



# Fairy Hill, Compton Dando: Proposed Solar Farm

# Design and Access Statement

Date: 16 August 2024

For: BWCE

Ref: eg211118

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# ABBREVIATIONS

AONB	Area of Outstanding Natura Beauty
°C	Degrees Celsius
EIA	Environmental Impact Assessment
EMR	Electricity Market Reform
Km	Kilometre
m	Metre
MW	Megawatts
PV	Photovoltaic
RPG	Registered Park and Garden
UNFCCC	United Nations Framework Convention on Climate Change



# Fairy Hill Community Solar Farm Design and Access Statement

# 1 INTRODUCTION

# Scope of this Document

- 1.1 This Design and Access Statement has been prepared in support of a planning application for a new solar farm by Bath and West Community Energy (BWCE).
  The site is located on the outskirts of Compton Dando (Figure 1)
- 1.2 BWCE is a community benefit society, established in June 2010. BWCE's vision is for a local area able to supply decreasing local energy demand with increasing generation from renewable energy, driven by collective action and community ownership. BWCE's local areas covers Bath & North East Somerset (BANES) and parts of Wiltshire and South Gloucestershire.
- 1.3 The planning application is accompanied by technical reports and assessments necessary to demonstrate the acceptability of the proposals. This document sets out the environmental context to the site of the proposed solar farm and describes how the proposal has been designed to be appropriate to the site and its setting.







# Fairy Hill Community Solar Farm Design and Access Statement

# 2 LEGISLATIVE AND POLICY CONTEXT

# Scope

- 2.1 The solar farm would constitute 'development' as defined in Article 2 of the *Town* and Country Planning (Development Management Procedure (England) Order 2015.
- 2.2 The application is submitted with a Planning Statement, which sets out in detail the proposal in relation to relevant planning policies of the Core Strategy, Placemaking Plan and Local Plan Partial Update, which together make up the local development plan.
- 2.3 The application is submitted in the context of a global, national and local drive to increase the amount of renewable energy generation. The drive to increase the use of renewable sources of energy has its roots in the recognition that the burning of fossil fuels has an adverse effect on global climate, and that local, national and global measures are required to deal with it.
- 2.4 The UK is already affected by rising temperatures. The average temperature in Britain is now 1°C higher than it was 100 years ago and 0.5°C higher than it was in the 1970s. The UK Government advises that if action is now taken to radically reduce greenhouse gas emissions, there is a good chance that we can limit average global temperature rises to 2°C. International policy support for development of renewable sources of energy is far-reaching, however this Design and Access Statement focuses on matters relating directly to the UK.

# National Legislation and Policy

# The Climate Change Act 2008

2.5 The Climate Change Act 2008 established long-term statutory targets for the UK to achieve reductions in greenhouse gases by 2050 against a 1990 baseline. The Act originally set a legally binding target of an 80% cut in greenhouse gas emissions by 2050.







2.6 On 12 June 2019, as a direct response to the climate change emergency declaration, the Government laid the draft Climate Change Act 2008 (2050 Target Amendment) Order 2019 to amend the Climate Change Act 2008 by introducing a target for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as a net zero target because some emissions can remain if they are offset by removal from the atmosphere and/or by trading in carbon units.

UK Government Net Zero Strategy 2021

2.7 The UK Committee on Climate Change advises the government on progress on tackling climate change. In May 2019, the Committee on Climate Change published its Net Zero report which responded to a request from the Governments of the UK, Wales and Scotland, asking the Committee to reassess the UK's long-term emissions targets. The report identifies that the supply of low-carbon power must continue to expand rapidly if the UK is to meet its carbon targets. The government's Net Zero Strategy responded by committing to 'take action so that by 2035, all our electricity will come from low carbon sources...'. This brings forward the previous government commitment in the Energy White Paper to a fully decarbonised power system by 15 years. The same strategy goes on to say that 'low-cost, net zero consistent electricity system is most likely to be composed predominantly of wind and solar generation...'.

The proposed solar farm would contribute to the expansion of the supply of lowcarbon power and is thus in accordance with the Net Zero Strategy and the advice of the Committee on Climate Change.

# Net Zero in the Power Sector

2.8 The National Infrastructure Commission (NIC), official advisor to the Government on Infrastructure, has published a report (Net-Zero Opportunities for the Power Sector, March 2020) setting out the key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed.







2.9 The NIC recommends that in meeting this target, the UK's energy mix needs to be made up of around 90% renewables. To achieve this would require a significant increase in installed capacity across the UK, including over nine times the current installed capacity of solar technologies, which as of October 2020 is around 13.4GW according to the Department for Business, Energy & Industrial Strategy (BEIS).

## National Planning Policy Framework

- 2.10 The National Planning Policy Framework (NPPF), revised on 5<sup>th</sup> September 2023, recognises the need for a reduction in the UK's carbon emissions, which can be met in part through increased renewable energy generation.
- 2.11 Paragraph 152 of the NPPF states that:

The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; <u>and support renewable and low</u> <u>carbon energy and associated infrastructur</u>e.

2.12 The NPPF goes on to state in Paragraph 156 that:

Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.

#### 2.13 And in Paragraph 158:

When determining planning applications for renewable and low carbon development, local planning authorities should:

a) 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

b) approve the application if its impacts are (or can be made) acceptable

The Environmental Impact Assessment (EIA) Regulations 2017

- 2.14 The proposed development is not a *Schedule 1* development under the EIA regulations and therefore does not automatically require an EIA. It is however an installation for the production of electricity of more than 0.5 hectares, and it therefore constitutes a project under category 3(a) of Schedule 2 of the EIA regulations.
- 2.15 A screening report was submitted, requesting a screening opinion from BANES in June 2022. The screening report set out how the potential environmental impacts of the development proposal have been assessed according to standard guidance. BANES provided a screening response on 30<sup>th</sup> August 2022, which confirmed that the project is not EIA development.

# Local Policy

2.16 The relevant development plan for the project comprises the Core Strategy (including saved policies), the Placemaking Plan and the Local Plan Partial Update and Supplementary Planning Documents.

# Design Guidance

2.17 The Building Research Establishment (BRE) provide guidance for the development of ground mounted solar farms. Appendix 1 provides the key elements of this guidance and how the proposal responds to them.





# Fairy Hill Community Solar Farm Design and Access Statement

# **3 PROJECT DESCRIPTION**

# The Site

3.1 The site is located approximately 500m north of Compton Dando in the Bath and North East Somerset council area (**Figure 2**). The Ordnance Survey grid reference for the center of the site is ST647651. The site comprises a single agricultural field that slopes from the Fairy Hill Road on its western boundary down to the River Chew along its eastern boundary.



# The Development Proposal

- 3.2 The solar farm would consist of:
  - solar photovoltaic panels;
  - transformer substation;
  - switchroom;
  - perimeter security fencing;
  - access track;
  - on site cabling
  - offsite cabling connecting the switchroom to the grid via the road running south towards Compton Dando
  - DNO cabin





- Satellite mast
- CCTV cameras
- The community orchard and nature reserve that will be developed in the field surrounding the solar array
- 3.3 The generating capacity is estimated to be approximately 2.1MW over an area of approximately 2ha. The installed capacity will depend on the technology available at the time of construction. The layout has taken into account topography, ground conditions, ecology, landscape and visual elements of the environment. The layout has also been adjusted to take account of feedback from the local community (**Figure 3** and **Figure 4**)
- 3.4 The solar panels will be orientated to face the south on static frames, with a clearance above ground at the lower (front) edge of approximately 0.7m and a height at the higher (rear) edge of up to 1.908m, at an angle of approximately 15 degrees. The dimensions of each individual panel will be selected prior to construction to take advantage of the most efficient technology available on the market at the time.
- 3.5 The solar panels will be connected to inverters in order to convert the direct current electricity that they generate into alternating current for use in the electricity grid. The inverters will be housed in a small building approximately the size of a shipping container (approximately 2.5m high, 2.5m wide and 12m long). 'String inverters', which are connected to cabling underneath and between the panels, can be used instead of a central inverter building depending on technical design resolution later in the project. The solar farm also requires the construction of a switchroom building and underground cabling to connect into the electricity grid via cabling under the road to a connection point south of the field in which the solar farm would be located.
- 3.6 The solar array and associated infrastructure will not be publicly accessible and will be set behind security fencing that will be approximately 2m high. This typically consists of galvanised steel mesh fencing with wooden posts and a 100mm gap at the bottom for wildlife.





- 3.7 Construction of the solar farm is expected to take approximately four to five months to complete. Once installed, the solar farm will operate for a period of 30 years. During operation the site is monitored externally and there are no permanent staff on site.
- 3.8 There will be no artificial lighting on site during operation of the solar farm. Security cameras will use infra-red imaging and the infrastructure within the permitter fence does not need to be illuminated.
- 3.9 Scheduled on-site activities will consist of annual vegetation management, regular inspection and cleaning of the panels, and servicing, maintenance or replacement of parts as required.
- 3.10 Once the operational lifetime of the solar farm is complete, it will be possible to remove the panels and above-ground infrastructure and return the site to an alternative use. Any below-ground footings or cabling can either be secured and left *in-situ* or removed, depending on whichever is the most environmentally appropriate option.





Fairy Hill Community Solar Farm Design and Access Statement

# 4 DESIGN RESPONSES

# Site Selection

- 4.1 The site has been selected as a sustainable location for the generation of renewable energy on the basis of factors including:
  - Physical characteristics: the site is orientated suitably for the generation of solar power and there are no topographical constraints to the constriction or operation of the solar farm. Furthermore, the positioning of the solar farm would not require the removal of vegetation or other structures.
  - Location: the proposed solar farm would be able to supply enough renewable energy to power up to 606 homes in Compton Dando via a viable connection point. Compton Dando, which is aiming to be a zero-carbon village by 2030.
  - Accessibility: the site can be accessed directly off an existing public road through an existing field gate, and there is an available grid connection point close to the solar array without necessitating lengthy underground cabling.
  - Landscape: the site is well screened by landform and vegetation such that any impacts on landscape and visual amenity would be minimised.
  - Community benefits: BWCE seek to deliver solar schemes that combine renewable energy generation with wider community benefits. This site is located close to a village and is connected the public right of way network, which offers potential for the local community to benefit from proposed land use improvements that can be combined with the solar farm proposal.
- 4.2 These and other factors (discussed in more detail below) contribute to the acceptability of the Very Special Circumstances to justify development in the Green Belt.





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4.3 The location of the solar panels within the site has been adjusted in response to community feedback. The original position of the array (Figure 3) has been moved eastwards within the site (Figure 4) to maximise screening of the array by the existing tall hedgerows and boundary trees.







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# **Biodiversity**

# **Baseline Characteristics**

- 4.4 The majority of the site consists of a cultivated arable field which is bordered by wide field margins occupied by rough grassland characteristic of periodically cultivated fallow ground (Figure 5). The margins are dominated by grass and tall ruderals.
- 4.5 The boundary hedges are tall and bushy and comprise a diverse mix of woody species. There is a large, mature oak tree in the western section of the site. The boundary features and the mature oak tree may be used by various wildlife including birds, bats, reptiles and amphibians. A baseline habitat map is presented below.









Design Response

4.6 The core principles influencing biodiversity design are application of the 'mitigation hierarchy' (below) and an aspiration to deliver a biodiversity net gain.









- 4.7 The following built-in features of the project will avoid or mitigate impacts on wildlife:
  - The installation of a solar farm has very limited footprint impacts, typically occupying less than 5% of a given site area. This project's footprint impacts will comprise the footings for the panels, the ancillary buildings and the new access track, all of which are located away from the features of ecological value.
  - Site selection: the proposed solar farm is on an arable field, which has negligible habitat value
  - Measures to avoid impacts on wildlife during construction are designed into the Construction Environmental Management Plan (CEMP) that is submitted with the application.
  - The proposal includes habitat creation including the replacement of the arable cropping regime with a managed grassland, and the provision of an orchard, which will provide new habitats for wildlife.





