

Design & Access and Planning Supporting Statement On behalf of Beba Energy and J & A Smales

Proposed 996.30 kWp ground mounted solar panels at Manor Farm, Burton Pidsea, Hull, HU12 9DJ

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> > March 2022

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For and on behalf of Brown & Co.

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Date: March 2022



1. INTRODUCTION

- 1.1 This Design & Access and Planning Statement has been prepared by Brown & Co to support a full planning application submitted on behalf of Beba Energy and J A Smales for the installation of 996.30 kWp ground mounted solar panels at Manor Farm, Burton Pidsea, Hull.
- 1.2 The purpose of this statement is to set out the background to the applicant's proposals and the key planning issues raised by them. The statement is structured as shown below:
 - **Section 1**: introduction;
 - Section 2: describes the physical characteristics of the site and its surroundings;
 - Section 3: outlines the proposed development;
 - **Section 4**: site history;
 - Section 5: summarises the relevant national and local planning policy context;
 - **Section 6:** provides a planning assessment of the key considerations raised by the proposal;
 - Section 7: Design & Access considerations; and
 - Section 7: sets out in brief our overall conclusions on the proposal.
- **1.3** This statement should be read in conjunction with the following application documents submitted as part of the outline application:
 - Planning application forms;
 - Site Location Plan (red line plan);
 - Block Plan (equipment layout)
 - PV layout
 - Side elevations;
 - Detailed PV layout;
 - Front and rear elevations; and
 - Cable and trench cross section.

2. SITE & SURROUNDINGS

2.1 The proposed development site comprises of an area of arable land, which is part of a 10 acre field opposite Manor Farm. Manor Farm is a 1000 acre farm ran by J & A Smales, who farm over 5000 acres, with 2000 acres being owned within the East Riding. Manor Farm grows, dries and processes grass and lucerne into pellets for the horse industry. There are several dwellings associated with Manor Farm, including Manor Farmhouse, a Grade II listed building to the north east of the application site. The application site is bounded by hedges along all boundaries. There are two access points into the field, with the southernmost access proposed to be used to install and maintain the panels.





Figure 1: looking east across the application site towards Manor Farm



Figure 2: Manor Farm and Manor Farmhouse seen from the application site

2.2 The application site is located around 600m from the southern edge of Burton Pidsea, accessed from Carr Road, which is not a through road and only serves a small number of dwellings and small farms. The site is surrounded by arable land with sporadic dwellings and farms in the vicinity. There are three wind turbines to the south west of the application site, which are not associated with Manor Farm.





Figure 3: Application site with nearby turbines seen in context with the site

2.3 There is an area of tree planting to the north of the application site. Within this area there is a non-designated heritage asset known as 'mill clump' which is shown on historic maps (see Heritage Statement).

3. PROPOSED DEVELOPMENT

3.1 The applicants are proposing to install a 996.30 kWp ground mounted solar PV array to provide renewable energy for Manor Farm. It will consist of 2,214 no. individual modules over a double mounted solar array, consisting of four rows of free-standing panels. The panels will be angled at 23 degrees, facing south with the maximum height 2.29m above ground level. The panels will be 0.6m from ground level at the lowest point. The rows will be 7m apart from the end of one panel to the start of the next row, with the posts being 10.78m apart. The panels will be constructed via the existing access into the site.





Figure 4: Existing substation at Manor Farm

- 3.2 The proposed development will be used to produce renewable energy by converting solar radiation to electrical energy which will be used on site to provide electrical power to Manor Farm. The electricity bill for the farm is around £30,000 per month, before the increase in electricity prices. Heat for the farm is generated by biomass from woodchip and straw produced on the farm. There is 100kW solar panels on one of the buildings which was installed in 2014. The proposal would seek to reduce carbon and be fully sustainable.
- 3.3 The main income of the farm is from the production of pellets for the horse industry. Grass and lucerne are dried and pressed into pellets, with the pelleting being an electricity intensive process. It is intended to maximise this process within daylight hours to maximise the use of the solar panels and therefore significantly reducing the need for grid electricity and minimising the use of carbon and fossil fuels.

4. SITE HISTORY

4.1 There is significant planning history relating to Manor Farm, however there is no planning history on the application site itself. The following history is considered relevant to this proposal as they relate to renewable energy applications and applications for wind turbines which were withdrawn.



