Lime Down
Solar Park

Environmental Statement

Volume 4, Non-Technical Summary (Clean)

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2	Paragraph 4.3.5	Clarification added around replacement of non-solar Scheme components.	Updated at Deadline 4 of Examination in response to ExA request at Issues Specific Hearing 4.

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1 Introduction

1.1 Overview

1.1.1 This document has been prepared on behalf of Lime Down Solar Park Limited (hereafter referred to as the 'Applicant') and provides a Non-Technical Summary (NTS) of the Environmental Statement (ES) for Lime Down Solar Park (hereafter referred to as the 'Scheme').

1.1.2 The Scheme involves the construction, operation and maintenance, and decommissioning of ground mounted solar photovoltaic (PV) panels, together with associated infrastructure including a Battery Energy Storage System (BESS) and import and export connection to the national grid via the Existing National Grid Melksham Substation. The Scheme also includes land for ecological mitigation and enhancement.

1.1.3 The Scheme is a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 (Ref 1), as it will have the capacity to generate more than 50 megawatts (MW) of electricity. Under the Planning Act 2008, a type of planning consent called a Development Consent Order (DCO) is required to build and operate an NSIP.



Plate 1 Example of a Solar Scheme

1.2 The Applicant

1.2.1 The Scheme is being developed by Lime Down Solar Park Limited (the Applicant), part of Island Green Power Limited (IGP) who is a leading developer of renewable energy projects, established in 2013.

1.2.2 Island Green Power (IGP) has delivered 34 solar projects worldwide with a total generating capacity of more than 1 gigawatt (GW) which includes 17 solar projects in the United Kingdom and the Republic of Ireland. Their mission is to increase solar energy usage, making more renewable energy possible and saving thousands of tonnes of greenhouse gas emissions in the process.

1.3 The Order Limits

1.3.1 The land for which DCO consent is being sought is referred to as the 'Order Limits' and comprises approximately 1,237 hectares (ha) of land located largely within the administrative area of Wiltshire Council with small areas within the administrative area of South Gloucestershire Council. The Order Limits are shown on **Figure 1** in **Annex A – Figures** of this NTS.

1.3.2 The Order Limits comprise the following elements as shown on **Figure 2 Annex A – Figures** of this NTS:

- The Solar PV Sites, which consists of approximately 749.1 ha of land for Solar PV Panels, associated infrastructure, landscaping, heritage, surface water and biodiversity mitigation areas. The Solar PV Sites comprise of the following five areas:
  - Lime Down A;
  - Lime Down B;
  - Lime Down C;
  - Lime Down D; and
  - Lime Down E.
- The BESS Area which is the area of land within which the BESS would be located for the storage, import and export of energy to the National Grid. The Scheme would include a single BESS Area located within Lime Down D;
- The Highway Improvement Areas, which are approximately 17.8 ha (of which 5.9 ha overlap with the Cable Route Corridor) of land within which improvements to sections of the existing highway network will be completed to facilitate access to the Scheme, such as

improvements to road edge, passing places and traffic management measures;

- The Cable Route Corridor within which the Cable Route (hereafter referred to as the 'Grid Connection Cables') would be located to connect the Solar PV Sites to the National Grid at the Existing Melksham Substation and the area within which cables connecting the Solar PV Sites would be located (hereafter referred to as the 'interconnecting cables'); and
- The Existing National Grid Melksham Substation, which comprises the existing Melksham substation (owned and operated by the National Grid) where the 400 kilovolt (kV) Grid Connection Cables would connect to the grid.

1.3.3 A description of the physical characteristics of the Scheme and the land-use requirements during the construction, operation and maintenance, and decommissioning phases is presented in Section 4 of this NTS.

1.4 The Purpose of the ES and NTS

1.4.1 An ES has been prepared by the Applicant to present the environmental impact assessment (EIA) for the Scheme.

1.4.2 The Scheme is considered to be 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations') (Ref 2), and as such requires an EIA to be undertaken. This ES forms part of the application for a DCO and presents the findings of the EIA undertaken for the Scheme in accordance with the EIA Regulations and the Planning Act 2008 (Ref 1).

1.4.3 The purpose of this NTS is to provide a summary of the ES in non-technical language.

2 EIA Process and Methodology

2.1.1 The approach the EIA has taken to assessing impacts associated with the Scheme, including the significance criteria against which impacts have been assessed will be described within **ES Volume 1, Chapter 6: EIA Methodology [EN010168/APP/6.1]**.

2.2 Overview

2.2.1 EIA is the process undertaken to identify and evaluate the likely significant effects of a proposed development on the environment and to identify measures to avoid, mitigate or manage any significant negative effects, and explore opportunities to enhance through positive effects. The EIA has been informed by consultation with statutory consultees, other interested bodies, and members of the public. The purpose of identifying significant effects is to ensure decision makers are able to make an informed judgement on the environmental impacts of a proposal.

2.2.2 The assessment considers the environmental impacts of the Scheme at key stages in its construction, and operation and maintenance phases, and as far as practicable, its decommissioning phase. The Baseline Conditions consist of the existing conditions prior to the Scheme, describing the relevant baseline characteristics of the Order Limits and the relevant Study Area. Detailed environmental baseline information has been collected from various sources, including digital resources data searches baseline site surveys, stakeholder engagement and environmental information submitted in support of other planning applications in the vicinity of the Scheme. This is the principal baseline against which environmental effects will be assessed. The ‘existing baseline’ date is 2023 to 2025 since this is the period in which the baseline studies for the EIA have been undertaken.

2.2.3 Where relevant, ‘future baseline’ conditions are also predicted for each assessment scenario, whereby the conditions anticipated to prevail at a certain point in the future are identified for comparison with the new predicted conditions with the Scheme. The future baseline is considered in the ES to be in 2027 to 2029, which is the expected construction period, with the peak construction year being 2028.

2.2.4 The assessment of construction and decommissioning effects have been undertaken based on existing knowledge, techniques, and equipment. A ‘reasonable worst-case' scenario has been used with respect to the construction and decommissioning methods, location (proximity to sensitive receptors), phasing, and timing of activities as defined in **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1]**.

2.2.5 The evaluation of the significance is important as it is the significance that determines the resources that should be deployed in avoiding or mitigating a significant adverse effect, or conversely, the actual value of a beneficial effect. Where mitigation measures are identified to eliminate, mitigate or reduce adverse impacts, these have either been incorporated into the design, translated into construction commitments, and/or operational or managerial standards/procedures. The criteria for determining significance is presented in **Table 6-2 Sensitivity Criteria, Table 6-3 Magnitude Criteria and Table 6-4 Degrees of Significance** of **ES Volume 1, Chapter 6: Methodology [EN010168/APP/6.1].** Generic definitions for the classification of effects are provided in **Table 6-5 Classification of Effects** of **ES Volume 1, Chapter 6: Methodology [EN010168/APP/6.1].** This chapter defines the sensitivity and magnitude criteria which determine the degree of significance of an effect. For example, a high magnitude of impact / change on a high sensitivity receptor will result in an effect that is classed as major significance.

2.2.6 The significance of residual effects is determined by reference to criteria for each assessment. Specific effect significance criteria for each technical chapter (**ES Volume 1, Chapter 7** to **Chapter 20 [EN010168/APP/6.1]**) have been developed. The ES identifies 'residual effects' which remain following the implementation of suitable mitigation measures and classify these in accordance with the effect classification terminology listed in **Table 6-5** in **ES Volume 1, Chapter 6: Methodology [EN010168/APP/6.1]**.

2.2.7 In accordance with Schedule 4, Paragraph 5 of the EIA Regulations (Ref 2), an assessment of 'cumulative effects' has also been considered in the ES. These effects result from incremental changes caused by other past, present or reasonably foreseeable actions cumulatively with the Scheme. For the cumulative impact assessment presented in the ES, two types of effect are considered:

- In-Combination effects: these are the combined effect of individual impacts from the Scheme, such as someone being impacted by both construction noise and traffic; and
- Cumulative effects: these are the combined effects of other development scheme(s) which may interact with the effects of the Scheme. The effects of these schemes may be insignificant on an individual basis, but cumulatively with the Scheme have a new or different likely significant effect.

2.2.8 The assessments within the ES reflect feedback received during statutory consultation, the findings of surveys, and the Scheme design refinements. The process of identifying environmental effects is both iterative and cyclical, running in tandem with the iterative design process.

2.3 Consultation

2.3.1 The process of consultation is critical to the development of the Scheme design as well as informing the development of a comprehensive and balanced ES. The Scheme has a wide range of stakeholders (including landowners, statutory consultees, local communities and special interest groups) with potentially differing interests. Consultation activities have been designed to be accessible and to allow differing stakeholders the ability to engage with the Scheme in a way that is appropriate to them. Where appropriate, the design of the Scheme has been updated to incorporate amendments suggested through the consultation process (refer to **ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010168/APP/6.1]**).

Scoping Consultation

2.3.2 The purpose of the EIA Scoping process is to identify key environmental issues at an early stage, to determine which elements of the Scheme are likely to result in significant effects on the environment and to establish the extent of survey and assessment requirements for the EIA, including identifying which topics should be included in the EIA and the level of detail to which they should be assessed.

2.3.3 An EIA Scoping Report and request for an EIA Scoping Opinion under Regulation 10 of the EIA Regulations (Ref 2) was submitted to the Secretary of State through the Planning Inspectorate on 16 July 2024.

2.3.4 The Scoping Opinion was received on 22 August 2024. It presents the formal response from the Planning Inspectorate (on behalf of the Secretary of State) and statutory consultees. Key issues raised in the Scoping Opinion are summarised and responded to within a Scoping Table provided in **ES Volume 3, Appendix 1-2: Scoping Opinion Responses Table [EN010168/APP/6.3]**. The Scoping Table demonstrates how the matters raised in the Scoping Opinion are addressed within the ES.

DCO Consultation Requirements

2.3.5 The Planning Act 2008 sets out the statutory requirements for consultation when preparing an application for development consent. The Planning Act 2008 (Ref 1) requires applicants to carry out statutory consultation on their proposals ahead of submission of a DCO application. The stages of consultation the Applicant undertook are:

Stage 1 consultation: Non-Statutory

2.3.6 The Applicant undertook a first stage of non-statutory consultation from 14 March 2024 to 26 April 2024. Consultation activities included engaging

with parish, district and county councillors; distributing Scheme information; hosting online and in person events; and collating consultation feedback.

2.3.7 A **Consultation Report [EN010168/APP/5.1]** has been produced and provides a summary of the consultation methodology and extent of engagement and participation over the consultation period, along with an overview of the issues raised in feedback submitted during consultation, and that the Applicant has had regard to consultation responses including any responses to the feedback.

Stage 2 consultation: Statutory Consultation and Preliminary Environmental Information

2.3.8 A Preliminary Environmental Information Report (PEIR) was prepared and published in January 2025 to satisfy the requirement of the EIA Regulations (Ref 3) 'Preliminary environmental information' is defined in Regulation 12(2) of the EIA Regulations as information "*which (a) has been compiled by the applicant; and (b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*".

2.3.9 In order to enable consultees to understand the likely environmental effects of the Scheme, the PEIR presented preliminary findings of the environmental assessments undertaken at the point writing. Statutory Consultation took place between 29 January 2025 and 19 March 2025. Together with ongoing discussion and meetings, this allowed consultees to develop an informed view of the likely significant effects of the Scheme and provide a response prior to the finalisation of the DCO Application and the EIA. The Applicant sought the views of consultees on the information contained within the PEIR, and there was an opportunity within the process up to submission of the DCO Application for both the EIA and the project design to have regard to comments received.

Targeted Consultation

2.3.10 A further round of targeted consultation was undertaken between 3 June 2025 and 11 July 2025 following changes to the development boundary area of the Scheme presented in the PEIR and at Stage Two Statutory Consultation. Further detail is provided in **ES Volume 1, Chapter 1: The Introduction [EN010168/APP/6.1]**.

2.3.11 The targeted consultation focused on fifteen small changes to the Order Limits which included:

- Six areas to enable the temporary highway and traffic works that would be required to safely accommodate the movement of abnormally sized

vehicles (larger than a standard HGV size) needed during the construction phase of the Scheme; and

- Nine areas where the development boundary has been adjusted to enable access to and within the Site and to avoid constraints such as woodland and hedgerows.

2.3.12 These changes do not result in any new (or different) significant environmental effects compared to those reported in the PEIR.

2.3.13 In addition, a project website has been set up to provide information on the Scheme (https://www.limedownsolar.co.uk/) and channels (email, Freepost, and phone line) have been opened for stakeholders to enquire about the Scheme.

3 Site Selection and Design Evolution

3.1.1 The Site was identified through a site selection exercise undertaken by the Applicant. **ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010168/APP/6.1]** presents an overview of the policy requirements for considering alternatives, factors that influenced the site election process, and the alternatives considered as the design has evolved since EIA Scoping.

3.1.2 A range of technical, environmental and economic factors are considered when investigating and assessing any potential site for NSIP-scale ground-mounted solar PV development. The key factors which were considered by the Applicant when selecting land for the Scheme included (in no particular order):

- Irradiance and site topography;
- Network connection;
- Proximity to dwellings;
- Agricultural land classification and land type;
- Accessibility; and
- Public Rights of Way (Public Rights of Way).

3.1.3 Following consideration of the above factors, the Site was identified as having good potential for a large-scale ground mounted solar PV facility.

3.1.4 **ES Volume 3, Appendix 4-1 Site Selection Assessment Report [EN010168/APP/6.3]** evaluates the proposed location for the Scheme against other potential areas for solar development in order to establish whether the Scheme is in a suitable location. It adopts a staged approach, as follows:

- Stage 1: Identification of an area of search near the available grid connection point;
- Stage 2: Exclusion of various planning, environmental and spatial constraints, in accordance with policy considerations (such as a preference not to site on best and most versatile agricultural land), to identify the most unconstrained land;
- Stage 3: Application of considerations around site size and land assembly, use of previously developed land and topography to identify potential development areas on the remaining land;
- Stage 4: Evaluation of the identified potential Sites against assessment indicators such as ecology and biodiversity, land use, landscape and visual, flood risk;

- Stage 5: Widening the search to consider further potential Sites on parcels of Grade 3 agricultural land, and land within flood zones 2 and 3; and
- Stage 6: Widening the search to consider further potential development areas on parcels of land with a higher gradient (5% or less).

3.1.5 The Site Selection Assessment Report concludes that there are no locations within the search area that are more suitable than the proposed location for the Scheme, based on the criteria identified.

4 Scheme Description

4.1 Description of the Scheme

4.1.1 The Scheme comprises a solar photovoltaic (PV) electricity generating station of over 50 megawatts (MW) and 'associated development' comprising a Battery Energy Storage System (BESS), substations, grid connection infrastructure and other infrastructure integral to the construction, operation and maintenance and decommissioning phases.

4.1.2 The environmental impacts of some conventional forms of power generation are a direct result of the amount of electricity it can generate, for example, through the import of fuel to power the process or the level of atmospheric emissions in produces. This is not the case for solar PV energy generation and for this reason it is not proposed that the Scheme is restricted by imposing a limit on how much electricity it can generate.

4.1.3 Instead, the Scheme is seeking a DCO that restrict the aspects of the solar farm which have potential environmental impacts, such as the height and location of the Solar PV Panels and dimensions of the associated infrastructure. These are known as the 'design parameters' which also ensure the Scheme would be able to generate electricity as efficiently as possible by allowing for the use of improving technologies to potentially allow a greater amount of electricity to be generated in the future. Further information about the design parameters is presented in the sections below and described in full in **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1].**

4.1.4 The PV electricity generating station and BESS Area would be located within five land parcels referred to as Lime Down A, B, C, D and E (hereafter collectively referred to as the 'Solar PV Sites'. These are depicted in **Figure 4** in **Annex A – Figures** of this NTS.

4.1.5 The Cable Route Corridor is the area within which the Grid Connection Cables would be located to connect the Solar PV Sites to the Existing National Grid Melksham Substation and the area within which cables connecting the Solar PV Sites would be located.

Scheme Components

4.1.6 The Scheme consists of principal infrastructure described below. Further detail is included in **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1]**.

4.1.7 The Scheme comprises the key components listed below:

- Solar PV Panels that are made up of multiple bifacial PV cells which covert sunlight into direct current (DC) electricity from both sides of the Solar PV Panel;
- Solar PV Mounting Structures that would be Tracking Solar PV Structures (Option A) (as illustrated in **Plate 2** and **Plate 3**) or Fixed Solar PV Structures (Option B) (as illustrated in **Plate 4**);
- The Conversion Units incorporate the inverters, transformers and switchgear and are required to manage the electricity generated by the Solar PV Panels. These would either be standalone equipment or they would be housed ('integrated') together with a container. An integrated Conversion Unit would comprise one or two central inverters, transformers and switchgear all housed within a complete, preassembled and preconfigured unit. Inverters are required to convert the DC electricity collected by the Solar PV Panels into alternating current (AC) via the inverters which is the format of electricity distributed in Great Britain;
- The BESS would be situated in Lime Down D (referred to as the 'BESS Area') and will be designed to provide peak generation and grid balancing services to the electricity grid (as illustrated in Plate 5);
- Up to 132 kV Substations located at Lime Down A, C, D and E to increase the voltage of electricity received from the Conversion Units for export to the 400 kV Substation (as illustrated in Plate 6);
- One 400 kV Substation would be located within Field D22 of Lime Down D, comprising electrical infrastructure, such as the transformers (as illustrated in Plate 7), switchgear and metering equipment, to step up the voltage of electricity received from the 132 kV Substations for export to the Existing National Grid Melksham Substation;
- Works at the Existing National Grid Melksham Substation involve the addition of new electrical infrastructure and associated civil works to comprise a new 400 kV feeder bay to connect the Grid Connection Cables for the Scheme;
- On-Site Cables to transfer electricity between the Solar PV panels and Conversion Units;
- Interconnecting Cables to transfer electricity between the Conversion Units and 33kV Sub-distribution Switch Rooms or 132 kV Substations and on to the 400 kV Substation via underground Interconnecting Cables;
- Grid Connection Cables to transfer electricity between the 400 kV Substation and Existing National Grid Melksham Substation;

- Highway Improvement Areas comprising minor improvements along existing highways, such as repair to road edges where this has deteriorated and provision of passing places. The location of the Highway Improvement Areas are presented in **Figure 2** in **Annex A – Figures** of this NTS;
- Access tracks to facilitate access within the Solar PV Site, and the Grid Connection Corridor;
- Permissive paths are incorporated into the Scheme design, contributing to the wider network of footpaths in the area and facilitate greater public access to the countryside during the lifetime of the Scheme. The design and implementation of the permissive paths is set out in the **Outline Public Right of Way and Permissive Path Management Plan [EN010168/APP/7.17]**;
- Temporary construction compounds/laydown areas to facilitate the construction phase of the Scheme (refer to **Figure 3** in **Annex A – Figures** of this NTS);
- Fencing and security measures (e.g. CCTV) around the perimeter and within the Site;
- Ecological mitigation and enhancement such as grassland and meadow management, increasing diversity of hedgerows and applying vegetation buffers;
- Landscaping including the creation of new woodland blocks and belts, planting new hedgerows and trees, and reinforcing existing boundary hedgerows; and
- Surface water drainage measures to manage surface water drainage within the Site.

Plate 2: Typical Tracker Solar PV Panels in an Angled Tilt



Plate 3: Typical Tracker Solar PV Panels in a Near Flat Orientation



Plate 4: Typical Fixed Solar PV Panels (with Conversion Unit/Inverter)



Plate 5: Typical Battery Energy Storage System



Plate 6: Typical 132 kV Substation Compound



Plate 7: Typical (Large 400 kV) Power Transformer associated with the Onsite Substation



4.2 Construction

Construction Programme

4.2.1 Subject to being granted DCO consent and following a final investment decision, the earliest construction would start is in 2027. Construction of the Grid Connection Cables is anticipated to be undertaken over an 18-month period; construction of the Solar PV Sites is anticipated to be undertaken over 24 months and the operation and maintenance phase anticipated to commence in 2029.

Construction Activities

4.2.2 The core construction working hours during which construction activities would be completed for the Scheme (not including start-up and shut-down works) are defined as:

- Monday to Friday from 07:00 to 18:00 (daylight hours permitting);
- Saturday from 08:00 to 13:30 (daylight hours permitting); and
- No Sunday or Bank Holiday working unless crucial to construction or in an emergency.

4.2.3 Start-up and shut-down activities on-site will involve low-noise tasks, including security checks, unlocking and locking gates, and conducting toolbox talks.

4.2.4 Construction activities within the Solar PV Sites would broadly include:

- Site preparation and civil engineering works;
- Import of construction materials;
- Upgrading of existing access points and creation of new access points and associated access tracks;
- Enabling works and creation of temporary compounds;
- Erection of Solar PV Panels and Solar PV Mounting Structures;
- Installation of electrical cabling associated with the Solar PV Panels;
- Construction of electrical infrastructure including inverters, transformers and switch gear;
- Construction of electrical cables between Conversion Units and the substations;
- Construction of BESS Area; and
- Installation of fencing, security and lighting.

4.2.5 Construction activities within the Cable Route Corridor would broadly include the construction of cable circuits (including the use of trenchless methods where required), jointing bays, and the final testing and commissioning of electrical infrastructure.

Construction Access

4.2.6 Wherever possible, the Scheme will utilise existing points of access and access tracks. New access tracks will also be established across the Site. New Solar PV access tracks would be a maximum of 6 m wide, constructed of hardcore or gravel over a levelling layer of substrate.

4.2.7 The access points into the individual Sites will be designed to accommodate articulated heavy goods vehicles (HGV) with a maximum length of 16.5m. Existing field access points will be used, where practicable, with visibility splays added, where necessary, based on the recorded speed of the vehicles on the road network to ensure safety. There may be some variation of visibility splays based on site-specific conditions.

4.2.8 Accesses will be designed to ensure there are no impacts on veteran or protected trees caused by vehicle movements, however, there may be localised removal of hedgerows e.g. for visibility splays for safety purposes. **Figure 4** in **Annex A – Figures** of this NTS illustrates the indicative layout for the Scheme, including access locations.

4.2.9 Accesses 5, 10, 18, 19 and 20 set out in Table 3-2 of **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1]** will provide access to the substations and BESS and will be suitable for abnormally sized vehicles (larger than standard HGV size). These will comprise a track up to 6 m wide (with up to 8m wide passing places) constructed of asphalt over a levelling layer of substrate. The access points from the public highway and bends in the track would be wider to accommodate turning space for large vehicles. Routes for large vehicles accessing the Order Limits are considered in **ES Volume 1, Chapter 13: Transport and Access [EN010168/APP/6.1].**

4.2.10 **ES Volume 1, Chapter 13: Transport and Access [EN010168/APP/6.1]** provides an assessment of these accesses to the Solar PV Sites, as well as the access routes along the Cable Route Search Corridor.

Construction Staff

4.2.11 For the purposes of assessment, it is assumed that the construction of the Scheme elements would happen concurrently, maximising the estimated potential numbers of construction staff working on the Scheme.

4.2.12 Based on the phasing assumptions and the Applicant's experience of other similar sized solar projects, it is currently estimated that the Scheme would generate a peak of 692 construction workers and 268 Full Time Equivalent (FTE) jobs during the construction phase. The size of the workforce is based on the activities required and would fluctuate during the construction period.

Construction Controls

4.2.13 The construction phase would be subject to a suite of management documents which will limit and control activities. The outline documentation that has been prepared to support the DCO Application includes:

- **Outline Construction Environmental Management Plan (CEMP) [EN010168/APP/7.12]**;
- **Outline Soil Resources Management Plan (SRMP) [EN010168/APP/7.15]**;
- **Outline Site Waste Management Plan (SWMP) [EN010168/APP/7.16];**
- **Outline Construction Traffic Management Plan (CTMP) [EN010168/APP/7.22]**;
- **Outline Public Right of Way and Permissive Path Management Plan (PRoW MP) [EN010168/APP/7.17]**; and
- **Outline Skills, Supply Chain and Employment Plan (SSCEP) [EN010168/APP/7.20]**.

4.3 Operation and Maintenance

Operation and Maintenance Programme

4.3.1 The Scheme is anticipated to have a 60-year operational life. It is anticipated that the operation and maintenance phase would commence in 2029.

Plate 8 Operational Solar Farm



Operation and Maintenance Activities

4.3.2 During the operation phase two scenarios have been considered within the ES:

- General operational maintenance activities; and
- Programme of replacement activities.

General Operational Maintenance Activities

4.3.3 During operation and maintenance, other than in the context of a programme of replacement, activity on the Solar PV Sites would be restricted principally to vegetation management, equipment maintenance and servicing, ad hoc replacement of any components that fail or reach the end of their lifespan, periodic fence inspection, vegetation management along accesses, permissive paths and landscape ecological mitigation maintenance (see **Figure 5-1** to **Figure 5-5** in **Annex A – Figures** of this NTS), and monitoring to ensure the continued effective operation of the Scheme.

4.3.4 Along the Cable Route Corridor, operation and maintenance activity will consist of routine inspections and any reactive maintenance such as where a cable has been damaged.

Programme of Replacement Activities

4.3.5 The following assumptions have been made for the programme of replacement activities:

- It is expected that the operational life of Solar PV Panels is 40 years or more, and that all the Solar PV Panels will be replaced once during the operation and maintenance phase. It is possible that the panels may outperform this, but it is considered prudent to assume they will be replaced. The Solar PV Panels are anticipated to be replaced over a maximum 12-to-24-month period;
- It is expected that the BESS units could be replaced up to five times during the 60 year operation and maintenance phase;
- Accesses to the Solar PV Sites defined for construction would be used during the replacement activities. If any abnormal loads are required for the replacement of equipment, consultation will be carried out and approvals will be sought from the relevant local planning and highways authorities;
- Components such as Solar PV Mounting Structures, cabling and the Substation and BESS Area buildings are not anticipated to be replaced during the operation and maintenance phase, except in the event of unforeseen damage, failure, or deterioration. No intrusive ground works are anticipated to replace Solar PV Panels or BESS;
- Transformers are assumed to have a design life of 30 years, transformers may require replacement once during the lifetime of the Scheme, although, replacement will only be carried out if required for performance, or health and safety reasons.

Operation and Maintenance Access

4.3.6 During operation and maintenance, other than the period of operational replacement of Solar PV Panels, there would be a small number of daily vehicle trips with staff attending for maintenance and cleaning activities when required.

4.3.7 Existing field accesses would be used, where practicable, and accesses from the construction phase would continue to be used. This excludes the access from Fosse Way to Lime Down B which would only be used during the operational programme of replacement activities. The following accesses would be the primary point of access used during operation (refer to **Figure 4** in **Annex A – Figures** of this NTS):

- Lime Down A – Access 5;
- Lime Down B – Access 4b;
- Lime Down C – Accesses 1, 2 and 19;
- Lime Down D – Access 7, 8 and 10; and

- Lime Down E – Access 18.

4.3.8 The frequency of maintenance visits would reasonably be expected to be up to five visits per month to any of the Solar PV Sites.

Operational Staff

4.3.9 No on-site staff will be required to operate the Scheme but there will be limited staff facilities located in the control rooms associated with the 400 kV and 132 kV substations. Some permanent equipment for monitoring the Solar PV Sites will be located in the Relay and Control Rooms. Whilst this would typically be accessed remotely, it would be available for occasional physical access during routine visits. A further 15 FTE staff jobs would be created, which would not be based on site.

Operation and Maintenance Controls

4.3.10 The operation and maintenance phase would be subject to management documents which will manage and control activities. The outline documentation that has been prepared to support the DCO Application to mitigate effects associated with this phase includes:

- **Outline Operational Environmental Management Plan (OEMP) [EN010168/APP/7.13]**;
- **Outline Landscape and Ecological Mitigation Plan (LEMP) [EN010168/APP/7.18]**; and
- **Outline Battery Safety Management Plan (BSMP) [EN010168/APP/7.21]**.

