

<p>Reference: 21/00077/FUL</p>	<p>Site: Land adjacent Fen Farm Judds Farm and part of Bulphan Fen Harrow Lane, Bulphan Essex</p>
<p>Ward: Orsett</p>	<p>Proposal: Installation of renewable led energy generating station comprising ground-mounted photovoltaic solar arrays and battery-based electricity storage containers together with substation, inverter/transformer stations, site accesses, grid connection cable, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements</p>

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BF1.0 Rev v.b	Consolidated Location Plan	20 January 2021
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BF1.2 Rev v.b	Location Plan 2 (Thurrock)	20 January 2021
BF2.0 Rev v.b	Consolidated Site Location Plan	20 January 2021
BF2.1 Rev v.c	Consolidated Location Plan 1 (Havering)	20 January 2021
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BF3.0 Rev 03	PV Elevations	20 January 2021
BF4.0 Rev 01	Inverter/Transformer Stations	20 January 2021
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BF7.0 Rev 01	Weather Station	20 January 2021
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BF9.0 Rev 01	Control Room Elevations	20 January 2021
BF10.0 Rev 01	Auxiliary Transformer	20 January 2021
BF11.0 Rev 01	CCTV Elevations	20 January 2021
BF12.0 Rev 01	Battery Container Elevations 40ft	20 January 2021
BF13.0 Rev 01	Storage Container Elevations 40ft	20 January 2021
BF13.0 Rev 01	PV Elevations Ballast	17 May 2021
BF14.0 Rev v.a	Field Topographical Data	20 January 2021
7509_005_D	Landscape and Ecological Enhancement Plan	20 January 2021
No no's	Preliminary Greyscale	17 May 2021

The application is also accompanied by:

- R003 Planning Statement including Green Belt Assessment
- R004 Design and Access Statement
- R005 Construction Traffic Management Plan
- R006 Non-Technical Summary of the Environmental Statement
- R007 Environmental Statement Main Text
- R008 Environmental Statement Technical Appendices
- R009 Landscape and Ecological Management Plan
- R010 Flood Risk Assessment and Drainage Strategy
- R011 Noise Impact Assessment
- R012 Ecological Appraisal Report (including Biodiversity Net Gain Statement)
- R013 Statement of Community Involvement
- R014 Agricultural Land Classification Report
- R015 Heritage Assessment Desk Based Assessment
- R016 Interim Archaeology Geophys Report
- R017 Glint and Glare Assessment
- Ecology Data File (parts 1 – 26)
- Ground Channel

Applicant:

Mr Simon Wheeler
Warley Green Limited

Validated:

18 January 2021

Date of expiry:

27 September 2021 (Extension of time agreed with applicant)

Recommendation: Grant planning permission

1.0 **BACKGROUND**

1.1 At the meeting of the Planning Committee held on 15 July 2021 Members considered a report assessing the above proposal. Members of the Planning Committee voted to undertake a site visit to view the site to better understand the proposal. The site visit took place on 7 September 2021.

- 1.2 There were also a number of questions raised by Members, which are addressed within this report.
- 1.3 A copy of the report presented to the July Committee meeting is attached.

2.0 CONSULTATION AND REPRESENTATIONS

- 2.1 Since the previous Committee report was published an additional representation has been received as follows.

Fen Farm Cottages – wish to confirm they do not object to the proposal.

3.0 PLANNING UPDATES, ASSESSMENT & IMPLICATIONS

- 3.1 Since the last committee the applicant's planning agent has provided a further submission regarding climate change. The agent advises that in an International context, the Intergovernmental Panel on Climate Change (IPCC) recently published the first part of their Sixth Assessment Report. The report assesses the physical science basis of Climate Change; multiple lines of scientific evidence confirm that the climate is changing due to human influence. The report states *Human-induced climate change is already affecting many weather and climate extremes in every region across the globe; the increased frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, agricultural and ecological droughts in some regions, and proportion of intense tropical cyclones, as well as reductions in Arctic sea ice, snow cover and permafrost*
- 3.2 From a UK national context the objectives of the UK renewable energy policies are in accordance with the overall international policy objectives. These are focused on a number of key climate change challenges, which include:
- The reduction of CO2 emissions to tackle climate change;
 - The promotion of competitive energy markets in the UK;
 - Affordability to customers; and
 - Security of decentralised energy supplies.
- 3.3 This support is rooted in the Government's policy of growing the economy in a decarbonising way and achieving its legally binding target of net-zero greenhouse gas emissions by 2050. This followed a national climate emergency being declared by UK Parliament in May 2019, building upon the previous target to reduce greenhouse gas emissions by at least 80% relative to 1990 levels by 2050. To achieve this ambitious target many commentators note it will require a step change in the way in which the UK generates electricity and in many other ways of life
- 3.4 To help achieve this net-zero target the Government is rapidly seeking to transition from a traditionally fossil fuel dependent economy to increasing amounts of secure, resilient renewable and low carbon energy, including solar power. The fact that solar

technology has advanced to the point where it no longer requires public subsidy to make it commercially viable lends it further support from Government compared to other innovative means of renewable energy generation, which are still reliant on subsidy.