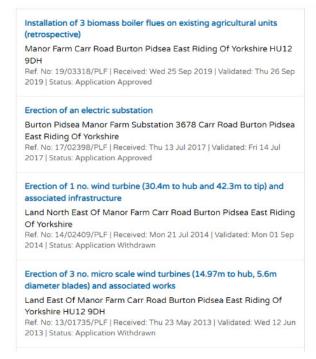


Figure 5: Site history relating to energy

5. PLANNING POLICY CONTEXT

- 5.1 Planning law requires that planning applications are determined in accordance with the development plan unless material considerations indicate otherwise. The development plan is, therefore, the starting point for the assessment of all planning proposals. Development plan policies of particular relevance to this application are summarised below.
- 5.2 The Government's planning policies, as set out in the National Planning Policy Framework (NPPF) and the National Planning Practice Guidance (NPPG), are also a significant material consideration in deciding planning applications. National planning policies of particular relevance to this application are summarised below.

Development Plan Policies -

- 5.3 Policy S2 Addressing climate change states that The Local Plan and development decisions will support a reduction in greenhouse gas emissions and adaptation to the expected impacts of climate change.
- 5.4 Policy ENV1 Integrating high quality design states that all development proposals will: 1. Contribute to the safeguarding and respecting the diverse character and appearance of the area through their design, layout, construction and use; and 1. Seek to reduce carbon emissions and make prudent and efficient use of natural resources, particularly land, energy and water.

- 5.5 Policies ENV3 Valuing our heritage and EC6 Protecting mineral resources are also considered relevant.
- 5.6 ERYC has declared a Climate emergency and the Climate Change Review Panel Report published 2021. This document states 'although farming has historically been centred on food production, it is increasingly being recognised as an important tool in reducing climate change'. 'The National Farmers Union have set a goal for the farming industry to be net carbon zero by 2040'. The document also states 'The Council works in partnership with local growers to help them utilise more sources of renewable energy such as wind turbines and solar power. The Council employs a sympathetic stance on planning for schemes that incorporated renewable energy sources'.

National Planning Policy Framework

- 5.7 The NPPF sets out the Government's planning policies and how these are expected to be applied and advises that the purpose of the planning system is to contribute to the achievement of sustainable development. Three objectives s of sustainable development are identified: economic, social and environmental.
- 5.8 Economic considerations include ensuring that sufficient land of the right type is available in the right places and at the right time to support growth. Social considerations include supporting healthy communities by creating high quality environments with accessible local services. Environmental considerations include protecting and enhancing the natural, built and historic environments.
- 5.9 At the heart of the NPPF is a presumption in favour of sustainable development. For decision-taking, the presumption in favour means approving developments that accord with the development plan without delay, and where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:
 - the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
 - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.
- 5.10 The NPPF establishes a series of core planning principles which include that planning should proactively drive and support sustainable development to deliver new homes, business units, infrastructure and thriving local places. To this end, every effort should be made to identify and meet the housing, business and other development needs of an area and to respond positively to wider opportunities for growth.

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5.11 Other core principles of particular note in relation to the development proposed include Section 2 of the current NPPF which sets out the purpose of the planning system to contribute to the achievement of sustainable development. Sustainability is summarised as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

The NPPF outlines the three mutually supportive objectives of sustainability as being economic, social and environmental, and emphasises that the presumption in favour of sustainable development lies at the heart of the Framework.

- 5.12 Paragraph 152 states that the planning system should 'support the transition to a low carbon future in a changing climate'.
- 5.13 Chapter 14 addresses the need of the planning system to support the transition to a low carbon future and supporting renewable and low carbon energy and associated infrastructure.' Within chapter 14, Section 156 states that local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.
- 5.14 Section 15 also states that in determining planning applications, local planning authorities should expect new development to: a) comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and b) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption. Additionally, section 158 states that when determining planning applications for renewable and low carbon development, local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions.

