PAP/2023/0071

Fillongley Solar Farm

Design and Access Statement

On behalf of **Enviromena Project Management UK Ltd**

ENVIROMENA

Project Ref: 33313457300| Rev: AA | Date: November 2023

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For and on behalf of Stantec UK Limited				

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1 Introduction

1.1 Background

1.1.1 This Design and Access Statement ('DAS') has been prepared by Stantec on behalf of Enviromena Project Management UK Ltd (the 'Applicant') to accompany a planning application to North Warwickshire Council (the 'Council') for a proposed solar photovoltaic (PV) farm with associated infrastructure (the 'Development') on land east of Meriden Road, Fillongley (the 'Site').

1.1.2 The Development comprises the construction, operation, management and decommissioning of a grid-connected solar farm with associated infrastructure to provide a reliable source of clean, renewable energy.

1.1.3 The Development is sought for a temporary operational period of 40-years, following which the equipment associated with the Development would be removed, and the Site remediated fully to its former state.

1.2 Role of this Design and Access Statement

1.2.1 This Design and Access Statement has been prepared to be compliant with Part 3, Article 9 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (the 'DMPO') and national Planning Practice Guidance ('PPG') which set out the requirements for Design and Access Statements.

1.2.2 The purpose of this document is to demonstrate that the Applicant has fully considered the design and access issues as part of the comprehensive preparation of the scheme prior to submission of the planning application. This report therefore covers the following matters:

- Use – what buildings and spaces will be used for;
- Amount – how much will be built on site;
- Layout – how the buildings and public and private spaces will be arranged on site, and the relationship between them and the buildings and spaces around the site;
- Scale - how big the buildings and spaces would be (their height, width and length);
- Landscaping - how open spaces will be treated to enhance and protect the character of a place;
- Appearance - what the building and spaces will look like, for example, building materials and architectural details;
- Access - why the access points and routes have been chosen, and how the site responds to road layout.

1.2.3 This DAS should be read in conjunction with the supporting technical reports and assessments which accompany the planning application.

1.3 Structure of Design & Access Statement

1.3.1 This DAS is structured as follows:

- Section 2 describes the Site and surrounding context;
- Section 3 outlines key local and national planning policy of relevance;

- Section 4 details the approach the Applicant has undertaken to the design of the Development;
- Section 5 details the proposed Development; and
- Section 6 concludes the Statement.

2 The Site

2.1 Location

2.1.1 The Site is situated approximately 9km north-west of Coventry City Centre and circa 600m south-west of the village of Fillongley. It lies wholly within the administrative boundary of North Warwickshire Council as the Local Planning Authority.

Figure 2.1 Site Location

2.2 Site Description

2.2.1 The Site extends to 61 hectares (150 acres) and is currently in agricultural use, consisting of several agricultural fields with trees and hedgerows present. A watercourse, Bourne Brook, traverses the north-western boundary with drainage ditches located in the north west area. A second unnamed watercourse runs from the southern boundary to the south eastern boundary.

2.2.2 The site is set within an open countryside setting bound to the north, east and west by agricultural land and the M6 south with further agricultural land beyond. Within the wider open countryside around the Site are isolated homes, commercial premises, and farmsteads.

2.2.3 The main vehicular access to the Site is from field access from the B4102 Meriden Road at the Site's western boundary.

2.2.4 A Public Right of Way runs north-south across the Site and is situated on the western extent following the first field boundary inwards.

2.3 Designations

2.3.1 In terms of technical considerations and policy designations, the Site:

- The Site is wholly within the North Warwickshire Green Belt
- The Site is predominantly in flood zone 1, but a small section is at elevated flood risk along the route of the watercourse Bourne Brook and drainage ditches at the north west extent of the Site;
- The Site is not in a High Landscape Value Area or within an Area of Outstanding Natural Beauty;
- The Site is not subject to any statutory ecological designations, nor are there any within 2km;
- The Site does not contain any listed structures and is not within a conservation Area. There is however the scheduled ancient monument Ringwork Castle occupying approx. 2ha, c.500 metres north.
- The Site comprises predominently of agricultural land of Grade 2 and Grade 3a. Best and Most Versatile land has been identified across the Site.