4.4 Decommissioning

4.4.1 Decommissioning is expected to take between 12 and 24 months and will be undertaken in phases, and for the purposes of the assessment is expected to occur after the 60-year design life of the Scheme in 2089. A requirement to decommission the Scheme is secured via a Requirement in the **Draft DCO [EN010168/APP/3.1]**.

4.4.2 When the operation and maintenance phase ends, the Solar PV Sites would be decommissioned and the land returned to its original use and condition as far as practicable and returned to the landowner. All Solar PV Panels, mounting piles, cabling, inverters, transformers, switchgear, BESS Area and substations would be removed from within the Solar PV Sites and recycled or disposed of in accordance with good practice and market conditions at that time. This will include the areas of agricultural land where the soil health, quality and structure may have improved, and the established habitats. Foundations and other below ground infrastructure

will be cut to 1.2 m below the surface to enable future ploughing. Any piles would be grouted or removed.

4.4.3 Post-decommissioning, the landowners would choose how the land is to be used and managed. Permissive paths would be removed during decommissioning, with the precise timing to be determined by the contractor(s) and communicated to Wiltshire Council in accordance with the **Outline Decommissioning Strategy [EN010168/APP/7.14]**.

4.4.4 The mode of removing the Interconnecting Cables and Grid Connection Cables decommissioning would be dependent upon government policy and good practice at that time. Currently, the most environmentally acceptable option is considered to be leaving the cables in situ, as this avoids disturbance to overlying land and habitats and to neighbouring communities. Alternatively, the cables can be removed by opening up the ground at regular intervals and pulling the cable through to the extraction point, leaving the ducting and jointing bays in place, avoiding the need to open up the entire length of the cable route. The impact assessment is based on the worst-case parameters for each technical topic.

4.4.5 All work to the Existing National Grid Melksham Substation would remain under National Grid's control.

4.4.6 The effects of decommissioning would be similar or of a lesser magnitude than construction effects and are considered in the relevant sections of the ES.

5 Assessing Environmental Effects

5.1 Topics Assessed

5.1.1 **ES Volume 1, Chapters 1 to 6 [EN010168/APP/6.1]** provide a description of the Scheme and its surroundings, an overview of the Scheme, an overview to the alternatives considered during the design evolution, an introduction to energy need and policy and legislative context, and the approach and methodology to the EIA.

5.1.2 The following topic specific chapters have been produced and assessed in **ES Volume 1 [EN010168/APP/6.1]**:

- Chapter 7: Climate Change;
- Chapter 8: Landscape and Visual;
- Chapter 9: Ecology and Biodiversity;
- Chapter 10: Arboriculture;
- Chapter 11: Hydrology, Flood Risk and Drainage;
- Chapter 12: Cultural Heritage
- Chapter 13: Transport and Access;
- Chapter 14: Noise and Vibration
- Chapter 15: Air Quality
- Chapter 16: Socio-Economic, Tourism and Recreation;
- Chapter 17: Soils and Agriculture;
- Chapter 18: Human Health;
- Chapter 19: Ground Conditions;
- Chapter 20: Other Environmental Matters, including:
  - Minerals;
  - Materials and Waste;
  - Telecommunications, Utilities and Television;
  - Glint and Glare;
  - Electromagnetic Fields; and
  - Major Accidents and Disasters.
- Chapter 21: Cumulative and In-Combination Effects; and

- Chapter 22: Summary of Residual Effects.

5.1.3 **ES Volume 1, Chapter 21 [EN010168/APP/6.1]** describes cumulative effects and effect interactions that lead to combined effects from the Scheme and other identified developments on sensitive receptors.

5.1.4 **ES Volume 1, Chapter 22 [EN010168/APP/6.1]** presents a brief summary of the ES, outlining the significant effects identified during the EIA process.

5.2 ES Terminology

5.2.1 To enable comparison between technical topics and to aid understanding of the ES findings, standard terms are used wherever possible to describe the relative significance of effects throughout the ES (i.e. 'major', 'moderate', minor', and 'negligible'). The effects are also described as being adverse or beneficial. Where technical disciplines deviate from the standard assessment methodology, these are described in the relevant technical chapters of the ES (**Volume 1**).

5.2.2 Each of the technical chapters within ES (**Volume 1**) provides a further description and definition of the significance criteria relevant to the discipline. Where practicable, this has been based upon quantitative and accepted criteria (e.g. noise assessment guidelines), together with the use of value judgement and expert interpretation to establish to what extent an effect is significant.

5.2.3 Typically, effects that are considered to be negligible or minor are judged to be 'not significant', whereas those that are moderate or major are 'significant'. Where the EIA presented in the ES predicts a significant adverse effect on one or more receptors, it has been considered whether there are further mitigation measures which could avoid or reduce the effect or reduce the likelihood of it happening. The use of any such mitigation will be secured through the DCO should it be granted. As the design of the Scheme has evolved, the Applicant has worked with environmental specialists to ensure the design avoids or reduces environmental effects on receptors where practicable through the use of measures that form part of the design or methods for construction or operation (also known as embedded mitigation measures), such as the use of an **Outline CEMP [EN010168/APP/7.12]**. These measures are taken into account in the EIA and assessment of effects of the Scheme.

6 Energy Need, Legislative Context and Energy Policy

6.1.1 Urgent and unprecedented actions are required on a global scale to halt climate change. A rapid increase in the supply of low carbon electricity is needed for the UK to meet its legally binding target of achieving Net Zero carbon emissions by 2050.

6.1.2 The government's Clean Power 2030 Action Plan, published in December 2024, reinforces the urgent need for additional low carbon generation schemes to come forwards to deliver a clean electricity system as soon as possible, and to keep the electricity system clean as power demand over the 2030s and 2040s rapidly grows due to the country pursuing the electrification of heat, transport, and industrial demand to reduce fossil fuel use. A clean electricity system is one where the vast majority of electricity used is supplied from UK-based low-carbon sources.

6.1.3 The Secretary of State must have regard to the current suite of National Policy Statements (NPSs) for energy as relevant NPSs and must decide the application for development consent for the Scheme under the Planning Act 2008 in accordance with those NPSs.

6.1.4 The NPSs establish a critical national priority for low carbon infrastructure, including for large-scale solar farms, because of the decarbonisation, energy security, and affordability benefits that they deliver. The NPSs confirm that substantial weight should be given to the need for low carbon generation schemes, and that large-scale ground mounted solar farms have a critical role to play in achieving the government's energy policy aims of delivering a secure, low carbon and low-cost electricity supply for consumers on the way to delivering Net Zero carbon emissions by 2050.

6.1.5 The Scheme will, if consented, help to address the climate change emergency that affects everyone's lives and the environment, by ensuring our energy supply is secure, low carbon and low-cost.

7 ES Findings

7.1.1 An assessment of the environmental effects of the Scheme during its construction, operation and maintenance, and decommissioning phases has been completed for each of the topics identified in Section 5.1 above. Key environmental and planning constraints are presented in **Figure 6 in Annex A – Figures** of this NTS.

7.1.2 The conclusions on the likely significant environmental effects of the Scheme are described within the technical chapters of the ES (**Volume 1**). This section provides a non-technical summary of the overall findings of the ES.

7.2 Climate Change

7.2.1 This section summarises the key findings of the assessment of the climate change effects of the Scheme. The full climate change assessment is included in **ES Volume 1, Chapter 7: Climate Change [EN010168/APP/6.1]**.

Baseline and Context

7.2.2 The Order Limits currently predominantly consists of arable land with managed trees and hedgerows with baseline Greenhouse Gas emissions (GHG) derived from agricultural activities. The extent of baseline GHG emissions is dependent on the soil and vegetation present, and the fuel used during the operation of any plant and machinery.

7.2.3 Consideration has been given to the following aspects of climate change assessment:

- GHG Impact Assessment – the impact of GHG emissions arising from the Scheme on the climate over its lifetime;
- Climate Change Risk (CCR) Assessment – the resilience of the Scheme to climate change impacts; and
- In-combination Climate Change Impact (ICCI) - the combined impact of the Scheme and future climate change on the receiving environment.

7.2.4 For the lifecycle GHG impact assessment, the future baseline is a 'business as usual' scenario whereby the Scheme is not implemented. The future baselines comprise existing carbon stock and sources of GHG emissions within the Scheme from existing activities. As a conservative approach, the baseline activities are assumed to generate zero emissions.

7.2.5 For the Climate Change Risk Assessment, the Study Area for this assessment is the Order Limits of the Scheme. The current baseline for

the Climate Change Risk Assessment and In-combination Climate Change Impact assessment is the current climate of the Site. This is based on historic climate data recorded by the closest Met Office station to the Order Limits (Yeovilton) for the 30-year climate period of 1991 to 2020.

7.2.6 It is anticipated the future baseline would be different from the current present-day baseline due to changes in climate. For this assessment, the latest climate predictions have been provided.

Embedded Mitigation

7.2.7 Embedded mitigation measures will be implemented to reduce the GHG impact of the Scheme and are also included in the **Outline CEMP [EN010168/APP/7.12]** and **Outline SWMP [EN010168/APP/7.16].** Embedded mitigation measures include reusing of materials on-site, off-site recycling and recovery of materials, encouraging local bus connections and cycle access routes, and implementing a shuttle bus system.

7.2.8 Climate change resilience measures are embedded within the Scheme, particularly in relation to flood risk. The specific flood risk impacts and associated mitigation measures are discussed in more detail in **ES Volume 1, Chapter 11: Hydrology, Flood Risk and Drainage [EN010168/APP/6.1]** and include:

- Associated electrical infrastructure being located in areas with a 'low probability of flooding', where practicable;
- For both fixed and tracker panels, all electrical equipment on the Solar PV Panel will be elevated by the legs above the 1 in 1,000 annual probability of river flooding; and
- Tracker panels will be mounted on raised frames with a tracking system to ensure electrical equipment on the solar panel is raised to a minimum of 2.5 m above ground level in the horizontal position.

Assessment of Effects

Lifecycle GHG Impact Assessment

7.2.9 Worst case total GHG emissions from the construction phase are estimated to equate to around 237,149 tonnes of carbon dioxide equivalent (tCO_2e).

7.2.10 GHG emissions from construction activities will be limited to the duration of the construction phase (anticipated to be 2 years). The emissions from the construction will not be evenly weighted between the 2 years but for the purpose of this assessment it is considered emissions will be evenly

weighted between both years and will be made in 2027 and 2028. When annualised, the total annual construction emissions equate to around 118,575 tCO_2e.

7.2.11 Annual emissions from the construction of the Scheme contribute to less than 0.030% and 0.034% of the respective carbon budgets which are legally binding limits on greenhouse gas emissions in the UK. The applicable greenhouse gas emission targets for the Scheme requires a 52% reduction in emissions from 1990 levels, and the 57% reduction from 1990 levels. The magnitude of effect is therefore considered low. GHG emissions from the construction of the Scheme are considered to have a Minor Adverse effect on the climate which is not significant.

7.2.12 The total construction phase emissions are estimated to be 237,149 tCO_{2e}, with the majority coming from the embodied carbon in the Solar PV Panels and battery storage systems. The total operational phase emissions are estimated to be 686,989 tCO_{2e}, again dominated by the embodied carbon in the replacement of Solar PV Panels and batteries. It is expected that the decommissioning phase emissions will be less than 1% (approximately 8,961 tCO_2e) of the total GHG emissions and minimal compared to the beneficial effects of the scheme over its 60-year operational lifetime.

7.2.13 Over the Scheme's lifespan, it is estimated to result in a net saving of 218,611tCO_2e if tracker panels are used, or 253,839 tCO_2e if fixed panels are used. These savings are calculated by comparing the Scheme's emissions to those that would occur if the same amount of electricity were generated from the UK grid in 2029 (the Scheme's first year of operation).

7.2.14 Therefore, the Scheme will reduce greenhouse gas emissions compared to conventional grid electricity, and this reduction is considered a significant beneficial effect in relation to climate change. It should be noted that all estimated emissions are based on the current best available baseline data. It is anticipated that GHG emissions will reduce in future years as technology improves and further policy and legislation, which are assumed to bring further GHG reductions, takes effect.

Climate Change Risk Assessment

7.2.15 The climatic changes expected to take place during the construction phase have the potential to cause delays to the construction schedule due to the occurrence of severe weather events. The extreme weather conditions may also impact the health and safety of the workers on site. As a consequence, the expected climate changes are not as severe and will likely be able to be mitigated against.

7.2.16 Based on the above assessment, without appropriate mitigation the Scheme is at high risk to climate change impacts.

7.2.17 Embedded mitigation measures to increase the resilience of the Scheme to climatic changes are outlined in **ES Volume 1, Chapter 7: Climate Change [EN010168/APP/6.1]**.

In-Combination Climate Change Impact Assessment

7.2.18 The greatest risk of in combination effects are increased flooding events from extreme weather arising from a changing climate.

7.2.19 There is potential for in-combination effects on receptors, including flood risk to future people and/or property at the Solar PV Sites and surrounding areas, construction workers and construction equipment, and local watercourses and groundwater bodies. These effects may arise in conjunction with Ecology (**ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**), particularly regarding impacts on watercourses and associated sensitive habitats, and ground conditions, with respect to interactions with groundwater and soil stability. Following the respective mitigation measures outlined, any cumulative impacts on the Scheme are considered to be effectively managed.

Additional Mitigation

7.2.20 No additional mitigation has been identified.

Residual Effects

7.2.21 The GHG assessment findings indicate the Scheme will yield **significant beneficial effects** during the operational and maintenance phase and achieve a net reduction in GHG emissions. This is compared to a scenario without the Scheme, where energy would need to be generated using the grid methods.

7.2.22 The Scheme's design and integrated mitigation measures effectively address climate change risks. Therefore, the climate change risks during the construction, operation and maintenance or decommissioning phase are not significant.

7.3 Landscape and Visual

7.3.1 This section summarises the key findings of the assessment of the landscape and visual effects of the Scheme. The full landscape and visual assessment is found in **ES Volume 1, Chapter 8: Landscape and Visual [EN010168/APP/6.1].**

Baseline and Context

7.3.2 The Scheme is set within a rural landscape, characterised by gently undulating agricultural land with arable fields, hedgerows, scattered woodlands, and woodland blocks. Its landform comprises gently undulating topography, generally rising westwards, with a series of small valleys and flatter land between these. In the surrounding area, there are several individual farm holdings, rural dwellings, and small commercial business properties.

7.3.3 The Scheme is situated approximately 800m to the north of Hullavington and lies to the south and east of the Cotswold National Landscape. The northern boundary of Lime Down A and the western boundary of Lime Down C, are adjacent to the boundary of the Cotswold National Landscape. Refer to **ES Volume 3, Figure 8-1 Study Area [EN010168/APP/6.3]**.

7.3.4 The Scheme is located approximately 1.7 km north of the M4 motorway, with Junction 17 of the M4 approximately 1.7 km to the south of Lime Down E. The Scheme lies approximately 7.7 km east of the A46 classified road. The A429 runs north of junction 17 of the M4 between Lime Down E to the east and Lime Down A-D to the west. The A429 passes through the villages of Malmsbury, Corston and Lower Stanton St. Quintin. The B4040 (Sherston Road) is located approximately 450 m to the north-West of Lime Down A. Minor highway improvement works will be undertaken within the Cotswold National Landscape to the north of Grittleton (refer to **ES Volume 2, Figure 8-6: Landscape Receptors [EN010168/APP/6.2]**).

7.3.5 The surrounding area is primarily rural agricultural land with a number of smaller villages within 1 km. The Scheme is visible from minor roads, byways, bridleways, and footpaths. Views of the Scheme are generally from short-distances due to Solar PV Panel areas being interspersed with hedgerows and woodland, with some longer-distance views possible from higher ground in the surrounding area. There are Public Rights of Way, cycleways, and road receptors located within or in close proximity to the Site, as well as a number of residential properties and settlements, which have views of the individual Sites.

7.3.6 The Great Western Railway South Wales Main Line runs east to west to the south of Lime Down D and intersects Lime Down C and Lime Down E.

7.3.7 The Fosse Way, a Roman road built during the first and second centuries AD between Exeter and Lincoln is a strong linear feature of the landscape which runs southwest-northeast through the Scheme. The distinctly linear route, rises and falls across the undulating topography. The route crosses a number of small streams but is generally on higher flatter land. Views are predominantly enclosed by hedgerows but there are some views over

the surrounding arable landscape from higher ground. Longer views are typically restricted by dense woodland on the skylines, limiting views beyond.

7.3.8 In order to assist with viewpoint selection and to appreciate the potential influence of the Scheme in the wider landscape, Zone of Theoretical Visibility figures have been used to illustrate the area from where it may be theoretically possible to view all, or part, of the Scheme. The Zone of Theoretical Visibility figures produced are both Bare Earth (landform only) to illustrate a worst-case scenario (as shown in **ES Volume 2, Figure 8-8: Bare Earth Zone of Theoretical Visibility [EN010168/APP/6.2]**) and augmented Zone of Theoretical Visibility figures (as shown in **ES Volume 2, Figure 8-9: Augmented Zone of Theoretical Visibility [EN010168/APP/6.2]**) which illustrate the effects of landform, built form and vegetation.

7.3.9 A series of photomontages have been produced to show the effects of the Scheme at locations where significant effects were considered likely to occur. Locations of the required photomontages and Accurate Visual Representation (AVR) were agreed with the Landscape Officer representatives for Wiltshire Council and Cotswolds National Landscape Board.

Embedded Mitigation

7.3.10 The LVIA assessment process has identified mitigation to avoid and reduce to a minimum any significant adverse landscape and visual impacts identified.

7.3.11 Mitigation measures for landscape and visual effects include avoidance measures, general offsets/buffers, landscape design parameters, enhancement measures, and phase specific embedded mitigation measures. All mitigation measures are detailed in **ES Volume 1, Chapter 8: Landscape and Visual [EN010168/APP/6.1].** Some of these mitigation measures include:

- Avoiding development adjacent to the National Landscape where it would affect its setting;
- Avoiding development where it would be visually intrusive and affect the character and visual experience of the landscape. These measures include the removal of panels within the setting of the Cotswolds National Landscape in Sites A, B and C where there is a strong visual relationship between the Cotswolds National Landscape and the Scheme;
- Buffers have been used to create a set of design parameters in which above-ground infrastructure has been located. The distances listed in

Section 8.9 of **ES Volume 1, Chapter 8: Landscape and Visual [EN010168/APP/6.1]** are a minimum set distance which have been agreed across disciplines that was tested throughout the design process.

7.3.12 Overarching Landscape Design principles include:

- Reinforcement to host landscape fabric, strengthening and reinforcing existing landscape elements of the site in accordance with LCA aims and guidelines;
- Retention of existing hedgerows/scrub cover and existing hedgerows will be allowed to grow to a height of 4.5 m; and
- The location of the Solar PV Panels are set back from the Site Boundary.

7.3.13 The following principles outlined below have been embedded into the design of the Scheme to protect the landscape fabric of the Sites:

- Reinforce the existing hedgerows to provide greater enclosure to the site;
- Retention of existing woodland/scrub and hedgerow cover;
- Existing water corridors have been identified, and new riparian planting has been proposed to enhance features as they pass through the Site;
- Lighting is not required during operation and maintenance phase, and lighting during construction and decommissioning will be designed to minimise potential light spillage as far as reasonably practicable;
- New planting within the Sites to provide screening and habitat connectivity; and
- New planting would screen certain views for Public Rights of Way, the bridleway network and local roads.

7.3.14 Enhancement measures are included to 'further the purpose' of the Cotswolds National Landscape to conserve and enhance its natural beauty, as required by the Levelling Up and Regeneration Act 2023 detailed in **Volume 1, Chapter 8: Landscape and Visual [EN010168/APP/6.1].** These enhancement measures have been informed by the Cotswolds National Landscape Plan, the Cotswolds Nature Recovery Plan and the 'special qualities' of the National Landscape, those aspects which make the area distinctive. This includes:

- The avoidance of panels within fields C1, C6, C8, C9, A1 and B12, with these fields put to permanent wildflower meadow to increase biodiversity;

- The inclusion of wildflower meadow verges on the edge of set aside land in fields A11, A12 and C10 to provide attractive buffers in views from public roads; and
- 119.7 hectares of flower-rich neutral grassland, long term maintenance of existing hedgerow and woodland, additional tree and hedgerow planting in accordance with the CNL Nature Recovery Plan;
- Maintaining hedgerows at their current height of c1.5m (or as existing if greater) bordering the Cotswolds National Landscape within Site C to maintain open views of the landscape within the setting of the Cotswolds National Landscape.

Plate 9 Wildflowers establishing in an operational Solar Farm



7.3.15 These measures are incorporated into **ES Volume 2, Figure 3-4 Landscape and Ecology Mitigation Plan [EN010168/APP/6.2]**.

7.3.16 The following construction phase control documents are included as embedded mitigation measures:

- **Outline CEMP [EN010168/APP/7.12]**;
- **Outline LEMP [EN010168/APP/7.18]**;
- **Outline Ecological Protection and Mitigation Strategy (EPMS) [EN010168/APP/7.19]**;
- **Outline SRMP [EN010168/APP/7.15]**;
- **Outline CTMP [EN010168/APP/7.22];** and

- **Outline Public Rights of Way and Permissive Path Management Plan [EN010168/APP/7.17]**.

Assessment of Effects

Landscape Effects

Landscape Fabric

7.3.17 No significant effects have been recorded during construction and Year 1 regarding the Landscape Fabric, as Embedded Mitigation measures have been included within the design of the Scheme to protect the landscape fabric of the existing landscape features within the Scheme.

7.3.18 The Scheme would result in the following benefits to Landscape Fabric such as:

- 702.80 ha of Proposed Ground Cover;
- 11.45 ha of Green Corridor and Woodland Planting;
- 7.78 ha of Enhanced Native Riparian Planting;
- 54.94 km of Hedgerow Reinforcement and Roadside Reinforcement;
- 15.49 km of Proposed Hedgerows;
- Reintroduction of 14 Historic Ponds and New Ponds;
- 12.8 km of new permissive paths.

7.3.19 By Year 15, embedded mitigation planting would be established and add to the Green Infrastructure across all of the Lime Down Sites. The new planting would provide extensive habitat and biodiversity benefits and make a positive contribution to Biodiversity Net Gain. The embedded landscape mitigation provides reinforcement to the host landscape fabric of each site, strengthening and reinforcing existing landscape elements in accordance with the aims and guidelines of the Landscape Character Assessments, as well as Wiltshire's Nature Recovery Strategy and the Cotswold Nature Recovery Plan.

7.3.20 Following mitigation establishment, **Moderate Beneficial effects (significant)** have been identified for the Scheme at Year 15 of the operation and maintenance phase and the decommissioning phase.

1km Local Study Area

7.3.21 During the construction phase, prior to the growth and establishment of the mitigation planting (including hedgerow reinforcement, new hedgerows and reinforced roadside planting), there would be an immediate change to the character of the Local Study Area (1km) as the

Site changes from an area of arable farmland to solar infrastructure. At Year 1, the impacts of the proposed mitigation planting would be limited. During both construction and Year 1 of operation, the effect of the Scheme on the Local Study Area is **moderate adverse** which is **significant in EIA terms**. As Embedded Mitigation measures mature, the adverse effects of the Scheme would reduce and as such, whilst adverse effects continue, no significant adverse effects are predicted from Operation Year 15 through to Decommissioning.

Visual Effects

7.3.22 Significant visual effects have been identified to receptors within **ES Volume 1, Chapter 8: Landscape and Visual [EN010168/APP/6.1]**. During construction, the Solar PV Sites will have a **major / moderate adverse effect** on one Private Receptor, 16 Public Receptors, and 3 Transport Receptors, and a **moderate adverse effect** on eight Private Receptors, 11 Public Receptors and nine Transport Receptors. The same level of effects will be experienced a year 1 of operation, other than for one Transport Receptor for which no significant effects are reported. Once Embedded Mitigation has matured, four Public Receptors remain at a **moderate adverse** significant level and six at a **major / moderate** throughout the lifetime of the Scheme.

7.3.23 Where significant long-term effects on public receptors remain at Year 15, this is primarily because mitigation is not proposed as it would not be appropriate to long-term landscape character and the legacy landscape, e.g. where footpaths diagonally cross fields, new hedgerows to screen views of infrastructure would not be consistent with the regular pattern of fields which is characteristic of the existing landscape. Other instances of significant long-term visual effects on Public Receptors relate to the local topography where there are views from higher ground to infrastructure which cannot be fully alleviated by mitigation.

Cable Route Corridor

Landscape Effects

7.3.24 All effects on the landscape from the Cable installation would be short term, temporary in nature and are confined to the area within the Cable Route Corridor itself. All cables would be underground with no new overhead lines or associated poles required. Runs of overhead lines between components or to connect underground cables are not proposed.

7.3.25 Where the cable is proposed to cross open farmland, excavations and trenching would take place to allow the cable to be placed in situ. Where the cable is proposed to pass through substantial landscape features (such as woodland), the cable would use trenchless techniques to pass

underneath with no permanent above ground structures proposed. This is proposed to reduce the effects landscape and visual receptors.

7.3.26 Given the above, the construction stage of the Cable Route Corridor would have a very low level of change on the character of the landscapes within the Cable Route Corridor Study Area and associated effects on the landscape are considered to result in Minor / Negligible Adverse effects (not significant) during construction and before mitigation has matured in year 1 of operation. No significant effects were recorded from year 1 of operation onwards.

Visual Effects

7.3.27 **Moderate adverse significant effects** were recorded for six private and six public visual receptors during the construction phase, along with one **major / moderate adverse** effect for one public receptor. These receptors are in close proximity to both the Cable Route Corridor and Temporary Construction Compounds which would cause a noticeable change in views and visual amenity. No significant effects were recorded from year 1 of operation onwards.

Assessment of Abnormal Loads

7.3.28 There are a number of works required including widening and passing bays to accommodate the Abnormal Indivisible Loads. There are three small sections on the route where works to trees are required. This includes cutting back or trimming of hedgerow rather than removing/loss. The effect on Landscape and Visual Receptors would be temporary and would be Negligible (Not Significant).

Assessment of Effects on the Cotswolds National Landscape

7.3.29 Although the Solar PV Sites of the Scheme are located outside the designated boundary of the Cotswolds National Landscape, two Sites (Lime Down A and C) lie adjacent to it, with Lime Down A, B and C all being within the setting of the National Landscape. Given the proximity, a detailed assessment was undertaken to understand potential impacts on the Cotswolds National Landscape and its special qualities. The assessment concludes that there would be no direct significant adverse effects on the Cotswolds National Landscape or its special qualities. Harm to the Cotswolds National Landscape itself would be minimal with beneficial landscape effects within the setting of the CNL in the long term which would further the purposes of the designation.

Additional Mitigation and Residual Effects

7.3.30 Mitigation for LVIA involves planting throughout the Solar PV Sites which is embedded into the Scheme and secured in the design, meaning additional mitigation is not available. No additional mitigation measures for the Scheme are proposed. The Residual Effects are therefore as set out in paragraphs 7.3.1 to 7.3.29.

7.4 Ecology and Biodiversity

7.4.1 This section summarises the key findings of the assessment of the ecology and biodiversity effects of the Scheme. The full ecology and biodiversity assessment is provided in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**.

Baseline and Context

7.4.2 Baseline habitat and species information, referenced in the assessment, and presented in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**, is based on site surveys conducted in 2023, 2024 and 2025, published data, third party ecological records and web-based information obtained between 2023 and 2025.

7.4.3 The Order Limits comprises a variety of habitats, including arable fields, grasslands, woodlands, hedgerows, ponds, and watercourses. These support or have been assumed to support on a precautionary basis, a range of protected and notable species, such as badgers, bats, dormice, otters, water voles, brown hares, hedgehogs, reptiles, amphibians, breeding and overwintering birds, terrestrial invertebrates, white-clawed crayfish, and various fish species.

