levels are maintained - as a guide a minimum summer	N	
G	Less than 10% of the ditch is heavily shaded.	N	
H	There is an absence of non-native plant and animal species[1].	Y	
	Number of criteria passed	3	

Condition Assessment	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 8 criteria	Good (3)	
Passes 6 or 7 criteria	Moderate (2)	
Passes 5 or fewer criteria	Poor (1)	X

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – This includes any species listed on the Water Framework Directive UKTAG GB High Impact Species List: Water Framework Directive (WFD) UKTAG classification of alien species working paper v8.pdf (wfduk.org)

• Frequently occurring non-native plant species include water fern *Azolla filiculoides* , Australian swamp stonecrop *Crassula helmsii* , parrot's feather

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Type(s)			
Line of trees			
Habitat Description			
Hedge with trees associated with ditch (dry)			
See the Biodiversity Metric 4.0 User Guide Section 9.			
Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	At least 70% of trees are native species.	Y	
B	Tree canopy is predominantly continuous with gaps in canopy cover making up	N	
C	One or more trees has veteran features and or natural ecological niches for	Y	
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to	N	
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features	Y	
	Number of criteria passed		3

Condition Assessment Result (out	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	X
Passes 2 or fewer criteria	Poor (1)	

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK.* 2nd ed [online]. Defra, London. PB1195.
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and:
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow
Native hedgerow - associated with bank or ditch
Native hedgerow with trees
Native hedgerow with trees - associated with bank or ditch
Species-rich native hedgerow
Species-rich native hedgerow - associated with bank or ditch

Habitat Description

Species-rich native hedgerow with trees - associated with ditch (along western boundary)

See the Biodiversity Metric 4.0 User Guide Section 9.

Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163

Condition Assessment Criteria

A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook[1] and Favourable Conservation Status document[2]. For further clarification please refer to the Hedgerow Survey Handbook.
Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.

Hedgerow favourable condition attributes

Attributes and functional groupings		Criteria - the minimum requirements for 'favourable condition'	Description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem	Y	
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point	Y	
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy	Y	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no	Y	
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow.	N	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of	Y	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.	Y	
Additional group - applicable to hedgerows with trees only					
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Y	
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

Condition categories for hedgerows with trees

Category	Category Requirements	Metric score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	2

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)
Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).
Footnote 4 – CHEFFINGS, C. M. et al. (2005) *The Vascular Plant Red Data List for Great Britain.* Species Status 7: 1-116. [online] Available on:
The Vascular Plant Red Data List for Great Britain (Species Status No. 7) | JNCC Resource Hub
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). *Definitions: wild, native or alien?* [online] Available on:
Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) *Online Atlas of the British and Irish Flora.* [online] Available on:
Acknowledgements | Online Atlas of the British and Irish Flora (brc.ac.uk)
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on:
Home » NNSS (nonnativespecies.org)
Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from:
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow

Habitat Description

Other native hedgerow with trees - along bottom and top fence line

See the Biodiversity Metric 4.0 User Guide Section 9.

Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163

Condition Assessment Criteria

A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook[1] and Favourable

Hedgerow favourable condition attributes

	Attributes and functional groupings	Criteria - the minimum requirements for 'favourable condition'	Description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem	Y	
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of	Y	
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy	Y	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no	Y	
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow.	N	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the	Y	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.	Y	
Additional group - applicable to hedgerows with trees only					
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N	
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

Condition categories for hedgerows with trees

Category	Category Requirements	Metric score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	2

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)

Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)

Footnote 3 – Wildlife and Countryside Act 1981 (as amended).

Footnote 4 – CHEFFINGS, C. M. et al. (2005) *The Vascular Plant Red Data List for Great Britain.* Species Status 7: 1-116. [online] Available on:
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and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow

Habitat Description

Native hedgerows along eastern boundary

See the Biodiversity Metric 4.0 User Guide Section 9.

Site name and location	Morgan - 2163	**On-site or off-site**	On-site
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Morgan
Grid reference		**Habitat parcel reference**	2163

Condition Assessment Criteria

A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook[1] and Favourable

Hedgerow favourable condition attributes

	Attributes and functional groupings	Criteria - the minimum requirements for 'favourable condition'	Description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem	N	
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of	N	
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy	N	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no	N	
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow.	N	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the	Y	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.	N	
Additional group - applicable to hedgerows with trees only					
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	1

Condition categories for hedgerows with trees

Category	Category Requirements	Metric score
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)

Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
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