

TCP/11/16(340)

Planning Application 14/00627/FLL - Erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven

FURTHER INFORMATION

Appendix 1: Perth and Kinross Council's EIA Screening Opinion



**Town & Country Planning (Environmental Impact Assessment)
(Scotland) Regulations 2011**

EIA SCREENING OPINION

Part I - Particulars of Screening Request/Planning Application

Applicant's Name & Address	Agent Name & Address
As agent	Thermal Power Engineering Ltd 21 Buchandrive Newmachar Aberdeenshire AB21 0NR

Date Request received	Application Ref. (if applicable)
21 December 2012	12/00563/PREAPP

Site Location	Description of Proposal
Innernyte Farm, Stanley	Erection of two wind turbines, 71m blade tip height

Part 2 - Particulars of Screening Decision

Perth and Kinross Council hereby give notice, in accordance with the provisions of the Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, that the development referred to in Part I above is **unlikely** to have significant effects on the environment. The Council has therefore adopted a screening opinion to the effect the development is **not** an EIA development.

The Council's reasons for reaching this conclusion are set out below.

This development is a Schedule 2 Development because the height of the proposed turbine exceeds 15m.

The development therefore must be screened for the requirement of an Environmental Assessment.

The likely environmental impact of the proposed development has been assessed under the following headings using the selection criteria in Schedule 3 of the EIA Regulations:

Characteristics of Development

a	size of the development	2 turbine, 71m blade tip height
b	cumulation with other developments	Potential cumulative impact
c	use of natural resources	Limited to construction phase
d	production of waste	None
e	pollution and nuisances	Low pollution risk to third party receptors
f	risk of accidents, with particular regard to substances or technologies used	Low

Location of development

a	existing land use	Upland Agricultural Grazing land
b	relative abundance, quality and regenerative capacity of natural resources in the area	Relatively small area of agricultural grazing land
c	absorption capacity of the natural environment	Limited capacity

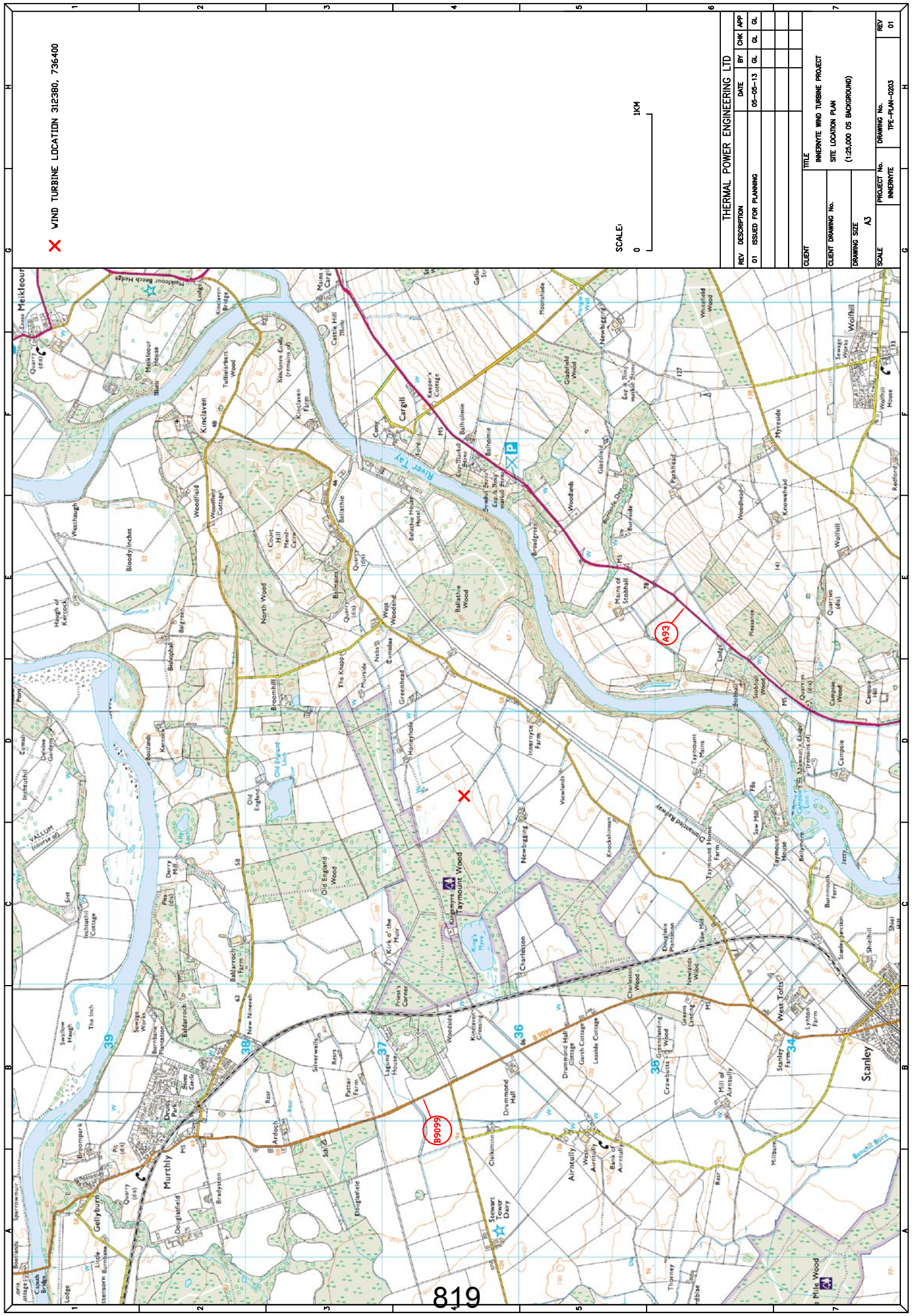
Characteristics of the potential impact(s)

a	extent of the impact(s)	Potential impact on the landscape and visual amenity of the area
b	transfrontier nature of the impact(s)	Permanent
c	magnitude and complexity of the impact(s)	Limited in magnitude and largely limited to the impact on the landscape and visual amenity
d	probability of the impact(s)	High
e	duration, frequency and reversibility of the impact(s)	Permanent (for 25 years)

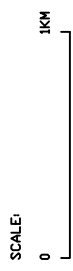
Development Quality Manager
The Environment Service
Perth and Kinross Council

Dated: 7 Feb 2013

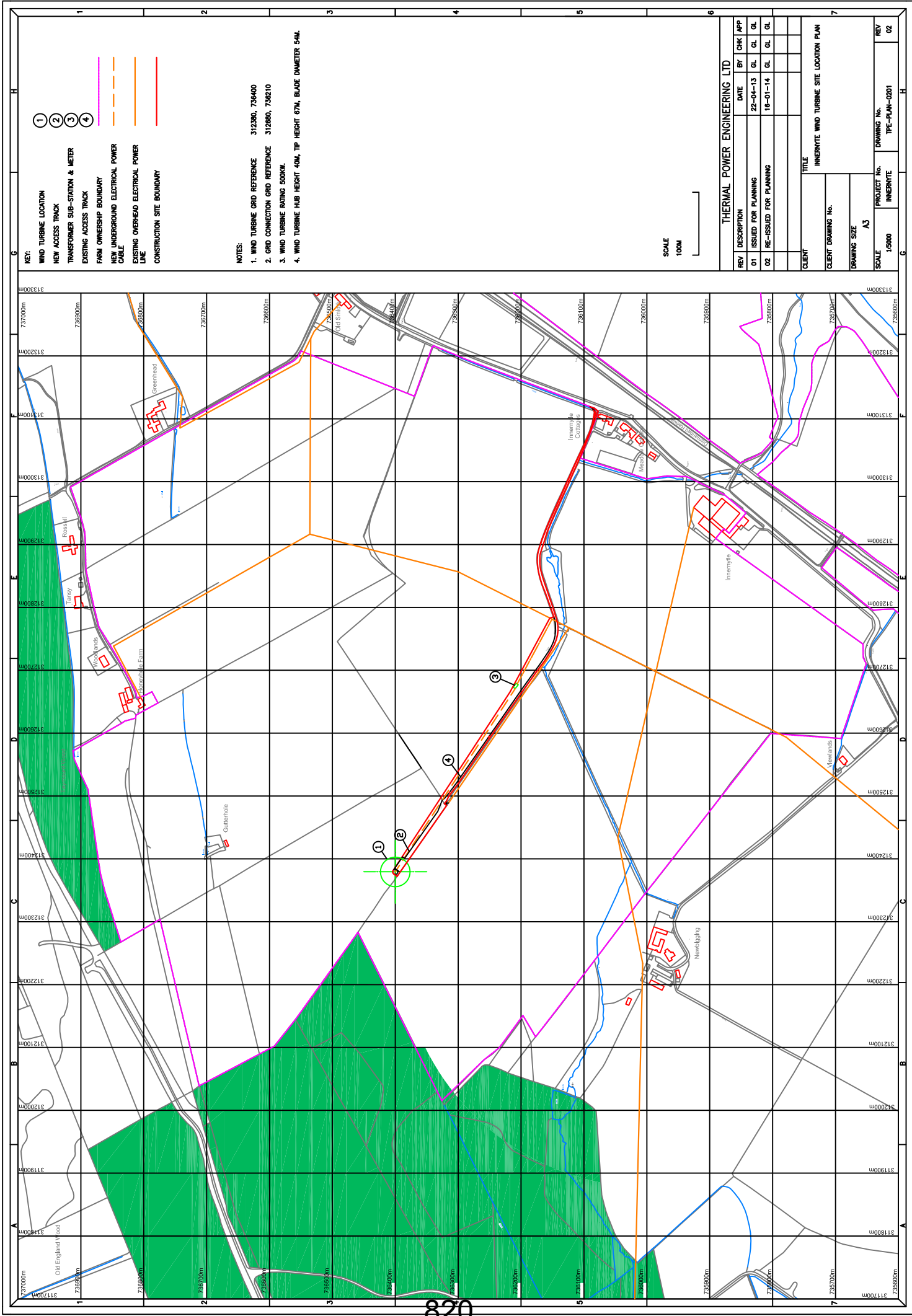
Appendix 2: Site Location Plans

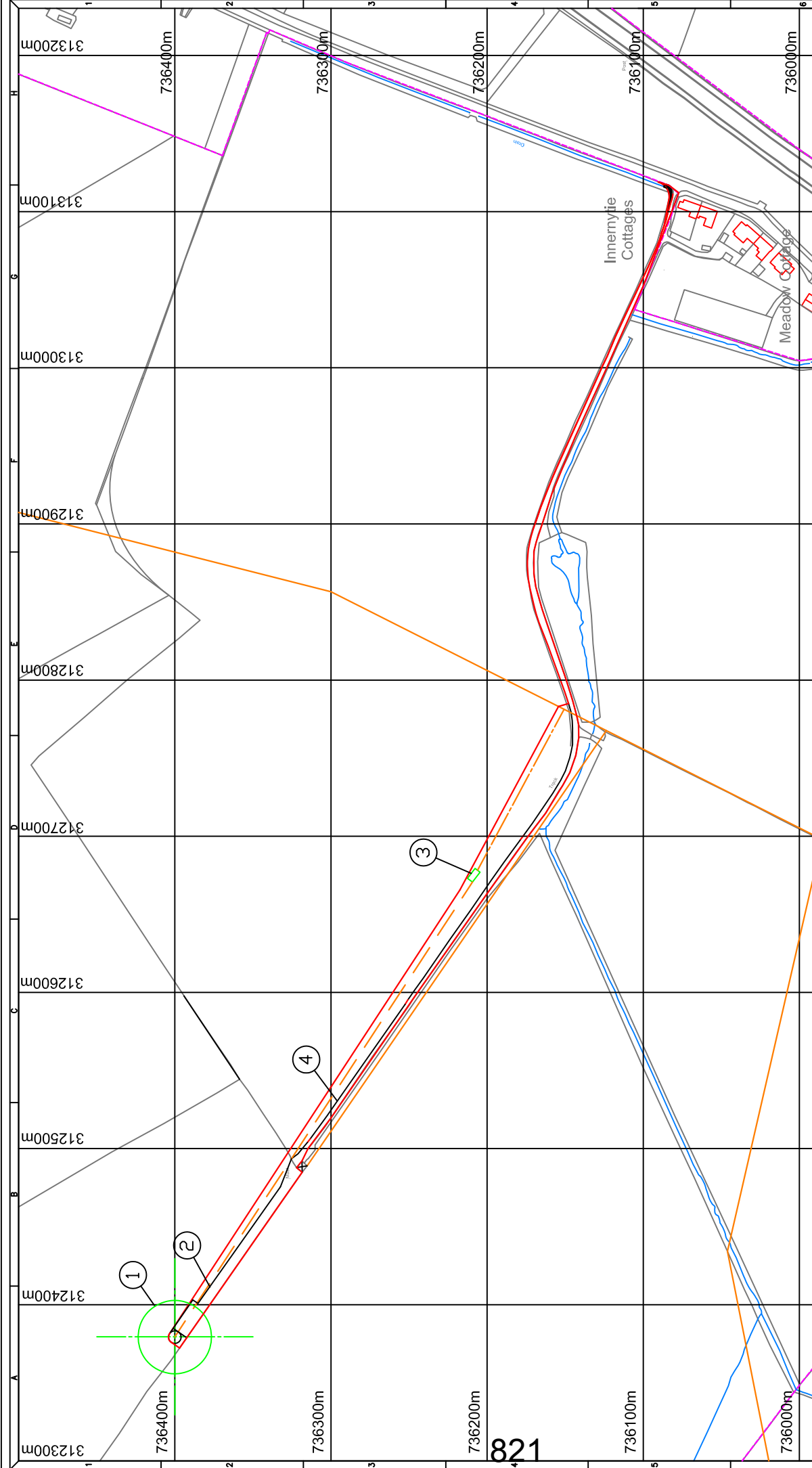


✗ WIND TURBINE LOCATION 312380, 736400



THERMAL POWER ENGINEERING LTD			
REV	DESCRIPTION	DATE	BY
01	ISSUED FOR PLANNING	05-05-13	GL
CLIENT		TITLE	
INNERYTE WIND TURBINE PROJECT		SITE LOCATION PLAN	
DRAWING No.		(1:25,000 OS BACKGROUND)	
DRAWING SIZE		A3	
SCALE	PROJECT No.	DRAWING No.	REV
	INNERYTE	TPE-PLAN-0203	01





KEY:

1

2

3

4

WIND TURBINE LOCATION

NEW ACCESS TRACK

TRANSFORMER SUB-STATION & METER

EXISTING ACCESS TRACK

FARM OWNERSHIP BOUNDARY

NEW UNDERGROUND ELECTRICAL POWER CABLE

EXISTING OVERHEAD ELECTRICAL POWER LINE

CONSTRUCTION SITE BOUNDARY

NOTES:

1. WIND TURBINE GRID REFERENCE 312300, 736400

2. GRID CONNECTION GRID REFERENCE 312680, 736210

3. WIND TURBINE RATING 500KW.

4. WIND TURBINE HUB HEIGHT 40M, TP HEIGHT 67M, BLADE DIAMETER 54M.

SCALE

100M

7

CLIENT

INNERYTE WIND TURBINE SITE LOCATION PLAN

500KW

1:2500

A3

SCALE 1:6500

PROJECT No. INNERYTE

DRAWING No. TPE-PLAN-0202

REV 02

6

THERMAL POWER ENGINEERING LTD

REV DESCRIPTION DATE BY CHK APP

01 ISSUED FOR PLANNING 22-04-13 GL GL GL

02 ISSUED FOR PLANNING 20-01-14 GL GL GL

CLIENT

TITLE

INNERYTE WIND TURBINE SITE LOCATION PLAN

500KW

1:2500

A3

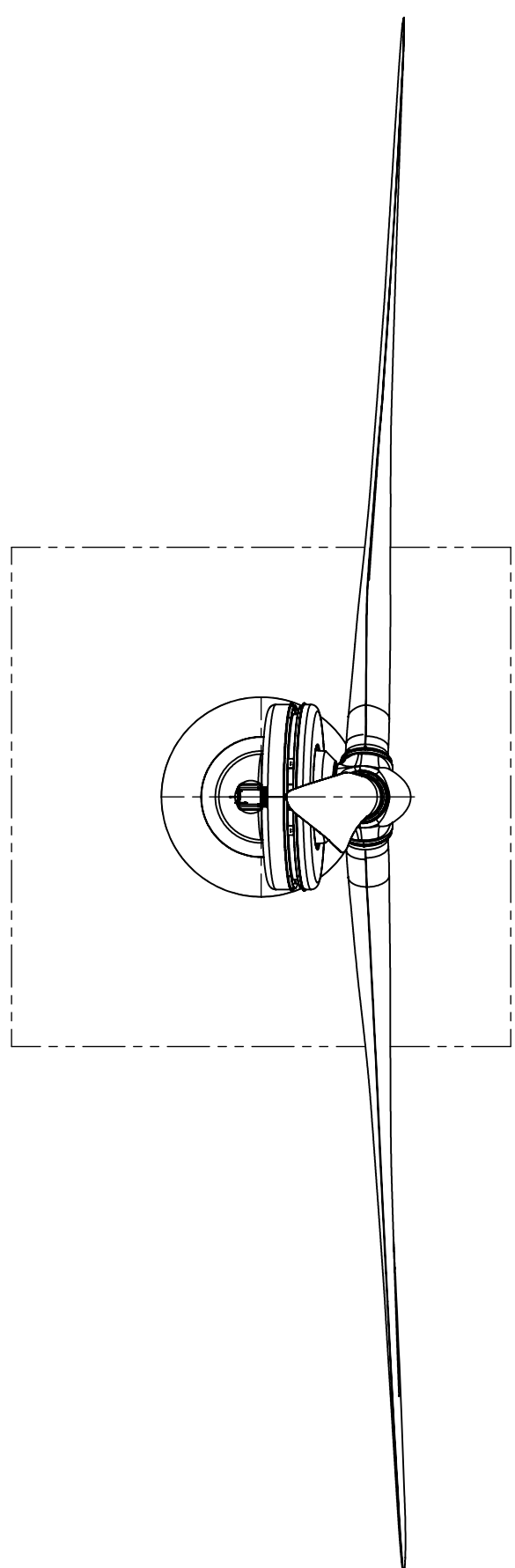
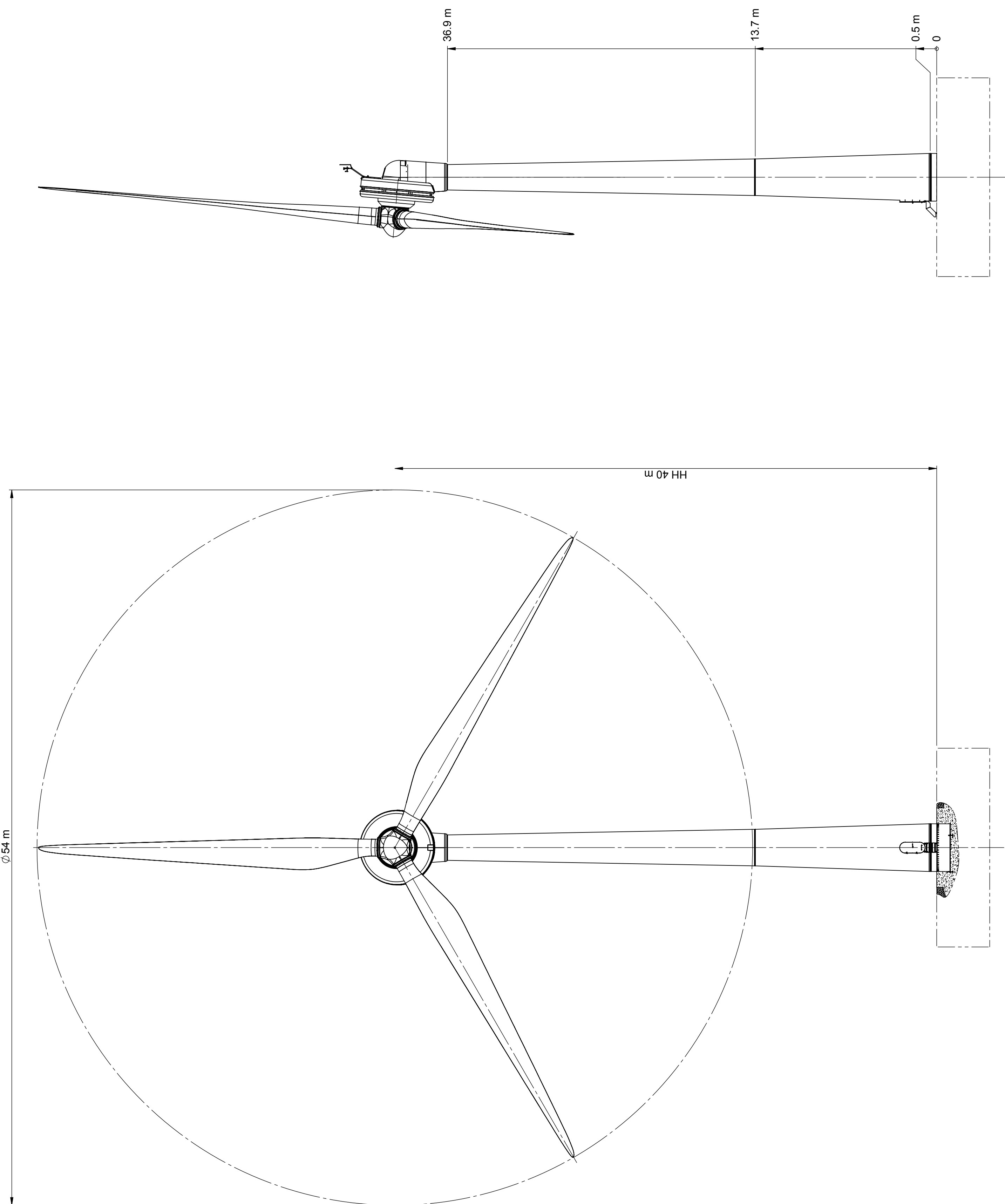
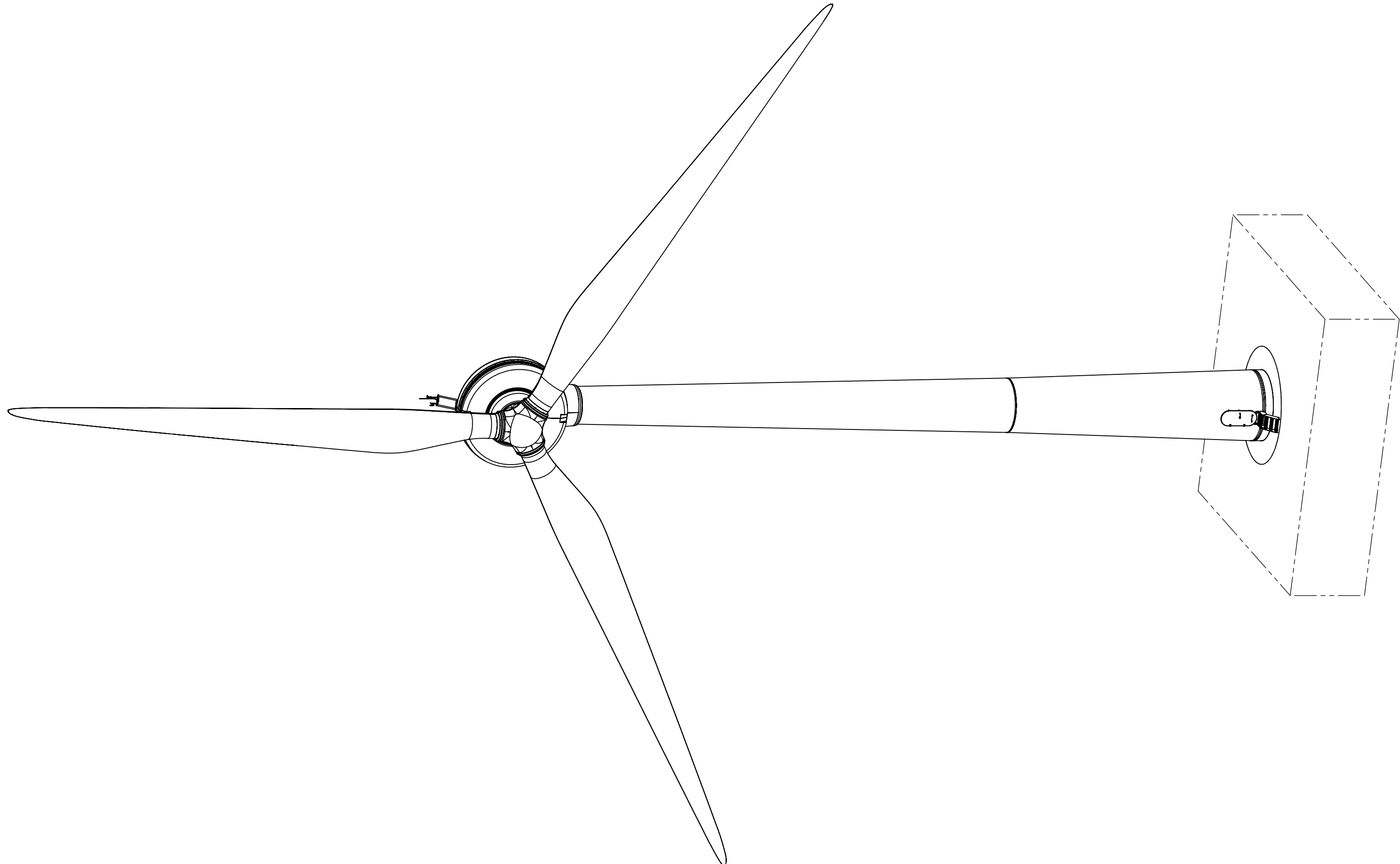
SCALE 1:6500

