FUTURESECOLOGY

JT Energy Storage Ltd (Windel Energy)

BESS Egremont, Cumbria

BIODIVERSITY IMPACT ASSESSMENT (BIA)

Report Reference Number: FE496/BIA01

May 2025

Futures Ecology Ltd
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REV	Issue Status	Notes	Author or Reviewer	Name & Qualifications	Position	Date
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	Final		Author	A. Eales BSc (Hons)	Ecology Director	14.05.2025

CONTENTS

TABLES

APPENDICES

FIGURES

1.0 INTRODUCTION

1.1 The following report has been prepared by Futures Ecology Ltd. on behalf of JT Energy Storage Ltd. (Windel Energy). This summary report presents the results of the Biodiversity Impact Assessment (BIA) calculations using the Statutory Biodiversity Metric (SBM) Calculation Tool produced in respect of a proposed 30MW Battery Energy Storage System (BESS) scheme and cable route to grid connection on land to the east of Dalzell Street, near Woodend, Cumbria (NGR: E: 300842, N: 513769).

SITE LOCATION AND CONTEXT

1.2 The Site comprises land to the east of Dalzell Street between the villages of Bigrigg, Cleator and Moor Row (NGR: E: 300842, N: 513769). The larger settlements of Egremont, Cleator Moor and Whitehaven are all located within a 5km radius of the Site. The Lake District National Park boundary lies approximately 2.7km to the north-east. The Site is wholly located within the administrative boundary of Cumberland Council.

1.3 The Site boundary including the underground cable route to the point of connection at Woodend substation measures 1.18ha. The proposed cable route will follow Dalzell Street southwards to the point of connection at Woodend substation.

1.4 The Site area, excluding the cable route, wherein the Proposed Development will be located will be approximately 0.58ha. The Site area for the triangular field to the northern portion of the Site to be used for BNG purposes is 0.32ha.

1.5 The Site comprises pasture land, which has most recently been used for the grazing of livestock. The Site is split across two fields, separated by an access track. The Site boundaries are demarcated by hedgerow and scattered trees.

1.6 Access to the site is via the existing track taken from Dalzell Street, a local road. Dalzell Street connects with the A5086 and the A595, approximately 1-1.25km to the south of the Site.

1.7 The Site is adjoined to the eastern boundary by National Cycle Route 72, a long-distance route, which connects Ravenglass, Cumbria with South Shields, Tyne & Wear. To the north and south of the Site is agricultural land. To the western boundary is Dalzell Street.

1.8 Habitats in the main BESS Site comprise semi-improved grassland with some scattered scrub, a short treeline, and a dry ditch. The cable route is entirely hardstanding. The main BESS Site lies directly west of a narrow stretch of woodland along an embankment, through which the long-distance National Cycle Route 72 passes.

1.9 Landscape immediately around the Site comprises mostly agricultural land, and beyond are the small rural villages of Moor Row (c. 480m northwest), Cleator (c. 510m east), and Bigrigg (c. 560m west).

DEVELOPMENT PROPOSALS

1.10 Proposals comprise the clearance of pasture land to facilitate the construction of a 30MW Battery Energy Storage System (BESS) development with associated ancillary structures, hardstanding, landscape screening and biodiversity enhancements. A buried cable route

will be installed along Dalzell Street to the point of grid connection at the existing Woodend Substation to the south of the Site.

1.11 Further information on the Proposed Development is contained within the Planning, Design and Access Statement which accompanies the planning application.

2.0 METHODOLOGY

FIELD SURVEY – HABITATS

Personnel

2.1 J. Wheeldon MCIEEM, BSc (Hons) has over 20 years of experience undertaking these surveys. J Wheeldon is a Full member of the Charted Institute of Ecology and Environmental Management (CIEEM) and holds licences for bats (WML-CL18, Ref: 2015-12340-CLS-CLS), great crested newt *Triturus cristatus* (WML-CL08, Ref: 2015-12340-CLS-CLS) and white clawed crayfish *Austropotamobius pallipes* (WML-CL11, Ref: 2016-20902-CLS-CLS).

