

**Beauly to Blackhillock to New Deer to
Peterhead 400 kV Project
Environmental Impact Assessment Report
Volume 5 | Appendices**

Appendix 12.1.120: Woodland Report Parcel 2456



APPENDIX 12.1.120: Woodland Report Parcel 2456

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1 Introduction

- 1.1.1 This Appendix presents information relevant to the Beauly to Blackhillock to New Deer to Peterhead 400 kV Overhead Line (OHL) Project (the Proposed Development). It should be read in conjunction with the Environmental Impact Assessment (EIA) Report, specifically **Chapter 12: Forestry**, for full details of the Proposed Development.
- 1.1.2 As part of the EIA, it has been identified that construction of the Proposed OHL Alignment and the associated access tracks would cross several woodland areas within private or publicly owned landholdings.
- 1.1.3 This woodland report assesses the potential impacts of the Proposed Development on woodland, Parcel 2456. It includes the requirements for woodland removal and management recommendations to mitigate the impact of the woodland removal. The report provides an overview of the characteristics of the affected woodland, including woodland composition, site conditions, soil conditions, exposure levels and existing felling approvals. The report also provides details of existing infrastructure, and potential constraints related to forestry operations. It aims to inform decision-making by identifying key environmental and logistical considerations associated with the Proposed Development. Additionally, it evaluates the feasibility of timber extraction and access whilst highlighting necessary mitigation measures to minimise disruption to the woodland ecosystem and surrounding landscape.
- 1.1.4 Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity hectares (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

2 Woodland Property

- 2.1.1 The landholding property boundaries are identified in **Figure 12.1.120a: Parcel 2456 Location Map**. The woodland is situated along the A891 1.5 km northeast of New Deer in the Aberdeenshire Council region (NJ 898051 481744).

3 Development Requirements

3.1 400 kV Overhead Line Infrastructure Requirements

- 3.1.1 The Study Area for this assessment initially focussed on a 100 m width either side of the centreline of the Proposed OHL Alignment and ancillary infrastructure, where relevant, prior to the identification of an Operational Corridor (OC). The Applicant defines the OC as the area in which it has rights to remove woodland for the purposes of the safe construction, resilience and continued maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002¹ and The Electricity Act 1989². The OC is defined based on two different factors as follows:
- The first factor in which the OC is determined is with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage. As a result, the OC width would be based on the safety distance required to allow for a mature tree falling towards the OHL at the mid-point on an OHL span between two towers, taking account of topography and tree height at maturity. Standard falling distance for a mature conifer tree is considered to be a minimum of 45 m. Where the OC passes through areas of broadleaved woodland, it is noted that the width of woodland removal is likely to be reduced, due to the general lower height and characteristics of the tree species present.

¹ UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: [The Electricity Safety, Quality and Continuity Regulations 2002](#)

² UK Gov (1989). Electricity Act 1989. Available at: [Electricity Act 1989](#)

- The second factor that is considered is the maximum distance that the OHL conductors can blow out from the tower under a 1 in 50-year return period wind condition, plus the required electrical clearance distance. This is to ensure that the OHL conductors do not come into contact with, or come close enough to, any object that could result in an electrical clearance infringement. This conductor blowout distance varies between each tower dependent on span length and must therefore be considered on a span-by-span basis.

- 3.1.2 The typical OC required within areas of commercial conifer forestry for a 400 kV OHL is 90 m (i.e. 45 m either side of the centre line). Where the OC passes through areas of broadleaved woodland, it is proposed that the extent of woodland removal is likely to be reduced due to the lower height of the tree species present. The OC for the Proposed OHL Alignment through areas of broadleaved woodland has been reduced to 70 m (i.e. 35 m either side of the centre line of the OHL). This has been based on the likely height of the woodland at maturity. Where any woodland removal within the OC is proposed to be reduced from the 45 m either side of the line, a site-specific assessment must be carried out to confirm that the conductor blowout does not exceed the proposed OC width. If the conductor blowout exceeds the OC, then the width of the OC must be increased to meet the requirements of the blowout assessment as a minimum. This will ensure compliance with ESQCR requirements and that the required safety clearances are maintained.
- 3.1.3 A resilient OC of 90 m in width is required throughout the commercial conifer woodland within Woodland Parcel 2456, taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.120b: Parcel 2456 Proposed Felling Requirement**.

