

Tree Survey and Constraints Report Prepared for Coriolis Energy

Temporary meteorological mast at Margam Forest



ARC Woodlands Ltd
Chartered Foresters
Swan y don
Mathry
Haverfordwest
Pembrokeshire
SA62 5HA

01348 837723
07796 920757
info@arcwoodlands.co.uk
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1.0 Introduction

- 1.1 Instruction- ARC Woodlands has been instructed to prepare the following tree constraints report for the trees located around a proposed met mast.
- 1.2 The report will be carried out in line with BS 5837: 2012 *Trees in relation to design, demolition and construction-Recommendations* and will evaluate the direct and indirect impacts of the current tree population.

2.0 Report Limitations

- 2.1 The inspection has been carried out from ground level only, using visual observation methods. Should a more detailed inspection be required then this will be highlighted in the recommendations.
- 2.2 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on an appropriate basis given their location. The conclusions and recommendations in this report are only valid for a period of six months from the date of report issue.
- 2.3 ARC have not contacted the local planning authority to determine whether any tree preservation order (TPO) cover the tree(s) or to determine if the site is within a Conservation Area. We strongly advise this check to be carried out.
- 2.4 No soil analysis has been undertaken. Basic soil and ground condition observations will be noted if appropriate.
- 2.5 Any information used in the report supplied by the client is understood to be accurate.
- 2.6 No responsibility is assumed by ARC Woodlands Ltd for legal matters that may arise from this report and the consultant shall not be required to give testimony or attend court unless further contractual arrangements are made.
- 2.7 Any alteration or deletion from this report will invalidate it.
- 2.8 Any tree works undertaken as suggested by the report are the responsibility of the client and or land managers.

3.0 Methodology and data collection

- 3.1 The site was visited and the trees were assessed visually utilizing the Visual Tree Assessment methodology.
- 3.2 The trees were assessed as a group with regard to their condition and health.
- 3.3 Where dimensions have been recorded the following measurement conventions have been observed
 - a) Height crown spread and crown clearance have been recorded to the nearest half metre for dimensions up to 10m and the nearest whole metres for dimensions over 10m.
 - b) Stem diameters are recorded in millimeters and rounded to the nearest 10mm.

c) Where dimensions have been estimated (where access is restricted) these trees will suffixed with #

- 3.4 Recommendations for remedial tree works (preliminary management Recommendations) have been provided on the basis of the trees current condition.
- 3.5 Trees growing as groups or woodland will be considered in the management unit of the land managers and recommendations will reflect the silvicultural treatment of the wider woodland.
- 3.6 Where trees/group have not been plotted by topographical survey they will be plotted by eye or with the aid of GIS.

4.0 Survey area

- 4.1 The survey area is located in a remoted rural location and centered within a forest. The immediate site is generally flat with wet ground conditions.

5.0 Summary

- 5.1 Two tree groups have been identified. In summary, all are retention value 'C'.
- 5.2 No trees have been identified at the site that would qualify as important arboricultural assets.
- 5.2 The tree groups have been identified as category 'C' due to their limited arboricultural merit and also as they are part of a significant sized forest.

6.0 Concluding statement

- 6.1 The site around the development does not contain any trees of arboricultural significance.

Appendix 1**Survey Key****Tree No:**

Sequential reference number eg T1, T2 for individual trees, where trees are determined to be a group they will be denoted as follows G1, G2 and W1, W2 for woodlands

Species:

Recorded and listed by both common name and scientific name

Stem:

Principal above ground structural components of a tree that supports its branches.

Height:

Provides an indication of the height of the tree and is measured in meters from ground level to the upper canopy edge.

Stem diameter:

Measured at a height of 1.5metres from ground level using a diameter tape and recorded in millimeters. Where the stem cannot be measured at 1.5metres due to irregular swellings on the stem or low branching then the position of measurement will be taken in accordance with the specification in Annex C of BS 5837:2012

Crown spread:

Measured at the four cardinal points of a compass from the centre of a stem.

Crown height:

Measured distance between the lowest points of the crown from ground level.

Life stage:

A method of age estimation e.g. young- the first one third of the estimated life expectancy, middle mature- the second third of the estimated life expectancy, mature- the last third of the estimated life expectancy, over mature – trees showing obvious signs of senescence

Comments:

A brief evaluation and description of the tree or group in order to inform on significant defects or characteristics. Where no comment appears it should be assumed that no relevant features were noted.

Recommendations:

Arboricultural recommendations based on the current land use only and are provided where action is required in order to aid the long term management of the trees.

Survey restrictions:

It may be necessary on occasion to estimate tree dimension where access is not available or where the structure or vegetation is precluding the visual assessment. Where dimensions are estimated it will be clearly marked in the tree schedule with #.

Root protection area:

Lay out design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. All stem diameters are calculated in the line with the guidance given in BS 5837:2012 Annex D

Tree categorization:

A method of apportion a value (non-fiscal) to trees in order to identify the quality and value of the tree stocks and allowing for informed decisions to be made about which trees are to be retained or removed dependent on development occurring.

