

Flaxlands Solar Farm

Planning Design and Access Statement

Ampyr Solar Europe

Project number: 60727989

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Prepared for:

Ampyr Solar Europe

Prepared by:

AECOM Limited

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1. Introduction

- 1.1.1 This Planning, Design and Access Statement (PDAS) has been prepared in support of an application for full planning permission on behalf of Ampyr Solar Europe (the 'Applicant').
- 1.1.2 The proposal comprises the construction, operation, maintenance and decommissioning of a solar photovoltaic (PV) array with an installed capacity of up to 49.9 Megawatts (MW), a 49.9 MW battery energy storage system (BESS), and associated infrastructure (hereafter referred to as the 'Proposed Development') on a total of 87.09 hectares (ha) of agricultural land on two adjacent farms, Flaxlands Field Farm and Flaxlands Manor Farm, north of Royal Wootton Bassett, Swindon (herein referred to as the 'Site').
- 1.1.3 The application is submitted to Wiltshire Council under the provisions of the Town and Country Planning Act 1990 (as amended) in their role as the Local Planning Authority (LPA).

1.2 The Applicant

- 1.2.1 Ampyr Solar Europe is a leading European provider of sustainable solar energy solutions, with a solar portfolio of 7+Gigawatts peak (GWp) in development and over 1 GWp that is operational, under construction or in advanced development. The Applicant focuses its development predominately within the United Kingdom (UK), Germany and Netherlands.
- 1.2.2 The Applicant hosts the capabilities spanning the entire solar power production project lifecycle, from land acquisition, permitting and development, construction, operation and power commercialisation of solar plants. With such expertise within the industry, the Applicant strives to deliver sustainable energy solutions, creating positive impacts on the environment and communities.
- 1.2.3 The Applicant seeks to deliver a multitude of environmental and sustainability benefits as part of the development of Flaxlands Solar Farm.

1.3 Background and context

- 1.3.1 As a result of its commitments to the Paris Agreement¹, in June 2019 the United Kingdom (UK) became the first major economy to legislate for a 2050 net zero greenhouse gas (GHG) emissions target through the Climate Change Act 2008 (2050 Target Amendment) Order 2019. Through this legislation, the UK committed to meeting a legally binding target of net-zero carbon emissions by the year 2050.
- 1.3.2 To accord with net-zero carbon targets, the UK is required to accelerate development of low carbon renewable infrastructure to keep on track with meeting its five-yearly carbon budgets, its 2030 Nationally Determined Contribution (NDC), and its net zero target by 2050. The Sixth Carbon Budget (2033-2037)² requires the UK to reduce its greenhouse gas (GHG) emissions by 78% by 2035 compared to 1990 levels (794 megatonnes of carbon dioxide equivalent (MtCO_{2e})) – i.e. for emissions to be less than 175 MtCO_{2e} in 2035 (emissions were 371 MtCO_{2e} in 2024, so still over twice the target). This requires major investment in proven renewable technologies, such as solar, which are supported by planning policy at local and national level.
- 1.3.3 On 26 February, the Climate Change Committee (CCC) published its recommendations to the UK Government on the required emissions for the Seventh Carbon Budget. The recommended target given by the CCC's advice is to achieve an 87% reduction in UK emissions by 2040, setting the 5-year budget for 2038-2042 at 535 MtCO_{2e} – i.e. averaging 107MtCO_{2e} per year. In addition to these domestic targets, the UK has an international commitment (its Nationally Determined Contribution (NDC)) which aims to reduce UK GHG emissions by 68% by 2030 (254 MtCO_{2e} in 2030) and 81% by 2035 (less than 151 MtCO_{2e}) compared to 1990 levels, all in pursuit of reaching net zero by 2050³.

¹ United Nations, Climate Change, the Paris Agreement, [The Paris Agreement | UNFCCC](#)

² Climate Change Committee, Sixth Carbon Budget, [Sixth Carbon Budget - Climate Change Committee](#)

³ [The Seventh Carbon Budget - Climate Change Committee](#)

- 1.3.4 In addition to reducing the emissions of existing energy demand, the CCC envisages that by the year 2040, the UK will require twice as much electricity as today. The CCC envisages this will envisage this will need to include an increase in solar capacity to 82 GW.
- 1.3.5 The need for the development of solar energy is not only to meet the requirements of net-zero targets but also to help improve Britain's energy security. In 2023, the Powering Up Britain: Energy Security Plan⁴ was published to set out a plan for the UK to transition to net-zero, whilst securing energy independence and helping towards economic growth. The plan aims to transition Britain's energy source and reliance to domestic low-carbon and renewable energy, that helps to decarbonise the UK and provide clean and cheap energy.
- 1.3.6 In February 2019, Wiltshire Council recognised the climate emergency and committed to becoming a carbon neutral organisation by 2030. The council has already reduced its emissions by 80% through the Carbon Management Plan (2013). The 2022-27 Climate Strategy sets out a framework for reducing emissions across Wiltshire over the next 5 years, including achieving a carbon neutral council, this is supported by the Draft Climate Delivery Plan 2025, which once adopted, will set out how the council will be working to deliver the Climate Strategy.
- 1.3.7 Wiltshire Core Strategy (WCS) (adopted January 2015), strategic objective 2, addresses the challenges of climate change and how the Council plans to tackle such issues. The Council supports the development of standalone renewable energy schemes subject to resolving any site-specific constraints, to help contribute towards meeting national net-zero targets.
- 1.3.8 The Applicant anticipates that the Proposed Development will supply the electricity needs of approximately 21,000 homes a year over a 40-year period (the proposed design lifetime of the solar farm). The clean and domestically produced energy generated will save on average 17,900 tonnes of carbon dioxide (CO₂) per year which adds up to 716,000 tonnes of CO₂ over the design lifetime.
- 1.3.9 National and local energy strategies, and the declaration of Climate Change Act 2008 fully support the need to accelerate the development and deployment of renewable and low carbon electricity generation projects.

1.4 Pre-application enquiry

- 1.4.1 On behalf of the Applicant, AECOM submitted a pre-application enquiry to Wiltshire Council in July 2024, seeking advice on the principle and layout of the proposals. The pre-application request was registered on 05 July 2024, reference ENQ/2024/01008. A response was received from Wiltshire Council on 06 December 2024. The pre-application enquiry was based on a larger, and slightly different site boundary. The final Site red line boundary covers an area of 87.09 ha (this being the red line boundary subject to this planning application). This is as a result of increased provision of land for Biodiversity Net Gain (BNG) purposes compared to the previous design iterations. This revision excludes the southern field and northern field in the western parcel, and a southern field in the eastern parcel (all of which previously included solar panels in the pre-application submission). Furthermore, the updated boundary incorporates new BNG areas in the southwest of the eastern parcel, totalling an overall larger area of BNG provision within the Site.
- 1.4.2 Wiltshire Council acknowledged through the pre-application summary report that the Proposed Development would provide a significant contribution toward meeting the targets for renewable energy generation within Wiltshire and that in the context of sustainable development, the development of renewable energy generating infrastructure is encouraged.
- 1.4.3 Table 1 provides a summary of comments received from Wiltshire Council following the pre-application request, with commentary provided by the Project Team (technical specialists) on how these comments have been addressed where necessary.

⁴ Department for Energy Security & Net Zero. Powering up Britain, [Powering Up Britain: Energy Security Plan - GOV.UK](https://www.gov.uk/government/publications/powering-up-britain-energy-security-plan)

Table 1-1 Summary of Pre-application comments and responses

Discipline	Summary of Officer Comments	Project Team response
Principle of Development	Renewable energy supported in principle but stresses the need for compliance with Core Policies. Request to quantify the benefits of the Proposed Development e.g. how many homes could be powered by the development. Further clarity on grid connection preferred.	Comments noted and detail to be provided where available. Regarding cable route to allow for a connection to the grid, this is under discussion, the Applicant is working to establish a fixed route for the cable (which will be outside of the red line boundary subject to this planning application). A separate consents process will apply, e.g. under the Highways Act, and a separate planning application only if required by that consents process.
Landscape	Comments regarding landscape and visual impact due to the Site's elevated position and rolling topography. Landscape and Visual Impact Assessment (LVIA) including cumulative impacts and a landscape strategy with mitigation/enhancement is essential. The potential effects upon the setting to the North Wessex Downs National Landscape should be considered within the scope of an LVA/LVIA. Any new built development / changed land use proposals will need to adequately buffer and mitigate against resulting harmful effects to Ancient Woodland designations. There are a number of rural Public Rights of Way (PRoW) that will potentially be subsumed by the development proposal and / or experience harmful visual change as a result of the development proposal being implemented which will impact on these user's perceptual experience and views of existing countryside. These visual receptors will need to be proportionately represented within the scope of the visual assessment. Cumulative assessments should be prepared in support of this application. Any subsequent application submitted for full planning should include a comprehensive landscape strategy as part of the development proposal. The strategy should illustrate a multifunctional and complementary approach to conserve important landscape and ecological features including Green / Blue Infrastructure and BNG policy requirements in a manner that supports the inherent local landscape character of the area. It is also requested that any existing or proposed utility/service routes alongside any associated easement corridors (with tree planting restrictions) are included on the landscape drawings.	An LVA, Outline Landscape Masterplan, Outline Landscape Ecological Management Plan (LEMP) and BNG Assessment are provided as part of this planning application. The LVA includes an assessment of cumulative considerations in relation to the Proposed Development- further detail on this assessment is provided in Chapter 8 of this PDAS, along with information regarding the parcel diversion of PRoW(s).

Discipline	Summary of Officer Comments	Project Team response
	The landscape strategy should clearly differentiate between essential mitigation measures and enhancement proposals to help officers understand the difference between proposals that mitigate identified harm and those that deliver appropriate opportunities for environmental enhancement.	
Ecology	10% BNG required. Full Ecological Impact Assessment (EcIA) and species surveys needed. 15 metre (m) buffers around ancient woodland must be maintained. Surveys should be in line with the requirements of the Wiltshire Solar PV Farm advice note and with other guidance documents and any deviation would need to be fully justified and evidenced, ensuring that the proposal meets all policy requirements, particularly the National Planning Policy Framework (NPPF) and Core Policy 50. It is recommended that confirmation of survey effort and likely impacts to the Flaxlands Manor County Wildlife Site is obtained through the Council's bespoke chargeable pre application and discretionary advice service Given the location of the Site the LPA would expect to see a full suite of bat activity surveys from April to October, inclusive.	A BNG Assessment has been submitted as part of this planning application and concludes that the Proposed Development will provide over 10% BNG. A EcIA has been provided along with bat surveys (including bat activity report, bat roost reports)/great crested newt eDNA report, reptiles, otter and water vile, and breeding bird reports)- further commentary on these reports is provided in Chapter 7 of this PDAS. Bat activity surveys have taken place between May and October 2024. A buffer of 30m around the ancient woodland is proposed as a minimum - refer to the Outline Landscape Masterplan.
Agricultural land	In the event that an application is submitted further information regarding the quality of the agricultural land to be lost and the amount of it should be provided.	An Agricultural Land Classification (ALC) report has been provided as part of this planning application, refer to Chapter 8 of this PDAS.
Archaeology and Heritage	Heritage Statement required, including geophysical survey and trial trenching. Built heritage impacts on Grade II listed Flaxlands Manor must be considered. The Site is subject to a trench evaluation prior to the determination of the application, with trenches targeted upon possible features identified by the geophysics.	An Historic Environment Desk Based Assessment (HDBA) and Geophysical Survey Report have been provided as part of this planning application. The closest listed building to the Site comprises Manor Farmhouse (NHLE 1199833), an 18th-century brick building replacing one of earlier construction, located approximately 130 m south-west of the Site's eastern land parcel- .the HDBA provides an assessment of the listed building and it's character in the context of the Proposed Development and considers potential harm on this asset- further detail is provided in Chapter 7 of this PDAS.

Discipline	Summary of Officer Comments	Project Team response
Highways	Access via Flaxlands Lane is problematic; road widening may be necessary but could harm rural character; logistics and mitigation strategy needed for HGV use.	A series of passing places is proposed along Flaxlands Lane, these passing places will be temporary only, and removed once construction is complete. Refer to plan ref ACM-XX-XX-DR-CE-00-0003-P02. Traffic movement will be carefully managed in line with a Construction Traffic Management Plan (CTMP).
Public Rights of Way (PRoW)	Proposals to divert PRoWs must meet legal tests and are subject to public consultation. Several stiles and crossings need to be upgraded.	The Applicant is aware that stiles in this location are in a poor condition and the proposal includes updates to these stiles with 'kissing gates', thus allowing the PRoW to be more accessible to a range of users. The PRoW(s) will be diverted under Section 257 of the Town and Country Planning Act 1990, a process which will likely take place parallel to the determination of this planning application- this will involve the permanent diversion of PRoW refs LTRE 28 and sections of LTRE 26.
Drainage and Flood Risk	Site lies within flood risk areas. Drainage strategy must address 1-in-100-year storm events plus climate change. Sustainable Urban Drainage Systems (SuDS) and runoff betterment needed. A site-specific Flood Risk Assessment (FRA) and drainage strategy should be submitted and should demonstrate that the Site is not adversely affected by flood risk from different sources, and how the flood risk from all sources will be managed without increasing flood risk to the development itself or elsewhere. A construction management plan, which shall include monitoring of, and measures to retain, the existing vegetation across the Site, together with details of drainage arrangements during the construction phase should be submitted	According to the Environment Agency Planning Flood Mapping ⁵ , the Site is located within Flood Zone 1 (land assessed as having a less than 1 in 1,000 (<0.1%) annual probability of river or sea flooding) and has been identified to be at a very low risk to surface water flooding. However, it is acknowledged that there are areas of low risk groundwater vulnerability within the eastern land parcel of the Site. A FRA and Drainage strategy have been provided - further details is provided in Chapter 7 of this PDAS.

⁵ Flood map for planning. Get flood risk information for planning in England - GOV.UK, 2024, <https://flood-map-for-planning.service.gov.uk/>

Discipline	Summary of Officer Comments	Project Team response
Contaminated Land	No specific comment in the document on contaminated land, but typically site history and potential risks should be addressed in planning.	A Geotechnical and Geo-Environmental Desk Study has been provided as part of this planning application- further details is provided in Chapter 7 of this PDAS.
Amenity	A glint and glare study would be required. The Public Protection officer has advised that a noise impact assessment should be provided with any application.	A Glint and Glare Report has been provided as part of this planning application, refer to Chapter 7 of this PDAS. A Noise Impact Assessment (NIA) has been provided as part of this planning application, refer to Chapter 7 of this PDAS.
Transport	A commissioning strategy with routes, vehicle types and numbers and swept path analysis including access points and on-site turning along with any staffing requirements will be sufficient to support the application. A Highway Mitigation Strategy to ensure that routes are returned to their original condition following commissioning and decommissioning should be submitted.	These details are provided in the Transport Statement CTMP submitted as part of this planning application.

1.5 Community consultation

- 1.5.1 A Statement of Community Involvement (SCI) has been submitted with this application which provides an overview of the stakeholder and community consultation undertaken by the Applicant.
- 1.5.2 A formal public consultation ran from 5th November until 3rd December 2024. The consultation included a project website where all consultation material could be downloaded, and a drop in event at Hook, Greatfield and Greenhill Village Hall between 2 – 7pm of 19th November 2024. A local venue was chosen to enable local residents and groups to attend and maximise participation in the consultation. Members of the project team were available to answer questions from event attendees, including specialists from the Applicant and planning specialists. Feedback was invited via an online or hard copy feedback form, or in writing via email or letter. The consultation was widely publicised in the surrounding area through a postcard to local residents and businesses, as well as direct contact with stakeholders.
- 1.5.3 During the public consultation period, 18 responses were received, 10 of which were feedback forms. The feedback from the public consultation was taken into account where practicable and has been used to inform the design iteration and evolution of the Proposed Development.
- 1.5.4 Following consultation, it was clear that vegetation and screening were two important factors to those living locally. The Applicant has worked closely with the project team to ensure that screening in the form of vegetation ensures that existing gaps in hedgerows (of which will be retained where possible) are enhanced. The project team welcomed feedback from members of the public regarding the proposed buffers beside the proposed diverted Public Right of Way (PRoW), and potential to allow this PRoW to become more user friendly.

1.6 Planning application submission documents

- 1.6.1 In addition to this PDAS, detailed application drawings and technical supporting documents accompany the application and provide the information necessary to describe, assess and determine the application, all of which are listed in the covering letter than accompanies this planning application.

1.7 Environmental Impact Assessment

- 1.7.1 An Environmental Impact Assessment (EIA) screening request for the Proposed Development was submitted to Wiltshire Council in July 2024 (LPA reference PL/2024/06500⁶). No response was received from the LPA by October 2024, a screening request was therefore issued to the Secretary of State (SoS) on 15 October 2024.
- 1.7.2 A Screening Direction received from the SoS on 17 March 2025, confirmed that the Proposed Development would not have significant environmental impacts. As a result, the SoS confirmed that the Proposed Development is not EIA development, and that a forthcoming planning application for the Proposed Development is not required to be accompanied by an Environmental Statement.