3.2 Access Track Route Design

- 3.2.1 The tracks associated with this section of the OHL are within the OC or over land without woodland cover.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland parcel 2456 was surveyed in December 2024. Within the OC the shelter belt consists of Sitka spruce (SS) with an edge of Beech (BE) trees along the trunk road. The crop is unthinned, mature and shows signs of instability though wind damage is limited.
- 4.1.2 The forest area sits within a landscape characterised by undulating agricultural heartland. The surrounding land use is agricultural.
- 4.1.3 The shelter belt is moderately exposed as a result of the flat landscape. The maximum Detailed Aspect Method of Scoring (DAMS) score for the areas is 13^{3,4}.
- 4.1.4 The National Soil Map of Scotland⁵ indicates the dominant soil types within the site are noncalcareous gley soils.
- 4.1.5 The Ecological Site Classification (ESC)⁶ identifies the site as having a cool, moderately exposed and moist climate. The soils have a wet moisture status and very poor nutrient status.
- 4.1.6 No environmental designations apply to this parcel.
- 4.1.7 The area is covered under an active forest management plan (MPL310084) which runs until 20/5/2028.
- 4.1.8 The proposed section of OHL consists of a section of OC between towers NP2-1A and NP2-2A.

³ Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁴ The Detailed Aspect Method of Scoring (DAMS) is a system used to assess wind exposure in forestry and land management. It provides a numerical score that quantifies the level of exposure a site experiences based on factors such as elevation, topography, and aspect (the direction a slope faces). The DAMS score helps foresters predict wind risk, which is crucial for understanding tree stability, growth potential, and the likelihood of windthrow (trees being uprooted or broken by wind). The scoring system ranges from 0 to 24, with higher scores indicating more exposure to wind.

⁵ Scottish Government (2024). Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁶ Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

- 4.1.9 There is no existing forest road infrastructure in the forest. Material could potentially be extracted to the existing active travel route in the south end of the forest, approximately 250 meters from the remaining crop edge. This would mean extracting over bare ground with limited brash availability and the active travel route would need significant upgrade. It is therefore recommended that part of the infrastructure needed for the Proposed OHL Alignment is built to facilitate the forestry operations. The closest forest road suitable for haulage within the ownership is the A981. This is classed as an Agreed Route by the Timber Transport Forum^{7,8}.
- 4.1.10 Considering the size of the crop felling using harvester / forwarder combinations is the most practical and economical option. An element of hand felling is likely required for the Beech trees amongst the crop and along the A981.
- 4.1.11 Liaison with the trunk road authority will be key to facilitate the felling operations along the A981 as trees are within striking distance of the road.

4.2 Photo Record – Operational Corridor Assessment

- 4.2.1 The following photographs provide a visual record of key locations along the OC. Each image illustrates existing vegetation types, land use, and notable landscape features relevant to the planning and management of the OC. Particular attention has been given to areas of mature woodland, natural regeneration, and locations where proposed works may intersect with ecologically or visually sensitive habitats. The photos are intended to support site assessments and inform mitigation strategies.

⁷ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

⁸ Roads which can be used for timber haulage without restriction other than as regulated by the Road Traffic Act 1988. "A" roads (e.g. the A9) are classified as Agreed Routes by default unless covered by one of the other categories (e.g. Consultation Route).