2.2 D. Heppenstall BSc (Hons) has 1 years' experience of conducting and leading field surveys for habitats and protected species across a wide range of sites and is suitably qualified based on the CIEEM competencies.

Habitat Appraisal

2.3 The initial habitat appraisal of the Site was completed by J. Wheeldon on behalf of Futures Ecology Ltd. on the 23rd February 2025.

2.4 An updated Site walkover was completed by D. Heppenstall on behalf of Futures Ecology Ltd. on the 15th April 2025.

2.5 Survey methodology followed guidance from Joint Nature Conservation Committee (JNCC) 2016[1] comprising a walkover of the survey area mapping (using JNCC standard habitat codes) and broadly describing and classifying the principal habitat types and identifying the dominant plant species present within each habitat type, noting any features of interest. The frequencies at which plant species occurred were noted using the DAFOR[2] method[3]. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.

2.6 The Statutory Biodiversity Metric works best where habitat types are classified using the UK Habitats Classification methodology (UKHab Ltd., 2023)[4]. Therefore, habitats were also described and evaluated in accordance with the UK Habitats Classification methods aligning the assessed habitats with the Biodiversity Metric habitat types.

2.7 Grassland surveys were undertaken to determine habitat type and condition. The results of the survey including quadrat locations and species present is provided in Appendix B.

2.8 The surveys used were sufficient to determine the Statutory Biodiversity Metric habitat types present onsite and to fully inform the Biodiversity Impact Assessment (BIA) using the Statutory Biodiversity Metric (SBM). This information was used to adequately map the onsite habitats to inform the BIA.

[1] JNCC (2016) *Handbook for Phase1 Habitat Survey – a technique for environmental audit.* ISBN 0 86139 636 7
[2] DAFOR: D=dominant, A=abundant, F=frequent, O=occasional, R=Rare, L=Locally
[3] WJ Sutherland (August 2006) Ecological Census Techniques. A Handbook, 2nd Edition. ISBN: 9780521606363
[4] UKHab Ltd. (July 2023) UK Habitat Classification Version 2.0 https://ukhab.org/

2.9 A summary of the habitats present onsite is provided within the report including the UK Hab equivalent habitats for the purpose of the Biodiversity Impact Assessment (BIA).

Habitat Condition Assessment

2.10 Habitat condition was assessed and assigned during the habitat appraisal following the guidance from the 'The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology' excel document (Natural England, February 2024) which accompanies the Statutory Biodiversity Metric. Assessment criteria were followed for each broad habitat type, to determine the condition of each habitat.

Survey Limitations

2.11 The initial habitat appraisal was carried out in February which is outside the optimal period for surveys (April – September). However, an update Site walkover in April confirmed the habitats present within the optimal survey window, as such, no survey limitations are anticipated.

Strategic Significance

2.12 Strategic significance is the local significance of the habitat based on its location and habitat type.

2.13 The Statutory Biodiversity Metric assigns strategic significance based on the Local Nature Recovery Strategy (LNRS) and descriptions set out in Table 7 of the Statutory Metric User Guide[5].

2.14 In the absence of an LNRS, the relevant planning authority should specify alternative documents for assigning strategic significance whilst an LNRS is put in place. The strategic significance is then based on the alternative documents and the descriptions set out in Table 8 of the Statutory Metric User Guide[6]. If no alternative documents are specified by the relevant planning authority medium strategic significance can be assigned when the criteria in Table 8 are met.

2.15 Westmorland and Furness Council (WFC) has been appointed by DEFRA to be the Responsible Authority[7] to lead on the development of the LNRS for Cumbria. However, WFC has not produced a LNRS and does not anticipate to publish it until June 2025[8]. WFC has produced an interim guidance document as well as the Cumbria Local Nature Recovery Network (CLNRN) for determining strategic significance until the LNRS is published.

