Bockingfold Solar Farm

Planning Statement

Prepared on behalf of Voltalia UK Ltd

September 2022

bartonwillmore.co.uk

BARTON WILLMORE now Stantec

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Checked by:	WS	WS	WS
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CONTENTS

APPENDICES

1.0 INTRODUCTON

1.1 This Planning Statement (PS) has been prepared by Barton Willmore, now Stantec on behalf of Voltalia UK Ltd (the Applicant) to accompany a full planning application to Tunbridge Wells Borough Council (TWBC) (as the 'Local Planning Authority'), for a proposed solar photovoltaic (PV) farm on Land at Bockingfold Farm, Maidstone Road, Horsmonden, Kent ('the Site').

1.2 Planning consent is being sought for the following Description of Development ('The Development'):

> ***Installation and operation of a renewable energy generating station comprising ground-mounted photovoltaic solar arrays together with inverter/transformer units, control house, substation, onsite grid connection equipment, storage containers, site access, access gates, internal access tracks, security measures, other ancillary infrastructure, and landscaping and biodiversity enhancements.***

1.3 The Development comprises the construction, operation, management and decommissioning of a grid connected solar farm with associated infrastructure (the 'generating station') to provide a reliable source of clean renewable energy for local consumers via the Distribution Network Operator (DNO) grid network.

1.4 The Development would contribute to local and national 'Net Zero' targets with an export capacity of up to 49.9 Megawatts (MW) of renewable energy. The annual output of the generating station will provide enough clean electricity to meet the annual electricity demand of approximately 14,385 average family homes.

1.5 The CO_2 displacement of the annual electricity production of the generating station is approximately 35,681 tonnes compared to the same annual electricity being generated by fossil fuels. This represents an emission saving equivalent to removing 5,904 average petrol cars driving 15,000 miles a year from the road every year.

1.6 The Statement sets out the planning policy context relating to the benefits and acceptability of the principle of the Development, assessed against the design principles and concepts that have been applied, and how environmental issues relating to the Development are addressed.

1.7 Whilst the Planning Statement is set out to be read as a standalone document, it should be read in the context of the entire submission documentation in order to fully understand the Development, its potential impacts and planning merits. Table 1.1 outlines the accompanying documents to this planning application, whilst Table 1.2 outlines the supporting plans.

Table 1.1 Document List

Document	Author
Application Form	Barton Willmore, now Stantec
Planning Statement	Barton Willmore, now Stantec
Design and Access Statement	Barton Willmore, now Stantec
Aboricultural Impact Assessment	Barton Hyett Associates
Agricultural Land Classification Assessment	Askew Land & Soil Ltd.
Ecological Impact Appraisal	Clarkson Woods
Biodiversity Net Gain Assessment	Clarkson Woods
Heritage Desk Based Assessment	Cotswold Archaeology
Written Scheme of Investigation for Archaeological Assets	Cotswold Archaeology
Geophysical Survey Report	Magnitude Surveys
Solar Photovoltaic Glint and Glare Study	Pager Power
Flood Risk Assessment	Amber Planning
Landscape and Visual Impact Assessment	Barton Willmore, now Stantec
Noise Impact Assessment	InAcoustic
Transport Statement	ITP Energised
Construction Traffic Management Plan	ITP Energised
Statement of Community Involvement	34/7 Communications
Topographic Survey	Cole & Cole

Table 1.2 Plan List

Drawing	Reference	Author
Location Plan	BCK-01-SP-01	Voltalia
Site Plan (existing)	BCK01-PL-01	Voltalia
Layout Plan (proposed)	BCK01-PL-02	Voltalia
Array Elevation Details	BCK01-DV_CS_105_02_00	Voltalia
Inverter-Transformer Details	BCK01_DV_HV_111_02_00	Voltalia
Fence & Gate Details	BCK01-DV_CS_102_02_00	Voltalia
Access Track Details	BCK01-DV_CS_202_02_00	Voltalia
Customer Substation Details	BCK01-DV_HV_201_02_00	Voltalia
Control House Details	BCK01-DV_CS_601_02_00	Voltalia
DNO Substation Details	BCK01-DV_HV_101_02_00	Voltalia
CCTV Details	BCK01_DV-SEC_411_02_00	Voltalia
DNO Security Fence Details	BCK01-DV_CS_103_02_00	Voltalia
Storage Unit Details	BCK01-DV_CS_402_02_00	Voltalia
Weather Station Details	BCK01-DV_MON_421-02-00	Voltalia
Culvert Details	BCK01-DV_CS_302_02_00	Voltalia
Indicative Construction Compound	BCK01-PL-03	Voltalia
Landscape Strategy Plan	LN-OP-07	Barton Willmore, now Stantec

About the Applicant

1.8 **Experienced.** Founded in 2005 Voltalia is an experienced global renewable energy developer and Independent Power Producer (IPP) that specialises in solar, wind, hydro, biomass and storage. Operating in the UK since 2012, Voltalia has been responsible for the installation of 23 UK solar farms with a total capacity of over 246 Megawatts (MW) and is due to complete a further 196 MW across 4 solar farm sites in the coming year.

1.9 **Considerate.** Voltalia is a global company that understands the world is local. This is reflected in their approach to renewable energy development. Voltalia UK builds, owns, and operates the solar farms it develops as an IPP. This means that Voltalia makes a long-term commitment to every community in which it operates. Voltalia is committed to being a considerate neighbour and to make a positive contribution wherever their sites are located.

1.10 **Collaborative.** The UK is facing a climate and energy crisis, which will require us all to play our part. As an experienced and established global company, Voltalia is focused on providing renewable energy schemes to help decarbonise the UK's electricity generation and combat the climate crisis by supplying an affordable and renewable source of clean electricity. And, as a company dedicated to solving global challenges through local development, Voltalia understands that consultation and engagement with local communities is vital to delivering the renewable energy development we all need.

Structure

1.11 This PS provides a background to the proposal and demonstrates the planning merits of the Development, having regard to relevant National and Local Planning Policy, as set out within TWBC Local Plan, confirming that planning permission should be granted for the Development.

1.12 The remainder of this Statement comprises the following chapters:

- Section 2.0 provides a description of the Site, its surroundings and any relevant planning history of the Site, as well as a description of the Development;
- Section 3.0 sets out the sequential site assessment undertaken for the Development;
- Section 4.0 sets out the approach to engagement and pre-application discussions;
- Section 5.0 sets out the relevant national, regional and local planning policies and guidance relevant to the Site and the Development;
- Section 6.0 considers the main planning issues and provides an assessment of how the application complies with planning policy; and
- Section 7.0 summarises the Planning Statement and draws conclusions.

2.0 THE APPLICATION SITE AND DEVELOPMENT PROPOSAL

The Site

2.1 The Site extends to 69.23ha and is located approximately 520m to the southwest of the hamlet of Claygate. A Site Location Plan can be found at **Appendix A**.

2.2 The Site is wholly within the jurisdiction of Tunbridge Wells Borough Council as the Local Planning Authority. The boundary between TWBC and Maidstone Borough Council (MBC) is just north of the Site. The Site is fully within Horsmonden Civil Parish (CP) with Paddock Wood CP adjoining the Site's western boundary. The parish of Brenchley and Matfield is approximately 330m south, and Collier Street CP (in MBC) is approximately 110m north.

2.3 Figure 1 below provides an aerial image with the red outline to provide context for the Site.

Figure 1 – Aerial Photograph of the Site Context

2.4 The Site is currently in agricultural use, consisting of seven arable fields separated by hedgerows and drainage ditches. Although the immediate character is rural/agricultural, it does not have a remote 'unspoilt' feel. The Site is affected by the presence of electrical infrastructure (pylons, overhead lines) and surrounded by numerous anthropogenic influences including small settlements and numerous agricultural enterprises and commercial premises in the vicinity.

2.5 The village of Marden is located approximately 2.3km east and the strategic town of Paddock Wood is approximately 2.5km west. The east of the Site is bound by Maidstone Road (B2162) whilst the remaining boundaries are further agricultural fields and the River Tiese to the north.

2.6 Bockingfold Farmhouse and yard is approximately 375m north of the Site. Gaffords Bridge cottages, which are part of the Bockingfold estate, adjoin the eastern boundary and Site access off the B2162. The Oasthouse Farm, 'Scrapco Metal Recycling' facility, and other commercial / industrial businesses in an estate along Old Hay Road are 150m west. The Old Hay Airfield is approximately 1km to the northwest and is lightly utilised as a non-commercial landing strip.

2.7 The main vehicular access to the Site is an existing paved access off the Maidstone Road (B2162), a single carriageway with a posted speed limit of 60mph. The B2162 provides access to Horsmonden to the south and Claygate to the north.

2.8 The River Teise is located approximately 130m north of the Site at its closest. Northern areas of the Site are within Flood Zone 2 (Medium Risk) and Flood Zone 3 (High Risk), as shown on the Environment Agency's Flood Map for Planning. Remaining areas are within Flood Zone 1 (Low Risk). Further detail on flood risk and drainage is provided at Section 4.0 of this PS.

2.9 The Site does not include any Scheduled Ancient Monuments (SAM), World Heritage Sites or Listed Buildings. However, a full list of all heritage assets within a 1km Study Area along with a high-level assessment of their heritage significance is set out in the Heritage Desk-Based Assessment (HDBA) which is submitted in support of this planning application. The HDBA identifies 17 Listed Buildings within the Study Area, with the closest being the Basset's Farmhouse and attached Oasthouse approximately 230m to the southeast, and the August Pitts and attached walls approximately 230m south. The nearest SAM comprises a ring-work in Castle Wood, approximately 1.3km to the south-west. There are no Registered Parks and Gardens or Conservation Areas within the Study Area.

2.10 There are a number of Public Rights of Way (PRoW) crossing the Site and in the surrounding area. A Site Layout has been prepared, which includes the locations of the PRoWs. The PRoWs include:

- PRoW WT327 runs north through the Site from the Maidstone Road (B2162) to a parcel of land northwest of the Site, passing through and around the Site and River Teise.
- PRoW WT328 heads north from Pittlands Lakes / Churn Lane, extends through the Site, and ends adjacent to the River Teise, where it joins PRoW WT327 to the north of the Site.
- PRoW which do not cross the Site but are in close proximity include WT330 and WT329.

2.11 The High Weald Area of Outstanding Natural Beauty (AONB) lies approximately 1.55km to the southwest. There are no other designated or otherwise protected landscapes in proximity.

2.12 There are no statutory environmental designations within a 4km radius. The closest is the River Beult Site of Special Scientific Interest (SSSI), approximately 4km to the north. There are also no local or non-statutory designated sites within the 1km. However, there are areas of ancient, semi-natural woodland. The closest of which is Ancient Woodland approximately 300m north.

Planning History

2.13 There is no relevant planning history with regards to the Site. Planning applications in the wider area relating to solar farm development are summarised in Table 2.1 below.

Table 2.1 Historic Solar Planning Applications in TWBC

Reference	Address	Description	Status	Decision Date
14/00870/FULL	OS Plots 0072 6400 4568 Off Sherenden Road Tudeley Tonbridge Kent	*Solar park for generation of low carbon renewable electricity to the local distribution network- (15)*	Approved	27/11/2014
14/502851/FULL	Knells Farm Pearson's Green Road Paddock Wood Tonbridge Kent TN12 6NP	*Construction and 25 year operation of a solar farm and associated infrastructure for connection to local electricity distribution network, temporary construction compound, security fencing and ecological and landscape enhancement measures*	Approved	10/04/2015
14/506168/FULL	OS Plot 8200 Badsell Road Five Oak Green Tonbridge Kent	*Development of 6.6MW Solar Photovoltaic Park on land 120m to the south of Five Oak Green village, along with attendant equipment and infrastructure*	Approved	10/04/2015
15/505374/ADJ *15/503884/FULL*	Land At Pullen Farm Staplehurst Road Frittenden Kent	*Article 10 Consultation from Maidstone Borough Council - Use of the land to provide a solar farm and its enclosure by fencing and the erection of just over 39000 solar panels along with the provision of associated transformers, switch gear housing and a substation*	No Objection *Refused*	11/03/2016 *24/06/2016*
22/01695/FULL	Netters Farm Attwaters Lane Hawkhurst Cranbrook Kent TN18 5AT	*Proposed Development of a Photovoltaic Solar Array, Battery Storage and Associated Infrastructure*	Pending	Pending
22/01884/FULL	Land At Lower Ellenden Farm Water Lane Hawkhurst Cranbrook Kent TN18 5AX	*Proposed Development of a Photovoltaic Solar Array, Battery Storage and Associated Infrastructure*	Pending	Pending

2.14 These developments along with other nearby schemes in neighbouring authorities that may be of relevance have been considered in respect of cumulative impact in the application's LVIA,

2.15 The list above reveals that there have been relatively few major of solar energy developments in TWBC. Those consented or in-planning have been smaller scale, with only one being over 10MW (14/00870/FULL – 14.4MW). This is likely to reflect the fact that a great majority of the Borough's open countryside is constrained by Green Belt and High Weald AONB designations, thus limiting opportunities for the scale of decentralised energy necessary to support local and national Net Zero targets without intrusion into more sensitive or protected landscapes.

2.16 A review of solar farm applications in TWBC reveals key determining factors include:

- The NPPF guidance that applicants should not be required to demonstrate the overall need for renewable energy and authorities should approve the application if its impacts are (or can be made) acceptable, unless material considerations indicate otherwise.
- Visual screening / mitigation measures used to help reduce visual impact – location of solar panels, the retention and use of existing landscape features, additional planting of hedgerows and trees. Acceptability in landscape terms is of effective strategic landscaping.
- Development, should seek to limit the use of 'Best and Most Versatile' agricultural land.

- Impacts on the setting of heritage assets and consideration of buried archaeology.
- Early consideration of construction traffic – routing of delivery vehicles, HGVs, etc.

The Development

2.17 The Development is a renewable energy generating station comprising ground mounted solar photovoltaic arrays together with ancillary infrastructure and landscaping and biodiversity enhancements on land at Bockingfold Farm. The solar farm will have an export capacity of up to 49.9MW of renewable electricity at peak operation and is proposed for a 40-year period. A suite of detailed drawings accompanies this submission as per Table 1.2 and a fuller description of the elements of the Development is provided within the DAS. These include the following:

- Solar PV panels, ground mounted onto a pile-driven sub-structure framework.
- 8 No. Inverter/Transformer Stations distributed across the solar farm;
- String Combiner Boxes to combine multiple strings of PV panels;
- 1 No. Customer Substation;
- 1 No. Customer Control House (if not incorporated into the Customer Substation)
- 3 No. Spares Containers for maintenance;
- Compacted internal crushed stone tracks, rolled in layers to allow vehicular access from the highway and around the Site between field parcels;
- 2m high security fencing (deer fencing) with double wing gates to enclose the perimeters of the Site and allow sheep to graze securely;
- Security and monitoring CCTV/infra-red cameras mounted on poles along the perimeter;
- Pole mounted weather station;
- Underground and cable tray cabling to connect the panels, inverters-transformer units to the proposed on-site substation units and DNO infrastructure;
- 1 No. DNO 132kV Substation Building with Point of Connection (POC) compound containing external electrical equipment;
- 2m-2.4m high Weld Mesh security fencing around the DNO POC infrastructure;
- Construction and operational site access from the existing access at the B2162; and
- Landscaping planting, biodiversity enhancements.

2.18 The POC will be within the northern boundary of the Site and connect into an existing 132kV overhead electricity line. This is shown on the Site Layout Plan.

Landscape and Biodiversity Proposals

2.19 Key landscape mitigation and biodiversity enhancement measures are as follows:

- Delivering a calculated 124.67% net gain for habitats, 50.08% gain in hedgerow units, and +18.78% net gain in river units;
- Species-rich native wildflower meadow to perimeter buffer areas and along PRoW. Along with aesthetic value, wildflower species will attract insects, in particular bees;
- Species rich grassland pasture grassland across the majority of the Site to be managed via low intensity sheep grazing to promote biodiversity and soil carbon sequestration;
- Areas of tussocky grassland or diverse meadow seeding where panels are not present;

- Enhancing existing hedgerows to be species-rich. All existing hedgerows will be surveyed for gaps pre-commencement and reinforced with appropriate tree and hedge species;
- New native species hedgerows interspersed with trees to restore lost hedges. Along with screening these will increase boundary connectivity and foraging opportunities;
- The provision of 10 bird boxes located within existing hedgerows and on mature trees. Boxes will comprise various designs suitable for species including: robin, wren, blue tit, great tit, coal tit, nuthatch, house sparrow and starling;
- One barn owl box located in a mature tree near to the western site boundary;
- 5 bat boxes facing in different directions to offer suitable year-round roosting conditions;
- 2 amphibian / reptile hibernacula located in the tussocky grassland areas;
- 5 dormouse within hedgerows across the site.
- Provision of log piles to benefit invertebrates, hedgehog, reptiles & amphibians
- Mammal gaps in perimeter fencing with wildlife sympathetic groundskeeping regime; and
- Management of ditches to increase the diversity and extent of marginal vegetation.

Construction Methodology

2.20 The following summary of the overall construction approach is expanded on in the DAS. The Construction Traffic Management Plan (CTMP) sets out a detailed management scheme in relation to transport/access. It is envisaged that a Construction Environmental Management Plan (CEMP), would be provided as a Pre-Commencement Condition of any planning consent.

2.21 Construction is estimated to be up to 34 weeks, consisting of the following principal operations:

- Erection of security fencing and gate;
- Setting down the temporary construction lay-down area;
- Delivery of solar panels, mounting frames, and ancillary units;
- Installation of mounting system and solar panels;
- Installation of ancillary units;
- Cable trenching, ducting & backfilling;
- Commissioning of the generating station equipment and grid connection;
- Site reinstatement and ecological enhancement; and
- Demobilisation from the Site.

2.22 Construction and operational phase vehicles will access and egress the Site via an existing paved access off the B2162. All traffic associated with the construction phase will utilise this access and be able to enter and exit in forward gear. If ground conditions dictate wheel washing facilities will be provided to ensure no mud or loose material is transferred onto the local highway network by construction vehicles. This is detailed within the CTMP.

2.23 All construction worker and delivery vehicles will park or offload in a temporary construction compound close to the access. This compound does not form part of the Development. In the event of the Development being granted planning permission, the compound would be provided under associated Permitted Development rights. The compound will house temporary site office

cabins and welfare facilities for contractors. The area will also be used for refuelling, tools, waste management, and materials storage. The temporary compound will be constructed using a geogrid base, or similar, to facilitate removal and reinstatement.

2.24 The number of vehicles travelling to and from the Site will vary throughout the construction phase. Assuming a six-month construction period, on average there would be c. 4.9 (5) HGV deliveries (10 two-way movements) per day. Proposed working hours are 0700-1900 Monday to Friday and 0700 -1300 on Saturdays with no construction on Sundays or Public Holidays.

2.25 These and other methods to minimise the effects of construction vehicles on the local road network and impact on local communities is detailed within the CTMP. This has been informed by a Transport Statement (TS) detailing the proposed routing and access strategy.

Operations

2.26 Once operational, the Development will be monitored remotely and will not require permanent staff to be located on site. Occasional maintenance activities will be required for groundskeeping, cleaning of the solar panels, checks on equipment and occasional visits to the substation by the DNO. Based on the Applicant's experience with other solar farm projects it is expected that the operational development could require up to two maintenance visits per month in cars or transit van type vehicles, using the access from the B2162.

2.27 Vegetation will grow under the solar panels and around the field margins, which will require ground maintenance. It is envisaged that a Landscape and Ecological Management Plan (LEMP) will be conditioned to any planning consent and set out how the land would be managed and monitored throughout the Development's operational lifetime. It is proposed that the Site would be maintained in co-located pastoral agricultural use through low intensity sheep grazing and managed to deliver significant biodiversity net gains.

Decommissioning

2.28 At the end of the proposed 40-year operational period, the solar farm and its ancillary equipment will be decommissioned, dismantled and removed and the site will be fully reinstated to the satisfaction of the local planning authority and returned to its agricultural use.