Photo 1: Mature Sitka spruce shelter belt along A981 with Beech trees in edge (NJ 897921 480344, looking northeast)



Photo 2: Sitka spruce shelter belt with signs of instability (NJ 898141 480871, looking north)

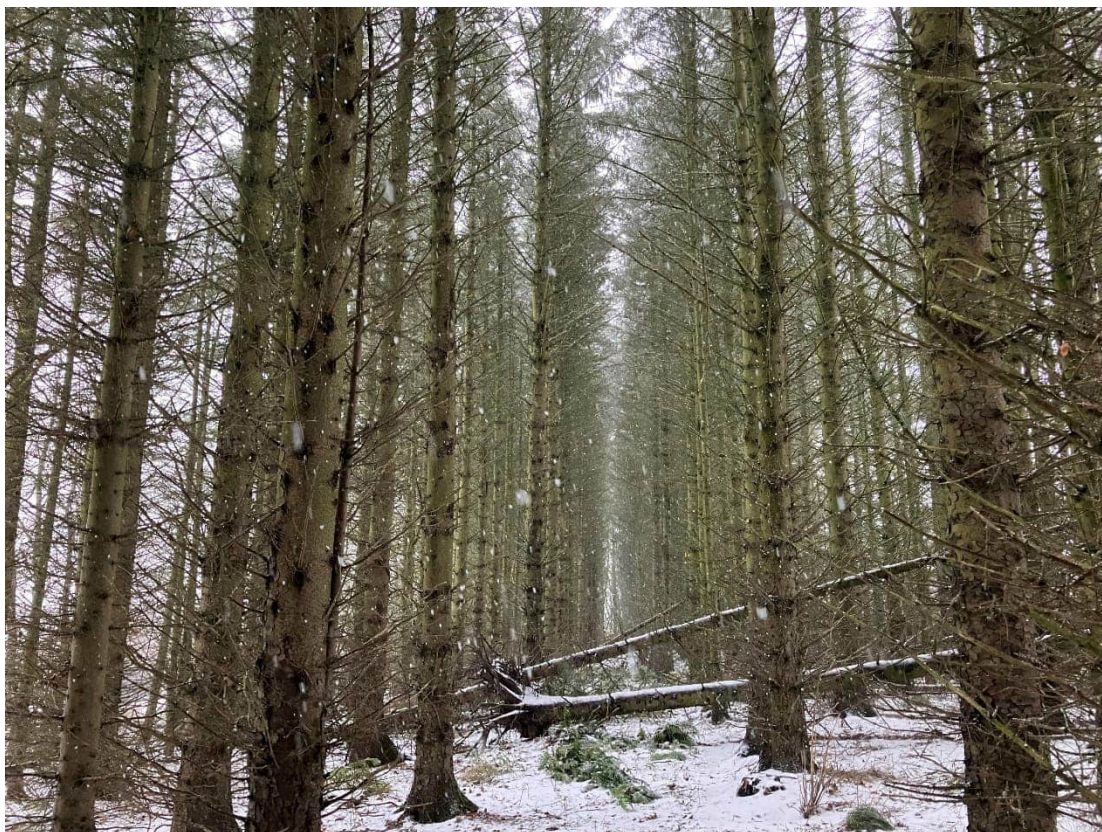


Photo 3: A981 with Beech edge and shelter belt behind (NJ 897904 481515, looking south)

