Renantis

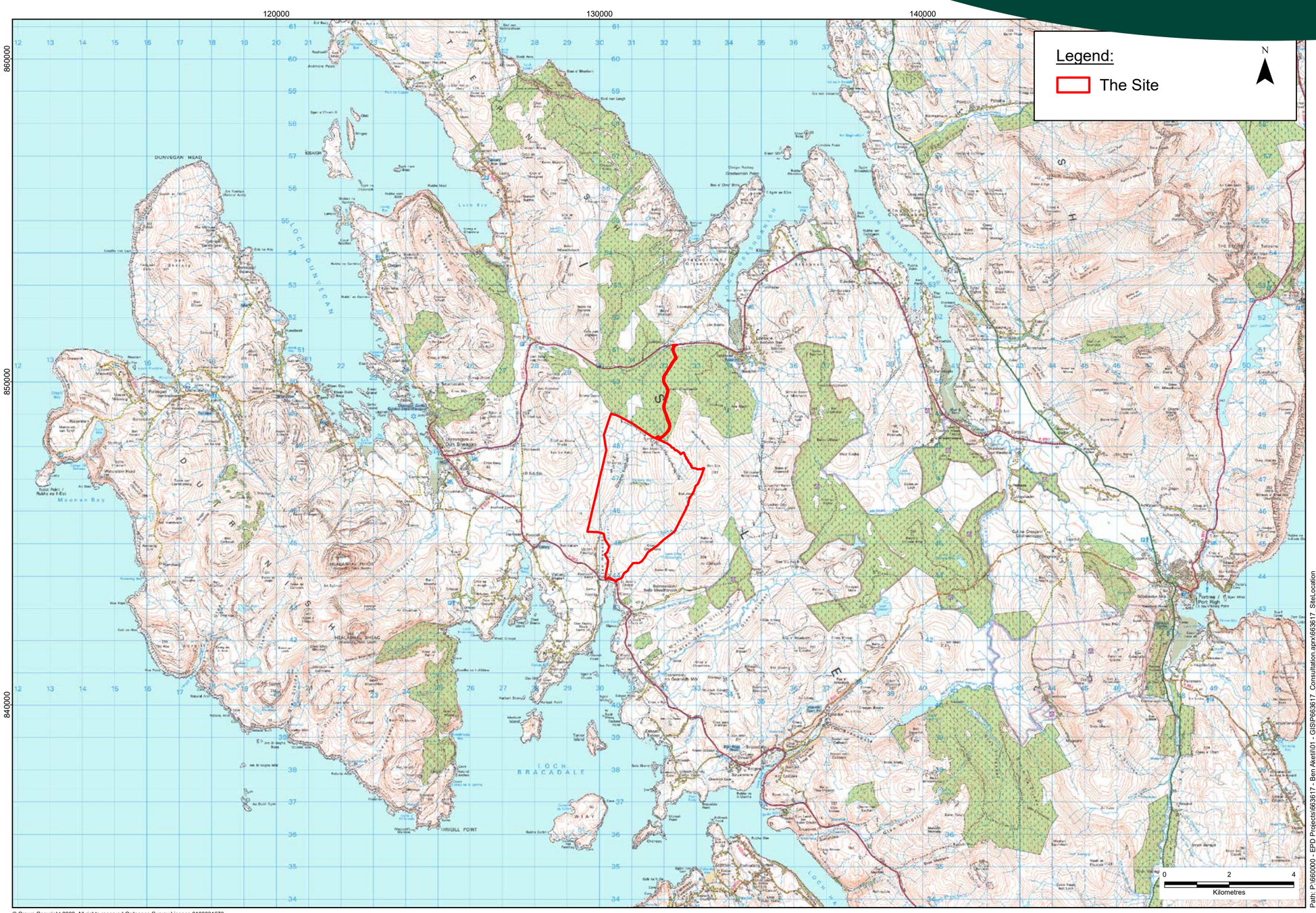
Formerly Falck Renewables

Since our first Ben Aketil public consultation exhibition, Falck Renewables has evolved into Renantis.

The new Renantis brand incorporates our caring approach to building a positive impact for our planet. This is a goal that we can only achieve together by collaborating with our colleagues, stakeholders and clients for real, safe and meaningful growth.

We will build on the Falck Renewables legacy as a leading player in the global energy transition to deliver a better future for all, by powering people's everyday life with care.

Welcome to our second public consultation event



Welcome to the second public consultation for the proposed repowering and extension of the existing Ben Aketil Wind Farm

Ben Aketil Wind Farm is an existing 27.6 MW wind farm near the town of Dunvegan on the Isle of Skye, Scotland. The wind farm comprises 12 turbines, each generating 2.3 MW and being 99.5m to tip.

Due to several factors, including the impending end of life of the turbines and advances in wind power technology, Renantis (formerly Falck Renewables) wishes to repower and extend the Ben Aketil Wind Farm.

Repowering explained

Repowering is the process of replacing older first-generation wind turbines with more powerful models that use the latest technology and are capable of producing significantly more electricity more efficiently. The process is carried out within a timeframe that allows replacement of the older units before they come to the end of their operational life.

Developer

Last year, the Falck family sold its stake in the company to the Infrastructure Investments Fund (IIF) and Falck Renewables has since been formally rebranded to Renantis. IIF will partner with Renantis to accelerate its growth plan and reinforce its leadership position in the renewable energy sector.

Renantis develops, designs, builds and manages power plants from renewable sources, with an installed capacity of more than 1.4 GW in the UK, Italy, USA, Spain, France, Norway and Sweden.

Since 2002, the company has been active in the UK, where it operates 12 onshore wind farms (413 MW) and has pioneered community and co-operative ownership in wind energy.

Renantis would like to take this opportunity to thank the community for their attendance of the previous public consultation event and for providing feedback on the Proposed Development online and in person. This event will highlight what has changed since the previous public consultation event in September 2022.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

The Proposed Development

Description of the proposal

Renantis wishes to replace the existing turbines with fewer, larger turbines that are each capable of producing more than double the electricity of the existing operational turbines. It is expected that the Proposed Development will deliver energy generation in excess of 50MW. Environmental, technical and commercial considerations throughout the design process have informed the final number and layout of turbines.

