



**LEGEND**

- Site Boundary
- Proposed Solar PV Area
- Proposed Solar PV Area 5 km Buffer
- 100m Grid Point

**Zone of Theoretical Visibility:  
No. of 100m Grid Points Visible**

1 - 5	16 - 20	31 - 35
6 - 10	21 - 25	36 - 40
11 - 15	26 - 30	41 - 45

**Note**

This Zone of Theoretical Visibility (ZTV) has been generated using ESRI ArcGIS Spatial Analyst extension. The digital terrain model (DTM) has been derived from OS Terrain 5 dataset (1.5 - 2.5m Root Mean Square Error (RMSE)) up to 5km from solar array. Earth curvature has been included in the ZTV calculation and refraction of light has been applied using SNH guidance settings. The ZTV has been generated from a viewing height of 2m above ground level which falls within recommendations by "Visual Representation of Windfarms" prepared for Scottish Natural Heritage (SNH) February 2017 - Version 2.2.

The use of ZTV mapping at this stage is limited and the following assumptions should be noted:

- The ZTV has been generated using a 100m grid for the maximum proposed solar array within each PV Area at Trecwn.
- A proposed solar array panel height of 3m has been used for generating the ZTV.
- The ZTV is generated from a bare earth terrain and does not account for the screening effect of features within the landscape such as settlements and woodland. It does not indicate potential visual effects or show the likely significance of effects. It shows potential theoretical visibility only. The ZTV has been produced for the purpose of informing 'on the ground' visual assessment.
- The ZTV colour palette has been specifically developed to assist viewers with reduced sensitivity to red, green and blue light.



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**TRECWN GREEN ENERGY HUB**  
**SCOPING REPORT**  
**ZONE OF THEORETICAL VISIBILITY**  
**BARE EARTH: SOLAR PV AREA**

**FIGURE 6.10**  
Scale 1:40,000 @ A3 Date JANUARY 2023