

Wether Hill Wind Farm 132kV Grid Connection



Welcome

About Scottish Power Energy Networks

Scottish Power Energy Networks (SPEN) holds the electricity distribution licence for southern Scotland.

Background

The developers for the Wether Hill Wind Farm have approached SPEN to provide a grid connection for the wind farm to the wider electricity transmission network. SPEN has a legal duty under the Electricity Act 1989 to provide grid connections to new electricity generating developments.

In response to this, we are proposing to construct a new 132kv grid connection between Wether Hill Wind Farm and the proposed Quantans Hill Wind Farm Collector Substation.

This proposal supports the Scottish Government's Net Zero targets by increasing the supply of green energy to the grid. SPEN is committed to helping Scotland achieve this target and improve energy resilience and security in the UK.



Why we are consulting

The purpose of this consultation is for you to learn about the Preferred Route and share your views.

Your views and opinions will be considered and will inform the development of the Proposed Route which will be taken forward to the next stage in the process.



Planning and consent

New electricity lines exceeding 20kV require planning consent from Scottish Ministers under Section 37 of the Electricity Act 1989.

The responses received from the consultation process will be considered and inform the development of the Proposed Route to be progressed.

Following this, SPEN intends to submit an application for consent for the grid connection under Section 37 of the Electricity Act 1989. This will include the submission of an Environmental Appraisal.



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Overview of developments in the area

This grid connection is part of a wider programme of developments happening in the area. The ongoing projects support the Scottish Government's target to reach Net Zero by 2045 under the Climate Change Act (2008).

SPEN has a critical role to help the UK meet its targets and transition to a low carbon economy. We are committed to achieving Net Zero and increasing efficiency to have a more resilient and secure energy network.

About Wether Hill Wind Farm

A 14-turbine onshore Wind Farm developed by Scottish Power. It has been in operation since 2007.

About Quantans Hill Wind Farm

Proposals for Quantans Hill 14-turbine Wind Farm are currently under consideration with the Scottish Government's Energy Consents Unit. If consented, construction could commence this year, with renewable energy being generated by 2027. The Quantans Hill collector substation is proposed to be sited within the Quantans Wind Farm boundary, adjacent to the Wind Farm substation.



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The routing approach

Under the Electricity Act, SPEN is required to consider environmental, technical and economic considerations, and to reach a balance between them.

SPEN’s routing objective is to identify a technically feasible and economically viable route, between Wether Hill Wind Farm and the proposed Quantans Hill Collector Substation, which causes the least disturbance to people and the environment.

Key considerations

A number of constraints were considered alongside environmental and technical constraints for the development of route options and selection of the Preferred Route.

Landscape

- Landscape designations and classifications, including:
 - Galloway Forest Park;
 - Knockgray Park Gardens and Designated Landscape;
- Visual receptors, including:
 - Residents of properties;
 - Road users;
 - Users of Public Rights of Way and National Cycle ways;
 - Visitors to cultural heritage locations and viewpoints.
- Areas of forestry and woodland;
- Ancient Woodland.

Biodiversity

- Designated Ecological Sites, including Special

- Areas of Conservation;
- Protected Habitats;
- Habitats suitable for Protected Species.

Heritage

- Scheduled Monuments;
- Listed Buildings;
- Canmore Records;
- Heritage Dumfries and Galloway conservation zone.

Geology, Hydrology and Hydrogeology

- Watercourses;
- Private Water Supplies;
- Drinking Water Protected Areas;

- Flood Risk;
- Peat.