The main aim of the Proposed Development is two-fold: (1) to enable the Ben Aketil Wind Farm to continue generating renewable energy beyond the operational life of the existing turbines on the site, and (2) to increase the capacity of the wind farm to generate renewable energy. The overarching objectives of the Proposed Development are to:

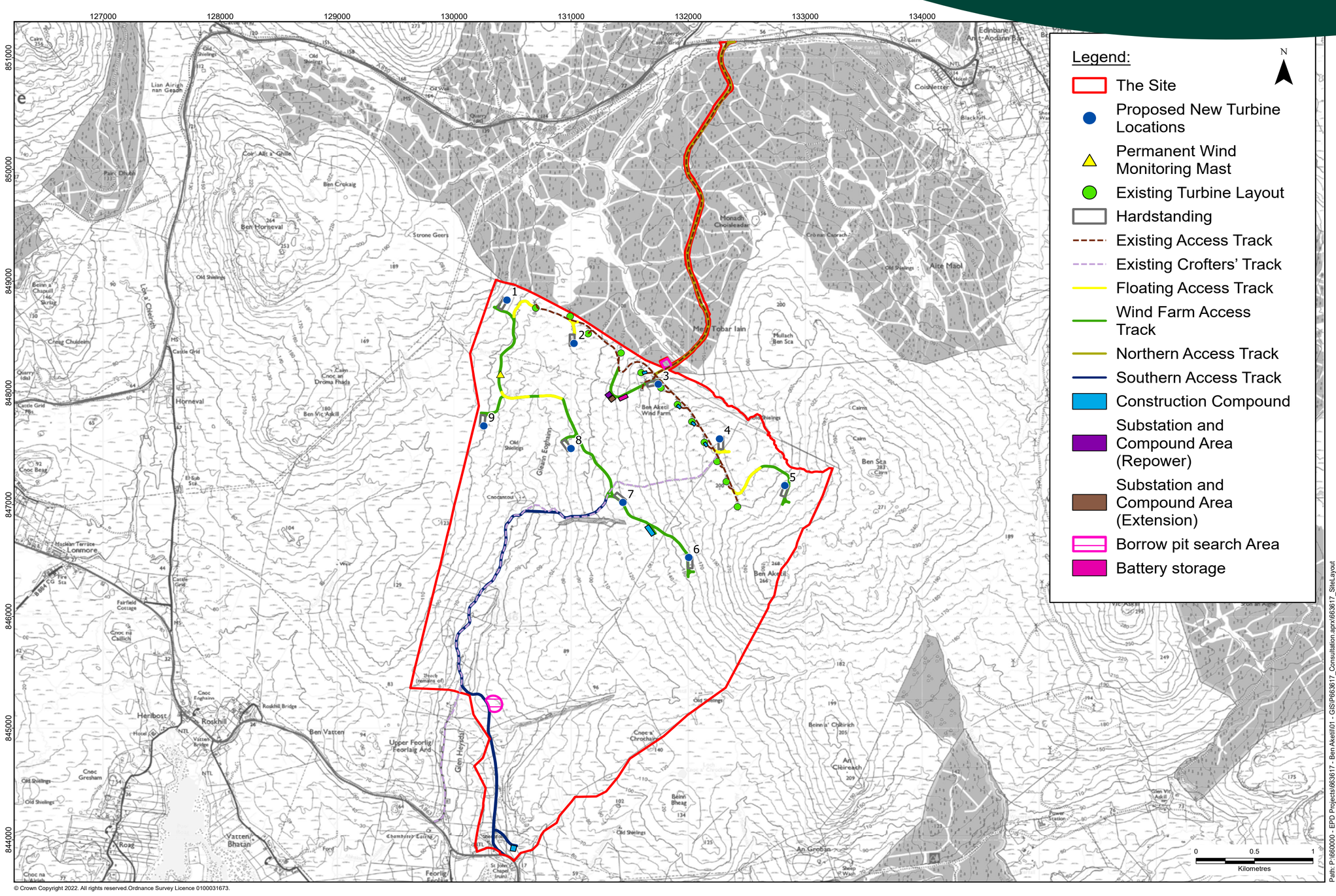
- replace the existing turbines at Ben Aketil Wind Farm, which will soon be nearing the end of their operational life, with new, more efficient turbines
- extend the wind farm to increase electricity generation capacity
- potentially continue generating electricity throughout the construction period
- minimise where practicable additional disturbance or environmental impacts by reusing existing infrastructure on the site.

Design objectives of the Proposed Development included minimising environmental impacts through careful design, while also taking into consideration technical and economic aspects. The ultimate aim is to achieve an outcome that is feasible for the applicant, acceptable to the consultees and will benefit the local community while minimising potential environmental impacts as far as practicable.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

The Proposed Development



The Proposed Development will include the following:

- decommissioning and removal of the 12 existing turbines and related infrastructure including hardstandings and the existing operational control building
- erection of 9 new turbines of approximately 5.6 to 6.6 MW each, with a maximum tip height of 200m
- hardstanding areas at the base of each turbine
- one permanent wind monitoring mast and associated hardstanding area
- approximately 17.4 km of track consisting of:
  - 6.1 km existing track
  - 7.5 km new track
  - 2.3 km upgraded track
  - 1.5 km floating track
- two substations and associated compounds including parking and welfare facilities
- an energy storage facility
- up to six construction compounds
- two potential borrow pits, to provide suitable rock for access tracks, turbine bases and hardstandings
- underground cabling linking the turbines with the substations.

