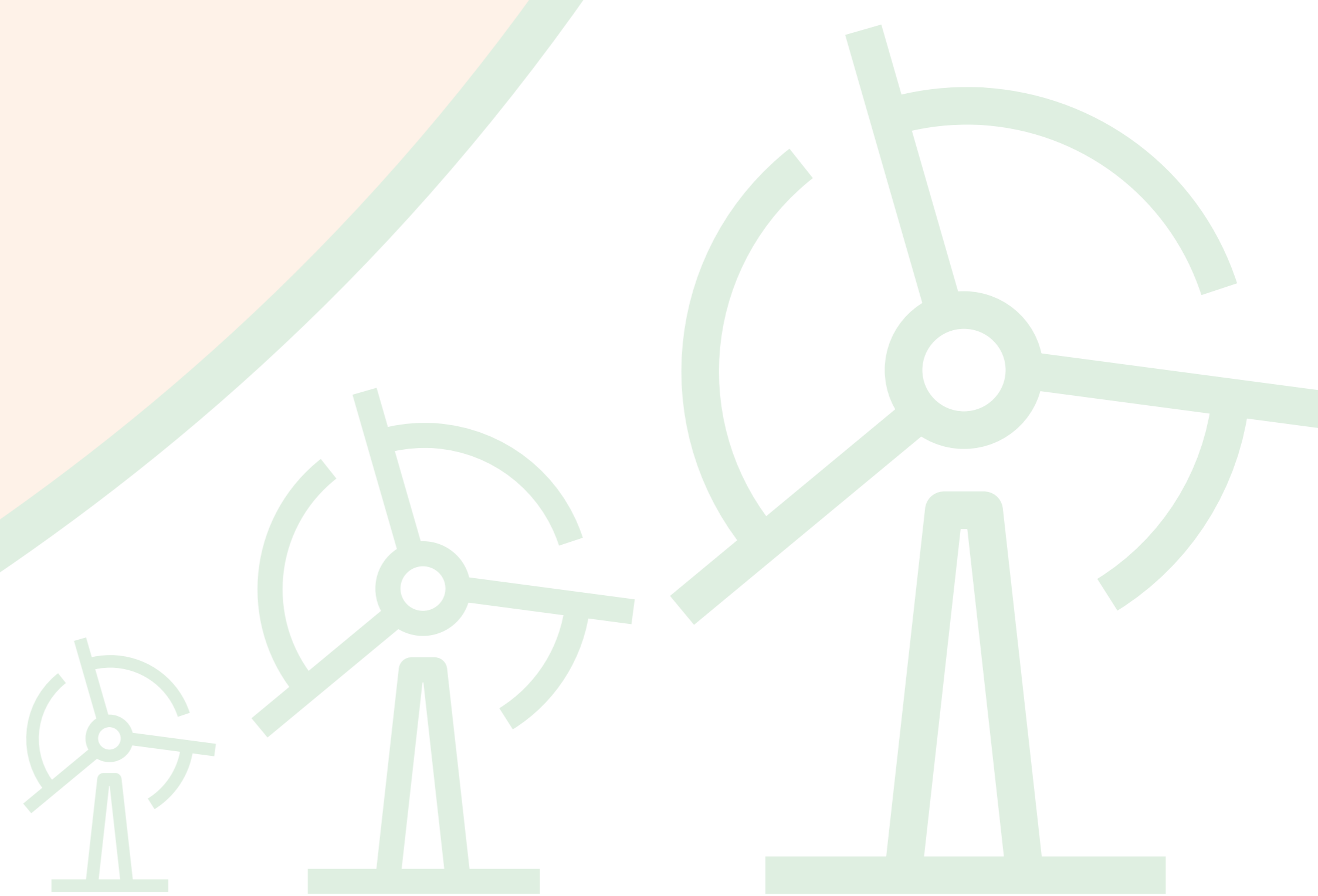


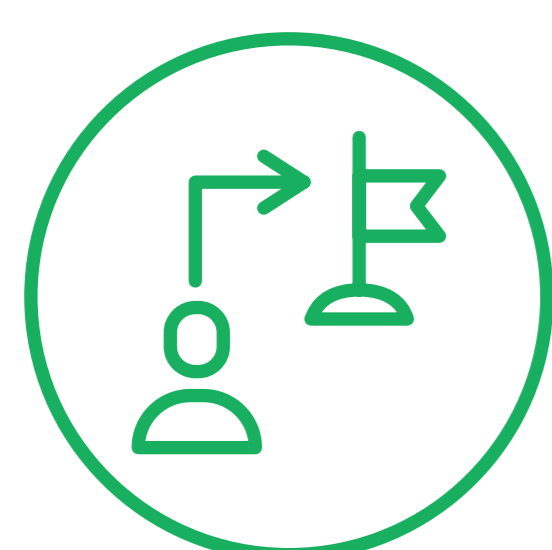
# Holm Hill Substation

Proposed Project



## Welcome

SP Energy Networks (SPEN) is proposing to construct and operate a new 132kV substation at Holm Hill.



## Our responsibilities

SPEN holds the electricity transmission licence for southern Scotland. We transport electricity generated from wind farms through our vast transmission network of overhead lines and underground cables, which we own and maintain.

We have a legal duty under the Electricity Act 1989 to provide grid connections to new electricity generating developments, including planned wind farms. Our systems play an important role in supporting the Scottish and UK Governments' renewable energy objectives.

The proposed substation location adjacent to the A713



## Why a substation is needed

Substations play a crucial role in enabling the transmission of electricity across the nation to supply local communities, households and commercial establishments.

The Holm Hill substation is essential for connecting local wind farms to the existing electricity transmission network. Two 132kV wind farm connections will come into Holm Hill substation, the Lorg wind farm connection (including Eucharhead and Shepherd's Rig teed to the line) and Quantans Hill wind farm connection (including Wether Hill and Cornharrow connected to the collector at Quantans Hill).



## Planning and consent

The proposed project is being progressed as an application under the Town and Country Planning (Scotland) Act 1997 and will be submitted to Dumfries and Galloway Council.



