



## **Proposal**

### **100kWp Solar Photovoltaic (PV) Arrays**

Bernard Matthews Ltd  
New Rivergate Farm  
Holbeach Drove  
Spalding  
Lincs  
PE12 0RY

## **DESIGN AND ACCESS STATEMENT**

Version 1.0 January 2015

RenEnergy, Woodbastwick Road, Blofield Heath, Norwich, NR13 4RR

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## 1. Introduction

- 1.1. This Design and Access Statement has been prepared to accompany the planning application for a renewable energy generation project at Bernard Matthews Holbeach St Johns poultry farm. The project comprises ground mounted photovoltaic (PV) arrays, to generate electricity for use on site with any additional generation exported to the national grid.
- 1.2. This document highlights the UK and European guidelines on renewable energy, addresses national and local validation requirements, describes the proposed installation and gives a contextual background to the proposed site.
- 1.3. It has been written to ensure that the Local Planning Authority has a proper understanding of the proposal and the local community are fully and accurately informed of the application.

## 2. The Applicant

- 2.1. The applicant is:

RenEnergy  
Woodbastwick Rd  
Blofield Heath  
Norwich  
Norfolk  
NR13 4RR

- 2.2. RenEnergy are a Norfolk based renewables specialist, working with homeowners, farmers, landowners, contractors, consultants and architects in the private, public and construction sectors to deliver a wide range of renewable energy solutions. RenEnergy provides a full service from initial feasibility and design through to installation, commissioning and maintenance.

- 2.3. This planning application is being made on behalf of:

Bernard Matthews Ltd  
Great Witchingham Hall  
Great Witchingham  
Norfolk  
NR9 5QD

- 2.4. For over 60 years Bernard Matthews been focused on growing and developing a business with turkey at its heart. In doing so they have become a major farmer, food producer, employer and contributor to the UK economy.
- 2.5. As a large farming and manufacturing business, Bernard Matthews recognises it has a role to play in helping manage climate change. Bernard Matthews has clear goals within their Corporate Responsibility strategy to help maintain and protect our environment. Bernard Matthews are

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committed to managing their carbon footprint and reducing their energy usage to achieve carbon neutral status by 2020. By investing in and supporting renewables initiatives, they hope to help create a sustainable future for the environment and the local community.

### **3. Context and Objective**

- 3.1. Planning permission is sought to install photovoltaic panel arrays on a poultry breeding farm to generate renewable electricity. This electricity will be used by Bernard Matthews as part of their farming and food production operations. Any excess power will be used by other grid connected properties.
- 3.2. This proposed PV installation project is the next step for Bernard Matthews to further reduce their carbon footprint and energy spend. There are increasing pressures on businesses to reduce their carbon emissions, especially within the food production chain. By installing solar PV at New Rivergate Farm, Bernard Matthews are ensuring their own carbon use is dramatically reduced.
- 3.3. The need for an increase in energy from renewable sources is formally recognised across local, national and international contexts. Moves toward these targets have to be taken seriously by councils, businesses and homeowners alike.

### **4. Project Overview**

- 4.1. This project totals 100kWp of PV, situated in on a grassed area to the north of the farm site. This area is currently a maintained area of grass, which serves no function to the farm. There are trees surrounding the area, precluding long ranging views of the site.
- 4.2. Due to the sensitive nature of poultry breeding, it is not appropriate to install solar panels on the roofs of these sheds and as such this area at the north of the site has been identified as the ideal location for solar PV. It is flat, south facing, can be well screened from the road by a hedge and is not visible from any public rights of way. It is not overlooked by any domestic properties.
- 4.3. There is a suitable connection point on the site, and permission has been obtained from Western Power Distribution to connect the solar PV. The solar PV has been sized to ensure that Bernard Matthews get the maximum use of the generated power.
- 4.4. The solar PV will be comprised of 1 row of 400 panels.