2.16 The guidance specified by WFC sets out the following for assigning strategic significance for Area Habitats and Hedgerows:

[5] DEFRA (July 2024) The Statutory Biodiversity Metric. User Guide.
[6] DEFRA (July 2024) The Statutory Biodiversity Metric. User Guide.
[7] https://www.gov.uk/government/publications/local-nature-recovery-strategies-areas-and-responsible-authorities#full-publication-update-history
[8] https://www.westmorlandandfurness.gov.uk/planning-and-building-control/biodiversity/biodiversity-net-gain-planning-advice

- High = This category can only be applied when the habitat in question is a priority habitat and is within the coverage of the LNRN for that priority habitat (see Table 2). The relevant layers of the CLNRN map are:
    - Primary Habitat;
    - Associated Habitat;
    - Habitat Restoration – Creation;
    - Restorable Habitat;
    - Fragmentation Action Zone; and
    - Network Enhancement Zone 1.
- Medium = This can only be applied when the habitat in question is a priority habitat and is outside the coverage of the LNRN for that priority habitat (see Table 2) or is a priority habitat for which no LNRN has been defined (see Table 2).
- Low = All habitat parcels that cannot be assigned to high or medium strategic significance should remain as the default category of low.

BIODIVERSITY IMPACT ASSESSMENT (BIA)

2.17 To quantify deliverable net gain for the application, the baseline value of the habitats within the Site have been calculated utilising the Statutory Biodiversity Metric.

2.18 The calculations were undertaken on 07.05.2025 and quantified using the Statutory Biodiversity Metric (Appendix A).

3.0 BASELINE ECOLOGY

3.1 The baseline habitats are shown on Figure 1.

3.2 A summary of the habitats present is provided in Table 1 below. This includes the Biodiversity Metric Habitat Type and the equivalent Phase 1 habitats, as well as a brief description of the habitats and the condition assessments for the purpose of the BIA.

3.3 The grassland survey data and quadrat locations are provided in Appendix B and the habitat condition assessment sheets are provided in Appendix C.

Table 1: Summary of Habitats

Phase 1 Habitat	Biodiversity Metric Habitat Type	Brief Description and Habitat Condition Assessment (HCA)
Area Habitats		
Hardstanding	Urban: Developed land; sealed surface	HS1: Hardstanding associated with Dalzell Street. (Area associated with cable route). Condition: **N/A** Fixed condition.
Hardstanding	Urban: Developed land; sealed surface	HS2: Hardstanding associated with field / farm access track. Condition: **N/A** Fixed condition.
Poor semi-improved grassland	Grassland: Modified grassland	G1: Grassland in the south of the Site. Condition: **Good** Passes: A, B, C, D, E, F, G.
Poor semi-improved grassland	Grassland: Modified grassland	G2: Grassland in the north of the Site. Condition: **Good** Passes: A, C, D, E, F ,G; Fails: B.
Scattered trees	Individual trees: Rural trees Small trees (DBH >7.5cm and ≤30cm)	TG1: A group of coppiced sycamores made up of four small trees. Condition: **Moderate** Passes: B, C, E, F; Fails: A, D.
Scattered trees	N/A	Multiple trees with DBH ≤7.5cm. Therefore, these trees are not considered as individual trees as per metric user guidance.
Scattered scrub	N/A	Assessed within adjacent habitats.
Hedgerow Habitats		
Treeline	Line of trees - associated with bank or ditch	TL1: Treeline in south of the Site made up of approximately 11 trees. Condition: **Moderate** Passes: A, B, D; Fails: C, E.
Watercourse Habitats		
Dry ditch	N/A	Dry ditch not holding water. Assessed within adjacent habitats.

Strategic Significance – Baseline Habitats

3.4 Strategic significance has been applied to the baseline habitats as described in the methodology.

3.5 None of the baseline habitats fell within any of the strategic significance criteria set out in the methodology (the Site is not located within the Cumbria Local Nature Recovery Network). As such, all habitats are considered to have a low strategic significance.