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- There will be no artificial lighting required during the operation of the scheme.
- The site will be subject to a long-term ecological management plan for wildlife.
- 4.8 Taking account of the good practice principles and the constraints and opportunities of the site and the development proposal, the basis of the net gain strategy is to replace the existing arable crop with seeded grassland to create a wildflower meadow, which will deliver a net gain in habitats of over the 10% policy requirement. Around the edges the seed mix will favour pollinators by including a range of flowering plants specifically targeted at this group. Over the remaining areas the seed mix will be a locally appropriate mix of grasses and wildflowers. The net gain is also helped by the decision to provide a community orchard on site, which can be formed of traditional apple tree varieties over a wildflower sward.

# Noise

- 4.9 The site is located in a quiet rural area where the primary sources of noise are road traffic on Fairy Hill and agricultural operations on the site and in surrounding fields. Typical low-level background noise in such settings are in the range of 25-30dB, compared with a typical urban level of 30-40dB.
- 4.10 The nearest residential property is approximately 80m to the south of the site boundary.
- 4.11 During construction, noise will be generated during deliveries to the site, the installation of foundations, panels and infrastructure.
- 4.12 During operation, solar farms generate little noise as there are few moving parts or machinery. Inverters generate noise equivalent to a small domestic appliance and will be housed within an enclosed structure. The table below provides indicative noise levels for solar farm equipment.







Source	Sound Power Level, dB
Solar Inverter	66
Transformer	86
Substation Switchgear	84
Main Substation Transformer	80

- 4.13 The fixed infrastructure including the switchgear and transformer are located in the northern boundary of the site, approximately 200m away from the nearest dwelling and from the Public Right of Way. At this distance and in consideration of the noise levels stated above there is not likely to be an impact on residential amenity or users of the Public Right of Way. There are no wildlife receptors that would be sensitive to low-level noise generated by the fixed infrastructure.
- 4.14 Routine maintenance visits and land management would generate noise equivalent to typical agricultural operations and would therefore not elevate noise levels against the baseline.
- 4.15 A pre-construction planning condition requiring the provision of a noise impact assessment can be attached to any planning consent.

# Hydrology

# Flood Risk and Surface Water Drainage

4.16 The field in which the solar panels would be located slopes gently down to the River Chew, which forms the eastern boundary of the field. Approximately 90% of the field, and all of the proposed development is in Flood Zone 1 i.e. it has a low probability of flooding. The lowest lying area adjacent to the River Chew is in Flood Zone 3 i.e. this area has a high probability of flooding.

# Design Response

4.17 During construction, the risk of pollution or flooding will be controlled by the implementation of a CEMP. This will comprise standard methods for the control of risk, using well established principals that have successfully been applied on similar developments.







- 4.18 The site will be seeded with a wildflower seed mix under and around the panels. This will bind the soils and contribute towards slowing the flow of surface water, thus reducing the existing runoff rates and protecting the soils from erosion.
- 4.19 In terms of the hydrology receptors, the electrically sensitive infrastructure, such as the inverters, will be designed to be flood resistant to a 1:200-year flood event plus an allowance for climate change.
- 4.20 The Flood Risk Assessment that accompanies the application identifies that the changes to landscaping and permeable area, including the provision of berms for control of surface water, will offer improvements to flood risk and water quality.

# Heritage

# Potential Impacts on Heritage Assets

- 4.21 There is no intervisibility between the site and any Listed Buildings. The nearest Scheduled Ancient Monuments are Compton Dando bridge (which is screened from the development site), sections of the Wansdyke (from which small parts of the site may be glimpsed at distance but the LVIA concludes the effect on views will be negligible and there will be no impact on this heritage asset) and Stantonbury Camp (from which the development will be barely visible, the visual effect would be negligible and there would be no impact on this heritage asset).
- 4.22 There are two Designated Parks and Gardens within 5km of the site but given the distance and landform there is no intervisibility with the site and there would be no impact upon them.
- 4.23 Woolard Conservation area is 2.7km away from the site and given the distance and landform there is no intervisibility with the site and there would be no impact upon the Conservation Area.
- 4.24 The site has been in use as arable farmland for a substantial length of time and there is no evidence to suggest that the proposals would have any impact on buried assets.





#### Design Response

4.25 The proposed landscape planting and management will serve to improve the screening of the development from close and long-range views.

# Landscape and Visual Amenity

#### Potential Impacts on Landscape and Visual Amenity

- 4.26 The site of the proposed solar farm is an arable field on a gently sloping field facing east, surrounded by mature tree lines and hedges on the upper slopes of the valley of the River Chew. The landscape surrounding the site is characterised by irregularly shaped fields bounded by mature hedgerows, woodland and steeply sloping valleys with flatter landforms above.
- 4.27 The site is within the Bristol & Bath Green Belt and the Forest of Avon Community Forest, the Bristol, Avon Valleys and Ridges National Character Area (NCA 118) and the Chew Valley Landscape Character Area.
- 4.28 The site is in the 'southern green belt', which is of most importance for preserving the identity and character of towns, villages and hamlets<sup>1</sup> (point 2 above).
- 4.29 A Landscape and Visual Impact Assessment has been submitted with the application, which includes 22 viewpoints within a Zone of Theoretical Visibility (Figure 6).

<sup>1</sup> Bath and North East Somerset Green Belt Review, Stage 1 Report. Arup, 2013. On Behalf of: BWCE









- 4.30 The development proposals will result in harm to the openness of the green belt in terms of encroachment of development and a reduction in openness. There will be impacts on local landscape character at the site level (through the introduction of built form into an open field). The LVIA concludes nevertheless that the level of harm to the green belt and to visual amenity is not unacceptable once mitigating factors and the benefits of the scheme are taken into account.
  - Design Response





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- 4.31 Existing hedges and boundary vegetation will be retained and managed to ensure they continue to provide a function of screening the solar array from potential views. Where opportunities exist these retained features will be planted up or enhanced to increase their screening function.
- 4.32 The proposed community orchard and tree planting will provide screening to mitigate the visual impact of the solar array, as illustrated in the photomontages in Appendix 1. Tree planting in the western part of the site will largely screen the panels from views into the site from the entrance. Tree planting will also soften the visual impact of the solar array from the Two Rivers Way and from a Public Right of Way crossing Fairy Hill.
- 4.33 Seeding of the field to create a species-rich meadow will soften the visual appearance of the areas outside of the solar arrays, removing the regular pattern of even-height and crops of uniform colour and replacing it with a seasonally variable sward in keeping with pastures in the surrounding landscape. The introduction of sensitively designed landscape features such as the community orchard and wet meadow in the eastern part of the site would blend this area in with the adjacent tree-lined river.
- 4.34 The development proposal will enhance local landscape character (through the proposed planting), landscape features (the boundary hedgerows) and seeks to enhance local distinctiveness through the choice and design of species for the landscape planting. The impacts on landscape character of introducing new built form (the solar panels and infrastructure) are therefore mitigated by the landscape planting and management proposals.

# Trees

# **Baseline Conditions**

4.35 There is a large, mature oak tree in the western part of the site. The trunk is over 1m in diameter and there is some dead wood in the canopy. The land is cultivated under the canopy of the tree with the exception of a small area of rough grassland.





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### Design Response

4.36 Standing advice for the protection of ancient or veteran trees includes this requirement:

A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter

4.37 This translates to a buffer of between 15-20m around the tree, which has been accounted for in the layout of the solar farm. The required buffer zones for trees and hedges are met by the proposed layout, as illustrated in **Figure 7**.



# Access and Public Rights of Way

4.38 The site can be accessed through an existing field gate off Fairy Hill Road, which leads north out of the village of Compton Dando. This provides sufficient





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accessibility for construction and maintenance, subject to the temporary widening of the gateway to accommodate construction traffic (see CTMP submitted with the application), which will be reinstated after the 4 - 5month construction period.

- 4.39 The completed access will be sufficient for emergency vehicles to enter the site and the access track will be suitable for access, turning and egress from the site. There is no known increased risk of fire on solar farms relative to other similar equipment. The provision of adequate access for emergency vehicles and the exclusion of public access through the construction of a secure perimeter fence (with security cameras at regular intervals) are measures that help to manage fire risk during construction and operation.
- 4.40 Fairy Road is approximately 5m wide adjacent to the proposed site access and is subject to a national speed limit, reducing to 30mph approximately 60m downhill from the proposed site access. At the site of the proposed road access the carriageway is bordered by a road verge approximately 2m wide, with the site's boundary hedgerow set back from the road edge by approximately 2m, giving good visibility at the proposed point of access.
- 4.41 A Public Right of Way (BA8/84) crosses the eastern boundary of the site (Figure 8). This footpath leads to / from Compton Dando village to the south, along the River Chew and (via a pair of connected bridleways BA27/66 and BA27/65) into Keynsham to the north. No paths will be diverted or removed. The solar farm would be visible from the Public Right of Way and from the existing access gate off the road.









#### Design Response

- 4.42 The community engagement exercise explored options around permissive paths and interpretation, following which the project has incorporated proposals for:
  - A pedestrian track allowing access from the public right of way in the south-eastern part of the site, up to the top of the hill and returning on a circular route
  - A sensory track in open space in the south-western part of the site, with varied surfaces and sensory elements
  - Education boards with QR code links to online information, sited on the perimeter fence to provide interpretation and understanding of the purpose, context and function of the solar farm.
- 4.43 These features are enhanced by the provision of new planting, the type and nature of which have been developed as part of the public consultation. These proposals are illustrated in the Mitigation Plan submitted with the application (Figure 9).



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- 4.44 Permissive paths to the site will be restricted to areas outside of the secure perimeter fence. There will be no access to any structures or equipment that would pose a risk to public health and safety, and the Public Right of Way provides a safe means of exit from the site.
- 4.45 Whilst there will be changes to the experience of users (largely pedestrians) of the Public Right of Way and the road, considering their sensitivity and the magnitude of change, the LVIA concludes that these impacts would not be unacceptable.

# **Energy and Sustainability**

- 4.46 The proposed project would generate approximately 2.1MW a year of clean, renewable energy. This will contribute to the Council's sustainability targets for renewable energy generation and contribute to reducing the impact of rising prices of fossil fuels on the UK power sector. The proposed solar farm is estimated to be able to provide twice the electricity demand of Compton Dando village. This is an important step in the village reaching net zero. Furthermore, the solar farm would provide 1.9% of the 110MW target for electricity generation imposed by BANES Policy CP3.
- 4.47 Solar farms typically have a lifespan of around 40 years and do not produce waste or emissions during their lifetime. Upon decommissioning, the installation can be removed and the land can continue to be used for appropriate agricultural purposes. Solar panels are manufactured using recyclable materials that can be re-used once a solar farm is decommissioned. PV panels typically comprise approximately:
  - 75% glass
  - 10% plastic
  - 7% aluminium
  - 5 silicon
  - 1% metal





- 4.48 These materials are readily re-used and recycled. The panels are mounted on metal frames, which can also be re-used or recycled at the end of their lifetime.
- 4.49 The construction and operation of a solar farm will contribute to BANES renewable energy targets as set out in relation to Core Policy 2. CP2 also requires standards for sustainable construction to be met, as set out in Table 1 below.