PROJECT No. INNERYTE

DRAWING No. TPE-PLAN-0202

REV 02

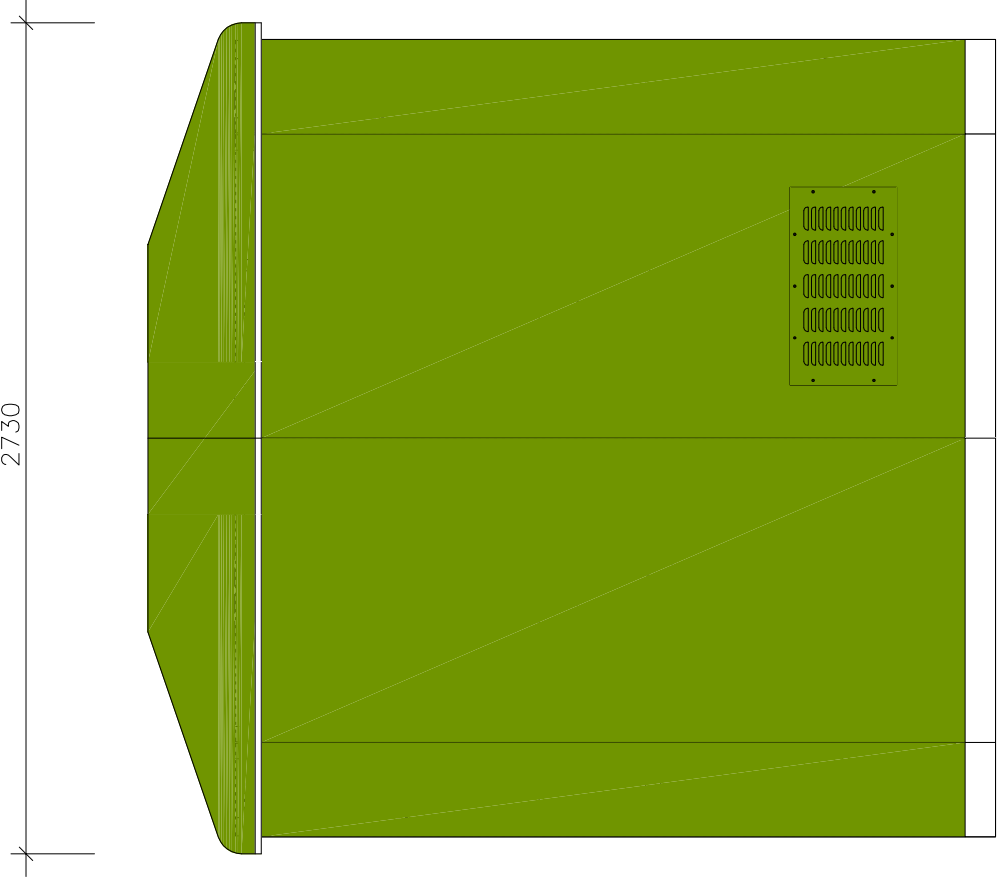
Appendix 3: General Arrangement Drawing



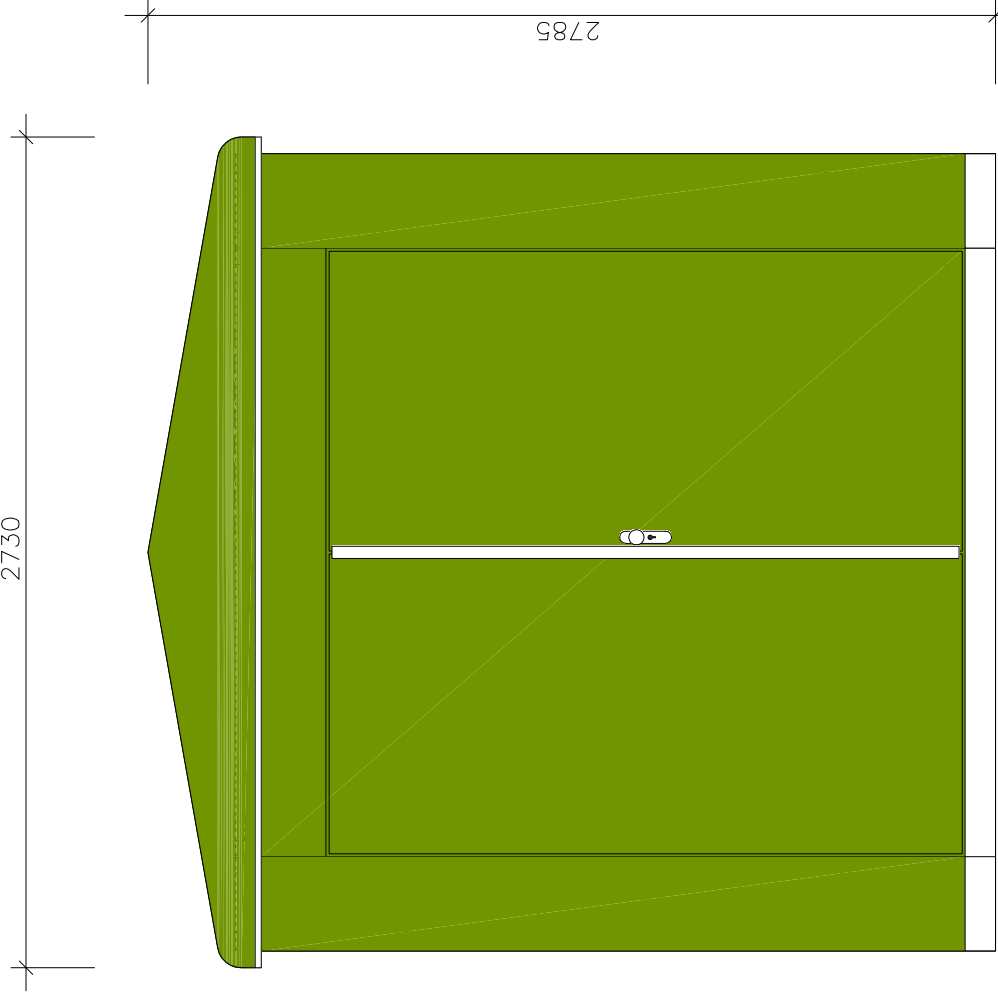
FOR INFORMATION ONLY

[illegible]

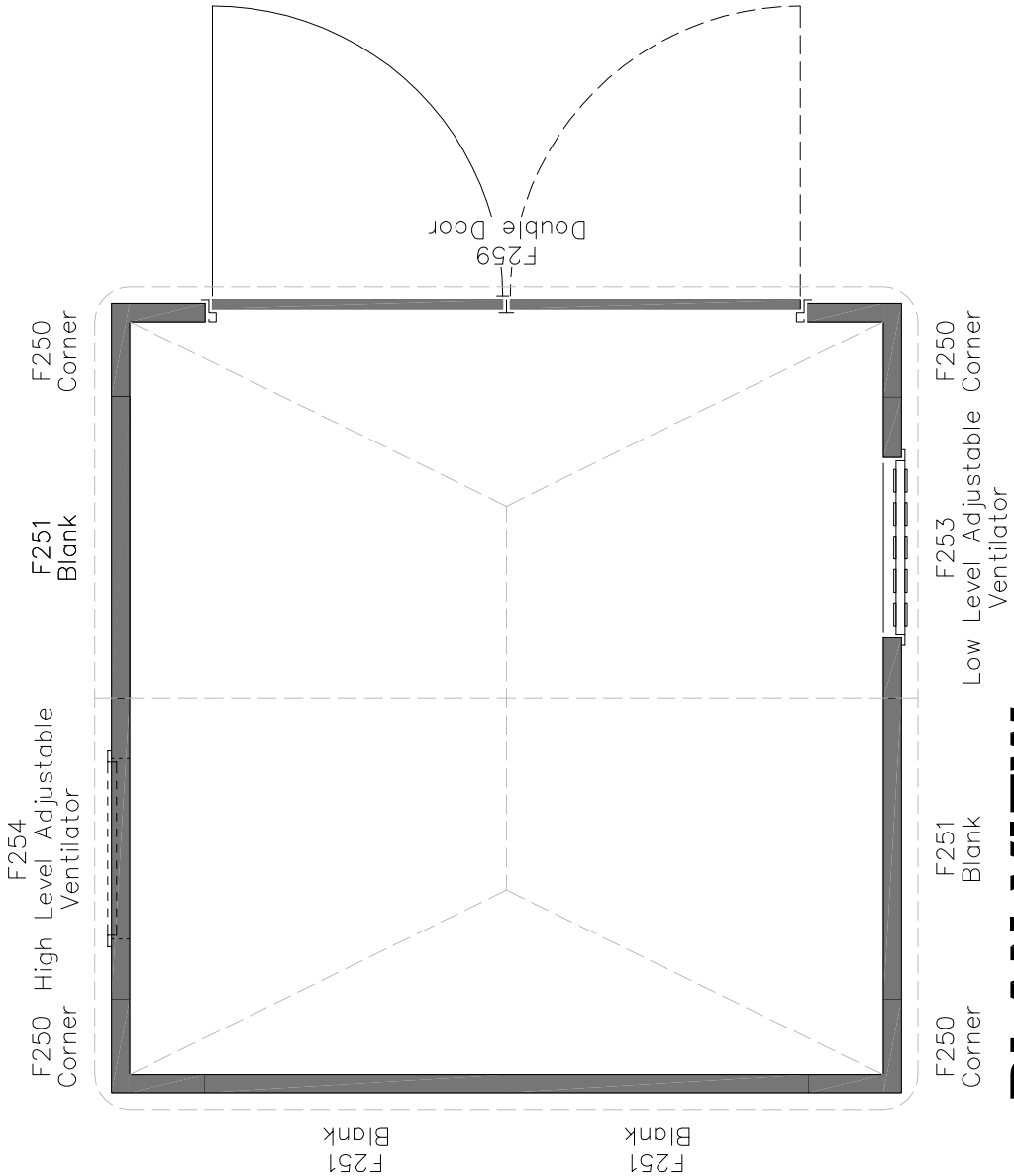
Appendix 4: Transformer & Control Building Drawing



FRONT ELEVATION



SIDE ELEVATION



PLAN VIEW

NOTES :

Colour – Standard 'Dark Green' approx.
BS.4800 (12.B.27).

Colours shown on this drawing are for
illustrative purposes only.

Base fixing bolts supplied as standard
(base fix and seal by others).

Appendix 5: Carbon Reduction Calculation

Carbon Reduction Calculation

EWT DW54 500kW

G. Lennox

2014-01-09

Grid CO₂ production rate - compare with DEFRA 2002 figures:

- Coal fired 0.86tCO₂/MWh
- Grid Mix 0.43tCO₂/MWh
- Fossil Fuel 0.607tCO₂/MWh

$$GM_{CO_2} := 0.607 \frac{\text{tonne}}{\text{MW} \cdot \text{hr}}$$

$$GY_{pa} := 1820.920 \frac{\text{MW} \cdot \text{hr}}{\text{yr}}$$

$$A_v := 95\%$$

$$\eta_{wt} := 98\%$$

$$PTCF := 1.014$$

$$NY_{pa} := GY_{pa} \cdot A_v \cdot \eta_{wt} \cdot PTCF = 1719 \frac{\text{MW} \cdot \text{hr}}{\text{yr}}$$

$$LC := 25 \cdot \text{yr}$$

$$NY := NY_{pa} \cdot LC = 42975.3 \text{ MW} \cdot \text{hr}$$

$$CO_{2\text{redpa}} := GM_{CO_2} NY_{pa} = 1043.4 \frac{\text{tonne}}{\text{yr}}$$

$$CO_{2\text{red}} := GM_{CO_2} NY = 26086 \text{ tonne}$$

Annual wind turbine gross yield
EWT DW54 500kW, 40m,
6.64m/s

Availability

Efficiency

Site pressure & temperature correction factor

Annual wind turbine net yield

Expected project lifecycle

Total turbine yield

Annual mass carbon dioxide reduction

Total mass carbon dioxide reduction

The following references are given for CO₂ produced during the manufacture, transportation and installation of wind turbine in Calculating Carbon Savings From Wind Farms on Scottish Peat Lands 2008 (page 41):

Vestas, Denmark, 2005 4.64tonnesCO₂/GWh

White, USA, 2007 14 to 34tonnesCO₂/GWh

Ardente, Italy, 2008 8.8 to 18.5tonnesCO₂/GWh

Use an average value as follows:

$$wt_{CO_2} := \frac{4.64 \cdot 10^{-3} + 34 \cdot 10^{-3}}{2} \cdot \frac{\text{tonne}}{\text{MW} \cdot \text{hr}} = 0.019 \frac{\text{tonne}}{\text{MW} \cdot \text{hr}}$$

$$WT_{CO_2} := wt_{CO_2} NY = 830.28 \text{ tonne}$$

Mass of CO₂ produced during the
manufacture, transportation and installation of
wind turbine

$$PB := \frac{WT_{CO_2}}{CO_{2\text{redpa}}} = 0.796 \text{ yr}$$

Carbon payback time

Appendix 6: Cumulative Landscape and Visual Impact Assessment (CLVIA)

Appendix 7: Noise Assessment Report

Thermal Power Engineering Ltd

Wind Turbine Site Noise Assessment Report

Innernyte Farm, Kinclaven, Perthshire, PH1 4QH

REVISION RECORD

REV	DESCRIPTION	DATE	ORIGINATED BY	CHECKED BY	APPROVED BY
01	Issued for Planning	11/04/2013	G. Lennox		
02	Re-issued for Planning	02/01/2014	G. Lennox		

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1.0 Introduction

This noise assessment has been carried out for the proposed wind turbine installation at Innernyte farm. The proposal is to install a single 500kW wind turbine and noise data from the EWT DW54 500kW has been used in the evaluation.

The noise assessment was carried out in accordance with Perth and Kinross Council planning guidance and ETSU R-97.

2.0 Summary

In accordance with Perth and Kinross Council SPG, good acoustical design and siting of turbines is essential to ensure there is no significant increase in ambient noise level as they affect the environment and any nearby noise-sensitive property.

PKC SPG states that loss of amenity from noise will be assessed on the following basis:

- A difference of 3dB or less – insignificant
- A difference of 4dB to 6dB - marginal loss of amenity
- A difference of 10dB or more - major loss of amenity

The PKC SPG provides background noise levels for rural areas, to be used unless demonstrated otherwise by site specific background noise measurement.

ETSU R-97 limits the free field sound pressure level $L_{A90,10min}$ to the greater of: 35dB(A) at quiet times or 43dB(A) at night-time; or 5dB above measured background noise levels.

Site specific background noise measurement was carried out at the nearest residential properties to the Innernyte turbine location. The background noise was found to be marginally higher than the PKC SPG figures at low and medium wind speeds, but lower at high wind speeds.

The results of the assessment show that at wind speeds of 5m/s to 10m/s, the noise level at the nearest receptor is less than the limits set out in ETSU R-97 and would not create a greater than marginal loss of amenity in accordance with PKC SPG.

3.0 Guidance Documents & Standards

The following guidance documents and standards have been used for the purpose of the assessment:

- Supplementary Planning Guidance (SPG) for Wind Energy Proposals in Perth & Kinross, Perth and Kinross Council, 2005
- ETSU R-97 - Assessment and Rating of Noise from Wind Farms, DTI, 1996
- BS EN 61400-11 Wind Turbines - Acoustic Noise Measurement, 2003
- BS 7445-2 Description and measurement of Environmental Noise, 1991
- ISO 9613-1 Calculation of the Absorption of Sound by Atmosphere, 1993
- ISO 9613-2 Attenuation of Sound - General Method, 1996

3.1 Supplementary Planning Guidance for Wind Energy Proposals in Perth & Kinross

In accordance with Perth and Kinross Council SPG, good acoustical design and siting of turbines is essential to ensure there is no significant increase in ambient noise level as they affect the environment and any nearby noise-sensitive property.

PKC SPG states that loss of amenity from noise will be assessed on the following basis:

- A difference of 3dB or less – insignificant
- A difference of 4dB to 6dB - marginal loss of amenity
- A difference of 10dB or more - major loss of amenity

The PKC SPG provides background noise levels for rural areas, to be used unless demonstrated otherwise by site specific background noise measurement, as follows:

Table 3-1: PKC Recommended Background Noise Level

Wind Speed @ Receptor	m/s	4	5	6	7	8	9	10	11	12
Background Noise Level	dB(A)	24	25	27	29	31	33	35	37	39

3.2 ETSU R-97

According to ETSU R-97, the simple approach can be used, which does not require site noise measurement, provided the daytime A weighted free field sound pressure level at 10m elevation $L_{A90,10min}$ can be shown to be less than or equal to 35dB(A) at 10m/s. At night-time the limit is increased to 43dB(A) according to ETSU.

The $L_{A90,10min}$ is the 90% probability average over 10min and is to be used when describing wind farm noise and background noise. $L_{A90,10min}$ is considered to be 2dB less than the measured or calculated L_{Aeq} for background noise or noise level provided by the turbine manufacturer, so 2dB is subtracted from the calculated L_{Aeq} .

Where the limit of the simple approach cannot be achieved, the site back ground noise may be considered such that the limitation is increase to 5dB above background noise level.

Where background noise measurements are undertaken, the daytime measurements are to be measured at the quiet time, defined as:

All evening from 6pm to 11pm;

Saturday afternoon from 1pm to 6pm;

Sunday 7am to 6pm;

and Night-time is defined as 11pm to 7am.

4.0 Methodology

4.1 Wind Turbine Noise Level

The warranted sound power level from the EWT DW54 500kW wind turbine was obtained from the manufacturer's noise test report. The sound power level verses wind speed is summarised as follows:

Table 4-1: Turbine Sound Power Level

Windspeed@10m, m/s	5	6	7	8	9	10
EWT DW54	97	98	99	100	100.5	100.5

The manufacturer's noise test certificate is attached in Appendix 1.

The wind turbine has been located at grid reference 401108, 854482.

4.2 Tonality of Noise

ETSU R-97 requires a noise penalty to be added to the turbine noise level if the audibility of tonal noise is greater than 2dB. The audibility of tonal noise is calculated in accordance with BS 7445-2, which states as follows:

"...a prominent tonal component may be detected in one-third octave spectra if the level of a one-third octave band exceeds the level of the adjacent bands by 5 dB or more..."

For the EWT DW54 500kW, a tonal noise penalty of 2.5dB is applicable only at a wind speed of 5m/s and this has been added for the evaluation.

4.3 Calculation of Noise Level at Receptors

As per the planning guidance the noise level at the nearest dwelling house has been considered at the following locations at distance (R) from the wind turbine:

Table 4-2: Receptor Location

Location	Easting	Northing	Distance (R, m)
Newbigging	312280	735995	417
Honeyhole	312640	736802	479

The sound pressure level at the receptor is calculated from the wind turbine sound power level, subtracting factors for divergence, atmospheric and ground absorption in accordance with ISO 9613-1/2, as follows:

$$LA = LwA - Adiv - Aatm - Agr$$

where,

LA = A weighted sound pressure level

Adiv = Sound attenuation from divergence

Aatm = Sound attenuation from atmospheric absorption

Agr = Sound attenuation from ground absorption

4.3.1. Divergence

The apparent sound attenuation due to divergence is calculated using the following formula provided in ISO 9613-2:

$$A_{div} = 20 \cdot \log(R) + 11$$

where,

A_{div} = Sound attenuation from divergence

R = Distance from source to receptor

4.3.2. Atmospheric Absorption

Sound attenuation from atmospheric absorption is calculated in accordance with ISO 9613-1, at an air temperature of 10°C, atmospheric pressure of 101.35kPa and relative humidity of 70%. The atmospheric absorption is calculated for the central audible octave band of 1000Hz, and absorption coefficient is calculated to be 0.00366dB/m.

4.3.3. Ground Absorption

Sound attenuation from ground absorption is calculated in accordance with ISO 9613-2. The simple method is used since the surrounding farm land is classified as porous ground, as follows:

$$A_{gr} = 4.8 - (2 \cdot h_m / R) \cdot (17 + (300 / R)) \text{ and } \geq 0$$

where,

A_{gr} = Sound attenuation from ground absorption

h_m = Average height above ground level between source and receptor

R = Distance from source to receptor

4.3.4. Wind Shear

In accordance with ETSU-R-97, turbine noise data which is specified at the wind speed at the turbine hub height must be adjusted to an elevation of 10m to allow comparison with background noise.

The noise data provided for the EWT DW54 in the noise report is already adjusted for wind speeds at 10m elevation and as such no further adjustment of the figures is required to account for wind shear.

4.3.5. Results

The following results were calculated for the sound pressure level $L_{A90,10min}$ at the nearest receptors:

Table 4-3: Sound Pressure Level at Receptor

Wind Speed@10m (m/s)	5	6	7	8	9	10
Newbigging $L_{A90,10min}$, dB(A)	33.0	31.5	32.5	33.5	34.0	34.0
Honeyhole $L_{A90,10min}$, dB(A)	31.6	30.1	31.1	32.1	32.6	32.6

The results are presented graphically with limits in figures 4-8 and 4-9 below.

4.4 Background Noise Measurement

Background noise measurement was carried out by RMP Acoustics, based at Napier University under the direction of Richard Mackenzie BSc, PGDip, FIOA, MInst SCE.

4.4.1. Equipment Location

The measurement locations are shown in figure 4-1 and photographs of the instruments in location are shown in figures 4-2 to 4-3.

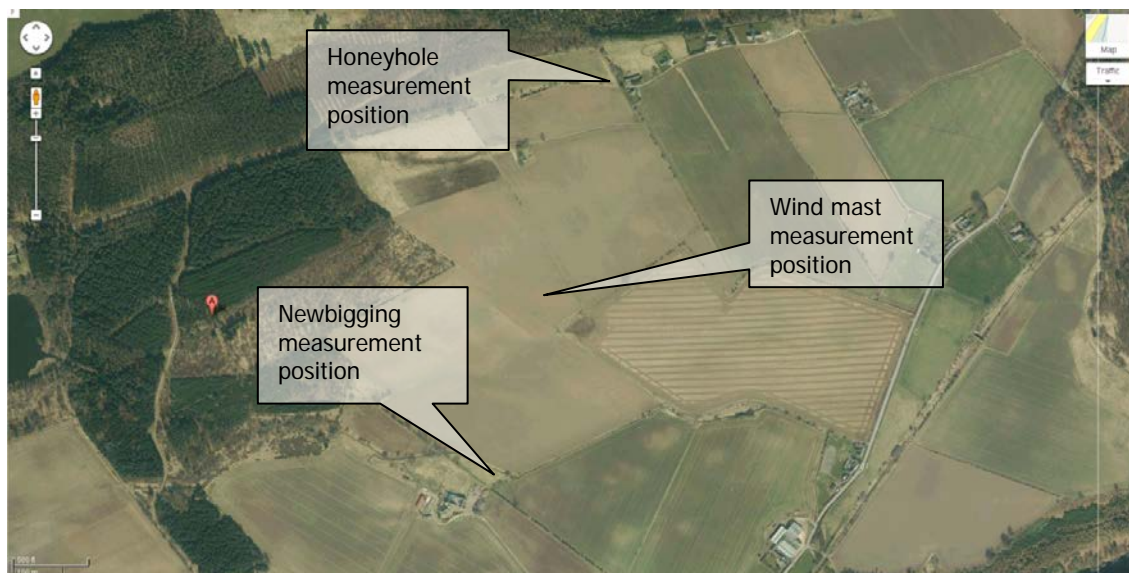


Figure 4-2: Measurement Locations



Figure 4-1: Sound Meter at Honeyhole



Figure 4-3: Met Mast



Figure 4-4: Sound Meter at Newbigging

Calibration certificates for the instruments used are attached in Appendix 4.

4.4.2. Measurement Results

Noise measurement started on 19th Feb 2013 and continued over circa 3 weeks finishing on 11th March at Honeyhole and 13th March at Newbigging. Rainfall was also measured at the met mast and noise readings were filtered out during any significant rainfall (>25mm/min).

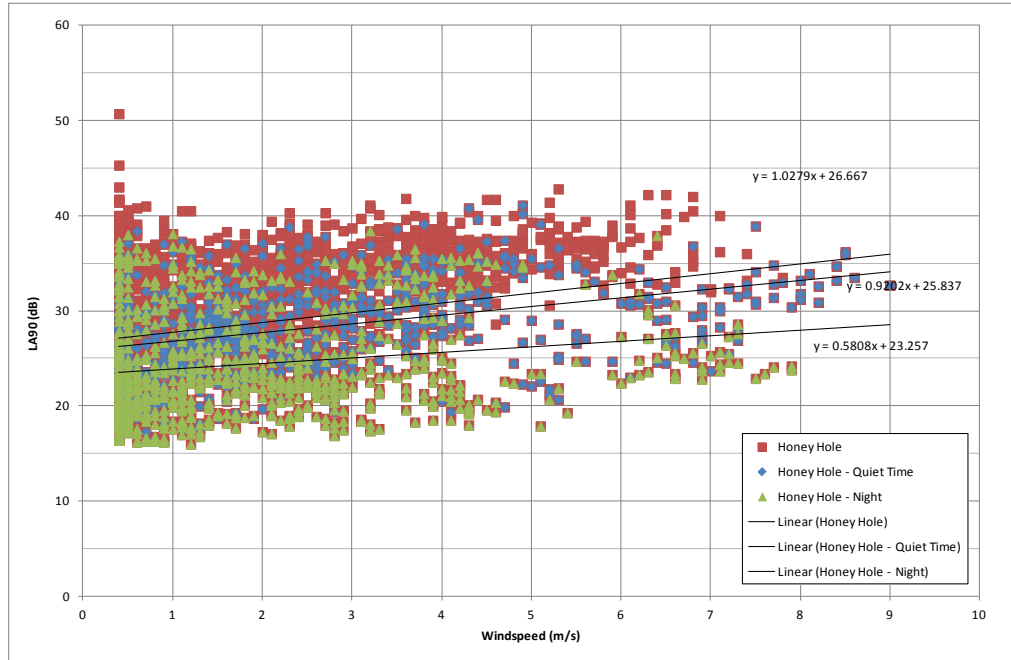


Figure 4-5: Honeyhole Background Noise Results

The noise data results are plotted in figure 4-6 and 4-7. Filtered results during quiet time and night time are also shown and linear best fit lines applied.

