#### **COMHAIRLE NAN EILEAN SIAR**

The Town and Country Planning Scotland Act 1997 – Section 36(1)

**Town and Country Planning General Development Procedure Order 2013 Regulation 16** 

Planning Register - Part 1

**Application Details** 

Reference Number 24/00197/PPD Date registered as valid 27/05/2024

Description of Development Erection of 120m high meteorological mast for a period

of 5 years

Address or description of location to

which the development relates Meteorological Mast, Lochs Road, Isle of Lewis

Co-ordinates N 928 664, E 137 350

Applicant Name RWE Renewables Per Miss Sophie Rose

Applicant Address Earn House, Broxden Business Park, Lamberkine Drive,

Perth, PH1 1RA

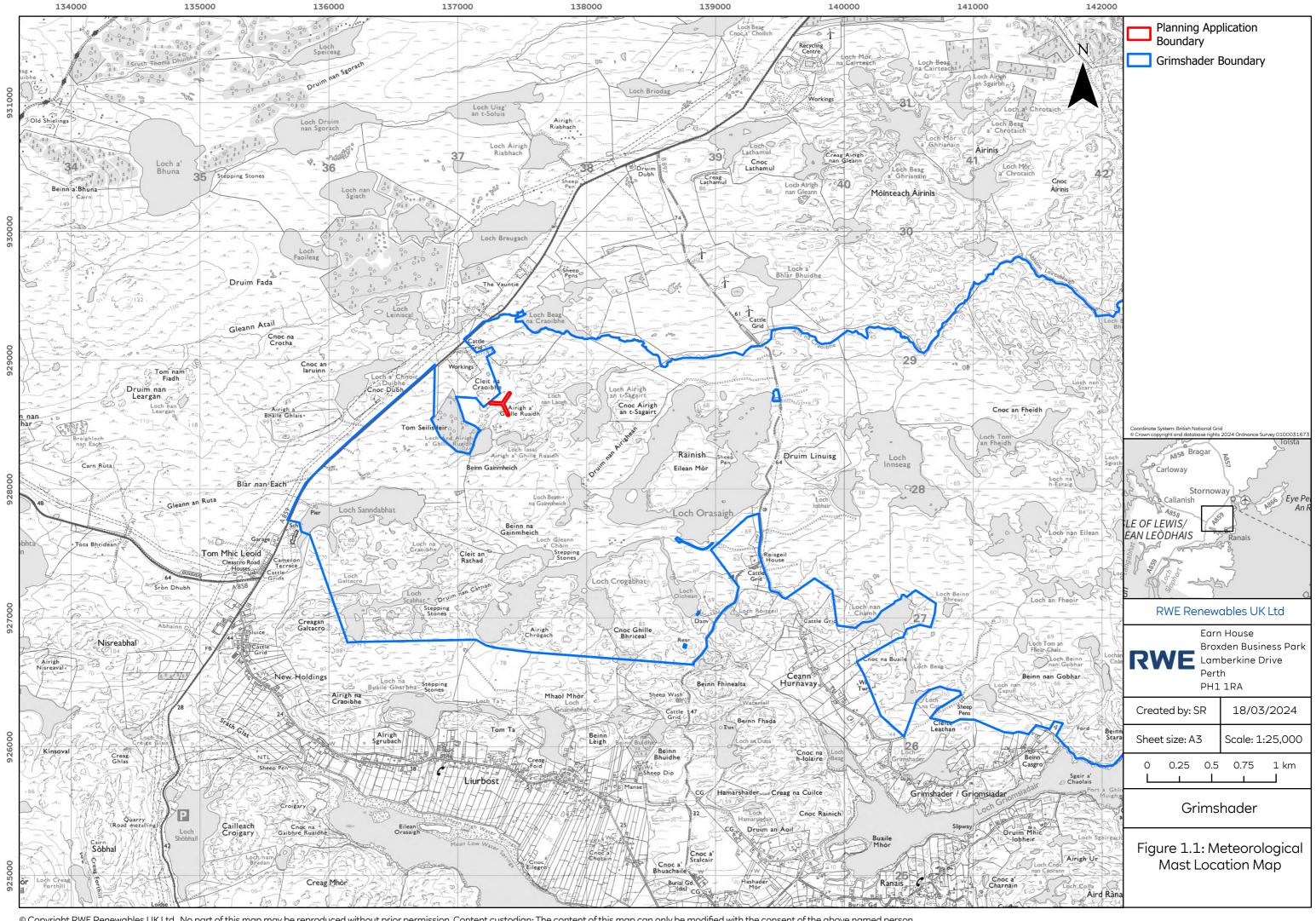
Agent name N/A
Agent Address N/A

The above application summary is accompanied by plans and drawings sufficient to describe the development and where relevant any design statement.