#### Table 1. CP2 Sustainable Construction Standards

CP2 Standard	Project Response
Maximising energy efficiency and integrating the use of renewable and low- carbon energy (i.e. in the form of an energy strategy with reference to Policy CP4 as necessary)	As a renewable energy installation the proposal would generate locally significant amounts of clean energy and contribute to BANES targets in CP2
Minimisation of waste and maximising of recycling of any waste generated during construction and in operation	The construction of the solar arrays and associated infrastructure will make use of a range of materials including (in approximate order of quantities) glass, concrete, steel, aluminium, silicon, copper and plastic. All of these materials can be recycled upon decommissioning of the solar array.
Conserving water resources and minimising vulnerability to flooding	The proposed landscaping and management of the site will reduce surface water flows and contribute to flood management associated with the River Chew
Efficiency in materials use, including the type, life cycle and source of materials to be used	Main materials used in the construction and operation of the solar farm are recyclable. The materials will be sourced







CP2 Standard	Project Response
	from the most economically viable sustainable source available
Flexibility and adaptability, allowing future modification of use or layout, facilitating future refurbishment and retrofitting	The installation is temporary in nature and fully reversible, allowing for future adaptation, modification and retrofitting
Consideration of climate change adaptation	The proposal directly addresses the national and BANES climate emergency.







# 5 CONCLUSION

- 5.1 This Design and Access Statement sets out how the site selection process and design of the proposed development have responded to the environmental context of the site so that the development will be appropriate to the site and its setting.
- 5.2 The design process has also been informed by consultation with the local community, a pre-application enquiry with BANES, and comprehensive feedback from BANES provided in the EIA screening opinion dated 30<sup>th</sup> August 2022.
- 5.3 The proposed design responds to the key elements of design as set out in Appendix 1.
- 5.4 The proposed development would be temporary in nature and has been designed so that it can most easily be remediated at the end of its operational life. Whilst in operation, the project would secure the management of the land for biodiversity benefits, both within the array and on surrounding land. This will be supported by a long-term management and monitoring strategy that will facilitate adaptation of the site management in response to changes in biodiversity, with a secure source of funding.
- 5.5 The proposed development would comply with national planning policy as set out above and in the separate Planning Statement. It will also comply with local planning policy.
- 5.6 It is therefore concluded that the proposed development is an appropriate temporary use of the site designed in keeping with its environmental context, that will assist in meeting the urgent need to reduce carbon emissions, enhance biodiversity and facilitate public access to the new community facilities.







# **APPENDIX 1 – DESIGN GUIDANCE REVIEW**

Design Guidance	Design Response
Solar farms should ideally utilise previously developed land, brownfield land, contaminated land, industrial land or agricultural land preferably of classification 3b, 4, and 5	The site is located on Grade 3b agricultural land.
Construction compounds should be carefully located in order to minimise environmental or amenity impact	The construction compounds will be located away from the eastern end of the site to minimise the risk of impacts on the River Chew
Where it needs to be removed, topsoil and subsoil should be stripped, stored and replaced separately in order to minimise soil damage and to provide optimal conditions for site restoration	Detailed measures for the protection of soils are included in the CEMP, in accordance with this guidance.
The installation and use of access tracks should be kept to an absolute minimum	The project will require only one short section of new access track for construction and maintenance. The location of the access track was modified from the original design to account for community feedback.
A buffer strip of larger than 5 metres between hedges and solar panels is desirable to promote ecological and biodiversity opportunities if it can be achieved	The solar panels are located no closer than 15m from the nearest hedgerow sections.





Design Guidance	Design Response
Solar PV installations which are developed on agricultural ground should be 'reversible', allowing the site to be easily restored to a more intensive agricultural use. Intrusive development, such as trenching and foundations, should therefore be minimised and the use of mass concrete should be avoided. Where possible Solar PV arrays should be installed using 'pile' driven or screw foundations, or pre-moulded concrete blocks (shoes), and capable of easy removal. The use of shoes may be required for archaeological sensitive areas. Where 'pile' driven foundations are proposed applicants should consider impacts during construction on nearby noise sensitive properties	The solar panel installation is designed to be reversible so that the future use of the land is not constrained at the end of the 30-year period or which consent is sought.
The development will need to have regard in both its design layout, and future maintenance plans for the retention of growth of vegetation on any important boundaries	The panels are set back from the boundaries and management of these areas is included in a Landscape and Ecology Management Plan
Any buildings required in order to house electrical switchgear, inverters etc should be designed and constructed in order to minimise their landscape and visual impact	These buildings have been located against the northern boundary hedgerow in a visually discrete location

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Design Guidance	Design Response
Design should be informed and influenced by ecological assessments (phase 1 habitat surveys, protected species surveys etc).	The design has been informed by an Ecological Appraisal and Ecological Impact Assessment and is accompanied by a Biodiversity Net Gain plan and a Landscape and Ecological Management Plan.
The project should take account of the results of historic environment assessments in their design, for instance through the sensitive planning of installations.	There are no likely significant impacts on heritage assets. Potential impacts on heritage assets have been considered and described in the Landscape and Visual Impact Assessment accompanying the application. The Zone of Theoretical Visibility, viewpoint photographs and photomontages illustrate the visibility of the site and the proposed solar panels, with and without additional planting. The proposed panels and landscaping would not have any significant impacts on views from any designated heritage assets. The proposal would not alter the field pattern (i.e., there would be no removal of hedgerows or alteration of boundaries). There would be a change to the field system within the site (i.e. the addition of the new planting).
Where access tracks need to be provided, permeable tracks should be used, and localised SUDS, such as swales and infiltration trenches, should be used to control any run-off where recommended.	Permeable surfaces will be used for the new access track.





Design Guidance	Design Response
The potential for solar PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all of the materials used in the construction of the solar PV farm	The panels will be low-reflectance and consideration is given to this in the LVIA accompanying the application
Community involvement should be considered as an integral part of the development process.	The proposal is a community-benefit project and extensive public consultation has been undertaken in the lead up to the submission of the planning application, and public involvement will continue to be a key feature of the project. A community engagement event was held on site on the 11 <sup>th</sup> August 2022 and feedback from that event has been incorporated into the project.

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# **APPENDIX 2 – SUSTAINABLE CONSTRUCTION CHECKLIST**

# Assessing Risk

The development does not potentially increase climate-related risks in the locality in terms of:

- Increased surface water run-off (see Flood Risk Assessment).
- Causing changes to the flood or groundwater regimes elsewhere (see Flood Risk Assessment).
- Increased pressure for new or enhanced flood or coastal defence measures.
- Loss of tree cover that provides wind protection or shade.
- Fragmentation and vulnerability of habitats.
- Increased pressure for water resources.

# **Design Considerations – adaptation**

The development has adopted features that increase resilience and adaptability to climate impacts:

- Flood risk and heavy rain events: all infrastructure and facilities will be designed to be appropriate to the site conditions and the Flood Risk Assessment identifies that the site is not at excessive risk of flooding.
- Storms and strong winds: the equipment is securely fixed and designed to withstand appropriate wind loading.
- Emergency planning: there is sufficient access for emergency vehicles to the site.





# Design considerations – mitigating greenhouse gas emissions

The development is inherently contributing to the reduction of greenhouse gas emissions by reducing the need for energy generation using fossil fuel.







# **APPENDIX 3 – CONSULTATION REFERENCE TABLE**

Feedback	Response / Reference
In order to ensure impacts to natural resources are temporary in nature, it would be expected that any eventual application would seek planning permission for a temporary period only, following which a decommissioning and land restoration strategy would be implemented. A decommissioning and restoration strategy would likely be secured by condition in the event of an eventual planning application being granted.	The application is for temporary permission for a period of 30 years.
It is noted that the EIA Screening Report includes limited information in relation to natural resources associated with production of the solar panels and equipment itself. It is unclear if the equipment uses materials/minerals or energy which are non-renewable or in short supply. Information in respect of energy and materials associated with manufacture of the equipment, how natural resources can be recycled following decommissioning and if not, how the equipment will be disposed of avoiding detriment to natural resources would be beneficial.	Further information is provided in the 'Energy and Sustainability' section and Appendix 2 of the DAS
The standalone mature Oak tree at the site is a high-quality natural resource. Limited information has been provided in relation to the tree within the EIA Screening Report. It is unclear exactly how far the perimeter of the solar farm and any associated development would be sited from the tree. No scaled drawings have been provided at screening stage.	The tree is fully retained and protected and scaled drawings are provided in the Root Protection Area and Buffer Plan submitted with the application (and referred to in the relevant section of the DAS).
The Local Planning Authority would be interested to understand whether other construction materials such as frames, cabling, buildings and other infrastructure can also be re-used or recycled following use at the site.	Further information is provided in the 'Energy and Sustainability' section and Appendix 2 of the DAS

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Feedback	Response / Reference
Further information in relation to exact noise levels predicted to be	The location of noise generating equipment (the inverters and
associated with operation of the proposed infrastructure would be	substations) are shown on the submitted plans.
valuable. The exact location of noise generating equipment on site is	
unclear given the detail included on plans submitted. Whilst noise levels	Indicative noise levels are set out in Section 4 of this document.
equivalent to a domestic appliance may not be problematic in an urban	
area, the site is located in open countryside where very low levels of	In common with most rural solar installations in the BANES area a
background noise are likely to prevail. It is unclear how noise levels	separate Noise Assessment has not been prepared.
would be perceived by users of the Public Right of Way crossing the land.	
It is also unclear how this noise may impact ecology. Nevertheless, the	
Local Planning Authority accepts that this information can be	
Incorporated within a Noise Assessment submitted with an eventual	
application. It is anticipated that there is a good possibility of effectively	
this is necessary. Subject to further information and mitigating propagale	
significant environmental impacts as a result of noise generated by the	
development are found unlikely	
The EIA Screening Report also lacks information relating to the likelihood	There will be no permanent lighting installed on site
of light and heat emissions. The FIA Screening Report suggests no	
permanent artificial lighting is required.	
However the Local Planning Authority believes health and safety	
requirements will likely necessitate some provision of artificial lighting	
relating to maintenance work, particularly during winter or overnight. It is	
unclear whether this has been considered.	
Similarly, it is unclear how the solar panels will impact the local	There is no evidence from available studies of solar installations and
microclimate surrounding the development as a result of heat reflection	ecology that micro-climate effects are significant, and the biodiversity
and association radiation. This may have implications for biodiversity and	benefits of sowing an arable field with a wildflower meadow mix outweigh
ecology. These issues should be accounted for within an eventual full	any concerns in this regard.
planning application.	

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Feedback	Response / Reference
The information included within the EIA Screening Report relating to	All construction work will comply with the relevant health and safety
health and safety risk is found to be limited and somewhat ambiguous.	regulations and all materials will meet the relevant standards.
There appears to have been limited input from relevant specialists and no	
information is included relating to specific health and safety	The site, once operational, is protected by security fencing and CCTV, to
requirements associated with solar farms. Details of relevant national	prevent public access to the equipment.
regulations and requirements to ensure safe operation would be	
beneficial.	
It is highlighted that there have been recent examples of fires at solar	
farms, including one at Verwood, Dorset in July 2022. This example took	
place during a period of high temperatures which will become more	
commonplace given the predicted effects of climate change. A major	
issue with this fire related to access to the site by fire crews. As such, due	
consideration must be given to emergency service access to the site	
which will be a relevant Transport and Access issue.	
It is noted that the BRE National Solar Centre were commissioned by the	
Government in 2018 to undertake a study on fires involving solar	
photovoltaic systems. The outcome of this study has not yet been	
published. However the BRE have acknowledged that there is no reason	
to believe that the fire firsks associated with PV systems are any greater	
commissioned due to PV systems becoming more common and to inform	
and minimise risk associated	
It is acknowledged that the density of surrounding population is low given	
the rural location and the site is situated at least 70m from neighbouring	
residential properties. This separation would be beneficial in terms of	
reducing the impact to human health in the event of a fire as well as	
other pollution and emissions based risks at neighbouring properties	
The position of the Public Right of Way crossing the site is highlighted	
which means the public can access land nearby the development.	