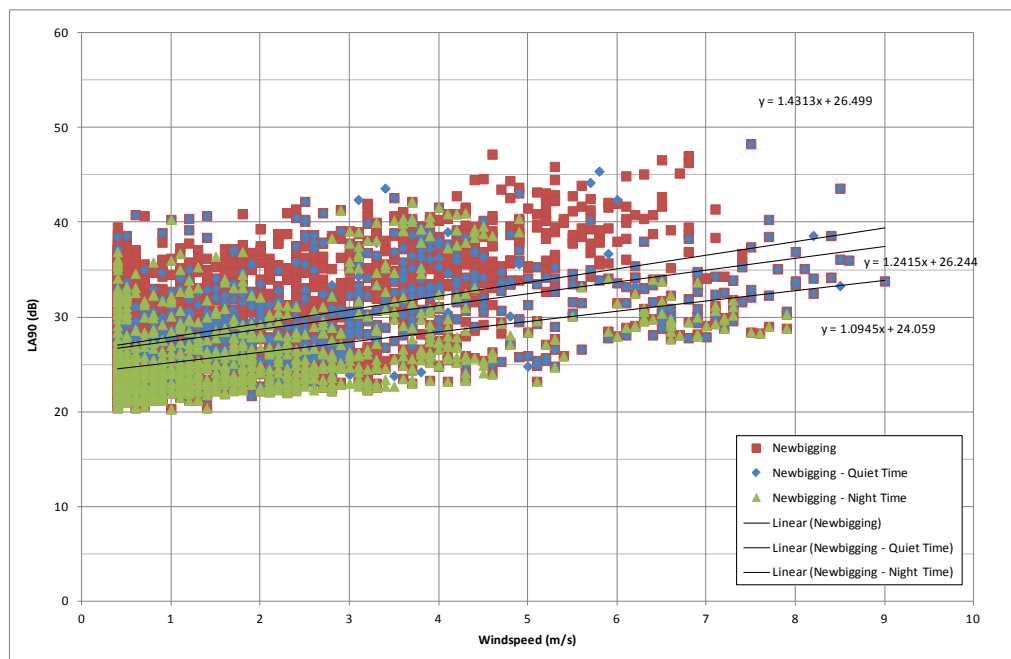


Figure 4-6: Newbigging Background Noise Results

The background noise level at quiet and night time is used to calculate the noise limit as described earlier and plotted against the calculated noise level at receptors in figures 4-8 and 4-9. It can be seen that the noise level at receptor is below the noise limits across all wind speed from 5 to 10m/s.

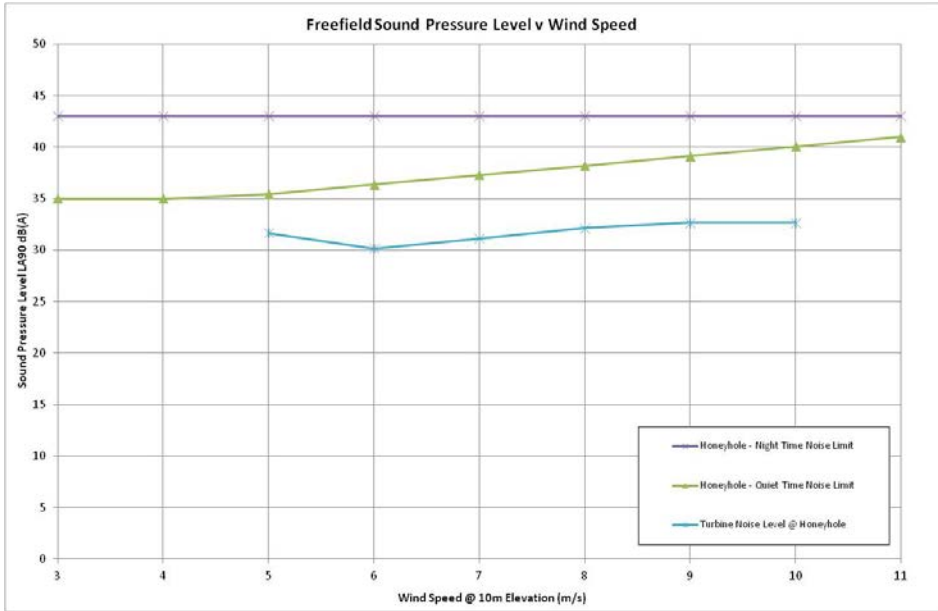


Figure 4-7: Honeyhole SPL versus Wind Speed

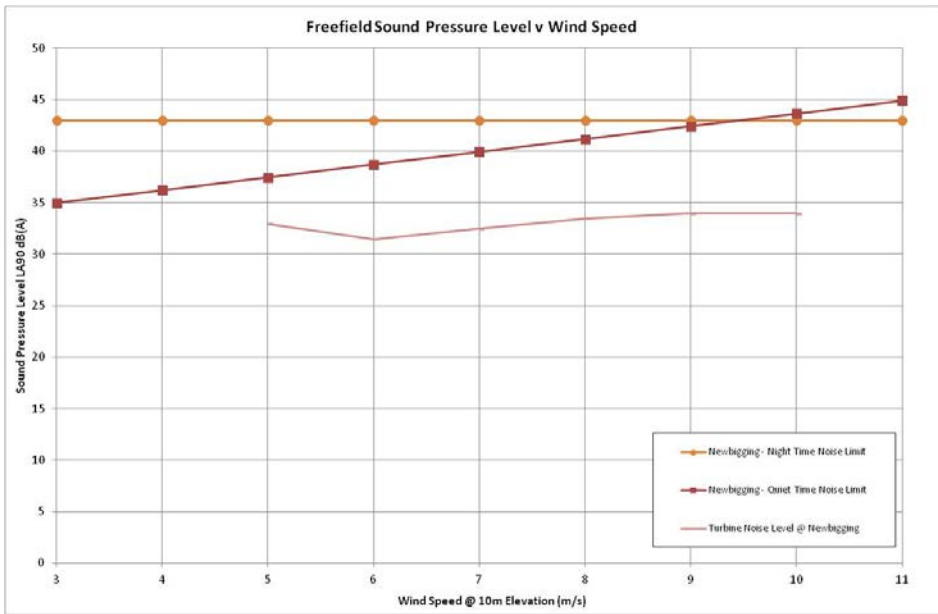


Figure 4-8: Newbigging SPL versus Wind Speed

4.5 Conclusion

From the site specific background noise measurement carried out at the nearest residential properties to the Innernyte turbine location, the background noise was found to be below the PKC SPG figures at low and medium wind speeds, but lower at high wind speeds.

The results of the assessment show that at wind speeds of 5m/s to 10m/s, the noise level at the nearest receptor is less than the limits set out in ETSU R-97 and would not create a greater than marginal loss of amenity in accordance with PKC SPG.

Appendix 1: Manufacturer's Noise Test Certificates



Emergya Wind Technologies BV

Engineering

Category:	Specification	Page 1 / 2
Doc code:	S-1005020	

Created by:	TY	Creation Date:	07-12-11
Checked by:	MS	Checked Date:	07-12-11
Approved by:	TY	Approved Date:	07-12-11

Title:

Specification


Sound power warranty levels DW52/54 500kW

Revision	Date	Author	Approved	Description of changes
02	14-03-12	AB	TY	Modifications based on new IEC measurements
01	09-12-11	AB	TY	correction
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Emergya Wind Technologies BV

Building 'Le Soleil' - Computerweg 1 - 3821 AA Amersfoort - The Netherlands
T +31 (0)33 454 0520 - F +31 (0)33 456 3092 - www.ewtinternational.com

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	Category:	Specification	Revision: 02
	Title:	Sound power warranty levels DW52/54 500kW	Page 2 / 2
	Doc code:	S-1005020	

Sound power levels

The warranted sound power levels are presented with reference to IEC 61400-11:2002.

V_{wind} at 10m height	DW52	DW54
5 m/s	96,5 dB(A)	97.0 dB(A)
6 m/s	97.5 dB(A)	98.0 dB(A)
7 m/s	98.5 dB(A)	99.0 dB(A)
8 m/s	99.5 dB(A)	100.0 dB(A)
9 m/s	100.3 dB(A)	100.5 dB(A)
10 m/s	100.5 dB(A)	100.5 dB(A)

Sound power level L_w in dB(A)

The warranted sound power levels are based on actual measurements executed by an independent noise measurement institute according to the preferred methods set out in IEC-61400-11.

Uncertainty levels are included in the warranted sound power levels.

At 5m/s a maximum tonal noise penalty of 2,5dB shall be considered according to ETSU-R-97 guidelines.

The measured third octave sound power levels are available upon request.

The values given in the table are valid for normal operational mode (rotation speed 0-24 RPM)

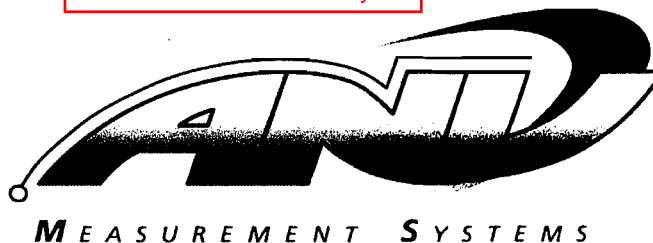
The calculation of the standardized wind speed at 10m height according to IEC 61400-11 is based on a terrain roughness length $Z_0=0,05m$.

In case validation measurements have to be performed, they should be executed according to the preferred methods set out in IEC-61400-11 by an independent measurement institute which is accredited to ISO/IEC 17025 to conduct measurements of wind turbine noise emissions.

EWT reserves the right to make modifications or adjust settings in order to comply with the warranted sound power levels.

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Appendix 2: Instrument Calibration Certificates



CERTIFICATE OF CONFORMANCE

Date of Issue 06 June 2012
Customer Edinburgh Napier University
Certificate Number CONF061202

	Manufacturer	Type	Serial Number
Sound Level Meter	Rion	NL-52	00420769
Preamplifier	Rion	NH-25	20818
Microphone	Rion	UC-59	03578

This is to certify that the instrument was tested and calibrated at the Manufacturer's factory according to their specification and that the product satisfied all the relevant requirements of the following Standards:

IEC 61672-1:2002 Class 1.

The instrument also received a functional check by ANV Measurement Systems prior to despatch in the UK, in accordance with our standard procedures.

Signed Amrat C Patel Position Laboratory Manager Date 06/06/2012

BEAUFORT COURT, 17 ROEBUCK WAY, MILTON KEYNES, MK5 8HL

☎ 01908 642846 ☎ 01908 642814

✉ info@noise-and-vibration.co.uk 🌐 www.noise-and-vibration.co.uk



CERTIFICATE OF CALIBRATION

Certificate Number CAL021240
Date of Issue 08/02/2012
Customer ANV Measurement Systems

Description of Instrument

Sound Level Meter Rion NL-31 Sound Level Meter [Serial No. 00741759] with
Rion UC-53A Microphone [Serial No.308436] and
Rion NH-21 Preamplifier [Serial No.12057]
Fitted with a WS-10 foam windshield.

The instrument successfully completed the Class 1
Periodic Tests of BS EN 61672.

Associated Calibrator B & K 4226 S/N 2590976.

Date of Calibration 08/02/2012.

Test Procedure ..\..\..\Calibration Results Sheets\Current Approved Results
Sheets\NL-31 Master 61672-3 Approved Issue 6 (BK 2590976).xls

Test procedures in accordance with BS EN 61672-3:2006.
NOTE: Test 10.1 (Self Generated Noise with Microphone Installed)
omitted.

Test Engineer Amrat Patel

APPROVED SIGNATORY

Les Jephson ☒ Mike Breslin ☐

BEAUFORT COURT, 17 ROEBUCK WAY, MILTON KEYNES, MK5 8HL

☎ 01908 642846 📠 01908 642814

✉ info@noise-and-vibration.co.uk 🌐 www.noise-and-vibration.co.uk

ACOUSTICS NOISE AND VIBRATION LIMITED. REGISTERED IN ENGLAND No. 3549028. REGISTERED OFFICE AS ABOVE.

CERTIFICATE OF CALIBRATION

CERTIFICATE NO. CAL021240.
DATE OF ISSUE 08/02/2012

Information relating to the operation and adjustment of the sound level meter were obtained from the data contained in the Rion Instruction Manual 32005 and associated Technical Notes 32042. Additional information relating to measurement uncertainties required by clause 11.3 has been provided by the Rion European Office and is available for inspection upon request.

Results

Tests on the Sound Level Meter were principally performed on the Main Channel. Limited tests were also performed using the Sub-Channel.

No Acoustic Calibrator was supplied with the instrument. When ANV Measurement Systems' B&K 4226 s/n 2590976 was initially applied the Sound Level Meter read 93.9dB (A). The meter was adjusted to read 94.0 dB (A) derived from the current calibration certificate for the calibrator at the indicated frequency of 1000 Hz.

The environmental conditions at the start and end of the calibration were within the specified range for calibration and were noted to be as follows:

Conditions	Measured Value at Start	Measured Value at End
Temperature	23.4 °C	23.8 °C
Relative Humidity	30.6 %	30.8 %
Atmospheric Pressure	103.2 kPa	103.2 kPa

The self generated noise levels of the instrument with the microphone replaced by the electrical input device were:

9.0 dB (A);
15.2 dB (C); and
20.9 dB (Z).

These measured levels were within the specified limits defined within the instruction manual.

The Sound Level Meter submitted for testing has successfully completed the Class 1 Periodic Tests of BS EN 61672, for the environmental conditions under which the tests were performed. However, no general statement or conclusion can be made about the conformance of the Sound Level Meter to the full requirements of BS EN 61672-1:2003 because evidence was not publically available, from an independent testing organisation responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the requirements of BS EN 61672-1:2003 and because the periodic tests of BS EN 61672-3:2006 only cover a limited subset of the specifications in BS EN 61672-1:2003.

The calibration incorporated the windshield corrections supplied by the manufacturer and the results are therefore applicable to the instrument with the microphone and pre-amplifier attached with the windscreen fitted.

No information on the uncertainty of measurement, required by 11.7 of IEC 61672-3:2006, of the adjustment data given in the instruction manual or obtained from the manufacturer of the

CERTIFICATE OF CALIBRATION



CERTIFICATE NO. **CAL021240.**
DATE OF ISSUE **08/02/2012**

Sound Level Meter, or the manufacturer of the Microphone, or the manufacturer of the multi-frequency Sound Calibrator was published in the instruction manual or made available by the manufacturer or supplier. The uncertainty of measurement of the adjustment data has therefore been assumed to be numerically zero for the purpose of this periodic test. If these uncertainties are not actually zero, there is a possibility that the frequency response of the Sound Level Meter may not conform to the requirements of IEC 61672-1:2002.

The total expanded measurement uncertainties associated with the calibration equipment and procedures is based on a standard uncertainty multiplied by a coverage factor $k=2$ to provide a confidence of approximately 95% in the results. The assessment of uncertainty has been carried out in accordance with national and international guidance upon the calculation of uncertainties in metrology.

Notes

1. The tests were conducted principally on the main channel, with a limited number of tests conducted for the sub channel. The Peak C sound level measurements were carried out for the sub channel as they are only available on this channel.
2. The instrument was running firmware version 1.045.

ANEMOMETER CALIBRATION REPORT

Test Date: 10 January 2012

Revision No: 0

630 Peña Drive, Suite 800
Davis, CA 95618-7726
Office: (530) 757-2264
<http://www.otechwind.com>

Customer Information

NRG Systems, Inc.
110 Riggs Road
Hinesburg, VT 05461
USA

Wind Tunnel Test Facility

Otech Tunnel ID: WT2B
Type: Eiffel (open circuit, suction)
Test Section Size: 0.61 m x 0.61 m x 1.22 m
Manufacturer: Engineering Laboratory Design, Inc.

Measuring Equipment

Reference Speed: Four United Sensor Type PA Pitot-static tubes sensed by an MKS Barotron Type 220D Differential Pressure Transducer (NIST traceable)
Amb. Pressure: Setra Model 270 Barometer (NIST traceable)
Amb. Temperature: OMEGA HX94 SS Probe (NIST traceable)
Relative Humidity: OMEGA HX94 SS Probe (NIST traceable)

Instrument Under Test (IUT)

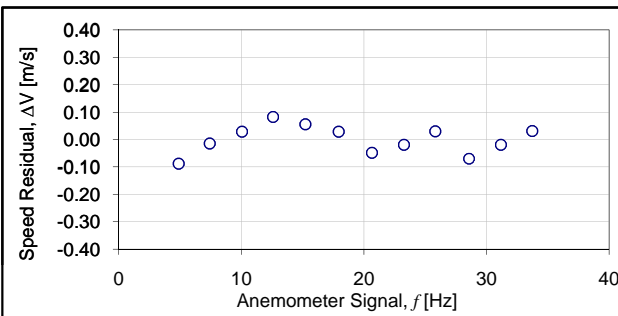
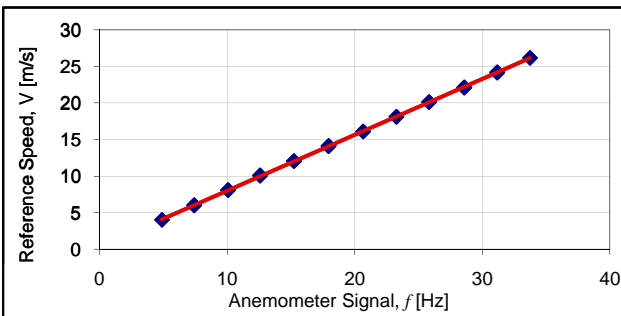
Model No: NRG #40 Sine
Serial No: 179500193771
Output: Sine Wave
IUT Power: 0 VDC
Heater Power: 0 VDC
Mount Diameter: 12.7 mm
Test Procedure: OTECH-CP-001

Data Acquisition

Hardware: National Instruments CDAQ-9172 USB 2.0 chassis with NI 9205 32-chan 16-bit AI module
Software: National Instruments LabVIEW 2010
Signal Reduction Method for IUT: FFT Analysis

Test Conditions

Reference Speed Position Correction = 1
Reference Speed Blockage Correction = 1.00735
Mean Ambient Pressure = 101,893 Pa
Mean Ambient Temperature = 21.5 deg C
Mean Relative Humidity = 24.9% RH
Mean Density = 1.2021 kg/cubic meter

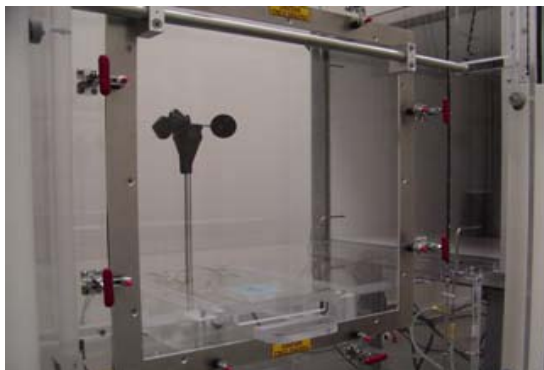


Transfer Function Test Results:

$$V \text{ [m/s]} = 0.765 f \text{ [Hz]} + 0.35$$

Regression Parameters

$r = 0.99997$ std. err. estimate = 0.0541 m/s
slope = 0.765 m/s per Hz std. err. slope = 0.00172 m/s per Hz
offset = 0.35 m/s std. err. offset = 0.03659 m/s



Note: Generic photo of test set-up

Approved by: John Obermeier,
President



Reference Speed [m/s]	Anemometer Output [Hz]	Residual [m/s]	Ref. Speed Uncertainty
3.998	4.882	-0.088	0.601%
8.071	10.056	0.029	0.596%
12.044	15.217	0.056	0.593%
16.097	20.652	-0.048	0.592%
20.128	25.821	0.031	0.597%
24.164	31.164	-0.019	0.594%
26.175	33.726	0.032	0.587%
22.131	28.571	-0.070	0.593%
18.112	23.249	-0.019	0.623%
14.091	17.928	0.028	0.598%
10.051	12.575	0.083	0.588%
6.004	7.409	-0.015	0.593%

This document reports that the above IUT was tested at Otech Engineering, Inc., a wind tunnel laboratory accredited in accordance with the recognised International Standard ISO/IEC 17025:2005 (Certificate number CL-126). This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009). Uncertainties estimated at 95 % confidence level. This report shall not be reproduced except in full, without written approval from Otech Engineering, Inc.





1. SOUND POWER LEVEL

Measurement of Acoustic Noise Emission of the GEV MP 32/275 has been performed following the IEC 61400-11 standard "Wind turbine generator systems – Part 11: Acoustic noise measurement techniques".

MEASNET member (<http://www.measnet.com/members.html>) CENER (<http://www.cener.com>), who did proceed to measurement of the Acoustic Noise Emission of the GEV MP wind turbine installed on our test site in Gommerville, close to Orléans, France, certified the following values in its report ("No. 21.1603.0-AN-R" dated 05/05/2010).

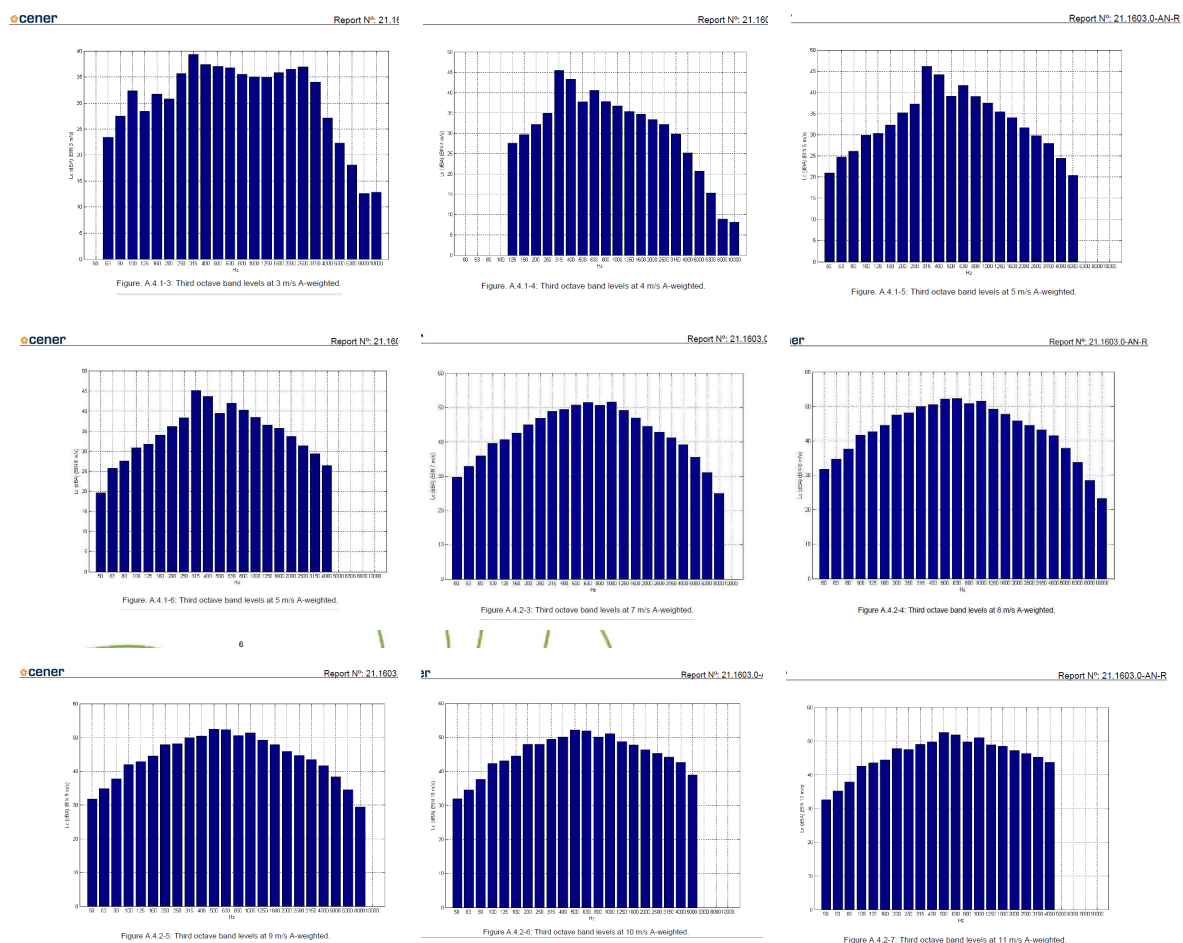
We hereby report sound power level (L_w) obtained.

