

# Rosefield Solar Farm

## Applicant's Response to the Examining Authority's First Written Questions

EN010158/APP/8.13  
Revision 01  
Deadline 2  
April 2026  
Rosefield Energyfarm Limited



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# 1. Introduction

## 1.1. Purpose of the Report

- 1.1.1. This report provides the Applicant's responses to the Examining Authority's written questions and requests for information (ExQ1) **[PD-010]** issued on 2 April 2026 in respect of the proposed Rosefield Solar Farm (the Proposed Development).

## 1.2. Structure

- 1.2.1. Section 1 of this report sets out the purpose and structure of this report and explains the approach taken by the Applicant in preparing responses.
- 1.2.2. Section 2 of this report provides the Applicant's responses to the questions raised of the Applicant by the Examining Authority (ExA), including signposting to other responses and documents where appropriate. Where questions have been raised of other parties, the Applicant has not provided a response to those questions except where it considers that it would be helpful for the ExA for it to do so.

## 1.3. Approach

- 1.3.1. To minimise duplication, the Applicant has sought to cross-refer where appropriate to responses provided in the **Responses to Relevant Representations [EN010158/APP/8.3]**, or other relevant submissions that have been entered into the Examination.

## 2. Response to the Examining Authority's First Written Questions

### 2.1. Overview

2.1.1. The following topics were raised by the ExA in the ExQ1 [\[PD-010\]](#):

- General, Cross-topic and Need;
- Design, parameters and other details of the Proposed Development;
- The Environmental Statement (general);
- Need, site selection and alternatives;
- Air Quality;
- Associated Development
- Biodiversity and Ecology;
- Climate Resilience;
- Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations;
- Cultural Heritage;
- Cumulative Effects;
- The Draft Development Consent Order (DCO);
- Health and Wellbeing;
- Land and Groundwater;
- Landscape and Visual;
- Noise and Vibration;
- Population;
- Soils;
- Transport and Access; and
- Water Environment.

2.1.2. The tables below provide the Applicant's response to these topics arranged under the headings listed above.

### 3. Responses to First Written Questions (ExQ1)

Table 3-1: General, Cross-topic and Need Questions

ExQ1 Ref	Question	Applicant's Response
Q1.1.1	<p><b>Installation capacity and lifetime energy production</b></p> <p>ES Chapter 8 (Climate) [APP-051] paragraph 8.8.14 states that the Proposed Development is anticipated to have an installed capacity of 334.1 megawatts (MW), and generation of 324,864 megawatt hours (MWh) in the first year of operation. Taking into account an annual degradation factor of 0.4%, the total energy generation from the proposed 40-year operational life is predicted to be approximately 12,030,492 MWh.</p> <ol style="list-style-type: none"> <li>1. Do these figures account only for the solar energy generation, as well as the installed energy capacity of the battery energy storage system (BESS)? Set out the installation capacities of the solar energy generation and the BESS separately.</li> <li>2. Have any changes to the grid connection arrangements affected the likely installed energy capacities for the solar energy generation and the BESS, and if so, how does this effect the conclusions of the Environmental Statement (ES) more widely?</li> </ol>	<ol style="list-style-type: none"> <li>1. The figures stated in the question are for Solar PV energy generation only and do not account for the installed Battery Energy Storage System (BESS), which is not for this purpose considered a generator of energy. The installed capacity of the BESS is not usually considered in the lifetime energy production for this reason. Please also see related question ExQ1 1.6.2 and Applicant response. These figures are considered reasonable assumptions for the purposes of assessment and it is possible that the capacity and generation will vary dependent on the detailed design and available solar PV technology at the time of construction.</li> <li>2. The grid connection arrangements have been amended to more closely align with the anticipated installed capacity of the Proposed Development and so the changes will not affect the installed energy capacity. There is therefore no knock-on effect on conclusions of the Environmental Statement (ES).</li> </ol>
Q1.1.2	<p><b>Plans</b></p> <p>Update Environmental Statement Background and Context Figures, Figure 1.1 Location Plan [APP-061] to identify land parcels 1, 1a, 2 and 3.</p>	<p><b>ES Volume 3, Figure 1.1: Location Plan [EN010158/APP/6.3.2]</b> has been updated to identify Parcels 1, 1a, 2 and 3 and submitted at Deadline 2.</p>
Q1.1.3	<p><b>Grid connection</b></p> <p>In your responses to the relevant representations [PDA-006], you refer to updated grid connection offers for the solar and BESS elements of the Proposed Development. Provide an update on the grid connection arrangements for the Proposed Development following the National Energy System Operator review, including the status of these offers and the energy capacity of any grid connection offers. Does the outcome of the review have any implications for the updated grid connection agreement due to be updated by Q1 2026 as identified in the Grid Connection Statement [APP-137].</p> <p>The ExA understands that the BESS element of the Proposed Development has a 'Gate 1' offer, meaning that the indicative dates of the connection window for the BESS have not yet been confirmed. Explain what would happen if the BESS element of the Proposed Development did not obtain a more formal grid connection offer prior to commencement of the Proposed Development and how this would affect the delivery of the Proposed Development, given that the Planning Statement [REP1-019] suggests that the BESS is needed to support the operation of the main solar element of the Proposed Development. How would this affect the assessments in, and findings of the ES if the BESS element of the Proposed Development could not be delivered?</p>	<p>Following the National Energy System Operator (NESO) review, it has been confirmed that the Proposed Development will receive a Gate 2 Phase 2 connection offer for solar PV and a Gate 1 connection offer for BESS. The formal offer confirming this outcome is expected to be received between September 2026 and January 2027 and it is anticipated that the capacity of the revised offer will be reduced to 335MW for solar PV as requested by the Applicant and that the import capacity will be reduced to 0MW based on the Gate 1 offer for BESS.</p> <p>The BESS component of the Proposed Development will receive an Agreement to Vary its existing connection agreement to move it to a Gate 1 connection offer. The indicative connection date for such offers has not yet been confirmed but is expected to be confirmed in 2027 by NESO, after Gate 2 offers have been sent out (timelines on confirmations have changed since the DCO Application Documents were submitted and may change again).</p> <p>Upon receiving consent for the Proposed Development (if granted), the Applicant would re-submit the BESS component of the Proposed Development to a future re-prioritisation round to seek a Gate 2 connection offer (firm connection date).</p> <p>While Section 9.3 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> explains that the inclusion of a storage facility as associated development to the main solar scheme allows the scheme to support the transition to Net Zero by providing flexibility to a fully low carbon electricity</p>

ExQ1 Ref	Question	Applicant's Response
		<p>system, Section 6.10 of the Statement of Need confirms that, because stand-alone renewable schemes also generate zero-marginal carbon electricity from a renewable source, such stand-alone schemes also provide an essential contribution to reaching Net Zero.</p> <p>Therefore, if no “more formal grid connection offer” was obtained at a point in time which allowed the Applicant rationally and with confidence to proceed with the BESS element of the Proposed Development, the Applicant would proceed without the BESS element. The Applicant is also seeking consent to place Work No. 1 (solar PV) within the location of Works No. 4 (BESS), should the BESS not be taken forward. This is depicted on the <b>Works Plans [EN010158/APP/2.3.3] [REP1-005]</b>.</p> <p>In the event that the Proposed Development were implemented without BESS, there would be minor reductions to the noise, landscape, traffic and cultural heritage impacts reported in the ES but these reductions would be unlikely to change the level of effect reported. With regard to landscape mitigation, in the absence of BESS the screening effects of proposed hedgerow/tree planting proposed in the <b>Outline Landscape and Ecological Management Plan (Outline LEMP) [EN010158/APP/7.6.3]</b> would likely be more effective at an earlier stage in areas near the BESS, due to the reduction in the height of the infrastructure, noting that the level of effect in the timescales reported would not change. In terms of the assessment on climate, whilst removal of the BESS component would decrease the GHG emissions that have been quantified within the assessment (across all phases), it would overall increase long-term system GHG emissions associated with the national grid, because the solar energy would be used less effectively to displace fossil fuel-generated electricity. However, this would not result in a change to the significant beneficial GHG effect.</p> <p>Overall, whilst the purpose of the BESS would be to support the Proposed Development, the Proposed Development could also be delivered without the BESS if required and the benefits of the Proposed Development set out in the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b>, the significant/not significant effects reported in the ES and the overall Planning Balance reported in the Planning Statement would remain unchanged.</p>
<p><b>Q1.1.4</b></p>	<p><b>Grid connection</b></p> <p>If the Proposed Development was consented but the proposed replacement National Grid East Claydon substation did not receive permission and / or the approved substation was not built, what implications would the unavailability of a new substation at East Claydon have for the delivery of the Proposed Development?</p>	<p>The Applicant is not aware of any obvious reason as to why planning permission would be refused for the replacement National Grid East Claydon Substation and no evidence of any such impediment has been put forward by any party. In the event that the replacement substation were not to come forward, then the Applicant would expect to be offered an alternative point of connection from National Grid, noting that National Grid has a grid connection agreement with the Applicant and National Grid is under a legal obligation to facilitate a connection.</p> <p>As identified through the <b>Works Plans [EN010158/APP/2.3.3] [REP1-005]</b>, Work No. 6 (Grid Connection Cabling Corridor) (which is to extend from the Rosefield Substation to provide connection to the NETS) covers land that extends across both the existing location and proposed location of the replacement National Grid East Claydon Substation. This approach has sought to secure necessary flexibility at this stage to maintain optionality in the design envelope of the Proposed Development. This would allow other options such as connection to the existing National Grid East Claydon Substation to be explored if required. The point of connection at the replacement National Grid East Claydon Substation is the optimal connection point but others would be made available in the event that planning permission for the substation was delayed or rejected. In the</p>

ExQ1 Ref	Question	Applicant's Response
		<p>unlikely scenario that the connection was outside of the Order Limits, the Applicant would consider seeking a town and country planning permission to facilitate the connection (or NGET may facilitate it under its own powers). Please also refer to the Applicant's response to RR-049 at page 344 of the <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b> which confirms that the solar element of the Proposed Development will receive an updated Gate 2 Phase 2 connection offer within the re-prioritised connections queue (i.e. connection between 2031 and 2035 inclusive) and highlights the current and continuing need for schemes to ensure that electricity demand is met.</p> <p>The Applicant notes that this scenario was considered by the Secretary of State in the decision letter for <b>Springwell Solar Farm Order 2026</b>, where at paragraph 4.14, he stated in relation to a proposed new National Grid Navenby Substation (NGNS):</p> <p><i>"...The Secretary of State agrees with the ExA's weighting of substantial weight but does not agree that a restriction should be imposed restricting the commencement of the Proposed Development until NGNS has been granted planning permission, as the Applicant has not identified any issues that would result in refusal of the proposed NGNS or the required overhead powerlines, neither has there been any substantive evidence put forward by the local authorities or Interested Persons ("IPs") that demonstrate that there is an obvious reason as to why planning permission would be refused for either the proposed NGNS or overhead powerlines. He also notes that the Applicant has a grid connection agreement with National Grid Electricity Transmission ("NGET") to export power to the National Electricity Transmission System [ER 4.3.36] and that NGET, as a regulated business, has a legal obligation to meet any requests for new power connections from developers that make such requests...."</i></p>
<p><b>Q1.1.5</b></p>	<p><b>Interrelationships with other nationally significant infrastructure projects and major development schemes</b></p> <p>Prepare and submit an interrelationship report which considers other nationally significant infrastructure projects and other major development schemes in Buckinghamshire. The report should consider the different project delivery timelines, how they may overlap with the Proposed Development and what inter-project coordination measures have been or might be put in place. The ExA draws the applicant's attention to the structure of the '<a href="#">Interrelationships with other Nationally Significant Infrastructure Projects and Major Development Schemes</a>' report submitted as part of the Springwell Solar Farm DCO application which the ExA requests is followed, including provision of a diagram which shows any overlapping timelines.</p>	<p>The Applicant notes this request and can confirm that an interrelationships report is being prepared in a similar fashion to the one submitted as part of the <b>Springwell Solar Farm Order 2026</b> DCO application. The Applicant intends to submit this report into the Examination by Deadline 3.</p>
<p><b>Q1.1.6</b></p>	<p><b>Solar Roadmap 2025</b></p> <p>The applicant and all interested parties are invited to make comments or representations about the <a href="#">Solar Roadmap 2025</a> and its applicability and implications for the Proposed Development.</p>	<p>The Applicant considers the Government's Solar Roadmap to be highly applicable and both important and relevant to the Secretary of State's decision to the Proposed Development as it outlines practical actions for industry and government to overcome the challenges to delivering the Clean Power 2030 capacity ranges for solar as well as setting the stage for longer-term solar capacity growth beyond 2030.</p> <p>Section 3.10 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> provides the Applicant's assessment of the Solar Roadmap 2025 and implications for the Proposed Development.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>Importantly, in the Solar Roadmap the Government confirms that both small scale and large-scale solar installations are needed to meet the level of solar generation capacity required to deliver and sustain a Clean Power system. Therefore, the Solar Roadmap supports the need for new large-scale solar schemes such as the Proposed Development.</p>

Table 3-2: Design, parameters and other details of the Proposed Development

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.2.1</b></p>	<p><b>Horlock Rules</b></p> <p>NPS EN-5 paragraph 2.9.18 states that The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989, and these principles should be embodied in applicants' proposals for the infrastructure associated with new overhead lines. Direct the ExA to where The Horlock Rules have been considered in the design of the Proposed Development and explained in the application documents. If they have not been, why not?</p>	<p>The Horlock Rules have not been explicitly referenced within the DCO Application. However, the Applicant confirms that, as required by paragraph 2.9.18 NPS EN-5 (2023), appropriate appraisal criteria/principles have been considered and complied with as relevant in the design of the Proposed Development and the preparation of the DCO Application.</p> <p>A description of the Proposed Development is provided for in <b>ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1.2] [REP1-034]</b>. As established within the Horlock Rules, the relevant matters required for an appropriate appraisal have been duly considered through the site-level design for the Rosefield Substation. Section 3 of the <b>Design Approach Document [EN010158/APP/5.8.3]</b> considers the Site context in relation to a range of environmental factors, with each subsection including a summary of the key issues that have influenced the design of the Proposed Development. Section 3 confirms that the Site lies outside any of the internationally and nationally designated areas identified at paragraph 2, note 1 of Section III of the Horlock Rules and that consideration has been given to the relevant historic sites listed at paragraph 2, note 2 in the design of the Proposed Development. The <b>Design Commitments [EN010158/APP/5.9.4]</b> include offsets to all elements of the Proposed Development, not just the Rosefield Substation, to provide protection to woodland, hedgerows and other environmental features as required by paragraph 3 of Section III of the Horlock Rules.</p> <p>The <b>Design Approach Document [EN010158/APP/5.8.3]</b> also details how, among a wider range of constraints, the location and design of the Rosefield Substation is aligned with Section 3 of the Horlock Rules as it sought to:</p> <ul style="list-style-type: none"> <li>• Avoid BMV land as far as reasonably possible (Paragraph 3.6.4).</li> <li>• Be located outside of areas at high and medium risk of surface water flooding (Paragraph 3.7.8 and Project Principle 8.2);</li> <li>• Be located outside of Flood Zones 2, 3a or 3b (Project Principle 8.2);</li> <li>• Minimise traffic passing through villages and direct AIL traffic along approved routing (Paragraphs 5.3.10 – 5.3.12); and</li> </ul>

- Minimise visual impact (for example, through topographical consideration, consideration of visual receptors (e.g., dwellings and PRowWs) and proximity of other existing infrastructure) (Paragraphs 5.3.10 – 5.3.12).

The Applicant notes to the ExA that the Proposed Development does not include the provision of new overhead lines and so this response is framed from the perspective of the Rosefield Substation only.

Table 3-3: The Environmental Statement (general)

ExQ1 Ref	Question	Applicant's Response
Q1.3.1	<p><b>Rochdale envelope</b></p> <p>How was the worst-case scenario determined and assessed within the ES where options are proposed in the Rochdale envelope, such as the options for the balance of solar system plant, or options for enclosure of the electrical equipment for the main collector compound (Work No. 5)?</p>	<p>Where options are proposed within the Rochdale Envelope, the Environmental Statement applies a reasonable worst-case assessment approach to ensure that the likely significant effects of the Proposed Development are fully captured, regardless of which option is ultimately taken forward. For each environmental factor, the assessment identified the parameters, locations and design options, as illustrated in <b>ES Volume 3, Figure 3.5: Zonal Masterplan [EN010158/APP/6.3] [APP-063]</b>, within the Rochdale Envelope that could give rise to the greatest potential for significant effects to ensure the worst-case scenario is assessed in each instance. The option representing the greatest credible environmental impact was then assessed as the reasonable worst-case scenario.</p> <p>In practice, this means that where flexibility exists, each environmental topic has adopted an assumed option that would, for their topic, have the greatest environmental impact, having consideration of whether:</p> <ul style="list-style-type: none"> <li>• A larger or smaller physical footprint would result in greater impacts;</li> <li>• Being in closer proximity to sensitive receptors would cause increased impact; and/or</li> <li>• If a particular technology or design option would result in the higher emissions, noise levels, or visual effects.</li> </ul> <p>For example, for some assessments the worst-case scenario was determined by the location of an element, with the closest point to a sensitive receptor assessed. For others, the worst-case was defined by the maximum height, maximum extent, or the absence of an enclosure.</p> <p>The reasonable worst-case assumptions applied to each project element are set out in Table 5.3 of <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b> which outlines how the worst-case assumption has been selected and applied consistently across the Environmental Statement. Each topic chapter in <b>ES Volume 2 (Chapters 6 – 16)</b> then explains how these assumptions have been applied and identifies any justified topic-specific deviations.</p> <p>As a result, the Environmental Statement does not rely on a preferred or minimum-impact option. Instead, it assesses the maximum likely environmental effects that could reasonably arise from the design flexibility permitted by the Rochdale Envelope.</p> <p>In relation to the Balance of Solar System, Table 5.3 of <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b> sets out that the plant would be independently located</p>

outdoors and that central inverters would be used, as this is considered to be the worst-case scenario, unless outlined in the environmental factor assessment chapters detailed in **ES Volume 2, Chapters 6 – 16**.

