

Appendix 3A and associated Figures



RWE Renewables UK Onshore Wind Ltd.

Enoch Hill 2

Appendix 3A: Forestry Assessment



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	V1	V2		
Date	04/07/2023	21/07/2023		
Prepared by	Neil Mckay	Neil McKay		
Checked by	Vicky Mclean			
Authorised by	Vicky Mclean			
Project number				
Report number				
File reference				



CONTENTS

1	INTRODUCTION	1
2	LEGISLATION, POLICY AND GUIDANCE	3
<hr/>		
2.1	CONSULTATION	4
3	ASSUMPTIONS AND LIMITATIONS	5
4	FORESTRY STUDY AREA	6
5	DEVELOPMENT OF WIND FARM FOREST PLAN	7
6	BASELINE CONDITIONS	8
<hr/>		
6.1	DESK STUDY	8
6.2	FIELD SURVEY	9
6.3	WIND FARM DESIGN	9
7	WIND FARM FOREST PLAN	10
<hr/>		
7.1	ENOCH HILL 2 WIND FARM FELLING PLAN	10
8	FOREST MANAGEMENT PRACTICES	14
<hr/>		
8.1	CROP CLEARANCE	14
8.2	RESTOCKING / PLANTING METHODOLOGY	14
8.3	DEER CONTROL	14
8.4	PUBLIC ACCESS	14
8.5	STANDARDS AND GUIDANCE	15
9	SUMMARY	16
<hr/>		

TABLES

Table 2-1 - Consultation Responses	4
Table 7-1 - Felling areas for the Proposed Development:	11

FIGURE

Figure 7-1 - Example Bat Stand-off Area	10
---	----

APPENDICES

APPENDIX A

PHOTOGRAPHIC RECORDS

1 INTRODUCTION

This Forestry Impact Assessment ('FIA') Technical Appendix of the Environmental Impact Assessment Report ('EIAR') evaluates the potential effects of the proposed Enoch Hill 2 wind farm (the Proposed Development) on the forest and woodland areas within the Development Site (**Figure 3A.1: Location**).

This Technical Appendix has been prepared by Neil McKay MICFor, Director of Neil McKay Forestry Consultant Limited, a professional member of the Institute of Chartered Foresters ('ICF') since 1994 with more than 35 years' forestry practice in the public and private sectors throughout Scotland. Neil McKay has more than ten years' experience producing forestry inputs for EIARs for renewable energy and energy transmission infrastructure developments across Scotland.

Forestry is not regarded as a receptor for Environmental Impact Assessment ('EIA') purposes. Commercial forests are dynamic and their structure continually undergoes change due to normal felling and restocking by the landowner; natural events, such as windblow, pests or diseases; and external factors, such as a wind farm development.

This Technical Appendix describes the plans resultant from the Proposed Development through the felling, replanting and maintenance of successor tree crops. The changes to the forest structure are also described as well as any forestry waste generated. The forestry proposals are interlinked with environmental effects which are outside the scope of this Technical Appendix but which should be read in conjunction with the following EIAR chapters in relation to forestry:

- Chapter 3 – Project Description;
- Chapter 4 – Design Evolution and Alternatives;
- Chapter 5 – Planning;
- Chapter 6 – Renewable Energy and Peat;
- Chapter 7 – Noise;
- Chapter 8 – Aviation;
- Chapter 9 – Landscape and Visual Amenity;
- Chapter 10 – Cultural Heritage;
- Chapter 11 – Ecology;
- Chapter 12 – Ornithology;
- Chapter 13 – Hydrology, Hydrogeology and Geology;
- Chapter 14 – Traffic and Transport;
- Chapter 15 – Socio-Economics;
- Chapter 16 – Infrastructure and Other Issues; and
- Chapter 17 – Summary of Mitigation.

This Technical Appendix identifies areas of forest to be permanently or temporarily removed for the construction and operation of the Proposed Development and outlines the proposed management practices, while identifying the replanting proposals and subsequent aftercare. While the Proposed Development has direct implications to a single privately owned conifer plantation, the Development Site covers an extensive area, and several other woodland areas are present. These are included in the woodland descriptions. The forestry proposals have been developed to:

- Identify areas permanently lost to forest cover;
- Identify those areas which may be felled as a result of the Proposed Development and replanted on Site; and
- Demonstrate how the Proposed Development fits within the future forest structure.

This Technical Appendix is structured as follows:

1. Legislation, Policy and Guidance;
2. Assumptions and Limitations;
3. Forestry Study Area;
4. Development of the Wind Farm Forest Plan;
5. Baseline Conditions;
6. Wind Farm Forest Plan;
7. Requirement for Compensatory Planting;
8. Forestry Waste;
9. Forestry Management Practices; and
10. Summary.

2 LEGISLATION, POLICY AND GUIDANCE

This Technical Appendix has been informed by the following scope of the assessment has been informed by consultation responses summarised in **Table 2.1** and the following guidelines/policies:

- Forestry Commission Scotland (2019): Scottish Government's policy on control of woodland removal: implementation guidance¹;
- Forestry Commission Scotland (2009): The Scottish Government's Policy on Control of Woodland Removal, Edinburgh²;
- Forestry Commission (2017). The UK Forestry Standard: The Government's Approach to Sustainable Forestry, 4th Edition, Forestry Commission, Edinburgh³;
- Forestry Commission (2017): The UK Forestry Standard Guidelines³;
- The Scottish Government (2019) Scotland's Forestry Strategy 2019-2029⁴;
- The Scottish Government (2020) Scotland's Forestry Strategy Implementation Plan »2020-2022⁵;
- Forestry and Land Management (Scotland) Act 2018⁶
- The Scottish Government (2011). Scottish Land Use Strategy⁷;
- The Scottish Government (2023). Scotland's National Planning Framework 4 ('NPF4')⁸;
- SEPA (2013): SEPA Guidance Notes WST-G-027 "Management of Forestry Waste";
- SEPA (2014): LUPS-GU27 "Use of Trees Cleared to Facilitate Development of Afforested Land";

¹ Forestry Commission Scotland, 2019. Scottish Government's policy on control of woodland removal: implementation guidance. Online. Available at: <https://forestry.gov.scot/images/corporate/pdf/Implementation-Guidance-Control-of-woodland-removal.pdf> [accessed 09/05/2023].

² Forestry Commission Scotland, 2009. The Scottish Government's Policy on Control of Woodland Removal, Edinburgh.

³ Forestry Commission, 2017. The UK Forestry Standard: The governments approach to sustainable forestry. Online. Available at: <https://www.gov.uk/government/publications/the-uk-forestry-standard> [accessed 09/05/2023]

⁴ The Scottish Government (Scottish Forestry) 2019. Scotland's Forestry Strategy 2019-2029. Online. Available at: <https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/> [accessed 09/05/2023].

⁵ The Scottish Government (Scottish Forestry), 2020. Scotland's Forestry Strategy Implementation Plan 2020-2022. Online: Available at: <https://forestry.gov.scot/publications/793-scotland-s-forestry-strategy-implementation-plan-2020-2022> [accessed 09/05/2023].