Please refer to Table 1 Cascade chart for tree quality assessment, including subcategories reference BS 5837:2012

Estimated remaining contribution: estimated remaining life expectancy eg <10, 10+, 20+, 40+

Appendix 2

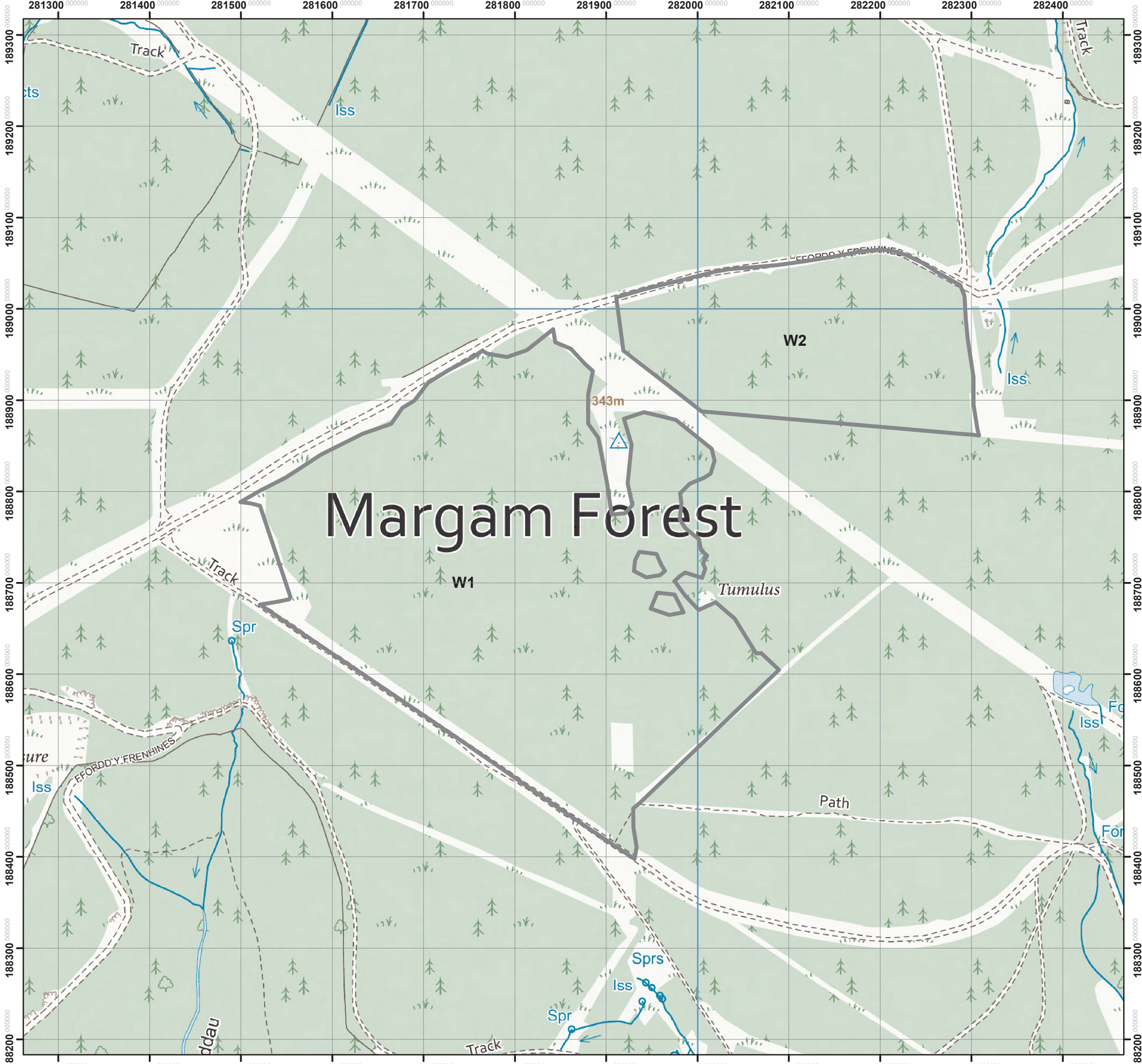
Table 1 cascade chart

Category and definition	Criteria		
Trees unsuitable for retention			
Category U Trees in such a condition that they cannot realistically be retained as living trees in the current context of the current land use for longer than 10 years	Trees that have a serious, immediate, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion side shelter cannot be mitigated by pruning) Trees that are dead or showing signs of significant, immediate and irreversible decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve.		
Trees to be considered for retention			
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant trees within and avenue)	Trees, groups of woodlands of particular importance as arboricultural and/or landscape features	Trees groups or woodlands of significant conservation, historical, commemorative or other value (eg wood pasture or veteran trees)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees might be included in category A but are downgraded because of impaired condition such that they are unlikely to be suitable for retention for beyond 40 years; or tree lacking the special quality necessary to merit the A designation	Trees present in number, usually growing in woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in group or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Appendix 3 Survey schedule

Appendix 4 Tree constraints plan

[illegible]



Project:

Y Bryn Met Mast

Title:

Tree Constraints Plan

Retention Value Key

Retention Value A

Retention Value B

Retention Value C

Retention Value U

Key

Woodland Group

Notes:

a) Information on this map is directly reproduced from digital and analogue material from different sources. Minor discrepancies may therefore occur. Where further clarification is considered necessary, this is noted through the use of text boxes on the map itself.

b) For the avoidance of doubt and unless otherwise stated:

1. where a line recorded in the key demarcates a boundary on this plan, the boundary edge is the outside edge of the line.

2. where a line or feature recorded in the key of this plan is also shown as a line or feature by the Ordnance Survey, and that line or feature is located in a different position on the ground than shown by the Ordnance Survey, then the line or feature shall be deemed to follow the position as existing on the ground.

3. this plan should be used for identification purposes only, unless specifically stated above or in accompanying documentation.

Approximate scale @ A3: 1:4,000

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Prepared by: REC

Drawing No.
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Revisions:



ARC Woodlands Ltd
Swn y don
Mathry
Haverfordwest
SA62 5HA