Welcome

Welcome and thank you for visiting this public exhibition for the **Galashiels to Eccles 132kV OHL Replacement Project.**

In normal circumstances, we would engage with communities face-to-face through drop-in public exhibitions, however, given current COVID-19 social distancing advice, this is not considered to be feasible at this stage. Therefore, we have prepared this virtual consultation material to replicate an in-person village hall experience in line with Scottish Government good practice guidance.

Photograph of existing AT Route

We hope you enjoy your visit, and we would encourage you to get in contact with SP Energy Networks should you wish to discuss the project further or have any questions.

Through this consultation, you will have the opportunity to:

- Learn about SP Energy Networks;
- Learn about the Project;
- Read about the proposals and the methods used to identify route options;
- View the preferred route; and
- Learn about the next steps and how you can provide feedback.

These exhibition boards and a copy of the Routeing and Consultation Report (2021) are also available for download.

This consultation will be live for four weeks between **27th September and 24th October 2021**. However, the information will remain accessible online at the website and available to download in a pdf format.

www.spenenergynetworks.co.uk/galashiels-eccles

About Us and Project Need

SP Energy Networks is part of the ScottishPower Group of companies and owns three regulated businesses in the UK. These businesses are ‘asset-owner’ companies holding the regulated assets and Electricity Transmission and Distribution licenses of ScottishPower. As part of this, SP Energy Networks operates, maintains and develops the network of cables, overhead lines and substations which transport electricity to connected homes and businesses in Southern and Central Scotland.

SP Energy Networks has a legal duty under Section 9 of the Electricity Act 1989 to keep its network up-to-date to safeguard electricity supplies, as well as to enable new connections for the generation of electricity.

The supply of electricity to homes and businesses in Galashiels and the surrounding area is currently secured by two existing overhead lines (OHL) (‘AT’ and U’ routes) which run between the Galashiels and Eccles substations. The ‘AT’ route is a 132 kilovolt (kV) OHL of approximately 30 kilometres (km) in length, carried on single circuit double wood pole supports as well as single and double circuit steel lattice towers. The ‘U’ route is also a 132kV OHL of approximately 26 km in length, carried on single circuit steel lattice towers.

The existing ‘AT’ and ‘U’ routes are being replaced to ensure that there is sufficient electricity transmission capacity in the network in the area.

Photograph of existing AT Route

Location and Study Area

Study area
132kV overhead line
400kV overhead line
Substation

Galashiels Substation

Eccles Substation

ZA

U

AT

The Galashiels to Eccles 132kV OHL Replacement Project

www.spenenergynetworks.co.uk

SP ENERGY NETWORKS

What are the Proposals?

SP Energy Networks' proposal is to seek Section 37 Consent under the Electricity Act 1989 from Scottish Ministers to construct and operate a new double circuit 132kV OHL between Galashiels and Eccles substations.

The new OHL will replace the existing 'AT' and 'U' routes. The construction and operation of the replacement OHL and the removal of the existing 'AT' and 'U' routes comprise the **'Galashiels to Eccles 132kV OHL Replacement Project'.**

What will the Overhead Line look like?

The replacement OHL will be approximately 30 km in length and will use 'L7' steel towers which have six-cross arms (three on each side) and a standard design height of 27 metres (m). The section of OHL between the steel towers is known as the 'span'. Span lengths between steel towers will average between 250 m and 350 m.

The existing 'AT' route comprises single circuit wood poles with an average height of 14 m and single and double circuit steel towers with an average height of 22 m. The existing 'U' route comprises single circuit steel towers only with an average height of 22 m.

Like the existing 'U' route, the steel towers for the replacement OHL will be fabricated from galvanised steel and grey in colour.

To maintain the electricity supplies in the area whilst the replacement OHL is being constructed, the existing 'AT' and 'U' routes will continue to be operational. Only after the replacement OHL is fully installed and operational, will the existing OHLs be decommissioned and removed.