1.8 Report structure

- 1.8.1 This PDAS is structured as follows:
- **Section 2** describes the application site and surrounding context;
 - **Section 3** sets out relevant planning history;
 - **Section 4** outlines the site selection process;
 - **Section 5** sets out a detailed description of the Proposed Development;
 - **Section 6** provides a summary of the relevant planning policy;
 - **Section 7** considers the planning merits of the proposal having regard to planning policy and other guidance; and
 - **Section 8** sets out the planning balance, summary and conclusions of this PDAS.

⁶Wiltshire Council, Planning and Building Control Public Register, [Planning Application: PL/2024/06500](#)

2. Site and surroundings

- 2.1.1 The Site is located within the administrative boundary of Wiltshire Council, approximately 0.2 kilometres (km) west of the village of Hook and 1.7 km north of Royal Wootton Bassett, beyond the M4 motorway (north of junction 16) and 3.2 km west of Swindon, situated at Flaxlands Field Farm and Flaxlands Manor Farm, SN4 8DY.
- 2.1.2 The Site location is displayed in Figure 2-1 below.

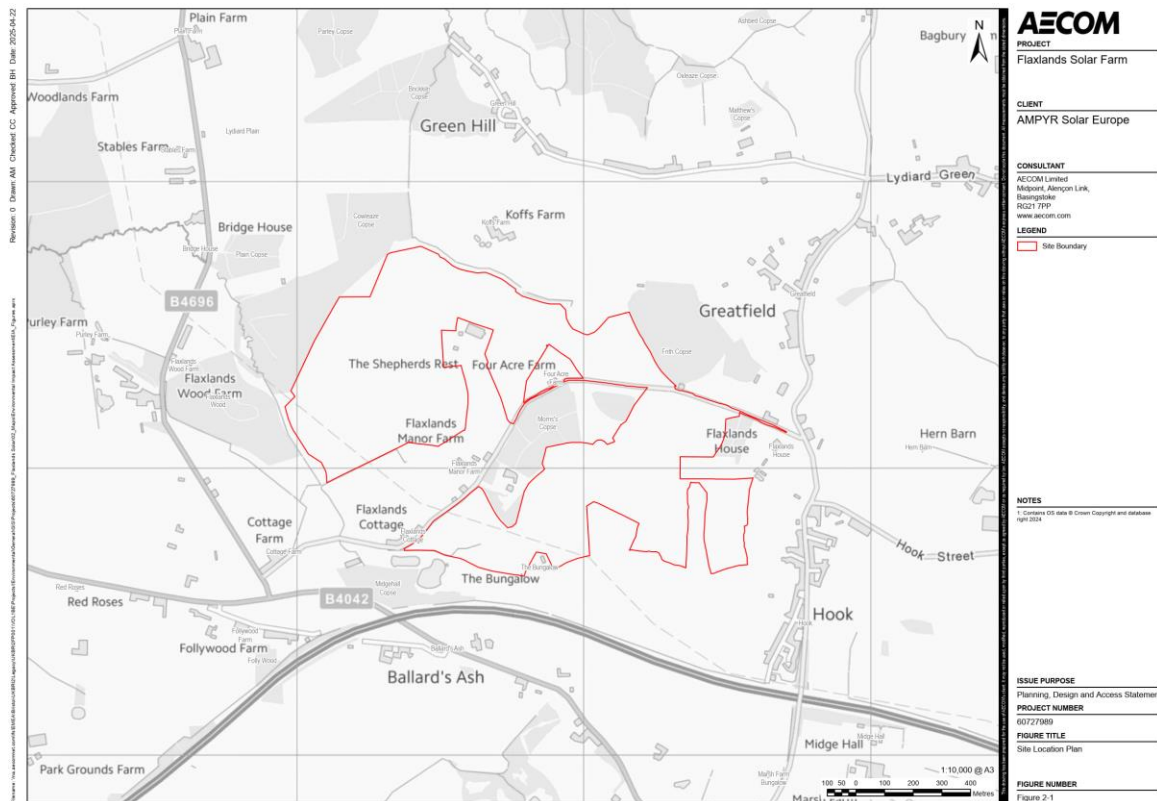


Figure 2-1: Site location

- 2.1.3 The Site measures 87.09 ha, comprises two land parcels from two farms, joined via Flaxlands Lane. The Site is rural in nature, with undulating topography, and is composed of predominantly greenfield, agricultural land (pasture). The Site is made up of various individual fields, used largely for the grazing of livestock (currently sheep).
- 2.1.4 The Site is enclosed and relatively well screened in most directions by the existing vegetation and hedgerows along field margins and along Flaxlands Lane. The Site is bounded to the west and north-west by ancient woodland, to the north by agricultural land, and to the east by agricultural land, woodland, highway, commercial and residential properties associated with the village of Hook. The south of the Site is bounded by agricultural land, woodland and beyond, the M4.
- 2.1.5 The Site is within proximity to a number of properties that are listed as follows:
- Flaxlands House – located 60 meters (m) northeast of the north-eastern parcel of the Site;
 - Four Acres Farm and Flaxlands Manor Farm – located between the adjoining land parcels (Flaxlands Lane), approximately 70 m from the Site boundary;
 - 'The Church of God in Swindon' – located approximately 80 m adjacent to Flaxlands Manor Farm;
 - Koff's Farm – located 90 m north of the western land parcel;

- Residents associated with the village of Hook - located approximately 170 m east of the eastern land parcel;
- Swindon and District Animal Haven – located 200 m south of the western land parcel of the Site;
- Cottage Farm – situated approximately 240 m southwest of the western parcel of land, with the Bungalow approximately 150 m southwest of the eastern land parcel and Flaxlands Cottage approximately 180 m south of the western land parcel; and
- Flaxlands Wood Farm – sited 290 m northwest of the western land parcel of the Site.

2.2 Key environmental designations and land uses

2.2.1 The following key environmental designations have been identified on, or within close proximity of the Site.

Landscape

- 2.2.2 The Site does not lie within any international or national landscape designations and is not within a designated Special Landscape Area.
- 2.2.3 The defining west facing scarp slopes forming the edge of the 'North Wessex Downs' National Landscape (NL) lie approximately 6 km to the southeast of the Site at their nearest point.
- 2.2.4 The Site is within the extents of the 'Great Western Community Forest' Plan Area and the 'Braydon Forest' a former Royal Hunting Forest.
- 2.2.5 The Study Area (3 km radius around the Site) is located within Landscape Character Area (LCA) 11 (Swindon-Lyneham Limestone Ridge and Minety Rolling Clay Lowland) as identified in the Wiltshire Landscape Character Assessment.

Ecology

- 2.2.6 A Preliminary Ecological Appraisal (PEA) was undertaken in June 2024, and as part of this a desktop study was carried out to identify all ecological sites within 2 km of the Site and designated sites for bats within 10 km of the Site (referred to as the 'Study Area'). As part of the PEA, ecological surveys were also undertaken within the Site (referred to as the 'Survey Area'). The findings of the desktop study and surveys are set out in the PEA and are summarised below.
- 2.2.7 In terms of ecological sites within the Study Area:
- There are no international ecological designations or designated sites for bats within the Site or Study Area;
 - There are no Ramsar, Special Protected Areas (SPA) or Special Areas of Conservation (SAC) within the Study Area;
 - There is one Site of Special Scientific Interest (SSSI) located approximately 550 m north of the Site, land at Restrop Farm and Brockhurst Wood;
 - Jubilee Lakes, Local Nature Reserve (LNR), are situated approximately 800 m south of the Site;
 - Flaxlands Manor Local Wildlife Site (LWS) lies within the eastern parcel of the Site;
 - Four LWS lie directly adjacent to the Site; and
 - There are a further 20 local non-statutory designated sites within 2 km of the Site boundary, including two Wiltshire Wildlife Trust (WWT) Nature Reserves.

Trees

- 2.2.8 The Site comprises mostly open fields with some hedgerows and trees mostly along field boundaries. There are veteran trees located within the Site and trees with Tree Preservation Orders (TPOs)

present within the western portion of the Site within hedgerows, and as lines of trees in the western part of the Site. There are also TPOs adjacent to the west of the Site within Flaxlands Wood.

- 2.2.9 Thirteen Ancient Woodlands have been identified within 2 km of the Site, with five areas designated as ancient woodland directly adjacent to the Site boundary including: Morris's Copse Ancient Semi-Natural Woodland (ASNW), Frith Copse ASNW, Cowleaze Copse ASNW, Flaxlands Wood ASNW, and Flaxlands Wood, Ancient Replanted Woodland.

Heritage

- 2.2.10 There are no World Heritage Sites or Registered Battlefields on or adjacent to the Site.
- 2.2.11 There are two Scheduled Monuments located within the surrounding area. These include the following:
- 'Ringsbury Camp hillfort' (National Heritage List for England⁷ (NHLE) entry 1018124) – located approximately 1.2 km northeast of the Site; and
 - 'Rabbit warren 800 m east of Woodland Fram' (NHLE entry 1019730) – located approximately 1.6km west of the Site.
- 2.2.12 There are eight listed buildings and one registered park and garden located within 1 km of the Site and a further 35 listed buildings (33 Grade II and 2 Grade II*), located within 2 km, none of which are located on the Site itself, including:
- One Grade II located approximately 160 m west of the eastern parcel of the Site;
 - Four Grade II in and around the village of Hook, located approximately 170 m east of the Site;
 - Grade II listed Lydiard Park (NHLE entry 1001238), located approximately 960 m east of the Site.
 - Two Grade II located 1.3 km and 1.6 km northwest of the Site;
 - One Grade II located approximately 1.40 km southwest of the Site;
 - Ten Grade II in and around Royal Wootton Bassett, located approximately 1.7 km;
 - Two Grade II and one Grade II* in the village of Restrop, located approximately 1.7 km north of the Site; and
 - 13 Grade II and one Grade II* in and around Lydiard Millicent, located approximately 2 km northeast of the Site.
- 2.2.13 'Lydiard Green' Conservation Area is situated 1.1 km northeast of the Site, and 'Wootton Bassett' Conservation Area is located 1.7 km south of the Site.
- 2.2.14 There are 94 recorded non-designated heritage assets within the Study Area which are listed in the HDBA.

Flood risk

- 2.2.15 According to the Environment Agency Planning Flood Mapping⁸, the Site is located within Flood Zone 1 (land assessed as having a less than 1 in 1,000 (<0.1%) annual probability of river or sea flooding) and has been identified to be at a very low risk to surface water flooding.
- 2.2.16 In addition, there are areas of low-risk groundwater vulnerability within the eastern land parcel of the Site.

Agricultural Land Classification

- 2.2.17 An agricultural land classification (ALC) survey was undertaken on the Site to determine the quality of agricultural land and the distribution between ALC grades and sub-grades. Natural England⁹ define Best and Most Versatile (BMV) land as ALC grades 1 and 2 and sub-grade 3a, with non-BMV land

⁷ Historic England, 2024, <https://historicengland.org.uk/listing/the-list>

⁸ Flood map for planning. Get flood risk information for planning in England - GOV.UK, 2024, <https://flood-map-for-planning.service.gov.uk/>

⁹ Natural England, Guide to assessing development proposals on agricultural land, [Guide to assessing development proposals on agricultural land - GOV.UK](#)

being of sub-grade 3b and grades 4 and 5. The results of the ALC Survey set out in the Soils and Agricultural Land Report have determined that the land is sub-grade 3b and sub-grade 3a. Developed land (excluding dedicated BNG areas) at Flaxlands Farm includes 10.4 ha of sub-grade 3a land, which constitutes 11.9% of the Site. Sub-grade 3b land covers a total area of 63.4 ha, making up 72.9% of the Site. (The remaining 13.3 ha is un-surveyed proposed BNG land – not to be developed.) As such, Flaxlands Farm is comprised predominately of non-BMV agricultural land, which is demonstrated in the Soils and Agricultural Land Report, covered in greater detail in Chapter 7 of this report.

Transport and Access

- 2.2.18 Existing access to the Site is via Flaxlands Lane using the existing farm tracks.
- 2.2.19 There is a well-connected PRoW network across the surrounding area, forming links between villages and across the countryside.
- 2.2.20 There are six PRoW (LTRE 26, 28, 30 and LMIL 13, 16 and 22) which intersect the Site. Sections of PRoW LTRE 27 and 31 and LMIL 8 and 13 run along the southern, western and northern boundaries of the Site in approximately that order. As such, in summary:
- Footpath LTRE26 starts at the Village Hall at Hook, runs northwest and through the Site until Flaxlands Lane and then further north between the boundary of the Site and Frith Copse joining LMIL13;
 - Footpaths LTRE24A and LTRE24 connect to Flaxlands Lane and to the northeastern section of the Site boundary;
 - Footpath LTRE28 runs through the Site from Flaxlands Lane in the north to and joining LTRE27 in the south;
 - LTRE27 runs along the southern boundary of the Site, starting in the village of Hook in the east and joining LTRE29 in the west;
 - Footpath LTRE29 connects from LTRE27 to Flaxlands Lane and runs through the Site in the south;
 - Footpath LTRE30 starts within the Site at a junction with LTRE28 and runs north through Morris's Copse, across Flaxlands Lane and through the Site again joining LMIL13 and LTRE22;
 - Footpath LTRE31 runs adjacent to the western boundary of the Site between Flaxlands Lane, through Flaxlands Woods, and the B4696;
 - Sections of Footpath LTRE52 run close to the northern boundary of the Site between LTRE31 in the west and LMIL8 in the north, connecting to other footpaths south of Green Hill such as LMIL7, 10 and 13; and
 - Footpath LMIL13 starts at the northeastern corner of the Site at Frith Copse and runs northwest / north crossing LMIL8 towards Green Hill.
- 2.2.21 Figure 2-2 illustrates the local PRoW network within and around the Site.



Figure 2-2: PRoW Network

3. Planning history

3.1.1 A planning history search has been undertaken using the Wiltshire Council interactive map¹⁰ for the Site and the surrounding area. Table 3-1 summarises the history of planning applications within the Site and surrounding development within a 3 km study area. The on-Site records are limited to agricultural uses, and the EIA Screening Opinion request for this project. The nearest ground-mounted solar PV application is approximately 2 km away from the Site.

Table 3-1: Planning history of the Site and surrounding area

Reference	Address	Proposal	Distance to Site	Decision date	Decision
Site					
PL/2024/06500	Flaxlands Solar Farm, Royal Wootton Bassett, Wiltshire	Request an Environmental Impact Assessment (EIA) Screening Opinion pursuant to Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (as amended) ('the EIA Regulations') in relation to the Flaxlands Solar project (herein referred to as 'the Proposed Development').	On Site	11/11/2024	It was confirmed by the SoS that the proposal is not EIA development
20/08842/FUL	Four Acre Farm, Flaxlands, Royal Wootton Bassett, Wiltshire, SN4 8DY	Installation of Sewage Treatment Plant for the Welfare of Operatives Working on the Small Holding.	On Site	09/10/2020	Approved with Conditions
19/03873/FUL	Flaxlands, Royal Wootton Bassett Swindon, Wiltshire SN4 8DY	Provision of temporary shepherds' accommodation and mess facility (retrospective); erection of agricultural workers dwelling ancillary to established farm business; associated track and landscaping. Erection of 2no. agricultural buildings (retrospective).	On Site	09/04/2021	Approved with Conditions
17/06647/FUL	Flaxlands, Royal Wootton Bassett Swindon, Wiltshire SN4 8DY	Proposed agricultural barn.	On Site	18/09/2017	Approved with Conditions
14/02731/FUL	Flaxlands Manor Farm, Flaxlands, Royal Wootton Bassett Swindon, Wiltshire SN4 8DY	Continue Use of Land & Buildings for Clay Pigeon Shooting & Increase of Operation from 26 to 30 Days (Previously Granted Under 09/00666/FUL).	On Site	09/05/2014	Approved with Conditions
Surrounding Area					
15/07373/FUL	Park Grounds, Brinkworth Road, Royal Wootton Bassett, Swindon, Wiltshire, SN4 8DW	Construction & Operation of a Solar Farm (Not brought forward / been developed)	c.2 km	11/12/2015	Approved with Conditions

¹⁰<https://development.wiltshire.gov.uk/pr/s/>

Reference	Address	Proposal	Distance to Site	Decision date	Decision
14/02508/FUL	Wickfield Farm, Royal Wootton Bassett, Swindon, SN4 8QR	Construction of a 10.75 ha Solar Park, to include the installation of solar panels to generate electricity with transformer housings, security fencing and cameras, landscaping and other associated works.	c.3 km	05/06/2014	Approved with conditions
13/02191/FUL	Spittleborough Farm, Swindon Road, Lydiard Tregoze, Royal Wootton Bassett, Wiltshire, SN4 8ET	Installation of 22.7 ha 10 MW Solar PV Farm with Ancillary Plant, Fencing, Electrical Equipment & Landscaping.	c.2 km	14/10/2013	Approved with conditions
N/13/01723/FUL	Braydon Manor Farm, Braydon, SN5 0AG	Installation of Ground Mounted Photovoltaic Solar Array to Provide Circa 7 MW Generation Capacity Together with Transformer Stations; Internal Access Track; Landscaping; Security Fencing; Security Cameras; Access Gate; and Ancillary Infrastructure.	c.2 km	12/06/2013	Approved with conditions

Source: Wiltshire Council

4. Site Selection

4.1 Identification of the area of search

- 4.1.1 Fundamental to the viability and deliverability of a commercial-scale solar PV site such as this is proximity to an available grid connection with appropriate capacity. This is recognised at paragraph 2.10.24 of NPS EN-3 which states:

“...the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal.”

