NEW DEER 2 BATTERY ENERGY STORAGE PROJECT
TREE MANAGEMENT REPORT
1st April 2025

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TREE SURVEY & MANAGEMENT REPORT
1st April 2025

1. INTRODUCTION

The proposed development comprises a grid-connected Battery Energy Storage System (BESS) with a capacity of up to 400 MW. The proposed development will import and export energy to and from the transmission network via the proposed nearby New Deer 2 substation. The proposed development will include battery storage containers, transformers, substation, access tracks, grid connection powerlines, fencing, drainage, landscaping, and other associated infrastructure.

The Planning Boundary is located within commercial forestry blocks and agricultural fields amounting to approximately 128 hectares (Ha). The majority of the forestry blocks are recently replanted conifer and the agricultural areas are a mix of grazing and arable.

Bowlts Chartered Surveyors has been instructed to inspect the significant trees that could be affected by the proposed development and to prepare the following information to support the planning application:-

- a schedule of the relevant trees to include basic data and a condition assessment;
- an appraisal of the impact of the proposal on trees; and
- a preliminary arboricultural method statement setting out standard protective measures and management for trees to be retained.

This survey was undertaken on 11th February 2025 by Ben Watson of Bowlts Chartered Surveyors on behalf of Field New Deer.

The report provides an analysis of the impact of the proposed development on trees and local amenity with additional guidance on appropriate management and protective measures. Its primary purpose is for the planning authority and the Energy Consents Unit (ECU) to review the tree information and consider its relative merits against the planning proposal.

The survey and resulting report have been produced in accordance with the best practice guidelines set out in BS 5837 (2012) *Trees In Relation To Construction Sites: Recommendations.*

2. SITE DESCRIPTION

2.1 Location

The survey site is located to the south east of the town of Cuminestown in the county of Aberdeenshire, Scotland.

Centroid Grid ref: NJ 814 477
Postcode: AB53 8JJ

What 3 Words: /// changes.valued.forgot

2.2 Description

The proposed development comprises a grid-connected BESS with a capacity of up to 400 MW. The proposed development will import and export energy to and from the transmission network via the planned nearby New Deer 2 substation. The proposed development will include battery storage containers, transformers, substation, access tracks, grid connection powerlines, fencing, drainage, landscaping, and other associated infrastructure.

The Planning Boundary (PB) is located within a mixed landscape consisting of commercial forestry and agricultural field systems amounting to approximately 128 Ha. The BESS Site is located in a deer fenced area of recently restocked commercial conifer within the west of the PB. These woodland groups (WG1, WG2 and WG3) amount to a total of just under 33ha and consist primarily of recently restocked Sitka spruce. WG1 is a few years younger than WG2 & 3 with WG3 consisting of a mixture of eucalyptus and native broadleaves.

The remainder of the area within the PB is mostly agricultural, both pasture and arable. There is an additional area of woodland labelled WG9 within the boundary. This is a conifer plantation approximately 15-20 years old and consists primarily of Sitka spruce and larch. There is a group of mature sycamore (WG7) at Northburnhill, remnants of old shelterbelts (WG8 and trees along the road near Berryhill). Rowan trees are present between field boundaries and there are several hedges to the eastern end of the area.

There are a number woodland groups outside the boundary that have the potential to be affected by the proposals: WG4 a commercial conifer block consisting of Sitka spruce and larch roughly 15 years old, WG5 a native broadleaf section roughly 15 years old, WG6 a mature conifer block of larch with an understory of Sitka spruce.

As expected in a historical farming environment there are several archaeological points of interest. Just to the east of the BESS Site, NJ 8109 4812, there is a Canmore record (19876) for the site of a historic cairn although this has since been destroyed. There are additional heritage features within the PB: Northburnhill a steading found on the 1867 1st edition, a rig a fur field system in WG9 along with a historical dyke on the northern edge.

2.3 Site Constraints

The BESS Site is not constrained by any statutory designations. The majority of WG1, however, is under a restocking grant contract from Scottish Forestry (case number 21FGS59746). Any compensatory planting undertaken as a result of the project going ahead would require like for like planting and discussion with the Scottish Forestry as grantors.

The aforementioned archaeological points, whilst not designated, remain of potential heritage value and should be avoided during the development.

3. SURVEY METHODOLOGY

The site survey was undertaken on 11th February 2025 using information supplied by the client.