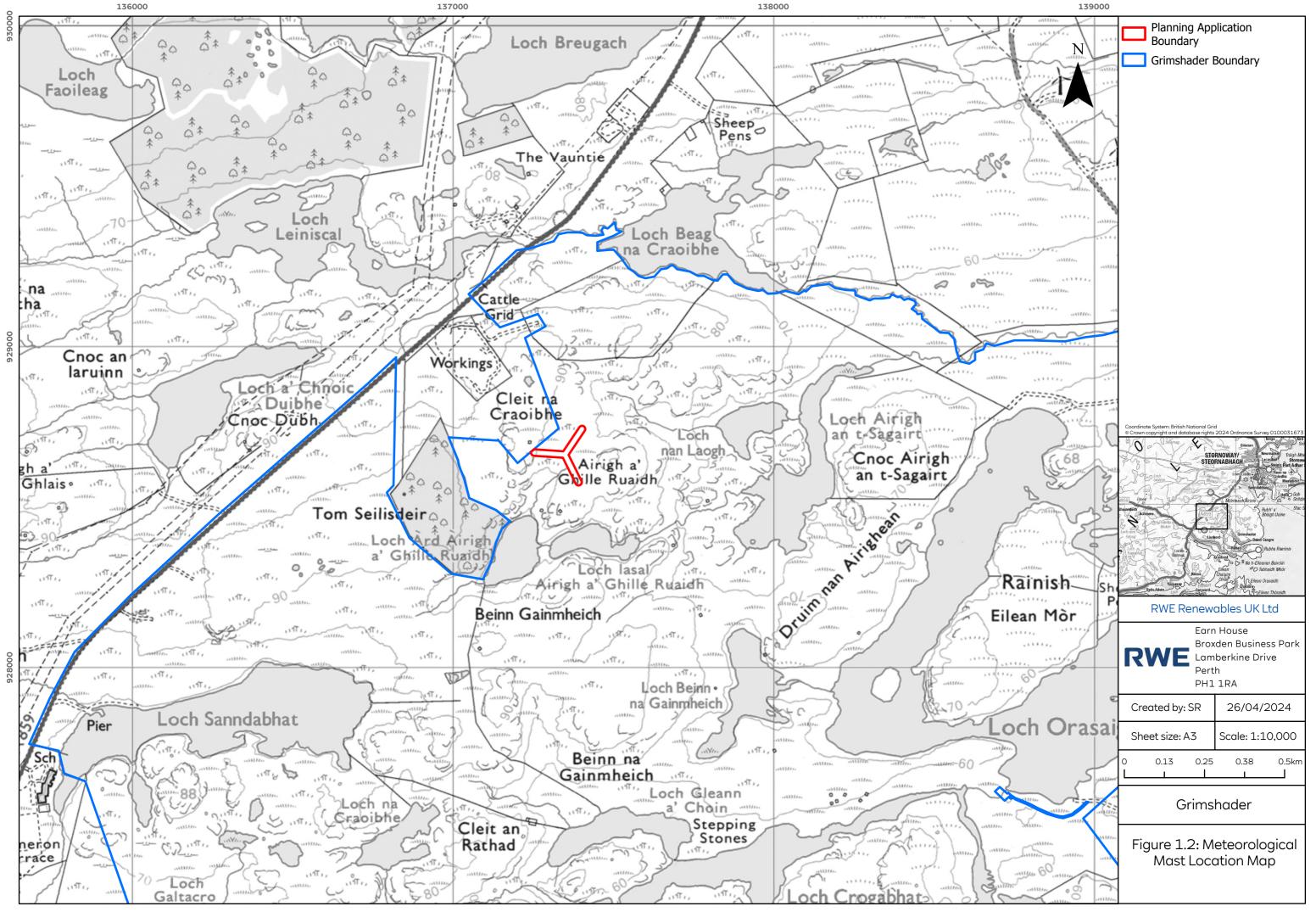
Important Note: on Tuesday 07 November 2023, Comhairle nan Eilean Siar experienced a criminal cyber incident and is working with Police Scotland, the Scottish Government and the National Cyber Security Centre to investigate the matter.