⁶ Forestry and Land Management (Scotland) Act 2018. Available at <https://www.legislation.gov.uk/asp/2018/8/contents/enacted>.

⁷ The Scottish Government, 2021. Scottish Land Use Strategy: Land use - getting the best from our land: strategy 2021 to 2026. Online. Available at: <https://www.gov.scot/publications/scotlands-third-land-use-strategy-2021-2026-getting-best-land/> [accessed 09/05/2023].⁸ The Scottish Government, 2023, National Planning Framework 4. Online. Available at <https://www.transformingplanning.scot/national-planning-framework/> [accessed 09/05/2023].

⁸ The Scottish Government, 2023, National Planning Framework 4. Online. Available at <https://www.transformingplanning.scot/national-planning-framework/> [accessed 09/05/2023].

- UKWAS (2012) The UK Woodland Assurance Standard, Third Edition, UKWAS; and
- East Ayrshire Council (2014) East Ayrshire Local Development Plan Ayrshire and Arran Forestry and Woodland Strategy.

2.1 CONSULTATION

Table 2-1 summarises the consultation responses received in relation to forestry and provides information on where and/or how they have been addressed in this assessment.

Full details on the consultation responses can be reviewed in **Technical Appendix 3A.1: Consultation Register**.

Table 2-1 - Consultation Responses

Consultee and Date	Scoping / Other Consultation	Issue Raised	Response / Action Taken
East Ayrshire Council ('EAC') 02 April 2020	Scoping Opinion	A Forestry chapter would be expected within the EIA Report which should detail the area of trees to be felled, the species composition, potential impacts on wildlife as a result of proposed felling and details of the level of compensatory planting proposed including area and species	This Technical Appendix includes the felling requirements and compensatory planting requirements
Scottish Wildlife Trust	Scoping Opinion	The removal of forestry on the site may allow for the reinstatement of some areas of deep peat on site.	As a keyhole design forest removal has been kept to a minimum, however the restoration of peat within these areas is considered.
RSPB	Scoping Opinion	Compensatory planting should be sympathetic to the biodiversity and recommend native broadleaves and Scots pine be used as compensatory species. RSPB also advise against encroaching onto valuable open habitats. Details of the compensatory planting should be included within the Forestry chapter.	Compensatory planting would be off site and would be in accordance with UK Forestry Standards.

3 ASSUMPTIONS AND LIMITATIONS

As described, forests and woodlands are dynamic and are susceptible to natural influences such as catastrophic wind throw, infestation by pests and diseases as well as changes in management or owners' objectives.

Limited forest information has been made available by the Monquhill woodland owner or agents. The forest areas have been digitally mapped from recent aerial imagery.

Pencloe forest information is from publicly available sources and are noted as being not up to date reflecting windblow and replanting.

4 FORESTRY STUDY AREA

The Forestry Study Area is confined to the two following areas of the Development Site:

- the woodlands, known as Monquhill (a first rotation upland conifer plantation); and
- the access through the National Forest Estate Pencloe Forest (hereafter regarded to as ‘the Pencloe Forest access track’).

The two areas are illustrated on the plan included as **Figure 3A.2: Forestry Study Area**.

Accurate mapping of planted areas, open ground, and management boundaries within Monquhill woodland was carried out through aerial imagery. Pencloe Forest information is taken from the Forestry Commission Open Data Site.

5 DEVELOPMENT OF WIND FARM FOREST PLAN

Existing crop information for forestry plantation within the Site was provided by landowner's forestry agent. Landowner information is limited to general planting years.

Site inspections were undertaken in January 2023, to obtain tree growth and current vigour and verification of mapping.

This assessment is based upon details of the two turbine locations, battery storage and other infrastructure within the Monquhill woodland. Access is taken through the Pencloe Forest.

Development Description

This data was amalgamated with the forestry data to construct the forestry proposals. The location of turbines, battery storage and associated infrastructure is influenced by site constraints and technical considerations, e.g., wind capture, ground conditions, etc. The final location of turbines, the battery storage facility and associated infrastructure has taken the various site constraints into consideration. Environmental constraints, such as peat depth, habitat management requirements and ecological and hydrological buffers, together with any land management requirements, associated with the construction of the Proposed Development would also be incorporated into the forestry proposals, where appropriate.

The wind farm felling programme would largely be driven by technical constraints. Within on-site forest habitats, areas of crop would be required to be felled to accommodate the construction and operation of the Proposed Development. Typically, a minimum felled area of ≤ 3 ha is required to accommodate each wind turbine hardstanding which is then developed to accommodate the stand-off between trees and turbines as mitigation following the NatureScot guidance, 'Bats and Onshore Wind Turbines, Survey, Assessment and Mitigation, August 2021⁹. Access to the Development Site is via an existing track off Afton Road to the east and then following an existing access track through Pencloe Forest.

Some tree felling is planned within the Pencloe Forest to accommodate the Proposed Development access track alignment requirements.

The approach that would be adopted to on-site forestry felling is the "keyhole" design. This is a minimal felling approach which would only be achievable by felling certain areas to a rationalised boundary which is not intended to be replanted on site. This includes additional felling required for wind yield or turbine performance purposes.

Tree felling for tracks and other site infrastructure is included in the design.¹¹

⁹ Bats and Onshore Wind Turbines, Survey, Assessment and Mitigation, August 2021. Available at <https://www.nature.scot/doc/bats-and-onshore-wind-turbines-survey-assessment-and-mitigation>.

6 BASELINE CONDITIONS

The Forestry Study Area currently contains an upland coniferous plantation where part of the Proposed Development would take place. Monquhill woodland, was planted in 1991 with a smaller area planted in 1994. The main crop is Sitka spruce with minor areas of silver fir and some broadleaf planted areas. Unplanted open ground is the Strandlud Hill, along the march boundaries, unplanted gulleys and open forest rides.

The plantation is bordered by coniferous plantations to the south and east, with open hill grazing to the north. The privately owned Strandlud Hill has commenced felling and replanting and the National Forest Estate has cleared large areas of windthrow recently.

The access to Monquhill woodland is by way of the Pencloe Forest access track which is also shared with other privately owned woodlands.

Restructuring the age class and species of such forests is desirable and would yield both forest management and environmental benefits in keeping with the UK Forestry Standards.

Future Baseline in the Absence of the Proposed Development

In absence of the Proposed Development, Monquhill woodland would continue to be managed as a productive conifer forest with future felling and restocking plans drawn up to meet the UKFS and seek approval through Scottish Forestry. This would include phased felling periods and replanting to include more species diversity and open ground.

6.1 DESK STUDY

Scottish Forestry Map Viewer¹⁰ indicates that no forest management plans or felling permissions are in place throughout the Development Site, this is confirmed in discussion with the Monquhill woodland owner. The Scottish Forestry Map Viewer also contains the past records which indicate 0.30 ha was approved for restocking at Monquhill in 1998 with a contract end date of 31 March 2003.