Table 3-4: Need, site selection and alternatives

ExQ1 Ref	Question	Applicant's Response
Q1.4.1	<p><b>National Policy Statement (NPS) EN-3</b></p> <p>The Policy Compliance Assessment Tables in the Planning Statement <a href="#">[REP1-016]</a> do not address NPS EN-3 paragraph 2.10.17. Provide the following information:</p> <ol style="list-style-type: none"> <li>1. How many acres (and hectares) of land is required for each megawatt (MW) of output?</li> <li>2. How does the above relate to the range of 2 to 4 acres cited in NPS EN-3 and the range of 4 to 5.6 acres cited in paragraph 2.10.9 of NPS EN-3 2026?</li> <li>3. How does the Proposed Development compare with the statement in paragraph 2.10.17 that "A typical 50MW solar farm will consist of around 100,000 to 150,000 panels and cover between 125 to 200 acres"?</li> <li>4. How does the above (acres required and number of panels) compare with other recently consented NSIP scale solar farms? Provide an explanation for any variations.</li> </ol>	<p>The Applicant has provided response in turn to the points raised.</p> <ol style="list-style-type: none"> <li>1. The Applicant has applied the approach that was agreed by the ExA and SoS for Mallard Pass Solar Farm which presented an acres/MW ratio based on the MW peak in direct current (DC). The ExA's Recommendation Report for Mallard Pass Solar Farm includes discussion on "output" at Paragraph's 8.2.84 onwards, including recognition that the acres/MW ratio range "is intended to include 'associated infrastructure' as stated but not mitigation and enhancement areas". As per <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b>, the Proposed Development is assumed to have an installed capacity of 334.1 MW DC. Given the developable land related to the Solar PV development and related infrastructure is approximately 693 acres (689 acres plus 4 acres for the BESS), this would equate to 1MW requiring 2.07 acres.</li> <li>2. Section 7.7 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> confirms that the Proposed Development lies within the range of 2 to 4 acres per MW of output as cited in Paragraph 2.10.17 of NPS EN-3 (2023). The Applicant notes, therefore, that the Proposed Development lies below (i.e. is a more efficient use of land) the range indicated in NPS EN-3 (2025).</li> <li>3. Paragraph 5.4.3 of the <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> assumes an indicative requirement for 470,433 Solar PV Modules. Comparing this to the indicative 334.1MW in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b>, this gives an equivalent figure of circa 70,400 panels per 50MW installed. This figure is below the value given in the question and this is likely to relate to the Applicant's indicative design using panels available in the market today which have higher outputs per panel than panels historically available. Section 7.8 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> provides further detail.  The 'typical' coverage of a 50MW solar farm of between 125 to 200 acres is equivalent to a range of 2.5 to 4 acres per MW installed. The Applicant therefore refers the ExA to its answer in point 2 above.</li> <li>4. The Applicant considers that variations of what a typical solar farm may look like depends heavily on the context of a proposal (e.g. topography and choice of panel technology (i.e., single axis tracker and/or fixed south facing)) but also the scale of an NSIP's grid connection. For example, the number of acres and panels needed to fulfil West Burton Solar Farm's 480MW connection versus Springwell Solar Farm's 800MW connection will naturally vary. However, what is important to recognise in the Proposed Development's case is that it falls within the</li> </ol>

ExQ1 Ref	Question	Applicant's Response
		lower end of the range for acres per MW which reflects the Proposed Development's effective use of land.
Q1.4.2	<p><b>NPS EN-3</b></p> <p>The Planning Statement [REP1-016] does not directly address paragraph 2.10.32 of NPS EN-3 regarding the use of agricultural land. Set out how this policy has been met. Is any continued agricultural use secured? If so, how? If not, why not? (also see questions Q1.7.17 and Q1.18.4)</p>	<p>Normal agricultural use (e.g. arable and/or grazing as current) would continue (except for during the cable installation and access track construction) in Work Nos. 6, 7 and 10B (<b>Works Plans [EN010158/APP/2.3.2] [AS-006]</b>). The <b>Outline LEMP [EN010158/APP/7.6.3]</b> secures under section 3.3 that the management of grassland within the Order Limits will be undertaken by a combination of sheep (under panels) and cattle grazing (areas with no panels). Appendix 2 (Landscape and Ecological Mitigation and Enhancements) to the secured <b>Outline LEMP [EN010158/APP/7.6.3]</b> spatially identifies the fields with potential for grazing by sheep or cattle.</p>
Q1.4.3	<p><b>NPS EN-3</b></p> <p>Confirm that maximum combined capacity of the installed inverters measured to determine the site capacity is measured in alternating current (AC) as per NPS EN-3 paragraph 2.10.53.</p>	<p>NPS EN-3 (2023) Para 2.10.53 explains that “for the purposes of Section 15 of the Planning Act 2008, the maximum combined capacity of the installed inverters (measured in alternating current (AC)) should be used for the purposes of determining solar site capacity” and Para 2.10.54 explains that the capacity threshold is 50MW (AC) in England. Section 15 of the Planning Act 2008 relates to the criteria for schemes to be considered as nationally significant infrastructure projects, consentable through the DCO process.</p> <p>The Applicant confirms that the installed capacity of the proposed solar site, measured in AC from the combined capacity of installed inverters, is greater than 50MW (AC), and therefore that it is correct that the Proposed Development is classified as a Nationally Significant Infrastructure Project.</p>
Q1.4.4	<p><b>Overplanting</b></p> <p>Section 7.6 of the Statement of Need [APP-036] states that the applicant “limits” overplanting, “does not propose overplanting” but also “...that it is possible that, at the application stage, applicants may not be sufficiently informed to commit to an overplanting strategy for their scheme”. Provide answers to the following queries:</p> <ol style="list-style-type: none"> <li>1. Is overplanting proposed? If so, how much and why? If not, why not?</li> <li>2. To what extent would panel degradation reduce the output of the Proposed Development over its lifetime in the absence of overplanting?</li> <li>3. If overplanting is not proposed, would this increase the need to replace solar panels during the 40-year operational phase? (also see question 1.8.8)</li> </ol>	<p>Paragraph 2.10.55 of NPS EN-3 (2023) (Footnote 92) defines overplanting as “the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator's grid connection”.</p> <p><b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b>, explains that the Proposed Development is anticipated to have an installed capacity of 334.1 MW (DC). This is lower than the current grid connection capacity secured by the Applicant at the time of making the DCO Application, which is 500MW (AC).</p> <p>Section 7.6 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> explains that the Applicant responded to feedback received during the consultation process, which reduced the land area upon which the Applicant proposes to install Solar PV modules and limits <i>the opportunity to deliver overplanting</i> at the Proposed Development (italicised words added for additional clarity). However, the <b>Grid Connection Statement [EN010158/APP/7.1] [APP-137]</b> explains that the Applicant has requested a reduction to the grid connection capacity, seeking to decrease the import to 335MW (AC) and the export to 335MW (AC). The Applicant expects that in Q1 27 or earlier, the Applicant will receive its Gate 2 grid connection which will reflect the revised export capacity of 335MW (AC). However, this cannot be assumed until a revised offer is issued by NESO and accepted by the Applicant (although the Applicant has not identified any reasons why the revised offer might not be forthcoming).</p> <p>Assuming no changes to the indicative design, the overplanting ratio versus the expected new grid connection capacity would therefore be <math>334.1 / 335 = 0.997</math>. Section 7.8 of the <b>Statement of Need</b></p>

ExQ1  
Ref

Applicant's Response

**[EN010158/APP/5.6]** **[APP-036]** explains that panel efficiency and therefore output has increased historically, and is expected to continue to increase in the future. This therefore brings the possibility that at the detailed design stage, optimisation of the site layout and the utilisation of panels with higher performance than those assumed in the indicative design may lead to an increase in installed capacity versus the indicative design, while respecting the control parameters established in the DCO, which would lead to overplanting.

It is within this context that the Applicant has answered the questions posed:

1. Overplanting is not proposed against the 500MW (AC) connection agreement. As noted in the Site Selection Report (Appendix 1 to the **Planning Statement [EN010158/APP/5.7.3]** **[REP1-016]**), the Applicant sought to develop a single new NSIP generating between 250 - 500MW (based on a site comprising a minimum of 1,000 acres). Following on from the selection of the Site and at the Site level, the Applicant made key changes to the design of the Proposed Development following the initial phase 1 consultation which, as captured in the **Consultation Report [EN010158/APP/5.1]** **[APP-020]**, resulted in a reduction in the area proposed for solar PV modules by 40% from 1,108 acres to 689 acres. This reduction, together with other design amendments during the design stages, means that the design parameters in the DCO Application would not deliver an overplanted scheme based on the current grid connection capacity of 500MW (AC). However, as described above, the Applicant may at the detailed design stage design a scheme which is overplanted based on the expected grid connection capacity of 335MW (AC) and respects the design parameters in the DCO Application, as set out within the **Design Commitments [EN010158/APP/5.9.4]**.
2. For an invariant grid connection capacity and panel choice, an overplanted scheme will comprise a higher number of panels than a scheme which is not overplanted. However, it is each of those panels individually which will degrade at an expected rate per year (**ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2]** **[APP-051]** utilises an annual degradation factor of 0.4%/year). Therefore, degradation reduces the power generated at the panels of an overplanted scheme at the same rate as a scheme which is not overplanted. It is important to note however that an overplanted scheme would be expected to have a slower reduction in its output to the national grid in its early years of operation (dependent on its overplanting ratio) because 'clipped' generation would reduce and instead be exported (until no more generation is clipped).  
  
Clipped generation occurs on overplanted schemes when, under high insolation, the panels generate more power than can be exported to grid. As panels degrade, clipped generation reduces until such time as no more generation is clipped.  
  
**ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2]** **[APP-051]** assesses the Proposed Development without overplanting, and incorporates an annual degradation factor in its assessment of the output and benefits of the Proposed Development. The lifetime generation (approximately 12,030,492 MWh) provided in Paragraph 8.8.14 is the lifetime energy generation of the Proposed Development taking into account annual degradation, in the absence of overplanting.
3. Overplanting a scheme does not affect the degradation rate of an individual panel which is part of that scheme. Therefore, the decision or requirement to replace an individual panel

ExQ1 Ref	Question	Applicant's Response
		would not be dependent on whether the Proposed Development was overplanted or not. If anything, not overplanting a scheme would reduce the total number of degraded panels requiring replacement because there would be less installed panels in the first place.
Q1.4.5	<p><b>Irradiance</b></p> <p>The Planning Statement <a href="#">[REP1-016]</a> refers to irradiance levels in Buckinghamshire being higher than the UK average. What are the irradiance levels in the vicinity of the Order limits?</p>	<p>The Applicant uses publicly available data and bolsters this with ground data from the Met Office. Figure 16 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> shows that the Proposed Development lies in an area of Great Britain which experiences specific production of on average between 985 and 1022 kWh/kWp per year. This equates to a load factor between 11.25% (985 / 8760) and 11.67% (1022 / 8760) assuming a similar Solar PV layout.</p> <p>The Applicant has also sourced irradiance levels in the vicinity of the Order Limits from SolarGIS TMY, giving a value which is consistent with the broader assessment of irradiance levels described above.</p>
Q1.4.6	<p><b>Load factor</b></p> <p>Section 7.4 of the Statement of Need <a href="#">[APP-036]</a> refers to an average load factor of 10.4% in the UK for solar generation since 2016. What is the load factor of the Proposed Development?</p>	<p>A specific production of between 985 and 1022 kWh/kWp per year equates to a load factor between 11.25% (985 / 8760) and 11.67% (1022 / 8760). 8760 is the number of hours in a year.</p> <p>The Proposed Development candidate design is expected to achieve a load factor within this range.</p>
Q1.4.7	<p><b>Site selection – objectives</b></p> <ol style="list-style-type: none"> <li>How were the objectives for the site selection process as set out at paragraph 4.1.3 of the Site Selection Report <a href="#">[REP1-016]</a> established?</li> <li>Were they subject to consultation?</li> <li>To what extent do they encapsulate the full extent of relevant policy requirements?</li> </ol>	<ol style="list-style-type: none"> <li>As set out in Section 7.4 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> the objectives for site selection are based on the guidance set out by NPS EN-1 and NPS EN-3 (2023). The Applicant notes that NPS EN-3 (2023) (paragraph 3.2.4) sets out that <i>“it is for industry to propose new energy infrastructure projects that they assess to be viable within the strategic framework set by government”</i>, recognising that an individual developer’s approach to screening is sensitive to local variability and the individual approach of the developer.</li> <li>For the reasons set out above, it was not considered necessary or appropriate for the objectives to be subject to consultation. However, in <b>Consultation Report Appendices A-1 to A-4 [EN010158/APP/5.2] [APP-021]</b>, the Applicant provided a ‘why here?’ section within the Phase One Consultation Booklet. This section explained why the Applicant had selected the Site and consultees were invited to provide comments on the early plans and proposals via the Phase One Consultation Questionnaire. Comments made by consultees on the suitability of the location of the proposals were considered by the Applicant in developing the Stage 2 Design.</li> <li>The Applicant considers that the site selection objectives written in to paragraph 4.1.3 of the Site Selection Report (<b>Appendix 1 to the Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b>) reflect the extent of relevant site selection policy requirements as follows: <ul style="list-style-type: none"> <li>“contribute to meeting the UK’s urgent need for low carbon energy generation” NPS EN-1 (2023) Paragraphs 3.3.58 and 3.3.63;</li> <li>“be in close proximity to an available grid connection or part of the transmission network in which capacity exists” NPS EN-1 (2023) Section 4.11 and NPS EN-3 (2023) Paragraphs 2.10.21 to 2.10.26 and Paragraph 2.10.60;</li> </ul> </li> </ol>

ExQ1 Ref	Question	Applicant's Response
		<ul style="list-style-type: none"> <li>- “avoid impacts on sensitive landscapes and environmental features as far as practicable” NPS EN-1 (2023) Paragraphs 5.10.7 to 5.10.9, Paragraph 5.10.12 and Paragraph 5.8.36 and NPS EN-3 (2023) Paragraphs 2.10.18 to 2.10.20 and Paragraphs 2.10.27 to 2.10.34 and Paragraphs 2.10.40 to 2.10.48;</li> <li>- “be readily accessible from existing strategic road network to facilitate; construction access” NPS EN-3 (2023) Paragraphs 2.10.35 to 2.10.39; and</li> <li>- “be delivered on land which could be acquired voluntarily thereby avoiding the need for large scale compulsory acquisition” NPS EN-1 (2023) Paragraph 4.3.9.</li> </ul> <p>Furthermore, the following key attributes were drawn from NPS EN-3 (2023) paragraphs 2.10.18 to 2.10.48 to drive the initial screening process:</p> <ul style="list-style-type: none"> <li>• The existence and availability of sufficient land to deliver to the project to meet the scale set out in the scheme’s aims;</li> <li>• The availability of a suitably placed point of connection to the NETS and/or the local distribution network; and</li> <li>• Solar irradiation levels which support the potential for the development to produce an energy yield which is both useful and economic.</li> </ul> <p>Paragraph 7.4.5 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> sets out that environmental attributes described in NPS EN-3 (2023) Paragraphs 2.10.27 to 2.10.48 and the potential for environmental impacts as described in NPS EN-3 (2023) Paragraphs 2.10.73 to 2.10.126 were also applied to the screening process where applicable.</p>
<p><b>Q1.4.8</b></p>	<p><b>Site selection – area of search</b></p> <p>Paragraph 4.2.3 of the Site Selection report <a href="#">[REP1-016]</a> states that a 10 kilometre (km) radius is the commercially viable cable distance from National Grid East Claydon Substation, taking into account the capacity, distance from the grid connection, underground cable costs, capital costs and market conditions. Provide further evidence in support of this position.</p> <p>Other than the sites identified on Buckinghamshire Council’s Brownfield Register as identified in Table 1 of the Site Selection Report and the industrial area referenced at paragraph 4.2.22, were any other specific sites within the area of search considered? If so, which sites were considered, how were they assessed and why were they not taken forward? If not, why not?</p>	<p>The <b>Site Selection Report (Appendix 1 to the Planning Statement [EN010158/APP/5.7.3] [REP1-016])</b> sets out that a site closer to the National Grid East Claydon Substation was preferred on the basis that a shorter cable route has benefits in terms of ease and timeliness of the delivery of key infrastructure, minimising disruption to residents and businesses along the route, and minimising environmental disturbance and cost. As noted in the SoS’s Decision Letter to approve the <b>Springwell Solar Farm Order 2026</b>, the ExA “considered that with regards to the choice of site location near to available grid export capacity, the Applicant’s approach maximises the existing grid infrastructure and minimises disruption in accordance with paragraph 2.10.25 of NPS EN-3 [ER 4.4.36]” (Paragraph 4.8) and so the Applicant’s approach is considered to be consistent with this conclusion.</p> <p>The Applicant refers to paragraph 4.2.14 of the <b>Site Selection Report (Appendix 1 to the Planning Statement [EN010158/APP/5.7.3] [REP1-016])</b> which recognises the relative lack of consistency in the sizes of search areas adopted across solar NSIPS. As recognised in the Helios Renewable Energy Project Decision Letter, the applicant of that scheme determined that a 5km search area was proportionate when considered alongside the energy generation capacity of the project of 190MW. For similar reasons, the Applicant concluded that the 10km Search Area was proportionate to the generation capacity of the Proposed Development and that extending beyond 10km would not be viable or appropriate in this case having regard to the factors listed above.</p>

ExQ1 Ref	Question	Applicant's Response
		Discussions with other landowners in the area did not identify any alternative sites which met the site selection criteria, including because they were not interested in offering their land for solar development, or because they were pursuing alternative proposals on their land. Further to the above, the Applicant would like to note the overarching policy position established within NPS EN-1 (2023) Paragraph 4.3.9 which is that <i>"this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective"</i> .
Q1.4.9	<p><b>Site selection – Best and Most Versatile (BMV) agricultural land</b></p> <p>The Site Selection report [REP1-016] identifies that the south-western extent of the area of search demonstrated a larger presence of grade 4 non-BMV land.</p> <p>What consideration was given to further utilising land within the south-western extent of the area of search to reduce the use of BMV land?</p>	<p>Figure 3 of the <b>Site Selection Report (Appendix 1 to the Planning Statement [EN010158/APP/5.7.3] [REP1-016])</b> sets out that much of the grade 4 non-BMV land to the south-western extent of the Search Area is outside of the 10km radius. <b>ES Volume 4, Appendix 12.1: Agricultural Land Classification Report [EN010158/APP/6.4.2]</b> and <b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> set out that 94.42% of the Site is non-BMV and 4.07% is non-agricultural land, therefore there was considered to be no need to extend into the grade 4 land to the south-west.</p> <p>As recognised in Paragraph 2.10.29 of NPS EN-3 (2023), <i>"land type should not be a predominating factor in determining the suitability of the site location"</i> and <i>"Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of "Best and Most Versatile" agricultural land where possible"</i>. The Proposed Development's Order Limits is concluded to have a BMV take of 1.51% which, in the wider context of solar NSIPs, is exceptionally low.</p>
Q1.4.10	<p><b>Site selection – consolidation with other projects</b></p> <p>Did the applicant engage with the promoters of other nearby energy generation and storage projects to consider the scope for consolidation of infrastructure with a view to reducing overall land take and effects? If not, why not?</p>	<p>The Applicant recognises that there are several other developments in construction or planned within the local area and these have been considered in the development of the design. Such other developments in the local area do not make the location unsuitable for the Proposed Development. An assessment of cumulative effects has been undertaken and is detailed in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>. This considers other developments within the 10km Zone of Influence from the Proposed Development that fall within the short list, including HS2, East West Rail, Grendon Prison, East Claydon Greener Grid Park, East Claydon BESS, Tuckey Farm, Fox Covert, Padbury Brook and Longbreach Solar Farm.</p> <p>The Applicant has been in discussions with the developers of the East Claydon BESS to identify elements of the respective proposals which could be consolidated. While each project has its own bespoke requirements and timelines for construction and connection we will continue to engage with East Claydon Storage to identify appropriate areas to reduce overall land take and coordinate activities to reduce associated effects.</p>
Q1.4.11	<p><b>Battery Energy Storage System (BESS) location</b></p> <p>Submit a copy of the BESS Location Review as referenced in Buckinghamshire Council's Local Impact Report [REP1-112]. If the review does not already consider them, also provide commentary on the implications of the clearances sought by National Grid Electricity Transmission Limited in its written representation [REP1-130] on the scope to accommodate the BESS in the vicinity of the East Claydon National Grid Substation.</p>	<p>The Applicant confirms that Appendix 1 of the <b>Applicant's Response to Buckinghamshire Council's Local Impact Report [EN010158/APP/8.11]</b> is a submission of the Letter to Buckinghamshire Council on BESS locations referenced in Buckinghamshire Council's Local Impact Report.</p> <p>Table 1 of <b>Applicant's Response to Buckinghamshire Council's Local Impact Report [EN010158/APP/8.11]</b> recognises, as appropriate, the implications of the offsetting requirements</p>

ExQ1 Ref	Question	Applicant's Response
		that are and/or will be sought by NGET in relation to overhead lines and pylons with regard for the suitability of fields for BESS development in the vicinity of the National Grid East Claydon Substation.

