Kennoxhead Windfarm to Coalburn Substation 132 kV Overhead Line

Environmental Impact Assessment Report

Volume 1: Non-Technical Summary

November 2022

SP ENERGY NETWORKS

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Prepared by
RSK Environment Ltd
on behalf of
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November 2022

RSK IS A REGISTERED ORGANISATION
WITH THE INSTITUTE OF ENVIRONMENTAL
MANAGEMENT AND ASSESSMENT (IEMA)
EIA QUALITY MARK SCHEME

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Glossary

132 kV	132 Kilovolt capacity of an overhead electricity powerline
Bing	A heap, especially of metallic ore or of waste from a mine.
CA	Conservation Area
CEMP	Construction Environmental Management Plan
ECU	Energy Consents Unit (Scottish Government)
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIA Regulations	The Electricity Works (Environmental Impact Assessment (Scotland) Regulations 2017
Electricity Act	The Electricity Act 1989
GWDTE	Groundwater Dependent Terrestrial Ecosystem
ha	Hectares
HER	Historic Environment Record
Holford Rules	Guidelines developed in 1959 by Lord Holford which define the principles of route selection for overhead lines which continue to inform transmission line routeing in the UK.
IBA	Important Bird Areas' includes sites designated or identified for designation as Special. Protection Areas under European Community Directive 79/409 on the Conservation of Wild Birds
kV	Kilovolt capacity of an overhead line
LDP	Local Development Plan
LPA	Local Planning Authority
LVIA	Landscape and Visual Impact Assessment
m	Metres
NRHE	National Record of Historic Environment
NGR	National Grid Reference
NGT	National Grid Transmission
NPV	Net Present Value
NTS	Non-Technical Summary
NVC	National Vegetation Classification
OHL	Overhead line: an electricity powerline above ground level
OS	Ordnance Survey
Planning Application	An application for planning permission under The Town and Country Planning (Scotland) Act 1997
Preferred Route	The preferred route identified through the routeing study process, which has not been subject to non-statutory consultation. Considered to represent the optimum balance between the various environmental and technical considerations
Proposed Route	The final route within which alternative OHL route alignments will delineated and appraised
PWS	Private Water Supply
Ramsar Site	A wetland site designated to be of international importance under the Ramsar Convention
Route	Linear area of search within study area, through which a new transmission line could be sited
RCD	Routeing Consultation Document
SAC	A Special Area of Conservation (SAC) protects one or more special habitats and/or species – terrestrial or marine – listed in the Habitats Directive.
SF	Scottish Forestry
SDP	Strategic Development Plan
section 37 application	Application for development consent under section 37 of the Electricity Act 1989
SHETL	Scottish Hydro Electric Transmission Limited
SM	Scheduled Monument
SEPA	Scottish Environment Protection Agency
SLA	Special Landscape Area
SLC	South Lanarkshire Council, the LPA for the proposed development
SLLDP	South Lanarkshire Local Development Plan
SNH	Scottish Natural Heritage (known as NatureScot since 4 September 2020)
SPA	Special Protection Areas (SPAs) are selected to protect one or more rare, threatened or vulnerable bird species listed in Annex I of the Birds Directive, and regularly occurring migratory species.
SPEN	ScottishPower Energy Networks
SPD	SP Distribution plc
SPT	SP Transmission plc
SSSI	Site of Special Scientific Interest is a statutory designation made by Scottish Natural Heritage under the Nature Conservation (Scotland) Act 2004.
Trident wood pole	This construction type is nominally known as a "Trident" line due to the appearance of the poles once constructed.
WHS	World Heritage Site
WoSAS	The West of Scotland Archaeology Service
WSI	Written Scheme of Investigation

Preface

1. This document is the Non-Technical Summary (NTS) of the Environmental Impact Assessment Report (EIA) Report and has been prepared to accompany the section 37 consent application for the proposed Kennoxhead Windfarm to Coalburn Substation 132 kV Overhead Line (hereafter, the 'proposed development'). Kennoxhead Windfarm is located on land south of the A70, near the village of Glespin on the Douglas Estate while Coalburn Substation is located approximately 14 km north-north-east on land west of the M74 near Coalburn. The proposed development would be known as the Kennoxhead Wind Farm Grid Connection project.

2. The EIA Report comprises the following:

- Volume 1: Non-Technical Summary;
- Volume 2: Written Statement;
- Volume 3: Figures and Visualisations; and
- Volume 4: Technical Appendices.

3. A copy of the application, with a plan showing the land to which it relates, together with a copy of the EIA Report discussing the Company's proposals in more detail and presenting an analysis of the environmental implications, will be available for download free of charge via the Kennoxhead Wind Farm Grid Connection webpage: https://www.spenergynetworks.co.uk/pages/kennoxhead_wind_farm_grid_connection.aspx and the ECU portal at: www.energyconsents.scot, under application reference ECU00002096.

4. Hard copies of the EIAR will be available to view locally. Electronic (USB) and hard copies of the EIAR may also be obtained by contacting SPEN by email: Kennoxheadgc@spenenergynetworks.co.uk. These copies will be subject to a fee of £400.

5. Any representations to the application may be submitted via the ECU portal at Scottish Government - ECDU (energyconsents.scot), by email to the Scottish Government ECU mailbox at Econsents_Admin@gov.scot, or by post to the Scottish Government Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the proposal and specifying the grounds for representation.

EIA Report Non-Technical Summary

1 Introduction

1. This Non-Technical Summary (NTS) summarises the Environmental Impact Assessment (EIA) Report for the Kennoxhead Wind Farm Grid Connection project. The EIA Report accompanies an application for consent section 37 consent under the Electricity Act 1989 and deemed planning permission for all associated works (such as temporary access tracks for construction) under section 57 (2) of the Town and Country Planning (Scotland) Act 1997.

2. The Kennoxhead Wind Farm Grid Connection project is referred to in this NTS and in the EIA Report as 'the proposed development'. The proposed development is a new 132 kilovolts (kV) continuous overhead line (OHL) between Kennoxhead Windfarm and Coalburn Substation together with 3.5 km of proposed underground cables. The proposed development is described in further detail in **Chapter 4: Development Description** of the EIA Report.

3. The proposed development is located within the South Lanarkshire Council Local Authority Area. Kennoxhead Windfarm is located on land south of the A70, near the village of Glespin on the Douglas Estate while Coalburn Substation is located on land west of the M74 near Coalburn. The location of the proposed development is shown in **Figure 1**.

4. Environmental effects of the proposed development have been considered as part of an iterative design process and included within the EIA. The results of the EIA are presented within the EIA Report and summarised in this NTS. The EIA Report informs readers of the nature of the proposed development, likely significant environmental effects and measures proposed to protect the environment, during site preparation, construction, and the operation of the proposed development.