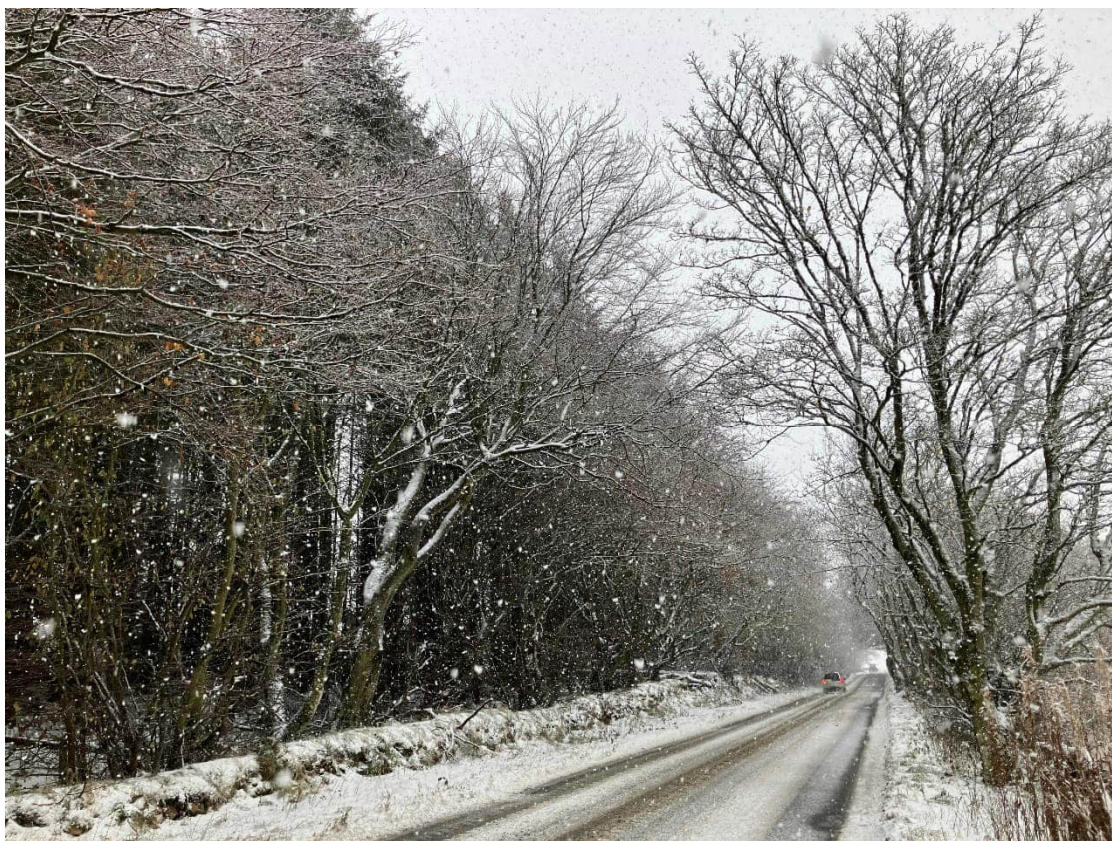


Photo 4: Northern edge of Sitka spruce shelter belt with broadleaves running further north (left on the picture) (NJ 898144 482751, looking east)



5 Windblow Risk

- 5.1.1 It is acknowledged that the creation of the OC would result in wider potential indirect effects on the surrounding woodland areas. These areas would be subject to potential increased risk of damage (windblow). Each woodland report identifies further areas of felling to a windfirm edge, defined as 'Management Felling' (categorised as an indirect secondary impact). This is covered in more detail in the **Section 12.4**. Any felling undertaken out with the OC would be solely under the control of the relevant landowner (and not the Applicant). It is the intention of the Applicant to encourage the landowners to follow this good practice in terms of redesign of their current Long-Term Forest Plans, which in-turn would aim to follow UK Forestry Standard (UKFS)⁹ for the implementation of the works required.

⁹ Scottish Forestry (2024). Available online at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

- 5.1.2 Considering the size of the crop and the exposure as a result of the landscape and adjacent landuse there is a high risk of windblow as a result of the felling of the trees in the OC.

6 Woodland Management Impact

- 6.1.1 Considering the mature nature of the Sitka spruce and its location along the A981 the removal of the trees is likely to be desirable from a forest income perspective as well as a road safety perspective in the short-term.
- 6.1.2 In the long-term the OC will reduce the management unit leaving small forest areas to the north and south of the OC. These will not be of commercial interest considering their size, location, and constraints. This will have a negative impact on productivity of the land in this ownership.
- 6.1.3 The infrastructure built for this section of the OHL could provide a minor benefit to the landowner for future access to the trees. However, as mentioned above, it is unlikely the areas remaining on either side of the OC will be suitable for productive forestry. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner.
- 6.1.4 The Proposed OHL Alignment furthermore introduces an electrical hazard, but the constraint associated with the electrical hazard will be reduced by regular maintenance of the which will avoid the incidences of "Red Zone" trees (reference¹⁰ FISA 804 "Electricity at Work: Forestry").
- 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.0 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 No opportunities for mitigation were found within this parcel.