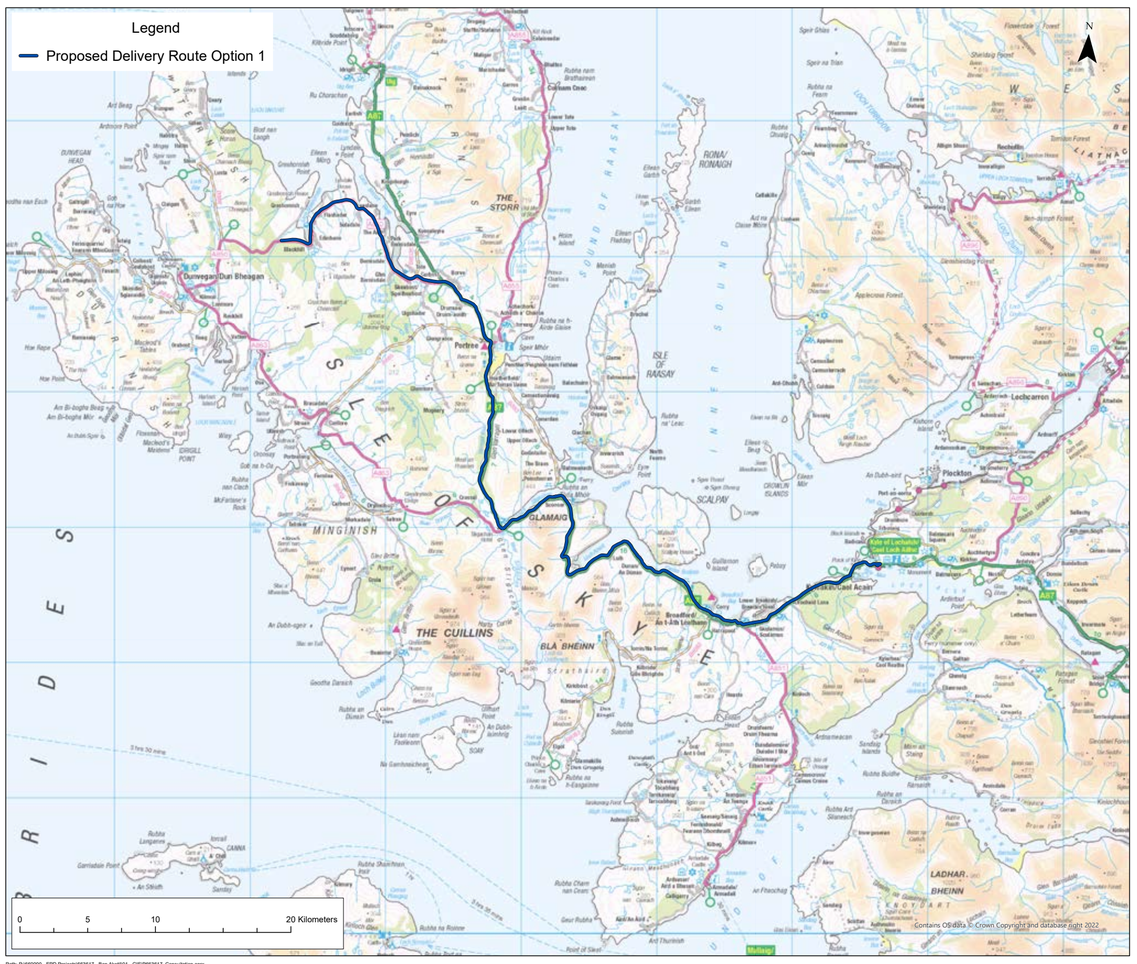
The plans also include battery energy storage capacity (20 MW) to maximise the use of the grid connection and help balance the national electricity transmission grid.

Various options are under consideration as to how to manage the waste that will be generated as a result of decommissioning the existing turbines. Metal waste will be recycled and hardstanding material will be reused as far as practicable on site during construction. Opportunities for re-use or recycling of the fibreglass-reinforced polyester blades is an evolving industry. Options for reusing, recycling or recovering material from the blades will be explored as industry best practice develops over the next few years.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Construction and access



Alternative construction phasing options

The applicant is considering two alternative construction phasing options.

- Scenario 1 proposes that the construction of the extension turbines and the construction of the repowering turbines is undertaken at the same time.
- Scenario 2 proposes that the four extension turbines are constructed first, followed by the decommissioning of the existing, currently operational Ben Aketil Wind Farm turbines, and then construction of the five repowering turbines.

It is estimated that construction would take the following approximate times to complete:

- Scenario 1: 18 months
- Scenario 2: Construction of the four extension turbines (approximately 1 year), followed by decommissioning and removal of the existing wind turbines and associated infrastructure (approximately 1 year), followed in turn by construction of the five repowering turbines (approximately 1 year) – Total of 3 years. There would be a delay between the completion of construction of the first four turbines and the start of construction of the second five turbines of no more than 5 years.

Two alternatives are being considered to gain access to the site and a study has been undertaken which took into consideration the requirement to transport materials to site, in particular the turbine components which will require transport via abnormal load heavy goods vehicles (HGVs).

Both options included the transport of materials from the port at Kyle of Lochalsh to the east of the Isle of Skye. Both routes share the A87 to Sligachan then split, with one route providing access to the site from the A850 in the north (using the existing northern access track), and the other route providing access to the site from the A863 in the south.

If the site is constructed using Scenario 1, where the repowered and extended layout are constructed together, the northern access is preferred. If the extension is constructed first, the preference is to utilise access from the south.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Environmental Impact Assessment

RSK has been appointed to carry out a detailed environmental impact assessment (EIA) of the Repowered and Extended Ben Aketil Wind Farm. This study will form part of the formal application for consent to the Scottish Ministers.

The environmental impact assessment process includes:

- consultation with the local authority, various organisations and the public to identify specific concerns and issues
- determining the existing wind conditions at and around the development site by reviewing available data and undertaking specialist field surveys
- assessing the potential impacts on the existing environment
- mitigation proposals to alleviate any significant impacts identified.

The environmental impact assessment will include detailed studies for the following disciplines:

- landscape and visual assessment
- ecological and ornithological impact
- cultural heritage and archaeology
- geology, hydrogeology, hydrology and peat
- telecommunications
- noise
- traffic and transport
- aviation
- shadow flicker
- climate change
- socioeconomics.