In order to assess the impact of the proposed development, information was collected against the criteria below.

Once the trees were positioned, the tree data required in the BS5837:2012 process was collected for each tree:-

Tree no	As per plan
Species	Common name/Botanical Name
Height	Metres
Diameter at 1 .5m from	cm
Crown spread (north)	Metres
Crown spread (east)	Metres
Crown spread (south)	Metres
Crown spread (west)	Metres
Age class	Young/Semi mature/Mature/Over mature/Veteran
Physical condition	Grading of physical condition assessment of roots through to foliage
Structural condition	Grading of structure, identifying potential weaknesses
Preliminary	Arboricultural recommendations
Category	A = High, B = Medium, C = Low, U = Unsuitable
Criteria	1 = Arboricultural value, 2 = Landscape value, 3 = Cultural/conservation value
Comments	Additional relevant information

Once the tree survey was completed in the field, the data was verified and downloaded into ArcMap. Analysis was undertaken to identify which trees were affected by the proposed development.

4. SURVEY RESULTS

The site was surveyed in relation to the proposed development. Trees were divided into categories depending on their level of cultural and ecological importance with A regarded as the most important and C as the least important (U as unsuitable). Definitions may be found at the end of Appendix I.

Full and detailed tree survey data can be found in Appendix I.

5. ARBORICULTURAL IMPACT ASSESSMENT

In total, 7 individual trees were identified, surveyed and evaluated. In addition, 9 groups of trees and woodlands were surveyed. These include all of the woodlands inside the PB and several lying on the margins which had the capacity to impact on, or be impacted by, the development (See Map 1). Overall, the woodlands on site were found to be young commercial plantations that had recently been replanted following the felling of the previous crop. As such, all were regarded to be of limited ecological or landscape value.

The proposed footprint of the development is now known and is shown on Map 2. The main woodland groups affected by the proposals are WG1, WG2, WG 3 and WG 5. These are recently replanted areas of commercial conifer established between 2020 and 2023. These are comprised of young neophyte conifer plantations (mostly Sitka spruce) and, in the wider context of Aberdeenshire, have low ecological value and have been categorised as category C. There is a Scottish Forestry restocking grant contract (21FGS59746) on WG1 which was claimed in 2023, and any changes to this or compensatory planting would therefore need to be approved by Scottish Forestry as well as the Planning Authority.

Despite the initial impact of the development on the woodland, it is understood that some areas will be replanted with site native broadleaves as part of the landscaping proposals. Other areas will be left as open as part of the Biodiversity Net Gain contribution. Therefore, the impact should be considered in two parts. Gross impact and Net impact. This is summarised below.

Table 1 – Summary of Gross and Net Losses of Woodland

Tree loss which the Landscape Plan has accounted for	**Ha**
Recolonised heathland (inc. temp compound)	7.64
SuDS	1.34
Retained heathland (west)*	0.61
Retained heathland (northeast)**	0.11
BESS Compound + internal tracks + bellmouth	10.29
Proposed native planting	4.97
Total loss	**24.29**
Net loss (i.e., minus native planting)	**19.32**
Cable Route (inc. 30 m working corridor)	0.65
Total loss	24.94
Final Net Loss (+ cable route, - native planting)	**19.97**

*not included within the tree loss as this is existing.

**not included within the tree loss as this is existing.

Retained forestry (within the west)	7.9

The implementation of this proposal would result in the loss of approximately 19.92 Ha of this woodland, primarily under the main site, but also as part of the attenuation pond and heathland restoration areas.

The loss of woodland from development is addressed in PA2023-01, Planning Advice Aberdeenshire, Forestry and Woodland Strategy (2021). Guidance as follows.

Policy PR1 Protecting Important Resources:

- Identifies that developments would not normally be approved where they result in the loss of, or serious damage to, trees and woodlands of significant ecological, recreational, historical, landscape or shelter value. Development which damages this resource will only be approved where there is significant overriding public interest.

- Requires any development which damages or results in the loss of trees and woodland, approved due to overriding public interest, to minimise damage to existing trees and protect existing or potential ecological networks. It also requires compensatory planting in such cases.

It is understood that the proposed development constitutes national infrastructure and is thus covered under the clause that refers to overriding public interest.