7.4.4 There are no statutory internationally designated ecological sites located within 10 km of the Solar PV Sites. However, five international designated sites with qualifying mobile species (bats/migratory birds), and/or with hydrological connectivity, were identified within the wider search radius of 30 km. The search radius was extended for these features due to the highly mobile nature and larger home ranges of these species which can extend any potential functional linkage between them and the Solar PV Sites beyond 10 km. These designated sites are: the Bath and Bradford-on-Avon (BaBOA) Bats Special Area of Conservation (SAC); Severn Estuary SAC; Severn Estuary Special Protection Area (SPA); Severn Estuary Ramsar site; and Salisbury Plain SPA.

7.4.5 Four national designated sites for nature conservation were identified within 5 km of the Solar PV Sites, including two Sites of Special Scientific Interest (SSSI) and two Local Nature Reserves (LNR). This included Harries Ground, Rodbourne SSSI, which is located immediately adjacent to Lime Down E. One additional SSSI located within the search area

(Stanton St Quinton Motorway Cutting SSSI) is designated solely for its geological features and was not considered within **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**.

7.4.6 No statutory designated sites for nature conservation are present within the Cable Route Corridor or immediately adjacent. However, the BaBOA Bats SAC lies approximately 3.77 km to the west of the Cable Route Corridor at the closest point. A 2015 guidance document provided by Natural England and Wiltshire Council (Ref 4) details a network of sensitive features used by the bat populations of the BaBOA Bats SAC. These include Core Roosts, which are defined in the guidance but in summary are those roost sites where large numbers of the relevant bat species are known to regularly hibernate and breed, and which are judged to have a functional and demographic connection with the SAC population.

Embedded Mitigation

7.4.7 An **Outline CEMP [EN010168/APP/7.12]**, **Outline OEMP [EN010168/APP/7.13]**, and **Outline Decommissioning Strategy [EN010168/APP/7.14]** have been prepared and include measures to be adopted to limit the likelihood of impacts upon retained habitats through damage, pollution, and disturbance. Details of landscape planting and habitat management options to provide net gains in biodiversity is set out within the **Outline LEMP [EN010168/APP/7.18]** submitted alongside the ES.

7.4.8 Buffers have been integrated into the Scheme to avoid impacts to ditches, watercourses, ponds, woodland, hedgerows, trees, designated sites, and other ecological features identified, such as badger sett, features with suitability for roosting bats, and nesting sites. These buffer distances are detailed in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]** and will not contain Solar PV Mounting Structures, hard standing or electrical hardware, with the exception of new accesses and cables which need to cross existing habitats. Protective fencing will observe these buffer distances during the construction phase.

7.4.9 Access for construction and operational maintenance has been specifically designed to utilise existing field entrances and gaps in hedgerows and other linear habitats wherever practicable. This has been completed through collaboration between several technical disciplines, and through scrutinising Ordinance Surveys (OS), topographical imagery and aerial imagery. Any hedgerow removal required to facilitate temporary access tracks will be reinstated following completion of construction.

7.4.10 An **Outline EPMS [EN010168/APP/7.19]** has been produced to support the ES and **Outline CEMP [EN010168/APP/7.12]** by providing more

detailed ecology-focused protection and mitigation prescriptions for the construction phase. The **Outline EPMS [EN010168/APP/7.19]** summarises the measures and approaches to be adopted which will limit the likelihood of impacts occurring upon retained habitats and protected species through damage, pollution and/or disturbance during the construction phase in order to enact the mitigation requirements set out in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**.

7.4.11 An Ecological Clerk of Works (EcoCoW) will be designated at the onset of the construction phase, which will provide ecological supervision during the completion of any works which have the potential to impact protected and notable species, as appropriate.

7.4.12 The **Outline EPMS [EN010168/APP/7.19]** also contains criteria under which certain potentially impactful operations would need to be restricted to particular months or seasons in order to lessen likely adverse ecological effects (for example, hibernation or nesting season for particular species).

Assessment of Effects

Construction

7.4.13 The magnitude of habitat loss and change would have an impact on ground-nesting birds such as skylark and yellow wagtail. Similarly, bats, dormice, riparian mammals, and white-clawed crayfish would experience impacts due to habitat loss and fragmentation from new access routes and cable installations. The potential for accidental harm to amphibians, reptiles, and small mammals during construction activities also poses a risk that will be managed. However, with the planned embedded mitigation measures, it is considered that the effects potentially arising from these impact pathways on the component species and sites within the BaBOA Bats SAC, Severn Estuary SAC and SPA, Severn Estuary Ramsar, and Harries Ground Rodbourne SSSI will be neutral and non-significant**.** No significant effects are anticipated Other National Statutory Designated Sites within 5 km of Scheme.

7.4.14 Non-Statutory Designated Sites within 300 m of Solar PV Sites found that no direct impacts on habitats present are anticipated during the construction phase. Therefore, no additional mitigation measures (beyond those embedded in the design of the Scheme) are required. The same is the case for Non- Statutory Designated Sites between 300 m and 2km of the Solar PV Sites.

7.4.15 No significant adverse effects upon these sites are anticipated during the operation and maintenance phase as any impact would be of negligible

magnitude. No additional mitigation measures (beyond those embedded in the design of the Scheme) are required, and no residual effects are anticipated. When considering the above embedded mitigation measures that will be adopted through the **Outline CEMP [EN010168/APP/7.12]** and **Outline EPMS [EN010168/APP/7.19]**, it is considered that the impacts to arable field margins, other neutral grassland, woodlands and ponds is anticipated to be minimal. As a result, no significant effects are anticipated.

Operation and Maintenance

7.4.16 During the operation and maintenance phase, the risk of significant adverse effects is lower. The retention and management of buffer zones and new habitats are expected to mitigate most potential impacts and therefore the effect of habitat loss and change is limited. Limited activities required during the operation and maintenance phase will also minimise the risk of harm to species, and impact to habitats.

7.4.17 It is considered highly unlikely that any new badger setts would be excavated within the main body of the Solar PV Sites, such that there would be potential conflict with ongoing operation and maintenance activities. However, this possibility cannot be ruled out. Although considered unlikely, the damage of disturbance of active badger setts during the operational phase would constitute a **significant adverse** effect at the Site level. There is therefore some risk of electromagnetic fields (EMFs) affecting migratory fish in the vicinity of the 400 Kv Grid Connection Cables, where they are required to cross tributaries of the River Avon. The likely significance of effects arising from EMFs on fish as a result of the Scheme are difficult to quantify. However, on a precautionary basis, without additional mitigation, impacts on eels and sea trout from EMFs could lead to an adverse impact on the Severn Estuary Ramsar which would be significant at an International Level.

7.4.18 Significant beneficial effects are predicted on the following habitats and species as a result of the habitat creation and enhancement provided by the Scheme implemented within the **Outline LEMP [EN010168/APP/7.18]**:

- Other Neutral Grassland: significant beneficial effect at a Local level;
- Woodland: significant long-term beneficial effect at the Local level;
- Ponds: significant beneficial effect at Site to Local level;
- Hedgerows: significant beneficial effect at a Local level;
- Ditches and watercourses: significant beneficial effect at Site level;
- Badgers: significant beneficial effect at Site level;

- Bats – Foraging/Commuting: long-term, significant beneficial effect on bats at the Local level;
- Dormice: long-term, significant beneficial effect on dormice at the Local level;
- Brown Hare: significant beneficial in the long term at the Site level;
- Harvest mouse, hedgehog and polecat: significant beneficial effect at the Local level;
- Amphibians (Great Crested Newts): long-term significant benefit at the Local level;
- Reptiles: long-term significant benefit at the Local level;
- Breeding birds (Open Habitats and Boundary Habitats): significant benefit at the Local level;
- Overwintering Birds: significant beneficial effect at a Local level; and
- Terrestrial invertebrates: significant beneficial effect at a Site level.

Decommissioning

7.4.19 The assessment of decommissioning effects takes into account the measures set out in the **Outline Decommissioning Strategy [EN010168/APP/7.14]** which accompanies the ES and will be secured by a DCO Requirement in the **Draft DCO [EN010168/APP/3.1]**. Activities relating to the removal of solar panel frames, underground cabling, substations and concrete footings, access and energy storage would be expected to have similar (or no worse) direct effects as those described in the construction phase impacts for each receptor. Comparable levels of disturbance from movement of vehicles and personnel would also be expected.

7.4.20 The restoration of the land back to open arable farmland would likely be beneficial for some species of farmland bird which require open sightlines, as well as for plant species associated with arable margins, but much of the biodiversity value which it is anticipated will develop in the preceding (approximately) 60 years of the operation and maintenance of the Scheme would be lost, along with habitat for a variety of other species.

Additional Mitigation

7.4.21 In addition to the embedded mitigation within the **Outline EPMS [EN010168/APP/7.19]**, approximately 25.17 km of new hedgerow planting has been incorporated into the Scheme within the Solar PV Sites in order to compensate for any losses anticipated across the Order Limits. The

Biodiversity Net Gain Assessment concluded that there would be a 12.31% net gain in Hedgerow Units across the Scheme.

7.4.22 As prescribed within the **Outline EPMS [EN010168/APP/7.19]**, an Ecological Clerk of Works will conduct relevant follow up surveys, pre-construction inspections and oversee any necessary ditch trenching work associated with both construction of the Solar PV Sites and Cable Route Corridor. The Ecological Clerk of Works will also be tasked with monitoring the success of all replacement planting and organising remedial action, where necessary.

7.4.23 It is proposed to register all works within the Cable Route Corridor under Natural England's District Level Licensing (DLL) for Great Crested Newts (GCN) as a compensation measure. The land within the entire Order Limits falls within either 'green' or 'amber' Natural England risk zones for GCN and therefore DLL is possible. Furthermore, correspondence with Natural England has confirmed that there is an adequate supply of compensation ponds within Wiltshire to enable DLL to be adopted for the Scheme.

7.4.24 As part of additional mitigation for ground nesting birds, a number of fields have been removed from hosting infrastructure for the Scheme and will be managed sensitively as set out within the **Outline LEMP [EN010168/APP/7.18]** to provide improved nesting habitat for these species. These fields will either be managed as permanent grassland with a late season hay-cut (to avoid disturbance to birds during the breeding season) or as set-aside.

7.4.25 Cables will be installed via Horizontal Directional Drilling (or other non-open-cut methods) to cross those watercourses deemed suitable to regularly support eels and sea trout, including Gauze Brook, Gabriel's Well Brook, Pudding Brook, Pudding Brook Tributary, and Byde Mill Brook. In all such cases cables will be buried to a minimum depth of 5 m below the channel bed, in order to maximise attenuation of electromagnetic fields and minimise the risk of any adverse impacts. This is prescribed within the **Outline EPMS [EN010168/APP/7.19].**

Residual Effects

7.4.26 With the adoption of additional mitigation measures described in the above section it is considered that the majority of significant adverse effects would be reduced to neutral, non-significant levels.

7.4.27 During construction and decommissioning, residual **significant adverse effects** (after all mitigation has been considered) as a result of the Scheme are anticipated for the following Important Ecological Features:

- Hedgerows **(Adverse – Significant effect** at Local level in the short term. Neutral and not significant in the medium to long term)**;** and
- Breeding Birds – Ground Nesting Birds of Open Habitats **(Adverse – Significant effect** to Skylark at Local level, and **Adverse Significant** effect at Site level for Yellow Wagtail, Corn Bunting, Grey Partridge and Quail)**.**

7.4.28 Significant beneficial effects have been reported on a number of habitats and species in Section 7.4.18. As reported in the **Biodiversity Net Gain Assessment Report [EN010168/APP/7.8]** the Scheme will result in a total increase of 34.56 % in habitat units, 12.31% for hedgerow units and 20.08% for watercourse units.

7.4.29 The cessation of intensive arable farming and switch to permanent grassland (for the lifetime of the Scheme) and the creation and enhancement of a wide range of other habitats, including woodlands, hedgerows, ponds and species-rich and/or tussocky grassland within the Solar PV Sites is expected to provide lasting ecological benefits where the Scheme remains operational across multiple decades. Significant residual benefits resulting from the increase in extent, quality and connectivity of retained, enhanced and newly created habitat are expected for other neutral grassland, woodland, ponds, hedgerows, ditches and watercourse habitats.

7.4.30 This in turn is also expected to result in significant residual benefits for species associated with such habitats, including badgers, brown hares, foraging/commuting bats, dormice, brown hares, harvest mice, hedgehogs, polecats, amphibians, reptiles, breeding and overwintering birds, invertebrates, and freshwater fish. Such benefits are anticipated to be significant at the Site to Local level depending on the species.

7.5 Arboriculture

7.5.1 This section summarises the key findings of the assessment of arboricultural effects. The arboricultural assessment is found in **ES Volume 1, Chapter 10: Arboriculture [EN010168/APP/6.1]**.

Baseline and Context

7.5.2 The Study Area comprises the Order Limits and a 50m buffer beyond it's extents. It includes five land parcels described as Lime Down A, B, C, D, E (collectively known as the Solar PV Sites, which includes areas for battery storage and associated infrastructure, landscaping, heritage, surface water and biodiversity mitigation areas).

7.5.3 Arboricultural features, for the purpose of this assessment, are defined as individual trees, groups of trees and woodlands. Hedgerows are not

included in this assessment and are considered separately in **Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]**.

7.5.4 A total of 1,021 individual trees, 226 groups of trees, 57 hedgerows and 11 woodlands were recorded altogether across the Order Limits.

7.5.5 52 veteran trees were recorded, none of which were found to be ancient. Six woodlands were recorded as ancient in accordance with the desk study results.

Embedded Mitigation

7.5.6 The Scheme has been designed to avoid and reduce impacts and effects on Arboriculture by embedding mitigation measures into the design process. In addition, how the Scheme is constructed, operated and maintained, and decommissioned would be controlled in order to manage and minimise potential environmental effects.

7.5.7 Embedded mitigation measures such as the below have been incorporated into the Scheme:

- Machinery movements and spoil/material storage will avoid the Root Protection Areas (RPAs) of retained trees within the Solar PV Sites and the Cable Route Corridor;
- Any excavation work within the RPAs of retained trees will be undertaken using hand tools only and in accordance with the root pruning methodology within **ES Volume 3, Appendix 10-1: Arboricultural Impact Assessment and Outline Arboricultural Method Statement [EN010168/APP/6.3]**;
- No new landscaping is proposed within the Veteran Tree Buffers Zones to avoid soil disturbance to veteran trees during construction;
- Cable Route Corridor design work has been undertaken in order to retain, avoid and fully protect identified veteran trees to provide sufficient space to allow for open cut trenching around veteran tree buffer zones ensuring impacts to veteran trees are avoided;
- Micro-siting will be employed to avoid the removal or occurrence of root or canopy impacts to veteran trees and high-quality category A trees within the Cable Route Corridor. If micro-siting cannot be achieved around such arboricultural features, trenchless techniques such as Horizontal Directional Drilling (HDD) will be utilised to avoid impacts to veteran trees;
- An Arboricultural Clerk of Works (ACoW) will be required to guide consented tree removal and pruning and ensure tree protection

measures are put in place and maintained to safeguard trees during construction;

- Temporary construction compounds will be sited outside of the canopy spreads and RPAs of adjacent trees and woodlands;
- If required, tree removal along the Cable Route Corridor will preferentially target trees of lower quality over those of higher quality. Veteran trees will not be removed in the Cable Route Corridor;
- Retained trees along the Cable Route Corridor will also be protected with tree protection fencing for the duration of works as appropriate in sections of the Cable Route Corridor;
- Perimeter fencing will be installed and remain in situ during the operation and maintenance phase of the Solar PV Sites;
- No new tree planting is proposed within the open cut sections of the Cable Route Corridor, ensuring that future tree removal will not be required to remedy possible tree route interference with the cable.

Assessment of Effects

7.5.8 No ancient or veteran trees require removal within the Solar PV Sites. No ancient woodland requires removal at the Solar PV Sites. Within Lime Down C, there is a neutral arboricultural impact to C14-T1 veteran ash from solar PV panels being installed just within the Veteran Tree Buffer Zone. A neutral impact is anticipated due to the decline of the tree from ash dieback and historic ploughing close to the stem.

7.5.9 Within Lime Down E, there is potential arboricultural impact to North Bincombe Wood. Crown lifting and root pruning may be required to facilitate construction of a 242m section of access track within the Ancient Woodland Buffer Zone. This may result in minor adverse effect to woodland edge trees only.

7.5.10 Within the Cable Route Corridor, there are no Category A trees, hedgerows and tree groups that are likely to be removed. A short term **moderate adverse effect (significant)** is anticipated from the potential Root Protection Area incursions and pruning requirements of Category A trees along the Cable Route Corridor in order to create working space. It is likely that many of the Category A affected can be avoided and fully protected so that potential impacts are minimised

7.5.11 A maximum of up to 54 individual Category B trees and 40 groups of trees may require removal. The significance of effect of the Scheme on these Category B trees is deemed moderate. This is anticipated to lead to a short term **moderate adverse effect (significant)**. The potential removal of Category C and U trees will lead to a minor adverse effect.

7.5.12 Details of the nature of the anticipated impacts to trees is provided in **ES Volume 3, Appendix 10-1 Arboricultural Impact Assessment and Outline Arboricultural Method Statement [EN010168/APP/6.3]**.

7.5.13 Embedded mitigation is in place to protect trees from impacts to arboricultural features during maintenance and replacement activities which will ensure no impacts to retained trees during Scheme operation. During operation, trees and woodlands planted at the Solar PV Site will mature and have a significant positive impact upon tree cover at the Site.

7.5.14 Given that the Solar PV Panels are anticipated to be removed using the access tracks and permanent access points installed during the construction phase, no significant effects to ancient and veteran trees and ancient woodland at the Solar PV Site are anticipated during decommissioning.

Additional Mitigation

7.5.15 Potential significant effects have been identified in this arboriculture assessment, so additional mitigation and monitoring is proposed.

7.5.16 Likely Significant effects (LSEs) are identified therefore the **Outline CEMP [EN010168/APP/7.12]** includes monitoring requirements to minimise and mitigate any potential significant residual effects as far as practicable.

Residual Effects

7.5.17 Neutral and non-significant impacts are anticipated for ancient and veteran trees at the Solar PV Sites provided that embedded mitigation measures are followed. Neutral and non-significant impacts are anticipated for ancient woodlands at the Solar PV Sites provided embedded mitigation measures are followed, however, minor and non-significant impacts to a small number of trees on the outer northern edge of North Bincombe Wood are anticipated from the installation of an access track near the woodland.

7.5.18 The spatial clearances within the Cable Route Corridor allow for the retention, avoidance and protection of each of these features and their veteran tree buffer zones. Neutral and non-significant residual impacts to veteran trees are anticipated.

7.5.19 A short term **moderate** residual impact is anticipated from the potential RPA incursions and pruning requirements of Category A trees, and Category B trees along the Cable Route Corridor in order to create working space, open cut sections of cable route trenching and a 10 m width permanent easement. It is likely that many of the Category B trees listed precautionarily in **ES Volume 1, Chapter 10: Arboriculture [EN010168/APP/6.1]** as requiring removal would be retained through

micro-siting during construction, but their loss is presumed as a worst case assumption at this stage.

7.5.20 Minor and non-significant residual impacts are anticipated from the removal of Category C trees along the Cable Route Corridor as well as potential canopy and root impacts to Category B trees along the Cable Route Corridor.

7.5.21 No effects are anticipated for arboriculture during the operational and maintenance and decommissioning phases.

7.6 Hydrology, Flood Risk and Drainage

7.6.1 This section summarises the key findings of the Hydrology, Flood Risk and Drainage assessment. The full assessment is found in **ES Volume 1, Chapter 11: Hydrology, Flood Risk and Drainage [EN010168/APP/6.1]**.

Baseline and Context

7.6.2 The Study Area for the Hydrology, Flood Risk and Drainage assessment comprises both the Solar PV Sites and the Cable Route Corridor (including the Highway Improvement Areas).

7.6.3 A Flood Risk Assessment has been undertaken in line with the criteria in NPS EN-1 and footnote 59 of the National Planning Policy Framework (NPPF) (December 2024) (Ref 15). Surface water management is also a key consideration for the Scheme with regards to both surface water and water quality control to appropriately manage any on or off-site impacts to flood risk and/or water quality.

7.6.4 The Scheme is situated within the Severn River Basin Management Plan (RBMP) area. Within the Severn RBMP, the Scheme is situated within the Avon Bristol and North Somerset Streams Management Catchment. The upper allowance for peak river flow in the 2080s is 71%. The 2080's epoch has been chosen from the Environment Agency's Climate Change Allowance Guidance (11-16) as it is the closest aligning epoch to the design life (60 years) of the Scheme. Across the Solar PV Sites, the land is primarily in arable use, with some areas of grassland in Lime Down B, C and E.

7.6.5 The existing baseline conditions for fluvial and surface water flooding are detailed for each element of the Scheme in the **ES Volume 3, Appendices 11-1 – 11-9: FRA and Drainage Strategy [EN010168/APP/6.3]**.

Embedded Mitigation

7.6.6 The Scheme has been designed, as far as practicable, to avoid and reduce impacts and effects on Hydrology, Flood Risk and Drainage

through the process of embedding mitigation measures into the design. In addition, how the Scheme is constructed, operated and maintained, and decommissioned would be controlled in order to manage and minimise potential environmental effects (required as a result of legislative requirements and/or standard sectoral practices).

7.6.7 The following embedded mitigation measures have been incorporated into the Scheme design, with detailed proposals and locations submitted with the DCO Application. Accompanying management plans will be secured by DCO requirement. It should be noted that any site-specific mitigation required has been outlined in the respective site-specific Flood Risk Assessment and Drainage Strategies in the supporting appendices. Embedded mitigation measures include:

- Associated electrical infrastructure being located in areas with a 'low probability of flooding', where practicable;
- For both fixed and tracker panels, all electrical equipment on the Solar PV Panel will be elevated by the metal posts above the 1 in 1000 year flood level;
- Drainage and surface water management, including eight metre buffers from infrastructure will be established around watercourses, with linear infiltration trenches incorporated around isolated infrastructure and, where practicable, permeable sustainable drainage systems incorporated;
- Access to the Scheme will be taken from new permeable or existing farm tracks accessed from the local highway;
- Water quality and pollution control including a Water Management Plan and an **Outline LEMP [EN010168/APP/7.18];**
- Implementing appropriate environmental controls (including procedures to detect and respond to potential breakouts) where trenchless crossing techniques such as HDD are used;
- Implementing suitable planting (wildflower or grass mix) to strengthen the underlying ground cover; and
- Measures to deal with silt-laden runoff and spillages and leaks of pollutants (these measures will be outlined within the **Outline CEMP [EN010168/APP/7.12]** and **Outline Decommissioning Strategy [EN010168/APP/7.14).**

Assessment of Effects

Construction

7.6.8 Potential flood risk and drainage impacts during the construction phase include mud and debris blockages, temporary increase in impermeable area (temporary hardstanding), and temporary increases in soil compaction.

7.6.9 There is the potential for mud and debris generated during construction activities to enter existing surface water and land drainage systems, leading to blockages and restricted flows, resulting in the risk of flooding. As the Scheme is currently in agricultural use, the baseline risk is considered to be low. Temporary drainage infrastructure will be installed in advance of construction works where required.

7.6.10 Temporary increases in impermeable area during construction and decommissioning have the potential to increase flood risk both on and off site. Temporary hardstanding or compacted areas could result in more rapid surface water runoff to local watercourses or cause an increase in overland flow. As the Scheme is currently greenfield, there is potential for overland flow paths to form and for localised flooding to occur.

7.6.11 Risks to water resources during the construction phase include increased silt-laden runoff, inappropriate wastewater disposal, HDD and drilling fluid breakout risks, and the spillages and leakage of pollutants which could result in adverse impacts to local watercourses and ditches within and surrounding the Site.

7.6.12 All significant construction phase effects would be negligible or minor adverse with the application of appropriate mitigation measures.

Operation and Maintenance

7.6.13 The sensitivity of receptors, including people, property, and operational infrastructure, is considered to be Medium. With the implementation of embedded mitigation measures, including the use of permeable surfacing, SuDS-based drainage where required, and maintenance controls secured through the **Outline OEMP [EN010168/APP/7.14]**, the effect on flood risk as a result of increased impermeable area, increase in discharge to local watercourses and blockage of drainage networks during operation and maintenance is assessed to be Negligible to Minor Adverse and therefore not significant.

7.6.14 During the operation and maintenance phase, the Solar PV Sites are proposed to drain as per existing conditions and therefore no significant residual effects are identified. The management of any proposed Sustainable Drainage System has been designed appropriately so as not

to exacerbate surface water risk from the Solar PV Sites including BESS Area and substations. These controls are detailed in **ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy [EN010168/APP/6.3]** and secured through the **Outline OEMP [EN010168/APP/7.13].**

7.6.15 Potential water resource impacts during the operation and maintenance phase include diffuse pollution resulting from fire, diffuse pollution contained in urban runoff, increase in highway routine runoff/spillage risk, and an increase demand on water supply. The Scheme also has the potential to increase flood risk downstream. Without appropriate control, the disposal of surface water and foul water from the Site into local land drainage ditches and local watercourses. The implementation of the mitigation measures such as perimeter buffer zones around sensitive receptors and emergency response measures secured through the **Outline OEMP [EN010168/APP/7.13]** reduce these effects to be Negligible to Minor Adverse and therefore not significant.

7.6.16 During programmed replacement of equipment, including Solar PV Panels and batteries, certain short-term impacts similar to those identified for the construction and decommissioning phase may occur. These could include temporary increases in traffic ground disturbance, and pollutant risk.

Decommissioning

7.6.17 Hydrology, flood risk, and drainage impacts during the Scheme decommissioning phase would be similar to or less than the impacts during the construction phase. The assessment presented for the construction phase will therefore be representative (or an overestimate) of the decommissioning phase. As such, a separate assessment for hydrology, flood risk, and drainage during the decommissioning phase is not presented.

Additional Mitigation

7.6.18 No additional mitigation measures are considered necessary. Through discussions with relevant stakeholders and the implementation of embedded mitigation, all potential impacts on hydrology, flood risk and drainage have been reduced such that no significant residual effects are expected. The embedded measures are secured through the DCO and associated management plans, and no further mitigation is required.

Residual Effects

7.6.19 With the embedded and additional mitigation by design measures described above and those within the **Outline CEMP [EN010168/APP/7.12]**, all identified likely significant effects have been

assessed as being minor adverse to negligible and therefore not significant.

7.7 Cultural Heritage

7.7.1 This section summarises the key findings of the assessment of the cultural heritage effects of the Scheme. The full cultural heritage assessment is found in **ES Volume 1, Chapter 12: Cultural Heritage [EN010168/APP/6.1]**.

Baseline and Context

7.7.2 The Study Area for designated heritage assets covers a 2km radius around the Solar PV Sites (Lime Down A to Lime Down E). Records of all designated heritage assets and Conservation Areas within the Solar PV Sites and the Study Area have been collated to inform an assessment of the potential indirect (setting) impacts of the Scheme upon these (**ES Volume 2, Figure 12-1: Designated and Non-Designated Heritage Assets Scoped in for Assessment [EN010168/APP/6.2]**). Designated Heritage assets outside the 2km radius were also reviewed, up to 5 km.

7.7.3 There are no World Heritage Sites, Registered Battlefields, or Protected Wrecks within 2 km of the Solar PV Sites and 250 m of the Cable Route Search Corridor. There are no Conservation Areas located within the Order Limits. A total of 28 Conservation Areas were identified within the Study Area, of which, six Conservation Areas were identified where there is a potential for impacts.

7.7.4 There is one Grade II Listed Building located within the Order Limits. A total of 339 Listed Buildings of varying grade were identified within the Study Area, of which 89 Listed Buildings were identified where there is a potential for impacts.

7.7.5 There are no Registered Parks and Gardens (RPGs) located within the Order Limits. A total of three RPGs were identified within the Study Area, of which one RPG was identified where there is a potential for impacts.

7.7.6 There are no Scheduled Monuments located within the Order Limits. A total of 34 Scheduled Monuments were identified within the Study Area, of which two Scheduled Monuments were identified where there is a potential for impacts.

7.7.7 There are no non-designated heritage assets located within the Order Limits. A total of 62 non-designated assets were identified within the Study Area, of which 26 non-designated heritage assets were identified where there is a potential for impacts.