National Planning Practice Guidance

- 5.15 The Government's Planning Practice Guidance provides a web-based resource of national planning guidance covering a wide range of topics. Of particular relevance to this application is the guidance set in the sections of the NPPG relating to Active solar technology, (photovoltaic and solar water heating) on or related to a particular building is often permitted development (which does not require a planning application) provided the installation is not of an unusual design, or does not involve a listed building, and is not in a designated area. Where a planning application is required, factors to bear in mind include:
 - the importance of siting systems in situations where they can collect the most energy from the sun;

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- need for sufficient area of solar modules to produce the required energy output from the system;
- the effect on a protected area such as an Area of Outstanding Natural Beauty or other designated areas; and
- the colour and appearance of the modules, particularly if not a standard design.

6. ASSESSMENT

- 6.1 The proposed application is for a 996kWp free-standing solar array on land at Manor Farm. Solar panels will convert solar radiation into electrical energy which will help to power the commercial property and significantly reduce CO2 emissions. Any excess energy which may be produced by the installation will be exported to the national grid for off-site network use.
- 6.2 In February 2021, East Riding of Yorkshire Council made a declaration of a climate emergency after councillors voted to adopt 12 recommendations following an extensive examination into how its policies and practices impact on climate change and the environment. This application will significantly reduce the amount of carbon based electricity required by Manor Farm, which currently uses a vast amount of electricity in their daily operations with current monthly electricity bills around £30,000 per month, prior to the increase in energy prices.
- 6.3 The proposed installation will have the following benefits:
 - Reduce the operational cost of the business for the applicant by generating electricity on site from a renewable source;
 - Will protect the applicant from future energy price increases;
 - Will reduce the applicants, the local communities and the nation's reliance on electricity produced from fossil fuels, aiding the economy and benefiting the environment; and
 - There will be a significant CO2 reduction per annum for the 25 year life span of the panels.

Flood Risk

6.4 The proposed development site is located in Flood Zone 1 as shown on the flood map for planning produced by the Environment Agency. As this is a major application, a FRA has been submitted as a separate document.

Biodiversity

6.5 The site is currently arable land, with historic maps showing the site has always been in arable use. There are not expected to be any protected species on or close to the site and it is not considered that this type of development would have a significant adverse impact on biodiversity. The land underneath and around the solar panels can be grassed for sheep to graze, or can be sown with wildflower seeds to improve biodiversity.



Impact on adjacent land users

6.6 The site is located outside of the main body of the village, served by Carr Road. Carr Road is not a through road and serves only a small number of dwellings and small farms. There is a residential property located just over 100m of the application site, which is not associated with Manor Farm. Manor Farmhouse and the main farm complex are located to the north east of the application site and a bungalow to the south east which is associated with the farm. The field which the application site forms part of is bounded by hedges, which will provide significant screening from the nearby properties and from the road. Further planting can be carried out if this is required. It is not considered that the proposal would have any adverse impact on adjacent land users.

Heritage and Archaeology

- 6.7 The site is located diagonally opposite Manor Farmhouse, which is a Grade II listed building, and is the main dwelling associated with the farm. There is also a listed building, a pigeon house, located within the farmyard. These building have been altered and extended over the years, with the pigeon house being joined by a concrete and steel agricultural building. More details on the listed buildings and the impact of the proposal on it, can be found in the submitted Heritage Statement.
- 6.8 There is a non-designated heritage asset known as 'mill clump' located to the north west of the application site. This is not affected by the proposal, however this is covered in more detail in the Heritage Statement.

Decommissioning

6.9 The expected operational life span of the proposed solar installation is 25 years. If required by the Local Planning Authority, a standard condition can be attached to any planning approval, which requires decommissioning, and land restored to the previous condition after the lifetime of the development.

Mineral Safeguarding

6.10 The application site is located close to a mineral safeguarding area, which is around 'mill clump'. Policy EC6 states that 'within or adjacent to Mineral Safeguarding Areas, non-mineral development, which would adversely affect the viability of exploiting the underlying or adjacent deposit in the future, will only be supported where it can be demonstrated that the...3. Non-mineral development can take place without preventing the mineral resource from being extracted in the future; 4. Non-mineral development is temporary in nature'. As this application is for a temporary development which can be re-sited if extraction was required, it is not considered that the proposal would have an adverse impact on mineral safeguarding.