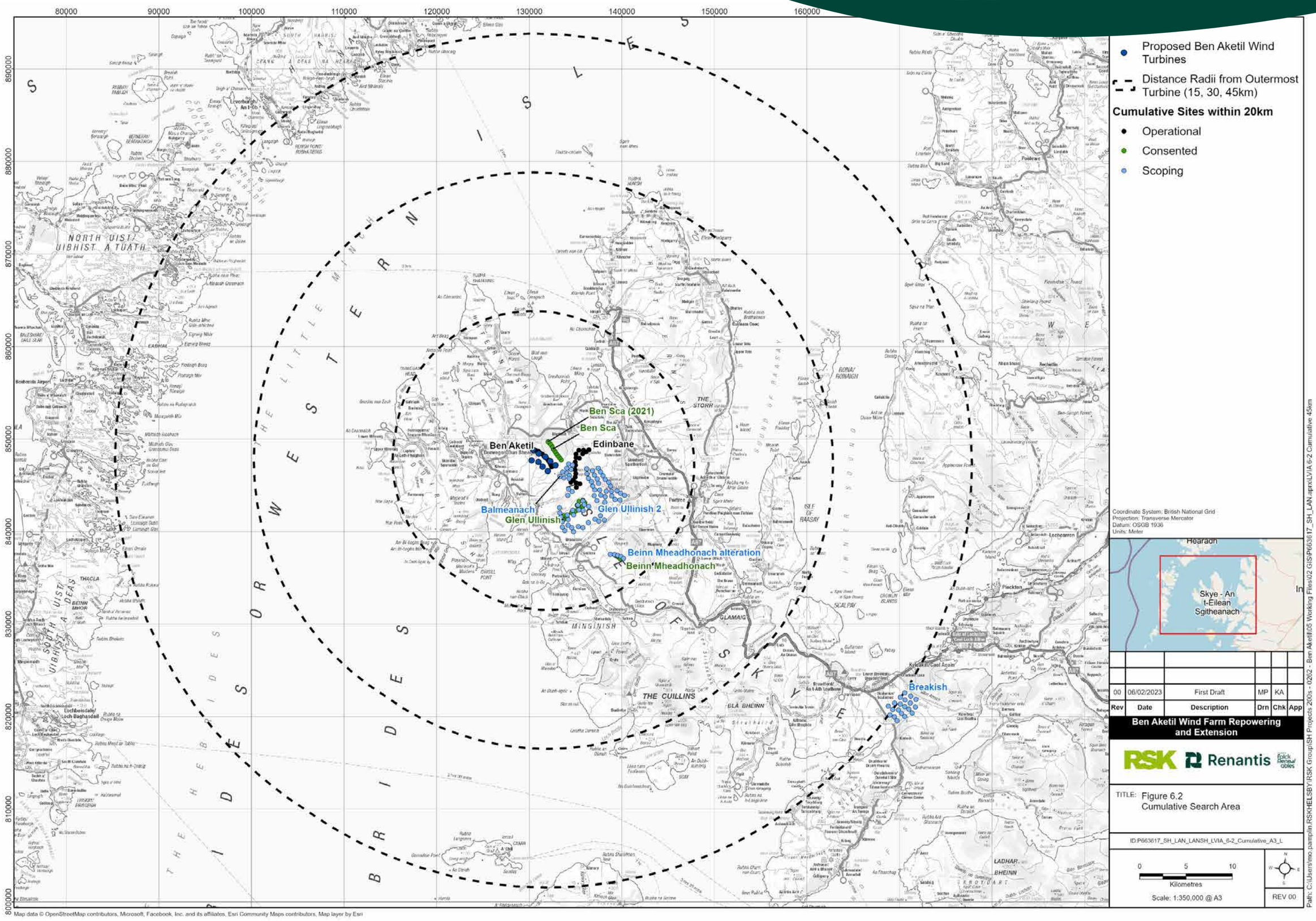
Since the previous public consultation event, Renantis has conducted a detailed scoping exercise to identify the environmental aspects to address in the EIA for the Proposed Development. This included a review of available environmental information and desk- and site-based surveys.

A Scoping Report was submitted to the Energy Consents Unit as part of a request for a scoping opinion issued on the 8 August 2022. This report identified the environmental aspects to be addressed within the EIA report. Statutory and non-statutory organisations were consulted at the scoping stage and their responses were included in the scoping opinion issued by the Scottish Government on 13 October 2022.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Landscape and visual impact



A landscape and visual impact assessment will establish the potential effects of the Proposed Development on the surrounding landscape and visual amenity.

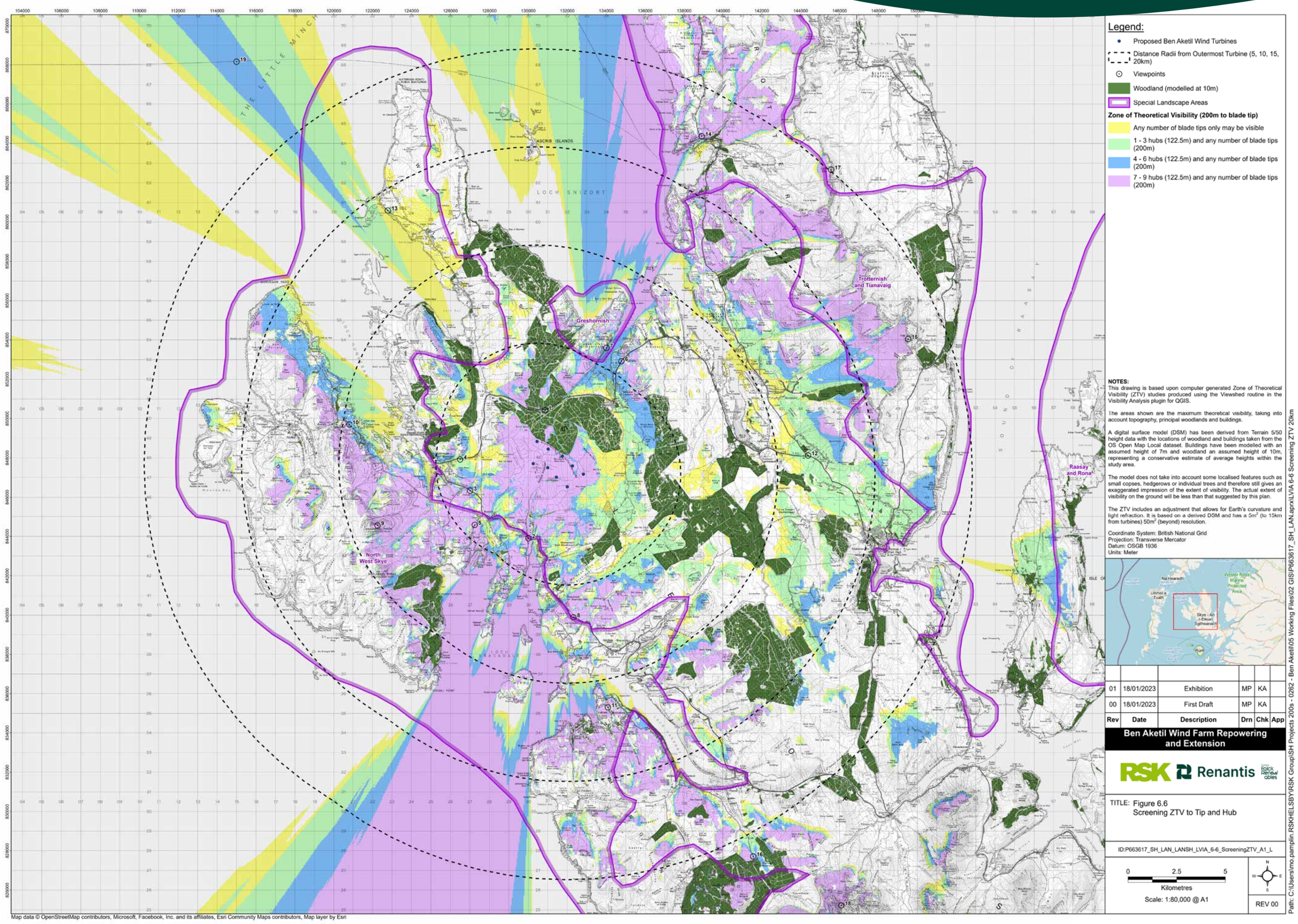
A zone of theoretical visibility (ZTV) is a computer generated tool that establishes the likely extent of the visibility of a Proposed Development. A ZTV based on preliminary design options has been prepared to inform the landscape and visual impact assessment.