7.7.8 There are 17 archaeological assets within Lime Down A, seven archaeological assets within Lime Down B, 25 archaeological assets

within Lime Down C, 22 archaeological assets within Lime Down D, 12 archaeological assets within Lime Down E,33 archaeological assets within the Cable Route Corridor and two archaeological assets within the Highway Improvement Areas. These have been identified from desk-based research, geophysical survey, air photo and Light Detection and Ranging (LiDAR) assessment and evaluation trenching.

7.7.9 There are 34 Historic Landscape Characterisation (HLC) units mapped by the Wiltshire and Swindon HLC Project in 2016 across Lime Down A, B, C, D and E. There are 91 HLC mapped across the Cable Route Corridor.

Embedded Mitigation

7.7.10 Mitigation that has been embedded into the Scheme by design includes the avoidance of archaeologically sensitive areas and areas considered to cause an indirect impact to the significance of heritage assets through their setting. Proposed Solar PV Panels have been partially or entirely removed from various fields within the Solar PV Sites as a result of heritage or archaeological sensitivities. The partial removal of panels is considered sufficient because it reduces any potential visual impacts on nearby built heritage assets and the direct impact on archaeological assets. This targeted setback approach reduces effects on the significance and setting of these assets while allowing the Scheme to maintain operational efficiency.

7.7.11 In locations with heritage assets that could be impacted by the Scheme through their settings, enhanced visual screening through vegetation and distance offsets are proposed. Offsets of a minimum 15m have been applied to Public Rights of Way and existing hedgerows across the Scheme.

7.7.12 Landscape mitigation to mitigate potential adverse effects upon heritage assets will include planting of shelter belts and scattered trees, planting of new hedgerows, and existing hedgerow reinforcement. Where practicable, any hedgerow removal required as part of the construction phase (i.e. as part of the cable route corridor) will be kept to a minimum and be reinstated.

7.7.13 Construction traffic routes have been identified in **ES Volume 1, Chapter 13: Traffic and Access [EN010168/APP/6.1]** and the **Outline CTMP [EN010168/APP/7.22]** to avoid large increases in HGV movements near to heritage assets and to minimise the potential for swipes and strikes to assets located directly adjacent to roads.

7.7.14 An overarching Archaeological Mitigation Strategy (AMS) (see **ES Volume 3, Appendix 12-6: Outline AMS [EN010168/APP/6.3]**) details the embedded mitigation required to safeguard archaeological assets identified within the Order Limits.

7.7.15 Embedded mitigation will also comprise the use of trenchless cabling techniques below areas known to contain important archaeological remains at a suitable depth to avoid impacts to buried archaeological remains.

7.7.16 The landscape mitigation proposals (e.g. planting of shelter belts and scattered trees, planting of new hedgerows, existing hedgerow reinforcement) which should reach maturity by Year 15, are the main embedded operation mitigation measures for Cultural Heritage.

7.7.17 In line with the AMS in **ES Volume 3, Appendix 12-6: Outline AMS [EN010168/APP/6.3]** a detailed Decommissioning Strategy will be agreed with the Archaeological Advisor to the relevant Local Planning Authority prior to decommissioning, which will be sufficient to safeguard any archaeological remains during the decommissioning phase. Embedded mitigation at the decommissioning phase should be undertaken in line with the **Outline DS [EN010168/APP/7.14]**. Temporary fencing will be erected around 'no development' areas containing archaeological assets during decommissioning.

Assessment of Effects

7.7.18 Embedded mitigation measures being incorporated into the design and construction of the proposed Scheme are set out in **Section 7.7.10**. Prior to the implementation of any mitigation (embedded or additional), the proposed Scheme has the potential to affect Cultural Heritage (positively or negatively), during construction, operation and decommissioning, in the following ways:

Construction

7.7.19 There are 23 archaeological assets where there is the potential for **significant** effects (i.e. Moderate adverse or higher) to occur as a result of impacts caused by the Scheme, with scores ranging from **Moderate to Major/Moderate adverse** as set out in Section 12.10 of **ES Volume 1, Chapter 12: Cultural Heritage [EN010168/APP/6.1]**.

7.7.20 Within the Cable Route Corridor, it is assumed as a worst-case scenario that any archaeological assets would be of medium to high significance based on recent evaluation results in proximate areas and that, in the absence of route refinement or mitigation measures prior to construction, there could be at worst-case a high impact (i.e. asset is totally altered or destroyed), resulting in a **Moderate** to **Major adverse** effect **(significant)**.

7.7.21 There is potential for the Scheme to indirectly impact designated and non-designated heritage assets within the Order Limits during the construction phase. The assessment results in **ES Volume 3, Appendix 12-8: Cultural Heritage Impact Assessment Tables [EN010168/APP/6.3]** indicate that

all of the identified impacts to heritage assets would result in less than substantial harm and are considered not significant.

7.7.22 Construction phase impacts include the possible visibility of construction plant movement, temporary cranes, and the presence of temporary construction compounds. The assessment results indicate that all of the identified impacts to heritage assets from these activities would be not significant, with effects ranging between Neutral and Minor/Moderate Adverse.

7.7.23 Construction activities may also impact the historic landscape character. Negative impacts, such as the removal of hedgerows, are likely to be reversible. In some cases, positive outcomes may occur where proposed enhancements reinstate features recorded on historic maps or strengthen existing historic patterns. The majority of the land within the Order Limits of the Scheme forms enclosed land characterised by post-medieval and modern land uses and is considered to have a low sensitivity. Areas characterised by modern land use have a negligible sensitivity.

7.7.24 Changes to the historic landscape character units during the construction phase of the Cable Route Corridor would occur during the construction phase and would largely be of temporary nature. Elements that characterise the historic landscape within the Order Limits will be retained, and any temporary change in land use will be ended following decommissioning. Consequently, it is considered that the Scheme will not alter the ability to understand or experience the historic landscape character of the land within the Order Limits. The Scheme is therefore considered to cause a low adverse impact on the historic landscape character during the construction phase. Consequently, minor adverse effects would occur to the historic landscape character during the construction phase, which are not significant.

Operation and Maintenance

7.7.25 Once the Scheme is operational, no further direct adverse effects on buried archaeological remains have been identified. While the operation and maintenance phase will see replacement of panels, there will not be additional piling or ground disturbance beyond that caused during the construction phase. During operation, mitigation in line with the **Outline OEMP [EN010168/APP/7.13]** will be implemented. No significant adverse effects have been identified on designated or non-designated, archaeological assets, historic landscape character. **Significant Moderate beneficial** effects have been identified on two non-designated archaeological assets.

Decommissioning

7.7.26 As engineering approaches and technologies are likely to change over the operational life of the Scheme, this could remove or reduce any potential decommissioning impacts.

7.7.27 There may be potential for the Scheme to have effects upon the settings of heritage assets within the surrounding area during the decommissioning phase. It is considered such impacts to be of the same level as those that occurred during the construction phase, and as such would be temporary in nature.

7.7.28 It is not envisaged that there would be any further impacts to buried archaeological remains beyond that experienced during the construction and operation and maintenance phases as a result of any proposed groundworks and/or plant movement during the decommissioning phase.

7.7.29 The decommissioning impacts would be temporary, short term and reversible in nature, and would ultimately result in the reversal of the operation and maintenance phase impacts leading to Neutral effects at the end of the decommissioning phase.

Additional Mitigation

7.7.30 Additional mitigation measures during the construction phase are secured in the **Outline CEMP [EN010168/APP/7.12]**.

7.7.31 Additional mitigation may involve Strip, Map and Sample (SMS) excavation or Archaeological Monitoring and 'preservation by record' or the implementation of a transport management plan. The additional mitigation measures for the construction phase are detailed in **ES Volume 3, Appendix 12-8: Cultural Heritage Impact Assessment Tables [EN010168/APP/6.3]** and will include detailed proposals and locations where this additional mitigation would be, or is likely to be, required. Additionally, an overarching AMS (see **ES Volume 3, Appendix 12-6: Outline AMS [EN010168/APP/6.3]**) details the additional mitigation required during the construction phase of the Scheme.

Residual Effects

7.7.32 Where there are no additional mitigation measures beyond the embedded mitigation for designated heritage assets located beyond the Order Limits, residual effects would be the same as the significance of effects identified following embedded mitigation, with effects ranging between Neutral and Minor/Moderate Adverse.

7.7.33 Following the implementation of the additional mitigation, the residual effect on the archaeological assets would be reduced to Negligible, which is not significant. Where archaeological mitigation in the form of a

programme of excavation and recording will occur or re-instatement of earthworks, it should be noted that physical impact will still occur to archaeological assets identified. However, the archaeological mitigation works proposed are considered sufficient to preserve the asset by record, and as such compensate for their loss.

7.7.34 No additional mitigation measures are proposed at the operation and maintenance and decommissioning phases of the Scheme and, as such, residual effects are the same as the significance of effects identified following embedded mitigation.

7.8 Transport and Access

7.8.1 This section summarises the key findings of the assessment of the Transport and Access effects of the Scheme. The full Transport and Access assessment is found in **ES Volume 1, Chapter 13: Transport and Access [EN010168/APP/6.1]**.

Baseline and Context

7.8.2 Roads within and surrounding the Order Limits include a mix of major roads (A-roads), minor roads (B-roads), and various named and unnamed rural roads. Key roads include the M4, A46, B4040, B4039, A429, Alderton Road, and Fosse Way.

7.8.3 Pedestrian infrastructure is available along roads to the Scheme including A46, B4039, Alderton Road, A429, A420, B3353, Neeld Court, Silver Street, Corsham Road, and The Street, Grittleton.

7.8.4 Section 14 of the Wiltshire Cycleway, which is an on-road, unsegregated route, operates along Alderton Road and the Fosse Way, and there are cycle routes which cross the Cable Route Corridor. There are a number of Public Rights of Way that run through or nearby the Solar PV Sites or within the vicinity of the Cable Route Corridor.

7.8.5 There are no railway stations within the immediate vicinity of the Solar PV Sites or Cable Route Corridor, with the nearest station located in Chippenham. From the centre of the Solar PV Sites, Chippenham Railway Station is approximately 10 km south.

Embedded Mitigation

Construction

7.8.6 An **Outline CTMP [EN010168/APP/7.22]** has been prepared and will be secured through the DCO. The **Outline CTMP [EN010168/APP/7.22]** provides a framework for the management of construction vehicle movements to and from the Scheme, to ensure that the effects of the

temporary construction phase on the local highway network are minimised. The embedded mitigation measures include:

- Engines will be switched off on-site when not in use;
- Advisory signs informing contractors and visitors that parking will not be permitted on-street in the vicinity of the Order Limits;
- A wheel wash facility will be provided ahead of exiting the Order Limits allowing vehicles to be hosed down so that no construction vehicles will take mud or debris onto the local highway network;
- Vehicles carrying waste material off-site to be sheeted;
- All residents in the vicinity of the Order Limits along the designated route will be provided with contact details of the Community Liaison Manager, which will also be provided on a site-board at access and egress junctions;

7.8.7 An **Outline Construction Worker Travel Plan (CWTP)** has also been prepared as part of the **Outline CTMP [EN010168/APP/7.22]** and will include measures for the provision of shuttle buses to transport construction workers to the Order Limits, and encouragement to workers who drive to car share where practicable.

7.8.8 Embedded mitigation measures also include all points of access and internal access tracks being appropriately designed to accommodate HGV and abnormally sized vehicle (larger than standard HGV) movements where required.

7.8.9 There will be a small number of abnormally sized vehicles required to transport the larger transformers and substation equipment. These movements will be managed by a specialist haulage company so that the potential effects are mitigated. The exact measures will be agreed with the Local Highway Authority (LHA) and police prior to the movements occurring.

7.8.10 An **Outline Public Rights of Way and Permissive Paths Management Plan [EN010168/APP/7.17]** has been prepared and will be secured through the DCO. Measures in this document include:

- The provision of banksmen where the track crosses a Public Rights of Way, to hold vehicles if a Public Rights of Way user is present;
- Speeds limited to 5mph;
- Drivers to stop and give way to Public Rights of Way users;

- Appropriate signage to be installed along the Public Rights of Way to make Public Rights of Way users aware of the construction activity; and
- Any damage to the surface of the Public Rights of Way will be replaced as soon as practicable.

Operation and Maintenance

7.8.11 Embedded mitigation measures implemented within the operation and maintenance phase of the Scheme include providing suitable access points, planting of landscaping and screening to conceal reflections from the Solar PV Panels as far as possible, and implementation of relevant measures from the **Outline CTMP [EN010168/APP/7.22]** secured via the **Outline OEMP [EN010168/APP/7.13]** during the programme of replacement for the Solar PV Panels, Conversion Units and BESS Batteries.

7.8.12 In addition, permissive paths shown on the **Works Plan [EN010168/APP/2.3]** and implemented by the **Outline Public Rights of Way and Permissive Paths Management Plan [EN010168/APP/7.17]**.

Decommissioning

7.8.13 A requirement for a Decommissioning Traffic Management Plan (DTMP) to be approved by the local highway authority prior to the decommissioning phase will be secured through the DCO. This will sit underneath the broader **Outline Decommissioning Strategy [EN010168/APP/7.14]** to be secured through a DCO requirement. The DTMP will follow the principles of the **Outline CTMP [EN010168/APP/7.22]**. It is anticipated that the effects associated with decommissioning will be no worse than during the construction phase.

Assessment of Effects

Construction

7.8.14 As a reasonable worst-case assessment for the ES, it is assumed that all areas/elements of the Scheme will be constructed concurrently. However, this is not likely, and it is expected that areas/elements of the Scheme will be constructed at different times during the construction phase. Details of the construction programme are included in **ES Volume 1, Chapter 13: Transport and Access [EN010168/APP/6.1].**

7.8.15 During the construction phase, access points serving the Solar PV Sites will be required. Where the proposed access points utilise existing agricultural access points or tracks, they will be formalised and widened where necessary. Access Drawings including swept path analysis are

included within **ES Volume 3, Appendix 13-1: Transport Assessment [EN010168/APP/6.3]** and **Outline CTMP [EN010168/APP/7.22]**.

7.8.16 The construction phase will include the use of HGVs to bring the equipment onto the Solar PV Sites and this will be strictly managed to ensure that vehicle movement is controlled and kept to a minimum. On a day-to-day basis, the largest vehicle that will be used to deliver equipment to the Order Limits will be a 16.5 m articulated vehicle, although a significant proportion of movements will be by smaller vehicles.

7.8.17 Changes in total traffic flows on all roads taken forward for further assessment are below 30%, which relates to a 'slight' change in 'severance' in line with Paragraph 3.16 on the Institute of Sustainability and Environmental Professionals (ISEP) guidelines (Ref 16). Therefore, the likely effects on severance during the construction phase are considered to be temporary and negligible (not significant).

7.8.18 Through the **Outline CTMP [EN010168/APP/7.22]**, construction vehicles will be coordinated to avoid peak hour travel, the period where capacity constraints may occur, and, where practicable, there will be no construction traffic on roads within the Study Area between 08:00-09:00 or 17:00-18:00. Whilst these changes are likely to perceptible to driver delay, they will not change conditions which would otherwise prevail and will not materially increase driver delay over the course of a daily period. As such, the likely effect of construction traffic on driver delay within the Study Area is considered to be minor adverse and temporary, which is not significant.

7.8.19 During the construction phase, the effects on non-motorised users (NMUs)—including delay, amenity, and aspects such as fear and intimidation—are expected to be minor and temporary. The Study Area has limited infrastructure for walking, cycling, and horse riding, and NMU activity is generally low. As such, the presence of construction vehicles on the local highway network is unlikely to cause significant delays or materially affect journey quality. Public Rights of Way (PRoW) within the Order Limits will mostly remain open, although brief delays may occur when construction vehicles cross these paths. Temporary closures may be required where Grid Connection Cables intersect PRoWs, but these will be short-term, managed, and communicated in advance, with diversions provided where necessary. The **Outline PRoW and Permissive Path Management Plan [EN010168/APP/7.17]** includes mitigation measures such as signage, banksmen, and temporary diversions to minimise disruption and maintain safety. While the addition of HGVs may reduce the relative pleasantness of NMU journeys, the low traffic volumes and embedded mitigation mean that impacts on amenity and fear/intimidation are not significant. Overall, effects on NMU delay and amenity are considered minor adverse and temporary, both on the

local highway network and where construction tracks intersect PRoWs. The low level of construction traffic associated with the Scheme is unlikely to materially affect road safety on the links in the Study Area, and the effects on accidents and safety from the Scheme's construction phase on all links will be temporary and negligible (not significant).

7.8.20 A small number of Abnormal Indivisible Loads will be required to transport larger equipment such as Conversion Units and substation components. These movements—defined as vehicles exceeding 44 tonnes, 2.9 m in width, or 18.65 m in length—will be managed by specialist hauliers, with routes and safety measures agreed in advance with the local highway authority and police. As outlined in the **Outline CTMP [EN010168/APP/7.22],** the low frequency of these trips and embedded mitigation mean the effects are well below ISEP thresholds and are considered negligible and temporary across all identified routes.

Operation and Maintenance

7.8.21 During the operation and maintenance phase, there are anticipated to be around five visits to each Solar PV Site per month for maintenance purposes. These would typically be made by light van or 4 x 4 type vehicles. Whilst each construction compound will be removed at the end of the construction phase, space will remain within each Solar PV Site on the access tracks for such a vehicle to turn around to ensure that reversing will not occur onto the highway.

7.8.22 It is expected that the Solar PV Panels will be replaced once during the Scheme's lifespan whereas the BESS units could be replace up to five times during the Schemes lifespan. The Solar PV Panels are anticipated to be replaced on a field by field basis. The measures set out in the **Outline OEMP [EN010168/APP/7.13]** will be applied to the planned replacement operations. During the planned replacement just the Solar PV Panels, Conversion Units and BESS Batteries will need replacing, with no activity relating to the mounting structures. There will also be no activity in relation to other elements of the Order Limits, including, fencing, access tracks and landscaping. Therefore, there will be significantly fewer HGV movements on the local highway network compared to the construction phase of the Scheme.

7.8.23 There will be no transport operation effects associated with the installed Grid Connection Cables (within the Cable Route Corridor) as they will be located underground.

7.8.24 In light of this, effects on severance, driver delay, NMU delay and amenity, road safety and hazardous loads during the operation and maintenance phase of the Scheme are considered to be not significant.

Decommissioning

7.8.25 The Scheme is anticipated to have a design life of approximately 60 years. At the end of the Scheme's operational life, it will be decommissioned. The number of vehicles associated with the decommissioning phase are not anticipated to exceed the number set out for the construction phase. An **Outline Decommissioning Strategy [EN010168/APP/7.14]** has been submitted as part of the DCO Application.

7.8.26 Effects on severance, driver delay, NMU delay and amenity, road safety and hazardous loads are considered to be the same as shown in the Likely Effects for the construction phase as a reasonable worst-case assessment. The effects will also be short-term and temporary.

Additional Mitigation

7.8.27 Although no significant transport effects were identified, the Applicant has committed to minimising disruption during construction, decommissioning, and planned replacement activities. Measures include a Stage 1 Road Safety Audit at all access junctions, traffic management with signage and banksmen, and careful coordination of road trenching works to maintain emergency and pedestrian access. Where cables are laid along roads, rolling traffic management will be agreed with Wiltshire Council to minimise disruption.

7.8.28 No further mitigation is proposed for the general operation and maintenance phase beyond what is already planned for infrastructure replacement. These measures aim to ensure safety and reduce inconvenience for residents, businesses, and road users throughout the Scheme's lifecycle.

Residual Effects

7.8.29 All effects during the construction phase will be temporary and short term and there will be no significant residual effects on Transport and Access. Residual effects for the operation and maintenance phase will remain unchanged compared to the levels presented in the assessment. These are considered to be not significant. Residual effects for the decommissioning phase will be the same as the residual effects of the construction phase as a reasonable worst-case assessment. The effects will also be short term and temporary.

7.9 Noise and Vibration

7.9.1 This section summarises the key findings of the assessment of the noise and vibration effects of the Scheme. The full noise and vibration

assessment is provided in **ES Volume 1, Chapter 14: Noise and Vibration [EN010168/APP/6.1]**.

Baseline and Context

7.9.2 For the purposes of providing an assessment of likely significant noise and vibration effects, the Study Area has been defined as receptors within 500 m of the Order Limits along with the construction routes, as agreed with Wiltshire Council.

7.9.3 The baseline noise environment has been established following noise surveys in proximity to the Solar PV Sites and the Cable Route Corridor. A logging weather station was installed onsite during the Cable Route Corridor surveys so any periods of adverse weather conditions would be identified and omitted from further analysis, in accordance with BS 4142:2014 (Ref 6).

7.9.4 The existing acoustic environment in the vicinity of much of the Order Limits is typical of a quiet rural location, with occasional sounds from wildlife, farming activity, trains and local traffic. Locations closer to the M4 and A429 are subject to more continuous road traffic noise.

7.9.5 Construction and decommissioning noise calculations for the Solar PV Sites and Cable Corridor Route have been undertaken using the computer modelling software SoundPLAN ® (version 9.1).

7.9.6 The Noise Policy Statement for England defines adverse and significant adverse effects which are used for determining noise effects below, as follows:

- Lowest Observable Adverse Effect Level (LOAEL) – the level above which adverse effects on health and quality of life can be detected.
- Significant Observed Adverse Effect Level (SOAEL) – the level above which significant adverse effects on health and quality of life occur.

Embedded Mitigation

7.9.7 During the Construction and Decommissioning phases, the following good practice measures would be put in place to minimise noise and vibration:

- Ensuring that all appropriate processes, procedures and measures are in place to minimise noise before works begin and throughout the construction programme;
- When works are taking place within close proximity to sensitive receptors, the screening of noise sources via the erection of temporary screens would be employed where practicable;

- All construction machinery would be regularly maintained to control noise emissions, with particular emphasis on lubrication of bearings and the integrity of silencers;
- All construction plant and equipment to be properly maintained, silenced where appropriate, operated to prevent excessive noise and switched off when not in use; and
- As far as practicable, construction compounds must be located a minimum of 250 m from residential receptors (refer to **ES Volume 2, Figure 3-2: Key Construction Phase Features [EN010168/APP/6.2]**).

7.9.8 To minimise noise and vibration impacts during the operational and maintenance phase, the Scheme layout has been carefully designed to keep key infrastructure away from sensitive receptors. The Battery Energy Storage System Area and substations are located at least 400–450 metres from nearby receptors. Additionally, a 2-metre earth bund with a 3-metre acoustic barrier has been included around the eastern and southern boundaries of the BESS Area to reduce both noise and visual impacts.

7.9.9 Further mitigation has been built into the noise modelling, including silencers on 75% of BESS containers and all inverters, silencers on seven conversion units, and acoustic enclosures for all substation transformers. These measures are secured through the **Outline OEMP [EN010168/APP/7.13]**, which commits to achieving the predicted operational noise levels, with final specifications to be confirmed once equipment details are known.

Assessment of Effects

7.9.10 The proposed Scheme has the potential to affect noise and vibration sensitive receptors (positively or negatively), during the Construction, Operation and Maintenance, and Decommissioning phases in the following ways:

- The potential noise and vibration effects arising from Construction and Decommissioning phase activities (e.g. site preparation, installation of plant, construction of substations and structures, laying of cables and vehicle movements);
- The potential noise effects arising from the operational plant over the lifetime of the Scheme; and
- The potential noise and vibration effects arising from vehicle movements during operation and maintenance of the Scheme. These impacts were scoped out of the assessment, however, in line with Planning Inspectorate comments, the number of vehicle movements

are provided in **ES Volume 1, Chapter 14: Noise and Vibration [EN010168/APP/6.1].**

Construction

Noise Effects

7.9.11 Construction noise levels at surrounding receptors would vary depending on the locations and types of works taking place. Due to the variation in construction works activities and locations across the Scheme, it is considered that any periods of regular high construction noise levels experienced at a receptor would be of a limited short-term duration (i.e. less than one month). Occupants of nearby receptors are likely to be more tolerable of these events if they are provided with timings and duration of high noise generating events.

7.9.12 Predicted construction noise levels at all receptors, around the Solar PV Sites remain below the daytime SOAEL and are therefore not significant. 33 receptors are predicted to experience construction noise levels between the LOAEL and SOAEL, with two additional receptors equal to the LOAEL, resulting in a minor adverse impact which is not significant.

7.9.13 Predicted noise levels for construction activities along the Cable Route Corridor remain below the daytime SOAEL and are therefore not significant at all receptors, except for Receptor R58 (Silver Street). Seven receptors are predicted to experience construction noise levels between the LOAEL and SOAEL with an additional two receptors (R46, R48) equal to the LOAEL resulting in a minor adverse impact which is not significant.

7.9.14 HDD activities may last for up to three days and involve activities at a drill site and a reception pit. At this stage of the Scheme, 13 locations that may require HDD installation methods have been identified along the Cable Route Corridor. For the purposes of the noise assessment, HDD has been identified as the worst-case trenchless cable installation method due to the noise levels and potential requirement for night-time working.

7.9.15 Sound Power Level of plant applicable to HDD activities, (see **ES Volume 3, Appendix 14-4: Noise Modelling [EN010168/APP/6.3])**, indicate that significant effects (an exceedance of SOAEL) may occur during the night at the majority of identified sensitive receptors within 500m of activities. However, this is a precautionary assessment, as night-time HDD is only expected in exceptional circumstances, such as safety or minimising daytime disruption. Mitigation measures—including acoustic fencing providing up to 10 dB attenuation—will reduce noise levels below the night-time SOAEL at all twelve identified locations. HDD activities are expected to last no more than three days at any one location. For any works outside core hours, a Section 61 consent will be obtained, detailing

noise control measures, communication plans, and monitoring, as secured through the **Outline CEMP [EN010168/APP/7.12].**

7.9.16 Increases in noise levels at receptors due to construction traffic are predicted to constitute a minor adverse impact which is not significant.

Vibration Effects

7.9.17 Construction vibration is expected to be minimal across the Scheme. Vibration from typical construction vehicles, such as HGVs and plant machinery, is predicted to remain below 1mm/s at sensitive receptors. Piling activities for substations and solar mounting structures have been assessed, and no receptors are located within the distances where significant vibration effects could occur.

7.9.18 The highest vibration levels may arise from vibratory rollers used during cable reinstatement. Two receptors—R20 and R60—located between 25m and 50m of the Cable Route Corridor may experience vibration above the lower threshold (LOAEL). Four receptors—R52, R56, R58 and R66—are within 25m and may experience vibration above the significant threshold (SOAEL) for short periods.

7.9.19 For vibration levels anticipated to exceed 1.0mm/s, prior warning will be provided on the timings and duration of vibration generating activities. This will be stated in the **Outline CEMP [EN010168/APP/7.12]** and the **Outline Decommissioning Strategy [EN010168/APP/7.14]** which will be secured through the DCO.

7.9.20 Horizontal Directional Drilling may produce similar vibration levels, but the nearest receptor is approximately 100m away, where vibration is not expected to be an issue. Overall, with embedded mitigation in place, construction vibration effects are considered temporary and not significant.

Operation and Maintenance

7.9.21 Due to the nature of the operation and maintenance activities of the Scheme (including the replacement of Solar PV Panels and BESS Batteries), vibration is considered to be negligible and unlikely to be perceptible. This assumption was validated within the Planning Inspectorate Scoping Opinion Responses.

7.9.22 Expected traffic volumes during the operation and maintenance, replacement periods are presented in **ES Volume 1, Chapter 13: Transport and Access [EN010168/APP/6.1]**. In summary, traffic flows are anticipated to be below those considered within the construction traffic noise assessment and, therefore, it is considered that any temporary

impacts resulting from operation and maintenance traffic would be less than those predicted within the construction traffic noise assessment.

7.9.23 Therefore, no significant effects are anticipated as a result of Solar PV Panel and BESS Container replacement, whether it be ad hoc or planned.