- 4.1.2 The search for a potential site was based on a grid-first approach. Grid capacity has been identified as available in the overhead transmission line that connects from Minety Substation to Swindon Substation.
- 4.1.3 A 3 km buffer zone was then established around the transmission line, becoming the ‘area of search’. The extent of the buffer zone reflects what the Applicant has assessed as being the greatest viable extent of the cable route corridor given the high costs of high-voltage cable. An increased distance from the Point of Connection (or PoC) results in increased financial cost, potential disruption to more receptors and weakened efficiency of cabling (leading to lost electricity in transmission). As a result, it was assessed that a cable route extending beyond 3 km would make the project unviable.
- 4.1.4 The area of search extends into the administrative areas of both Wiltshire Council and Swindon Borough Council.

4.2 Requirements for site selection

- 4.2.1 With an identified area of search, the availability of brownfield land, using local data through the brownfield register¹¹ was scoped. This search did not identify any suitable brownfield land of the required scale.
- 4.2.2 Following this, the Applicant sought to identify a site by avoiding the following environmental constraints where possible:
- Statutory ecological designations (Ramsar, SPA, SAC, SSSI);
 - Statutory landscape designations (National Landscape, National Park);
 - Statutory heritage designations (Scheduled Monuments, Listed Buildings, Registered Parks and Gardens, Conservation Areas);
 - Flood Zone 3;
 - BMV agricultural land, determined by the desk-based ALC data that confirms Grades 1 and 2 land, and in limited areas (‘post-1988 data’), Grades 1, 2 and 3a, with the aim to avoid BMV land where possible; and
 - Ancient Woodlands.
- 4.2.3 To limit potential cumulative impacts, a 1 km exclusion radius around existing solar farms was applied.
- 4.2.4 Further to this, the Applicant identified ‘inclusionary’ requirements relating to the size of operational land and orientation of the Site to facilitate the successful construction and operation of a solar farm of the scale and nature proposed. These requirements included:
- A minimum area of 60 ha – to facilitate a 49.9 MW solar farm, a site must be at least 60 ha, ideally 80 ha in order to deliver a viable solar farm that achieves sufficient output in electricity generated to justify the cost of the grid connection, construction and long-term operational costs and) that is able to enhance, protect and mitigate environmental and planning constraints within the Site and Study Area (2 km area surrounding the Site boundary).

¹¹ Wiltshire Council, Brownfield Register, 2022, <https://www.wiltshire.gov.uk/planning-brownfield-register>

- Generally flat topography or south-facing slopes – viability in terms of electricity generated is greatly affected by topography, with north-facing slopes requiring significantly larger land area to generate the same output. North, east, or west orientating land parcels are not optimal for solar panels to absorb the maximum quantity of sunlight and are therefore not preferred. Also, the frames for solar panels are difficult to construct and maintain on steep slopes, with very limited options in terms of construction contractors, procuring the right designs / equipment, and ability to ensure such projects during operation due to maintenance, rendering such sites non-viable.
- 4.2.5 Land availability was also an inclusionary requirement. The landowners of potential sites were contacted via a door knock approach and land agents were used to understand whether landowners were willing to consider the proposal of a solar farm on their land.

4.3 Preferred site assessment

- 4.3.1 From the assessment of potential sites, five sites were identified to be potentially suitable for the Proposed Development, all of which were either on or included undifferentiated ALC Grade 3 land, so unknown if BMV subject to detailed site ALC survey. In this respect, all five sites were equal.
- 4.3.2 After initial talks with landowners, three out of the five sites were then discounted. The remaining two sites underwent an evaluation of their planning, environmental and operational context to identify the most suitable site. Both sites were assessed to have similar environmental constraints. The Flaxlands Site was considered to be more suitable than the alternative site, as it was a larger site in terms of operational land. Furthermore, the alternative site was within 1 km of another solar farm which had the potential to have had adverse cumulative effects and was excluded.
- 4.3.3 Following the evaluation of the potential sites, the combined two plots of land at Flaxlands were chosen as the selected site for the Proposed Development.
- 4.3.4 It performed well in relation to flood risk, access, heritage, size and is south-facing. The Site is also well screened by existing hedgerows and the surrounding woodland which reduces landscape impacts. The evaluation of the selected site found that any proposal would require an appropriate and considerate design and commitment to long-term management to mitigate potential impacts on the local wildlife site (LWS) in the eastern land parcel. These mitigation measures have been designed into the project and will benefit the LWS.
- 4.3.5 The results of the site selection process demonstrate that there are no alternative sites that perform significantly better than the Flaxlands Site for the Proposed Development, notably due to the limited environmental and planning constraints and optimal operational land size within a viable distance from the grid connection opportunity.

5. The Proposed Development

The Proposed Development

5.1.1 The Proposed Development will comprise a solar PV array with an installed capacity of 49.9 MW, 49.9 MW of BESS, associated infrastructure and dedicated BNG enhancement area on 87.09 ha of agricultural land. The Proposed Development will contain the following elements:

- Rows of fixed south-facing solar PV panels orientated between 10-20 degree, with the lowest edge of the arrays 0.6 m at a minimum from the ground and up to 3 m from the ground to the highest panel edge;
- String inverters mounted to the back of the solar PV mounting structures;
- Inverters, transformers and switchgear (Medium Voltage (MV) Stations which house the transformers and switchgears measure 6 m x 2.5 m x 2.5 m (L x W x H));
- BESS measuring 15.3 m x 3.1 m x 3.3 m (L x W x H) with 14 battery units;
- A 132 kV transformer substation compound, measuring 7.5 m x 6 m x 5.3 m (L x W x H) inclusive of distribution network operator (DNO) equipment;
- DNO communications tower (15 m high) assumed (a DNO requirement, normally permitted development), storage / spare parts containers (2.5 m high), and fire safety water tanks;
- Cabling (largely buried services);
- Stock-proof perimeter fencing (1.8 m high), palisade perimeter fencing around the DNO equipment (2.5 m high) with access gates;
- Internal aggregate tracks;
- On-site BNG enhancement area; and
- Temporary construction laydown area and welfare facilities.

5.1.2 This is considered the minimum level of development required to ensure the Site performs effectively in generating and exporting electricity.

5.1.3 The Proposed Development includes the provision of landscaping to effectively assimilate into the wider landscape and to provide ecological enhancement, and an Outline Landscape Masterplan has been submitted as part of this planning application

Definition of development

5.1.4 The formal definition of the Proposed Development is as follows:

“The construction and operation (including maintenance) of a 49.9 MW solar farm to include ground-mounted solar photovoltaic (PV) arrays, electrical substations, grid balancing infrastructure, cabling, BESS (49.9 MW capacity), other associated infrastructure and areas for biodiversity net gain (BNG) enhancement and landscape mitigation.”

Development process and the design approach

5.1.5 Following on from the site selection process, the design of the Proposed Development has been informed by the context of the Site and its surroundings, as well as the opportunities and constraints presented.

5.1.6 The pre-application enquiry was based on a larger, and slightly different site boundary. The final Site red line boundary covers an area of 87.09 ha (this being the red line boundary subject to this planning application). This is as a result of increased provision of land for BNG purposes compared to the previous design iterations. This revision excludes the southern field and northern field in the western parcel, and a southern field in the eastern parcel (all of which previously included solar panels in the pre-application submission and related public consultation event). Furthermore, the updated boundary incorporates new BNG areas in the southwest of the eastern parcel, totalling an overall larger area of BNG provision within the Site.

- 5.1.7 The immediate and wider context is formed mainly by agricultural land; however, there is a presence of built development in the area, in the form of the village of Hook, several single dwellings and farmsteads, as well as the M4 motorway.
- 5.1.8 The key design principles for the Proposed Development include:
- Providing a high-quality design that makes the best use of location and provides for efficient generation of electricity, namely by orientating the panels north-south to benefit from maximum solar irradiation;
 - Maximise the grid connection through generating electricity;
 - Creating an efficient scheme where the BESS supports the solar generation by providing grid balancing services to store excess energy and release it to the grid at greatest demand;
 - Maximising solar irradiance through the use of fixed south-facing solar panels (which in turn minimises the land requirement to achieve the targeted output);
 - Minimising the environmental impact by preserving as far as possible trees and hedgerows;
 - Maintaining suitable stand-offs from woodland, trees, hedgerows, waterways and ponds to avoid impact on habitats;
 - Dedicated biodiversity enhancement areas;
 - Assimilating the Proposed Development into the local landscape as far as possible, including providing additional screening or the addition of hedgerow planting in areas with gaps along the Site boundaries;
 - Providing buffers around PRow to protect visual impacts and amenity of PRow users;
 - Situating infrastructure in such a way as to avoid and reduce adverse impacts. For example, the substation and transformers have been placed to the north of the western parcel of the Site to eliminate any potential for noise impact on nearby local receptors; and
 - Ensuring safe and efficient access to the public highway.

Design evolution

- 5.1.9 The design evolution of the Proposed Development has been an iterative process. The initial design was assessed by planning and environmental specialists in terms of, amongst other matters, landscape and visual, cultural heritage, ecology, hydrology and traffic considerations. Each specialist visited the Site and identified the presence or absence of potential environmental constraints and opportunities. Plans were produced to show potential environmental constraints both within the Site and adjacent, including in respect of landscape and visual impact.
- 5.1.10 Although there are factors (engineering and commercial) that limit the extent to which the layout and design of the Proposed Development can be adjusted, the design iterations have ensured that the Proposed Development has as little impact on the local environment as practicable. Furthermore, the protection of existing landscape features and valuable habitat, including hedgerows and trees, has been a central consideration in the preparation of the layout.

Layout

- 5.1.11 As shown on the Site Layout Plan in **Error! Reference source not found.**, the Proposed Development would be set within the existing field pattern, with all field margins and boundary vegetation retained where possible; some vegetation removal is required to allow for additional access points into field parcels. The fencing around the Site would be situated inside the boundary vegetation ensuring the fencing is not outwardly visible and the hedge can still be accessed for maintenance.
- 5.1.12 The solar arrays would be laid out horizontally running east-west and will be mounted on metal frames facing south to maximise the absorption of sunlight. The transformers would be located within the solar PV array areas to ensure that visual and noise impacts on surrounding receptors are minimised.
- 5.1.13 The Proposed BESS and substation will be located in the north-western area of the Site.

- 5.1.14 There is a need to locate the solar PV in close proximity to a point of connection with capacity to ensure the electricity generated can easily feed into the national electricity transmission system. The Proposed Development will be connected to the line running between Minety Substation and Swindon Substation. Such proximity to the national grid allows a seamless connection to the existing infrastructure.

Solar PV panels

- 5.1.15 The panels are mounted in horizontal rows, configured as a two panel portrait, and fixed at an angle in the optimum position for absorbing year-round solar irradiation, between 10-20 degrees. At the lowest edge the arrays would be 0.6 m at a minimum from the ground and up to 3 m from the ground at the highest edge.
- 5.1.16 The solar panels would be laid out in rows running from east to west across the Site. There would be a gap of minimum 2.5 m between each row. The panels would be mounted on a fixed, southern facing frame, to be installed using piled foundations at 1-2 m deep.
- 5.1.17 An example of a similar solar farm is shown in Figure 5-1 below.



Figure 5-1: Example of similar solar farm PV array

Inverters, transformers and switchgears

- 5.1.18 String inverters will likely be used, which would be mounted separately directly under the tables behind the racking. The transformers and switchgear would be located within containerised units.
- 5.1.19 MV Stations which house the transformers and switchgears measure 6 m x 2.5 m x 2.5 m (Lx W x H).
- 5.1.20 The inverters would convert the direct current (DC) generated by the solar PV panels into alternating current (AC). The transformers would convert the low voltage output from the inverters to high voltage, suitable for feeding into the local electricity distribution network. Switchgear is used to protect and isolate the electrical connections. Typically, there would be low voltage switchgear on one side of the transformer, and high voltage switchgear on the High Voltage (HV) side.
- 5.1.21 An example of a string inverter is shown in Figure 5-2 and an example of a transformer and switchgear is presented in Figure 5-3.



Figure 5-2: Example of string inverter

Source: Metlen Energy & Metals



Figure 5-3: Example of MV station

Source: Metlen Energy & Metals

Substation and BESS

- 5.1.22 The substation and BESS infrastructure will be located in the northeast section of the western parcel of the Site as shown in **Figure 4-1**, as far as practicable from residential and ecological receptors. The

BESS will have a capacity of 49.9 MW and will store excess energy from the solar infrastructure and release it to the national grid when the demand is for energy is high.

- 5.1.23 The BESS system will have the ability to store electricity generated from the Proposed Development and/or import energy from the grid at times of excess generation, discharging the stored energy at times of peak demand and assisting in balancing UK's electricity supplies.
- 5.1.24 The BESS storage area would measure 15.3 m x 3.1 m x 3.25 m (L x W x H) and would comprise of the BESS equipment. The BESS would consist of 14 battery units set in two separate banks. These banks of battery units will be separated by transformers and switchgear which will run up the middle.
- 5.1.25 The DNO Control Substation will be made of glass reinforced plastic (GRP) measuring 7.5 m x 6.0 m x 5.3 m (L x W x H). This would have storage containers which are 2.5m high, control buildings which are 5 m high, a communications mast 15 m high, and electrical equipment. Lighting would be installed on the substation but would only be used for the rare need for nighttime maintenance or emergency works by the DNO.
- 5.1.26 The substation compound will be accessed via internal access tracks within the Site. The substation and associated DNO equipment will be steel, positioned on steel supports with concrete foundations. Cabins/containers will be coloured dark green or a similar neutral colour that is consistent with the natural palette of the Site and its surrounding vegetation. The substation will include a control room, storage units and electrical bay.
- 5.1.27 The BESS and substation compound is proposed to have a lined detention basin storage to attenuate runoff rates and a dedicated, fully lined drainage system designed to prevent potential contamination from fire water runoff entering the ground, this is covered in greater detail below.

Cabling and grid connection

- 5.1.28 The Proposed Development will be connected to the National Grid via the existing 132 kV pylon, approximately 1.7 km north of the Site, on the line that runs from Minety Substation to Swindon Substation.
- 5.1.29 It is anticipated that the cable route will leave the Site via the main access, then follow Flaxlands Lane east, before turning north up Greatfield Road before connecting to the existing pylon- this route however is yet to be determined in detail. A separate planning application will be submitted for the cable route connection.

Access

- 5.1.30 Access to the Site will be gained via Flaxlands Lane. There will be three separate access points to the Site, allowing vehicles to access both the eastern and western parcels as well a segment of the site to the north of Flaxlands Lane. Vehicles will turn right into and left out of the Site accesses on to Flaxlands Lane. At the junction with Greatfield/Flaxlands Lane, vehicles will enter/exit along Greatfield in a north/south direction to access the wider road network due to width restrictions on Flaxlands Lane to the west. Further detail of the construction access routes is detailed within the Construction Traffic Management Plan (CTMP) that accompanies this planning application.
- 5.1.31 The proposed eastern site access will be located to the south of Flaxlands Lane via an existing field gate access, shown in drawing ACM-XX-XX-DR-CE-00-0009. The site access will be widened as required and will be in the form of a dropped kerb vehicle crossover junction.
- 5.1.32 The proposed northern site access will be located to the north of Flaxlands Lane via a new access point, shown in drawing ACM-XX-XX-DR-CE-00-00010. The hedgerow will be partially removed as required and will be in the form of a dropped kerb vehicle crossover junction.
- 5.1.33 The proposed western site access will be located to the west of Flaxlands Lane via the existing farm access, shown in drawing ACM-XX-XX-DR-CE-00-00011. The site access will be widened as required and will be in the form of a dropped kerb vehicle crossover junction. The western access is constrained by an ancient woodland buffer zone that covers the verge in the vicinity of this access to the east and west of Flaxlands Lane. Therefore, any widening required is proposed outside of this buffer zone and within land under the control and ownership of the applicant.

- 5.1.34 Seven temporary passing bays are proposed along Flaxlands Lane, with one approximately every 150 m between Greatfield and the western site access. The proposed temporary bays are appropriately sized to allow two articulated vehicles to pass each other, these passing points will be removed once construction is complete.
- 5.1.35 Four car parking spaces will be provided to accommodate staff vehicles during operation. No cycle parking will be provided due to the likely lack of uptake. The need for cycle parking will be reviewed following commencement of construction, and appropriate facilities will be introduced if need was identified.
- 5.1.36 A 15 m buffer has been applied to all PRoW within the Site.