L_w (dB(A))	3m/s (*)	4m/s	5m/s	6m/s	7m/s	8m/s	9m/s	10m/s	11m/s
at Low Speed (LS)	86.30	92.86	94.62	95.41					
at High Speed (HS)					103.36	104.42	104.64	104.22	104.03

(*) wind speed measured at 10m (32' 10")

2. OCTAVE BAND NOISE SPECTRUM

Measurement of Octave band noise spectrum of the GEV MP 32/275 has also been performed by CENER, following the IEC 61400-11 standard "Wind turbine generator systems – Part 11: Acoustic noise measurement techniques". The final report ("No. 21.1603.0-AN-R" dated 05/05/2010) shows the 3rd octave band spectrum from 3 to 11m/s:



Date	Status	Release	Author	Checker	Approved by	Page
29/07/2010	Update Source DE-RE258a - MP noise CENER 21.1603.0-AN-R	7	851 PVE	EVA	DSA	1/2



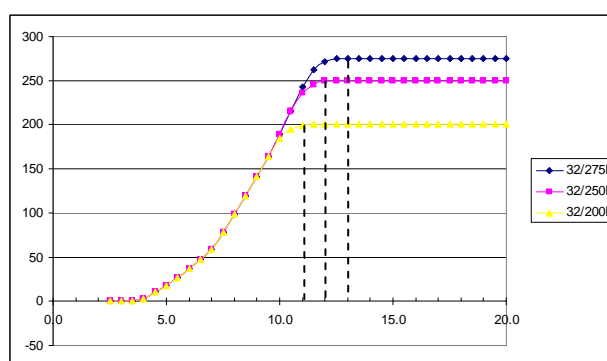
3. EXTRAPOLATION OF RESULTS TO GEV MP-R

The GEV MP-R using the same drive train as the GEV MP-C, the GEV MP-R sound characteristics can be considered as identical to the ones of the GEV MP-C measured above.

4. EXTRAPOLATION OF RESULTS TO OTHER RATED POWERS THAN 275 KW

Measurements made on GEV MP 32/275 can be extrapolated to other identical wind turbines with other rated powers such as GEV MP 32/200 (200 kW) or 32/250 (250 kW) :

Turbine	Rated power	Rated wind speed at hub height
GEV MP 32/275 L	275kW	13m/s
GEV MP 32/250 L	250kW	12m/s
GEV MP 32/200 L	200kW	11m/s



For hub height wind speed lower than rated wind speed of each of those wind turbines, power curve is not modified compared to GEV MP 32/275, therefore sound level power is not impacted.

For hub height wind speed higher than rated wind speed (11m/s for GEV MP 32/200 L and 12m/s for GEV MP 32/250 L), mechanical noise is identical to 32/275 above its rated power, and aero-dynamical noise is linked to power regulation ensured by pitch, therefore sound power is identical to 32/275 above its rated power.

Therefore sound level power is not impacted.



Date	Status	Release	Author	Checker	Approved by	Page
29/07/2010	Update	7	852	EVA	DSA	2/2



free breeze
energy systems ltd.

V47 Noise Study

TEST REPORT



Page 1 of 7

Determination of sound power level V47, Øster Gammelby

Report no. : 1 (P4.010.97)
Date : August 14. 1997

Journal no. : 35.4150.01
Viborg dep. : OLB/NJH/olb

Performed by

Signatory

Niels Jørgen Hviid

Ole Bust

Summary

The noise emission from a V47 wind turbine measured on the 28. of July 1997 has been determined according to statutory order no. 304 of May 14. 1991, relevant parts of Guideline no. 6/1984, "Noise From Industrial Plants" from the Danish Ministry of Environment and letter of August 29. 1995 "Measurement Of Noise From Wind Turbines, Correction For The Influence of Background Noise" from The Danish National Laboratory for Noise Measurements.

The purpose was to determine the sound power level of the wind turbine and to test the content of tones, when the pitch-regulation was adjusted to **OptiTip**.

The wind turbine is erected at Finn Petersen, Øster Gammelby 1, 6261 Bredebro.

Results:

The sound power level of the wind turbine was determined to $L_{WA,ref} = 100,8$ dB re. 1 pW, at a wind velocity of 8 m/s at a height of 10 m. The **gradient** (sound power level/wind velocity) was determined to 0.5 dB pr. m/s.

The noise from the wind turbine contains no clearly audible tones.

The degree of accuracy of $L_{WA,ref}$ based on the definitions given in statutory order no. 304 is ± 2 dB(A).

The Test Report may only be reproduced in full.
However, publication of e.g. test results or conclusions may be used in full accordance with the written permission of the laboratory.

Acoustica als

Acoustics · Noise · Vibration
Consulting Engineers and Planners

Head office
Glostrup
Granskoven 8
DK-2600 Glostrup

Branches
Haderslev
Storegade 82
DK-6100 Haderslev

Næstved
Præstøvej 39
DK-4700 Næstved

Odense
Vermehrensvej 14
DK-5230 Odense M

Viborg
Fælledvej 3
DK-8800 Viborg

Aalborg
Søhngårdsholmsvej 2
DK-9000 Aalborg

Århus
Nordlandsvej 60
DK-8240 Risskov



Acoustica as

35.4150.01 / P4.010.97
V47, Øster Gammelby

Page 2 of 7
Report no. 1

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1	Introduction	page 3
2	Object under measurement	page 3
3	Methods of measurement and analysis	page 3
4	Results	page 5
5	Conclusion	page 5

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Appendix 2	Frequency analysis of the noise on the plywood sheet	page 7

1 Introduction

The purpose of the measurements carried out was to determine the sound power level of a V47 wind turbine and to test the content of audible tones in the noise from the turbine.

The wind turbine is erected at Finn Petersen, Øster Gammelby 1, 6261 Bredebro.

2 Object under measurement

The wind turbine is manufactured by Vestas and the identification is V47. The pitch-regulation was adjusted to **OptiTip**. During the measurement the wind direction was south-westerly, and the running conditions of the wind turbine were standard.

3 Methods of measurement and analysis

The sound power level has been determined according to statutory order no. 304 of May 14. 1991, relevant parts of Guideline no. 6/1984, "Noise From Industrial Plants" from the Danish Ministry of Environment and letter of August 29. 1995 "Measurement Of Noise From Wind Turbines, Correction For The Influence of Background Noise" from The Danish National Laboratory for Noise Measurements.

Measurement of sound pressure levels were performed at a distance of 75 meters leeward to the turbine and wind velocity in a distance of 40,5 meters windward to the turbine.

The measurements were carried out with the microphone placed on a 1,5 x 2.01 meters solid sheet of plywood placed directly on the ground. Wind velocity was measured at a height of 10 meters.

Measurements were performed both with the turbine operating (determination of "total noise") and with the turbine stopped for determination of background noise.

The area around the wind turbine was open agricultural land.

For frequency analysis the noise was recorded using a tape recorder.

Apparatus used:

Description	Producer	Type	ACA no.	Date of calibration	
				latest	next
Microphone	Brüel & Kjær	4189	664	97.04.05	98.04.05
Tape recorder	Sony	TCD-D8	614	97.04.01	98.04.01
Analyser	Brüel & Kjær	2033	36	95.08.09	97.08.09
Analyser	Brüel & Kjær	2131	606	95.08.16	97.08.16
Sound lev. mt.	Brüel & Kjær	2260	627	97.02.07	99.02.07
Calibration unit	Brüel & Kjær	4230	932	97.06.20	97.12.20
Wind meter sta.	Vector Instr.	A100R	935	96.03.22	98.03.22
Counter	Grant	1201	936	96.03.22	98.03.22

Corresponding values of the equivalent A-weighted sound pressure level (L_{Aeq}) and the mean wind velocity were measured for a number of one minute periods.

The connection between these corresponding values of the wind velocity and the sound pressure level of the background noise was determined using linear regression analysis.

For each measurement of the total noise the expected value of the background noise at the same wind velocity was determined using the linear regression analysis. The measured values of the total noise are corrected for the influence of the background noise giving the corrected values L_{Aeq} of the noise from the wind turbine. Values not exceeding the background noise by more than 6 dB must be left out in the following calculations.

The connection between corresponding values of the sound pressure level L_{Aeq} and the wind velocity was determined using linear regression analysis. At a wind velocity of 8 m/s the A-weighted sound pressure level ($L_{Aeq,ref}$) is determined using the linear regression analysis.

The reference sound power level ($L_{WA,ref}$) of the turbine is calculated by using the formula:

$$L_{WA,ref} = L_{Aeq,ref} + 10 \log (4 \pi (d^2 + h^2)) - 6$$

where

d = distance from the centre of the tower to the measurement position.
h = the level difference from the top of the hub to the measurement position.

4

Results

With $d = 75,0$ meters, $h = 40,5 + 0,5$ meters and $L_{Aeq,ref} = 57,2$ dB(A) (appendix 1) the sound power level of the wind turbine will be:

$$L_{WA,ref} = 100,8 \text{ dB(A)}$$

Below is an octave analysis corresponding to a wind velocity of 8 m/s.

Frequency	Sound pressure level, $L_{Aeq,ref}$	Sound power level, $L_{WA,ref}$
1/1 octave 63 Hz	34,6	78,2
1/1 octave 125 Hz	42,5	86,1
1/1 octave 250 Hz	46,2	89,8
1/1 octave 500 Hz	51,6	95,2
1/1 octave 1 kHz	53,4	97,0
1/1 octave 2 kHz	49,2	92,9
1/1 octave 4 kHz	44,2	87,9
1/1 octave 8 kHz	25,6	69,2
Sum	57,2	100,8

The unit of the sound pressure level $L_{Aeq,ref}$ is dB re 20 μ Pa.

The unit of sound power level $L_{WA,ref}$ is dB re 1 pW.

All values are A-weighted.

The frequency analysis (appendix 2) shows that the noise from the wind turbine contains no clearly audible tones.

5

Conclusion

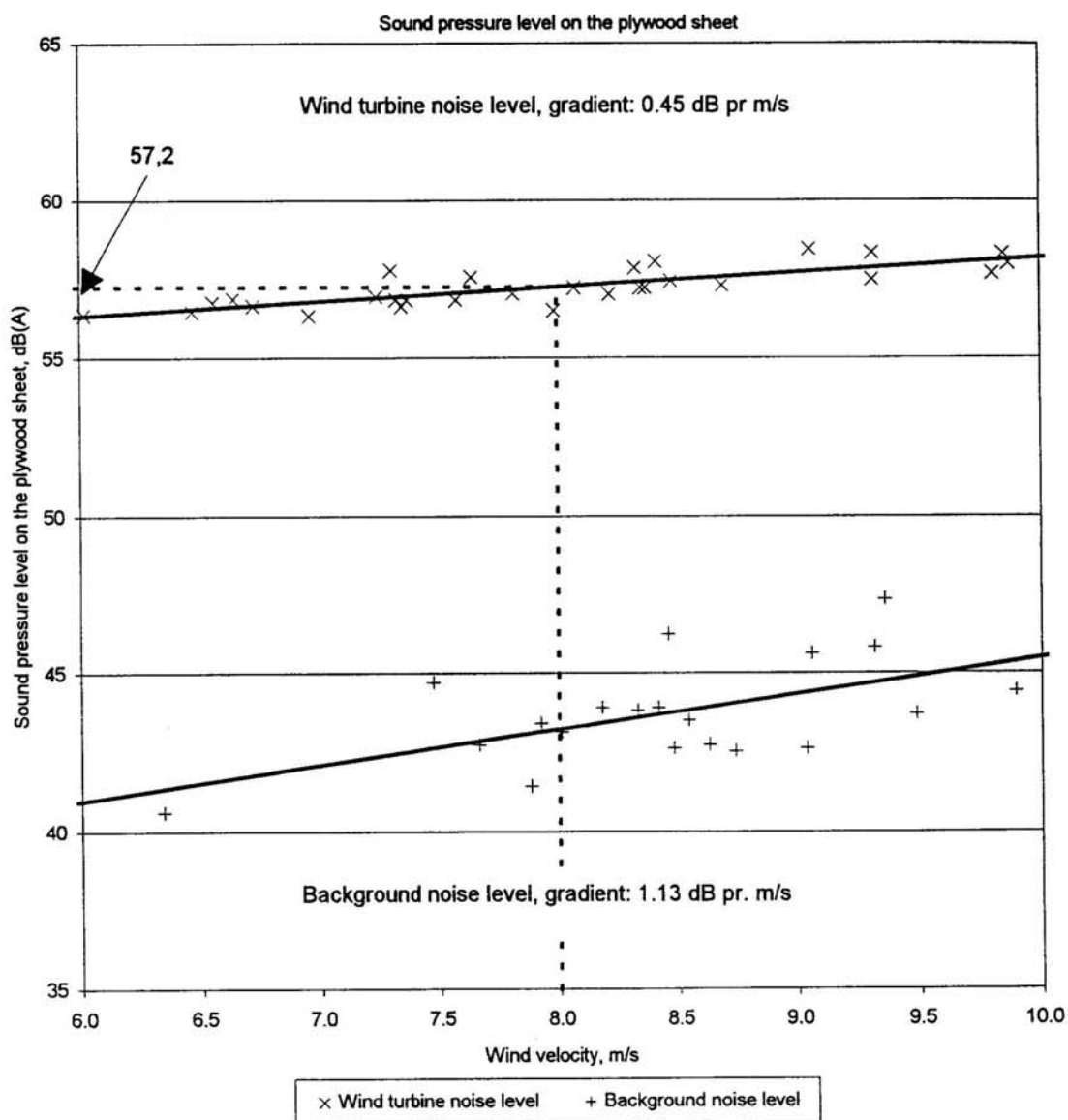
The sound power level $L_{WA,ref}$ of the V47 wind turbine with the adjustment **OptiTip** is determined to 100,8 dB(A) at a wind velocity of 8 m/s in the height of 10 meters.

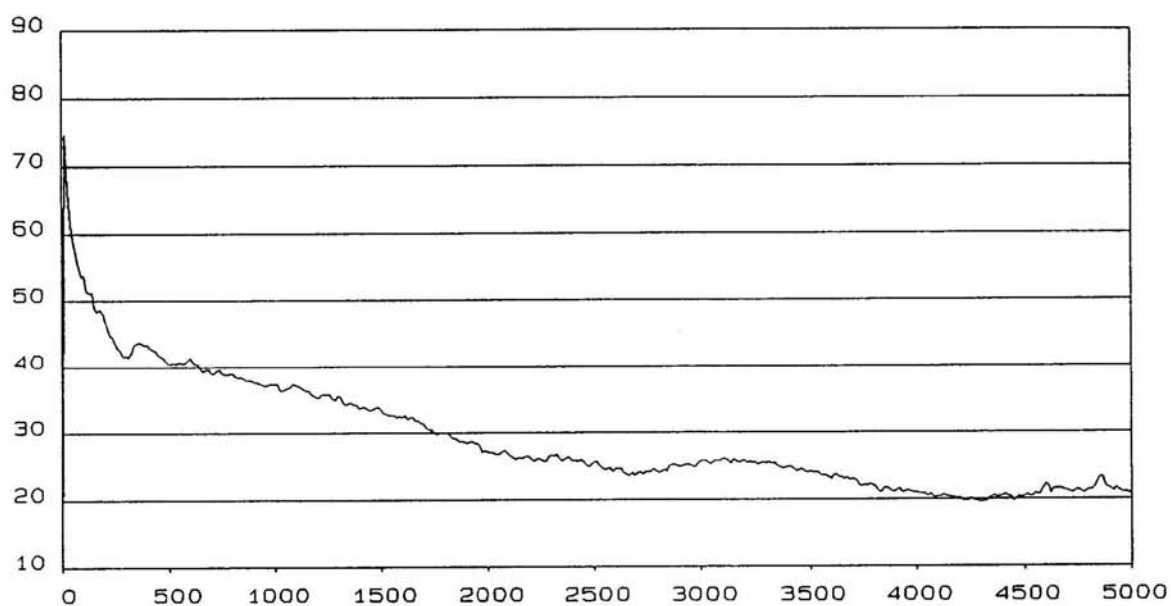
The noise from the wind turbine contains no clearly audible tones.

The degree of accuracy of $L_{WA,ref}$ based on the definitions given in statutory order no. 304 is ± 2 dB(A).

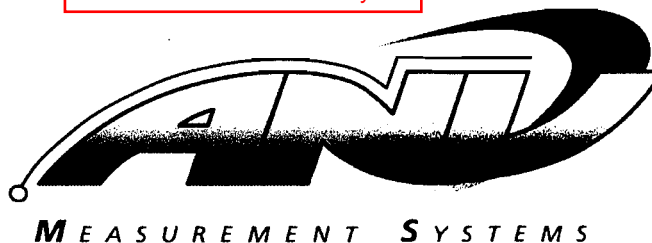
Appendix 1

Correspondence of wind velocity and noise



Appendix 2
Frequency analysis of the noise on the plywood sheet**Analysis parameters:**

No. of spectra:	256
Time weighting:	Hanning
Averaging:	Lin
Effective band width:	18,75 Hz



CERTIFICATE OF CONFORMANCE

Date of Issue 06 June 2012
Customer Edinburgh Napier University
Certificate Number CONF061202

	Manufacturer	Type	Serial Number
Sound Level Meter	Rion	NL-52	00420769
Preamplifier	Rion	NH-25	20818
Microphone	Rion	UC-59	03578

This is to certify that the instrument was tested and calibrated at the Manufacturer's factory according to their specification and that the product satisfied all the relevant requirements of the following Standards:

IEC 61672-1:2002 Class 1.

The instrument also received a functional check by ANV Measurement Systems prior to despatch in the UK, in accordance with our standard procedures.

Signed Amrat C Patel Position Laboratory Manager Date 06/06/2012

BEAUFORT COURT, 17 ROEBUCK WAY, MILTON KEYNES, MK5 8HL

☎ 01908 642846 ☎ 01908 642814

✉ info@noise-and-vibration.co.uk 🌐 www.noise-and-vibration.co.uk



CERTIFICATE OF CALIBRATION

Certificate Number CAL021240
Date of Issue 08/02/2012
Customer ANV Measurement Systems

Description of Instrument

Sound Level Meter Rion NL-31 Sound Level Meter [Serial No. 00741759] with
Rion UC-53A Microphone [Serial No.308436] and
Rion NH-21 Preamplifier [Serial No.12057]
Fitted with a WS-10 foam windshield.

The instrument successfully completed the Class 1
Periodic Tests of BS EN 61672.

Associated Calibrator B & K 4226 S/N 2590976.

Date of Calibration 08/02/2012.

Test Procedure ..\..\..\Calibration Results Sheets\Current Approved Results
Sheets\NL-31 Master 61672-3 Approved Issue 6 (BK 2590976).xls

Test procedures in accordance with BS EN 61672-3:2006.
NOTE: Test 10.1 (Self Generated Noise with Microphone Installed)
omitted.

Test Engineer Amrat Patel

APPROVED SIGNATORY

Les Jephson ☒ Mike Breslin ☐

BEAUFORT COURT, 17 ROEBUCK WAY, MILTON KEYNES, MK5 8HL

☎ 01908 642846 📠 01908 642814

✉ info@noise-and-vibration.co.uk 🌐 www.noise-and-vibration.co.uk

ACOUSTICS NOISE AND VIBRATION LIMITED. REGISTERED IN ENGLAND No. 3549028. REGISTERED OFFICE AS ABOVE.

CERTIFICATE OF CALIBRATION

CERTIFICATE NO. CAL021240.
DATE OF ISSUE 08/02/2012

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No Acoustic Calibrator was supplied with the instrument. When ANV Measurement Systems' B&K 4226 s/n 2590976 was initially applied the Sound Level Meter read 93.9dB (A). The meter was adjusted to read 94.0 dB (A) derived from the current calibration certificate for the calibrator at the indicated frequency of 1000 Hz.

The environmental conditions at the start and end of the calibration were within the specified range for calibration and were noted to be as follows:

Conditions	Measured Value at Start	Measured Value at End
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Relative Humidity	30.6 %	30.8 %
Atmospheric Pressure	103.2 kPa	103.2 kPa

The self generated noise levels of the instrument with the microphone replaced by the electrical input device were:

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CERTIFICATE NO. **CAL021240.**
DATE OF ISSUE **08/02/2012**

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ANEMOMETER CALIBRATION REPORT

Test Date: 10 January 2012

Revision No: 0

630 Peña Drive, Suite 800
Davis, CA 95618-7726
Office: (530) 757-2264
<http://www.otechwind.com>

Customer Information

NRG Systems, Inc.
110 Riggs Road
Hinesburg, VT 05461
USA

Wind Tunnel Test Facility

Otech Tunnel ID: WT2B
Type: Eiffel (open circuit, suction)
Test Section Size: 0.61 m x 0.61 m x 1.22 m
Manufacturer: Engineering Laboratory Design, Inc.

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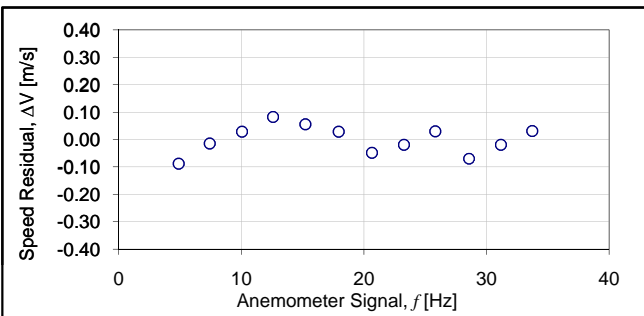
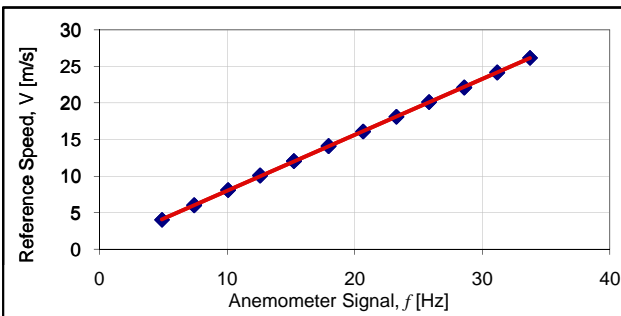
Model No: NRG #40 Sine
Serial No: 179500193771
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IUT Power: 0 VDC
Heater Power: 0 VDC
Mount Diameter: 12.7 mm
Test Procedure: OTECH-CP-001

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Signal Reduction Method for IUT: FFT Analysis

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Reference Speed Position Correction = 1
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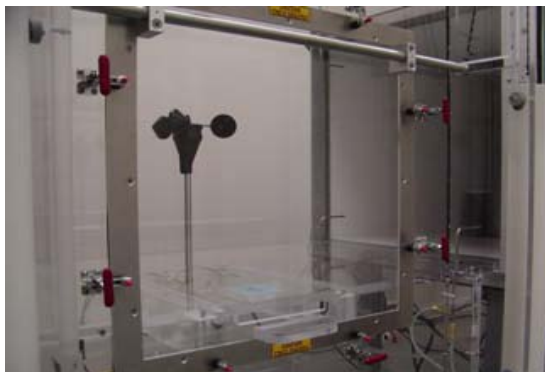


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Note: Generic photo of test set-up

Approved by: John Obermeier,
President



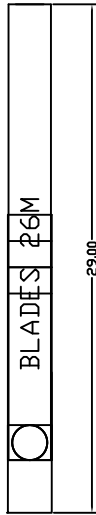
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16.097	20.652	-0.048	0.592%
20.128	25.821	0.031	0.597%
24.164	31.164	-0.019	0.594%
26.175	33.726	0.032	0.587%
22.131	28.571	-0.070	0.593%
18.112	23.249	-0.019	0.623%
14.091	17.928	0.028	0.598%
10.051	12.575	0.083	0.588%
6.004	7.409	-0.015	0.593%

This document reports that the above IUT was tested at Otech Engineering, Inc., a wind tunnel laboratory accredited in accordance with the recognised International Standard ISO/IEC 17025:2005 (Certificate number CL-126). This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009). Uncertainties estimated at 95 % confidence level. This report shall not be reproduced except in full, without written approval from Otech Engineering, Inc.