2.29 Where possible, all of the solar farm components will be removed and reused or recycled. Where this is not possible, any waste generated during decommissioning will be removed and transported by a certified and licensed contractor.

2.30 The traffic management and reinstatement works of the decommissioning phase will be addressed in an appropriately timed Decommissioning Plan as required by planning condition in the event planning permission is granted.

3.0 SITE SELECTION

3.1 The UK electricity network faces exceptional challenges to meet the government's target of reducing carbon emissions. This will largely be achieved through decommissioning carbon intensive energy plants and increasing low carbon generation such as wind and solar. Voltalia has undertaken a robust and effective site selection exercise to identify suitable areas for solar development to meet the electricity demand within this network area. This section of the PS outlines the site selection process that the Applicant has undertaken in the approach to the Development. A more in-depth insight into site and design refinement is set out in the DAS.

3.2 The site selection exercise has been undertaken with regard to a number of different planning policy, environmental and technical criteria including:

- The availability of utilities and viability of a grid connection;
- Suitability for solar generation;
- Land availability;
- Accessibility
- Compatibility with national and local planning policy;
- Preference for previously developed land or industrial settings;
- Agricultural Land Quality;
- Visual impact; and
- Proximity to sensitive landscapes and areas of designated environmental significance.

3.3 The Applicant engaged with TWBC for Pre-Application Advice. This confirmed the Authority's climate change ambitions would be material to the planning balance. It is established that requirement for applicants to demonstrate the overall need for renewable energy and applications for renewable energy should be approved if the impacts can be made acceptable.

3.4 The following summary sets out how the site has been selected and refined, and can be read alongside the DAS; it is proportionate to the scale and nature of the proposed development and aligns with the view of the Inspector in Planning Appeal APP/Z3825/A/14/2219843 (Horsham District Council) which states at Paragraph 31 *"A sequential test for the siting of solar farms is not an explicit requirement of either the development plan or the Framework*".

Requirements for Solar Generation

3.5 The following sub-headings set out the principal requirements for Solar PV Farm Development.

- **Grid Capacity** – Identify any local substations or points of connection with capacity to accept additional generation and secure a Grid Offer. This is essential to an energy project.
- **Environmental Suitability** – Review of high-level planning/environmental constraints, including suitability for solar generation, via desk-based sources.

- **Land Availability & Productivity** – Approach landowners within a search area from the point of connection to discuss availability of land for the potential Solar PV Farm.
- **Planning Suitability** – Detailed assessment of land available for the proposed project which must be suitable and achievable from a planning perspective.

Grid Capacity

- **Available Grid Connection Capacity:** The DNO must be able to offer a Point of Connection (POC) with capacity to accept the output of the solar park. Finding available capacity is one of the biggest challenges facing renewable energy development.
- **Avoiding Energy Loss:** A site must be located close to a POC to avoid transmission losses. The greater the distance, the more energy is lost along the way. Locating a site far from a POC is not an efficient use of land; it means there is less clean energy getting to the grid from the same land use area, which undermines the principles of sustainable development.
- **Route to Connection**: The cost of cable to connect into a POC is c.£0.5m per km. There are often technical considerations which mean that cable paths of an off-site POC cannot be 'as the crow flies'. A site 1km from a POC is likely to have at least a 2-3km cable route. This can be for DNO requirements, land-ownership constraints, or to avoid undue construction impact. A site with an on-site POC is therefore optimal to avoid disruption and transmission loss.
- **Viability & Site Search Area:** A site selection methodology for a solar farm of this scale (<50MW) is unlikely to be viable beyond a 1km radius from a POC based on cable route to POC, not direct distance. A good methodology requires that an on-site substation should not be more than 1km from a POC. Any additional distance over 1km would incur excessive connection costs and export losses that compromise viability. If the grid is known to have capacity it is considered that 5km section of the 132kV HV line to which the proposed solar farm would connect is a reasonable extent to consider. Land within this range which is also within 1km of the line forms the Site Search Area.

Environmental Considerations

- **Suitability for Solar**: Any site must be fit for the purposes of solar energy generation. Field patterns, shade factors, topography, and ground conditions must be suitable for construction and output optimisation.
- **Accessibility:** Site selection must consider connectivity with the Highways network for safe access. It also has to be viable to implement a CTMP that can avoid or mitigate impact.
- **Flood Risk:** Although solar farms are not vulnerable to flooding and will not increase risk elsewhere, where possible the site selection process will prefer areas with lower flood risk.
- **Protected Species / Habitats:** Although protections can be put in place for protected species and habitats, site selection will prioritise areas without high risk of the presence of protected species or where conditions would inhibit ecological mitigation in construction.

Land Use (Planning) Considerations

- **Landscape & Heritage Designations**: Potential land within the Search Area is screened in relation to statutory and local heritage and landscape designations. This includes Green Belt, AONB, Conservation Areas, and above/below ground heritage assets.

- **Environmental Designations:** A search considers proximity to ecological areas like SSSI, RAMSAR, LNR, Special Areas of Conservation, and Special Protection Areas.
- **Planning Policy:** Site selection is mindful of national and local planning and environmental policy. This ranges from requirements in the NPPF, Local Plan, and Neighbourhood Plans.
- **Sustainable Development:** All solar farms will entail some sort of impact so a site must be capable of multifunctional enhancements to support the economic, environmental, and social dimensions of sustainable development. A good site can will be able to incorporate visual mitigation, to protect and enhance PROWs, and to enable Biodiversity Net Gain.

Land Availability & Quality

- **Agricultural Land:** For the UK to meet its Net Zero objectives it requires solar farms of too large a scale to rely on only rooftops and brownfield land. And, most brownfield sites are likely to be needed for long term permanent housing and economic development. A solar farm is only a temporary use that does not change the agricultural land classification. A key site search consideration is to avoid, where possible, *"best and most versatile"* agricultural land.
- **Land Availability**: Site options are restrained by land availability. It is important to focus on estates that are large enough to incorporate renewables as part of a temporary diversification that will not compromise the overall viability of the primary farm operations.
- **Continued Agricultural Use:** Site selection will aim for opportunities to co-locate with ongoing agricultural operations. At present this is most likely to be sheep grazing, although innovations in agrivoltaics means crops may also be viable on sites in the mid-term future.

Site Selection

3.6 The process of finding capacity to 'connect into' the grid is a key determinant of whether a site may be viable for solar. This is heightened within the sub-regional area of Kent; TWBC's Energy Topic Paper (February 2021) states at Para 3.24 that: *"There are significant electricity grid constraints within Kent and Medway making new connections that deliver renewable energy onto the electricity grid increasingly difficult.*" This issue is similarly highlighted in the Renewable Energy for Kent 2017 Update (October, 2017)[i]:

> ***'Grid capacity limits** – An aging electrical distribution network invokes capacity issues if significant upgrades are not viable within a timescale that matches local generation capacity. The cost of network connections and limitation on installation size are beginning to impact the viability of renewable installations, which may reduce the rate of uptake in renewables in future. …*
>
> *The likely main barriers to future renewable installations could become competition for grid connections to sell generated electricity and, therefore, the key drivers for installing renewables may move away from electricity sales and towards local generation; displacing the need for grid supplied electricity'*

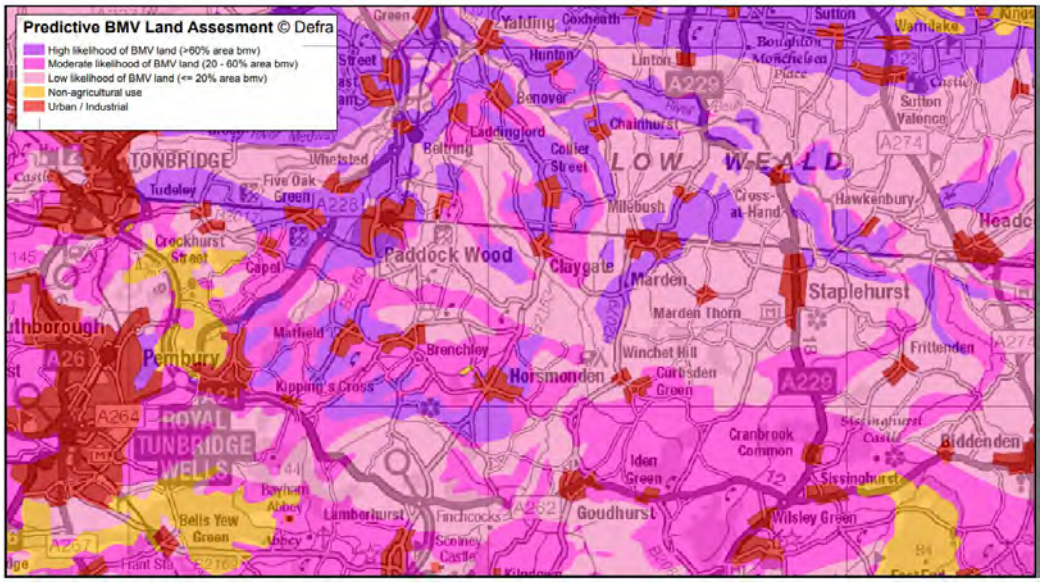
3.7 For development in the area potential non-agricultural, urban, and previously developed land (PDL) (or 'brownfield land') was identified and considered. TWBC maintain a Brownfield Land Register. These are predominantly PDL areas (as defined in NPPF Annex 2) and the record is updated annually. There are 44 brownfield land sites within the Register for 2021-2022.

3.8 Although predominantly allocated for housing development, it is worth also noting their unsuitability for solar given the scale of the associated land parcels. Of the 44 brownfield sites, the largest is 7.07 ha in scale (with the smallest being 0.09ha). These sites were therefore discontinued from the outset as an insufficient quantum of solar development would be able to be sited, meaning that the Development would be unviable. This is before considering any of the additional site constraints listed above. Therefore, although considered, given the scale of the Development, no such land was considered to be suitable or available.

3.9 Having identified grid capacity along the 132kV line crossing Bockingfold Farm, and having established the lack of brownfield viability, the Applicant undertook a site selection exercise as outlined by the key criteria in the sections above. The process was limited because, as noted in the TWBC Pre-Application Advice on this topic, "*The borough is highly constrained with landscape (AONB) and Green Belt designations.*" Such designations provided the initial constraints framework, along with others available via sources including National Agricultural Land mapping[ii], Magic Maps, and TWBC Local Plan mapping.

3.10 LVIA Figure 1 - Site Context Plan (LN-LP-01 REV A) provides an overview of the constraints identified within the local area from a planning and environmental designation perspective. In addition to this, Figure 2 below provides an overview of predictive BMV within TWBC and Maidstone BC, whilst Figure 4 provides an overview of the some of the key environmental constraints and their location relative to the POC search area.

Figure 2: Predictive BMV Land Assessment (019)

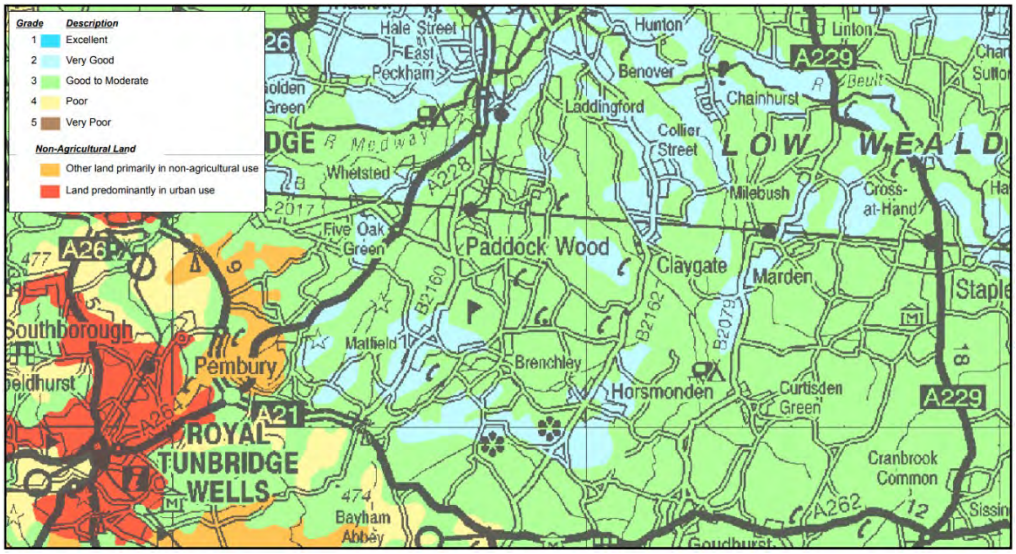


3.11 Because a solar farm is temporary and will not affect a permanent loss of agricultural land, and because of the preference of brownfield land for permanent housing and employment development, it is unlikely that solar farms of the scale required to meet local and national Net Zero commitments is possible on PDL. Therefore, the use of agricultural land for such projects

is expected and acceptable, with responsible site selection targeting land of lower grade and avoiding best and most versatile agricultural land where possible. ALC019 extracted above at Figure 2 demonstrates that much of TWBC benefits from high quality agricultural land, although with good probability of some lower grade land within areas just east of Paddock Wood.

3.12 Noting that viable land in the search area is agricultural in nature, the Applicant consulted the Regional Agricultural Land Classification maps (ALC007; Figure 4)[iii] which identifies much of the area's agricultural land as '3 Good to Moderate', with some pockets of higher grade 2 land.

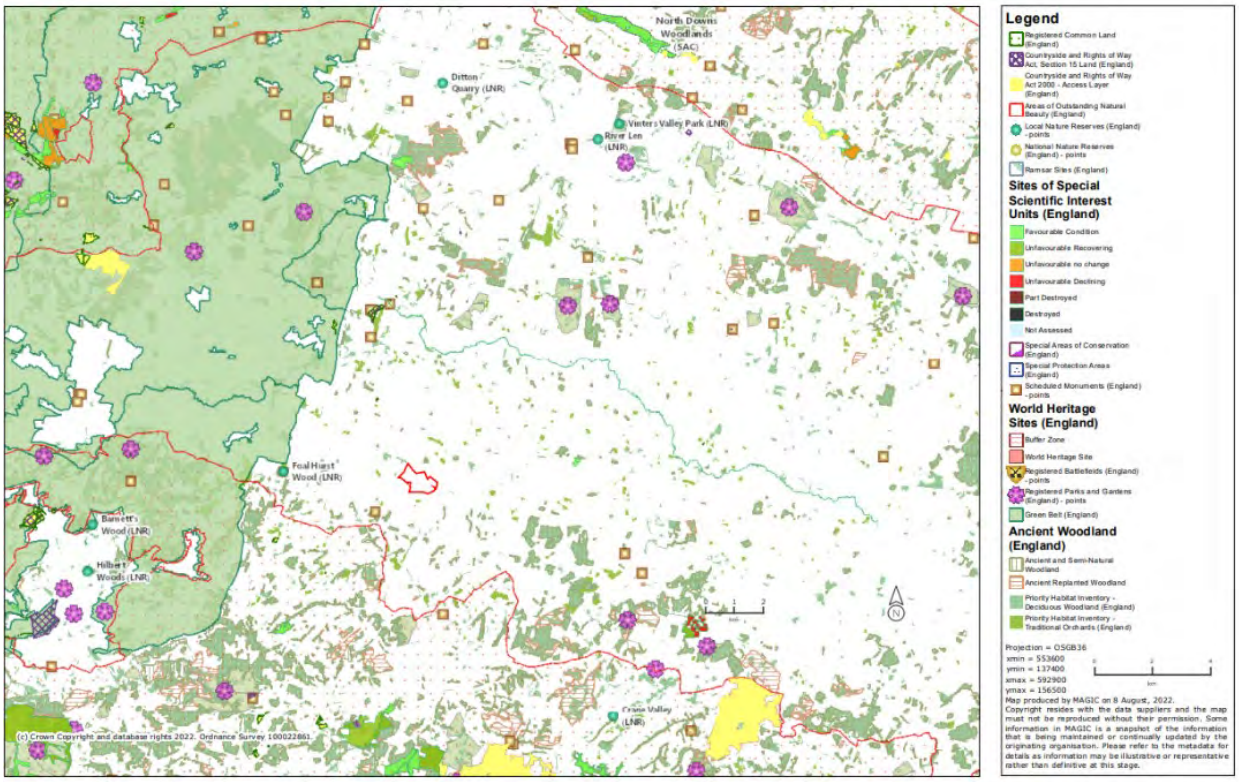
Figure 3: Regional ALC 007



3.13 Although the use of higher-grade land can be justified with respect to other interests in a planning balance, to understand the suitability of the potential Bockingfold Farm site, a ALC was undertaken of a larger 90ha area. Areas identified as Grade 2 'Best and Most Versatile" (BMV) land were excluded from development proposals. A small proportion of higher grade 3a remains in the Site. However, it is noted that around .5ha of this cannot be in agricultural use due to features like paved access tracks and IDB land drains. All land identified as predominantly 3a was also excluded. What remains in the Site area pockets of 3a within significantly larger 3b fields. As a small proportions of 3b fields they cannot be cultivated independently from 3b land which sets the baseline for the use and versatility of the field.

3.14 A key stage of the site selection exercise is to scope out more sensitive designated land such as Green Belt, AONB, National Park and any land allocated for development in the TWBC Local Plan. Land is also then screened for proximity to and mitigation potential in respect of environmental and heritage designations such as RAMSAR, SSSI, priority habitat areas, Conservation Areas, and Listed Buildings. Other constraints that are not ideal, but resolvable, such as flood risk or potential archaeology, are also weighed into the selection process.

Figure 4: MAGIC Maps Extract including key Environmental Constraints



3.15 When undertaking site search the Applicant sought to identify land where landscape character was such that a solar farm could be located with limited and/or mitigatable impact. Conditions at Bockingfold Farm reflect suitable topographic and landscape sensitivity parameters. It benefits from being relatively flat with strong boundaries and good potential for further containment from new-mitigation planting, as reflected in the Landscape Strategy Plan.

3.16 There are no local TWBC or KCC landscape capacity studies indicating areas potentially suitable for different types of energy generation. However, the EnergySouth2East Local Energy Strategy (2019)[iv] highlights significant potential, particularly from solar, as *'[t]he South East ranks third in England for the amount of electricity generated from renewable sources, calculations show that solar PV schemes can produce up-to 36% more electricity than elsewhere in the UK'*.

3.17 Furthermore, the near-urban countryside location is only approx. 5.8 miles east of the main town of Royal Tunbridge Wells, is close to the strategic settlement of Paddock Wood, and is surrounded by smaller villages and commercial/industrial clusters. This means there is robust demand in the area to take up the locally generated electricity, which avoids the energy losses associated with a greater distance between the export POC and uptake by energy users.

3.18 The above represents a proportionate insight into the site selection methodology for Bockingfold Solar Farm. The Applicant has followed a sequential approach which has taken account of technical, environmental, and planning considerations in accordance with best practice and national policy. Further discussion of agricultural land use is at Section 6.0 herein.

4.0 PRE-APPLICATION ADVICE & COMMUNITY CONSULTATION

4.1 This section provides an overview of the stages of pre–application engagement with TWBC, the local community, and other stakeholders prior to submission. A full account of community consultation undertaken is provided in the Statement of Community Involvement (SCI).

TWBC Pre-Application Advice

4.2 In January 2022, Barton Willmore wrote to TWBC introducing a potential solar farm on land at Bockingfold Farm. A request was made for TWBC's formal Pre-Application Advice on a 49 MW solar energy generating station. The submission was supported by a detailed letter which set out the proposals, a red-line Location Plan, and Constraints Plan. The request was registered by the Council in January 2022 and given the reference 22/00078/PAMEET.