Baseline Summary

3.6 From the completed Statutory Biodiversity Metric, the value of the existing habitats is **5.22 Area Habitat Units** and **0.12 Hedgerow Units** (see Appendix A).

4.0 BIODIVERSITY IMPACT ASSESSMENT

4.1 In accordance with the National Planning Policy Framework (NPPF) (December 2024)[9], proposals should "*pursue opportunities for securing measurable net gains for biodiversity*".

4.2 Strategic Policy N3: 'Biodiversity Net Gain' of the Copeland Local Plan[10] states that all development "*must provide at least 10% biodiversity net gain over and above existing site levels, following the application of the mitigation hierarchy set out in Policy N1*".

4.3 The Environment Act 2021[11] became mandatory on 12th February 2024 and requires a minimum 10% net gain in biodiversity units.

Biodiversity Net Gain Assessment

4.4 From the completed Statutory Biodiversity Metric, the value of the existing habitats is **5.22 Area Habitat Units** and **0.12 Hedgerow Units** (see Appendix A).

4.5 In order to achieve a 10% net gain the Site must achieve **5.74 (+0.52) Area Habitat Units** and **0.14 (+0.02) Hedgerow Units.**

Mechanisms of achieving a net gain

4.6 In order to achieve a 10% net gain in onsite Area Habitat Units (AHU) and Hedgerow Units (HU) the Site must achieve an AHU value of 5.74 (+0.52) and a HU value of 0.14 (+0.02).

4.7 There are three mechanisms in which developers can secure a net gain, and a combination of all three mechanisms can be used. The three mechanisms for net gain delivery are:

a) Enhancing and restoring biodiversity onsite (within the redline boundary (RLB)).
   - further consideration of the feasibility of onsite BNG provision, this could include making provision within the Site layout to provide and secure areas for BNG provision.

b) Delivery through enhancing and restoring biodiversity offsite. Developers can either:
   - make offsite biodiversity gains on their own land outside the RLB of the Site; or
   - buy offsite biodiversity units on the market. This can be from a range of sources including:
     - directly from a landowner.
     - from a habitat bank operator.
     - through a broker.
     - from a trading platform.

[9] Ministry of Housing, Communities and Local Government (December 2024). National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 Accessed: February 2025
[10] Cumberland Council (November 2024) Copeland Local Plan 2021-2039. Available at: https://www.copeland.gov.uk/content/copeland-local-plan Accessed: May 2025.
[11] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

- or from the LPA (if they provide this service).

c) Purchasing Statutory Biodiversity Credits (SBC)[12, 13]. However, this must be a last resort.

i) SBCs are different from offsite biodiversity units sold in the offsite private market.

ii) SBCs are priced in tiers. Different habitats are grouped in tiers to reflect the cost to create, maintain and monitor different habitat types. Prices of SBCs are reviewed every six months. Tiers 'A1' to 'A5' refer to area habitats (A1 being lower value habitats and A5 higher value), tier 'H' refers to hedgerow, and 'W' to watercourse habitats. The SBM automatically calculates the required number of SBCs and sorts the biodiversity habitat deficit into the right pricing tiers.

iii) A spatial risk multiplier is also applied to the SBCs to ensure they do not compete with biodiversity units in the offsite market. Therefore, one credit is worth 0.5 biodiversity units. The spatial risk multiplier is applied automatically and factored into the unit shortfall summary.

Additional Enhancements

4.8 The above calculation does not account for the following additional enhancement measures that will be provided within the Proposed Development as these cannot be quantified using the BM calculator. The inclusion of the following biodiversity enhancements with what has already been outlined above would be considered a benefit to biodiversity.

- Provision of bat and bird boxes throughout the Site;
- Log piles to act as refugia for a range of species within areas of greenspace.

Post-Development Net Gain

4.9 It is anticipated that a net gain of at least 10% is achievable within the Site boundary. Details of the calculations and biodiversity gain plan will be provided in due course in an addendum Biodiversity Impact Assessment Report once the landscaping proposals are finalised.