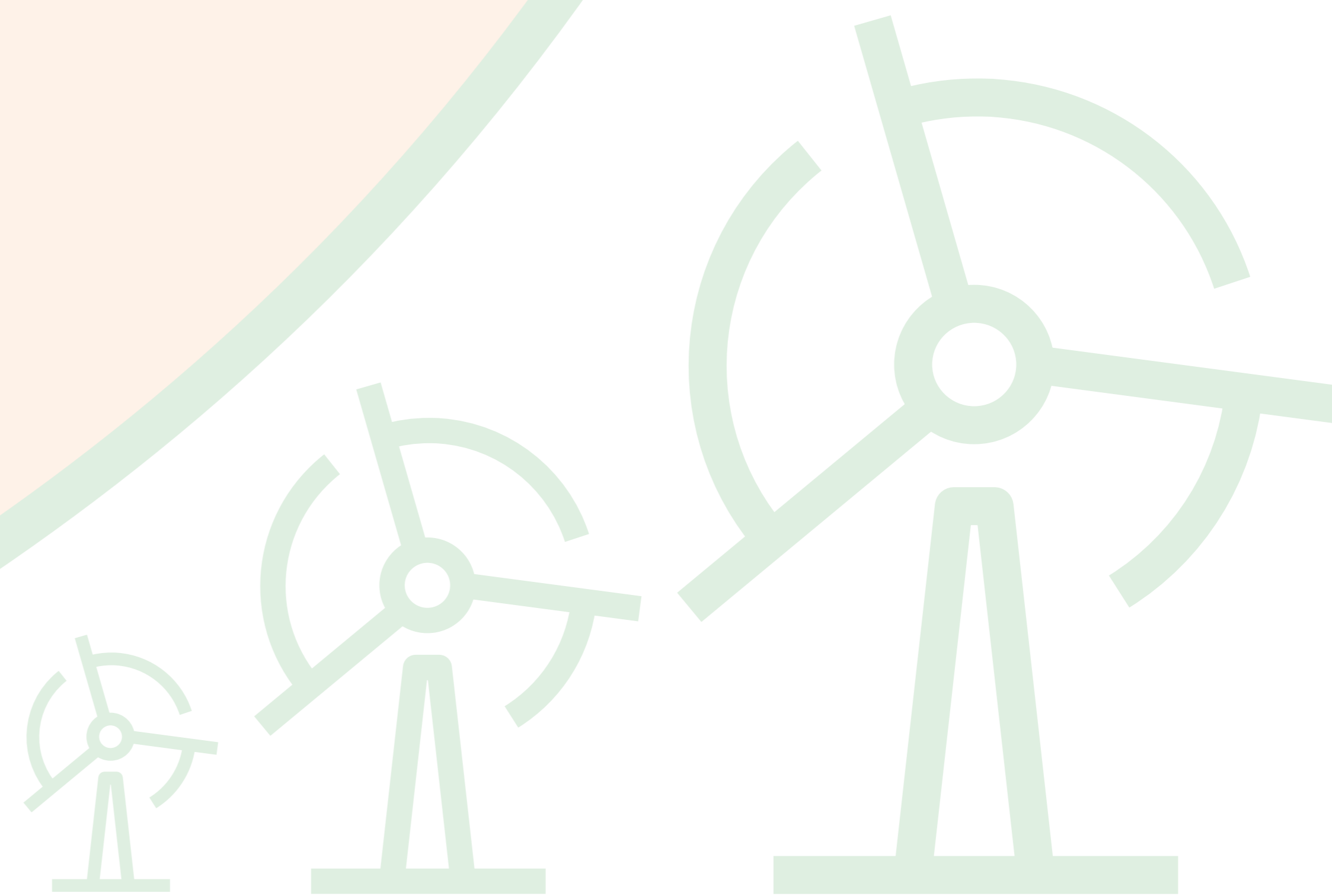
## Why we are consulting

Stakeholder and public involvement are an important part of the Scottish planning system. SPEN wants to ensure effective, inclusive and meaningful engagement to help progress projects and reach a balanced proposal.

This consultation offers you the opportunity to provide feedback and ask any questions about the proposed project before the planning application is submitted.