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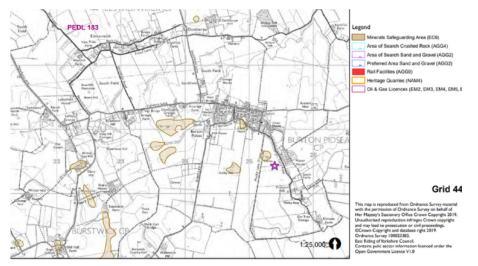


Figure 6: Mineral Safeguarding map

Policy Compliance

- 6.11 It is considered that the low-carbon proposal is an environmentally and economically sustainable proposal. East Riding planning policy and the climate emergency documents are supportive of proposals for renewable energy and acknowledge that renewable energy is required in agriculture. The application site is well screened and is not located within a sensitive landscape. The smallest field, which is awkward to farm and is relatively uneconomic, has been identified as the best location for the proposal. This is also the most direct point for connection to the substation. The proposal would have a neutral visual impact on its location and the character of the area. It can be described as development which meets the needs of the present without compromising the ability of future generations to meet their own needs and would make a valuable contribution to cutting greenhouse gas emissions.
- 6.12 The proposed array has been sited to maximise collected energy from the sun. The proposed panels are relatively well screened by existing hedges and are in a relatively remote location. The panels have a non-reflective coating and dull metal framework, which will not be incongruous within this setting.
- 6.13 This application fits well with local planning policy and the NPPF. As the application is for a relatively small installation to provide an additional solar supply to an existing business, rather than a large commercial solar farm, and will be relatively well screened, it is not considered that the proposal would have any adverse visual impact on the landscape, impact on ecology or any heritage assets.



7. DESIGN & ACCESS CONSIDERATIONS

Use

7.1 This application is for a 996.3kWp solar array to provide renewable electricity to Manor Farm, which will significantly reduce their need for carbon generated fuel.

Amount

7.2 The proposed scheme will require the installation of 2,214 individual panels over four double rows. Each panel will generate 450W giving a total output of 996.3kWp.

Layout

7.3 The proposed layout of panels is four long horizontal rows which extend the full width of the field and account for approximately one third of the depth. Initial discussions were held with BeBa Energy regarding the possible layout. These discussions were for a smaller scheme with two layout options as shown below. It was considered that the linear layout would have less visual impact and less impact on the listed buildings and non-designated heritage assets than the other option.



Figure 7: Option 1 for layout



Figure 8: Option 2 for layout





Scale

7.4 The proposed solar panels will be accommodated over four rows. The northern most row will measure 294.7m in length and the southern most row 314.3m. The panels will be double mounted with each panel measuring 2.12m deep, taking each row to 4.24m depth. The panels will be angled at 23 degrees and raised 0.6m off ground level at the lowest part to 2.29m at the highest part. The panels will be separated at a distance of 7m from the base of one panel to the top of the next row, with a distance of 10.78m between the legs of the panels.

Appearance

7.5 The proposed solar panels are of a standard appearance as per the example photograph below. The panels have a non-reflective coating and a dull metal frame to reduce glare and maximise efficiency.



Figure 9: Free-standing solar panels, similar to those proposed

Landscaping

7.6 There are existing boundary hedges to all field boundaries that are to be retained and maintained by the applicant, and if any further planting or landscaping is required, the applicant will be happy to do this.

Access

7.7 The field to which the solar panels will be installed has two existing access points, with the southernmost access over an existing ditch, into the part of the field where the panels are proposed. This gives a direct access between the solar panels and the farmyard, therefore requiring minimal cabling.





Figure 10: Edge of access track over ditch. Existing substation can be seen (green building to right hand side)



Figure 11: Existing access onto Carr Road

8. CONCLUSIONS

8.1 This document has sought to provide a detailed explanation of the proposed development project whilst addressing the relevant guidance, issues arising and policy surrounding the development.



- 8.2 The main purpose for the development is to provide energy to the agricultural buildings and to reduce reliance on the national energy supply. Any excess energy will be exported to the national grid distribution network for use off-site.
- 8.3 National and local plan policy offers clear support to renewable energy production proposals, including small scale schemes to power existing business developments such as the proposal within this application. This application is considered as sustainable development, meeting the NPPFs main aim of therefore being a presumption in favour of sustainable development.
- 8.4 As a result of this development there will be no significant or irreversible impacts on ecology, local amenity, heritage or permanent loss of agricultural land, and the proposal therefore adheres to local and national planning policy.