2.4 Site Summary

2.4.1 The Development has been sensitively sited within the local landscape and is being assessed as being a good location for a solar farm for the following reasons.

- The site is close to a viable grid connection;
- The site has good solar irradiation levels;
- It lies outside statutory environmental, archaeological and landscape designations;
- The site is surrounded by existing trees and hedgerows, providing decent levels of screening; and
- An appropriately designed landscape strategy can deliver net biodiversity gains for the Site for the benefit of local wildlife.

2.4.2 As a result of the above and the relative ‘light touch’ built nature of solar farm development, minimal disturbance will be required to the Site to implement the Development.

2.4.3 It is acknowledged that the Site lies within the North Warwickshire Green Belt, as such Very Special Circumstances are required to be demonstrated to permit development within the Green Belt. The generation of renewable energy is a well-established Very Special Circumstance. The accompanying Planning Statement sets out the justification for the temporary solar farm in the Green Belt. Similarly, it is also acknowledged that whilst the Site comprises of BMV land the nature of solar farm development is such that the Site can be fully remediated to its current state. The Development will not result in the permanent loss of BMV land but rather pause its productive use. Please see accompanying Planning Statement for full discussion.

3 Planning Policy

3.1.1 CABE guidance on "Design and Access Statements", dated 2007, states that relevant planning policies and guidance which affect and shape the development of the site should be included within the document. Therefore, this section outlines the relevant planning policy context for the proposed development considering national and local planning policy.

3.2 National Planning Policy

3.2.1 The National Planning Policy Framework (NPPF, 2023) sets out the Government's planning policies for England and how these should be applied. One of the core land-use planning principles says that planning should seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings.

3.2.2 Chapter 12 of the Framework specifically deals with ensuring that new development is of a good design. It states, at paragraph 126 that:

> **"The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."**

3.2.3 Paragraph 130 states:

"Planning policies and decisions should ensure that developments:

- **a) Will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;**
- **b) Are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;**
- **c) Are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);**
- **d) Establish or maintain a strong sense of place, using the arrangement of stree ts, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;**
- **e) Optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and**
- **f) Create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users, and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."**

3.3 Local Planning Policy

3.3.1 The North Warwickshire Local Plan 2011-2033 was formally adopted in September 2021 and sets out the spatial strategy and management policies for development in the Borough.

3.3.2 LP 30 Built form, outlines what is considered the general principles for all development in terms of its layout, form and density and the importance of respecting and reflecting the existing local characteristics within the development. All proposals should therefore:

- **“ensure that all of the elements of the proposal are well related to each other and harmonise with both the immediate setting and wider surroundings;**
- **make use of and enhance views into and out of the site both in and outside of the site;**
- **make appropriate use of landmarks and local features;**
- **reflect the characteristic architectural styles, patterns and features considering their scale and proportion,**
- **reflect the predominant materials, colours, landscape and boundary treatments in the area;**
- **ensure that the buildings and spaces connect with and maintain access to the surrounding area and with the wider built, water and natural environment;**
- **are designed to take into account the needs and practicalities of services and the long term management of public and shared private spaces and facilities;**
- **create a safe, secure, low crime environment through the layout, specification and positioning of buildings, spaces and uses in line with national Secured by Design standards**
- **reduce sky glow, glare and light trespass from external illumination; and**
- **ensure that existing water courses are fully integrated into site layout at an early stage and to ensure that space is made for water through de-culverting, re- naturalisation and potential channel diversion.”**

3.3.3 Policy LP35, Renewable Energy and Energy Efficiency expects renewable energy projects to be supported provided they respect the capacity and sensitivity of the landscape and communities which accommodate them. Any proposals of this type will be assessed on their individual and cumulative impact on landscape quality, sites or features of natural importance, sites, or buildings of historic or cultural importance, residential amenity, and the local economy.