# Holm Hill Substation

## Proposed Project

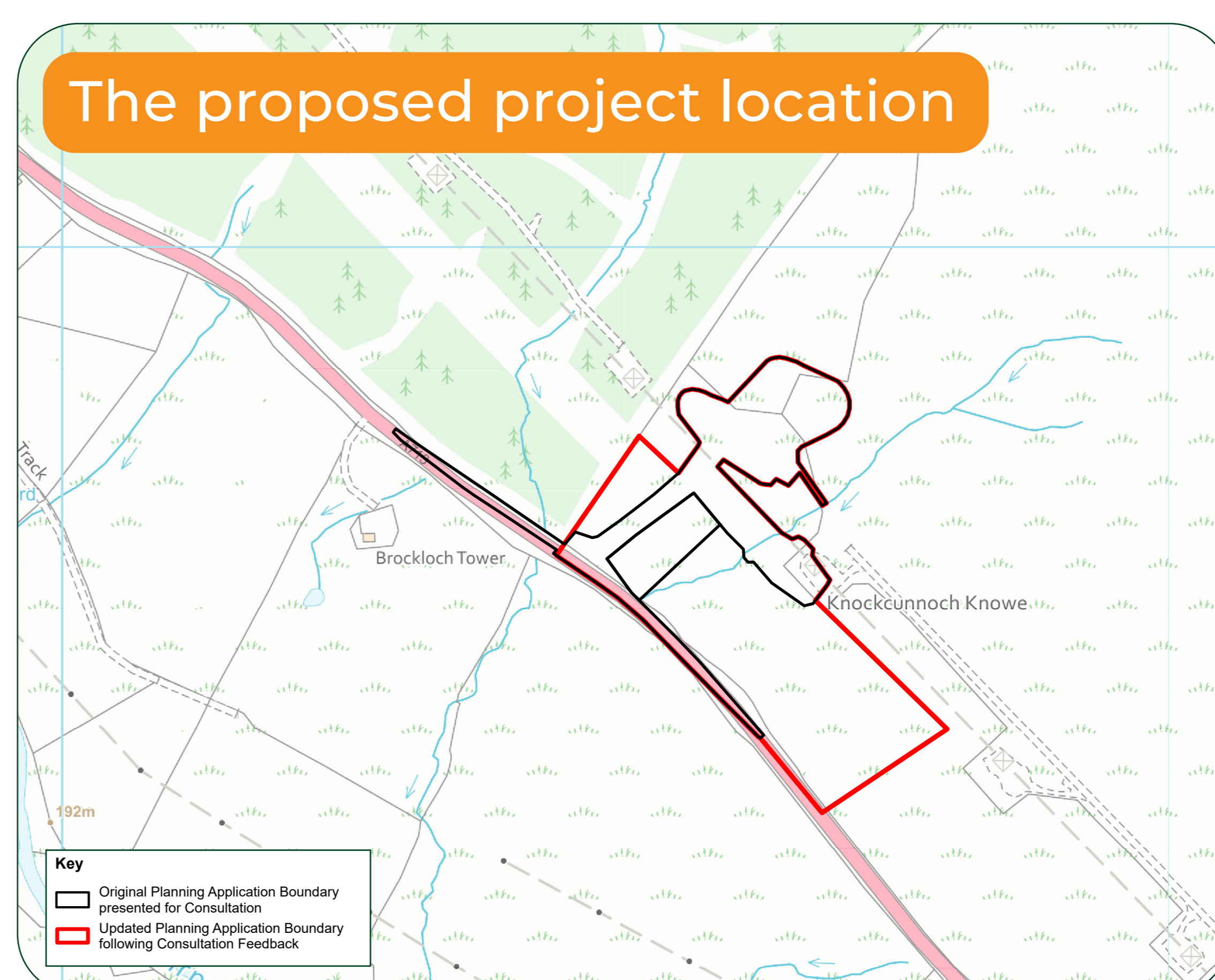


## About the substation

### Location

The proposed substation would be located approximately 2.5km to the north-west of Carsphairn and 7.5km south-east of Dalmellington.

The site is adjacent to the existing DE 132kV overhead line/steel pylon network, which shall connect to the proposed substation. The site is accessed via the A713 road network, positioned to the south of the site. The boundary of the site has been extended since the first consultation event to incorporate a scheme of landscape planting around the proposed substation.



### Indicative design

Within substations, specialised equipment facilitates the transformation of high voltage electricity from overhead lines to a lower voltage that can be transported through the distribution lines to supply homes and businesses

The proposed Holm Hill substation is a 132kV Air Insulation Substation, which means that electrical equipment is arranged in open air compartments.

#### The proposed 132kV substation will comprise:

- A main platform area with electrical infrastructure, generator, control building and four car parking spaces.
- A smaller platform/compound area, which shall connect to existing adjacent pylon.
- A sustainable drainage system (SuDS) including a pond.
- A permanent vehicle access from existing A713, with bellmouth to ensure vehicles leaving the substation have clear visibility of the road.
- Other components including the security fencing, CCTV and lighting.

In response to the feedback received during the first consultation event, we are also including additional planting around the site to help reduce the visibility of the proposed substation from the road and surrounding area.