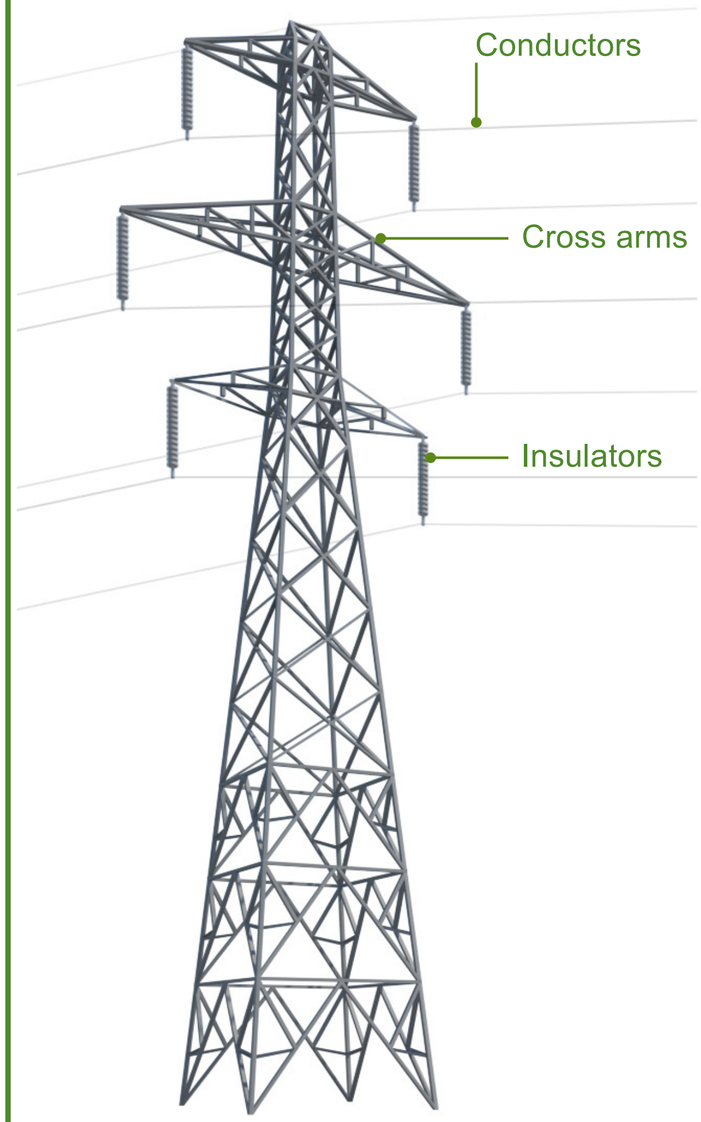
continued >

The location of new steel towers along the final proposed route will be confirmed through a detailed design/technical review process which will be informed by the findings of this public consultation.

Other temporary infrastructure will be required during construction of the replacement OHL, including access tracks and storage areas. It is likely that a number of these components will be used for both construction as well as decommissioning of the existing OHLs.

In terms of operation and maintenance, whilst most OHL components are maintenance free, exposed elements which suffer from corrosion, wear, deterioration and fatigue may require inspection and periodic maintenance.

When the operational life of the replacement OHL comes to an end, it is possible that the line may be re-equipped with new conductors and insulators and refurbished. Alternatively, the OHL may be decommissioned fully.



