

# 01 – Welcome

## Public Consultation Event 1

## Welcome

Thank you for taking the time to come along to today's consultation. This event is being held to give the local community an opportunity to find out more about the proposed repower of the Bugar Hill Wind Farm and to provide information on the Environmental Impact Assessment (EIA) and surveys which are being undertaken to support the Planning Application.

Please take your time to review the information presented today. Members of the project team from both **Bugar Hill Energy** and **Green Cat Renewables**, the appointed planning consultant, are present today to answer any questions you may have.

We value your feedback as we seek to review and refine our plans and would be grateful if you could take a few minutes to share your views and any comments.

For further information please email us at:

[hello@bugarhillenergy.co.uk](mailto:hello@bugarhillenergy.co.uk)

Or contact us via the Project website at:

[bugarhillenergy.co.uk/contact-us](http://bugarhillenergy.co.uk/contact-us)



**Bugar Hill Energy (BHE)** is a joint venture between **Bugar Hill Renewables (BHR)** and **Thrive Renewables plc**. BHE was created to repower the wind farm on Bugar Hill as it reaches the end of its current life.

Bugar Hill Renewables Limited owns the majority of the land on Bugar Hill and is the operator of a 2.3MW Enercon E-70 on the site, which was commissioned in 2009. Bugar Hill Renewables Limited is owned by Orcadians Mervyn and Maureen Spence and their children.

Thrive exists to tackle the climate emergency, working with investors, developers, businesses and communities to fund, build and operate clean energy projects since 1994. The company has operated a 1.3MW turbine at Bugar Hill for more than ten years.





# 02 - Bargar Hill History

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Bargar Hill holds a **significant place in the history of wind power development**, both in the UK and globally. The site has been at the **forefront of wind energy research and innovation** since the 1980s.

**Early Developments - 1980s:** Bargar Hill was established as a test site for wind energy technologies in the early 1980s. The windy climate of Orkney made it an **ideal location for studying wind turbine performance under challenging conditions**. The site was part of a broader effort to explore renewable energy solutions in response to the energy crises of the 1970s.

One of the most notable installations at Bargar Hill during this period was the 3MW experimental wind turbine. At the time of its commissioning, this was one of the largest wind turbines in the world, featuring advanced design elements including variable pitch blades to cope with high wind speeds. Smaller designs were also installed to study different blade designs and generator systems.

**Transition to Modern Day - 1990s:** By the early 1990s, the focus at Bargar Hill **shifted from experimental research to more commercial wind energy production**. Advances in turbine technology and growing need for renewable energy led to the development of a modern wind farm on the site.

In the late 1990s, Bargar Hill became home to several modern wind turbines, marking a transition from experimental to operational wind energy projects. These turbines, while smaller than the pioneering 3MW unit, were representative of the growing wind energy industry.

**Early 2000s:** There are **currently 6 turbines operating** on Bargar Hill, of varying makes and models, including Nordex, NEG Micon and Enercon machines. Total capacity generated on the hill is approximately 12.5MW. The turbines currently age between 16 - 25 years old. Given the windy site conditions, **these turbines have had a very productive life**.

**2020s and Beyond: Bargar Hill Energy:** At Bargar Hill Energy, as the UK seeks to reach 2030 clean energy targets and net zero, we want to ensure that the historic Bargar Hill site remains at the **forefront of renewable energy generation in the UK**.





# 03 - Proposed Repower

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In assessing the suitability for the repowering of the wind farm, a detailed design process must be undertaken to consider a range of environmental and technical constraints. This helps to reveal the most appropriate sites with the greatest potential for wind energy development.

Following a review of the operational site and constraints, it is considered that **Burgar Hill can accommodate larger, more modern machines with a potential for turbines up to 200m to blade tip**. Final design, including turbine numbers and heights will be confirmed shortly.