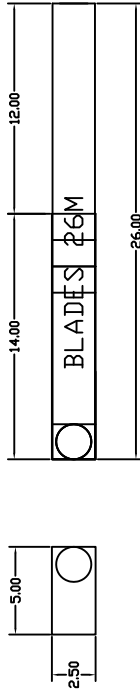


Appendix 8: Transportation Drawing

LORRY DETAILS

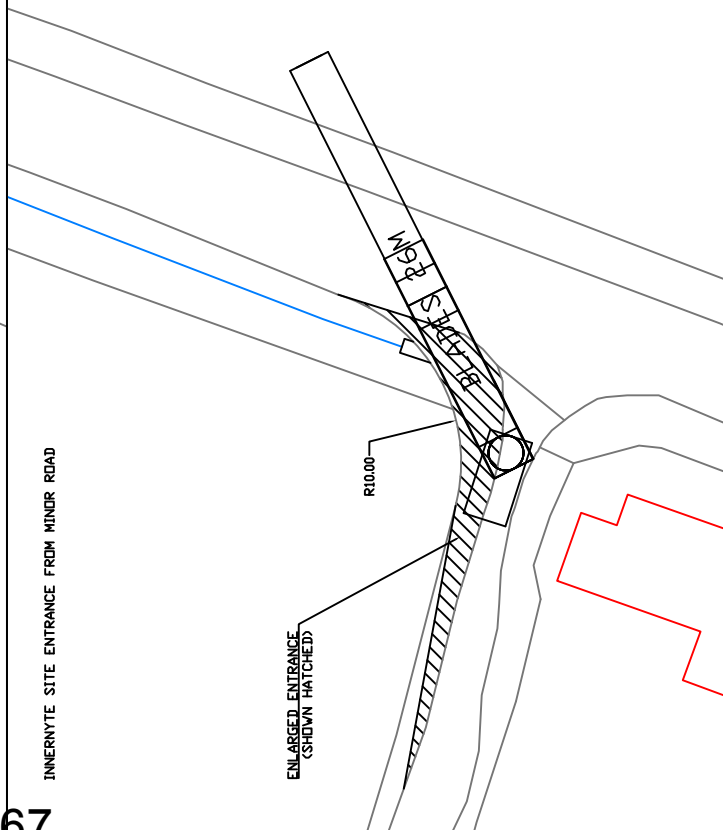


OVERALL LENGTH TRACTOR & TRAILER

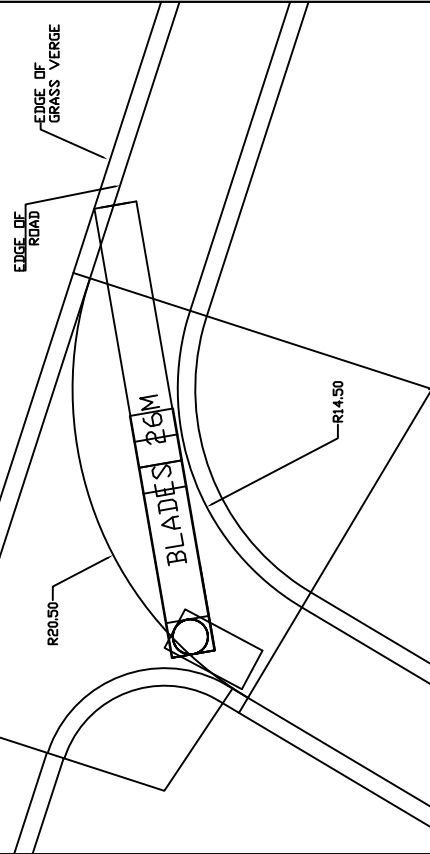
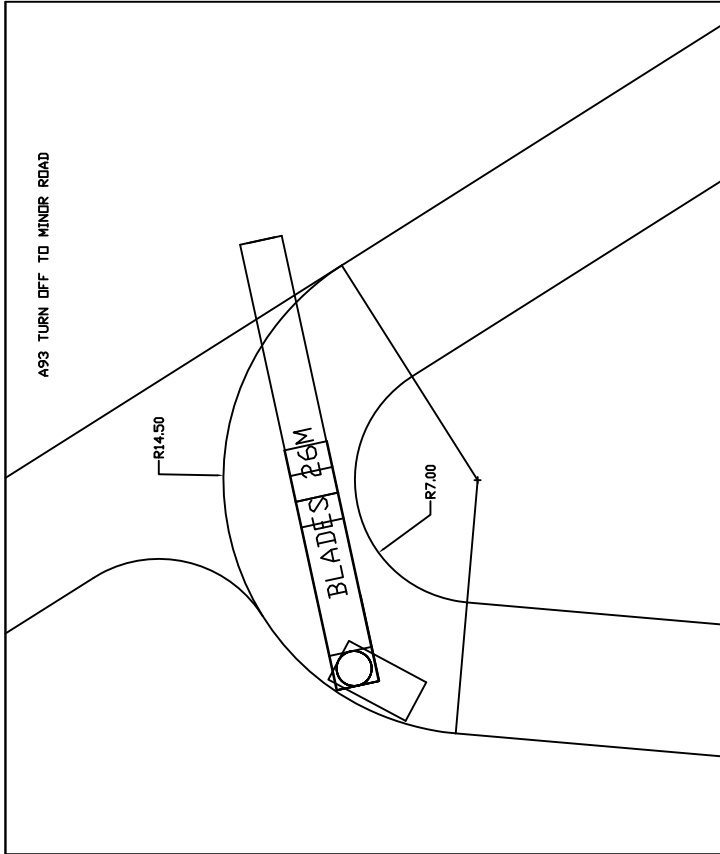


TRACTOR EVT DW54 TURBINE BLADES (26M) ON STANDARD 14.0M 6 WHEEL TRAILER

INNERYTE SITE ENTRANCE FROM MINOR ROAD



JUNCTION NEAR TULLIELARBERT WOOD



SCALE: 10M

THERMAL POWER ENGINEERING LTD									
REV	DESCRIPTION	DATE	BY	CHK	APP				
01	ISSUED FOR PLANNING	22-04-13	GL	GL	GL				
02	RE-ISSUED FOR PLANNING	16-01-14	GL	GL	GL				
CLIENT						TITLE			
						INNERYTE WIND TURBINE PROJECT			
CLIENT DRAWING No.						TRANSPORTATION DRAWING			
DRAWING SIZE						EWT DW54 (500kW)			
						A3			
SCALE		PROJECT No.		DRAWING No.		REV			
		INNERYTE				TPE-PLAN-0210		02	

Appendix 9: Decommissioning Plan

Inneryte Wind Turbine Decommissioning Plan (based on EWT DW54 500kW)									
Item	Activity	Duration (days)	Qty	Rate	Labour Cost	Lump Cost	Scrap Value	Net Cost	Notes:
1	Electrical Isolation	2	1	£700	-£1,400	£0	£0	-£1,400	To be carried out by the DNO. Cost based on 1 electrician for 2 days at £700/day.
2	Dismantelling Wind Turbine	10	4	£300	-£22,000	-£15,000	£0	-£37,000	By suitable contractor. Crane hire estimated at £15,000 Labour cost based on 4 workers for 5 days @ £300/day Concrete foundations left in situ.
3	Removal of Wind Turbine	2	2	£300	-£1,200	-£500	£8,000	£6,300	By suitable contractor. Cost based on 2 workers for 2 days @ £300/day Scrap value includes steel and generator. Transport cost estimated at £500
4	Removal of Electrical Equipment	2	2	£300	-£1,200	-£500	£5,000	£3,300	By suitable contractor. Farm forklift used for load out. Cost based on 2 workers for 2 days @ £300/day Scrap value includes transformer copper. Transport cost estimated at £500.
5	Demolition of Transformer and Control Building	2	2	£300	-£1,200	-£1,000	£0	-£2,200	By suitable contractor. Farm forklift used for load out. Cost based on 2 workers for 2 days @ £300/day Transport cost estimated at £500. Landfill cost / recycling estimated at £500 Concrete foundations left in situ.
6	Dig up Underground Cables	5	1	£300	-£1,500	£0	£5,000	£3,500	Digger hire 5 day at rate of £300/day. Cable copper scrap value estimated at £5000.
Total Cost of Decommissioning								-£31,000	

General Notes:

1. Track extensions shall be left in situ.
2. Concrete foundations shall be left in situ.
3. Costs are based on estimated 25yr future values.

Appendix 10: Consultation Correspondence

Lennox, Gordon

From: dale.aitkenhead@openreach.co.uk on behalf of radionetworkprotection@bt.com
Sent: 15 April 2013 08:56
To: lenny_e8@yahoo.co.uk
Subject: RE: Proposed Wind Turbine Development - Innernyte Farm

Dear Gordon

Thank you for your letter dated 14/04/2013.

We have studied this turbine proposal with respect to EMC and related problems to BT point-to-point microwave radio links.

The conclusion is that, the Project indicated should not cause interference to BT's current and presently planned radio networks.

Thanks

Regards

Dale Aitkenhead

Radio Frequency Allocation & Network Protection

Tel 0191 2696372

mobile : 07540 897558

dale.aitkenhead@bt.com

Web: <http://operate.intra.bt.com/operate>

From: Gordon Lennox [mailto:lenny_e8@yahoo.co.uk]

Sent: 14 April 2013 17:18

To: windfarms@atkinsglobal.com; windfarms@jrc.co.uk; radionetworkprotection G; wind.farms@argiva.co.uk

Subject: Proposed Wind Turbine Development - Innernyte Farm

Dear Sir/Madam,

Our proposed wind turbine development at Innernyte Farm, Kinclaven, Perthshire has now been granted screening approval by Perth and Kinross Council. Consultation was previously carried out by Adele Ellis on 6th December 2011. The consultation highlighted some radio links in the area and the position of the turbine was subsequently moved for the screening application.

Due the length of time from the initial consultation and change to the type, number and position of the turbine, I would like to request a fresh consultation. I've attached the site plan showing the exact turbine location and a drawing of the proposed turbine, with specifications as follows:

Type	500kW RRB V47
Hub Height	65m
Blade Diameter	37m
Tip Height	88.5m
Grid Reference	312380, 736400

Please don't hesitate to contact me for any further information.

Regards,
Gordon Lennox

Lennox, Gordon

From: Windfarms (windfarms@atkinsglobal.com) <windfarms@atkinsglobal.com>
Sent: 15 April 2013 12:03
To: Gordon Lennox
Subject: WF 22364 - Innernyte Farm, Kinclaven, Perthshire - NO 12380 36400

Dear Gordon,

I am responding to an email of 14-Apr-13, regarding the above named proposed development.

The above application has now been examined in relation to UHF Radio Scanning Telemetry communications used by our Client in that region and we are happy to inform you that we have **NO OBJECTION** to your proposal.

Please note that this is not in relation to any Microwave Links operated by Scottish Water

Atkins Limited is responsible for providing Wind Farm/Turbine support services to TAUWI.

Atkins Limited is responsible for providing Wind Farm/Turbine support services to the Telecommunications Association of the UK Water Industry. Web: www.tauwi.co.uk

Windfarm Support

ATKINS

The official engineering design services provider
for the London 2012 Olympic and Paralympic Games
Web: www.atkinsglobal.com/communications

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Consider the environment. Please don't print this e-mail unless you really need to.

Subject: RE: Screening opinion

From: Robert Bramble (robert.bramble@arqiva.com)

To: adeleellis191@btinternet.com;

Cc: Rob.Taylor@arqiva.com;

Date: Monday, 12 September 2011, 9:35

Dear Adele.

Thank you for the opportunity to comment on the two proposed wind turbines at Innernyte Farm Kinclaven Perth.

Arqiva do not have any microwave radio links in this area, so from this respect I have no objections to this proposal.

Regards.

Bob Bramble.

From: ADELE ELLIS [mailto:adeleellis191@btinternet.com]
Sent: 06 September 2011 10:18
To: windfarms@atkinsglobal.com
Cc: windfarms@jrc.co.uk; radionetworkprotection@bt.com; rob.taylor@arqiva.co.uk; Robert Bramble
Subject: Screening opinion

Dear Sir/Madam

Please find attached details of a proposed wind turbine development. We would be grateful for your response to this site and whether there will be any issues we require to address before proceeding to a formal application.

Many thanks in advance for your assistance.

Kind regards

Adele Ellis

FOR MINT ENERGY LTD

Tel: 01337 827571/07910741328

Subject: RE: Proposed Windfarm – Innernyte Farm Kinclaven Perth

From: Rob Taylor (Rob.Taylor@arqiva.com)

To: adeleellis191@btinternet.com;

Cc: Jack.Fitzsimons@arqiva.com; tim.shergold@arqiva.com;

Date: Monday, 12 September 2011, 11:17

F.A.O Adele Ellis

PROPOSED WINDFARM : Innernyte Farm Kinclaven Perth NGR (NO 1249 3633)

Dear Adele

Thank you for the opportunity to comment on the above proposal. Arqiva is responsible for providing the BBC and ITV's transmission network and therefore is responsible for ensuring the integrity of Re-Broadcast Links (RBLs). Based on the information that you provided, our analysis shows that the proposed wind farm is unlikely to affect any of our RBLs.

Regarding microwave links a colleague from Arqiva's Winchester office has already replied.

For your future reference Arqiva requests a 200m wide corridor (i.e. $\pm 100\text{m}$) about the line-of-sight path be kept clear of any turbine or part thereof.

Please notify Arqiva if the turbine positions change so that we can re-evaluate this proposal at:

wind.farms@arqiva.com

Regards

Rob

Rob Taylor
Senior Engineer
Spectrum Planning
Arqiva Services Ltd
Warwick
Tel 01926 - 416567

From: ADELE ELLIS [mailto:adeleellis191@btinternet.com]
Sent: 06 September 2011 10:18
To: windfarms@atkinsglobal.com
Cc: windfarms@jrc.co.uk; radionetworkprotection@bt.com; rob.taylor@arqiva.co.uk; Robert Bramble
Subject: Screening opinion

Dear Sir/Madam

Please find attached details of a proposed wind turbine development. We would be grateful for your response to this site and whether there will be any issues we require to address before proceeding to a formal application.

Many thanks in advance for your assistance.

Kind regards

Adele Ellis

FOR MINT ENERGY LTD

Tel: 01337 827571/07910741328

From: Windfarms Team (windfarms@jrc.co.uk)
To: adeleellis191@btinternet.com;
Date: Friday, 9 September, 2011 15:29:14
Cc: ruaridh.maclean@scottish-southern.co.uk;
Subject: Innernyte Farm, Perth - Wind Turbines Proposal

Dear Adele,

Site Name: Innernyte Farm, Perth

Turbine at NGR:

1. 312490 736330
2. 312621 736374

Hub height: 60m Rotor radius: 16m

This proposal cleared with respect to radio link infrastructure operated by Scottish and Southern Energy

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements.

In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However, if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal. Please note that due to the large number of adjacent radio links in this vicinity, which have been taken into account, clearance is given specifically for a location within 100m of the declared grid reference (quoted above).

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, you are advised to seek re-coordination prior to submitting a planning application, as this will negate the possibility of an objection being raised at that time as a consequence of any links assigned between your enquiry and the finalisation of your project.

JRC offers a range of radio planning and analysis services. If you require any assistance, please contact us by phone or email.

Regards

Alessandra Lees BSc (Hons) MSc

Wind Farm Team

The Joint Radio Company Limited
Dean Bradley House,
52 Horseferry Road,
LONDON SW1P 2AF
United Kingdom

TEL: +44 20 7706 5196

<alessandra.lees@jrc.co.uk>

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<<http://www.jrc.co.uk/about>>



Ms Adele Ellis
Mint Energy (Scotland)
Station House
South Street
MILNATHORT
KY13 9XB

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Direct Line: 0131 668 8730
Direct Fax: 0131 668 8722
Switchboard: 0131 668 8600
Robin.Campbell@scotland.gsi.gov.uk

Our ref: AMN/16/TC
Our Case ID: 201101880

21 July 2011

Dear Ms Ellis

**Proposed erection of 2 no. wind turbines on land at Innernyte Farm, Kinclaven, Perth
Pre-application Consultation**

Thank you for your letter dated 28 June 2011 seeking comments on the above proposal. Our comments here concentrate on our statutory remit for scheduled monuments and their setting, category A listed buildings and their setting and gardens and designed landscapes appearing in the Inventory. Please also seek information and advice from the relevant Council's archaeological and conservation service if you have not already done so.

The Development Proposal

From the information submitted, I understand the proposed development consists of 2 no. wind turbines on land at Innernyte Farm, Kinclaven. The two turbines are to be of different height, with one having a blade tip height of 40m and the other a blade tip height of 76m.

Our Views on the Principle of this Proposal

We have concerns regarding the potential impact of the proposed development on certain assets within our statutory remit. In particular, this relates to the potential impact on the setting of Woodhead, unenclosed settlement 400m NW of (Index no. 7182) and Stobhall Inventory Designed Landscape and its category A-listed buildings.

The potential impact on the setting of the assets listed below, under '*Potential Indirect Impacts*' should be assessed. We would expect the assessment to contain a full appreciation of the setting of these heritage assets and the likely impacts on their settings. We recommend that a Zone of Theoretical Visibility (ZTV) analysis be applied to the proposal, which shall provide a basis for assessing the potential impacts on the setting of surrounding assets.

Potential Direct Impacts

I can confirm that there are no assets within our statutory remit located within the proposed search area.

Potential Indirect Impacts

The following assets are located within the vicinity of the search area and should be considered in terms of impact on setting:

*Scheduled Monuments*

- Campsie Hill, enclosure 500m NNE of (Index no. 7181)
- Woodhead, ring-ditch 340m WNW of (Index no. 7337)
- Woodhead, unenclosed settlement 400m NW of (Index no. 7182)
- Balhomie, cup-marked stone 95m N of (Index no. 7326)
- Inchtuthil, Roman fortress (Index no. 1606)

Category A Listed Buildings

- Stobhall (HB nos 5475, 5474, 5473, 5477)
- Kirk O' The Muir, United Presbyterian Church (HB no. 11233)

Gardens and Designed Landscapes (GDL)

- Stobhall

Any ES to be produced for this development should consider impacts upon these assets and any others in the wider area which may experience significant impacts. It would be helpful if such an analysis contained appropriate visualisations such as photomontage and wireframe views of the development in relation to the sites and their settings, illustrating views both towards and from the proposed development.

Woodhead, unenclosed settlement 400m NW of (Index no. 7182)

The proposed turbines at this location could compromise the setting of the Roman frontier leading from Bertha to Inchtuthill, essentially an extension of the Gask Ridge Frontier. This manifests itself as a potential impact upon the setting of the above monument which was demonstrated by excavation last year to be a Roman watchtower. This scheduled monument is located in a strikingly elevated position and it is likely that turbines of any size would be visible. We are concerned that two turbines of differing height (40m and 76m) could appear conspicuous and jarring. As such, a visualisation would be of particular use, showing the turbines when viewed from this scheduled monument.

Stobhall (HB nos 5475, 5474, 5473, 5477) and Stobhall GDL

We have concerns however about possible impacts on Stobhall and its designed landscape. Stobhall is situated some 13 km (8 miles) north-east of the city of Perth on a ridge approximately 30m (100 feet) above the east bank of the River Tay which forms the western boundary of the site. The surrounding landscape on either side of the Tay is agricultural or afforested. The high situation enables fine views to be gained to the river and the landscape beyond from the west and north side of Stobhall. We would recommend that the visual impact of the turbines on the view north from the historic group of listed buildings and on key views out of the designed landscape are assessed. It would be helpful if appropriate visualisations could be produced looking towards the proposed turbines from the key viewpoints out of Stobhall.

Depending on the outcome of the assessment work, consideration should be given to relocating the turbines or introducing mitigation measures such as, reducing their height and avoiding having turbines of differing heights.

I would emphasise the need to address the potential for cumulative impacts on the above historic environment assets, which could arise from this development in combination with other wind farms in the vicinity. This should assess the incremental impact or change when

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AOSMHOR

the proposal is combined with other past, present and reasonably foreseeable developments.

Below is Historic Scotland's Guidance Note on 'Setting' which I hope you find helpful:
<http://www.historic-scotland.gov.uk/setting-2.pdf>

We would be keen to engage further with you in relation to this proposal, and please contact me should you wish to discuss the issues raised in this letter.

Yours sincerely

Robin Campbell

Senior Heritage Management Officer (EIA)



INVESTOR IN PEOPLE

www.historic-scotland.gov.uk

Lennox, Gordon

From: Windfarms <windfarms@jrc.co.uk>
Sent: 01 May 2013 14:41
To: Gordon Lennox
Subject: Innernyte Farm, Perthshire (revised) - Wind Turbine Proposal

Dear Mr Lennox,

Site Name: Innernyte Farm, Perthshire (revised)

Turbine at NGR: 312380 736400

Hub Height: 65m Rotor Radius: 24m

This proposal cleared with respect to radio link infrastructure operated by:

Scottish Hydro (Scottish & Southern Energy) and Scotia Gas Networks

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements.

In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However, if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal. Please note that due to the large number of adjacent radio links in this vicinity, which have been taken into account, clearance is given specifically for a location within 100m of the declared grid reference (quoted above).

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, you are advised to seek re-coordination prior to submitting a planning application, as this will negate the possibility of an objection being raised at that time as a consequence of any links assigned between your enquiry and the finalisation of your project.

JRC offers a range of radio planning and analysis services. If you require any assistance, please contact us by phone or email.

Regards

Alessandra Lees BSc (Hons) MSc

Wind Farm Team

The Joint Radio Company Limited
Dean Bradley House,
52 Horseferry Road,
LONDON SW1P 2AF

United Kingdom

TEL: +44 20 7706 5196

<alessandra.lees@jrc.co.uk>

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Lennox, Gordon

From: Wind Farm Enquiries <Windfarms@arqiva.com>
Sent: 30 May 2013 10:03
To: Gordon Lennox
Cc: Tim Shergold
Subject: Proposed Wind Turbine - Innernyte Farm, Kinclaven, Perthshire

F.A.O Gordon Lennox

PROPOSED WINDTURBINE : Innernyte Farm, Kinclaven, Perthshire NGR (NO123364)

Dear Gordon

Thank you for the opportunity to comment on the above proposal. Arqiva is responsible for providing the BBC and ITV's transmission network and therefore is responsible for ensuring the integrity of Re-Broadcast Links (RBLs). Based on the information that you provided, our analysis shows that the proposed wind turbine is unlikely to affect any of our RBLs.

Regarding microwave links Arqiva has no issues with this proposal.

For your future reference we request a 200m wide corridor (i.e. $\pm 100\text{m}$) about the line-of-sight path be kept clear of any turbine or part thereof.

Please notify Arqiva if the planned turbine location changes so that we can re-evaluate the proposal

Regards

Rob

Rob Taylor
Senior Engineer
Spectrum Planning
Arqiva
Sutton Coldfield
Tel 01926 - 416567

From: Gordon Lennox [mailto:lenny_e8@yahoo.co.uk]
Sent: 16 April 2013 07:15
To: Wind.Farms@Arqiva
Subject: Proposed Wind Turbine Development - Innernyte Farm

Dear Sir/Madam,

Our proposed wind turbine development at Innernyte Farm, Kinclaven, Perthshire has now been granted screening approval by Perth and Kinross Council. Consultation was previously carried out by Adele Ellis on 6th December 2011. The consultation highlighted some radio links in the area and the position of the turbine was subsequently moved for the screening application.

Due the length of time from the initial consultation and change to the type, number and position of the turbine, I would like to request a fresh consultation. I've attached the site plan showing the exact turbine location and a drawing of the proposed turbine, with specifications as follows:

Type 500kW RRB V47

Hub Height 65m
Blade Diameter 37m
Tip Height 88.5m
Grid Reference 312380, 736400

Please don't hesitate to contact me for any further information.

Regards,
Gordon Lennox
07752103541

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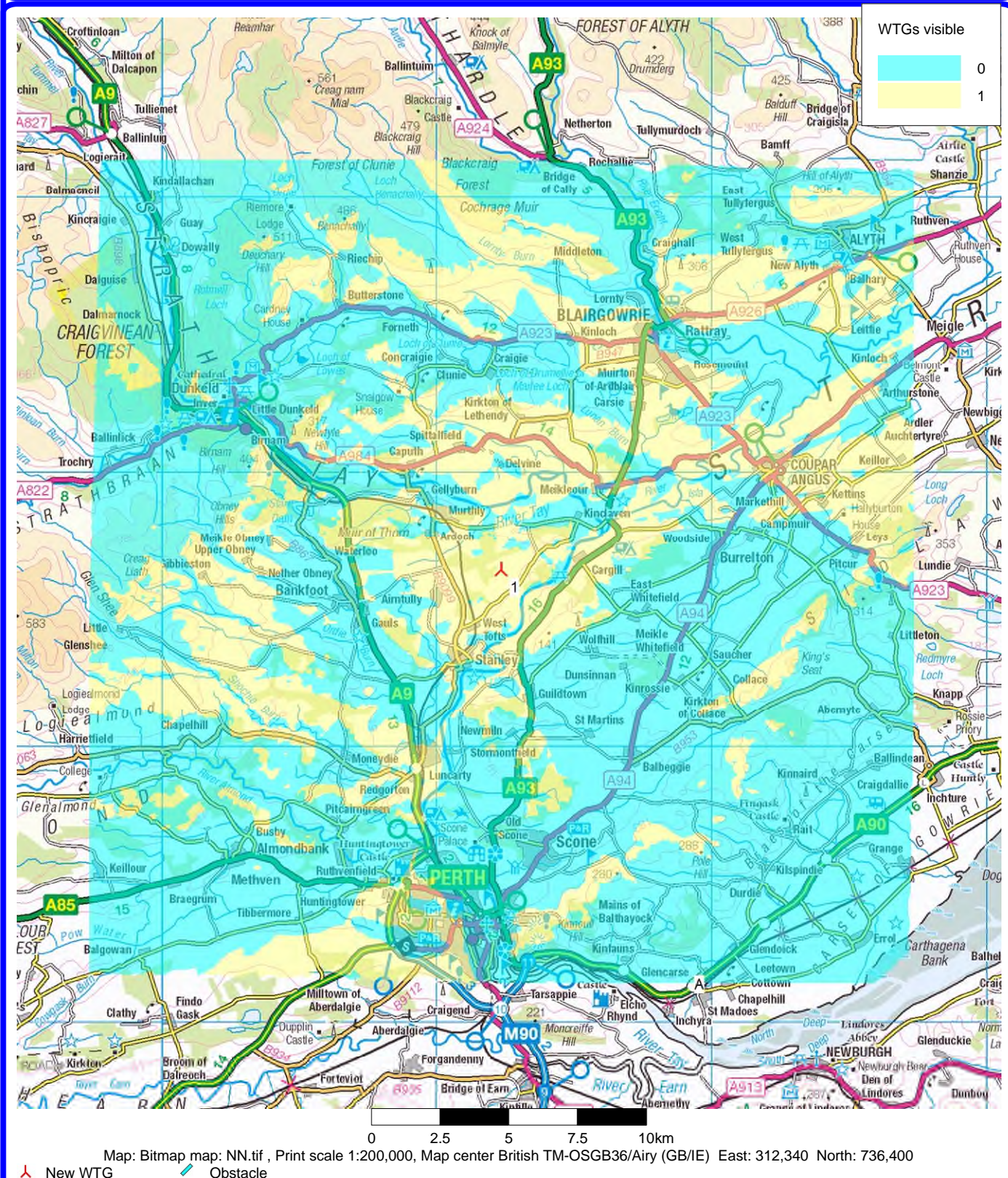
Project: **Inneryte Proposal**
 Description: Installation of a wind turbine

Printed/Page
 16/12/2013 10:08 / 1
 Licensed user:

+44 1337 827571
 Adele Ellis / whichturbine@btinternet.com
 Calculated:
 16/12/2013 10:08/2.9.250