Decommissioning

7.9.24 The Scheme is intended to be decommissioned after 60 years. It is expected that the noise and vibration impacts resulting from the decommissioning of the Scheme will be equivalent to but no worse than the impacts arising from construction and construction traffic noise.

7.9.25 Additionally, no piling will be required during decommissioning of the Scheme and as such, no significant effects are identified as a result of vibration during decommissioning.

Additional Mitigation

7.9.26 During the Construction phase, temporary elevated construction noise levels may be experienced at one receptor (R58 Silver Street) with respect to the Cable Route Corridor. Additionally, four receptors (R52 Ivy House, R56 The Roebuck, R58 Silver Street, R66 Thingley Farm) have been identified to experience vibration levels exceeding the SOAEL for temporary periods due to vibratory rollers during cable laying activities.

7.9.27 These receptors therefore require a detailed and bespoke communication strategy to inform occupants on the precise timing and duration of the associated construction activity that could lead to high noise and/or vibration levels for a short period.

Residual Effects

7.9.28 After implementing mitigation measures, the impact of noise and vibration from the Scheme would be limited. Noise and vibration impacts during the construction, operation and maintenance, or decommissioning phases are identified as not significant.

7.10 Air Quality

7.10.1 This section summarises the key findings of the assessment of the air quality effects of the Scheme. The full air quality assessment is found in **ES Volume 1, Chapter 15: Air Quality [EN010168/APP/6.1]**.

Baseline and Context

7.10.2 Wiltshire Council has declared eight Air Quality Management Areas (AQMAs) for exceedances of the annual average nitrogen dioxide Air Quality Strategy objective. These are:

- AQMA 1 Salisbury City Centre – An area encompassing the city centre bounded by main ring roads to North, East and the River Avon to the East and South;
- AQMA 2 Salisbury London Road – Residential properties in the vicinity of St Mark's roundabout and following London Road as far as the railway tunnel;
- AQMA 3 Salisbury Wilton Road (extended) – Part of Devizes Road and Wilton Road as far as Skew Bridge;
- AQMA 4 Bradford on Avon – Main roads in the centre of the town;
- AQMA 5 Westbury – Main A350 through centre of the town;
- AQMA 6 Marlborough – The whole town as described by town council boundary;
- AQMA 7 Devizes – Main roads through the town; and
- AQMA 8 Calne – Main roads through the town.

7.10.3 The closest AQMA to the Scheme is AQMA 4 Bradford-on-Avon which is located over 8km southwest of the Scheme and is shown in **ES Volume 2, Figure 15-6: Air Quality Baseline [EN010168/APP/6.2].**

7.10.4 The most recently available Annual Status Report from Wiltshire Council is the 2024 Air Quality Annual Status Report (Ref 7) which details the local authority's monitoring results for 2023. The 2024 Annual Status Report shows that there were 64 nitrogen dioxide diffusion tube monitoring sites across Wiltshire and three automatic monitoring stations measuring nitrogen dioxide and particulates. Monitoring sites in the vicinity of the Scheme are shown in **ES Volume 2, Figure 15-6: Air Quality Baseline [EN010168/APP/6.2]**.

7.10.5 The Department for Environment, Food and Rural Affairs provides predicted background concentrations for a range of pollutants for each square kilometre across the UK (Ref 8). The predicted concentrations for the pollutants of interest in the assessment for the grid squares covering the Scheme were all well below the relevant annual average Air Quality Strategy/critical level.

Embedded Mitigation

7.10.6 The following embedded mitigation measures have been incorporated into the Scheme design.

Construction

7.10.7 Mitigation measures outlined in **ES Volume 3, Appendix 15-1 Construction Dust Methodology and Assessment [EN010168/APP/6.3]** and in the **Outline CEMP [EN010168/APP/7.8]**. These include: no bonfires or burning of waste materials, using water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out onto the local road network and implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable). All plant and vehicles will be required to switch off their engines when not in use and when it is safe to do so and avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

7.10.8 Commitments made within the **Outline CTMP [EN010168/APP/7.22]** include signs to direct construction vehicles associated with the development will be installed along the construction traffic route and a visual inspection of vehicles will be undertaken before they depart the Site, to ensure that they are not carrying any residual debris onto the highway.

7.10.9 Measures included in the **Outline CWTP [EN010168/APP/7.22]** which include the provision of shuttle buses to transport construction workers to and from the Order Limits and encouraging workers who drive to car share where practicable.

Operation and Maintenance

7.10.10 Sensitive routeing and sitting of infrastructure which have been considered throughout the process.

7.10.11 Measures included in the **Outline BSMP [EN010168/APP/7.21]**, and **ES Volume 3, Appendix 15-2: BESS Fire Emissions Modelling Methodology and Assessment [EN010168/APP/6.3]** which include:

- Notification of potentially affected residents including advice on the health effects of smoke and ways to reduce exposure;
- Notification of potentially affected members of the public to move to a cleaner air location;
- Cancellation of outdoor events and potentially moving affected residents to a cleaner air location;
- Should there be a BESS Container fire in close proximity to the road, the site operator to determine wind direction and seek to close the road if deemed necessary; and

- Should there be a BESS Container fire in close proximity to the rail line, the site operator to determine the wind direction and notify Network Rail if deemed necessary.

7.10.12 Commitments made within the **Outline OEMP [EN010168/APP/7.13].** Air quality specific measures determined as part of this assessment that have been incorporated into the Outline OEMP are the same as those incorporated into the **Outline CEMP [EN010168/APP/7.12]** outlined above.

Decommissioning

7.10.13 Commitments focused on the decommissioning phase of the Scheme have been made within the **Outline Decommissioning Strategy [EN010168/APP/7.14]**. Within the **Outline DS [EN010168/APP/7.14]** it states that measures proposed for the construction phase in the **Outline CEMP [EN010168/APP/7.12]** will also be adopted for the decommissioning phase. All mitigation measures will be reviewed and updated prior to decommissioning.

Assessment of Effects

7.10.14 The Scheme has the potential to affect air quality during construction, operation and maintenance, and decommissioning, in the following ways:

- Generation of dust during construction, operation and maintenance and decommissioning phases;
- Change in pollutant concentrations associated with vehicle emissions during the construction, operation and maintenance and decommissioning phases;
- Change in pollutant concentrations associated with Non-Road Mobile Machinery (onsite plant) emissions during the construction, operation and maintenance and decommissioning phases;
- Change in pollutant concentrations associated with back-up generator emissions (if required) during the operation and maintenance phase; and
- Change in pollutant concentrations associated with emissions generated in the event of a BESS Container fire during the operation and maintenance phase.

7.10.15 Effects have been assessed in accordance with best practice guidance and using professional judgement.

7.10.16 Following assessment of effects and consideration of embedded mitigation measures, air quality effects as a result of the Scheme have been determined as not significant, for all phases of the Scheme.

Additional Mitigation

7.10.17 No additional mitigation has been identified.

Residual Effects

7.10.18 Residual air quality effects as a result of the Scheme would not be significant, for all phases of the Scheme.

7.11 Socio-Economics, Tourism and Recreation

7.11.1 This section summarises the key findings of the assessment of the Socio-economics, Tourism and Recreation effects of the Scheme. The full Socio-economics, Tourism and Recreation assessment is presented in **ES Volume 1, Chapter 16: Socio-Economics, Tourism and Recreation [EN010168/APP/6.1]**.

Baseline and Context

7.11.2 The existing baseline is predominantly derived from desk-based studies with information on the status and use of Public Rights of Way corroborated by field studies undertaken by the Applicant.

7.11.3 As of 2021, the 20 km Study Area for socio-economics has an age profile that has a lower proportion of children under 15, and greater proportion of people over 65 than the national population age profile.

7.11.4 The 20 km Study Area had a combined population of 728,300 in 2021 (Ref 12). The 20 km Study Area falls across seven local authority areas: Bath and North East Somerset, Cotswold, Mendip (former district in Somerset), South Gloucestershire, Stroud, Swindon, and Wiltshire.

7.11.5 For the purpose of the EIA, the Scheme is anticipated to be decommissioned no later than the period 2089 to 2091. The national population of the UK is projected to grow by approximately 20.6% between 2021 and 2089 (Ref 14), almost entirely generated by population growth in England of 23.7%. Applying the latter estimate to the 20 km Study Area, it is estimated that the population may reach approximately 901,000 in 2091.

7.11.6 There are high employment rates, low unemployment, and a strong presence in sectors such as wholesale and retail trade, human health and social work, and professional, scientific, and technical activities. Overall, the population of the 20 km Study Area is predominantly in better health

than regional or national rates, and is less likely than the national average to be deprived of access to good health.

7.11.7 There are challenges in housing affordability and a marginal undersupply of housing in some areas and the area experiences significant inequalities in deprivation levels, however, much of the 20 km Study Area is located among the least deprived neighbourhoods in England. Overall, the socio-economic conditions indicate a healthy and growing economy with a strong labour market and a relatively affluent population.

7.11.8 Whilst there are significant deprivation inequalities present within the 20 km Study Area, the Solar PV Sites fall within the category that are in the 30% least deprived neighbourhoods in England while the Cable Route Corridor falls within the category that are in the 50% least deprived neighbourhoods in England. Of any location within the Order Limits, only the single Highway Improvement Area in Tomarton is in the 40% most deprived neighbourhoods in England (Ref 9).

7.11.9 Wiltshire is a significant destination for both domestic and international visitors, driven by attractions such as the Cotswolds National Landscape and events like the Badminton Horse Trials.

7.11.10 The size of the local economy can be measured using Gross Value Added, which measures the value of goods and services in a given area. The most recent data for Gross Value Added available in Great Britain is from 2023. The Study Area for socio-economics – including all of Somerset as data for Mendip is not available at the former district level – had a Gross Value Added (balanced) of £73.6 billion, forming approximately 39.6% of the South West's Gross Value Added of £186 billion, with Great Britain having a GVA of £2.46 trillion (Ref 10, Ref 11).

7.11.11 The tourism and visitor economy in the 20 km Study Area is driven predominantly by the domestic visitor sector market on overnight or day trips, with day trips by far contributing the greatest number of visits to any part of the 20 km Study Area.

Embedded Mitigation

7.11.12 The Scheme has been designed to minimise potential impacts on socio-economics, tourism, and recreation through a range of embedded mitigation measures. These have been integrated into the design, construction, operation, and decommissioning phases and are secured through the draft Development Consent Order (DCO).

7.11.13 Key embedded mitigation includes:

7.11.14 Design Phase: Layout includes visual buffers and planting to reduce impacts on Public Rights of Way (PRoW), neighbouring buildings, and tourism sites.

7.11.15 Construction Phase:

- Construction will be phased to reduce peak workforce and traffic impacts.
- Safety and accommodation plans will minimise disruption to communities and tourists.
- Visual and traffic impacts will be mitigated through design and management plans.
- PRoW will be maintained where possible, with any diversions kept temporary, well-signed, and clearly communicated.
- A Community Liaison Manager will oversee public concerns and monitoring during construction.

7.11.16 Operation and Maintenance:

- Continued landowner income through ground rent.
- Minimal activity and ongoing landscaping help preserve tourism and recreational amenity.
- Visual and access impacts will be managed through the **Outline OEMP [EN010168/APP/7.13]** and **Outline LEMP [EN010168/APP/7.18].**
- PRoW connectivity will be maintained, and any temporary diversions managed as during construction.

7.11.17 Decommissioning:

- Impacts will be similar to construction and managed with the same mitigation measures.
- Cable infrastructure may be left in place to reduce disruption to land use.

7.11.18 Security Measures:

- Anti-trespass and security provisions are embedded across all phases, secured via relevant environmental management plans.

7.11.19 These measures ensure potential effects are minimised and managed in line with best practice and legal requirements.

Assessment of Effects

Construction

7.11.20 The construction phase would generate beneficial effects for employment and the economy by providing an estimated 268 full time equivalent jobs per annum, with the estimated on-site construction workforce peak of 692 employees.

7.11.21 Taking into account direct, indirect, and induced employment generated by the Scheme, and the effects of leakage and displacement on existing jobs, the net employment increase during the construction of the Scheme is 234 full time jobs in the Study Area and a peak of 326 jobs created in the Study Area. A full breakdown of full time equivalent employment per annum and peak employment generate during the Scheme's construction is provided at Table 8 and Table 9 in **ES Volume 3, Appendix 16-1: Socio-Economics, Tourism and Recreation Legislation, Policy, Guidance, and Supporting Information [EN010168/APP/6.3]**.

7.11.22 The Scheme's construction peak will likely require a peak of 412 employees to move to the Study Area. This is likely to bring a short-term, temporary uplift to the projected residential population of the Study Area, who are likely to be generally physically active, in moderate to good health, and of working age. These are likely to bring negligible to minor beneficial effect (not significant) to the age and self-assessed health demography in the Study Area.

7.11.23 As a worst-case scenario, the potential impacts of a 412 inbound employees requiring temporary accommodation have been assessed. Access to housing and accommodation in the Study Area is of medium sensitivity to change. Peak inbound employees are projected to occupy 15.8% of vacant private rental accommodation, therefore implying no greater than a negligible magnitude impact on the local private rental accommodation market, and is thus a short- to medium-term temporary minor adverse effect (not significant).

7.11.24 Additional potential effects include the Scheme is however anticipated to have an adverse effect on the agricultural industry in the Study Area. The Scheme's construction is also anticipated to have a negative impact on tourism spending, although this is likely to be limited to within the 2 km and 5 km Study Areas for tourism and recreational effects.

7.11.25 The net direct employment generated by the Scheme during construction is anticipated to induce an uplift of £15.7 million GVA per annum to the Study Area during construction. The Scheme is anticipated to induce a further uplift of £10.2 million GVA per annum more generally in the economy of the Study Area through indirect and induced economic

benefits associated with the Scheme's construction. The increase in economic performance within the Study Area is negligible in magnitude, and as a result of the low sensitivity of economic prosperity, or local wages in the Study Area, the resultant effects are medium-term temporary negligible beneficial effects to the local economy and prosperity, which is not significant.

7.11.26 The Scheme's construction is likely to have direct impacts on a number of Public Rights of Way and long-distance recreation routes as a result of temporary use as construction accesses, any required diversions and closures, and as a result of the movements of construction goods and employee traffic. This results in significant adverse effects ranging from **moderate adverse to major-moderate adverse (significant)** on three Public Rights of Way, and four long distance recreational routes. The greatest level of effect on high sensitivity long-distance recreational routes as set out in Table 3-15 in **ES Volume 3, Appendix 16-2: Tourism and Recreation Receptor Tables [EN010168/APP/6.3]** is a medium-term temporary **major-moderate adverse effect** on the Palladian Way. This is therefore a significant effect.

7.11.27 The Scheme is also likely to have receptor-specific significant effects within the 2 km and 5 km Study Areas for tourism and recreation as a result or direct and indirect impacts on visitor attractions and recreation venues. As a result of the embedded visual and transport mitigation measures, the overall magnitude of impact on local visitor attractions is likely to be low, resulting in an overall medium-term temporary minor adverse effect (not significant) during the Scheme's construction. The overall effect on nationally and regionally important tourism destinations is a medium-term temporary moderate-minor adverse effect, which is not a significant effect.

7.11.28 The 2 km Study Area of the Scheme has a number of formal and informal recreational facilities, including those for recreational youth sports and children's play areas. There are eleven recreational youth sport and children's play areas which have been identified as likely to be impacted by the Scheme. None are expected to have direct, open views of any part of the Scheme. Given that these facilities are more likely to be used by children and youths, there is greater risk of reduced accessibility and desirability impacting safety, and health and wellbeing. As such, these facilities are of a medium sensitivity to changes. At worst, it would be anticipated that construction traffic has an up to medium-level impact on the accessibility of the local recreation area at Grittleton Village Hall, generating up to a medium-term temporary moderate adverse effect on this receptor. When considering all eleven identified receptors together and the provision of embedded transport mitigation measures, the overall level of significance is anticipated to be a medium-term temporary minor

adverse effect (not significant) on the accessibility of recreational facilities for children and youth groups.

7.11.29 When considering the overall impact on all equestrian facilities within the Scheme's 2 km Study Area, the level of significance is a medium-term minor adverse effect, considered not significant.

Operation and Maintenance

7.11.30 During its operational lifetime, the Scheme is anticipated to require a gross 15 full time equivalent employees per annum, of whom a worst-case estimate of 4 full time equivalent employees are anticipated to be sourced from within the Study Area for socio-economic effects. The short-term workforce required to deliver the peak replacement scenario of all solar photovoltaic panels and battery energy storage infrastructure is assessed as requiring a full-time workforce of 125 full time equivalent employees, with a peak month requiring up to 360 gross on-site workers.

7.11.31 Due to the low operational staffing requirement, there are no significant effects to the socio-demographic environment, accommodation need, or any more than minor beneficial effect on skills and education opportunities (such as apprenticeships) during the Scheme's general operation and maintenance phase.

7.11.32 During its operational lifetime, the Scheme is anticipated to create a net direct total of 3 full time equivalent energy sector jobs, 5 full time equivalent indirect and induced jobs from supply chains and spending within the Study Area for socio-economic effects. The Scheme will continue to result in the long-term loss of up to 20 full time equivalent jobs in the agricultural sector, while impacts on tourism spending in the Study Area may result in a long-term loss of 10 full time equivalent jobs in tourism dependent sectors.

7.11.33 The resultant changes to employment and GVA in the Study Area for socio-economic effects is therefore estimated to be a long-term reduction of 23 full time equivalent jobs. The Scheme is however likely to generate an uplift of £1.46 million GVA per annum in the Study Area during its operational lifetime. Neither of these are significant effects.

7.11.34 In the peak replacement scenario, the Scheme is anticipated to create a resultant change to employment and GVA estimated to be an uplift of 76 full time equivalent jobs per annum, generating £12.5 million GVA per annum in the Study Area. These are therefore overall short- to medium-term temporary negligible beneficial effects on the labour force and economic prosperity and are therefore not significant effects.

7.11.35 Operational effects on tourism and recreation assets are largely defined by visual effects, which will be gradually mitigated through landscape

planting and screening as it matures, while additional traffic and amenity impacts may arise during the peak replacement scenario.

7.11.36 There are no long-term significant effects to tourism destinations or attractions, or to formal and informal recreational venues and facilities within the 2 km or 5 km Study Areas, anticipated during the operation and maintenance phase of the Scheme, including during peak replacement activities.

7.11.37 Impacts on Public Rights of Way during the peak replacement scenario may lead to significant **moderate adverse effects** to some individual receptors, however these can be mitigated by additional targeted mitigation and enhancement measures. Impacts on long-distance recreation routes are similarly likely to generate significant **moderate adverse effects** during the operation and maintenance phase of the Scheme, including during peak replacement activities, but to some extent can be mitigated by additional targeted mitigation and enhancement measures.

Decommissioning

7.11.38 The decommissioning of the Scheme is anticipated to generate an estimated 75-80% of the level of employment of the construction phase. As such, a gross 214 full time equivalent employees per annum is estimated, with the estimated on site decommissioning workforce expected to peak at approximately 554 employees.

7.11.39 Socio-demographic impacts from the Scheme's decommissioning are anticipated to be similar to, but no greater than those arising from the Scheme's construction phase, and are therefore not significant.

7.11.40 The resultant employment and economic impact of the Scheme's decommissioning, taking into account direct employment, indirect and induced employment, and losses to agriculture and tourism, is therefore estimated to be an uplift of 131 full time equivalent jobs per annum, generating £18.9 million GVA per annum in the Study Area for socio-economics during the Scheme's decommissioning. These are therefore medium-term temporary negligible beneficial effects on the labour force and economic prosperity and are therefore not significant effects.

7.11.41 The scale of works required for decommissioning is likely to be no greater than that of the Scheme's construction phase, and as such, impacts on tourism and recreation receptors during decommissioning are of a reduced or no greater than equitable level of significance to those during the construction phase.

7.11.42 As such, the Scheme is anticipated to generate **significant adverse effects** on Public Rights of Way and long-distance recreation routes

during decommissioning, but to some extent can be mitigated by additional targeted mitigation and enhancement measures.

Additional Mitigation

7.11.43 Where significant adverse effects are identified (as per Section 7.11.20), additional mitigation and enhancement measures have been proposed to reduce or offset impacts on socio-economic, tourism, and recreation receptors. These are designed to supplement embedded mitigation and are secured through the **Draft DCO [EN010168/APP/3.1]** with reference to key documents, including:

- **Outline CEMP [EN010168/APP/7.12],**
- **Outline OEMP [EN010168/APP/7.13],**
- **Outline Decommissioning Strategy [EN010168/APP/7.14],**
- **Outline PRoW and Permissive Path Management Plan [EN010168/APP/7.17],**
- **Outline LEMP [EN010168/APP/7.18],**
- **Outline SSCEP [EN010168/APP/7.20], and**
- **Outline CTMP [EN010168/APP/7.22].**

Construction Phase

7.11.44 Enhanced traffic and PRoW management measures (**Outline CTMP [EN010168/APP/7.22] and PRoWMP [EN010168/APP/7.17]),** including:

- Additional signage and banksmen at key PRoW crossings and site entrances.
- Targeted diversions of footpath WT|GRIT|20 and bridleway WT|MALW|54 to reduce conflicts between users and HGVs.
- These measures aim to mitigate significant effects on PRoW, long-distance recreational routes, equestrian facilities, waterbodies, formal sports and youth play areas.

Operation and Maintenance:

- During peak maintenance (e.g. panel or battery replacement), temporary reintroduction of traffic and PRoW management measures, such as banksmen and diversions.
- Long-term adverse effects are expected for the Fosse Way only, which may experience a residual significant effect.

- Reapplication of the diversion of bridleway WT|MALW|54 during peak activity to ensure user safety (as per construction measures).

Decommissioning

- Effects expected to be similar in scale to construction. Additional mitigation includes reimplementation of construction-phase traffic and PRoW management strategies (e.g. banksmen, diversions).
- Diversions of footpath WT|GRIT|20 and bridleway WT|MALW|54 will again be used to protect PRoW users.

Construction – Enhancement Measures:

7.11.45 Education and training schemes promoted via the **Outline Skills, Supply Chain and Employment Plan [EN010168/APP/7.20]** including:

- Apprenticeships and local training opportunities in construction, engineering, and energy sectors.
- Support for agricultural workers transitioning to compatible land use (e.g. sheep grazing).

7.11.46 These measures aim to improve local employment, skills, and economic activity, though beneficial effects are not considered significant.

Operation and Maintenance – Enhancement Measures:

- Continued support for education, skills development, and local procurement/employment (**Outline Skills, Supply Chain and Employment Plan [EN010168/APP/7.20]**).
- Enhancement of PRoW through:
  - Repairs, upgrades, new signage and furniture (secured via **Outline LEMP [EN010168/APP/7.18]**).
  - Creation of new permissive paths across Solar PV Sites (Work No.10 on the **Works Plan [EN010168/APP/2.3]**) to remain open year-round for 60 years, improving access and connectivity, and benefiting health and wellbeing.

Decommissioning – Enhancement Measures:

- Continued focus on local skills, training, and employment (**Outline Skills, Supply Chain and Employment Plan [EN010168/APP/7.20]** and **Outline Decommissioning Strategy [EN010168/APP/7.14]**).

7.11.47 These are expected to deliver local economic benefits but are not considered significant in effect.

Residual Effects

7.11.48 During the construction phase, the impacts on Park Farm equestrian facilities, three Public Rights of Way, and four long distance recreational routes (the Fosse Way, Long Path, Palladian Way, and Wiltshire Way), pose a significant residual medium-term temporary **moderate adverse effect**.

7.11.49 During the operation and maintenance phase, the Scheme will have significant residual **moderate adverse effect** on the Fosse Way long distance recreational route. No additional significant effects are generated during peak replacement activities.

7.11.50 During decommissioning, the Scheme is anticipated to have a significant residual medium-term temporary **moderate adverse effect** on four long-distance recreation routes: the Fosse Way, Long Path, Palladian Way, and Wiltshire Way.

7.12 Soils and Agriculture

7.12.1 This section summarises the key findings of the assessment of the Soils and Agriculture effects of the Scheme. The full Soils and Agriculture assessment is included in **ES Volume 1, Chapter 17: Soils and Agriculture [EN010168/APP/6.1]**.

Baseline and Context

7.12.2 The Study Area for Soils and Agriculture extends to all of the agricultural land within the Order Limits, including the Solar PV Sites, BESS Area and Cable Route Corridor. Across all of the Solar PV Sites, the land is primarily in arable use, with some areas of grassland in Lime Down B, Lime Down C and Lime Down E. The landform is typically level to gently sloping throughout. The agricultural land within the Cable Route Corridor is generally mostly arable in the north and mostly grassland in the south.

7.12.3 Soil surveys have been completed within the Cable Route Corridor where permission was able to be obtained for access. Where ground data has not yet been possible to obtain, nearby survey data and published data sources have been used to complete the initial assessment of likely effects.

7.12.4 The assessment of soil and agricultural land quality has been informed by data collected during surveys undertaken within the Order Limits. The Solar PV Sites were surveyed at an observation density of approximately one per two hectares where Solar PV Panel installation is proposed, typically ensuring one observation within each temporary constriction compound area. The BESS Area was surveyed at an observation density of one per hectare. Observations within the Solar PV Sites were

supported by pits dug in each soil type, and topsoil samples were taken from across the Order Limits for laboratory analysis to support the field data.

7.12.5 The mapped soil information shows eight soil associations present within the Order Limits, broadly grouped into:

- Shallow, well-drained, brashy, calcareous, fine loamy, or clayey soils over limestone;
- Slowly permeable, fine loamy over clayey or clayey soils, often calcareous; and
- Clayey soils affected by groundwater.

7.12.6 Land within the Solar PV Sites is comprised of approximately 240 ha (33% of agricultural land) classified as Best and Most Versatile (BMV) quality, mostly in Subgrade 3a with a small proportion of Grade 2, and around 477 ha (67% of agricultural land) as Subgrade 3b and Grade 4, which is not BMV land.

Embedded Mitigation

7.12.7 The following embedded mitigation measures have been incorporated into the Scheme design.

Construction

7.12.8 Preparation and adherence to the **Outline Soil Resources Management Plan (SRMP) [EN010168/APP/7.15]**, as well as the **Outline CEMP [EN010168/APP/7.12]** will incorporate good practice measures to ensure adverse effects on soil and agricultural land are minimised where practicable. This includes only handling or tracking soils that are in a dry condition and ensuring topsoil and subsoils are handled separately when being stripped, stored and reinstated.

7.12.9 The Scheme design seeks to locate access tracks, compounds and substations on the lowest quality land available within each parcel where practicable.

Operation and Maintenance

7.12.10 Continued adherence to the **Outline SRMP [EN010168/APP/7.15]** when accessing areas for maintenance and replacement activities will avoid adverse effects on soils during the operation phase. It is assumed that vegetation would be managed with machinery, however there are no known covenants that would prevent the land beneath the Solar PV Panels being grazed by sheep. There may be opportunity for some continued agricultural use throughout the operation phase.

Decommissioning

7.12.11 The **Outline SRMP [EN010168/APP/7.15]** and **Outline CEMP [EN010168/APP/7.12]** also make provisions for the decommissioning phase with regards to tracking and handling of soils, similar to the construction phase.

Assessment of Effects

Construction

7.12.12 The level of disturbance to the soil resource caused by the construction of the Scheme would be variable. Most disturbance is anticipated to be due to the installation of access tracks, substations and compounds. Disturbance from the installation of Solar PV Panels, and Grid Connection Cables would be temporary and short-term. Soil handling and storage would be undertaken in line with the requirements of the **Outline SRMP [EN010168/APP/7.15]**.

7.12.13 Most of the topsoil and subsoils throughout the Order Limits are heavy-textured (clayey) and therefore a resource of high sensitivity.

7.12.14 During construction, agricultural uses would cease within each of the fields within the Order Limits proposed to accommodate the Solar PV Panels, substations, BESS Area, landscaping schemes and for laying the underground cables. Agricultural use may return during the operation and maintenance phase however it is assumed for the purpose of this assessment that the Solar PV Sites would remain primarily but temporarily in non-agricultural use.