The ZTV indicates the areas where turbines will be visible, based on the relief of the surrounding study area (45 km from the outer turbines). This is supported by producing and analysing wirelines and photomontages from several agreed viewpoints that give a clearer picture of what the new turbines would look like.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Zone of theoretical visibility



Renantis
Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Visualisations

Viewpoint 2: A863 at Feorlig (at night)

Viewpoint 2: A863 at Feorlig

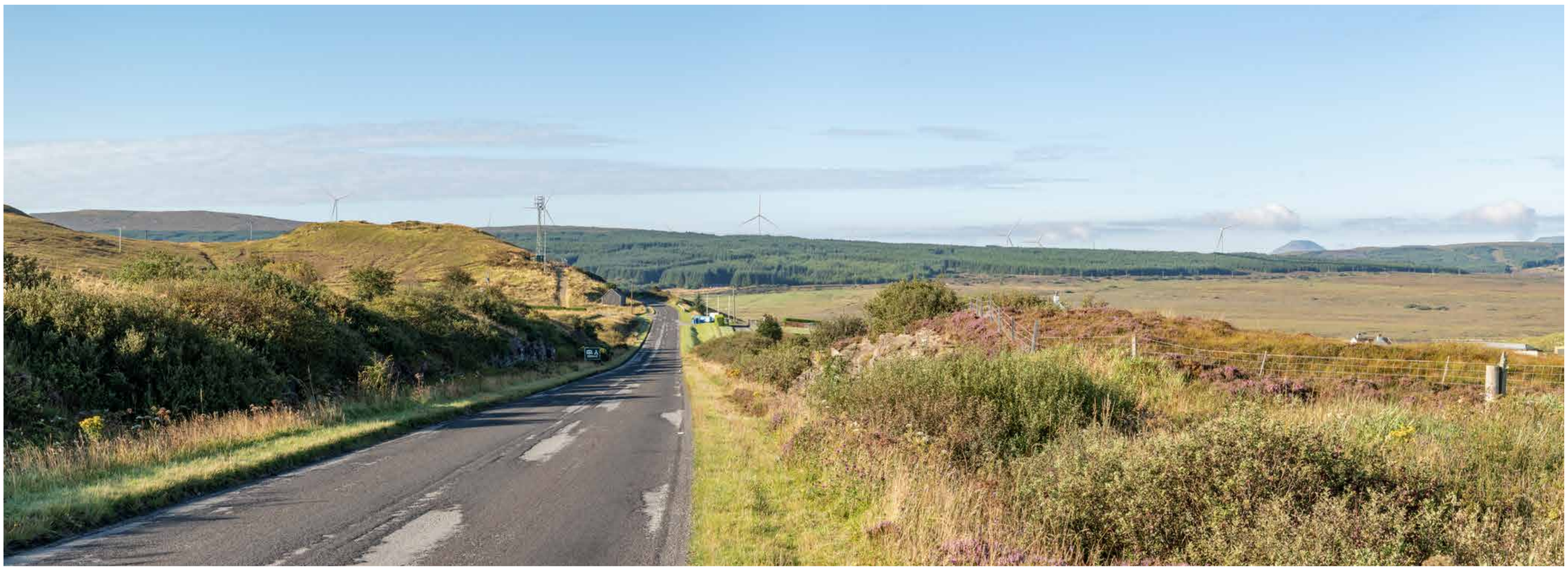
These visualisations are for exhibition purposes only so they can be seen clearly at this size. They do not conform fully to NatureScot and THC visualisation standards but final visualisations included in the Environmental Impact Assessment Report (EIA Report) that would accompany any application for consent will meet appropriate standards and guidance. Please stand at arms length from visualisation to gain the best impression.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Visualisations