ZVI - Map

Calculation: Inneryte 40m hub 15km ZTV to hub height



Inneryte Cumulative Base Map



Wind Turbine RRB V47
NGR 312380, 736400



Wind Turbines Approved/Operational

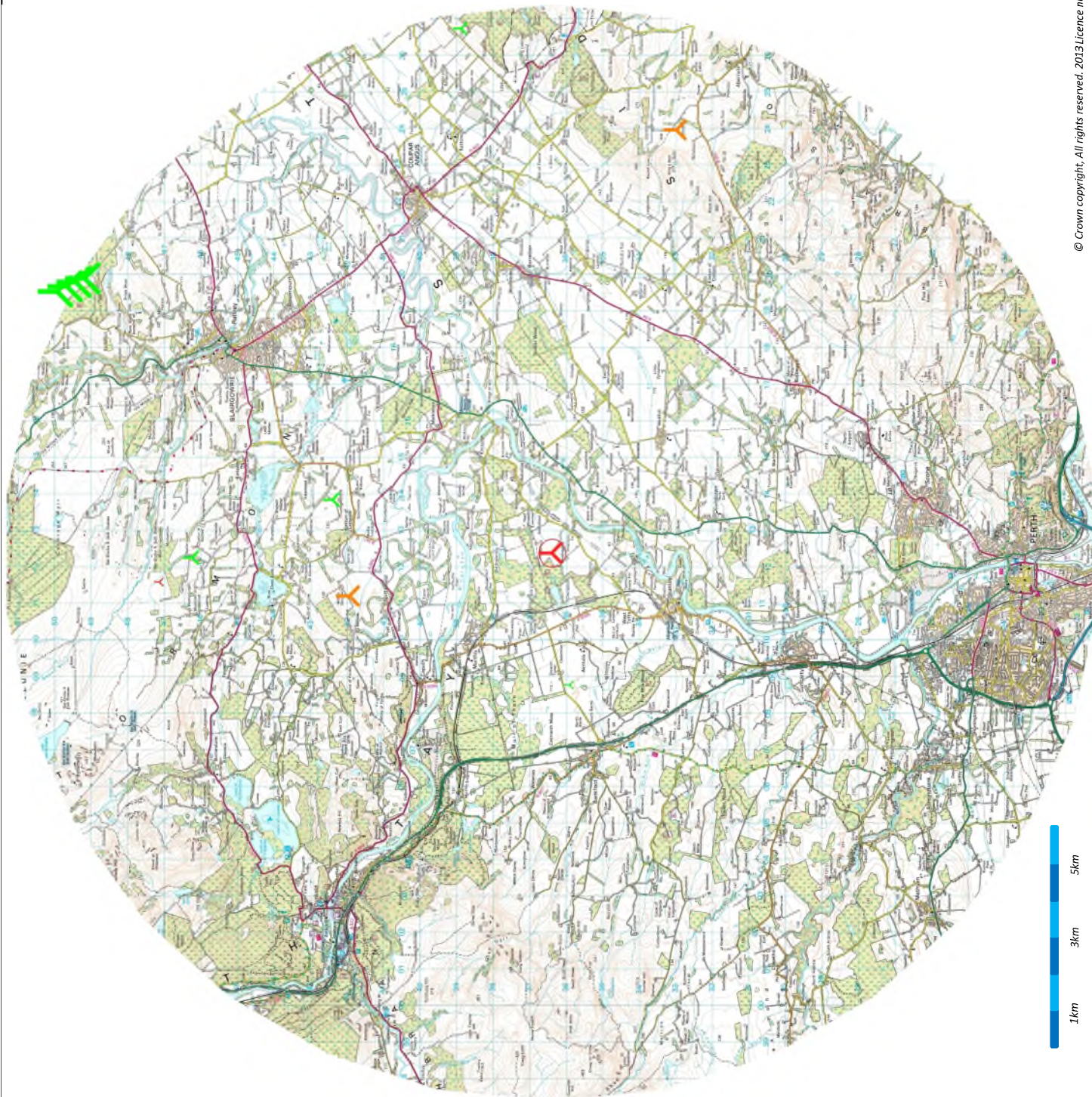
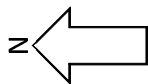


Wind Turbines Pending



Wind Turbines in Screening

Note: All wind turbines are shown to scale, with representative symbols sized at 15 times the machine's rotor diameter.



Drawing size A3
Scale 1:50,000



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Inneryte Cumulative ZTV

ZTV study area up to 15km from proposed Inneryte wind turbine. Visibility measure to hub height

All wind turbines are shown to scale, with representative symbols sized at 15 times the machine's rotor diameter.



Wind Turbine RRB V47
NGR 312380, 736400



Wind Turbines Approved/Operational



Wind Turbines Pending



Wind Turbines in Screening



0 - 3 Wind Turbines visible to hub height



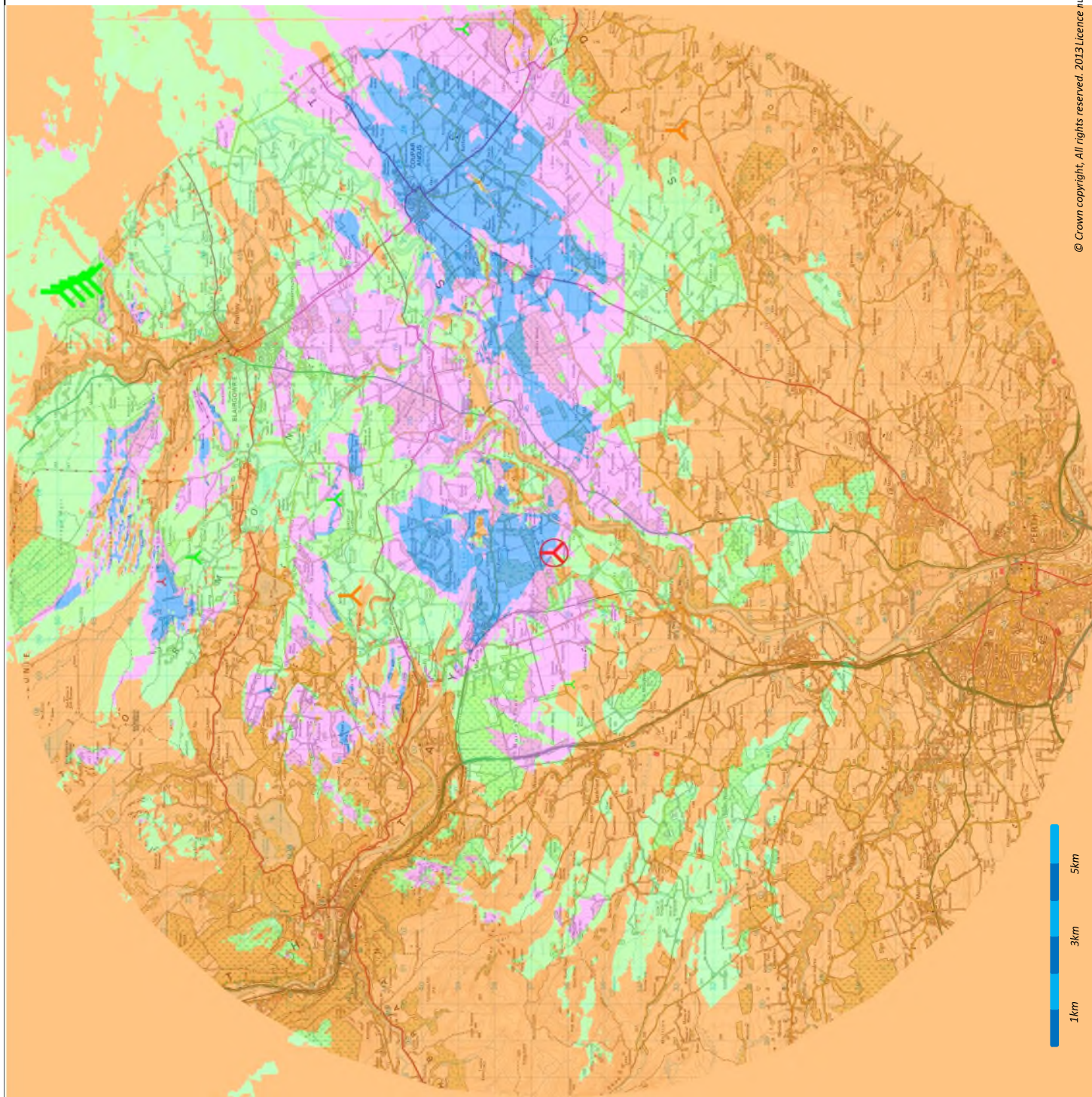
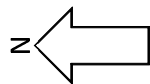
4 - 6 Wind Turbines visible to hub height



7 - 9 Wind Turbines visible to hub height

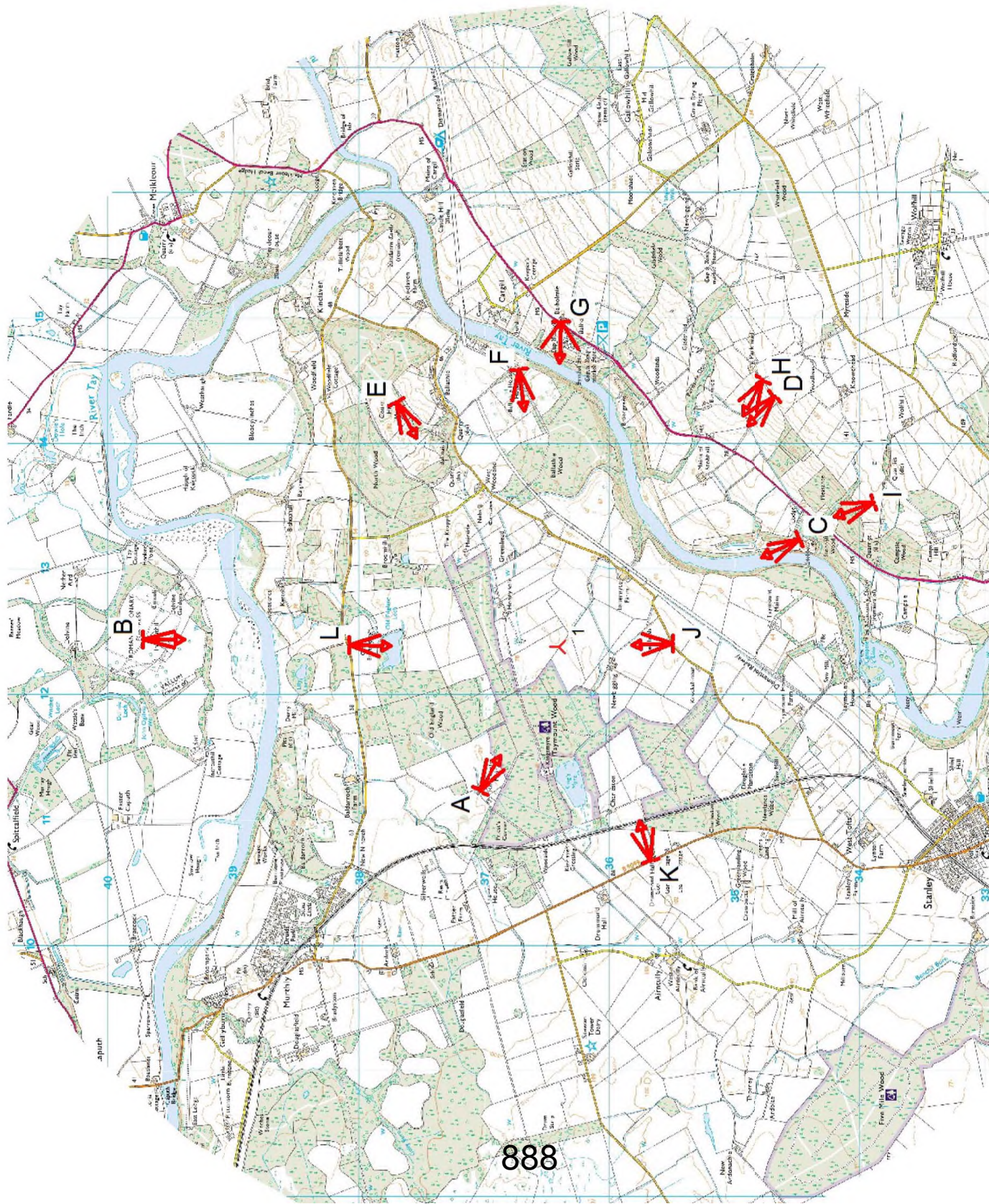


10 - 12 Wind Turbines visible to hub height



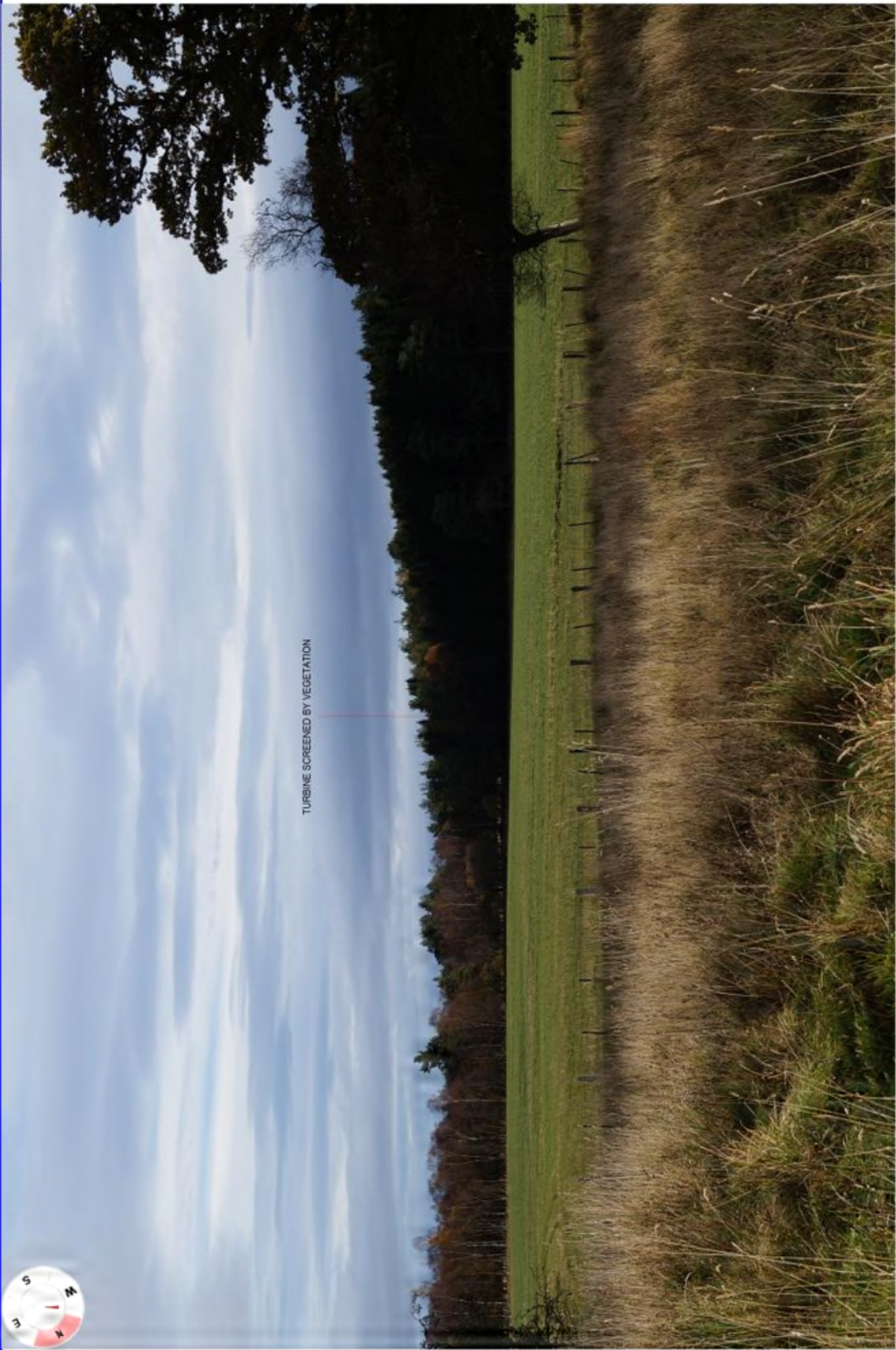
Drawing size A3
Scale 1:50,000

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EXISTING VIEW A – KIRK O THE MUIR – 311230, 737035



Project:
Innemyte Proposal

Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Distance [m]
1 New Yes	EWT	DW54-500	500	54.0	40.0	1,279

Recommended observation distance: 32 cm

Photo exposed: 06/11/2012 13:21:32

Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/IE) East: 311,230 North: 737,035

Wind direction: 0° Direction of photo: 120°

Software: WindPRO version 2.9.250 Jul 2013

Photo desc.: A - KIRK O THE MUIR

Created by:
+44 1337 827571
Adele Ellis / whichturbine@btinternet.com

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk



TURBINE SCREENED BY VEGETATION

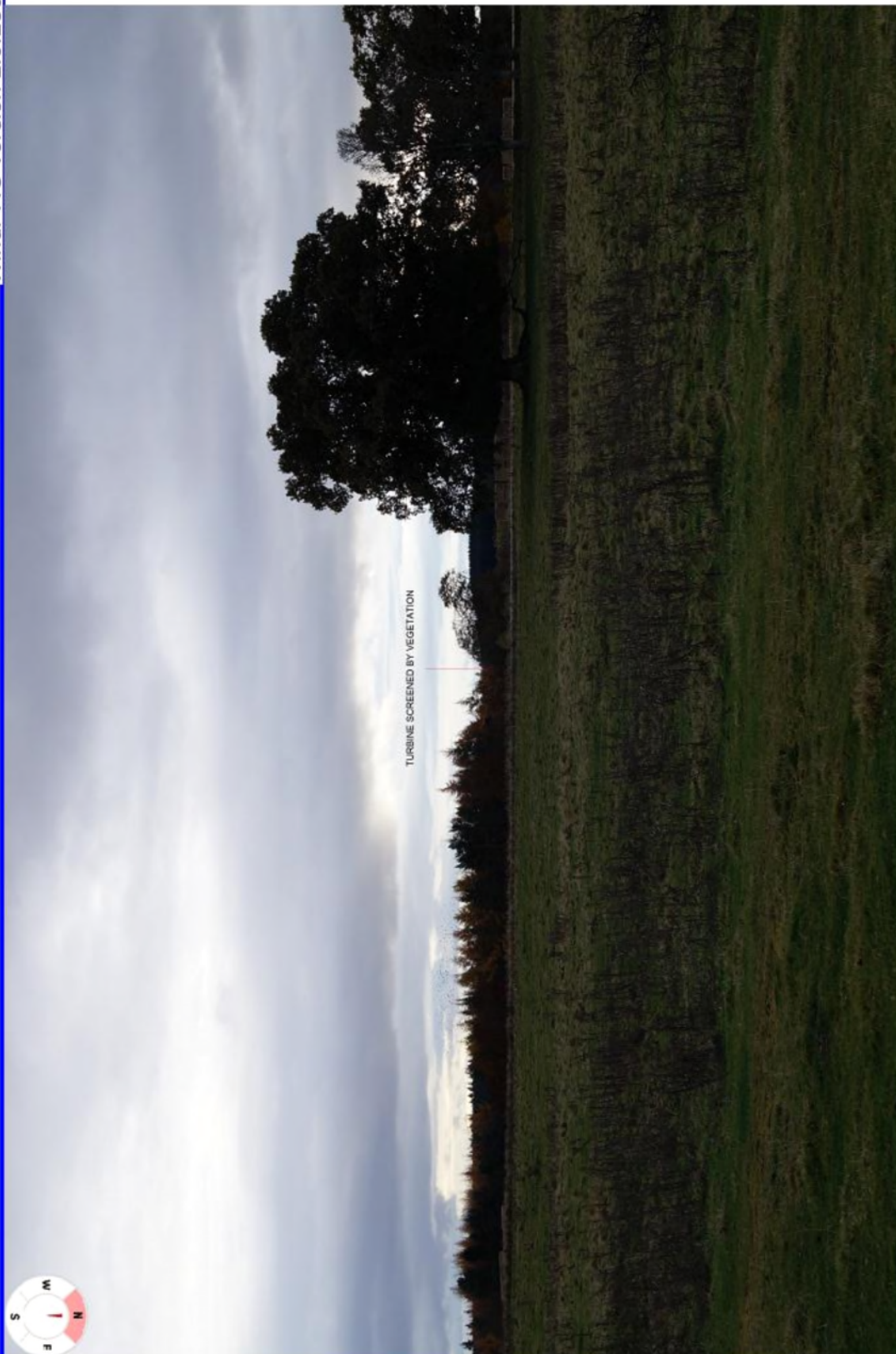


Project: Innemyte Proposal	Valid	Manufact.	Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 36 cm Photo exposed: 06/11/2012 13:21:32 Lens: 52 mm Film: 39x19 mm Pixels: 1000x500 Eye point: British TM-OSGB36/Airy (GB/IE) East: 311,230 North: 737,035 Wind direction: 0° Direction of photo: 120° Camera: WIRE A Photo desc.: A - KIRK O THE MUIR
	1 New Yes	EWT	DW54-500	[kW] 500	[m] 54.0	[m] 40.0	[m] 1,279	

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 46, Fax +45 96 35 44 46, e-mail: windpro@emd.dk



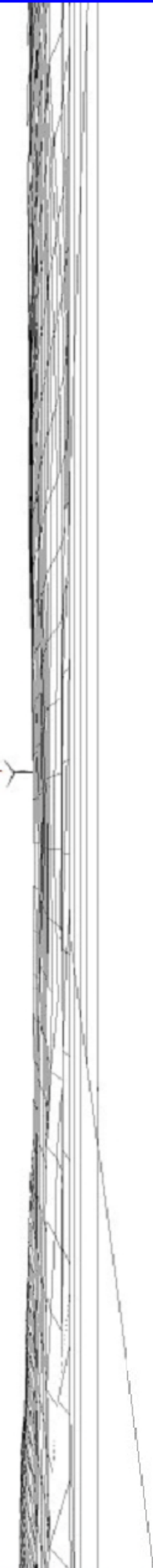
EXISTING VIEW B – INCHTUTHIL ROMAN FORTRESS – 312436, 739723



Project:		Innernes Proposal		Valid		Manufact.		Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 32 cm		Photo exposed: 06/11/2012 14:59:17		Created by:		
		1 New		Yes		EWT		DW54-500		54.0		40.0		3.324		Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264		+44 1337 827571	
																Eye point: British TM-OSGB36/Airy (GB/E) East: 312.436 North: 739.723		Adele Ellis / whichturbine@btinternet.com	
																Wind direction: 0° Direction of photo: 180°			
																Software: WindPRO version 2.9.250 Jul 2013			
																Photo desc.: B - INCHTUTHIL ROMAN FORTRESS			



TURBINE SCREENED BY VEGETATION



Project:		Valid Manufact.		Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 36 cm		Created by:	
Innervye Proposal		1 New Yes EWT		DW54-500	500 [kW]	54.0 [m]	40.0 [m]	3,324 [m]	Photo exposed: 06/11/2012 14:59:17			
									Lens: 52 mm Film: 39x19 mm Pixels: 1000x500			
									Eye point: British TM-OSGB36/Airy (GB/IE) East: 312,436 North: 739,723			
									Wind direction: 0° Direction of photo: 180°			
									Camera: WIRE B			
									Photo desc.: B - INCHTUTHILL ROMAN FORTRESS			



EXISTING VIEW STOBHALL – C1 – 313237, 734474



Project:
Innemyte Proposal

Valid Manufact. Type-generator Power, rated [kW] 500

1 New Yes EWT DW54-500

Recommended observation distance: 31 cm

Photo exposed: 31/08/2013 14:00:41

Lens: 50 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/E) East: 313.237 North: 734.474

Wind direction: 228° Direction of photo: 320°

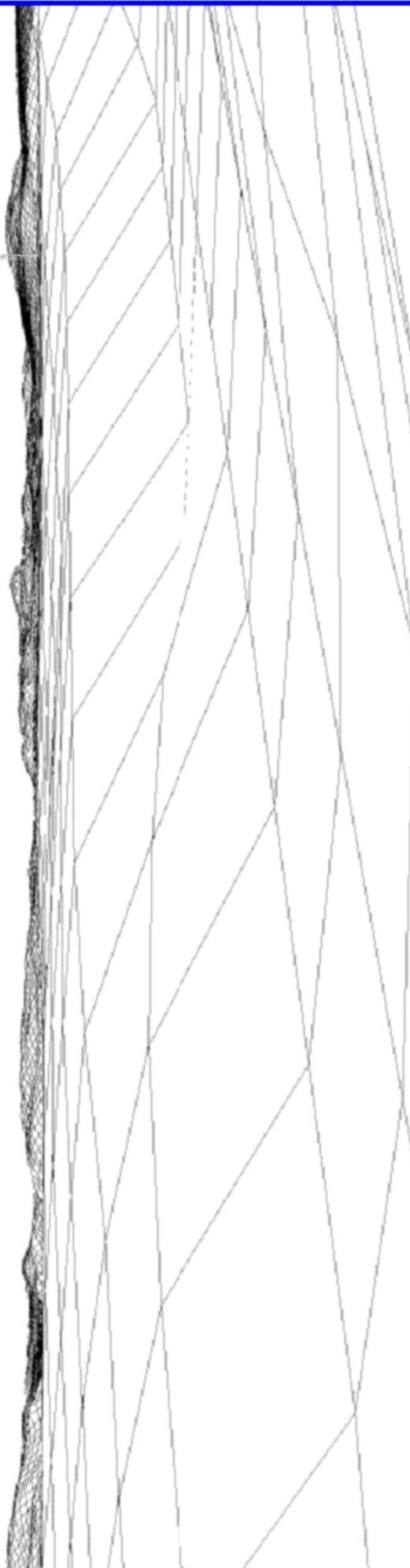
Software: WindPRO version 2.9.207 Apr 2013

Photo: C1 - STOBHALL

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



Project:

Innervylle Proposal

Valid

Manufact.