Feedback	Response / Reference
Furthermore, it is indicated that a community orchard and nature reserve (assumedly publicly accessible) are also proposed on site. Therefore, despite the location being separate from neighbouring residential properties, there will be public access to land directly adjacent to the development. This should be taken into account in the design, specification and management of the site to ensure any risk to health and safety is minimised.	
It is highlighted that as the development is more than 1 hectare in area in Flood Zone 1 and therefore a Flood Risk Assessment will be required. Furthermore, as a major development a Sustainable Drainage Strategy will also be required with any eventual application in accordance with local Policy SU1	A Flood Risk Assessment is provided with the application
Ecological surveys will need to ensure that all affected areas of suitable habitat, including compounds and areas required for enabling works such as cabling, have been assessed. Details of any external lighting proposals would also need to be provided with any application.	The Ecological reports submitted with the application address potential impacts on habitat and wildlife. As the site is largely unsuitable for protected species the risk of harm is very low, and measures to avoid harm to wildlife are set out in the ecology reports submitted with the application.
There are also high levels of local surrounding longrange visibility as a result of topography. Whilst some viewpoints in the LVIA provided include some screening, the Local Planning Authority would not support the statement that the development is largely screened from view. The development appears to be visible from the range of surrounding viewpoints presented and it is not clear if a full range of public viewpoints have been assessed.	The solar panels will be visible from a small number of viewpoints – illustrative photomontages are provided in Appendix 3 of the DAS and a full assessment is presented in the Landscape and Visual Impact Assessment submitted with the application.
It is acknowledged that there are Scheduled Ancient Monuments in the area surrounding the site. This includes the Wansdyke located approximately 200m south-west at the nearest point and also Compton Dando Bridge approximately 320m south. The EIA Screening Report	The LVIA submitted with the application includes viewpoints from the route of the Wansdyke





Feedback	Response / Reference
states that there is no intervisibility between Scheduled Ancient	
Monuments and the site. However it is noted that the Landscape Visual	
this has not been demonstrated at this stage	
A critical beritage and archaeology asset which is not explicitly	The LVIA submitted with the application assesses impacts on the
acknowledged in the EIA Screening Report is the historic agricultural	agricultural landscape
landscape. This is considered a non-designated heritage asset. The	
report does assess the field system and pattern as mediaeval, which is	
probably accurate, although could also easily be more ancient, Iron Age	
or even earlier, and Is therefore of high historic significance. The field	
system and pattern will be substantially impacted upon, both in terms of	
the development site/field itself and the setting of the surrounding historic	
agricultural landscape, which is considered a non-designated heritage	
form part of the consideration and assessment	
The Landscape Visual Impact Assessment submitted with the EIA	The LVIA submitted with the application contains an assessment of
Screening Report does not include views to and from the heritage assets	visibility between heritage assets surrounding the site. The conclusions
which surround the site. This absence of evidence makes it difficult to	are summarised in Section 4 of the DAS and presented in full in the LVIA.
reach a conclusion in relation to the likelihood and significance of	
environmental effects. This will need to be resolved in order to confirm	
compliance with national and local planning policies against which an	
application for full planning permission would be assessed.	





# **APPENDIX 4 – EIA SCREENING RESPONSE**



# Bath & North East Somerset Council

Bath & North East Somerset Council Sustainable Communities - Planning Keynsham Civic Centre, Market Walk BS31 1FS www.bathnes.gov.uk

Contact: David MacFadyen Direct Line: 07790 372410 Email: <u>david\_macfadyen@bathnes.gov.uk</u> Date: 30<sup>th</sup> August 2022

Dear Engain,

# The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

Applicant:	Bath and West Community Energy (BWCE)
Site:	Parcel 6600, Fairy Hill, Compton Dando, Bath and North East Somerset, BS39 4LJ
Development:	Construction of solar farm capable of 2.1MW energy generation on agricultural land including solar panels, frames, associated substations plant and equipment, access arrangements, fencing, cable connections and biodiverse landscaping proposals.

Following receipt of your request for a Environmental Impact Assessment (herein EIA) screening opinion on 9<sup>th</sup> June 2022, please accept this letter in response as the formal screening opinion now adopted by the Local Planning Authority.

# Site and Background

The application relates to land approximately 6ha in area located to the eastern side of Fairy Hill, Compton Dando. The site is located approximately 100m north of the village of Compton Dando and approximately 2.5km south of the town of Keynsham. The site is previously undeveloped open agricultural land (Agricultural Land Classification Grade 3) of ununiform shape. It is bound to the eastern side by the River Chew and hedgerows mark the northern, southern and western boundaries. There is an existing access gate to the northern side of the western boundary on Fairy Hill. The site contains a standalone mature Oak tree located centrally to the west of the site.

The site is designated Green Belt land. Public Right of Way BA8/84 runs north/south across the eastern side of the site. The River Chew which bounds the eastern side of the site is a designated Site of Nature Conservation Interest. The river also results in the eastern part of the site being within Flood Zone 3, before a section within Flood Zone 2 then the majority of the site is within Flood Zone 1.

There is no prior history of applications seeking planning permission for development of the land concerned.



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The current application seeks EIA screening relating to the proposed development of a solar farm on the land. The proposed solar farm would cover an area of approximately 2ha. It is estimated to generate energy output totalling 2.1MW however actual output may vary dependent on several factors. The equipment would include a series of solar panels mounted to ground fixed frames facing south. The equipment would be installed in an L shape, located broadly centrally on land, significantly in set from both the east and west boundaries, with smaller distances to the north and south. The maximum height of the panels would be 2m. The equipment would also include substation and switch room as well as on-site and off-site cabling enabling export of energy from the site to the national grid. The equipment would be located behind a perimeter security fence, approximately 2m in height and constructed with steel mesh fencing and wooden posts. A compacted aggregate access track is proposed from the site.

# **Relevant Legislation**

The National Planning Policy Framework (2021) sets out that environmental impact assessment is a procedure to be followed for certain types of project to ensure that decisions are made in full knowledge of any likely significant effects on the environment.

The application for Screening Opinion is made under Part 2 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the Regulations'). Part 2, Paragraph 6 sets out that a person who is minded to carry out development may request the relevant planning authority to adopt a screening opinion.

The screening procedure requires determining whether a proposed project falls within the remit of the Regulations, whether it is likely to have a significant effect on the environment and therefore requires an assessment. It must be determined by the Local Planning Authority whether the project is of a type listed in Schedule 1 or Schedule 2 of the Regulations.

If the project falls within the developments listed in Schedule 1, an Environmental Impact Assessment is required in every case.

If the project falls within the developments listed in Schedule 2, the Local Planning Authority should consider whether it is likely to have significant effects on the environment.

The procedure for determining whether a project is likely to have significant effects on the environment is set out at Part 2, Paragraph 6, Sub-Paragraph 3 of the Regulations. This states:

"A request for a screening opinion in relation to development where a subsequent application has been or is proposed to be submitted must be accompanied by—

- a) a plan sufficient to identify the land;
- b) sufficient information to enable the relevant planning authority to identify any planning permission granted for the development in respect of which a subsequent application has been made;
- c) the information described in paragraph (2)(c) and (d), but only to the extent that this relates to likely significant effects on the environment not previously identified; and

d) such other information or representations as the person making the request may wish to provide or make, including any features of the proposed development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.

Part 1, Paragraph 4 of the Regulations states that: "the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors—

- a) population and human health;
- b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC(a) and Directive 2009/147/EC(b);
- c) land, soil, water, air and climate;
- d) material assets, cultural heritage and the landscape;
- e) the interaction between the factors referred to in sub-paragraphs (a) to (d)."

Schedule 3 of the Regulations provides a selection criteria for screening Schedule 2 development. This requires regarding must be had to the following:

## Characteristics of development

- 1. The characteristics of development must be considered with particular regard to
  - a) the size and design of the whole development;
  - b) cumulation with other existing development and/or approved development;
  - c) the use of natural resources, in particular land, soil, water and biodiversity;
  - d) the production of waste;
  - e) pollution and nuisances;
  - f) the risk of major accidents and/or disasters relevant to the development concerned, including those caused by climate change, in accordance with scientific knowledge;
  - g) the risks to human health (for example, due to water contamination or air pollution).

#### Location of development

2.—(1) The environmental sensitivity of geographical areas likely to be affected by development must be considered, with particular regard, to—

- a) the existing and approved land use;
- b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
- c) the absorption capacity of the natural environment, paying particular attention to the following areas
  - i. wetlands, riparian areas, river mouths;

- ii. coastal zones and the marine environment;
- iii. mountain and forest areas;
- iv. nature reserves and parks;
- *v.* European sites and other areas classified or protected under national legislation;
- vi. areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
- vii. densely populated areas;
- viii. landscapes and sites of historical, cultural or archaeological significance.

Types and characteristics of the potential impact

3. The likely significant effects of the development on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the development on the factors specified in regulation 4(2), taking into account—

- a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- b) the nature of the impact;
- c) the transboundary nature of the impact;
- d) the intensity and complexity of the impact;
- e) the probability of the impact;
- f) the expected onset, duration, frequency and reversibility of the impact;
- g) the cumulation of the impact with the impact of other existing and/or approved development;
- *h)* the possibility of effectively reducing the impact.

#### Assessment

The request for a screening opinion is supported by an EIA Screening Report prepared by Engain dated May 2022. This includes a plan which identifies the land, descriptions of the aspects of the environment likely to be significantly affected by the development, descriptions of likely significantly effects of the proposed development including residues, emissions and waste as well as use of natural resources, in particular soil, land, water and biodiversity.

The EIA Screening Report concludes that the proposed development is not Schedule 1 development under the Regulations. Having regard to the facts of the case and the Regulations, the Local Planning Authority would agree with this conclusion. The development does not fall within the developments listed in Schedule 1 and an EIA is not automatically required.

The EIA Screening Report finds that the development would qualify as Schedule 2 development under the Regulations. Following review, the Local Planning Authority supports this conclusion on the basis that the proposed development would be 'Energy Industry' development including

'industrial installations for the production of electricity' and would have an area of approximately 2ha, therefore in excess of 0.5ha. The development is therefore Schedule 2 EIA development and requires EIA screening.

The development must therefore be screened against the selection criteria as set out at Schedule 3 of the Regulations (as listed above) in order to establish a position in relation to whether significant effects on the environment are likely and if EIA is required.

Consideration for issues cited in Schedule 3 of the Regulations will be given in turn beneath, taking account of the information provided in the EIA Screening Report and other resources available to the Local Planning Authority.

## Natural Resources

In terms of natural resources at the site itself, the site comprises approximately 6ha of grade 3 agricultural land which is understood to be used for crop production. The site also includes hedgerows, tree lines, a mature oak tree and the river bank. The submitted EIA Screening Report identifies the soil conditions at the site as 'slowly permeable seasonally wet acid loamy and clayey soils'.

The submitted EIA Screening Report sets out that the development will involve the temporary partial loss of approximately 2ha of grade 3 agricultural land, as well as removal of small amounts of field-margin habitat to facilitate installation of the proposed access track, solar panels and perimeter fence.

With regard to physical changes in the topography of the area, the development poses some impact to the topography of the site. The EIA Screening Report sets out that the solar panels would be frame mounted, temporary and removable structures. It is therefore recognised that the size, design and temporary duration of the development would result in limited topographical changes.

In relation to loss of agricultural land, the EIA Screening Report identifies that the land at the site could continue to be used for agricultural purposes such as sheep grazing during its operation, so the land would not be entirely removed from agricultural productivity. The applicant is referred to the BRE National Solar Centre guidance for best practice (Agricultural Good Practice Guidance for Solar Farms, 2014). Grazing proposals would assist with limiting the impact associated with loss of natural resources associated with reduced crop production.

In order to ensure impacts to natural resources are temporary in nature, it would be expected that any eventual application would seek planning permission for a temporary period only, following which a decommissioning and land restoration strategy would be implemented. A decommissioning and restoration strategy would likely be secured by condition in the event of an eventual planning application being granted.