5. Assessments as reported in this EIA Report have been informed by work undertaken as part of the EIA process. Further details on the site history and selection are provided in **Section 4** of this NTS.

6. SPEN (the Applicant) is the trading name for Scottish Power Energy Network Holdings Limited which owns and operates the electricity transmission and distribution networks in central and southern Scotland through its wholly-owned subsidiaries SPT and SPD. SPT is the holder of a transmission licence. The references to SPEN in the context of statutory and licence duties should be read as applying to SPT unless the context indicates otherwise.

7. In response to statutory duties and licence obligations upon it, SPEN is obliged to provide grid connections to new electricity generating stations. The developer of Kennoxhead Windfarm has sought a grid connection to the wider electricity transmission network. As a result, SPEN is proposing to provide this connection by constructing a new 132 kV OHL and two sections of underground cabling between Kennoxhead Windfarm and Coalburn Substation.

2 Legal and Policy Framework

2.1 Legislative Context

8. The overhead line forming part of the proposed development would exceed 20 kV and it therefore requires consent under section 37 of the Electricity Act from the Scottish Ministers. Furthermore, the Applicant is also seeking a direction under Section 57 of the Town and Country Planning (Scotland) Act 1997 that planning permission is deemed to be granted for the proposed development.

9. Schedule 9 of the Electricity Act imposes duties on the Applicant , to have regard for a range of factors in developing the proposals. These are*: "…have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest."* In addition, under Schedule 9, paragraph 3 (1)(b) the Applicant must "*do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects*". Through the EIA process the Applicant has ensured that the proposed development complies with the duties under Schedule 9 to the 1989 Act.

10. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations) require that, before consent is granted for certain developments, an EIA must be undertaken. The EIA Regulations set out the types of development that are always subject to an EIA (Schedule 1 developments) and other developments which may require an EIA if they exceed certain thresholds and are likely to give rise to significant environmental effects (Schedule 2 developments). The proposed development currently falls under the following Schedule 2 definition:

> *"(2) an electric line installed above ground -*
>
> *(a) with a voltage of 132 kilovolts or more*
>
> *(b) in a sensitive area; or*
>
> *(c) the purpose of which installation is to connect the electric line to a generating station the construction or operation of which requires consent under section 36 of the Electricity Act 1989…"*

11. As such, SPEN have undertaken an EIA of the proposed development to support the application for section 37 consent and deemed planning permission.

12. In accordance with the EIA Regulations, potential environmental effects have been assessed to evaluate their significance. Mitigation is proposed where possible to prevent, reduce or offset significant potential effects. Also, the assessment has considered 'cumulative effects'. By definition these are effects that result from incremental changes in combination with past and reasonably foreseeable developments or different types of impacts on a single receptor.

2.2 National Planning Policy

13. National planning policy is contained in The National Planning Framework 3 (NPF3, 2014) and Scottish Planning Policy (SPP, 2014).

2.2.1 National Planning Framework for Scotland (NPF3)

14. NPF3 is the long-term spatial expression of the Scottish Government's Economic Strategy and plans for infrastructure investment and development priorities over the next 20 to 30 years with a focus on supporting sustainable economic growth and the transition to a low carbon economy. As defined by NPF3, the proposed development is considered as a 'National Development' that will assist in ensuring security of energy supply, which is a key objective for the Scottish Government.

15. Chapter 3 of the NPF3 focuses on the promotion and achievement of a low carbon economy and the ambition to reduce greenhouse gas emissions by 80% by 2050. The proposed development is closely related to achieving 'A Low Carbon Place' due to its importance in supporting the connection of a consented onshore windfarm to the electricity network. NPF3 notes that strengthening the electricity grid will be essential in unlocking renewable resources.

2.2.2 (Draft) National Planning Framework for Scotland (NPF4)

16. The Draft Fourth National Planning Framework (draft NPF4) was laid in Parliament on 10th November 2021. A public consultation was undertaken at the same time as the Parliamentary scrutiny and this closed on 31st March 2022. The Scottish Government is anticipated to lay a revised draft of NPF4 for Scottish Parliament's consideration and approval in early 2023.

17. NPF4 has now been laid before Parliament for approval. It is accompanied by an Explanatory Report[1], which explains how the Scottish Government has considered responses to the initial draft NPF4 received during the preceding period of parliamentary scrutiny and consultation, in line with its statutory duty. This is the final stage of NPF4 being examined before adoption. At the

[1] National Planning Framework 4: explanatory report - gov.scot (www.gov.scot)

time of writing the revised NPF4 is expected to go before the Scottish Parliament for six weeks, which means the 40-day period for examination would expire just before the end of December 2022.

2.2.3 Scottish Planning Policy

18. SPP creates a presumption in favour of development that contributes to sustainable development. Paragraph 29 of the SPP advises that planning policies and decisions should support sustainable development and sets out a number of principles which should be taken into account.

19. Paragraph 4 of SPP is clear that the planning service should seek to focus on outcomes, maximising benefits and balancing competing interests. The proposed development has been designed to avoid and minimise environmental impacts and mitigate the likely significant environmental effects that are predicted, wherever possible. Paragraph 29 of SPP also advises that planning policies and decision should support sustainable development.

2.3 Local Planning Policy

20. The Development Plan for the proposed development comprises the:

- Clydeplan Strategic Development Plan 2017; and
- South Lanarkshire Local Development Plan 2 (SLLDP2).

2.3.1 Clydeplan Strategic Development Plan 2017

21. Clydeplan seeks to create "*a resilient, sustainable compact city region attracting and retaining investment and improving the quality of life for people and reducing inequalities through the creation of a place which maximises its economic, social and environmental assets ensuring it fulfils its potential as Scotland's foremost city region*" (Clydeplan, page 8). It is envisaged that by 2036, the City Region will be contributing to the Scottish Governments strategic objectives which include creating "*Low carbon heat and power, waste management and green networks, contributing to ecologically sustainable economy and lifestyles*" (Clydeplan, page 8).

2.3.2 South Lanarkshire Local Development Plan 2 (SLLDP2)

22. The SLLDP2 sets out SLC's vision statement and spatial strategy for the area alongside the policies against which development will be assessed. The vision and key objectives have been informed by the key challenges facing South Lanarkshire. The overall vision is *"To promote the continued growth and regeneration of South Lanarkshire by seeking sustainable economic and social development within a low carbon economy whilst protecting and enhancing the environment."* (SLLDP2, page 9). The proposed development has been considered in the context of the SLLDP2, and the most relevant policies are identified and detailed in EIA Report **Chapter 5: Planning Policy**.

3 The Routeing Process and Design Strategy

23. SPEN is obliged to comply with the requirements of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electricity transmission. SPEN's approach seeks to find an OHL solution for all connections and only where there are exceptional constraints would underground cables be considered as a design alternative. Such constraints can be found in urban areas and in rural areas of the highest scenic and amenity value. Where an OHL solution is not achievable for technical reasons, SPEN look to an underground cable solution as an alternative. However, sections of underground cable identified for inclusion within a scheme, must balance the economic, technical and environmental considerations.