4.3 After 22/00078/PAMEET validation a pre–application meeting was held with TWBC Planning Officers on the 8th of February. The Applicant provided an update on the Development and discussions were had regarding the details of the submitted pre-application advice request

4.4 A TWBC Pre-Application Response was received 28th February 2022. It is a comprehensive overview of key policies and topics most relevant to the planning balance. The Response includes specific relevant local policy, advice on the likely key issues that may arise when seeking planning permission, as well as helpful recommendations for further consultation.

4.5 Policy specific advice and how this application meets requirements thereof is more fully detailed and addressed in the relevant sections of the PS to follow. Detail arising from the Response and subsequent discussions is reflected in this application, as outlined below in Table 3.1.

Table 3.1: Pre-Application Comments

Pre-App Comment	Response
…The area is relatively flat and low in level and may be visible from surrounding higher level land…. viewpoints need to be taken into consideration as part of any…LVIA… *Two PROW bisect the site and there are other PROWs in close proximity … development would be particularly noticeable from these public viewpoints and would result in harm to the landscape. This …should be fully assessed as part of the LVIA.*	This advice is considered and addressed within the LVIA submitted alongside the application.
The LVIA should also assess the impact from glint and glare from the panels.	A Glint & Glare Study has been undertaken and accompanies this planning application.
I recommend that early engagement is sought with Brenchley & Horsmonden Parish Council, adjoining Parish/Town Councils and neighbourhood plan groups. The site is on the boundary with [MBC] and you may wish to discuss this proposal with them….	The Applicant has undertaken extensive community consultation, as detailed within the SCI and outlined in section 4.0 of this PS.
It is not clear from the submission what impact the development would have on the agricultural holding and whether it would affect the operation and viability of the farm … Further information and an assessment of the ongoing business plan for the enterprise should be submitted…	Insight into the Site Selection process is found at Section 3.0 in this PS. Individual business plans pertinent to the wider Bockingfold Farm operation are not provided. The need to provide such

	information is not a statutory or LDF requirement. In any case, the Applicant is unable to provide meaningful detail owing to confidential contractual agreements. Nonetheless, the Site occupies only part of the wider Bockingfold estate. The Development offers a source of additional income through diversifying the current portfolio of agrarian assets utilised at the Site (being arable land uses). In combination with the potential for the use of sheep grazing, the Development offers a secure stream of income guaranteed over a fixed time period. This is within the context of major change to the financial support offered to UK farmers as part of Brexit and therefore enhances the resilience of the farming operation as a whole.
The [PEA] … identifies the needs for further surveys for breeding birds and great crested newts, which should be carried out … In addition to these identified surveys, dormice are likely to be impacted through the creation of new accesses or widening of existing accesses in the hedgerows and a dormice survey is therefore required. The proposal may also impact reptiles, so a reptile survey should be carried out…	All required surveys have been undertaken and are reported in the EcIA. Some recommendations were subsequently revised further to ongoing direct engagement between the County Ecologist and Clarkson Woods ecologist. This is also discussed within the EcIA.
Any future scheme should not only include biodiversity mitigation measures but also demonstrate a net gain for biodiversity on site in accordance with Para 174 of the NPPF and Policy EN9 of the Submission Local Plan, which requires a biodiversity net gain of at least 10%. A Landscape & Ecological Management Plan should be submitted…	The Development will deliver BNG far exceeding a 10% target. The approach to delivering BNG is outlined in the Biodiversity Net Gain Assessment. A standalone LEMP is not submitted although key inputs for a CEMP and LEMP are included in the EcIA. Further discussion on this is at PS Section 6.0
… there is no functional relationship of the land with the closest listed buildings, so the effect on significance would be about the change in character to the rural land, which could be mitigated to some extent by screening. There is the potential for less than substantial harm to be caused to this part of their setting which forms part of their significance (the rural character), but if so, this is likely to be at the low end of the scale due to the lack of intervisibility. With appropriate new landscaping to act as a screen to intervisibility, it is likely that the low end of less than substantial harm would be outweighed by the public benefits of the renewable energy generation	Consideration of the impact on heritage assets is detailed within the HDBA and WSI. Details of the landscaping strategy is provided within the LVIA. This PS discusses, in detail, the significant benefits of the Development in delivering renewable energy and supporting environmental restoration through BNG.
The site also has potential for archaeology. I recommend that you contact Wendy Rogers (Senior Archaeologist) at [KCC] to determine the level of archaeological assessment required…	KCC Archaeology have been consulted on the approach to archaeological interests. This is detailed in the HDBA and Written Scheme of Investigation.
I recommend that you view … reports for applications 14/00870/FULL (Sherenden Road) and 14/502851/FULL (Knells Farm). … The application at Knells Farm included swales to help slow down the rate of run off and to store water temporarily.	The approach to development in higher flood risk areas and SuDS been considered and is detailed within the Flood Risk Assessment (FRA) submitted alongside this application.
I recommend that you seek pre-application advice from KCC Flood & Water Management at an early stage as they may raise an objection to the scheme. … I also recommend that you seek … advice from the [EA] and Upper Medway [IDB]	KCC Flood & Water Management, the Environment Agency, and the Upper Medway IDB have been approached for advice with their inputs feeding into the Development. This is detailed within the FRA.
It is recommended that pre-application advice is sought from KCC Highways in respect to the impact of the development on the local highway network, especially during the construction…	KCC Highways have been engaged with respect to the Local Highway Network. This is detailed within the Transport Statement.
The site is currently used for agricultural purposes. There are two small areas of potentially contaminated land within the site, which may be infilled ponds. I recommend that you contact Mid Kent Environmental Protection who will advise on	Crops are grown in the areas identified as infilled ponds, suggesting no contaminants harmful to flora and fauna. Owing to the nature of a solar farm, it is unlikely that

the level of information that should be submitted with any future planning application. It is likely that a preliminary contaminated land assessment would be required.	significant environmental effects would occur at these areas. The Applicant is willing to accept a condition requiring that if areas of contamination are identified these should be managed appropriately in line with a CEMP.
A small part of the south-west corner of the site lies within the KCC 250m Minerals Waste buffer zone. This may be associated with the metal recycling facility .... I recommend that you contact KCC to discuss whether this designation will impact…	This point was discussed with the KCC Minerals & Waste Team and is detailed in Section 6 of this PS.
A Tree Survey, Arboricultural Impact Assessment and Tree Protection Plan should be submitted…	These documents are provided within the submission pack.
A Noise and Vibration Assessment is required … Any parts of the development likely to cause noise/vibration should be carefully sited to the minimise their impact on residential amenity.	A Noise Impact Assessment (NIA) has been prepared with all potential noise emitting sources assessed. All buildings associated with potential noise impacts are located well away from any noise sensitive receptors.

Kent County Council Pre-Application Advice

4.6 In accordance with recommendations of TWBC Pre-Application Advice, further topic specific engagement was undertaken with key consultees.

4.7 In February 2022 Integrated Transport Planning (ITP) requested advice on transport and routing options from Kent County Council Highways (REF: PAP/2021/209). In April 2022 a response was received. This set out KCC Highways expectations for information required in the CTMP and for routing and access analysis in the Transport Statement. The advice of KCC Highways, augmented by inputs from local community engagement, has been instrumental in the preparation of this planning application and the proposed construction routing.

4.8 In March 2022 KCC Flood and Water Management, as Lead Local Flood Authority (LLFA), provided Pre-Application Advice (NON/2022/089067) to Amber Planning to aid in the preparation of the Flood Risk Assessment (FRA) and sustainable drainage (SuDS) strategy. The LLFA recommended that ancillary buildings are located outside the areas of highest flood risk and that positive measures be included for surface water flood risk mitigation/betterment. In particular the LLFA focus on the importance of good land/vegetation management on a solar farm. The layout of the solar farm exceeds LLFA requirements by excluding development from the Zone 3b functional flood plain, as opposed to merely removing more sensitive equipment from these areas. The design of the solar farm also incorporates targeted SuDS for ancillary units and reflects a sustainable landscape-led SuDS strategy as set out in the FRA.

4.9 Informal pre-application engagement was also undertaken on other topic areas. In particular, the project ecologist at Clarkson Woods discussed and agreed the requirements and expectations for further assessment and mitigation with the County Ecologist. The heritage consultants, Cotswold Archaeology, have engaged directly with the County Archaeologist for the preparation of the Heritage Desk Based Assessment (HDBA), approval of the Geophysical

Survey WSI, and for the WSI submitted with this application outlining stages of further archaeological works, with the expectation that these works will be secured by condition.

EIA Screening

4.10 Environmental Impact Assessment (EIA) Screening Request was submitted to TWBC on the 7th of January 2022 (Ref: 22/00068/ENVSCR) under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017[v], as amended.

4.11 TWBC issued their Screening Opinion on the 21st of January 2022, which determined the Development did not constitute EIA Development. TWBC state that it is considered that whilst the Development is above the indicative threshold set in Schedule 2 (3)(a) of the EIA Regulations, the Development would not be likely to have significant effects on the environment by virtue of factors such as its nature, size, location and cumulative impact. The environmental impacts of the Development have been considered through the suite of supporting technical reports listed in Table 1.1.

Community Consultation

4.12 The Applicant is committed to meaningful engagement with local residents and stakeholders. Voltalia recognise that proactive pre-application discussions lead to better design and more well-informed planning applications, with improved outcomes for all involved. This section summarises some of Voltalia's community engagement efforts ahead of the submission. An account of the pre-application consultation process is provided in the application's SCI.

4.13 To facilitate public participation Applicant has provided a dedicated project website and hosted a series of in-person exhibition events and online web events along with dedicated briefings at the Parish Council and Member level.

4.14 Two days of public consultation were held on May 25th-26th in Paddock Wood and Horsmonden. An online virtual event was also held in the evening of Wednesday 25th May for those unable to attend in-person events. These exhibitions provided an opportunity for local residents to find out more about the project from the Applicant, to ask questions, and provide feedback.

4.15 A further public online event was held on the evening of Tuesday 28th June via Zoom, which was attended by local councillors and members of the public. On the 4th of July, the Applicant team attended Horsmonden Parish Council's full Council Meeting to provide a background to the project and understand local concerns. The Applicant team also held a Members Briefing session with TWBC on Friday 8th July. Since then the Applicant has engaged with stakeholders by email into late August on important local matters like transport and routing optioneering where ongoing engagement has been particularly influential for the final as-submitted proposals.

5.0 PLANNING POLICY FRAMEWORK

5.1 Section 70 (2) of the Town and Country Planning Act and Section 38 (6) of the Planning and Compulsory Purchase Act 2004 together require that planning applications be determined in accordance with the Development Plan unless material considerations indicate otherwise.

5.2 For the purposes of this application, the Development Plan comprises the Tunbridge Wells Borough Council 'Local Plan' (2006) 'Core Strategy' (2010), and 'Site Allocations Plan' (2016), together with Supplementary Planning Documents (SPD), Neighbourhood Development Plans (NDP), and the emerging 'Submission Local Plan 2020-2038' (2021).

5.3 The following section identifies the above Local Development Framework (LDF) policies and material considerations relevant to this application. An assessment of the proposed development against the relevant policies is set out in Section 6.0.

5.4 Additional material policy considerations for the Proposed Development is derived from global and national energy policy and planning policy as set out in the National Policy Statement (NPS), the National Planning Policy Framework (NPPF) (July 2021), and the online Planning Policy Guidance (PPG) advice on renewable and low carbon energy.

Material Considerations

Kyoto Protocol (2005)

5.5 It is widely accepted that greenhouse gas emissions need to be significantly reduced. In 2005, the Kyoto Protocol came into effect providing the first ever framework for international climate action. Under the Protocol, the United Kingdom, together with 37 other industrialised countries, committed to reducing greenhouse gas emissions by 5.2% from 1990 levels by the year 2012.

UN Framework Convention on Climate Change: The Paris Agreement (2015)

5.6 The central aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping a global temperature rise below 2 degrees and to pursue efforts to limit the temperature increase even further to 1.5 degrees. Additionally, it aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals appropriate financial flows, a new technology framework, and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust framework.

Climate Change Act (2008) - Net Zero 2050 (2019)

5.7 The Climate Change Act (2008) (2050 Target Amendment) Order 2019[vi] sets a legally binding target for reducing greenhouse gas ('GHG') emissions, in particular carbon dioxide ('CO_2'). As

originally enacted, these targets include a reduction of GHG by 100% (on 1990 levels) by 2050, and a requirement that domestic emissions are reduced by no less than 3% each year. In setting these targets, the Act established the Committee for Climate Change ('CCC'), which is responsible for setting interim binding targets over five-year periods.

5.8 In May 2019, the CCC recommend a new emissions target for the UK: a 100% reduction ('net zero') of emissions by 2050. This change in legislation mandating a 100% reduction in CO_2 emissions by 2050 was approved by the House of Commons on 24th June 2019 and the House of Lords on 26th June 2019 and is now the Government's statutory carbon reduction obligation.

5.9 Chapter 6 of CCC's 'Net Zero – The UK's Contribution to stopping global warming'[vii] report refers to delivering a net zero emissions target. It sets out actions, including the transition to a net zero economy and what is needed to underpin net zero delivery. 'Part B' sets out key near term actions to put the UK on track and recommends that more rapid electrification must be accompanied by greater build rates of low carbon generation capacity, accompanied by measures to enhance the flexibility of the electricity system.

IPCC Special Report on Global Warming of 1.5°C (2018)

5.10 An IPCC Special Report was prepared discussing the potential impacts of global warming of 1.5°C above pre-industrial levels and related global GHG emission pathways in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. The report sets out that pathways limiting global warming to 1.5°C with no or limited overshoot requires rapid and far-reaching transitions in energy, land, and infrastructure, and deep emissions reductions in all sectors. A 'wide portfolio' of mitigation options and a significant upscaling of investments in those mitigation options is needed.

National Infrastructure Strategy – Fairer, Faster and Greener (November2020)[viii]

5.11 The National Infrastructure Strategy (NIS) sets out the Government's plans to deliver on its ambition, being *'deliver an infrastructure revolution: a radical improvement in the quality of the UK's infrastructure to help level up the country, strengthen the Union, and put the UK on the path to net zero emissions by 2050'*.

5.12 The NIS is relevant to the Development as it sets out how the Government will address the issues we face and how it will build back fairer, faster and greener. The NIS aims to provide investors with clarity over the Government's plans so they can look at the UK with confidence and help deliver the upgrades and projects needed across the country.

Energy White Paper (December 2020)[ix]

5.13 'The Energy White Paper – Powering our Net Zero Future' (the 'White Paper') was published as a long-term strategic vision for the UK energy system. It establishes the Government's goal of

a decisive shift from fossil fuels to clean energy in power, buildings, and industry, whilst creating jobs and growing the economy. The White Paper is clear that: *"Onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind."*

5.14 Renewable energy generation from solar has been identified by the White Paper as a key element of the future energy mix in the UK. It states that the UK needs:

> **"…sustained growth in the capacity of these sectors in the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios."**

Net Zero Strategy: Build Back Greener (October 2021) (December 2020)[x]

5.15 The Net Zero Strategy sets out policies and proposals which ensure the UK is in accordance with upcoming carbon budgets and Nationally Determined Contributions ('NDC'). NDCs provide a mechanism for countries to voluntarily impose national emission limits under the Paris Agreement. The strategy seeks to realise a decarbonised economy by 2050.

British Energy Security Strategy (April 2022)[xi]

5.16 The British Energy Security Strategy (BESS) sets out how the UK intends to secure clean and affordable energy for the 'long-term'. Realising the strategy requires 70GW of solar generation capacity by 2035. This is a significant increase from the 13.7GW of solar as of February 2022.

5.17 Over the last five-year period, the UK increased its solar capacity by only an estimated 1.8GW, highlighting the extraordinary need for a significant increase in the deployment of decentralised solar energy schemes of the proposed Development's scale if the BESS targets are to be met. The Strategy offers clear support for solar development that is co-located with other functions to maximise the efficiency of land use – this includes dual solar and agricultural land use.

Energy Security Bill (July 2022)[xii]

5.18 The Energy Security Bill builds upon the British Energy Security Strategy to invest in homegrown energy and maintain the diversity and resilience of the UK's energy supply. The Bill establishes the need to accelerate the growth of low carbon technologies.

Climate Emergency Declaration (June 2019)

5.19 In June 2019 the United Kingdom (UK) became the first country to declare a climate emergency and legislate long term climate targets. The resultant legislation amended the Climate Change Act 2008 (c.27) and introduced a legally binding target to achieve 'net zero' by 2050. Paragraph 1 of the Climate Change Act (as amended) sets out the target to 2050 and states that:

> **"it is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline (which means the aggregate amount of net UK emissions of carbon dioxide for that year and net UK emissions of each of the other targeted greenhouse gases for the year that is the base year for that gas)".**

5.20 On a local level, TWBC declared a Climate Emergency in June 2019, and have set out an ambitious aim to be a carbon neutral Borough by 2030.

Tunbridge Wells Climate Change Strategy

5.21 TWBC declared a Climate and Biodiversity Emergency at a full council meeting in July 2019. After this, a cross-party Climate Emergency Advisory Panel was established to identify a pathway to reduce the Council's corporate emissions to net zero by 2030, as outlined in the Corporate Carbon Descent Plan & Action 2021-2022 report.

KCC Climate Emergency Statement

5.22 KCC recognised the UK Climate Emergency at a county council meeting on the 23rd May 2019. This established a target for the KCC estate and corporate activities to be net zero by 2030. This declaration also committed to reducing greenhouse gas emissions from the whole county to net-zero by 2050, in alignment with the national target.

5.23 KCC published the Kent and Medway Energy and Low Emissions Strategy to outline the principles and strategy to respond to the UK climate emergency. It recognises that net-zero action is currently focused on direct emission reductions from the County. However, KCC will also be able to offset emissions with significant renewable energy generation.

National Planning Policy

National Planning Policy Framework (NPPF July 2021)

5.24 The NPPF 2021 sets out the Government's planning policies for England and how these should be applied.

5.25 The NPPF emphasises the importance of sustainable development. Paragraph 7 states:

> **'The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs'**

5.26 Paragraph 8 sets out the three overarching objectives of achieving sustainable development through the planning system:

- **an economic objective** - to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.
- **a social objective** - to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- **an environmental objective** - to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity,

using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

5.27 NPPF paragraph 10 advises that:

> **'So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.'**

5.28 Paragraph 11 of the NPPF sets out the presumption in favour of sustainable development, which for decision-taking means the following:

> **'c) approving development proposals that accord with an up-to-date development plan without delay; or**
>
> **d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:**
>
> **i. the application of policies in this Framework that protects areas or assets of particular importance provides a clear reason for refusing the development proposed; or**
>
> **ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.'**

5.29 Section 14 Meeting the challenge of climate change, flooding and coastal change, Paragraph 152 states:

> **'The planning system should support the transition to a low carbon future in a changing climate ... It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; ... and support renewable and low carbon energy and associated infrastructure.'**

5.30 Section 15 Conserving and enhancing the natural environment, Paragraph 174, states:

> **'Planning policies and decisions should contribute to and enhance the natural and local environment by:**
>
> **a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);**
>
> **b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;...**
>
> **d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;...**
>
> **f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.'**

5.31 Paragraph 38 states that local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makes at every level should seek to approve applications for sustainable development where possible.

5.32 Paragraph 55 sets out how LPAs should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations.

5.33 Section 6, 'Building a strong, competitive economy' seeks to support a prosperous rural economy. Paragraph 83 sets out that planning policies should enable development and diversification of agricultural and other land-based rural businesses.

5.34 Paragraph 120 identifies how planning policies and decisions should encourage multiple benefits from both urban and rural land and take opportunities to achieve net environmental gains such as developments that, amongst other things, would enable new habitat creation.

5.35 Paragraph 158 sets out that, when determining planning applications for renewable and low carbon development,

> **local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small scale projects provide a valuable contribution to cutting greenhouse gas emissions; and approve the application it its impacts are (or can be made) acceptable.**

5.36 Paragraph 174 advises that planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts and seeking biodiversity net gains.