It is noted that the EIA Screening Report includes limited information in relation to natural resources associated with production of the solar panels and equipment itself. It is unclear if the equipment uses materials/minerals or energy which are non-renewable or in short supply. Information in respect of energy and materials associated with manufacture of the equipment, how natural resources can be recycled following decommissioning and if not, how the equipment will be disposed of avoiding detriment to natural resources would be beneficial. The Local

Planning Authority is satisfied that this is unlikely to cause significant environmental effects given the scale of the solar farm in this instance. Nevertheless, this information should be incorporated as part of the Sustainable Construction Checklist submitted with an eventual application to satisfy Bath & North East Somerset Policy CP2 (Sustainable Construction).

The standalone mature Oak tree at the site is a high-quality natural resource. Limited information has been provided in relation to the tree within the EIA Screening Report. It is unclear exactly how far the perimeter of the solar farm and any associated development would be sited from the tree. No scaled drawings have been provided at screening stage. The Local Planning Authority has consulted it's Arboricultural Officer in relation to the Screening Opinion. They note that a scaled plan clearly demonstrating an adequate buffer between trees and development should be provided at application stage. The positioning of subterranean cabling to connect to the grid should avoid all trees and other green infrastructure and will need to be shown on any subsequent plans. On the whole however, it is recognised that the cessation of agricultural cultivation activity close to the Oak should benefit the tree. The proposals for community orchard and nature reserve in the field surrounding the solar farm are also welcomed. Given the probability of detrimental impact to the tree and the possibility of effectively reducing the impact through arboricultural best practice, the development is not found likely to cause significant environmental effects in this regard. Sufficient information in respect of the impact of development to this important tree must be supplied with any eventual application seeking planning permission.

On the basis of the information supplied, the development is considered unlikely to pose significant environmental impacts to natural resources. Sufficient information to ensure this can be provided within other planning documents and a full EIA is not required.

# Waste

In relation to waste, this can be generated during construction, operation and decommissioning. The supplied EIA Screening Report acknowledges this and indicates that waste may be associated with removal of topsoil to facilitate installation and construction. However the EIA Screening Report outlines that this will be reused on site within landscaping proposals. Packaging associated with construction materials and other consumables generated during construction will be separated on site and recycled. The EIA Screening Report indicates that when the development reaches the end of its operational life and expiry of the temporary consent, the solar panels can be recycled. Decommissioning would be undertaken in accordance with an agreed method and strategy.

The Local Planning Authority would be interested to understand whether other construction materials such as frames, cabling, buildings and other infrastructure can also be re-used or recycled following use at the site. It is satisfied that such information can be supplied as part of the Sustainable Construction Checklist submitted with an eventual application to satisfy Bath & North East Somerset Policy CP2 (Sustainable Construction).

It would also be expected that management and recycling proposals for waste generated during construction are outlined within a Construction Environmental Management Plan.

Overall, the proposed solar farm is found unlikely to generate significant quantities of waste either during construction, operation and decommissioning accounting for the size and design of the development. Therefore, the development is considered unlikely to pose significant

environmental impacts as a result of waste generation and EIA is not required relating to this issue.

## **Pollution and Nuisances**

Pollutants can relate to a wide variety of potential sources and emissions, released throughout construction, operation or following decommissioning. This can include light, heat, energy, electromagnetic radiation, posing risk of contamination to land, air and water, both directly and indirectly. There are various wider legal frameworks which also seek to manage such impacts.

At the Pollution and Nuisances section, the submitted EIA Screening Report identifies potential pollution associated with fuel for plant and machinery as well as emissions associated with construction related road traffic and construction related plant and machinery.

Further information is provided under a subsequent subheading relating to Noise and Vibration. This provides details of likely sources of noise during the construction phase. It is indicated that the solar panels themselves will not generate noise during operation. Inverters are stated to generate noise equivalent to a small domestic appliance and would be housed within enclosures.

The focus of impacts identified within the EIA Screening Report relate to construction related activity. The Local Planning Authority accepts that these will be temporary in nature and can be appropriately managed through protocols secured as part of Construction Management Plan and Construction Environmental Management Plan. The Local Planning Authority is satisfied that these sources do not pose likely significant environmental impacts.

Further information in relation to exact noise levels predicted to be associated with operation of the proposed infrastructure would be valuable. The exact location of noise generating equipment on site is unclear given the detail included on plans submitted. Whilst noise levels equivalent to a domestic appliance may not be problematic in an urban area, the site is located in open countryside where very low levels of background noise are likely to prevail. It is unclear how noise levels would be perceived by users of the Public Right of Way crossing the land. It is also unclear how this noise may impact ecology. Nevertheless, the Local Planning Authority accepts that this information can be incorporated within a Noise Assessment submitted with an eventual application. It is anticipated that there is a good possibility of effectively reducing the impact of noise through acoustic insulation and attenuation if this is necessary. Subject to further information and mitigating proposals, significant environmental impacts as a result of noise generated by the development are found unlikely.

The EIA Screening Report also lacks information relating to the likelihood of light and heat emissions. The EIA Screening Report suggests no permanent artificial lighting is required. However the Local Planning Authority believes health and safety requirements will likely necessitate some provision of artificial lighting relating to maintenance work, particularly during winter or overnight. It is unclear whether this has been considered.

Similarly, it is unclear how the solar panels will impact the local microclimate surrounding the development as a result of heat reflection and association radiation. This may have implications for biodiversity and ecology. These issues should be accounted for within an eventual full planning application. However given the magnitude and spatial extent of the impact, which owing to the size of the development is likely to be relatively low, as well as possibility for

reducing the impact through mitigation, significant environmental impacts as a result of such pollution are deemed unlikely.

# Population and Human Health

Impacts to population and human health within EIA development context relate to risk of major accidents and as a result of pollution and emissions during construction, operation and decommissioning. Assessment of risk must have regard to the density of surrounding populations.

The supplied EIA Screening Report highlights that the solar farm will be self contained as a result of perimeter fencing (e.g. not routinely publicly accessible) and will not generate airborne emissions. These points are accepted. It is acknowledged that due to high voltage electricity, there may be increased risk of electrocution or electrical fire in the event of failure or malfunction. It is stated that it is '*not known*' that there is higher risk of fire at solar farms in comparison to other development.

The information included within the EIA Screening Report relating to health and safety risk is found to be limited and somewhat ambiguous. There appears to have been limited input from relevant specialists and no information is included relating to specific health and safety requirements associated with solar farms. Details of relevant national regulations and requirements to ensure safe operation would be beneficial.

It is highlighted that there have been recent examples of fires at solar farms, including one at Verwood, Dorset in July 2022. This example took place during a period of high temperatures which will become more commonplace given the predicted effects of climate change. A major issue with this fire related to access to the site by fire crews. As such, due consideration must be given to emergency service access to the site which will be a relevant Transport and Access issue.

It is noted that the BRE National Solar Centre were commissioned by the Government in 2018 to undertake a study on fires involving solar photovoltaic systems. The outcome of this study has not yet been published. However the BRE have acknowledged that there is no reason to believe that the fire risks associated with PV systems are any greater than those associated with other electrical equipment. The study was commissioned due to PV systems becoming more common and to inform and minimise risk associated.

It is acknowledged that the density of surrounding population is low given the rural location and the site is situated at least 70m from neighbouring residential properties. This separation would be beneficial in terms of reducing the impact to human health in the event of a fire as well as other pollution and emissions based risks at neighbouring properties.

The position of the Public Right of Way crossing the site is highlighted which means the public can access land nearby the development. Furthermore, it is indicated that a community orchard and nature reserve (assumedly publicly accessible) are also proposed on site. Therefore, despite the location being separate from neighbouring residential properties, there will be public access to land directly adjacent to the development. This should be taken into account in the design, specification and management of the site to ensure any risk to health and safety is minimised.

The risk of major accident associated with a solar farm is accepted to be relatively low in comparison to other forms of EIA and energy development. The development would not be subject of Control of Major Accident Hazards (COMAH) Regulations. Relevant health and safety regulations and requirements must be followed and it appears further review is required in relation to these. However subject to relevant regulations and requirements, risk to human health should only be in exceptional circumstances. Consequently, the probability of this environmental impact is low and can be reduced through mitigation and emergency planning measures. It is therefore concluded that significant environmental impacts to population and human health associated with the development are unlikely and EIA in relation to this issue is not required.

# Water Resources

Environmental impact to water resources includes features such as rivers, lakes/ponds, coastal or underground waters on or around the location which could be affected by the project, particularly in terms of their volume and flood risk.

The submitted EIA Screening Report identifies that the site includes a section within Flood Zone 3 adjacent to the River Chew, with most of the wider site located in Flood Zone 1. The report recognises potential impact to water resources during construction and in operation as a result of pollution and changes to run off and infiltration rates. It is indicated that risks to water resources as a result of pollution and flooding during construction will be managed by implementation of a Construction Environment Management Plan. Risks to water resources during operation as a result of flooding will be mitigated through use of a wildflower seed mix on adjacent land. It is outlined that electrically sensitive infrastructure will be designed to be flood resistant.

The Local Planning Authority has consulted the Lead Local Flood Authority in relation to the development and no objection has been raised in relation to environmental impacts to water resources. It is highlighted that as the development is more than 1 hectare in area in Flood Zone 1 and therefore a Flood Risk Assessment will be required. Furthermore, as a major development a Sustainable Drainage Strategy will also be required with any eventual application in accordance with local Policy SU1. The Local Planning Authority is satisfied that sufficient information in respect of environmental impact to water resources can be included within these documents. Impacts to water resources will likely be capable of being reduced via sustainable drainage methods and therefore impacts can be effectively reduced. Significant environmental effects as a result of impact to water resources are deemed unlikely and EIA in relation to this issue is not required.

# Biodiversity, Species and Habitats

Environmental effects relating to biodiversity, species and habitats include protected areas which are designated or classified for their terrestrial, avian and marine ecological value, or any non-designated / non-classified areas which are important or sensitive for reasons of their terrestrial, avian and marine ecological value, located on or around the location and which could be affected by the development. This also incorporates environmental effects of the development to protected, important or sensitive species of flora or fauna which use areas on or around the site, e.g. for breeding, nesting, foraging, resting, over-wintering, or migration.

The EIA Screening Report offers a good assessment of conditions at the site and details anticipated impacts in relation to biodiversity. The Local Planning Authority has sought the advice of its Ecologist in relation to the development. It is noted that the site comprises a large arable field with boundary hedgerows, one mature oak tree and wide rough grassland margins. The River Chew borders the east of the field. The river and associated marginal vegetation forms part of the 'River Chew and Adjacent Land Site of Nature Conservation Interest' (SNCI).

The proposals for the solar farm are not in close proximity to the SNCI and a wide buffer appears to be maintained. There are no Site of Special Scientific Interest (SSSI) designated for nature conservation within 2km. The proposals do not meet Natural England's SSSI Impact Risk Zone criteria. There are no units of Special Areas of Conservation designated for bats within 8km.

The site may be used by commuting and foraging bat species, nesting birds including ground nesting birds such as skylark, badger, brown hare, reptiles and amphibians as well as other wildlife. None of these species are of particularly significant ecological sensitivity given the size and nature of the development, generating need for an EIA to be triggered, although negative impacts must still be avoided, minimised and mitigated. Ecological surveys will need to ensure that all affected areas of suitable habitat, including compounds and areas required for enabling works such as cabling, have been assessed. Details of any external lighting proposals would also need to be provided with any application.

The proposals are not in or likely to impact on an ecologically-sensitive area. There will not be significant ecological impacts which would trigger the requirement for EIA due to ecological sensitivities.