Typical 132kV ‘L7’ steel lattice tower

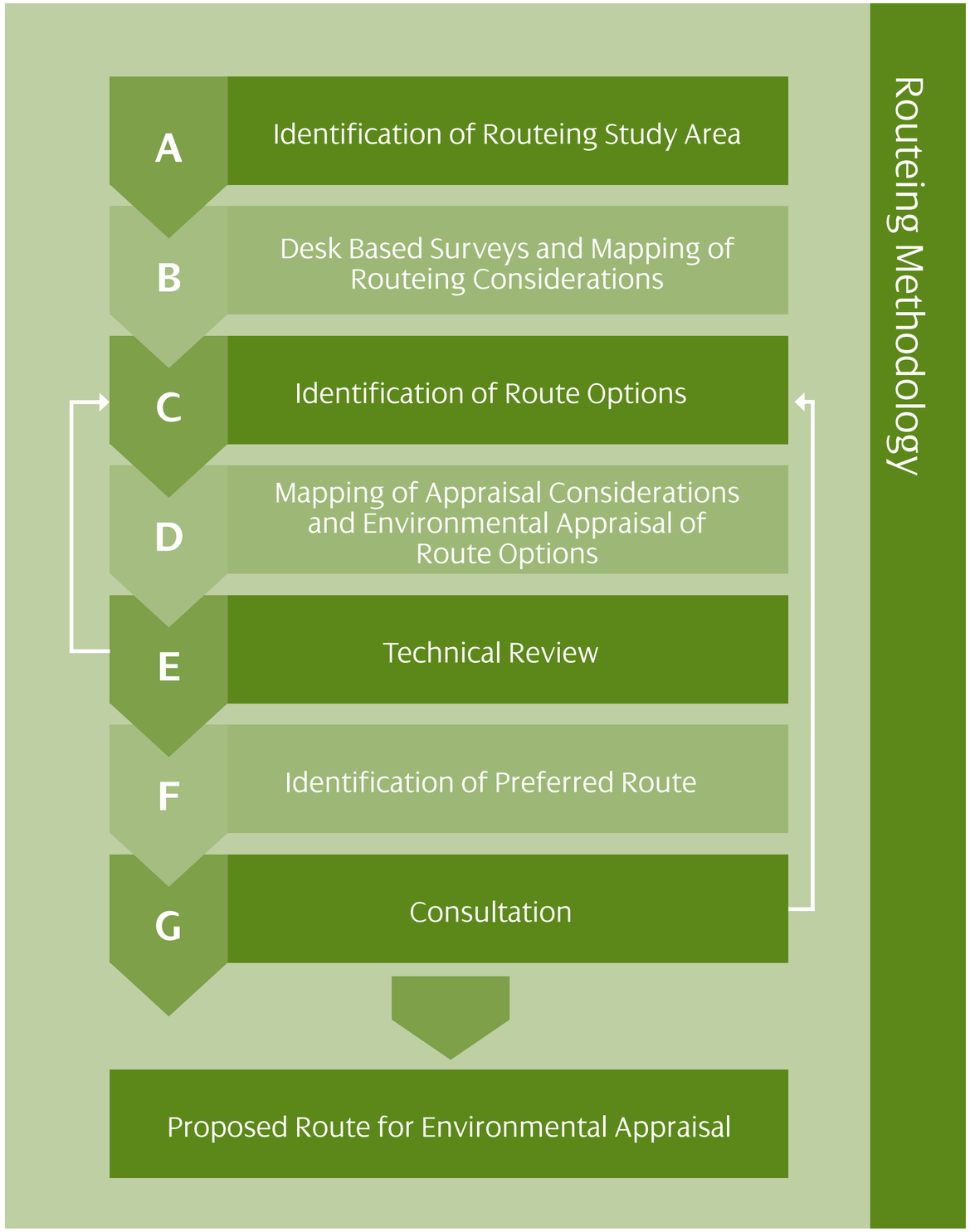
Routeing Methodology

SP Energy Networks has been working with independent consultants to identify potential route options for the proposed replacement OHL. Our objective is to identify a route for the OHL which meets the technical requirements of the electricity system, which is economically viable and causes, on balance, the least disturbance to the environment and the people who live, work and enjoy recreation within it.