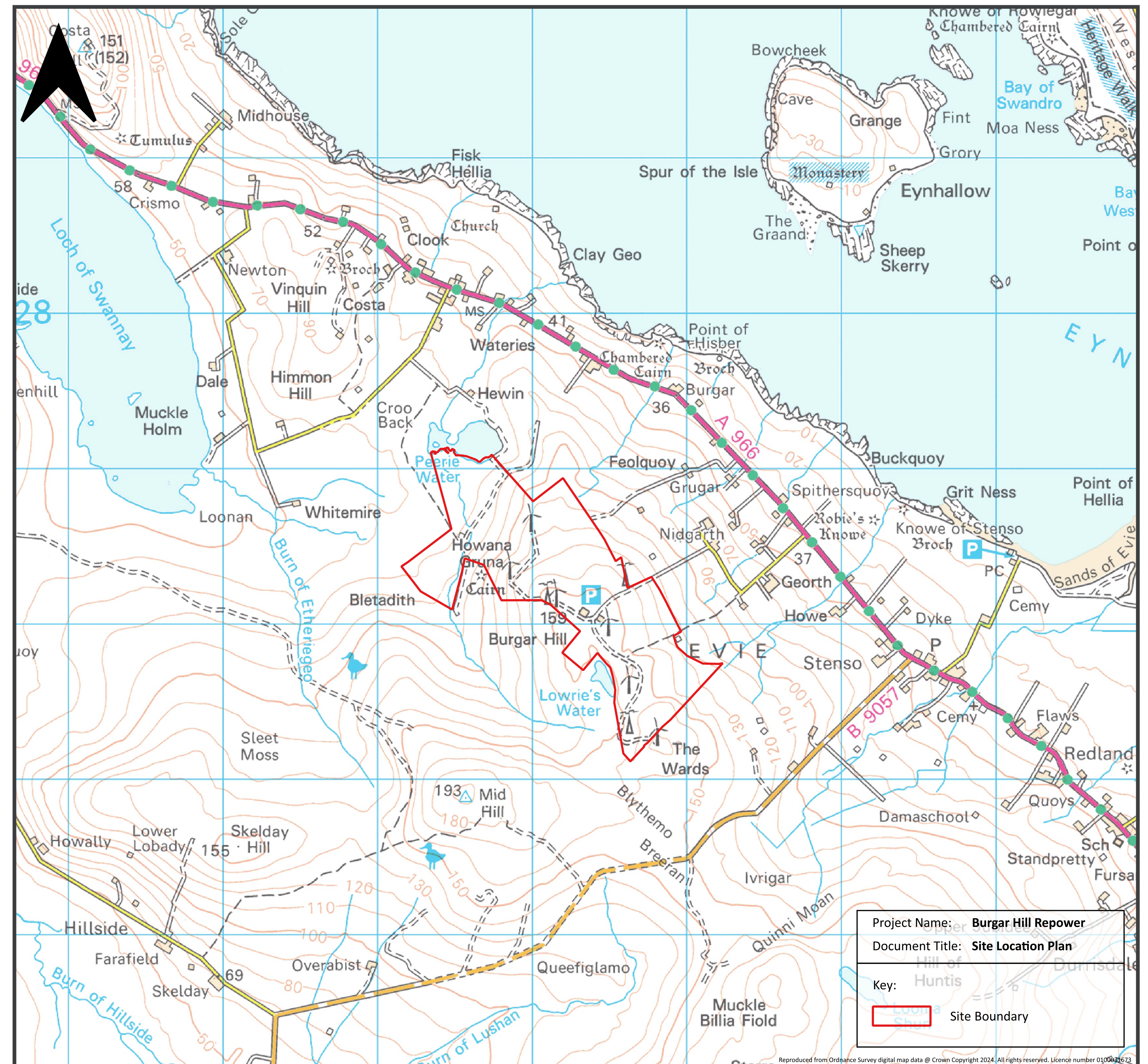
Currently, a number of environmental assessments are underway that will be used to inform the **Environmental Impact Assessment Report (EIAR)**.