Crime and security

- 5.1.37 Perimeter fencing will be installed along the outer edges of the Site. It is proposed that stock-proof fencing 1.8 m high (shown in Figure 5-4) will be situated inside the outermost hedges/ trees/ vegetation along existing field boundaries, ensuring that the fence is visually obscured, and that access remains available for hedge trimming and maintenance.
- 5.1.38 The substation compound will be enclosed by a palisade perimeter fencing of 2.5 m to ensure maximum safety and security of the DNO equipment in line with the relevant standards. Indicative palisade security fencing is presented in Figure 5-5. Gates will be installed at the highway access point for maintenance access. The gates would be the same design, material and colour as the other security fencing.
- 5.1.39 CCTV/thermal imaging cameras on 3 m high poles will be installed around the site boundary, focussed inwards towards the site, and allow remote monitoring. The CCTV will use thermal imaging and infrared technologies, therefore no lighting (other than that noted above for the substation for maintenance only) is required or proposed within the Site at night once operational.



Figure 5-4: Example of stock proof mesh-type fencing to enclose the perimeter of the Site

Source: <https://predatorguard.com/blogs/news/when-and-how-to-install-a-deer-fence>



Figure 5-5: Example of palisade fencing to enclose substation compound

Landscaping and biodiversity

- 5.1.40 The Proposed Development has been designed to respect the existing landscape and use the opportunity afforded by existing strong field boundaries to integrate the Proposed Development into the landscape as far as practicable. Particular consideration has been given to screening the Site from Flaxlands Lane and PRowS that intersect and run along the border of the Site. The design of the Proposed Development has taking into account trees and hedgerows and these will be retained unless removal is needed for site access.
- 5.1.41 Hedgerows around the Site would be maintained to screen the development from external views and also provide biodiversity benefit. Where there are existing gaps in the hedgerow, additional infill planting with native hedgerow species will be provided to improve screening and enhance biodiversity.
- 5.1.42 It is expected that an additional 0.9 km of hedgerow will be planted, as well as 2.2 km of hedgerow is proposed to be enhanced.
- 5.1.43 The proposed Outline Landscape Masterplan included as Figure 5-6 of this PDAS (Figure 11, Appendix B of the LVA) demonstrates the extent of the proposed planting within the Site.
- 5.1.44 The following enhancement/mitigation has been embedded into the Proposed Development's design as shown in Figure 5-7:
- Establishing flora margins/buffer strips along field boundaries, between the boundary hedge/vegetation and the proposed fence;
 - Dedicated BNG enhancement areas;
 - Sowing areas with a lowland meadow in buffer strips, and grazing mixture beneath and in between rows of solar panels (subject to accordance with a grazing regime which maintains the Site's BNG commitments. The permissible grazing regime will be specified in the biodiversity management plan);
 - Retaining trees and hedgerows (and field margins generally) as far as possible within and adjacent to the Site, to retain the sense of enclosure and avoid opening long views; and

- Providing enough space for new/replacement hedgerows and vegetation to be planted, to integrate the Site into the surrounding landscape as far as practicable.
- 5.1.45 It is anticipated that a full Landscape and Biodiversity Management Plan as well as Construction Environmental Management Plan would be secured by condition.

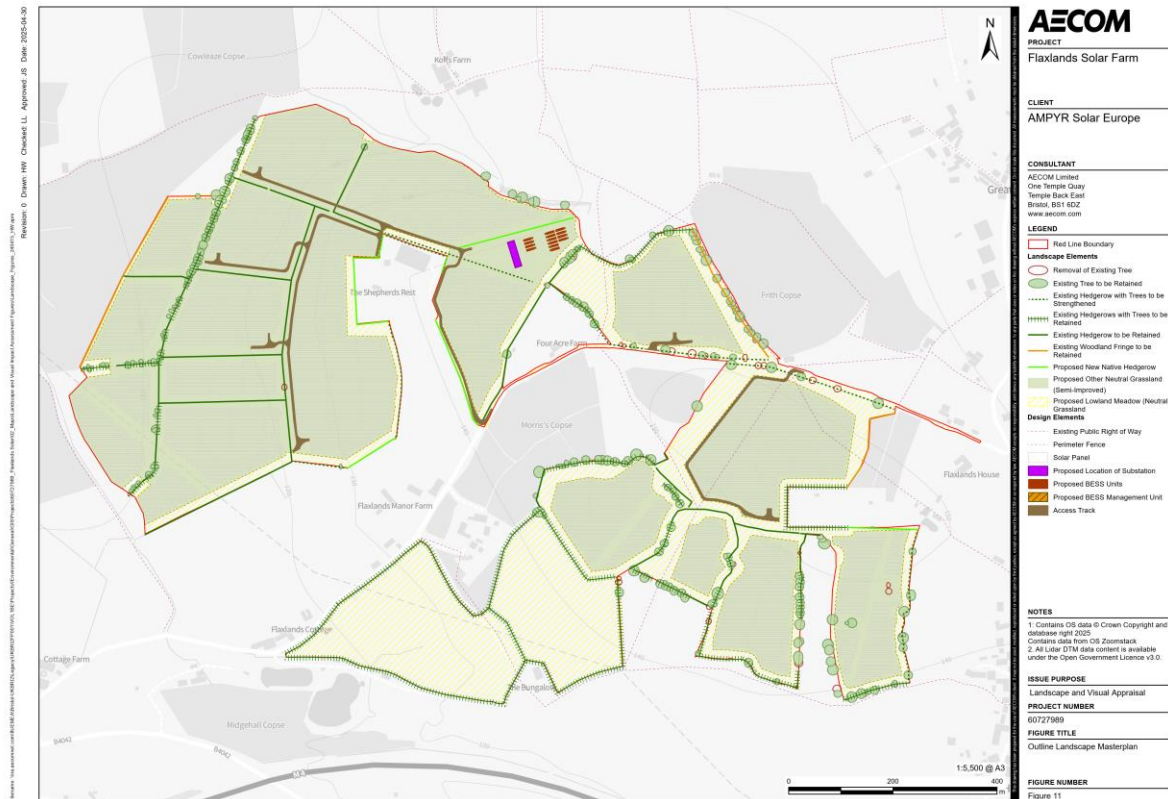


Figure 5-6: Outline Landscape Masterplan

Drainage

- 5.1.46 An attenuation basin is proposed to attenuate runoff from the BESS and Substation area to restrict post-development runoff rates to the equivalent greenfield rate.
- 5.1.47 Where Site access roads drain onto Solar PV fields, boundary swales are proposed to capture and attenuate runoff and maintain the existing runoff regime. Boundary swales will not be connected to the existing ordinary watercourses. Instead, they will convey runoff to the current outfall points identified by the existing catchments.
- 5.1.48 The Solar PV fields will be planted to ensure the introduction of Solar PV fields does not lead to channelised flow of runoff.

Construction programme

- 5.1.49 The construction phase of the Proposed Development is expected to last for approximately 6 months (excluding enabling works). Enabling works such as access widening and internal tracks would start 6-12 months prior to construction.
- 5.1.50 The construction phase will provide economic benefits such as employment opportunities for local and regional citizens.
- 5.1.51 During the construction phase, initial site setup works would take place followed by construction of the internal access route(s), ground works for drainage and foundations for substations and storage cabins, and the installation of the solar panels.

5.1.52 The construction programme is anticipated to include the following activities:

- Initial site setup works would take place followed by construction of the internal access track(s);
- Provision of construction compound with welfare facilities for workers;
- Vehicles movements along haulage routes and access tracks associated with the delivery and removal of spoil;
- Equipment delivery;
- Site and ground preparation activities;
- The installation of the solar panels, BESS and other infrastructure; and
- Habitat creation.

5.1.53 The sequence of activities would be determined by the appointed principal contractor and may be different than shown in the list above.

Hours of work

5.1.54 During the six-month construction period, it is proposed that construction working hours would be as follows:

- 08:00 – 18:00 Monday to Friday; and
- 08:00 – 13:00 Saturday.

5.1.55 No work would take place on Sundays and Bank Holidays.

5.1.56 Should work be required to be undertaken outside of these times, this would be agreed in advance and in writing with the LPA.

Construction vehicle movements and traffic management

5.1.57 During the construction period, different types of vehicles would need access to the Site, to deliver equipment and supplies. It is anticipated that these would include:

- Heavy good vehicles (HGVs) – these vehicles would be used for the delivery of construction materials and plant.
- Light Goods Vehicle (LGV) - Occasional deliveries of miscellaneous supplies.
- Staff Vehicles - A maximum of 80 construction workers are anticipated to be on-site during peak times during the construction phase. Equating to a maximum of 40 staff vehicles accessing the Site each day (80 daily two-way movements).

5.1.58 No abnormal indivisible loads (AILs) are required during the construction phase.

5.1.59 The delivery of equipment and plant to Site would be staggered throughout the construction programme. The average daily number of HGV delivery vehicles throughout the construction period would be expected to be low, with approximately 10 HGV deliveries per day (20 two-way movements, 10 inbound and 10 outbound).

5.1.60 Construction plant operating within the Site are anticipated to include those typical of a construction site, including excavators and tractors.

Temporary construction compound and parking

5.1.61 An area for temporary construction laydown and welfare facilities will be required for construction to take place. This temporary compound will be used to store delivered materials (usually in shipping containers), along with skips, parking, site cabins for workers and other ancillary construction equipment. The temporary construction compound will have a footprint of approximately 5,500 m² and is indicatively located near the access point of the western parcel of the Site, as shown in **Figure 5-1**.

5.1.62 Facilities would be provided on-site for construction workers within the temporary construction compound. This would include provision of a site office and welfare facilities (including toilets, changing and drying facilities, and a canteen). Fencing would be installed around the perimeter of the Site and temporary parking would be provided for the construction workers within the secure and temporary construction compound. No parking would be allowed on the public highway.

- 5.1.63 At the end of each day, mobile plant would be returned to a secure overnight plant storage area, where drip trays can be utilised under the various types of plant, if needed. Any temporary construction lighting would be turned off overnight and when not in use.
- 5.1.64 The temporary construction compound is intended to be implemented using Schedule 2, Part 4, Class A (temporary buildings and structures) of the Town and Country Planning (General Permitted Development) (England) Order 2015.

Operation

- 5.1.65 The operational life of the Proposed Development is expected to be up to 40 years.
- 5.1.66 During operation, the Site will be remotely operated and would only be visited for the purposes of maintenance, inspections and habitat monitoring and management.
- 5.1.67 Once operational, occasional maintenance of the solar panels and other infrastructure would be required. It is estimated that maintenance checks would occur once per month, with cleaning of the panels and equipment occurring occasionally where necessary. Vehicle movements to the proposed solar site associated with maintenance activities will involve a technician/ supervisor attending the development using a car or small van (i.e. no HGVs).
- 5.1.68 Most of the Site would be planted with a combination of grassland, which would enable grazing (sheep) with appropriate stocking densities (subject to accordance with a grazing regime which maintains the Site's BNG commitments. The permissible grazing regime will be specified in the biodiversity management plan). These would be timing controlled to establish higher value grassland habitats. This would include land between and underneath panels.

Decommissioning and site restoration

- 5.1.69 At the end of the Proposed Developments' lifespan, the solar PV panels and other infrastructure would be removed, and the Site restored. Tree and hedge planting will not be removed by the Applicant or operator. The decommissioning activities are anticipated to be similar in nature to those during the construction phase. Decommissioning is expected to take approximately 6 months.
- 5.1.70 The restoration process is intended to ensure that the land is restored to the same or better quality as it was prior to construction. The Applicant would be willing to agree to a condition requiring the submission of a restoration and decommissioning plan to ensure the land is returned appropriately to its condition prior to the Proposed Development.

6. Planning policy context

6.1 Overview

- 6.1.1 This Section of the PDAS sets out the national and local planning policy and guidance that is relevant to this application. Analysis of the Proposed Development's compliance with these policies is discussed in Section 7 of this report.
- 6.1.2 The Planning and Compulsory Purchase Act 2004 (Section 38(6))¹² states that planning decisions shall be taken in accordance with the Development Plan unless other material consideration indicate otherwise. The Site falls within the administrative area of Wiltshire Council. Therefore, the relevant 'Development Plan' for the Site comprises:
- Wiltshire Core Strategy (WCS) (Adopted 2015);
 - Saved policies – Appendix D WCS; and
- 6.1.3 Other important material considerations include:
- The Emerging Wiltshire Local Plan (WLP)
 - The National Planning Policy Framework (NPPF)¹³;
 - National Policy Statements (NPS (EN-1 and EN-3)¹⁴;
 - National Planning Practice Guidance (PPG)¹⁵;
 - National Infrastructure Commission Design Guide¹⁶;
 - The National Design Guide¹⁷;
 - The Energy White Paper (2020)¹⁸;
 - Clean Power 2030 Action Plan (2024)¹⁹; and
 - The Environment Act (2021)

6.2 Wiltshire Core Strategy

- 6.2.1 The WCS was adopted in 2015 and sets out a framework to guide sustainable development within the administrative area up to 2026. The WCS aims to strengthen communities, grow the local economy and enhance and protect the natural environment. The underlying principles of the strategy seek to manage future development to ensure that communities have an appropriate balance of jobs, services and facilities and homes.
- 6.2.2 Whilst the Site is not designated or an allocated site for development within the WCS, the Proposed Development will need to demonstrate how it accords with the development plan and local policies.
- **Core Policy 42** – Standalone renewable energy installations;
 - **Core Policy 50** – Biodiversity and geodiversity;

¹² Planning and Compulsory Purchase Act 2004 – legislation.gov.uk, 2024, <https://www.legislation.gov.uk/ukpga/2004/5/contents>

¹³ National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2024, <https://www.gov.uk/guidance/national-planning-policy-framework>

¹⁴ National Policy Statement for renewable energy infrastructure (EN-3), Department for Energy Security and Net Zero, 2024, <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3>

¹⁵ Planning Practice Guidance, Ministry of Housing, Communities and Local Government, 2024, <https://www.gov.uk/government/collections/planning-practice-guidance>

¹⁶ Design Principles for National Infrastructure, National Infrastructure Commission, 2024, <https://nic.org.uk/studies-reports/design-principles-for-national-infrastructure/>

¹⁷ National design guide, Ministry of Housing, Communities and Local Government, 2021, <https://www.gov.uk/government/publications/national-design-guide>

¹⁸ Energy white paper: Powering our net zero future, Department for Energy Security and Net Zero, 2020, <https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>

¹⁹ Clean Power 2030 Action Plan: A new era of clean electricity, UK Government, <https://assets.publishing.service.gov.uk/media/675bfaa4c8fb84c3b2bcf986/clean-power-2030-action-plan.pdf>

- **Core Policy 51** – Landscape;
- **Core Policy 52** – Green Infrastructure;
- **Core Policy 55** – Air Quality;
- **Core Policy 56** – Contaminated Land;
- **Core Policy 57** – Ensuring high quality design and place shaping;
- **Core Policy 58** – Historic Environment;
- **Core Policy 62** – Development impacts on the transport network; and
- **Core Policy 67** – Flood risk.

6.3 Material considerations

Emerging Wiltshire Local Plan

- 6.3.1 In November 2024 Wiltshire Council submitted the Wiltshire Local Plan to the Secretary of State for Housing Communities and Local Government for independent examination. The plan has been through the Regulation 19 consultation which took place between 27 September to 22 November 2023. Representations on the Wiltshire Local Plan, along with a schedule of proposed changes have been submitted alongside the prescribed submission documents.
- 6.3.2 Given the advanced stage the Wiltshire Local Plan has reached in the plan making process, the document will be afforded significant weight in decision making in relation to the Proposed Development. Relevant policies found in the emerging local plan are as follows:
- **Policy 4:** Addressing Climate Change;
 - **Policy 71:** Transport and New Development;
 - **Policy 83:** Health and wellbeing;
 - **Policy 85:** Sustainable construction and low carbon energy;
 - **Policy 86:** Renewable energy;
 - **Policy 88:** Biodiversity and Geodiversity;
 - **Policy 89:** Biodiversity net gain;
 - **Policy 90:** Woodland, hedgerows and trees;
 - **Policy 91:** Conserving and Enhancing Wiltshire's Landscapes;
 - **Policy 93:** Green and Blue Infrastructure;
 - **Policy 95:** Flood Risk;
 - **Policy 98:** Ensuring High Quality Design and Place Shaping; and
 - **Policy 99:** Ensuring the Conservation and Enhancement of the Historic Environment

National Planning Policy Framework (NPPF)

- 6.3.3 The National Planning Policy Framework (NPPF) was last updated on 12 December 2024 and sets out the Government's overarching planning policies for England. The NPPF must be taken into account in preparing the Development Plan and is a material consideration in planning decisions.
- 6.3.4 Paragraph 5 of the NPPF states that "*National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications*".

- 6.3.5 The following sections of the NPPF are considered relevant to the Proposed Development:
- Paragraph 5 *“National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications”*;
 - Section 2: Achieving sustainable development;
 - Section 9: Promoting sustainable transport;
 - Section 11: Making effective use of land;
 - Section 12: Achieving well-design places;
 - Section 14: Meeting the challenge of climate change, flooding and coastal change;
 - Paragraph 161. The planning system should support the transition to net zero by 2050 and take full account of all climate impacts;
 - Section 15: Conserving and enhancing the natural environment; and
 - Section 16: Conserving and enhancing the historic environment.