24. SPEN's approach to routeing an OHL is based on the premise that the major effect of an OHL is visual and that the degree of visual intrusion can be reduced by careful routeing. A reduction in visual intrusion can be achieved by routeing the line to fit the topography, by using topography and trees to provide screening and/or background, and by routeing the line at a distance from settlements and roads. In addition, a well-routed line takes into account other environmental and technical considerations and would avoid, wherever possible, the most sensitive and valued natural and man-made features.

25. For the proposed OHL route, SPEN began by establishing a number of possible 'route options'. This process involved designing routes in accordance with the Holford Rules[2], that best fit the landscape and minimise effects on visual amenity, whilst avoiding wherever possible areas of high environmental value.

26. RSK were commissioned by SPEN to undertake an assessment of route options for the proposed development. The assessment reviewed economic, technical and environmental constraints to identify a preferred route in accordance with relevant guidelines. Mitigation by design has been achieved through the routeing process, which has ensured that the proposed development provides the optimum balance of avoiding environmental effects while taking account of technical and economic factors.

27. At the northern and southern extents of the proposed development, underground cabling has been proposed. This is a common approach taken to allow an OHL to enter a substation. During the design development of the proposed development, the southern section of the proposed underground cables was extended. This was because an OHL in this location was considered not to be achievable within the proposed route for technical reasons due to the proximity of the proposed development to the Kennoxhead Windfarm Extension turbines. The proposed route could also not be amended to form an alternative OHL route due to the surrounding environmental constraints. Therefore, an underground cable was proposed.

28. The preferred route of the proposed development was presented to consultees in the Routeing Consultation Document (RCD), published in December 2019. The purpose of the consultation exercise was to invite comments on the preferred route from and members of the public. The consultation responses to the RCD did not raise any significant concerns in relation to the preferred route and therefore this became the proposed route to be taken forward and presented at scoping in June 2020. Whilst the consultation responses to the RCD did not raise any significant concerns there were objections raised by individuals and community groups regarding the proposed development. We are comfortable that these issues have been addressed satisfactorily as part of the development process. **Appendix 2.2: Report on Consultation** of the EIA Report details the consultation responses received in relation to the RCD and how the comments have been addressed.

4 Scoping and Consultation

29. The purpose of scoping and pre-application consultation is to:

- Ensure that statutory consultees and other bodies with a particular interest in the environment are informed of the proposal and provided with an opportunity to comment at an early stage in the EIA process;
- Obtain baseline information regarding existing environmental site conditions;
- Establish key environmental issues and identify potential effects to be considered during the EIA;
- Identify those issues which are likely to require more detailed study and those which can be justifiably excluded from further assessment; and
- Provide a means of confirming the most appropriate methods of assessment.

4.1 Scoping

30. Following public consultation, all responses were considered and their relevance to the preferred route assessed. In light of this the preferred route was reviewed. This process resulted in a proposed route that was taken forward to EIA Scoping and further analysis.

31. A scoping exercise was undertaken to establish the scope and level of information to be provided within the EIA Report. A Scoping Request was submitted alongside a Scoping Report to the Energy Consents Unit (ECU) on 24 June 2020, who then

[2] It is generally accepted across the electricity industry that the guidelines developed by the late Lord Holford in 1959 for routeing overhead lines, 'The Holford Rules', should continue to be employed as the basis for routeing high voltage overhead lines. A subsequent review of the Holford Rules (and NGC clarification notes) was undertaken by Scottish Hydro Electric Transmission Limited (SHETL) in 2003 to reflect Scottish circumstances.

contacted a number of interested parties to determine their views on the proposed route of the proposed development and to collect baseline information.

32. In line with ECU guidance, it is recommended that advice regarding the requirement for an additional scoping opinion is discussed with relevant consultees if no application has been submitted within 12 months of the date a scoping opinion has been received. Although SPEN has taken on board all consultee comments and factored these into assessments, a further scoping exercise was undertaken in May 2022 which involved asking consultees to highlight if they felt that there had been any significant changes to the scoping advice on environmental matters within their remit previously provided. The result of this process and a summary of the scoping responses received from consultees are detailed in **Appendix 2.1 Summary of Scoping Responses** of the EIA Report.

33. The scoping responses received indicated that, generally, the scope of the EIA had been defined appropriately. However, a number of consultees did highlight issues where further investigation or clarification was required. This has been highlighted and addressed where appropriate within the EIA Report.

4.2 Consultation

34. Stakeholder engagement, including public involvement, is a vital component of the Scottish planning and consenting system. While there are no formal pre-application requirements for consultation in respect of applications for section 37 consent/ deemed planning permission, legislation and government guidance aim to ensure that the public, local communities, statutory and other consultees and interested parties have an opportunity to have their views considered throughout the planning process.

35. Striking the right balance can be challenging, and in seeking to achieve this, SPEN recognises the importance of consulting effectively on proposals and of being transparent about the decisions reached. SPEN has engaged with key stakeholders including local communities and others who have had an interest in the proposed development, particularly during the routeing stage (during 2019 and 2020) and the feedback received has been considered during the detailed design of the final route alignment.

36. As well as the scoping and routeing consultation described above, before formal consultation commenced on the proposed development in December 2019 and when the preferred route had been identified, SPEN identified all landowners who own land within the Preferred Route. Owners were identified via a title search at the Land Registry. SPEN made contact with these landowners to make them aware of the proposed development and of the potential for the proposed development to directly affect land owned by them. SPEN encouraged individual landowners to attend one of the public exhibitions to discuss the proposed development with SPEN staff and, in addition, offered individual face-to-face meetings with each landowner.

37. The preferred route underwent further iteration during the EIA process. This resulted in the proposed route alignment described and assessed in this EIA Report, which causes, on balance, the least disturbance to the environment and the people who live, work and enjoy recreation within it and is technically and economically feasible.

5 Development Description

38. A detailed plan of the proposed development is provided in **Figure 3**. A detailed project description is provided in **Chapter 4 Development Description** of the EIA Report.

5.1 Proposed Development Overview

39. The proposed development comprises the construction of a new 17 km long 132 kV single circuit wood pole (Trident) OHL and two sections of underground cable, totalling approximately 3.5 km, at each end of the OHL to allow connection to the consented Kennoxhead Wind Farm Substation and the existing Coalburn Substation.

40. It is proposed that 169 wood poles would be installed along the length of the proposed route, as shown in **Figure 3**. The proposed development will likely require construction using ‘H’ poles (rather than single poles), with spans between poles ranging from 77 m to 119 m with an average span length of 101 m and pole heights ranging from 11 m – 18 m with an average height of 12.6 m.