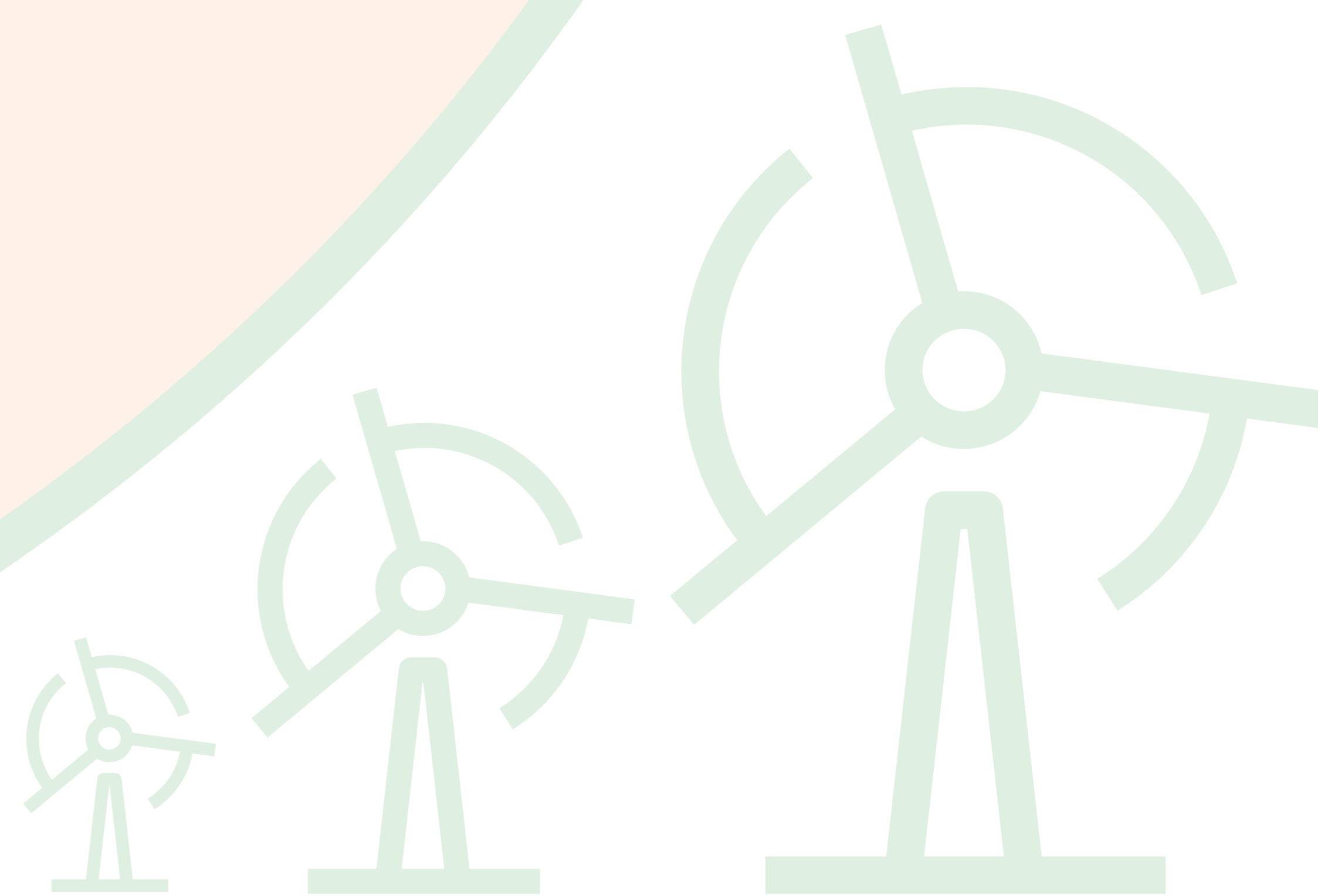
### Substation dimensions

- Total substation footprint: 2Ha
- Main platform: 60m x 40m
- Building heights: approximately 3.8m
- Substation plant height: will vary between 2.7m and 9.5m
- Overhead line gantry height; 10m

At this moment in time, the substation footprint and layout is only indicative. The design will be subject to further development, taking into consideration the consultation responses and other variable factors.

