

BYPASS FARM SOLAR PROJECT

QUESTIONS AND ANSWERS

In which Parish and Planning Authority is the site located?

The site lies within the Civil Parish of Allington and the Civil Parish of Foston. The substation is located in the Civil Parish of Long Bennington. The responsible Planning Authority is South Kesteven District Council.

Why has this site been chosen?

The site is relatively flat and is not constrained by environmental designations. The scheme will not therefore cause any unacceptable visual harm. Due to the position and configuration of the nearby settlements, very few properties would actually have any views across the site itself. It is generally of poorer quality farmland. Due to the amount of land needed, the scheme cannot fit in an urban area and requires a countryside location. The A1 Foston Bypass physically separates the site from Foston village to the north and northeast, and Long Bennington to the northwest. The village of Allington lies to the south however, there are no immediate neighbouring residential properties and the site is generally well screened. Importantly there is capacity on the local electricity grid and a viable point of connection in proximity. The solar farm would provide significant ecological benefits as the change from arable farming, additional hedgerows and areas of wildflower planting would result in increased biodiversity. In addition, the provision of bat and bird boxes on retained trees, will provide ecological enhancements at the site, leading to a net biodiversity gain and improving opportunities for UK and local Priority Species. This site is therefore very well suited to the proposed development.

How will the land between the panels be maintained?

The land will remain in agricultural use and it will continue to be available for livestock to graze, generating an additional agricultural yield. The development is planned to require minimal ongoing maintenance and only periodic management would be required control the height of hedgerows and wildflowers.

Will any hedgerow be removed?

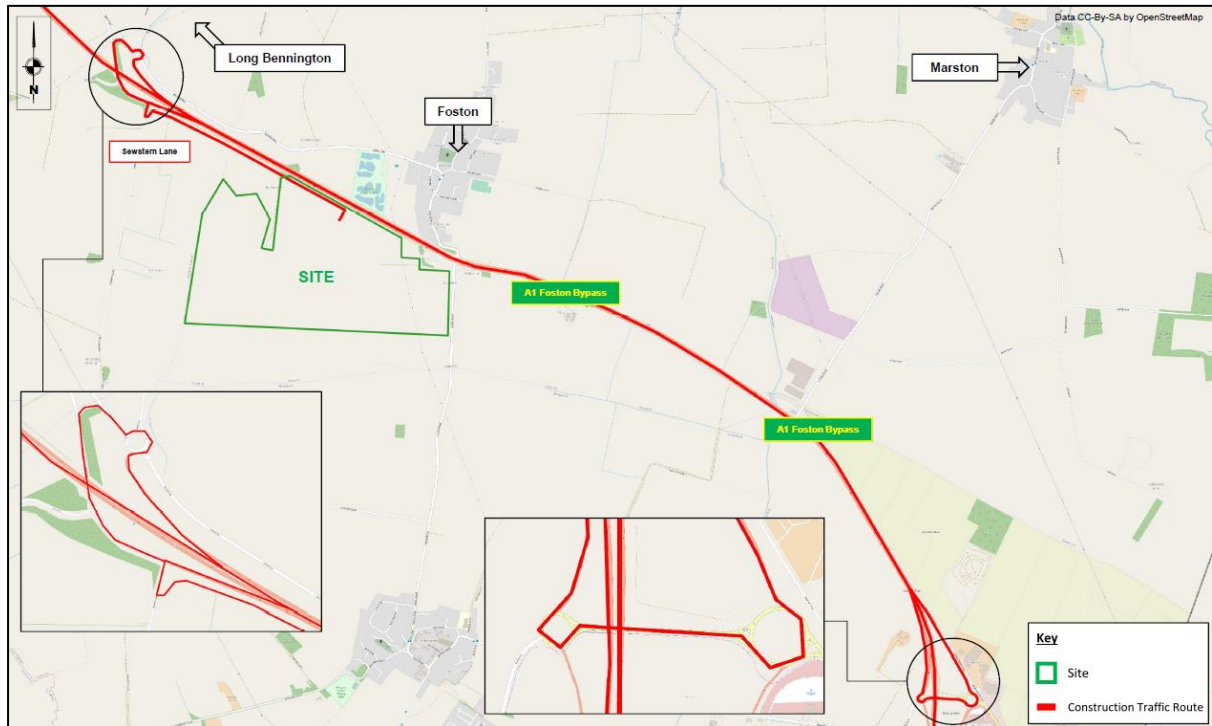
All hedgerows would be retained through the scheme and measures would be taken to enhance these in order to fill existing gaps which would improve habitat connectivity and obscure views to the site. An additional stretch of hedgerow would also be planted along the eastern boundary of the site, screening views from the east and improving habitat connectivity for local wildlife.