This report will be submitted with the final planning application to ascertain the likelihood for any significant impacts to arise in conjunction with the proposed repower.

### What does the EIAR assess?

Some of these assessments include, but are not limited to:

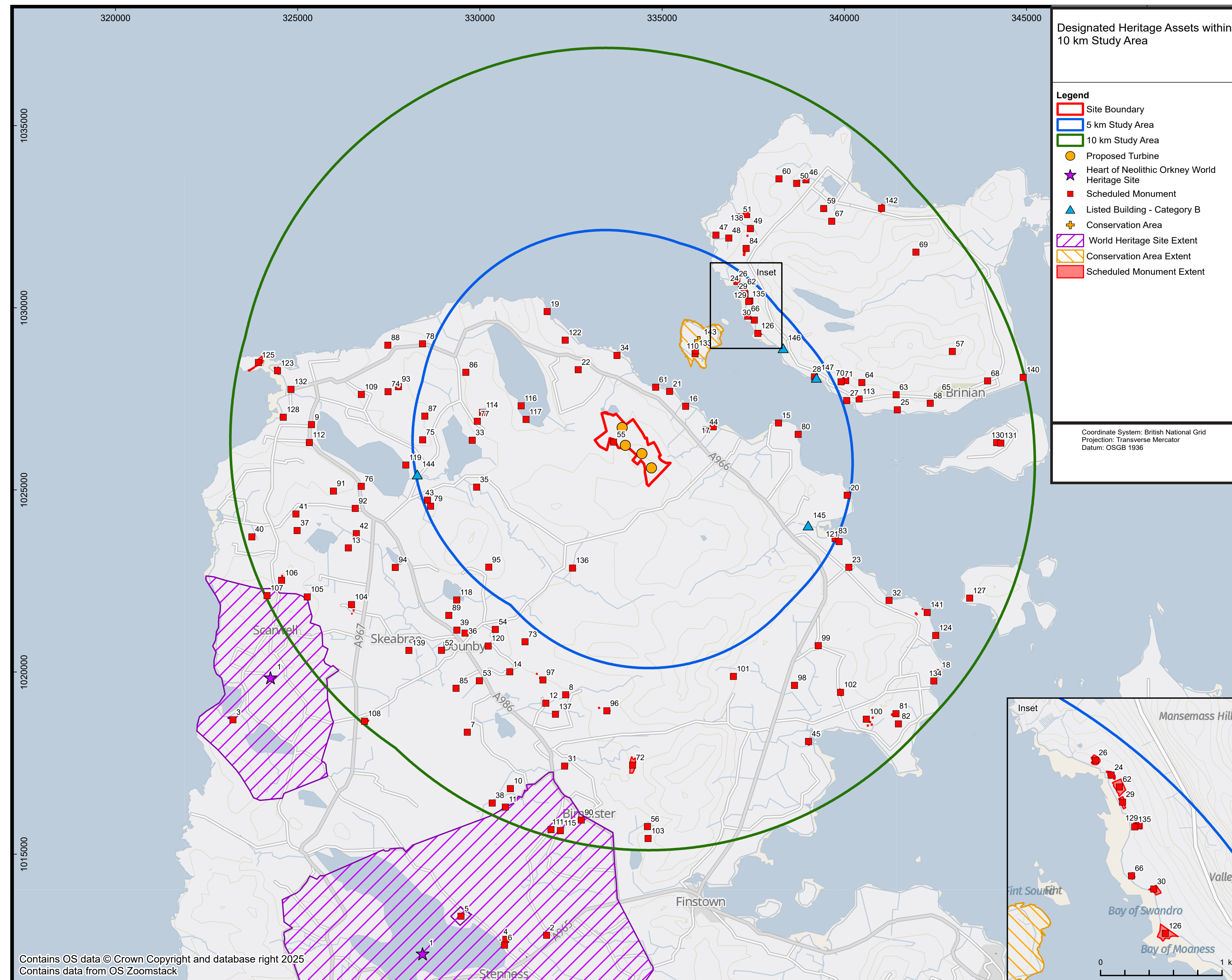
- Cultural Heritage, including potential impacts on the World Heritage Site
- Landscape and Visual Impact
- Ecology
- Ornithology
- Hydrology





# 04 - Cultural Heritage

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The proposed repowering represents the third cycle of energy development on the site.