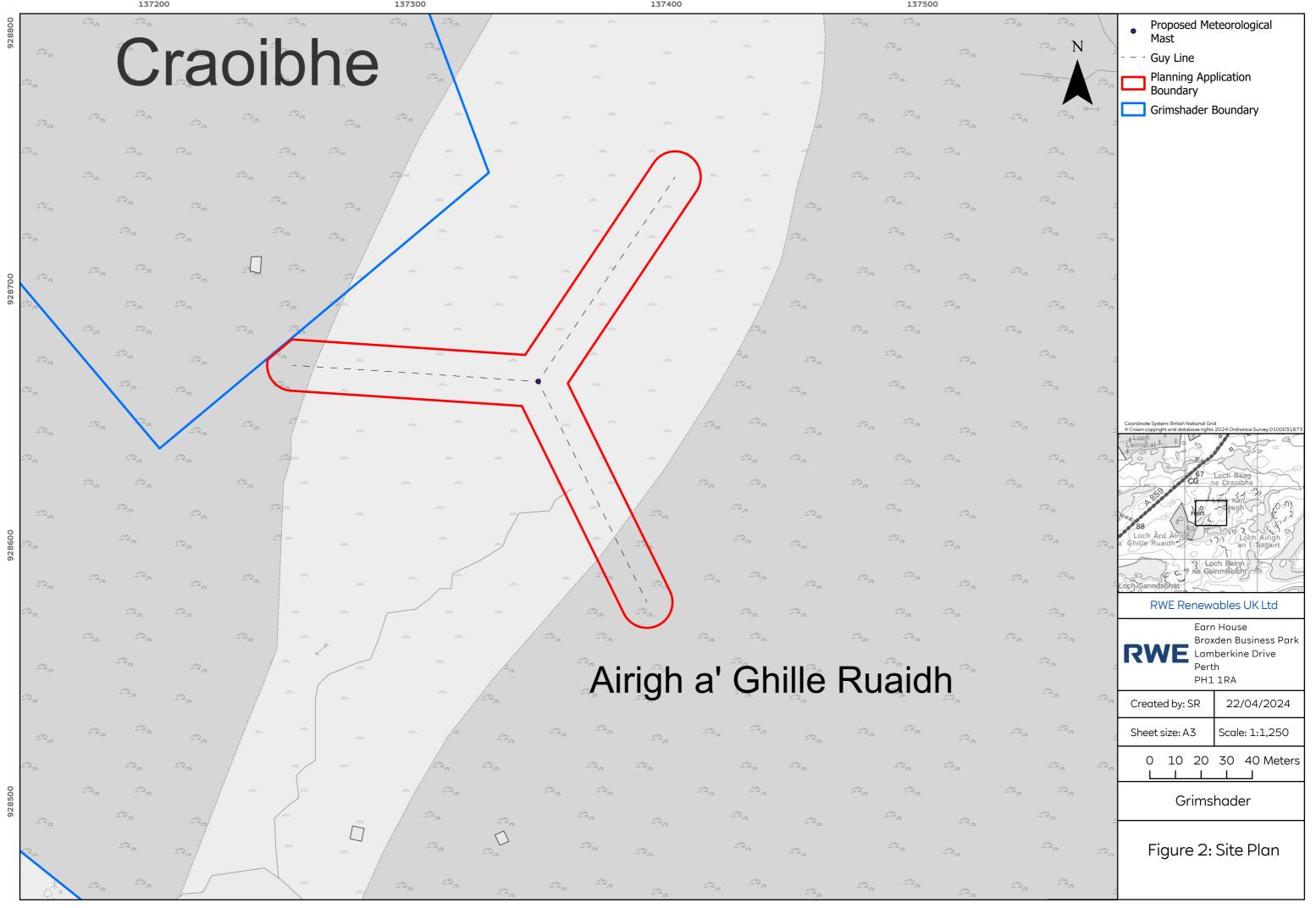
The Online Planning Portal remains unavailable as does our suite of integrated software and hardwaresystems. In order to enable access by the wider public to application documents and consult upon planning applications, interim systems have been put inplace on the temporary website of Comhairle nan Eilean Siar, including a rudimentary facility to display a limited number of documents per application.