National Policy Statements

- 6.3.6 Energy National Policy Statements provide planning guidance for developers of Nationally Significant Infrastructure Projects (NSIP).
- 6.3.7 Whilst this development does not meet the threshold for an NSIP, paragraph 5 of the NPPF sets out that National Policy Statements (NPS) may be a material planning consideration for planning applications. Paragraph 5 states:
- “The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.”*
- 6.3.8 It should also be noted that as the Energy NPS’ are a material consideration, that the designation of NPS EN-1 and EN-3 in January 2024 confirms the presumption for granting renewable energy projects due to the critical national priority (CPN) to deliver low carbon and renewable electricity generation to meet the legally binding targets of delivering electricity from renewable sources by 2035. The Energy NPS’ establish the urgent and critical need for the renewable energy schemes, as it states in NPS EN-1 [Para 3.3.20]:
- “a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar”*
- 6.3.9 Solar development falls under the definition of CNP infrastructure under paragraph 4.2.5 of NPS EN-1 as it is classed as onshore electricity generation that does not involve fossil fuel combustion. NPS EN-1 paragraph 3.3.63, concludes that the *“Government strongly supports the delivery of CNP Infrastructure, and it should be progressed as quickly as possible”*. For projects which qualify as CNP, such as the Scheme, paragraph 4.1.7 of NPS EN-1 sets out that *“it is likely that the need case will outweigh the residual effects in all but the most exceptional cases”*.
- 6.3.10 NPS EN-1 section 5.10 sets out the importance of landscape and visual effects of energy projects.
- 6.3.11 Paragraph 5.10.5 of NPS EN-1 states virtually all major energy projects will have adverse effects on landscape, however there is the potential to have beneficial effects to the character through mitigation. Similarly, 5.10.13 of NPS EN-1 states that *“All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.”*

- 6.3.12 NPS EN-3 sets out the importance of a grid connection for solar development in the site selection process:

“The connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal.”

“To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce overall costs applicants may choose a site based on nearby available grid export capacity.” [2, Paras 3.10.37 & 38].

- 6.3.13 NPS EN-3 also lists irradiance, site topography and land area as key inputs to site selection [2, paras 3.10.8 & 10 & 11].
- 6.3.14 The NPS also set out policy tests for relevant environmental constraints in association with large scale solar development such as paragraph 2.10.98 of NPS EN-3, as it makes it clear that applicants *“will be expected to direct considerable effort towards minimising the landscape and visual impact of solar PV arrays”*. NPS EN-3 (Ref. 3) paragraph 2.10.131 also states that applicants should consider the potential to mitigate landscape and visual impacts through measures such as screening with native hedges, trees and woodland. Paragraph 2.10.132 requires applicants to consider utilising existing features such as hedges or landscaping to assist in site security and screen security fencing.
- 6.3.15 Further to this, paragraph 5.11.12 of NPS EN-1 states that *“Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5)”*.
- 6.3.16 NPS EN-3 also sets policy guidance in relation to PRoW in paragraph 2.10.41 as it indicates that PRoW may need to be temporarily closed or diverted to facilitate development and at paragraph 2.10.44 setting out the expectation that *“applicants should consider and maximise opportunities to facilitate enhancements to the public rights of way and the inclusion, through site layout and design of access, of new opportunities for the public to access and cross proposed solar development sites”*.

National Planning Practice Guidance

- 6.3.17 The National Planning Practice Guidance (PPG) provides advice on the interpretation of, and supports, the NPPF. As guidance, not policy, PPG is subordinate to the NPPF as confirmed by the Planning and Compulsory Purchase Act (2004). The Planning Practice Guidance contains particular guidance in relation to climate change, and renewable and low carbon energy.
- 6.3.18 The NPPG outlines the importance of planning for renewable and low carbon energy:
- “Increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.”*
- 6.3.19 The NPPG also specifically addresses guidance for largescale solar development as it states:
- “The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively.*
- Particular factors a local planning authority will need to consider include:*
- encouraging the effective use of land by focussing large scale solar farms on previously developed and non agricultural land, provided that it is not of high environmental value;*
- where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;*

that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;

the proposal's visual impact, the effect on landscape of glint and glare (see guidance on landscape assessment) and on neighbouring uses and aircraft safety;

the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;

the need for, and impact of, security measures such as lights and fencing;

great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting;

the potential to mitigate landscape and visual impacts through, for example, screening with native hedges;

the energy generating potential, which can vary for a number of reasons including, latitude and aspect."

National Infrastructure Commission Design Guide

- 6.3.20 The Commission's Design Group has identified four principles to guide the planning and delivery of major infrastructure projects: climate, people, places and value. For climate, the Guide notes that the design of our infrastructure must help set the trajectory for the UK to achieve net zero greenhouse gas emissions by 2050 or sooner. This means opportunities must be sought during design and construction to enable the decarbonisation of our society and mitigate and offset residual emissions.

Climate Change Act 2008

- 6.3.21 In 2008, the UK government set to reduce greenhouse gas emissions by 80% of 1990 levels by 2050. However, since then, as of June 2019, a secondary legislation was passed where the government increased this target to bring greenhouse gas emissions to net zero by 2050.
- 6.3.22 This is further supported at EU level, in which the European Commission are proposing to turn the European Green Deal into law, which would see the EU committed to being climate neutral by 2050 in their strive to be the first climate-neutral continent. While this would not directly apply to UK policy, it is important context demonstrating the importance being put on renewables at a global scale.

The Energy White Paper (2020)

- 6.3.23 The Energy White Paper sets out the Government's policies and commitments to put the UK on course to net zero by 2050. The Paper contains the Prime Minister's ten-point plan for a green industrial revolution. Whilst the Paper does not list solar energy as one of the ten-points, solar energy can contribute significantly to helping the Government meet climate targets.
- 6.3.24 The Energy White Paper sets out Government's aim to increase the rate of installation of home electric heat pumps from 30,000 per year to 600,000 per year by 2028.

The Environment Act (2021)

- 6.3.25 The Environment Act is described as "An Act to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes."

British Energy Security Strategy (2022)

- 6.3.26 The British Energy Security Strategy was published 07 April 2022 and sets out how the UK will expand its domestic energy supply alongside commitments to completely remove Russian oil and coal imports by the end of 2022. The Strategy wants to accelerate the transition from fossil fuels through the roll out of new renewables. In terms of solar, the Strategy states that solar will be supported where it is co-

located with other functions, for example, agriculture, on-shore wind generation or energy storage, to maximise the efficiency of land use.

- 6.3.27 The Strategy aims to ensure that by 2050 all UK buildings will have low-carbon heating, and reconfirms the Government's intent to phase out the sale of new and replacement gas boilers by 2035 – an intent which was replicated in Powering Up Britain (which confirmed as 2035), the date beyond which certain gas boiler replacements would no longer be permitted.
- 6.3.28 The online British Energy Security Strategy includes an explicit ambition for up to 70GW of British solar on roofs and on the ground by 2035. For ground-mounted solar, the strategy indicates a future consultation on planning rules to strengthen policy in favour of development on non-protected land, while ensuring communities continue to have a say and environmental protections remain in place.

Powering Up Britain (2023)

- 6.3.29 In March 2023, the UK Government published the policy paper 'Powering Up Britain' (PUB). PUB is an over-arching delivery plan which brings together the Energy Security Plan and Net Zero Growth Plan as the blueprint for the future of energy in the UK. PUB states that solar has huge potential to help the UK decarbonise the power sector, with ambitions for a fivefold increase in solar by 2035, up to 70 GW, enough to power around 20 million homes. The UK chose to largely decarbonise its power sector by adopting low carbon sources quickly, bringing forward a need for low carbon developments to meet the challenges of both energy security and climate change.
- 6.3.30 PUB states that the Government seeks large scale ground-mount solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land.

Clean Power 2030 Action Plan (December 2024)

- 6.3.31 The Clean Power 2030 Action Plan sets out a pathway of how the government will support and accelerate the delivery of new infrastructure, in order to achieve a clean power system. The action plan sets out the three biggest challenges the UK faces in achieving the clean energy target, which are as followed:
- Maintain a secure and affordable energy supply in an increasingly unstable world.
 - To create new industries and investments around the country.
 - To protect the environment we live in from the most damaging effects of climate change.

7. Planning appraisal

7.1 Overview

7.1.1 Following a review of the Development Plan and other relevant local and national material planning policy considerations, along with the need and impacts of the Proposed Development, the following themes have been identified:

- Principle of development;
- Design;
- Land Use;
- Landscape and visual impact;
- Natural environment ;
- Heritage;
- Flood risk and drainage;
- Transport and Access;
- Amenity; and
- Land contamination.

7.1.2 The following sections will set out an assessment of the Proposed Development against the relevant national and local policy set out in Section 6 of this document, in relation to the identified themes.

7.2 Principle of development

7.2.1 There is a Critical National Priority (CNP) to deliver energy infrastructure, which includes solar farms due to the critical and urgent global need to provide sufficient, reliable and affordable sources of electricity, whilst meeting national climate change and carbon reduction targets and budgets as set out in paragraphs 3.2.6 and 3.2.7 of NPS EN-1. Further to this, Paragraph 168 of the NPPF (2024) states that “*significant weight should be given to the benefits associated with renewable and low carbon energy generation and proposal’s contribution to a net zero future*”.

7.2.2 The Government expects large-scale solar generation to make an important contribution to achieving its decarbonisation requirements and climate change targets, as well as its objectives for the UK’s power system, which includes ensuring the supply of energy remains secure, reliable and affordable. NPS EN-1 (which can be a material consideration as per Paragraph 5 of the NPPF) sets out at paragraph 3.3.20 that solar, along with wind, is expected to be the main form of electricity generation in the Government’s targeted 2050 Net Zero energy system that is secure, reliable and affordable.

7.2.3 Details surrounding the need for the Proposed Development are set out in Section 1 of this PDAS.

7.2.4 The NPPF outlines support for the transition to low carbon energy generation through Paragraph 161 which states:

“The planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks 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; and support renewable and low carbon energy and associated infrastructure.

7.2.5 From an environmental perspective, the Proposed Development aligns with Paragraph 8 of the NPPF; protecting and enhancing the natural and historic environment; including improving biodiversity (with significant net gains), minimising pollution, and mitigating and adapting to climate change, including moving to a low carbon economy. Details of which are provided in other topic sections below.

7.2.6 At a local level, Core Policy 42 (Standalone renewable energy installations) of the WCS and draft Policy 86 (Renewable energy) of the emerging WLP, support proposals for renewable energy projects,

to help Wiltshire transition to a low-carbon future. Both policies support such schemes, subject to the proposals meeting satisfactory resolutions to site specific constraints.

- 7.2.7 Draft Policy 86 of the emerging WLP, supports proposals for renewable energy schemes that address climate change and help Wiltshire to transition to a low-carbon future.
- 7.2.8 The Proposed Development provides a renewable energy supply which would reduce carbon emissions, diversify the UK's energy source supply and help to improve energy security and resilience in the UK. Therefore, the principle of the Proposed Development is supported and in accordance with Core Policy 42 of the WCS and the goals of the PUB (2023) plan.
- 7.2.9 The Proposed Development responds to the Government's support for solar energy and will make a valuable contribution towards meeting the legally binding targets to meet net zero through the implementation of a clean, renewable and sustainable form of generating electricity. The Proposed Development will also contribute towards meeting the objectives for the UK's power system in terms of ensuring that energy generation remains secure, reliable and affordable. The principle of supporting renewable energy, such as solar power, is strongly supported by both local and national planning policy.
- 7.2.10 The Proposed Development will be connected to the National Grid using the existing 132 kV power line located 1.7 km north of the Site, running from Minety Substation to Swindon Substation. In doing so, the Proposed Development will contribute towards reducing and offsetting CO₂ emissions, providing mitigation from climate change. The Proposed Development is expected to produce enough renewable energy to meet the annual electricity needs of approximately 21,000 homes.
- 7.2.11 Wiltshire Core Strategy 2015 Core Policy 42: Standalone Renewable Energy Installations and emerging Policy 86 Renewable Energy Installations, encourages and supports standalone renewable energy installations, of all types.
- 7.2.12 Consequently, there is a presumption in place to approve applications for renewable energy given the proposals demonstrate how impacts have been assessed. It is clear the principle of development accords with local and national planning policy and substantial positive weight can be placed on the benefits associated with renewable electricity generation the associated reduction in greenhouse gas emissions arising from the Proposed Development and its contribution towards providing sufficient, reliable and affordable electricity to the National Grid.
- 7.2.13 The assessments of potential impacts are summarised in the remainder of this section.

7.3 Design

- 7.3.1 As described in detail in Section 5 of this PDAS, the design of the Proposed Development has been part of an iterative process and sought to avoid environmentally sensitive areas, with mitigation included to reduce other impacts where possible.

- 7.3.2 In considering the design of development proposals, Paragraph 135 of the NPPF states that effort must be made to ensure development proposals:

“a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

(b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

(c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)”

- 7.3.3 Paragraph 137 of the NPPF further states:

“Design quality should be considered throughout the evolution and assessment of individual proposals. Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important for clarifying expectations and reconciling local and commercial interests. Applicants should, where applicable, provide sufficient information to demonstrate how their proposals will meet the

design expectations set out in local and national policy, and should work closely with those affected by their proposals to evolve designs that take account of the views of the community. Applications that can demonstrate early, proactive and effective engagement with the community should be looked on more favourably than those that cannot.”

- 7.3.4 As per Paragraph 137 of the NPPF, the Applicant has undertaken discussions between the local community (evidenced through the Statement of Community Involvement) and the local planning authority (evidence through pre-application reference ENQ/2024/01008) to ensure that the layout and design of the Proposed Development is acceptable. Communication with relevant stakeholders has enabled the Applicant to gain a greater understanding of the character of the Site and the surrounding area. Feedback from the community consultation and pre-application has been incorporated in the design of the Proposed Development where possible.
- 7.3.5 The Proposed Development as a solar farm is to a large extent inherently sympathetic to the area and surrounding environment, as it is generally low-lying (with panels at maximum 3 m height) compared to most other forms of development (e.g. housing, commercial, industrial or combustion-related energy), does not excavate into or modify the land's topography (e.g. for minerals or landfill), follows the land's topography in terms of existing undulations etc., and as a minimum maintains field boundary treatments such as existing hedges and trees. Solar farms can be described as a relatively unobtrusive form of development in a very many environments, and certainly at this Site.
- 7.3.6 The Proposed Development has been designed carefully with consideration to national and local planning policy and guidance. Core Policy 57 (Ensuring high quality design and place shaping) of the WCS sets out key design principles that all new development should use as guidance, which are summarised below:
- Enhance local distinctiveness;
 - Retention and enhancement of natural landscaping and natural features;
 - Sympathetic to the historic environment;
 - Sustainable construction;
 - Make effective use of land;
 - Protect the public realm, to help create safe and accessible places; and
 - Major developments should be accompanied by a design statement.
- 7.3.7 The design of the Proposed Development has taken consideration of the design principles set out in Core Policy 57 of the WCS, and has been designed with the following key elements:
- Minimising the environmental impact by preserving as far as possible trees and hedgerows, maintaining suitable buffers from sensitive ecological features;
 - Seeking opportunities for the management and enhancement of biodiversity, including dedicated biodiversity net gain zones;
 - Providing a functional design that makes the best use of location and provides for efficient generation of electricity, namely by orientating the panels south to benefit from maximum solar irradiation;
 - Assimilating the Proposed Development into the local landscape as far as possible, including providing additional screening along the Site boundaries;
 - Careful design to locate the BESS and substation compound in areas of non-BMV land and in a location where there is minimal noise and vibration impacts on sensitive receptors;
 - Provide 15 m buffers around PRoW; and
 - Ensuring safe and efficient access to the public highway.
- 7.3.8 The above design principles are in accordance with the design considerations set out in the WCS, NPS EN-3 and the NPPF. These design principles ensure the solar PV panels and associated infrastructure is positioned to maximise solar irradiation and the production of renewable energy whilst maintaining and enhancing the soft landscaping to protect the landscape and visual amenity, ecology and biodiversity on the Site. This has resulted in a proposal that is largely screened from public view.

- 7.3.9 As such, the Proposed Development has demonstrated good design and consideration of the community and stakeholder in the design process in accordance with Core Policy 57 of the WCS and paragraphs 135 and 137 of the NPPF.