Archaeologists will undertake a series of assessments to identify cultural heritage assets surrounding the site. This will involve:

- Detailing surveys of the site, to record any remains that may be evident on the surface;
- Visiting the Orkney Archives in Kirkwall;
- Consulting with both the Orkney Historic Environment Record and Historic Environment Scotland (HES); and
- Visiting Scheduled Monuments and other designated heritage assets within the surrounding landscape to assess whether their setting is likely to be impacted by the repowering.





# 05 - Landscape and Visual Impact

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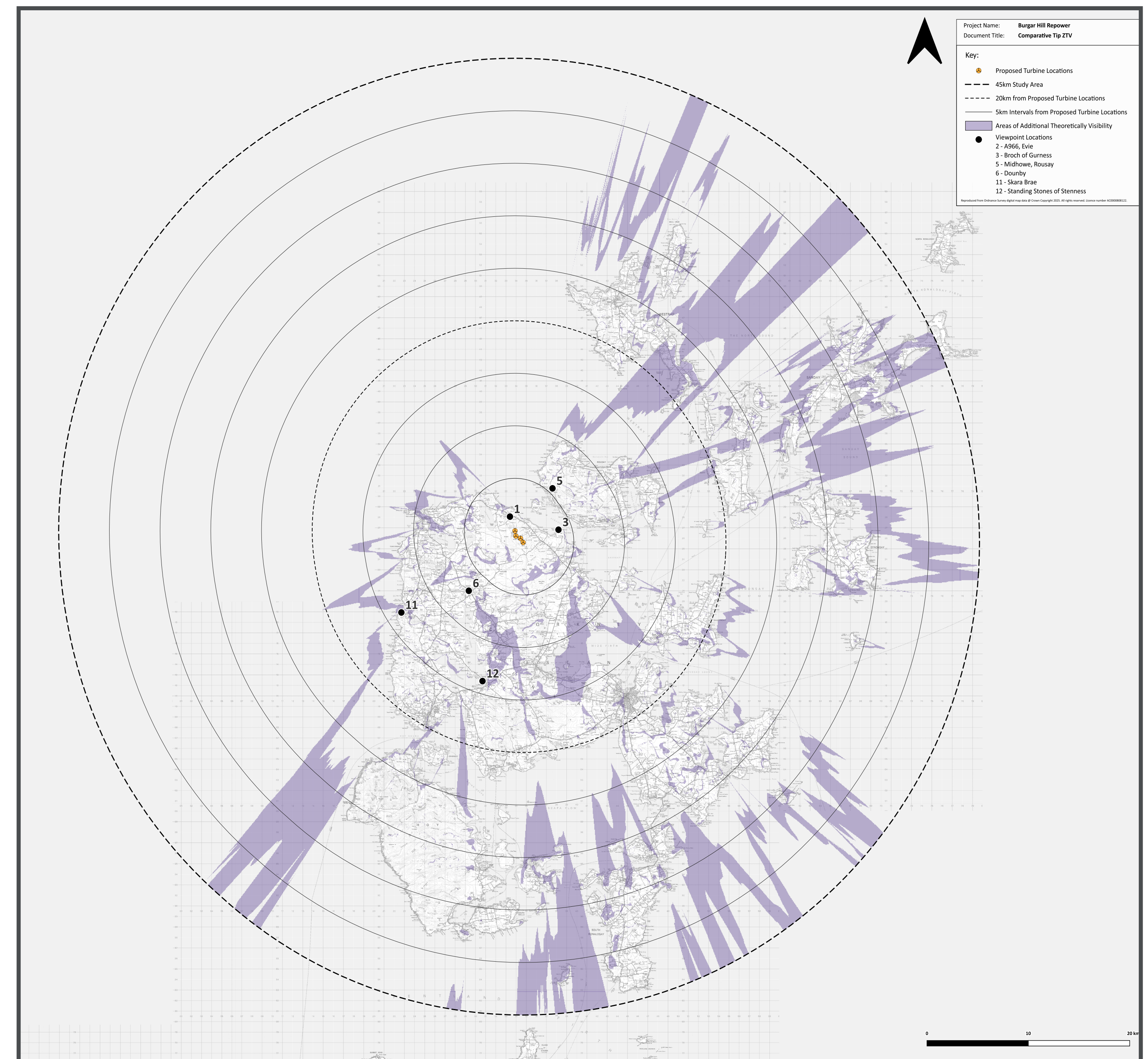
A Zone of Theoretical Visibility map (ZTV) was used to identify areas where the proposed repower would be visible. Using this, 18 viewpoints (VPs) have been identified and will be used to assess any potential impacts on character and the surrounding landscape. The figure below shows the areas of additional theoretical areas of visibility of the larger turbines.