[12] Statutory Biodiversity Credit Guidance. Available at: https://www.gov.uk/guidance/statutory-biodiversity-credits Accessed: July 2024
[13] Statutory biodiversity credit prices. Guidance. Last updated February 2024. Available at: https://www.gov.uk/guidance/statutory-biodiversity-credit-prices Accessed: July 2024

5.0 COMPLIANCE

Legal Minimum National Information Requirements

5.1 Where an applicant believes the development would be subject to the biodiversity gain condition, the application must be accompanied by minimum information set out in Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015.

5.2 The minimum requirements are set out in Table 2.

Table 2: Legal Minimum National Information Requirements

Requirement	Confirmation that requirement has been satisfied
Confirmation that the applicant believes that planning permission, if granted, for the development would be subject to the biodiversity gain condition.	It is anticipated that the Site would be subject to the biodiversity gain condition.
Baseline Conditions the pre-development biodiversity value(s), either on the date of application or earlier proposed date (as appropriate).	The pre-development biodiversity values (baseline values) are detailed in Section 3 of the report and are calculated using the Statutory Biodiversity Metric v. 1.0.3 provided in Appendix A. The baseline value of the Site is: • 5.22 Area Habitat Units • 0.12 Hedgerow Units. There are no watercourse units applicable to the Site.
Relevant Date where the applicant proposes to use an earlier date, this proposed earlier date and the reasons for proposing that date.	No earlier date has been used. The relevant date is the date of application.
Metric Calculations The completed metric calculation tool showing the calculations of the pre-development biodiversity value of the onsite habitat on the date of application (or proposed earlier date) including the publication date of the biodiversity metric used to calculate that value.	The completed metric is provided in Appendix A in the Excel format. Headline results are provided within this document. The pre-development biodiversity values (baseline values) are detailed above.

Degradation A statement whether activities have been carried out prior to the date of application (or earlier proposed date), that result in loss of onsite biodiversity value ('degradation'), and where they have: • a statement to the effect that these activities have been carried out; • the date immediately before these activities were carried out; • the pre-development biodiversity value of the onsite habitat on this date; • the completed metric calculation tool showing the calculations, and • any available supporting evidence of this.	No activities have been carried out prior to the application date, as such no degradation is considered to have been taken place.
Irreplaceable Habitats a description of any irreplaceable habitat (as set out in column 1 of the Schedule to the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024) on the land to which the application relates, that exists on the date of application, (or an earlier date).	No irreplaceable habitats onsite.
Baseline Habitat Plan plan(s), drawn to an identified scale and showing the direction of North, showing onsite habitat existing on the date of application (or earlier proposed date), including any irreplaceable habitat (if applicable).	The baseline habitat plans are provided in Figure 1.

APPENDIX A: STATUTORY BIODIVERSITY METRIC (SBM)

The headline results are provided below. Please see the accompanying SBM (excel document) for further details.

Note that the errors occur as a result of no post-development habitats being inputted. The results only show the baseline value of the Site.

JT Energy Storage, Egremont, Cumbria

Headline Results

Return to results menu

Scroll down for final results ⚠

On-site baseline	*Habitat units*	5.22		
	Hedgerow units	0.12		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change (units & percentage)	*Habitat units*	-5.22	-100.00%	On-site net gain is less than target set ⚠
	Hedgerow units	-0.12	-100.00%	On-site net gain is less than target set ⚠
	Watercourse units	0.00	0.00%	
Off-site baseline	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	*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)	*Habitat units*	-5.22		
	Hedgerow units	-0.12		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	*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)	*Habitat units*	-5.22		
	Hedgerow units	-0.12		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-100.00%		Total net gain achieved is less than target set ▲
	Hedgerow units	-100.00%		Total net gain achieved is less than target set ▲
	Watercourse units	0.00%		
Trading rules satisfied?		No - Check Trading Summaries ▲		

Area created must match area lost for both onsite and offsite ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	5.22	5.74	5.74	
Hedgerow units	10.00%	0.12	0.14	0.14	
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲

APPENDIX B: GRASSLAND SURVEY

Grassland surveys were carried out in field parcels G1 and G2. Species Abundance is recorded using the DAFOR Scale.

