

Planning and Building Control East Lindsey District Council Tedder Hall Manby Park Louth Lincolnshire LN11 8UP

> Sustainable Planning and Design daniel@spd-studio.co.uk T: 01206 203253 Unit 1 and 2 Tollgate Business Park Colchester CO3 8AB 7th October 2021

Land at Hatton Solar Farm , Great Sturton, Horncastle, LN9 5NX (coordinates: 53,275490, -0.215657).

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT)
REGULATIONS 2017
REQUEST FOR A SCREENING OPINION IN RESPECT OF THE PROPOSED INSTALLATION
OF A SOLAR PHOTOVOLTAIC (PV) GENERATOR

We write to seek a formal Environmental Impact Assessment screening opinion in respect of a proposed installation of a 49.9mw Solar Farm at Land at Hatton Solar Farm, Great Sturton, Horncastle, LN9 5NX (coordinates: 53,275490, -0.215657).

The site is shown on the accompanying plan and is sufficient to identify the land to which this screening request relates. The land is currently used for agricultural purposes and is approximately 68 hectares in size.

We wish to obtain a formal screening opinion from East Lindsey District Council to confirm an Environmental Impact Assessment is not required.

Consideration against Environmental Impact Assessment (EIA) Regulations.

Section 6 (Part II) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 requires that a screening option request must be accompanied by a detailed plan sufficient to identify the land, a brief description of the development, a description of the aspects of the environment likely to be affected by the development, a description of any likely significant effects, and other such information.

In determining whether the Proposed Development requires EIA, the planning authority is required to follow Part II, Section 4 of the Regulations and the relevant schedules. The



Regulations state that the planning authority shall adopt an opinion within 21 days from the date of receipt.

Within the EIA Regulations, developments can be considered under the following schedules:

- Schedule 1 development types requiring EIA;
- Schedule 2 development types where, if the relevant threshold criteria are exceeded, a formal assessment must be undertaken against Schedule 3 in order to determine whether an EIA is required.

The Proposed Development does not fall within Schedule 1 of the EIA regulations, but does fall within Schedule 2, Column 3(a) 'Energy Industry'.

Schedule 2: Column 3. Energy Industry

a) Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)

The applicable threshold/criteria that triggers the need to consider whether an EIA is whether the area of the development exceeds 0.5 hectare.

The EIA Threshold Table from the PPG states that the indicative criteria and threshold is thermal output of more than 50MW and the key issues to consider are levels of emissions to air, arrangements for the transport of fuel and any visual impact.

Consideration of the Proposed Development against the Regulations is set out in the sections below.



#### 1. Site Location

The site is located at land at Stourton, Great Sturton, Horncastle, LN9 5NX (coordinates: 53,275490, -0.215657).

The site is located on around 68ha of agricultural land spread across 5 parcels of land. For ease of reference, each of the distinguishable clusters of fields have been divided into areas 1-5; the schedule below sets this out in detail and the site plan in Figure 1.2 illustrates the location of each of these areas relative to the entire site.

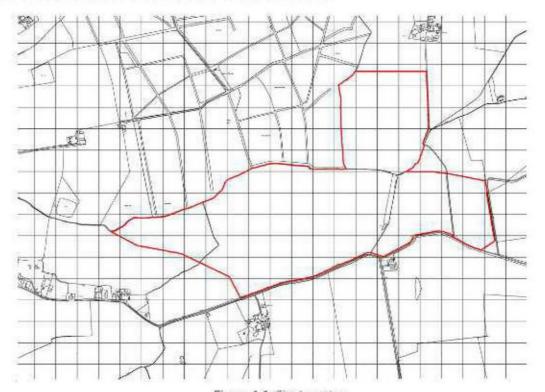


Figure 1.1: Site Location

Parcel 1 is located furthest west. It is bounded to the north by Sotby Forest and to the east by a line of young trees. Open agricultural land lies to the south and west.

Parcel 2 is adjacent east of parcel 1 and is bounded to the north by Sotby Forest. It is bounded to the east and south by open agricultural land. To the west lies a line of young trees.

Parcel 3 is located adjacent south of parcel 2 and the furthest south of all the parcels. It is bounded to the north and west by open agricultural land and to the south by Buttergate Hill.

Parcel 4 is the furthest north of the parcels. Sotby Woods borders the parcel to the west, with agricultural land to the north, east, and south.

Parcels 5 is to the east of the site and is bounded to the north, east and south by agricultural land.



The choice of fields has sought to minimise any effect of the development on any residential properties surrounding each of the areas, either through distance, screening, or a combination of these.

