GREEN FARM SOLAR PROJECT

QUESTIONS FROM BARKESTONE, PLUNGAR & REDMILE PARISH COUNCIL

In which Parish and Planning Authority is the site located?

The main panelled area of the site lies within the Civil Parish of Redmile and the substation is located in the Civil Parish of Bottesford. The site also lies immediately adjacent to Granby Parish.
The responsible Planning Authority is Melton Borough Council.

Why has this site been chosen considering it is located a considerable distance from a suitable connection to the National Grid and next to an important SSSI?

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 settlement, it is unlikely that many properties would actually have any views across the landscape. It is also poorer quality farmland. Due to the amount of land needed, the scheme cannot fit in an urban area and requires a countryside location. There are also no immediately 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. Although it is nearby to the SSSI the proposals would not impact upon the important habitat here. In fact the solar farm would have provide significant ecological benefits as the change from arable farming and additional hedgerow 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 an agricultural use and the ground will be grazed by sheep at a low density, 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?

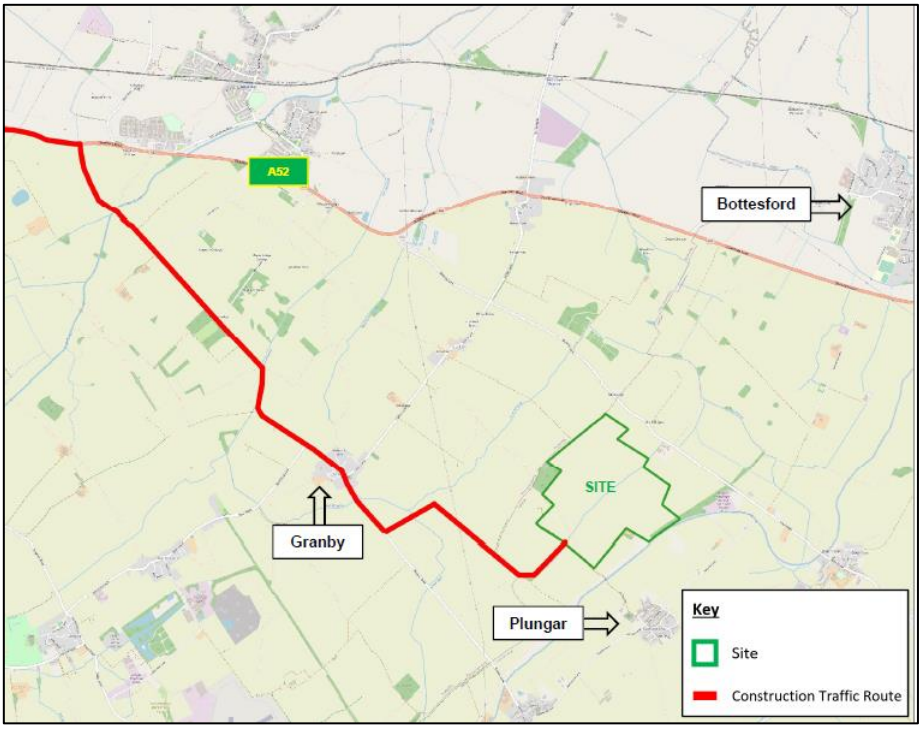
All hedgerows would be retained through the scheme and measures would be taken to enhance these in order to fill existing gaps in order to improve habitat connectivity and obscure views to the site. An additional hedgerow is also to be planted on the eastern side of the public footpath along the section where it immediately adjoins the site.

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 in.

How will construction traffic access the site given the canal and railway bridges are narrow and have limited weight capacity?