Table 3-5: Air Quality

ExQ1 Ref	Question	Applicant's Response
Q1.5.1	<p><b>Environmental Statement (ES) Chapter 6 (Air Quality) - Methodology</b></p> <p>NPS EN-1 paragraph 5.2.9 states that ES assessments on air quality and emissions should describe the predicted absolute emissions, concentration change and absolute concentrations as a result of the Proposed Development, after mitigation methods have been applied and any potential eutrophication impacts. Neither ES Chapter 6 [APP-049], the Air Quality Assessment [APP-086], nor the Scoping Report [APP-079] appear to refer to these matters. Explain why they are not addressed, or update the ES in accordance with the requirements of NPS EN-1.</p>	<p>NPS EN-1(2023) paragraph 5.2.8 precedes paragraph 5.2.9 and states 'Where the project is likely to have adverse effects on air quality the applicant should undertake an assessment of the impacts of the proposed project as part of the ES'. As per <b>ES Volume 2, Chapter 6: Air Quality [EN010158/APP/6.2.2] [APP-049]</b> no significant effects after mitigation are predicted and therefore no further assessment was deemed to be required.</p>
Q1.5.2	<p><b>ES Chapter 6 (Air Quality) - Methodology</b></p> <p>Was the 'guide to the assessment of air quality impacts on designated nature conservation sites' (Institute of Air Quality Management, 2020) considered in the assessment methodology for ES Chapter 6 [APP-049]? If so, how has this guidance been incorporated into the assessment methodology? If not, why not?</p>	<p>Yes the IAQM 2020 guidance was considered. All designated ecological sites are more than 200m from the affected road network and therefore screened out of further assessment, as per the IAQM 2020 guidance, except the Ham Home-cum-Hamgreen Woods SSSI and Long Herdon Meadow SSSI parts of which are within 200m of the A41. However as per the Design Manual for Roads and Bridges (DMRB) guidance (referenced in the IAQM 2020 guidance) further assessment can be screened out where cumulative traffic generation is below 1000 Annual Average Daily Traffic (AADT) for Light Duty Vehicles and 200 AADT for Heavy Duty Vehicles. As set out in <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> these screening criteria are not exceeded and traffic from the construction phase would be temporary in nature and therefore further assessment was not undertaken on ecological sites.</p>
Q1.5.3	<p><b>ES Chapter 6 (Air Quality) - Methodology</b></p> <p>Why was the Greater London Authority guidance on 'Non-Road Mobile Machinery Practical Guide V.6' determined to be the most appropriate guidance to inform the methodology for ES Chapter 6 [APP-049] regarding non-road mobile machinery?</p>	<p>In the absence of any recommended guidance on the assessment of construction equipment, the Greater London Authority Non-Road Mobile Machinery Practical Guide has been adopted, which sets out the type of plant which is likely to have effects on air quality based on the size of plant. This approach was also used on the recently consented <b>Springwell Solar Farm Order 2026</b>.</p>
Q1.5.4	<p><b>ES Chapter 6 (Air Quality) - Methodology</b></p> <p>Direct the ExA to where ES Chapter 6 [APP-049] considered the impacts of the Proposed Development on 'critical levels' and national air quality objectives with</p>	<p>All designated ecological sites are more than 200m from the affected road network and therefore screened out of further assessment, as per the IAQM 2020 guidance, except the Ham Home-cum-Hamgreen Woods SSSI and Long Herdon Meadow SSSI parts of which are within 200m of the A41. However as per the DMRB guidance (referenced in the IAQM 2020 guidance) further assessment can be screened out where cumulative traffic generation is below 1000 AADT for LDVs and 200 AADT for HDVs.</p>

	<p>regards to the protection of vegetation and ecosystems? If it has not, explain why not.</p>	<p>As set out in <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> these screening criteria are not exceeded and traffic from the construction phase would be temporary in nature and therefore further assessment of impacts on critical levels and national air quality objectives was not undertaken on ecological sites, vegetation and ecosystems.</p>
<p><b>Q1.5.5 Mitigation</b></p>	<p>Buckinghamshire Council stated <a href="#">[REP1-112]</a> that it seeks certainty that the proposed 75% of staff arrivals during construction through a minibus scheme would be fully managed and enforced to ensure that the stated maximum impact is accurate and can be achieved. Otherwise, the Council suggests that there is potential for the Environmental Protection UK and Institute of Air Quality Management guidance screening criteria to be breached and therefore the air quality assessment should be updated.</p> <ol style="list-style-type: none"> <li>1. How would you ensure that 75% of staff would utilise the proposed minibus service? The Transport Assessment <a href="#">[APP-131]</a> states that this would be controlled via the Staff Travel Plan secured through the outline Construction Traffic Management Plan <a href="#">[REP1-084]</a>. However, this document does not refer to the minimum use of 75% of staff using a minibus, therefore the ExA queries whether this is adequately secured.</li> <li>2. How could you enforce the use of a minibus service rather than use of the private vehicle to meet the 75% target?</li> <li>3. Would staff travel patterns be monitored during construction, if so how and what measures could be put in place if the 75% target was not being met?</li> </ol>	<ol style="list-style-type: none"> <li>1. The movement of staff to and from the Site will be secured as a requirement of the detailed Construction Traffic Management Plan and undertaken as a binding commitment of the DCO. The mode share targets, including the 75% use of minibuses, will be included in the detailed Construction Traffic Management Plan, which would be approved by Buckinghamshire Council, based upon the traffic generation presented <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b>.</li> <li>2. The requirement for construction staff to use the proposed travel plan mode share targets will be a commercial requirement under the construction contract between contractors and the Applicant.</li> <li>3. Monitoring would be a contractual obligation and would be monitored in line with commitments set out in the <b>Outline Construction Traffic Management Plan (Outline CTMP) [EN010158/APP/7.5.3]</b>.</li> </ol>

Table 3-6: Associated Development

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.6.1</b></p>	<p><b>Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems (Department for Energy Security and Net Zero)</b> In March 2024, the Department for Energy Security and Net Zero published guidance on <a href="#">Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems</a>. The ExA notes that this is not referred to in the Outline Battery Safety Management Plan (oBSMP) <a href="#">[REP1-092]</a>. The ExA requests that this guidance is reviewed and its recommendations are incorporated into the oBSMP, or an explanation is provided as to why the recommendations would not be appropriate.</p>	<p>The Applicant is aware of this guidance and confirms it was incorporated within the design process. This has been added to the reference section of the <b>Outline Battery Safety Management Plan (Outline BSMP) [EN010158/APP/7.9.3]</b> that is submitted at Deadline 2.</p>
<p><b>Q1.6.2</b></p>	<p><b>BESS Capacity</b></p> <ol style="list-style-type: none"> <li>1. The Grid Connection Statement <a href="#">[APP-137]</a> confirms that the Proposed Development seeks a grid connection to support import of 335 megawatts (MW) (alternating current) of electricity. Is this the same as the capacity for the proposed BESS? If not, explain why, and confirm the capacity of the proposed BESS. (Also see question Q1.1.1)</li> </ol>	<p>In response to these points in turn.</p> <ol style="list-style-type: none"> <li>1. The Applicant confirms it has requested a 335MW import/export capacity grid connection, and that this matches the Battery Energy Storage System's (BESS) power capacity of 335MW import/export. The BESS capacity is generally aligned with the import and export capacity and then multiplied by a number of hours of charge/discharge. For example, a BESS could be constructed that charges/discharges at 335 MW for a period of 3 hours giving 1005 MWh capacity, or 300 MW for 4</li> </ol>

ExQ1 Ref	Question	Applicant's Response
	<p>2. The Planning Statement [REP1-016] explains that the BESS is proposed to support the operation of the main solar nationally significant infrastructure project, to store energy generated by it and export it to the National Electricity Transmission System when it is needed. Explain why an import capacity of 335MW from the grid is sought, if the main purpose of the BESS is to store energy generated by the solar panels serving the Proposed Development?</p> <p>3. Are there any measures as part of the application control documents to ensure that any energy stored in the BESS comes directly from the Proposed Development? If not, why not and explain how the BESS would meet the definition of associated development in the Planning Act 2008 and in accordance with <a href="#">guidance on associated development applications for major infrastructure projects April 2013</a>.</p>	<p>hours giving 1200 MWh. The exact configuration of the Proposed Development's BESS depends on the requirements of the market, for instance grid balancing services or regulatory and policy requirements. In any case, the BESS design would be compliant with the DCO. This final configuration would be confirmed at detailed design once the prevailing requirements are confirmed.</p> <p>2. The Applicant confirms that, as written into the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b>, the BESS is provided to support the operation of the main solar NSIP. Section 7.9 of the <b>Statement of Need [EN010158/APP/5.6] [APP-036]</b> provides further information on the nature of this support. Further, the Statement of Need explains that at times when the BESS is not supporting the operation of the principal solar site, it may be useful for the BESS to support the national supply and demand balance by importing directly from the grid rather than from the co-located solar. For this reason, an import capability is sought.</p> <p>3. There are no measures as part of the application control documents which ensure that energy stored in the BESS comes directly from the Proposed Development. This is consistent with recently approved Solar NSIPs, such as <b>Springwell Solar Farm Order 2026</b>. This is because the BESS is intended to both export power to the grid and, as an additional function, import from the grid. Further, the NPSs for Energy confirm that assets which provide flexibility to the national electricity system, or to the energy system generally, are needed to achieve national decarbonisation and energy security aims. The NPSs also state that Government supports solar that is co-located with storage to maximise the efficiency of land use. Flexibility in the context of a BESS generally means storing energy when it is needed less (including when generation is abundant) and releasing it when it is needed more (e.g. when demand is higher). However, how the BESS would operate at any one time would depend on many uncontrollable factors, including: national demand, the weather, and the technology composition of the UK energy market. Commercial asset operation is controlled through other means (i.e., those outside of the planning system) including but not limited to NESO and Ofgem Use of System and other Energy Market codes. There is therefore no reason to limit the operability of the Proposed Development or any component of it provided that operating the Proposed Development does not impact any parameters of the consent envelope which are captured in the DCO.</p> <p>As stated in the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b>, the BESS is considered to form associated development, in accordance with the 'Planning Act 2008: Guidance on associated development applications for major infrastructure projects' principles, see <b>Appendix 1: Guidance on Associated Development Applications [EN010158/APP/8.13]</b>, for further detail. The proposed BESS is intrinsically linked to the principal development in that it supports the operation of the main solar NSIP. The proposed BESS is designed to store energy generated by the Solar PV modules by allowing excess electricity generated from Solar PV modules to be stored in the batteries of the BESS and then be discharged to the Grid when required. As noted in point 2 above, the BESS may also import surplus energy from the Grid when the energy available to the Grid exceeds demand required from it. The grid connection agreement for the Proposed Development allows for both the import and export of electrical power from and to the NETS. The energy storage capacity of the BESS has been sized to be proportionate to the energy generation potential of the Solar PV development.</p>
Q1.6.3	<p><b>Waste</b> To what extent has the Environmental Statement and supporting information considered waste generated by the need to replace BESS? Provide more information on the degradation of the batteries in the BESS. Amongst other</p>	<p>Table 3.23 of <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b> sets out the service life of the Proposed Development components, which have been assumed as a reasonable worst-case estimate for the purposes of the ES. This confirms that the service life for BESS is assumed to be 17.5 years.</p>

ExQ1 Ref	Question	Applicant's Response
	<p>matters, explain in particular what is the typical lifespan of batteries and how often, if at all, they require replacement.</p>	<p>In determining the expected operational life of the battery system, the Applicant considers both the lifecycle of the cells and the anticipated operational duty of the plant. Modern lithium-ion battery systems are designed to achieve a defined number of full charge and discharge cycles before reaching end of life. The number of cycles undertaken per year is dependent on the operational use of the asset and will vary depending on market conditions, system configuration, and duration. Based on typical usage assumptions for grid-scale systems, this results in an indicative operational lifespan. The 17.5 year value presented in Table 3.23 of <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b> has been adopted as a conservative estimate for the purposes of assessment. The replacement and augmentation may need to occur more than once during the 40-year operational phase, therefore, the preference will be to augment the BESS and therefore extend the performance rather than replace the BESS unit.</p> <p>The ES, including the GHG assessment presented in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> has considered the service life of the BESS and the waste generated by the need to replace the BESS. It is worth noting that a 1.5 replacement cycle has been assumed for the purposes of the GHG assessment presented in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> as at the end of the first replacement cycle, there are only 5 years remaining before the end of the 40-year service life of the entire Proposed Development. Therefore, half a replacement cycle has been assumed given that it is unlikely that all BESS would be replaced 5 years before the Proposed Development is decommissioned. The GHG assessment detailed in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> includes in-direct emissions associated with the BESS, which includes, off-site transportation and disposal of waste.</p> <p>At the end of the life of the BESS and/or operational (including maintenance) phase, the BESS will be dismantled and removed per industry good practices. The BESS and associated components will follow the waste hierarchy such that they will be reused where possible before recycling and disposal are considered. However, it is worth noting that it is anticipated that the type of battery chemistry that will be used for the Proposed Development would be recyclable.</p> <p>The Applicant has outlined measures to manage Battery Energy Storage System (BESS) waste during the operational (including maintenance) phase in section 2.12 of the <b>Outline Operational Environmental Management Plan (Outline OEMP) [EN010158/APP/7.3.3]</b> and in section 2.10 of the <b>Outline Decommissioning Environmental Management Plan (Outline DEMP) [EN010158/APP/7.4.3]</b>. Indicative volumes of waste that will be produced over the lifetime of the Proposed Development, which considers the replacement of the BESS is presented in <b>ES Volume 4, Appendix 5.7: Indicative Construction, Operation and Decommissioning Waste [EN010158/APP/6.4.2]</b>.</p>

Table 3-7: Biodiversity and Ecology

ExQ1 Ref	Question	Applicant's Response
Q1.7.1	<p><b>General - CSAG deadline 1 submission</b></p> <p>Provide a comprehensive response to the submission by CSAG on ecological matters (<a href="#">[REP1-127]</a> Part 2 – Ecology (CSAG-02) - CRITIQUE OF ECOLOGICAL COMPONENTS OF EIA and the supporting letter from Dominic Woodfield dated 3 December 2024 - PDF pages 53 – 58 of <a href="#">[REP1-128]</a>). It would be helpful to the ExA if you could respond in a table format which replicates and responds to the points identified by CSAG.</p> <p>Provide the completed Biodiversity Net Gain metric in Excel form as requested by CSAG <a href="#">[REP1-127]</a>. For expediency this should also be provided directly to CSAG to review at the earliest opportunity and at deadline 2 to the examination.</p>	<p>The Applicant has responded to the questions raised by the Claydon Solar Action Group (CSAG) in <b>Applicant's Response to Written Representations [EN010158/APP/8.12] ref 3.1.2, to 3.1.20 and 3.1.29 to 3.1.37.</b></p> <p>With regards the specific comments raised by Dominic Woodfield, the Applicant notes that the letter was dated 2024 and therefore provides commentary on an earlier version of the Proposed Development. Regardless, a response to each of the points raised in this letter are set out in <b>Appendix 2: Response to CSAG Biodiversity Appendix</b> within the <b>Applicant's Response to Written Representations [EN010158/APP/8.12]</b>.</p> <p>The Biodiversity Net Gain Metric was provided direct to CSAG in Excel spreadsheet form on 14 April 2026.</p>
Q1.7.2	<p><b>General - confidential documents</b></p> <p>The ExA notes that 2 preliminary ecological appraisals were provided with the application; the version dated 2022 <a href="#">[APP-087]</a> was marked as confidential, whereas the version dated 2025 <a href="#">[APP-093]</a> was redacted to allow for publication on the project website. Could the 2022 version be redacted in a similar way to allow for publication on the project website, if not, why not? The Examining Authority (ExA) requests that you review all documents marked as confidential to ascertain if they could be appropriately redacted for publication on the project page.</p>	<p>The Applicant will redact the <b>ES Volume 4, Appendix 7.1: Preliminary Ecological Appraisal (2022) (Confidential) [EN010158/APP/6.4] [APP-087]</b> so that only location sensitive information regarding legally protected species is redacted. This will be provided at Deadline 3. The Applicant will also review the other documents that were marked as confidential (<b>ES Volume 4, Appendix 7.4: Breeding Bird Survey Report (2022) (Confidential) [EN010158/APP/6.4] [APP-090]</b>, <b>ES Volume 4, Appendix 7.6: Badger Survey Report (2022) (Confidential) [EN010158/APP/6.4] [APP-092]</b>, <b>ES Volume 4, Appendix 7.8: Otter and Water Vole Survey Report (2023) (Confidential) [EN010158/APP/6.4] [APP-094]</b>, <b>ES Volume 4, Appendix 7.12: Breeding Bird Survey Report (2024) (Confidential) [EN010158/APP/6.4] [APP-098]</b> and <b>ES Volume 4, Appendix 7.15: Badger Survey Report (2025) (Confidential) [EN010158/APP/6.4] [APP-101]</b>) and, if deemed appropriate will redact these and provide at Deadline 3.</p>
Q1.7.3	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>Paragraph 4.6.16 of NPS EN-1 states that applicants should make use of available guidance and tools for measuring natural capital assets and ecosystem services, such as the Natural Capital Committee's 'How to Do it: natural capital workbook', the government's guidance on Enabling a Natural Capital Approach, and other tools that aim to enable wider benefits for people and nature. Explain how you met this requirement.</p>	<p>The Applicant has considered a Natural Capital Approach, alongside good design outcomes that support sustainable development. Good design has been embedded into the Proposed Development through a clear design framework from the outset of the design process. The <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b> set out the approach to the design of the Proposed Development, including how good design has principles have been implemented to take advantage, where possible, of opportunities to deliver wider environmental net gains. This includes enhancements contributing to biodiversity net gain such as:</p> <ul style="list-style-type: none"> <li>• Habitat creation and management;</li> <li>• New and improved species rich hedgerows;</li> <li>• Enhancement of field margins; and</li> <li>• Sowing of land under and between panels with legume rich r rich grassland mix.</li> </ul> <p>Alongside the above, enhancements to the community and environment including enhancing access and connectivity to the countryside including the creation of new permissive footpaths and interpretation boards and wayfinding signage.</p>
Q1.7.4	<p><b>NPS EN-1</b></p>	<p>The Applicant considers that the only protected species licence that will be required is for great crested newt (GCN). The full assessment with regards GCN is outlined in <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>. Where required, mitigation measures are detailed and secured by the <b>Outline</b></p>