5.2 Proposed Route

41. The proposed route exits the Kennoxhead Windfarm substation in a north-easterly direction following a valley moorland landscape located between Kennox Water and an area of commercial forestry. The proposed route then crosses an area of degraded land (from opencast workings).

42. The proposed route passes Carmacoup and crosses the A70, near a small number of residential properties, and continues broadly north-east and enters the Douglas Water valley with the village of Glespin and the A70 to the south. The proposed route continues through the Douglas Valley to the north-west of the village of Douglas. Here the proposed route passes Douglas substation.

43. Approximately 1 km after Douglas substation the proposed route changes direction, heading north-west. The proposed route continues north-west across a landscape comprising moorland and large former opencast mining areas (including Dalquhandy opencast coal site). The proposed route then loops around the south and south-west of the village of Coalburn. To the west of Coalburn the proposed route briefly runs through a transitional landscape between upland and lowland.

44. The final northern section of the proposed route runs through a simple moorland landscape, with signs of former and current opencast mine working visible within the landscape. The proposed route runs to the east of Hollandsbush Golf Club and then along Coalburn Road before joining Coalburn Substation. The landform in this location is relatively level/ only slightly undulating lowland landscape.

5.3 Construction

45. The estimated period of construction of the proposed development is 12 months.

6 Environmental Effects and Mitigation

46. The EIA has examined potential effects of the proposed development on the following factors, as set out in the EIA Scoping Report:

- Landscape and Visual Amenity;
- Geology, Hydrogeology and Hydrology;
- Ecology;
- Ornithology;
- Archaeology and Cultural Heritage; and
- Forestry.

47. Terms that are commonly used within the assessment include:

- **Effect**: Refers to the change in the existing environmental conditions that will result from the proposed development during construction, operation and decommissioning. Significant effects must be reported in the EIA Report. Effects can be adverse or beneficial.
- **Cumulative effects**: Effects which may arise as a result of: i) interaction between, and combination of effects from, the proposed development (e.g. the effect of changes to water quality on animal species nearby), as well as ii) effects of the proposed development in combination with other future developments nearby.
- **Mitigation**: Refers to measures that will be taken to avoid or reduce any adverse effects identified. Residual effects are those that remain following mitigation.
- **Receptor**: Refers to elements of the natural and built environment and also people and communities that may experience effects – adverse or beneficial – as a result of the proposed development. Examples of receptors include people, historic features, animal and plant species, watercourses etc.

48. To assist with interpretation of the assessment and identification of likely significant effects, potential effects are identified as ‘Major’, ‘Moderate’, ‘Minor’ or ‘None’. ‘Major’ and ‘Moderate’ effects are considered to be significant in the context of the EIA Regulations.

49. The assessments were informed by desk studies, field surveys and consultation.

50. The key findings of the EIA with respect to each topic are set out below.

7 EIA Assessment Findings

51. This Section outlines the predicted environmental effects of the proposed development. In summary, the EIA assessments show that through careful and iterative design of the proposed development, through site-specific mitigation measures and the use of good practice methodologies during construction there would be '**No Significant'** environmental effects, with the exception of some localised **significant** landscape and archaeology effects.

52. The following **Sections** (**7.1** to **7.6**) provide a summary of the effects for each of the EIA assessments.

7.1 Landscape and Visual Amenity

53. The landscape and visual amenity (LVIA) assessment has assessed the likely significant environmental effects on the landscape character and visual amenity, which could result from the proposed development.

54. The landscape baseline surrounding the proposed development is dominated by open moorland, commercial forestry, former and existing areas of opencast mining and the river valley around Douglas Water. The upland landscape around the valley is host to a number of existing and consented wind farms. Away from the areas of commercial forestry, it is generally an open landscape with hedgerow boundaries limited to the landscape around Douglas and to the north of Coalburn. As the proposed route passes through Douglas Valley, it would pass through the Douglas Valley Special Landscape Area (SLA), which is a locally designated landscape. Within the SLA there are a number of Core Paths, from which the proposed OHL would be visible. The LVIA study area also includes a mixture of small settlements and scattered individual properties, connected by a small number of roads and lanes.

55. The visual baseline and visual envelope for the proposed development is based on the landscape baseline. Where commercial forestry exists, primarily at the southern end of the proposed route and on uplands to the south of Coalburn, the forestry would act as a significant screen to long distance views from within these areas, and also when viewing into or past these areas from further afield. The more uniform and open areas of moorland and opencast mining, to the north of and around Coalburn, and the central regions to the west of the Douglas Valley, create a landscape where long distance views are possible, although occasional vegetation and tree belts can act as a visual filter within the landscape.

56. The key mitigation strategy has been by design to ensure the minimal loss of landscape elements such as mature trees and hedgerows and, as far as feasible, to avoid the proposed development going too close to residential properties and, where feasible, to avoid high ridge lines in the landform. Although no specific additional mitigation measures have been identified, SPEN have acknowledged that a compensatory planting strategy to offset forestry felling would be required for the scheme and will consult with local landowners on this issue.

57. The assessment of landscape and visual effects has taken into account the construction and operation phases of the proposed development. Effects would be likely to arise from the appearance, height and spacing of the poles, and any subsequent landscape losses and intrusion on visual amenity. Any direct effects on the landscape in terms of tree or vegetation loss would occur as part of the construction phase, though these losses would be minimal and locally contained within the construction corridor, access areas and construction compounds. Careful routeing and subsequent micro-siting of poles will assist in further limiting these potential losses. **No significant effects** have been identified on landscape character.

58. Localised **moderate (adverse) significant effects** have been identified on the visual amenity for the following receptors:

- Receptors at the small village of Glespin, located between 100 and 500 m south-east of the proposed development between OHL pole nos. 37 and 47;
- The Bungalow (200 m south-east of OHL pole no. 33), a single property adjacent to Douglas Water slightly set back from the A70;
- Longhouse (120 m south-east of OHL pole no. 37), a single property to the west of Glespin adjacent to the A70;
- CL/5891/1 (ACP) c.500 m east to west path oversailed by the route corridor between OHL pole nos. 28 and 29;
- CL/3455/1 c.1.3 km east to west path. 45 m north of OHL pole no. 36 at its closest point;
- CL/3454/1 c.180 m south-east to north-west path oversailed by the route corridor between OHL pole nos. 37 and 38;
- CL/3453/1 c.2 km north-east to south-west path oversailed by the route corridor between OHL pole nos. 39 and 40;
- CL/5729/1 (ACP) c.950 m north-east to south-west path oversailed by the route corridor between OHL pole nos. 85 and 86;
- CL/5735/3 c.440 m south-east to north-west path oversailed by the route corridor between OHL pole nos. 101 and 102;
- CL/5909/1 (ACP) c.300 m west to east path oversailed by the route corridor between OHL pole nos. 122 and 123;
- CL/5736/1 (ACP) c.230 m north-west to south-east path running parallel for 50 m to the route corridor for its length and between OHL pole nos. 122 and 126;
- CL/5737/1 (ACP) c.620 m east to west path oversailed by the route corridor between OHL pole nos.125 and 126;
- CL/5835/1 c.670 m north to south path 115 m east of OHL pole no. 129 at its closest point;
- CL/3310/1 c.1.1 km east to west path oversailed by the route corridor between OHL pole nos. 134 and 135; and
- CL/5190/1 c.620 m north-east to south-west path 20 m west of OHL pole no. 142 at its closest point.