A Landscape and Visual Impact Assessment (LVIA) is currently underway to identify any potential impacts of the proposed repower on the character and surrounding landscape.

This assessment considers:

- Visual impacts on the surrounding landscape, such as landscape character areas, landscape designations and special landscape areas;
- Visual impacts experienced by local receptors, such as local communities, tourists and road users, and;
- The cumulative impact of the proposed repower of Bugar Hill will be assessed in the context of surrounding wind energy developments. This assessment will consider all operational, consented, and in-planning wind farm projects located within a 45-kilometre radius of the site.

**We have a selection of viewpoints on display here today. The locations of these are shown on the figure.**





# 06 – Ecology and Ornithology

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Our specialist environmental and technical consultants are currently progressing many of the studies that form the EIA. The information and data from these studies will be used to refine our proposals and also to identify ways in which we could remove, reduce or mitigate any potential impacts.

### Ecology

The non-avian ecological surveys are being undertaken by technical consultants across the site. Consultees include SEPA, NatureScot and the Orkney Island Council. Surveys for habitat, mammals, and other protected species are underway.

These include, but are not limited to:

- Ground Water Dependent Terrestrial Ecosystems (GWDTE);
- Otters;
- The Orkney vole; and
- Brown Hare.

Ecological assessments are still ongoing; however, it is not anticipated any significant effects are likely to arise as a result of the proposed repower due to mitigation through the design process. The EIA will propose measures to retain, protect, and enhance biodiversity throughout the full process.

### Ornithology

Burgar Hill's wind farm and local wildlife have successfully coexisted for over 40 years, and frequent impact monitoring has taken place over recent years. These surveys, as well as a range of additional ornithological surveys and consultation with key stakeholders including NatureScot, will provide a robust dataset to inform the updated assessments which will form part of the planning application submission. The key species that have been considered are Red-throated Diver, Great Skua, Hen Harrier, Short-eared Owl and Arctic Skua.





# 07 - Noise and Hydrology

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### Noise

Noise is not expected to significantly impact the existing environment as there are various operational wind farms within the area; however, cumulative impacts will be considered. While assessments are yet to be completed, current analysis suggests that the proposed repower will be able to meet the required noise limits due to the distance between the nearest properties and the location of the wind farm.

