

Information to support planning application for ground mounted solar panels at Trevalyn Wood, Manor Lane, Rossett

Background

This application is for the installation of 7.2kW (DC peak) of solar panels to supply the property at Trevalyn Wood, Rosset.

The solar panels will supply a battery system that will supply at least 80% of the property's annual electricity consumption.

The capacity of this system is close to double a normal domestic roof installation. There are two reasons for this. Firstly, the aim of this system is to be close to self-sufficient. Most domestic installations were installed to take advantage of generous subsidies (that are no longer available) rather than to make the property self-sufficient. Secondly, the property at Trevalyn Wood extends to 7 acres and includes numerous outbuildings, so electricity consumption is more than a standard property.

A traditional roof-mounted solution has been discounted because the property is curtilage listed, and the panels would detract from the views from the neighbouring Trevalyn Hall and associated buildings. Roof-mounted panels would also be inefficient, as the property is not arranged in an east-west orientation and suffers from shading from trees. Even if panels were mounted on the roof, they would not provide enough energy to make the investment worthwhile.

The property does include a large 16th Century barn. Apart from significant visual impact of solar panels on this roof we have no desire to put the timber structure at risk with the additional loading of solar panels.

Proposal

The proposal is to install ground mounted panels in the ideal orientation and free from tree shading towards the edge of a field that forms part of the property.

The image below shows the proposed location. This location has been chosen to be as far as possible from other properties that can see the panels, but without risking trees obscuring the panels. There are also some practical consideration to ensure farm gates and turning circles for tractors are not affected.

The base on the panels will be raised to allow grazing underneath.

The photomontage below shows how the panels will look from the closest property that can see the panels. A high glare has been added to the panels in this image. This glare will only be visible when the sun is low in the sky. At all locations there are trees or hedges between the panels and Chester Road, so this glare will not affect road users.

