MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Outline Arboriculture Method 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.
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.
Applicants	Morgan Offshore Wind Limited (Morgan OWL) and Morecambe Offshore Windfarm Ltd (Morecambe OWL).
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.
Construction Traffic Management Plan	A document detailing the construction traffic routes for heavy goods vehicles and personnel travel, protocols for delivery of Abnormal Indivisible Loads to site, measures for road cleaning and sustainable site travel measures.
Design envelope	A description of the range of possible elements and parameters that make up the Transmission Assets options under consideration, as set out in detail in Volume 1, Chapter 3: Project Description. This envelope is used to define the Transmission Assets for EIA purposes when the exact engineering parameters are not yet known. This is also referred to as the Maximum Design Scenario or Rochdale Envelope approach.
Development Consent Order	An order made under the Planning Act 2008, as amended, 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.
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 bay inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).
Local Authority	A body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and County Borough Councils.

Term	Meaning
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.
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.
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The offshore export cables, landfall, and onshore infrastructure for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. 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.
National Policy Statement(s)	The current national policy statements published by the Department for Energy and Net Zero in 2023 and adopted in 2024.
Onshore export cables	The cables which would bring electricity from the landfall to the onshore substations.
Onshore export cable corridor	The corridor within which the onshore export cables will be located.
Onshore Infrastructure Area	The area within the Transmission Assets Order Limits landward of MHWS. Comprising the offshore export cable corridor from MHWS to the transition joint bay, onshore export cable corridor, onshore substations and 400 kV grid connection cable corridor, and associated temporary and permanent infrastructure including temporary and permanent compound areas and accesses. Those parts of the Transmission Assets Order Limits proposed only for ecological mitigation and/or biodiversity benefit are excluded from this area.
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.
Preliminary Environmental Information Report	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project, and which helps to inform consultation responses.
Renewable energy	Energy from a source that is not depleted when used, such as wind or solar power.
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 (such as construction compounds).

Term	Meaning
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). Also referred to in this report as the Onshore Order Limits, for ease of reading.

Acronyms

Acronym	Meaning
AMS	Arboriculture Method Statement
CEZ	Construction Exclusion Zone
CoCP	Code of Construction Practice
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EMP	Ecological Management Plan
ES	Environmental Statement
LMP	Landscape Management Plan
MLWS	Mean Low Water Springs
RPA	Root Protection Area
TPZ	Tree Proximity Zone
UK	United Kingdom

Units

Unit	Description
%	Percentage
km	Kilometres
km^2	Kilometres squared
kV	Kilovolt
m	Metres
m^2	Metres squared

1 Outline Arboriculture Method Statement

1.1 Background

1.1.1 Introduction

1.1.1.1 This Outline Arboriculture Method Statement (AMS) has been prepared as part of a Development Consent Order (DCO) Application for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to hereafter as 'the Transmission Assets'). This method statement sets out the key management measures that will be implemented in relation to tree protection during the construction phase of the Transmission Assets.

1.1.1.2 This document provides an arboricultural framework for tree protection, which will form the basis for future, detailed AMS(s) which will relate to specific areas of arboricultural impact.

1.2 Implementation

1.2.1.1 This Outline AMS forms an appendix to the Outline Code of Construction Practice (CoCP) (document reference J1). Following the granting of consent for the Transmission Assets, detailed AMS(s) will be prepared as a part of the detailed Code of Construction Practice(s) on behalf of Morgan OWL and/or Morecambe OWL, prior to commencement of the relevant stage of works, and will follow the principles established in this Outline AMS. The detailed AMS(s) will require approval by the relevant planning authority following consultation with relevant stakeholders. Morgan OWL and/or Morecambe OWL and all appointed contractors will be responsible for the implementation of the detailed AMS(s).

1.2.1.2 The Applicants have committed to implementation of detailed AMS(s) which are secured through Requirement 8 of the draft Development Consent Order (DCO) (document reference C1) Schedules 2A & 2B. Below sets out the requirement wording for Project A (Project B's requirement mirrors that of Project A for this requirement and is, therefore, not repeated):

8.—(1) No stage of the Project A onshore works or Project A intertidal works may commence until for that stage a code of construction practice has been submitted to and approved by the relevant planning authority following consultation as appropriate with –

(a) Lancashire County Council;

(b) Natural England;

(c) the Environment Agency;

(d) in relation to the Project A intertidal works or, if applicable to the Project A offshore works, the MMO; and

(e) in relation to the Project A Blackpool Airport works, BAOL to the extent specified in the outline code of construction practice.

(2) Each code of construction practice must accord with the outline code of construction practice and include, as appropriate to the relevant stage, a…

(r) arboriculture method statement (in accordance with the outline arboricultural method statement).

(3) The code of construction practice approved in relation to the relevant stage of the Project A onshore works must be followed in relation to that stage of the Project A onshore works and Project A intertidal works.