7.2 Hydrology and Geology

59. The proposed development has been assessed in relation to the potential impacts on geology, hydrogeology, hydrology and soils during the construction, operational and decommissioning phases.

60. The proposed route has minimal risk of flooding from any source. Designated sites and private water supplies that are near, or have a hydrological connection to, the study area have been assessed individually and appropriate mitigation measures set out where linkages or potential linkages have been identified.

61. Peat is limited in extent and distribution across the proposed development site. As the proposed development has a very small excavation footprint, and assuming that all construction, operation and decommissioning works at all developments abide by good practice with relation to soil and peat handling and storage, no cumulative effects relating to soils and peat are anticipated.

62. Mitigation measures have been identified for all potential impacts, either through the site design process or in accordance with good practice guidance.

63. It has been shown, as a consequence of the site design and embedded mitigation, that the proposed development would result in **no significant effects** on hydrology, hydrogeology, geology and soils.

7.3 Ecology

64. Potential effects on ecology and biodiversity that may arise from the proposed development have been assessed during the construction and operational phases. The assessment has been based on information relating to statutory and non-statutory nature conservation sites, priority habitats and species, and legally protected species obtained from various desk-based sources. A suite of ecological surveys has also been undertaken, including an extended phase 1 habitat survey, national vegetation classification (NVC) and ground water dependent terrestrial ecosystems (GWDTE) surveys and surveys for protected species such as bats, badgers, otter and water vole.

65. There are a number of statutory designated sites within 2 km of the proposed development. This includes Coalburn Moss Special Area of Conservation (SAC) and Sites of Special Scientific Interest (SSSI), which lies immediately to the east of the northern section of the proposed route. The site is one of the best examples of lowland raised bog in the UK for its actively-growing Sphagnum-rich vegetation. There are also 39 Ancient Woodlands within 2 km of the proposed development, two of which are within 50 m.

66. Within 250 m of the proposed route comprises the following habitat types; woodland and scrub, grassland and rush dominated vegetation, tall herb and fern, ephemeral, dry and wet heath, mire and flush, ponds, rivers, ditches and swamps, residential, hardstanding and substation associated structures. Field boundaries were typically formed by fences, dry stone walls and occasional hedgerows.

67. Taking into account mitigation measures, **no significant effects** are expected on any receptors.

7.4 Ornithology

68. A separate assessment of the potential effects on ornithology from the proposed development is presented in the EIA Report.

69. Existing information relating to statutory and non-statutory nature conservation sites, priority habitats and species, and bird species was gathered from various sources. Ornithology surveys were also undertaken including vantage point surveys, winter walkover surveys, a breeding bird survey, a raptor nest search, a breeding bird survey and black grouse surveys.

70. There are a number of statutory designated sites applicable to birds within 2 km of the proposed development. These include Muirkirk and North Lowther Uplands Special Protection Area (SPA), Muirkirk Uplands SSSI, North Lowther Uplands SSSI, North Lowther Hills Important Bird Area (IBA) and Airds Moss and Muirkirk Uplands IBA. There are no non-statutory designated sites of ornithological importance within 2 km of the study area.

71. Mitigation measures have been identified to address any potential adverse significant effects including pre-construction surveys, bird deterrents and deflectors. On the assumption that mitigation measures are successfully and correctly applied, there are **no likely significant residual effects** as a result of the proposed development.

7.5 Archaeology and Cultural Heritage

72. The archaeology and cultural heritage assessment has described the likely significant effects of the proposed development on identified and potential archaeological and cultural heritage resources in and around the proposed development. The assessment has comprised an archaeological desk-based baseline assessment including a walkover survey to inform an assessment of potential direct physical and impacts on the setting of heritage assets as a result of the proposed development.

73. There are no designated heritage assets (scheduled monuments, conservation areas, listed buildings, inventory battlefields, inventory garden and designed landscapes or world heritage sites) within the cultural heritage study area) within the 200 m study area. The nearest heritage asset is the Category B listed building of the Statue of a Highlander at West Toun, located 710 metres north-west of the proposed route. The Scheduled Monument of St Brides Church and the Conservation Area of Douglas are located 1.46 km west of the proposed route.

74. There are 59 non-designated assets identified within the 200 m study area, 27 of which are recorded on the South Lanarkshire Council Historic Environment Records (HER) and/or the National Record of the Historic Environment (NRHE). They include a wide variety of remains that are evidence of the rich history of mining and agriculture within the area around the proposed development, with 51 of the identified 59 assets (81%) dating to the post-medieval period, 1560– 1900 AD. Details of all assets are included in **Appendix 10.1 Gazetteer** and **Appendix 10.2 Cultural Heritage Baseline** of the EIA Report.

75. Development infrastructure is proposed to be located within 30 m of 24 of these assets. With the implementation of best practice mitigation such as micrositing to avoid or minimise impact, pre-construction archaeological evaluation, archaeological and curatorial monitoring during construction, and a programme of post-excavation assessment on completion of the archaeological fieldwork, **no residual significant effects** are predicted. The programme of archaeological mitigation works to be delivered will be agreed with the West of Scotland Archaeology Service (WoSAS) prior to delivery and confirmed through agreement of a Written Scheme of Investigation (WSI). WoSAS will be given the opportunity to monitor the archaeological mitigation works in progress prior to and during construction.

7.6 Forestry

76. The forestry assessment within the EIA Report has considered the long-term loss of forest resource (commercial forestry), loss of young broadleaved woodland and amenity planting and long-term loss of areas of broadleaved scrub woodland as a result of the proposed development. An initial desk study was carried out to gather all available information within the routeing study area. This included obtaining all available information on any of the woodlands likely to be affected by the proposed development. This was followed by a field survey, which included assessments and mensuration on each of the plantations that might be affected.

77. SPEN require a minimum swathe width of 60 m for the proposed development, i.e. 30.m on either side of the proposed OHL for the wayleave corridor. Where there are conifer plantations, all trees would need to be felled and the swathe kept clear of vegetation. There are also several individual broadleaved trees that would need to be felled especially in the northern part of the proposed route. For loss of local forest resource, if landowners have land available for compensatory planting, then there will be no loss of forestry resource for them as an equal area of commercial woodland would be planted on their estate. Replanting of an equal area of broadleaved woodland in the locality will also mitigate long-term loss of broadleaved scrub woodland and amenity planting.