ExQ1 Ref	Question	Applicant's Response
	<p>NPS EN-1 paragraph 5.4.45 states that the Secretary of State (SoS) will need to consider whether the statutory nature conservation body has granted or refused, or intends to grant or refuse, any relevant licences, including protected species mitigation licences. The ExA notes in the Schedule of Other Consents and Licences [REP1-014] that protected species licences would be applied for prior to the commencement of construction. However, why have letters of no impediment for protected species licences not been sought in order to provide reassurance for the SoS that the relevant licences would be offered if applied for?</p>	<p><b>Construction Environmental Management Plan (Outline CEMP) [EN010158/APP/7.2.3], Outline LEMP [EN010158/APP/7.6.3] Outline OEMP [EN010158/APP/7.3.3] and Outline DEMP [EN010158/APP/7.4.3]</b> which are robust and sufficient to offset the impacts of the Proposed Development. The assessment outlines that the Proposed Development would make use of either the local District Level GCN licence or Natural England licence option. Within the <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b>, it is noted that Natural England's Wildlife Licensing team have engaged with the Applicant to discuss potential impacts to GCN and agreed the survey approach, the mitigation approach and the compensation approaches in principle. In addition, the Applicant has also engaged with NatureSpace regarding the use of the local District Level GCN licence, and NatureSpace have also confirmed that the Proposed Development would be eligible to apply for this licencing option.</p> <p>A protected species mitigation licence cannot be obtained on a precautionary basis, and there are (as yet) no grounds on which a bat licence would be required so a letter of no impediment is not required. The Applicant believes it is unlikely that a licence with regards roosting bats would be required due to the fact that the majority of tree resource including woodland retained is unaffected. It is unlikely that one would be encountered within the small number of trees (approx. 16) that may require removal, several of which have no or limited suitability to support roosting bats. See also the Applicant's response to Q1.7.12.</p> <p>The <b>Outline LEMP [EN010158/APP/7.6.3]</b> secures a commitment to surveying trees to be removed before felling and, in the unlikely event that a roost is found, a licence would be sought from Natural England in the normal way. This approach has been accepted on other NSIPs, such as Springwell and Byers Gill both DCO and consented.</p> <p>In addition, due to the preconstruction survey and other safeguards in the <b>Outline CEMP [EN010158/APP/7.2.3]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b> it is considered unlikely that a licence with regards to raptor species or badgers protected under Schedule 1 of the Wildlife and Countryside Act 1981 would be required.</p> <p>With the above in mind, the Applicant considers the Secretary of State should be satisfied that the Applicant has engaged proactively and to a satisfactory level, at this time, to conclude the Applicant's endeavours are in compliance with NPS EN-1 (2023) Paragraph 5.4.45.</p>
<p><b>Q1.7.5</b></p>	<p><b>NPS EN-3</b></p> <p>NPS EN-3 paragraph 2.10.82 states that where pole mounted closed-circuit television (CCTV) facilities are proposed, the location of these facilities should be carefully considered to minimise impact. The ExA notes that the draft Development Consent Order (dDCO) [REP1-008] lists associated development which includes (i) "works for the provision of security and monitoring measures such as CCTV columns and CCTV...". However, CCTV columns are not referenced in Environmental Statement (ES) Chapter 7 (Biodiversity) [REP1-036]. Explain how the Proposed Development meets paragraph 2.10.82 of NPS EN-3.</p>	<p>The Applicant confirms that the Proposed Development complies with Paragraph 2.10.82 of NPS EN-3 (2023) since, and as confirmed in <b>ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1.2] [REP1-034]</b>, the pole-mounted CCTV systems would: have a maximum height of 5m around the perimeters of Work Nos. 1 - 5 and the Jointing Bay elements of Work No. 6; have fixed views of the Proposed Development; not be positioned to face any residential properties; have fixed views into the Order Limits as a security measure and, importantly, would utilise a passive infra-red detector technology which means this lighting will not be within the visible spectrum for wildlife. Therefore, no impacts on biodiversity are envisaged and the CCTV has not been assessed within the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>.</p> <p>The detailed design stage would confirm the exact locations and heights of the CCTV systems and such systems will be designed in accordance with the securing mechanisms within the <b>Design Commitments [EN010158/APP/5.9.4]</b>.</p>

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.7.6</b></p> <p><b>Environmental Improvement Plan 2023 and Local Nature Recovery Strategy for Buckinghamshire and Milton Keynes</b></p> <p>Buckinghamshire Council suggests [REP1-112] that the potentially significant effects identified on Bechstein's bats appear to contravene goal 1 of the Environmental Improvement Plan 2023 that the Proposed Development would result in fragmentation of an existing established ecological network, which goes against government's national policies and strategies for nature recovery.</p> <ol style="list-style-type: none"> <li>1. Do you agree with these statements? If not, why not?</li> <li>2. If the effects on Bechstein's bats were determined to be significant (rather than potentially significant) do you consider that this would result in conflict with the aims of the Environmental Improvement Plan 2023 or Local Nature Recovery Strategy for Buckinghamshire and Milton Keynes?</li> </ol>	<ol style="list-style-type: none"> <li>1. The Applicant disagrees with the statement that the Proposed Development would result in fragmentation of an existing established ecological network (particularly in relation to bats, but also other species). Fragmentation could only occur where bats are unable to access areas that are part of their Core Sustenance Zone (CSZ) sufficiently to isolate different parts of the population. This is considered unlikely as a result of the Proposed Development given the proposed mitigation measures have sought to ensure connectivity is maintained within the Order Limits and also to link to habitats in the wider landscape. The Applicant has proposed buffer zones to maintain connectivity, and specifically to minimise the risk of displacement to commuting bats. Commuting routes are protected by wide buffers that are wider than the distance over which the echolocation calls of Bechstein's bats are likely to operate, supporting the hypothesis that these buffers should be adequate/effective. The buffer zones are augmented by an additional 5m between the security fence that would not be intensively managed but sown to meadow and (where achievable) lightly grazed. The retained/augmented connectivity will ensure that Bechstein's bats (and other species) have access to an enhanced invertebrate resource across the wider landscape within the CSZ of Bechstein's bats.</li> <li>2. Firstly, the Applicant has not identified a significant effect but a <i>potentially significant</i> effect, so the question is hypothetical. But regardless of actual significance the Applicant does not consider conflict would arise with either the Environmental Improvement Plan 2023 or Local Nature Recovery Strategy for Buckinghamshire and Milton Keynes. This is because despite a detrimental displacement effect of solar farms that has been suggested for some bat species, the studies are short-term and the evidence limited; there are no longitudinal (i.e. before/after) studies of effects on well-designed well-managed established solar farms. Nonetheless, the assessment of 'potentially significant' has been applied on a precautionary basis because the mechanism by which any such effect might manifest is uncertain. However, given the mitigation in place, even if foraging bats are displaced, all of the woodland resource foraging and roosting resource is maintained, and connectivity between these parcels is maintained, and alternate foraging areas without panels will be created. Therefore, it is hard to conceive of an effect that would result in significant detriment sufficient to conflict with strategies for nature recovery. In addition to the above a detailed review of the literature pertaining to bats and solar will be submitted at deadline 2 adding further justification to the Applicants position.</li> </ol>	
<p><b>Q1.7.7</b></p> <p><b>Presentation of likely effects and mitigation in ES Chapter 7 (Biodiversity)</b></p> <p>The ExA identifies the following points in ES Chapter 7 [REP1-036] which it requests are updated:</p> <ol style="list-style-type: none"> <li>1. The ES has not clearly set out the secondary mitigation measures where they are proposed. For example, in various sections, the ES states "The outline OEMP [EN010158/APP/7.3] details and secures measures to mitigate and manage operational related effects on habitats to prevent pollution." This does not identify which mitigation measures specifically proposed in the Outline Operational Environmental Management Plan (oOEMP) [REP1-080] address the impacts identified. Update the ES to be more specific.</li> <li>2. Where residual effects are identified, the ES does not specify what the significance of effect is – the effects should not be reported as</li> </ol>	<ol style="list-style-type: none"> <li>1. For clarity the Applicant will update the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> so that it is completely clear that where an embedded or additional mitigation measure is identified where exactly in the <b>Outline CEMP [EN010158/APP/7.2.3]</b>, <b>Outline OEMP [EN010158/APP/7.3.3]</b> <b>Outline DEMP [EN010158/APP/7.4.3]</b> or <b>Outline LEMP [EN010158/APP/7.6.3]</b> the measure is secured. This update will be provided at Deadline 3.</li> <li>2. The biodiversity impact assessment has been carried out in accordance with CIEEM guidance (<a href="https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/">https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/</a>) which requires a clear statement as to whether an impact is significant or not and at what geographical scale. This is standard accepted practice in Ecological Impact Assessment (EclA). Whilst some EIAs include a 'translation' between CIEEM-derived assessment categories and terms used by other disciplines, in our view this is contrary to the aims of the CIEEM methodology which is ecology-specific and therefore more relevant/appropriate.</li> <li>3. Within <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> the <i>additional mitigation</i> measures are secondary to the <i>embedded mitigation</i> measures. The assessment of residual effects on ecological receptors has taken into account both the <i>embedded mitigation</i> measures and <i>additional</i></li> </ol>	

ExQ1 Ref	Question	Applicant's Response
	<p>just either 'significant' or 'not significant', but should be reported as, for example, negligible/ minor adverse/ moderate adverse/ major adverse, as well as whether the effect would be significant or not significant. Review and update the ES for both adverse and beneficial effects. This will assist the ExA to report the residual effects and offer appropriate weight to them in the planning balance.</p> <ol style="list-style-type: none"> <li>The assessment of residual effects appears to include additional mitigation measures in addition to those identified in the secondary mitigation measures. Update the assessment to include all mitigation measures.</li> <li>The conclusions on various 'not significant' effects are somewhat unclear. For example, paragraph 7.10.91 states that "There is not anticipated to be an adverse effect on cereal and non-cereal crops during operation (including maintenance), which is considered to be not significant" – the ExA queries whether this means that there an effect which is not significant, in which case it should be confirmed if this would be a negligible or minor adverse effect, or there would no adverse effects at all? Review all of the document and update similar statements for clarity.</li> <li>In terms of reporting effects during decommissioning, would any effects identified during construction also apply to the decommissioning phase?</li> <li>The ExA note your response to Action Point 3 from compulsory acquisition hearing 1 <a href="#">[REP1-107]</a>. However, the ExA seeks additional clarification in the ES regarding the extent of ecological mitigation, compensation and enhancements proposed – these are 3 distinct elements of the ES assessment which need to be understood and whilst the ExA accepts that the same parcel of land can provide more than one function, the ExA must have confidence that adequate mitigation or compensation is provided where effects have been identified. Enhancements should also be identified where they could be achieved.</li> </ol>	<p><i>mitigation</i> measures both of which were used to form the assessment undertaken to identify any residual impacts that could occur, with mitigation measures relied upon set out within <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>. This approach has been deemed acceptable for the consented Springwell and Byers Gill NSIP solar schemes.</p> <ol style="list-style-type: none"> <li>For the avoidance of doubt, the Applicant does not consider there would be any adverse effects on arable crops during the operational phase, nor for the other receptors where this has been stated within <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>. But as outlined above in point 2, the biodiversity impact assessment has been carried out in accordance with CIEEM guidance and to introduce terms such as negligible or minor adverse would render the impact assessment contrary to CIEEM guidelines.</li> <li>As outlined in <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> paragraph 7.10.146, effects arising from decommissioning are likely to be similar to those that arise during the construction phase. Impacts arising from decommissioning would be appropriately mitigated for in line with the <b>Outline DEMP [EN010158/APP/7.4.3]</b>.</li> <li>For this Proposed Development the Applicant does not consider biodiversity compensation measures are required. Where an effect on an ecological receptor has been identified specific mitigation measures have been identified. This is clearly set out in <b>Table 7.7</b> within the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> which identifies the mitigation measures embedded into the design, whilst additional mitigation measures are identified in <b>Section 7.9</b>. Finally, it is accepted that some <i>enhancement</i> will accrue as a result of the mitigation measures proposed, for example provision of cattle grazed grassland for foraging bats and ground nesting birds will likely result in a more diverse flora, a net biodiversity <i>enhancement</i> or <i>benefit</i>. All of the biodiversity <i>enhancement</i> accruing from the embedded and additional mitigation measures proposed have been captured within the <b>ES Volume 4, Appendix 7.17: Biodiversity Net Gain Assessment [EN010158/APP/6.4.2] [REP1-060]</b>, whilst mitigation measures are secured by the <b>Outline CEMP [EN010158/APP/7.2.3]</b>, <b>Outline OEMP [EN010158/APP/7.3.3]</b>, <b>Outline DEMP [EN010158/APP/7.4.3]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b>. Also note the response to point 1 above where the Applicant will make it clear for each mitigation measure identified in the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> where these measures are secured in the <b>Outline CEMP [EN010158/APP/7.2.3]</b>, <b>Outline OEMP [EN010158/APP/7.3.3]</b>, <b>Outline DEMP [EN010158/APP/7.4.3]</b> or <b>Outline LEMP [EN010158/APP/7.6.3]</b>.</li> </ol>
<p><b>Q1.7.8</b></p>	<p><b>Surveys of ground nesting birds</b></p> <p>Provide further justification for not surveying the cable corridor route, given its potential to support ground-nesting bird species, and outline how the ecological assessment remains robust and adequate in the absence of dedicated survey data for the cable corridor route. Clarify any assumptions made, evidence used to rule out potential impacts, and whether any additional survey, avoidance, or mitigation measures are required to address any gaps.</p>	<p>It is correct that only panel areas have been subject to breeding bird survey but, as outlined in <b>ES Volume 4, Appendix 7.4: Breeding Bird Survey Report (2022) (Confidential) [EN010158/APP/6.4] [APP-090]</b> and <b>ES Volume 4, Appendix 7.12: Breeding Bird Survey Report (2024) (Confidential) [EN010158/APP/6.4] [APP-098]</b>, a significant area has been subject to breeding bird survey over two years. As the Cable Corridors and other areas support identical habitat to areas that have been subject to breeding bird surveys, this gives confidence that the likely usage of these areas by breeding birds can be predicted and the Applicant has considered the same usage by birds as areas proposed for solar PV panels Survey of the Cable Corridors would therefore not change the conclusions reached in the ecological assessment. In any case, due to the temporary nature of the cabling works, no significant effects are envisaged as land would be returned to agricultural use and could continue to be utilised by breeding birds as currently. In addition, it should be noted that Natural England are in agreement with the biodiversity survey efforts and conclusions of</p>

ExQ1 Ref	Question	Applicant's Response
		<p>the assessment for protected species (excluding bats) (see <b>Draft Statement of Common Ground with Natural England [EN010158/APP/5.14] [REP1-025]</b>). The <b>Outline CEMP [EN010158/APP/7.2.3]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b> secure commitments to undertaking cabling works outside of the breeding bird season or, failing this, subjecting these areas to nesting bird checks undertaken by a suitably qualified ecologist to ensure legislative compliance regards nesting birds and to ensure no harm would occur to nesting birds, including ground nesting species. Finally the <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b>, <b>RR-020 page 288</b> outlines the suite of mitigation measures designed to benefit ground-nesting birds. These measures would be secured by the <b>Outline LEMP [EN010158/APP/7.6.3]</b> along with a monitoring programme.</p>
<p><b>Q1.7.9</b></p>	<p><b>Surveys of Bechstein's bats</b></p> <p>Provide a view on Natural England's position regarding the survey work for Bechstein's bats [RR-203, AS-038, REP1-124] – to what extent do you agree or disagree with this and why?</p>	<p>The Applicant has undertaken consultation with Natural England to agree the Zone of Influence (ZOI), survey study area extent and types of surveys required to inform the assessment for bats..</p> <p>During a meeting (11 March 2025), Natural England officers agreed that additional survey effort for bats would not be useful and that the Applicants data in combination with The Bernwood Population of Bechstein's Bats - A Non-Technical Summary of the Evidence report (Natural England, 2024) and additional information from HS2 (see <b>Draft Statement of Common Ground with Natural England [EN010158/APP/5.14] [REP1-025]</b>) is sufficient to inform the baseline.</p> <p>The Applicant would highlight that this area of the UK (and this population of Bechstein's bats) is one of the most studied, with almost continuous survey undertaken for HS2 stretching back years - from 2010 - and expected to continue for many more years to come (at least until 2039, potentially 2050).</p> <p>The Applicant acknowledges that the information provided in the <b>ES Volume 4, Appendix 7.10: Bat Activity Survey Report (2024) [EN010158/APP/6.4] [APP-096]</b> alone would not be sufficient to inform a robust assessment of the likely significant effects of the Proposed Development on foraging, commuting and roosting bats; however, this is only one document that has been used to inform the ES assessment and evaluation, as indicated above. This has enabled the Applicant to establish a robust baseline on which the ES assessment has been undertaken. The assessment has also been undertaken in accordance with the Bat Mitigation Guidelines<sup>1</sup> (lead-authored by the Technical Specialist advising the Applicant on bats). The Applicant's Technical Specialist is also the named ecologist on the HS2 licence for the Bernwood area, so has in-depth understanding of the use of this area by Bechstein's bats and other species.</p>
<p><b>Q1.7.10</b></p>	<p><b>Mitigation hierarchy - brown and black hairstreak butterfly</b></p> <p>Explain how you have appropriately applied the mitigation hierarchy regarding brown and black hairstreak butterflies.</p>	<p><b>Table 7.5</b> within the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> indicates how the mitigation hierarchy has been applied. As detailed within the <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b>, the presence of both black and brown hairstreak butterflies has been assumed within the Order Limits given the Blackthorn resource present. Appropriate mitigation to safeguard hairstreak butterflies by retaining woodland and the majority of hedgerows with substantial buffers will be implemented as detailed within <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>, and secured within the <b>Outline CEMP [EN010158/APP/7.2.3]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b>. The <b>Outline CEMP [EN010158/APP/7.2.3]</b> also makes a commitment to survey all hedgerow sections to be removed for hairstreak species so that the sections containing overwintering eggs</p>

