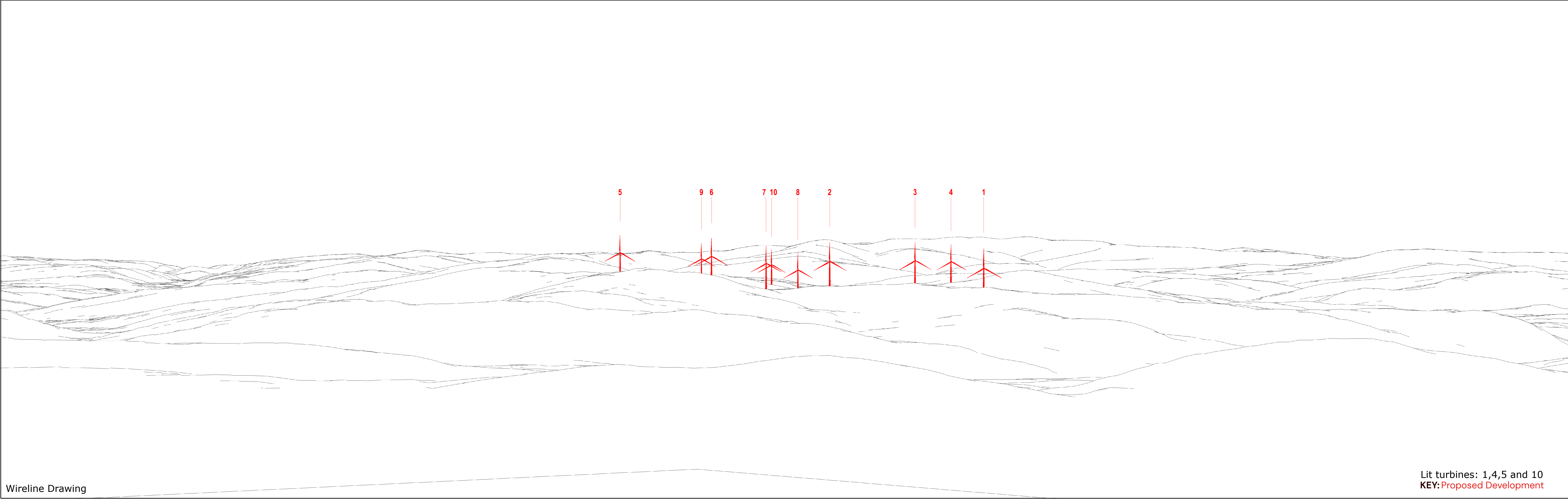




Wireline Drawing

Viewpoint Information

FOEL FACH WIND FARM

OS Reference: E287121, N344595
Ground level: 670m (AOD)

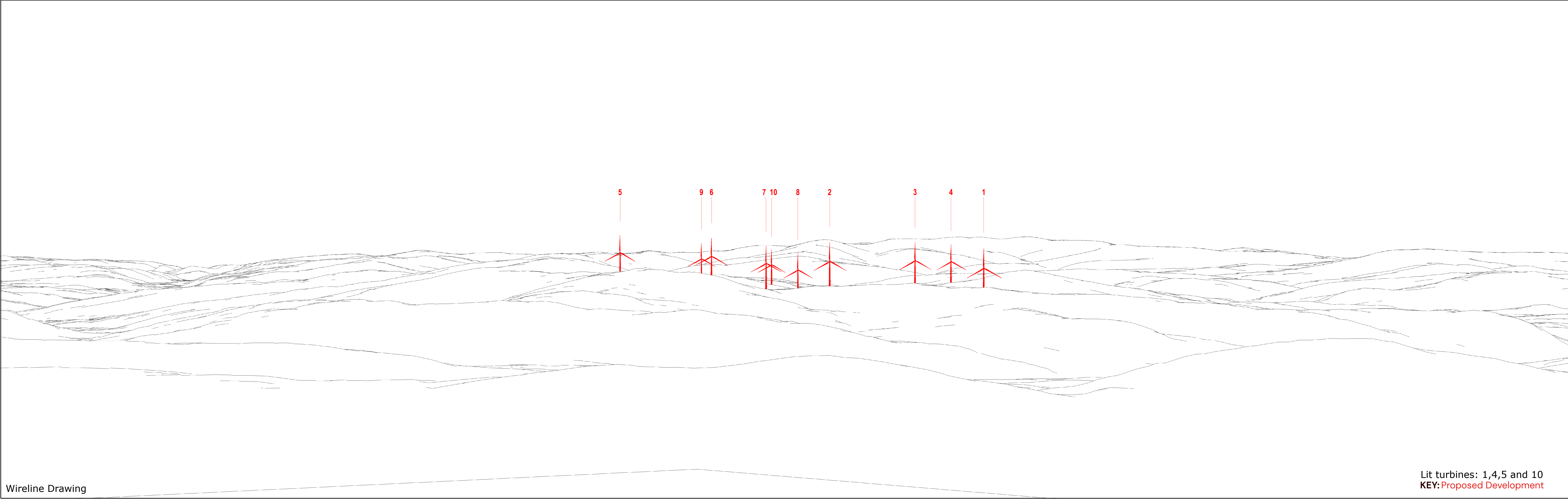
Distance to nearest turbine: 6964m (T1)
Bearing to centre of photograph: 114.3°