Overarching National Policy Statement for Energy (EN-1) and the National Policy Statement for Renewable Energy Infrastructure (EN-3)[xiii]

5.37 NPPF Paragraph 5 states that National Policy Statements (NPS) *'form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications*.' As such, NPS for Energy (EN-1) and the NPS for Renewable Energy Infrastructure (EN-3) are part of national planning policy and are material considerations in the determination of this application.

5.38 NPS EN–1 was published in July 2011 and sets out the UK Government's commitment to increasing renewable generation capacity. Paragraph 1.2.1 confirms that *"In England and Wales this NPS is likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended)".*

5.39 Paragraph 1.7.2 states that energy NPSs should speed up the transition to a low carbon economy and help the UK to realise its climate change commitments. It is also acknowledged that the development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative effects on biodiversity, landscape/visual amenity and cultural heritage, but that it should be possible to mitigate the most significant potential negative effects.

5.40 The three goals of Government policy on energy development are emphasized throughout EN-1. Paragraph 2.2.6 states that *"the UK needs to wean itself off such a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification".* EN-1 clearly sets out the need for new low carbon energy infrastructure to contribute to climate change mitigation.

5.41 At Paragraph 5.9.16, the NPS advises that it is relevant to consider whether any adverse impact on the landscape is temporary and capable of being reversed. For the Cleve Hill Development Consent Order (DCO) (Reference: EN010085), which related to a solar farm with a capacity of around 350 MW the Examining authority concluded that *'…all of the adverse landscape and visual impacts are fully reversible and would be removed on full decommissioning'*.

5.42 In September 2021 a review and consultation on NPS revision was announced and this ran until 29th November 2021. The energy NPS's are being reviewed to:

- reflect the policies and broader strategic approach set out in the white paper
- ensure that we continue to have a planning policy framework which can support the infrastructure required for the transition to net zero

5.43 Draft EN-1 states at Paragraph 1.21:

> **"In England and Wales this NPS may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). Whether, and to what extent, this NPS is a material consideration will be judged on a case by case basis and will depend upon the extent to which the matters are already covered by applicable planning policy."**

5.44 A summary of some of the most relevant policy provisions of EN-1 are:

- Recognises the UK's target to cut greenhouse gas emissions to net zero by 2050. Paragraph 3.3.20 confirms that there is an urgent need for new electricity generating capacity to meet the UK's energy objectives. Paragraphs 3.3.21 to 3.3.23 identify the role of solar (and wind) in meeting that need.
- The draft NPS states that solar is one of the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply. UK government analysis demonstrates that a secure, reliable, affordable and net zero consistent system in 2050 is likely to be composed predominantly of wind and solar. The draft NPS recognises that this will require sustained growth in the capacity of solar in the next decade.

5.45 Draft NPS for Renewable Energy Infrastructure (EN-3) (September 2021)[xiv]:

- At paragraph 2.47.1 draft EN-3 recognises solar farms as one of the most established renewable electricity technologies in the UK, and the cheapest form of electricity generation worldwide. It provides clear support for large scale solar development, stating, '*the government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions'*

5.46 The EN-3 draft contains a section dedicated to solar which details factors that influence site selection by applicants, these are:

- Irradiance and site topography
- Proximity of a site to dwellings
- Capacity of a site
- Grid connection
- Agricultural land classification and land type
- Accessibility

5.47 Matters to be considered in the decision-making process include (at sections 2.49 to 2.54):

- Access tracks;
- Site layout, design, and appearance (including any flood risk);
- Security and lighting;
- Project lifetimes;
- Flexibility (to account for technology types and advancements);
- Biodiversity and nature conservation;
- Landscape, visual and residential amenity;
- Glint and glare;
- Cultural heritage; and
- Construction impacts including traffic and transport noise and vibration

5.48 It also goes on to state at paragraph 2.48.15 that: '*the development of ground mounted solar arrays is not prohibited on sites of agricultural land classified 1, 2, 3a'* and at paragraph 2.48.13 that: '***land type should not be a predominating factor in determining the suitability of the site location'*** *(our emphasis)*

Planning Practice Guidance (PPG)

5.49 Planning Practice Guidance (PPG) (launched in March 2014) is a web – based resource, which brings together planning guidance on various topics together. In June 2015, guidance was published on renewable and low carbon energy. The guidance sets out why planning for renewable and low carbon energy is important explains that,

> **"increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environment impact is acceptable" (paragraph: 001 Reference ID: 5-001-20140306).**

5.50 PPG paragraph: 010 (reference ID: 5-010-20140306) states renewable energy developments should be acceptable for their proposed location. Along with factors applicable to acceptability for any form of renewable energy development, there are considerations for each technology.

5.51 PPG paragraph 013 (Reference ID: 5 – 013 – 20150327) states that the visual impact of a well-planned and well-screened solar park can be properly addressed within the landscape if planned sensitively. Factors include:

- Encouraging the effective use of land by focussing large scale solar parks on previously developed and non-agricultural land, if it is not of high environmental value;
- Where a proposal involves greenfield land, whether
  - the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and
  - the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;
- That solar parks are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;
- The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;
- The extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;
- The need for, and impact of, security measures such as lights and fencing;
- Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale solar parks on such assets. Depending on their scale, design and prominence, a large-scale solar park within the setting of a heritage asset may cause substantial harm to the significance of the asset;
- The potential to mitigate landscape and visual impacts through, for example, screening with native hedges;
- The energy generating potential, which can vary for several reasons including, latitude and aspect.

5.52 Paragraph: 013 goes on to state,

> **'the approach to assessing cumulative landscape and visual impact of large-scale solar parks is likely to be the same as assessing the impact of wind turbines. However, in the case of ground mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.'**

Local Planning Policy

5.53 The Local Development Plan (LDP) sets out the policies and proposals for the development and use of land in Tunbridge Wells Borough. The LDP comprises the following:

- Local Plan (2006, with saved policies)
- Core Strategy (2010)
- Site Allocations Local Plan (2016) (SALP)
- Supplementary Planning Documents (SPD)
- Neighbourhood Development Plans (NDP)

5.54 TWBC are currently undergoing examination of a new local plan which would guide development to 2038, with the Submission Local Plan 2020-2038 published in October 2021 (SLP). Given the advanced state of the emerging Local Plan, it will be considered within this PS as having the standing of adopted LDP documents.

5.55 Policies Maps associated with the LDF shows that the Site is located in open countryside beyond the development limits of any of the surrounding settlements. There are no policy allocations relevant to the Site. The Site falls wholly within the emerging Horsmonden NDP area as designated in 2017.

5.56 The following section will identify the key planning policies that will need to be considered for the development of the Site for a solar farm. In particular, focus will be given to policies relating to renewable energy; the Site's location within the open countryside; and the potential environmental, ecological, and landscape issues relevant to the Development.

TWBC Local Plan 2006 [xv]

5.57 The following saved policies within the Local Plan 2006 are relevant to the Development:

- **LBD1**: Development outside the Limits to Built Development;
- **EN1**: Development control criteria;
- **EN8**: Outdoor lighting;
- **EN10**: Archaeological sites;
- **EN13**: Tree and woodland protection;
- **EN16**: Protection of groundwater and other watercourses;
- **EN18**: Flood risk;
- **EN25**: Development control criteria for all new development proposals affecting the rural landscape;
- **TP1**: Major development requiring Transport Assessments and a Travel Plan;
- **TP4**: Access to the road network.

5.58 Of particular relevance is **Policy LBD1** as the Site falls outside the designated Limits to Built Development (LBD). This states:

> **'Development will only be permitted where it would be in accordance with all relevant policies contained in this Local Plan and the Kent Structure Plan 1996 and the Kent & Medway Structure Plan 2006 rural settlement and countryside policies'**

5.59 Policy LBD1 seeks to restrict development outside of defined LBD (settlement boundaries). The policy appears to be intended to restrict sprawl and coalescence, particularly from new housing. Explanatory text in paragraph 3.39 notes that "*once taken for built development, the countryside cannot be easily replaced or restored*". However, as set out in the DAS the Development is low impact, minimally intrusive, is proposed for a limited 40-year life, and would thereafter be decommissioned and restored to sole agricultural use. The Development is therefore easily reversible. Although located outside of LBD, the reversible nature and limited environmental impact should weigh in favour such that the conflict with LBD1 should have limited weight.

5.60 The Local Plan 2006 does not include specific policy on renewable energy development or climate change. However, at paragraph 4.132 under heading *Renewable Energy* it states,

'The production of energy from renewable sources, such as wind, can make an important contribution towards reducing emissions of greenhouse gases, such as carbon dioxide. The Kent Structure Plan 1996 and the Kent & Medway Structure Plan 2006 contains a policy which lends support to the development of sources of renewable energy, in appropriate locations, within the County. Whilst there is no history of such applications having been received within the Plan area, POLICIES EN1, EN25, … will apply to any such proposals which may come forward during the Plan period. '

5.61 Policy EN1 requires that

All proposals for development within the Plan area will be required to satisfy all of the following criteria:

1 The nature and intensity of the proposed use would be compatible with neighbouring uses and would not cause significant harm to the amenities or character of the area in terms of noise, vibration, smell, safety or health impacts, or excessive traffic generation;

2 The proposal would not cause significant harm to the residential amenities of adjoining occupiers, and would provide adequate residential amenities for future occupiers of the development, when assessed in terms of daylight, sunlight and privacy;

3 The design of the proposal, encompassing scale, layout and orientation of buildings, site coverage by buildings, external appearance, roofscape, materials and landscaping, would respect the context of the site and take account of the efficient use of energy;

4 The proposal would not result in the loss of significant buildings, related spaces, trees, shrubs, hedges, or other features important to the character of the built up area or landscape;

5 There would be no significant adverse effect on any features of nature conservation importance which could not be prevented by conditions or agreements;

6 The design, layout and landscaping of all development should take account of the security of people and property and incorporate measures to reduce or eliminate crime; and

7 The design of public spaces and pedestrian routes to all new development proposals should provide safe and easy access for people with disabilities and people with particular access requirements.

5.62 The Development is aligned with EN1, having been assessed with respect to its impact on amenity, environmental health, traffic, landscape character, and ecology. EN1 reflects the desire for new development to have minimum adverse impact on amenity, to avoid environmental harm, and to generally be of a design and nature that is complementary.

5.63 These considerations have been thoroughly assessed and avoided or mitigated, as per the relevant technical assessments. The way in which the Development reflects good design in responding to constraints and opportunities is set out in the DAS. Further discussion on the Development's compliance with EN1 and other related policies are found in PS Section 6.0.

5.64 Policy EN25 sets out '*[d]evelopment control criteria for all new development proposals affecting the rural landscape'*. EN25 requires:

'Outside of the Limits to Built Development, as defined on the Proposals Map, all proposals for development will be required to satisfy all of the following criteria:

1 The proposal would have a minimal impact on the landscape character of the locality;

2 The development proposal would have no detrimental impact on the landscape setting of settlements;

3 The development proposal would not result in unsympathetic change to the character of a rural lane which is of landscape, amenity, nature conservation, or historic or archaeological importance;…'

5.65 The location of the Development has been carefully considered and fulfils the objectives of EN25. Existing features are protected and enhanced. The layout and landscape planting strategy has been informed by expert landscape architect input. Assessments have conducted and reported in this application's LVIA to demonstrate compliance with EN25 and other related policies. Further discussion on this topic can be found in PS Section 6.0.

5.66 Policy EN8 restricts outdoor lighting, particularly in rural areas to avoid light pollution and other risks. Although not stated in EN8 or associated text, outdoor lighting can also be harmful to ecological interests. The Development includes no proposals for permanent outdoor lighting and limits the temporary construction period to daylight hours only. In the unlikely event of a requirement to attend in hours of darkness for maintenance a torch or directed clip on light would be used. The Development is therefore compliant with EN8.

5.67 Policy EN10 seeks to avoid harm to underground heritage assets and preserve archaeological interests. An HDBA addressing both above and below ground heritage assets, including the setting of heritage assets, is provided in association with this application. With respect to archaeological interests, consideration of potential impact and mitigation is set out within the application's WSI, with the measures of the WSI to be secured by planning condition. The initial stage of WSI compliance is already underway, with geophysical surveys having commenced after harvest at the start of August 2022. More information relating to alignment with policies for the protection of heritage interests is set out in PS Section 6.0 which summaries findings of the *HDBA* and County Archaeologist pre-application engagement.

5.68 Policy EN13 secures the protection of trees under a Tree Protection Order, Ancient Woodland, and Conservation Area. None of these constraints are applicable to the Development. However, the Development does align with the broader tree protection interests of EN13 and has been designed to avoid root protection zones of trees as informed by the Arboricultural Impact Assessment (AIA) and Tree Constraints/Protection Plan.

5.69 Policy EN16 requires:

'Development proposals will only be permitted if all of the following criteria are satisfied:

1 There would be no unacceptable effect on the quality or potential yield of groundwater;

2 There would be no adverse impact on the water quality within, or water supply to, lakes, ponds, wetlands and other watercourses; …; and

4 In appropriate locations, development proposals will be required to incorporate sustainable drainage systems for the disposal of surface waters.'

5.70 Policy EN18 requires:

'Within those developed areas identified by the Environment Agency as being at high risk from flooding, built development and conversions will only be permitted if both of the following criteria are satisfied:

1 Practicable and effective flood protection and mitigation measures would be proposed and maintained for the lifetime of the development; and

2 Practicable and effective measures would be included as part of the development proposals to prevent the increased risk of flooding elsewhere.

Within those undeveloped areas identified by the Environment Agency as being at high risk from flooding, but outside functional floodplains, built development and conversions will not be permitted unless a particular location is essential and no suitable alternative lower-risk location is available. In such exceptional circumstances, development will only be permitted if the above criteria are satisfied.

Within functional floodplains identified by the Environment Agency as being at high risk from flooding, built development and conversions will not be permitted except essential transport and utilities infrastructure that has to be sited there.'

5.71 This application's FRA demonstrates the Development's compliance with EN16 and EN18. Solar farms are confirmed as 'essential infrastructure' in NPPF Annex 3. The manner in which the solar farm reflects compliance with policies relating to flood risk and sustainable drainage is discussed more thoroughly in Section 6.0 of this PS.

5.72 On matters relating to transport and access the relevant policies are TP1 and TP4. The Development's compliance with these policies is demonstrated by the application's CTMP and Transport Statement, as informed by the expertise of the project transport consultants, pre-application engagement with KCC Highways, advice from surrounding Parish Councils, and local community feedback. Further discussion on this topic is found at PS Section 6.0.

5.73 Along with the above there are numerous policies within the Local Plan 2006 that are not triggered by the Development. This includes but it is not limited to policies relating to cultural heritage (EN5, EN11) nature conservation (EN15), open space & recreation (EN21, R1, TP18), and landscape designations (EN22, EN23, EN24). This is a result of the Applicant's site selection criteria which has limited the potential for impact on more highly sensitive human and environmental constraints through embedded mitigation measures.

TWBC Core Strategy 2010

5.74 The TWBC Core Strategy (2010) provides the overarching principles of the LDF through provision of a spatial vision, strategic objectives for development, as well as a delivery strategy for how much and where development should take place across the Borough.

5.75 Sustainable Development Objectives are listed within the Core Strategy, as overarching principles with which development should align. These include:

> ***SD3:*** *To ensure that development is consistent with the principle of living within environmental limits by conserving finite non-renewable resources, including land, energy, water, soil and air quality wherever possible and ensuring that any trade-offs are made in an explicit and transparent way.*
>
> ***SD4:*** *To avoid making adverse contributions to climate change, having regard to the potential impacts of already-unavoidable long-term changes and (where possible) mitigating such impacts.*
>
> ***SD5:*** *To ensure development gives full consideration to good design principles, including energy efficiency, use of renewable energy technologies and sustainable construction.*

5.76 The Core Strategy does not provide explicit policy objectives within the Strategy, but instead refers to the South East Plan (as a wider, strategic cross-regional framework) which has subsequently been revoked following amendments to the national planning system.

5.77 The following Core Strategy Core Policies (CP) are relevant to the Development:

- **CP 3**: Transport Infrastructure;
- **CP 4**: Environment;
- **CP 5**: Sustainable Design and Construction; and
- **CP 14**: Development in the Villages and Rural Areas

5.78 The interests of CP3 that relate to the Development are broadly similar to those secured by the compliance with Local Plan 2006 policies TP1 and TP4 as demonstrated by the Transport Statement and CTMP and as summarised in this PS at Section 6.0.

5.79 CP 4: Environment is an important consideration for the Development and broadly reflective of the objectives of Local Plan 2006 policies EN1 and EN25, while also capturing the interests of related polices subsequently not-saved following the Local Plan review. CP4 states:

> **'The Borough's built and natural environments are rich in heritage assets, landscape value and biodiversity, which combine to create a unique and distinctive local character much prized by residents and visitors alike. This locally distinctive sense of place and character will be conserved and enhanced as follows:**
>
> **1. The Borough's urban and rural landscapes, including the designated High Weald Area of Outstanding Natural Beauty, will be conserved and enhanced**
>
> **2. The Borough Landscape Character Area Assessment 2002 will be utilised to manage, conserve and enhance the landscape as a whole**
>
> **3. A hierarchical approach to nature conservation and the protection of biodiversity and geodiversity will be applied across the sites and habitats of national, regional and local importance within the Borough. The objective will be to avoid net loss of biodiversity and geodiversity across the Borough as a whole**
>
> **4. Opportunities and locations for biodiversity enhancements will be identified and pursued by the creation, protection, enhancement, extension and management of green corridors and through the development of green infrastructure networks in urban and rural areas to improve connectivity between habitats**

> **5. The Borough's heritage assets, including Listed Buildings, Conservation Areas, Scheduled Ancient Monuments, archaeological sites and Historic Parks and Gardens will be conserved and enhanced and special regard will be had to their settings**
>
> **6. The positive management of heritage assets through partnership approaches and measures will be encouraged, including by the use of Conservation Area Management Plans'**

5.80 The Development is located outside the High Weald AONB and the LVIA has appropriately assessed the scheme based on Landscape Character Assessment 2002 and the 2017/2018 Landscape Sensitivity Assessments. The HDBA and WSI provide information on the protection of heritage assets in accordance with CP4. The ECiA and BNGA detail the protection of ecological interests and the significant BNG of 124.67% for habitats and 50.08% gain for hedgerows. More detailed discussion of these topics and the conformity with CP4 is found in PS Section 6.0.

5.81 CP5 requiring '*Sustainable Design and Construction'* sets out expectations for protection of human and environmental health, covering topics broadly similar to Local Plan 2006 policies EN1, EN8, EN16, and EN18. Assessments that demonstrate compliance with CP5 include the application's Glint & Glare Assessment, NIA, and FRA and is supported by measures set out in the CTMP and EcIA. Requirements for construction and operational site management as they relate to CP5 will be set out in a CEMP and LEMP to be required by condition.

5.82 CP14 relates to *'Development in Rural Areas'* and is primarily concerned with the siting and provision of housing. Otherwise it includes text on new development preserving the character and qualities of the countryside and protection of PRoW, as addressed in prior text on EN25 and CP4. Further explanatory text following CP14 sets out matters relating to protection of the rural economy that will be relevant to the Development including:

> **'5.290** *Although agriculture (including hunting, forestry and fishing) only provides 3% of employment within rural Kent as a whole, it remains an important part of the Borough's rural economy and is also instrumental in protecting the character and appearance of the landscape. The rural economy has been changing during the past decades, with a trend towards rural businesses diversifying from traditional rural activities, … This has not only helped to retain economic activity within rural areas, but has also enabled some farms to remain operational, as the diversified activities financially support the remaining farming business*
>
> **5.293** *Agriculture, horticulture and forestry have an important and varied role in the rural economy, including the maintenance and management of the countryside. Land management will need to follow best practice to ensure that the conservation of biodiversity is a priority. Core Policy 4: Environment sets out how biodiversity can be enhanced through policies to ensure that this approach is followed. Within the context of economic development, farmers should be encouraged to be more competitive and more sustainable and, where appropriate, to diversify into new agricultural and commercial ventures, including renewable energy crops, in order to ensure a farm's viability and to maximise opportunities to strengthen the rural economy, while maintaining the character of the rural landscape.'*

5.83 Protections afforded by CP14 include policy support for agricultural diversification to remain operational and provide financial security for the wider farming business. TWBC specifically

recommend innovative commercial-agricultural ventures like energy crops. The Development accords with this recommendation as it enables co-located agricultural use and will produce 6-20 times more energy per acre than energy crops. This and other aspects of agricultural land use and rural diversification are discussed further in PS Section 6.0.