7.12.15 The agricultural land within the Order Limits is mainly of low sensitivity in accordance with the receptor sensitivity criteria set out in **ES Volume 1, Chapter 17: Soils and Agriculture [EN010168/APP/6.1]**. Within the Order Limits, there would be a long-term but reversible loss of more than 50 ha from agricultural use which represents a high magnitude of impact.

7.12.16 Therefore, the Scheme would have a temporary, long-term, moderate adverse effect on all agricultural land use; a temporary, long-term, major/moderate effect on BMV land use as a result of the construction of the Scheme; and a temporary, moderate beneficial effect on soil health (i.e., from it being removed from arable farming) realised throughout the operation phase and at decommissioning. All these effects would be significant.

Operation and Maintenance

7.12.17 There are no direct effects on agricultural land anticipated to occur during the 60-year operation and maintenance phase of the Scheme. However,

whilst the land would remain largely undisturbed during the operation and maintenance period, it would not be primarily available for food production which, other than some potential grazing by livestock beneath the panels, would be lost during the operation and maintenance phase.

Decommissioning

7.12.18 All land within the Scheme will be returned to the landowner. The effect on agricultural land quality at decommissioning would be influenced by the extent of disturbance caused by the removal of the Solar PV Panels. Currently, the most environmentally acceptable option is to leave the cables in-situ, and the effects would be less than those likely to occur during the construction phase.

7.12.19 By leaving land undisturbed under long-term grassland, soil health, quality and structure with the Solar PV Sites are likely to improve during the lifetime of the Scheme, resulting in a temporary, moderate beneficial effect on soil resources in the decommissioning phase. This is assessed as a **significant** effect.

Additional Mitigation

7.12.20 No additional mitigation or monitoring is proposed for Soils and Agriculture.

7.12.21 The **Outline LEMP [EN010168/APP/7.18]** includes monitoring requirements to ensure that disturbed land and soil resources continue to fulfil all their ecological functions. Ongoing monitoring of soil conditions should occur throughout the construction phase to ensure soils are only handled or tracked when in an appropriate moisture state.

Residual Effects

7.12.22 There is no method to mitigate the direct, temporary but long-term loss of land for agricultural production resulting from the construction of the Scheme. The construction phase effects remain as: a temporary long-term **moderate adverse effect** on all agricultural land; and a temporary **long-term major/moderate** effect on BMV land. The temporary effects on agricultural land are considered to be **significant**.

7.12.23 With embedded mitigation in place in the form of the **Outline SRMP [EN010168/APP/7.15]**, the magnitude of impact on soil resources during construction would reduce to low. With high sensitivity soils, the residual effect is temporary and **moderate adverse**, which is considered to be **significant**.

7.12.24 No significant effects are anticipated to arise during the operation and maintenance phase of the Scheme.

7.12.25 Improvements to soil health, quality and structure from taking land out of intensive arable production would result in a temporary, **moderate beneficial effect** on soil resources to be realised in the operational and decommissioning phases. This is considered to be **significant**.

7.13 Human Health

7.13.1 This section summarises the key findings of the assessment of the Human Health effects of the Scheme. The full Human Health assessment is included in **ES Volume 1, Chapter 18: Human Health [EN010168/APP/6.1]**.

Baseline and Context

7.13.2 The primary Study Area for determining baseline conditions for human health comprises all electoral ward areas falling within 2 km of the Scheme. An additional 5 km Study Area is used solely for assessing baseline provision of primary health services and likely significant effects upon these services.

7.13.3 The 2021 Census identifies a total population in the 2 km Study Area of approximately 55,100. The proportion of residents in the 2 km Study Area aged up to 15 years old is 17.9%. The proportion of the total population that is aged 65 or above is 22.9%, which is a slightly larger proportion in the 2 km study. These numbers are comparable to the statistics for Wiltshire but slightly higher than national average.

7.13.4 The combined proportion of the population in the 2 km Study Area declaring they had ‘bad’ or ‘very bad’ health was 4.3%. This is noticeably lower than the proportion for the South West (5.1%) and England and Wales (5.2%).

7.13.5 The 2 km Study Area covers a total of 34 Lower Super Output Areas (LSOAs) in northwest Wiltshire, covering a largely rural area with a substantial level of variance in deprivation.

7.13.6 Existing sensitivity to changes in environmental conditions and their associated health risks, such as from GHG emissions, air and water quality, transport, noise and ground conditions, are generally low. The 2 km Study Area is host to a well-connected network of Public Rights of Way and permissive recreational routes, which are important for both connectivity, and personal activity and wellbeing. The 2 km Study Area also boasts a number of leisure and recreation facilities, equestrian centres, and recreational play and informal sport areas in local villages and settlements for children.

7.13.7 The proportion of 16 to 64 year olds achieving no qualifications in the Wider Baseline Study Area is 4.2%, compared to 4.7% in the South West,

and 6.8% in the UK, and attainment of a national vocational qualification (NVQ) Level 4 and higher has an overall rate of 47.6% in the Wider Baseline Study Area, compared to 47.2% across the UK.

Embedded Mitigation

7.13.8 The layout and configuration of the Scheme have been designed to include measures to minimise likely significant effects on human health receptors during the Scheme's construction phase. The **Outline CEMP [EN010168/APP/7.12]** will be used to phase and stagger the construction schedule where practicable across the Solar PV Sites and Cable Route Corridor to reduce impacts on environmental receptors.

7.13.9 The embedded visual mitigation includes designing the layout of the Sites to provide suitable buffers from roads, Public Rights of Way, recreation facilities, and neighbouring buildings and land uses.

7.13.10 The **Outline CEMP [EN010168/APP/7.12]** commits to appointing a Community Liaison Manager to address community concerns during construction. The **Outline OEMP [EN010168/APP/7.13]** provides for the Community Liaison Manager during scheduled replacement of panels and BESS within the operation and maintenance phase, and the **Outline Decommissioning Strategy [EN010168/APP/7.14]** provides for this during the decommissioning phase.

Assessment of Effects

7.13.11 For assessing the likely magnitude of impact on human health, a worst-case assumption is that a negligible negative impact on access to accommodation will have a resultant medium-term temporary minor/negligible adverse effect to human health during construction and decommissioning, as a result of population sensitivity to accommodation and housing need. This is not a significant effect.

7.13.12 Children and adults with limited activity are most vulnerable to changes to open space, leisure and play and therefore at highest sensitivity to changes. Existing baseline conditions demonstrate that, whilst vulnerable groups are more sensitive to change, the overall population is not disproportionately more sensitive than the Wider Baseline Study Area or national expectation. As such, the sensitivity of the overall population to changes to open space, leisure and play is low. Therefore, the impact on human health with regard to open space, leisure and play is anticipated to be a medium-term temporary minor adverse effect (not significant) during construction and decommissioning.

7.13.13 The ability for people to access public transport is also related to health and wellbeing, particularly where it related to social connectivity and

isolation, and a perceived reduction in user safety. The assessment of residual transport and access effects concludes that the construction effects on the local highway and Public Rights of Way network will be temporary negligible to minor adverse effects, which are not significant.

7.13.14 Sense of community is a multi-faceted wider determinant of human health and is influenced by a number of factors (identity, culture, resilience, and influence) that primarily impact upon mental health and wellbeing. Changes to community sense of rurality, feelings of the attractiveness of the area and community pride, and the extent to which the community understand they can influence their surroundings are likely to have a resultant medium- to long-term temporary minor adverse effect (not significant) on community wellbeing, particularly during construction.

7.13.15 Likely residual effects subject to enhancement measures on education and training during construction are considered in the assessment in **ES Volume 1, Chapter 16: Socio-Economics, Tourism and Recreation [EN010168/APP/6.1]**. The chapter identifies that enhancement measures can lead to a medium-term temporary moderate-minor beneficial effect on skills and qualification attainment in the Study Area for socio-economics, tourism and recreation. Existing baseline conditions demonstrate that the sensitivity of the overall population to changes in access to education and training is medium, due to good overall levels of qualification attainment. The impact on human health with regard to education and training is anticipated to be a medium-term minor beneficial effect, which is not significant.

7.13.16 In terms of employment and income, existing baseline levels demonstrate that in the Wider Baseline Study Area, the levels of economic activity and unemployment are favourable compared to national trends, while income is comparable to national levels. Therefore, the sensitivity of the overall population is low, and the impact on human health with regard to employment and income is anticipated to be no greater than a medium-term temporary negligible beneficial effect during construction and decommissioning, which is not significant. However, during operation this is anticipated to be a long-term minor adverse effect (not significant), especially to those working in the agriculture and tourism industries where employment losses are anticipated.

7.13.17 Due to its contribution towards reducing greenhouse gas emissions associated with energy production in the UK, the Scheme is anticipated to induce a long-term negligible beneficial effect (not significant) to human health during its operational lifetime.

7.13.18 As a result of embedded dust and emissions mitigation measures to minimise air quality impacts on human health, the construction of the

Scheme is likely to have no greater than a low negative magnitude impact on human health. As a result of the population's sensitivity to air quality impacts, this is therefore likely to result in no more than a medium-term temporary minor adverse effect (not significant). No effects of greater significance are anticipated at any phase of the Scheme's lifetime.

7.13.19 Subject to implementation of embedded and additional mitigation measures to protect both onsite workers and offsite receptors from flooding and water quality impacts, the magnitude of impacts on human health is anticipated to be negligible overall, with a solitary low magnitude risk of HDD breakout. As such, the overall anticipated effect on human health as a result of changes to water quality is up to a medium-term temporary minor adverse effect (not significant) during construction. No effects of greater significance are anticipated at any phase of the Scheme's lifetime.

7.13.20 **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]** identifies that, subject to implementation of a suitable Discovery and Inspection Strategy, construction workers, are not anticipated to experience any significant adverse effects from contamination during construction activities on the Scheme, with adjacent users and residents experiencing some level of beneficial effect as a result of the removal of contamination sources from the Scheme. As the risk of contamination to nearby residents, visitors and workers are considered to not be significant, for human health this is considered to be of up to a low magnitude. Therefore, the potential effects to human health from changes to ground conditions and contamination during construction are considered to be a medium-term temporary to long-term minor adverse effect during construction, which is not significant. No effects of greater significance are anticipated at any phase of the Scheme's lifetime.

7.13.21 Subject to implementation of additional mitigation, such as noise and vibration reduction, or giving due notice and explanation of noisy works to nearby residents, as set out in **ES Volume 1, Chapter 14: Noise and Vibration [EN010168/APP/6.1]**, the residual noise and vibration effect during construction is not anticipated to be significant. Therefore, the resultant effect to human health for nearby residents at highest risk is anticipated to be up to a short- to medium-term minor/negligible adverse effect (not significant) on their health and wellbeing. No effects of greater significance are anticipated at any phase of the Scheme's lifetime.

7.13.22 As a worst case scenario, the greatest level of induced impact on healthcare services within the 5 km Study Area is likely therefore to have a minor adverse effect (not significant) on human health as a result of increased demand on healthcare services and subsequent decrease in

accessibility to existing service users during the construction (and decommissioning) period.

7.13.23 The Scheme in its operational lifetime is valuable both for national energy security but also helps supply electricity for the benefit of people's lives and livelihoods while contributing to improving the country's climate change resilience. The ability for the Scheme to contribute towards these goals is likely to lead to a long-term minor beneficial effect (not significant) on human health during its operational lifetime.

Additional Mitigation

7.13.24 No significant effects to human health have been identified, however additional mitigation measures have nevertheless been identified with the aim of reducing the impacts of the Scheme in circumstances where the significance of the effect could be improved beyond the extent controlled by the embedded measures. These measures include:

- To reduce the level of impact on primary healthcare services within the 5 km Study Area for primary healthcare provision, the **Outline CEMP [EN010168/APP/7.12]** contains specific mitigation designed to support to construction workers to find and register with GPs across the Wider Baseline Study Area in reasonable proximity to their temporary or full-time accommodation and where such GP surgeries have reasonable capacity to take on additional patients; and
- Maintaining contact with the operators of care homes and service providers ahead of and during construction, to ensure that operators at these receptors are suitably resilient to reduce the likelihood of construction impacts affecting the functional operation and quality of environment for residents and users.

Residual Effects

7.13.25 There are no residual significant effects from the Scheme on human health are anticipated at any stage of the Scheme following the implementation of embedded and additional mitigation.

7.13.26 A full table of non-significant residual effects is set out in **ES Volume 3, Appendix 18-3: Human Health Summary of Non-Significant Effects [EN010168/APP/6.3]**.

7.14 Ground Conditions

7.14.1 This section summarises the key findings of the assessment of the ground conditions effects of the Scheme. The full ground conditions assessment is included in **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]**.

Baseline and Context

7.14.2 The Study Area for the assessment comprises all areas required for the Scheme, including Solar PV Sites, the Cable Route Corridor, and Highway Improvement Areas, as well as a 500 m buffer beyond the Order Limits boundary.

7.14.3 The ground conditions are anticipated to comprise topsoil and subsoil comprising lime-rich loamy and clayey soils with impeded drainage, overlying the Forest Marble Formation comprising mudstone with limestone beds. The Forest Marble Formation is designated as a Secondary A aquifer with high vulnerability and within Source Protection Zone (SPZ) 1, inner catchment zone, and Source Protection Zone 2, outer catchment zone. Flooding from groundwater has been recorded as unlikely.

7.14.4 Potential contamination sources include historical farming activities, vehicle repair garages, a slurry pit, industrial sites, a former sewage works, and quarries with some recorded pollution incidents. Nearby quarries have been identified with historical opencast clay and shale quarries present near Lime Down A, B C, and E.

7.14.5 Within the Cable Route Corridor, a variety of soil types, potential contamination sources, and geohazard risks are present. The soils range from lime-rich loamy and clayey to sandy clayey loam with some areas having superficial deposits, such as Alluvium. Potential sources of contamination include historical farming activities, quarries, sewage works, and railway lines. Regarding hydrogeology, the Cable Route Corridor is within various SPZ with shallow groundwater often perched on low permeability soils. Key geohazards include a moderate risk of compressible ground, shrink-swell clays, landslides, and instability from historical mining activities.

Embedded Mitigation

Construction

7.14.6 An **Outline SWMP [EN010168/APP/7.16], Outline CEMP [EN010168/APP/7.12]** and **Outline SRMP [EN010168/APP/7.15]** is included as part of the DCO Application submission. These plans will effectively manage the hazards associated with the construction phase of the development. This will include the following measures:

- The construction and management of roadways and access, management of excavated and imported soils and aggregates, management of wastes generated by the construction process, and Asbestos surveys to be obtained where necessary where demolition or disturbance of existing structures is required;

- Intrusive ground investigation will be undertaken prior to commencement of construction in areas impacted by identified geohazards and in locations where permanent structures are to be deployed;
- A discovery and inspection strategy is included in the **Outline CEMP [EN010168/APP/7.12]**, as well as consideration of risks to sensitive groundwater receptors;
- All photovoltaic arrays/ panels will be certified as PFAS free, meaning there is no risk of mobilisation of PFAS coatings on the panels being leached or otherwise mobilised and entering ground or surface water;
- Construction compounds and laydown areas will be appropriately located, designed and managed, foundations associated with structures will be designed to minimise impact on soils and groundwater, and a drilling fluid breakout plan will be secured in the **Outline CEMP [EN010168/APP/7.12]** to mitigate potential impacts from Trenchless Techniques on groundwater; and
- Good practice guidance including management of spillage risk will be included in an Emergency Response Plan.

Operation and Maintenance

7.14.7 All mitigation measures are listed in the **Outline OEMP [EN010168/APP/7.13]** and **Outline BSMP [EN010168/APP/7.21]**. These include:

- Appropriate sustainable drainage will be designed into the permanent buildings, installations will be bunded to retain firefighting substances used to control fire, and measures reflecting the mitigation required in the construction phase will be required where equipment must be replaced;
- The detailed **Outline OEMP [EN010168/APP/7.13]** will also specify the management of any chemical substances, i.e. herbicides, pesticides, lubricants, used on site and the precautions in place to avoid uncontrolled discharge; and
- There is no intention for fluid-filled cables to be utilised so there is no risk of the uncontrolled release of insulating fluids.

Decommissioning

7.14.8 Relevant mitigations identified in the Construction and Operational Phase will be applied to the Decommissioning phase, considering good practice at the point of decommissioning. Mitigations for decommissioning will be

secured by DCO requirement through the **Outline DS [EN010168/APP/7.14]**.

Assessment of Effects

7.14.9 Prior to the implementation of any mitigation (embedded or additional), the proposed Scheme has the potential to affect ground conditions and contamination (positively or negatively), during construction, operation and decommissioning, in the following ways:

- Soils impacted by historic contamination could be mobilised by construction activity and migrate to impact adjacent receptors;
- Soils impacted by historic contamination displaced and stockpiled by construction activity could be mobilised and migrate to impact receptors;
- Decommissioning activities could release contaminants within building fabrics or trapped within foundations that could migrate to impact receptors;
- Release of hydrocarbon fuels and/or lubricants from construction vehicles or other plant and machinery;
- Source Protection Zones exist around private and public groundwater abstractions and works associated with the construction, operation and decommissioning of the scheme could impact the quality and safety of those supplies;
- The use of chemicals such as herbicides and pesticides in maintenance activities;
- Uncontrolled releases of drilling fluids during the use of Trenchless Techniques;
- Mine Workings in the Southwest Cable Route Corridor have residual features which may create ground instability along the cable route. Unregistered mine workings may exist along a wider section of the cable route; and
- There are isolated areas of instability associated with potential ground dissolution and land slips which may impact cable routing choices.

Construction

7.14.10 Construction activities, such as excavation, have the potential to disturb soils and mobilise contaminants which could impact highly sensitive receptors, including surface water features and private water supplies.

These displaced and exposed soils will be carefully managed through the implementation of an **Outline CEMP [EN010168/APP/7.12]** and **Outline SRMP [EN010168/APP/7.15]**, which will consider how soils be appropriately excavated, stockpiled and if necessary, disposed of to avoid the mobilisation of any historic contaminants contained within. A SWMP based on the **Outline SWMP [EN010168/APP/7.16]** will be developed for the management of waste generated by the construction works.

7.14.11 While no significant sources of contamination are expected, they cannot be discounted even if detailed ground investigation is undertaken. Therefore, a discovery and inspection strategy will be employed to ensure that where unexpected contamination is identified, it can be quickly dealt with without risk to receptors.

7.14.12 The Pre-Desk Study Assessment for UXO confirmed that UXO risk across the Study Area is considered to be low and therefore a detailed desk survey is not essential and therefore is not included in this DCO application.

7.14.13 While Trenchless technique Avoidance Areas do not overlap with areas designated as High or Medium Risk of mining instability, there is the potential for abandoned mine workings to create the obstacles to shallow trenching. These features have been identified and trenchless techniques in these areas will be avoided in the final cable route.

Operation and Maintenance

7.14.14 The potential for chemicals used during the operation and maintenance of the Solar PV Sites to impact soils and groundwater has been assessed. No PFAS-based coatings will be applied to the Solar PV Panels themselves, and the Scheme will not include any fluid filled cables. Therefore, no impacts are anticipated in relation to these aspects.

7.14.15 In the unlikely event of a fire within the BESS Area, firefighting foams - which are expected to be PFAS free at the time the Scheme will be operating - may be deployed. While run off from such activities could have an adverse effect on soil and groundwater, the BESS Area will be contained within an impermeable bund with controlled drainage outfall. This containment is expected to effectively manager and mitigate and potential runoff impacts.

7.14.16 Any contaminated soils encountered during construction would have been remediated as per the Discovery and Inspection Strategy that is set out within the **Outline CEMP [EN010168/APP/7.12]** and therefore would not present a risk during the Operational and Maintenance phase.

7.14.17 Following the implementation of embedded mitigation measures, no significant effects are anticipated during the Operation and Maintenance phase.

Decommissioning

7.14.18 Potential impacts from the decommissioning phase of the Scheme are similar but of less intensity in nature to those during construction. There will be fewer intrusive works. A separate assessment of decommissioning effects is therefore provided, as an **Outline Decommissioning Strategy [EN010168/APP/7.14]**.

7.14.19 The mode of cable decommissioning for the Grid Connection and On-Site Cables will be dependent upon government policy and good practice at that time. Currently, the most environmentally acceptable option is considered is to leave the cables in situ, as this avoids disturbance to overlying land and habitats and to neighbouring communities.

7.14.20 Excavations will be sensitively located so as not to impact watercourses. This is not anticipated to prevent natural geomorphic evolution or potential future restoration of affected areas. As a result, it is considered the decommissioning impacts and effects would be no greater than those of the construction phase and no additional impacts are anticipated.

Additional Mitigation

Construction

7.14.21 Where unexpected contamination is encountered, consideration will be given to the impacts of its disturbance on sensitive receptors; particularly water supplies and surface water features. If necessary, material would be removed in line with the Discovery and Inspection Strategy, the requirement for which is secured via the **Outline CEMP [EN010168/APP/7.12].**

7.14.22 Additional ground investigation will be deployed to confirm the presence of any unrecorded mine workings, shafts, etc which are within the cable alignment in Cable Route Corridor Southwest. This information may indicate that additional precautions need to be made in terms of the selection of techniques such as Trenchless Techniques to advance cables and plant used in trenching, i.e. long-reach excavators.

Operation and Maintenance

7.14.23 No additional mitigation measures have been identified for the Operation and Maintenance Phase.

Decommissioning

7.14.24 Relevant mitigations identified in the construction and operation and maintenance phase will be applied to the decommissioning phase, considering good practice at the point of decommissioning. Mitigation measures for decommissioning are outlined in the **Outline Decommissioning Strategy [EN010168/APP/7.14]**.

Residual Effects

7.14.25 With the embedded and additional mitigation by design measures, and those included within the **Outline CEMP [EN010168/APP/7.12]**, the effects of the Scheme on ground conditions during the construction, operation and maintenance, and decommissioning phases would be not significant.

7.15 Other Environmental Matters

7.15.1 **ES Volume 1, Chapter 20: Other Environmental Matters [EN010168/APP/6.1]** presents the findings of an assessment of the likely effects of the Scheme on the following topics:

- Minerals;
- Materials and Waste;
- Telecommunications, Utilities and Television;
- Glint and Glare;
- Electromagnetic Fields; and
- Major Accidents and Disasters.

Minerals

Baseline and Context

7.15.2 The mineral resources that have been assessed have been identified by the British Geological Survey and through allocations, mineral resource zones and minerals safeguarding areas contained in the Wiltshire and Swindon Minerals Local Plan. Assessment of the impacts of the Scheme on the mineral interests have considered a number of parameters including extent, magnitude, duration and reversibility of the Scheme as well as the extent, likely quality and situation of any affected mineral reserve.

7.15.3 The bedrock underlaying the Scheme consists of a series of sedimentary formations dating from the Jurassic period. The strata is generally progressively younger moving from west to east across the site. The

bedrock is overlain in places by quaternary superficial deposits of alluvium, clays, silts, sand and gravels principally of fluvial origin.

Embedded Mitigation

7.15.4 The following embedded mitigation measures have been incorporated into the Scheme's design:

- Depth of trenching/horizontal directional drilling (HDD) for installation of the Grid Connection Cables to be no more than 4 m below the surface area within the area of the Oolitic limestone mineral safeguarding area, including Monks Park Mine;
- Prior to any excavations, the owners/current operators of Monks Park Mine to be informed to ensure appropriate safety precautions are in place within the Mine during the construction works;
- Construction methods including the use of smaller excavators, low ground pressure plant and long reach excavators to reduce the point load at the excavation location in areas where mining activities are taking place; and
- The decommissioning and removal of plant and structures at the end of the life of the Scheme to restore the baseline condition for the identified mineral resources. (Infrastructure is only left in the ground such as cable ducts after decommissioning where these do not present any significant constraint to future mineral extraction).

Assessment of Effects

7.15.5 The Cable Route Corridor to the southeast of Corsham towards Whitley (**ES Volume 2, Figure 20-1: Minerals Constraints [EN010168/APP/6.2]**) crosses a mineral safeguarding area associated with Oolitic Limestone deposits and the permitted area of Monks Park Mine These deposits are actively being mined for building stone at a depth of approximately 20 to 30 m below the surface.

7.15.6 On the basis that the Grid Connection Cables are installed at a depth of no more than 4 m below the surface the installation of cables within the Cable Route Corridor would have no impact on the identified mineral resource, nor on the ability to exploit the permitted mineral resource.

7.15.7 The sensitivity of Oolitic Limestone mineral safeguarding area and associated Monks Park Mine is considered to be high, however the magnitude of the impact is considered to be negligible taking account of the embedded mitigation and the significance of effect is moderate/minor (not significant for the purposes of the assessment).

7.15.8 The Cable Route Corridor affects a very small area of the Bristol Avon Mineral Resource Zone and Mineral Safeguarding Area as it approaches the existing National Grid Melksham Substation. The Scheme thus has the potential to affect the future sand and gravel supply in Wiltshire for the life of the Scheme

7.15.9 The Scheme affects two peripheral areas of the Mineral Resource Zone where the mineral resource is likely to be at its thinnest in an area where the Wiltshire and Swindon Minerals Local Plan acknowledges that the sand and gravel deposits are typically shallow and of poorer quality. The area of the Mineral Resource Zone affected are relatively isolated parcels of land with no apparent suitable access for mineral related traffic and already heavily constrained by adjoining surface development. They are considered impractical to work and not available to meet Wiltshire's aggregate needs.

7.15.10 The sensitivity of Bristol Avon Mineral Resource Zone is considered to be medium. The magnitude of the impact is considered to be negligible and the significance of effect is minor and not significant for the purposes of the assessment.

Additional Mitigation

7.15.11 No additional mitigation has been identified.

Residual Effects

7.15.12 Overall, following the implementation of embedded mitigation, no significant residual effects have been identified.

Materials and Waste

Baseline and Context

7.15.13 In summary, the existing baseline for national annual steel availability is 15 million tonnes, and the regional annual availability of aggregates, concrete, and asphalt is 28.6 million tonnes, 2.6 million tonnes, and 2.1 million tonnes, respectively. The existing baseline for landfill capacity is approximately 9.7 million m^3 for hazardous waste and a total of 16.6 million m^3 for non-hazardous and inert waste.

Embedded Mitigation

7.15.14 The Scheme will aim to prioritise waste prevention, followed by preparing for reuse, recycling and recovery and lastly disposal to landfill as per the waste hierarchy.

7.15.15 The construction of the Scheme will be controlled by the measures defined within the **Outline CEMP [EN010168/APP/7.12]** and **Outline**

SWMP [EN010168/APP/7.16], which will be developed post DCO. Key measures in the environmental management plans will include:

- The contractor will consider the objectives of sustainable resource and waste management and apply the principles of the waste hierarchy;
- All waste management will be undertaken in accordance with the relevant regulations as outlined in **ES Volume 3, Appendix 20-2: Materials and Waste Legislation, Policy and Guidance [EN010168/APP/6.3]**;
- Waste would be transported by licensed waste hauliers to waste management siters which hold the necessary regulatory authorisation and/or permits for those wastes cosigned to them; and
- Waste would be segregated to be reused and recycled, where reasonably practicable.

Assessment of Effects

7.15.16 The estimated main construction material types and their associated quantities to be used for the Scheme's construction are steel, concrete and aggregate. For steel, concrete and aggregates the magnitude of impact is considered to be 'negligible', given the Scheme's estimated construction material requirements (<1% of national and regional availability respectively). Therefore, the magnitude of impact is negligible, and the effect is slight, which is considered to be not significant.

7.15.17 The type of waste generated at the Scheme during the Scheme's construction likely includes general waste from site offices and welfare facilities, small quantities from the maintenance of construction vehicles, packaging waste from incoming materials and other waste from the construction of fencing, substations, and the installation of other supporting infrastructure.

7.15.18 The Solar PV Panels, BESS Area and other supporting infrastructure would be manufactured off-site and no modifications generating waste would be required. Therefore, wastage during installation is expected to be minimal.