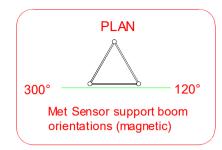
Any party wishing to view the application file in full may do so at the offices of Comhairle nan Eilean Siar at Sandwick Road, Stornoway Isle of Lewis, HS1 2BW or Balivanich, Isle of Benbecula. HS7 5LA, ordinarily between 9am and 5pm Monday to Friday (excluding public and local holidays). It is recommended that in advance of visiting an office to view an application that you make an appointment by sending an email to planning@cne-siar.gov.uk



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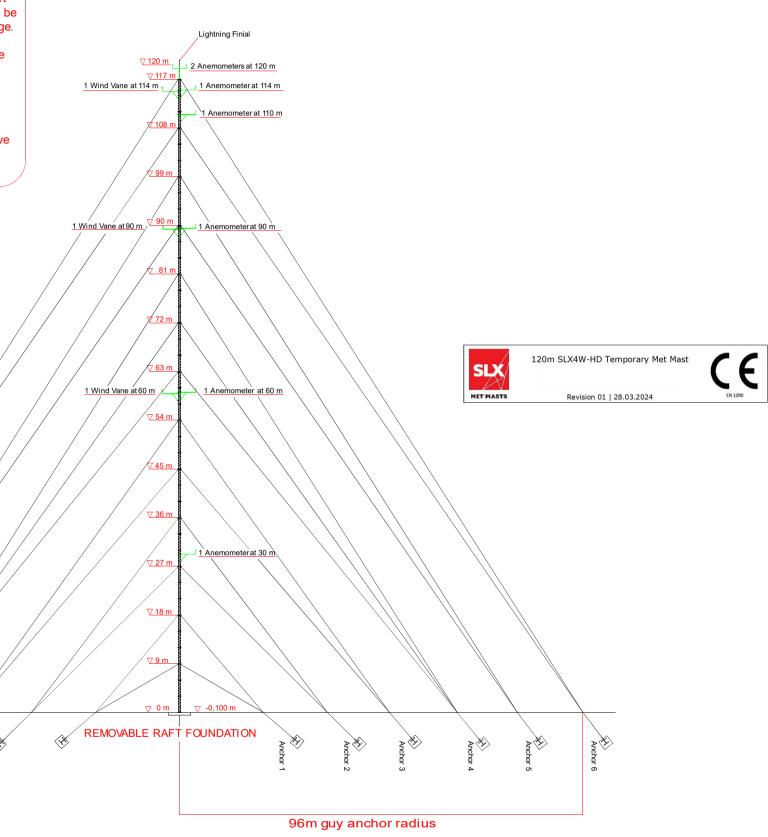


This drawing is submitted to support project planning purposes and may be subject to alteration at contract stage.