Viewpoint 5: Roag



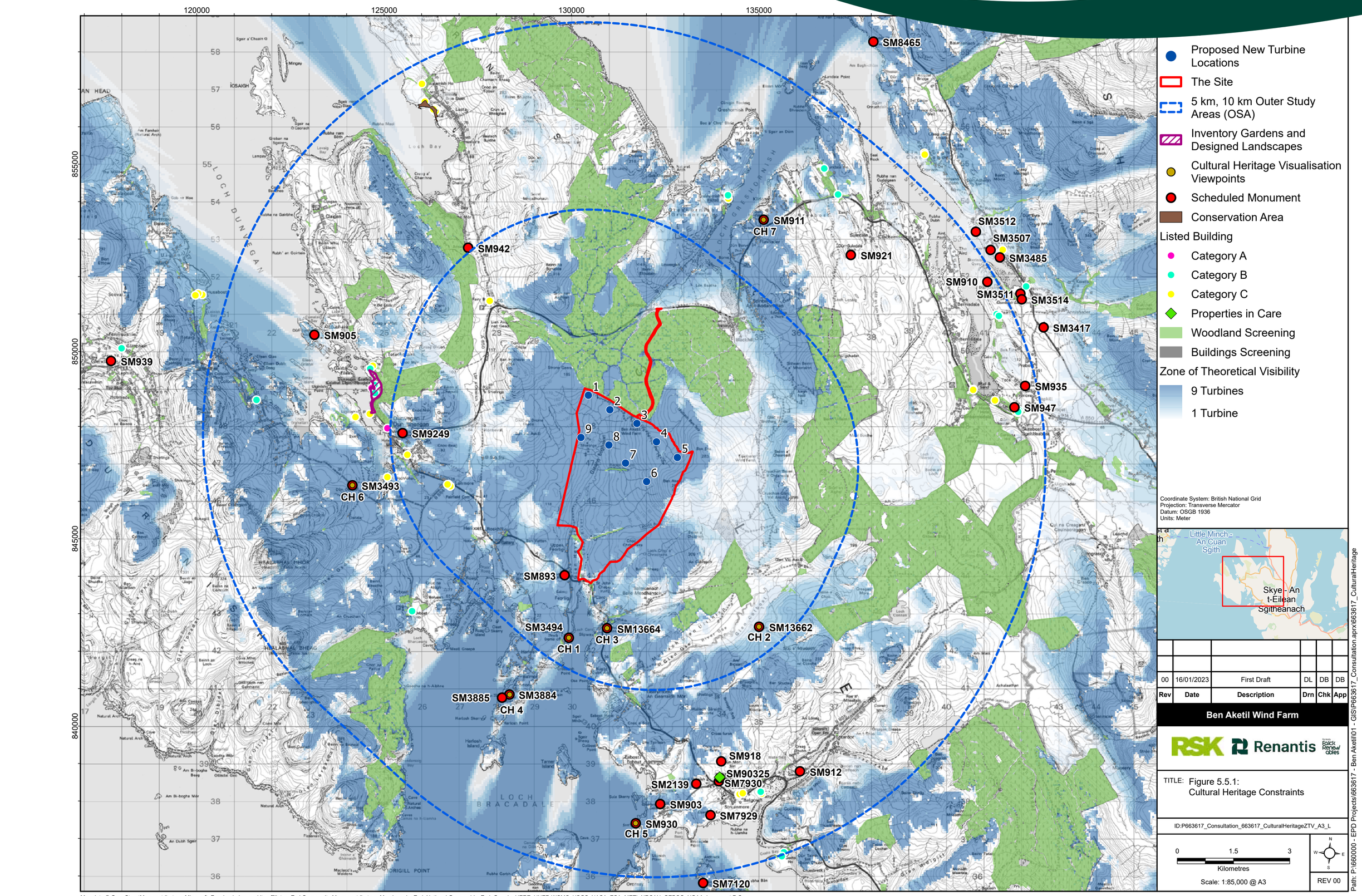
Viewpoint 6: A850 Flashader

These visualisations are for exhibition purposes only so they can be seen clearly at this size. They do not conform fully to NatureScot and THC visualisation standards but final visualisations included in the Environmental Impact Assessment Report (EIA Report) that would accompany any application for consent will meet appropriate standards and guidance. Please stand at arms length from visualisation to gain the best impression.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Cultural heritage and archaeology



Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

The effects of the Proposed Development on the historic environment, including cultural heritage and archaeology, will be assessed.

This study will consider the wind farm's direct and indirect effects on known and potential receptors. The potential impacts include:

- construction impacts (direct or indirect physical impacts and impacts on setting) on designated and non-designated heritage assets, such as cairns and abandoned farmsteads
- construction impacts on previously unrecorded heritage assets
- operational impacts on the setting of heritage assets.

Once the known heritage assets have been established and the potential for the presence of previously unknown heritage assets has been assessed, the EIA will assess the magnitude and significance of the impact on heritage assets in the area.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Ecology and ornithology

A programme of ecological and ornithological surveys is being carried out on the site. The results will be used to ensure that any impacts on wildlife are mitigated.

In addition, opportunities for biodiversity enhancements that the development could deliver will be explored in consultation with specialist interest groups.

Ornithology surveys

A comprehensive survey programme is underway to identify the use of the site and its wider surroundings by sensitive bird populations.

Ecology surveys

The ecology surveys include:

- a phase 1 habitat survey
- a national vegetation classification survey
- terrestrial mammal surveys
- bat activity surveys
- bat preliminary roost assessment survey
- fish habitat survey.

The site largely comprises blanket bog and wet modified bog, with small areas of dry and wet heath, and acid and marshy grassland. A variety of acid flushes and springs are found across the survey area, primarily within the blanket bog habitats.