5.84 As with the Local Plan 2006 there are numerous policies within the Core Strategy 2010 that are not triggered by the Development because of good design and site selection. This includes avoiding interaction with or impact on potential allocations (CP1), avoidance of impact on the Green Belt (CP2), not compromising rural employment (CP7), and avoiding adverse impact on outdoor recreation opportunities (CP8).

TWBC Site Allocations Local Plan 2016

5.85 The Site Allocations Local Plan 2016 provides policies that supersede un-saved policies from the Local Plan 2006. SAML primarily relate to designating or allocating sites to set out a strategic vision for future development in the Borough. It is therefore of limited relevance to the proposed Development which is not on or otherwise affecting any SAML or emerging Local Plan allocations. Where policies may be directly relevant they covered by other saved policies such as AR/STR 1 which corresponds to and affirms LBD-1 in Local Plan 2006.

Supplementary Planning Documents (SPD) & Supplementary Planning Guides (SPG)

5.86 The following SPD/SPG have been identified as being relevant to the Development:

- Tunbridge Wells Borough Landscape Character Assessment SPD (2017)
- Landscape & Nature Conservation SPG (2002)
- Green Infrastructure Plan SPD (2014)
- Rural Lanes SPD (1998)
- Kent Design Guide SPG (2020)
- Farmsteads Assessment Guidance SPD (2016)
- Noise & Vibration SPD (2014)
- Contaminated Land SPD (2016)
- Renewable Energy SPD (2007)

5.87 The **Landscape Character Assessment (LCA) SPD (2017)** has informed the assessment and design of the Development, particularly within the context of the LVIA and Landscape Strategy Plan. The LCA does not include any additional/new policies but provides useful information for consideration of factors that detract from or otherwise undermine landscape character. The Development is aligned with the LCA in avoiding loss of landscape features, respecting existing field patterns, and restoring features that have been lost to modern agriculture such as hedgerows and grasslands.

5.88 The **Green Infrastructure Plan SPD (2014)** provides a framework for the concept of Green Infrastructure (GI) as a principle that underpins existing policies. This framework is a useful lens through which to consider the Development, which represents a multifunctional GI-led scheme that delivers much more than (physical) green energy infrastructure.

5.89 PRoWs will be protected and enhanced for the benefit of human interconnectivity while environmental interconnectivity and biodiversity will be enhanced through the scheme's landscape proposals. The landscape strategy will not only mitigate visual impact, but help to realise a significant biodiversity net gain that contributes to the GI *"network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits".* The way in which the Development supports GI objectives is detailed across the LVIA, Landscape Strategy Plan, EcIA, and BNGA.

5.90 The **Farmsteads Assessment Guidance SPD (2016)** is primarily concerned with buildings. However, it is also clear from the SPD that the functional relationship of farm buildings and the wider agricultural setting is critical to the character and distinctiveness the SPD intends to support. The SPD is relevant to the Development because,

> **'The visual and functional relationship of farmsteads to the land, including the extent to which they have changed, is key to identifying constraints, what can be enhanced or reinstated and where there may be opportunities for future change'**

5.91 The relationship of the Development to Bockingfold Farm and the agricultural landscape is detailed in the LVIA and, in some respects, the HDBA. The SPD also speaks to the potential for adaptation and non-agricultural diversification to support its objective. It states,

> **'Adaptive re-use (including diversification projects) and new build for non-agricultural purposes have the potential to maintain or enhance the contribution that the farmstead makes to the landscape, its landscape setting and wildlife.'**

5.92 This advice is as applicable to the surrounding land as to farm buildings because the historic functional relationship with the farmland is a large part of the special interest of traditional farmstead. The Development will not undermine this relationship or the overall function of the agricultural enterprise. More in depth discussion of multi-use diversification and solar farms as an appropriate temporary use of agricultural land is at PS Section 6.0.

5.93 The **Noise and Vibration SPD (2014)** provides no new policies but supports the delivery of policies like EN1 and CP5. The proposed Development accords with these policies and this is demonstrated by the NIA submitted with this application.

5.94 The **Contaminated Land SPD (2016)** has been considered with respect to the Development. Pre-Application advice raised the matter due to the presence of two historic infilled ponds on

the Site. How this issue is addressed and the Development is compliant with the SPD and related LDF policies is discussed in Section 6.0 of this PS.

5.95 The **Renewable Energy SPD (2007)** was largely intended to guide developers to incorporate efficient and renewable energy technologies into more traditional developments but it includes guidance that is equally applicable to renewable energy development in-itself. In particular, it, *'recognises that viability is a key issue and that planning should have regard to overall cost, availability of technologies and their viability thresholds'*. This is relevant to the Development with respect to site selection and the importance of being located in viable proximity to a POC.

5.96 It also offers technology specific advice relating to solar panels, including advice relevant to the design of the Development and factors considered in the site selection methodology, confirming that, *'Systems should only be situated where they are completely unshaded. Panel performance can be significantly affected even if only partially shaded'*.

5.97 At the time of adoption the SPD offered guidance and no specific new policy. Since then a number of the regional supporting strategies upon which it relies, like the Kent & Medway Structure Plan (KMSP), are now defunct. However, it is retained as SPD and sets out policy from the KMSP that, in effect, lives on through SPD inclusion. Policy relevant to the Development includes KMSP NR3 which states:

> **Development necessary for the production of energy from renewable sources will be supported where there would be no overriding conflict with environmental interests and Local Development Documents will include criteria for their location. Provision of renewable and sustainable energy production as an integral component of new development and in small-scale and community projects will be supported. Local Development Documents will include renewable energy production targets in support of sub-regional targets for individual energy sources, and will identify sites for renewable and sustainable energy facilities where viable proposals have been put forward.**

5.98 The SPD is retained and remains applicable LDF policy. TWBC SPD on this topic is not provided only as the 2007 document but includes two other documents as the SPD suite:

- The Energy Policy Position Statement (2019) provides insight into TWBC expectations in the upcoming local plan period that go beyond the requirements of the 2007 SPD. It advises, '*Implementing a more ambitious approach to talking climate change has been a key objective during the development of the new Draft Local Plan*.' It is expected that TWBC declaration of a Climate Emergency and the centrality of climate change mitigation to the emerging Local Plan will be a significant weight in favour of the Development.

- Updates to the Renewable Energy Supplementary Planning Document (2019) set out context and change since the SPD with respect to renewable energy developments. It advises that policy like CP5 is intended to support renewable energy development in advance of more specific policies in the SLP. It also advises that there has been an increase in solar energy development since 2007 and developers should refer to the KCC Renewable Energy Action Plan (2017) when submitting applications. This document has been referred to as being particularly relevant a consideration of site selection.

TWBC Submission Local Plan 2020-2038 (2021) (SLP) [xvi]

5.99 Once adopted the new Local Plan for Tunbridge Wells Borough will provide the basis for determining the suitability of development proposals across the Borough to 2038. The SLP is currently at the examination stage, ahead of adoption in 2023. Given these timescales, the SLP is a material consideration in the determination of the Development.

5.100 Many SLP polices are reflective or identical to those of the adopted LDF such that further discussion is not deemed necessary in all cases. Emerging policy which are reflective or identical to those in the adopted LDF are listed below in Table 5.1, along with corresponding adopted policy. For these policies preceding text and associated cross references will be sufficient for consideration of policy compliance. Discussion of SLP policies that are new or speak to the proposed Development in a new or particularly relevant manner will follow.

Table 5.1: Submission Local Plan and Emerging Local Plan Policy

Submission Local Plan Policy	Equivalent, Adopted LDF Policy
STR 1: The Development Dtrategy	LBD1
STR 2: Place Shaping and Design	EN1, EN25, CP4, CP5, SPD
STR 5: Infrastructure and Connectivity	EN1, EN25, CP4, CP5, TP4, SPD
STR 6: Transport and Parking	TP1, TP4, CP3
STR 8: Conserving and Enhancing the Natural, Built, and Historic Environment	EN25, CP4, CP5, SPD
EN 4: Historic Environment	EN10
EN 5: Heritage Assets	EN10
EN: 8 Outdoor Lighting and Dark Skies	EN8
EN 10: Protection of Designated Sites and Habitats	EN1, CP4, SPD
EN 12: Trees, Woodland, Hedges and Development	EN13, SPD
EN 14: Green, Grey, and Blue Infrastructure	CP4, SPD
EN 18: Rural Landscape	EN25, CP4, CP14, SPD
EN 21: Air Quality	CP5
EN 24: Water Supply, Quality, and Conservation	EN16
EN 25: Flood risk	EN16, EN18
EN 26: Sustainable drainage	EN16, EN18
EN 27: Noise	CP5, SPD
EN 28: Land Contamination	CP5, SPD
TP 1: Transport Assessments, Travel Plans and Mitigation	TP1, TP4, CP3
TP 2: Transport Design and Accessibility	TP1, TP4, CP3

5.101 Submission Local Plan policies relevant to the Development but not listed above include:

- **STR 7:** Climate change;
- **STR 10:** Neighbourhood Plans;
- **EN 1:** Sustainable design;
- **EN 3:** Climate change mitigation and adaptation;
- **EN 9:** Biodiversity net gain;

- **EN 20:** Agricultural land;
- **ED 4:** Rural Diversification;

5.102 Policy STR 7 is a key strategic policy for the delivery of the vision for a sustainable and resilient Borough. This confirms that, *'All development within the borough will recognise the Climate Emergency and be supportive of the Council's ultimate target to achieve net zero emissions across the borough by 2030'*. The Development is aligned with Policy STR 7 and would make a valuable contribution to TWBC Net Zero targets.

5.103 Policy STR 10 promotes neighbourhood planning and affirms that emerging NDPs will be given increasing weight as they progress through the examination process. The Development falls within the Horsmonden NDP area. The Horsmonden NDP was submitted to TWBC on the 20th June 2022 and is to be consulted on for an eight-week period from July to August 2022. The emerging Horsmonden NDP has been considered throughout this Statement and given weighting in the policy balance. Emerging NDP from the Brenchley and Matfield NDP area has also been given proportionate consideration.

5.104 How the Development accords with Policy EN 1 is largely achieved in discussion of adopted LDF policy like CP4, CP4, and SPDs. The aspect of EN1 not previous addressed is on the topic of Community Engagement. On this EN 1 states:

> **'New development should be informed by effective engagement between applicants, local communities, neighbours of sites, local planning authorities, infrastructure providers, and other interested parties throughout the planning process. Applications that demonstrate early, proactive, and effective engagement, and that the views expressed in that engagement have been properly considered, will be looked on more favourably than those that cannot.'**

5.105 This application is informed by meaningful pre-application engagement with local stakeholders as set out at PS Section 4.0. The engagement has been instrumental to the delivery of a comprehensive application and proposals that reflect local knowledge inputs.

5.106 Policy EN 3 '*Climate Change Mitigation and Adaptation'* states,

> '**Subject to all other material considerations, proposals for zero carbon and low emission development, as well as development that allows communities, infrastructure, businesses, and the natural environment to adapt to the impacts of climate change, will be strongly supported…'**

5.107 And, to achieve *Climate Change Adaptation* the EN3 provides *[s]upport for proposals and associated infrastructure that allow for more resilient forestry and agricultural practices.*

5.108 In accordance with EN 3 the Development would deliver clean, zero-carbon, renewable energy to the local DNO grid for local consumption and carbon emissions displacement. It will also make a local family farm business more secure in the face of climate change impacts on farming while supporting landscape restoration and biodiversity enhancement.

5.109 Policy EN 9 reflects the objective of TWBC's declaration of a Climate and Biodiversity Emergency. It requires that applicants deliver a Biodiversity Net Gain via the DEFRA Metric. This application's BNGA demonstrates an uplift of 124.67% in habitats, 50.08% in hedgerow units, and 18.78% for river units from the Development which therefore complies with EN 9.

5.110 Policy EN 20 sets out TWBC policy on the use of *Agricultural Land*. It states,

> **'The Local Planning Authority seeks to protect best and most versatile agricultural land from significant, inappropriate, or unsustainable development. Where development of agricultural land is required, applicants should seek to use areas of poorer quality agricultural land in preference to that of higher quality, except where this would be inconsistent with other sustainability objectives.**
>
> **Planning applications that would result in the loss of best and most versatile agricultural land will need to justify why the loss of the agricultural land is acceptable and also assess the impact of the loss of the agricultural land on the wider farming resource, natural capital, and ecosystem services. Where site-specific ALC studies are not available, the Local Planning Authority will assume that the site is classified as best and most versatile'**

5.111 Although the Development will temporarily take agricultural land out of sole agricultural use, it will not lead to any loss of agricultural land. The ALC Report demonstrates that >75% of the site is not BMV. Where BMV land is included it represents small proportions of a much larger field such that its presence or absence is immaterial to existing arable practices.

5.112 Policy ED 4 provides support for development that represents part of a '*farm diversification scheme, or otherwise helps maintain the viability of rural businesses engaged in sustainable land management'.* It goes on to advise that such developments will need to demonstrate that the diversification will not cause a severance to the holding that will undermine the primary agricultural enterprise, that they will support continued farm operations, and will not have unacceptable impacts on the local environment, landscape, and road network. The Development represents diversification that allows for continued co-located agricultural use.

Horsmonden Neighbourhood Plan [xvii]

5.113 The stated vision of the Horsmonden NDP is for Horsmonden be a village that has:

> **'retained its character, community spirit and rurality but that has embraced new technologies and social and economic opportunities. It will have diversified to allow improvements in transport, housing, and leisure, to cater for all members of the community.'**

5.114 A number of Hosrmonden NDP policies are identified as being relevant to the Development and will be discussed in Planning Statement Section 6.0. These policies are:

- **2.8** Charging Points
- **7.2:** Protecting Important Views
- **7.3** Biodiversity Net Gain
- **7.4** Trees and Hedgerows

- **7.6** Retaining the best, most versatile and characteristic agricultural land
- **7.7** Light Pollution
- **7.9:** Development adjacent to the AONB
- **7.11:** Flooding

Brenchley and Matfield Neighbourhood Plan[xviii]

5.115 Brenchley & Matfield emerging NDP policy identified as relevant to the Development include:

- **BE7** Renewable Energy Generation: states that renewable energy projects will be permitted subject to appropriate siting scale, impacts on local residents and provided there are no unacceptable impact of features of natural or biodiversity importance.
- **LE6** Biodiversity: states that new development must demonstrate how they will conserve and enhance biodiversity, with a net gain of at least 10% to be demonstrated.

Summary

5.116 This section of the PS demonstrates that there is policy support for renewable energy generation at the national and local levels, in order to respond to the recent declaration of a climate change emergency and also to move towards a low carbon economy, delivery of 70GW of renewable electricity to to meet the ambitious net zero target by 2050.

5.117 The Development would make a substantial contribution towards achieving this net zero goal and is also fully compliant with local and national planning policy. It is considered that this policy context provides clear, and favourable, support for the Development at this location.

6.0 PLANNING ASSESSMENT

6.1 This section provides a planning assessment that goes beyond policy review commentary. It discusses the principle of development, topic-specific considerations, and provides a robust case for why and how the scheme represents a form of sustainable development.

6.2 The proposed solar PV installation at Bockingfold Farm has been informed by a series of technical assessments and through consultation with Council Officers, Parish Council members and the local community. The findings of the assessments undertaken are presented in the relevant technical reports as listed in Table 1.1.

6.3 To demonstrate how the proposals respond to these matters, this section of the Statement sets out the key topics arising from this informative work and in doing so, demonstrates the compliance of the application with the relevant planning policy context.

6.4 This section contains a detailed analysis of the Development against the identified relevant national and local planning policies and other material planning considerations. Key issues for the determination of the application that are assessed in this section are as follows:

- The Principle of Development as Renewable Energy;
- Landscape and Visual Impacts;
- Cultural Heritage Impacts;
- Ecology & Biodiversity Impacts;
- Use of Agricultural Land;
- Impacts on Environmental Health and Amenity;
- Hydrology Impacts;
- Transport Impacts and Access;
- The Development as Sustainable Development

The Principle of the Development as Renewable Energy

6.5 The Development is a solar energy generating station supplying up to 49.9MW to the local grid. The Glossary of the NPPF defines renewable energy as those energy flows that occur naturally and repeatedly in the environment, including from the sun. The Development therefore meets the definition of renewable energy as defined in national planning policy.

6.6 National policy is strongly supportive of renewable energy as a means of meeting our increasing energy demands, tackling climate change, addressing supply security, and transitioning to a sustainable low carbon economy. Privately funded, large scale solar developments such as this are recognised as being not just necessary but central to meeting an urgent need.

6.7 There is not a requirement within national or local policy to demonstrate the need for renewable energy. The urgency of the need for substantially greater quantities of renewable energy (including large scale solar) is self-evident given the dramatic step change in Government energy policy driven by its declared Climate Emergency to achieve a 100% reduction in greenhouse gas emissions by 2050 (Net Zero). This is a legally binding target.

6.8 UK energy policy acknowledges renewable energy developments as key to the net-zero target. The NIS states that to achieve Net Zero 2050, the power system must be carbon free and significantly larger to cope with additional demand. As discussed in PS Section 4.0, solar is seen by the UK Government as one of the building blocks of the country's low-cost, net zero consistent generation mix, with a further 64GW of solar required by 2035.

6.9 It is also clear that decentralised renewables contribute to national energy security. This is particularly acute set against a BESS states that accelerating the transition away from oil and gas depends critically on how quickly large-scale renewables can be deployed.

6.10 TWBC declared a Climate Emergency in June 2019, committing to an even tougher target of becoming a carbon neutral Council by 2030. Following this, a cross-party Climate Emergency Advisory Panel (CEAP) was established to conduct an audit of the Council's current carbon footprint and develop a pathway to reach net zero by 2030. This commitment has fed into the emerging new Local Plan; Policy STR 7 confirms that climate change mitigation and achieving Net Zero will be factored in to all TWBC decision making on development in the Borough.

6.11 The TWBC LDF is aligned with the the NPPF (Paragraph 11) presumption in favour of sustainable development which is defined as '*meeting the needs of the present without compromising the ability of future generations to meet their own needs'* (Paragraph 7). NPPF Paragraph 148 states that the planning system should support the transition to a low carbon future and support renewable and low carbon energy and associated infrastructure. Paragraph 154 goes on to state that when determining planning applications for renewable and low carbon development, local planning authorities should "*not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions*" and "*approve the application if its impacts are (or can be made) acceptable*".

6.12 Adopted Local Plan Policies EN1 and EN25, along with Renewable Energy SPD provide the policy context for consideration of renewable energy developments in the Borough. Policy EN 3 of the emerging Local Plan, set out that planning applications involving renewable energy development will be encouraged provided that there is no unacceptable adverse impact, and that a balanced assessment of the proposal's positive and negative effects ensure that impacts are appropriately minimised, mitigated and, if necessary, compensated.

6.13 The Development's contribution of 49.9MW clean renewable electricity is a significant contribution to meeting both national and local renewable energy targets. It is a significant environmental benefit, meeting the electrical needs of approximately 14,384 homes. This provides a CO_2 displacement of 35,681 tonnes compared to the same energy from fossil fuel sources. This is being provided at a time of Climate Emergency.