How many solar panels will be installed on the site and what are their dimensions?

It is difficult to provide an exact number of the panels proposed to be installed as the precise specification would be determined by the appointed contractor in order to achieve the optimum efficiency in system design. A typical Solar PV panel measures 65in x 39 inches. The solar arrays (rows of panels) would be mounted at 0.8m above ground level and extend to 2.8m at their highest point.

How will construction traffic access the site?

The proposed route for construction traffic has been carefully considered and will be achieved via an existing access (Sewstern Lane) with immediate access onto the A1 and wider highways network. The proposed route has been assessed for its suitability to accommodate construction traffic which would be further managed through a detailed Construction Traffic Management Plan.

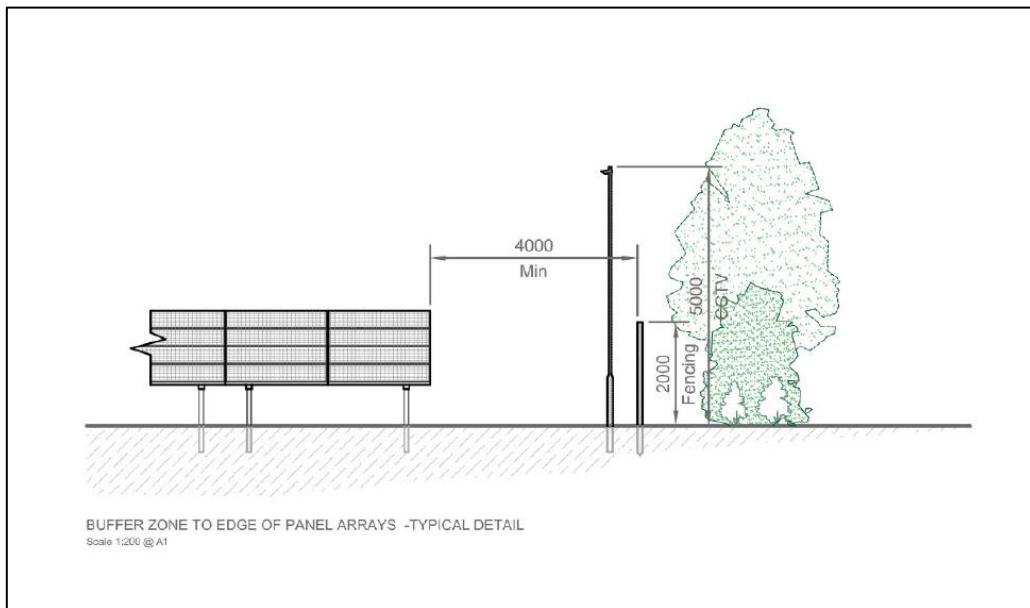


Will the site be surrounded by tall metal fencing with CCTV monitors?

The site will be bordered by stock proof fencing maintaining the agricultural character of the area. This fencing will be high enough to allow foxes and smaller animals to pass in and out of the site but high enough to stop bigger animals from entering/exiting the site. Examples of this fencing are shown below. As the site lies within existing field boundaries, the fence will not be visible around the entirety of the site as it would largely be obscured by existing hedgerows.



How would the solar panels and fencing be installed?