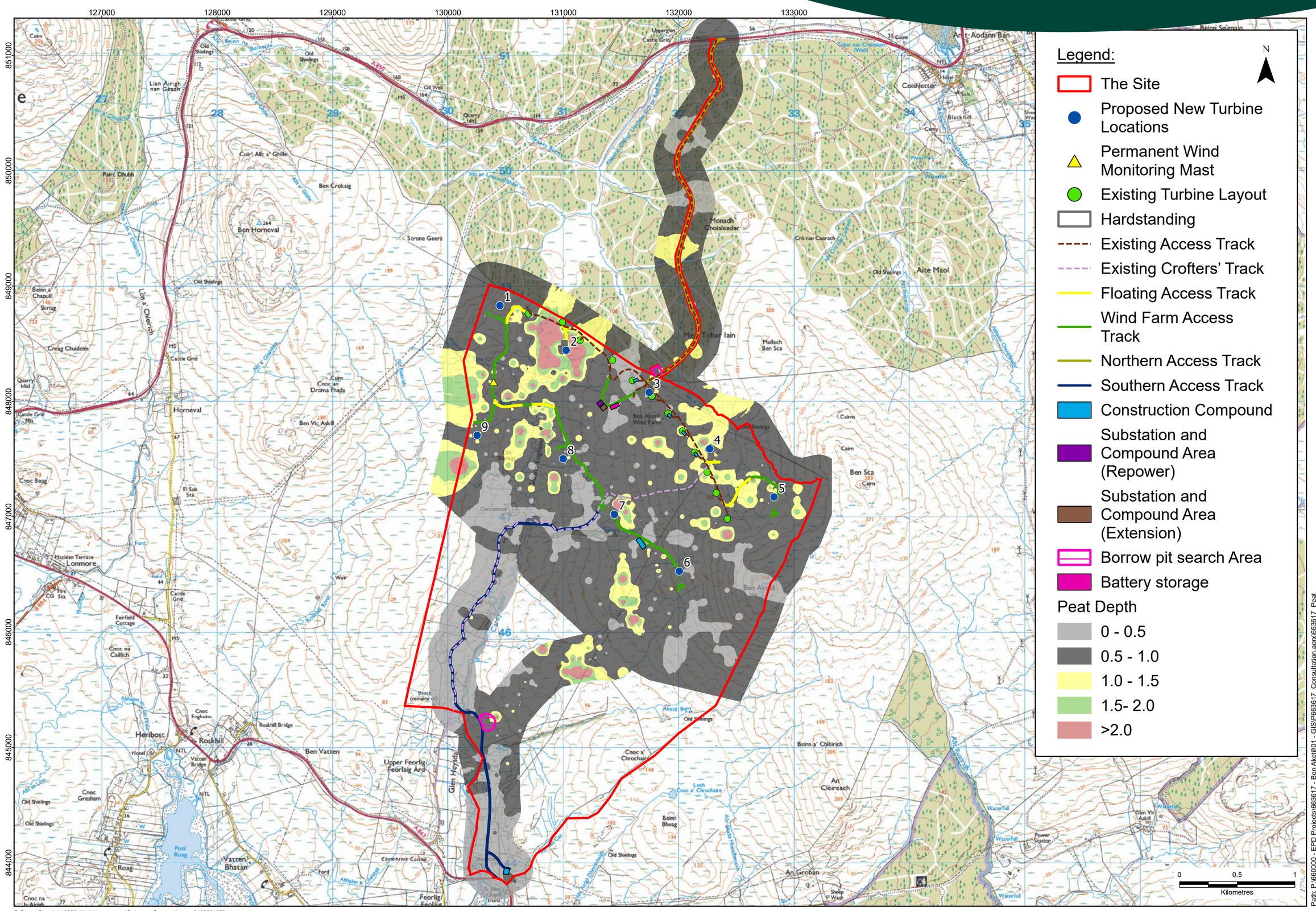
Habitats within the southern extent of the site along the southern access are a mix of improved fields for fodder and grazing with some remnant patches of bog and some areas of planted broadleaf woodland and acid grassland. The site is bordered to the north by a dense Sitka spruce and lodgepole pine plantation, some of which shows fire damage.

Several streams and burns of peat-stained water drain across the site, with the main watershed draining through the Caroy River.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Geology, hydrogeology, hydrology and peat



Potential impacts on groundwater quality or quantity, flood risk, water quality and private water supplies, and changes to peat and carbon-rich soils are being considered in the EIA.

Several peat depth surveys have been conducted to inform design of the Proposed Development.

A number of areas of deep peat, primarily in the northern section of the site, were identified. In the design stage, placement of proposed infrastructure in these areas has been avoided. Where deep peat could not be avoided, the use of alternative components, such as floating track, has been considered.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

Additional environmental considerations

Noise and vibration

Operational noise impacts are being assessed in line with ETSU-R-97, The Assessment and Rating of Noise from Wind Farms, and the associated guidance provided by the Institute of Acoustics (IOA) document, A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise. Predicted operational noise levels are being compared with relevant noise limits for the Proposed Development both in isolation and in combination with other consented wind farms in the vicinity.

Telecommunications and infrastructure

Radio waves and microwaves are used in a variety of communications. Structures such as wind turbines have potential to interfere with their reception. Telecommunication links crossing the site from east to west have been avoided in the proposed design.

Aviation and radar

An initial impact assessment identified all stakeholders potentially affected by the Proposed Development and dialogue is ongoing with them. Where impacts are of concern, additional analysis may be required and, where those impacts are deemed unacceptable, further mitigation solutions will be identified and explored with the goal of reducing those impacts to acceptable levels.

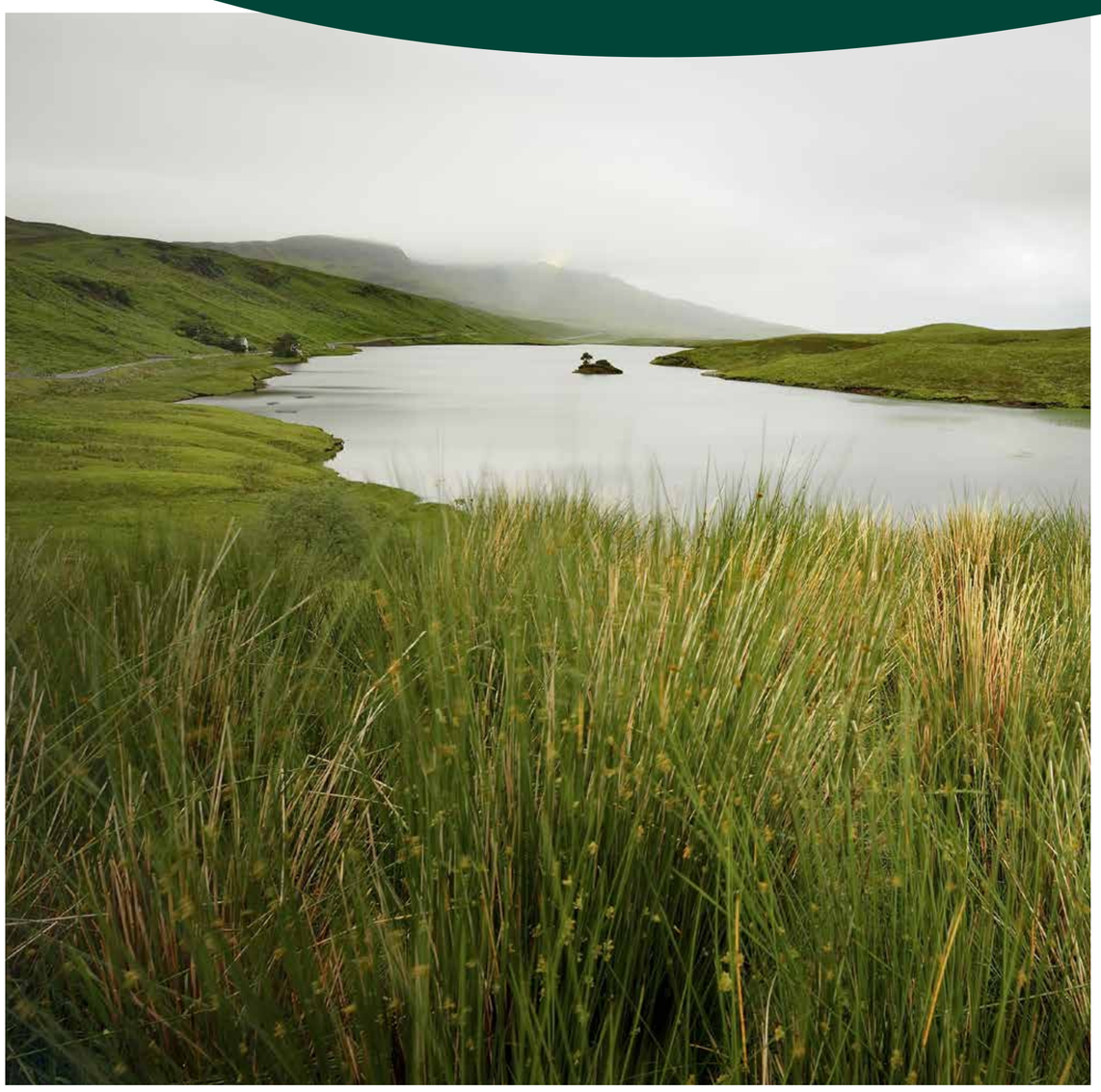
The wind energy industry has decades of experience of working with the aviation industry to resolve the impacts of wind turbines on aviation. The issues of wind turbine effects on radar are well known and the methods of mitigating them are tried and tested. The wind industry has provided hundreds of millions of pounds of funds to air traffic control radar operators for enhancements to their radars to deal with wind turbines.