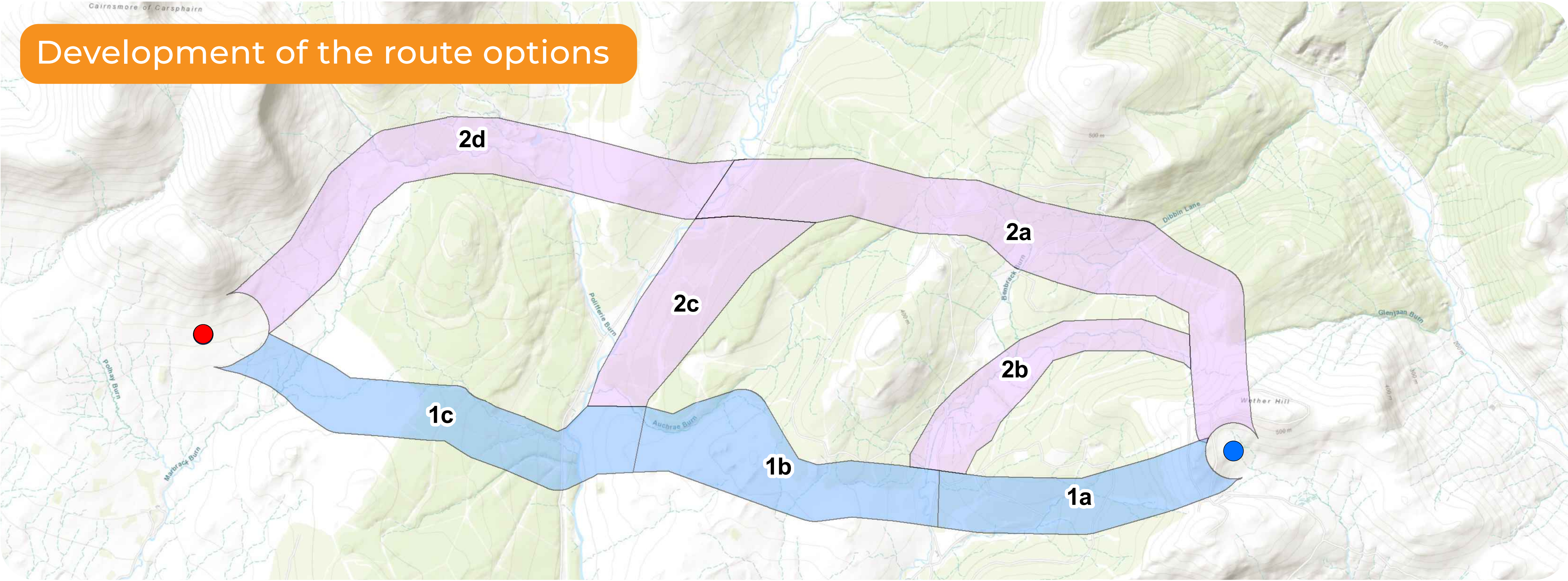
Land Use

- Commercial uses, including forestry;
- Planning Applications;
- Public Rights of Way;
- Tourist attractions.

Technical

- Topography;
- Existing grid infrastructure;
- Transport network.

The following route options were developed and then evaluated as part of the appraisal process.



Development of the route options

A series of route options were developed using:

- Routing guidance for overhead lines
- Environmental and technical considerations
- SPEN’s approach to routing strategy

This involved designing potential routes in accordance with best practice guidelines (the Holford Rules) to best fit the landscape and minimise effects on visual amenity, whilst avoiding areas of high environmental value wherever possible.

It is SPEN’s policy not to use overhead lines when the connection passes in close proximity to existing or proposed turbines. This means that underground cabling will be required for tie-ins to the substations and when the connection passes through Shepherds’ Rig Wind Farm.



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Route option appraisal

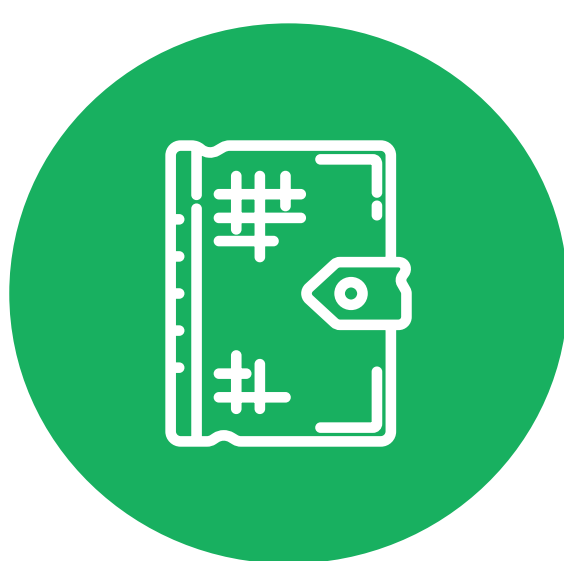
Once the route options were developed, a detailed appraisal was undertaken to grade likely impacts on each route option segment in relation to the following topics:



LANDSCAPE AND VISUAL AMENITY



LAND USE



CULTURAL HERITAGE



FORESTRY / WOODLAND



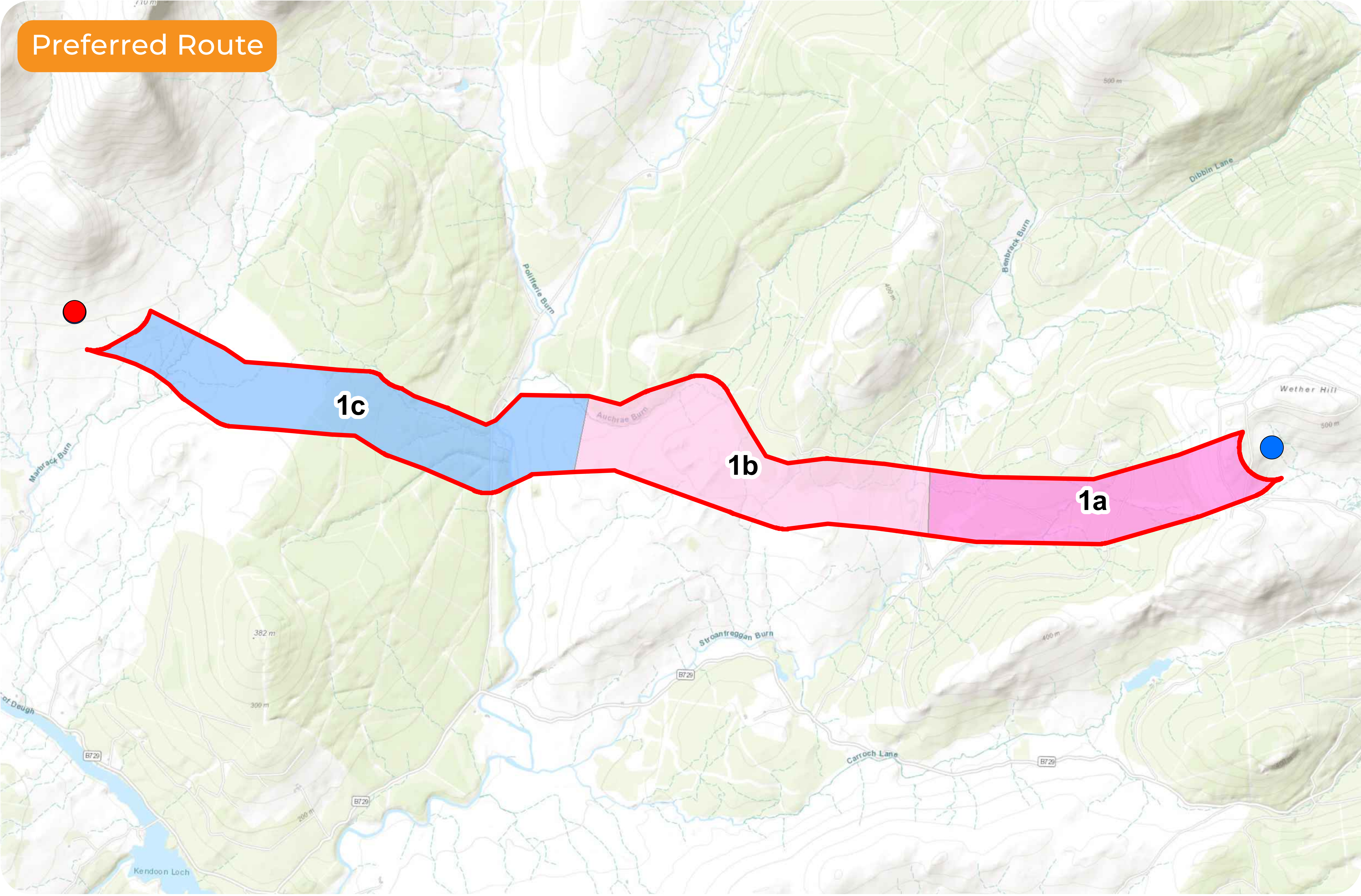
ECOLOGY



GEOLOGY, HYDROLOGY AND HYDROGEOLOGY

The appraisal followed best practice guidelines as outlined by the Holford Rules and SPEN’s Approach to Routeing.

This process identified the Preferred Route, which consists of Sections 1a, 1b and 1c, as shown below.



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What will it look like?

Trident wood poles carry single circuit lines operating at 132kV.

There are three types of poles that can either be a single or ‘H’ pole configuration:

- Intermediate: the pole is part of a straight-line section
- Angle: where the overhead line changes directions
- Terminal: where the overhead line terminates into a substation or on to an underground cable section via a cable sealing end.

Based on the surrounding environment, it is anticipated that both single and ‘H’ pole configurations would be used.



Trident Single Pole



Trident ‘H” Pole



Terminal “H” Pole

How will it be constructed?

Temporary construction compound established as a lay down area for plant, equipment and staff welfare.

Access created to the pole locations in a manner that minimises impact on soils.

Pole foundations constructed.

Poles hoisted into position.

Excavated material backfilled to maintain original horizons.

Conductors strung between poles.

Reinstatement of pole sites and removal of temporary infrastructure sites.



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Have your say

Involving the local community in the project is important to us. Talking to you will help us understand your concerns and your feedback will be used to develop the Proposed Route.

All feedback received during the consultation will be considered. While we cannot respond to every response individually, we will provide information on how it has been considered as part of our planning application

How to respond

The consultation will run from Tuesday 22 April 2025 until Friday 23 May 2025. You can submit your comments using the feedback form, or by sending your comments to:

Next steps

Alternatively, please email us at: **wetherhillconnection@spenergynetworks.co.uk**

Consultation materials are available to download at:
www.spenergynetworks.co.uk/pages/wether_hill_wind_farm_connection.aspx



Wether Hill Connection Project
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All feedback will be considered, and options to amend or refine the design will be explored. Any changes following the consultation period will be captured in the ‘Proposed Route’. The ‘Proposed Route’ will be taken forward in an EIA Screening Request to Dumfries and Galloway Council.

Further environmental and technical assessment will then take place, following receipt of the EIA Screening Opinion, and the route further refined until a Route Alignment is identified. This Route Alignment will subsequently be submitted as a Planning Application under Section 37 of the Electricity Act.

Project timeline