4 Design Approach

4.1 Introduction

4.1.1 Local and national planning policy stress the importance of achieving high quality design in new development and the contribution that this can make to the promotion of sustainable development.

4.1.2 The design principles adopted by the Applicant in the development of the scheme are:

- Provide a functional and efficient design that maximises opportunities presented by the location for electricity generation;
- Enhance biodiversity of the Site;
- Minimise visual impacts as far as practicable;
- Ensure safe and efficient access to the public highway; and
- Minimise impact on historic environment.

4.1.3 In addition to the principles outlined above, in the design evolution of the Development the Applicant has considered the constraints and opportunities presented by the site, the operational needs of the Development, local and national policy requirements and technical input from the project team.

4.2 Constraints and Opportunities

4.2.1 As part of a comprehensive review of the Site, the existing constraints and opportunities have been identified. These constraints and opportunities have been reviewed in the context of the emerging development proposals and the findings of this assessment are set out below:

Constraints

- The Site's designation as Green Belt;
- The Site is visible from portions of the adjacent highway.
- Whilst overall the Site is in Flood Zone 1, there is a small section at the north west of the Site at increased localised flood risk relating to the existing watercourse Bourne Brook and drainage ditches present;
- The Site's proximity to the Scheduled Ancient Monument of Ringwork castle located c.500m to the north east;
- Relative proximity to residential dwellings at Fillongley, the nearest being c.600 m to the northeast; and
- A Public Right of Way crosses the Site at its western extent in a north-south orientation.

Opportunities

- The Site is an appropriate size and shape for efficient and viable Solar Farm Development,
- The Site receives sufficient levels of solar gain and is free of features that could cause significant overshadowing;
- Proximity to a viable grid connection;

- The Development presents an opportunity to introduce wildlife enhancement measures delivering significant net biodiversity gains for the area;
- The Site is free from statutory landscape, heritage, and ecological designations;
- Overall, the Site is at low risk of flooding; and
- The Development will contribute to the provision of renewable and low carbon energy assisting in achieving carbon Net Zero.

4.3 Assessment

4.3.1 The Development has been designed to be sympathetic to its surroundings, whilst being practical in terms of technical and engineering considerations.

- Key elements of the design approach have included the following:
- Preserving existing trees and hedgerows;
- Providing additional hedgerow, shrub and tree planting, including where there are currently gaps, to screen and minimise the visual impacts on surrounding sensitive receptors, including nearby residential dwellings, PRoWs and users of the surrounding road network;
- Providing habitat improvements within the site for benefit of local wildlife;
- Orientating the solar panels south and on an east-west axis to benefit from maximum solar irradiation;
- Improving existing field access junction with increased visibility splay through appropriate landscape management; and
- Developing an appropriate drainage strategy that corresponds with local guidelines to help manage surface water flows and ensure no increased flood risk arising from the Development.

4.3.2 The design approach undertaken is considered appropriate and proportionate for the Site's location, built and natural surroundings, scale and purpose to generate and export electricity.

5 The Development

5.1 Use

5.1.1 The proposed development is for a solar photovoltaic farm.

5.1.2 Electricity produced by the proposed development will be exported to the National Grid. A suitable grid connection is therefore required, and this will be undertaken by the Distribution Network Operator utilising their Permitted Development Rights.

5.2 Amount

5.2.1 The Development comprises of the following infrastructure:

- Arrays of solar PV panels;
- Substation compound to include: DNO substation and Customer substation equipment;
- Perimeter fence and access gate; and
- CCTV cameras.

5.2.2 No lighting is required during the operational phase of the Development. Temporary lighting will be required during the construction phase, which is anticipated to last approximately 30 weeks, but this will be minimal, using directional lighting to minimise light spill, generator powered and will be removed once construction is completed.

5.2.3 This is the appropriate quantum of development to ensure that the scheme operates efficiently and effectively to generate electricity.