Angle of view: 53.5° (planar)
Principal distance: 812.5mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260mm





Photomontage

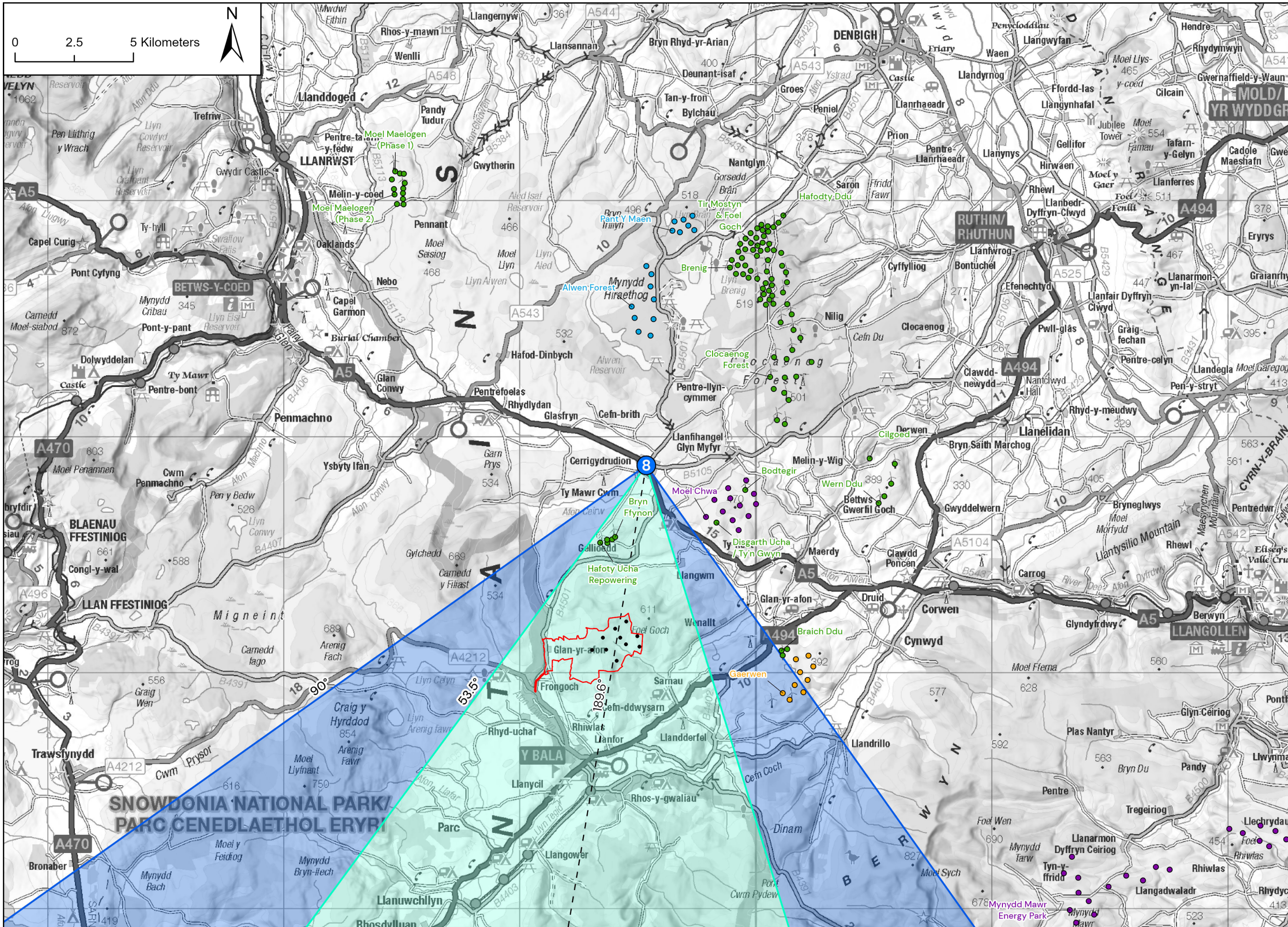


Wireline Drawing

Lit turbines: 1,4,5 and 10