<sup>1</sup> Reason, P.F. and Wray, S. (2025). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2*. Chartered Institute of Ecology and Environmental Management, Ampfield. <https://cieem.net/resource/uk-bat-mitigation-guidelines-2025/>

ExQ1 Ref	Question	Applicant's Response
Q1.7.11	<p><b>Mitigation hierarchy - Bechstein's bat roosts</b></p> <p>ES Chapter 7 [REP1-036] states that 3 trees with suitability to support maternity roosts would be removed to facilitate the Proposed Development. Why can't these trees be avoided?</p>	<p>and pupae can be safeguarded and translocated as required. Appropriate survey work will be outlined in the detailed Construction Environmental Management Plan, in consultation with relevant stakeholders. In addition, the <b>Outline LEMP [EN010158/APP/7.6.3]</b> includes habitat creation and enhancement measures that will be of benefit to hairstreak butterflies, with commitments for woodland, scrub and hedgerow planting that will include blackthorn.</p> <p>Given the known importance of the tree roost resource, the Applicant has worked to ensure that the design of the Proposed Development minimises potential tree loss. The predicted tree loss of three trees with <i>potential</i> to support maternity roosts is a worse-case scenario. Should an important tree roost be identified, such tree loss may be avoidable through micro-siting at construction stage (this would require balancing all relevant constraints, including those posed by other protected species as detailed within the <b>Outline CEMP [EN010158/APP/7.2.3]</b>.</p> <p>Note that Potential Roost Features (PRFs) are categorised as PRF-I (only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats) or PRF-M (suitable for multiple bats and may therefore be used by a maternity colony). However, this is a <i>structural</i> assessment that does not take into account location or context.</p> <p>Here, trees considered to pose a <i>risk</i> of supporting more important roosts on a <i>structural</i> basis only, i.e. those supporting PRF-M are all located to the north-east of Runts Wood. These are within the 3km CSZ of Bechstein's bats, but outside of their recorded home range (Natural England, 2024<sup>2</sup>); the risk of finding a maternity roost of Bechstein's bats in a tree to be removed is therefore low.</p> <p>The <b>Outline CEMP [EN010158/APP/7.2.3]</b> and the <b>Outline LEMP [EN010158/APP/7.6.3]</b> secure a commitment to pre-construction surveys of all trees to be removed. In the unlikely event that a maternity roost is identified and loss of the tree cannot be avoided through micro-siting (other than a Bechstein's bat or barbastelle roost where the intention would be to retain the roost as detailed within the <b>Outline CEMP [EN010158/APP/7.2.3]</b>); the supporting tree would be left <i>in situ</i> until a licence from Natural England is secured with appropriate compensation to mitigate for the loss of roost agreed.</p>
Q1.7.12	<p><b>Effects on Bechstein's bats</b></p> <p>ES Chapter 7 [REP1-036] describes effects on Bechstein's bats as being 'potentially significant', but that this would not equate to 'substantial harm'. Confirm the following:</p> <ol style="list-style-type: none"> <li>1. Whilst the ExA acknowledges the presented knowledge gaps regarding the effects of solar farms on Bechstein's bats as set out in ES Chapter 7, in accordance with paragraph 2.10.155 of NPS EN-3, environmental effects should be presented on a worst-case scenario basis. Update your assessment to provide a definitive</li> </ol>	<ol style="list-style-type: none"> <li>1. The Applicant proposes to retain the assessment as 'potentially significant' to reflect the uncertainty inherent in the current evidence base. While a detrimental effect of solar farms has been suggested for some bat species, the studies are largely short-term and the evidence limited; there are no longitudinal (i.e. before/after) studies of effects on well-designed, well-managed, established solar farms. Thus, the assessment of 'potentially significant' has been applied on a precautionary basis because the mechanism by which any negative effect might arise, and in which circumstances, is uncertain. Indeed, since the ES was published, at least one study (Szoldatits et al., 2025<sup>3</sup>) has found increased bat activity at ecovoltaic<sup>4</sup> solar sites (though not for all species in all seasons, and the study was undertaken in the US not in the UK). A critical review of relevant recent academic papers has been undertaken and is</li> </ol>

<sup>2</sup> Natural England (2024). The Bernwood population of Bechstein's Bats. A Non-Technical Summary (NECR558). Available online: <https://publications.naturalengland.org.uk/file/6128248514412544>

<sup>3</sup> Szoldatits, K. E., Walston, L. J., Hartmann, H. M., Fox, L., Stanger, M. E., Steele, S. E., Hogstrom, I., & Macknick, J. (2025). Bat activity at ecovoltaic solar energy developments in the Midwestern United States. *Global Ecology and Conservation*, 63, e03864. Available at: <https://doi.org/10.1016/j.gecco.2025.e03864>

<sup>4</sup> 'Ecovoltaic' sites co-prioritise electricity generation and ecosystem function to align renewable energy development with biodiversity conservation.

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- conclusion on the significance of effects for Bechstein's bats or provide further justification for the inclusion of 'potentially'.
2. Provide a more detailed explanation of the point that a significant effect would not result in substantial harm. Are you able to provide an example of a precedent for a similar example which has been accepted by the SoS?
  3. If the ExA or SoS were to determine that the effects on Bechstein's bats would equate to substantial harm, do you consider that benefits derived from the Proposed Development would outweigh such harm – justify your answer.
  4. Natural England identifies [\[RR-203, AS-038\]](#) the ecological value of field parcels B6, B7 and B8 and Buckinghamshire Council expresses concerns around field parcels B10, B11, D28 and D29 [\[RR-026, REP1-112\]](#). The ExA notes that you propose compensation measures to address the ecological value loss of these field parcels. Explain how you have applied the mitigation hierarchy to these areas and why avoidance measures are not considered appropriate to mitigate potential effects?

- provided at **Appendix 2** of this document. This review highlights the limitations to the methods used in each paper and other reasons for uncertainty.
2. It is worth noting that 'significance' for ecological receptors is determined at different geographic scales (from 'site' upwards) and not all levels of significance therefore equate to 'significant harm' to the conservation status of the species. As set out in Paragraph 7.10.133 of **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]**, there would be no 'significant harm' (either alone or cumulatively). This is because the impacts, predicted on a precautionary basis only, are unlikely to result in an effect at a sufficient scale to adversely change the current conservation status of the species in the longer term. The Proposed Development design and mitigation has focused on protecting and enhancing the foraging and commuting habitat for Bechstein's bats such that, even if bats are discouraged (to a limited extent) from foraging by the placing of solar PV modules via a mechanism that is not currently understood, the mitigation proposed provides alternate areas for foraging of a better quality/ linked by substantial flightlines along hedgerows and woodlands that are protected with appropriate buffers wide enough to exceed the echolocation range of Bechstein's bat. In the Applicant's view, and as presented through the **Planning Statement [EN010158/APP/5.7.3] [REP1-016]**, Paragraphs 5.4.42 and 5.4.43 of NPS EN-1 (2023) establish the policy compliance threshold which is that concluding whether or not 'significant harm' is to arise on biodiversity interest is the basis from which policy compliance ought to be drawn. The Proposed Development demonstrates compliance with these policy tests by concluding no 'significant harm' and this provides the favourable basis from which the Secretary of State is to consider the worst-case effects, in accordance with Paragraph 2.10.155 of NPS EN-3 (2023). **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]** and **ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]** both confirm that identified potentially significant effects do not amount to 'significant harm'. For the reasons outlined above, even if bats are discouraged from foraging (to a limited extent) by the placing of solar PV modules in some areas (which the Applicant believes is unlikely), it is concluded that level of displacement would not result in significant harm, given their current status of the land on which panels would stand (arable), and its lower value to bats.

With regard to precedent, firstly, in according to CIEEM guidelines (as noted above), 'significance' is assigned at different geographic scales, not all of which would equate to 'significant harm'. There are also precedents on similar projects, but for other disciplines, that have been accepted by the Secretary of State. On the Cottom Solar Farm Project decision, the Secretary of State accepted that heritage impacts on Thorpe constituted less than substantial harm despite the effect being considered as moderate adverse and significant in EIA terms. The Applicant and Historic England agreed that the resulting effect would amount to less than substantial harm, assessed as moderate adverse and significant in EIA terms, a conclusion which the Examining Authority agreed with. The Secretary of State accepted this assessment and concluded that the harm was outweighed by the public benefits of the scheme. The Applicant believes this is also the case here.

In answering this question, the Applicant considers that the intention of the ExA by referring to "substantial harm" was to mean "significant harm" in accordance with Paragraphs 5.4.42 and 5.4.43 of NPS EN-1 (2023). The Applicant also considers that the correct policy test in this context would be equating to a significant harm to the conservation status of Bechstein's bats in accordance **with ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]**.

  - 3. The Applicant's position is yes - were the ExA or SoS to determine that the effects on Bechstein's bats equated to significant harm, the Applicant is confident that such revision would not tilt the balance

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against the grant of consent. This view is concluded on review of NPS EN-1 (2023), specifically Paragraph 5.4.43, which states that “if significant harm to biodiversity resulting from a development cannot be avoided (for example through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then the Secretary of State will give significant weight to any residual harm”. In this theoretical case, the significant weighting afforded to this negative effect is recognised but the Applicant notes that the ExA and ultimately the SoS would need to weigh this increased negative weighting against the overwhelming support that is afforded to the Proposed Development’s Critical National Priority nature, for which there is an established urgent need, for which “substantial” weight must be afforded. Furthermore, the planning policy afforded to the Proposed Development by virtue of it being of a Critical National Priority is not disapplied under the exceptions listed under Paragraph 4.2.15 of NPS EN-1 (2023) should significant harm be concluded (as none of those exceptions apply). This is further clarified in Paragraph 3.3.63 of NPS EN-1 (2023) which states that “subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible” (our emphasis). Were the ExA or SoS minded to conclude significant harm, the Applicant is confident of its exhaustive application of the mitigation hierarchy. As noted in **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]** the significant effect has been identified as the impact of solar farms on bat species are not well understood at present, with limited research available on which to build a common consensus. This means there is not a clear point at which any reduction in function, beyond what has been captured in the Proposed Development’s design, would remove such a potentially significant effect. The Applicant concludes that the Proposed Development would remain compliant with Paragraph 3.3.63 of NPS EN-1 (2023) and so the SoS should be minded to grant consent.

4. Table 7.5 within the **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]** indicates how the mitigation hierarchy has been applied; principally by avoiding all woodland habitat and the majority of hedgerows and individual trees, with substantial buffers to these retained features.

Setbacks from hedgerows specifically within Fields B6, B7, B8 and B10 that link Shrubs Wood, Sheephouse Wood and Decoypond Wood have been increased to 15m (with the additional 5m from security fence to Solar PV panels (this means that gaps between panels in these adjacent fields is 40m, i.e. 20m either side of these hedgerows). This approach was adopted following consultation with Natural England, recognising that these hedgerows provide key routes for commuting and foraging bats. 30m offset from Shrubs Wood, Sheephouse Wood and Decoypond Wood are proposed for the same reasons.

An offset at least 30m from existing woodland and hedgerows located along the boundaries of Field D29 and in part of Field D28 is also proposed, as it is recognised these fields provide a key link between Finemere Wood and Runts Wood. Within the Fields B6, B7, B8 and B10 buffers, a mosaic of grassland and scrub is proposed, along with strengthening the existing hedgerows to provide a wide corridor link between these woodlands. Within the Field D29 and D28 buffers, additional woodland planting is proposed to strengthen the corridor between Finemere Wood and Runts Wood. These measures are proposed to help reduce potential displacement effects from Solar PV development to foraging and

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		<p>commuting bats and ensure the connectivity between these woodlands is maintained, secured via the <b>Outline LEMP [EN010158/APP/7.6.3]</b>.</p> <p>It is worth noting here that, for most fields under current management, the invertebrate biomass will be relatively low due to standard agricultural practices, offering limited value to foraging bats. The grassland habitat proposed for the siting of Solar PV modules would be replaced by more than twice as much grassland, of greater value.</p>
<p><b>Q1.7.13</b></p>	<p><b>Barbastelle bats - effects</b></p> <p>Provide further justification for the conclusion of no likely significant effects on barbastelle bats when a long-term permanent effect on this district level species has been identified.</p>	<p>The impacts from operation (including maintenance) of the Proposed Development are assessed as being <i>potentially</i> adverse, long-term and permanent with respect to barbastelle for the same reason as for Bechstein's bat, i.e. on a precautionary basis (see response to Q1.7.7). However, barbastelles have a much larger CSZ than Bechstein's bat (of which the Proposed Development comprises a small percentage) and as yet there is no evidence of a breeding population of this species (from HS2 trapping and bat-box data (P. Reason, pers. comm.)).</p>
<p><b>Q1.7.14</b></p>	<p><b>Ground nesting birds – effects</b></p> <p>Given the extent of habitat loss within the proposed solar array area and the sensitivity of species such as skylark, provide the evidence base and justification that supports the conclusion of a long-term beneficial effect on ground nesting birds at a local level identified in ES Chapter 7 <a href="#">[REP1-036]</a>.</p>	<p>The Applicant has based the mitigation requirement on the number of birds observed. As presented in the <b>Outline LEMP [EN010158/APP/7.6.3] Paragraphs 4.5.22 to 4.5.25</b>, it is estimated that there were 67 skylark territories (used as a proxy for all ground-nesting species as they were the most abundant species and sufficient quantum of mitigation for skylark would likely accommodate other species requirements as well) across the area subject to breeding bird survey (473ha) at an average density of 0.14 territories per ha. The actual area where ground nesting birds will be displaced by solar PV modules is only 279 ha and it is estimated that this area supports 39 breeding pairs (0.14 x 279). Therefore, mitigation is based on the requirement to mitigate for 39 breeding pairs. It is considered that, with appropriate management, the carrying capacity of the areas set aside for ground-nesting bird mitigation (95ha) would support a greater carrying capacity of nesting pairs than the current arable farmland. Areas such as the Cable Corridor will only be subject to short-term temporary effects before being returned to arable farmland and, as such, birds could continue to use the arable farmland as nesting habitat as they currently do. Finally, as indicated in the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, provision of ground-nesting habitat is only one of a suite of measures designed to benefit nesting birds, others of which include increasing the availability of insect prey during the summer months as well as provision of a source of winter seed.</p> <p>Evidence presented by the RSPB<sup>5</sup> has shown that solar schemes designed with biodiversity in mind can support a greater diversity of breeding birds than a typical arable and modified grassland landscape. In addition, a very recent paper<sup>6</sup> has shown that ground-nesting corn bunting are foraging under panels including commuting to forage within the solar park from adjacent habitat. So, although corn bunting is not present within the Proposed Development's Order Limits, it does suggest that the wider suite of measures in the <b>Outline LEMP [EN010158/APP/7.6.3]</b> will be effective at providing a foraging resource for ground-nesting birds in the vicinity, increasing the carrying capacity locally.</p>
<p><b>Q1.7.15</b></p>	<p><b>Habitat Fragmentation</b></p>	<p>As indicated above (Q7.1.11) <b>Table 7.5</b> within the <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b> indicates how the mitigation hierarchy has been applied. As detailed within the</p>

<sup>5</sup> Solar farm management influences breeding bird responses in an arable dominated landscape. Joshua P Coping et al, Bird Study 2025, Vol 2.No 3, 217222. Paper by RSPB and Cambridge University.

<sup>6</sup> Observations on the use of a solar park by Corn Buntings in Siouthern England. British birds 2026 Vol.119: pages 208-207.