This does not negate the need for comprehensive ecological surveys to be completed and an ecological avoidance, mitigation, compensation and enhancement (net gain) scheme to be developed. An Ecological Impact Assessment will need to be prepared in accordance with CIEEM guidance. The commitment to delivering measurable biodiversity net gain is required in accordance with the NPPF, adopted Policy NE3 and the emerging Policies CP3 (Renewable Energy), NE3 (Sites, Habitats and Species) and NE3A (Biodiversity Net Gain) in the Local Plan Partial Update and forthcoming Environment Act commitments. Habitat creation should be targeted on land which is already of low ecological value.

#### Landscape and Visual

Landscape and visual environmental effects relate to impacts of development to areas or features on or around the location which are protected for their landscape and scenic value as well as any non-designated areas or features of high landscape or scenic value on or around the location which could be affected by the development. Assessment should have regard to the visibility of the development and the extent people are likely to be aware of the development, accounting for directions and distances.

The EIA Screening Report identities that a Public Right of Way crosses the site north/south to the eastern side. It is also identified that the site is located within the Green Belt, the Forest of Avon Community Forest, the Bristol, Avon Valleys and Ridges National Character Area (NCA 118) and the Chew Valley Landscape Character Area. The EIA Screening Report describes the landscape surrounding the site as being characterised by irregularly shaped fields bounded by mature hedgerows, woodland and steeply sloping valleys with flatter landforms above. It is noted

that there is limited intervisibility between the site and Compton Dando to the south as a result of vegetation.

A Preliminary Landscape Visual Impact Assessment forms part of the EIA Screening Report. This demonstrates visibility of the proposed infrastructure from the Public Right of Way immediately adjacent, as well as from the gate on Fairy Hill. Immediately beyond this, some screening appears to be provided by vegetation and topography, including from Compton Dando. Due to the low lying riverside position, the site is visible from a range of wider surrounding view points

It is noted that the 'Summary LVA' is actually more an initial or skeleton assessment document. Only a small number of viewpoints are tested and no professional assessment of the impact of development on the landscapes concerned.



Public Rights of Way surrounding the site.

The EIA Screening Report presents the assessment that: "the impact of the development on the openness of the Green Belt is limited because although it is visible from a small number of viewpoints, it would not dominate any views of the landscape and is largely screened from view". The EIA Screening Report highlights that hedgerows will be retained and enhanced where opportunities exist. Tree planting is also proposed on site to screen the development. It is stated that species-rich meadow planting will soften the appearance of the development.

The EIA Screening Report provides an assessment of the merits of the development against Green Belt planning policy, discussing very special circumstances, benefits which may be associated with the development and what weight can be given to these. Whilst this will be relevant to assessment of a full planning application, it is not necessary to undertake this assessment at EIA screening stage. The acceptability of the development in planning terms and whether significant environmental effects are likely necessitating EIA are separate processes.

The Local Planning Authority supports the descriptions of the landscape character of the area provided. There will be unavoidably high levels of near visibility of the development from the Public Right of Way and points on Fairy Hill. There are also high levels of local surrounding long-range visibility as a result of topography. Whilst some viewpoints in the LVIA provided include some screening, the Local Planning Authority would not support the statement that the development is largely screened from view. The development appears to be visible from the range of surrounding viewpoints presented and it is not clear if a full range of public viewpoints have been assessed. The statements to the contrary within the EIA Screening Report are not

found to be entirely accurate. The Local Planning Authority would encourage further and more accurate assessment of the landscape impacts.

The Council's Landscape Officer notes that:

"The existing and proposed images for Viewpoints 1 and 2, do in my view indicate that changes in landscape character and changes in view would be adverse and at a magnitude of at least moderate, so given the high sensitivity of the receptors the effects are likely to reach the threshold for significance. However, whilst there are a few relatively localised viewpoints where significant effects are to be expected, overall the site could not be considered prominent in the landscape."

The BRE National Solar Centre guidance (Planning guidance for the installation of large scale ground mounted solar PV systems) states that: "*In general, an EIA is likely to be needed for Schedule 2 developments if the solar PV development is in a particularly environmentally sensitive or vulnerable location.*"

"In each case it will be necessary to judge whether the likely effects on the environment of that development will be significant in that particular location. In judging whether the effects of a development are likely to be significant it is necessary to have regard in particular to the visual impact of the development on landscape character and how this will be affected by the installation of a solar PV farm development, and also the possible cumulative effect with any existing or approved development."

Sensitive area is defined at Part 1, Paragraph 2 of the Regulations. This includes Sites of Special Scientific Interest; National Parks; the Broads; World Heritage Sites; Scheduled Ancient Monuments; Areas of Outstanding Natural Beauty; and European sites.

It is acknowledged that there are Scheduled Ancient Monuments in the area surrounding the site. This includes the Wansdyke located approximately 200m south-west at the nearest point and also Compton Dando Bridge approximately 320m south. The EIA Screening Report states that there is no intervisibility between Scheduled Ancient Monuments and the site. However it is noted that the Landscape Visual Impact Assessment does not include views from these monuments so this has not been demonstrated at this stage.

The site itself is not subject of any of any of the designations referred to above. Therefore the site is not considered to be in a sensitive area as defined by the Regulations. This does not mean however that the landscape in the area is not sensitive to landscape impact associated with the development. Comprehensive landscape impact assessment will be required to ensure compliance with relevant national and local planning policies. This must objectively assesses and report the likely landscape and visual effects, so that they can fully inform any planning decisions.

The most significant landscape designation which applies to the site is Green Belt.

Paragraph 137 of the NPPF states that: "*the essential characteristics of Green Belts are their openness and their permanence*." In accordance with current case law, openness and permanence relate to the absence of any buildings or development and not merely an absence of *visible* development.

Clearly most buildings and development will pose harm to Green Belt landscapes where essential characteristics are related to the absence of any development. The proposed solar farm would be widely visible and the panels, frames, associated infrastructure and fencing would be alien and unnatural features within the context of open fields. However, the development would be relatively low profile and is understood to following the established topography of the site. These factors would aid landscape integration. Furthermore, the scale of the solar farm (2ha) is not large in comparison to others within the district. Irrespective, a degree of harm to the Green Belt landscape and its essential characteristics is inevitable. However such impact is not uncommon and is routinely assessed through Landscape Visual Impact Assessment.

In terms of proposed tree screening, the Local Planning Authority notes that whilst this will provide a more natural appearance, it would not offset, and in fact may increase impact to the openness or permanence of the Green Belt. Such proposals should be carefully considered, taking account of the essential characteristics of Green Belt land and the established character of the landscape at and surrounding the site.

The Local Planning Authority concludes that the supplied LVA is not a full assessment but the information provided indicates substantive landscape impact. Having regard to the size and design of the development, the location of development within the Green Belt but not within a designated sensitive area for landscape as well as the magnitude, intensity and complexity of the impact, it is not found that significant effects for landscape and visual appearance in EIA terms are likely. Whilst comprehensive Landscape Visual Impact Assessment will be required with a full planning application, EIA is not necessary in relation to landscape and visual impact.

# Cultural Heritage and Archaeology

Cultural heritage and archaeological environmental effects relate to impacts of development on heritage assets, places and above and below ground archaeological features protected for their cultural heritage or archaeological value. This includes non-designated assets, classified areas and features of cultural importance around the location which could be affected by the development. Impact will include to the setting of such assets, views to, from and within areas or assets. Regard must be had to the level of designation, varying between local and international significance.

The EIA Screening Report includes a list of designated heritage assets in the area surrounding the site. These are predominantly grouped in the village of Compton Dando situated to the south of the site. These are all heritage assets and scheduled monuments of national significance. The cultural value, significance and sensitivity to change is therefore high. Attention is also drawn to the two Scheduled Ancient Monuments: the Wansdyke and the Compton Dando Bridge which is also Grade II Listed. The Church of St. Mary is Grade II\* Listed and therefore within the top 6% of designated heritage assets. The area to the south of the site is relatively rich in cultural and archaeological heritage.

A critical heritage and archaeology asset which is not explicitly acknowledged in the EIA Screening Report is the historic agricultural landscape. This is considered a non-designated heritage asset. The report does assess the field system and pattern as mediaeval, which is probably accurate, although could also easily be more ancient, Iron Age or even earlier, and Is therefore of high historic significance. The field system and pattern will be substantially impacted upon, both in terms of the development site/field itself and the setting of the surrounding historic agricultural landscape, which is considered a non-designated heritage asset. This is both 'built' and archaeological cultural heritage that should form part of the consideration and assessment.

The Landscape Visual Impact Assessment submitted with the EIA Screening Report does not include views to and from the heritage assets which surround the site. This absence of evidence makes it difficult to reach a conclusion in relation to the likelihood and significance of environmental effects. This will need to be resolved in order to confirm compliance with national and local planning policies against which an application for full planning permission would be assessed.

It is acknowledged that the development would be located several hundred meters north and at higher elevation than most adjacent heritage assets. The development would have a relatively low profile, with maximum height of approximately 3m. The physical separation, position and scale of development are expected to be beneficial in terms of the likelihood of effects to the setting and significance of adjacent heritage assets.

Given the physical separation from the Wansdyke, the development is unlikely to impact on the archaeological significance of this monument. This has been confirmed following consultation of the Council's Archaeology officer.

Overall, despite the absence of supporting evidence the Local Planning Authority is of the view that significant environmental effects which would warrant EIA as a result of impact to cultural heritage and archaeology are unlikely. This is mainly based on the position, size and design of the development and probability of impact resulting. It is therefore advised that EIA in relation to cultural heritage and archaeology will not be required in relation to this development. It is acknowledged however that the area does include a variety of nationally and locally significant heritage assets and appropriate information and assessment of impact to these will be required in order to determine compliance with Section 16 of the National Planning Policy Framework and Placemaking Plan Policy HE1. This would take the form of Heritage Statement and Landscape Visual Impact Assessment.

# **Transport and Access**

Environmental impacts as a result of transport and access relate to publicly accessible routes on or around the site which could be affected by the development. This also includes transport routes on or around the location which are susceptible to congestion or which cause environmental problems which may be exacerbated by the development.

The EIA Screening Report outlines highways conditions and potential effects of the development. The highway (Fairy Hill) is a single carriageway, typical rural road bound by hedgerows and subject to national speed limit. There is an existing access gate at the north of the site. In relation to vehicle movements, the report predicts approximately 30 HGV deliveries to the site during construction. Staff trips will mainly be by car, van or minibus. It is stated that vehicle movements during operation will be low in number, related to maintenance and undertaken by car or van. This is estimated to total 10-20 trips per year.

The Local Planning Authority has consulted its Transportation & Highways officers in relation to transport and access environmental impacts. They highlight that the national speed adjacent to the proposed access on Fairy Hill limit may make achieving adequate visibility splays at the access difficult. However, this is not a particularly complex issue which may be capable of

resolution through the planning process. This is therefore not found to pose significant environmental effects which would warrant EIA. No concerns are raised by Highways officers in relation to the predicted level of vehicle movements. Whilst roads in the area are tight and HGVs will have some impact, construction traffic can be routed appropriately via Construction Management Plan. Highways officers support the conclusion that transport impacts associated with the development with predominantly be construction related. These can be sufficiently managed through the planning process. It is accepted that there would likely be negligible impact to highways during operation of the solar farm. Therefore, significant environmental impacts as a result of transport and access issues are unlikely and EIA is not required.

# Land Use

Environmental impacts relating to land use issues refer to existing land uses or community facilities at the site and in the adjacent area which could be impacted by the development. This is a wide sphere but relates to human and operational issues which may be experienced by existing land uses following development. Consideration of this issue must have regard to plans for future land uses which could also be affected by the development.

The site is presently used as agricultural land for crop production. A Public Right of Way runs across the eastern side. Adjacent land entirely comprises agricultural fields. The adjacent fields to the south appear to be used for livestock, possibly domestic in nature. The adjacent fields to the north appear to be cultivated for crop production. The village of Compton Dando is situated to the south and includes adjacent community facilities.