The topography of all parcels is relatively flat. Further, the majority of the parcels are bordered by mature trees.

The Proposed Development plan in Figure 1.2 illustrates the location of each of these areas relative to the entire site. It is envisaged that the application site would comprise all parcels.



Figure 1.2: Indicative Proposed Development Plan

#### 1.2 Access

Access would be via pre-existing tracks off different points on Buttergate Hill, which bounds the south of the site.

### 1.3. Planning History

There have been no relevant planning applications made on each of the areas in the previous 5 years.

## 2. Proposed Development

The proposed development is for the temporary erection of multiple rows of Solar PV arrays for a duration of up to 40 years. The maximum installed connection capacity we are looking to develop would be 49.9MW though this is subject to detailed technical design and site



layout. The PV arrays would be ground mounted (approximately 800mm from the ground) and are not expected to exceed 3m in height.

The panels will be mounted due south at an angle of between 20-30 degrees, to optimise daylight capture. The mounting frames would be of either galvanised steel or aluminium and would have a rough matt finish, rather than a polished finish. The mounting frames are pile driven into the ground, so no concrete foundations are required. This ensures that they have very little impact on the ground and do not require any prior excavation.

The proposals would require the installation of inverters and transformer cabinets, in order to convert the generated electricity to be compatible with the substation, adjacent to the site. The inverters would be housed underneath some of the modules, similar to that in Figure 2.4. The transformers transfer electrical energy from one circuit to another, allowing it to be fed into the local grid network. The transformers would either be housed (similar to the inverters) or would be external, surrounded by a fence.

Images of a similar solar farm are shown below in Figures 2.1-2.4. Figure 2.1 shows solar panels in their setting enclosed by protective fencing, with Figure 2.2 showing the sufficient gap from the ground to accommodate the grazing of sheep. Figure 2.3 shows typical ancillary infrastructure that would be required within the solar array.



Figure 2.1: Example of solar panels in their setting enclosed by protective fencing.



Figure 2.2: Example of sheep grazing under solar panels.



Figure 2.3: Example of supporting ancillary infrastructure - CCTV.





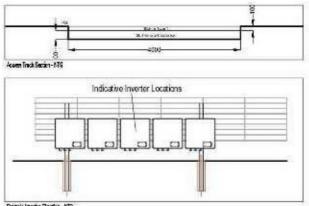


Figure 2.4: Example of supporting ancillary infrastructure.

# 3. Proposed Planning Application Supporting Surveys

Subject to the feedback received from this communication, it is our intention that a subsequent detailed planning application would be accompanied by the following information and studies:

- Design and Access Statement;
- Planning Statement;
- Heritage Statement;
- Archaeology Assessment;
- Ecological Assessment (including Biodiversity Net Gain Report);
- Landscape and Visual Impact Assessment;
- Geophysical Survey Report;
- Flood Risk Assessment;
- · Glint and Glare Report;
- Agricultural Land Classification Report;

It is considered that the above information would enable the assessment of the application, but we would welcome the opportunity to discuss submission requirements as need be.

### 3.1. Characteristics of the development

**The size of the development** - The Proposed Development would be approximately 68 hectares in size located within 5 parcels of land.

When deployed this would have an installed connection of 49.9MW.

The cumulation with other developments - There are no other consented solar farms within the local area, meaning there would be no cumulation with other development.

The use of natural resources - The development utilises sunlight, a renewable resource, to generate power. However, the materials used in the manufacture of the equipment for the scheme are an abundant resource which can be recycled at the end of the development's life. In this regard the use of any natural resource would be sustainable.



**The production of waste** - The development would not produce any waste during operation. At the end of the development's life the materials used can be recycled. The minimal amount of waste generated during the construction period would be sustainably managed.

**Pollution and noise** - Potential nuisance from the development would be mostly limited to some short-term noise, vibration, vehicle movement and dust, potentially created during the construction phase. The nature of solar farms means that no hazardous, toxic or noxious substances would be released, nor would there be risk of contamination to air, water or land.

There would be no permanent lighting and no releases of heat, energy or electromagnetic radiation to the environment. The proposal does not require significant earthworks and the site would be self-contained. It would be normal practise that the potential construction phase nuisances would be controlled via planning conditions attached to any subsequent planning permission.

As such there would be no significant impacts in terms of pollution or nuisances. The only noise arising from the development would be associated with the equipment used to keep the inverter units cool during hot weather. These are unlikely to be audible from outside the site.

The risk of accidents having particular regard to substances or technologies - Solar farms contain no materials that are combustible or liable to explode.

The risk to human health - Solar farms do not produce any pollutants that would present a risk to human health.