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<p>Buckinghamshire Council identify <a href="#">[REP1-112]</a> that the Proposed Development would result in the loss of 2,060m of hedgerow, with up to 1,310m anticipated to be a permanent loss. The ExA notes that the applicant proposes <a href="#">[PDA-006]</a> 4.17km of new and reinstated hedgerow planting. However, whilst this new and replacement hedgerow planting is establishing, to what extent would this provide sufficient habitat to support species such as black and brown hairstreak butterflies to mitigate the loss of habitat for species affected by their loss? Clarify how long all proposed habitat replacements would take to be effective.</p>	<p><b>Applicant's Response to Relevant Representations <a href="#">[EN010158/APP/8.3]</a> <a href="#">[PDA-006]</a></b>, the presence of both black and brown hairstreak butterflies has been assumed within the Order Limits given the Blackthorn resource present and appropriate mitigation to safeguard hairstreak butterflies by retaining woodland and the majority of hedgerows with substantial buffers and habitat creation and enhancement measures that will be of benefit to hairstreak butterflies, through woodland, scrub and hedgerow planting that will include blackthorn as detailed within the <b>Outline LEMP <a href="#">[EN010158/APP/7.6.3]</a></b>. The <b>Outline CEMP <a href="#">[EN010158/APP/7.2.3]</a></b> also makes a commitment to survey all hedgerow sections to be removed for hairstreak species so that the sections containing overwintering eggs and pupae can be safeguarded and translocated as required. Appropriate survey work will be included in the detailed Construction Environmental Management Plan, in consultation with relevant stakeholders. A technical note produced by Butterfly Conservation<sup>7</sup> suggest that although they can lay on young blackthorn (2-3 years old) the species prefers to use stands of blackthorn 3-4m in height at an age of 7-10 years old, and this is the age at which any new planting is therefore likely to be become used by this species.</p> <p>However, it should be recognised that all the woodland blackthorn resource is retained along with the majority of hedgerows and that hedgerow management will be relaxed to allow dense blackthorn to develop from existing hedgerows along the retained buffers which will likely increase the extent of blackthorn habitat available in a shorter period 2-3 years whilst new planting matures.</p>
<p><b>Q1.7.16 Proposed grassland</b></p> <p>In your response to the relevant representations <a href="#">[PDA-006]</a>, you refer to the provision of 93 hectares of open grassland. However, the Commitments Register <a href="#">[REP1-076]</a> states that there would be the "Creation of 95 ha of species-rich neutral grassland" (commitment 67):</p> <ol style="list-style-type: none"> <li>1. Confirm which amount of grassland is correct and to what extent the proposed grazing land would provide mitigation, how much would provide compensation and what proportion would provide enhancements for each species it is intended to support.</li> <li>2. The ExA note that the Outline Landscape and Ecological Management Plan (oLEMP) <a href="#">[REP1-086]</a> refers to grazing by cattle or sheep 'if possible'. The ExA queries how grazing would be controlled during operation to ensure that any benefits derived from it (such as those as set out in the Bat Technical Study <a href="#">[REP1-105]</a>) would take place – for example, would there need to be a minimum number of cattle or sheep grazed across an area across a year for a minimum amount of time to deliver the associated benefits and how would this be controlled?</li> <li>3. Explain to what extent you rely on the benefits from grazed areas of grassland. If grazing of grassland during operation of the Proposed Development cannot be controlled, then to what extent can any benefits from grazing be offered weight?</li> </ol>	<ol style="list-style-type: none"> <li>1. 95ha is the correct area of grassland, 93 ha was a typographical error. The 95ha of grassland is being provided as both mitigation for loss of open-ground foraging for bat species and open-ground nesting habitat for ground nesting birds. As bats and birds use foraging habitats at different times (diurnal/nocturnal, so different invertebrate resource), the Applicant is confident that 95ha is available for both species groups. This represents a doubling of the grassland area currently available within the Order Limits used by these species, and an improvement in its quality, leading to a higher invertebrate biomass and subsequent foraging resource. As stated in response to Q.1.7.8, The <b>ES Volume 2, Chapter 7: Biodiversity <a href="#">[EN010158/APP/6.2.3]</a></b> has clearly articulated the difference between mitigation and enhancement measures with enhancement measures being largely confined to measures within the fields containing solar panels.</li> <li>2. It is the Applicant's intention to manage grassland through grazing in the first instance (although this management method cannot be confirmed yet at this stage in case of uncontrollable reasons such as biosecurity risks including TB outbreaks or other diseases that affect cattle or sheep), and initial discussions have already taken place with regards tenants who may be willing to provide either sheep or cattle grazing. The exact final grazing regime including proposed livestock stocking densities would be detailed and secured by the detailed Landscape and Ecological Management Plan but is likely to be low numbers of sheep under Solar PV modules moved regularly and low numbers of cattle again moved regularly on grassland areas without Solar PV modules.</li> <li>3. The Applicant recognises that there are some benefits from grazing particularly for foraging bat species. The Applicant is not relying on grazing to deliver effective mitigation but, as indicated under Point 2, discussions have taken place. The Applicant is in agreement that open non-woodland habitats are</li> </ol>

<sup>7</sup> chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://butterfly-conservation.org/sites/default/files/black-hairstreak-regional-priority-species-factsheet.pdf

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	<p>4. The ExA also notes that the oLEMP [REP1-086] states that “The neutral grassland will be managed either through grazing or a hay cut late in the summer after ground nesting birds have fledged.” Would there be the same level of mitigation/ compensation/ enhancements provided if the grassland is used for hay-making, rather than cattle grazing? If not, provide justification for your approach in the context of the above questions.</p> <p>(also see questions Q1.4.2 and Q1.18.4)</p>	<p>important for Bechstein’s bats, but it should be noted the results of faecal DNA analysis have so far shown that the majority of Bechstein’s bats invertebrate prey species are associated with woodland habitats (69.4% - 74%), as expected given Bechstein’s bats strong association with woodland habitat<sup>8</sup>. Hence, as outlined within the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, the Applicant has identified areas for the creation of grassland without Solar PV modules linked by commuting corridors comprising wide buffers around hedgerows and woodland to enable bats to move around the landscape and find open areas to forage. The mitigation has been designed on a landscape-scale ensuring that commuting is protected and foraging is improved compared to the current situation. It should also be noted that large parts of the Order Limits, such as the Cable Corridors will be returned to arable farmland following short-term temporary disruption (with mitigation measures provided within the <b>Outline CEMP [EN010158/APP/7.2.3]</b> to offset these temporary impacts) and will also be available for bats to use for foraging as they do currently. It is considered that, in the absence of grazing, habitat creation both under Solar PV modules and within dedicated mitigation areas (95ha) will provide suitable foraging for both bats and ground-nesting birds, as the alternative to grassland management via grazing would be through a cutting regime designed to maximise flora diversity and subsequently invertebrate biomass. Therefore, whilst some weight should be attached to the securing of grazing, the Applicant considers mitigation would still be effective in the absence of grazing in case circumstances beyond the Applicant’s control mean that grazing is not possible and a cutting regime is used instead.</p> <p>4. As indicated in Point 3, whilst low-intensity grazing with low numbers of stock has some advantages with regards foraging bats, and may benefit breeding birds slightly, for ground-nesting birds, there is no material difference between a late summer hay cut and low intensity cattle grazing. The habitat creation measures detailed in the <b>Outline LEMP [EN010158/APP/7.6.3]</b> would provide an increase in insect availability with or without grazing. For bats, there is some evidence that bats can benefit from the presence of cattle (even where non-organic), but data from HS2 for at least one grazed field (Rosefield Field B7) does not show extensive use (from HS2 2018 data made available to Natural England; P. Reason, pers. comm.).</p>
<p><b>Q1.7.17</b></p>	<p><b>Proposed grassland</b></p> <p>The oLEMP [REP1-086] includes calculations to deliver approximately 95 hectares of grassland intended to provide open nesting habitat for ground-nesting birds, as compensation for habitat lost due to the placement of the solar photovoltaic modules. The calculation appears to consider only the footprint of the solar photovoltaic modules when assessing habitat loss.</p> <p>Explain:</p> <ol style="list-style-type: none"> <li>1. why the assessment of habitat loss has been restricted solely to the area occupied by the solar photovoltaic modules</li> <li>2. whether other infrastructure—such as access roads, cable routes, inverter/ transformer stations, fencing, substations, construction compounds, and areas subject to shading or disturbance—have</li> </ol>	<ol style="list-style-type: none"> <li>1. The calculation has been amended to include all permanent habitat loss (e.g. to accommodate Substation and BESS, access routes), as well as the area of Solar PV modules, see the answer to point 3 for more details. As well as the 279ha allocated to Solar PV development, there is an additional estimated 35.72ha of land that will be permanently lost (314.72ha in total) As presented in the <b>Outline LEMP [EN010158/APP/7.6.3] paragraphs 5.5.22 to 4.5.25</b>, it is estimated that there were 67 skylark territories (used as a proxy for all ground-nesting species) across the area subject to breeding bird survey (473ha) but the actual area where ground-nesting birds will be displaced by Solar PV modules is only 279ha and it is estimated that this area supports 39 breeding pairs. Therefore, mitigation is based on the requirement to mitigate for 39 breeding pairs. Using the same average density of territories per ha as was used for the original estimate (0.14) x 314.72 equates to 44 territories that would need to be compensated for due to habitat loss or modification, see also point 3 below.</li> <li>2. Other habitat loss associated with permanent infrastructure (e.g. Substation and BESS, access routes) has been added to the calculation of overall permanent habitat loss (314.72ha in total).</li> </ol>

<sup>8</sup> Natural England (2024). The Bernwood population of Bechstein's Bats. A Non-Technical Summary (NECR558). Available online: <https://publications.naturalengland.org.uk/file/6128248514412544>

ExQ1 Ref	Question	Applicant's Response
	<p>been considered in calculating the extent of habitat loss for ground-nesting birds</p> <p>3. and, if these elements were excluded, how the calculation can be considered robust given the potential for additional habitat loss, fragmentation, disturbance, or displacement arising from these features</p> <p>Provide justification, supporting evidence, and any recalculated figures if other infrastructure components materially affect the assessment.</p>	<p>3. Even when considering other permanent habitat loss, it is still considered that the 95ha of mitigation will deliver sufficient area and the estimate of the quantum of mitigation is robust. It is considered that, with appropriate management, the carrying capacity of the areas set aside for ground-nesting bird mitigation (95ha) would support a greater carrying capacity of nesting pairs than the current arable farmland at an average 0.14 territories per ha. (Donald 2004<sup>9</sup>) suggests up to 0.56 skylark territories per ha for set aside (grassland creation essentially) so 95ha of mitigation could potentially accommodate 169 skylark territories (95 divided by 0.57). So, the 95ha of mitigation is oversized to accommodate more than just the displacement from the Solar PV development and also account for any existing baseline population. The Applicant has considered that temporary impacts such as Cable Corridors will not require dedicated mitigation as only a small part of each field is affected and these areas will be returned to agriculture following construction and could then be used by ground-nesting birds as currently.</p> <p>Finally, as indicated in the <b>Outline LEMP [EN010158/APP/7.6.3]</b> provision of ground-nesting habitat is only one of a suite of measures designed to benefit nesting birds which include increasing the availability of insect prey during the summer months as well as provision of a source of winter seed; these measures will also help to increase the carrying capacity of ground-nesting birds in the local environment. Evidence presented by the RSPB<sup>10</sup> has shown that solar schemes designed with biodiversity in mind can support a greater diversity of breeding birds than a typical arable and modified grassland landscape. In addition, a very recent paper<sup>11</sup> has shown that ground-nesting corn bunting are foraging under panels including commuting to forage within the solar park from adjacent habitat. So, although corn bunting is not present within the Proposed Developments Order Limits, this does suggest that the wider suite of measures in the <b>Outline LEMP [EN010158/APP/7.6.3]</b> will be effective at providing a foraging resource for ground-nesting birds in the vicinity increasing the carrying capacity locally reducing potential for residual effects.</p>
<p><b>Q1.7.18</b></p>	<p><b>Mitigation - hedgerow buffers</b></p> <p>Natural England recommends [REP1-124] that hedgerow buffer mitigation for bat commuting routes and foraging areas is created based on measuring from the edge of existing hedgerows in line with the precautionary principle, so that the mitigation buffer is wholly additional to the feature itself. Natural England advises that the existing material ecological baseline is maintained, and that the buffer expands upon this, otherwise there would be diminishing returns with the size of the buffers. However, the ExA notes that you have measured the buffer distance from the central point of hedgerow rather than the edge of the receptor. Whilst the ExA acknowledges that the outer extent of the habitat may fluctuate over time due to management practices, a precautionary worst-case scenario should be applied when defining and measuring buffer distances for mitigation purposes. Explain therefore, how a worst-case scenario has been accounted for when applying an approach that measures the buffer from the central point of the affected receptor rather than from its precautionary outer edge?</p>	<p>A response has previously been provided within the <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b> and secured within the <b>Design Commitments [EN010158/APP/5.9.4]</b>. In making their request, Natural England has not taken into account that there is an additional 5m from the security fence to the first set of Solar PV modules.</p> <p>Measurements for hedgerow buffers are taken from hedgerow centrelines with the measurement being offset either side from centre line of hedgerows within the Order Limits. This is the most consistent and accurate way to measure buffers (as well as being realistic/achievable on-site).</p> <p>The 'worst-case scenario' is not applicable here, as there is no outer/upper limit for a hedgerow width; an outgrown hedgerow would simply become an area of impenetrable scrub. However, there is an additional 5m between the security fence and first row of Solar PV modules, which will be managed (as will the rest of the field supporting Solar PV modules) to benefit biodiversity and that 5m distance is greater than the maximum likely width of an unmanaged hedgerow. Management to benefit biodiversity means sown to grassland and (where achievable) lightly grazed.</p> <p>The proposed buffer zones are considered adequate to maintain connectivity (given they exceed the echolocation detection range of short- to mid-range echolocating bats (including Bechstein's bats) specifically</p>

<sup>9</sup> Donald P.E, (2004) The Skylark, Poyser , London.d

<sup>10</sup> Solar farm management influences breeding bird responses in an arable dominated landscape. Joshua P Coping et al, Bird Study 2025, Vol 2.No 3, 217222. Paper by RSPB and Cambridge University.

<sup>11</sup> Observations on the use of a solar park by Corn Buntings in Siouthern England. British birds 2026 Vol.119: pages 208-207.

ExQ1 Ref Question	Applicant's Response
<p><b>Q1.7.19 Mitigation – nesting birds</b></p> <p>The oOEMP [REP1-080] states that vegetation clearance would avoid the nesting bird season or would be checked for the presence of any nests by a suitably experienced ecologist within 48 hours prior to vegetation removal or ground clearance. Why would vegetation clearance be required during operation of the Proposed Development?</p>	<p>to minimise the risk of displacement. The Applicant considers this to be a more important measurement as opposed to a measurement from the outer edge of a hedge.</p> <p>There will be a requirement for some vegetation management during the operational life of the Proposed Development. For example, it is proposed that buffers between the infrastructure and adjacent habitat support a mosaic of scrub and rough grassland, some management will be required to maintain the buffers during the operational life, but this does not imply large-scale vegetation clearance. Therefore this provision in the <b>Outline OEMP [EN010158/APP/7.3.3]</b> is simply a reflection that species such as nesting birds and hairstreak butterflies for example need to be taken into account during any operational management and maintenance.</p>
<p><b>Q1.7.20 Mitigation – nesting birds</b></p> <p>ES Chapter 7 [REP1-036] states that once habitats for nesting birds are established during operation, the Proposed Development would be able to deliver a net gain in habitats required to support a diverse breeding farmland bird assemblage of ground nesting birds similar to that currently present. How long would it take for habitats to be established to support the current assemblage of ground nesting birds?</p>	<p>The estimated time to reach habitat condition to deliver numerical Biodiversity Net Gain (BNG) is slightly different from the time when created habitat will be suitable for use by ground-nesting birds. <b>ES Volume 4, Appendix 7.17: Biodiversity Net Gain Assessment [EN010158/APP/6.4.2] [REP1-060]</b> estimates between 5 to 10 years for other neutral grassland to reach full numerical BNG condition value, depending on the final condition assumed. However, ground-nesting birds such as skylark are adapted to utilising arable cropping on an annual basis, often nesting in crops sown the previous autumn. Therefore, it is estimated that birds will start to make use of mitigation areas in the first spring after autumn sowing and more regularly once grassland is fully established after 1-2 years (although not yet reaching full numerical BNG condition). It is intended that habitat creation will occur in advance of construction works where reasonably practicable, so mitigation is available at the start of construction (see <b>paragraphs 4.3.12 - 4.3.15</b> within the <b>Outline LEMP [EN010158/APP/7.6.3]</b>).</p>
<p><b>Q1.7.21 Monitoring</b></p> <p>ES Chapter 7 confirms [REP1-036] confirms that management and monitoring of mitigation habitats would be required for a period of 30 years. Why is this not proposed for the lifetime of the Proposed Development?</p>	<p>Yes, <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3] paragraph 7.9.46</b> states: <i>Appropriate management and monitoring of mitigation habitats would be required for a period of 30 years (as required by the Environment Act 2021 [Ref. 7-4]) to ensure successful establishment and condition. The habitat management and monitoring regime is detailed in and secured by the Outline LEMP [EN010158/APP/7.6]. This includes management of ecological mitigation areas, hedgerows, grassland, field margins, watercourses and treatments under Solar PV modules, but then paragraph 7.9.47 continues: As the operational life of the Proposed Development is 40 years, the Outline LEMP [EN010158/APP/7.6] will be reviewed during the 30 year period to ensure the management prescriptions are still appropriate.</i> Therefore, the intention is to carry out appropriate habitat management of mitigation habitats for the full 40-year operational life but giving the Applicant the opportunity to review the management prescriptions after 30 years.</p>
<p><b>Q1.7.22 Monitoring</b></p> <p><b>The applicant:</b></p> <ol style="list-style-type: none"> <li>The oOEMP [REP1-080] refers to the need for monitoring of bat activity during the operation of the Proposed Development. The oLEMP [REP1-086] provides more information on the requirements for a bat monitoring strategy. Whilst oLEMP states that this would be developed in consultation with Natural England, it does not require their agreement, nor does it require that Buckinghamshire Council or the BBOWT are party to its agreement – why is this?</li> </ol>	<ol style="list-style-type: none"> <li>As stated within <b>Applicant's Response to Relevant Representations [EN010158/APP/8.3] [PDA-006]</b>, the Applicant has committed within the <b>Outline LEMP [EN010158/APP/7.6.3]</b> to a detailed post-construction monitoring programme. The Applicant envisages that as the monitoring strategy will be presented in the detailed Landscape and Ecological Management Plan, the Applicant would consult with Natural England, and the detailed Landscape and Ecological Management Plan will be submitted to and approved by the relevant planning authority.</li> <li>Comment is noted.</li> </ol>

ExQ1 Ref Question	Applicant's Response
<p>2. The oLEMP refers to a monitoring report which would be produced following bat surveys at year 1, 3, 5 and 10 of operation, and would detail any actions or adaptive management practices required where appropriate, which would be actioned before the next monitoring survey visit where possible.</p> <p>3. Who would review the monitoring report?</p> <p>4. If it were found that the existing mitigation measures were not effective, what additional measures could be put in place to mitigate the effects and who would agree that they are suitable?</p> <p>5. The aforementioned wording of the oLEMP suggests that implementing additional mitigation measures between surveys may not be possible. Why would it not be possible to implement additional measures given that the surveys are proposed a number of years apart?</p> <p>6. The ExA also notes that Buckinghamshire Council suggest <a href="#">[REP1-112]</a> that a more comprehensive monitoring programme in the form of a detailed research project is required for the Proposed Development. Is this something which you would be prepared to accommodate? If not, why not?</p>	<p>3. It is envisaged that the bat monitoring report would be reviewed by the stakeholders involved in the preparation of the monitoring strategy which is set-out within the <b>Outline LEMP [EN010158/APP/7.6.3]</b>; namely Natural England, BBOWT and the relevant planning authority.</p> <p>4. The structure of the monitoring strategy will follow that outlined in Ch9 of the Bat Mitigation Guidelines<sup>12</sup>; this requires meaningful, objective, specific tests of those objectives and remedial actions to be specified. Such remedial actions will depend on which tests are not being met; the reasons why those test(s) are not met; and whether or not those reasons are within the applicants control. This could include measures such as refining habitat management to deliver more invertebrate biomass to increase prey availability. Such measures would be agreed in consultation with Natural England and the relevant planning authority.</p> <p>5. <b>Paragraph 6.2.8</b> of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> indicates that implementation of mitigation measures between surveys will be undertaken where possible. However, depending upon the type of effect apparent, there might be a requirement to review the monitoring data in more detail (for example, against HS2 data, or against national population trends to fully ascertain the root cause and agree appropriate mitigation) and this may delay the delivery of revised mitigation measures. It will be important that any additional measures are specific and appropriate to the need, as identified in Point 4.</p> <p>6. The Applicant is fully prepared to discuss wider research and indeed EDF is currently sponsoring a number of PhDs in relation solar farms and biodiversity. It is also worth noting that such a long-term study is already taking place through the requirements of the HS2 Bernwood bat licence, and that techniques such as radio-tracking do not need to be duplicated by the Applicant (for example, trapping bats in the same woods).</p>
<p><b>Q1.7.23 Survey data</b></p> <p>Ground-derived data and drone survey data have been used to establish the arboricultural baseline <a href="#">[APP-099]</a>. Provide a brief methodology note explaining how the 2 datasets were captured, processed, and integrated, and how you have assured positional and attribute accuracy in line with relevant technical guidance. In particular, outline the accuracy tolerances, any limitations, and how conflicts or gaps between the datasets were resolved.</p>	<p>Drone-derived topographic data was captured using a UAV platform following a structured survey process. Ground Control Points (GCPs) were first established across the Site using GPS-RTK equipment, arranged on an approximate grid to ensure high positional accuracy. These GCPs were physically marked and recorded to provide precise reference points.</p> <p>Aerial data was then collected through planned UAV flights at approximately 120m altitude, achieving a ground sampling resolution of approximately 6cm per pixel. All imagery was georeferenced using onboard GPS, recording latitude, longitude, and elevation.</p> <p>Post-processing involved:</p> <ul style="list-style-type: none"> <li>• Alignment of images using GPS data and identification of tie points between overlapping photographs;</li> <li>• Georeferencing using GCPs, allowing each pixel to be accurately positioned in real-world coordinates;</li> <li>• Generation of a dense 3D point cloud from overlapping imagery;</li> <li>• Production of outputs including an orthomosaic (2D) and Digital Elevation Model (DEM).</li> </ul>