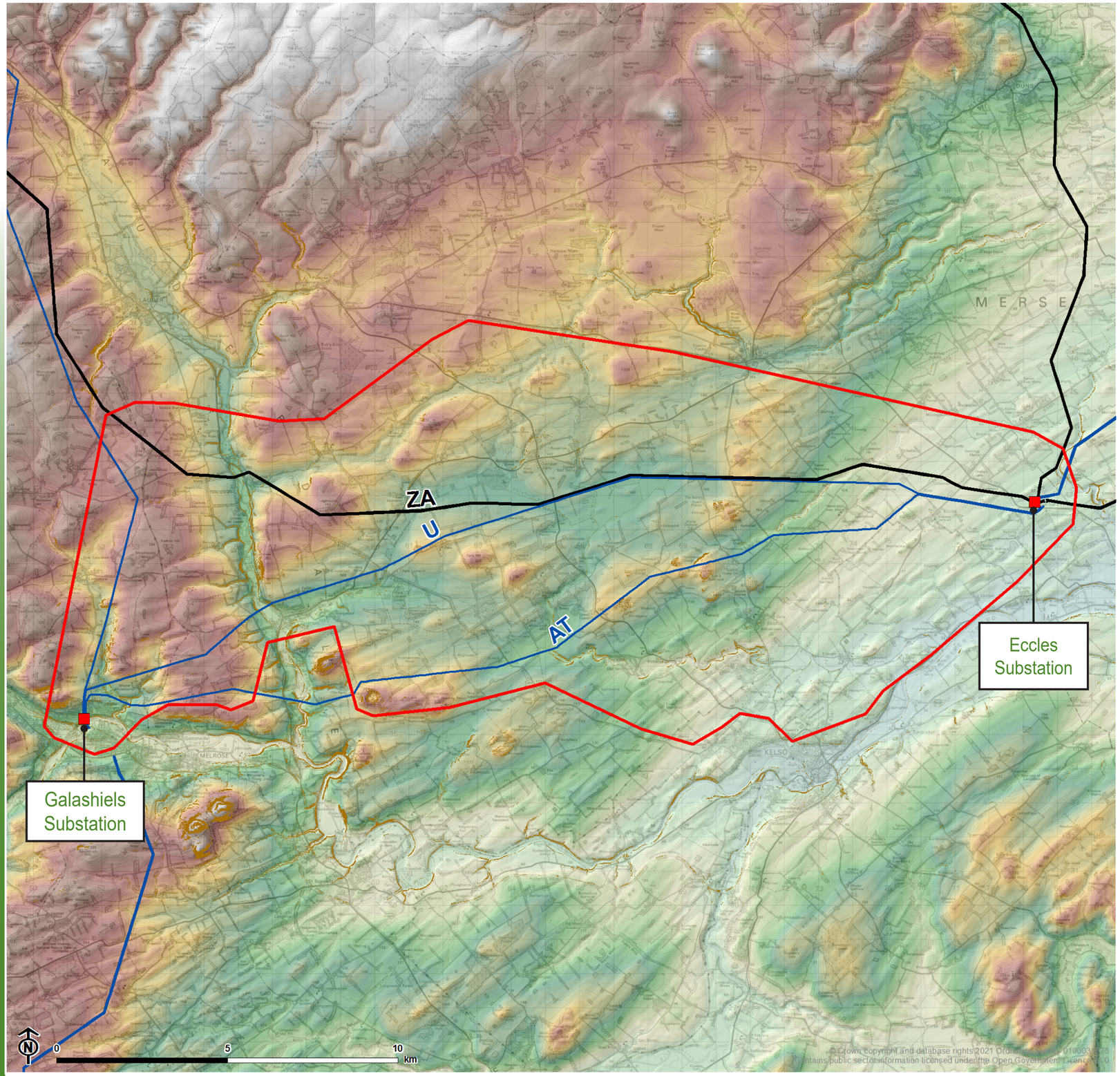
An overview of the routeing methodology adopted is illustrated here.

The routeing methodology follows a linear iterative process of steps. The first step (Step A) involves the identification of a study area, which is large enough to accommodate all potential route options, taking account of key environmental and technical requirements (i.e. connection points) and other factors such as topography and proximity to other existing OHLs.

The study area adopted for the purposes of routeing is displayed on the next board.



The study area for the Galashiels to Eccles 132kV OHL Replacement Project



Study area
132kV overhead line
400kV overhead line
Substation
>22° Slope

Topography AOD

High : 464.2

Low : 15.2

Routeing Considerations

Following the identification of the study area, areas/sites of natural and cultural heritage value designated at a national, European or international level (areas of 'highest environmental value') were mapped and avoided where possible in the identification of route options. These routeing considerations included areas such as: Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSI), Scheduled Monuments, Gardens and Designed Landscapes and Listed Buildings.

The mapping of routeing considerations also included areas that are of regional or local importance and/or are smaller in scale to aid in the appraisal and selection of a preferred route. These routeing considerations included areas of Ancient and Native Woodland, Scottish Wildlife Trust Reserves, Local Wildlife Sites, Class 1 and 2 Priority Peatland Habitat, non-designated heritage assets, residential properties, wind turbines, existing OHLs, committed developments (planning applications or consented but unbuilt developments) and waterbodies.

Photograph of existing U Route

Landscape character and landscape designations have also been key considerations in the routeing process. Whilst not within the study area, there are nationally and locally designated landscapes to the immediate south, including the Eildon and Leaderfoot National Scenic Area (NSA), the Tweed Lowlands Special Landscape Area (SLA) and the Tweed, Ettrick and Yarrow Confluences SLA, and the avoidance of these areas were important considerations when initially identifying the study area and route options.

The Route Options

Given the nature of overhead transmission lines, the primary environmental effects are likely to be landscape and visual effects. The best way to limit adverse effects on landscape and visual amenity is to have a landscape led approach to routeing, reflecting the Holford Rules (guidelines for routeing OHLs) and taking account of the other routeing considerations.

The study area was analysed to establish a number of possible 'route options'. This process involved the avoidance where possible of designated areas of high environmental value, as well as technical constraints.