## 5. Application Site

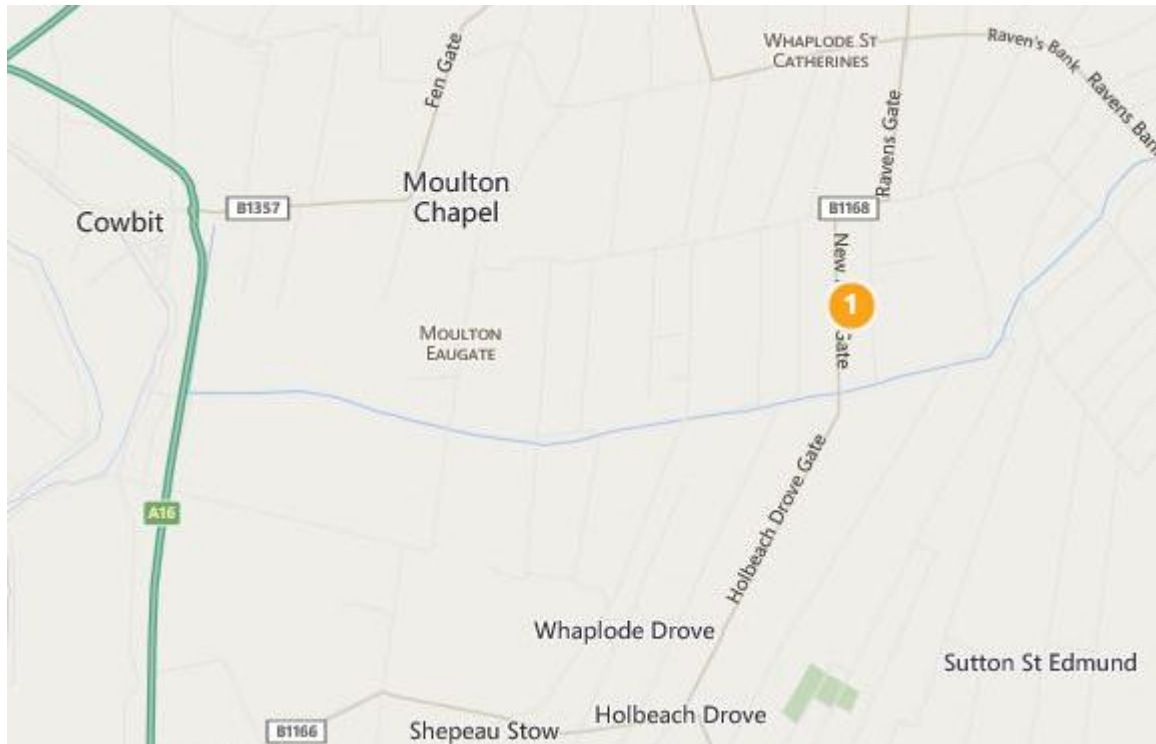


Fig 1. Site Location Map. Site location marked with number 1. ©Microsoft Corporation 2014



Fig.2 – Site overview. Yellow boxes show approximate array location. Aerial Image taken from Bing Maps

5.1. Bernard Matthews Holbeach site is approximately 11 miles south east of Spalding, 6 miles to the east of the A16 at Cowbit. The site is surrounded by arable land, with no other properties within viewing distance.

5.2. The address of the site is:

Bernard Matthews  
New Rivergate Farm  
Holbeach Drove  
Spalding  
Lincs  
PE12 0RY

5.3. The farm comprises eight (8) turkey rearing sheds. A number of small auxiliary buildings, including an office and shower block, and LPG tanks are also on the site. A domestic property, owned by the site and occupied by site staff is at the south of the farm. The site is gated, with strict biosecurity measures limiting access to the whole area.

5.4. There is a track around the site and between the sheds for access, with a grassed area to the rear (east) of the farm.

5.5. A tree line has been planted to screen the sheds from the outlying areas, and the solar PV site would be to the north of this, on an unused strip of land.

5.6. The proposal area is a strip of land to the north of the farm, which is separated by a tree line. This site is visible from the road, and a new native hedge, matching that to either side, is proposed to screen this area.

5.7. The site is access off the B1168, New River Gate, which is suitable for large vehicles. The site is already serviced for regular LPG, feed, and livestock deliveries and collections. The farm has its own entrance and driveway. The site is kept locked and is subject to strict biosecurity measures. There is adequate space on site for parking and vehicle movements.

## 6. Design

6.1. The photovoltaic modules and mounting frames used will measure 1640mm x 992mm and have a face depth of 40mm. The modules have a blue/black finish of glass over silicon which is light absorbing and will have a silver surround.

6.2. The modules will be mounted on an east-west axis frame and pitched at an angle of 30°. The panels will be mounted two high in portrait orientation. (refer to drawing 10362-P02).

6.3. The mounting frames are made from galvanised steel and aluminium. The frame is a 'single leg' system, with a support post pile driven into the ground to a depth of 1,157mm every 3000mm along

the east-west axis. The frames stand 2,250mm high. This frame is bespoke and manufactured in Norfolk.

- 6.4. The inverters for the installation will be outdoor suitable and mounted to the underside of the array. This type of mounting prevents the need for further buildings or the creation of hard standing.
- 6.5. A new buried cable will be laid to connect the solar PV to the electrical connection point. This will be contained wholly within the site boundary.
- 6.6. Some further electrical components and infrastructure will be needed to connect the array to the local distribution network. These materials will be housed in an enclosure mounted on the array (see Fig. 3 below).



Fig. 3 Example of frame mounted enclosure and inverter

- 6.7. This array is wholly temporary and it can be completely removed once the photovoltaic modules have reached the end of their efficiency, leaving no trace on the land.

### **Access**

- 6.8. There is no additional or new access required or proposed for the installation.
- 6.9. Adequate parking for installation teams exists on site. In most cases, they will use long wheel based vans to access site, with 2 to 4 vehicle movements per day. There will be a maximum of three HGV deliveries during the installation phase of the project.
- 6.10. The installation is expected to take no more than three weeks, following which the site will be fully operational. When operational, visits to the site will be on an annual basis, with any further visits on an ad-hoc basis as necessary for maintenance.