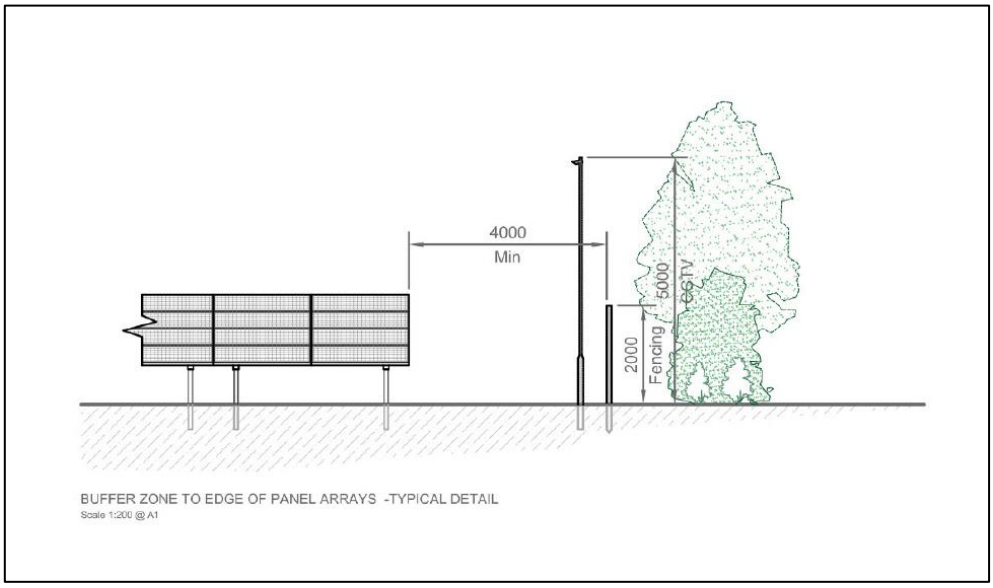
The proposed route for construction traffic has been carefully considered and will be achieved via the track off Plungar Road as shown on the HGV plan shown below. The route avoids the narrow bridges to the south west of the site across the canal and the railway. The proposed route has been assessed 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 as the site at Orston?

The site will be bordered by stock 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.

Why do the panels need to be so high off the ground and why does the surrounding fence needs to be so high?



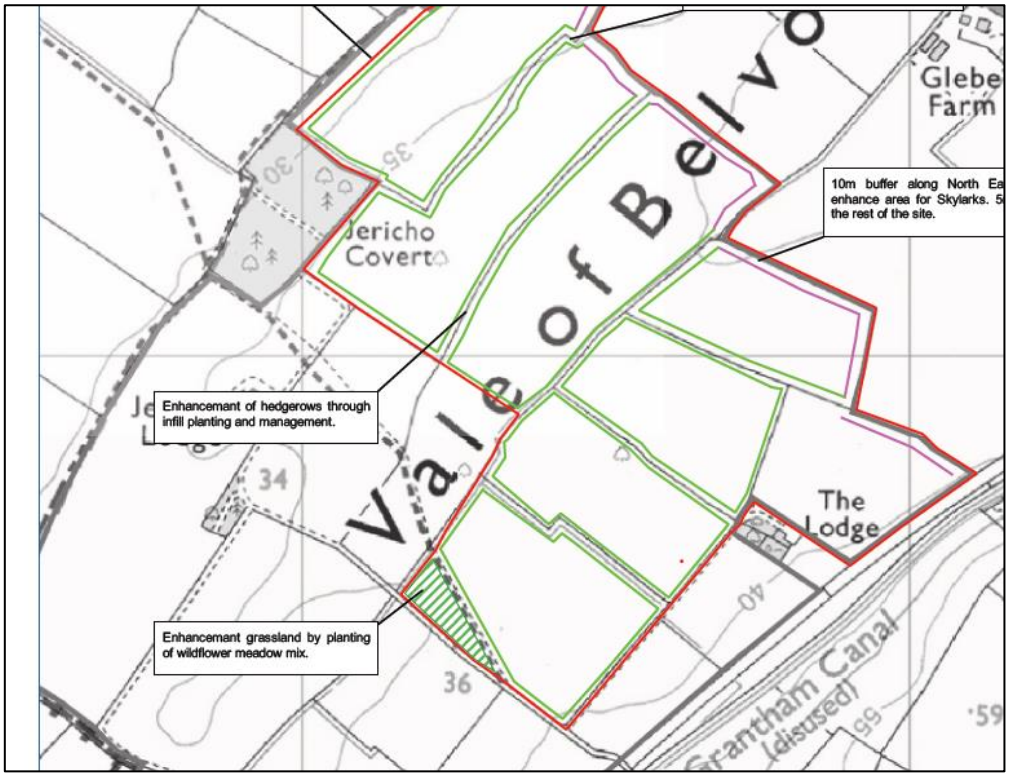
The solar panels will be spaced to avoid shadow and set on a frame supported by stakes. There will be minimal disturbance to the ground, the units also sited to achieve optimum exposure for solar energy absorption. This construction method allows the scheme to be easily reversed in the future, simply 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 and wooded areas bordering the site. 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.