The solar panels will be spaced to avoid shadow and set on a frame supported by stakes. There will be minimal disturbance to the ground, the units will also be sited to achieve optimum exposure for solar energy absorption. This construction method allows the scheme to be easily reversed in the future, simply by pulling out the framework. There would be no foundations used.

The panels will have a maximum height of up to 2.8m, with a gap of approximately 0.8m at its lowest edge. This offers the potential for grazing to occur alongside the development, with livestock able to pass beneath the panels. Small vertical gaps will be maintained between the panels in order to prevent an accumulation of surface water runoff so rainwater can drip through and ensure that the hydrological response of the site is unchanged.

What will be the specific impact on footpaths, trees and hedgerows?

The Site does not fall within a designated landscape and despite it covering a large footprint it is relatively discreet within the local area due to its low height, benefitting from screening in the form of hedgerows. The proposal is designed to minimise landscape impacts and views into the Site from key receptors. Any residual landscape impacts will be mitigated through appropriate screening measures. The development will incorporate a 5-10 metre buffer from hedgerows and trees in order to avoid any impacts upon the root protection zones and the habitats which these provide.

The site has been designed to maintain the most ecologically significant habitats on site which include the hedgerows and mature trees. Overall, the site will provide a net biodiversity gain.

There are no Public Rights of Way within or adjacent to the site.

What measures will be taken to improve biodiversity?

Seed buffers with wildflower meadow mixes will be planted within the hedgerow buffer areas, as well as seeds in the remaining solar area to make the site suitable for grazing. Bat and bird boxes will be installed on the site where appropriate. Furthermore, hedgerows will be enhanced through infill planting and management, whilst an additional hedgerow will be added on the eastern boundary. All of which will contribute to a net biodiversity gain on the site.

What is the quality of the land and what is it used for now?

The site is currently in agricultural use as arable land. In order to preserve the most productive farmland, National Planning Policy is supportive of Renewable Energy on sites which avoid 'Best and Most Versatile' (BMV) agricultural. This is land of sub-grade 3a and above as assessed through the Ministry of Agriculture, Fisheries and Food (MAFF) grading system.

A site-specific survey has been undertaken to determine the agricultural grading of the site and confirm whether the site comprises any 'Best and Most Versatile' land. The survey involved scientific analysis of soil samples from across the Site in accordance with best practice methodologies. The findings identify 95% of the site as Grade 3b and is not therefore comprised of mainly BMV land.

What is the actual expected output of the farm?

The Site is large enough to deliver significant environmental benefits in reducing greenhouse gas emissions in the transition to a carbon neutral economy. The 49.9MW capacity will generate clean renewable power for over 15,000 homes, and substantial CO₂ savings of 21,500 tonnes of CO₂ per annum, making a meaningful contribution to meeting the UK's greenhouse gas emission targets.

It is true that the actual power output of the site (rather than its generating capacity) will vary depending on various factors including the prevailing climate, the efficiency of the panels and topographical features which might cause shading. The Solar Trade Association (STA) have advised that the National Renewable Energy Laboratory (NREL) tool (<https://pvwatts.nrel.gov/pvwatts.php>) provides a reasonable expectation as to the expected annual power output of the scheme. Having run an assessment through this tool it has shown that the proposed scheme at 49.9MW would generate a total of 42,935,212 kWh/Year. There are of course limitations to this tool (including the fact that it does not

triangulate the precise weather conditions) but it nevertheless provides a useful guide to understand the sheer scale of the projected power output.

What grants or feed in tariffs are available? Are all the installation costs borne by the applicants?