7.15.19 With embedded mitigation measures in place, the quantities of waste to be disposed of to landfill are anticipated to be below 1% (0.01%) of regional inert and non-hazardous landfill void capacity and less than 0.1% of national hazardous landfill void capacity . This is a negligible magnitude of impact.

7.15.20 Considering the above, it is concluded that there will be no significant waste effects during construction of the Scheme.

7.15.21 During operation, waste generation activity within the solar PV Sites would be restricted principally to vegetation management, equipment maintenance and servicing, replacement of any components (i.e. that fail or reach the end of their lifespan), periodic fence inspections, and monitoring activity to ensure the continued effective operation and maintenance of the Scheme.

7.15.22 Recycling routes are generally available for component replacement waste at present, and it is likely that there will be even greater opportunities for recycling in the future, not least because the recycling market will have expanded to meet demand as solar PV installations increase. The **Outline OEMP [EN010168/APP/7.13]** presents the commitment of the Applicant to maximise recycling and reuse of the Scheme components at the end of their life.

7.15.23 With the embedded mitigation measures in place, the overall quantities of operational waste to be disposed of to landfill are anticipated to be below 1% of regional inert and non-hazardous landfill capacity, and less than 0.1% of national hazardous landfill capacity. This is a negligible magnitude of impact.

7.15.24 The **Outline Decommissioning Strategy [EN010168/APP/7.14]** submitted with the DCO Application sets out the commitment of the Applicant to maximise reuse and recycling of Scheme components at the end of their life. It is anticipated that all waste types during the decommissioning phase will be minimal and have the ability to be recycled or recovered. The overall quantities of decommissioning waste to be disposed of to landfill are anticipated to be less than 0.1% of regional inert and non-hazardous landfill capacity.

7.15.25 Considering the above, it is concluded that significant waste effects are not likely during decommissioning of the Scheme.

Additional Mitigation

7.15.26 No additional mitigation has been identified.

Residual Effects

7.15.27 No residual significant effects have been identified for materials and waste.

Telecommunications, Utilities and Television

Baseline and Context

7.15.28 There are multiple cables, pylons, and pipelines crossing the Order Limits which are owned and operated by a number of different utilities providers.

Three mobile phone masts are present within the Order Limits, which are all contained within Lime Down C. There are 49 telecoms assets within the Order Limits, 44 of which are owned by British Telecommunications, four by Zayo and one by Lumen.

7.15.29 Consultation has been and will continue to be undertaken with the relevant organisations, including, but not limited to Exolum Pipeline System Ltd, National Grid Electricity Distribution, National Gas Transmission (NGT) and South West Water.

7.15.30 The utilities and infrastructure that have the potential to be affected by the Scheme includes the NGT asset 14 Feeder Wormington/Pucklechurch high pressure gas pipeline which runs through the centre of Lime Down C and the west of Lime Down B. There are multiple other assets including water pipelines, sewage, low pressure gas pipelines and both overhead and underground electric lines. The majority of the high voltage (132 kV) electricity lines are those feeding into and associated with the Existing National Grid Melksham Substation.

Embedded Mitigation

7.15.31 Precautionary mitigation measures will be captured in the **Outline CEMP [EN010168/APP/7.12]** including the use of topographical data alongside mapping provided by telecommunications and utilities providers, use of ground penetrating radar before excavation to identify unknown utilities, use of Trenching and HDD and locating the Scheme outside of utilities protected zones.

7.15.32 In advance of construction, the Applicant will liaise with all utility providers with assets in the area in regard to construction timelines, construction activities, proximity to assets and construction management measures that will be in place to ensure no impact to utilities.

7.15.33 Similarly, measures in relation to safe working near buried utilities, particularly gas pipelines, will be in place at all phases of the Scheme. For example, safety measures set out in National Grid and Northern Gas Networks guidance documents for third parties working in the vicinity of high pressure gas pipelines and associated installations

Assessment of Effects

7.15.34 The Scheme consists of low-lying infrastructure and is therefore unlikely to interfere with digital television signals. Given a standard two-storey property is approximately 7m tall and the substations (i.e., the tallest infrastructure) are located over 400m from residential properties, no interference is anticipated. Therefore, no effects are anticipated during the Scheme construction, operation and maintenance, and decommissioning phases.

7.15.35 The design of the Scheme has been informed by topographical and geophysical survey data, alongside mapping provided by telecommunication and utilities providers to ensure underground and overground utilities are adequately offset from.

7.15.36 The Cable Route Corridor will involve the installation of a 400kV grid connection to the Existing National Grid Melksham Substation. Trenching and horizontal directional drilling activities to lay these cables will need to consider the significant number of existing utility services that interact with the Cable Route Corridor. When crossing existing buried utilities or apparatus, the maximum depth of the dug cable trench is 2m below the level of the existing apparatus.

7.15.37 The application of embedded mitigation secured in the **Outline CEMP [EN010168/APP/7.12]** would reduce the likelihood of effects on utilities during the construction phase. With the implementation of such measures, no significant adverse effects are expected during Scheme construction.

7.15.38 No groundworks are proposed during the operation and maintenance phase of the Scheme. Therefore, no effects on utilities are predicted. Any works associated with replacement activities will be carried out in accordance with the embedded mitigation in the **Outline CEMP [EN010168/APP/7.12]**.

7.15.39 Effects during decommissioning on utilities are dependant on several factors. All Solar PV Panels, mounting piles, cabling, inverters, transformers, switchgear, BESS Area, substations and On-Site Cables would be removed from within the Solar PV Sites. Given most of this infrastructure is above ground or low lying (up to 1.2m beneath ground level in the case of On-Site Cables) this is unlikely to interfere with utilities.

7.15.40 The embedded mitigation used during construction would also apply during decommissioning and with the implementation of such measures, no significant adverse effects on utilities are predicted.

Additional Mitigation

7.15.41 No additional mitigation has been identified.

Residual Effects

7.15.42 The Scheme is to be designed so that sufficient off-set distances are provided between on-site infrastructure associated with the development and underground and overground services. As such, no significant residual effects to telecommunications, utilities, and television are anticipated.

Glint and Glare

Baseline and Context

7.15.43 The following airfields in the surrounding area have been identified for assessment. Hullavington Airfield, approximately 1.1 km west, Badminton Airfield, approximately 4.6 km west, Langley House Airfield, approximately 5.2 km south, Charlton Park Airfield, approximately 5.8 km northeast and Bowldown Farm Airfield, approximately 7.0 km northwest.

7.15.44 Road receptors have been identified for assessment along the A429 and the road called Bradfield Cottages. 66 receptors were identified, at intervals of approximately 100 m along these roads. 249 dwelling receptors have been identified within the assessment area. Some receptors are used to represent a small number of separate addresses and results are considered representative for the adjacent observer locations.

7.15.45 Railway receptors have been identified along the adjacent railway line. In total, 94 receptors were identified, at intervals of approximately 50m along the railway.

7.15.46 Several kilometres of footpaths and bridleways are located within the Study Area. This includes the Cotswold National Landscape, which is located to the north and west of the Scheme. 15 sensitive viewpoints have been identified for geometric modelling.

7.15.47 Public Rights of Way and permissive paths have been considered more widely at a high-level and without detailed modelling, as it is considered that effects would be considered a 'low impact' in the worst-case, as impacts would be short term and transitory.

Embedded Mitigation

Operation

- The Scheme design has incorporated setbacks from dwelling receptors where practicable;
- Committing to use of single axis tracking Solar PV Panels where required and implementing a resting angle of 5° (field C14); and
- Committing to use of 2.5m 1P fixed south-facing panels where required (field B11).

7.15.48 These measures are secured within the **Outline CEMP [EN010168/APP/7.12]** and the **Outline OEMP [EN010168/APP/7.13].**

7.15.49 Planting has been proposed across the Scheme to screen views from sensitive receptors, as shown within the **Outline LEMP [EN010168/APP/7.18].** This proposed planting has not been considered within the Glint and Glare Assessment, as this is considered to present a reasonable worst-case scenario. This ensures that any temporary impacts that would occur until planting sufficiently matures are considered within this chapter.

Assessment of Effects

7.15.50 Solar reflections are predicted towards the approach paths and visual circuits (specified paths to be flown by aircraft operating in the vicinity of an aerodrome) at Hullavington Airfield, however it is understood that flying activity ceased at this airfield in 2016, and it is now permanently closed. Solar reflections with 'potential for temporary after-image' are predicted towards receptors on the visual circuits at Badminton Airfield. The effects have been considered in an operational context and are considered to be operationally accommodatable. The impact is therefore not considered to be significant and no mitigation is required.

7.15.51 For a 0.3km section of railway, solar reflections are predicted to occur within a train driver's primary field-of-view (30° either side of the direction of travel) for fixed south facing panels and single axis tracking panels. The Applicant has committed not to implement fixed south facing panels in the affected area or implement a resting angle of 5° to the single-axis tracking panels, which would be sufficient to mitigate any impacts. These impacts are considered to be not significant.

7.15.52 Existing vegetation is not currently at a sufficient height (approximately 2m in 2025) to screen views from residential receptor 24. This vegetation will reach approximately 3.2m by the operation and maintenance phase when panels will be in situ, therefore the Applicant has committed to use of 2.5m fixed panels in field B11 to prevent any significant impacts. No impact is predicted, and no mitigation is proposed.

7.15.53 With the implementation of embedded mitigation measures , impacts to road receptors, dwelling receptors, railway receptors and Public Rights of Way receptors are not significant.

7.15.54 A low impact is predicted towards five of the 15 viewpoint receptors, where partial screening has been identified in the form of intervening terrain and existing vegetation. These impacts are considered to be not significant.

Residual Effects

7.15.55 No significant residual effects are predicted following the implementation of embedded and additional mitigation.

Electromagnetic Fields

Baseline and Context

7.15.56 The Scheme would be located on predominantly agricultural land. There are existing cable routes and electrical infrastructure within the Study Area and surrounding areas which will have associated Electromagnetic Fields (EMF).

7.15.57 The Cable Route Corridor includes a single 400kV Grid Connection Cable circuit made up of three cables, and the total length of the Cable Route Corridor is approximately 22 km.

7.15.58 The focus of the assessment is primarily on the Scheme's proposed electrical infrastructure, rather than any existing electrical infrastructure, as domestic appliances with motors and transformers generate some of the highest magnetic fields that most people are exposed to.

Embedded Mitigation

7.15.59 The Scheme has been designed so that the maximum levels of electromagnetic radiation received at existing residential properties, places of work, and Public Rights of Way, from the 400 kV Grid Connection Cables during operation will be below ICNIRP reference levels.

7.15.60 There are no overhead cables planned as part of the Scheme. This is material as underground cables significantly reduce the risk of significant EMF impacts upon human health. All proposed cables will be ‘UKCA’ and/or ‘CE’ marked.

7.15.61 A minimum 10m setback will be imposed between receptors (residential dwellings) and 400 kV Grid Connection cables. The Grid Connection Cables will be installed in trenches up to 2 m deep.

Assessment of Effects

7.15.62 The maximum magnetic field level at 1 m above ground, for a direct buried single circuit underground cable 0.9 m below ground level, is below ICNIRP reference levels. This is considering a 400 kV underground cable, which represents the maximum assumed voltage for underground cables in the Scheme. No setback distances are required for these cables, and it follows that no setback distances are required for any direct buried single cables at 0.9 m below ground level or lower.

7.15.63 EMFs from other electrical infrastructure, including transformers, inverters, substations and BESS Area have also been assessed. All transformers and inverters should be CE and/or UKCA marked. CE marking indicates that a product has been assessed by the manufacturer and deemed to

meet European Union safety, health and environmental protection requirements. As these will be CE and/or UKCA marked and housed in protective enclosures, any EMFs emitted would be of a low magnitude.

7.15.64 There are Public Rights of Way and permissive paths which pass over the cable route and may experience magnetic fields. The magnetic fields will not breach ICNIRP reference levels even directly above the 400 kV Grid Connection Cables. This is deemed to be a low impact, as magnetic fields will be below the ICNIRP reference levels and any exposure will be brief, whilst the user of a Public Rights of Way or permissive path passes over the 400 kV Grid Connection Cables.

7.15.65 Considering the medium and low sensitivity of dwelling and Public Rights of Way receptors and the low magnitude of EMF impacts the overall significance of the effect would be minor, and therefore not significant in EIA terms.

Additional Mitigation

7.15.66 No additional mitigation has been identified.

Residual Effects

7.15.67 It is anticipated that through the use of the embedded mitigation measures and the implementation of well-established good industry practices, the Scheme will result in no significant residual adverse EMF effects on human health.

Major Accidents and Disasters

Baseline and Context

7.15.68 As set out in the ISEP assessment guidance document ‘Major Accidents and Disasters in EIA: A Primer:

- ‘Accidents’ are an occurrence resulting from uncontrolled developments in the course of construction, operation, and maintenance, and decommissioning (e.g. a major emission, fire or explosion); and
- ‘Disasters’ are naturally occurring extreme weather events or ground related hazard events (e.g. subsidence, landslide, earthquake).

7.15.69 There are several sensitive receptors present in the vicinity of the Scheme which could be vulnerable to major accidents or disasters, including towns, villages, farms and residential homes, roads, designated ecological sites, designated heritage sites, and underground utilities and services.

7.15.70 The Scheme is located within HSE's land use planning consultation zones for major accident hazard pipelines including 14 Feeder Wormington/Pucklechurch (HSE ref. number 7227).

Embedded Mitigation

7.15.71 The **Outline Battery Safety Management Plan (BSMP) [EN010168/APP/7.21]** has been integrated into the Scheme's design to ensure fire safety and minimise risks. Key measures include allocating land for water storage, positioning the BESS away from trees and hedgerows to prevent fire spread, and managing firewater runoff. The **Outline BSMP [EN010168/APP/7.21]** follows guidance from Dorset and Wiltshire Fire and Rescue Service and aligns with National Fire Chiefs Council recommendations.

7.15.72 To further reduce fire risk, the Scheme includes enclosures for battery components, and places the BESS Area over 600 m from residential receptors and 350 m from Public Rights of Way. In the event of a fire, emergency procedures—such as advising residents to stay indoors—are outlined in the Emergency Response Plan within the **Outline CEMP [EN010168/APP/7.12].** With these measures in place, the risk to air quality and public safety is considered not significant.

Assessment of Effects

7.15.73 The Scheme has the potential to affect the following major accident and disaster risk events:

- Flooding, including properties and people in areas of increased flood risk;
- Building failure, fire and associated explosions potentially impacting local residents, heritage features and habitats and species;
- Air quality events potentially impacting local residents, controlled waters and habitats and species;
- Rail accidents potentially impacting rail users;
- Road accidents, potentially impacting road Users and the terrestrial and aquatic environment;
- Aircraft incidents potentially impact aircraft users;
- Damage to/cut off of utilities (gas, electricity, water, sewage, oil, communications) potentially impacting employees, controlled waters and local residents;
- Mining/Extractive Industry (Unstable ground conditions) potentially impacting employees and local residents; and

- Plant disease potentially impacting habitats and species.

7.15.74 The majority of the Scheme is within Flood Zone 1. Parts of the Scheme are located within Flood Zones 2 and 3. Flood events can result in damage to property, pollution to land or water and impact communities through displacement.

7.15.75 Both the vulnerability of the Scheme to flooding and the potential for the Scheme to exacerbate flooding are covered in **Appendices 11-1 to 11-8: Flood Risk Assessment and Drainage Strategy [EN010168/APP/6.3]**. Mitigation has been considered and, where necessary, incorporated into the Scheme design to minimise any effects associated with flood risk.

7.15.76 There is potential for fire due to the BESS Container element of the Scheme. However, the BESS Containers proposed for the Scheme have built in safety features including cooling systems, fire resistant construction, fire detection, suppression systems, emergency stop functions and isolation monitoring, which are designed to regulate temperatures to within safe conditions to minimise the risk of fire. In addition, the Scheme design includes adequate separation between battery containers to ensure an isolated fire would not become widespread and lead to a major incident.

7.15.77 Following the implementation of the **Outline BSMP [EN010168/APP/7.21]** and mitigation included in **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]** and **Chapter 11: Hydrology, Flood Risk and Drainage [EN010168/APP/6.1]** risks associated with fires and explosions are considered to be not significant.

7.15.78 If the battery cells associated with the BESS Area become damaged by heat or are burnt within a fire affecting a single module, a rack of modules or multiple racks, then the combustible materials consumed in the fire could give rise to a range of organic and inorganic air pollutants.

7.15.79 The risks to railway and road users such as glint and glare effects and cabling in the vicinity assets has been considered within **ES Volume 1, Chapter 20: Other Environmental Matters [EN010168/APP/6.1].** Following the implementation of mitigation measures such as including protective provisions within the Draft DCO and routing cabling beneath the assets using HDD or other non-intrusive techniques, no significant effects are anticipated on these receptors.

7.15.80 There are two airfields located within 5 km of the Scheme – Hullavington Airfield: approximately 1.0 km to the south and Badminton Airfield: approximately 4.6 km to the west. Hullavington Airfield was a RAF aerodrome that closed in 1993. The site continued to be used for general aviation flying, with one operational runway, until 2016 when the site was permanently closed. Consequently, it not considered further in terms of

aviation activity. Badminton Airfield is an unlicensed General Aviation aerodrome and is understood not to have an Air Traffic Control Tower. It has one operational runway.

7.15.81 The risk of damage to/cut off of utilities (gas, electricity, water, sewage, oil, communications) is considered to be appropriately assessed by **ES Volume 1, Chapter 20: Other Environmental Matters, Section 20.4 Telecommunications, Utilities and TV [EN010168/APP/6.1].** The risk of Mining/Extractive Industry (Unstable ground conditions) is considered to be appropriately assessed within **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]** and associated appendices.

7.15.82 Use of the **Outline Landscape and Ecological Management Plan [EN010168/APP/7.18]** and **Outline Soil Resources Management Plan [EN010168/APP/7.15]** along with abiding by the advice outlined in the Department for Environment, Food & Rural Affairs 'Animal diseases: international and UK monitoring' website throughout the construction and decommissioning phases is deemed to mitigate any significant effects relating to plant disease.

Additional Mitigation

7.15.83 The additional mitigation proposed in **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]** summarised in Sections 7.14.21 to 7.14.23 is deemed of relevance to Major Accidents and disasters.

Residual Effects

7.15.84 It is considered that all major accident and disaster risk events associated with the construction, operation and maintenance, and decommissioning of the Scheme would be appropriately mitigated through design and the application of management plans submitted as part of the DCO Application. No significant major accident and disaster effects would arise.

7.16 Cumulative and In-Combination Effects

7.16.1 This section summarises the key findings of the assessment of the cumulative and in-combination effects for the Scheme. The full cumulative and in-combination assessment is included in **ES Volume 1, Chapter 21: Cumulative and In-Combination Effects [EN010168/APP/6.1].**

Methodology

7.16.2 Two types of cumulative effects have been considered in the assessment in accordance with the EIA Regulations and good practice guidance, these are:

- **In-combination effects:** Effects interactions and combination of different environmental residual (post-additional mitigation) effects from within the Scheme affecting a single receptor.
- **Cumulative effects:** Potential impacts arising from two or more developments that are reasonably foreseeable and/or consented, but not yet part of the existing baseline environment. These developments, if in proximity to the Scheme, may lead to cumulative effects on the same receptor.

7.16.3 A list of proposed schemes that overlap the Order limits or are located close enough to the Scheme that they have the potential to generate significant cumulative effects have been identified. The list of proposed schemes has been shared with Wiltshire Council.

7.16.4 The list of developments of cumulative developments is set out in Appendix 2 of this report. These developments were screened to assess their potential interaction with the Scheme and a short list of cumulative developments was produced to inform the cumulative effects assessment. The short list of developments are shown on **ES Volume 2, Figure 21-1: Location of Short List Cumulative Developments [EN010168/APP/6.2].**

7.16.5 The potential for cumulative effects and interactions as a result of the Scheme are summarised in **ES Volume 1, Chapter 21: Cumulative and In-Combination Effects [EN010168/APP/6.1].**

In-Combination Effects

7.16.6 In-combination effects are the combined effect of individual impacts from the Scheme that are likely to result in a new or different likely significant effect, or an effect of greater significance, than any one of the impacts on their own. The assessment draws on the assessment of impacts provided in **ES Volume 1, Chapter 7 to 20 [EN010168/APP/6.1].**

7.16.7 Table 21-7 in **ES Volume 1, Chapter 21: Cumulative and In-Combination Effects [EN010168/APP/6.1]** summarise the potential effect interactions. No significant effect interactions are anticipated as a result of the construction, operation and maintenance or decommissioning of the Scheme.

Cumulative Effects

7.16.8 The assessment of cumulative effects arising from the Scheme in combination with other proposed Schemes (inter-project effects) is based upon a review of current submitted planning applications, as well as a study of planning policy documents.

7.16.9 An assessment of the cumulative effects of the Scheme along with the shortlisted cumulative developments has been presented in each technical chapter **(ES Volume 1, Chapter 7 to 20 [EN010168/APP/6.1]**) and summarised in **ES Volume 1, Chapter 21 Cumulative and In-Combination Effects [EN010168/APP/6.1]**.

7.16.10 Within the majority of technical chapters, no likely significant effects have been identified through the cumulative effects assessment where they were not already predicted for the Scheme in isolation.

7.16.11 **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1]** has identified significant cumulative effects on Open Habitats at a Local level through displacement of a large proportion of skylark territories. This effect may be compounded by losses associated with 18/08271/OUT (ID: 96 in the shortlist) to a **significant adverse effect** at a District level, assuming a worst-case scenario where high numbers of skylarks are displaced by this project which are not mitigated.

7.16.12 **ES Volume 1, Chapter 16: Socio-Economics, Tourism and Recreation [EN010168/APP/6.1]** has identified medium-term temporary significant cumulative effects from all short-listed on the following tourism and recreation receptors during construction:

- Moderate adverse (significant) effect to Corsham Park. This is anticipated to be generated by cumulative impacts from project IDs 101, 103, 105, and 319;
- Moderate adverse (significant) effects to Footpath WT|HULL|29 from project ID 58 and byway open to all traffic WT|CORM|122 from project IDs 101, 103, 105, and 319; and
- Long-distance recreation routes – are anticipated to experience a moderate adverse effect overall within the 5 km Study Area (significant). Cumulative moderate adverse effects (significant) are therefore anticipated on Long Path (refer to project IDs 101, 103, and 358), Palladian Way (refer to project IDs 58 and 221), and Wiltshire Way (refer to project ID 358), albeit that are no greater in significance than for the Scheme in isolation. Sustrans Cycle Route 403 (also known as the North Wiltshire Rivers Route) is also anticipated to experience a significant cumulative moderate adverse effect, from project IDs 103, 105, and 319.

7.16.13 These effects, whilst significant, are temporary limited to construction phase and year 1 of the operation and maintenance phase (in the case of landscape). As such these are expected to reduce to non-significant levels following the completion of the aforementioned phases. It is important to note that the cumulative nature of these effects does not imply long-term

harm, as they are inherently short-lived and will diminish as the project transitions into its steady-state operation.

8 Summary and Conclusion

8.1.1 The ES presents the final findings and conclusions associated with the EIA process.

8.1.2 A number of environmental impact avoidance, design and mitigation measures have been identified to mitigate and control environmental effects during the construction, operation and maintenance, and decommissioning phases of the Scheme. It is proposed that these will be secured through appropriate requirements and other controls within the DCO for the Scheme, should this be granted.

9 References

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Ref 2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended). Available at: https://www.legislation.gov.uk/uksi/2017/572 (accessed 25/07/2025).

Ref 3 Planning Inspectorate (2020) Advice Note 7: EIA: Process, Preliminary Environmental Information and Environmental Statements. Available at: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-seven-environmental-impact-assessment-process-preliminary-environmental-information-an [Accessed 25 July 2025].

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Ref 6 British Standards Institute (BSI) (2019) BS 4142:2014+A1:2019. 'Method for Rating Industrial and Commercial Sound' 2014.

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Ref 8 Department for Environment, Food and Rural Affairs. (2025). UK AIR. Available at: https://uk-air.defra.gov.uk/ [Accessed 22 May 2025].

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Ref 11 ONS (2025). Regional Gross Value Added (Balanced) by Industry: all International Territorial Level (ITL) regions – Current Prices (2023). Available at www.ons.gov.uk [Accessed 25 July 2025].

Ref 12 ONS (2022). Census 2021: TS001 – Number of usual residents in households and communal establishments (2021). Available at www.nomisweb.co.uk [Accessed 25 July 2025]

Ref 13 NISRA (2022). Census 2021: MS-A01 Usual resident population. Available at www.nisra.gov.uk [Accessed 25 July 2025]

Ref 14 ONS (2025). National population projections by single year of age (2022 base). Available at www.nomisweb.co.uk [Accessed 25 July 2025].

Ref 15 Ministry of Housing, Communities and Local Government. National Planning Policy Framework. Available at: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf [Accessed 25 July 2025].

Ref 16 IEMA, Environmental Assessment of Traffic and Movement. Available at: https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf [Accessed 25 July 2025].