## 7. Impacts

### Biodiversity

- 7.1. This installation will not impact on any protected or priority species, nor will it affect recognised habitats. The land proposed to be used is a maintained lawn, and will continue to be so following the installation of the solar PV. The ground penetration of the piles is less than 5% of the total array area.
- 7.2. It is the view of the applicant and of RenEnergy that a formal biodiversity report is not required for this site.

### Lighting

- 7.3. No permanent visible spectrum lighting is to be installed as part of this proposal.

### Waste and Refuse

- 7.4. Wherever possible the design minimises wastage of materials. Where this is not possible, all materials that are re-useable will be retained by RenEnergy to be used in other photovoltaic installations. It is envisaged that 80% of materials which would otherwise be wasted are reused in this way. The main waste outputs will be cardboard and wood packaging which will be recycled in accordance with the RenEnergy Site Waste Management Policy which has been designed to meet DEFRA guidelines.

## 8. Flood Risk

- 8.1. This development is situated in Flood Zone 3, as defined by the Environment Agency flood map for planning.
- 8.2. Flood Risk Zone 3 is defined within the National Planning Policy Framework Planning Practice Guide document as follows:

### ***Zone 3a – High Probability***

#### ***Definition***

*Land having a 1 in 100 or greater annual probability of river flooding; or  
Land having a 1 in 200 or greater annual probability of sea flooding.  
(Land shown in dark blue on the Flood Map)*

- 8.3. This proposal is comprised of equipment which does not add to the risk or exacerbate the effects of a flood. Rain water is able to run over, through and behind the photovoltaic modules into existing gutters and watercourses.
- 8.4. All electrical equipment is kept off the ground, to ensure that if any flooding does occur to the area, the development is not affected.
- 8.5. This proposed solar PV installation is 420m<sup>2</sup>, with less than 5% of this area penetrating the ground. The installation does not comprise any inhabitants and would not be considered “major development”. By applying the Planning Practice Guidance, we conclude that despite being in Flood Risk Zone 3, the nature of this development is acceptable.

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## 9. Planning Policy and NPPF

### National

- 9.1. The need for an increase in energy from renewable sources, thereby reducing carbon emissions is formally recognised across local, national and international contexts. Moves toward these targets have to be taken seriously by councils, businesses and homeowners alike.
- 9.2. The 2009 EU Renewable Energy Directive sets a binding target of achieving 20% of the EU's energy consumption from renewable energy sources by 2020. The UK share of this EU target commits the UK to sourcing 15% of UK energy from renewable sources by 2020.
- 9.3. The Renewable Energy Strategy (RES) and Low Carbon Transition Plan sets out the vision for the UK for the switch towards a low carbon economy and society. By 2020 the UK should be firmly on the way to an 80% reduction in carbon emissions by 2050. Renewable energy from wind, water, sun and sustainable biomass will play a crucial part in making this happen. The RES recommends that over 30% of electricity come from renewable sources.
- 9.4. Paragraph 98 of the National Planning Policy Framework, published in April 2012, states that "local authorities should not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy".

### Local

- 9.5. This installation lies within South Holland District Council. The council has a local plan which has been in place since 2006.
- 9.6. The local plan has several policies which offer support of this scheme, particularly SG7 – Energy Efficiency and EN3 – Renewable Energy.

#### **Policy SG7 - Energy Efficiency**

*Development proposals will be encouraged where they are designed to provide maximum energy efficiency, through site layout and orientation, through the layout and design of individual buildings, including maximizing solar gain especially for residential buildings, and where they make full practical use of energy from renewable resources.*

*All development with a floor space of 1000 sq. m. or more, or 10 or more residential units, will be required to demonstrate good practice in energy efficiency and to incorporate renewable energy production equipment to provide at least 10% of its predicted energy requirements.*

#### **Policy EN3 - Renewable Energy**

*Proposals for the development of renewable energy schemes will be permitted in locations where environmental, economic and social impacts can be addressed satisfactorily. In assessing proposals for renewable energy schemes, the Council will have particular regard to the following issues:*

- 1) *The immediate and wider impact of the proposed development on the landscape.*

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2) *The need to protect features and areas of natural, cultural, historical and archaeological interest*

3) *The measures that would be taken, both during and after construction, to minimise the impact of the development on local land use and residential amenity.*

4) *The cumulative effect of proposals.*

*Development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.*

9.7. This proposal does not impact upon statutory historical or natural sites. The installation will not be overlooked by any residential homes and will have minimal impact on any passing traffic. The sites have been in use by Bernard Matthews for decades, with the local area well accustomed to this operation.

9.8. This installation is proposed to deliver greater economic and energy security to a leading national business. Their investment in this technology helps towards local and national renewable energy targets, whilst increasing the sustainability of the food supply chain.

## **10. Application plans and drawings**

10.1. The documents and drawings submitted to accompany this application are as follows. This is in addition to the planning form.

- 10362-DAS – Design and Access Statement (this document)

10.2. All drawings are to scale as stated on A3 paper.

- 10362-P01 – Site Location Plan
- 10362-P02 – Site Layout
- RENGM-BM ELEVATION – ground frame elevation

## Appendix 1 – Ground Installation Indicative Photographs

All photographs are of RenEnergy installations.





## Appendix 2 - Flood Risk Map