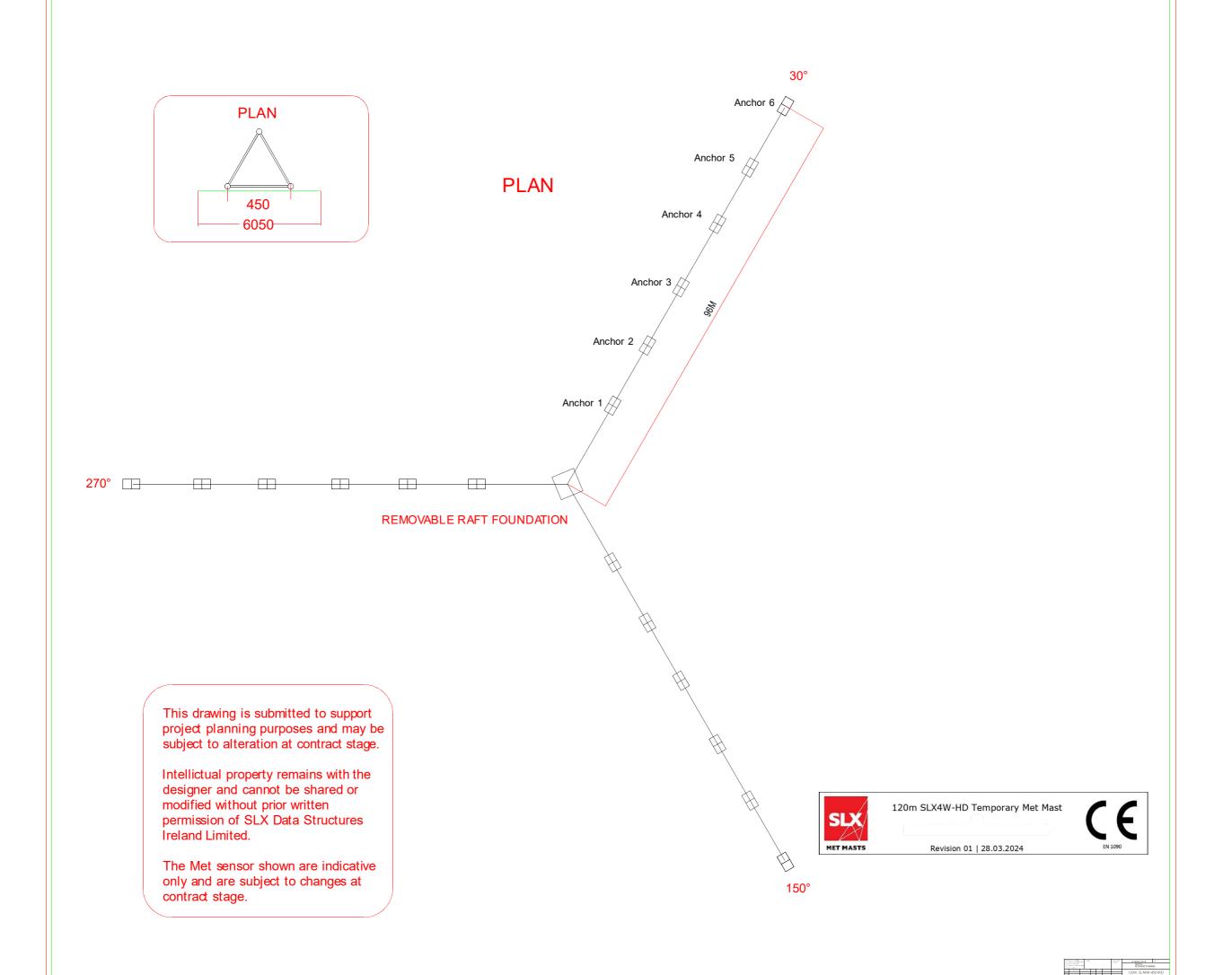
Intellictual property remains with the designer and cannot be shared or modified without prior written permission of SLX Data Structures Ireland Limited.

The Met sensor shown are indicative only and are subject to changes at contract stage.

#### **ELEVATION**







## RWE

# Design and Access Statement

**Meteorological Mast Application** 

**Grimshader Wind Farm** 

**RWE Renewables UK Ltd** 

### Contents

Ι.	Development Details	5
	Design	
	a. Context of the Development - Purpose of the Installation	
k	o. Siting the Met Mast	3
C	c. Met Mast Description, including Scale	4
C	d. Power Supply	4
3.	Installation Procedure	4
4.	Community Safety	4
5.	Maintenance	5
6.	Decommissioning	5

#### 1. Development Details

This Design and Access Statement has been prepared to accompany the planning application for the installation and operation of one temporary meteorological monitoring mast (hereafter referred to as 'the met mast'), aimed at measuring wind speed, direction, pressure and temperature over a period of up to 5 years from installation date.

The temporary mast would be situated within the land owned by Soval Estate, located approximately 5 km to the South of Stornoway in the Comhairle nan Eilean Siar council area. The proposed location of the temporary met mast and its planning application boundary (regarded to as 'the met mast site') is shown in Figures 1.1 and 1.2 and largely comprises of bare and boggy land.