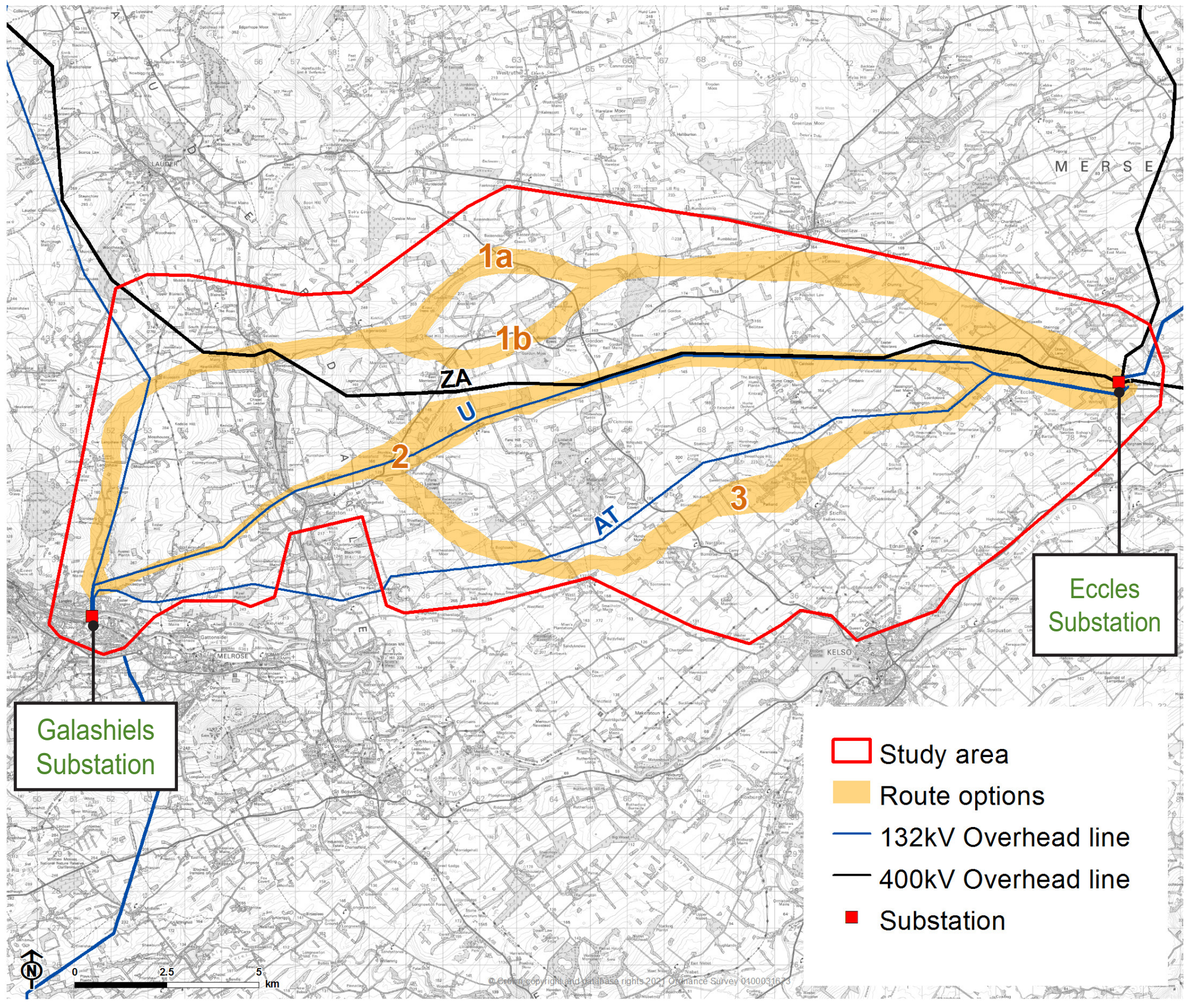
Following the desk-based mapping exercise to define potential route options based on the environmental and technical constraints, a site visit was undertaken by the project landscape architects to further refine the potential route options for taking forward to the appraisal stage.

Each of the route options were given a numerical reference: 1a, 1b, 2 and 3[1] .The route options have the same connection points i.e. between the existing Eccles substation and Galashiels substation.