(4) Onshore site preparation works must be carried out in accordance with the applicable details set out in the outline code of construction practice.

1.2.1.3 Articles 35 and 36 of the draft DCO (document reference C1/F09) also require that any works involving the felling, lopping or cutting back of the roots of any tree are undertaken in compliance with the process for tree removal set out in the outline AMS. The relevant process is set out in **section 1.8.6**.

1.2.1.4 The onshore elements of the Transmission Assets relevant to this method statement comprise:

- Onshore export cable corridor
- Onshore substations
- 400kV grid connection cable corridor
- Environmental mitigation areas
- Biodiversity benefit areas

1.2.1.5 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).

1.2.1.6 In addition to these elements, the Outline Code of Construction Practice (CoCP) (document reference J1) considers the temporary construction compounds, storage areas, accesses and mitigation areas required to support the construction of the Transmission Assets.

1.2.1.7 The relevant planning authorities for the onshore elements are:

- Fylde Borough Council
- South Ribble Borough Council
- Preston City Council
- Blackpool Council
- Lancashire County Council

1.3 Purpose of the Outline Arboriculture Method Statement

1.3.1.1 The draft Development Consent Order (DCO) (document reference C1) includes a requirement for the preparation of a final CoCP. The final CoCP will be supported by a series of management plans including an Arboriculture Method Statement (as part of the final CoCP), which must be submitted to and approved by the relevant planning authority prior to the commencement of onshore works.

1.3.1.2 The purpose of this Outline AMS is to set out the measures that will be implemented for the protection and removal of trees during the construction of the onshore and intertidal elements of the Transmission Assets to reduce impacts to trees (as far as possible).

1.3.1.3 This is an outline document based on the design set out in Volume 1, Chapter 3: Project Description (document reference F1.3) and includes measures that have been identified as part of the EIA process.

1.3.1.4 The Outline AMS should be read in conjunction with the Outline CoCP (document reference J1) and its supporting appendices. In addition, the following documents provide further information:

- Volume 3, Annex 10.5: Tree Survey and Arboricultural Impact Assessment (document reference F3.10.5).
- Volume 3, Chapter 10: Landscape and visual resources (document reference F3.10).
- Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3).

1.4 Scope of the Outline Arboriculture Method Statement

1.4.1.1 The scope of this Outline AMS applies to the onshore site preparation works and construction activities of the Transmission Assets located landward of MLWS. The Method Statement does not apply to activities associated with offshore works (i.e., seaward of MLWS).

1.4.1.2 Onshore site preparation works will be undertaken prior to the commencement of construction. These works will be undertaken in line with this Outline AMS which is secured through Requirement 8(4) of the DCO. Articles 35 and 36 of the draft DCO (document reference C1/F09) also require that any works involving the felling, lopping or cutting back of the roots of any tree are undertaken in compliance with the process for tree removal set out in the outline AMS. **Appendix B** provides a figure identifying all trees which might be removed as part of onshore site preparation works.

1.4.1.3 This Outline AMS provides the framework of how tree protection will be implemented, offering preliminary guidance to be developed for future, detailed tree protection regimes.

1.4.1.4 Although no Tree Preservation Orders (TPOs) have been identified to date within the Onshore Order Limits, if TPOs were to be identified prior/during construction the measures outlined in **section 1.8** below would apply.

1.4.1.5 The detailed AMS(s) will be in accordance with the principles established in the Outline AMS and will be agreed with the relevant authority prior to commencing construction of the relevant stage of the onshore and intertidal works (above MLWS). For the purpose of this document the term 'construction' includes all related construction and restoration activities as authorised by the DCO within the Order Limits.

1.5 Detailed Arboriculture Method Statement

1.5.1.1 The detailed AMS(s) will be prepared and agreed prior to start of construction. The method statement will contain the following:

- A detailed schedule and plan (tree removal and protection plan aligned with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (BSI Publication, 2012) of all trees and hedgerows to be removed, including maximum lengths of hedgerows to be removed. It will also identify the trees and hedgerows that will be protected and retained.
- Locations and specification of tree protection fencing.
- Locations and specification of ground protection (if required).
- Location and installation method of haul road.
- Location of launch and reception pits, construction compound for directional drilling.
- Timing of operations and schedule of arboricultural supervision and key sign-off milestones.
- Tree management and monitoring proposals, for an agreed period after construction has been completed (i.e., a 10 year maintenance period for trees and hedgerows, as set out within the draft DCO (document reference C1/F09)).

1.6 Tree survey and site access

1.6.1.1 Tree surveys were carried out in accordance with the requirements set out in BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (BSI Publication, 2012). The methodology and results of the survey are presented within Volume 3, Annex 10.5: Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5).