7.4 Agricultural Land

- 7.4.1 At both a national and local level, the loss of BMV agricultural land should be minimised. Part (b) of paragraph 187 of the NPPF requires decisions on planning applications to recognise “*the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*”. Footnote 65 to paragraph 188 of the NPPF further states that “*Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality*”.
- 7.4.2 The NPPG also provides guidance on the use of agricultural land for large-scale solar development as it states that:
- “Particular factors a local planning authority will need to consider include:*
- where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;”*
- 7.4.3 At a local level, Core Policy 42 (Standalone renewable energy installations), outlines that renewable energy scheme proposals will need to demonstrate that BMV agricultural land has been considered and any impacts have been satisfactorily assessed. This is echoed in the emerging WLP in draft Policy 86 (Renewable energy).
- 7.4.4 As outlined in Section 4 of this PDAS and as per EN-3 Paragraphs 3.10.37 & 38, the identification of a point of connection (PoC) in the site selection process is the most important consideration for the development of solar array. Once a viable point of connection has been identified and the availability of previously developed sites has been considered, potential development sites of low-quality agricultural land were sought, within the limitations of all available desk-based ALC data.
- 7.4.5 The proposed Site was, at the desk-based level, little different to any of its alternatives, all of which would have included at least some undifferentiated Grade 3 land at the desk-based level. Again, Grade 3 is unknown if containing any BMV land (sub-grade 3a). The proposed Site was also not the worst alternative, as it included some (c.40%) lower-grade land, being at Grade 4. It was therefore selected as the preferred Site in part because of its low potential to be BMV land, and certainly not majority BMV land, but all subject to site-level, detailed ALC survey and assessment.
- 7.4.6 An ALC report was completed by Roberts Environmental in October 2024, considering an initial Site red line boundary covering an area of 85.2 ha. Subsequently, AECOM produced a Soils and Agricultural Land Report in December 2024, which reanalysed the ALC data following minor amendments to the Site red line boundary, including a reduction overall size (to 84.8 ha).
- 7.4.7 Since the completion of both reports, the Proposed Development design has undergone further changes, including amendments to the Site red line boundary, driven by technical assessments and landowner negotiations, and an overall increase in area for BNG purposes compared to the previous design iterations. Despite these design changes, the findings of the original reports remain valid as the expansion of the Site red line boundary is attributed to additional BNG areas rather than any increase in solar infrastructure, which comprises the long-term temporary development of land.
- 7.4.8 The updated, final Site red line boundary covers an area of 87.09 ha. As stated in Section 2, 10.4 ha of the Site is confirmed sub-grade 3a land (BMV land), which constitutes 11.9% of the Site, and the rest of the surveyed area is sub-grade 3b, so not BMV land. (Approximately 13.3 ha was not surveyed, but is being used for habitat creation (BNG) rather than development.)
- 7.4.9 In conclusion, the Site comprises predominantly ALC Grade 3b – not BMV land.
- 7.4.10 As noted in the Soils and Agricultural Land Report (AECOM, 2024), improvements to soil function are anticipated while in use as green infrastructure, including seeding with species-rich grassland and

other measures to meet commitments to BNG. Loss of agricultural land is typically considered an adverse effect and the losses of both BMV and non-BMV land from agriculture to green infrastructure represents a minor adverse effect, however this is balanced by a minor beneficial effect to soil function and carbon sequestration, that develops from the absence of cultivation.

- 7.4.11 The site design and layout has located equipment and machinery that could have a greater impact on the agricultural land and soils, away from the small portions of BMV land. Further to this, the dedicated BNG enhancement area for planting, species-rich grassland and other green infrastructure features, to improve the soil function and biodiversity of the Site, will be located on the BMV land, so as to protect BMV land in accordance with the NPPF and Core Policy 42 of the WCS.
- 7.4.12 The PV solar array is a long-term temporary development of land that will be available to agriculture upon decommissioning the Proposed Development, after an operational lifetime of up to 40 years. Improvements to soil health will develop over the duration of the Proposed Development because of the absence of soil cultivation, and in the areas of planted meadow grassland, studies show such grassland enriches soil nutrients over time.
- 7.4.13 The Applicant has demonstrated through its site selection process that it is necessary for the Proposed Development to be located on agricultural land. The ALC Report confirmed that the Site is predominately non-BMV agricultural land. Therefore, the Proposed Development accords with Core Policy 42 of the WCS and paragraphs 187 and 188 of the NPPF, where poorer quality land has been used as a preference to that of higher quality.

7.5 Landscape and Visual

- 7.5.1 Paragraph 189 of the NPPF states that planning policies and decisions should contribute to and enhance the local environment through protecting and enhancing valued landscapes. Paragraph 182 of the NPPF states:

“Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues.”

- 7.5.2 Core Policy 42: (Standalone renewable energy installations) identifies how standalone renewable energy installations, of all types, will be encouraged and supported. The policy states that *“The development of most standalone renewable energy installations within Wiltshire will require careful consideration due to their potential visual and landscape impacts, especially in designated or sensitive landscapes, including AONBs and 239 the Stonehenge and Avebury World Heritage Site, and their setting”*.
- 7.5.3 Core Policy 51 (Landscape) of the WCS states that *“Development should protect, conserve and where possible enhance landscape character and must not have a harmful impact upon landscape character, while any negative impacts must be mitigated as far as possible through sensitive design and landscape measures.”*
- 7.5.4 Core Policy 51 goes further to list the particular aspects, that proposals should demonstrate that landscape will be conserved and where possible enhanced, through sensitive design and mitigation measures:

- i. The locally distinctive pattern and species composition of natural features such as trees, hedgerows, woodland, field boundaries, watercourses and waterbodies.*
- ii. The locally distinctive character of settlements and their landscape settings.*
- iii. The separate identity of settlements and the transition between man-made and natural landscapes at the urban fringe.*
- iv. Visually sensitive skylines, soils, geological and topographical features.*
- v. Landscape features of cultural, historic and heritage value.*
- vi. Important views and visual amenity.*
- vii. Tranquillity and the need to protect against intrusion from light pollution, noise, and motion.*
- viii. Landscape functions including places to live, work, relax and recreate.*
- ix. Special qualities of Areas of Outstanding Natural Beauty (AONBs) and the New Forest National Park, where great weight will be afforded to conserving and enhancing landscapes and scenic beauty.”*

- 7.5.5 An LVA has been prepared in support of this planning application and presents the findings of an appraisal of the likely effects of the Proposed Development with respect to landscape character and visual amenity, this considers the effects of the development at both construction and operational phases.

Landscape Appraisal

- 7.5.6 It has been established that the Proposed Development has the potential to affect the setting of the North Wessex Downs National landscape, therefore, a review of the perceptual characteristics of LCA within the extended cumulative effect Study Area has been undertaken using the North Wessex Downs Area of Outstanding Natural Beauty Integrated Landscape Character Assessment in the LVA. The Site also intersects with several local Landscape Character Areas (LCAs), including:
- LCA 3 – Swindon Fringe
 - LCA 4 – Braydon Wooded Plateau
 - LCA 5 – Minety and Malmesbury Rolling Lowland
 - LCA 11 – Avon Valley Lowland
 - LCA 14 – Hilmarton Rolling Lowland
- 7.5.7 As the proposed Site has the potential to affect the setting of the North Wessex Downs National landscape, a review of the characteristics of LCA within the extended cumulative effect Study Area (covering 3 km) has been undertaken using the North Wessex Downs Area of Outstanding Natural Beauty Integrated Landscape Character Assessment.
- 7.5.8 The Proposed Development would introduce a change in land use from farmland to a solar energy facility, with solar panels forming a new feature within the landscape locally. While this results in a noticeable change in the landscape—particularly a reduction in perceived openness—the existing field pattern would be retained. Additionally, the change in character would be visible from only a limited number of viewpoints within the 3km Study Area, limiting its overall impact on the landscape character.
- 7.5.9 The magnitude of landscape change as a result of the development has been appraised as low across these LCAs. At Year 1, the effects are considered temporary and reversible, resulting primarily from construction activities and the presence of Proposed Development. By Year 15, landscape mitigation including structural planting will mature, further reducing potential effects. The long-term landscape effects are concluded to range from **Minor Adverse** to **No Change**, depending on location and sensitivity.

Visual Appraisal

- 7.5.10 10 representative viewpoints were assessed, ranging from local residential properties and PRoW to more elevated distant views from the North Wessex Downs National Landscape. The most significant visual effects are expected for receptors in close proximity to the Site, including users of Flaxlands Lane and adjacent PRoWs. During construction, visual effects are assessed as **Substantial Adverse** for the most sensitive receptors, reducing to **Moderate** or **Minor Adverse** once the development is operational, and declining further as mitigation planting matures.
- 7.5.11 From elevated viewpoints, including those from the scarp ridgeline of the North Wessex Downs National Landscape approximately 8 km away, the development would be perceptible only as a minor change in field coloration, largely screened by existing vegetation. Consequently, no significant impact on the setting or tranquillity of the National Landscape is anticipated.

Cumulative Effects

- 7.5.12 A cumulative appraisal was undertaken considering existing and proposed solar and energy storage developments within a 3 km–8 km radius. On a local level, cumulative visual and landscape effects are considered **Low** due to topographic screening and vegetation cover, resulting in **Minor Adverse** effects at most.

Landscape Mitigation

- 7.5.13 The primary aims of the landscape mitigation are to reduce the visual prominence of the Proposed Development and assimilate it into the landscape context, while providing an enhancement to the provision for biodiversity. Key measures include:
- Panel Setback: Solar panels and infrastructure have been removed from the eastern boundary near Hook, creating a 10 m buffer to reduce visibility for local residents and public rights of way users.
 - Infrastructure Siting: The BESS compound, substation, and ancillary buildings have been positioned to minimise their visibility in the wider landscape.
 - Vegetation Retention and Enhancement:
 - Existing trees and hedgerows are retained wherever possible.
 - Gaps in hedgerows are to be filled, and diversity improved through native planting.
 - Along Flaxlands Lane, hedgerows will be managed to grow taller and screen views.
 - Grassland and Biodiversity:
 - Within fenced PV areas: creation of semi-improved neutral grassland to improve species richness.
 - Outside fenced areas: lowland meadow habitat of moderate to high diversity will be established to support pollinators and birds.
 - Buffer Zones and Offsets: The layout respects minimum stand-offs from sensitive features, including 30m from ancient woodland, 15 m from woodland/tree groups, and 10m from hedgerows, watercourses, and ditches.
 - Access and Construction Routes: Existing farm tracks and field entrances will be used where feasible to avoid unnecessary vegetation loss.
- 7.5.14 The overall strategy is shown in the Outline Landscape Masterplan (Figure 11 in Appendix B of the LVA) and ensures that the Proposed Development incorporates mitigation measures to reduce landscape and visual effects as far as possible in accordance with Core Policy 51.

Conclusion

- 7.5.15 Overall, the Proposed Development will introduce new energy infrastructure into the rural landscape, that will result in a change of landscape character. There will be no significant adverse effects in terms of setting or visual impact to the North Wessex Downs National Landscape in accordance with paragraphs 182 and 189 of the NPPF and Core Policy 42 of the WCS. However, there is expected to be some adverse landscape impacts in terms of setting and visual impacts on local sensitive receptors such as residential dwellings and PRoW. With careful design and implementation of mitigation measures such as extensive planting and buffer zones and offsets, the Proposed Development actively aims to protect the local landscape and minimise visual effects. The assessment concludes that the residual impacts are limited in scale, reversible and appropriately mitigated.

7.6 Heritage

- 7.6.1 Heritage assets are a valuable component of Wiltshire's landscape and built environment; therefore, the Proposed Development has been designed to ensure sensitivity to nearby heritage assets and that no significant adverse impacts result from construction, operation or decommissioning of the Proposed Development.
- 7.6.2 To support the protection of heritage assets, paragraph 201 of the NPPF states:
- “Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise.”*
- 7.6.3 Further to this, paragraph 216 of the NPPF relates to the impact of a proposed development on a non-designated site, as it states:

“The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”

- 7.6.4 At a local level, the WCS ensures that designated and non-designated heritage assets and their settings are conserved and enhanced, as outlined in Core Policy 58 (Ensuring the conservation of the historic environment):

“Development should protect, conserve and where possible enhance the historic environment.”

- 7.6.5 A HDBA has been submitted in support of this application. The HDBA has been undertaken on best practice and takes account of the relevant legislation, policy framework and guidance in relation to heritage assets. This includes the following:

- The Ancient Monuments and Archaeological Areas Act 1979²⁰(as amended);
- The Planning (Listed Buildings and Conservation Areas) Act 1990²¹;
- Historic England Guidance – GPA3 (2017); and
- Historic England Guidance - Advice Note 12 (2019).

- 7.6.6 The HDBA identified no World Heritage Sites, Registered Battlefields, Scheduled Monuments or Conservation Areas within the Site or the 1km study area (as identified within the HDBA).

- 7.6.7 There are nine designated heritage assets comprising eight listed buildings and one registered park and garden present within the 1 km study area. The impact assessment has identified that no designated assets will be physically impacted, nor will they experience a change to the setting due to topography and intervening vegetation and buildings, and therefore, it is established that there will be no harm on these designated assets as a result of the Proposed Development. As such, the Proposed Development conserves the overall historic environment surrounding the Site in line with Core Policy 58 of the WCS.

- 7.6.8 A total of 94 non-designated heritage assets are recorded within the study area by Wiltshire Historic Environment Record (HER), and this assessment identified the presence of three further assets within the Site boundary itself, namely an area of medieval or post-medieval ridge and furrow cultivation, the site of a post-medieval quarry and former field boundary. Two sections of WWII anti-tank ditch also survive as earthworks within the Site. The assets located within the Site boundary may be physically impacted by the Proposed Development but are all of low significance.

- 7.6.9 The programme of geophysical (magnetometer) survey undertaken in 2024, identified several areas of possible archaeological activity (likely to be of local, or at most, regional significance), and these should be targeted with evaluation trenching works to date and characterise any remains present. The Applicant has agreed with Wiltshire Council to complete trial trench sampling pre-determination with further trench sampling post-determination, should planning permission be granted.

- 7.6.10 The impact of the Proposed Development on the historic environment will be mitigated in the following ways:

- Tril trenching sampling targeting recorded areas of possible archaeological potential
- Hedge and boundary features will be retained where possible, with no woodland removed within the Site, so as to maintain the overall character of the historic landscape.

- 7.6.11 Given the above, the proposed mitigation will reduce the impacts of the Proposed Development on non-designated heritage assets so that there are no significant adverse effects. Due to minor impact on non-designated heritage assets, limited weight should be afforded to such impacts when considering the planning balance in Section 8 of this PDAS, in accordance with paragraph 216 of the NPPF.

- 7.6.12 Therefore, the Proposed Development is considered to preserve the historic environment of the Site and will not lead to any adverse impacts on designated heritage assets. With the implementation of mitigation measures there will be no significant effects to non-designated assets which are all of low

²⁰ <https://www.legislation.gov.uk/ukpga/1979/46/contents>

²¹ <https://www.legislation.gov.uk/ukpga/1990/9/contents>

significance. As such the Proposed Development complies with paragraphs 201 and 216 of the NPPF and Core Policy 58 of the WCS.

7.7 Natural Environment

Ecology

- 7.7.1 Paragraph 193 in the NPPF recognises that the following principles should be applied when determining planning applications:

“a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

- 7.7.2 Locally, Core Policy 50 (Biodiversity and Geodiversity) of the WCS, sets out how proposals must demonstrate they protect the natural environment. Core Policy 50 states that:

“There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured... All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.”

- 7.7.3 Core Policy 50 further states the importance of local ecological sites, and that development should *“avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances.”* Similarly, Policy 88 of the emerging WLP echoes Core Policy 50 of the WCS and paragraph 193 of the NPPF as it ensures that new development must protect and enhance features of nature conservation and ecological value.

- 7.7.4 This application is supported by a Preliminary Ecological Appraisal (PEA) and an Ecological Impact Assessment (EclA) which has assessed the impact of the Proposed Development on nearby national and international designations and the species and habitats present on Site and within the Ecological Assessment Boundary.

- 7.7.5 The Site does not lie within any designated SACs, SSSIs or SPAs. Restrop Farm and Brockhurst Wood SSSI and Jubilee Lake LNR are all located within 500 m from the Ecological Assessment Boundary. The implementation of pollution prevention controls outlined in the CEMP is considered sufficient to avoid all impacts to these designations.

- 7.7.6 As set out in Section 2 of this PDAS, Flaxlands Manor LWS lies within the Site, four LWS lie directly adjacent to the Site and a further 20 local non-statutory designated sites are within 2km of the Site, including 13 ancient woodlands. Given the number of local designations and proximity of the LWS

adjacent to the Site, a 30 m buffer zone has been applied between ancient woodlands and proposed works, as well as pollution prevention controls included within the CEMP. Flaxlands Manor LWS will experience moderate adverse effects due to the destruction of habitat for construction access, however, no impacts are likely to occur on the other surrounding local designations.

- 7.7.7 Where required, mitigation and compensation measures are proposed these include protecting trees, retaining hedgerows and minimising works on grassland where possible during construction, and incorporating buffers from existing habitats (such as stepping built form back from existing field margins for example), the provision of replacement/enhancement hedgerow planting, and the implementation of a CEMP (of which can be secured by way of pre-commencement planning condition), and a LEMP will ensure that the Proposed Development conserves and where possible enhances the biodiversity and ecological value of the Site and surrounding area, and thus ensuring compliance with Core Policy 50 of the WCS and Policy 88 of the emerging WLP.