## 3.2. Location of the development

**The existing land use** - The current land use is for agriculture. During operation, it is intended that sheep would be permitted to graze around the development and therefore the site would retain an agricultural use throughout its operation. The site can be completely returned to agriculture at the end of the development's operational life.

The relative abundance, quality, and regenerative capacity of the natural resources in the area - The natural resource being used is sunlight, which for all intents and purposes is limitless. The location, layout and design would retain and enhance natural biodiversity and landscape features.

The site is currently partially used for agriculture across the majority of parcels. The site would be returned to its current state after the temporary proposed development is removed.

An initial desktop review of Agricultural Land Classification (ALC) has demonstrated that majority of the development is located on grade 2 - very good, with some sections graded 3 - good to moderate land, using the guidelines set out in the publication "Agricultural Land Classification of England and Wales".



Although the majority of the land is classed as very good for agricultural land, it should be noted that none of the land would be harmed due to the Proposed Development. Due to the nature of solar panels, all of the land can be restored to its natural state once the equipment is removed at its end of life.

Further, the development would also allow for the opportunity for continued agricultural use throughout its operational life, as smaller farming stock (e.g. sheep) can graze under the panels. Temporary removal of some of the land would also help it naturally regenerate, leaving the site in better condition at the end of the development's life.

Therefore, agricultural land is abundant and the quality and regenerative capacity of the natural resource is likely to improve as a result of the scheme.

Agricultural Land Classification is shown in Figure 3.

Therefore, agricultural land is abundant and the quality and regenerative capacity of the natural resource is likely to improve as a result of the scheme. Additionally, an Agricultural Land Classification Report would be submitted with the planning application.

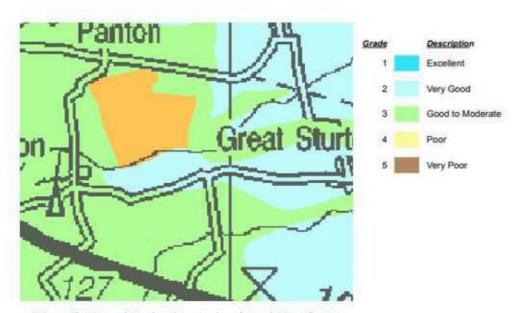


Figure 3: Natural England Agricultural Land Classification

The absorption capacity of the natural environment - Early feasibility work sought to identify the best locations within the area, including landscape and visual criteria (alongside heritage and ecological criteria). The limited height, configuration of the development and choice of fields, means the scheme would be well screened from most public viewpoints, or capable of being screened by new planting. The effect of this is to allow the scheme to be absorbed easily into the natural environment.

Therefore, the effect that the proposals have on the natural environment should not be considered significant, due to its limited landscape, visual, and negligible pollution and waste impacts as detailed above.



A Landscape and Visual Impact Assessment would accompany the planning application.

# 3.3. Characteristics of the potential impact

The magnitude and spatial extent of the impact - The total area covered by the development would be around 68ha. The magnitude of any impacts would be limited (see also "possibility of effectively reducing the impact" below):

- Ecology The site provides suitable habitat to support several protected species.
   However, populations of these are unlikely to be locally significant and measures to protect them, including any further survey and necessary protected species licences, can be obtained post consent.
- Sotby Woods is to the adjacent north of the Proposed Development. The woodland contains a mixture of tree species but has no formal environmental or heritage designations. It is currently managed by the Forestry Commission. As per the Forestry Commission Sotby Forest Plan 10 Year Review (2017-2027), the main objective of Sotby Forest is for rotational timber production. It also aims to maintain the current ecological value of the non-designated priority habitats. Due to these uses, the material harm against the woodland would be minimal. Further, an adequate buffer of 15m between the site and the woodland would be included for root protection purposes and to ensure that the Proposed Development is of no detriment to the ecological value of the forest. There would be effort to conserve trees, hedges, and woodland, other than minimal widening of existing field access points, if necessary. Appropriate measures would be employed to protect these features from harm during construction and operation.
- Development would be no more than 3m in height, meaning that visual impacts would be mostly localised in their extent and magnitude. Any harm to receptors would be minimised by planting new hedgerows and leaving appropriate corridors where necessary.
- No protected landscapes would be affected and any harm to landscape would be minimised by planting new hedgerows.
- The nearest heritage asset (a Grade II Listed Building Sturton Harden Corner House Farm) is to the adjacent south of Area 5. A Grade II Listed Building (Church of St Stephen) also lies approximately 0.8km east of Area 1. Due to the substantial distance between the site and the Listed Building, and the natural topography of the land, there would be no adverse impact of the development on the setting or significance of the Listed Building.
- The Proposed Development area is approximately 0.7km south west of the nearest Site of Special Scientific Interest (SSSI) (Sotby Meadows designation: Sotby Meadows are three species-rich unimproved grasslands managed traditionally for hay and late grazing. Their value for wildlife is increased by the adjacent green lane and its ancient hedges and the stream which bisects the site. The neutral to limerich soils derive from the Boulder Clays of the Lindsey Vale and provide suitable conditions for five species of orchid'). Given the designation is for flora, and the adequate distance between the site and Sotby Meadows, it is unlikely that the