The proposed solar farm development would temporarily prevent the land at the site from being cultivated for crops. It is suggested within the EIA Screening Report that the land beneath the solar farm could maintain agricultural use as grazing land. This would be encouraged in order to minimise environmental impacts and the applicant is referred to the BRE National Solar Centre guidance for best practice (Agricultural Good Practice Guidance for Solar Farms, 2014). It will be expected that a decommissioning strategy is secured as part of any eventual planning permission. This will outline how the land will be returned to the present or an improved state following the infrastructure reaching end of life or permission expiring. This can be dealt with through the planning process and would not pose significant environmental effects.

It is noted that the proposed solar farm would be positioned away from the Public Right of Way and would not hinder or interfere with its operation. The Council's Public Right of Way officers have been consulted and confirm no concerns based on the layout presented. The Council will have certain requirements relating to the Public Right of Way and how this is managed. This can be dealt with through the planning process and would not pose significant environmental effects.

Planning records have been reviewed for the adjacent land and no relevant development has been consented in the area. Given use of adjacent land and owing to the separations from boundaries as well as proposed retention and enhancement of hedgerows, the development is deemed unlikely to cause significant environment effects to the use of adjacent fields. It is noted that the land is within the Green Belt and therefore unless this designation is removed, development of adjacent land is unlikely. Physical separation from Compton Dando itself and associated uses in the village would ensure no significant impact to these adjacent uses.

Overall, it is concluded that significant environmental effects would not result relating to land uses at and adjacent to the site. EIA relating to land use issues are not required.

# Land Stability and Climate

Environmental impacts relating to land stability include issues such as the area being susceptible to earthquakes, subsidence, landslides or erosion which would be exacerbated by the development. Environmental impacts relating to climate include extreme or adverse climatic conditions which in association with the development would present environmental issues.

The submitted EIA Screening Report refers to possible soil erosion relating to changes in rainwater run off and drainage in comparison to the baseline position as cultivated fields. There is understood to be a fall to the east of the site, towards the river valley. The EIA Screening Report also refers to proposed piling in order to anchor the frames for solar panels. It is assumed that buildings and fencing will also require piling or minor foundations and cabling will require trenches.

The EIA Screening Report also refers to climate change but appears to have misinterpreted the implications for EIA screening. The information provided relates to how the development will contribute to reducing the effects of climate change, rather than what implications climate change will have for the environmental effects of the development.

No information has been provided in relation to ground conditions at the site or whether there are any stability issues. The Bristol Coalfield does lie immediately to the south of the site, including Compton Dando and Coal Authority Standing Advice applies to development in this area. The site is not known to have a history of mineral extraction and therefore stability issues are not foreseen.

Somerset has experienced earthquakes but these are typical low in magnitude and have not historically posed structural issues for buildings or developments.

Land stability will likely be relevant to the development. National policy requires a risk assessment of land potentially affected by land instability and that site investigation and surveys need to be carried out before land in these areas is developed. Again the onus is on developers to carry out investigative work to assess whether a proposed development would be affected by land instability and to set out any necessary stabilisation measures. The site is however not known to be at significant risk of stability issues and therefore EIA in relation to stability is not required in this instance.

The site is not in an area which is specifically prone to extreme climatic events. Regard should be had to the effects of climate change including more extreme weather events, wetter winters and longer, warmer summers. Phenomenon's such as wildfires and flash floods are more likely. As highlighted above, the development must have regard to fire risk by following relevant regulations and demonstrating sufficient emergency service access. The site includes sections in Flood Zone 2 and 3. As highlighted above, a Flood Risk Assessment will be a requirement for a full planning application. At this stage, it is not deemed that climate change would pose significant environmental problems for the development which require EIA.

# **Cumulative Effects**

With regards to cumulative environmental effects taking account of existing and/or approved development during the construction and/or operational phases of development, no significant

environmental effects are foreseen. This is largely based on the facts that there is no existing development at the site or any significant consented development in the surrounding area. As a consequence of being in an area where there are not significant levels of development, the impact and sensitivity to environmental effects is heightened. However, cumulative effects in combination with other uses and developments are unlikely it is not necessary to take account of this through EIA.

# Transboundary Effects

The Regulations require consideration of the transboundary nature of the impact. Due to the England's geographical location it is acknowledged that the vast majority of screening cases are unlikely to result in transboundary impacts. The proposed solar farm falls into this category and it is not necessary to take account of transboundary impacts through EIA.

# Conclusion

In light of the findings above, the Local Planning Authority advises that it is of the opinion that Environmental Impact Assessment is not required in this instance. Regard to the advice in respect of the environmental effects of the development included above should be had as part of any future application seeking planning permission for the development.

Yours sincerely,

**David MacFadyen** Senior Planning Officer Bath & North East Somerset Council





# **APPENDIX 5 – PRE-APPLICATION FEEDBACK**

#### **B&NES INITIAL SITE ASSESSMENT TEMPLATE AND WORKING PROTOCOL**

#### Request

	Parcel 6600
	Fairy Hill
Site Location(s)	Compton Dando
	Bristol
	Bath And North East Somerset
Description of	
Proposal and	Proposed community solar array at Fairy Hill.
information sought	
Information request	16 <sup>th</sup> June
date	
Requester Name	Jake Burnyeat

#### Planning steer

You are seeking advice on a proposal for the development of a ground mounted solar array on land near Compton Dando. The site is 5 hectares and is an open parcel of agricultural land located in the Parish of Compton Dando. The site is located within the Bath and Bristol Green Belt.

#### PLANNING HISTORY:

DC - 19/00432/AGRN - AP - 6 March 2019 - Extension to 1 no. barn; recladding of 2 no. barns; stationing of 4 no. shipping containers (including relocation of 1 no. existing container); demolition of existing hay store

DC - 20/00118/AGRN - AN - 10 February 2020 - Erection of forestry worker refuge building

POLICIES:

The Core Strategy for Bath and North East Somerset was formally adopted by the Council on 10th July 2014. The Core Strategy now forms part of the statutory Development Plan and will be given full weight in the determination of planning applications. The Development Plan for Bath and North East Somerset comprises:

- Bath & North East Somerset Core Strategy (July 2014)
- Bath & North East Somerset Placemaking Plan (July 2017)

- West of England Joint Waste Core Strategy (2011)
- Bath & North East Somerset saved Local Plan policies (2007) not replaced by the Core Strategy or the Placemaking Plan:
  - Policy GDS.1 Site allocations and development requirements (policy framework)
  - Policy GDS.1/K2: South West Keynsham (site)
  - Policy GDS.1/NR2: Radstock Railway Land (site)
  - Policy GDS.1/V3: Paulton Printing Factory (site)
  - Policy GDS.1/V8: Former Radford Retail System's Site, Chew Stoke (site)
- Made Neighbourhood Plans

#### Core Strategy:

The Core Strategy for Bath and North East Somerset was formally adopted by the Council on 10th July 2014. The following policies of the Core Strategy are relevant to the determination of this application:

CP3: Renewable Energy CP5: Flood Risk Management CP6: Environmental Quality CP8: Green Belt SD1: Presumption in favour of sustainable development

Placemaking Plan:

The Placemaking Plan for Bath and North East Somerset was formally adopted by the Council on 13th July 2017. The following policies of the Placemaking Plan are relevant to the determination of this application:

D2: Local character and distinctiveness

- D.6: Amenity
- GB1: Visual amenities of the Green Belt
- NE2: Conserving and Enhancing the landscape and landscape character
- NE2A: Landscape setting of settlements
- NE3: Sites, species and habitats
- NE5: Ecological networks
- NE6: Trees and woodland conservation
- RE5: Agricultural land
- ST7: Transport requirements for managing development

National Policy:

The National Planning Policy Framework (NPPF) was published in July 2018 and is a material consideration. Due consideration has been given to the provisions of the National Planning Practice Guidance (NPPG).

ASSESSMENT:

I consider the main planning considerations to be:

- Policy background
- Green Belt
- Landscape impact

- Agricultural land
- Heritage impact
- Residential amenity
- Highways Safety
- Ecology
- Archaeology
- Any other matters

#### POLICY BACKGROUND:

The Council declared a Climate Emergency in March 2019 and pledged to provide the leadership to enable carbon neutrality in the district by 2030. B&NES Climate Emergency Action Plan (Oct 2019) identifies the priority areas for action:

- energy efficiency improvement of the majority of existing buildings (domestic and non-domestic) and zero carbon new build;
- a major shift to mass transport, walking and cycling to reduce transport emissions;
- a rapid and large-scale increase in local renewable energy generation.

The Council is reviewing its planning policy to facilitate delivery of these objectives. In the meantime, the Council is seeking to ensure that appropriate consideration is given to responding to the Climate Emergency in considering planning proposals.

Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. As confirmed by the Courts in recent cases, Climate Change (and air quality) is a material consideration in planning decisions.

The National Planning Policy Framework (NPPF) states that the planning system should support the transition to a low carbon future in a changing climate (para 148).

The National Planning Policy Framework is clear that the planning system should ensure that places are shaped in ways which "contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure" (paragraph 148). Para 150 states that new development should be planned for in ways which reduce vulnerability to the impacts of climate change and reduce greenhouse gas emissions.

Policy CP3 of the Core Strategy has regard to renewable energy. It states that proposals for low carbon and renewable energy infrastructure, including large-scale freestanding installations, will be assessed under the national policies and against the following:

a potential social and economic benefits including local job creation opportunities

b contribution to significant community benefits

- c the need for secure and reliable energy generation capacity
- d environmental impact

The Climate Change Act 2008 was amended in June 2019 to set out a pathway to achieve a reduction in carbon emissions of at least 100% by 2050 compared to 1990 levels. This statutory target was amended from the previous target which sought an 80% reduction in the same time period. It is important to note that the Core Strategy and Placemaking Plan were adopted in the context of the previous target. The current policies need to be applied in the context of the new national target.

Policy CP3 sets generation targets to achieve 110 Mega Watt electricity and 165 Mega Watt heat by 2029. However, the latest monitoring shows only 20.9 Mega Watt electricity and 7.4 Mega Watt heat are available as of August 2018 in the district. The current installed capacity only amounts to just 19% of the electricity target and 4% of the heat target. A significant increase in the development of renewable energy is needed to achieve the policy targets and this can and should be given weight in the determination of planning applications.

Bath & North East Somerset (BANES) commissioned an update of their evidence base underpinning the renewable energy targets in its Core Strategy in 2018. It states renewable energy targets are unlikely to be meet and this is in part due to the many constraints of the district, including the Green Belt.

I consider that all of the above recognises and demonstrates the increased need for renewable energy, and sites to provide this.

#### GREEN BELT:

The application site lies within the Green Belt. Core Strategy policy CP8 largely mirrors national policy within the NPPF that identifies the fundamental aim of Green Belt policy being to prevent urban sprawl by keeping land permanently open and that the most important attributes of Green Belts are their openness and permanence

National and local policy establishes a presumption against inappropriate development in the green belt which, by definition, is harmful to the green belt. Development within the Green Belt is considered inappropriate unless it falls within one of the categories of exception set out in paragraphs of the NPPF. The proposed solar park does not fall within any of these categories of exception and is therefore considered inappropriate development in the first instance.

The NPPF goes on to say at paragraph 147 that When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

Essentially therefore Very Special Circumstances will need to be evidenced that outweigh the harm of the scheme being located in the Green Belt. You will need to put forward Very Special circumstances for consideration with a future submission which an officer can then assess.

In your submission I note that you are a community organisation aiming to make Compton Dando a zero carbon village by 2030. The proposed community solar array will have a capacity up to 2.5MW. I am not clear from the submission how far this will support the 2030 zero carbon aims. What proportion of the residential units in the village will be run off of the solar farm?