1.6.1.2 Due to access constraints, some areas within the Onshore Infrastructure Area were not subject to tree surveys in 2023 or 2024. The areas not subject to survey are labelled on the tree constraints plans (Appendix B of Volume 3, Annex 10.5: Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5)). Tree and woodland positions in these areas have been reviewed using satellite mapping only.

1.6.1.3 Any trees within the Order Limits that could not be surveyed either in 2023 or 2024, will be surveyed prior to any works to trees in accordance

with BS5837:2012. Any required protection for these currently un-surveyed areas will be described within the detailed AMS(s).

1.7 Roles and responsibilities

1.7.1 Overview

1.7.1.1 The key roles and associated responsibilities with regard to this Outline AMS are set out below. The Construction (Design and Management) Regulations 2015 also identify the legal duties, responsibilities and obligations of all the major roles within the construction team.

1.7.1.2 The responsibilities of each role will be refined as necessary in the detailed AMS(s).

1.7.2 Applicants

1.7.2.1 The Applicants will be responsible for the following:

- Ensuring that detailed AMS(s) are produced, to guide the protection of tree.
- Guaranteeing the detailed AMS(s) are implemented effectively.
- Giving necessary direction to contractors (for example, setting contractual obligations).
- Reviewing, revising and refining the AMS (where necessary) in conjunction with the Principal Contractor.
- Confirm that monitoring and reporting of the tree related works will take place (also with respect to monitoring of nesting birds and bats – refer to **section 1.8.6**).

1.7.3 Principal Contractor

1.7.3.1 The Principal Contractor will be appointed by the Applicants and has the overall responsibility for:

- Updating and delivering the detailed AMS(s) on behalf of the Applicants.
- Ensuring all procedures in the detailed AMS(s) are followed.
- Ensuring all contractors are suitably qualified and experienced in implementing the measure within the detailed AMS(s).
- Maintaining records relevant to the detailed AMS(s).
- Monitoring the delivery of the works, with regards to the detailed AMS recommendations.

1.7.4 Arboricultural Consultant

1.7.4.1 An Arboricultural Consultant will be responsible for ensuring that all retained trees and Root Protection Areas (RPAs) are satisfactorily

protected during construction. This will be secured via the CoCP (document reference J1).

1.8 Methodology

1.8.1 Overview

1.8.1.1 This methodology details the generic site wide methods that shall be adopted to ensure tree health is considered and maintained throughout construction.

1.8.1.2 Any required tree or hedgerow removal must be considered and reviewed by qualified and experienced ecologists and arboricultural specialists prior to removal.

1.8.1.3 Alongside the above mitigation methodologies, there will also be additional tree and habitat planting to mitigate the impacts of the Transmission Assets. The Outline Landscape Management Plan (LMP) (document reference J2) and Outline Ecological Management Plan (EMP) (document reference J6) provide further details.

1.8.2 General guidance

Construction Exclusion Zones (CEZ)

1.8.2.1 A tree protection zone de-marks an area of construction exclusion, with its position determined using the RPAs of recorded trees. All trees will have been surveyed prior to any works taking place.

1.8.2.2 Once the tree protection demarcation (often defined by protective fencing) is in place, it must remain *in situ* throughout the course of the construction phase until the works in each area are completed.

Requirements within the CEZs

1.8.2.3 Within the CEZ there should be:

- No mechanical excavation / scraping.
- No excavation by any other means without arboricultural supervision.
- No lowering of level for any purpose.
- No storage of plant, equipment, or material.
- No pedestrian, vehicular or plant access.
- No handling, discharge or spillage of any chemical substance including cement washings.

Further Restrictions Outside the CEZs

1.8.2.4 Outside the CEZ, no materials that may contaminate the soil such as concrete mixings, diesel oil and vehicle washings shall be discharged within close proximity of the stem of any tree (usually no less than 10 m).

1.8.3 Tree Protection Fencing

1.8.3.1 All required tree protection demarcation will be identified on the final tree removal and protection plans. As set out previously, these plans would be provided within the detailed AMS(s) to be developed post-consent and prior to the commencement of the onshore site preparation works and construction of the Transmission Assets. Outline tree protection fencing is provided within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5). Tree protection fence details are set out in **Appendix A** of this document.

1.8.3.2 The demarcation line shown is the minimum required and the length of the fence shall be extended or adjusted on site as agreed with the Arboricultural Consultant to ensure satisfactory protection of all retained trees and RPAs.

1.8.3.3 Once the protective demarcation is in place it must remain in situ where works are being undertaken in the vicinity of trees, other than to facilitate agreed tree removal or to complete landscaping works such planting or seeding.

1.8.3.4 Where necessary, tree protection fencing may be temporarily re-aligned in order to facilitate tree removal. Fencing is to be re-instated immediately following removal in a manner that protects the remaining trees and their respective RPAs.

1.8.3.5 During tree removal, no wheeled or tracked machinery is to enter the CEZ as shown in the final tree protection plans (i.e., the area protecting the trees that are not being felled).