78. The total area of felling within the wayleave corridor is 3.5 ha. There would also be approximately 82.56 m^3 of timber prematurely cleared from the commercial plantation to the west of Coalburn which will result in a loss of Net Present Value (NPV) for the landowner in perpetuity. The likely magnitude of impact is **Minor** given the relatively small area of permanent woodland loss taking in to account the scale of the size of the woodland resource.

79. The forestry that would be lost comprises woodland where change is a normal part of forestry management, low quality scrub that does not provide public recreation and is not of local or national importance, and amenity planting and that is locally important and susceptible to moderate change. The sensitivity of the forestry resources is **Moderate**. The likely significance of the effect on the local forestry resource is considered to be **Minor**, which is **not significant** in EIA terms.

8 Environmental Management

80. Environmental constraints and considerations have been taken into account in the design and routeing of the proposed development to avoid and minimise the potential for significant effects. Further measures to prevent or reduce any remaining significant environmental effects are described within each technical subject area of the EIA Report (**Chapters 6** to **11**). These measures and commitments are set out in **Appendix 2.5: Schedule of Mitigation and Monitoring** of the EIA Report. Furthermore, the environmental mitigation and commitments would be formalised within a CEMP. An outline CEMP can be found in **Appendix 4.1: Construction Environmental Management Plan** to the EIA Report.

81. The Applicant and the Principal Contractor would oversee operations and ensure that mitigation measures are implemented, and activities conducted in such a manner as to minimise or prevent effects on the environment. The Principal Contractor would be supported by specialists, such as an Ecological Clerk of Works to ensure that mitigation measures are implemented effectively.

9 References

Electricity Act 1989. Available [online] at: https://www.legislation.gov.uk/ukpga/1989/29/contents [accessed 12 September 2022]

Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. Available [online] at: https://www.legislation.gov.uk/ssi/2017/101/contents/made [accessed 12 September 2022]

Glasgow and the Clyde Valley Strategic Development Planning Authority (2017) Current Strategic Development Plan July 2017. Available [online] at: https://www.clydeplan-sdpa.gov.uk/strategic-development-plan/current-plan/current-strategic-development-plan-july-2017 [accessed 12 September 2022]

Town and Country (Scotland) Act 1997 (as amended). Available [online] at: https://www.legislation.gov.uk/ukpga/1997/8/contents [accessed 12 September 2022]

Scottish Government (2014) Scotland's Third National Planning Framework. Available [online] at: https://www.gov.scot/publications/national-planning-framework-3/ [accessed 12 September 2022]

Scottish Government (2021) Scotland 2045: Our Fourth National Planning Framework. Available [online] at: https://www.clydeplan-sdpa.gov.uk/strategic-development-plan/current-plan/current-strategic-development-plan-july-2017 [accessed 12 September 2022]

Scottish Government (2014) Scottish Planning Policy. Available [online] at: https://www.gov.scot/publications/scottish-planning-policy/ [accessed 12 September 2022]

South Lanarkshire Council (2020) South Lanarkshire Local Development Plan 2. Available [online] at: https://www.southlanarkshire.gov.uk/info/200145/planning_and_building_standards/39/development_plans/2 [accessed 12 September 2022]

Figures

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635000 630000 625000

Coalburn

Douglas

Glespin

SOUTH LANARKSHIRE

Kype Muir

Dunside Rig

Grouse Hill

Goodbush Hill

Spirebush Hill

Nutberry Hill

Priesthill Height

Starpet Rig

Little Auchinstilloch

Meikle Auchinstilloch

Common Hill

Opencast Workings

Legend:

- Proposed OHL Route
- Proposed Underground Cable Route
- Kennoxhead Windfarm Point of Connection
- Coalburn Collector Station

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter

Rev	Date	Description	Drn	Chk	App
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Kennoxhead Wind Farm Grid Connection

RSK

TITLE:
Figure 1:
Kennoxhead Wind Farm to Coalburn Substation
Overhead Line – Overview

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Kilometers

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627000 626000 625000 624000

Dovestone Rig 386 Waterfall White Hill Sheepfold Waterfall Carmacoup Burn Kennox Quarries (dis) Kennox Water Urit Hill 451 Grouse Butts Sheep Ree Chapel Hill 355 Haresnaw Hill 401 Green Hill 396 Mid Burn Kennox Water Waterfall Cairn 468 Wedder Hill 407 Quarry Quarry (dis) Waterfall Cleughs Kennox Hill 388 Dryrigs Hill 442 Kennoxhead Hartwood Hill Cross Base Black Burn Auchendaff Hill 427 Auchendaff Mossy Burn 361 Gart Law 452 North Bottom Sheepfold Quarry

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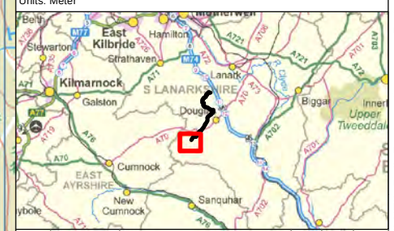
Legend:

- Kennoxhead Windfarm Point of Connection
- Initial Design Layout - Overhead Line
- Initial Design Layout - 132kV Cable
- Layout 1
- Layout 2
- Final Layout - Proposed Overhead Line Route
- Final Layout - Proposed 132kV Underground Cable

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



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Kennoxhead Wind Farm Grid Connection

RSK

TITLE:
Figure 2:
Route options and Preferred Route
Map 1 of 4

0 200 400
Metres
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78 79 80 81 82 29 30 28 27 39

Common Hill
Hagshaw Hill Wind Farm
Broomerside Hill
Avermarks Hill
Old Shielings
Windrow Hill
Rob's Hill
Scrogton
Station Road
Scrogtonhead
Windrow Cottage
Windrow Wood
Ladle Knowe Motte
Arnesalloch Bridge
Weston
Weston Wood
High Broomerside
Low Broomerside
Sheepfold
Strawberry Hill
Monksfoot
Monksfoot Bridge
Longhouse Hill
Longhouse
Darn Craig
Carmacoup
Glespinside
Glespin
West Glespin
East Glespin
Hazelside
Jeanfield Bridge
Kiln Hill
Earls Mill
Cairn
Glentaggart Cottage
Kennox
Opencast Workings
Quarries (dis)
Quarry (dis)
Waterfall
Podowrin Burn
Smitty Burn
Windrow Burn
Robshill Burn
Carmacoup Burn
Kennox Water
Douglas Water
Dismantled Railway
A70
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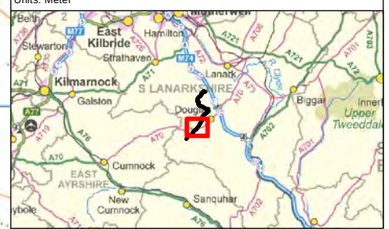
Legend:

- Initial Design Layout - Overhead Line
- Layout 1
- Layout 2
- Final Layout - Proposed Overhead Line Route

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



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Kennoxhead Wind Farm Grid Connection

RSK

TITLE:

Figure 2:
Route options and Preferred Route
Map 2 of 4

0 200 400
Metres

SCALE: 1:15,000 @ A3

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Legend:

- Initial Design Layout - Overhead Line
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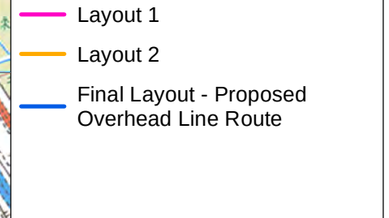
- Layout 2
- Final Layout - Proposed Overhead Line Route

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



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Kennoxhead Wind Farm Grid Connection

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TITLE:

Figure 2:
Route options and Preferred Route
Map 3 of 4

0 200 400
Metres

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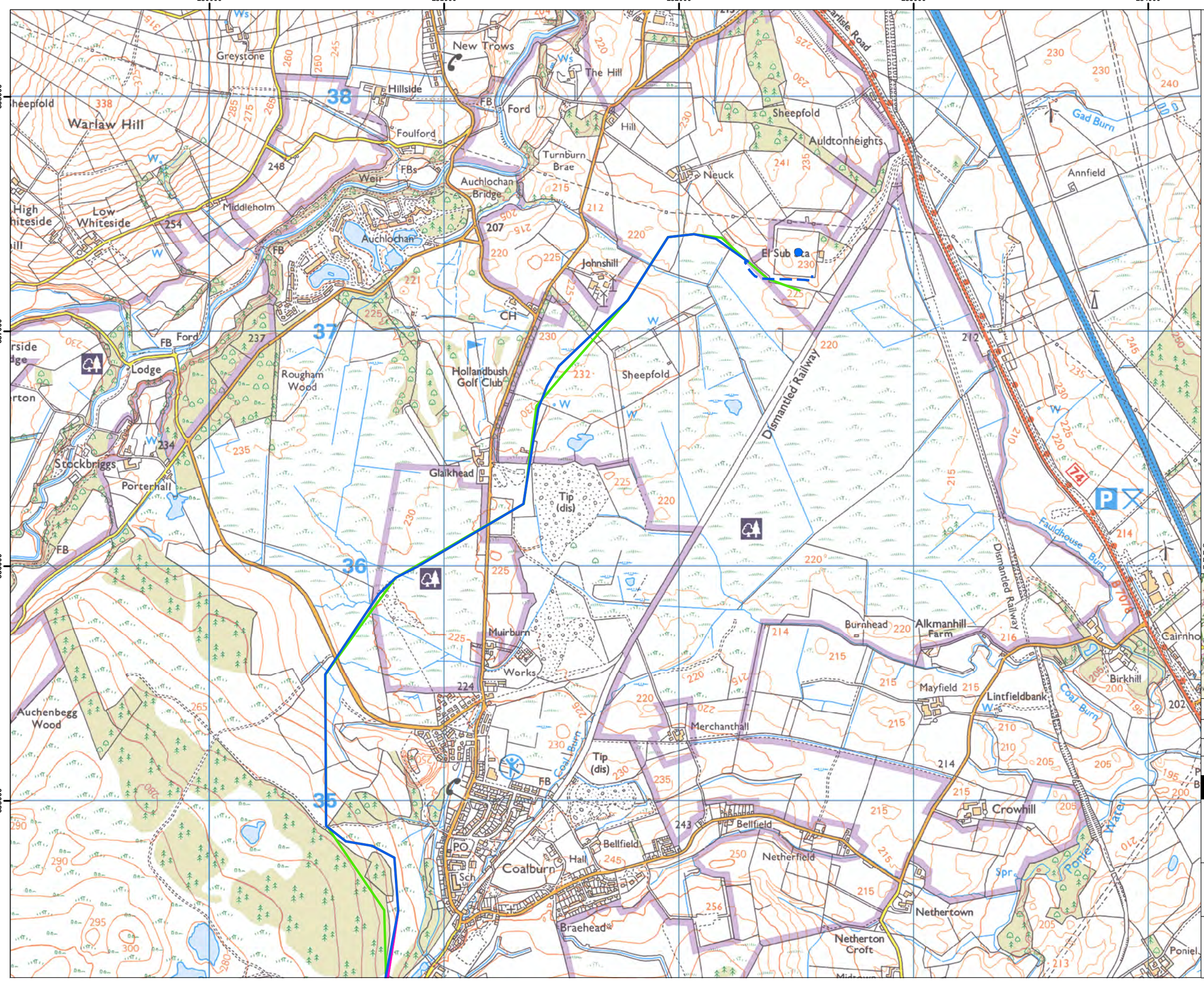

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Kennoxhead Wind Farm Grid Connection

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TITLE:

Figure 2:
Route options and Preferred Route
Map 4 of 4

0 200 400
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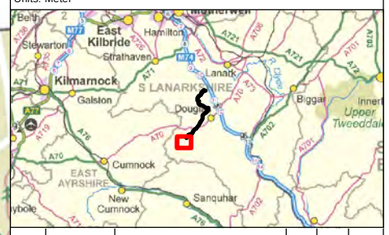
626000 625000 624000

Legend:

- Proposed Pole Location
- Proposed OHL Route
- Proposed Underground Cable Route
- Access Track
- Proposed Working Area
- Proposed Development Access
- Parking Area
- Proposed Compound

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



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Kennoxhead Wind Farm Grid Connection

TITLE:

Figure 3:
Kennoxhead New 132kV Overhead Line
Map 1 of 6

0 200 400
Metres

SCALE: 1:10,000 @ A3

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628000 627000 626000

Legend:

- Proposed Pole Location
- Proposed OHL Route
- Proposed Underground Cable Route
- Access Track
- Proposed Working Area
- Proposed Development Access
- Parking Area
- Proposed Compound

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
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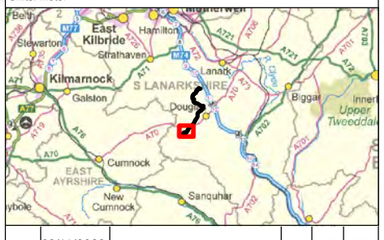

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Kennoxhead Wind Farm Grid Connection

TITLE:

Figure 3:
Kennoxhead New 132kV Overhead Line
Map 2 of 6

0 200 400
Metres

SCALE: 1:10,000 @ A3

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Legend:

- Proposed Pole Location
- Proposed OHL Route
- Access Track Proposed
- Working Area
- Proposed Development Access
- Proposed Compound