Grassland quadrat locations are provided on Figure B1.

Table B1: Grassland Survey of Field Parcel G1.

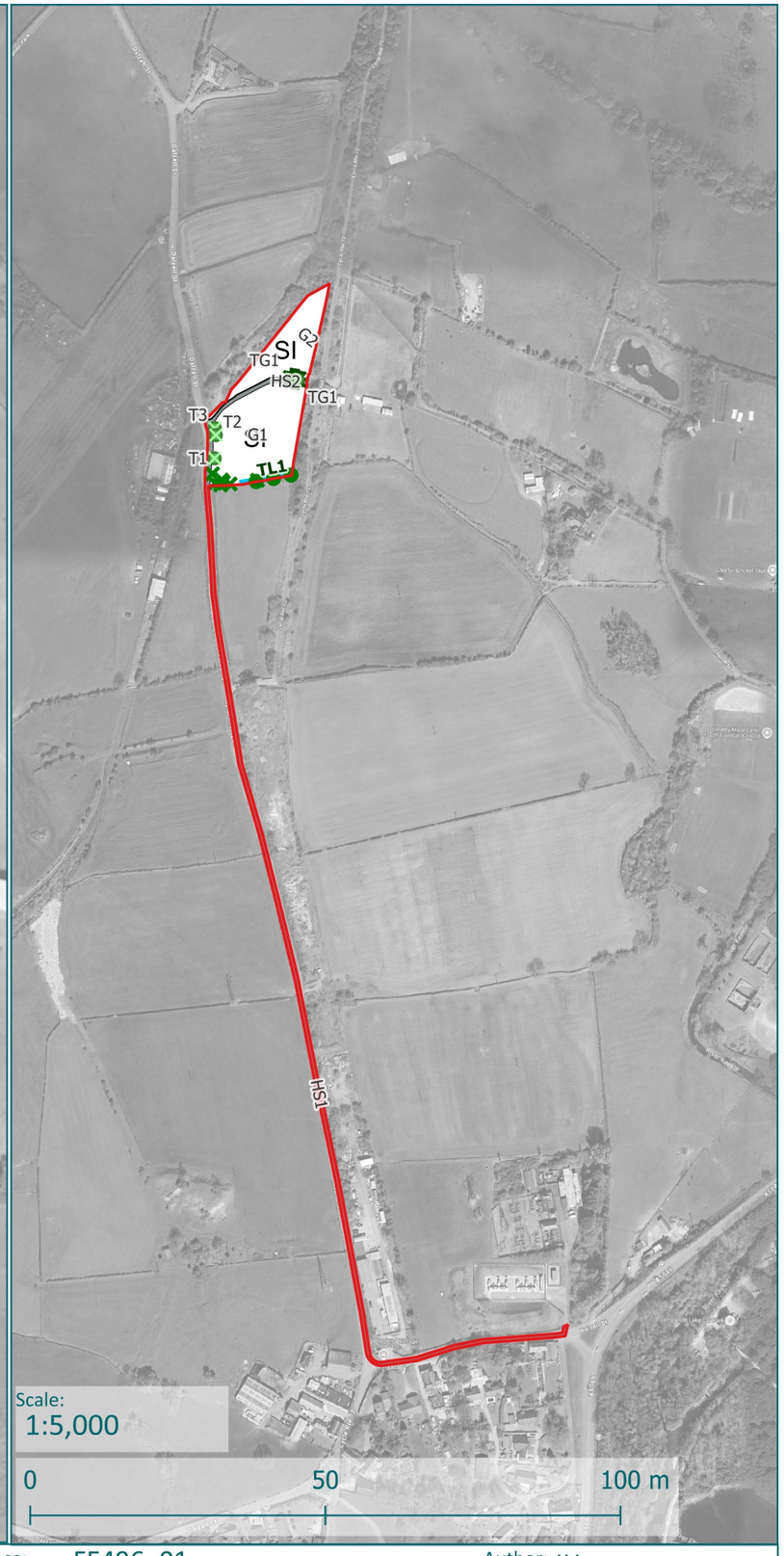
Common Name	Latin Name	DAFOR	Quadrat Ref.	Q1	Q2	Q3	Q4	Q5
			OS National Grid Reference	NY 00812 13713	NY 00839 13714	NY 00844 13736	NY 00867 13757	NY 00820 13749
Common bent	*Agrostis capillaris*	O		Yes	-	Yes	Yes	Yes
Crested dogstail	*Cynosurus cristatus*	A		Yes	Yes	Yes	Yes	Yes
Common nettle	*Urtica dioica*	R		-	-	Yes	-	-
Common sorrel	*Rumex acetosa*	LF		Yes	-	-	-	Yes
Creeping bent	*Agrostis stolonifera*	A		Yes	Yes	-	Yes	Yes
Cuckoo flower	*Cardamine pratensis*	R		-	-	-	Yes	-
Field buttercup	*Ranunculus acris*	F		Yes	Yes	Yes	Yes	Yes
Jointed rush	*Juncus articulatus*	R		-	-	-	Yes	-
Marsh thistle	*Cirsium palustre*	R		-	-	-	Yes	-
Red fescue	*Festuca rubra*	O		-	-	Yes	Yes	-
Soft rush	*Juncus effusus*	R		-	-	Yes	Yes	-
Yorkshire fog	*Holcus lanatus*	F		Yes	Yes	Yes	-	Yes
Total Species Recorded				6	4	7	9	6
Average Species Recorded								6.4