A Woodland Grant Scheme ('WGS3') at Pencloe Farm is recorded on the Map Viewer as "Community Woodland Contribution" with a contract end date of 30 May 2007.

The WGS3 approval was also new planting at Pencloe Farm, however no contract dates are shown and zero hectares are described.

Ancient Woodland Inventory and Native Woodland Survey of Scotland both show no results.

Land Information Search¹¹ shows no forestry constraints but highlights groundwater bodies for Galloway and Nithsdale.

Monquhill woodland is approximately 103 ha gross area comprising of planted and unplanted ground. The planted woodland area is measured as 72.75 ha. The unplanted ground is 30.25 ha which includes forest rides, gulleys and in particular the open hilltop of Strandlud Hill.

¹⁰ Scottish Forestry Map Viewer. Available at <https://scottishforestry.maps.arcgis.com/apps/webappviewer>. Visited 09/05/2023.

¹¹ Scottish Forestry Land Information Search. Available at <https://forestry.gov.scot/support-regulations/land-information-search>. Visited 09/05/2023.

Pencloe Forest is the subject of a Land Management Plan¹² from 2018 which gives the total area as 824.6 ha. The initial planting years were 1973 to 1975. The forestry study area within Pencloe Forest is 26.46 ha.

6.2 FIELD SURVEY

Field survey was carried out in January 2023.

Sitka spruce growth appears vigorous and healthy overall with a representative Yield Class¹³ 16 at the proposed substation location. Sitka spruce at turbine location T1 shows poor tree growth (YC<8) at the upper forest margin while the spruce at turbine location T2 shows some signs of chlorosis, perhaps due to waterlogged conditions with a similar low YC. Other conifer species present on site have not developed well and although still alive would not make a marketable product. The mixed broadleaves planted are limited in number. Photographs taken during this visit are included in the Photographic records.

While ploughing was used to cultivate the Development Site at establishment, there is little sign of windthrow.

The existing forest tracks suitable for timber harvesting only pass the lower part of Monquhill woodland. The greater part of the woodland has no road vehicle access. The woodland appears to have little or no public access taken to these proposed wind turbine locations.

Within the Pencloe Forest access track study area, significant areas of windblow have been cleared and replanted in recent years.

Pencloe farm new planting areas described in the Map Viewer shows no sign of tree planting which concurs with the no contract information.

6.3 WIND FARM DESIGN

The impact of the Proposed Development considers the changes to the forest structure through felling and replanting and compares this with any proposed felling and replanting plans for the individual forest unit.

¹² Pencloe Land Management Plan. Available at <https://forestryandland.gov.scot/what-we-do/planning/active/pencloe-land-management-plan> Visited on 20/07/2023

¹³ Yield class is an index used in British forestry of the potential productivity of even-aged stands of trees. It is based on the maximum mean annual increment of cumulative timber volume achieved by a given tree species growing on a given site and managed according to a standard management prescription. It is measured in units of cubic metres per hectare per year (m³ ha⁻¹ yr⁻¹).

7 WIND FARM FOREST PLAN

7.1 ENOCH HILL 2 WIND FARM FELLING PLAN

The Proposed Development felling plan is shown in **Figure 7-1**. This plan illustrates the total area to be felled for the Proposed Development infrastructure, including the turbine hardstandings, control building and substation, access tracks, bat buffer mitigation (as detailed further in **Chapter 11 - Ecology**) and felling for future wind resource.

Felling within the Development Site amounts to 10.38 ha.

Tree removal of 1.30ha within the Pencloe Forest access track area is required where the Proposed Development design has a different alignment to the existing forest HGV access. The area of young trees is 0.81ha with 0.49ha of mature standing timber.

7.1.1 PERMANENT FELLING

Permanent felling within the Development Site is restricted to an area of 8.05 ha which would not be replanted as the infrastructure associated with the two turbines including 93.5m radius stand off for bat mitigation, battery storage facility with the fire safety buffer, a safety buffer around the substation of 37.5 m equating to 1.5 times the tree height, new tracks with a 25m working width and other infrastructure with a 10m tree clearance buffer would remain throughout the lifecycle of the project. The turbine base radius relates to the bat stand-off distance from the potential tree height for the scheme turbine dimensions, which is then calculated in accordance with NatureScot onshore wind turbine bat mitigation guidance. The image below outlines a stand-off distance description example.

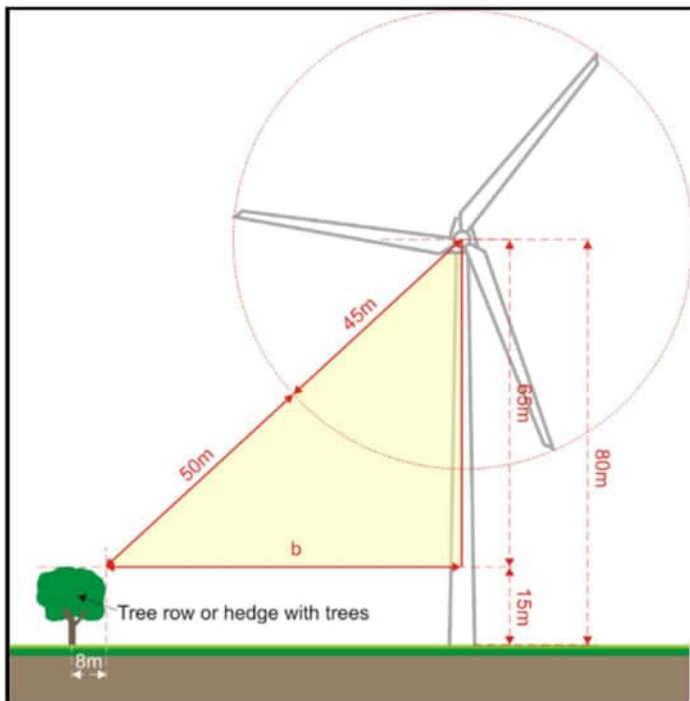


Illustration © Entec Ltd.

Figure 7-1 - Example Bat Stand-off Area

The tree removal of 1.30 ha within the Pencloe Forest access track area is considered permanent felling as it will be required throughout the operational period to provide further abnormal load deliveries should they be required.

7.1.2 TEMPORARY FELLING

Temporary Felling includes the area of woodland which is felled for the construction of the wind farm but would be replanted in situ once the construction activity is completed. The temporary felling area refers to felling beyond the requirements of the proposed infrastructure where wind throw¹⁴ is likely or where woodland areas may become isolated or uneconomic for future harvest and are therefore not useable for commercial purposes.

Temporary felling for the Proposed Development is only in conjunction with felling trees for the proposed substation and compound due to predicted windthrow likelihood. The felled area beyond the construction requirements is taken to the nearest wind farm boundary. This additional area beyond the construction requirements would be replanted with suitable tree species in situ.

7.1.3 OVERALL FELLING

Areas of permanent and temporary felling required to accommodate the Proposed Development are summarised in Table 7-1 below.

Table 7-1 - Felling areas for the Proposed Development.