3.5 The information below seeks to address the questions that were raised at the July Committee meeting.

3.6 Battery

There was a query raised with regard to battery storage safety. The applicant has submitted an Outline Battery Safety Management Plan (OBSMP). This evidences that for the proposed scheme safety risks are understood, accounted for and mitigated as far as possible. With the adoption of the measures set out in this OBSMP, the risk of a fire occurring from the battery energy storage systems (BESS) is considered to be minimised to an acceptable level. There is a suggested condition (no. 15) requiring that prior to the implementation of any BESS, a Detailed Battery Safety Management Plan (DBSMP) be submitted and approved, which would be in accordance with this report.

3.7 Concrete ballast

The use of concrete ballast is not proposed across the entire site, the main ground fixing for the PV array is a driven stanchion. This would extend into the ground to a depth dependent on conditions across the site. The concrete ballast would only be utilised within areas of archaeological interest. The concrete ballast cast offsite offers a shallow foundation option and is a result of the consultation response from the Council's archaeology advisor request that, following further archaeological investigation (as reserved by the proposed planning condition), a suitable solution is proposed for mitigating any archaeological impact. As the geophysical survey results show that the majority of the site is archaeologically sterile there is only a relatively small area (Field 4) where the concrete ballast option is used, this being potentially reduced to the key areas where it is demonstrated from further investigation that there is confirmed archaeological interest. The shallow foundation allows for a buffer between the minimal excavation depth and the underlying archaeological levels. This mitigation approach has been accepted in principle by the Council's archaeology advisor.

3.8 At the expiry of the temporary consent, the concrete ballast would be removed from the site along with the rest of the array and infrastructure and sent to a suitably regulated site for recycling and re-use therefore there would be no residual impact on the site.

3.9 Geese

BSG Ecology conducted both the site ecology surveys and the desk based studies of biodiversity records. The surveys carried out by BSG Ecology, including those targeted at breeding birds, did not record any native, wild geese which are of biodiversity conservation interest. The surveys did not record any feral geese. This is as expected as feral geese depend on waterbodies larger than farm ponds to establish a breeding territory and raise their young successfully (the risk of predation is too high on small waterbodies). Feral geese are not of biodiversity conservation interest and, in some circumstances, they are considered to be detrimental.

- 3.10 The desk studies contracted by BSG Ecology from the Essex Wildlife Trust and the Essex Field Club (representing the Essex Recorders' Partnership) provided no records of native, wild geese relating to the area of the solar farm or a 100m buffer around it. At a greater distance, small numbers of white-fronted geese have been recorded occasionally over the last 10 years at Orsett Fen.
- 3.11 The desk studies contracted by BSG Ecology from the Essex Wildlife Trust and the Essex Field Club provided records of feral Canada goose and greylag goose in the general area but none specifically in the area of the solar farm. These records should be given no weight in the decision making process as they relate to bird species that are not of biodiversity interest.

3.12 Construction traffic routing

There would be an average of 5 to 6 HGVs per day (10 to 12 two-way movements) during the construction phase of 40 weeks. The applicant's transport consultant has promoted the most appropriate route for the construction traffic as follows:

Inbound Route

Construction vehicles will route to the site from the A13 via the following roads:

- A128 (left-in turn only);
- Church Road; and
- Fen Lane.

Outbound Route

After departing the site, construction vehicles will route back to the A127 via the following roads;

- Fen Lane;
- Church Road; and

- A128 (left-out turn only).

3.13 It is understood from representations that there are concerns with construction traffic being routed through Bulphan village. The applicant has investigated other potential route options for construction traffic as follows.

Alternative route A:

A loop arrangement with inbound access via:

- B186 Warley Street;
- B186 Clay Tye Road; and
- Fen Lane.

Outbound route via:

- Fen Lane;
- Dunnings Lane;
- St Mary's Lane; and
- B186 Warley Street.

Alternative route B:

Inbound and outbound movements via:

- A127;
- Childerditch Lane; and
- Dunnings Lane.

Alternative route C:

Inbound and outbound movements via:

- B186 Warley Street; and
- Clay Tye Road.

Alternative route C:

Inbound access via:

- B186 Warley Street; and
- Clay Tye Road.

Outbound route via:

- Church Road; and
- A128.