KEY: Proposed Development

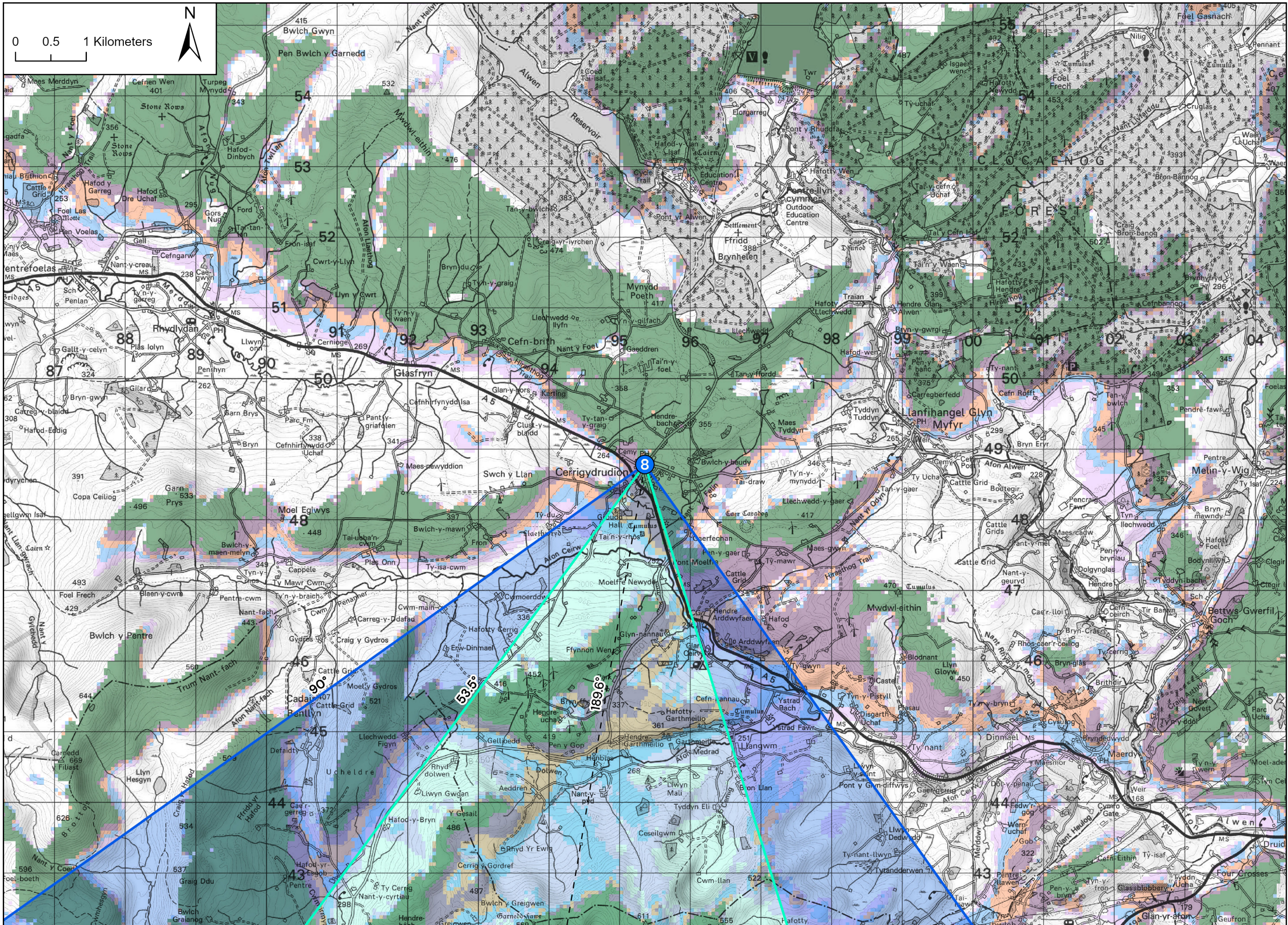


Photomontage



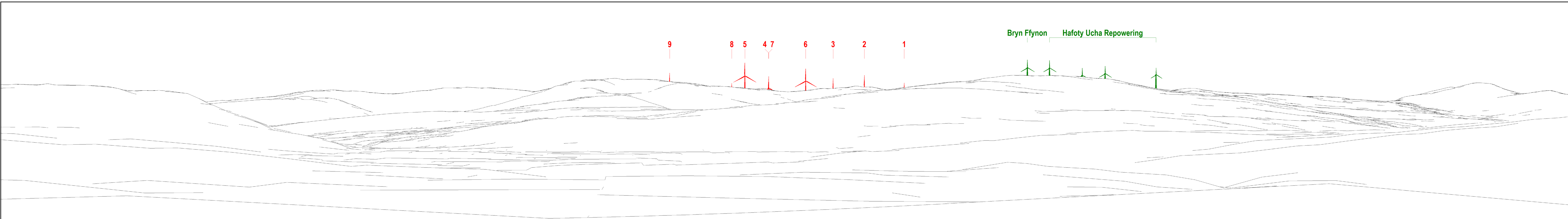
Viewpoint Location Plan - Site Context and Cumulative Wind Farms - Scale 1:150,000