The removal of woodland for development purposes is also dealt with under "The Control of Woodland Removal" as published by the Scottish Government (2009). Annex A refers;

- Any significant environmental impacts of woodland removal associated with development will be assessed in accordance with the requirements of 'The Environmental Impact Assessment (Scotland) Regulations 1999' or, in the case of Section 36 & 37 consents under the Electricity Act 1989, the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000.

- The Town & Country Planning (Scotland) Act 1997 places a duty on planning authorities "to ensure, whenever it is appropriate, that in granting planning permission for any development adequate provision is made, by the imposition of conditions, for the preservation or planting of trees".

It is considered that under the current guidelines this area of woodland could be suitably compensated for elsewhere in agreement with the Local Planning Authority. Consequently, it is proposed that an equivalent area of similar or better quality be found elsewhere in compensation.

The remaining trees and woodland groups within or close to the PB should be unaffected by the proposed development. The majority have been classed as category C as they are either commercial forestry blocks or semi mature trees growing in field boundaries or along the road edge. Two woodland groups have been classed as category B, WG5 and WG7. These are a planted area of young broadleaves at WG5 and group of mature Sycamore around

Northburnhill ruined steading. In addition, there are several hedges to the eastern end of the Planning boundary which should be protected where possible.

Table 2 - Summary of Trees That May be Affected by the Development

	Category A	Category B	Category C	Category U
Trees retained	0	0	3	
Trees removed	0	0	4	0
Total surveyed	0	0	7	0
Woodlands/groups	0	2	7	0
Area removed (Ha)	0	0	24.29	0
Area retained (Ha)	0	0.6	43.11	0
Woodland area replaced.			4.97	
Total area (Ha)	0	0.6	67.4	0

6. PRELIMINARY ARBORICULTURAL METHOD STATEMENT

Based on the site evaluation and the above assessment of trees and woodland it is considered that this project can be accommodated on this Site without long term detriment to the tree and woodland environment. Given the young age of the woodland to be removed, it is considered that this can be compensated by planting elsewhere, either on or off-site. The area of woodland to be removed amounts to 19.92 Ha of commercial woodland. For the purposes of this report is assumed that the whole of the development area within woodland groups (please see Figure 2 'Site Impact') will be removed, although it is recognised that this may not be the case and that a few trees around the fringes of each block may be retained as not all of the land will be required. Given that the crop is young, there is no chance of windthrow. Therefore the area surrounding the BESS footprint could be retained without further issues for the retained trees. There would clearly need to be a buffer zone around the footprint and the ability to manage the woods in the future without impact on BESS. The proposed recreational walking track / forestry track, which is illustrated on the Landscape Mitigation

Plan, would provide this buffer, and allow for future management of the retained forestry within the west of the BESS Site.

For the trees that have been identified to remain, certain measures should be taken to protect some of these. In most cases these will be self-protected due to the presence of tracks and fences that are beyond the construction zone. However, within WG1 and WG2, protective fencing is recommended to protect the young trees not being removed as part of construction and separate them from the construction zone (see Map 3).

6.1 Mitigation

Where trees are to be retained, the principal form of mitigation will be through the establishment of Construction Exclusion Zones based on a Root Protection Area. Where required, these will be defined by the installation of protective fencing. Some parts of the site are inherently protected by fencing and where this is the case, no additional fencing will be required.

6.2 Construction Exclusion Zones (CEZ)

In some cases trees and woods within the surveyed area are self-protected and lie well outwith the construction footprint. In these cases not additional fencing will be required.

Map 3 (Tree Protection Plan) shows the location of fencing required to define the Construction Exclusion Zones. This fencing is based on the Root Protection Area required to prevent unnecessary damage to the trees that are to remain.

No works access should be allowed into the Construction Exclusion Zones (CEZs) during the development phase. No storage of any building materials or any other materials should be allowed within the CEZs. Once the exclusion zones have been protected by barriers and/or ground protection, construction work can commence. All weather notices should be erected on the barrier with words such as: "Construction Exclusion Zone — Keep out".

In addition the following should be addressed or avoided –

- Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a Banks-man to ensure that adequate clearance from trees is maintained at all times. In some circumstances it may be impossible to maintain adequate clearance thus necessitating access facilitation pruning. This is to be agreed prior to any work being carried out.

- Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of the tree stem.

- Fires should not be lit in a position where their flames can extend to within 5m of foliage, branches of trunk. This will depend on the size of the fire and the wind direction.

- Notice boards, telephone cables or other services should not be attached to any part of the trees.