1.8.3.6 Signs detailing the purpose of the protective barrier shall be attached to the barriers, where deemed required. Such signs should be weatherproof and shall be substantially in the form of the specimen provided in **Appendix A**. Signs must be replaced as necessary should they be removed or become illegible.

1.8.4 Installation of Onshore Export Cables

1.8.4.1 Where practicable, the onshore export cables will be installed outside of RPAs by micro-siting of cables. Both BS5837:2012 and NJUG Volume 4 offer guidance on cable installation and will be followed.

1.8.4.2 If this option is not feasible, any excavation will be carried out by hand in accordance with the guidelines set out in NJUG Volume 4 (2007) – Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

1.8.5 Ancient woodlands/veteran trees

1.8.5.1 Where ancient woodlands/veteran trees have been identified, both within and outside the Order Limits, an appropriate buffer has been determined as shown within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference

F3.10.5), along with appropriate tree protection fencing where necessary. Tree protection fence details can be found in **Appendix A**.

1.8.5.2 These buffer zones will be shown on the final tree protection plans. As set out previously, these would be provided within the detailed AMS(s) to be developed post-consent and prior to the commencement of construction of the Transmission Assets.

1.8.5.3 Any trees within the Order limits that could not be surveyed either in 2023 or 2024, will be surveyed during detailed design and prior to any works commencing, including the identifying of any potential veteran trees within these areas. Any required protection for these currently un-surveyed areas will be detailed within the detailed AMS(s). Should any veteran trees be identified during the survey, the buffer zones will be calculated in accordance with guidance from Natural England and Forestry Commission (2022) Ancient woodland, ancient trees and veteran trees: advice for making planning decisions.

1.8.5.4 Unless otherwise specified within the detailed AMS(s), no works will be carried out within the ancient woodlands/ veteran tree buffer zones.

1.8.6 Pruning and Tree Removal Works

Overview

1.8.6.1 Trees will need to be removed at the Onshore Substations to create the substation platforms and accesses. Trees may also be removed along the Onshore Cable Corridor (where they cannot be avoided by micro-siting the cable route or haul roads). The number and location of the trees to be removed will be identified in the final tree plans that will accompany the detailed AMS(s).

Standard of Work

1.8.6.2 The tree work required in order to facilitate the Transmission Assets will adhere to the following standards.

- All tree works shall be carried out in accordance with BS3998:2010 and latest arboricultural best practice.
- All tree work shall be carried out by suitably qualified, competent and insured arboricultural contractors in accordance with Arboricultural Association Standard Conditions of Contract and Specifications for Tree Works (2008) Edition.

1.8.6.3 All green and woody waste generated by the tree works shall be dealt with in an environmentally sustainable manner.

1.8.6.4 Prior to the commencement of any tree works, an appropriate risk assessment shall be produced to describe the measures required to fulfil the statutory safety obligations (BS3998:2010 and latest arboricultural best practice). It shall identify and prioritise the necessary control measures and precautions.

1.8.6.5 If pruning a branch of a tree that is to be retained, injury of the wood and bark of the parent stem or branch above the cut shall be avoided. If a

branch collar is visible, the final cut shall be just outside it and care shall be taken to avoid tearing retained wood and bark when the cut is made. Preliminary cuts shall be made, if necessary, so as to remove weight, before a final cut is made. Care shall be taken to prevent falling branches from harming other parts of the tree (including its roots), its surroundings, people or property. Heavy branches shall be removed in sections and, where necessary, shall be lowered with ropes.

1.8.6.6 It is possible that roots of retained trees may extend further than their RPAs. Where roots are encountered by mechanical plant, then those smaller than 25 mm diameter may be pruned back using a sharp and clean cutting tool such as secateurs or handsaws. If roots larger than 25 mm are encountered within excavations, care will be taken to minimise any damage. Roots would only be cut having first consulted the appointed Arboricultural Consultant.

1.8.6.7 Micro-siting of the onshore export cables and haul roadwill be used where practical to minimise the number of trees to be removed. Micro-siting can only occur within the order limits defined within the draft Development Consent Order (Document Reference C1) and set out in the Works Plans (AS-016 and AS-017) with consideration of site specific constraints identified during detailed design.

1.8.6.8 Following the works, it is recommended that the trees are monitored to ensure their ongoing vitality and health. These inspections shall be completed by the Arboricultural Consultant.

Induction of Site Personnel

1.8.6.9 Site contractors will sign a site briefing sheet to confirm they have understood the scope and importance of tree protection measures as part of their contractual requirements.

Timing of Works

1.8.6.10 Tree works would be completed before commencement of any construction works in the vicinity of RPAs within the Onshore Order Limits.

1.8.6.11 All works shall ideally be timed to have regard to the phenological cycles of protected species that are associated with trees; notably birds and bats (refer to the Outline CoCP (document reference J1), Outline EMP (document reference J6) and Outline LMP (document reference J2)).