A short section of footpath runs immediately alongside the proposed development and here, a new hedgerow is to be planted on its eastern side in order to screen immediate views along this section of the footpath. On the other side, an area of 2.5 acres will be taken out of intensive agriculture and a wildflower meadow will be planted in this area enhancing the amenity of the footpath.



What is the quality of the land and what is it used for now? It should be used for food production.

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 98% of the site as Grade 3b and confirm that the site does not contain any 'Best and Most Versatile' agricultural 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 CO_2 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 45,900,111 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?

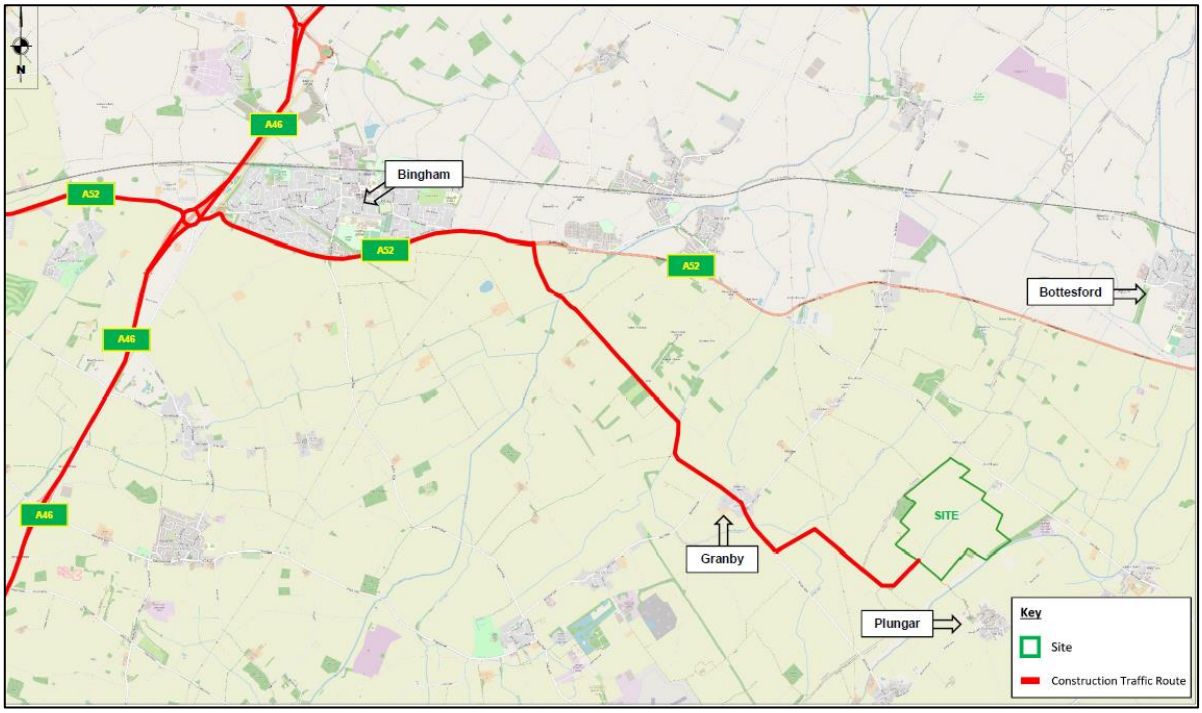
The scheme is planned to be delivered without any support from government subsidy or incentives and the construction and maintenance costs will be borne entirely by the developer. Feed in Tariffs were scrapped by the government in 2015 and since then, the solar energy sector has been severely impacted 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 site would be achieved through the sale of the power. The ongoing agricultural use would maintain an 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 Plungar Road as shown on the plan shown below. The route runs through the village of Granby towards the A52 and the major road network beyond. Care has been taken to avoid routes which are unsuitable due to traffic restrictions and to minimise impacts upon local villages. Although the route runs through Granby to the north, plans have been made to avoid school drop off and pick up times and to provide good signage so as to avoid any wrong turns and disruption within the local area.



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 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.