- It is essential that allowance should be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

6.3 Construction of Protective Fencing

In terms of tree and woodland impact, the main receptors are the impact on tree roots arising as a result of excavation and machinery tracking.

The potential impact on the habitat will be ephemeral and likely to be of minimal consequence. Machinery impact will be localised and the vegetation affected is abundant and will recover quickly. This is mostly comprised of heather species and bilberry.

CEZs (expressed as Root Protection Radius - RPR) have been identified in the Tree Protection Plan. On this occasion, high visibility netting is deemed sufficient to demarcate the Construction Exclusion zone. The netting should be at least 1000mm in height, high visibility, securely fastened, and upright.

The use of any alternative method of fencing should only be allowed following prior approval from the site Arboricultural Consultant or the Local Planning Authority.

The fencing will remain in place until completion of the development and then only removed with the consent of the local planning authority to permit completion of the scheme.

Other than works detailed within a method statement or approved in writing by the local planning authority, no works including storage or dumping of materials shall take place within the CEZs as defined by the protective fencing.

6.4 Special Construction Techniques

No special construction techniques are proposed for this operation.

6.5 Installation of Underground Utilities

None of these affect the surveyed trees other than those mentioned above.

6.6 Ground Protection During Works Within CEZs

Not applicable.

6.7 New Surfacing Within Root Protection Areas

No new surfacing is proposed during this operation.

6.8 Backfilling (if applicable)

Not applicable.

7. ARBORICULTURAL SUPERVISION

During the construction phase it is recommended that an appropriately qualified arboricultural consultant should be appointed to oversee and record works on site to ensure compliance with the Tree Protection Plan. This would likely constitute an initial visit once the site has been laid out and protective fencing in place, and at least once more during the construction phase.

Any deviation from the agreed prescribed method statement or the occurrence of any unforeseen damage to the trees must be immediately reported to the site's Arboricultural Consultant. All works around the affected area on site must be halted immediately. The Arboricultural Consultant will make a site visit to assess the extent of the damage or deviation from the prescribed method statement and any resulting works required.

Plan prepared by B Watson BSc For. & Dr B Lennon FIC For, RICS, M.A.
1st April 2025