Bats

- 7.7.8 The Site and surrounding area support a bat species assemblage of National importance, including barbastelle and lesser horseshoe bat which are particularly sensitive. No roosting bats were identified during the surveys, though trees with features suitable for roosting bats (excluding lesser horseshoe) are present within the Site.
- 7.7.9 Where works are required within 30 m of trees with suitability for roosting bats, these features will be subject to endoscopic inspection. Impacts to bats will be managed through the implementation of a Precautionary Working Method Statement (PWMS), to ensure that no bats are disturbed, killed or injured as a result of construction activities including vegetation clearance.
- 7.7.10 No works will be installed within 15 m of trees suitable for roosting bats, no solar panels within 20 m and no buildings or hardstanding to be constructed within 30 m, to reduce disturbance and loss of habitat for roosting bat species.
- 7.7.11 Where some trees and hedgerows are removed along Flaxlands Lane to facilitate temporary passing bays for construction traffic and access points, the loss of vegetation is not considered to pose a significant impact to commuting bats as the vegetation removal is localised and the line of trees and hedgerows will remain functional as a commuting corridor.
- 7.7.12 Due to the low level of maintenance activities during operation, there is no likely cause for disturbance to roosting bats. Due to the location of the solar panels, BESS and associated infrastructure it is anticipated that there will be no adverse impacts to roosting bats as a result of noise or lighting emitted from the Proposed Development.
- 7.7.13 The grassland habitat on Site is suitable for foraging bats. The construction of the BESS and transformers will lead to a permanent loss of habitat and the construction of solar PV arrays will lead to a temporary loss of habitat. As such, the Proposed Development has the potential to cause the degradation of 42.2 ha of grassland habitats in use by foraging bats. Acoustic analysis within solar farms has identified that bats continue to feed amongst solar PV arrays, though activity levels are generally lower than in semi-natural habitats. It is considered that the degradation of grassland for foraging bats is not significant due to low value of habitat and retention of similar habitat within the landscape.
- 7.7.14 As such, the Proposed Development is expected to cause moderate adverse impacts to bat species due to the removal of trees and hedgerow habits as well as degradation of foraging habitats. However, with the mitigation and managements measures set out above it is not considered a significant effect.

Breeding Birds

- 7.7.15 The Proposed Development has the potential to cause harm to breeding birds due to a loss or disturbance of habitat during the construction phase. However, during construction, impacts to breeding birds will be managed through the implementation of a PWMS, to ensure that no breeding birds are disturbed, killed or injured as a result of construction activities including vegetation clearance.
- 7.7.16 Due to the retention (where possible) and planting of hedgerows and scrub, it is considered that sufficient habitat within the Site will sustain the existing breeding population of birds.
- 7.7.17 During operation, the Proposed Development has potential to cause the continued disturbance to breeding birds as a result of noise generation at the BESS. As the breeding bird surveys did not

identify any particularly sensitive species, it is considered likely that the population will habituate to the ongoing noise.

Badger

- 7.7.18 Indicative signs of badger activity are present on Site and as such, surveys will be undertaken prior to the commencement of works. Works will be adjusted to avoid impacts to any identified badger setts and appropriately addressed through planning if necessary. If impacts to a sett cannot be avoided, a closure licence from Natural England will be secured and methods within the licence will be followed.
- 7.7.19 Habitats within the Site suitable for foraging and sett-building badger, including hedgerows and grasslands, will be retained.
- 7.7.20 Installation of solar PV arrays and perimeter fencing will follow a precautionary methodology, as outlined in the CEMP, to prevent the entrapment of badger within open excavations.
- 7.7.21 Due to the low activity recorded on Site and mitigation measures set out above, the impact to badgers as a result of the Proposed Development is considered negligible.

Great Crested Newt

- 7.7.22 Great crested newt are known to be present within at least five ponds in the Ecological Assessment Boundary and a further two ponds in close proximity to the boundary.
- 7.7.23 Given the geographic location of the Site, a Natural England District Level Licence (DLL) for great crested newt will be obtained in advance of the commencement of works to facilitate the Proposed Development.
- 7.7.24 A 10m buffer around aquatic habitats, including ponds, will be implemented and maintained, in which no works will take place within this buffer zone. Perimeter fencing will contain suitable gaps at the base to ensure habitats within the Site are available to amphibians. This, in combination with pollution prevention measures set out in the CEMP, will lead to no adverse impacts to great crested newt species. In summary, the Proposed Development does not result in direct impacts to designated ecological sites or wildlife corridors and this planning application is supported by assessments and appropriate surveys to identify impacts upon species. The Proposed Development provides measures as part of its design to provide compensation and to benefit protected ecological species such as breeding birds, bats and great crested newts recorded within the local area and this has been a key consideration of the Applicant in developing its design alongside its operational requirements. These enhancement measures will be secured as part of a LEMP. Therefore, the Proposed Development meets the requirement of NPPF paragraph 193, Core Policy 50 of the WCS and Policy 88 of emerging WLP.

Arboriculture

- 7.7.25 The retention of trees as part of the Development Proposals, is supported by national and local planning policy. Paragraph 187 of the NPPF outlines how planning policies and decisions should contribute to and enhance the local environment through recognising the benefits of trees and woodland. Paragraph 93, part c, provides further support for tree and habitat retention, stating:
- “development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;”.*
- 7.7.26 At a local level, the emerging WLP seeks to enhance woodlands, hedgerows and trees within Wiltshire. Policy 90 of the draft WLP states that *“Proposals for major development shall make provision for the retention and enhancement of Wiltshire’s woodlands, hedgerows, and trees, and shall incorporate these assets into development design as part of the wider Green and Blue Infrastructure (GBI) Network”.*
- 7.7.27 Similarly, Core Policy 51 of the WCS seeks new development to conserve and where possible enhance *“The locally distinctive pattern and species composition of natural features such as trees, hedgerows, woodland, field boundaries, watercourses and waterbodies”.*
- 7.7.28 An Arboricultural Impact Assessment (AIA) has been submitted with this application and provides and assessment of the Proposed Development’s impact on trees. The AIA notes that part of one moderate

quality (Category B) tree group and part of 18 low quality (Category C) hedgerows are required to be removed to facilitate the Proposed Development. Further to this, two individual trees are unsuitable for retention as living trees for more than ten years in the context of the current land use (Category U). The removal of these trees is justified regardless of any development proposal due to the poor condition and proximity to Flaxlands Lane.

- 7.7.29 In accordance with Policy 90 of the emerging WLP and Core Policy 51 of the WCS, tree removals will be mitigated with a high-quality scheme of new tree planting, which will represent an opportunity to enhance the quality, benefits and resilience of trees on the Site (refer to the Outline Landscape Masterplan submitted as part of this planning application). Retained hedgerows around the Site would be maintained to screen the Proposed Development from external views and also provide biodiversity benefit. Where there are existing gaps in the hedgerow, additional infill planting with native hedgerow species will be provided to improve screening and enhance biodiversity. In addition, over 2.23 km of hedgerow is proposed for enhancement and 0.91 km of new hedgerow would be planted, which includes the larger sections of hedgerow restoration / gapping-up where hedge is currently missing along with tree planting to enhance and maintain wildlife corridors around and through the Site.
- 7.7.30 No veteran or ancient trees will require removal to facilitate the Proposed Development which is in line with paragraph 93 of the NPPF.
- 7.7.31 Tree pruning is likely to be required for retained trees adjacent to the passing places and proposed perimeter fencing. The level of pruning required is likely to be minor and will be agreed on Site.
- 7.7.32 The Proposed Development requires incursions in the Root Protection Area (RPA) and/or canopy of 18 individual trees, two tree groups and two hedgerows to facilitate the Proposed development. Specialist construction management methods will be carried out in accordance with the measures set out in Appendix D of the AIA, including but not limited to factors such as tree protection fencing prior to commencement of development on Site.
- 7.7.33 Noting the proposed mitigation above, the Proposed Development seeks to protect and enhance trees during the construction phase in accordance with Policy 90 of the emerging WLP and Core Policy 51 of the WCS.

Biodiversity Net Gain

- 7.7.34 Under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021), developers must deliver a minimum BNG of 10% as part of major developments, meaning that the development should result in more or better-quality natural habitat than what was existing prior to the development.
- 7.7.35 The NPPF supports this legislation, as paragraph 187 asserts that:

*“Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.”*
- 7.7.36 At a local level, Core Policy 50 (Biodiversity and Geodiversity) of the WCS, seeks opportunities to enhance biodiversity as it states that:

“Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services.”
- 7.7.37 Further to this, the emerging WLP sets out more specific policy tests for BNG in Draft Policy 89 (Biodiversity net gain). Policy 89 seeks development to achieve a minimum of 20% BNG, or higher. Exempted development²² should achieve no net loss and aspire to achieve net gains up to 20%.

²² Department for Environment, Food & Rural Affairs, [Biodiversity Net Gain – what are the exemptions? – Environment](#)

- 7.7.38 As such, a BNG assessment has been undertaken and submitted as part of this application. The BNG assessment involves making a comparison between the existing biodiversity value of habitats present within the Site prior to development (i.e., the baseline) and the predicted biodiversity value of habitats following the completion of the Proposed Development.
- 7.7.39 A dedicated BNG enhancement area for the creation of habitats forms part of the Proposed Development, the predicted net gain for area habitats is 14.13%, 24.88% for hedgerow units, and 82.98% for watercourse units. Therefore, the Proposed Development exceeds the statutory minimum BNG target of 10% for each habitat type in line with the Environment Act and goes further to exceed the draft 20% BNG target for hedgerow and watercourse habitat types, in accordance with draft Policy 89 of the emerging WLP.
- 7.7.40 For area, hedgerow and watercourse habitats, the trading rules within the Statutory Biodiversity Metric (SBM) are all satisfied (see tables 6 and 7 of the submitted BNG Assessment).
- 7.7.41 The application is supported by assessments and appropriate surveys suitable to demonstrate and identify impacts upon species and habitats. The proposed layout and Outline Landscape Masterplan includes enhancements and mitigation where required and enhancement. These measures can be secured by conditions attached to the planning approval ensuring compliance with approved plans and the LEMP for the lifetime of the development.
- 7.7.42 Overall, the Proposed Development would enhance the biodiversity value of the local environment through the creation of dedicated wildlife and ecological enhancement areas and an extensive planting scheme, achieving the statutory 10% biodiversity net gains and as such accords with both national and local policy.

7.8 Flood Risk and Drainage

- 7.8.1 Section 14 of the NPPF and the associated PPG details current policy with respect to flood risk in England.
- 7.8.2 According to Paragraph 181 (footnote 63) of the NPPF, an FRA should accompany all proposals located within Flood Zone 2 and 3. When a site is located within Flood Zone 1, an FRA should be produced for: sites of 1 hectare (ha) or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a Strategic Flood Risk Assessment (SFRA) as being at increased flood risk in the future; and/or land that could be subject to other sources of flooding, where its development would introduce a more vulnerable use.
- 7.8.3 The NPPF considers the vulnerability of different types of development to flooding. According to Annex 3 of the NPPF²³, as the Site is proposed for a 'solar farm', it would be classified as 'Essential Infrastructure'. According to Table 2 of the PPG, which provides a matrix identifying the development vulnerability classifications that are compatible within each flood zone, 'Essential Infrastructure' development is acceptable in Flood Zone 1 and the Exception Test is not required.
- 7.8.4 As the Site has a footprint in Flood Zone 1 exceeding 1 hectare (the total Site area is 87.09 ha), a FRA has been submitted in support of the planning application to meet the requirements of the NPPF.
- 7.8.5 Core Policy 67 (Flood Risk) of the WCS promotes sustainable surface water management through the use of SuDS. Developments must aim to reduce surface water run-off and follow a three-step approach to drainage endorsed by the Environment Agency. Additionally, the policy requires developments in flood risk zones to follow national guidance, including the sequential test.
- 7.8.6 Core Policy 68 (Water Resources) focuses on protecting water resources by ensuring that development does not hinder the objectives of the relevant River Basin Management Plan and, where possible, contributes to its goals. Non-residential developments must include water efficiency measures, with developers required to show how these have been considered in the design.
- 7.8.7 Draft Policy 95 (Flood Risk) of the emerging WLP sets out a comprehensive approach to managing flood risk in line with national guidance. All development must assess and address flood risk from all sources, both on and offsite, using site-specific assessments and SuDS. Major developments are

²³ National Planning Policy Framework: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Accessed March 2025].

expected to reduce rainwater run-off rates by 20% below greenfield levels and manage water close to its source following a clear discharge hierarchy. The policy discourages culverting and encourages natural drainage features, aiming for flood resilience to a 1-in-100-year storm event plus climate change. Drainage strategies should also consider wider environmental benefits, referencing the Council's Green and Blue Infrastructure Strategy, the Climate Change Adaptation Plan, and the Wiltshire Design Guide.

- 7.8.8 Draft Policy 96 (Water Resources) adds development should not be permitted in areas within buffer zones or safeguarded areas, set out by utility companies unless impacts can be satisfactorily mitigated. The policy states Developers will be expected to demonstrate how water efficiency has been taken into account during the design of their proposals.
- 7.8.9 The Wiltshire Council Level 1 SFRA²⁴ describes its approach to flooding within the county and how it will work with other organisations. Information, where applicable, has been extracted from the SFRA to inform the risk of flooding within Section 5 of the submitted FRA.
- 7.8.10 The following potential sources of flooding which could affect the Site have been considered and assessed as follows:
- The current and future risk of tidal flooding is considered **Negligible** due to the distance from tidal sources.
 - The risk of fluvial flooding to the Site is **Very Low**. This has been concluded following a review of Environment Agency and SFRA data, and given the Site is located in Flood Zone 1.
 - The risk of surface water flooding to the Site is deemed **Very Low** (both present day and in the future) across the majority of the Site. There are small areas where the risk of surface water flooding up to 20 centimetres (cm) increases to 'Medium' and an area of 'High' risk, however these are located at and beyond the red line boundary of northern extent of the Western Parcel and are generally associated with watercourses / drains.
 - The risk of groundwater flooding to the Site is deemed **Low** based on information provided by British Geological Survey (BGS) Borehole Records Viewer and the Environment Agency's historical flood data.
 - The risk of flooding from sewers is considered to be **Very Low** due to the distance from the nearest urban centre and the lack of historical records of sewer flooding in this area.
 - The risk of flooding from artificial sources is considered to be **Very Low**, due to the Site being situated outside the flood extent for any major reservoirs.
- 7.8.11 Aspects of the Proposed Development, such as the solar PV panel, BESS area and substation, will increase the area of impermeable surfaces and alter the existing surface water drainage routes within the Site, this therefore requires management to avoid the risk of increasing surface water flooding to the development and third-party land.
- 7.8.12 A Drainage Strategy has been developed for the Proposed Development which seeks to replicate the existing drainage regime in order that the existing catchments continue to outfall at their existing location – in accordance with Core Policy 67. The Proposed Surface Water Drainage Strategy is set out in full in Section 5 of the Outline Drainage Strategy submitted with this planning application. The Drainage Strategy is summarised as follows:
- An attenuation basin is proposed to attenuate runoff from the BESS and Substation area to restrict post-development runoff rates to the equivalent greenfield rate.
 - Where Site access roads drain onto Solar PV fields, boundary swales are proposed to capture and attenuate runoff and maintain the existing runoff regime. Boundary swales will not be connected to the existing ordinary watercourses. Instead, they will convey runoff to the current outfall points identified by the existing catchments.
 - The Solar PV fields will be planted to ensure the introduction of Solar PV fields does not lead to channelised flow of runoff.

²⁴ Wiltshire Council Level 1 SFRA 2013: <https://cms.wiltshire.gov.uk/documents/s158907/FR092013SFRAUpdateReport.pdf> [Accessed October 2024]

- 7.8.13 To reduce the consequences of surface water flooding, the following flood risk mitigation measures are proposed to be incorporated into the Proposed Development.
- A Surface Water Drainage Strategy has been produced for the Site and details measures to mitigate any increase in impermeable areas to ensure there is no increase in surface water runoff from the Site.
 - Panel Design- panels are located within Flood Zone 1 and the majority are located outside the surface water flood extents. Panels will be raised at least 0.6m above ground levels.
 - BESS and Substation- these will be located within Flood Zone 1 and outside the surface water flood extents.
 - Access Roads- it is assumed all access roads will be permeable and not increase surface water flood risk. All access roads will utilise existing farm track and therefore no new crossings or culverts will be required to accommodate these.
 - During construction, control measures to manage the potential impact of flood risk will be implemented. This includes:
 - Storing mobile equipment outside of the surface water flood extent.
 - Locating stockpile facilities and compounds outside of the surface water flood extent.
 - Minimising impermeable areas and providing swales where necessary to control and manage the potential impact of flood risk during construction.
- 7.8.14 Based on the above, it is considered that with the implementation of the mitigation measures as set out above, the Proposed Development accords with both national and local policy with respect to flood risk and drainage matters.

7.9 Access, traffic and transport

- 7.9.1 Section 9 of the NPPF sets out policy requirements which promote sustainable transport. Paragraph 109 outlines that transport issues should be considered at the earliest stages of development proposals. Paragraph 116 further goes on to state that:
- “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.”*
- 7.9.2 Core Policy 42 of the WCS states that standalone renewable energy schemes will be supported where they demonstrate that the use of the local transport network has been satisfactorily assessed.
- 7.9.3 Draft Policy 71 (Transport and new development) of the emerging WLP aims to ensure that development proposals are capable of being served by suitable and safe access to the highway network. Further to this, where necessary, *“development should provide appropriate mitigation measures to offset any adverse impacts on the transport network as a result of new development.”*
- 7.9.4 A Transport Statement (TS) has been prepared and submitted with this application. The TS assesses the existing access conditions and the impact the Proposed development will have on the local highway network, expected traffic movement associated with the Proposed development and any measures that will be put in place to manage any potential transport impacts.
- 7.9.5 During the construction phase around 10 HGV deliveries (20 two-way movements) are anticipated per day. Occasional deliveries of miscellaneous supplies via LGVs are expected, equating to 20 two-way trips per month. No Abnormal Indivisible Loads (AILs) are required.
- 7.9.6 It is anticipated that the material required for the access tracks will arrive by 10 m rigid vehicles. The precise number will depend on the type and the amount of material required, but for the purpose of this assessment we have assumed that one delivery is required per five acres, resulting in a total of 43 deliveries (86 two-way movements) over the course of the construction period.
- 7.9.7 A number of front-end JCBs will also be required to transport equipment around the Site and distribute stone as necessary.