7.2 Restructuring

- 7.2.1 As the proposed operations will remove a large part of the mature trees within the ownership, the woodland structure will be negatively impacted. However, it is important to note that much of the standing crop comprises exotic spruce species which have now reached maturity and are showing signs of instability, indicating they are at or near the end of their rotation. This presents an opportunity to engage with the landowner regarding the potential restructuring of the Long Established of Plantation Origin (LEPO). A restructuring plan that prioritises the gradual replacement of non-native conifers with ecologically favourable native broadleaved species would support the long-term ecological enhancement of the LEPO.
- 7.2.2 The felling of the OC for the development will create new green edges to which the landowner can work to in the future. As the management units either side of the OC are relatively small this is likely of limited benefit to the landowner.

7.3 Restocking

- 7.3.1 If management felling takes place this would impose a restock obligation on the landowner. Considering the size of the remaining management units and the constraints (trunk road, OHL), it is likely that the future forest type will change from productive to non-productive.

¹⁰ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

8 Net Effect / Summary

- 8.1.1 **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between towers BN5-15 and BN5-16 within this parcel. It details the areas designated for clear felling, both within the OC and additional recommended Management Felling outside the OC to address windthrow risks and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC.

Item	Woodland Type	Area (ha)
OC felling	Mixed Conifer (90 m)	0.75
Total area		0.75

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Mixed Conifer	0.75
Total area		0.75

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.75
Total Compensatory Planting Area	0.75
Total Net Loss of Woodland Area	0.0

Table 8.4: Woodland removal for Management Felling, outwith OC.

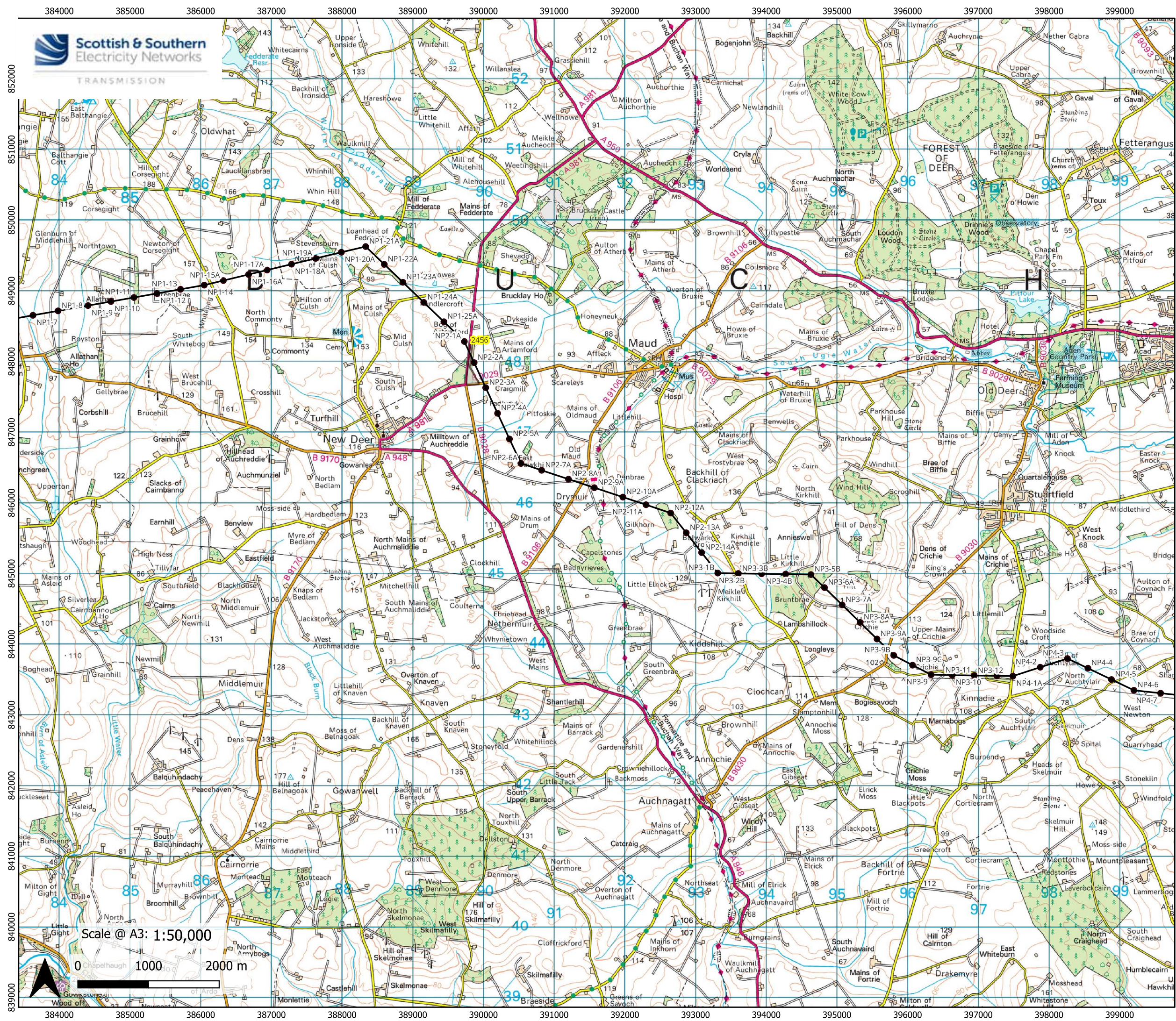
Item	Woodland Type	Area (ha)
Management Felling	Mixed conifer	0.5
Replanting / Restocking Opportunities	Mixed conifer	0.5
Net Loss of Woodland Area		0.0