1.8.6.12 Nesting birds are protected by law and any removal/tree works should not be carried out during the bird nesting season (March-August inclusive). Should any vegetation or trees require removal during this period, then an ecological inspection would be required to check that no nesting birds are present. Should checks reveal nesting birds the vegetation must remain until September or until an ecologist has certified that the fledglings have left the nest. A visual inspection for bats shall also be carried on mature/ivy clad trees prior to commencing operations. Further detail is provided in the Outline EMP (document reference J6).

1.8.7 Dust Management

1.8.7.1 During particularly hot, dry weather conditions, the dust created from construction activities (primarily from vehicles traversing unbound surfaces) can cause indirect damage to trees by reducing transpiration through the leaves and their ability to photosynthesise.

1.8.7.2 Where it is deemed that an unsustainable quantity of construction generated dust has settled on the tree canopies, a water hose shall be used to water down and remove all dust from leaves within the canopy. This would be monitored by the Arboricultural Consultant who would determine when the water hose should be used. The dust management plan (document reference J1.2) forms part of the Outline CoCP.

1.8.8 Soil Compaction and Remediation Measures

1.8.8.1 Every reasonable measure shall be taken to ensure that the soil within the RPAs is not compacted (refer to the Soil Management Plan (document reference J1.7) which forms part of the Outline CoCP). If, however, any incidence of compaction does occur within the vicinity of trees then it shall be reported to the appointed project Arboricultural Consultant to review the appropriate remediation measures to be taken.

1.8.8.2 Dependant on the level of compaction certain remediation measures may be undertaken, such as:

- The introduction of well composted wood mulch to the compacted area to encourage the reintroduction of organic matter into the soil sub-base and improve soil structure.
- Sub-soil aeration using compressed air.

1.8.9 CEZ Fencing Removal

1.8.9.1 As set out in the Outline CoCP (document reference J1), during the removal of the construction exclusion zone fencing, no wheeled or tracked machinery is to enter the area previously encompassed by tree protective fencing as shown in the final tree protection plans. Outline tree protection fencing is provided within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5).

Landscaping

1.8.9.2 All landscaping works shall accord with the works detailed within the Outline LMP (document reference J2). No arboricultural impact is proposed due to these works.

Monitoring

1.8.9.3 Following erection of the protective fencing and prior to commencement of the construction phase, an inspection of the site by the Arboricultural Consultant to confirm fencing has been installed in accordance with the final tree protection plans. Outline tree protection fencing is provided

within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5).

Reporting

1.8.9.4 Should any arboricultural issues become apparent during the works the Principal Contractor should immediately contact the Arboricultural Consultant for advice upon how to proceed.

1.8.10 Tree Protection Protocol

1.8.10.1 To ensure the protection of trees where needed, the following protocol will be followed:

Step 1: Is the tree working protocol needed?

1.8.10.2 Is detailed tree survey information, and RPA data available? If yes, then employ tree and hedgerow protection methods as per the final tree and hedgerow protection plans. Outline tree protection fencing is provided within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document reference F3.10.5).

1.8.10.3 If detailed tree survey information is not available, the tree protection protocol will be used any time works or works access is in reasonable, close proximity of any tree or hedge. In this situation, the tree and hedgerow protection methods will be informed by the Arboricultural Consultant.

1.8.10.4 If all works, including works access will take place more than 20 m from any trees or hedges, then the works can continue as planned with no additional arboricultural methodologies required.

Step 2: Identify RPA and tree proximity zones

1.8.10.5 If works fall within the tree protection protocol (20 m), the RPA and construction exclusion zones (CEZ) will be calculated as 12 x the diameter of the tree should be assigned to all trees within 20 m of works/ works access. **Table 1.1** sets out RPA and TPZ values for trees up to 12 m high or 1 m tree diameter (not including veteran and/or ancient trees). Mature trees, particularly ancient and veteran trees can have a greater diameter than this, which should be reflected in the size of the RPA. Therefore, the cap on the RPA would be removed in order to be reflective of the size of each tree impacted. Detail would also be protected at various points along the roots as some areas are more sensitive than others.

Table 1.1 Root protection areas and tree proximity zones (non-veteran/ancient trees).

Tree Size (diameter at 1.5m)	RPA (Radius)	TPZ (Radius)
Hedges	3m	8m
Small Trees (<250mm)	3m	8m
Medium Trees (251 – 500mm)	6m	11m
Large Trees (501 – 750mm)	9m	14m
XL Trees (>750mm)	12m	17m

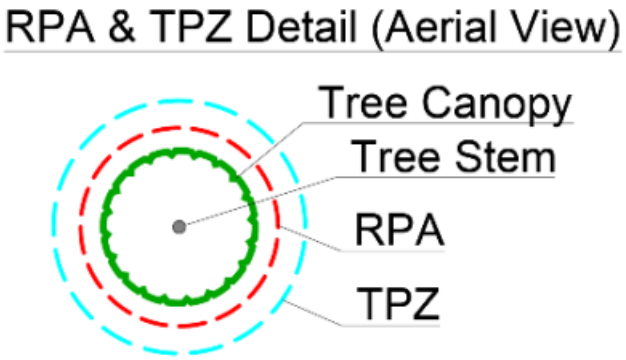


Figure 1.1 RPA and TPZ detail (aerial view).