<sup>12</sup> Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

ExQ1 Ref	Question	Applicant's Response
		<p>The resulting dataset achieves an accuracy of approximately <math>\pm 6</math> cm in plan (X,Y) and <math>\pm 9</math> cm in elevation (Z). It is noted that drone photogrammetry produces a surface model, meaning areas obscured by vegetation (e.g. tree canopies) represent the top of vegetation rather than true ground levels.</p> <p>By using a high density of ground control points, the drone survey delivers survey-grade mapping for the Proposed Development, this provides a far finer data resolution (around 3cm/pixel) than a typical ground topographical survey (often 5–10m between points), the drone survey offers a robust and reliable baseline for the arboricultural assessment.</p> <p>The arboricultural baseline was established through the integration of drone-derived topographical data and a ground-based arboricultural survey. A detailed tree survey was undertaken on foot by a qualified arboricultural consultant, in accordance with BS 5837:2012 and applying Visual Tree Assessment (VTA) principles. This included the collection of tree-specific data such as species, height, stem diameter, crown spread, condition, age class, and categorisation. The drone-derived dataset was used as a base mapping layer within a CAD software. Tree positions and features were verified and refined on site during the ground survey with the aid of a GPS Trimble device, with the arboricultural consultant aligning recorded features to the base plan using identifiable physical references. All arboricultural attributes were derived from site observations, with drone data used solely to support spatial accuracy and coverage. Ground-based measurements were undertaken using standard arboricultural tools and estimation techniques consistent with BS 5837:2012. Root Protection Areas (RPAs) were calculated using measured stem diameters in accordance with the Standard.</p> <p>In some areas, dense vegetation, or restricted access limited direct measurement; in such cases, professional judgement and visual estimation were applied. Drone data does not provide detailed structural or physiological condition, stem diameters or crown dimensions which is reliant on ground-based assessment. Whilst drone data provides a useful representation of canopy extent, it does not always accurately capture the true spread or asymmetry of individual tree crowns, particularly where trees are influenced by competition, prevailing winds, or management (e.g. hedgerow trees). Accordingly, crown spread measurements were taken on site during the ground-based survey, typically in four cardinal directions, in accordance with BS 5837:2012.</p> <p>All arboricultural features were ground-truthed, ensuring no reliance on aerial data alone. Where discrepancies arose between datasets (e.g. canopy extent or feature classification), these were resolved in favour of site-based observations. Any gaps in data were addressed through site verification and professional interpretation, ensuring a complete and coherent dataset.</p>
<p><b>Q1.7.24</b></p>	<p><b>Survey methodology</b></p> <p>Paragraph 4.24 of the Arboricultural Impact Assessment <a href="#">[APP-099]</a> states that there are numerous large woodlands recorded. However, only ancient semi-natural woodland is noted in the data tables in the assessment. Explain the methodology used to classify woodland, including the classification criteria applied to distinguish woodland parcels from tree groups.</p>	<p>Trees have been recorded as individuals (prefix T) or as groups (prefix G) within the survey data tables. BS 5837:2012 defines a group as: “trees that form cohesive arboricultural features either aerodynamically (e.g. shelter), visually (e.g. avenues or screens) or culturally including for biodiversity (e.g. woodlands, parkland or wood pasture)”.</p> <p>The field survey followed these definitions, with groups identified based on cohesive function and structure observed on site and supported by descriptive notes within the survey data tables outlining their composition and characteristics.</p> <p>The term woodland has been applied more broadly within the tree data table to describe tree-dominated habitats with a continuous or near-continuous canopy, typically of a larger scale (generally exceeding</p>

ExQ1 Ref	Question	Applicant's Response
		<p>approximately 5,000m<sup>2</sup> and 20m in width), and exhibiting characteristics distinct from linear or fragmented tree features such as hedgerows or belts.</p> <p>It should also be noted that the tree data tables include general observations describing the character of group features, and where appropriate, woodland characteristics are explicitly referenced. For example, Group G70 is described as a “woodland belt”, demonstrating that woodland-type features are recognised within the survey, even where classified as groups for the purposes of BS 5837.</p> <p>In addition, to inform the design of the Proposed Development and the application of offset distances, external datasets were utilised, including the National Forest Inventory (2021). This provided a consistent spatial reference for identifying woodland extents across the Site and its surroundings, supporting the application of appropriate buffers alongside the site-based arboricultural survey.</p> <p>Accordingly, whilst paragraph 4.24 refers to numerous large woodland features within and adjacent to the Site, only those woodlands with specific designation (e.g. Ancient Semi-Natural Woodland) are explicitly highlighted due to their elevated value and policy importance.</p> <p>All woodland features identified within the survey have been assigned a group (G) prefix in accordance with BS 5837:2012, reflecting their arboricultural function as cohesive tree features. However, their woodland characteristics are clearly described within the data tables to provide context, ensuring that their structure and significance are appropriately understood.</p> <p>This approach represents a consistent and proportionate application of BS 5837 terminology, supported by site-based professional judgement and supplementary datasets, and does not affect the identification of constraints or the assessment of impacts.</p>
<p><b>Q1.7.25</b></p>	<p><b>Biodiversity units</b></p> <ol style="list-style-type: none"> <li>1. Is it the applicant's intension to sell any of the biodiversity net gain units which it intends to create in the order limits, if development consent were granted? If so, how many of the biodiversity units would likely be offered for sale?</li> <li>2. If some of the biodiversity units were sold, would this reduce the weight to be offered to the benefits of net biodiversity gain of the Proposed Development in the planning balance and why?</li> <li>3. What is the likelihood that the proposal would substantially overprovide biodiversity net gain in comparison to that which is set out in requirement 7 of the dDCO <a href="#">[REP1-008]</a> and if so, would these units likely be sold? Justify your answers.</li> </ol>	<ol style="list-style-type: none"> <li>1. As per Requirement 7(2) of the <b>Draft DCO [EN010158/APP/3.1.4]</b> the Applicant has committed to deliver a minimum of 40% biodiversity net gain for area-based habitat units, 17% biodiversity net gain for hedgerow units and 10% net gain for watercourse units for all of the authorised development during operation. The methods for doing so are secured through the <b>Outline LEMP [EN010158/APP/7.6.3]</b>. These biodiversity net gain units would be delivered within the Order Limits and none of the units contributing to these values would be sold.</li> <li>2. It is therefore considered that the value of these biodiversity net gain units should be considered in the weight offered to the associated benefits. It is also noted that while the Environment Act 2021 mandates a statutory requirement for developments to deliver a minimum of 10% BNG, Nationally Significant Infrastructure Projects (NSIP) (including the Proposed Development) are currently exempt from BNG requirements. Despite this and BNG only being required for DCO applications submitted on or after 2 November 2026, the Applicant is still committing to deliver substantially above 10% BNG.</li> <li>3. The biodiversity net gain proposals within the Application are pragmatic, deliverable and secured through the <b>Draft DCO [EN010158/APP/3.1.4]</b> and <b>Outline LEMP [EN010158/APP/7.6.3]</b>. While it is unlikely that proposals would substantially overprovide biodiversity net gain when compared to what is set out in requirement 7, it is too early for this to be this to be determined and would be dependent on numerous external factors prior to implementation of the proposals.</li> </ol>
<p><b>Q1.7.26</b></p>	<p><b>Woodland creation</b></p> <p>Are any areas of woodland proposed to be created? If not, why not?</p>	<p>The Applicant is proposing to create approximately 8.5ha of woodland across the Site, this is detailed within <b>Paragraph 4.3.13</b> of the <b>Outline LEMP [EN010158/APP/7.6.3]</b>.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.7.27	<p><b>Decommissioning</b></p> <p>ES Chapter 7 [REP1-080] states that likely effects of the decommissioning phase on habitats may potentially be greater than those experienced during construction. Quantify the significance of the effect on biodiversity and habitats during decommissioning, with justification. Are there opportunities to secure some or all of the BNG delivered during the operation of the Proposed Development during decommissioning or once the land is handed back to the landowners, such as through a 'conservation covenant'?</p>	<p>Habitats created on-site would be managed for the operational (including maintenance) phase of the Proposed Development, with the assumption being that habitats would be returned to the landowner at the end of the decommissioning phase. Impacts arising from decommissioning would be appropriately mitigated for in line with the <b>Outline DEMP [EN010158/APP/7.4.3]</b>, and this would include the potential loss of any gain in biodiversity which has occurred over the lifespan of the Proposed Development.</p>

Table 3-8: Climate Resilience

ExQ1 Ref	Question	Applicant's Response
Q1.8.1	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>NPS EN-1 paragraph 4.10.9 states that the Environmental Statement (ES) should use government guidance and industry standard benchmarks such as the British Standards for climate change adaptation. Has this guidance been used to inform the ES and its conclusions, and if so where? If not, why not?</p>	<p>NPS EN-1 (2023), and other relevant government guidance, has been used to inform the climate change resilience assessment as stated under Section 8.2 'National Planning Policy' in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b>.</p> <p>The projected impacts of climate change have been assessed in <b>ES Volume 4, Appendix 8.2: Climate Change Resilience Assessment [EN010158/APP/6.4] [APP-105]</b>, using the government guidance and industry benchmarks from UKCP18 and Met Office data to inform current and future baseline scenarios, as detailed in NPS EN-1 (2023) paragraph 4.10.3. The approach to the assessment can be found in Section 2.3, following IEMA (2020) guidance and aligned with ISO 14090 (i.e., British Standards), detailing risk assessment-based methodology.</p>
Q1.8.2	<p><b>NPS EN-1</b></p> <p>The ExA notes the contents of table 8.7 of ES Chapter 8 [APP-051], however, the greenhouse gas (GHG) assessment only appears to consider the impacts of the Proposed Development on carbon emissions. How have other GHG emissions been accounted for in the assessment?</p>	<p>As referenced in Paragraph 8.6.26 of <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b>, emissions are measured in tonnes of carbon dioxide equivalence (tCO<sub>2</sub>e) which accounts for all relevant greenhouse gas emissions, not just carbon dioxide.</p>
Q1.8.3	<p><b>NPS EN-1</b></p> <p>Explain how reduction in energy demand and consumption during operation of the Proposed Development have been prioritised in comparison with other measures, in accordance with the requirements of NPS EN-3 paragraph 5.3.4.</p>	<p>To reduce emissions during the operation phase, the <b>Outline OEMP [EN010158/APP/7.3.3]</b> details measures to decrease energy demand and consumption, for example by maximising energy efficiencies in vehicles and making use of electric vehicles where possible.</p> <p>Paragraph 8.9.5 of <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> sets out that the overall impact on climate during the operation phase is positive, therefore no further additional mitigation measures are required. Paragraph 8.10.4 also sets out that the Proposed Development has a significant beneficial effect on the climate.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.8.4	<p><b>NPS EN-1</b></p> <p>Explain how operational emissions have been reduced as much as possible through the application of best available techniques, in accordance with the requirements of NPS EN-3 paragraph 5.3.4.</p>	<p>The Applicant confirms that the Proposed Development is compliant with the requirements of NPS EN-1 (2023) for the following reasons.</p> <p>The <b>Outline OEMP [EN010158/APP/7.3.3]</b> details measures where the application of best available techniques ensures reduction of GHG emissions as part of the operation (including maintenance) phase. These include measures such as</p> <ol style="list-style-type: none"> <li>1) maximising energy efficiencies in vehicles and plant, for example to ensure all vehicles switch off engines when stationary and ensure vehicles are well maintained and conform to current emissions standards, and</li> <li>2) promoting the use of sustainable fuels in vehicles, and where possible making use of electric vehicles to reduce fuel consumption.</li> </ol> <p>Paragraph 8.9.5 of <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> sets out that the overall impact on climate during the operation (including maintenance) phase is positive, therefore no further additional mitigation measures are required. Paragraph 8.10.4 also sets out that the Proposed Development has a significant beneficial effect on the climate.</p>
Q1.8.5	<p><b>NPS EN-1</b></p> <p>NPS EN-3 paragraph 5.3.7 states that steps taken to minimise and offset emissions should be set out in a GHG Reduction Strategy, secured under the Development Consent Order (DCO). Whilst the ExA note the response to this paragraph in the Planning Statement <a href="#">[REP1-016]</a>, which states that “Steps taken to minimise and offset emissions are demonstrated within Appendix 1: Green and Blue Infrastructure Parameters to the Outline LEMP” <a href="#">[REP1-087]</a>, this appendix does not refer to minimising or reducing GHG emissions and therefore does not fulfil the requirements set out in paragraph 5.3.7. Provide a GHG Reduction Strategy and update the draft DCO (dDCO) <a href="#">[REP1-008]</a> accordingly.</p>	<p>Table 8.9 in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> presents the mitigation measures embedded into the design, whilst Section 8.10 presents the additional mitigation measures. These measures will contribute towards a reduction of the overall GHG emissions associated with the construction, operation (including maintenance), and decommissioning phases of the Proposed Development.</p> <p>The additional mitigation measures identified in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> are outlined and secured in Table 3.3 of the <b>Outline CEMP [EN010158/APP/7.2.3]</b>. These includes measures such as requiring that all vehicle engines are switched off when stationary, using recycled materials including aggregates, where appropriate and a commitment to source materials locally, where practicable, resulting in shorter journey times that will minimise climate impacts. Further carbon reduction measures are identified in the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, which includes commitments to woodland and hedgerow creation, matters which are specifically referenced in Paragraph 5.3.7 of NPS EN-1 (2023). Together, these measures comprise the carbon reduction strategy for the construction phase of the Proposed Development, all of which are appropriately secured by the <b>Draft DCO [EN010158/APP/3.1.4]</b> via Requirements 7 and 11, in accordance with NPS EN-1 (2023) and therefore, no updates to the <b>Draft DCO [EN010158/APP/3.1.4]</b> are deemed required.</p>
Q1.8.6	<p><b>Climate Change Resilience Assessment - Methodology</b></p> <p>Regarding the significance of effect matrix (table 8) in the Climate Change Resilience Assessment <a href="#">[APP-105]</a>, there are scenarios presented where the effect could be ‘minor or moderate’ or ‘moderate or major’ and the overall significance of effect is determined by professional judgement.</p> <ol style="list-style-type: none"> <li>1. Why is the approach of ‘minor or moderate’ and ‘moderate or major’ used in the matrix – why has a significance of ‘moderate’ or ‘major’ in these examples not been used as a worst-case scenario approach?</li> </ol>	<p>The methodology presented in <b>ES Volume 4, Appendix 8.2: Climate Change Resilience Assessment [EN010158/APP/6.4] [APP-105]</b> Paragraph 2.3.1 describes the standard risk assessment based methodology to identify potentially significant climate change impacts based on IEMA’s (2020) ‘Guide to Climate Change Resilience and Adaptation’ guidance, which is the same approach that was taken on the <b>Springwell Solar Farm Order 2026</b> application.</p> <ol style="list-style-type: none"> <li>1. A worst case scenario has not been assumed as the matrix takes into account the inherent uncertainty and variability of climate risk.</li> <li>2. Professional judgement is used appropriately with justifiable evidence to determine the outcome. A preliminary judgement could determine a potential risk to be significant, and further evidence could be</li> </ol>

ExQ1 Ref	Question	Applicant's Response
	<ol style="list-style-type: none"> <li>Are there instances where professional judgement has reduced likely effect from a significant to a not significant effect?</li> <li>Why are only major effects deemed to be significant effects, why are moderate effects not deemed as significant (as they are in other ES chapters)?</li> </ol>	<p>provided to determine the risk to be not significant with justification clearly documented, this would be an acceptable approach in line with appropriate guidance. There have not been any instances where professional judgement has reduced a likely effect from a significant to a not significant effect.</p> <p>3. Only major effects have been reported as significant in the climate resilience chapter because the assessment focuses on effects that would materially compromise the operational integrity, safety, or functionality of the Proposed Development over its design life. Moderate effects represent outcomes where climate stressors may lead to reduced performance, temporary disruption, or increased maintenance requirements, but would not prevent the Proposed Development from continuing to operate as designed, or cause threat to life. On that basis, these effects are considered important management issues but not significant in EIA terms. Furthermore, as there are no moderate or major effects determined in the assessment, the designation of moderate effects as being significant would not change the overall conclusion of significance.</p>
Q1.8.7	<p><b>Climate Change Resilience Assessment - Methodology</b></p> <p>Regarding tables 9, 10 and 11 of the Climate Change Resilience Assessment <a href="#">[APP-105]</a>:</p> <ol style="list-style-type: none"> <li>Explain why are increased summer temperatures, heat waves and high heat days classed as 'unlikely' during construction, but 'likely' for operation and decommissioning?</li> <li>Why are they not considered 'very likely' given current climate trends?</li> <li>Why are other climate scenarios either 'unlikely' or 'very unlikely' given recent climate trends?</li> </ol>	<ol style="list-style-type: none"> <li>This is due to the variation in timescale for construction verses operation. The construction period is 30-months, whereas the operational period is 40 years. The construction period is in the near future, where there is lower likelihood of chronic or acute temperature increase that would impact the receptors in a negative way. During the operational phase, up to 40 years in the future, it is more likely that chronic or acute temperature increase would impact the receptors in a negative way.</li> <li>The likelihood of a risk follows IEMA's (2020) 'Guide to Climate Change Resilience and Adaptation' as presented in Paragraph 2.3.6 and Table 6 of <b>ES Volume 4, Appendix 8.2: Climate Change Resilience Assessment [EN010158/APP/6.4] [APP-105]</b>. Whilst it is very likely that chronic and acute temperature hazards increase in the future, the likelihood in this assessment relates to the likelihood of the specific effect of that hazard, as outlined in Tables 9, 10 and 11.</li> <li>Please see response to point 2.</li> </ol>
Q1.8.8	<p><b>ES Chapter 8 (Climate)</b></p> <p>ES Chapter 8 <a href="#">[APP-051]</a> paragraph 8.13.1 states that the quantity of solar panels assumed in the assessment presents a worst-case scenario regarding the emissions resulting from construction, operation, and decommissioning, however, this also represents the best-case scenario regarding emissions savings. ES Chapter 8 confirms that even with a reduction in the quantity of solar panels, the outcome of the assessment regarding significance would not change. Confirm to what extent a reduction in the quantity of the solar panels and their degradation over the lifetime of the Proposed Development would affect the overall energy output of the Proposed Development in terms of megawatt hours. Confirm if solar panel degradation has been considered in assessing the overall net carbon emissions – if not why not? (also see Q1.4.4)</p>	<p>Reducing the quantity of Solar PV modules would result in a proportionate reduction in the overall energy output of the Proposed Development.</p> <p>Solar PV module degradation has been considered in the GHG Assessment presented in <b>ES Volume 2, Chapter 8: Climate [EN010158/APP/6.2.2] [APP-051]</b> using a 40-year lifespan for Solar PV modules provided by the Applicant, as well as the annual degradation factor of 0.4%, to inform the overall net carbon emissions.</p>