Note: Species poor semi-improved grassland habitat with evidence of heavy sheep grazing although no stock present at time of survey. Localised erosion near gate and feeding trough. Colonisation of wetter areas along eastern boundary at bottom of slope with additional species such as *Juncus effusus* (O), *Juncus articulates* (O), *Cardamine pratensis* (R), and one rosette of *Cirsium palustre* (R).

Table B2: Grassland Survey of Field Parcel G2.

Common Name	Latin Name	Quadrat Ref.	Q1	Q2	Q3	Q5
		OS National Grid Reference	NY 00867 13793	NY 00838 13789	NY 00853 13818	NY 00880 13840
Common bent	*Agrostis capillaris*		-	-	-	A
Crested dogstail	*Cynosurus cristatus*		F	F	O	-
Cocksfoot	*Dactylis glomerata*		O	-	-	-
Daisy	*Bellis perennis*		R	-	R	-
White clover	*Trifolium repens*		F	F	F	F
Broadleaved dock	*Rumex obtusifolius*		O	R	R	-
Creeping buttercup	*Ranunculus repens*		R	-	-	R
Dandelion	*Taraxacum sp.*		R	O	R	R
Common mouseear	*Cerastium fontanum*		O	-	-	-
Hogweed	*Heracleum sphondylium*		R	-	O	-
Common sorrel	*Rumex acetosa*		-	-	-	R
Creeping bent	*Agrostis stolonifera*		A	A	F	-
Red fescue	*Festuca rubra*		F	O	F	F
Yorkshire fog	*Holcus lanatus*		R	O	O	O
Total Species Recorded			12	7	9	7
Average Species Recorded						8.75

APPENDIX C: HABITAT CONDITION ASSESSMENT (HCA)



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Key

- Site Boundary

Baseline Habitats

- Hardstanding
  [Urban: Developed land; sealed surface]
- SI — Poor semi-improved grassland
  [Grassland: Modified grassland]
- Small individual tree
  [Individual tree: Rural tree]
- Very small tree (< 7.5cm DBH)
  [Excluded from metric]
- Scrub - scattered
  [Excluded from metric]
- Broadleaved trees
  [Line of Trees]
- Dry ditch