5.3 Layout and Scale

5.3.1 The layout, scale and massing of the Development responds positively to the required amount of land to make the scheme viable and efficient and to accommodate the industry standard dimensions of the solar panels and associated infrastructure.

5.3.2 The proposed layout is shown on accompanying drawing number P.NailcoteFarm_09_PlanninglLayout Rev B, and illustrated at Figure 5.1.

5.3.3 Key features of the layout include:

- Solar panels laid out in straight south-facing arrays from east to west,
- Arrays are located wholly within existing field enclosures, no merging of existing fields are required,
- Maximised retention of trees and hedges and other features including watercourses and drainage ditches;
- Appropriate easement around the watercourses, ditches and existing subsurface utilities to ensure future maintenance access is achievable;
- A gap of approximately 2.5 to 6 metres between each row of arrays and maximum top height of the solar panels of 2.6m;
- Minimum distance of 4m between edge of panels and perimeter fencing to allow maintenance access; and
- Retention and enhancement of existing PRoWs running through the Site.

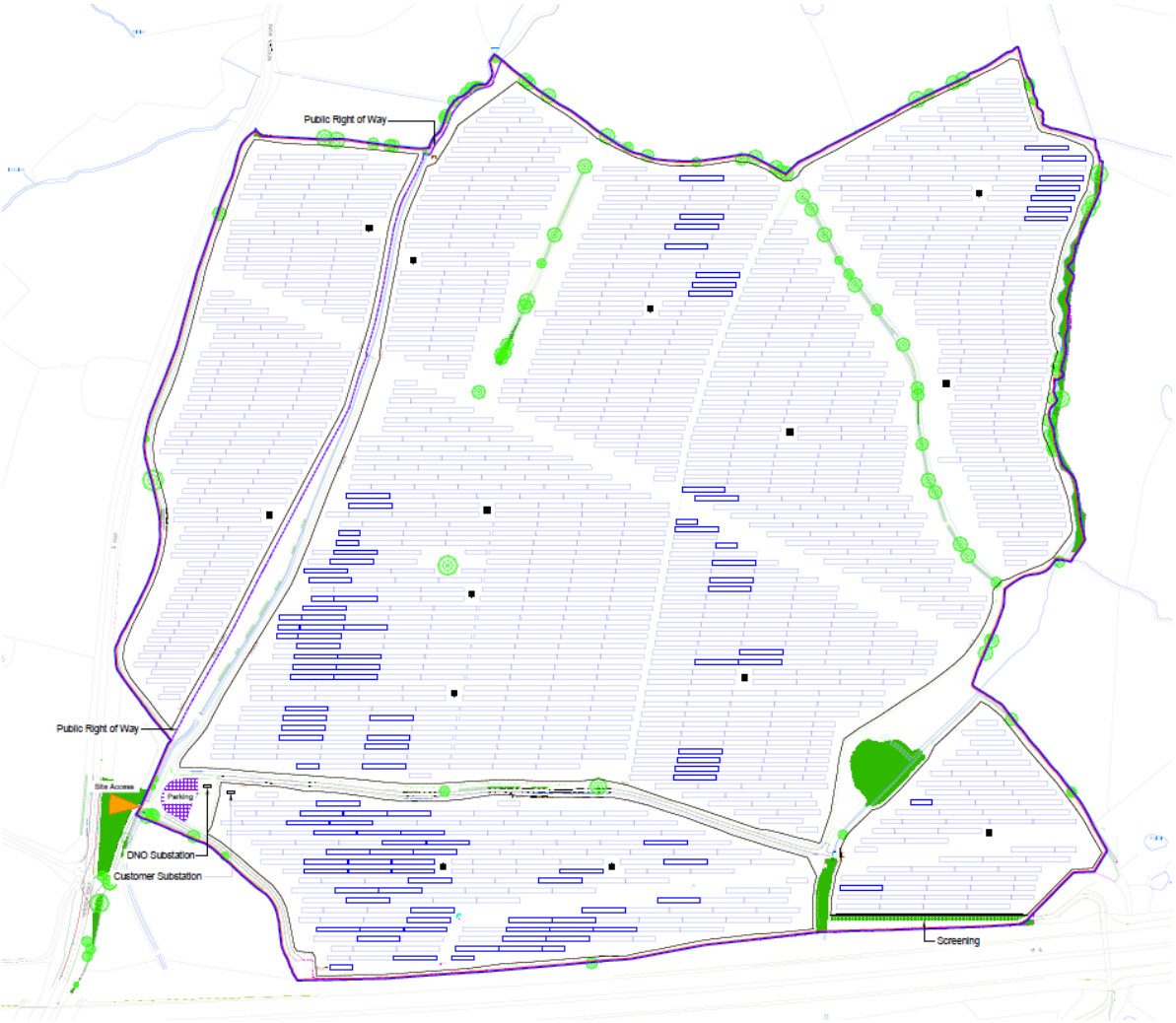

Figure 5.1: Site Layout

5.3.4 Solar farm components include:

- The solar panel modules are made from photovoltaics which are dark tinted glass and constructed of anodized aluminium alloy;
- A galvanised steel frame mounting system will support the solar array (Figure 5.2);
- Inverters will be mounted to the reverse of the array structures;
- Customer Switchgear and DNO Substation will be a maximum height of 3.5m and positioned at the south west corner of Site away from sensitive receptors (residential dwellings) and where the existing vegetation will screen it from passing road traffic (Figure 5.3);
- Perimeter fencing will be deer-proof comprising wooden posts with wire mesh at a height of 2m. The fencing will run parallel with the outer field boundaries (Figure 5.4); and
- Pole mounted CCTV security cameras positioned at intervals along the fencing at a height of 3m.

5.3.5 Overall, it is considered that the Development is of an appropriate scale and layout to meet operational requirements to generate electricity efficiently and effectively whilst also responding appropriately to the Site and surroundings to minimise impacts. The tallest structure on site, the

Customer substation measures only 3.07m (Figure 5.3) and this is situated to the south west away from sensitive receptors and surrounded by existing vegetation.