BW/BL/NH 4211
1st April 2025

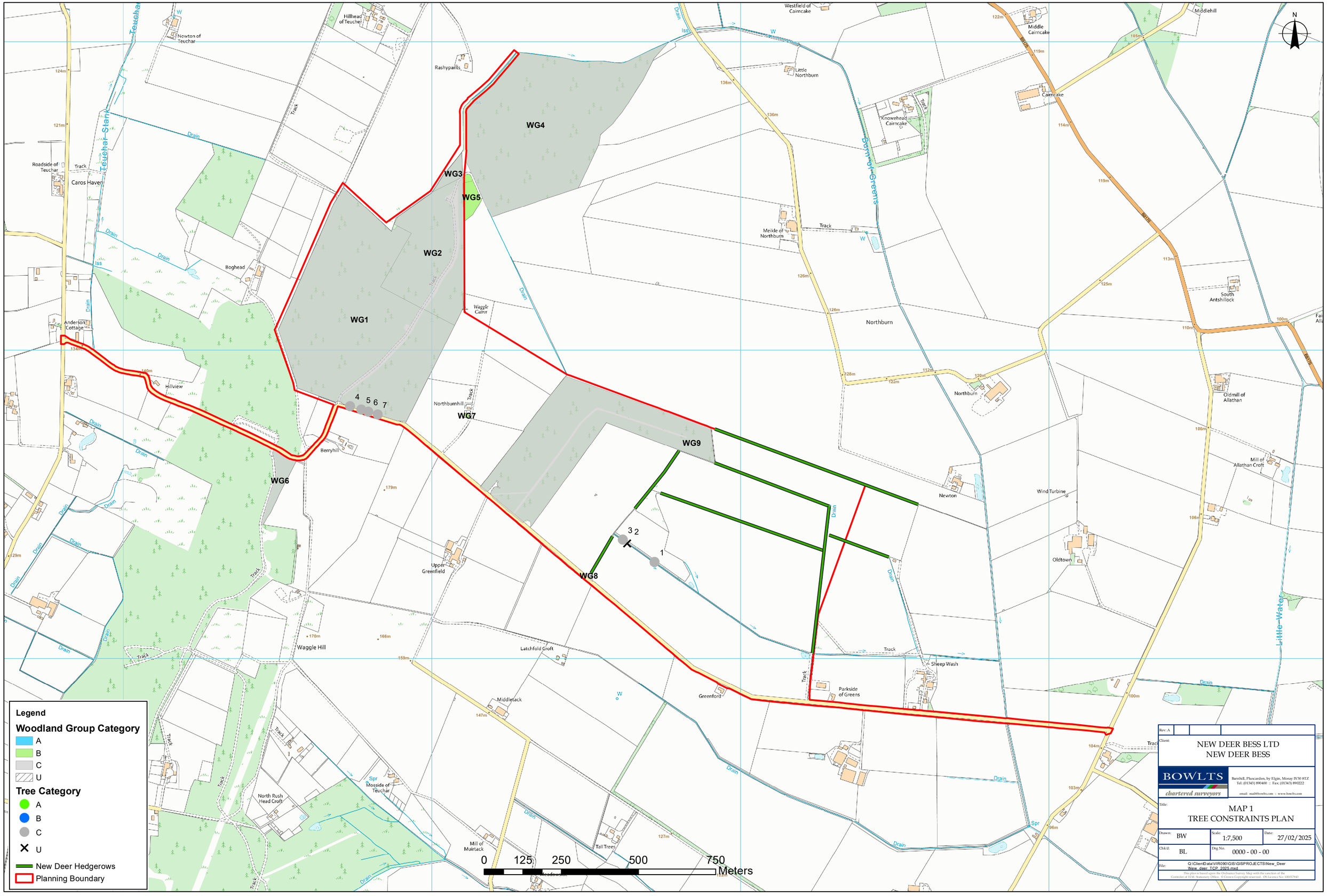
TREE SURVEY RESULTS

SITE: New Deer
CLIENT: Field Energy
DATE OF SURVEY: 11/02/2025

No.	Name	Botanical Name	Dia (cm)	TREE HEIGHT (m)	COMMENT	Crown spread				Category	AGE	STEM No.2/3	AV.DBH	CONDITION	RECOMMENDATION	RPZ Dia (m)
						N	S	E	W							
1	Rowan	*Sorbus aucuparia*	15	7	Rowan growing in field boundary	3	3	3	3	C	SM			Good	Retain	1.8
2	Rowan	*Sorbus aucuparia*	22	7	Windblown rowan in field boundary ditch	5	5	5	5	U	SM			Poor	Retain	2.64
3	Rowan	*Sorbus aucuparia*	12	4.5	Rowan growing in field boundary	3	1	3	4	C	SM			Fair	Retain	1.44
4	Rowan	*Sorbus aucuparia*	22	8	Rowan by roadside, old shelterbelt	4	4	4	4	C	M			Fair	Remove	
5	Sitka spruce	*Picea sitchensis*	30	14	Remainder of old shelterbelt by roadside	4	4	4	4	C	M			Fair	Remove	
6	Ash	*Fraxinus excelsior*	25	10	Remainder of old shelterbelt by roadside	2	3	2	1	C	M			Fair	Remove	
7	Sycamore	*Acer pseudoplatinus*	25	10	Remainder of old shelterbelt by roadside	3	3	3	3	C	M			Good	Remove	

Woodland area/groups									
No.	NVC/ Woodland type	Status (ASNW/LEPO, etc)	Approx. Area (Ha)	Av. Ht (m)	COMMENT	Category	AGE	CONDITION	RECOMMENDATION	RPZ radius (m)
WG1	Conifer plantation	NA	24.35	1	Recent sitka spruce restock	C	3	Good	Remove most of. Retain the western flank as shown on map.	3
WG2	Conifer plantation	NA	8.19	2	Recent sitka spruce restock	C	6	Good	Remove	
WG3	Mixed broadleaf restock	NA	0.43	3	Restocked broadleaf, Eucalyptus and Rowan mostly, gorse coming in	C	6	Good	Remove	
WG4	Conifer plantation	NA	20.32	8	Young sitka and larch plantation	C	15	Good	Retain	3
WG5	Native broadleaf restock	NA	0.60	5	Native broadleaf restock	B	15	Good	Retain	3
WG6	Conifer plantation	NA	0.83	18	Mature Larch with a naturally regenerated Sitka spruce understory	C	55	Good	Retain	6
WG7	Sycamore clump around old farmstead	NA	0.02	14	Mature sycamore, remnants of historic wind break for farmstead	B	60+	Good	Retain	8
WG8	Sitka spruce wind break	NA	0.04	18	Remnant of old field shelterbelt	C	45	Fair	Retain	5
WG9	Conifer plantation	NA	13.19	10	Young sitka and larch plantation	C	15	Good	Partial removal	3
			0.62							