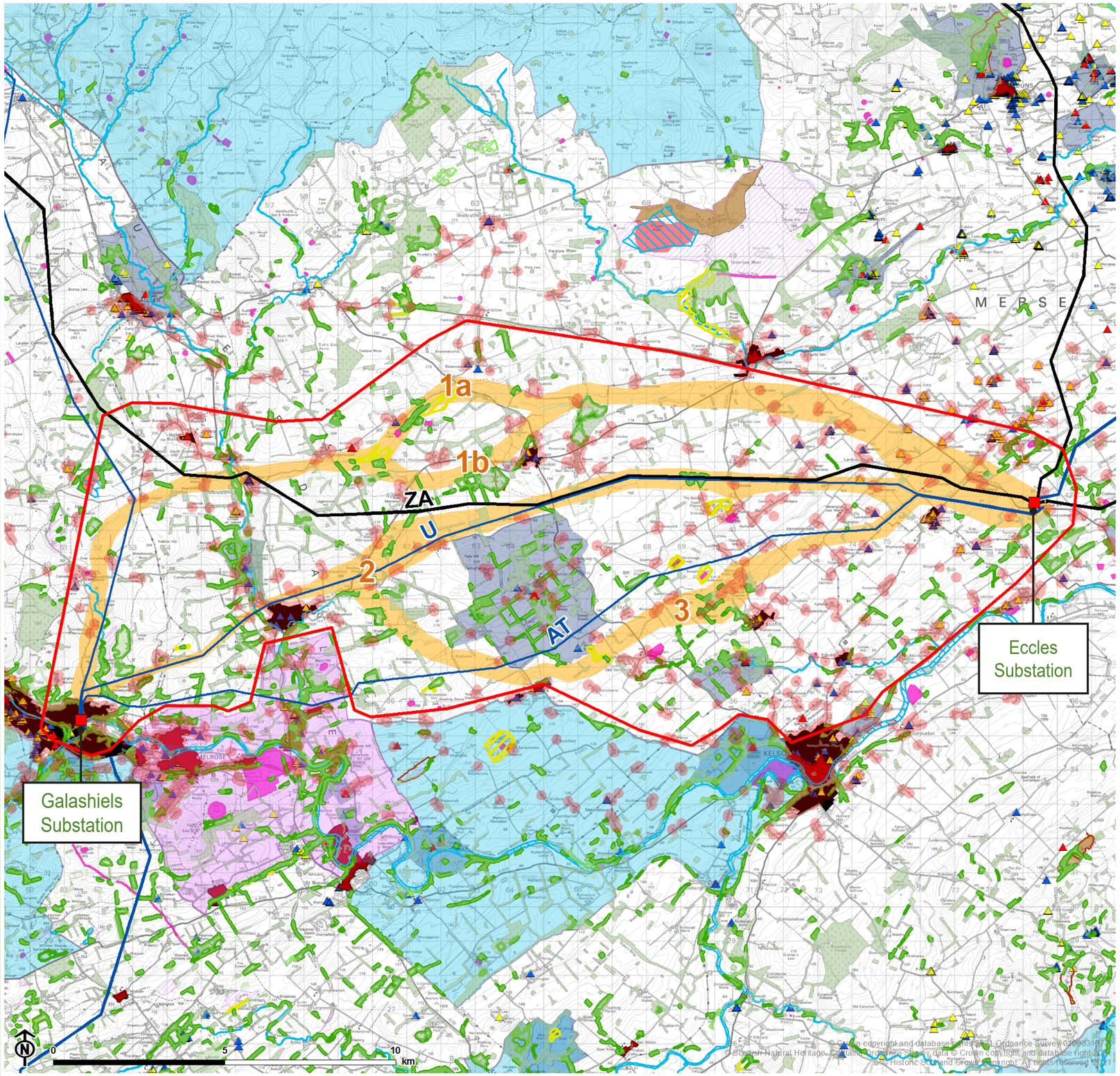
[1] Whilst Route Option 1 is split into two parts (a and b), it has been treated as one route rather than two, hence the reference to three route options in total instead of four.

In total, three route options were identified for the Galashiels to Eccles 132kV OHL Replacement Project, as shown below.