Enoch Hill 2 wind farm felling	Felling Area (ha)
Permanent Felling Development Site	8.98
Felling Pencloe access track area	1.30
Temporary (to be replanted in situ).	1.40
Total	11.68

The age of the tree crops to be felled is usually around 40 years for a typical upland spruce which would yield marketable forest products from the felled timber. The tree crop to be felled within the Proposed Development would be around 30 years old and slightly premature although at a tree size which would produce marketable timber in the lower proposed substation area. The standing timber volume per hectare also generally averages 364 m³ for the species and Yield class. However, the upper felling areas are low yield class and may produce biomass only. Given the total area of all felling for the construction of the Proposed Development a total export from this operation would equate to 1200 tonnes of timber and biomass.

Figure 7-1 illustrates the felling required for the Development Site

Figure 3A.4 illustrates the felling required for the Pencloe Forest access track area.

¹⁴ Wind throw refers to trees uprooted by wind.

7.1.4 ENOCH HILL 2 WIND FARM RESTOCKING PLAN

Replanting of 1.40ha in situ is designed making allowance for the permanent infrastructure and buffers described in 7.1.1. The replanting is situated within the ground felled to accommodate the temporary construction compound, the control building and substation.

The replanting areas and wind farm open ground is shown in **Figure 3A.5**. The proposed species include productive conifer with native broadleaves between the access track and the Carcow Burn watercourse.

Restocking in situ would be undertaken within two years of felling.

No replanting is proposed for the areas felled within the Pencloe Forest access track area. **Figure 3A.6** shows the areas felled as open ground.

Monquhill woodland does not presently have an approved Forest Design Plan ('FDP'). When the woodland owner or managers prepare an FDP in advance of the forest felling programme the wind farm replanting and open ground will be incorporated into their plans. The FDP would be based upon the best forest management practices in accordance with the sustainable forest design aspects as contained within the UK Forestry Standards.

7.1.5 REQUIREMENT FOR COMPENSATORY PLANTING

As a result of the construction of the Proposed Development there would be a net loss of woodland area. The area of stocked woodland in the study area would decrease by 10.28ha. The Scottish Government's Control of Woodland Removal Policy ('CoWRP') and other relevant guidance state that minimal woodland removal should be undertaken in order to facilitate new development. The CoWRP advises that the Proposed Development falls into the category of woodland removal with a need for compensatory planting. Compensatory planting ('CP') is calculated in accordance with Annex 5 of the Scottish Government's policy on control of woodland removal: implementation guidance February 2019¹⁵. Accordingly, compensatory planting arrangements would be provided for 10.28ha. Compensatory planting arrangements for the total amount, which meet the UK Forestry Standards, are being sought outside the Development Site and would be presented as a planting plan for approval by SF. The CP plan would include the design of the CP, the species selection, site cultivation and planting programme. The CP plan would describe the protection methods and subsequent maintenance to achieve the success of these woodland areas.

7.1.6 FORESTRY WASTE

The Scottish Environment Protection Agency ('SEPA') guidance document WST-G-027 (V3), "Management of Forestry Waste"¹⁶ highlights that all waste producers have a statutory duty to adopt the waste hierarchy as per the Waste (Scotland) Regulations 2012¹⁷, which amended Section 34 of the Environmental Protection Act ('EPA') 1990 (duty of care) (UK Government, 1990). Further

¹⁵ Scottish Government's policy on control of woodland removal: implementation guidance February 2019. Available at <https://scotland.forestry.gov.uk/images/corporate/pdf/Implementation-Guidance-Control-of-woodland-removal.pdf>.

¹⁶ SEPA, 2017. Guidance Document WST-G-027 (version 3): Management of Forestry Waste. Online. Available at: https://www.sepa.org.uk/media/28957/forestry_waste_guidance_note.pdf [accessed 21/03/2022].

¹⁷ UK Government. The Waste (Scotland) Regulations 2012. Online. Available at: [The Waste \(Scotland\) Regulations 2012 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukdsi/2012/50001/eng/schedule-1/paragraph-34) [accessed 21/03/2022].

guidance is contained within SEPA Guidance Notes WST-G-027 “Management of Forestry Waste”¹⁶ and SEPA (2014): LUPS-GU27 “Use of Trees Cleared to Facilitate Development of Afforested Land. A hierarchy of uses for forestry materials is proposed, derived from the waste hierarchy contained within the Regulations, summarised as follows:

- Prevention via the production of timber products and associated materials for use in timber and other markets;
- The re-use of materials on site for a valid purpose, where such a use exists e.g. road construction;
- There is no valid re-cycling use for forestry residues;
- Other recovery via collection and use as biomass for energy recovery or other markets, where not included above; and
- Where no valid on or off-site use can be found for the material, disposal would be in a way that is considered to deliver the best overall environmental outcome.

Due to the areas of woodland to be removed mainly being at a productive stage or able to be utilised as biomass, there is no expectation of forestry waste management as all utilisable material from timber harvesting would be exported from Site to the appropriate wood processing mills.

8 FOREST MANAGEMENT PRACTICES

8.1 CROP CLEARANCE

Tree crop clearance would be carried out by competent forestry specialists adhering to the safety and environmental guidelines current at the time. It is anticipated that tree felling would be undertaken by mechanised harvester, or similar, which would work systematically through the timber crop to be felled. The harvester fells the tree and presents assorted timber products to one side while stripping off branches from the felled stem and laying these in front of the machine along with the small diameter tree top which form a brash mat. This mat offers support to the forest harvesting machinery and provides ground protection during the harvesting operation. This brash mat would form the network of extraction routes for a forest forwarder to collect and extract timber produce to the forest/wind farm access roads. The forest products would then be uplifted by roadgoing timber lorries and delivered to the appropriate wood markets.

8.2 RESTOCKING / PLANTING METHODOLOGY

Restocking is likely to be a site preparation through the production of suitably sized mounds in a systematic fashion following the safety and current environmental guidelines. During the site cultivation, any drains to manage water run-off would be installed to meet the Forest and Water guidelines. Planting would be by manual means.

Maintenance to achieve successful establishment of the successor crop would include plant surveys to meet the required number and distribution of tree survival. Protection against damage through large pine weevil, (*Hylobius abietis*) infestation would be carried out following best practices. Where necessary, “beating up” would take place. Beating up is the replacement of any failed trees to maintain the correct number of trees.

8.3 DEER CONTROL

As Roe Deer are likely to be on-site, Deer control would be undertaken where necessary by the forest owners/managers own arrangements. Should tree damage occur by the Deer on-site, they would be culled to where tree damage is at an acceptable level to produce a future timber crop and to maintain and enhance the biodiversity within the forest holdings. Guidance provided by Scottish Natural Heritage Code of Practice on Deer Management¹⁸ and as updated would be followed.

8.4 PUBLIC ACCESS

Public access within the forest is likely to be improved due to the access tracks for the Proposed Development.

¹⁸ Scottish Natural Heritage Code of Practice on Deer Management. Available at <https://www.nature.scot/doc/code-practice-deer-management-leaflet>.