Client:	JT Energy Storage Ltd (Windel Energy)	Plan Reference:	FE496_01	Author:	JH
Project:	BESS Egremont, Cumbria	Project Reference:	FE496	Date:	9/5/2025
Title:	Figure 1 - Baseline Habitat Plan	Report Reference:	BIA01	Scale:	1:1,000

C:\Users\james.harries\Futures Ecology Ltd\James.Eales - Projects\FE496 BESS Egremont\QGIS\1_Plans\FE496_Biodiversity Net Gain Plan.qgs

Survey Cover Sheet			
Survey date/s	19.02.2025	**Site name or location**	FE496
Weather conditions		**Project or development name**	JT Energy Storage, Egremont, Cumbria
Surveyor name	J. Wheeldon	**On-site or off-site**	Onsite
Survey reference	Baseline	**Reason for assessment (if not baseline condition survey)**	
Notes			

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)

UK Habitat Classification (UKHab) Habitat Type

Grassland - Modified grassland

On-site or off-site, site name and location	Onsite, JT Energy Storage, Egremont, Cumbria	**Survey date and Surveyor name**	19.02.2025 J. Wheeldon
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	NY0083113735	**Habitat parcel reference**	G1

Habitat Description

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 (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	
	Essential criterion achieved (Yes or No)	No	
	Number of criteria passed	5	

Condition Assessment Result (out of 7 criteria)	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 criterion A)	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*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location	Onsite, JT Energy Storage, Egremont, Cumbria	**Survey date and Surveyor name**	19.02.2025 J. Wheeldon
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	NY0086313782	**Habitat parcel reference**	TG1

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	No	Group of 4 coppiced sycamore trees.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	
C	The tree is mature (or more than 50% within the block are mature)[1].	Yes	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	No	Coppiced.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	
	Number of criteria passed	4	

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	X
Passes 2 or fewer criteria	Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.		

Suggested enhancement interventions to improve condition score[2]

Footnotes

Footnote 1 - 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)

Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.

Condition Sheet: LINE OF TREES Habitat Type

Habitat Types

Line of trees
Line of trees – associated with bank or ditch
Ecologically valuable line of trees
Ecologically valuable line of trees – associated with bank or ditch

Please see the separate Individual trees condition sheet for linear blocks and groups of trees in an urban setting. You should only use this Line of trees condition assessment and record this habitat type in rural locations.

Habitat Description

See the Statutory Biodiversity Metric User Guide.
This assessment is based on the Hedgerow Survey Handbook[1]. For further clarifications please refer to the Handbook.
Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.

On-site or off-site, site name and location	Onsite, JT Energy Storage, Egremont, Cumbria	**Survey date and Surveyor name**	19.02.2025 J. Wheeldon
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	NY0084313698	**Habitat parcel reference**	TL1

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	At least 70% of trees are native species.	Yes	
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Yes	
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	No	
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice[2].	Yes	
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). 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.	No	
		Number of criteria passed	3

Condition Assessment Result (out of 5 criteria)	**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. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).

Footnote 2 – Where ancient and veteran trees are present, 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)

Survey Cover Sheet			
Survey date/s	15.04.2025	**Site name or location**	FE496
Weather conditions		**Project or development name**	JT Energy Storage, Egremont, Cumbria
Surveyor name	D. Heppenstall	**On-site or off-site**	Onsite
Survey reference	Baseline	**Reason for assessment (if not baseline condition survey)**	Update walkover (inclusion of additional land not previously assessed)
Notes			

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)

UK Habitat Classification (UKHab) Habitat Type

Grassland - Modified grassland

On-site or off-site, site name and location	Onsite, JT Energy Storage, Egremont, Cumbria	**Survey date and Surveyor name**	15.04.2025 D. Heppenstall
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	NY0085913809	**Habitat parcel reference**	G2

Habitat Description

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 (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Yes	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	
	Essential criterion achieved (Yes or No)		Yes
	Number of criteria passed		6

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

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*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).