Route Options 1 to 3



Routeing Considerations and Route Options 1 to 3



- Study area
- 132kV Overhead line
- 400kV Overhead line
- Substation
- Route options

Routeing Considerations

- Settlement boundaries
- Residential trigger for consideration (150m buffer)
- National Forest Inventory
- Native Woodland Survey of Scotland (NWSS)
- Ancient Woodland
- Category 1 Carbon Peatland
- Geological Conservation Review (GCR) Site
- Local Wildlife Site (Indicative)
- Scottish Wildlife Trust Reserve
- Special Area of Conservation
- Site of Special Scientific Interest (SSSI)
- National Scenic
- Special Landscape Area
- Conservation Area
- Category A listed
- Category B listed building
- Category C listed building
- Scheduled Monument
- Garden and Designed Landscape

The Preferred Route

To identify the preferred route, each identified route option was appraised using the following criteria, which continue to reflect the key considerations of the routeing methodology:

Length of Route

Landscape and Visual Amenity

Forestry

Current Land Uses

Hydrology

Biodiversity and Geological Conservation

Cultural Heritage

Technical Constraints

The reasoning for the use of these criteria and an outline of the methodology for appraising each route option against these is detailed in the Routeing and Consultation Document.

The preferred route is the one which achieves the best overall balance between limiting impacts on the environment and people, whilst also meeting SP Energy Networks technical requirements.

The Preferred Route - **Route Option 2**

Taking account of environmental and technical considerations, the preferred route for the replacement OHL is **Route Option 2**.

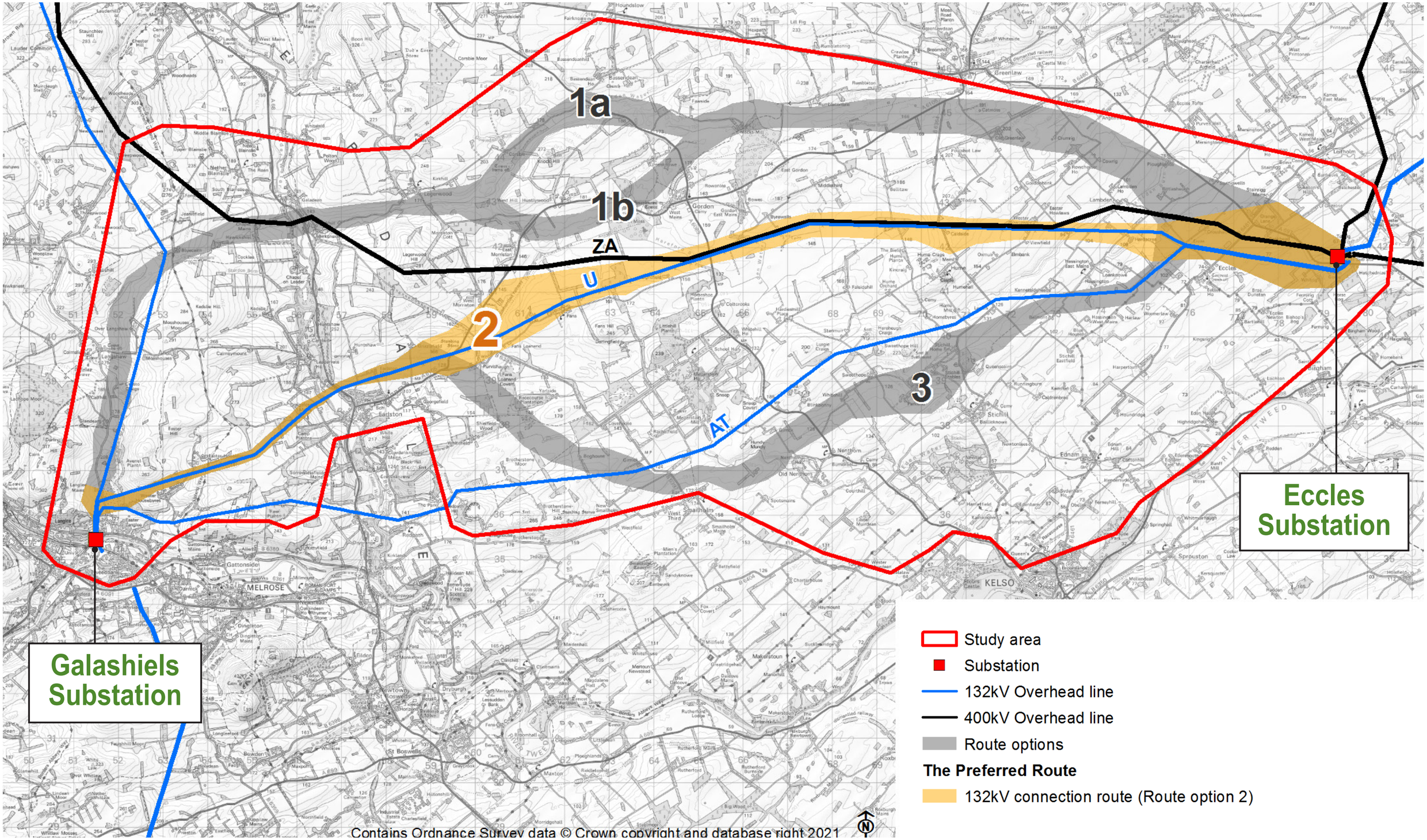
Route Option 2 broadly follows the existing 'U' route. From the existing Galashiels substation, the route passes north and north-east over undulating hills, crossing the Leader Water to the north of Earlston. It then passes north-east over hills to the north of Mellerstain Garden and Designed Landscape (GDL). The route continues east and south-east over an area of gently undulating lowland through the centre of the study area, before linking into the existing Eccles substation from the west.