9 Compensatory Planting

- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹¹. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically applies to areas where tree removal is necessary for the Proposed Development. See **Appendix 12.3 Compensatory Planting Management Strategy**.
- 9.1.2 Any additional felling outside the OC, such as areas cleared for windthrow management or forest design improvements, falls under the responsibility of the landowner, and is not included in the compensatory planting requirements. Instead, these areas may be replanted under a forest plan revision or felling license at the landowner's discretion. This approach aligns with national forestry guidelines, balancing infrastructure development with sustainable woodland management.
- 9.1.3 The total amount of net felling requiring compensation under the CoWRP is 0.75 ha.

¹¹ Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: <https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285>

- 9.1.4 In order to provide a greater balance limiting long-term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via off-site compensatory planting within the local authority area. It is proposed that full details of the areas subject to this off-site compensatory planting is notified to Scottish Forestry prior to energising the OHL.



Legend

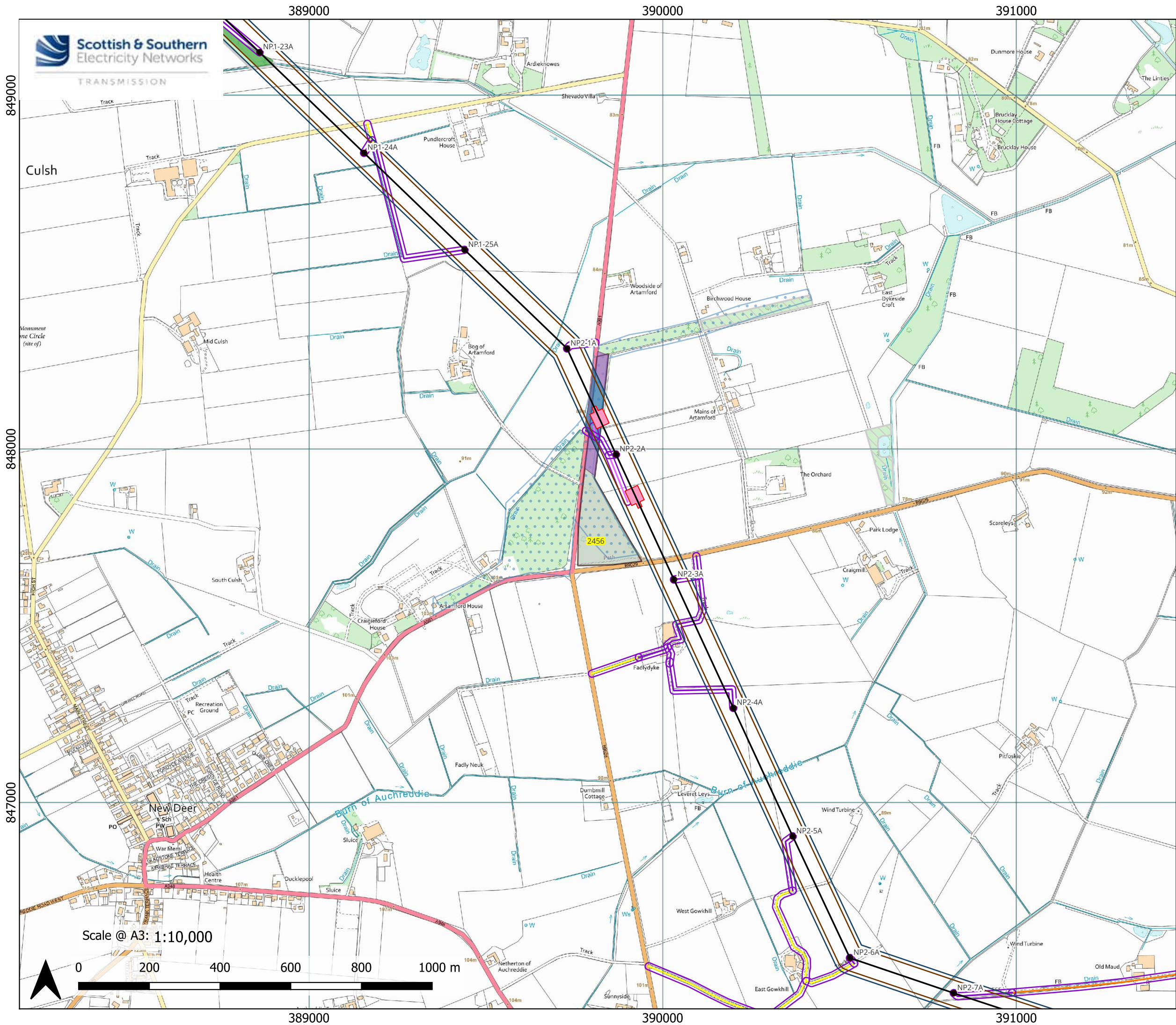
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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Project:
Beaulieu to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.120a Parcel 2456 Location Map

Drawn by: LA



Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Proposed Conductor Pulling Area (EPZ)
- 70m Operational Corridor - Broadleaved Woodland
- 90m Operational Corridor - Commercial Woodland
- Access Track 20m Buffer

Proposed Access Tracks

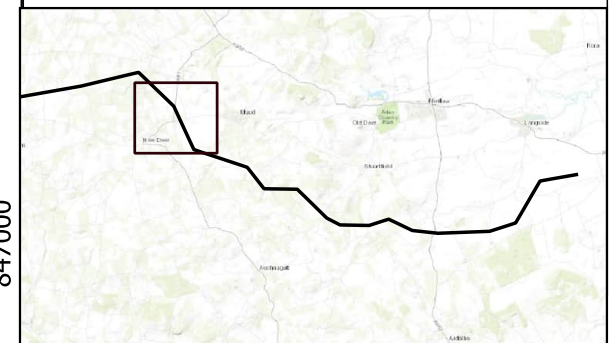
- Existing Access - Upgrade - Good/Fair Condition
- Existing Access - Upgrade - Poor Condition
- Proposed Access - ATV or Temporary Trackway
- Proposed Access - Temporary

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Broadleaved Woodland Access Track Felling
- Native Woodland Survey Scotland (NWSS)

Ancient Woodland Inventory

- Long-Established (of plantation origin)
- Landownership Boundary/Parcel



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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title: **Figure 12.1.120b** Parcel 2456 Proposed
Felling Requirements

Drawn by: LA