8.5 STANDARDS AND GUIDANCE

All forestry operations would be conducted in accordance with current good practice guidelines. This would include, but is not limited to: The UK Forestry Standard and the supporting guidelines:

- Forests and Biodiversity;
- Forests and Climate Change;
- Forests and Historic Environment;
- Forests and Landscape;
- Forests and People;
- Forests and Soil;
- Forests and Water; and
- Scottish Natural Heritage Code of Practice on Deer Management.

9 SUMMARY

Felling of 10.38ha within Monquhill woodland will be required for the construction within the Development Site.

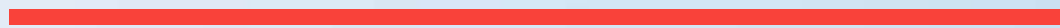
Additionally, the access through Pencloe Forest requires the removal of 1.30ha for alignment improvements.

Felling of 11.68ha is required for the construction of the Proposed Development. A total of 1.40ha would be replanted on site within Monquhill woodlands, leaving a balance of 10.28ha unplanted as a result of the permanent infrastructure and the associated environmental buffer areas. This area of permanent woodland loss is the calculated area to be taken forward for compensatory planting complying with the Scottish Government's Control of Woodland Removal Policy.

The Applicant is committed to providing 10.28ha of appropriate compensatory planting off site. The exact location, the extent and design which shall meet UKFS guidance and a detailed Planting Plan shall be provided for approval by SF.

Appendix A

PHOTOGRAPHIC RECORDS





Photograph 1 - Near proposed T2



Photograph 2 - Near proposed T2



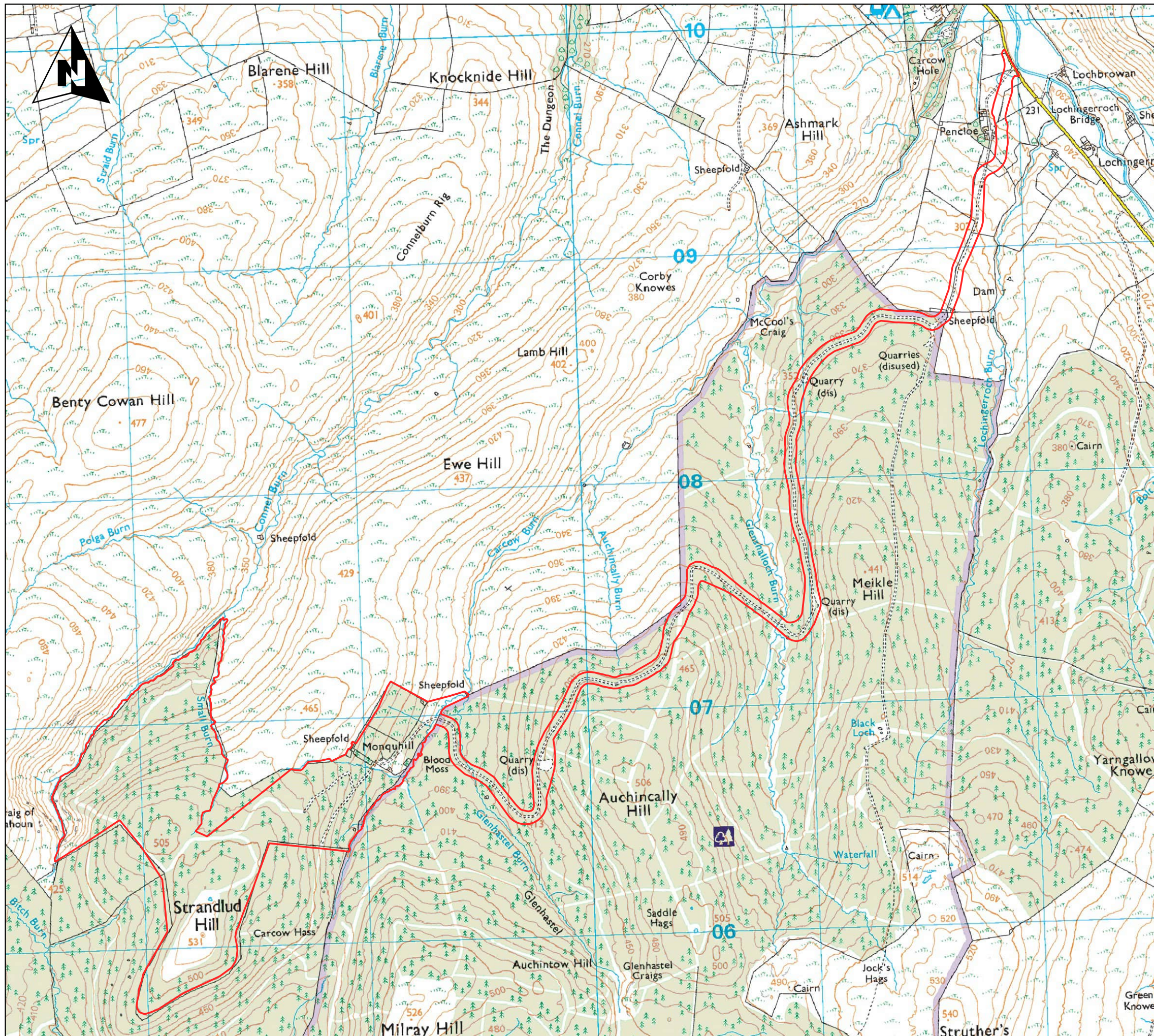
Photograph 3 - Poor growth of other conifer on wet soil conditions



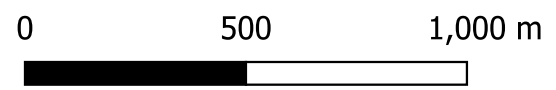
Photograph 4 - Good Sitka spruce growth near the proposed substation (with unsuccessful broadleaved planting)



Photograph 5 - Entrance to Monquhill woodlands with established broadleaves and good growth Sitka spruce