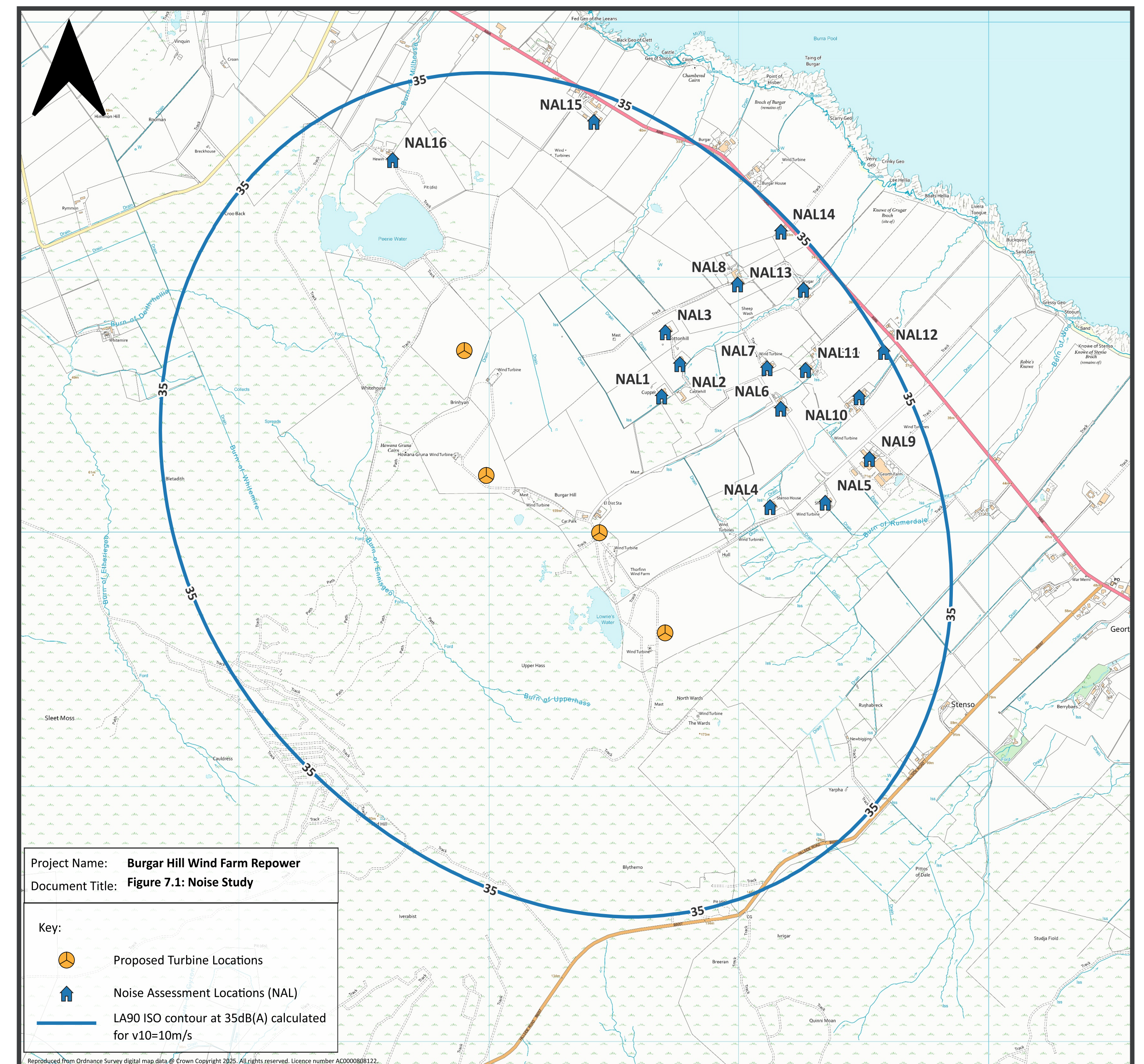
### Hydrology

An initial desk-based study has been carried out to identify any hydrologically sensitive areas within the study area. A site visit will be carried out in the coming months to verify information gathered during the desk-based study, assess any potential watercourse crossings and visually assess the ground conditions and topography on site.

This assessment is ongoing; however, carbon rich peat, ecological designations and watercourses have been identified as sensitive receptors and we are aware of their presence onsite. These have been given due sensitivity and avoided where possible as part of the detailed repower design.

Any potential impacts identified will be assessed and where required appropriate mitigation will be discussed.