- 7.9.8 A maximum of 80 construction workers are anticipated to be on-site during the peak times of the construction phase equating to a maximum of 40 staff vehicles attending the Site each day (80 daily two-way trips). A temporary construction compound will be provided for storage, parking for contractors and the turning of HGVs.
- 7.9.9 Highway improvements are proposed along Flaxlands Lane due to the narrow road width. Currently, there are no suitable locations for vehicles to pass HGVs along Flaxlands lane. Therefore, seven temporary passing bays are proposed, with one approximately every 150m between Greatfield and the western site access. The proposed temporary bays are appropriately sized to allow two articulated vehicles to pass each other, these passing points will be removed once construction is complete. Further details of the temporary passing bays are set out in Appendix B of the TS.
- 7.9.10 Given the low number of forecast daily vehicle trips forecast the Proposed Development will not lead to a significant increase to vehicle movements during the construction, operational and decommissioning phases. When considered in combination with the proposed access improvements and management measures along Flaxlands Lane, it is concluded that the Proposed Development will not have a material impact on the surrounding highway network and is accordance with Policy 42 of the WCS, Draft Policy 71 of the emerging WLP, and paragraph 116 of the NPPF.

Public Right of Way

- 7.9.11 NPPF paragraph 105.states:
- “Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.”*
- 7.9.12 Core Policy 52 (Green infrastructure) of the WCS stipulates development shall make provision for the retention and enhancement of Wiltshire’s green infrastructure network and shall ensure that suitable links to the network are provided and maintained- this includes rights of way
- 7.9.13 Draft Policy 93 (Green and blue infrastructure) of the emerging WLP reiterates this, stating development shall make provision for the retention and enhancement of Wiltshire’s green and blue infrastructure network and shall ensure that suitable links to the network are provided and maintained.
- 7.9.14 There are six PRoW (LTRE 26, 28, 30 and LMIL 13, 16 and 22) which intersect the Site. Sections of PRoW LTRE 27 and 31 and LMIL 8 and 13 run along the southern, western and northern boundaries of the Site respectively, as set out above. There is also a well-connected PRoW network across the surrounding area, forming links between villages and across the countryside.
- 7.9.15 One of the key design principles for the Proposed Development is to provide 15m buffers around PRoW to protect visual impacts and amenity of PRoW users.
- 7.9.16 The landscape mitigation, embedded mitigation, and enhancement design has been prepared to accompany the application is shown in the Outline Landscape Masterplan, which is included in Appendix B of the LVA, submitted in support of this application. With respect to PRoW, these include:
- Diversion of PRoW LTRE 26 that would otherwise run partially through a proposed solar array area. The diversion, which would provide a route around the eastern perimeter of the solar arrays, would be slightly longer but would run alongside belts of woodland and hedgerows. PRoW LTRE 26 would reconnect with the network of PRoW that link up along Flaxlands Road. The new route follows wooded and hedged field edges to maintain amenity value and visual experience
 - Diversion of PRoW LTRE 28 that would otherwise run through a large area of solar arrays. The diversion around the perimeter of the southeastern field of the solar array area would be slightly longer but it would run alongside pockets of native woodland, bands of mature trees and hedgerows. PRoW LTRE 28 would reconnect with the network of PRoW that link up along Flaxlands Road and remain accessible from LTRE 27 and LTRE 30. The new route follows wooded and hedged field edges to maintain amenity value and visual experience
- 7.9.17 The PRoW(s) will be diverted under Section 257 of the Town and Country Planning Act 1990, a process which will likely take place parallel to the determination of this planning application. With a 15

buffer either side of the PRow, and upgraded access to these PRow (such as kissing gates), the Proposed Development will enhance of Wiltshire's green infrastructure network in accordance with Core Policy 52.

7.10 Amenity

Noise and vibration

- 7.10.1 In relation to noise and vibrations paragraph 198 of the NPPF outlines the consideration new development should have on local amenity, pollution and health as it states:
- “new development should be appropriate to its location, taking into account the likely effects of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”*
- 7.10.2 The WCS considers the impact of noise from new developments in Core Policy 42 (part vii) and Core Policy 51 (part vii), as well as the emerging WLP Draft Policy 86 (part k). Specifically Core Policy 42 of the WCS states applications must demonstrate how the following impacts have been satisfactorily assessed:
- “vii. Residential amenity, including noise, odour, visual amenity and safety”*
- 7.10.3 Further to this, saved local policy NE18 (Noise and Pollution) of the North Wiltshire Local Plan (2011) sets out a specific policy requirement in relation to noise and pollution. Stating that:
- “Development will only be permitted where it would not generate, or itself be subject to, harm upon public health or cause pollution to the environment by the emission of excessive noise, light intrusion, smoke, fumes, other forms of air pollution, heat, radiation, effluent or vibration.”*
- 7.10.4 The Wiltshire Council Planning Consultation Guidance Note Noise and Vibration²⁵ provides guidance on matters relating to noise and vibration. Section 6.6 sets out specific guidance that *“development should be designed so as to achieve a rating level of 5 dB (LA_{eq}) below the typical background (LA₉₀) level at the nearest noise sensitive location... Where this criterion cannot be achieved, the various noise control measures considered as part of the assessment should be fully explained.”*
- 7.10.5 A Noise Impact Assessment (NIA) has been submitted in support of the Proposed Development. The NIA provides an assessment of the noise and vibration impacts of the Proposed Development on local sensitive receptors.
- 7.10.6 The NIA concluded that the noise levels in relation to the construction of the infrastructure and the vehicle movements are considered to have **no significant effects at all receptors** in accordance with both national and local policy.
- 7.10.7 The NIA also assessed the expected construction vibration levels associated with impact piling during installation of the solar PV panels. It is predicted that construction vibration levels are expected to exceed the Significant Observed Adverse Effect Level (SOAEL) (significant) at receptor R1 (located at the central western Site boundary, Flaxlands Field Farm) and between the Lowest Observed Adverse Effect Level (LOAEL) and SOAEL (not significant) at receptor R3 (located between Cottage Farm near Flaxlands Lane and Wood Farm near Flaxlands Lane) these effects will be temporary and during construction only.
- 7.10.8 As such, it is recommended that a Construction Environmental Management Plan (CEMP) is provided, secured by a pre-commencement planning condition should planning permission be granted, as well as a Construction Traffic Management Plan (CTMP). These reports will set out best practice measures that will minimise the vibration levels at sensitive receptors, which could include a communication strategy to inform the residents at R1 and R3 when vibration inducing activities will be taking place in close proximity, and to control working hours. With the proposed communication strategy and implementation of best practice measures, construction vibration is considered to not significantly affect residential amenity in line with Core Policy 51 of the WCS.
- 7.10.9 Further to this, an operational noise assessment has been set out in the NIA, which concludes that the maximum noise levels during the daytime, evening and nighttime periods would be between the LOAEL and SOAEL at various receptors. As such, additional mitigation measures are proposed in the

²⁵ Wiltshire Council Planning Consultation Guidance Note Noise and Vibration, Wiltshire Council. 2023

form of silencers, attenuation kits and enclosures from manufacturer specification sheets and information on similar types of development. Such mitigation measures can be secured through conditions by the LPA. With the implementation of the proposed mitigation, all noise receptors are predicted to be below or equal to the typical measured background levels. In accordance with the Wiltshire Council Planning Consultation Guidance Note Noise and Vibration.

- 7.10.10 Therefore, it is considered that with the implementation of the mitigation measures as set out above, no significant adverse noise and vibration effects are expected on sensitive receptors as a result of the Proposed Development. As such, the Proposed Development accords with both national and local policy.

Glint and Glare

- 7.10.11 Core Policy 42 of the WCS and draft Policy 86 of the emerging WLP, ensure that new proposals demonstrate that impacts to residential amenity are satisfactorily assessed, including light pollution and visual amenity.
- 7.10.12 As such, a Glint and Glare Study has been undertaken and submitted as part of this application, it considers the potential impacts on ground-based receptors such as roads, rail and residential dwellings.
- 7.10.13 The Glint and Glare Study assessed the likely impacts on surrounding roads within 1 km of the Site, excluding roads to the north due to the orientation of the panels, which can be seen in Figures 4-7 of the Glint and Glare Study. The results of the assessment found there to be no impact to any road receptors due to the location and topography of the Site and heavy vegetation screening the perimeter of the Site.
- 7.10.14 The Glint and Glare Study also assessed the impacts on 86 surrounding residential receptors within 1km of the Site, as highlighted in Figure 8 of the Glint and Glare Study. The assessment found that there will be **no impact** at 34 dwellings
- 7.10.15 For one dwelling, solar reflection is possible for less than three months of the year and less than 60 minutes on any given day. However, due to the screening in the form of existing vegetation which partially obstructs views of the panels this will result in a **low** and **not significant impact**.
- 7.10.16 For 28 dwellings, the solar reflections are predicted to occur for more than three months of the year but less than 60 minutes on any given day. Partial screening in the form of existing vegetation and/or buildings, alongside other mitigating factors which include reflections only coinciding with direct sunlight, and that effects are expected to be limited to observers above the ground floor, results in a **low** and **not significant impact**.
- 7.10.17 For three residential receptors (81, 82 and 86- see Glint and Glare Study figures) there is potential to experience moderate glint and glare impacts as a result of the Proposed Development. As such, proposed screening, in the form of planting at the location marked in Figures 30 and 31 of the Glint and Glare Study, will obscure the views of the panels from the affected dwellings so that there will be **no impact**.
- 7.10.18 Therefore, it is considered that with the implementation of additional screening along the Site boundary it is concluded that there will be **no significant** glint and glare impacts on road or residential receptors as a result of the Proposed Development. As such, the Glint and Glare Study satisfactorily assesses such effects of the Proposed Development on the local residential amenity, demonstrating that impacts to residential amenity are not significant in accordance with policies 42 of the WCS and draft Policy 86 of the emerging WLP.

7.11 Land contamination

- 7.11.1 Paragraph 196-201 of the NPPF focus on ground conditions and pollution Paragraph 196(a) states planning decisions should ensure that a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. Paragraph 198 adds planning decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment.

- 7.11.2 Core Policy 56 (Contaminated Land) addresses development on or near potentially contaminated land. It requires developers to show that any contamination risks can be effectively mitigated to protect health, the environment, and amenity. Proposals must demonstrate the site is, or will be, suitable for its intended use.
- 7.11.3 Draft Policy 97 (Contaminated Land) of the emerging WLP reiterates development proposals which are likely to be on, or adjacent to land which may have been subject to contamination will need to demonstrate that measures can be taken to effectively mitigate the impacts of land contamination on public health, living conditions both on the site and the wider area, environmental quality, the built environment and amenity. Developers will be required to demonstrate that the development site is, or will be, made suitable for the proposed final use.
- 7.11.4 A Geotechnical and Geo-Environmental Desk Study has been submitted in support of this planning application.
- 7.11.5 Potential sources of contamination have been identified on and around the Site, relating to the Site's and surrounding areas prolonged use as agricultural land with associated farmyards. This carries a risk with regards to waste activities, potential use of chemicals (pesticides/herbicides) and fuel/oil spillages and leaks from plant and vehicles. An old/ disused quarry, with unknown infill, is also present within the Site.
- 7.11.6 Based on the available desk study information and consideration of the Proposed Development, the Site is classified overall as having a **Very Low/Low Risk** with respect to contaminated land. This is predominantly driven by risks to on-site controlled water receptors (i.e. Secondary A Aquifers, Woodbridge and Lydiard Brooks, and ponds).
- 7.11.7 Human health risks, and risk from hazardous ground gases are considered **Very Low** based on likely very limited exposure to the identified receptors, and that no enclosed spaces are proposed for receptors to be exposed to.
- 7.11.8 The Study recommended that a ground investigation and subsequent interpretative reporting is carried out to confirm the ground and groundwater conditions on the Site, investigate and assess anticipated risks, and inform design. The key objectives to be addressed by the investigation include:
- Confirmation of the ground and groundwater conditions and validation of the general risks identified in the initial conceptual site model;
 - Chemical status of soil and Made Ground for the purpose of risk assessment to human health, groundwater and for preliminary waste classification to inform disposal / storage for UK Water Industry Registration assessment;
 - Assessing the chemical status of surface water (from upstream and downstream) in order to determine risks to controlled waters;
 - Investigating anticipated geotechnical hazards;
 - Identifying geotechnical design parameters;
 - Informing the design of proposed developments, including foundations, road-pavements, and drainage; and
 - Undertaking a topographic survey for the purpose of road design and BESS location confirmation.
- 7.11.9 Due to the Low and Very Low risks identified by in the Geotechnical and Geo-Environmental Desk Study, findings from the ground investigation should be interpreted within an interpretative Ground Investigation Report to be secured via a condition attached to any planning permission.
- 7.11.10 Following the implementation of the recommendations set out above it is considered that the Proposed Development will not have an unacceptable adverse effect as a result of contaminated land. As such, the Proposed Development is considered to comply with paragraphs 196 and 198 of the NPPF, Core Policy 56 and emerging WLP Draft Policy 97.

8. Conclusion

- 8.1.1 The Proposed Development will deliver CNP infrastructure providing clean, renewable and sustainable form of energy, supporting the UK governments aspirations of a net zero future. The Proposed Development would not only support the reduction in greenhouse gas emissions but would also help deliver the policy aims of Powering Up Britain (PUB): Energy Security Plan by providing a significant amount of low carbon electricity over its 40-year lifetime; and providing resilience, security and affordability of electricity supplies due to its large scale.
- 8.1.2 NPS EN-1 is a material consideration confirming that a presumption to grant planning permission for CNP infrastructure remains firmly engaged in all but the '*most exceptional circumstances*' where residual impacts remain. Substantial positive weight in favour of granting planning permission should be given to the need for the Proposed Development with its contribution towards the provision of renewable energy, enabling the generation of more low-carbon power from indigenous and renewable resources. Therefore, the Proposed Development will make a significant contribution to the UK's energy security needs, and the decarbonisation needs of the UK.
- 8.1.3 The design process adopted for the Proposed Development has been informed by the outcome of a suite of environmental reports, allowing the Proposed Development to avoid impacts (such as ecological considerations) thereby minimising effects and incorporating mitigation where required.
- 8.1.4 The Proposed Development will result in some adverse landscape and visual effects to local receptors such as residential dwellings and PRoW. However, with the implementation of an extensive planting scheme and appropriate buffer zones and offsets (with an Outline Landscape Masterplan) and LEMP, the Site will be well screened, and the effects will be highly localised, reducing in significance by year 15. As such, the residual impacts are limited in scale, reversible, and mitigated as far as practicable.
- 8.1.5 The Proposed Development will not harm any designated heritage assets, but has the potential for minor harm to non-designated heritage assets due their presence within the Site boundary. However, with the implementation of mitigation measures, no significant impact is expected to these assets which are of low significance. Due to the low significance of the assets and minimal harm, limited weight in the planning balance should be afforded to the potential harm to non-designated heritage assets.
- 8.1.6 The Proposed Development Site is primarily located on agricultural land classified as non-BMV, optimizing land use efficiency while preserving higher-quality soils elsewhere. Upon completion of its 40-year operational lifespan, the Site will be restored to agricultural use. Once reinstated there is potential for improvements to the Site's soil structure and functionality, supporting sustainable agricultural productivity in the long term
- 8.1.7 In terms of the Planning Balance, the public benefits weighing in favour of the Proposed Development include:
- Supplying electricity to 21,000 homes a year over a 40-year period (operational lifetime);
 - The clean and domestically produced energy generated will save on average 17,900 tonnes of CO₂ per year, which equates to 716,000 tonnes of CO₂ over the operational lifetime;
 - Ecological enhancements through the implementation of a high-quality landscape scheme (secured through the LEMP), including tree planting, additional hedgerows and grassland planting across the Site;
 - Deliver a BNG over the minimum 10% requirement laid down by the Environment Act. The Proposed Development will result in a net gain of 14.13% for area habitat units, a net gain of 24.88% for hedgerow units, and a net gain of 82.98% for watercourse units (again of which is to be secured through the LEMP and Outline Landscape Masterplan); and
 - Economic benefits including employment during construction.
- 8.1.8 In view of the above, there would be limited harm with respect to landscape and visual effects that would not wholly comply with Core Policy 51 of the WCS. In all other matters the Proposed Development would be in accordance with the Development Plan and overall would comply with the

Plan as a whole. Therefore, it is clear that the substantial public benefits of the Proposed Development outweigh any harm and as such, planning permission should be granted by the LPA.