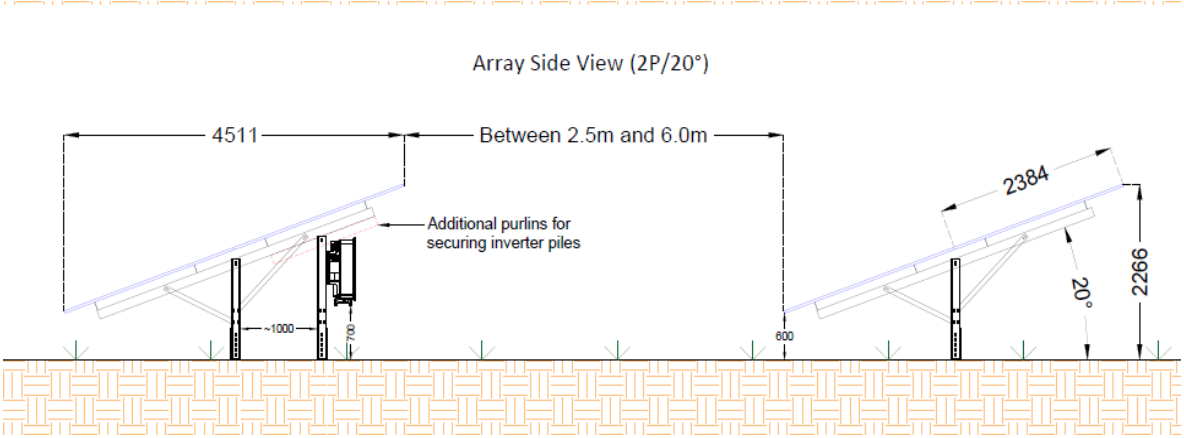

Figure 5.2: Solar array section view

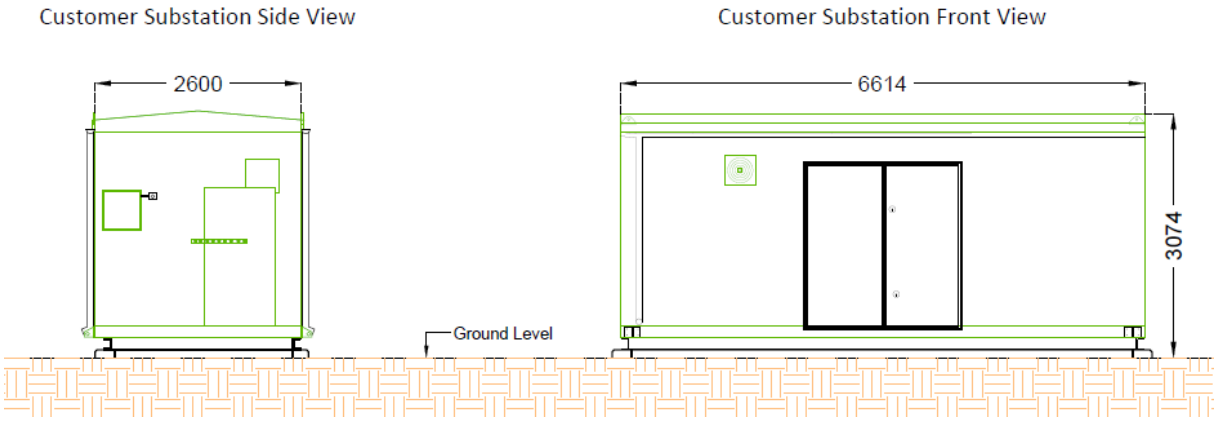

Figure 5.3: Customer substation section view

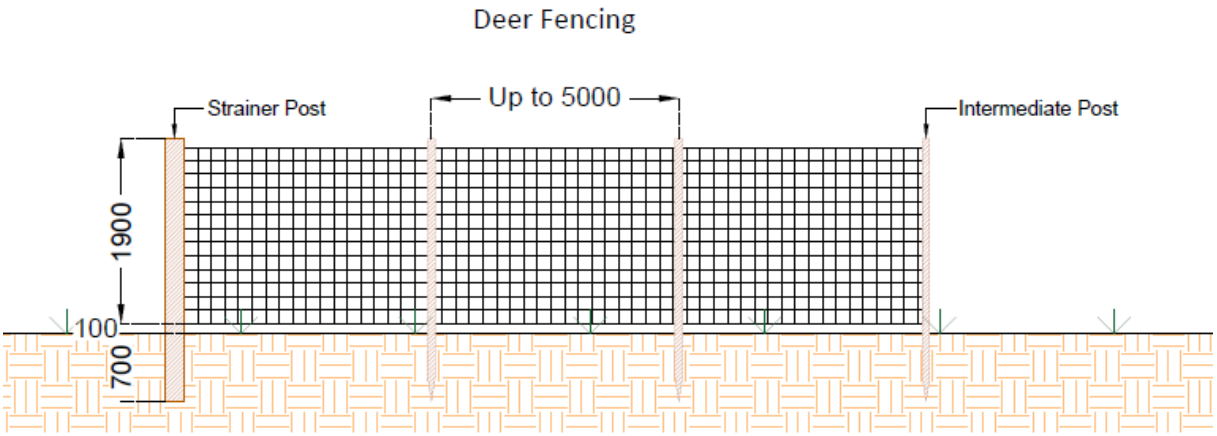

Figure 5.4: Proposed perimeter fencing

5.4 Appearance

5.4.1 Reflecting the use of the Site for the generation of electricity the appearance of the Development will be functional, comprising of industry standard solar technology components. The panels will be supported on a steel frame and will be primarily glazing with a non-reflective coating to allow as much light as possible through but minimise glare.

5.4.2 Other small buildings and structures required for ancillary infrastructure requirements are also functional in appearance, but can be appropriately coloured or clad to minimise any visual impact.