Peat probing and peat-depth surveys will be undertaken on site to identify the depth and quality of peat onsite as required. This information will inform the final design process to minimise the need for excavation of any carbon-rich soils.





# 08 – Community Benefits

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### Future Community Support Fund

Burgar Hill Energy is committed to delivering support to the local community. Based on the proposed capacity of 30MW, it is expected that there will be a fund of **approximately £150k per year to support the local community.**

We have some ideas about how this can be used locally, but we would love to hear from you about what you think this could deliver for Evie, Rendall or the rest of Orkney!

### Help us shape this!

You can provide feedback on how you think this money could be best used to support Orcadians by either scanning the QR code below or by filling out one of the forms we have provided today.





# 09 - Timeline

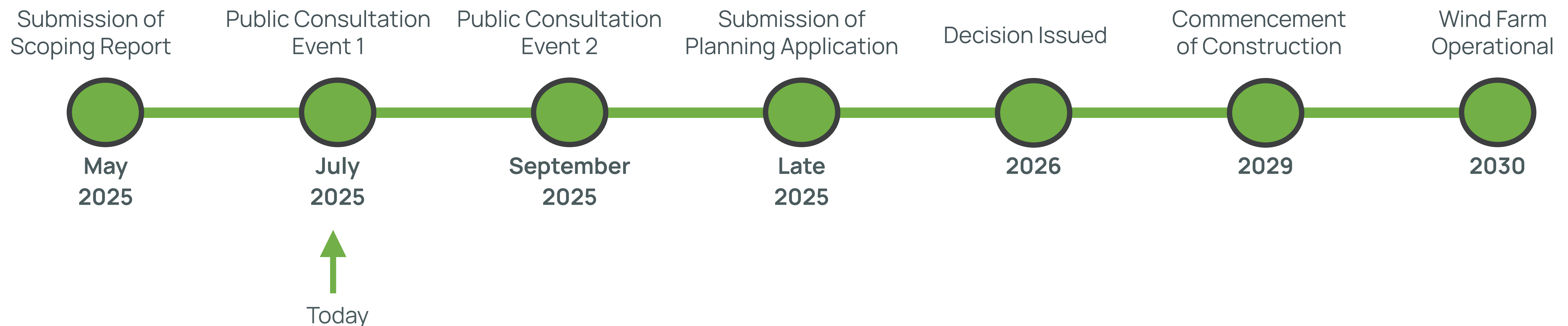
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Thank you for coming along to today's event. We hope that you have found it informative and have had the opportunity to find out more about the proposed repower of Bugar Hill and to ask questions of the project team.

The repowering proposal for Bugar Hill Wind Farm will **replace five of the existing turbines, with a blade tip height of up to 200m and a total generating capacity in the region of 30MW**. Being under 50MW, the planning application will be made to the Local Planning Authority (LPA), in this case that is Orkney Islands Council (OIC) under the Town and Country Planning Act.

Please note comments to Bugar Hill Energy at this stage are not comments to the Local Planning Authority.

A timeline of the expected events is outlined below.



Once the planning application is submitted to the OIC, there will be a consultation period where members of the public will have an opportunity to formally make comments on the planning application. Comments can be made to the OIC and will be considered in the determination of the planning application. The timescales for submitting public comments will be advertised by the OIC.

**If planning permission is granted in 2026, Bugar Hill Energy expects it would be in a position to commence development by 2029, subject to complying with any planning conditions.**





# 10 – Next Steps

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### How to Provide Feedback

We would be grateful if you could complete the available feedback form and return it to us.

These exhibition boards and a feedback form are also available on our website at [www.burgarhillenergy.co.uk](http://www.burgarhillenergy.co.uk)

### Next Steps

The key next steps in the planning application process are set out below:

- Scoping Opinion to be received: Q3 2025
- Public Exhibition 2: **September 2025**
- Submit to planning: Q4 2025

We'd love to hear from you!

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