6.14 Moreover, the Development would feed energy into the local DNO grid (as opposed to the National Grid transmission network) which means it would provide clean electricity directly to the immediate locality. This therefore directly contributes to TWBC energy security and climate change targets, whilst also helping to reduce national emissions. The TWBC Energy Topic Paper states at Paragraph 3.46 that '*most of the energy generated is fed into the national grid and used across the UK. It is therefore not possible to say what percentage of Kent and Medway's needs are directly met by local generation'*. This position is not the case with the Development, which will be delivering quantifiable benefits at a local level, and offsetting emissions associated with centralised power from plants that rely on fossil fuels.

6.15 It also notes the recent KCC Renewable Energy Action Plan Update which confirms installed capacity of 550MW of solar PV in 2017 (Paragraph 3.43). The Development would provide an uplift of at least 9% at the County level compared to this baseline.

6.16 Likely due to the Borough's land use constraints (75% being either AONB and/or Green Belt), only 3 solar farms totalling <25MW were consented before 2015, with none consented since. A review of TWBC planning history reveals that since the 2017 there has been only 1 x application for solar development >500kW (530kw - 21/00223/FULL) and only 5 x Prior Notification submissions for on-roof solar in this period, all ranging from 100-250kW. The majority of solar energy contribution in Tunbridge Wells therefore arises from smaller scale 'own use' schemes delivered at a time when the Government provided Feed in Tariff subsidy.

6.17 The supporting text to SLP Policy EN 3 notes at paragraph 6.33 that,

> **'The largest contributors to carbon dioxide emissions in the Borough are domestic gas (22%), A-roads (21%), industrial and commercial electricity (15%), minor roads (14%), and domestic electricity (12%). These five sectors have been the dominant emission sources since 2005 and this trend is likely to continue into the near future (albeit to varying degrees as the Government phases out gas heating and petrol/diesel vehicles and progresses with grid decarbonisation).'**

6.18 Energy from non-renewable sources therefore accounts for approximately 49% of the Borough's carbon emissions, and demand for electricity will only increase as gas heating is phased out and electric vehicles replace petrol/diesel fuel. However, these transitions will only support CO_2 emissions displacement if there are secure local sources of clean energy to meet demand. It will not be sufficient to rely on the Government's plan to decarbonise the grid when

this plan is reliant on decentralised energy schemes like the Development to achieve statutory national targets and therefore realise the TWBC Local Plan commitments.

6.19 Assessments accompanying the Application demonstrate that the Development, as mitigated, would not significantly adversely affect landscape designations, biodiversity (in fact a significant biodiversity net gain of 124.67% would be delivered) or the historic environment. Impacts on landscape character and heritage assets are carefully considered and the scheme is designed to avoid or minimise impact. Safe construction and operational access is provided and undue impact on local road network users is avoided. Public amenity and environmental health is protected from noise and glint and glare impacts. Soil health would be improved as a result of the temporary development that will not cause the permanent loss of agricultural land. The ALC confirms the site as predominantly Grade 3b, and therefore not categorised as BMV agricultural land, and grazing around the solar arrays would maintain the land in co-located agricultural use. In applying the relevant national and local policy regarding the principle of the development as renewable energy, the Development is fully compliant, and the 'in principle' acceptability of the Development is considered to be established.

Landscape and Visual Impact

6.20 The NPPF (Paragraph 130), Local Plan policies EN1 and EN25, Core Strategy CP4, Landscape Character Assessment SPD, SLP policies STR 8 and EN 18, and Horsmonden NDP Policy 7.2 all require the protection or enhancement of the landscape and visual quality of the area, including the need to respect the sense of place, sense of tranquillity, and the enjoyment of the landscape from PRoWs and valued viewpoints.

6.21 TWBC Core Strategy CP4, Green Infrastructure Plan SPD, and emerging policy EN 14 also state that the development will be supported that conserves and enhances the GI network. These policies have been relied on inform the layout and design of the Development and its integration into the landscape.

6.22 The NPPF (paragraph 40 & 132), Kent Design Guide SPD, and SLP STR 2 encourage an iterative approach to design and sustainable place-making. PPG advises that the visual impact of a solar farm can be properly addressed within the landscape if planned sensitively.

6.23 The DAS, SCI, and LVIA provide insight into how the Development has responded directly to the landscape setting of the Site, including formal Pre-Application Advice, consultee inputs, and community feedback relevant to landscape and visual impacts. This includes:

- Sensitive siting of panels and ancillary buildings;
- Retention and protection of trees and hedgerows within and around the Site, with development confined to individual field parcels to ensure it is well integrated into the landscape and benefits from existing screening.

- Protection and enhancement of PRoWs (WT327 & WT328) to ensure continued interconnectivity between villages and opportunities for outdoor recreation.
- New planting along boundaries to filter, screen, and help integrate the Development into its landscape context. It is proposed all boundaries along the Site's perimeter are enhanced where necessary, using native species' appropriate to the Site and the surrounding area.
- New planting to include the restoration of historic hedgerow boundaries to help reinforce field patterns that contribute to rural landscape character.
- Careful consideration of the internal access track network has been undertaken to limit the number of field boundary crossings. Where crossings are necessary, they have been carefully aligned to existing access points to avoid impacting on hedgerows and trees;
- Removal of panels for more visible northern aspects and addition of screening to the south to reduce impacts on sensitive visual receptors.
- Improved biodiversity across the Site through the creation of a variety of new habitats and management of existing habitats within the Site to improve their quality and functioning.

6.24 The DAS and LVIA make clear that great care has been taken in designing a high-quality scheme that secures multifunctional social and environmental gains. The objective of the landscape strategy is to integrate the Development into its surroundings, minimise potential negative effects, and enhance the landscape character, amenity value and biodiversity.

6.25 The likely landscape and visual impacts of the Development have been fully assessed in the LVIA. The key findings are summarised below.

- There are no landscape designations within the Site or study area that would be affected by the Development. The character of the Site and the surrounding area is predominantly semi-rural, with notable urban influences from detracting features within the immediate and local area including existing dispersed settlement and overhead high voltage powerlines with associated pylons. It is considered that in combination with the Landscape Strategy Plan, the Site has the capacity to accommodate the Development without long-term unacceptable effects on landscape character and visual amenity, whilst offering the potential for long-term beneficial effects through planting and restoring lost and degraded characteristic landscape features.
- During the operation of the solar farm the present land use would change from an agricultural landscape to a solar farm development albeit set within a significantly improved ecological environment. Effects on the wider landscape would reduce with distance from the Site, as the Development would be increasingly screened by a combination of vegetation, landform and some buildings in the intervening landscape.
- Effects on individual landscape elements vary between Minor Beneficial to Moderate Adverse, which are not significant. After the implementation of mitigation measures such as planting, effects are anticipated to be Minor Beneficial to Minor Adverse.
- Effects on landscape character are similarly judged not to be significant, varying between Negligible and Minor Adverse following the implementation of mitigation. Visual effects from receptors including proximate residential dwellings are judged to be Neutral to Minor Adverse. The Development would have the greatest effect on visual receptors using PRoW WT327 and WT328 through the Site. From these locations, views of the solar farm would be possible above and beyond layers of existing and newly proposed vegetation.
- Visual effects would reduce with distance and be largely contained by both landform and existing and proposed vegetation. The findings of the LVIA confirm that, after construction,

the impact of the Development would reduce rapidly and there would be no significant effects experienced by specific visual receptors for the majority of the Development's operational life.

6.26 In view of the above findings, it is considered that the Development would therefore accord with the relevant provisions of the NPPF, Local Plan policies EN1 and EN25 and emerging SLP policies STR 8 and EN18, and Horsmonden NDP Policies 7.2 and 7.9.

Cultural Heritage Impact

6.27 The HDBA considers the potential impacts of the Development upon above and below ground heritage assets, and the potential impacts on the setting of heritage assets within the wider landscape. A desk-based study, site visits and geophysical survey have been undertaken in order to identify assets that may be affected by the Development and to establish their current condition and baseline setting.

6.28 There are no designated heritage assets within any part of the Site, and no Registered Battlefields, World Heritage Sites or Registered Parks and Gardens within 5km of the Site. There are a number of Listed Buildings with some proximity to the Site. A full list of all heritage assets within a 1km Study Area were screened for inclusion within the assessment. Topography, existing screening and distance prevent intervisibility or more than negligible impact potential. Following a Site visit the 1km study area list of 17 assets was reduced to just two potentially affected assets following a Site visit. These assets are:

- Grade II Listed Bassets Farmhouse and Oasthouse (approximately 230m south-east); and
- Grade II Listed August Pitts (approximately 230m to the south).

6.29 The Development would lead to no non-physical impacts upon the significance of any other heritage assets (i.e., impact upon settings). The HDBA concluded that, in the most part, the Site is not considered to contribute to the setting or heritage significance of the two designated heritage assets. Whilst there is limited intervisibility between the Site and the two Grade II Listed Buildings, the Development would lead to no significant harm.

6.30 The HDBA provides an assessment of the significance of these designated heritage assets, the contribution to significance made by their setting, the extent to which the Development could impact on this significance, and the extent to which the solar farm layout and new planting can mitigate impact. HDBA conclusions align with Pre-Application Advice from the Conservation Officer suggesting less than substantial harm at the lower end of the spectrum.

Archaeology

6.31 The construction of a solar farm has the potential to disturb, damage or remove archaeological remains. The HDBA found ipotential for buried archaeological remains owing to the geological context of the Site. Whilst it is anticipated that the physical impact upon any underlying

archaeological remains is small due to the limited below ground impact of a solar farm development, the assessment concludes that there remains a potential for Palaeolithic remains. This is discussed in detail within the HDBA.

6.32 An assessment by a CIfA accredited archaeologist has included examination of historical aerial photographs and LiDAR data, along with the results of the Geophysical Survey (Geophys). Consideration of survey results has identified features of potential archaeological interest, although in most cases anomalies appear to represent the remnants of former orchards, irrigation or drainage systems and lost field boundaries. Geophys did not identify any anomalies which were indicative of substantial or significant archaeological remains.

6.33 This application includes a Written Scheme of Investigation (WSI). The WSI describes a phased programme of further examination of the archaeological potential within the Site. It is proposed that if warranted, following the geophysical survey, a trenching plan would also be prepared, and that this or any additional measures to protect archaeological interests would also be informed by post-determination geotechnical investigations.

6.34 It is expected that the results of the post-determination geotechnical survey would provide further clarification on the geological composition, with an updated WSI to provide for further investigation or mitigation (e.g., a watching brief) depending upon these results. The need for further surveys is recognised and can be secured by planning condition.

6.35 This phased programme of archaeological work would be undertaken prior to the commencement of the Development. The WSI identifies where additional investigation is warranted and what further pre-commencement action can and will be taken with respect to the identification and protection of potential underground heritage assets. Pre-Application engagement has been undertaken with KCC Archaeology and it is noted that the KCC archaeologist has affirmed the acceptability of a similar approach being taken at the proximate Cheveney Farm application (Reference: 22/501335/FULL) within MBC.

6.36 This provides reassurance that the Development can be delivered without risk of harm to such assets. Historic England *Advice Note 15: Commercial renewable energy development and the historic environment* (February, 2021) confirms that in the event of archaeological interests being recorded there are opportunities to mitigate potential impact through, for example, '*the use of concrete bases for the panels which entail less disturbance'.*

6.37 The limited ground intrusion and time-limited/reversible nature of solar farms makes them compatible with sites of potential archaeological interest. Less than 4% of the Site will see more than below-surface disturbance. The majority of works go no deeper than topsoil layers regularly disturbed by arable agriculture. The exception is cable trenching and array framework. Cable can be re-routed to avoid sensitivities and non-intrusive above-ground cable

options are available. Likewise, pile-driven mounting structures are not the only option for array framework stability. The Development is also not of a permanent nature that would prevent future investigation as there are no permanent buildings or hardstanding proposed.

6.38 The results of pre-commencement fieldwork ground investigations could have several outcomes, none of which would require the refusal of planning on heritage grounds:

- If no archaeological finds are uncovered, the development can be implemented as-proposed;
- If archaeological finds are revealed, they can be recovered and reported such that the development can be implemented as-proposed; or,
- If archaeological finds are of a nature where either as-proposed implementation or recovery could compromise the assets, there are solutions including either exclusion zones (removing any/all development) and/or an alternative ground-mounted system on ballasts in any areas where pile-driven mounting framework posts could pose risk.

6.39 Overall, the assessments undertaken have not identified anything in respect of archaeology or above-ground heritage interests that would preclude the Development. The identified 'less than substantial' harm to heritage assets means that the Development should be considered against the balancing process identified in NPPF Paragraph 202, which states:

> **'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal….'.**

6.40 The environmental and social benefits of the Development are a substantial weight in the planning balance. As such it is concluded that the Development complies with the policies of the NPPF including those at paragraphs 189, 193 and 194-197, Adopted Local Plan policy EN10 as well as SLP policies EN 4 and EN 5. Likewise, the Development would reflect the requirements of Objective 5 of the Horsmonden NDP which requires that new development responds positively to the heritage and distinctive character of Horsmonden.

Ecology and Biodiversity Impacts

6.41 Both national and local policy place great importance on the protection and enhancement of biodiversity, including achieving biodiversity and GI gains when mitigating impacts of development. Nationally and locally important conservation sites should be protected, along with protected species unless the benefits of the development outweigh the harm.

6.42 The likely effects of the Development on nature conservation and biodiversity have been fully assessed in the Ecological Impact Assessment (EcIA) accompanying this application. Environmental assessments have included a desk study, extended Phase 1 Habitat Survey (PEA), and species-specific surveys for Great Crested Newt (GCN), Badger, and Breeding Birds. Further assessments originally recommended by the County Ecologist were subsequently scoped-out due to the Development's lack of impact on / protection of hedgerows (re: dormice)

and lack of relevance of reptile surveys due to subsequent information on the lack of non-arable grassland habitat originally factored-in to the PEA. A BNG Assessment is also provided.

6.43 Species specific surveys found that GCN are present within one of the on-site ponds. A 50 metre buffer is provided around the GCN positive pond and construction works will be undertaken under a Risk Assessment Method Statement (RAMS) as detailed in the EcIA. Appropriate exclusion zones for other species are detailed in the EcIA confidential report.

6.44 Surveys also found that areas of the Site were a likely habitat for breeding pairs of Skylark. Although the solar farm as a whole will provide better skylark habitat than the arable use, breeding skylark require larger plots than are traditionally part of an optimal solar farm layout. To provide dedicated on-site habitat the Applicant has retained large areas of land that might have otherwise been excluded to be planted and managed as Tussocky grassland following the recommendations of the project ecologist. A summary list of these and other measures for wildlife and habitat enhancement is at Section 3.0 of this PS and the DAS.

6.45 Supporting the Application is an Arboricultural Impact Assessment (AIA) which includes a Tree Constraints & Protection Plan. The principles in BS5837:2012 were used to fully assess the impact on trees and other woody vegetation. This has informed the design and layout to ensure no loss or risk of harm to trees in association with the Development.

6.46 The PEA identified that the site predominantly consisted of intensively farmed arable fields of low ecological value, with a variety of species-rich and species-poor hedgerows around boundaries. Several ditches and small ponds are present on-site or adjoining. A woodland belt runs the length of the eastern boundary. All of these features (hedgerows, woodland, standing water, ditches and trees) which are considered habitats of the greatest ecological value will be retained, protected, and augmented/enhanced as part of the Development.

6.47 A description of the potential effects of the proposed solar farm on the habitats and species identified as being present are described in the EcIA. Measures to protect and enhance the site are also provided therein, along with a recommendation for these measures to be set out in a detailed CEMP to be provided pre-commencement. This CEMP would be informed by a further ecological walkover assessment to account for any changes and would ensure the CEMP measures would be appropriate for the intended construction timeframe based on up-to-date Site conditions as assessed by a qualified ecologist.

6.48 The AIA provides similar CEMP recommendations, some of which are already designed-in to the Development such as exclusion from Root Protection Zones (RPZ). The pre-commencement CEMP would also be informed by a walkover by a qualified arboriculturist to ensure implementation based on an up-to-date assessment of tree conditions on the Site.

6.49 A full LEMP is not submitted with this application because such a document will be more accurate and detailed if based on up-to-date pre-construction conditions and a final detailed plans following final technical assessments and the procurement exercise that will inform the exact details of the materials and layout of the Development.

6.50 LEMP requirements can also vary depending on the time of year of commencement and completion. And, it is known that aspects of the scheme could change due to other inputs of the planning application process such that a LEMP submitted now may not be fit for purpose at determination. Furthermore, aspects of a robust LEMP, such as details of the management structure and reporting mechanisms will not be available until the pre-commencement phase.

6.51 For the purpose of this application the EcIA sets out all of the measures that could be available for an outline LEMP at this stage in the development process. The Applicant expects a LEMP condition to complement a condition requiring a final pre-commencement Planting and Enhancements Plan detailing species, exact locations, sizes, etc. as well other measures like locations of bird nesting boxes and log piles. The LEMP will then set out a plan for holistic site and environmental management in the operational phase. This will include but is not limited to mechanisms to secure BNG and regular reporting-in on delivery.

6.52 The BNGA calculates that the creation and enhancement measures proposed would deliver 124.67% habitat net gain, 50.08% net gain in hedgerow units, and 18.78% gain in river units.

6.53 This is a significant contribution to TWBC objectives in declaring a Climate and Biodiversity Emergency and is a major beneficial residual effect. These provisions, and assurance of construction-stage protections, can be secured through the imposition of an appropriately worded planning condition in the event permission is granted. By adhering to the recommended objectives, implementation provision and monitoring set out in the EcIA and AIA, the Development will accord with the relevant NPPF (paras 174 and 179), TWBC adopted LDF policy EN1 EN13, and CP4, the Landscape & Nature Conservation SPG, Green Infrastructure Plan SPD, SLP Policies STR 8, EN 9 EN 10, EN 12, Brenchley and Matfield NDP Policy LE6, and Horsmonden NDP Policies 7.3 and 7.4.

Use of Agricultural Land

6.54 NPPF (para 174) seeks to prevent the loss of *best and most versatile land*, defined as Grades 1, 2 and 3a as defined in the MAFF 1988 guidance for grading the quality of agricultural land. TWBC SLP policy EN 20 similarly seeks to avoid the loss of BMV and requires site-specific surveying on proposals involving agricultural land.

6.55 Policy requires the proposed use of any agricultural land to be necessary and for poorer quality land to be used in preference to higher quality land. An assessment of agricultural land quality,

included an ALC survey of a larger 90ha area, was undertaken to determine agricultural land quality at Bockingfold Farm. This confirmed the study area as mostly Grade 3b with isolated patched of Grade 3a therein, along with parcels of Grade 2 and 3a. All fields made up of Grade 2 and 3a were removed, leading to the current Site. This demonstrates compliance with EN 20 and the recommendation to avoid BMV land where possible.

6.56 The ALC confirms that there are remaining areas of 3a within the Site, some of which are excluded from development but retained within the red line as dedicated grassland habitat. It advises that the majority of the Site (82.5%) is classed as low quality 3b land, while 17.5% would be classed as 3a. However, a proportion of the land identified as 3a is not farmable as it is crossed by paved tracks, PRoW, IDB land drains and belts of woody vegetation. When these non-farmable areas are factored in the proportion of BMV is reduced.

6.57 The use of this BMV land does not conflict with EN 20. All areas of Grade 3a land retained within the Site are non-contiguous and make up small proportions of 4 other fields that are predominantly Grade 3b. Therefore, although the soil quality in-itself would classify isolated areas as BMV, the way these areas are located means they cannot be farmed independently from the 3b land, and therefore do not make any positive contribution to the farm output in a way that is different to or better than the contribution of the lower quality 3b land.

6.58 Furthermore, the Development does not involve the irreversible loss of any land available for agriculture, either temporarily or permanently. The solar farm is wholly reversible, unlike other forms of development on agricultural land such as residential or industrial warehouse uses. The Development will not change the classification of the land from agricultural during the lifetime of the generating station and co-located agricultural use is intended.