FOEL FACH WIND FARM



Viewpoint Location Plan - Visual Extents and Blade Tip ZTV - Scale 1:50,000

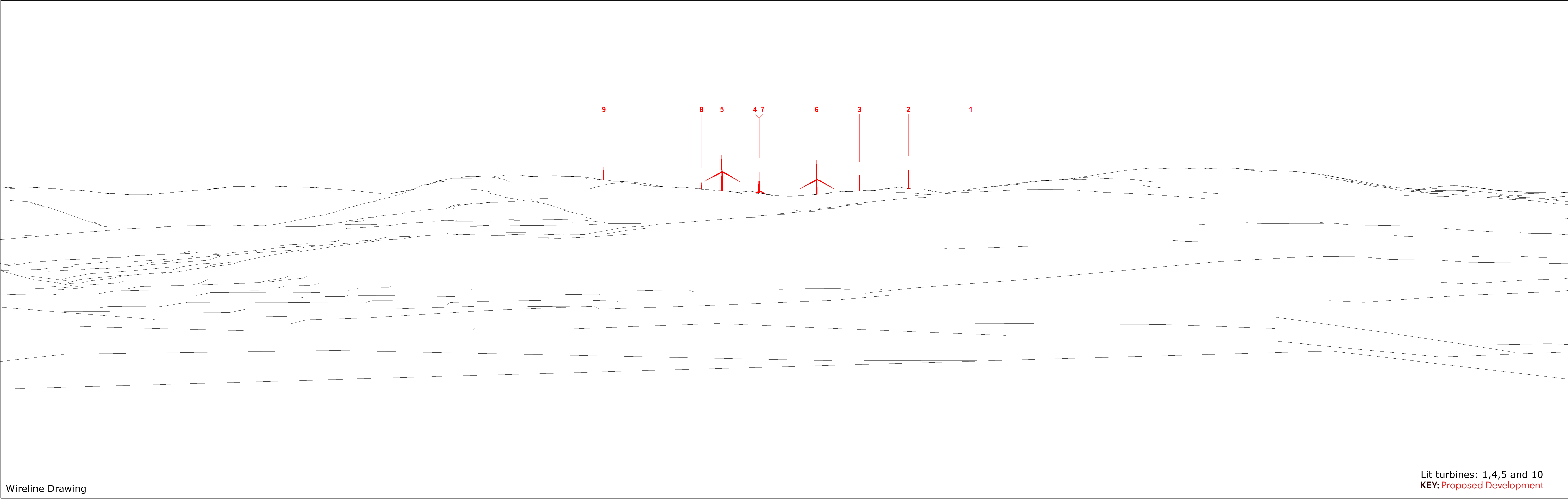
- Key**
- Application Boundary
 - Turbine Layout
- Blade Tip Zone of Theoretical Visibility (Various Heights)
- 1 to 2 Turbines Visible
 - 3 to 4 Turbines Visible
 - 5 to 6 Turbines Visible
 - 7 to 8 Turbines Visible
 - 9 to 10 Turbines Visible
- Wind Farm Status
- Operational
 - Consented / Under Construction
 - In Planning
 - Scoping
- Viewpoint Information
- L VIA Viewpoint
 - Centre of Visualisation (Bearing)
 - 53.5° Field of View
 - 90° Field of View