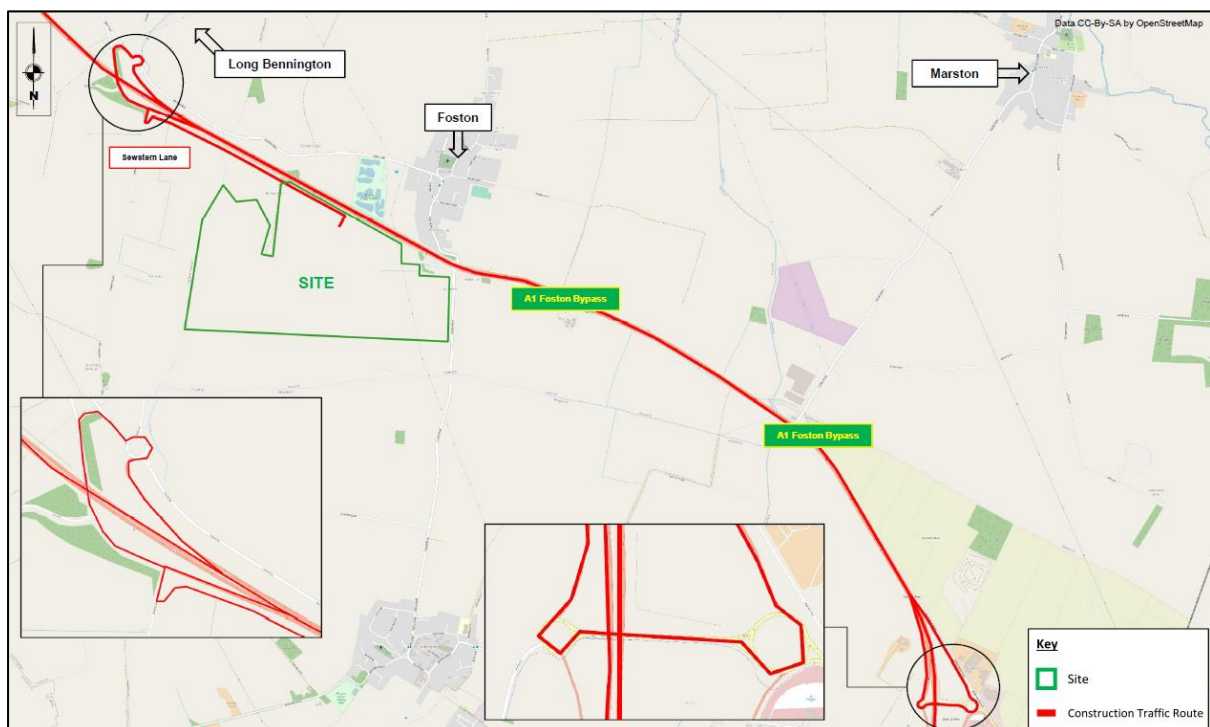
The scheme is planned to be delivered without any support from government subsidy or incentives and the construction and maintenance costs will be borne entirely by the developer. Feed in Tariffs were scrapped by the government in 2015 and since then, the solar energy sector has been severely impacted with very few schemes being delivered in that time. As such the viability of the proposed scheme remains marginal, particularly in uncertain times with fluctuating energy prices.

Is the only income from the sale of the energy at market rate?

The only income from the development would be achieved through the sale of the power. The ongoing agricultural use would maintain a supplementary income for the landowner.

Bearing in mind that construction is going to be a fairly major, what will be the precise route to the site?

Construction traffic would be routed via the track off Sewstern Lane, accessed via the major road network A1 Foston Bypass as shown on the plan below. Care has been taken to avoid routes which are unsuitable due to traffic restrictions and to minimise impacts upon local villages.



What investigations have been done into the impact of the construction work and what steps will be taken to minimise such impacts?

The construction process will be managed in accordance with a comprehensive Construction and Environmental Management Plan (CEMP) for which full details would be agreed with the LPA and secured via a legally enforceable planning condition. This plan will include full details of how all aspects

of the construction will be managed including (but not limited to) working hours, management of construction materials on-site, methods to protect tree roots, noise and ecological impacts.

A Construction Traffic Management Plan will also confirm the proposed arrangements for site access and will specify any temporary works or mitigation measures which might be required to ensure safe access and egress from the site.

The proposals include the retention and protection of all hedgerows and trees which are the most ecologically important habitats on site and are to be buffered from the proposals during the construction and operational stages.