# Holm Hill Substation

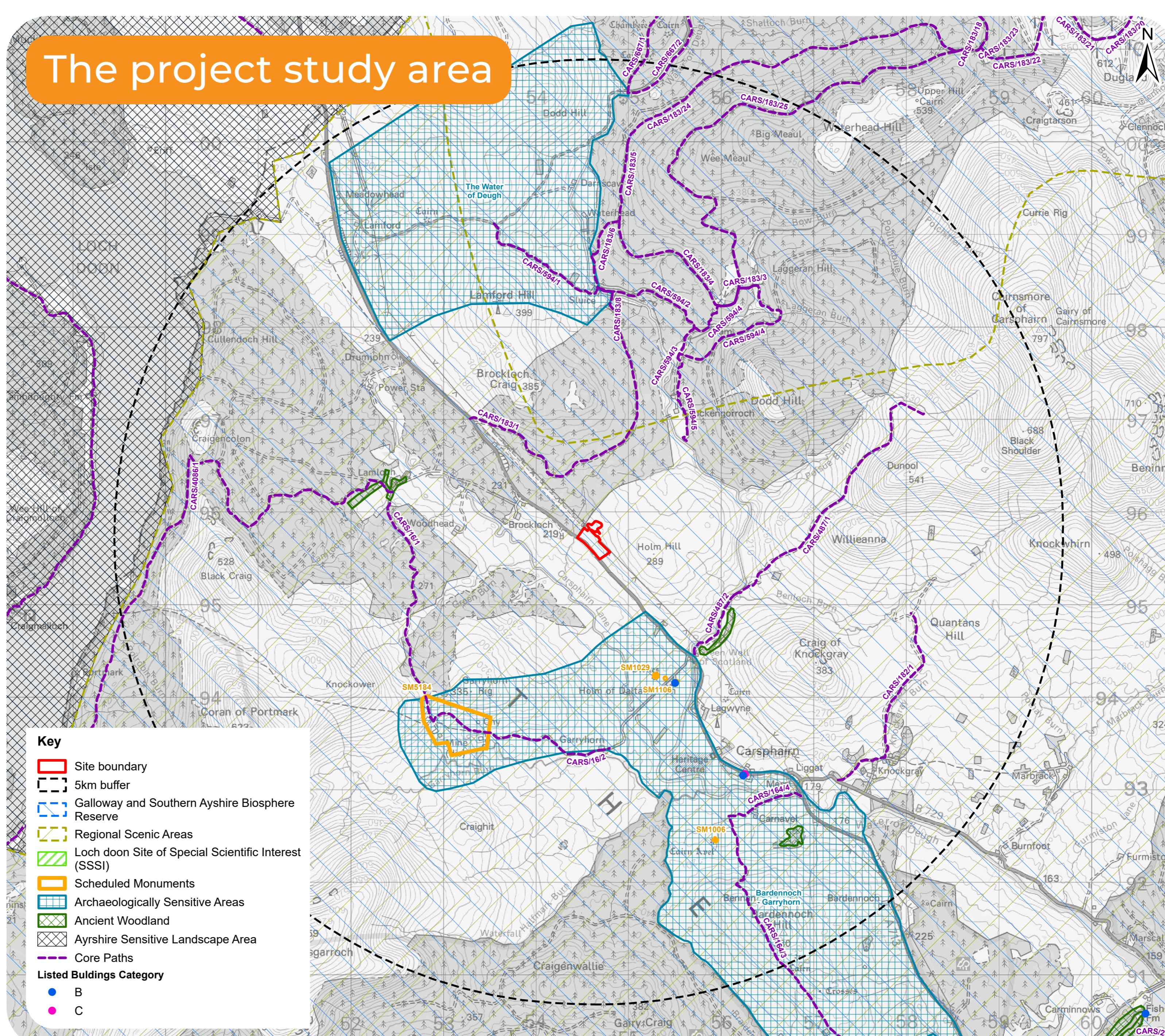
## Proposed Project



## Key considerations

As part of our site selection process and initial layout of the proposed substation, we conducted investigations to understand any potential effects on:

- Visual amenity
- Landscape
- Cultural heritage
- Ecology
- Ornithology
- Hydrology and peat
- Recreation and tourism
- Land use and forestry



These surveys ensure that we continue to incorporate ways to minimise the impact on the environment and local community as we develop the substation design. They also enable us to identify and implement suitable mitigation measures to be put in place during construction.

## Landscape and visual

The proposed substation would be read in context with the existing overhead line and pylon.

During construction, there may be some localised impacts due to construction activity and vehicle movements, but this would be short-term and temporary.

## Biodiversity

Ecological surveys show there are no signs of protected species other than otter in the vicinity of the site. Species Protection Plans will help address any impacts during construction activities including pre-construction surveys, regular surveys throughout works and avoidance of vegetation clearance during bird nesting season.

## How it will be constructed

A temporary works compound would be located between the bellmouth and substation on the eastern side of the access road. **Construction tasks would involve:**

- Establishing the temporary works compound and temporary access track
- Ground works, including temporary drainage works, to achieve a level site area
- Identifying a laydown area for materials
- Delivering materials to site
- Constructing the substation and installing the underground cables
- Reinstating the area around the site location
- Landscape planting

The planning application will be accompanied by a Traffic Management Plan which the Principal Contractor will adopt and develop to minimise disruption to the local road network and other road users.