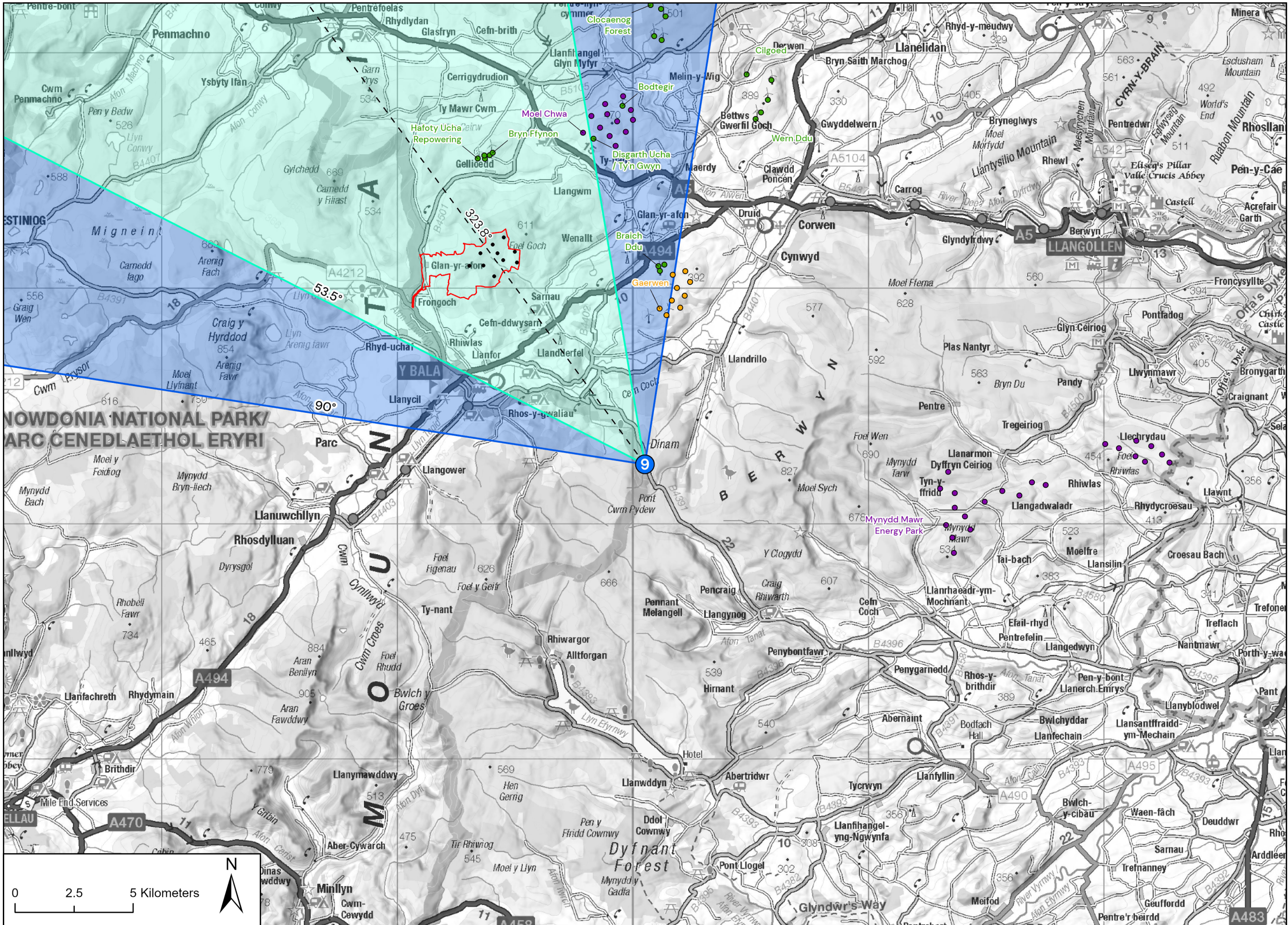


Cumulative Wireline Drawing

KEY: Proposed Development Operational Consented / Under construction In Planning Scoping/PreApp

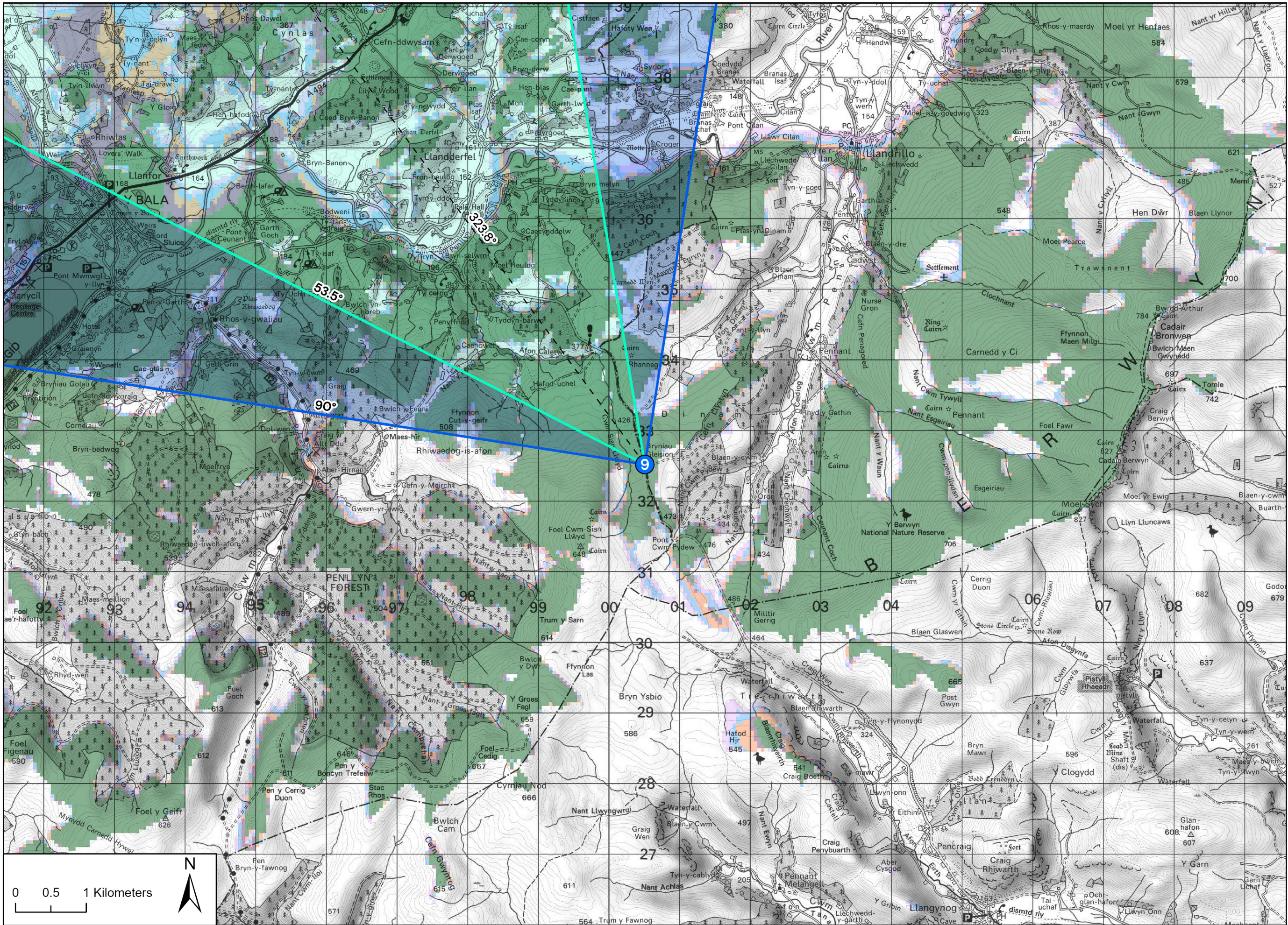
Lit turbines: 1,4,5 and 10





Viewpoint Location Plan - Site Context and Cumulative Wind Farms - Scale 1:150,000