5.4.3 The proposed DNO substation (Figure 5.3) and customer compound has been appropriately located at the south west of the site adjacent to the highways and is contained within an area surrounded by existing mature vegetation far from residential dwellings, meaning any views are heavily screened.

5.5 Landscaping and Biodiversity

5.5.1 The Development presents opportunities for landscape and biodiversity mitigation and enhancement. The proposed landscape strategy is replicated at Figure 5.5.

Figure 5.5: Landscape Strategy

5.5.2 The objectives for biodiversity within the scheme are: -

- Retain and protect existing habitats, trees, hedgerows, watercourses and drainage ditches during construction and operation;
- Identify protected or notable species that may be present and where appropriate incorporate suitable avoidance, protection and mitigation measures;
- Provide habitat and landscape enhancement though new planting using native species; and
- Increase biodiversity present through planting additional hedgerow, trees and seeding of a diverse meadow grassland and provision of bat/bird boxes as appropriate to increase foraging, commuting and nesting opportunities.

5.6 Access

5.6.1 The proposed construction access is via the existing field access point off Meriden Road, to the southwest of the Site. This access point is currently utilised by large agricultural vehicles and as such is appropriate for use by construction and maintenance traffic.

5.6.2 The junction will be upgraded appropriately to accommodate safe entrance and exit by both operative and construction vehicles and permit vehicles to enter and exit in forward gear.

5.6.3 As detailed in the accompanying Transport Statement HGV construction traffic will route to the application by taking the A452 off the A45 and following this road until the junction with Hampton Road (B4102) is reached. Construction vehicles will travel east along the B4102 where it becomes the Fillongley Road (B4102) at the roundabout. Construction vehicles will then travel northeast along the B4102 where it becomes the Meriden Road (B4102).

5.6.4 The construction phase of the Development would lead to a temporary increase in traffic on the road network surrounding the Site. This would be for a temporary c.28-week period. On average during this period, it is expected that the Development would lead to an increase in traffic movements of six two-way vehicle movements per day. Due to the proximity of the Strategic Road Network it is likely that commercial vehicle movements in the vicinity of the Site are sufficiently high that an increase six two-way daily vehicle movements are unlikely to cause a disturbance to other users.

5.6.5 During the operational phase of the development, there would be a minimal increase in traffic volumes with operational traffic (one van) expected to access the application site on two occasions per month at the most.

5.6.6 There are no residual traffic impacts identified.

5.7 Decommissioning

5.7.1 The solar farm would export renewable energy to the grid for 40 years. After the 40-year generation period the Development would be decommissioned, and the land restored back to its previous state.

5.7.2 The solar panels and other infrastructure will be removed and recycled where possible. Due to the relative ‘light touch’ development requirements - limited foundations and extent of impermeable areas – combined with the extent of retained and enhanced landscaping, the land will be easier to restore than more intrusive development.

5.7.3 The restoration process can be secured using a suitably worded planning condition or section 106 legal agreement.

6 Conclusions

6.1.1 The purpose of this document is to demonstrate that the Applicant has fully considered the design and access issues as part of the comprehensive preparation of the scheme prior to submission of the planning application.

6.1.2 The Applicant has undertaken an assessment of the constraints and opportunities presented by the Site, has considered the operational requirements of the Development and has taken into account input from members of the technical project team to ensure that design and access issues of the proposed renewable energy scheme have been proportionately addressed and designed sensitively.

6.1.3 The Development is of a quantum appropriate to ensure that the Development operates viably, efficiently and effectively to generate electricity. The Development will not have an adverse visual impact by way of its siting, scale, form, massing, or appearance.

6.1.4 The Development is compliant with the relevant provisions of Policies LP 30 Built Form and LP35 Renewable Energy and would not have an adverse effect on landscape character or residential amenity.

6.1.5 Overall, the Development meets the requirements of the NPPF's presumption in favour of sustainable development and is compliant with relevant policies of the adopted Development Plan.