Key
 Site boundary



Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

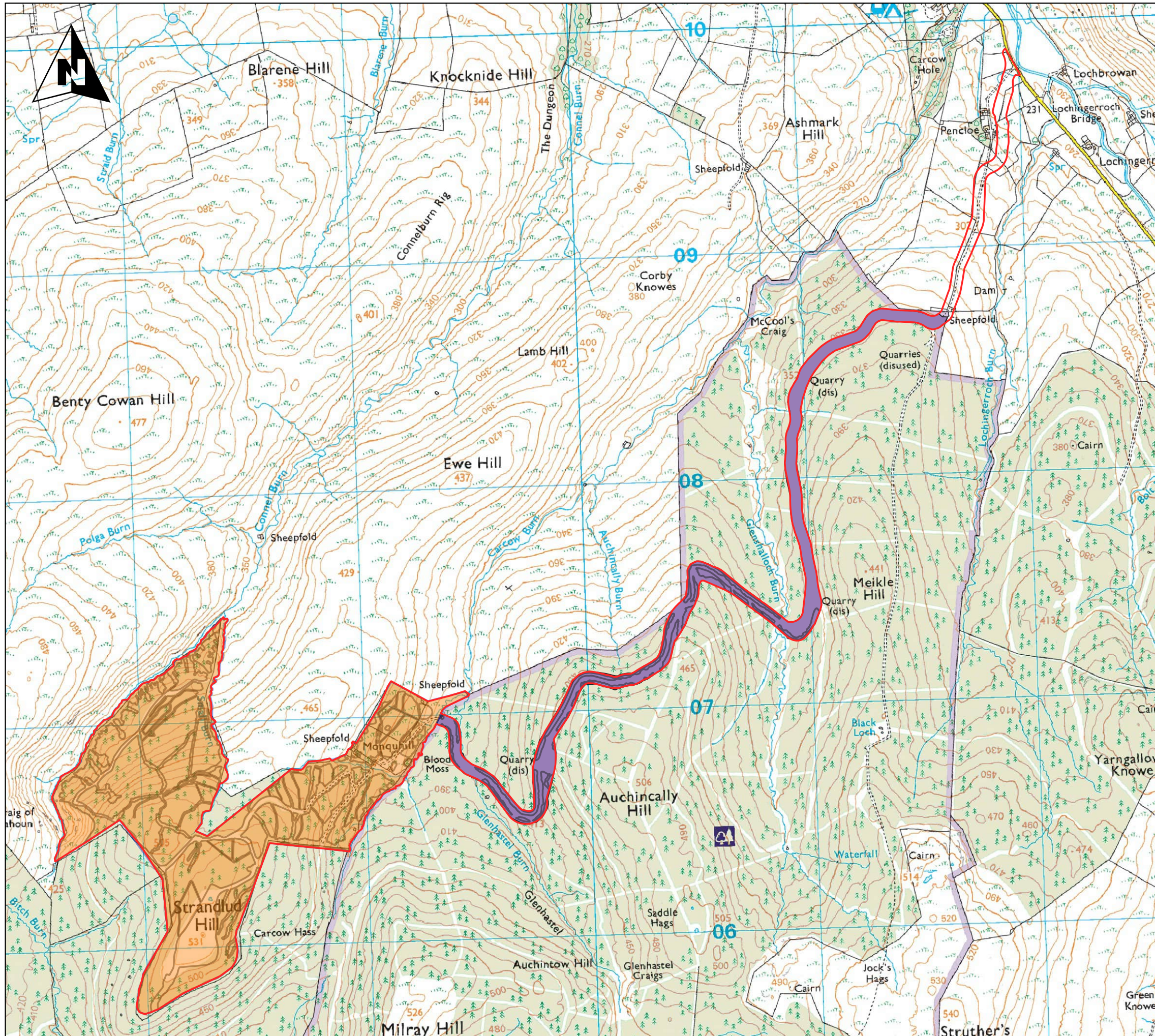
Scale 1:30000 @ A3



Enoch Hill 2 Wind Farm
 Environmental Impact Assessment Report

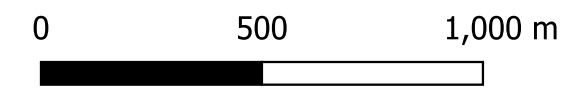
Figure 3A.1 Location





Key

- Site boundary
- Monquhill woodland
- Pencloe access road



Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

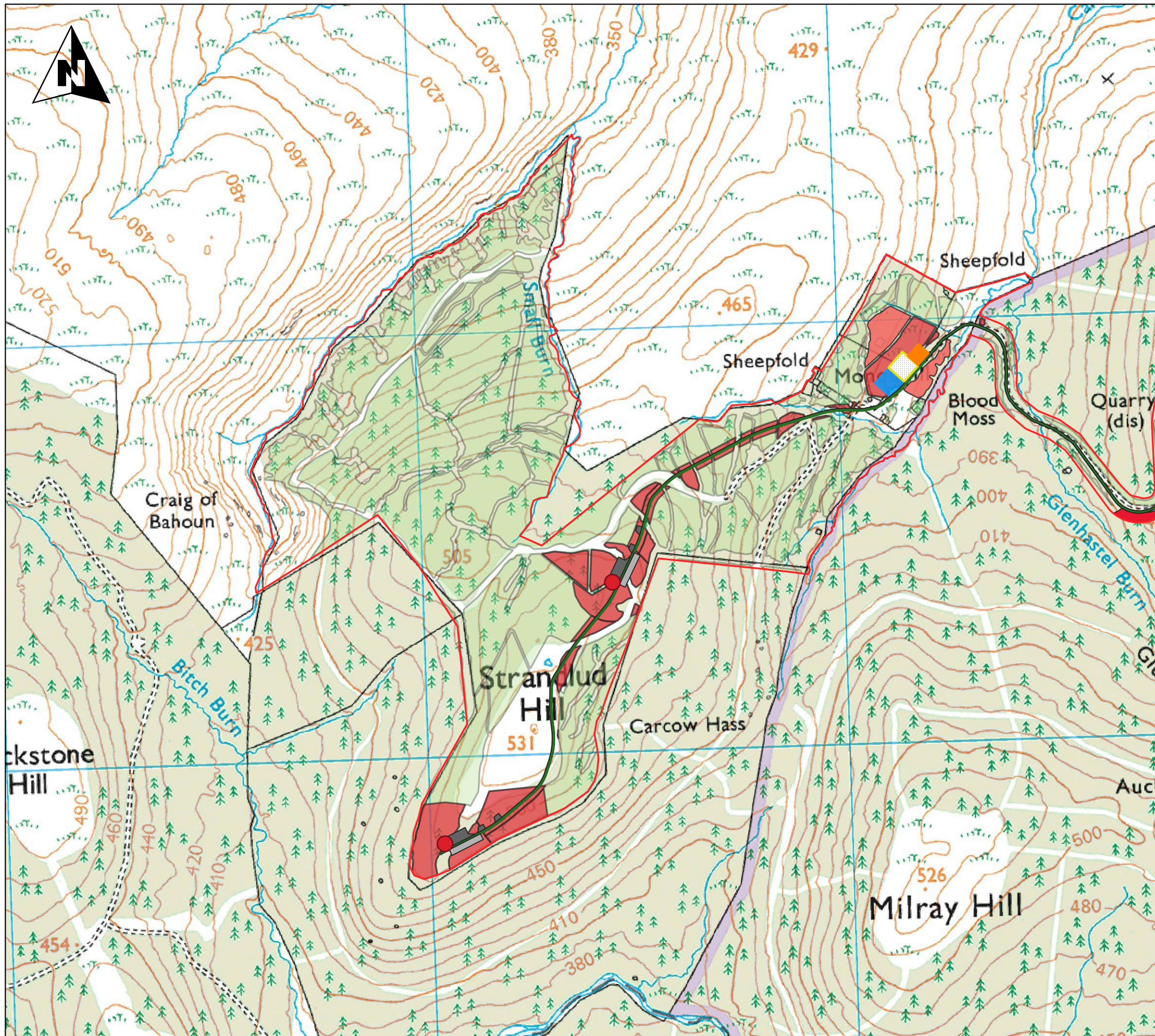
Scale 1:30000 @ A3



Enoch Hill 2 Wind Farm
Environmental Impact Assessment Report

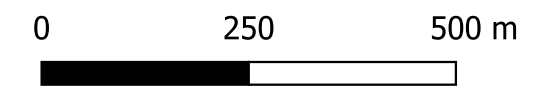
Figure 3A.2 Forestry study area





Key

- Site boundary
- Turbine location
- Primary and auxiliary crane pads (refer to figure 3.4 for crane pad layout)
- Blade laydown areas
- Control building & substation compound
- Battery storage compound
- Access tracks
- Wind farm felling



Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

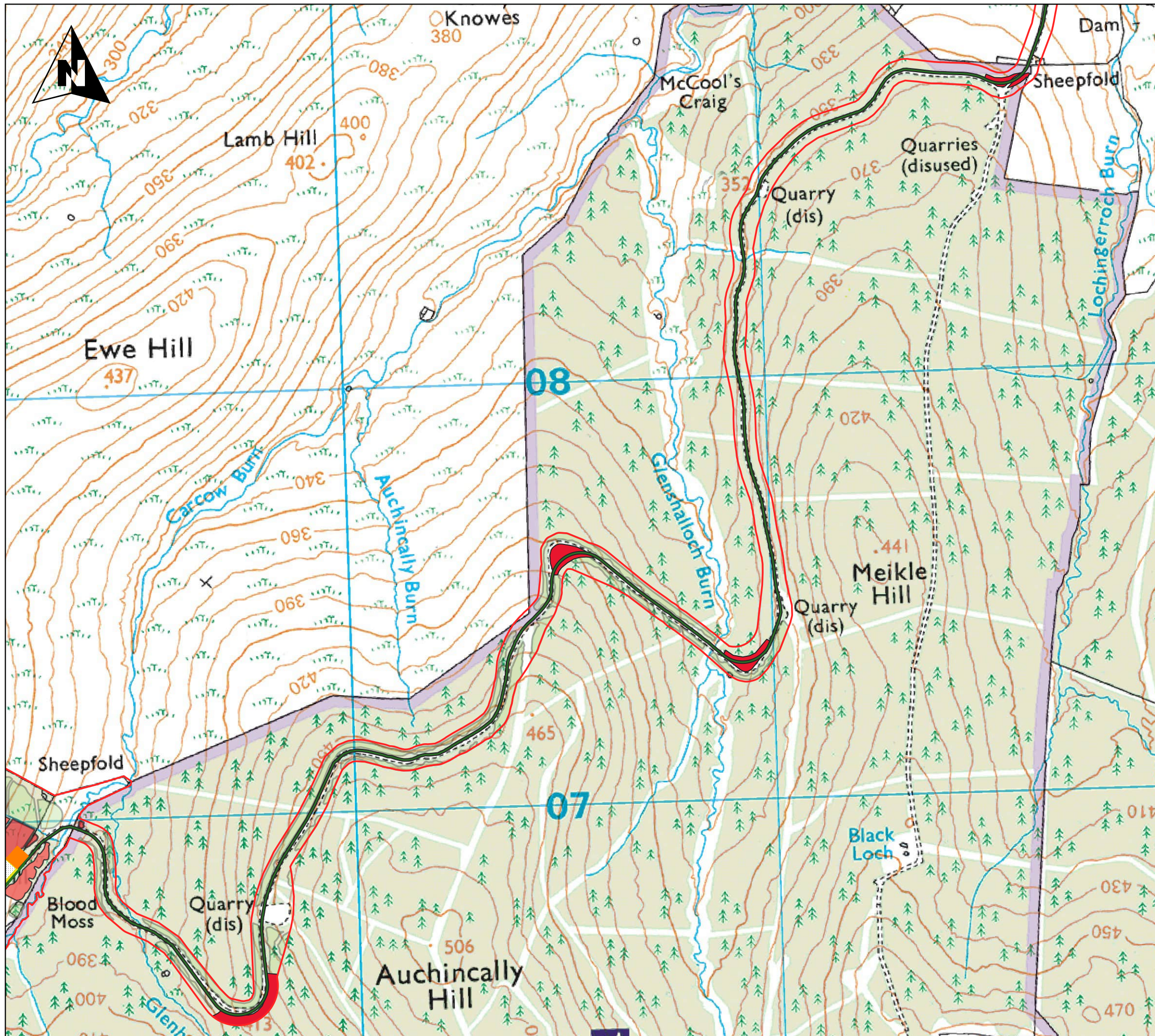
Scale 1:18000 @ A3



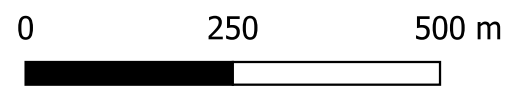
Enoch Hill 2 Wind Farm
Environmental Impact Assessment Report

Figure 3A.3 Wind farm felling





- Key**
- Site boundary
 - Control building & substation compound
 - Battery storage compound
 - Access tracks
 - Pencloe road fell



Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

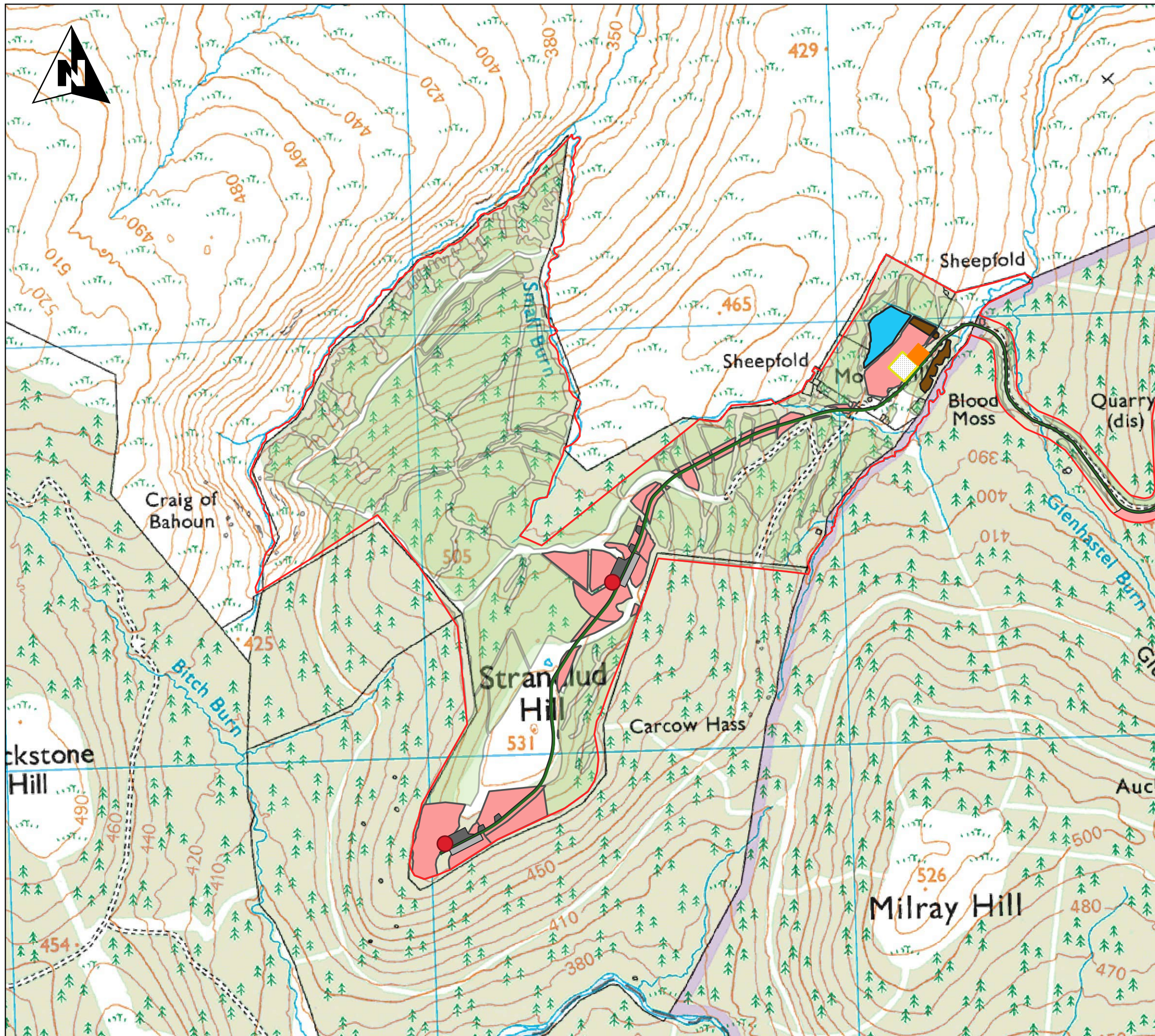
Scale 1:18000 @ A3



Enoch Hill 2 Wind Farm
Environmental Impact Assessment Report

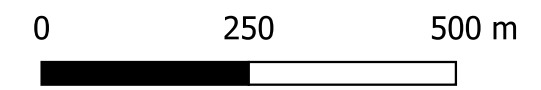
Figure 3A.4 Pencloe road access fell





Key

- Site boundary
- Turbine location
- Primary and auxiliary crane pads (refer to figure 3.4 for crane pad layout)
- Blade laydown areas
- Control building & substation compound
- Battery storage compound
- Access tracks
- Wind farm open ground
- Wind farm replanting native broadleaved
- Wind farm replanting productive conifer



Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

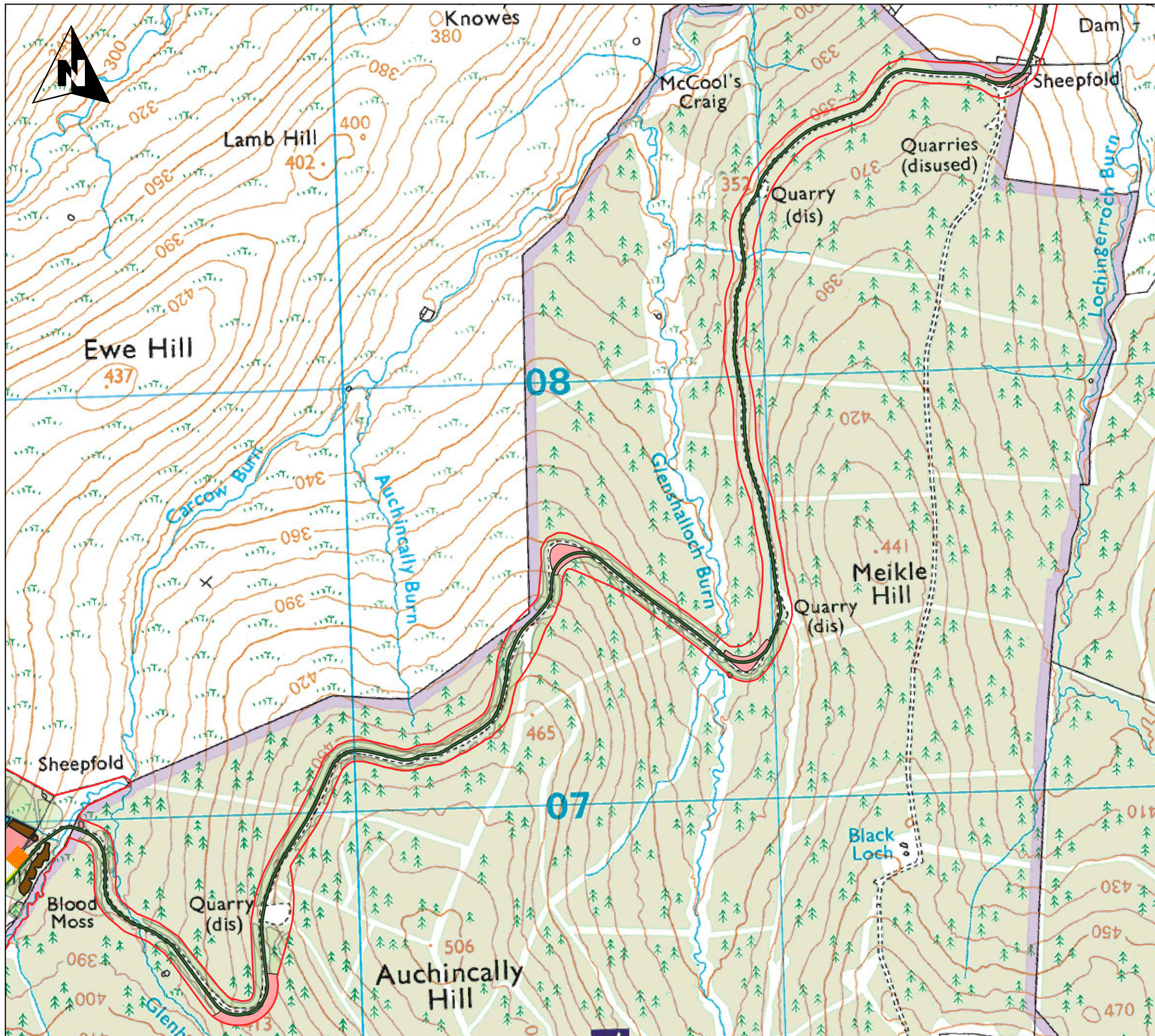
Scale 1:18000 @ A3



Enoch Hill 2 Wind Farm
Environmental Impact Assessment Report

Figure 3A.5 Wind farm replanting





- Key**
- Site boundary
 - Control building & substation compound
 - Battery storage compound
 - Access tracks
 - Pencloe road open ground

0 250 500 m

Based upon the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office @ Crown Copyright 100027856

Scale 1:18000 @ A3



Enoch Hill 2 Wind Farm
Environmental Impact Assessment Report

Figure 3A.6 Pencloe road access open ground





WSP House
70 Chancery Lane
London
WC2A 1AF

wsp.com

PUBLIC