

## 1. Developer Information

Company Name G&H Sustainability Ltd

Address Firlands Mill

South Parade Pudsey Leeds LS28 8AD

Contact Andrew Hudson Telephone 0113 255 6433

E-mail andrewhudson@ghsustainability.co.uk

### 2. Site Details

Applicant Birdsall Estates

Address Manor Farm

Village Street Scagglethorpe Malton YO17 8DU

OS Grid Reference SE 83457 72414

## 3. Proposal

To install a 100kWp ground mounted solar PV system in a field belonging to Birdsall Estates. The PV system will be installed in accordance with Birdsall Estates site wide carbon reduction plan. The site will at Manor farm has been selected further to discussions with Northern Power Grid and in consideration of restrictions on the local network. The system will generate electricity and reduce the estate's reliance on fossil fuels and the carbon emissions. The system will be connected to a building within the new housing development and the energy generated will benefit both the immediate and wider properties. The estimated annual electricity generation from the ground mounted PV system is 90,400 kWh which equates to a carbon saving of circa 47 tones. The energy generated will be used for the electricity needed for the building to which the system is connected and export to the National Grid. The proposal will therefore contribute towards the regional targets for renewable energy generation. Cables from the array to the farm will be laid in an underground duct so will not be seen.

# 4. Layout

There will be ten ground mounted structures with a combined total of 400 panels.

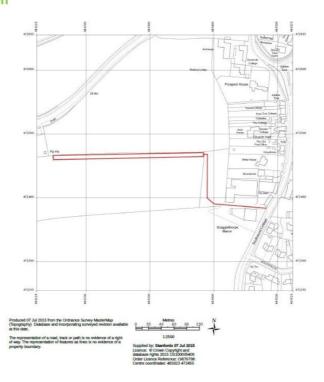
Each ground mount array will consist of 10 blocks of 40 panels; these will be laid out in rows one beside another running east to west with the panel orientation due south.

For scaled elevation drawings of the ground mount development, please see the submitted side and front elevation drawings and bird's eye view layout plan.





# 5. Site Location



OS Map showing the site. The red rectangle shows the approximate area of the ground mounted system.



Aerial photo of Manor Farm. The blue areas are the proposed locations of the panels.

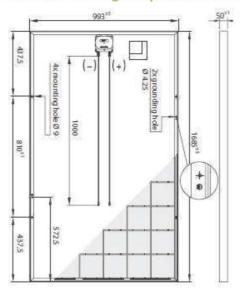


# 6. PV System Details

Panel manufacturer
Panel model
PV system generation capacity
Number of panels
Type of mounting
Panel dimensions
Panel weight

Winaico WST 250P 100kWp 400 Ground mounted 1650mm x 993mm Approx 20kg

# 7. Technical Drawing and picture of the Schott 240 Solar Panel





# 8. Technical Details:

### Foundation

Each array will be driven into the ground with a screw

#### Cabling

The PV system is connected to the building power supply at the main fuse box via an electrical cable.

#### Colour

As is evident from the picture below the photovoltaic panel has dark blue cells encased in an aluminum frame.

Please see the submitted Schott data sheet for more information on the Solar Panels.



# **Mounting System**

The panels will be ground mounted on a free standing custom built structure. Below are some photographs of installation of previous ground mounted PV systems. Each individual structure will look similar to the photos below.



Photos of an installed 20kW ground mounted PV system.



Photo of an installed 30kW ground mounted PV system.

Please see the submitted layout drawings that shows the dimensions of each ground mounted structure.



# 9. Visual Impact

## 9.1 Photomontages

The photographs below have been taken from the site of the proposed ground mount PV structure and illustrate the character of the landscape and its immediate surroundings.



Looking North



Looking South



Looking East



Looking South

The proposed PV system is to be located adjacent to a boundary hedge. The ground mounted PV system will be surrounded by a boundary of thick hedgerows from the North, West and East; to the south is an open agricultural field. The array is set back over 250m from the main road and therefore will not cause a visual distraction from the road.

Further, the PV system is not located in close proximity to neighboring residences. As the PV system will be installed on a freestanding ground mounted structure, it will not affect the character of the property as it will not be attached to any existing building. It is important to note that the system will not be a permanent fixture, as the panels and the freestanding ground mount structure can be easily removed and dismantled at the end of its life span.



## 10. Planning Policy

## 10.1 National Policy

### National Planning Policy Framework - March 2012

#### Paragraph 94 states that:

'Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations'.

**Paragraph 97** outlines how local planning authorities should determine planning applications for renewable energy. To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

- have a positive strategy to promote energy from renewable and low carbon sources;
- design their policies to maximise renewable and low carbon energy development while ensuring
  that adverse impacts are addressed satisfactorily, including cumulative landscape and visual
  impacts:
- consider identifying suitable areas for renewable and low carbon energy sources, and supporting
  infrastructure, where this would help secure the development of such sources;
- support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighborhood planning;
- Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Paragraph 98 states that when determining planning applications, local planning authorities should:

- not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and
- Approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

## 10.2 Regional Policy

# **Local Plan Strategy**

## Section 7.32 states that

'In order to assist in the decarbonisation of the UK's electricity and heat supply Ryedale will realise its potential for renewable and low carbon energy sources (both electricity and heat)'

## Paragraph 7.37 states that

It is important to recognize and support the contribution of community-led and farm-scale renewable and low carbon solutions. Small scale Small scale wind turbines, anaerobic digestion, biomass boilers and other forms of energy and heat generation, (notably solar power, hydro-electricity, ground and air-source heat pumps) will be supported in principle



#### 11. Access

Access will be via the applicant's own property. No permanent roads will need to be constructed for the works as the erection of the ground mounted PV system will be the only occasion heavy vehicles will need to access the site.

Excavations for the foundation and cable trenches will be carried out by small, tracked mini-digger. All excavations, protection, cable laying, builders work, holes through existing walls etc. will be carried out in accordance with relevant health and safety requirements and good construction practice and the safe use of tools and equipment. Care will be taken to ensure that tree roots are not interfered with. If roots are encountered then hand dig techniques will be used to ensure they are not damaged and that the viability of the hedgerow and trees are protected.

#### 12. Conclusion

The site for the ground mounted PV system has been carefully chosen to ensure that the structures can be absorbed by the local landscape. Where distinguishable from close vantage points on the public and private right of ways the visual effects of the PV system have been minimised through appropriate siting and design, and are outweighed by the economic, social and environmental benefits of the proposal outlined above.

### 13. Additional Information

The information contained within this application provides a comprehensive assessment of the landscape, visual effects and other aspects of the proposed development. It also provides details of the specific environmental, economic and social benefits that arise from this renewable energy project. As such it provides the necessary objective criteria based information for the planning authority to address the key Development control issues and to determine the application.

However the applicant recognises that notwithstanding the contents of this submission, local politicians and stakeholders may have questions or may require further information. The applicant (and representatives) is prepared to meet with politicians and stakeholders to provide any further information and in order to address any subjective concerns as part of the planning application determining process. Should the planning authority be minded to refuse the application based on any such concerns, then the applicant would wish to have the opportunity to provide further information, to modify the application, submit to relevant conditions or negotiate a developer obligation before a refusal was issued.