I note that proportion of surplus income from the solar array will go into a fund supporting community projects to reduce carbon emissions and fuel poverty in Compton Dando parish.

You have also suggested that net biodiversity gain could be achieved on site.

These are factors that could contribute towards very special circumstances, however they will need to be fully evidenced before I can conclude on whether the scheme would be supported in principle in the Green Belt.

#### Openness of the Green Belt:

The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. An assessment of impact on openness is based on visual and spatial impact.

Even if Very Special Circumstances can be provided, everything should be done to limit the impact on the openness of the Green Belt (e.g. in terms of design, siting etc) and then mitigate. This will be fully assessed in the planning balance should further details of the scheme come forward.

#### LANDSCAPE:

Policy GB1 states that development within or conspicuous from the Green Belt should not prejudice but should seek to enhance the visual amenity of the Green Belt by reason of its siting, design or the materials used for its construction.

Policy NE2 infers that development will only be permitted where it conserves or enhances local landscape character, landscape features, local distinctiveness and important views; that development should seek to avoid or adequately mitigate any adverse impact on landscape; and that proposals with the potential to impact on the landscape character of an area should be accompanied by a Landscape and Visual Assessment undertaken by a qualified practitioner to inform the design and location of any new development.

I note that the site is located in the open countryside, with the nearest development being the settlement of Compton Dando, some 500m away.

The site does not have any landscape designations other than the Green Belt designation. There is one public right of way running through the east of the site.

Landscape impact will be critical to securing permission or refusal. Any future submission will need to be supported by a Landscape Visual Impact Assessment that is appropriately proportionate to the scheme.

Proposed solar farms are likely to hinge on landscape impact therefore the Council cannot confirm that the proposal is acceptable in principle without first scrutinising an LVIA.

#### AGRICULTURAL LAND:

Policy RE5 of the Placemaking Plans has regard to Agricultural land, it states that;

- 1. Development which would result in the loss of the best and most versatile agricultural land particularly Grade 1 and 2 will not be permitted unless significant sustainability benefits are demonstrated to outweigh any loss.
- 2. Where it can be demonstrated that there is an overriding need for a proposal which will result in the loss of agricultural land, development should be steered towards the use of lower quality agricultural land in preference to higher quality agricultural land.

Recent guidance from government has stressed the need to develop solar farms on brownfield and

degraded land over greenfield sites. Agricultural land is classified from Grade 1 to 4 with grades 1, 2, 3a being considered the best and most versatile agricultural land.

The proposal is situated on land with a grading of 3, the data available does not distinguish whether this is 3a or 3b land.

Officers agree that solar farms should be developed on brownfield sites which should be promoted over greenfield land, and the loss of agricultural land is a planning consideration, however BANES is an overwhelming rural authority with relatively little brownfield or industrial land, and the largest settlement in the District, Bath, is a World Heritage Site. Therefore it seems unlikely that the ambitious targets the Authority has set itself can be achieved in this district without field based renewable energy applications (on greenfield agricultural land) such as this coming forward. In any event, the proposal does not appear to involve the "irreversible loss" of agricultural land as usually solar arrays have a certain lifespan and are essentially a 'temporary development', at the end of life of the park, the field could revert to full agricultural use.

Taking these considerations into account, the urgent national need for renewable energy development and relative lack of current production in the district, the temporary loss of the grade 3 field arising from the development could likely be considered to be acceptable.

#### **RESIDENTIAL AMENITY:**

Policy D.6 sets out to ensure developments provide an appropriate level of amenity space for new and future occupiers, relative to their use and avoiding harm to private amenity in terms of privacy, light and outlook/overlooking.

The nearest residential properties appear to be over 500m away. The proposals do not present any immediately obvious impacts upon the amenities of nearby residential properties. A glint assessment may be submitted with a future application to demonstrate no nearby residential properties will be impacted by glint/glare.

Please note that if an application is submitted neighbours and the parish council will be consulted on the scheme, any comments received at this stage will be taken into consideration and you may want to engage independently in advance so those comments can be taken into account in any submissions.

HIGHWAYS SAFETY AND PARKING:

Policy ST7 states that development will only be permitted provided, amongst other things, the development must not detract from highway safety.

There are no details of proposed access points or parking for comment on at this stage. It is noted that the red line does encompass a public rights of way (PROW), this should be a consideration in the final layout plan and the Public Rights of Way Team will be consulted on a future application along with the Highways Team.

#### ECOLOGY:

The site is located in a rural area and from desktop review / aerial photography the site comprises an arable field, with boundary vegetation that may comprise shrubs/ hedgerow.

While the majority of the site (arable use) may appear at first to support limited ecological or habitat value, there are records of brown hare, badger, reptiles, deer and other mammals, and a range of bird species (including ground nesting birds) active in this area.

The use of the site by and potential impacts on wildlife will need to be a consideration and an ecological survey and assessment would be required with a planning application, to be completed by a suitably experienced professional ecologist in accordance with current best practice guidelines. The scheme would need to demonstrate avoidance of harm to wildlife, and issues to be considered would need to include (but not be confined to):

- avoidance of physical barriers and ensuring fencing enables the site to continue to be "permeable" for all forms of wildlife and that animal movements into / from and around the site remain unimpeded.

- Avoidance of net loss of habitat; avoiding removal or reduction of features of particular habitat value such as hedgerows and grass verges

- Maintaining and strengthening habitat connectivity and the ecological functionality of linear habitats; avoiding fragmentation of linear habitats

In addition, and in accordance with NPPF and emerging local and national policy and legislation, the scheme would be expected to demonstrate measurable "net gain" of biodiversity with use of a calculator such as the most recent Defra Metric. New habitat creation, with habitats designed to enhance and sustain wildlife with particular attention to wildlife that has been recorded locally, as well as delivery of new benefits and habitats, and long term maintenance, so that the project will deliver net gain for biodiversity, should form an integral part of a scheme of this nature.

Reference and adherence to current best practice guidelines in particular Natural England Technical Information Note "Solar parks: maximising environmental benefits" TIN101 (2011) and BRE (2014) "National Solar Centre Biodiversity Guidance for Solar Developments" Eds G E Parker and L Greene is recommended.

Due to the rural location of the site and use of this area by nocturnal wildlife including light sensitive bats (such as horseshoe bats associated with local bat Special Areas of Conservation) there should be no new external lighting. Any lighting proposals, if deemed essential, would need to be justified and sensitively designed and used, and accompanied by detailed lighting assessment with predicted light spill calculations in accordance with current best practice guidelines (including "Bats and Artificial Lighting Guidance Note" ILP and BCT Sept 2018), and full details of proposed controls and means of avoiding impacts of upward light spill and of light spill onto habitats or ecologically sensitive features.

Subject to additional information and incorporation of ecology measures to achieve avoidance of harm to wildlife and measurable biodiversity net gain as described below, objections on ecological grounds would be unlikely.

ENVIRONMENTAL IMPACTS ASSESSMENT:

In accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 you will be required to submit an EIA Screening Opinion given that the site exceeds the thresholds of 0.5ha for schedule 2, type 3, part (a).

CONCLUSION:

Your proposal is inappropriate development in the Green Belt, you will be required to demonstrate

Very Special Circumstances to support the principle of development. Additionally, the site may result in landscape harm, a landscape visual impact assessment is required to be able to assess this in detail. Landscape impact is critical to whether the scheme would be considered acceptable. At present the council cannot support the scheme or conclude whether it will be supported on landscape grounds.

If an application is submitted the above sections of this response should be considered and responded to in detail.

Officer Samantha Mason Date 07/07/2021

# WORKING PROTOCOL

A protocol for Service to Service high level site assessment and for a one council on-going working practice.

# **Purpose:**

In order to enable the most efficient and effective path for Council projects through the planning system, other B&NES Council Services will consult the Planning Services on their emerging proposals at an early stage. This is before a decision has been made to pursue a development or where a particular need has arisen and whilst proposals are still formative, before the details of the scheme have been worked up. This is not intended to replace the pre-app process or the Development Team, but is a precursor.

# Scope:

This is a protocol primarily between the Planning Service and Other Services of the Council who are developer/applicant but at times it will also require the input of Transport.

Other non-planning constraints, for example relating to lease arrangements and contractual arrangements, should be assessed separately and the Council should satisfy itself that projects can progress in light of all statutory and legal requirements.

This is a protocol for an initial site assessment process but it also commits us to good ongoing communication and a working practice which takes into account the respective roles of the Council as LPA and that of developer/applicant.

# **Commitment from Planning Service/Transport to:**

- 1. **support** Corporate Priorities via policy and Development Management in as far as this does not contradict national policy/professional probity
- 2. **provide** a high level, written steer on key constraints For example, in relation to national and local policy, the Habitats Directive, Flood Risk (sequential and

exceptions tests), Contaminated Land, Heritage Impact, Protected Geological features, Avon Act

- 3. **provide** a high level, written steer on the suitability of nascent development proposals, where known and provide direction as to the acceptability, opportunities for and or constraints for the proposed use, massing based upon available information and current policy .
- 4. identify potential high level obstacles to development and identify how these can be addressed if possible. For example, restrictive policies such as the Green Belt, Transport constraints/highway safety where residual cumulative impact on road network might be severe. Substantial Harm or less than Substantial Harm to a Heritage Asset (World Heritage Site, Conservation Area, Listed buildings, other non-designated Heritage Assets) and the need to provide convincing public benefits where appropriate.
- identify where further information may be required. For example, Noise Assessment, Environmental Impact Assessment, Heritage Impact Assessments, Transport Assessments, Landscape and Visual Impact Assessments, Tests of Likely Significant Impacts (ecology)
- 6. **advise** as to any particular special interest groups the LPA is aware of that may need to be consulted at an early stage.
- 7. **advise** on best way forward, eg Local Plan allocation, Pre-application/Development Team, a Planning Application, a Lawful Development Certificate, Prior Approval
- 8. **ensure** clear advice is provided. Including (at the more subsequent detailed pre application stage) management of internal consultation responses. Professionally made views will not be overturned but conflicting consultee views will be assessed and a comprehensive Planning Service view from the planning case officer will be provided.
- 9. **Seek** to respond to the initial inquiry within 10 working days and thereafter within a timely manner to support the delivery of corporate objectives in
- 10. agree the recommendations with the LPA Head of Service
- 11. record the assessment on the Planning Service data base,
- 12. **seek** to maintain continuity in the assignment of subsequent preapplication/applications to the same case officer who has handled the initial assessments, or if not to ensure that the subsequent officers follow the advice previously provided. A different view may be formed in the event of material change in circumstances, which will be explained.

# **Commitment from other Council Services**

- 1. **identify** sites and proposals to the Planning Service (and Transport where appropriate) at a very early stage in their formulation before details are formulated
- 2. make notification in writing via the attached template

- 3. **take** account of the steer from Planning & Transport in working up proposals for sites by:
  - take into account when deciding to continue with a project, the need to address the key issues identified in terms of the acceptability of the proposals, the need for supporting information and the appropriate application mechanism
  - procuring expert planning advice/consultant at the beginning of a project where deemed appropriate and take account of advice. Advise LPA of appropriate contact at the earliest opportunity.
  - use of appropriate pre application/Development Team and PPA routes
  - communicate if there is a change in approach and before an application is submitted
  - allow reasonable timescales in the project plan to allow for potential amendments and for discussion over planning conditions and negotiation of legal agreements.
  - Seek to respond in a timely manner to support the delivery of corporate objectives.

#### Mechanism

- 1. Record request and advice via the attached template
- 2. To meet with Head or Deputy Head of Planning/Team Managers as required
- 3. Response for this process to be issued to agreed timescale (10 working days unless extension of time agreed)
- 4. To be delivered within existing resources and no Services are committed to extra expense