FOEL FACH WIND FARM



Viewpoint Location Plan - Visual Extents and Blade Tip ZTV - Scale 1:50,000

Key

Application Boundary

Turbine Layout

Blade Tip Zone of Theoretical Visibility (Various Heights)

1 to 2 Turbines Visible

3 to 4 Turbines Visible

5 to 6 Turbines Visible

7 to 8 Turbines Visible

9 to 10 Turbines Visible

Wind Farm Status

Operational

Consented / Under Construction

In Planning

Scoping

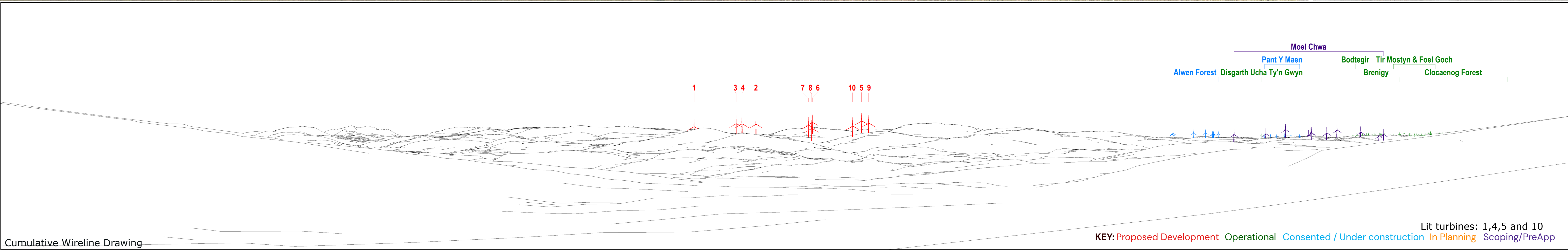
Viewpoint Information

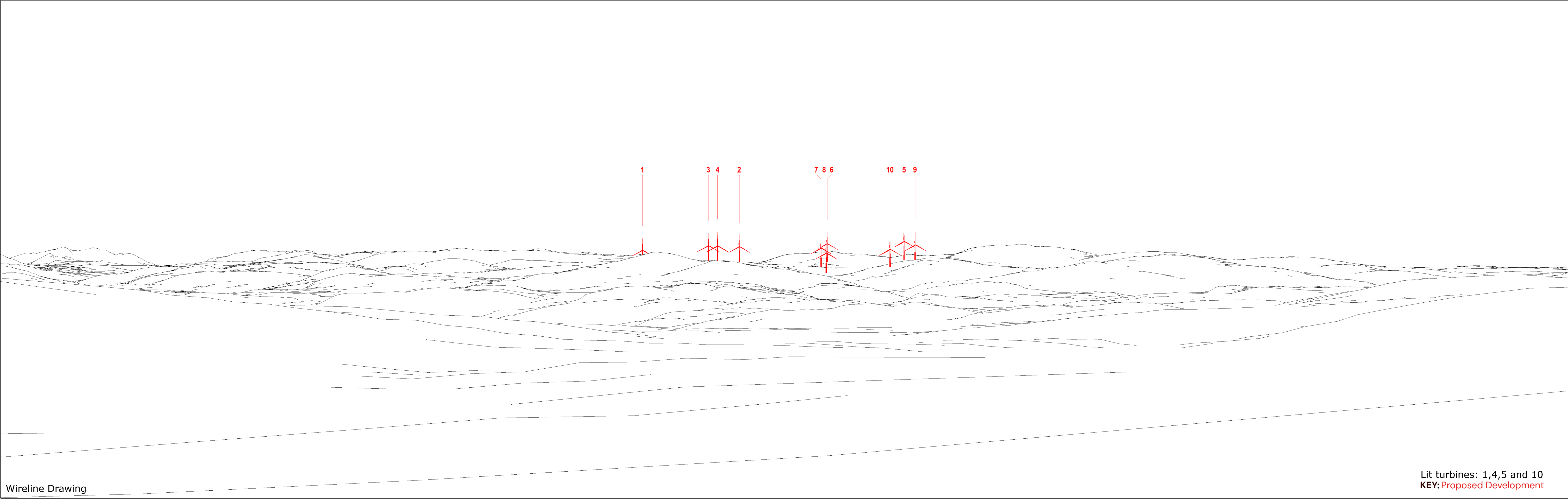
L VIA Viewpoint

Centre of Visualisation (Bearing)