Type-generator

Power, rated

Rotor diameter

Hub height

Distance

1 New

Yes

EWT

DW54-500

500

54.0

40.0

2,124

Recommended observation distance: 35 cm

Photo exposed: 31/08/2013 14:00:41

Lens: 50 mm Film: 39x19 mm Pixels: 1000x500

Eye point: British TM-OSGB36/Airy (GB/E) East: 313,237 North: 734,474

Wind direction: 228° Direction of photo: 319°

Software: WindPRO version 2.9.250 Jul 2013

Photo: C1 - STOBHALL

Created by:

+44 1337 821571

Adele Ellis / whichturbine@btinternet.com



EXISTING VIEW – STOBHALL – C2 – 313180, 734425



Project:

Innervyle Proposal

Valid

Manufact.

Type-generator

Power, rated [kW]

Rotor diameter [m]

Hub height [m]

Distance [m]

1

New

Yes

EWT

DW54-500

500

54.0

40.0

2,131

Recommended observation distance: 31 cm

Photo exposed: 31/08/2013 14:05:57

Lens: 50 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/IE) East: 313,180 North: 734,425

Wind direction: 228° Direction of photo: 337°

Software: WindPRO version 2.9.207 Apr 2013

Photo: C2 - STOBHALL

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



Project:
Innemyte Proposal

Valid

Manufact.

Type-generator

Power,
rated

Rotor
diameter

Hub
height

Distance

1 New Yes EWT DW54-500 500 [kW] 54.0 [m] 40.0 [m] 2.146 [m]

Recommended observation distance: 35 cm

Photo exposed: 31/08/2013 14:05:57

Lens: 50 mm Film: 39x19 mm Pixels: 1000x500

Eye point: British TM-OSGB36/Airy (GB/IE) East: 313,180 North: 734,425

Wind direction: 228° Direction of photo: 336°

Software: WindPRO version 2.9.250 Jul 2013

Photo: C2 - STOBHALL

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk

900



EXISTING VIEW – STOBHALL – C3 –
313205, 734475



Project:

Innemyte Proposal

Created by:

Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Distance [m]	Recommended observation distance: 31 cm
1 New Yes	EWT	DW54-500	500	54.0	40.0	2,095	

Photo exposed: 31/08/2013 14:05:08

Lens: 50 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/E) East: 313,205 North: 734,475

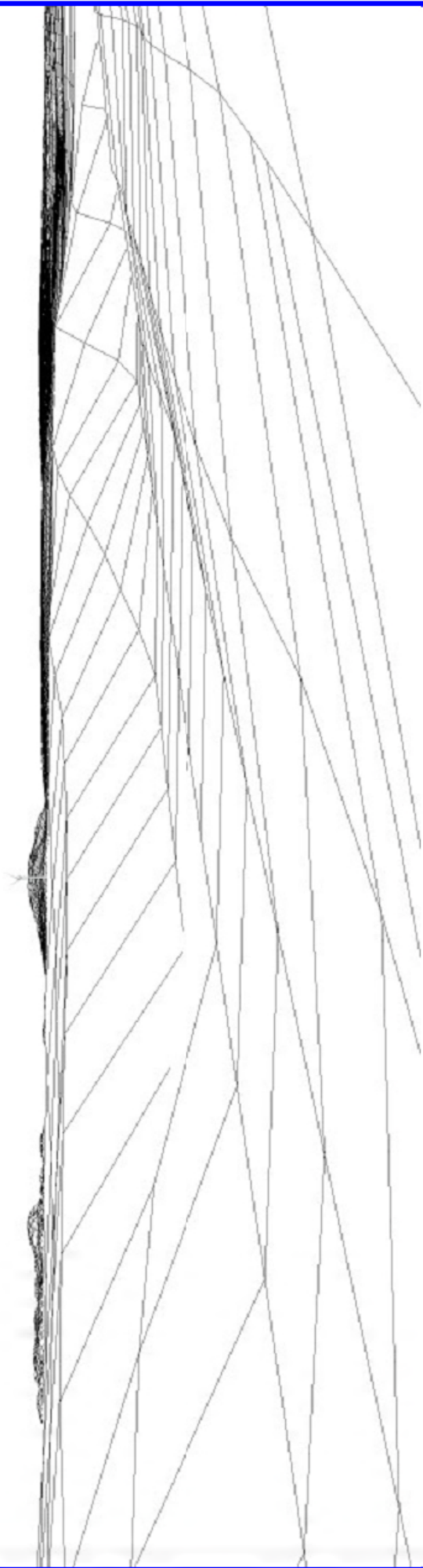
Wind direction: 228° Direction of photo: 337°

Software: WindPRO version 2.9.207 Apr 2013

Photo: C3 - STOBHALL

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



Project:
Innemyte Proposal

Valid

Manufact.

Type-generator

Power,
rated

Rotor
diameter

Hub
height

Distance

1 New

Yes

EWT

DW54-500

500

54.0

40.0

2,111

Recommended observation distance: 35 cm

Photo exposed: 31/08/2013 14:05:08

Lens: 50 mm Film: 39x19 mm Pixels: 1000x500

Eye point: British TM-OSGB36/Airy (GB/E) East: 313,205 North: 734,475

Wind direction: 228° Direction of photo: 337°

Software: WindPRO version 2.9.250 Jul 2013

Photo: C3 - STOBHALL

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



EXISTING VIEW – STOBHALL – C4 – 313180, 734450



Project:
Innemyte Proposal

Valid Manufact. Type-generator Power, rated [kW] 500 DW54-500 EWT

1 New Yes EWT

Recommended observation distance: 31 cm

Photo exposed: 31/08/2013 14:02:08

Lens: 50 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/E) East: 313,180 North: 734,450

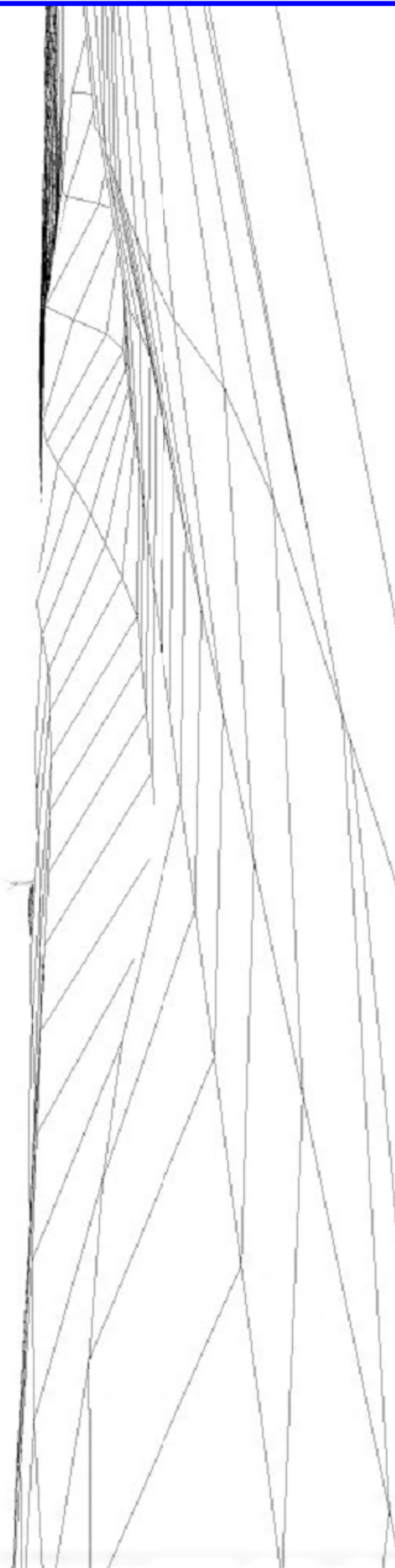
Wind direction: 228° Direction of photo: 338°

Software: WindPRO version 2.9.207 Apr 2013

Photo: C4 - STOBHALL

Created by:

+44 1337 827571
Adele Ellis / whichturbine@btinternet.com



Project:
Innervye Proposal

Valid
1 New
Yes
EWT

Manufact.
EWT

Type-generator
DW54-500

Power,
rated
500
[kW]

Rotor
diameter
54.0
[m]

Hub
height
40.0
[m]

Distance
2,124
[m]

Recommended observation distance: 35 cm
Photo exposed: 31/08/2013 14:02:08
Lens: 50 mm Film: 39x19 mm Pixels: 1000x500
Eye point: British TM-OSGB36/Airy (GB/IE) East: 313,180 North: 734,450
Wind direction: 228° Direction of photo: 338°
Software: WindPRO version 2.9.250 Jul 2013
Photo: C4 STOBHALL

Created by:

+44 1337 827571
Adele Ellis / whichturbine@btinternet.com



EXISTING VIEW D, WOODHEAD – 314373, 734672



Project:
Innervylle Proposal

Valid Manufact. Type-generator

1 New Yes EWT

Power, rated [kW]

500

DW54-500

Rotor diameter [m]

54.0

Hub height [m]

40.0

Distance [m]

2,668

Recommended observation distance: 32 cm

Photo exposed: 08/11/2012 15:09:03

Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/IE) East: 314,373 North: 734,672

Wind direction: 0° Direction of photo: 309°

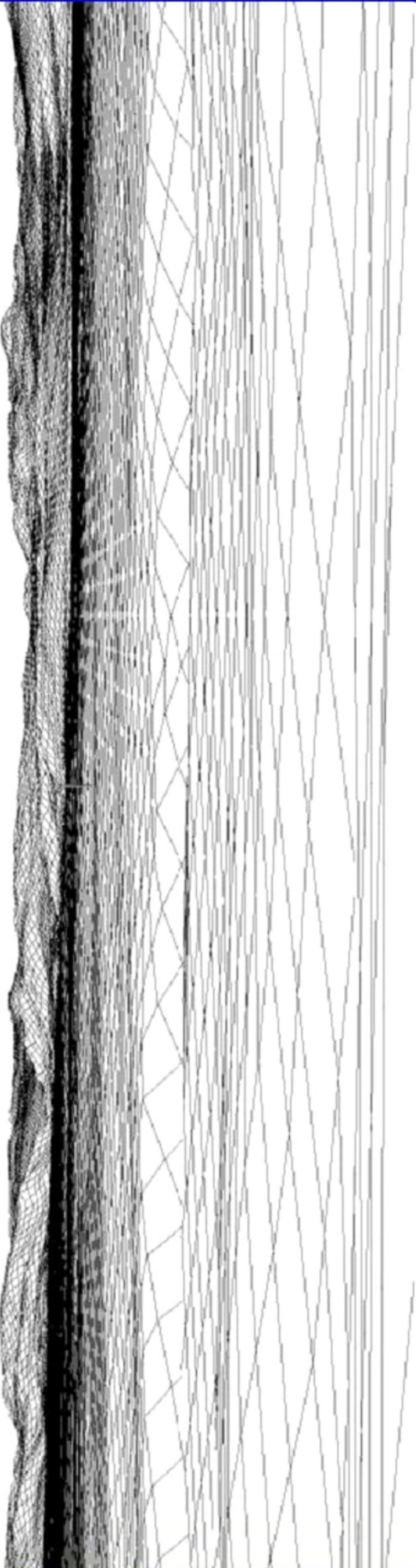
Software: WindPRO version 2.9.250 Jul 2013

Photo desc.: D - WOODHEAD

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



Project:		Valid		Manufact.		Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 36 cm		Created by:	
Innervale Proposal		1 New		Yes EWT		DW54-500		[kW]	[m]	[m]	Photo exposed: 08/11/2012 15:09:03		+44 1337 827571	
								500	54.0	40.0	Lens: 52 mm Film: 39x19 mm Pixels: 1000x500		Adele Ellis / whichturbine@btinternet.com	
										2,668	Eye point: British TM-OSGB36/Airy (GB/IE) East: 314,373 North: 734,672			
											Wind direction: 0° Direction of photo: 309°			
											Camera: WIRE D			
											Photo desc.: D - WOODHEAD			



VIEWPOINT E MENNI CAIRN

Before View

Camera: Sony SLT-35 Focal length: 50mm

Date: 28/03/2013 Time: 11:38

Viewpoint Location: NGR 314328, 737703

Recommended observation distance: 50cm

**VIEWPOINT E MENNI CAIRN**

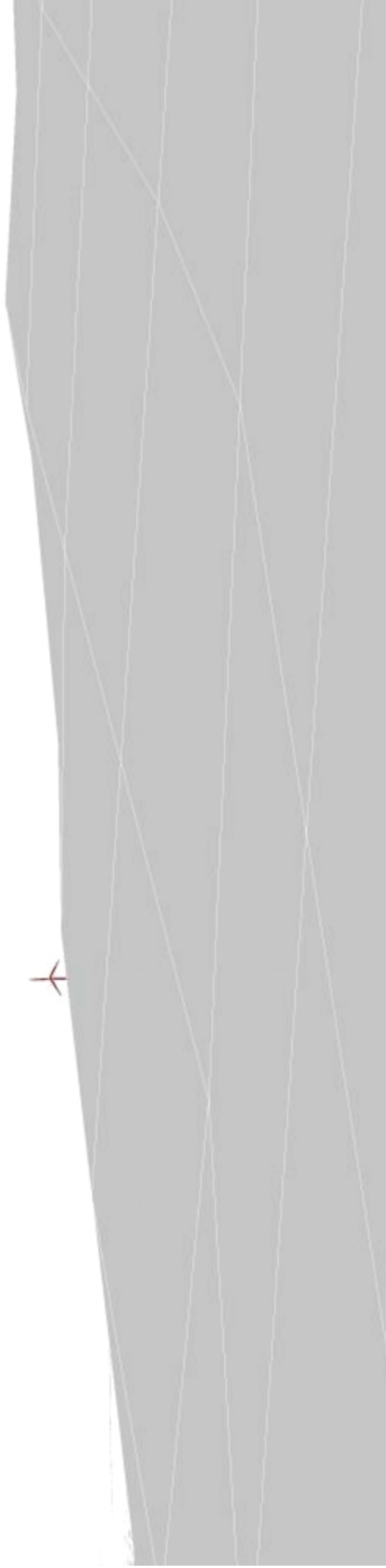
Distance to turbine: 2,343m

Camera: Sony SLT-35 Focal length: 50mm

Date: 28/03/2013 Time: 11:38

Viewpoint Location: NGR 314328, 737703

Recommended observation distance: 50cm



VIEWPOINT E MENNI CAIRN

Wireframe Image

Distance to turbine: 2,343m

Recommended observation distance: 50cm

Camera: Sony SLT-35 Focal length: 50mm

Viewpoint Location: NGR 314328, 737703



VIEWPOINT E MENNI CAIRN

Before View

Camera: Sony SLT-35

Date: 28/03/2013

Viewpoint Location: NGR 314328, 737703

Focal length: 50mm

Time: 11:38

Recommended observation distance: 50cm



VIEWPOINT E MENNI CAIRN

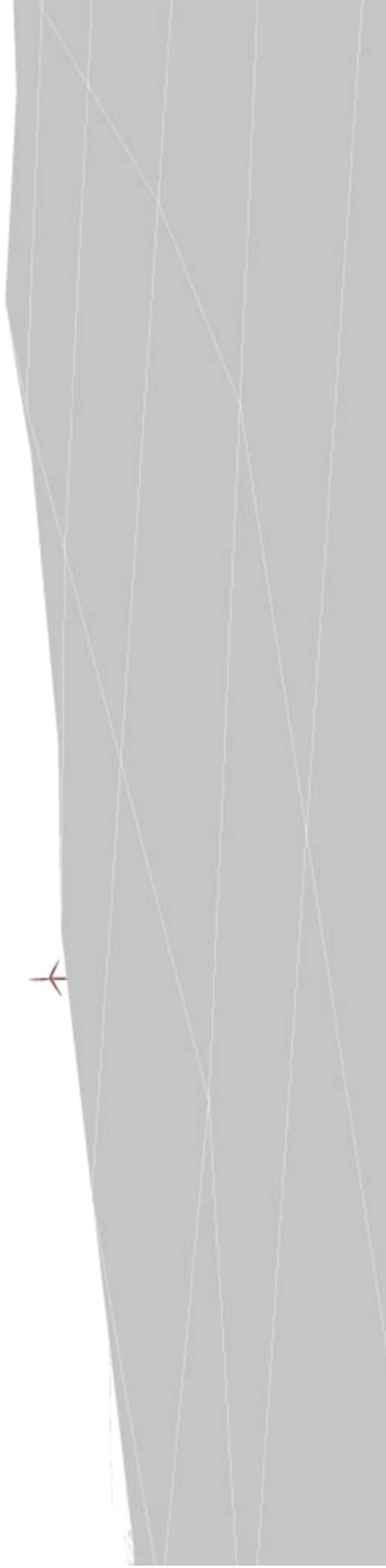
Distance to turbine: 2,343m

Camera: Sony SLT-35 Focal length: 50mm

Date: 28/03/2013 Time: 11:38

Viewpoint Location: NGR 314328, 737703

Recommended observation distance: 50cm



VIEWPOINT E MENNI CAIRN

Wireframe Image

Distance to turbine: 2,343m

Recommended observation distance: 50cm

Camera: Sony SLT-35 Focal length: 50mm

Viewpoint Location: NGR 314328, 737703



VIEWPOINT F BALLATHIE HOUSE HOTEL

Before View

Camera: Sony SLT-35 Focal length: 50mm

Date: 06/11/12 Time: 15:37

Viewpoint Location: NGR 314591, 736722

Recommended observation distance: 50cm



VIEWPOINT F BALLATHIE HOUSE HOTEL

Distance to turbine: 2,234m

Camera: Sony SLT-35

Date: 06/11/12 Time: 15:37

Viewpoint Location: NGR 314591, 736722

Focal length: 50mm

Recommended observation distance: 50cm



VIEWPOINT F BALLATHIE HOUSE HOTEL

Wireframe Image	Distance to turbine: 2,234m	Camera: Sony SLT-35 Focal length: 50mm	Viewpoint Location: NGR 314591, 736722
Recommended observation distance: 50cm			



VIEWPOINT F BALLATHIE HOUSE HOTEL

Before View

Camera: Sony SLT-35 Focal length: 50mm

Date: 06/11/12 Time: 15:37

Viewpoint Location: NGR 314591, 736722

Recommended observation distance: 50cm



VIEWPOINT F BALLATHIE HOUSE HOTEL

Distance to turbine: 2,234m

Camera: Sony SLT-35

Date: 06/11/12

Viewpoint Location: NGR 314591, 736722

Focal length: 50mm

Recommended observation distance: 50cm



VIEWPOINT F BALLATHIE HOUSE HOTEL

Wireframe Image

Distance to turbine: 2,234m

Camera: Sony SLT-35 Focal length: 50mm

Viewpoint Location: NGR 314591, 736722

Recommended observation distance: 50cm



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Before View

Camera: Sony SLT-35

Focal length: 50mm

Date: 06/11/12 Time: 16:47

Viewpoint Location: NGR 314967, 736382

Recommended observation distance: 50cm



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Distance to turbine: 2,587m

Camera: Sony SLT-35

Date: 06/11/12

Viewpoint Location: NGR 314967, 736382

Focal length: 50mm

Recommended observation distance: 50cm



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Wireframe Image

Distance to turbine: 2,587m

Recommended observation distance: 50cm

Camera: Sony SLT-35 Focal length: 50mm

Viewpoint Location: NGR 314967, 736382



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Before View

Camera: Sony SLT-35

Date: 06/11/12 Time: 16:47

Viewpoint Location: NGR 314967, 736382

Focal length: 50mm

Recommended observation distance: 50cm



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Distance to turbine: 2,587m

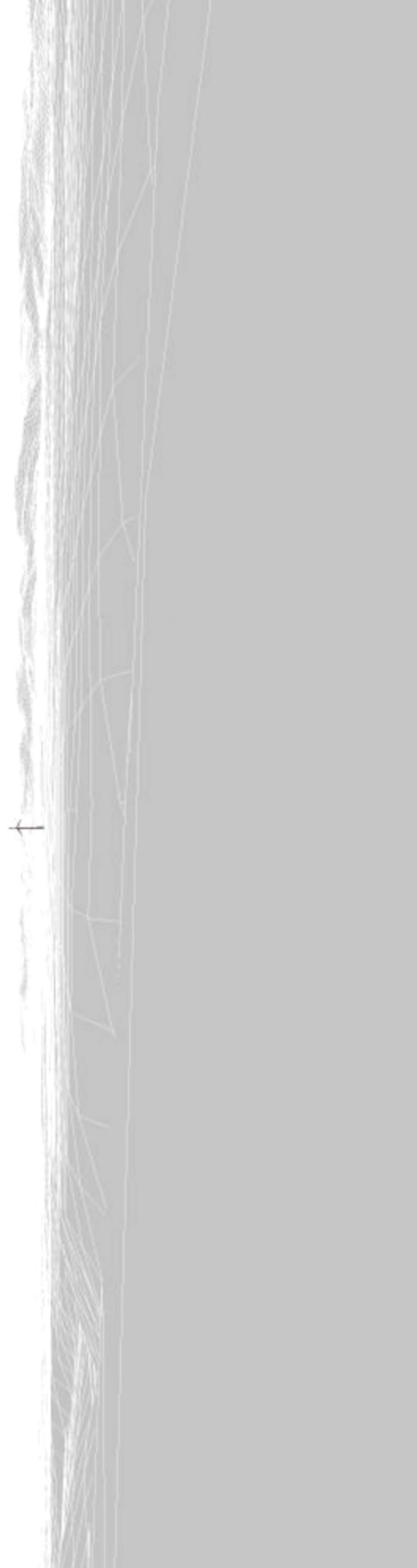
Camera: Sony SLT-35

Date: 06/11/12 Time: 16:47

Viewpoint Location: NGR 314967, 736382

Focal length: 50mm

Recommended observation distance: 50cm



VIEWPOINT G BALHOMIE, CUP MARKED STONE

Wireframe Image

Distance to turbine: 2,587m

Recommended observation distance: 50cm

Camera: Sony SLT-35 Focal length: 50mm

Viewpoint Location: NGR 314967, 736382



EXISTING VIEW H, WOODHEAD WITH ABERFELDY TURBINES – 314507, 734771



Project:
Innemyte Proposal

Valid

Manufact.