1.8.10.6 A tree's RPA is broadly defined in BS5837:2012, as a circle defining the minimum area around a tree that requires protection from works, which has a radius of roughly 12 times the diameter of a tree, measured at 1.5 m from ground level (presented in **Figure 1.1**). This calculation has been used in the creation of the table above.

1.8.10.7 As measuring and calculating the RPA of each individual tree on site is impractical on a site this large, instead the above table will be used to allow for quick 'at a glance' application of each tree's RPA.

1.8.10.8 The TPZ is a circular area around the tree with a radius 5 m larger than that of the RPA. This is a buffer area used to identify whether or not works are in close proximity to the RPA of trees and therefore requiring further protection of the RPA.

1.8.10.9 Where needed, the diameters of groups of similar trees can be averaged to give an average RPA and TPZ, however, any individual trees that have a big enough diameter to fall into a larger category should be picked out individually.

1.8.10.10 Once calculated, the RPAs and TPZs should be marked out ether with flags or paint for easy identification.

Step 3: Follow the tree protection flowchart

1.8.10.11 The flow chart in **Figure 1.2** should be used to identify the tree protection scenario that best fits the work in question.

Figure 1.2 Tree protection scenario flow chart.

Step 4: Apply chosen scenario protocol

1.8.10.12 Where specific detailed tree protection details are not proposed within the final tree protection plans, the generic tree protection protocols will be adopted. (Outline tree protection fencing is provided within Appendix C of the Tree Survey and Arboricultural Impact Assessment of the Environmental Statement (document deference F3.10.5).

1.8.10.13 Within the detailed AMS tree protection scenarios will be established, using appropriate tree protection techniques such as construction barriers, tree protection fence and/or visual barriers to define the demarcation zones.

1.8.10.14 Once the tree protection protocol flowchart in **Figure 1.2** has been used to identify the correct tree protection scenario such tree protection scenarios will be clarified in the detailed AMS.

1.9 References

Arboricultural Association (2008) Standard Conditions of Contract and Specifications for Tree Works

BSI Publication (2012) BS5837: Trees in relation to design, demolition and construction – Recommendations. Published by BSI Standards Limited 2012.

BSI Publication (2010) BS3998: Tree Work - Recommendations

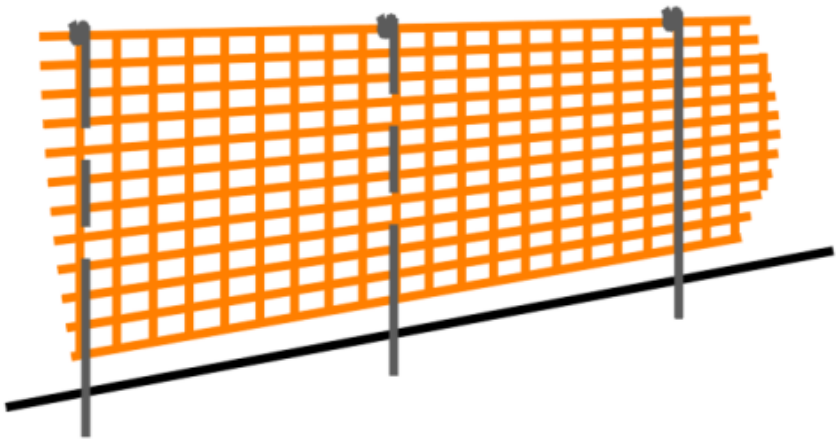
Natural England and Forestry Commission (2022). Guidance. Ancient woodland, ancient trees and veteran trees: advice for making planning decisions.

The National Joint Utilities Group (NJUG) (2007) Volume 4. NJUG guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.