53.5° Field of View

90° Field of View





Wireline Drawing

Lit turbines: 1,4,5 and 10
KEY: Proposed Development



Photomontage

Viewpoint Information

FOEL FACH WIND FARM

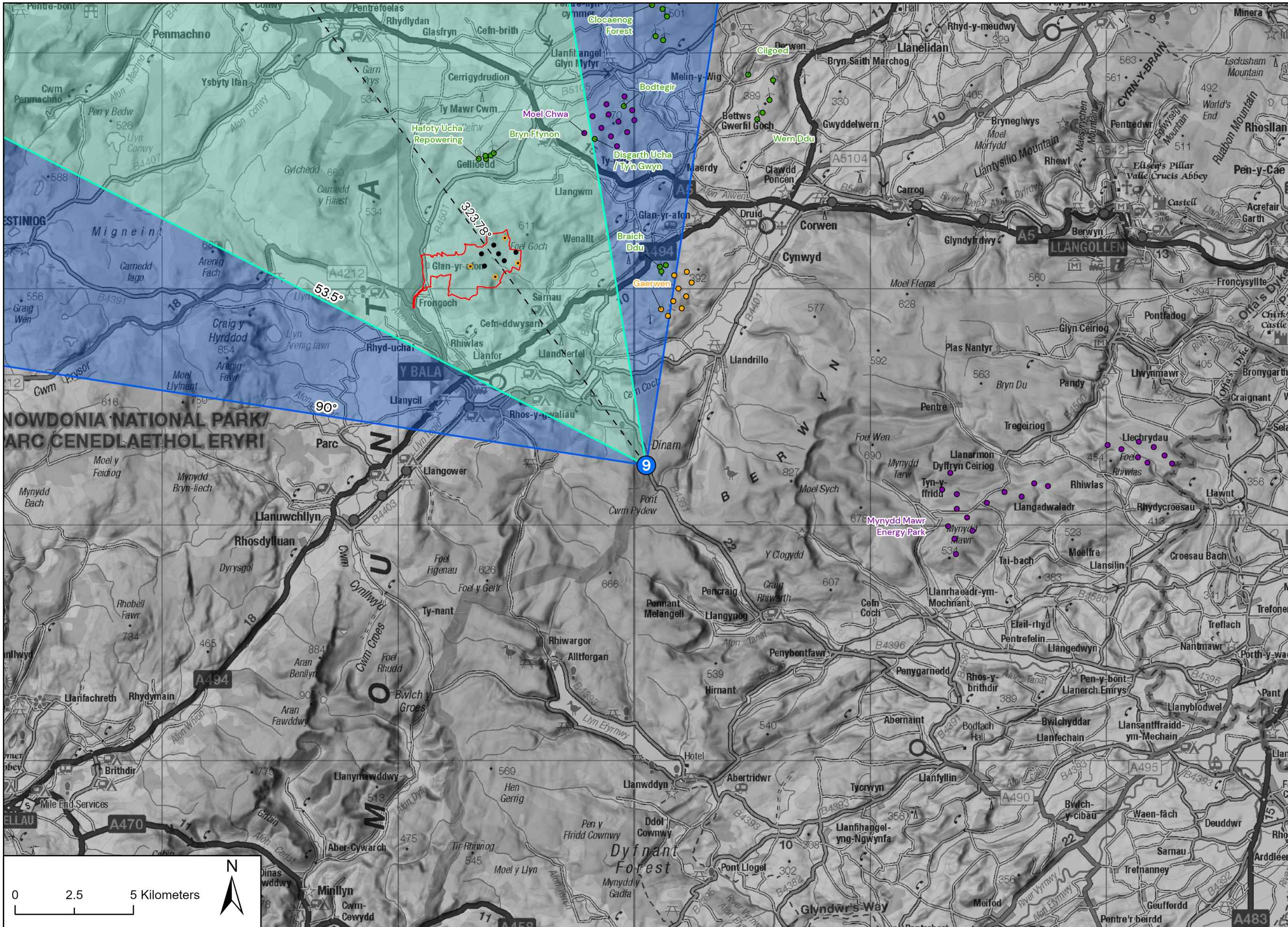
OS Reference: E300509, N332518
Ground level: 454m (AOD)

Distance to nearest turbine: 10153m (T10)
Bearing to centre of photograph: 323.8°

Angle of view: 53.5° (planar)
Principal distance: 812.5mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260mm