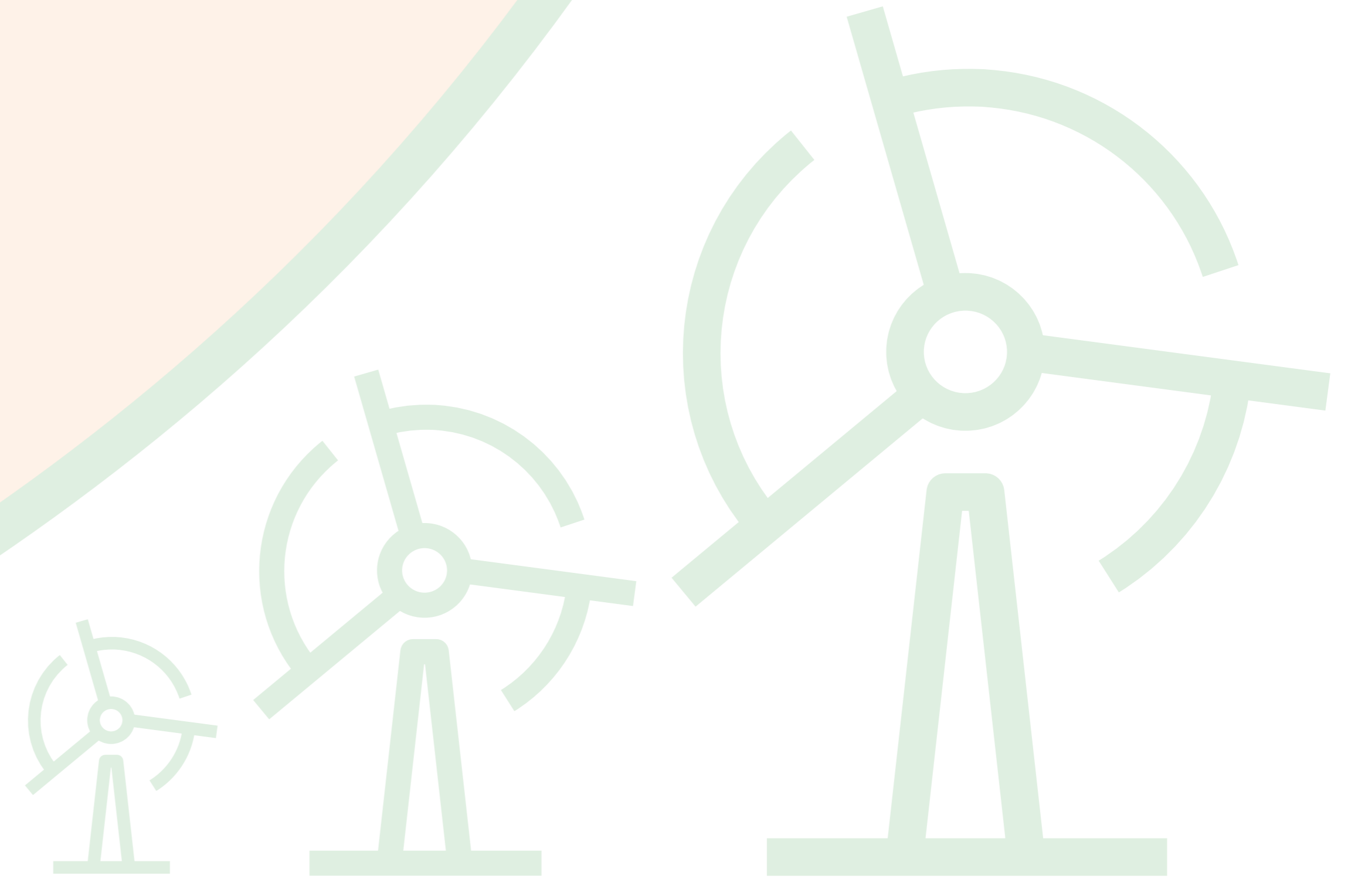
The construction of the substation is estimated to take between 12-18 months following the granting of consents for the proposed project.

## The substation in operation

Once in operation, the site will be unmanned and there will only be infrequent visits for maintenance purposes.