6.59 The agricultural land at the Site is in intensive arable use, with none of the crops grown for human food supplies. In many respects, the organic management of the land under and around solar arrays as species rich grassland will be a benefit to soil health and future agricultural land quality. It is likely that soil health will be improved over the operational life of the generating station, i.e. increase in soil organic matter, increase in the diversity of soil flora, fauna and microbes, and improved soil structure.

6.60 The use of agricultural land is necessary in this case as the location of the Development is driven first and foremost by its requirement to be close to a feasible grid POC, the availability of which has been secured under agreement with the DNO. The Applicant has signed a Connection Agreement with UKPN allowing for full export of the power of the Development with the POC connecting to the pylon and 132kV line crossing the Site.

6.61 The Applicant has searched for suitable and available sites within an appropriate study area, recognising that the viability of any energy project reduces the further away it gets from the

POC. This is not merely a matter of construction/development costs, which can be prohibitive with increased distance. It is also the case that the further a site is from a POC, the more energy is lost in transmission. The effect of the constrained local grid network is also recognised in the TWBC Energy Topic Paper (February 2021) which states at 3.24, "*[t]here are significant electricity grid constraints within Kent and Medway making new connections that deliver renewable energy onto the electricity grid increasingly difficult*."

6.62 It will almost always be the case that solar farms of a sufficient scale to support a transition to Net Zero will require the temporary use greenfield agricultural land; the use of brownfield land to meet permanent housing or employment needs is the much more sustainable option given the reversibility of a solar farm. However, if agricultural land is to be allowed a temporary use for direct energy production (as opposed to indirect such as growing biofuel crops), on the basis that this is necessary in the face of climate change, it is not an efficient use of land to locate solar farms in a location where clean energy is lost in transmission instead of locating close to a POC that is able to distribute to local users.

6.63 Bockiongfold Solar Farm at will be a multifunctional scheme with ecosystem services benefits for the rural economy and the farm's agricultural interests. The use of agricultural land is necessary and the Development would not undermine national agricultural interests in accordance with NPPF paragraph 174 or local agricultural and rural economy interests in accordance with emerging policy EN 20. It also presents an appropriate form of farm diversification in accordance with emerging Policy ED 4 and adopted policies for the protection of rural interests such as CP4. The Horsmonden NDP Policy 7.6 states that development that retains high quality agricultural land (Grade 2 and above) will be supported. The Site does not include any Grade 2 land. Furthermore, the emerging NPS EN-3 confirms that although ground mounted solar projects should aim to utilise PDL, or non-BMV agricultural land, land type should not be a predominating factor in determining the suitability of the site location.

Current Use and Rural Diversification

6.64 There is national and local policy support in NPPF paragraph 84 (b), SLP Policy ED4, and the Horsmonden NDP for rural diversification that meets sustainable development objectives, helps sustain the rural economy, and encourages agricultural enterprise. This is subject to proposals being well designed and of a use and scale appropriate to the location when considering landscape, heritage, and environmental impacts and acceptable access and highways impacts.

6.65 Due to the relatively low income from farming, many farmers have had to diversify to secure an economically sustainable profit. Farm diversification is broadly defined as *"the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain".* Hence, diversification reflects the reduced dependence of farmers on agriculture as a source of income. Diversification also implies entrepreneurial activity on behalf of the farmer.

6.66 The Site does not cover the entire land holding and in combination with the ecological benefits delivered on the Site, the opportunity remains for continued agricultural practice and/or enrolment with any relevant Countryside Stewardship schemes or similar programmes.

6.67 The Site is currently utilised for the growing of feed crops and is not currently used for the production of foodstuffs directly for human consumption. There is no anticipated reduction in food supply owing to temporarily removing these fields from intensive arable production. Indeed, the intention is to diversify the farm practices with co-located sheep for grazing at the Site, thus giving the Site a dual use for both the traditional farming sector and production of "home grown" electricity. Global advances in the field of agrivoltaics (growing crops on solar farms) is also beginning to generate interest in the UK so current dual-use practices are not the limit of multifunctional land use opportunities moving forward.

6.68 The solar farm is a temporary farm diversification strategy that entails no permanent nor temporary cessation of agricultural use beyond the short-term construction period. Although the Site will remain in co-located agricultural grazing use it will also provide a guaranteed income to the farm at a precarious time for UK agriculture[xix] when the adverse impacts of climate change, like an increase in extreme weather, puts smaller family farms at particular risk. In a context of climate change adaptation SLP EN 3 confirms '*Support for proposals and associated infrastructure that allow for more resilient forestry and agricultural practices*'

6.69 The Development will be an important stream of diversification income whilst underpinning the continuation of the overall farming enterprise. Farm businesses play a vital role in the rural economy, particularly supporting the agricultural supply chain to include seed merchants, machinery sales, maintenance and repair businesses, delivery drivers and professional services, to name but a few. The Development would help to support the local rural supply chain by making the farm more economically and operationally resilient.

6.70 Renewable energy is an important form of farm diversification, recognised by the National Farmers Union as an important step towards making British agriculture carbon neutral within two decades. As farming is responsible for around a tenth of UK greenhouse gas emissions, supporting clean energy farm diversification projects is a vital step to reaching net zero.

Solar Farms as a Sustainable Agricultural Use

6.71 Solar farms represent an effective use of agricultural land that is not discordant with current or historic agricultural land use. The practice of using farmland as a renewable energy source goes back centuries. Solar PV is a very efficient way of using land to produce energy when compared with crops grown for biofuels such as biodiesel (predominantly from oil seed rape) and bioethanol (predominantly from wheat and sugar beet), as recommended in Core Strategy

CP4. Even ignoring the fuel used to sow and harvest energy crops and produce agrochemicals, solar PV produces 6-20 times more energy per acre than energy crops.

6.72 Not all land in arable use contributes to animal or human food consumption. Recent data from DEFRA[xx] confirms that 121 thousand ha of UK arable land is dedicated to the production of energy crops, clearly demonstrating that energy production is agricultural production. The UK grows around 490,000ha of oil seed rape a year, almost half of which is exported for biofuel production, some of which is then re-imported (with further transportation GHG emission). By way of example, BP's Hull[xxi] biofuel plant requires >1 million tons of wheat a year, making it the UK's biggest purchaser of wheat.

6.73 Data on kW output and area suggests that in 1 year oil seed rape for biodiesel produces 17,155 kW/ha, wheat for bioethanol produces 31,509 kW/ha and sugar beet for bioethanol produces 50,323 kW/ha. By comparison (even without accounting for areas of the Site given over to environmental enhancement) the Development will produce approx. 727,271 kW/ha.

6.74 Farmland for energy is an agricultural use, and farmland for "home grown" solar energy represents a much more efficient use of land. Subsidised energy crops are significantly less energy efficient, have carbon costs associated with producing comparatively less energy, and represent intensive practices that degrade soil quality and harm biodiversity. Dedicating agricultural land to temporary PV energy generation (with co-located grazing) will enable significantly more land for growing local, human and animal food crops because less land will be needed for inefficient energy crops. Therefore, allowing solar PV on agricultural land is in keeping with policies for the protection of agricultural land and the rural economy.

Impacts on Environmental Health and Amenity

6.75 The need to protect the environmental health and amenity of the local area and nearby sensitive receptors through minimising noise impacts, light pollution, risks to air quality, and from contaminated land, is a requirement of planning policy. TWBC policies addressed in the sections to follow include adopted policies EN1, EN8, CP5, Noise and Vibration SPD, Contaminated Land SPD, and SLP policies STR 8, EN 8, EN 21, EN 27, and EN 28.

Noise

6.76 A *Noise Impact Assessment* (NIA) has been produced to accompany the application. The assessment considers the potential noise generation from the plant associated with the Development, with respect to existing sound levels in the area.

6.77 The NIA confirms the Development is likely to have a 'low' impact on all assessed receptors during both the day and night-time. It finds that maximum daytime and night-time specific sound levels are 16 and 13 dB below the daytime and night-time residual sound levels.

6.78 On this basis, and with reference to the PPGN, it is considered that operational noise levels would be of a magnitude equating to a No Observed Adverse Effect Level (NOAEL) which is defined as: "*Noise can* be *heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life.*"

6.79 The NIA demonstrates that the Development would give rise to rating noise levels that are typically below that measured at day and night- time background sound levels of the area at the closest associated residential receptors, thus giving rise to a low impact.

6.80 With respect to pre-operational construction noise and vibration, there is no anticipated source of noise beyond that associated with construction traffic. No groundbreaking will be required and no generators will be used other than for temporary welfare cabins. All construction stage noise will occur during daytime periods when background noise levels are higher. Local knowledge from community engagement discussions confirms that in this particular area background noise levels are higher than most of the surrounding countryside due to the Site's location close to the commercial/industrial operations just west. Periods of construction activity will align with periods of operation at these nearby noise-associated premises. Measures in the CTMP such as limiting working hours and the prevention of vehicles idling will also help to minimise noise during working hours when background levels are high. Any further measures associated with considerate construction beyond working hours limits and traffic management can be set out in the pre-commencement CEMP.

6.81 Therefore, with respect to noise as it relates to amenity and environmental health it would be compliant with National Planning Policy, the NPSE, TWBC Core Strategy CP7, the Noise & Vibration SPD, and emerging policy EN 27.

Glint & Glare

6.82 Solar panels are made up of silicon based photovoltaic cells that are encased in a glass covering. Glass does not have a true specular reflection but does reflect a certain magnitude of light. Reflection of sunlight from PV panels is contrary to solar energy production. This is because the greater the amount of light which can be captured at the PV cell, the greater the amount of electricity that can be produced. Panel manufacturers use anti–reflective coating in the glass that changes the reflectivity from specular distribution to diffuse distribution. Therefore, as light falls onto the PV panels, most of the sunlight is transmitted to the cell beneath the glass with only a small amount reflected back in a multiple of angles and magnitudes. The result is an object that is perceived to have very little glare. Nonetheless, a Glint & Glare Study has been undertaken. The assessment pertains to the possible effects upon surrounding road users, dwellings, and potential aviation receptors.

6.83 The definition of glint and glare can vary. The definition used in the assessment is aligned with the Federal Aviation Administration (FAA) in the United States of America as follows:

- **Glint** – a momentary flash of bright light typically received by moving receptors or from moving reflectors;
- **Glare** – a continuous source of bright light typically received by static receptors or from large reflective surfaces.

6.84 In context, glint will be witnessed by moderate to fast moving receptors whilst glare would be encountered by static or slow-moving receptors with respect to a reflector. The term 'solar reflection' is used in this report to refer to both reflection types i.e. glint and glare.

6.85 The modelling has shown that solar reflections are geometrically possible for road users along the B1252 or other nearby rural lanes due to the layout of the solar arrays. However, owing to existing strong boundary screening and buildings, any glint and glare would be screened along the entire section of road.

6.86 With regards to dwelling receptors, 60 out of the 85 identified dwelling receptors have geometrical possibility for glint and glare. However, when existing screening such as vegetation or buildings are considered, no or low impact is predicted for 56 out of these 60 dwelling receptors. The remaining four receptors are expected to experience glare for more than 3 months per year, but for less than 1 hour per day.

6.87 No significant impacts upon aviation activity associated with the Old Hay airstrip are predicted. Assessment has been undertaken with respect to the potential for 'yellow' and 'green' glare at some areas of the estimated landing flight path. However, glare is predicted to equivalent to c. 3% of light time per year, and on any given day it will occur for circa 30 minutes. Given the highly infrequent use of the Airfield, and owing to the proximate solar development to the west of the Site which would produce the same type of glare, it is not considered there would be a significant impact upon operations at Old Hay Airfield. There are available operational measures used by pilots to mitigate the effects of direct sunlight, which will also adequately mitigate the effects of solar glare from the panels

6.88 As such the Development is acceptable in visual amenity terms and meets the requirements of the NPPF (para 174(e)) and TWBC Core Strategy CP5, Rural Lanes SPD, and the principles of adopted Local Plan Policy EN8 and SLP Policy EN 8, and Horsmonden NDP Policy 7.7.

Air Quality

6.89 For the Authority's reassurance, solar farms operate as a passive form of energy generation. There are no moving parts, industrial processes, or ancillary elements such as generators that could be associated with emissions or air pollution impact.

6.90 Traffic associated with an operational solar farm is negligible and likely to be less than the traffic movements of existing arable farming operations. There will be a brief temporary increase in traffic associated with the temporary construction stage. Measures within this application's CTMP provide for relevant air quality mitigation including but not limited to prevention of vehicle idling and control of dust/dirt will prevent impacts in construction. These will be expanded on in the pre-commencement CEMP. The Development should be considered in accordance with TWBC adopted Core Strategy CP7 and SLP Policy EN 21.

Contaminated Land

6.91 TWBC Pre-Application Advice identified two 'infilled ponds' which had potential to be associated with land contaminants. It is considered that owing to the nature of the Development and the limited level of intrusive works needed, there is unlikely to be any significant effects with respect to contaminated land. This view is also informed by the lack of on-the-ground difference in these identified areas from surrounding ground where the same crops are grown.

6.92 It is proposed that standard mitigation measures for the controlling of any contaminated land is set out in the CEMP to be secured by condition. This is a proportionate manner in which to deal with any low-risk potential for contamination. The CEMP would detail best practice methods for reporting and controlling any irregularities over these identified areas. The Applicant would also accept a specific planning condition akin to that recommended by the Environment Agency on a solar farm site in Swale Borough Council (22/502778/EIFUL):

> **If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved**.

Minerals & Waste

6.93 The Site is partially within a KCC Minerals Waste Buffer Area. The relevant policy for consideration within the KCC Minerals and Waste Local Plan[xxii] (MWLP) is Policy DM8. This states that planning permission will only be granted for development that is incompatible with safeguarded minerals management, transportation or waste management facilities under a number of exceptions. The Development does not conflict with the identified Waste recycling facility at the Scrapco Metal Recycling Facility, approximately 550m to the west of the Site. The Development for a fixed period of forty years and will not impact the capacity of the facility, there are no shared access roads, or common borders, and they are compatible end uses. The Development is therefore in accordance with MWLP Policy DM8.

Hydrology Impacts

Flood Risk

6.94 A site-specific FRA has been undertaken to ascertain the potential risks involving flooding and drainage at the Site. The FRA provides an effective assessment of the as-is hydrological conditions, the impact of a solar farm in this location, and the mitigation of risk that has been designed-in to the scheme.

6.95 The FRA confirms that the Site is located in Flood Zone 2 & 3, with southern extents of the Site in Flood Zone 1. The Development is classed as 'Essential Infrastructure' by the Environment Agency (EA) and NPPF Appendix 3. Solar farms are suitable in flood risk areas and is considered appropriate within flood Zones 2 and 3a, with no requirement for consideration of the Flood Risk Sequential Test.

6.96 Despite this, a sequential approach to design and layout has been applied. This includes excluding areas within Flood Zone 3b (Functional Floodplain). Furthermore, all ancillary infrastructure has been located outside of the 3a higher risk areas, with mitigation designed-in including elevating ancillary buildings off ground level. Solar arrays are similarly elevated and designed for long term exposure to the elements. Nothing about the nature of the Development is vulnerable to flood risk or at risk of increasing flood risk elsewhere.

6.97 As a renewable energy generating station the Development fulfils the requirements of the 'Exception Test' within Paragraph 164 of the NPPF. The exception test is:

> **"a) The development would provide wider sustainability benefits to the community that outweigh the flood risk; and**
>
> **b) The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall."**

6.98 The Development is classed as 'Essential Infrastructure'. Solar farms are suitable in flood risk areas. The FRA provides reassurance that solar farms are not vulnerable to risk from flooding, and that the solar farm will not increase the risk of flooding elsewhere or put strain on surface water drainage networks.

Sustainable Drainage Strategy

6.99 Although the Development is 'Major' by virtue of a >1ha red-line area, the actual ground impact is insignificant (less than 1% of the Site). Research undertaken by Cook and McCuen (2013)[xxiii] found that provided that full vegetation cover beneath the solar panels is maintained, the change in runoff characteristics from solar farm sites is likely to be insignificant and ground cover has a much more important control over runoff. For this reason a landscape-led SuDs scheme is the most sustainable option and has been promoted by the LLFA in Pre-Application advice and in their consultation responses to other solar farm developments across the county.

6.100 The Development includes sufficient inherent and designed-in SuDS. All access tracks are of a fully permeable construction. All ancillary buildings will, as part of the design, incorporate a

300mm deep subbase to be filled with permeable aggregate with a 30% void ratio and low fines content to provide sufficient attenuation storage, and are set atop the subbase with a 100-500mm void between the ground level and floor level of the buildings.

6.101 Solar arrays themselves are not a single façade. There are gaps between stacked panels in an array, meaning water does not drip into only one location. A gentle 15-30 degree angle means water will not run down with velocity that helps it to “jump” gaps. Rather, water runs off at a reduced speed and drips down through the gaps at multiple points onto vegetated ground beneath the arrays. There is no risk of water sheeting down in one area at the lower edge of the arrays and causing erosion that alters existing runoff patterns.

6.102 In addition to the above, appropriate seeded vegetation cover will be provide below and between rows of the solar panels to act as a level spreader/energy dissipater to promote low erosivity sheet flow during operation of the solar farm. Grass will not only grow between array gaps; it includes all ground under the arrays as well. This means that excluding access tracks and ancillary buildings most of the Site will be fully vegetated species-rich grassland. This is a significant betterment for surface water flood risk conditions compared to intensive arable use with frequent periods of bare ground.

6.103 As part of a multifunctional ecosystem services strategy, large buffer zones along all watercourses (land drains, ditches, and ponds) are included, with at least 8m stand-offs and new grassland planting to be provided in these zones. The new grassland and targeted management techniques recommended in the EcIA, combined with the reduction in agricultural run-off, will contribute to improved water quality and habitats along the drains.

6.104 Additionally, the 4-6m vegetated gaps between the arrays are natural filter strips that slow the movement of surface water and promote infiltration. All existing boundary vegetation is to be retained with significant new planting proposed. Boundary vegetation will also be a source of infiltration. There will be no change to existing land contours to facilitate the arrays which will respond to existing topography. This means existing runoff characteristics and flow routes will not be altered, and boundary features will remain suitably hydrated.

6.105 The new buildings on a permeable gravel base are not changing any underlying conditions beyond the topsoil. What would otherwise be topsoil is being replaced by gravel which has more porosity and storage capacity than the existing topsoil would have. This means even if the gravel base is insufficient for storage and infiltration, the resulting conditions are no different than they would be on the as-is farmland, except that the extra storage capacity of the gravel base is a betterment compared to the topsoil. In the event the subbase reaches capacity excess water will overtop and be conveyed by gravity across the fields mimicking the existing site runoff characteristics. This approach will aid in managing flood flows, whilst at

the same time ensuring that the vegetated ground cover and existing and new boundary vegetation receive suitable hydration.

6.106 The Development prioritises a nature-based solutions approach to SuDS that is appropriate for the temporary development and the eventual restoration to arable use. Implementation and management of the soft landscaping (ground cover and boundaries) are the primary mechanism for surface water management and will provide multifunctional benefit compared to existing intensive agricultural practices.

6.107 The above outlines the SuDS strategy. It is expected that there will be planning conditions for a pre-commencement CEMP and a pre-operational LEMP. The former would deal with the holistic environmental management of the site during construction. The latter would deal with the Site's holistic environmental management once operational. It is anticipated that the content of these conditions could secure flood risk interests in construction and the whole-life maintenance of any SuDS in accordance with the SuDS Manual (C753F).

6.108 The provision of a surface water management system, which incorporates rural SuDS elements and a landscape-led approach to mitigating surface water flood risk ensure that potential detrimental impacts on flood risk and water quality are avoided and that betterment can be achieved throughout the anticipated lifespan of the Development.

Hydrology Impact Conclusions

6.109 Adopted Local Plan Policy EN28 states that new developments should be located in accordance with the Sequential test (generally outside of high-risk zones), produce no negative effects on existing flood patterns, and provide necessary mitigation measures. SLP Policy EN 25 states that the NPPF sequential and exception tests will be strictly adhered to across the Borough and be prepared in accordance with TWBC's Strategic FRA. SLP EN 26 requires drainage to be considered as an integral part of the design process, with SuDS integrated where necessary.