Proposed Development would have a detrimental effect on the species or their respective habitats within the SSSI. Further, given the relative ease of reversibility (panels being free-standing) and the wider landscape setting, it is not considered that any such potential adverse spatial or visual impact would be a cause for concern

There are various Public Rights of Way on site. The Proposed Development has been
designed to protect the Public Rights of Way on site by providing a buffer zone
around the PROWs to reduce any adverse impact. Further, the Proposed
Development would also provide additional maintenance to the PROWs by
maintaining the grassland surrounding the bridleway, allowing for better access by
the public.

In summary, the magnitude and spatial extent of the impact is small.

The nature of the impact - Solar farms are typically low impact developments and on the proposed site, these would be limited to some visual, landscape, and heritage impacts (see previous section). However, these impacts would be largely limited to within the site itself and immediate surrounding areas and could be suitably mitigated as part of this development.

The proposed development is low impact, with no emissions to air or water, meaning it is unlikely to have an adverse effect on the surrounding area. The proposal includes a significant biodiversity gain through onsite ecological enhancements, across the entire site. The proposed solar farm would take land out of intensive agriculture for the duration of the project which, along with an appropriate management plan, should bring significant benefits to flora and fauna, as well as to the soil and surrounding habitats.

The site lies predominantly within Flood Zone 1, presenting a low risk of flooding from rivers or surface water. A detailed Flood Risk Assessment, including high level surface water management plan would be undertaken and mitigation measures included, as necessary. Flood risk is shown below in Figure 5.

These risks are not expected to place significant constraints on the development.





Figure 4: EA Flood Map for Planning

The transboundary nature of the impact - No significant transboundary (national or international) impacts are envisaged.

The intensity and complexity of the impact - In terms of complexity, the principal impacts have been defined above and are not considered to be complex in nature and are clearly understandable. Any impacts would be limited to a small area. Noise would be emitted by the substation and transformers during operational (i.e. daylight) hours, but this would be very low level and the equipment can be sited away so that the intensity of this impact would not be significant outside of the site itself.

The probability of the impact - Although the impacts identified above would arise from the development, it is considered that these would not be significant and can be appropriately mitigated.

The expected onset, duration, frequency and reversibility of the impact - Although the proposed development is for 40 years, at the end of the operational period, site restoration would be relatively simple and all equipment removed, leaving no long-term impacts or pollution.

The possibility of effectively reducing the impact – A mitigations and enhancements plan would accompany the planning application. This would include:

- Enhancing existing natural screening and introducing additional hedges and trees where necessary to reduce landscape, visual and heritage impacts.
- If further investigations reveal archaeology of significance within the site, the applicant would consider alternative design options to limit harm to belowground archaeological remains, including non-penetrative solutions such as



setting PV panels and associated infrastructure on concrete feet, and cable trays above ground to avoid ground disturbance. Equipment such as transformers can also be moved to less archaeologically sensitive locations as an alternative to concrete bases. It is considered that all heritage and archaeological risks can be assessed in the course of a planning application.

- Micro-siting of equipment to avoid root protection areas or other harm to trees or hedges.
- The existing field pattern would be used to create a diverse management regime.
- There is potential for sheep grazing.
- Herbicides reduce wildflower diversity and create conditions suitable for weeds.
   Therefore, their use would be restricted to spot treating of pernicious weeds (docks, thistles, and ragwort) wherever possible.
- Extra care would be taken when clearing any vegetation or when working within proximity to the hedges and trees in effort to not disturb any species.
- Contractors would be made aware of the potential presence of any species present on site prior to the start of construction

Consideration of the proposed development against the Environmental Impact Regulations 2017 and the PPG has therefore determined that the proposal is unlikely to result in significant effects on the environment.

Consequently, it is our opinion that an environmental impact assessment is not required.

I trust that the above information is sufficient to enable you to issue a screening opinion decision within the statutory three-week period.

If you require any further clarification, please do not hesitate to contact me.

Kind regards,

Daniel White

Senior Town Planner