DIA:	Tree diameter in Cm at 1.5m from ground level
TOP HEIGHT:	Height estimated using a Suunto clinometer and rounded to the nearest metre
CROWN SPREAD	Measured (to bark at 1.5m) to the four compass points indicated
CATEGORY:	Retention category see below:
	A - Trees of high quality and value in such condition as to be able to make a substantial contribution for a minimum of 40 years
	B - Trees where retention is desirable - moderate category
	C - Trees of low quality and value currently in adequate condition to remain until new planting could be established and expected to remain for a minimum of 10 years
	U - Trees in such condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management
	1 - Mainly arboricultural qualities
	2 - Mainly landscape qualities
	3 - Mainly cultural values, including conservation
ASSESSMENT	Tree removal or retention decision following condition survey. Tree removal in red indicates tree to be removed due to both silvicultural qualities and proposed development
AGE:	Age class of each tree: OM- Over mature M- Mature, MA- Middle aged, SM - Semi mature, Y - Young
STEM NO:	Number of stems
RPZ Dia (m)	Root Protection Zone expresses as concentric circle in radius (in metres). Based on x12 of stem diameter.



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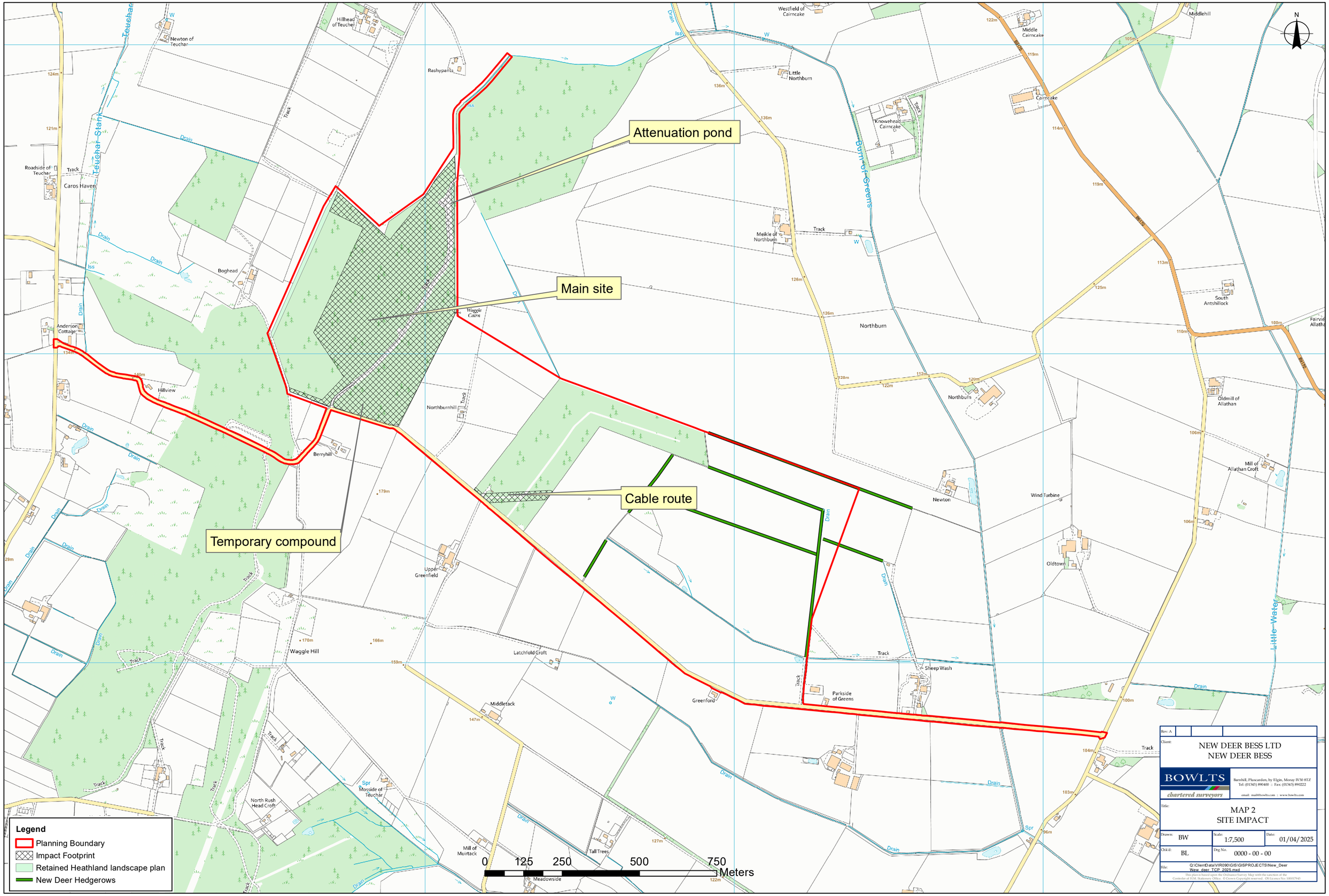