# Holm Hill Substation

## Proposed Project

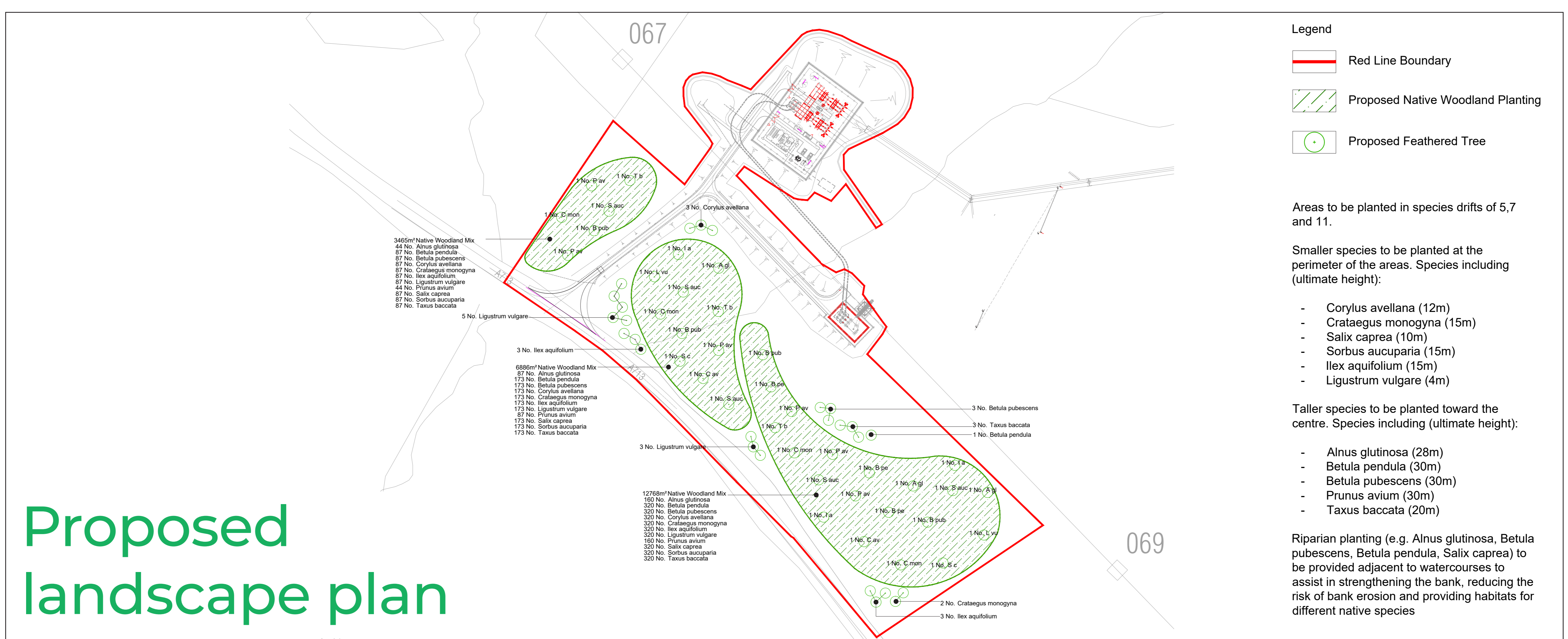


## Responding to your feedback

Involving the local community in the project is extremely important to us. We held a consultation event on 28 August 2024 and invited feedback on the proposed substation during the pre-application consultation that ran from 16 August 2024 to 13 September 2024.

All feedback received has been considered to help us refine the project before we submit our planning application. The purpose of this second event is to provide an update on the proposed substation and respond to the feedback received at the first event.

The planning application will be accompanied by a consultation report. This report will set out the themes of the feedback received and outline how they have been considered and addressed.



### Constuction lighting

Lighting shall be required during construction hours, particularly in the winter months. Measures to control lighting will be included in the Construction Environmental Management Plan, including keeping lighting at a low level and directional, pointing to the site. Only in the case of an emergency would lighting be required outside working hours.

### Protecting water supplies

We have undertaken a Private Water Supply Risk Assessment (PWSRA) which will be included as an appendix to the Environmental Appraisal. Where relevant, the PWSRA identifies mitigation measures and monitoring requirements to make sure Private Water Supplies are not adversely affected by the proposed works.

### Minimising noise

Dumfries and Galloway Council's Environmental Health section have been consulted on the types of equipment proposed, which do not require a noise impact assessment to accompany the planning application. No transformers are proposed within the substation. A diesel generator is proposed for emergency use only, which will only be in operation for testing or in the event of power failure.

Construction noise is likely to be intermittent and can be controlled through the implementation of a Noise Management Plan, within the Construction Environmental Management Plan, which would include the agreement of construction working hours with Dumfries and Galloway Council.

### Project timeline