Photograph of existing U Route

Route Option 2 is the shortest route and has the best potential to minimise landscape and visual effects as it largely follows the existing 'U' route (also comprising steel towers) which will present less of a change to the landscape and surrounding views, compared to the introduction of new infrastructure into a previously unaffected area. Moreover, as the area is currently supporting existing OHL infrastructure, it is assumed a replacement OHL following a similar route would already be assimilated into the natural environment, and would have less effects on local bird populations. By following the existing 'U' route, Route Option 2 is also considered to cause the least change to the settings of heritage assets, as well as the fewest direct effects on known non-designated heritage assets during construction. Route Option 2 is also the most favourable in relation to SP Energy Networks' technical criteria.

You can find more details of the appraisal in the Routeing and Consultation Document.

The Preferred Route - **Route Option 2**



The Consultation Process

Your feedback is an important part in helping us to finalise the proposed route which considers technical, economic and environmental issues along with landowner and public opinion.

We would be grateful if you could spare five minutes to complete our online questionnaire.

This virtual exhibition will run for four weeks from **Monday 27th September 2021** to **Sunday 24th October 2021.** The closing date for you to send your responses to us is midnight on **Sunday 31st October 2021**.

Following this date, the information will remain accessible online and available to download.

Your Views

As part of the consultation we would particularly like your views on:

1. The preferred route (Route Option 2) for the Galashiels to Eccles 132kV OHL Replacement Project
2. Any of the alternative route options we considered during the routeing process
3. Any other issues, suggestions or feedback you would like us to consider. We would particularly like to hear your views on your local area, for example areas you use for recreation, local environmental features you would like us to consider, and any plans you may have to build in proximity to the preferred route.

Please note comments at this stage are informal comments to SP Energy Networks and are made to allow us to determine whether changes to the preferred route are necessary. An opportunity to comment formally to the Scottish Government Energy Consents Unit (ECU) will follow at a later stage in the process following submission of the Section 37 application.

Below are the best ways to find out more or to talk to us

Visit the website:

On our dedicated website you can view or download all the project documents at the link below.

www.spenergynetworks.co.uk/galashiels-eccles

Email us:

GalaEcclesOHL@spenergynetworks.co.uk

Talk to us:

We will be on hand to answer any questions you may have via the live chat service on the virtual exhibition room on the following dates:

Monday 27th September from 2pm-4pm
Tuesday 28th September from 10am-12pm
Wednesday 29th September from 5pm-7pm.

You can also call the Community Liaison Team on 07516461129

Write to us:

Galashiels to Eccles 132kV OHL
Replacement Project
Land and Planning Team
SP Energy Networks
55 Fullarton Drive
Glasgow
G32 8FA

What happens next?

SP Energy Networks places great importance on the effect its work may have on the environment and local communities and we are keen to hear the views of local people to help develop the project in the best way.

Informed by the consultation responses and feedback from landowners, we will confirm the proposed route for the new overhead line.

Thank you for taking the time to visit this public exhibition.

Next Steps

- **A** Gathering of Feedback from Public Consultation to identify ‘Proposed Route’
- **B** Request Environmental Impact Assessment (EIA) Scoping Opinion from Scottish Government.
- **C** Undertake Environmental Surveys as part of EIA
- **D** Identification of Final OHL alignment and associated infrastructure for new and existing OHLs
- **E** Undertake EIA for the Construction and Operation of New OHL and Removal of Existing OHLs
- **F** Submit Section 37 Application for Consent to Scottish Government with EIA Report (circa late 2023)
- **G** Discharge of Planning Conditions (if consent is granted)
- **H** Construction of Project