Appendix A : Tree Protection Fences

A.1 Example Tree Protection Visual Barrier

VISUAL TREE PROTECTION BARRIER
Secondary tree protection barrier
(Not to scale)



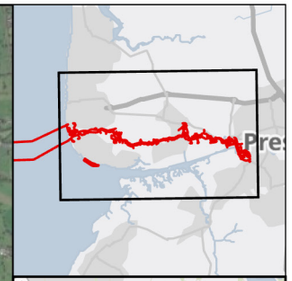
- To identify trees and vegetation not immediately adjacent to construction works.
- 1m high heavy duty hi-vis barrier mesh
- Erected and fitted to metal poles, timber stakes or railway pins driven into the ground at regular intervals

A.2 Example Construction Exclusion Zone (CEZ) Signage

Appendix B: Trees identified that could be removed as part of Onshore Site Preparation Works

500000

Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Sheet 7
Sheet 8
Sheet 9
Sheet 10
Sheet 11
Sheet 12
Sheet 13
Sheet 14
Sheet 15
Sheet 16



LEGEND

Order Limits

N

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION INDEX

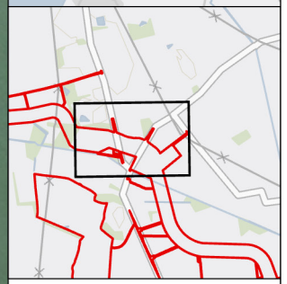
0 600 1,200 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:65,000

Data Sources:BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

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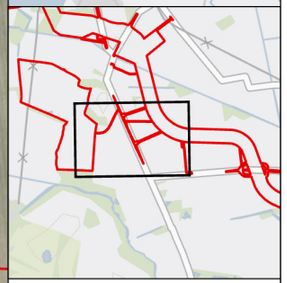
MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS	TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION SHEET 1	0 25 50 Meters	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:2,500	**Data Sources:** BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 2

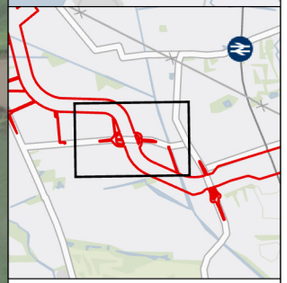
0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 3

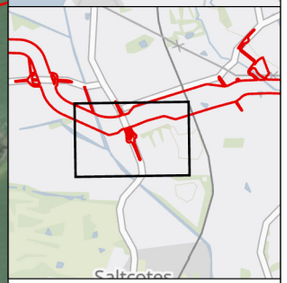
0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 4

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
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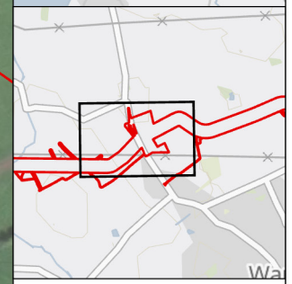

LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 5

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

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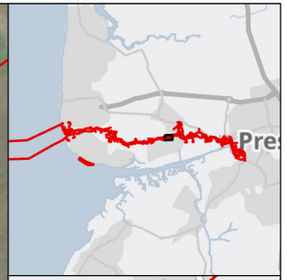

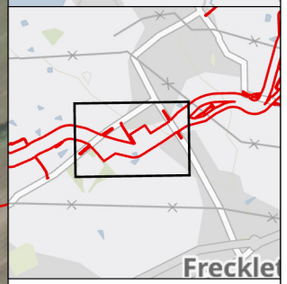

LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

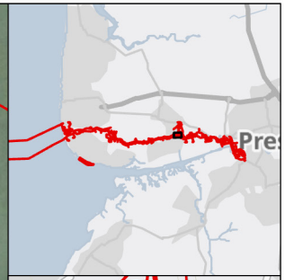
TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 6

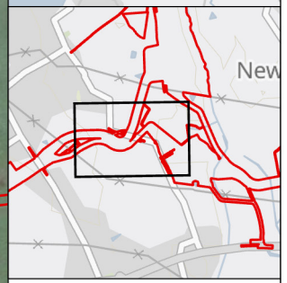
0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS





LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 7

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
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Contains data from OS Zoomstack

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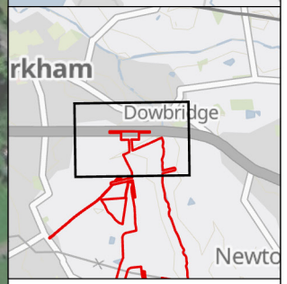

LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 8

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
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Contains data from OS Zoomstack

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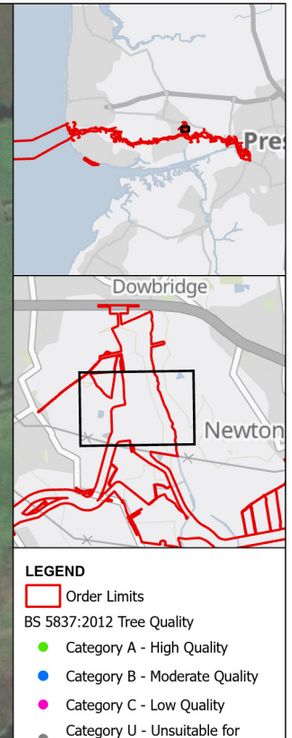

LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS	TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION SHEET 9	0 25 50 Meters	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:2,500	**Data Sources:** BP, Ordnance Survey	**Service Layer Credits:** World Imagery: Maxar, Microsoft GB Background Local Names: Contains OS data © Crown Copyright and database right 2023 Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
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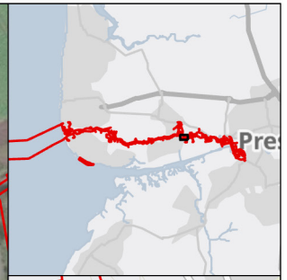

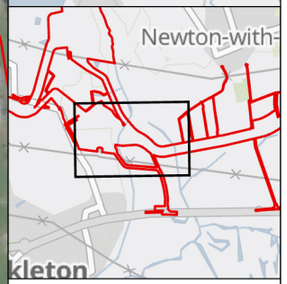

LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 10

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
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VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS

LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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N

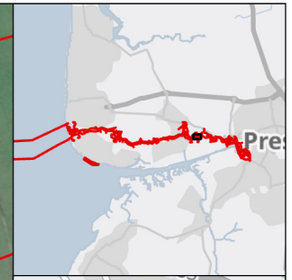
MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS	TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION SHEET 11	0 25 50 Meters	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:2,500	**Data Sources:** BP, Ordnance Survey	**Service Layer Credits:** World Imagery: Maxar, Microsoft GB Background Local Names: Contains OS data © Crown Copyright and database right 2023 Contains data from OS Zoomstack

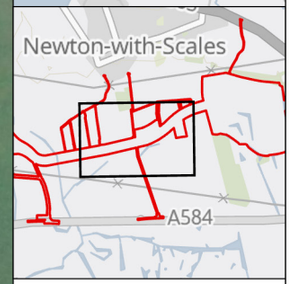
VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS

H134

H135

H136





LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

N

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

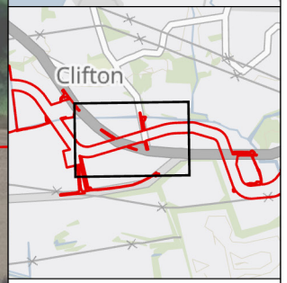
TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 12

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

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MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 13

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
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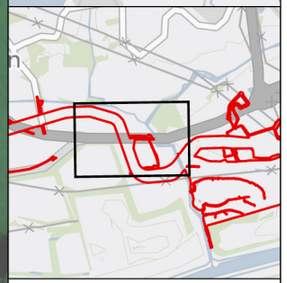
VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS



LEGEND

- Order Limits

BS 5837:2012 Tree Quality

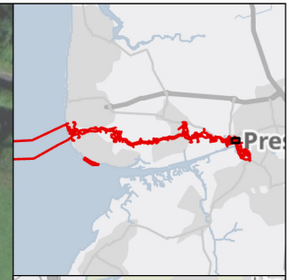
- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

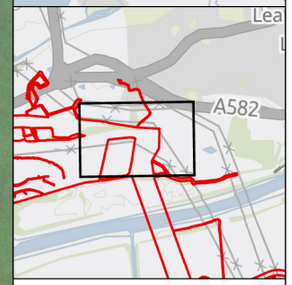
Morgan Offshore Wind Farm | MORECAMBE

M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS	TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION SHEET 14	0 25 50 Meters	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:2,500	**Data Sources:** BP, Ordnance Survey	**Service Layer Credits:** World Imagery: Maxar, Microsoft GB Background Local Names: Contains OS data © Crown Copyright and database right 2023 Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS





LEGEND

- Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

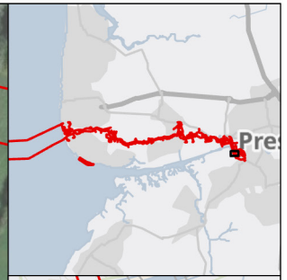
Morgan Offshore Wind Farm | MORECAMBE

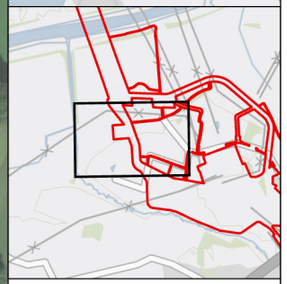
M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS	TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION SHEET 15	0 25 50 Meters	**Geodetic Information:** Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:2,500	**Data Sources:** BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS





LEGEND

Order Limits

BS 5837:2012 Tree Quality

- Category A - High Quality
- Category B - Moderate Quality
- Category C - Low Quality
- Category U - Unsuitable for retention

Morgan Offshore Wind Farm | MORECAMBE

M3_MR_PRJ_0039

MORGAN AND MORECAMBE OFFSHORE WINDFARMS: TRANSMISSION ASSETS

TREES IDENTIFIED TO BE POTENTIALLY REMOVED DURING ONSHORE SITE PREPARATION
SHEET 16

0 25 50 Meters

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:2,500

Data Sources: BP, Ordnance Survey

Service Layer Credits: World Imagery: Maxar, Microsoft
GB Background Local Names: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	11/09/25	Initial Issue	HAH	JS