Issues related to the height of wind turbines, such as the minimum permitted altitudes for aircraft flying in the vicinity, are the same as for any other tall structure such as radio and television transmitters. The proposed turbines will exceed 150 m blade tip height and will therefore require aviation obstruction lighting.

Shadow flicker

Shadow flicker is an effect caused in particular circumstances by the rotation of the turbine blades when the sun is shining, which can create a flickering or strobe-like effect. This can be a cause of annoyance at residences near wind developments.

The Proposed Development has been designed to avoid shadow flicker effects. In line with the Highland Council's supplementary guidance on shadow flicker, a Shadow Flicker Assessment is being conducted using the specified 11-rotor diameter distance study area, which in this case equals 1550m.



Climate change and carbon balance

In addition to the value that wind farms provide in terms of the renewable electricity they generate, they also provide an important mechanism for the reduction of carbon dioxide (CO_2) and other greenhouse gases into the atmosphere.

Operational wind farms achieve emissions savings by reducing the consumption of fossil fuel generated mains electricity. However, during their manufacture, construction and decommissioning, wind farms can result in the emission of greenhouse gases, particularly in such instances as where natural carbon stores such as forestry and/or peat are present and potentially impacted by the development.

The Scottish Government has prepared a carbon assessment tool for wind farms to help determine the time taken for the carbon impact of the Proposed Development to be reversed by the zero-carbon electricity generation. The assessment tool will be applied to the Proposed Development and the results reported in the EIA.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

The local community

Renantis will work closely with local communities, businesses and residents to ensure that the Repowered and Extended Ben Aketil Wind Farm proposal will continue to bring real benefits to the local area while helping to meet national climate change targets.

Since the previous public consultation event, Renantis has further engaged with the local community and key stakeholders by:

- undertaking formal pre-application consultation with the Highland Council and key agencies
- holding meetings with NatureScot, Historic Environment Scotland and the Scottish Environment Protection Agency (SEPA).

Key socioeconomic impacts

The Proposed Development would create an economic opportunity during construction with £17.9 million in civil engineering and construction contracts. There will be opportunities for companies in Skye and the wider Highland region, in areas such as construction trades, sub-contracting, suppliers to construction trades, accommodation, security and site services and environmental services.

There are also ongoing economic opportunities during operational lifetime of the wind farm, with an annual spend of £2.1 million on activities such as site maintenance and habitat management.

Business, employment and investment

Renantis would like to hear from businesses across the Isle of Skye, the Highlands and Scotland to ensure that it can involve as many local people and suppliers as possible if the Repowered and Extended Ben Aketil Wind Farm received approval.

The opportunities available include those for:

- an engineering, procurement and construction contractor
- construction material suppliers: concrete, aggregate and building materials
- electrical contractors: supply and installation of plant, cabling, earthing, etc
- plant and equipment hire contractors: excavation earthworks, cranage, welfare units, etc
- labour hire companies: engineers, plant operatives and general labourers
- transport: taxis and minibuses for local labourers
- waste recycling and management: waste carriers and recycling specialists.

If you are a local company and would like to register your interest, please email benaketilwindfarm@jmccomms.co.uk

Local accommodation providers

Construction projects of this nature inevitably require some specialist technicians from outside the area who will require local accommodation and catering facilities.

Community benefit

Renantis is working with the local community to help shape a community benefit package that best meets local needs and wishes. Renantis already works closely with the Dunvegan Trust who administer the funding that has been provided from Ben Aketil Wind Farm since 2008. If this project receives consent, Renantis would continue to work with the Trust to support the valuable work it does in the community.

Renantis Formerly Falck Renewables

www.benaketilwindfarm.co.uk

What next?

We welcome your feedback on the Repowered and Extended Ben Aketil Wind Farm, especially regarding community benefit.

The application for consent is expected to be submitted to the Scottish Ministers in February 2023. The Scottish Government will then undertake its own consultation process, when the public will be invited to make formal comments on the proposals.

You can view more information on our website:
www.benaketilwindfarm.co.uk

Contact points

Telephone: 07900 917143

Email: benaketilwindfarm@jmccomms.co.uk

Post:
Ben Aketil Wind Farm Extension
c/o JMC Communications
32A Union Road
Inverness
IV2 3JY

Online feedback form link: https://arcg.is/1mfS9z2

Renantis
Formerly Falck Renewables

www.benaketilwindfarm.co.uk