Annex A – Figures

Lime Down Solar Park

Title:

Figure 1: The Order Limits

Document:

Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

Order Limits

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APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0273

Coordinate system: British National Grid

Scale: 1:90,000 @ A3

0 2 4 km

Island GREEN POWER

Lanpro

375000 380000 385000 390000 395000 400000

185000 180000 175000 170000 165000

Hillesley
Westonbirt
Shipton Moyne
Charlton
Didmarton
Easton Grey
Milbourne
Malmesbury
Hawkesbury Upton
Sherston Parva
Lea
Sopworth
Sherston
Lime Down A
Lime Down B
Lime Down C
Lime Down D
Lime Down E
Horton
Little Somerford
Brinkworth
Luckington
Corston
Badminton
Alderton
Great Somerford
Hullavington
Startley
Dauntsey
Old Sodbury
Acton Turville
Lower Stanton St Quintin
Upper Seagry
Littleton Drew
Grittleton
Stanton St Quintin
M4
Burton
Bradenstoke
Tormarton
J18
Christian Malford
Sutton Benger
Nettleton
Upper Castle Combe
Kington St Michael
West Kington
Castle Combe
Foxham
Yatton Keynell
Kington Langley
Dyrham
Langley Burrell
North Wraxall
Ford
A4420
East Tytherton
Marshfield
Biddestone
Chippenham
Bremhill
Cold Ashton
Thickwood
Studley
Colerne
A4
Calne
Corsham
Derry Hill
Rudloe
Box Hill
Notton
Ashley
Box
Neston
Castard
Lacock
Upper Swainswick
Bowden Hill
Sandy Lane
A3102
Batheaston
Kingsdown
A4
Bathford
A350
Whitley
Beanacre
Bathampton
Atworth
Heddington
Shaw
Monkton Farleigh
Westbrook
A363
Bromham
Bath
South Wraxall

Lime Down Solar Park

Title:

Figure 2: Elevations of the Site

Document:

Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Existing National Grid Melksham Substation (PoC)

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Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0273

Coordinate system: British National Grid

Scale: 1:90,000 @ A3

N W E S

0 2 4 km

Island GREEN POWER

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Lime Down
Solar Park

Title:

Figure 3: Key Construction Phase Features

Document:

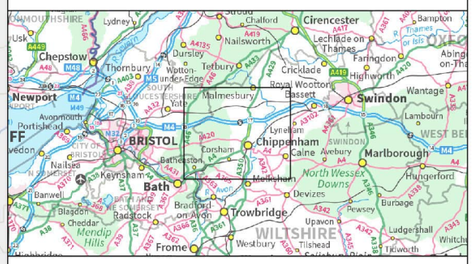
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Cable Corridor Access Point
- Indicative Temporary Construction Compound
- Indicative Temporary Construction Compound – Cable Route Corridor
- Avoidance Area
- Access track
- Substation and BESS Access Track

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to the Indicative Masterplan (ES Figures 8.15.1 to 8.15.5)

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Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0274

Coordinate system: British National Grid

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0 1 2 3 4 km

Island GREEN POWER

Lanpro

386000 388000 390000 392000

186000 184000 182000 180000

Lime Down A
Lime Down B
Lime Down C
Lime Down D
Lime Down E
400kV Substation
BESS Area

SHERSTON CP
NORTON CP
HULLAVINGTON CP
GRITTLETON CP
ST PAUL MALMESBURY WITHOUT CP
STANTON ST QUINTIN CP

Lime Down
Solar Park

Title:

Figure 4: Indicative Site Layout Plan

Document:

Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Solar PV Sites
- 400kV Substation
- 132kV Substation
- BESS Area
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

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APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:30,000 @ A3

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Island GREEN POWER

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186000 185000 184000

Lime Down Solar Park

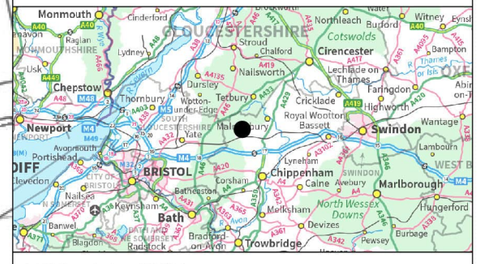
Title:
Figure 4-1: Indicative Site Layout Plan
Lime Down A

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Sites
- 132kV Substation
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

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Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:10,000 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

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387000
388000
389000
390000
186000
185000
184000

Withy Bed
The Plain Farm
New Barn
87
84
97
104
Dovecote (rems of)
Foxley Manor Farm
Foxley House
Foxley
Foxley Green
254
90
95
88
Baker's Gorse
202
203
4b
4a
Fosse Way ROMAN ROAD
107
NORTON CP
83
Lady's Wood
108
Ladyswood Farm
Spr
104
Norton
Honey Lane
Gorsey Leaze
Maidford
Norton Manor
Norton
93
96
Maidford Brake
4
Maidford Clump
Wr Twr
Manor Farm
97
Fosse Farm
20

Lime Down Solar Park

Title:
Figure 4-2: Indicative Site Layout Plan
Lime Down B

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Solar PV Sites
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

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APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:10,000 @ A3

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0 200 400 600 Metres

Island GREEN POWER

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387000
388000
184000
183000
182000

HULLAVINGTON CP

Quarry (dis)
Widley's Gorse
Widley's Farm
Quarries (disused)
Vineyard
Commonwood Lane
Commonwood Farm
New Plantation
Lordswood Farm
Lordswood House
Lord's Wood
Lady's Wood
Ladyswood Farm
Norton
Foss Farm
Townlease Farm
Farleaze Farm
Pig Lane
Cream Gorse
Broadmead Covert
Kingway Covert
Tunnel
New Covert
Surrendell Wood
Surrendell Farm
Surrendell Cottage
Pillow Mound
East Dunley Cottages
Quarry (dis)
Chapel (site of)
Elm and Ash
Fosse Lodge
East Dunley Farm
Little Worth Wood
Dunley
Wr Twr
Spr
108
119
123
110
96

1
2
3
4
19
21
2a
2b
204
205
206
207
208

Lime Down Solar Park

Title:
Figure 4-3: Indicative Site Layout Plan
Lime Down C

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Solar PV Sites
- 400kV Substation
- 132kV Substation
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:12,500 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

388000 389000 390000 391000

185000 184000 183000 182000

Lime Down
Solar Park

Title:
Figure 4-4: Indicative Site Layout Plan
Lime Down D

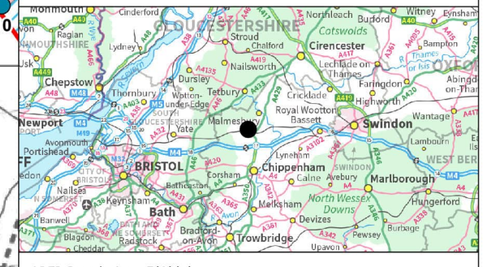
Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Solar PV Sites
- 400kV Substation
- 132kV Substation
- BESS Area
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:12,500 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

392000
393000
394000
183000
182000
181000

Rodbourne House
Parsloe's Farm
Water Tower
Cross
Rodbourne
Manor Farm
Gabriel's Well
Bottom Farm
Heath Farm
Goosegreen Farm
Rodbourne Bottom
Grove Farm
Cleeve House (Childrens Home)
Marsh Farm
Seagry Wood
Seagry
Bincombe Wood
Kingway Barn
Hangar Farm
Rowden Wood
Sewage Works (disused)
Lower Stanton Farm
Avil's Farm
A429

10
11
12
13
14
15
16
17
17a
17b
18
209

Lime Down Solar Park

Title:
Figure 4-5: Indicative Site Layout Plan
Lime Down E

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Solar PV Access Location
- Solar PV Crossing Location
- Solar PV Sites
- 132kV Substation
- Conversion Unit / 33kV sub distribution switch room
- Access track
- Substation and BESS Access Track
- Fence

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:10,000 @ A3

N
W
E
S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

385000 386000 387000 388000

180000 179000 178000

Lime Down Solar Park

Title:
Figure 4-6: Indicative Site Layout Plan
Cable Route Corridor

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:12,500 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

386000 387000 388000 389000

176000 175000 174000

Lime Down
Solar Park

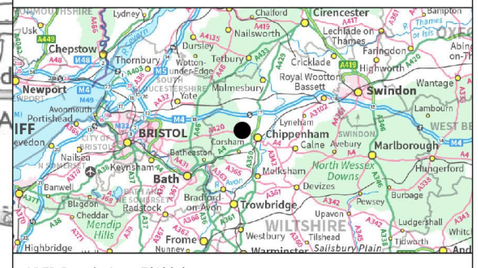
Title:
Figure 4-7: Indicative Site Layout Plan
Cable Route Corridor

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

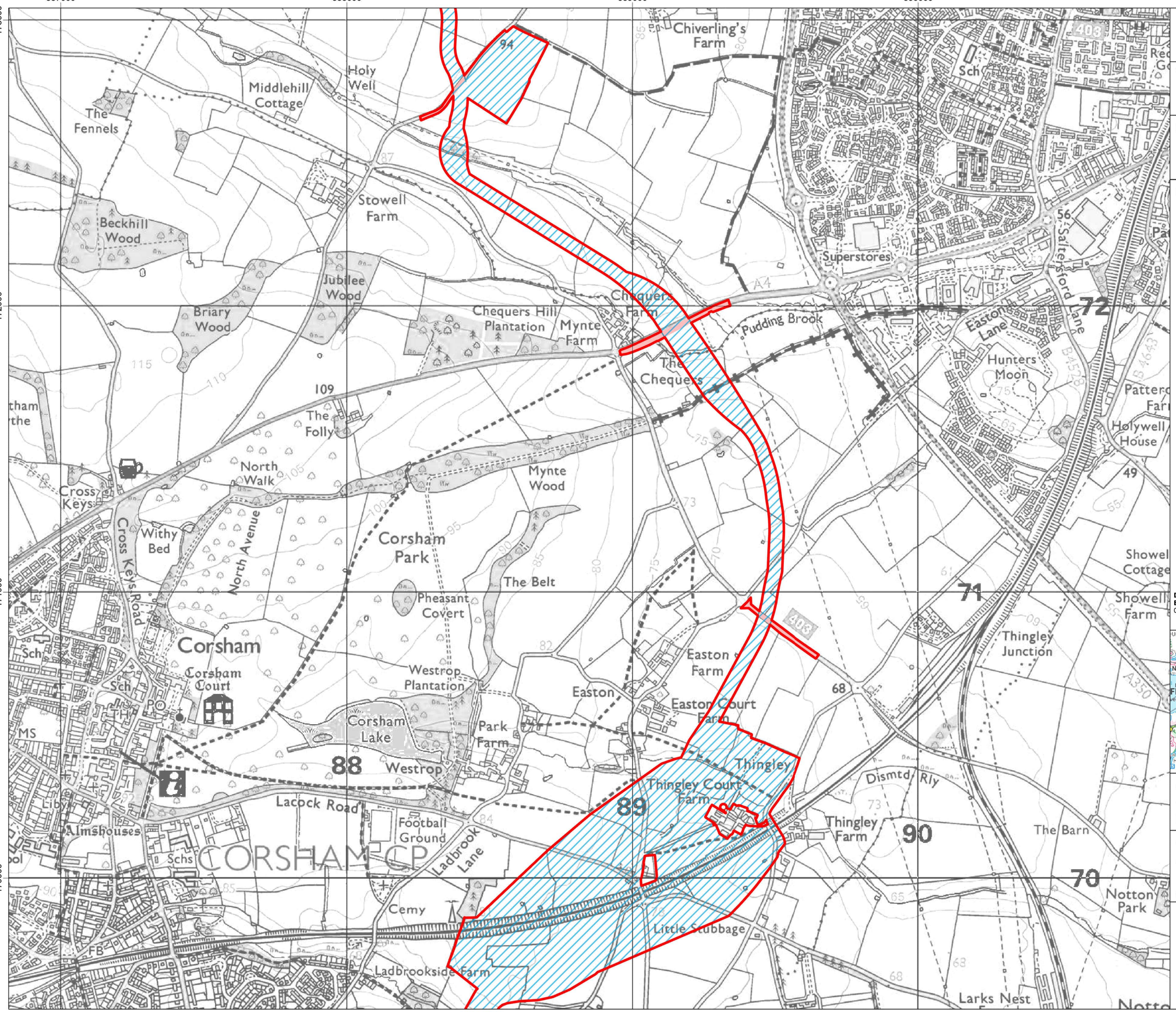
Scale: 1:12,500 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro



Lime Down Solar Park

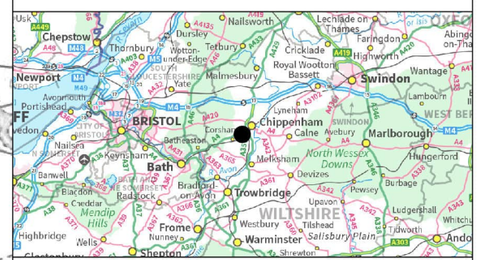
Title:
Figure 4-8: Indicative Site Layout Plan
Cable Route Corridor

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:12,500 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

388000 389000 390000 391000

169000 168000 167000 166000

Lime Down Solar Park

Title:
Figure 4-9: Indicative Site Layout Plan
Cable Route Corridor

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Cable Route Corridor
- Highway Improvement Areas
- Access track

For further detail in relation to the proposed hedgerow and woodland planting, green corridors, mitigation areas and roadside and riparian planting, refer to ES Figures 3-4 Landscape and Ecology Mitigation Plan

Data: IGP, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0275

Coordinate system: British National Grid

Scale: 1:12,500 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title:
Figure 5-1: Landscape and Ecological Mitigation Plan - Lime Down A

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Cotswolds National Landscape
- Existing Conservation Area
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Dump Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed
- Existing Drystone Wall To Be Retained

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

Location Plan
1:100,000 @ A0

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0337

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title:

Figure 5-2: Landscape and Ecological Mitigation Plan - Lime Down B

Document:

Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing

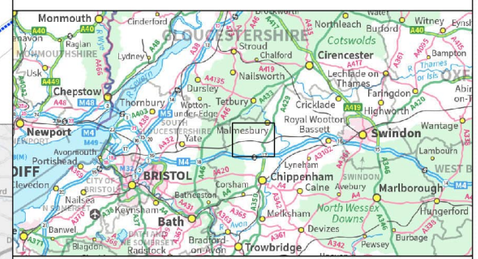
- Existing Vegetation
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Cotswolds National Landscape
- Existing Utilities

Proposed

- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Damp Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Permissive Path For Pedestrians
- Existing Vegetation To Be Removed
- Proposed Locations For Reintroduction Of Historic Ponds

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0338

Coordinate system: British National Grid

Scale: *Not to scale*

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Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-3: Landscape and Ecological Mitigation Plan - Lime Down C Sheet 1 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

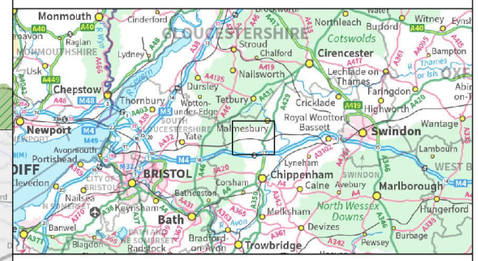
Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Cotswolds National Landscape
- Existing Conservation Area
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Dump Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed
- Proposed Indicative Locations For Ponds
- Proposed Locations For Reintroduction Of Historic Ponds

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0339

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-3: Landscape and Ecological Mitigation Plan - Lime Down C Sheet 2 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

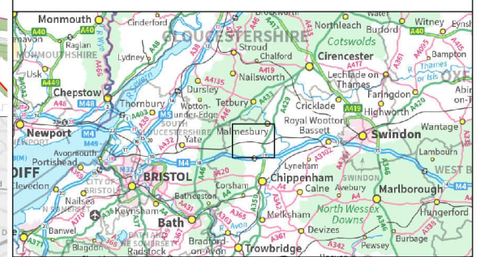
- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Cotswolds National Landscape
- Existing Conservation Area
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Dump Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed
- Proposed Indicative Locations For Ponds
- Proposed Locations For Reintroduction Of Historic Ponds

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0340

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-4: Landscape and Ecological Mitigation Plan - Lime Down D Sheet 1 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Damp Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Scrub And Tree Planting on Bund
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Battery Energy Storage System
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed
- Proposed Indicative Locations For Ponds
- Proposed Locations For Reintroduction Of Historic Ponds

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

Location Plan
1:100,000 @ A0

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0341

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-4: Landscape and Ecological Mitigation Plan - Lime Down D Sheet 2 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Damp Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Scrub And Tree Planting on Bund
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Battery Energy Storage System
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed
- Proposed Indicative Locations For Ponds
- Proposed Locations For Reintroduction Of Historic Ponds

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

Location Plan
1:100,000 @ A0

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0342

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-5: Landscape and Ecological Mitigation Plan - Lime Down E Sheet 1 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Existing Conservation Area
- Existing SSSI
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Damp Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

Location Plan
1:100,000 @ A0

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0343

Coordinate system: British National Grid

Scale: *Not to scale*

Island GREEN POWER

Lanpro

Lime Down Solar Park

Title: Figure 5-5: Landscape and Ecological Mitigation Plan - Lime Down E Sheet 2 of 2

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:

- Area For Solar Panels And Associated Development

Existing
- Existing Vegetation
- Existing Ancient Woodland
- Existing Ditch Verge
- Existing Watercourses
- Existing Footpath
- Existing Bridleway
- Existing Byway Open To All Traffic
- Existing Restricted Byways
- Existing Buildings
- Existing Listed Buildings
- Existing Conservation Area
- Existing SSSI
- Existing Utilities

Proposed
- Existing Vegetation To Be Retained And Enhanced
- Proposed Grassland Creation (Beneath Panels)
- Proposed Tussock Grassland Margins
- Proposed Dump Grassland
- Proposed Ground Nesting Bird Mitigation - Set Aside
- Proposed Diverse Wildflower Meadow
- Proposed Low Density Scrub
- Hedgerow Reinforcement
- Proposed Native Hedgerow With Trees
- Proposed Linear Tree Planting
- Proposed Native Woodland Belt
- Proposed Native Woodland Block
- Proposed Riparian Corridor
- Proposed Solar Arrays
- Proposed Fenceline
- Proposed Access Tracks
- Proposed Conversion Units/ 33kV Sub-distribution Switch Room
- Proposed Substation
- Proposed Permissive Path For Pedestrians
- Proposed Permissive Path For Pedestrians, Equestrians and Cyclists
- Existing Vegetation To Be Removed

This NTS Figure is provided for on screen reading only. For further detail please refer to the full Landscape and Ecological Mitigation Plan provided as Environmental Statement Figure 3-4 which is suitable for printing at A0 scale

Data: IGP, Lanpro, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

Location Plan
1:100,000 @ A0

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0344

Coordinate system: British National Grid

Scale: *Not to scale*

N W E S

Island GREEN POWER

Lanpro

Lime Down
Solar Park

Title:
Figure 6-1: Environmental and Planning Constraints
Lime Down A

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Ancient Woodland
- National Landscape
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

387000 388000 389000 390000 391000

187000 186000 185000 184000

Lime Down Solar Park

Title: Figure 6-2: Environmental and Planning Constraints Lime Down B

Document: Volume 4 Non-Technical Summary Environmental Statement (ES)

Legend:

- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Ancient Woodland
- National Landscape
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

384000 385000 386000 387000 388000

185000 184000 183000 182000

Lime Down Solar Park

Title: Figure 6-3: Environmental and Planning Constraints Lime Down C

Document: Volume 4 Non-Technical Summary Environmental Statement (ES)

Legend:

- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Ancient Woodland
- National Landscape
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

N W E S

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

388000 389000 390000 391000 392000

185000 184000 183000 182000

Lime Down Solar Park

Title: Figure 6-4: Environmental and Planning Constraints Lime Down D

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Conservation Area
- Ancient Woodland
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

N W E S

Island Green Power

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025.
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

391000 392000 393000 394000 395000

184000 183000 182000 181000

Lime Down Solar Park

Title: Figure 6-5: Environmental and Planning Constraints Lime Down E

Document: Volume 4 Non-Technical Summary Environmental Statement (ES)

Legend:

- Order Limits
- Solar PV Sites
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Ancient Woodland
- Sites of Special Scientific Interest (SSSI)
- Local Nature Reserves (LNR)
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025.
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

385000 386000 387000 388000 389000

181000 180000 179000 178000

Lime Down Solar Park

Title: Figure 6-6: Environmental and Planning Constraints Cable Route Corridor

Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)

Legend:
- Order Limits
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Ancient Woodland
- National Landscape
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse
- 400kV Overhead Line
- Electricity Tower



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

385000 386000 387000 388000 389000

177000 176000 175000 174000

CASTLE COMBE CP
YATTON KEYNELL CP
BIDDESTONE CP
KINGTON ST MICHAEL
CHIPPENHAM WITHOUT CP

Combe Leys, Broom's Farm, Westwell Cottage, Folly Farm, The Folly, Kent's Bottom Farm, Kent's Bottom, Quarries (disused), Castle Combe Circuit, ADVENTURE ACTIVITIES, Kent's Bottom Plantation, Yatton Keynell, Church Farm, Street Farm, Manor House, Quarry (dis), Hammerdown Wood, West Yatton, Tower, West Yatton Down, Long Dean, Chapel Wood, West Barn Farm, Hogsbush Farm House, Manor Farm, West Yatton, Ivy Farm, Pew's Hill, Skimpot Cottage, Slaughterford Road, Yatton Road, Red Houses, Giddeahall, Pewshill Farm, Plantation Farm, Ham Lane, Biddestone Mill, Mounjoy Farm, Biddestone Manor, Cemy, Biddestone Lane, Littlemead Stables, Cold Harbour, Golf Driving Range, Grove Farm, Fir Tree Farm, Sparrow Farm, Ivy House, The Long Stone, Lanhill Barrow Long Barrow, Lanhill Farm, Lan Hill, Lanhill Brake, Smith's Plantation, Fagot Heath, Fox Covert, Bushy Barrow, Chapscroft Wood, The Privet, Starveall Farm, Chippenham Lane, Cherrypatch Cottage, Priors Copse, Chiverlins, Sheldon Wood, Corsham Wood, Sheldon Manor, Sheldon Farm, Sheldon Corner, Sheldon Cottages, Frogwell, Southernwood, Fowlswick Cottages, Fowlswick Farm, Moat, Greenacres Farm, Old Meadow Farm, Batten's Farm, The Grange, Cedar Lodge, Bolehyde Manor, Allington, Manor Farm, Foxhill House, Daisy House Farm, Bristol Road, Garage, Tel Ex, Allington Bar, Bailey's Field, Heywood Cottages, Heywood Farm, Quarry (dis), Pit (dis), Down Farm, Grove Farm, Shipway's Brake, Red, Rest

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.

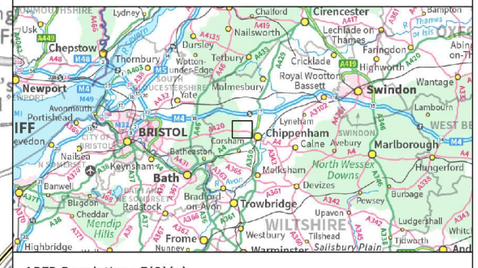
Lime Down Solar Park

Title: Figure 6-7: Environmental and Planning Constraints Cable Route Corridor

Document: Volume 4 Non-Technical Summary Environmental Statement (ES)

Legend:

- Order Limits
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Registered Parks and Gardens
- Ancient Woodland
- National Landscape
- Sites of Special Scientific Interest (SSSI)
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse
- 400kV Overhead Line
- Electricity Tower



APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

Island GREEN POWER

Lanpro

387000 388000 389000 390000 391000

173000 172000 171000 170000

Lime Down Solar Park

Title: Figure 6-8: Environmental and Planning Constraints Cable Route Corridor

Document: Volume 4 Non-Technical Summary Environmental Statement (ES)

Legend:

- Order Limits
- Highway Improvement Areas
- Cable Route Corridor
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Scheduled Monument
- Conservation Area
- Registered Parks and Gardens
- Ancient Woodland
- National Landscape
- Sites of Special Scientific Interest (SSSI)
- Flood Zone 3
- Flood Zone 2
- Statutory Main River
- Watercourse
- 400kV Overhead Line
- Electricity Tower
- Cable

APFP Regulation: 5(2)(a)

Application Doc No.: EN010168/APP/6.4

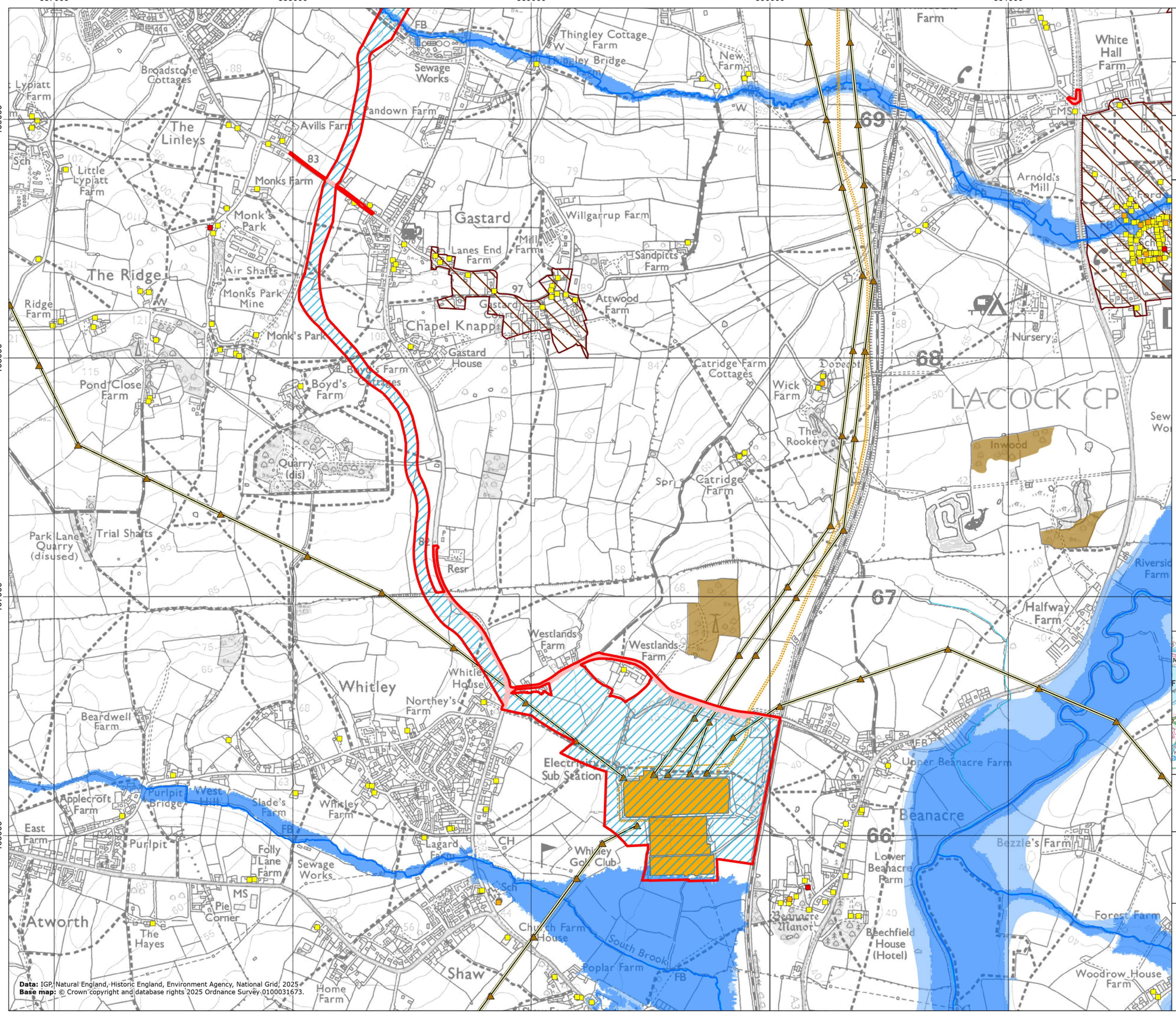
Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277

Coordinate system: British National Grid

Scale: 1:15,000 @ A3

0 200 400 600 Metres

Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025.
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.


387000
388000
389000
390000
391000
169000
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167000
166000
Lime Down
Solar Park
Title:
Figure 6-9: Environmental and Planning Constraints Cable Route Corridor
Document:
Volume 4
Non-Technical Summary
Environmental Statement (ES)
Legend:
Order Limits
Highway Improvement Areas
Cable Route Corridor
Listed Building Grade I
Listed Building Grade II*
Listed Building Grade II
Conservation Area
Ancient Woodland
Flood Zone 3
Flood Zone 2
Statutory Main River
Watercourse
400kV Overhead Line
Substation
Electricity Tower
Cable
Electricity Sub Station
Gastard
Whitley
Beanacre
LACOCK CP
Atworth
Shaw
Chapel Knapp
Monk's Park
The Ridge
The Linleys
Pandown Farm
Avills Farm
Monks Farm
Willgarrup Farm
Sandpitts Farm
Attwood Farm
Catridge Farm
Catridge Farm Cottages
Wick Farm
Arnold's Mill
White Hall Farm
New Farm
Thingley Cottage Farm
Thingley Bridge
Sewage Works
Lypiatt Farm
Broadstone Cottages
Little Lypiatt Farm
Ridge Farm
Air Shafts
Monks Park Mine
Lanes End Farm
Gastard Mill Farm
Gastard House
Boyd's Farm
Boyd's Farm Cottages
Pond Close Farm
Park Lane Quarry (disused)
Trial Shafts
Quarry (dis)
Nursery
Inwood
The Rookery
Halfway Farm
Riverside Farm
Upper Beanacre Farm
Lower Beanacre Farm
Bezzle's Farm
Beechfield House (Hotel)
Beanacre Manor
Woodrow House Farm
Forest Farm
Westlands Farm
Whitley House
Northey's Farm
Beardwell Farm
Applecroft Farm
East Farm
Purlpit
Purlpit Bridge
West Hill
Slade's Farm
Whitley Farm
Folly Lane Farm
Sewage Works
Lagard Farm
Whitley Golf Club
Church Farm House
Poplar Farm
South Brook
Pie Corner
The Hayes
Home Farm
Swindon
Chippenham
Marlborough
Trowbridge
Bath
BRISTOL
Warminster
Frome
Shepton Mallet
Glastonbury
Wells
Newport
Chepstow
WILTSHIRE
Data: IGP, Natural England, Historic England, Environment Agency, National Grid, 2025
Base map: © Crown copyright and database rights 2025 Ordnance Survey 0100031673.
APFP Regulation: 5(2)(a)
Application Doc No.: EN010168/APP/6.4
Drawing no.: P4443_LPR_ZZ_XX_DR_Z_NTS_0277
Coordinate system: British National Grid
Scale: 1:15,000 @ A3
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Island GREEN POWER
Lanpro