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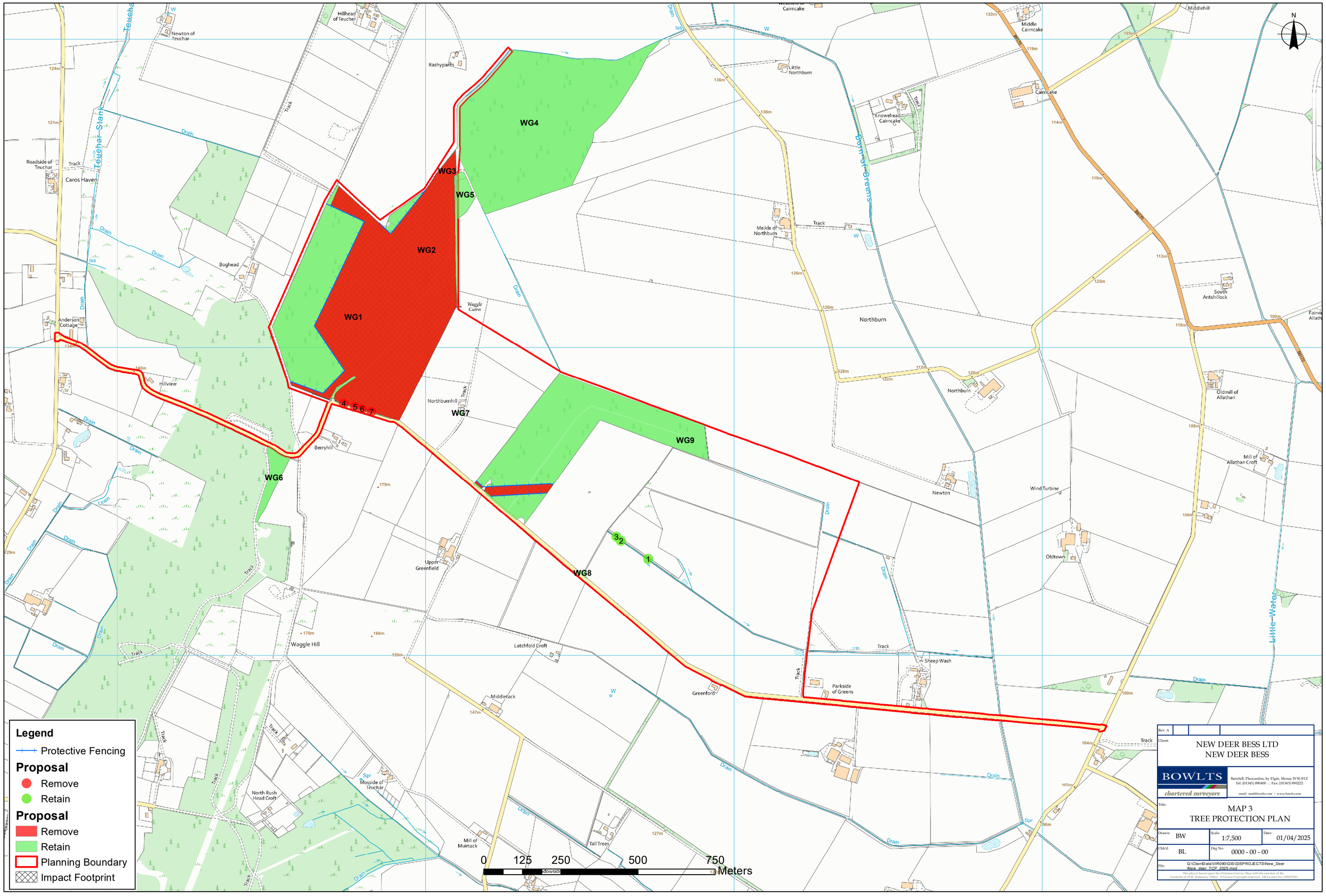