3.14 The preferred route is from the site via Fen Lane to the A128. This is the shortest and most direct route to the higher category of road. Other routes were investigated; however, these alternative routes are not practical in terms of road widths and relative distances to reach the higher level of classified road within the shortest distance. All the other routes that have been put forward are less optimal in highways and planning terms than the proposed route. Subject to the planning conditions set out below, the preferred route is considered acceptable in both highways and amenity terms, over the temporary construction phase.

3.15 Health impacts

The system installation, or construction, process does not require toxic chemicals or processes. Photovoltaic systems do not emit any material during their operation; however, they do generate electromagnetic fields (EMF), sometimes referred to as radiation. In modern society humans are all exposed to EMF throughout our daily lives without negative health impact. Someone outside of the fenced perimeter of a solar facility is not exposed to significant EMF from the solar facility. Therefore, there is no negative health impact from the EMF produced in a solar farm. Solar farms are not known to pose any health dangers to their neighbours.

3.16 Disposal and recycling

Condition 4 requires a decommissioning statement; this has been updated to include wording requiring recycling where viable.

5.0 CONCLUSION

The recommendation remains one of approval for the reasons stated in 7.0 of the July Committee report.

6.0 RECOMMENDATION

6.1 Grant planning permission subject to:

- (i) Referral to the Secretary of State under the terms of the Town and Country Planning (Consultation) (England) Direction 2009; and
- (ii) Subject to the application not being called-in by the Secretary of State for

determination, grant planning permission subject to the following conditions:

TIME LIMIT

1. The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

Reason: To comply with Section 91(1) of The Town & Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

PLANS LIST

2. The development hereby permitted shall be carried out in accordance with the following approved plans:

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Reason: For the avoidance of doubt and to ensure that the development is carried out in accordance with the details as approved with regard to policies PMD1 and PMD2 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

TEMPORARY PERIOD AND DECOMMISSIONING

3. Planning permission is hereby granted for a temporary period of 35 years from the first commercial export of energy. No later than one week before the first commercial export of energy the applicant shall supply written notice of the first commercial event. On the 35th anniversary of the first commercial export of energy the use shall cease. Prior to the 35th anniversary of the first commercial export of energy the solar panels and all ancillary equipment and structures shall be decommissioned and removed from the site in accordance with the Decommissioning Method Statement agreed pursuant to Condition 4.

Reason: In order to accord with the terms of the submitted planning application and to ensure the satisfactory restoration of this Green Belt site.

DECOMMISSIONING METHOD STATEMENT

4. Within three months of the cessation of power production on the site a Decommissioning Method Statement shall be submitted to and approved in writing by the local planning authority. The Statement shall include the timing for decommissioning of the solar farm if it ceases to be operational, along with the measures, and a timetable for their completion, to secure the removal of panels, plant, fencing and equipment and details of recycling. Decommissioning shall be carried out in accordance with the approved Statement and details including the timing of works.

Reason: To ensure the satisfactory restoration of the site in the Green Belt in accordance with policy PMD6 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

CONSTRUCTION PERIOD

5. The construction period shall be no more than 40 weeks unless otherwise agreed in writing by the local planning authority. Notice of commencement of the development must be given to the local planning authority in writing no less than one week before commencement.

Reason: In order to minimise any adverse impacts arising from the construction of the development in accordance with policy PMD1 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

CONSTRUCTION TRAFFIC MANAGEMENT PLAN [CTMP]

6. Construction and decommissioning works on site shall only take place in accordance with the CTMP (ref. R005 dated June 2021) and in particular the following elements of that document:

- Routing of construction vehicles; and
- Time of HGVs accessing the site

Reason: In order to minimise any adverse impacts arising from the construction of the development in accordance with policy PMD1 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN [CEMP]

7. No construction works shall commence until a Construction Environmental Management Plan [CEMP] has been submitted to and approved in writing by the local planning authority in writing. The CEMP should contain or address the following matters:

- (a) Details of construction any access or temporary access, and details of temporary parking requirements;
- (b) Location and size of on-site compounds [including the design layout of any proposed temporary artificial lighting systems];
- (c) Details of any temporary hardstandings;
- (d) Details of temporary hoarding;
- (e) Contact details for site managers including information about community liaison including a method for handling and monitoring complaints;
- (f) Wheel washing facilities; and
- (g) Days and hours of construction activities.

Works on site shall only take place in accordance with the approved CEMP.

Reason: In order to minimise any adverse impacts arising from the construction of the development in accordance with policy PMD1 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

ROAD CONDITION SURVEY

8. No construction works shall commence until a Road Condition Survey, the details of which to be previously agreed in writing by the local planning authority has been submitted to and approved in writing by the local planning authority. A further Road Condition Survey shall then be submitted within one month of the completion of construction works. Any degradation of existing road surfaces directly due to the impact of construction of the development will be remediated in accordance with details to the previously agreed in writing by the local planning authority.