Type-generator

Power,
rated

Hub
diameter

Height

Distance

1 New Yes EWT

DW54-500

500 [kW]

54.0 [m]

40.0 [m]

2,711 [m]

Recommended observation distance: 32 cm

Photo exposed: 28/11/2012 15:19:27

Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/E) East: 314,507 North: 734,771

Wind direction: 0° Direction of photo: 299°

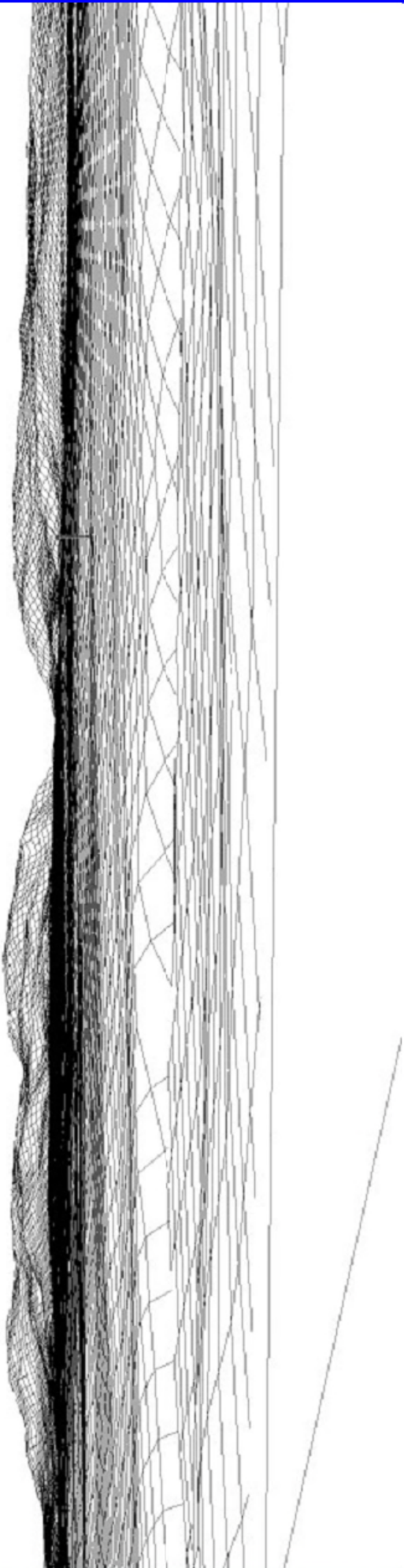
Software: WindPRO version 2.9.250 Jul 2013

Photo desc.: H - WOODHEAD (WITH ABERFELDY TURBINES)

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



Project:		Innemyte Proposal		Valid		Manufact.		Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 36 cm		Created by:	
1		New		Yes		EWT		DW54-500	500 [kW]	54.0 [m]	40.0 [m]	2.711 [m]	Photo exposed: 28/11/2012 15:19:27		+44 1337 827571	
													Lens: 52 mm Film: 39x19 mm Pixels: 1000x500		Adele Ellis / whichturbine@btinternet.com	
													Eye point: British TM-OSGB36/Airy (GB/IE) East: 314,507 North: 734,771			
													Wind direction: 0° Direction of photo: 299°			
													Camera: WIRE H			
													Photo desc.: H - WOODHEAD (WITH ABERFELDY TURBINES)			
													WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk			



EXISTING VIEWPOINT 1 – CAMPSIE HILL ENCLOSURE – 313526, 733886

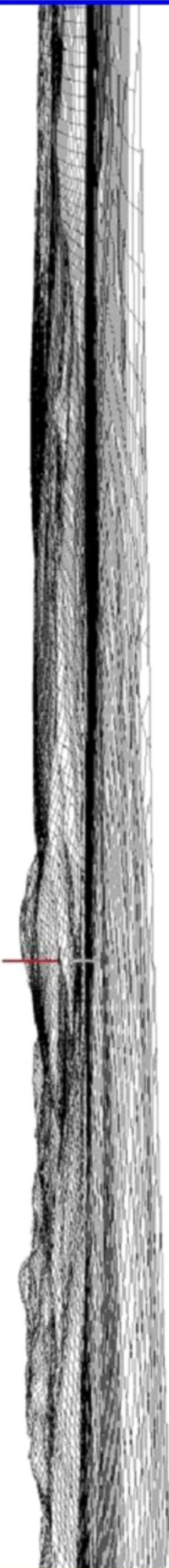


Project: Innemyte Proposal		Recommended observation distance: 32 cm		Created by:	
1 New Yes EWT		Photo exposed: 28/11/2012 14:46:13		+44 1337 827571	
Power rated [kW]		Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264		Adele Ellis / whichturbine@btinternet.com	
500		Eye point: British TM-OSGB36/Airy (GB/IE) East: 313,526 North: 733,886			
Type-generator		Wind direction: 0° Direction of photo: 338°			
Valid Manufact.		Software: WindPRO version 2.9.250 Jul 2013			
Type-generator		Photo desc.: I - CAMPSIE HILL ENCLOSURE			
Power, rated [kW]		Hub height [m]			
500		54.0 40.0			
Type-generator		Distance [m]			
Valid Manufact.		2,779			

WindPRO is developed by EMD International A/S, Niels Jernnesvej 10, DK-9220 Aalborg Ø. Tel. +45 96 35 54 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk



TURBINE PARTIALLY SCREENED BY VEGETATION



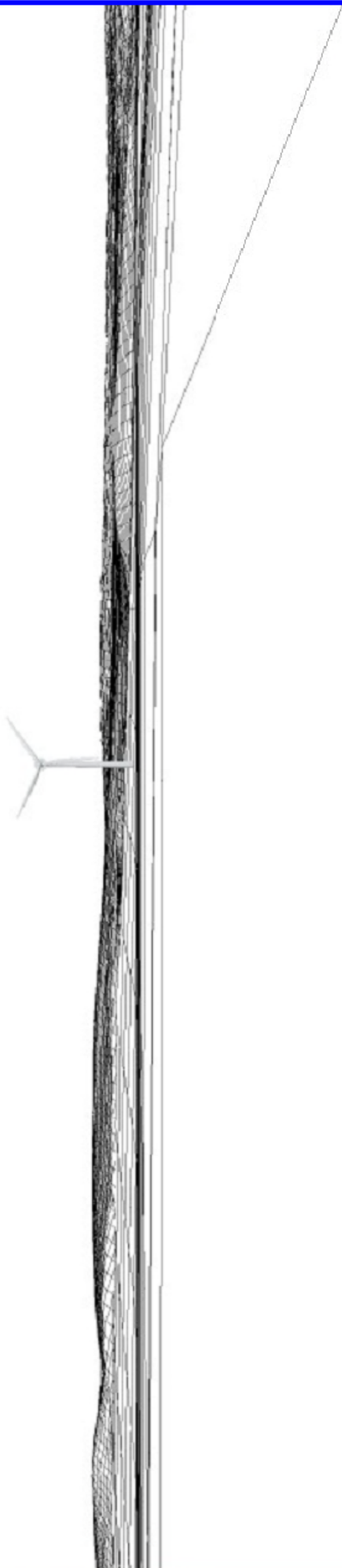
Project: Innervyle Proposal	Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Distance [m]	Recommended observation distance: 36 cm		Created by: +44 1337 827571 Adele Ellis / whichturbine@btinternet.com
	1 New	Yes	EWT	DW54-500	500	54.0	40.0	2,779	Photo exposed: 28/11/2012 14:46:13	
									Lens: 52 mm Film: 39x19 mm Pixels: 1000x500	
									Eye point: British TM-OSGB36/Airy (GB/E) East: 313.526 North: 733.886	
									Wind direction: 0° Direction of photo: 338°	
									Camera: WIRE 1	
									Photo desc.: 1 - CAMPSIE HILL ENCLOSURE	



EXISTING VIEW J – UNCLASSIFIED ROAD BY KNOCKSHINNAN– 312403, 735496



Project: Innemyte Proposal	Valid		Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Distance [m]	Recommended observation distance: 32 cm		Created by: +44 1337 827571 Adele Ellis / whichturbine@btinternet.com
	1	New	Yes	EWT	DW54-500	500	54.0	40.0	906	<div>Photo exposed: 28/03/2013 10:42:45 Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264 Eye point: British TM-OSGB36/Airy (GB/E) East: 312,403 North: 735,496 Wind direction: 0° Direction of photo: 354° Software: WindPRO version 2.9.250 Jul 2013 Photo desc.: J - UNCLASSIFIED ROAD BY KNOCKSHINNAN</div>	



Project:		Innervyle Proposal		Valid		Manufact.		Type-generator	Power, rated	Rotor diameter	Hub height	Distance	Recommended observation distance: 36 cm		Photo exposed: 28/03/2013 10:42:45		Lens: 52 mm Film: 39x19 mm Pixels: 1000x500		Eye point: British TM-OSGB36/Airy (GB/IE) East: 312,403 North: 735,496		Wind direction: 0° Direction of photo: 354°		Camera: WIRE J		Photo desc.: J - UNCLASSIFIED ROAD BY KNOCKSHINNAN		Created by:		+44 1337 827571		Adele Ellis / whichturbine@btinternet.com	
1		New		Yes		EWT		DW54-500	500	54.0	40.0	906																				

WindPRO is developed by EMD International A/S, Niels Jernsvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk



EXISTING VIEW K – B9099– 310671, 735671



Project:
Innemyte Proposal

Valid	Manufact.	Type-generator	Power, rated	Rotor diameter	Hub height	Distance
1 New	Yes	EWT	DW/54-500	500 [kW]	54,0 [m]	40,0 [m]

Recommended observation distance: 32 cm

Photo exposed: 09/04/2013 17:05:06

Lens: 52 mm Film: 36x24 mm Pixels: 4912x3264

Eye point: British TM-OSGB36/Airy (GB/IE) East: 310,671 North: 735,671

Wind direction: 0° Direction of photo: 70°

Software: WindPRO version 2.9.250 Jul 2013

Photo desc.: K - B9099

Created by:

+44 1337 827571
Adele Ellis / whichturbine@btinternet.com

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tel. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk



Project:
Innervye Proposal

Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Distance [m]
1 New Yes	EWT	DW54-500	500	54.0	40.0	1,821

Recommended observation distance: 36 cm

Photo exposed: 09/04/2013 17:05:06

Lens: 52 mm Film: 39x19 mm Pixels: 1000x500

Eye point: British TM-OSGB36/Airy (GB/E) East: 310,671 North: 735,671

Wind direction: 0° Direction of photo: 70°

Camera: WIRE K

Photo desc.: K - B9099

Created by:

+44 1337 827571

Adele Ellis / whichturbine@btinternet.com



VIEWPOINT L UNCLASSIFIED PUBLIC ROAD BY OLD ENGLAND, NORTH OF SITE

Before View Camera: Sony SLT-35 Focal length: 50mm Date: 28/03/13 Time: 11:16 Viewpoint Location: NGR 312394, 738081
Recommended observation distance: 50cm



VIEWPOINT L UNCLASSIFIED PUBLIC ROAD BY OLD ENGLAND, NORTH OF SITE

Distance to turbine: 1,681m

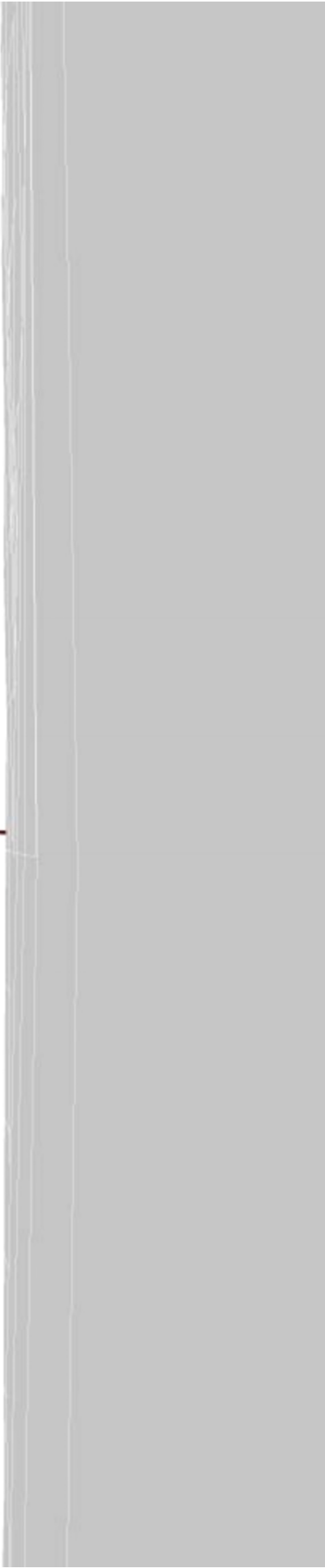
Camera: Sony SLT-35

Focal length: 50mm

Recommended observation distance: 50cm

Date: 28/03/13 Time: 11:16

Viewpoint Location: NGR 312394, 738081



VIEWPOINT L UNCLASSIFIED PUBLIC ROAD BY OLD ENGLAND, NORTH OF SITE

Wireframe Image	Distance to turbine: 1.681m	Camera: Sony SLT-35 Focal length: 50mm	Viewpoint Location: NGR 312394, 738081
Recommended observation distance: 50cm			

Planning Application Ref. 14/00627/FLL.
Your Ref. YO/AB TCP/11/16 (340).

Mr M. M. Farnsworth
4 Innernyte Cottages
Kinclaven
By Stanley
Perthshire
PH1 4QH

PERTH AND KINROSS LOCAL REVIEW BODY,
137 GLOVER STREET,
PERTH, PH2 0LQ.

28th MAY 2015

Dear Sirs,

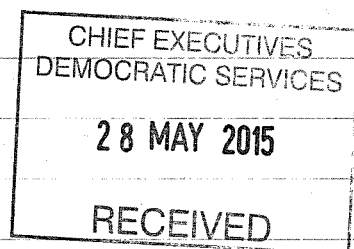
Proposed Wind Turbine on Land at Innernyte Farm, Perthshire

Thank you for your letter dated 20th May 2015.

Once more, I would like to emphasise the remarks contained in my letter to the Perth and Kinross Council of 29th May 2014, and ^{to those} specifically set out below.

- "(iv) Baird Lumsden state that "the proposed wind turbine would be a great asset to my Client in terms of cutting the significant expenditure on electricity". In this regard, I would point out that, in our various circumstances, we all have what we consider to be a high cost for what electricity we use.
- (v) The reduction in the cost of running his business would no doubt be an attractive proposition. On the other hand, the Applicant, who does not live on site, is, in my opinion, wishing to make this cost-saving at the indisputable detriment of nearby receptors, and of other properties and their occupants, beyond".

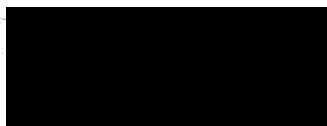
I feel sure that the sentiments expressed above will resonate with many local people, and especially with those who live in houses or cottages nearest to the site of this proposed wind turbine.



PERTH.

28 MAY 2015

Km



CHX Planning Local Review Body - Generic Email Account

From: [REDACTED]
Sent: 27 May 2015 13:19
To: CHX Planning Local Review Body - Generic Email Account
Subject: Attn: Gillian Taylor re TCP/11/16(340)

I write for the third time to object to this application for a wind turbine at Innernytie Farm.

By now, the applicant must be fully aware of the numerous (112 at the last count) objections to this proposal. It is worrying that he is disregarding these and that those reviewing this application are giving the applicant far more lee-way than the objectors.

At the Review board I and all the other local residents were taken aback by the misleading photographs submitted.

Not a single one showed the cottages and houses which will be adversely affected by this; not a single one showed the devastating impact it will have on a small and beautiful part of the country. I was under the impression that photographs were meant to show the effect the turbine would have on the visual amenity of the area: these photographs only showed the view from someone lying at the base of it. Interesting but useless.

I assume that on the site visit the councillors will be equally surprised and take this omission of relevant viewpoint into consideration.

I would also implore all those concerned to stop referring to the Stewart Tower turbine. That turbine is fundamentally different in three main areas; it is a great deal smaller, the farmer lives on the site, its purpose is, to an important extent, for the benefit of the community and a large number of visitors who visit the ice cream parlour. To cite this turbine as an excuse for having one at Innernytie - whose sole benefit would be to the **non-resident** farmer - is irrelevant.

I make no apology for sending this personal plea to refuse this application. Earlier submissions, by myself and others, have pointed out objectively how this application contravenes various local authority and government guidelines.

I assume the councillors have read all of these previous objections.

I finish with one question to the councillors:

If you lived in Kinclaven, in one of the homes adversely affected by the erection of this turbine, would you be happy?

Gail Wylie
5 Innernytie Cottages
Kinclaven
PH1 4QH

CHX Planning Local Review Body - Generic Email Account

From: TES Planning - Generic Email Account
Sent: 02 June 2015 09:42
To: CHX Planning Local Review Body - Generic Email Account
Subject: FW: TCP/11/16(340)

Good Morning

Please find attached a letter we have received in relation to the above LRB case.

Many Thanks

Kirsty

From: Janice Reid [REDACTED]
Sent: 31 May 2015 16:22
To: TES Planning - Generic Email Account
Subject: TCP/11/16(340)

Broomhill
Kinclaven
Stanley
Perth
PH1 4QL

Town & Country Planning (Scotland) Act 1997
The Town & Country Planning (Schemes of Delegation & Local Review Procedure)
(Scotland) Regulations 2013
Application Ref: 14/00627/FLL - Erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven –
Mr G Lennox

Dear Sir/Madam

Further to my previous submission I felt the need to make additional comments after reading the submission from the applicant's agent.

This proposed industrial sized turbine will not have any incremental economic impact on the local area and it is out of all proportion to the requirements of Innernyte Farm.

However it will have a significant detrimental impact as it is situated in the Lowland River Tay Corridor very close to a busy through road used not only by locals but many visitors to the area and the area itself is one which is dependent on tourism and country sports eg. fishing.

Comment is made that submissions have come from people in Stanley and Murthly who, like the applicant himself, will not be personally affected but yes they will as many use this road regularly. Also everyone is very conscious of protecting our local environment. Once a "commercial machine" such as this is approved how do planning refuse other local applications for wind turbines?

Our already poor telecommunications and television receptions will be seriously affected by this proposed turbine.

We seriously hope this application will be rejected

Yours sincerely
Janice Reid

CHX Planning Local Review Body - Generic Email Account

From: R SINCLAIR <[REDACTED]>
Sent: 31 May 2015 15:34
To: CHX Planning Local Review Body - Generic Email Account
Subject: Re: TCP/11/16(340)

Gillian A. Taylor

The applicant quotes 100% electricity generation from renewable sources as a desirable target. Due to the spasmodic and unreliable nature of the power sources, in this case wind, this cannot be achieved. Since the generation is of less importance than the applicant would have us believe, the balance against adverse visual impact is altered in favour of the visual impact. The application should therefor be refused.

R. F. Sinclair

CHX Planning Local Review Body - Generic Email Account

From: A F Wylie [REDACTED]
Sent: 31 May 2015 15:20
To: CHX Planning Local Review Body - Generic Email Account
Subject: RE: TCP/11/16(340)

Dear Ms Taylor,

Thank you for your email.

I strongly object to this application by Mr Lennox.

Please convey my additional comments to the Members of the Local Review Group (LRG).

It would be plainly wrong for the LRG to grant this review. The application is contrary to the Development Plan. It should have been refused at the last meeting on 31 March 2015.

Overwhelming objections have been lodged at a national and local level by Historic Scotland, by local residents and by the local community. Those powerful objections should be listened to and acted upon. Please also remember that our small rural cottage is only a few hundred yards from the proposed giant turbine – and a few feet away from the proposed access road.

This development would dominate the landscape and destroy the amenity of this wonderful area of Perthshire – and our cottage.

Please refuse this application now – for the reasons previously stated by the numerous objectors.

I am also concerned that the LRG was referred to a misleading set of photographs which was introduced during the last hearing.

Could I trouble you to make sure that the Members of the LRG, and their advisers, have copies of all the written objections?

For present purposes, I formally incorporate those objections (already in the hands of the Council) and hold them to be repeated in this email - for the sake of brevity. In fairness, please arrange for the objections to be made available online too.

On any reasonable view, there are sound planning reasons for refusal. There is no good reason to grant.

Please refuse this application at the next meeting – and without any further indulgence to the applicant.

Thank you for your assistance.

Yours sincerely,

A F Wylie

5 Innernytie Cottages
Kinclaven
By Stanley
Perthshire
PH1 4QH

CHX Planning Local Review Body - Generic Email Account

From: James Lochhead <[REDACTED]>
Sent: 27 May 2015 16:09
To: CHX Planning Local Review Body - Generic Email Account
Subject: Re: TCP/11/16(340)
Attachments: Innernyte Appeal.docx

Dear Audrey,

Town & Country Planning (Scotland) Act 1997
The Town & Country Planning (Schemes of Delegation & Local Review Procedure)
(Scotland) Regulations 2013
Application Ref: 14/00627/FLL - Erection of wind turbine and associated infrastructure, land
650 metres north west of Innernyte Farm, Kinclaven –
Mr G Lennox

Thank you for the e-mail updating me on the additional information submitted by the appellant. On behalf of my clients, Mr & Mrs Wylie, we wish to maintain the strongest possible objection to this proposal. In this regard I attach our original submission to the appeal.

The information submitted by the appellant was originally provided with the application (and with the appeal documentation). It is significant that it did not overcome the view of the Council that the application should be refused. A view also held by Historic Scotland.

At the meeting of the Review Body the photographs shown by the Planning Advisor to the Review Body were misleading in as much as they revealed where the proposed turbine would be located but not the impact the proposal would have on the landscape and nearby properties. Consequently, my clients are pleased that Members of the Review Body have requested the additional information and intend to undertake a site visit to more fully appreciate the nature of the impact the proposal will have. This will also assist Members in understanding why the Council and Historic Scotland consistently oppose the siting of a turbine in this location.

I look forward to receiving notification of when the appeal will be heard by the Review Body.

Yours sincerely,

James Lochhead
On behalf of Mr & Mrs Wylie

CHX Planning Local Review Body - Generic Email Account

From: Elspeth Coutts [REDACTED]
Sent: 03 June 2015 19:32
To: CHX Planning Local Review Body - Generic Email Account
Subject: Re: TCP/11/16(340)

To Perth and Kinross Local Review Body

From Elspeth Coutts, Tansy, Kinclaven, PH1 4QJ

Mobile: 07981 246030 (Please redact in the public record. Thank you.)

Dear Councillors Lyle, Cuthbert and Campbell

Re: **TCP-11-16-(340)**

Town & Country Planning (Scotland) Act 1997

The Town & Country Planning (Schemes of Delegation & Local Review Procedure) (Scotland) Regulations 2013

Application Ref: 14/00627/FLL - Erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven – Mr G Lennox

Environmental Statement and Landscape and Visual Impact and CIA Report

My main responses to these documents are contained in my original letters of objection in 2013 and 2014. However, prompted by their recent resubmission, I would like to make a few further observations.

Whilst these two documents have a formal, standardised format, apart from bearing the applicant's company name, Thermal Power Engineering Ltd, neither the Environmental Statement nor Landscape and Visual Impact Report declare the names of any of the authors, assessors or compilers. Where use has been made of specialist service providers, such as for noise level prediction, they have been named but much of the body of information and opinion in the reports is not specifically credited.

In respect of the LVIA Report, it would have been particularly interesting to know the following:

- a. the professional status/credentials/qualifications of the assessors/authors.
- b. who compiled the photomontage and wireframe imagery
- c. more explanation/justification of the concluded "sensitivity ratings" and "magnitude of effect" assessments, with which so few other interested parties concur. (For example, note the

contradictory nature of the assessment of “low” cultural heritage sensitivity, given the strength of objection from Historic Scotland and the description of the development site itself by Perth and Kinross Heritage Trust as an archaeologically sensitive site. Indeed the over-riding impression of low impact generally from the applicant’s perspective as represented in the LVIA Report is at considerable odds with that of the hundred-plus objectors as well as Historic Scotland and PKC’s professional planning official. In addition, broad brush claims by the author such as “This type of landscape is not uncommon and should be considered to have low sensitivity.” are clearly not absolute statements but are worryingly used in the reports as if to imply fact.)

- d. what specific guidance was taken from the documentation listed in LVIA Section 2.0, eg through clear referencing within the text
- e. why no effort has been made by the author of either report to discuss residential separation distances despite recognising “Significant effects from nearest local receptors”.

In addition to these observations above, as well as my formal objections to the planning applications, I would I reiterate the points set out in my letter to the Local Review Body on 25 February 2015 on the completely inadequate residential separation distances, total absence of neighbour engagement and my investigative puzzlement over various aspects of the carbon emissions and reduction data presented. I note again that the LVIA worryingly seeks to ensure flexibility of precise location and choice of turbine model for the developer should planning permission be secured for a generic 500kW turbine. Such latitude in both these aspects would mean a further threat to local residents over the currently described proposal. In particular, with the proposed location on the march boundary of Innernyte already being the furthest point on the farm from the surrounding houses, the slightest shift in location in any direction would reduce further the already inadequate residential separation distances.

Finally, I would like to repeat our invitation for the Local Review Board panel members to visit our homes as part of their site visit.

Thank you for reading this email and I look forward to hearing your response to our visit request in due course.

Yours sincerely

Elsbeth Coutts

CHX Planning Local Review Body - Generic Email Account

From: Vida Chapman [REDACTED]
Sent: 03 June 2015 16:58
To: CHX Planning Local Review Body - Generic Email Account
Subject: Fw: TCP/11/16/(340)

Vida Chapman
The Old Smiddy
Kinclaven By Stanley
Perthshire PH1 4QJ
Tel 01250 883 236
Mob 07703 540 932

On Wednesday, 3 June 2015, 16:36, Vida Chapman <oldsmiddy@yahoo.co.uk> wrote:

Dear Ms Taylor

TCP/11/16/(340)

INNERNYTE WIND TURBINE PROPOSAL

I note submission by the developer of the two documents for consideration by the Local Review Body. Had these been submitted in this format with the appendices included in the right places in the document in the original application (rather than adhoc separate additional documents) it would have been much easier for the public to consider the implications of the proposal.

They are still dated as before but there are changes including the insertion of a sentence in the Environmental Statement Section 1.3 , second paragraph and several corrections.

The documents grossly underestimate the impact on the local community in terms of proximity of dwellings to the proposed windturbine. Largely the photographs submitted are irrelevant in this respect.

I would urge you to ask the Local Review Body to look at the various montages submitted by located residents in their objections to get a clearer understanding of the proximity and potential impact of the windturbine on local dwellings. No proposals for the screening by the developer can mitigate this problem because of the open nature of the agricultural landscape.

I feel that the original grounds for refusal still stands. Nothing has changed

Yours faithfully

Vida Chapman

Vida Chapman
The Old Smiddy
Kinclaven By Stanley

CHX Planning Local Review Body - Generic Email Account

From: CHX Planning Local Review Body - Generic Email Account
Subject: FW: Application Ref:14/00627/FLL - Erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven - Mr G Lennox

-----Original Message-----

From: Jim Wyllie
Sent: 03 June 2015 09:43
To: developmentmanagement@pkc.gov.uk
Subject: Application Ref:14/00627/FLL - Erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven - Mr G Lennox

Dear Planning Department

We wish to lodge another objection against the above application for the erection of wind turbine and associated infrastructure, land 650 metres north west of Innernyte Farm, Kinclaven - Mr G Lennox. Application Ref 14/00627/FLL & TCP/11/16 (340)

Objecting on the same grounds as previously and in particular:

Landscape and Visual Impact - nothing on the new report submitted provides us with any reassurance - this industrial sized turbine will be a discordant introduction to the landscape, and will be seen for a great distance on the very busy Stanley to Kinclaven road. It will also be seen from the A93, distorting the landscape within the Tay Valley.

On page 4 of the Landscape and Visual Impact and Cumulative Impact Assessment Report provided, section 1.3 Conclusion ".while there may be some significant effects from the nearest visual receptors due to the introduction of the wind turbines, overall the project would have a low level of effect." Surely the nearest visual receptors, ie. everyone driving up and down the unnamed Stanley to Kinclaven Road plus all local householders will be significantly affected, and yet this report says that overall the project would have a low level of effect? Certainly it would have a low level of effect in Auchterarder where the proposers have the business for which food is produced at Innernyte farm but certainly not here for the residents in the vicinity of Innernyte Farm.

High Risk of setting a precedent for introducing wind turbines into this peaceful area - if permission for such a disproportionate wind turbine is given, we are concerned that consequently more will follow.

In conclusion there is no local benefit to this turbine, all of the benefits are going to a business based in Auchterarder with the costs all being to the local area around Innernyte, those being visual, auditory and potentially interrupting television signal.

Regards

Mr & Mrs Wyllie
Heathery
Ballathie
Stanley
PH1 4QN