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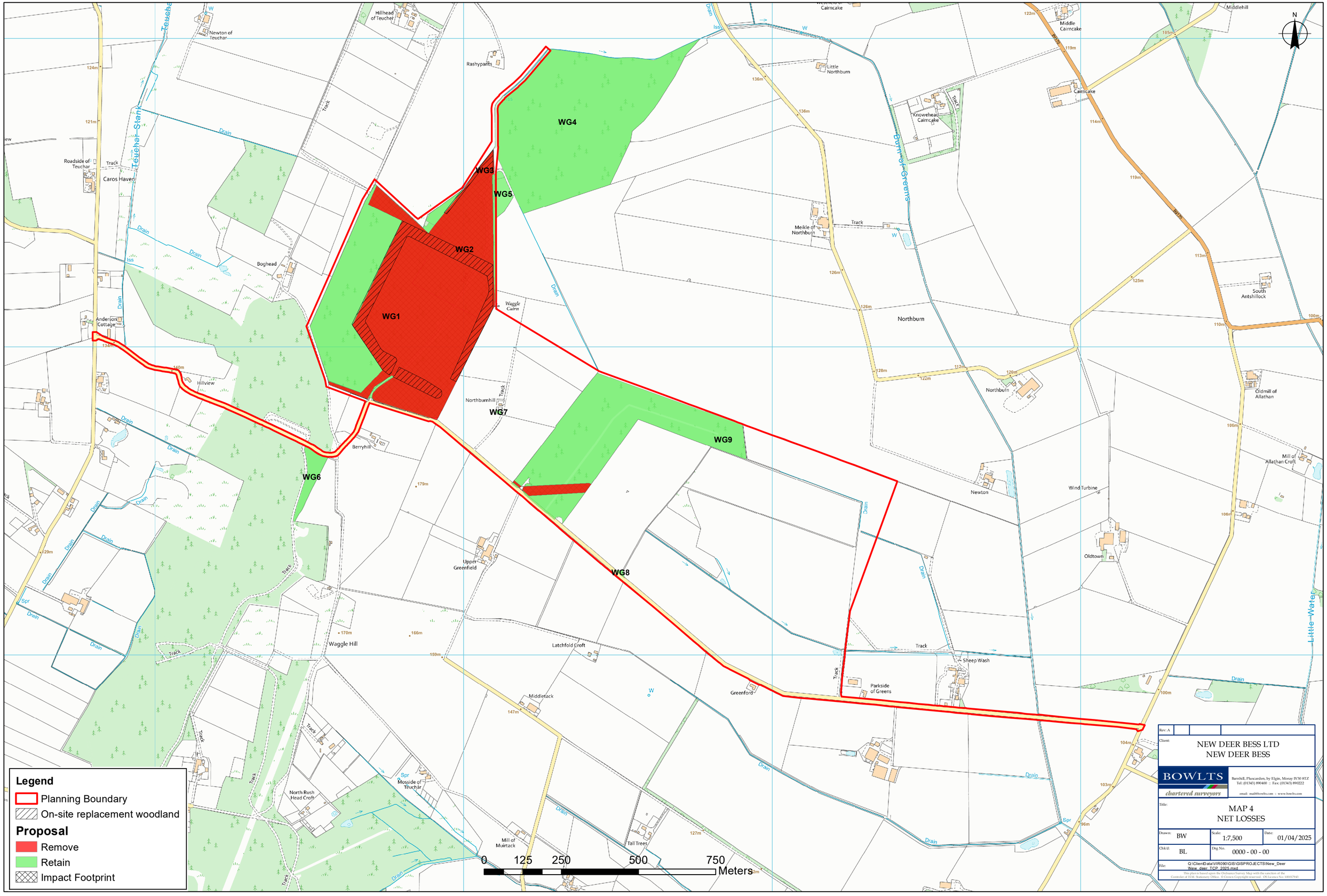

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