Reason: In order to safeguard the amenities of neighbouring occupiers and in the interests of visual amenity of the area in accordance with policies PMD1 and PMD2 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

HGV BOOKING SYSTEM

9. HGV movements from the site shall be limited to a maximum of 14 two-way movements per day (7 in and 7 out movements). A log of HGV movements shall be kept and submitted to the local planning authority for review upon written request. This log shall record details of the registration, origin, destination and operators of each HGV entering and leaving a plot within the site and the time of such movements.

Reason: In the interests of amenity and highway and pedestrian safety, in accordance with policy PMD1 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

ACCORDANCE WITH ENVIRONMENTAL STATEMENT

10. The development hereby permitted shall be carried out in accordance with the recommendations and mitigation measures contained with the Environmental Statement and schemes submitted with the application. Reason: To protect and improve the appearance of the site in the interests of visual amenity of the area and to provide biodiversity enhancement opportunities, in accordance with policy PMD1, PMD2, PMD6 and PMD7 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN (LEMP)

11. The landscape and ecological mitigation measures and schemes within the LEMP (document R009 Landscape and Ecological Management Plan and plan number

7509_005_D) shall be implemented in full in accordance with the approved program with the new planting carried out in the first available planting season after the commencement of the development unless otherwise agreed in writing by the local planning authority and shall be maintained as approved for the duration of the approved development. Any trees or plants, which within a period of five years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of a similar size or species unless the local planning authority approves alternatives in writing.

Within 6 months of the first export of energy from the site, the applicant shall undertake a review of the LEMP to consider whether there are opportunities for further enhancement as a result of mitigation proposals associated with the Lower Thames Crossing shall be submitted to and approved in writing by the local planning authority. If this review concludes there are reasonable further enhancements as a result of the Lower Thames Crossing, these enhancements shall be implemented as agreed.

Reason: To protect and improve the appearance of the site in the interests of visual amenity of the area and to provide biodiversity enhancement opportunities, in accordance with policy PMD1, PMD2, PMD6 and PMD7 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

ARCHAEOLOGICAL WORK AND MITIGATION

12. No demolition/development or preliminary groundworks shall take place until the Applicant or their successors in title has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation and specification which has been submitted to and approved in writing by the local planning authority. Following on from the works of investigation, no demolition/development or preliminary groundworks shall take place until the outcome of the investigations have been submitted to and agreed in writing with the local planning authority. The outcome of the investigations shall also detail any further safeguarding measures to ensure preservation in situ of any important archaeological remains and / or further archaeological investigation, such agreed measures shall be employed in accordance with the agreed scheme and timetable.

Reason: To ensure appropriate assessment of the archaeological implications of the development and the subsequent mitigation of adverse impacts in accordance with Policy PMD4 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

ARCHAEOLOGY – POST EXCAVATION ASSESSMENT

13. The applicant will submit to the local planning authority a post excavation assessment (to be submitted within six months of the completion of the fieldwork, unless otherwise agreed in advance with the Local Planning Authority). This will result in the completion of post excavation analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.

Reason: To ensure that investigation and recording of any remains takes place in accordance with Policy PMD4 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

EXTERNAL LIGHTING/SECURITY MEASURES

14. No external artificial lighting or other security measures other than those agreed as part of this permission shall be installed during the operation of the site as a solar PV facility without the prior written agreement of the Local Planning Authority.

Reason: In the interests of amenity and ecology and biodiversity and to ensure that the development can be integrated within its immediate surroundings in accordance with Policies PMD1 and PMD2 and PMD7 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

DETAILED BATTERY SAFETY MANAGEMENT PLAN (DBSMP)

15. No implementation any of the battery energy storage systems (BESS) shall commence until a Detailed Battery Safety Management Plan (DBSMP) has been submitted to and approved in writing by the local planning authority. The BESS operation on site shall only take place in accordance with the approved DBSMP.

Reason: In order to safeguard the amenities of neighbouring occupiers and in the interests of amenity of the area in accordance with policy PMD1 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development [2015].

Informative(s)

1. Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended) - Positive and Proactive Statement:

The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern within the application (as originally submitted) and negotiating, with the Applicant/Agent, acceptable amendments to the proposal to address those concerns. As a result, the Local Planning Authority has

been able to grant planning permission for an acceptable proposal, in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.

2. Public Rights of Way The grant of planning permission does not permit any changes, alterations, obstructions, diversions, closures or additional use by motor vehicles of any public rights of way affected by the proposal, the developer is required to contact the Council's public rights of way team for permission prior to undertaking any works.

Documents:

All background documents including application forms, drawings and other supporting documentation relating to this application can be viewed online:

www.thurrock.gov.uk/planning