Transport access route to the met mast site would be via the A859 from Stornoway to Soval Estate land.

The purpose of the proposed temporary met mast is to record wind resource data for the prospective Grimshader Wind Farm site (hereafter referred to as 'the wind farm site') over a temporary period of up to 5 years. Wind speed and direction at different heights will be recorded to take account for wind shear and to give accurate predictions comparable with the anticipated hub height of on-site wind turbines.

#### 2. Design

#### a. Context of the Development - Purpose of the Installation

Mounted at various heights on the met mast are a number of instruments which measure wind speed and direction. The wind speed data at a range of heights is recorded, accessed remotely, and thereafter utilised to calculate the wind resource.

The met mast will provide an understanding of the typical wind flows, directions and speeds across the wind farm site, in order to determine the viability of the wind resource and understand the effects of turbulence given by the existing topography and the residual commercial forestry in the adjacent land.

#### b. Siting the Met Mast

The location of the met mast has been selected to acquire the best wind profile data for the wind farm site in order to understand not just wind speeds and directions, but also to comprehend the effects of topography across this site and the residual pocket of commercial forestry in the adjacent land.

The proposed met mast location is sited to ensure optimum conditions for evaluating the wind resource across the wind farm site, whilst also providing:

- Assurance that sensitive habitats and species would be unaffected;
- Reasonable access off the public road to allow plant, personnel and mast trailer to reach the location; and
- Sufficient level area to lay out and install the met mast, and lifting of the mast into the prevailing wind.

The layout arrangements of the proposed mast and guy wires is shown in Figures 2: Location Plan.

The co-ordinates of the met mast are 137350, 928664.

#### c. Met Mast Description, including Scale

The met mast selected is a lattice mast up to 120m height, held up by high tensile guy wires made of galvanised steel.

There is a short section of galvanised chain joining the guy wires to the 18 anchors placed at distances of 21m, 40m, 55m, 65m, 85m and 96m from the base of the mast. The anchor layout schematic is shown in Figure 3.1: Mast Layout.

Please see the elevation schematic for a typical drawing of a met mast in Figure 3.2: Elevation Plan.

At several levels, including the top of the mast, booms (also steel) are installed for the mounting of anemometry which record the wind resource at different heights. The locations of the booms and anemometry are indicative at the current time and may be varied according to wind resource measurement requirements.

The data from the mast is recorded and stored in the data loggers, secure boxes attached near to the bottom of the mast which also house telecommunications equipment and batteries.

#### d. Power Supply

The met mast instrumentation will be powered by a standalone power supply.

Measures will be put in place to secure the met mast site. Tamper proof shackles will be used on the anchors. These require a special tool to be removed and, as such, this prevents the mast being cut down via the anchors. Signage will also be displayed at the anchors.

#### 3. Installation Procedure

The met mast sits on a steel baseplate which in turn is supported by timber sleepers beneath the steel baseplate. In total there are 18 anchor points for the met mast.

To construct the met mast anchors, a metal sheet is placed at the bottom of each hole with a steel rod extending to just above ground level. The excavation is backfilled using the material removed. No concrete is required.

Delivery of the components of the proposed met mast will take place using All Terrain Vehicle drive vehicles and trailers. Installation for the mast will take approximately 5 days.

Post installation, one vehicle every year would access the met mast site for essential maintenance. Access to the met mast site will be gained via the A859 from Stornoway to the Grimshader Wind Farm site entrance.

#### 4. Community Safety

The proposed met mast site is located within an area of bare ground and therefore is not subject to access restrictions. Accordingly, site signage will be erected to warn public users during installation and operation advising on the need for safety around the mast and the guy wires.

Meteorological masts are designed and constructed to withstand high wind speeds, therefore they do not present any safety concerns once erected.

#### 5. Maintenance

The met mast site will be visited every year by a site engineer in a 4x4 vehicle. The visit will include instrument checks, a visual check of the mast, guyed wires and anchors, and also ensuring that site signage is still in place. The instruments will also be monitored remotely and should any instrumentation fail, additional site visits will be required.

#### 6. Decommissioning

At the end of up to 5 years the met mast would be decommissioned. During decommissioning the anchors are removed from the ground, all equipment is removed and the met mast site will be reinstated to its former condition.



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