6.110 Taking predicted climate change allowances into account the FRA concludes that the Development is complaint with the NPPF, PPG, local planning policy, and LLFA advice. It is therefore considered that on implementation of the strategy there will be no flood risk to or from the Development. The Development should therefore be considered acceptable and in accordance with the NPPF (para 159,167, 169), TWBC adopted Local Plan policies EN16 and EN18, emerging SLP policies EN 25 and EN 26 and Horsmonden NDP policy 7.11.

Transport and Access

6.111 A *Transport Statement* (TS) and CTMP have been prepared in support of this application. These provide detail on the access off the B2162 and information on expected traffic impacts

associated with the temporary construction phase. The CTMP sets out how the development can be implemented safely and without undue impact on the local road network.

6.112 In preparing the TS both local and national transport policy have been reviewed. Following KCC Highways Pre-Application advice and extensive engagement with the local community Proposals have undergone extensive optioneering and modelling to provide the most efficient and safe routing strategy that avoids concentrating impacts on any one settlement or route.

6.113 It is expected that there will be an average of around 4.9 (5) HGVs per day accessing the Site over the construction period based on a “worst case” 6-month programme. Actual construction could take between 6-10 months depending on DNO scheduling, weather, and other factors. As the amount of work required to implement a solar farm will stay the same, a longer programme would merely reduce the intensity of any effects from HGV deliveries.

6.114 There will also be construction workers arriving at the Site in the morning and departing in the evening, although the numbers involved are forecast to be relatively low on a day-to-day basis and will occur outside of peak hours. The level of traffic forecast during the temporary construction phase would represent a short-term temporary increase against existing traffic levels, but can be managed (as per CTMP) to avoid adverse impact.

6.115 Once completed, operational traffic is very low, at approximately one to two light vans or 4x4 vehicles per month. There will be a less intensive use of existing farm access compared to the current use. The TS and CTMP establish that the temporary construction traffic associated with the Proposed Development will not have a material effect on the safety or operation of the local highway network. An overview of solar farm construction and key CTMP measures to secure the safety and amenity of road users is set out in the DAS.

6.116 The Development is also aligned with policies for air quality and sustainable transport, such as the transition to electric vehicle (EV) use. Reducing diesel and petrol consumption will help to reduce air pollution and CO_2 emissions. However, it will increase the demand for electricity. Coal and gas fired power plants provide approximately 41% of UK electricity. With electricity demand rising, renewables need to outpace current implementation rates to meet current and future needs. At present EV charging has to rely on an energy mix that includes electricity from fossil fuel power plants. Local clean energy is critical to realise the benefits of policies promoting the transition to EV like TP 2 in the SLP.

6.117 To support this transition the Development includes a minimum of 2 EV charging points to be installed at suitable locations for use by Voltalia and UKPN maintenance staff. Exact locations will be specified in collaboration with UKPN in the pre-construction phase. As an IPP Voltalia own and operate the sites they develop. The inclusion of EV charging points is a Voltalia policy to support the transition of their O&M fleet to EV. Solar farm developments are typically exempt

from including EV facilities and are not included in TWBC '*Electric Vehicle Charging Points for New Development – Guidance Note for Applicants*[xxiv]' (2020). The Development therefore accords with the proactive 'above and beyond' climate change mitigation advanced by SLP Policy STR 7 by including EV charging in accordance with SLP Policies EN 21 and TP 2 and Horsmonden NDP Policy 2.8.

6.118 The TS concluded that the Development would not create any significant transport impacts on the existing highway, and there are no highway capacity or safety reasons why planning permission should not be granted. The Development also provides an appropriate use in terms of transport policy. The above assessment, along with the overview provided in the DAS, the information in the TS, and measures set out in the CTMP, demonstrate that the Development is acceptable with respect to traffic and access and meets the requirements of the NPPF, TWBC adopted policy TP1, TP4, CP3, and emerging SLP policies TP 1 and TP2.

Sustainable Development Assessment

6.119 The Development represents a sustainable scheme that is supported by local and national policy. Sustainable development is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. Assessment of sustainability can be broken down under three primary headings; Economic, Social, and Environmental. A summary of the Development and its benefits with respect to the ambits of Sustainable Development is as follows:

6.120 The solar farm represents a temporary rural diversification strategy. This is key to the long-term overall survival of smaller family farms that are much more at risk from the destabilising impacts of climate change than larger commercially farmed estates. The co-location of grazing will enable to farm to maintain agricultural output and economic activity alongside the solar arrays. Although the solar farm will reduce arable activity on the predominantly Grade 3b land, it is an opportunity to increase pastoral use. The resting and improvement of the soil over the lifetime of the Development will improve options for the farm and its crop options. This period of soil recovery is an investment in the farmland's arable agriculture future.

6.121 The Development will generate local economic activity during construction and operation. As an IPP who will build and operate the solar farm, Voltalia company bylaws require a commitment employ and spend locally where possible. The most recent project of the same scale (50MW in Dorset) generated 4 new full time local jobs and Voltalia awarded contracts worth >£3.1m in the southeast region, including £800k within 25 miles of the site. Similar opportunities will be available in association with the construction of the Development.

6.122 Although the aforementioned economic activity is dependent on the availability of local options, there is some certain direct local economic benefit during the construction stage. If workers

are not local, they would be staying at local hotels and availing themselves of local shops and facilities, thus providing a boost to small businesses and the struggling hospitality industry.

6.123 There is further assured local economic benefit through Business Rates. While agricultural economic activity will remain in a co-located way, the temporary change of use means there is no Business Rates exemption. Bockingfold Solar Farm will generate at least £4 million pounds in revenue under the current regime, which has both economic and social benefit through the Council's public interest spending.

6.124 The Development includes a DNO substation. This is necessary for grid connection but will be a UKPN-owned asset. Developments of this ilk are essential to maintain investment levels and fund essential grid network upgrades for the benefit of all users. Without developer contributions the cost of upgrades would be passed on through higher energy bills.

6.125 Locating solar farms of this scale in urban-fringe countryside with higher energy demand is necessary for economic sustainability. Solar is an essential part of the UK's energy security strategy; it makes the UK more economically secure and resilient to be self-reliant for energy instead of having to rely on imports, with the uncertainties and moral compromises this can entail. Energy security is also essential to energy affordability for ordinary people, and economy-wide economic stability, as evidenced by the effects of recent small provider collapses, shortages, and extreme price rises that are at the heart of the cost of living crisis.

6.126 The above does not represent the whole of the Development's economic benefit because the principles of sustainable development are intrinsically linked. Bockingfold Solar Farm is a contribution to the betterment of local ecosystem services. Ecosystem Services are the benefits provided by ecosystems that contribute to making human life both possible and worth living. Examples include 'goods and services' like food, water, energy, and regulation of floods, and non-material benefits such as recreational and wellbeing benefits. Damage to the environment has a degrading impact on ecosystem services in a way that has direct and indirect economic and social impact. In a context of declared climate and biodiversity emergency it is essential to consider the positive economic and social knock-ons of a Development where the headline benefits are environmental, or the negatives of a failure to approve sustainable developments.

6.127 As with the economic arm of sustainability, many of the positive social gains reflate to ecosystems services and green infrastructure benefits and are understood by a holistic consideration of inter-dependencies. For example, the increase in Business Rates can mean more money for local social-benefit spending. Or the more money the Council has to spend dealing with harm from increasing extreme weather events, the less money is available for public-good spending like libraries or the provision of outdoor play areas. It is also well established that enhancements to biodiversity in one area have positive ecological effects

elsewhere, and that there are both direct and indirect links between environmental quality and psychological and physical health. The BNG of at least 124.67% associated with the scheme therefore has social benefit as a knock-on of its more direct environmental benefit.

6.128 The rural economy is highly exposed to risk from the impacts of climate change including livestock stress, crop blight, lower cereal yields, and destruction by extreme weather but harm to farming businesses is not only an economic negative. The IPCC report *Climate Change 2022: Impacts, Adaption, and Vulnerability* (2022)[xxv] states that climate change is "increasingly hindering efforts" to meet the nutritional and calorific needs of humanity and is already affecting "all dimensions of food security". This includes availability, access, stability, and food quality and safety. Therefore, the negative economic impacts of climate change on farm output has significant negative social impact, as does the effect of rising energy costs as can be seen from the acute cost of living crisis.

6.129 Recent reporting[xxvi] suggests that the 23 solar farms refused across the UK in 2021-22 would have powered 147,000 homes with clean energy and reduced the UK energy bill by £100m, thus demonstrating that each individual solar farm like the Development makes a valuable contribution to economic and social sustainability.

6.130 Positive environmental benefits are the most directly obvious. The Development will produce enough clean electricity to meet the electricity needs of around 14,385 average family homes. This provides a CO_2 displacement of 35,681 tonnes per annum compared to the same amount of energy from fossil fuel sources and is equivalent to removing around 5,904 cars driving 15,000 miles a year from the road. The environmental benefit of renewable energy replacing electricity from fossil fuels is a significant weight in the planning balance and has greater weight in a context of the climate emergency and Net Zero obligation.

6.131 Meeting the scale of change required in greenhouse gas emissions requires taking land out of agricultural use. The Natural England report[xxvii] on carbon and habitat states:

> **'Agricultural land currently covers 70 per cent of the terrestrial area of England. The UK target to meet net zero is dependent on making changes to the way we use and manage our land, with agricultural land often forming the baseline of land use change. The Committee on Climate Change (2020) recommend that around one-fifth of agricultural land will need to be released before 2050 for actions that reduce emissions and sequester carbon. The large area of agricultural land in England, and its management, means it plays a significant role in England's carbon balance. The sector contributed 10 per cent in total national GHG emissions in 2019 (BEIS 2021)'**

6.132 Change is necessary and where change will be most effective is where land is not the best and most versatile for agriculture, where natural ecosystems are most degraded, and land where the change can offer the greatest ecosystems services returns. Urban fringe countryside less than 6 miles from Tunbridge Wells, 1.5 miles from the town of Paddock Wood, and surrounded

by smaller settlements and commercial/industrial premises meets all of these criteria. The Site is not operationally BMV and it is a location with proximate demand for the renewable electricity which means no inefficiencies and losses that occur when energy travels over longer distances.

6.133 Alongside this, climate change and biodiversity loss are closely linked problems and need to be addressed in an integrated way. The way to reverse environmental degradation and ensure social, economic, and environmental resiliency in the face of climate change is through a joined-up Nature-Based Solutions (NBS) approach, addressing climate change and biodiversity decline together to meet the multiple demands on our environment (Natural England, 2019)[xxviii].

6.134 NBS are actions which support biodiversity and provide for people, including health and wellbeing, at the same time. A widely used definition is that of the IUCN (2020)[xxix]:

> **'Nature-based Solutions are actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.'**

6.135 This is a key concept for tackling the climate and biodiversity crises as affirmed by the TWBC Emergency Declaration. The Development's BNG of + 124.67% for habitats, +50.08% for hedgerows, and +18.78% river units is a valuable contribution in its own right and this solar farm represents the type of joined-up approach that reflects true sustainable development.

6.136 Aside from the CO_2 displacement of fossil fuels the Development provides offsetting through biodiversity and habitat improvement. Hedgerows, trees outside woodland, and scrub contribute to carbon sequestration and storage at the same time as supporting important aspects of biodiversity. They can also provide other benefits for agricultural ecosystem services, including reducing soil erosion and providing shelter for both livestock and wildlife.

6.137 Alongside new boundary planting, the majority of the land will be converted from intensive arable to a combination of wildflower meadow, species rich pastoral, and tussocky grassland that will be organically managed through light grazing. This is a contribution to both BNG and climate change mitigation; grazed grassland sequesters more carbon than mown grassland due to the greater return of organic matter and nutrients. In addition, grazing alters the soil microbial community which enhances the availability of substrate which favours SOC sequestration (Gilmullina and others., 2020)[xxx].

6.138 The Development also includes elements to support wildlife and insects. These are not accounted for in formal BNG calculations but make a valuable contribution to immediate and wider ecosystem health. Such features include log piles, reptile hibernacula, bat boxes, dormouse boxes, barn owl box, and bird boxes. Once implemented the rewilded and organically managed land will provide new habitat for skylark and other birds. The fencing will also have mammal gaps all around to enable and encourage foraging across the site. The Applicant has

also expressed continued openness to recommendations that might be made by consultees on other complimentary features that would local green infrastructure.

6.139 By combining significant contribution to climate change mitigation and biodiversity gain, along with the socioeconomic benefits detailed in the section above, the Development represents a true multi-functional green infrastructure scheme that makes a positive contribution to local ecosystem services and a sustainable rural economy. It is therefore considered that the Development accords with the underlying rationale of the NPPF, underlying objective for the adopted TWBC LP and emerging TWBC LP.

7.0 CONCLUSION

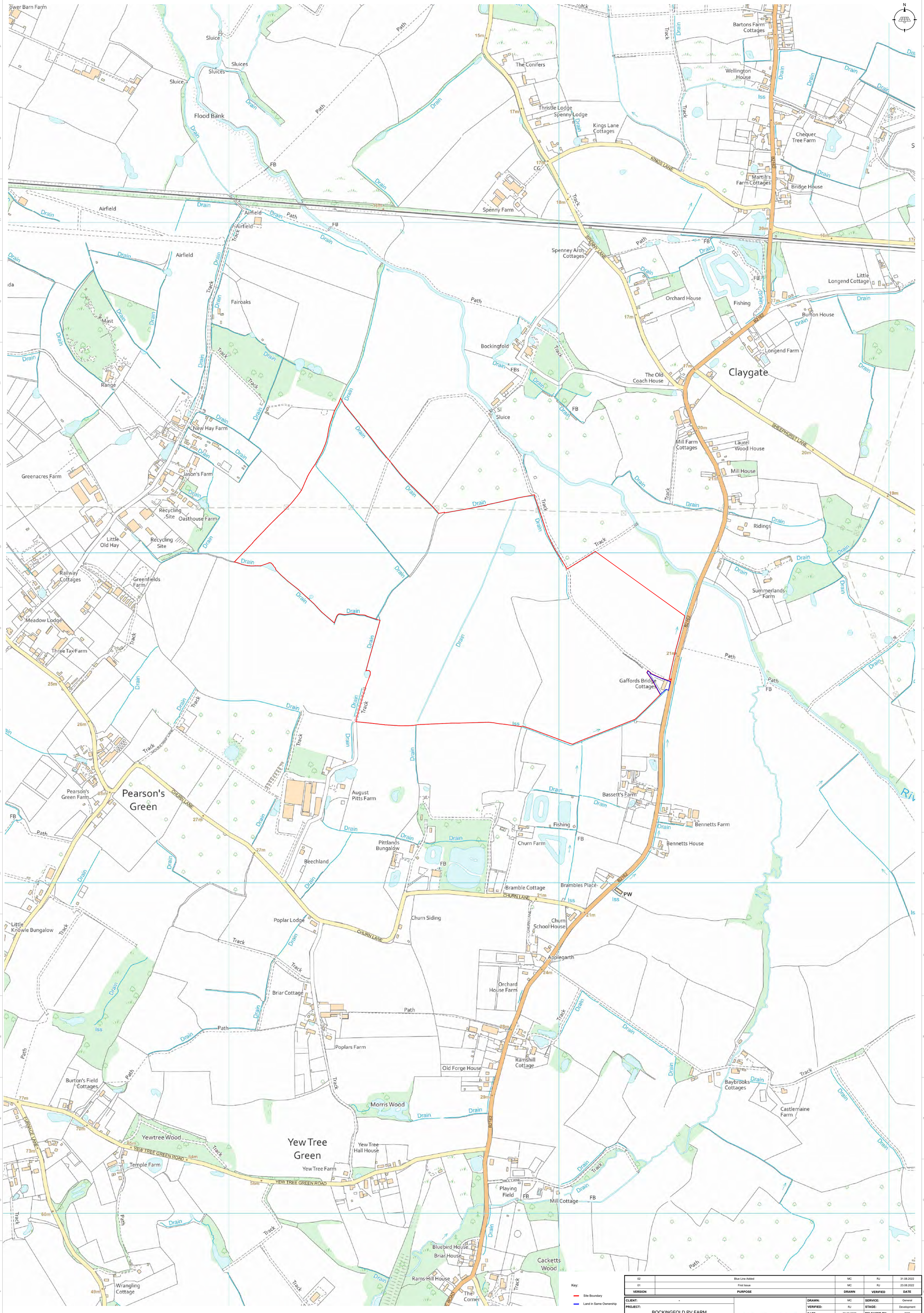
7.1 This PS supports a planning application submitted on behalf of Voltalia UK Ltd for the following development:

> **'Installation and operation of a renewable energy generating station comprising ground-mounted photovoltaic solar arrays together with inverter/transformer units, control house, substation, onsite grid connection equipment, storage containers, site access, access gates, internal access tracks, security measures, other ancillary infrastructure, and landscaping and biodiversity enhancements.'**

7.2 The Development comprises ground mounted photo voltaic panels with an export capacity of up to 49.9MW of renewable electricity at peak operation. The Development is proposed for a 40-year period.

7.3 The Development is in accordance with local and national planning policy and will make a significant contribution to the transition to a renewable energy system and the delivery of net zero. The Applicant has extensively consulted with local stakeholders and has iteratively designed the Development to take account of local concerns. In conclusion, it is considered that the complies with the adopted development plan and all other material considerations. Planning permission should therefore be granted accordingly.

APPENDIX A
SITE LOCATION PLAN [BCK01-SP-01]



VERSION	PURPOSE	DRAWN	VERIFIED	DATE
02	Blue Line Added	MC	RJ	31.08.2022
01	First Issue	MC	RJ	23.08.2022

CLIENT: -	DRAWN:	MC	SERVICE: General
PROJECT: BOCKINGFOLD PV FARM	VERIFIED:	RJ	STAGE: Development
SITE: Claygate, Surrey, United Kingdom	DATE:	23.08.2022	RELEASED BY: GED
DRAWING DESIGNATION: Site Location Plan	SCALE:	1:5000	VOLTALIA
	PROJECT N°:	BCK01	28 rue de Mogador
	FORMAT:	A1	75009 Paris, France
	DRAWING N°:	BCK01-SP-01	Tel: +33 (0)1 44 63 14 40

APPENDIX B
TUNBRIDGE WELLS BOROUGH COUNCIL EIA SCREENING OPINION (JANUARY 2022)

Barton Willmore
Robert Devas
7 Soho Square
London
W1D 3QB

26 January 2022

PLANNING DECISION NOTICE

APPLICANT:	**Barton Willmore**
APPLICATION NO:	**22/00068/ENVSCR**
PROPOSAL:	**EIA Screening Opinion; Construction of a ground mounted photovoltaic solar farm with a DC capacity of 49MWp, to include the installation of photovoltaic panels and transformers and inverters, a distribution network operator substation enclosure, security fencing and cameras, gravel access roads, landscaping and other associated infrastructure.**
ADDRESS:	**Land At Bockingfold Farm, Maidstone Road, Horsmonden, Tonbridge, Kent,**

The Council hereby adopts the opinion that an Environmental Impact Assessment for the above proposal is **NOT REQUIRED** for the following Reason(s):

(1) The site falls outside of a Sensitive Area as defined by the Regulations. The proposed development exceeds the threshold set in Schedule 2(3a) of the EIA Regulations. However, the development falls within the indicative threshold for thermal output set by the NPPG. Taking into account the criteria in Schedule 3 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended), it is considered that the proposal would not be likely to have significant effects on the environment by virtue of factors such as its nature, size, location and cumulative impact, such that an Environmental Impact Assessment would be required. The environmental impacts of the development can be adequately considered through the normal planning process.

Stephen Baughen
Head of Planning
Tunbridge Wells Borough Council

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