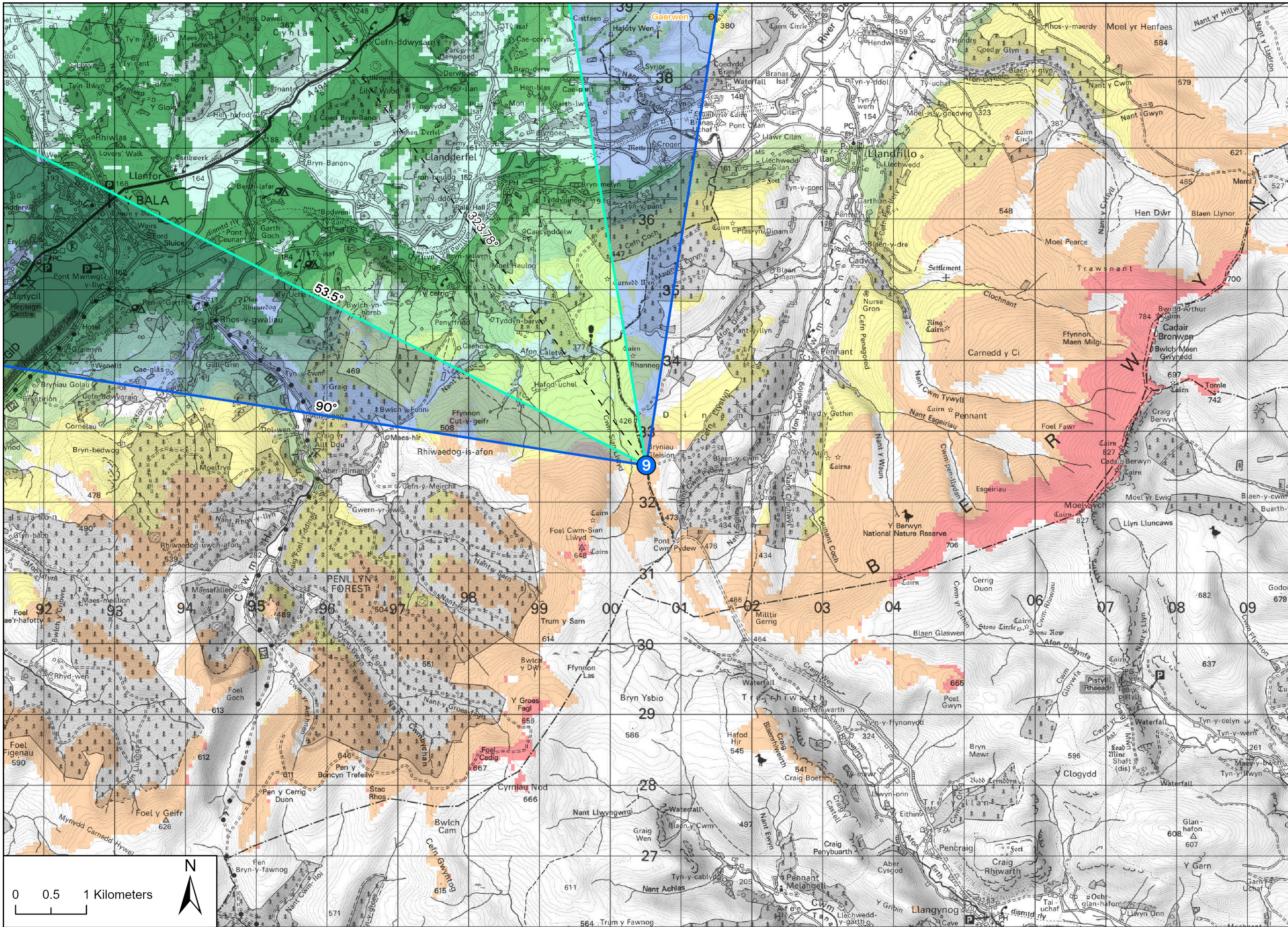
Camera: Canon 5D III, FFS
Lens: 50mm Fixed Focal Lens
Height: 1.5m
Date & Time: 06/08/2024 @ 13:54





Viewpoint Location Plan - Site Context and Cumulative Wind Farms - Scale 1:150,000

FOEL FACH WIND FARM



Viewpoint Location Plan - Visual Extents and Turbine Lighting Intensity ZTV Scale 1:50,000

Key

Application Boundary

- Lit Turbines
- Unlit Turbines

Wind Farm Status

- Operational
- Consented / Under Construction
- In Planning
- Scoping

Viewpoint Information

- L VIA Viewpoint
- Centre of Visualisation (Bearing)
- 53.5° Field of View
- 90° Field of View

Turbine Lighting Intensity ZTV

INTENSITY OF TURBINE LIGHTING SHOWN IN CANDELA [CD]		
VERTICAL ANGLE	2000 CD LIGHT	200 CD LIGHT
3° TO 0°	UP TO 2500 CD	UP TO 250 CD
0° TO -1°	2185 CD TO 982 CD	218 CD TO 98 CD
-1° TO -2°	982 CD TO 413 CD	98 CD TO 41 CD
-2° TO -3°	413 CD TO 217 CD	41 CD TO 21 CD
-3° TO -4°	217 CD TO 172 CD	21 CD TO 17 CD
BELOW -4°	BELOW 172 CD	BELOW 17 CD

NOTES

- A reduced lighting scheme has been agreed with the Civil Aviation Authority (CAA) and it is proposed six of the eight turbines would be lit (T1, T4, T6, T9, T12 and T15).
- The visible turbine lights will be switched on between Evening Civil Twilight and Morning Civil Twilight. Approximately 11 hours per day averaged over the year.
- Civil Aviation Authority SARG Policy Statement (2017) states "If the horizontal meteorological visibility in all directions from every wind turbine generator in a group is more than 5 km, the intensity for the light positioned as close as practicable to the top of the fixed structure required to be fitted to any generator in the wind farm and displayed may be reduced to not less than 10% of the minimum peak intensity."
- The lighting intensity for each of the vertical angles shown in the above table has been provided by Contamex (Light Bulb Manufacturer) and is based on optimal test conditions in a calibration chamber.
- The perception of theoretical candela intensity does not take account of atmospheric attenuation (reduction in brightness over distance).
- The ZTV does not take account of surface features such as buildings or forestry.
- The ZTV has been produced using OS Terrain 5 height data and calculates the difference in vertical angle between the turbine lights and the study area.
- The ZTV represents a reasonable worst case and the theoretical lighting intensity illustrated may be the result of a single turbine within the group.
- Actual visibility is likely to be less than predicted due to a range of other factors considered in Appendix 6.8 of the LIA which include the darkness adaptation of individual receptors and weather obscuration.

Further technical information can be found in Appendix 6.8 Night-time Lighting Assessment Methodology.