Coordinate System: British National Grid
Projection: Transverse Mercator
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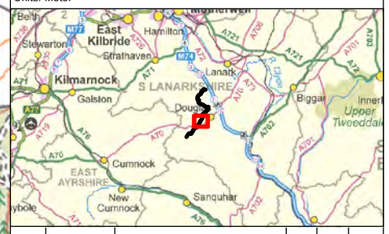

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Kennoxhead Wind Farm Grid Connection

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TITLE:
Figure 3:
Kennoxhead New 132kV Overhead Line
Map 3 of 6

0 200 400
Metres

SCALE: 1:10,000 @ A3

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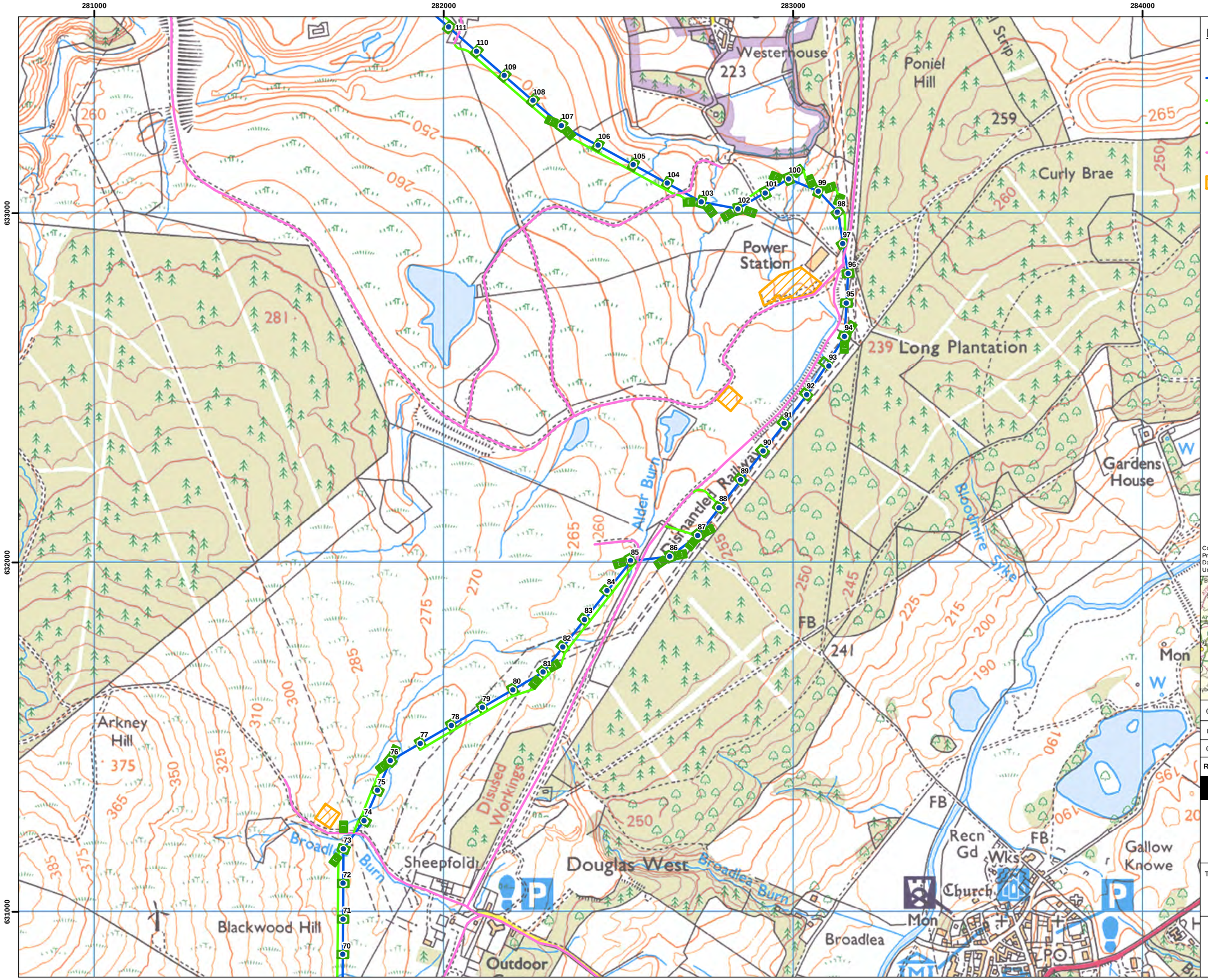

Legend:

- Proposed Pole Location
- Proposed OHL Route
- Access Track
- Proposed Working Area
- Proposed Development Access
- Proposed Compound

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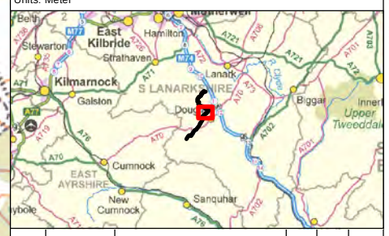

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Kennoxhead Wind Farm Grid Connection

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Figure 3:
Kennoxhead New 132kV Overhead Line
Map 4 of 6

0 200 400
Metres

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636000 635000 634000

Legend:

- Proposed Pole Location
- Proposed OHL Route
- Access Track
- Potential Stone Road
- Proposed Working Area
- Proposed Development Access
- Proposed Compound

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter

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Kennoxhead Wind Farm Grid Connection

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Figure 3:
Kennoxhead New 132kV Overhead Line
Map 5 of 6

0 200 400
Metres

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281000 282000 283000 284000

638000 637000 636000

Auchren Farm
Auldton Cottages
Ind Ests
Righead
Woodhead
New Trows
The Hill
Carlisle Road
Gad Burn
FB
Ford
Hill
Sheepfold
Auldtonheights
Turnburn Brae
Neuck
Annfield
Auchlochan Bridge
El Sub Sta
Johnshill
CH
Hollandbush Golf Club
Sheepfold
Dismantled Railway
Glaikhead
Tip (dis)
Fauldhouse Burn
Dismantled

Legend:

- Proposed Pole Location
- Proposed OHL Route
- Proposed Underground Cable Route
- Access Track
- Potential Stone Road
- Proposed Working Area
- Proposed Development Access
- Proposed Compound

Coordinate System: British National Grid
Projection: Transverse Mercator
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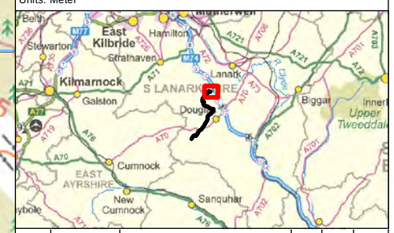
Units: Meter



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Kennoxhead Wind Farm Grid Connection

TITLE:
Figure 3:
Kennoxhead New 132kV Overhead Line
Map 6 of 6

0 200 400
Metres

SCALE: 1:10,000 @ A3

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