Table 3-9: Compulsory acquisition, temporary possession and other land or rights considerations

ExQ1 Ref	Question	Applicant's Response
Q1.9.1	<p><b>Land Rights and Negotiations Tracker and Statement of Reasons</b></p> <p>The applicant is invited to amend future iterations of the Land Rights and Negotiations Tracker [REP1-108] to identify the specific purposes for which each plot is required, including the works number, as per the Examining Authority's (ExA) procedural decision in Annex F of its Rule 6 letter [PD-008].</p> <p>The ExA also notes that table 3.2 of the Book of Reference [REP1-012] states that Annex A of the Statement of Reasons [REP1-010] "...provides details of the purpose for which compulsory acquisition and temporary possession powers are sought and reference each plot in the book of reference to these purposes". However, Annex A appears to be missing. Update the Statement of Reasons accordingly.</p>	<p>At Deadline 1 the Applicant completed the <b>Land Rights and Negotiation Tracker</b> [EN010158/APP/8.8] in line with the template provided by the ExA in the Rule 6 letter.</p> <p>An updated <b>Land Rights and Negotiation Tracker</b> [EN010158/APP/8.8.2], which includes works numbers, has been submitted at Deadline 2.</p> <p>Reference to the <b>Annex A</b> of the <b>Statement of Reasons</b> [EN010158/APP/4.1.3] [REP1-010] was made in error. An updated <b>Book of Reference</b> [EN010158/APP/4.3.3] with the reference deleted has been submitted at Deadline 2.</p>
Q1.9.2	<p><b>The applicant's approach to minimising private loss</b></p> <p>The ExA notes the applicant's response to action point 4 of compulsory acquisition hearing 1 (CAH1) that is provided in Appendix 1 of its written summary of oral submissions at CAH1 [REP1-107], which provides further details of its approach to minimising private loss that may be experienced by affected persons.</p> <p><b>To the applicant:</b></p> <p>Measures identified for the Claridge family include access provision referenced in the Design Approach Document (DAD) [REP1-018], including at paragraph 5.5.31, 5.5.28 and 5.5.29 of the DAD. The ExA notes that the DAD is not a control document. Please confirm how all of the measures identified to minimise private loss are secured.</p>	<p>The measures identified in the <b>Written Summary of Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 (CAH1)</b> [EN010158/APP/8.7] [REP1-107] to minimise private loss for the Claridge family are secured by the following measures:</p> <ul style="list-style-type: none"> <li>• The new access route around Romer Wood (plot 2/7), to avoid the need to pass via Knowlhill Farm via plots 2/3 and 2/4 unless necessary, is secured by its inclusion in the Order Limits as shown on the <b>Location, Order Limits and Grid Coordinate Plans</b> [EN010158/APP/2.1.2] [AS-004] and its inclusion in 'Work No. 10B Internal access to mitigation areas only', as shown on Sheet 2 of the <b>Works Plans</b> [EN010158/APP/2.3.3] [REP1-005].</li> <li>• Access to a spring for the Claridge family at plot 1/13 (Field B20) is secured by its inclusion in 'Work No. 9 Highway Works' on Sheet 3 of the <b>Works Plans</b> [EN010158/APP/2.3.3] [REP1-005].</li> <li>• Use of the indicative track across plots 3/11, 3/13, 3/14, 3/15, 3/16, 3/18,4/1 and 4/2 by the Claridge family for farm access purposes to assist with their movements around the farm holding during the operation (including maintenance) phase is secured in an update to the <b>Outline OEMP</b> [EN010158/APP/7.3.3] at Deadline 2.</li> <li>• The removal of the southern cable route and construction access track option, which would keep construction traffic further from Knowlhill Farm thereby limiting traffic disruption to the Claridge family, is secured as this land was removed from the Order Limits as shown on the <b>Location, Order Limits and Grid Coordinate Plans</b> [EN010158/APP/2.1.2] [AS-004].</li> <li>• A commitment to ensure any measures in plots throughout Parcel 1 that would not have the potential to alter existing water flows from Knowl Hill is secured in an update to the <b>Outline Drainage Strategy</b> [EN010158/APP/7.11.3] at Deadline 2.</li> </ul>
Q1.9.3	<p><b>Replacement land</b></p> <p><b>To the applicant:</b></p>	<p>1.Details of land areas are confidential to the parties involved and the Applicant does not have authority to release these details. The Applicant notes that Preston Farms and TCS Biosciences Ltd in their Written Representation indicated the replacement land on a plan.</p>

ExQ1  
Ref Question

Applicant's Response

The applicant is invited to provide the following information in relation to replacement land offered to registered tenants:

1. Location, including a site plan.
2. Amount of land (in hectares) compared with the amount of corresponding land subject to compulsory acquisition.
3. Commentary on the extent to which the replacement land could adequately function as part of the farming operation and serve as alternative provision. If any improvements are required to the replacement land to ensure that it is suitable, who would be responsible for delivering them?
4. Identify measures that could minimise disruption to ongoing farming operations during any transfer to replacement land.

2.

Tenant	Land Area Subject Permanent CA	Replacement Land Area
Preston Farms	135 acres	136.15 acres
Mr & Mrs Claridge	262 acres	261 acres

3. The replacement land is contiguous to the existing holdings as well as similar in size. Both tenants have been involved in the agreement over the replacement land offered. The terms of the agreement are confidential to each party, however the provisions of the agreements do extend beyond just the replacement of land.

4. The key measure to minimise disruption will be communication over the timing of any move. Provisions for timing are built into the terms agreed but the Applicant and the Claydon Estate as the Landlord will work with the tenants to ensure as much notice as possible and a smooth transition.

**Q1.9.4 Alternatives**

Elaborate on the justification for the creation and compulsory acquisition of new rights over plots 7/2 and 7/1 in the Land Plans [\[REP1-004\]](#). Whilst both plots would comprise part of Works no. 6 (Grid Connection Cabling Corridor), neither plot adjoins land identified in the Works Plans [\[REP1-005\]](#) for Works no. 2A (Rosefield Substation Compound) or other components of the Proposed Development from which the grid connection cable may originate.

Plots 7/1 and 7/2 are required for cable connection to either the existing or new National Grid East Claydon Substation. The parameters for the new National Grid East Claydon Substation remain unconfirmed, and NGET has not confirmed with the Applicant when it will submit its application for the new substation. When the location is confirmed, the Applicant will be able to reduce the flexibility sought over those plots to a defined cable corridor.

Seeking this level of flexibility at this stage and in the circumstances is standard practice: the Applicant refers to NGET's submission [\[AS-037\]](#) dated 9 January 2026 in response to Procedural Deadline A, and how at paragraph 5.2 of that response how NGET "appreciate the Applicant's position that as stated in the Environmental Statement (notably paragraph 4.7.26) that those limits extend to a larger area than may be required in practice for the delivery of the Proposed Development, in order to allow for flexibility, taking into account design development."

**Q1.9.5 Battery Energy Storage System (BESS)**

Provide further commentary on why land is required for the Works no. 4 (BESS) in the context of its Gate 1 status following the National Energy System Operator review. Does Gate 1 status ensure a future connection to the grid? If not, are the tests in section 122 (2) of the Planning Act 2008 met?

The Applicant's **Statement of Need** [\[EN010158/APP/5.6\]](#) [\[APP-036\]](#) provides evidence on how the proposed co-located BESS component of the Proposed Development would support the operation of the solar PV system. The BESS has a direct relationship with the Solar PV modules, storing excess energy generation and increasing the effectiveness of the generating station. The land over which compulsory acquisition powers are sought in respect of Work No. 4 is required to deliver the BESS component of the Proposed Development and therefore the test under section 122(2) of the Planning Act 2008 is satisfied.

The Applicant has been informed that the BESS component of the Proposed Development will receive an Agreement to Vary to its existing connection agreement to move it to a Gate 1 connection offer. The indicative connection date for such offers has not yet been confirmed but is expected to be confirmed in

ExQ1 Ref	Question	Applicant's Response
		<p>2027 by NESO, after Gate 2 offers have been sent out (timelines subject to change). For the avoidance of doubt, the BESS component does have a connection agreement with NESO, but the indicative connection date for that connection has not yet been confirmed. The BESS component of the Proposed Development may progress through future windows if readiness and strategic alignment can be demonstrated. Upon receiving consent for the Proposed Development) (if granted), the Applicant would re-submit the BESS component of the Proposed Development to a future re-prioritisation round to seek a Gate 2 connection offer (firm connection date).</p> <p>The Applicant is also seeking consent to place Work No. 1 (solar PV) within the location of Works No. 4 (BESS), should the BESS not be taken forward. This is depicted on the Works Plans <b>[EN010158/APP/2.3.2] [AS-006]</b>. It is therefore land required for the Proposed Development for which development consent is sought, and there is a compelling case in the public interest for the land to be acquired (to ensure delivery of the NSIP and its associated development).</p>

Table 3-10: Cultural Heritage

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.10.1</b></p>	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>Paragraph 5.9.13 of NPS EN-1 encourages applicants to consider opportunities to enhance access to, or interpretation, understanding and appreciation of, the heritage assets affected by the Proposed Development. Paragraph 9.11.1 of Environmental Statement (ES) Chapter 9 (Cultural Heritage) <b>[APP-052]</b> states that interpretation boards for Claydon House and Claydon Registered Park and Garden on the proposed permissive path to Knowl Hill to be secured by the Streets, Rights of Way and Access Plans <b>[REP1-006]</b> and the Outline Rights of Way and Access Strategy <b>[REP1-090]</b>. However, it is not clear how these documents secure interpretation boards. Answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Provide clarification of how the interpretation boards enhancement would be secured.</li> <li>2. Elaborate on the initiatives to improve the access and visitor experience at Claydon House as referenced at paragraph 9.11.1 and how they are secured.</li> <li>3. Has similar consideration been given or other consideration for enhancements been given for other heritage assets affected by the Proposed Development? If not, why not?</li> </ol>	<ol style="list-style-type: none"> <li>1. Interpretation boards are outlined within the <b>Outline LEMP [EN010158/APP/7.6.3]</b> which will provide the mechanism to secure agreement of the locations, content and materials and appearance of any interpretation boards. The <b>Outline LEMP [EN010158/APP/7.6.3]</b> is secured through Requirement 7 of the <b>Draft DCO [EN010158/APP/3.1.4]</b>.</li> <li>2. The Applicant intends to make a financial contribution to the National Trust to support their own access and visitor experience initiatives. As these measures are not required to mitigate the effects of the Proposed Development it is not necessary to secure them through the DCO.</li> <li>3. The <b>Draft Archaeological Management Strategy [EN010158/APP/7.10.2] [REP1-094]</b> includes provisions for community engagement which will provide opportunities to enhance access to and understanding and appreciation of the archaeological resource of the Order Limits. The Applicant is open to discussions with Buckinghamshire Council to expand the community engagement to include built heritage and historic landscape. The Applicant is also open to discussions with Buckinghamshire Council regarding potential additional interpretation boards at appropriate locations.</li> </ol>
<p><b>Q1.10.2</b></p>	<p><b>NPS EN-3</b></p> <p>Paragraph 2.10.110 of NPS EN-3 acknowledges that solar photovoltaic (PV) developments may have a positive effect on cultural heritage, for example archaeological</p>	<p>The Applicant recognises that shoes or low-level piling for Solar PV modules can be less damaging to archaeological remains. The Applicant however also notes that in circumstances where archaeological remains are close to the surface and sensitive to pressure then the use of</p>

ExQ1 Ref	Question	Applicant's Response
	<p>assets may be protected by a solar PV farm as the site is removed from regular ploughing and the use of shoes, or low-level piling is stipulated as footings for solar pv modules. The ExA notes the references at paragraph 5.1.1 in the draft Archaeological Management Strategy (dAMS) [REP1-094] to the "Use of non-intrusive foundations for Solar PV modules in areas of sensitive archaeological remains...". However, the paragraph also indicates that such mitigation "could" be included, "where allowed". Should the dAMS provide a firm commitment to use non-intrusive foundations in areas of sensitive archaeological remains? If not, why not? To what extent has the order limits been subject to regular ploughing?</p>	<p>shoes may be more damaging than piling and remains could still be impacted even by low level piling. The <b>Draft Archaeological Management Strategy [EN010158/APP/7.10.2] [REP1-094]</b> therefore allows for consultation with Buckinghamshire Council's archaeological advisor and Historic England to determine the most appropriate mitigation measure in each case – either complete avoidance, use of minimally intrusive Solar PV supports or archaeological excavation in advance of construction – following the post-consent evaluation.</p>
<p><b>Q1.10.3</b></p>	<p><b>Worst case scenario</b></p> <p>Table 9.4 of ES Chapter 9 [APP-052] states "The reasonable worst-case location for cultural heritage assumes that the Main Collector Compound will be sited on the area of greatest archaeological interest within Field E11 (unless this is used for the Rosefield Substation)." The ExA notes that the worst-case scenario for the substation does include Field E11. Provide clarification for the worst-case scenario applied for the main collector compound.</p>	<p>The Applicant recognises that it would not be possible for both the Rosefield Substation and the Main Collector Compound to be located in the same area. However, to ensure a reasonable worst-case approach has been assessed it has been assumed that at least one of these elements of the Proposed Development would be located within the area of greatest archaeological interest in Field E11.</p>
<p><b>Q1.10.4</b></p>	<p><b>Assessment assumptions</b></p> <p>Paragraphs 9.6.4 and 9.6.5 of ES Chapter 9 [APP-052] state that it is assumed that hedgerows required for cultural heritage mitigation would achieve a minimum height of 3.5 metres (m) by year 10 of operation and that this is secured in the Outline Landscape and Ecological Management Plan (oLEMP) [REP1-086]. However, the oLEMP refers to a target height of 3-3.5m for hedgerows. Confirm if any amendments are necessary to either the oLEMP or the assessment assumptions of cultural heritage to ensure consistency and that proposed cultural heritage mitigation would be adequately secured in the oLEMP.</p>	<p>The target heights in the <b>Outline LEMP [EN010158/APP/7.6.3]</b> provide a range as not all hedgerows will be required to reach 3.5m to provide the required mitigation. <b>ES Volume 2, Chapter 9: Cultural Heritage [EN010158/APP/6.2.2]</b> paragraphs 9.6.4 and 9.6.5 incorrectly stated a minimum height of 3.5m and should read a minimum height of 3m by year 10. <b>ES Volume 2, Chapter 9: Cultural Heritage [EN010158/APP/6.2.2]</b> has been updated at Deadline 2 for clarification. Despite this amendment, the assessment conclusions remain unchanged. All relevant cultural heritage mitigation in terms of mitigation planting is secured within the <b>Outline LEMP [EN010158/APP/7.6.3]</b>.</p>
<p><b>Q1.10.5</b></p>	<p><b>Embedded mitigation</b></p> <p>Table 9.8 of ES Chapter 9 [APP-052] includes the following embedded mitigation "15m width belt of structural native woodland planting along northern boundary of Field D3 (South)". Appendix 2 of the oLEMP [REP1-086] appears to show only partial planting on the northern boundary, with proposed tree belt screening. Should the oLEMP be updated to accord with the mitigation set out in table 9.8? If not, why not?</p>	<p>The planting proposed along the northern boundary of Field D3 (South) is to infill a gap in the vegetation that is present along the boundary. Further planting along the northern boundary is not required as the existing planting is considered to already provide sufficient screening.</p>
<p><b>Q1.10.6</b></p>	<p><b>Upper floors of Claydon House</b></p> <p>Provide confirmation of when the additional photomontages and visualisations from the upper floors of Claydon House as indicated in the Statement of Common Ground with the National Trust [REP1-028] and Historic England [REP1-027] will be submitted for consideration in the examination. Will this be accompanied by an updated cultural heritage assessment [APP-052]? The ExA is keen to stress the urgent need for this information to</p>	<p>Two additional photomontages have been submitted at Deadline 2, which form part of <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4]</b>. These have been shared with Historic England, National Trust and Buckinghamshire Council through ongoing consultation. Historic England and National Trust agree that the harm to the significance of Claydon House will be at the lower end of less than substantial harm and this agreement is set out in the <b>Statement of Common Ground with National Trust [EN010158/APP/5.17.2]</b> and <b>Draft Statement of Common Ground with Historic England [EN010158/APP/5.16] [REP1-027]</b> submitted at Deadline 2. <b>ES Volume 2, Chapter 9: Cultural Heritage</b></p>

ExQ1 Ref	Question	Applicant's Response
	<p>be provided as soon as possible in order to ensure adequate examination time for its consideration and review of any potential related mitigation.</p>	<p><b>[EN010158/APP/6.2.2]</b> has been updated to refer to these visualisations, but the conclusions previously reported are not affected by this update.</p>
<p><b>Q1.10.7</b></p>	<p><b>Additional mitigation – Pond Farmhouse</b></p> <p>Table 9.15 of ES Chapter 9 <a href="#">[APP-052]</a> identifies “Controls on hours of work, and on noise and dust.” as additional mitigation during the operation phase for changes to the setting of Grade II Pond Farmhouse. Are controls on hours of work, and on noise and dust proposed as additional mitigation for the operation phase or is this an error? If this is an error, does this have any implications for the ES and is any alternative additional mitigation proposed to reduce the magnitude of effect?</p>	<p>Reference to additional mitigation for Pond Farmhouse through controls on hours of work and on noise and dust in relation to operational phase effects was included in Table 9.15 in error, <b>ES Volume 2, Chapter 9: Cultural Heritage [EN010158/APP/6.2.2]</b> has been updated at Deadline 2. Controls on hours of work and on noise and dust apply during the construction and decommissioning phases for Pond Farmhouse as they do for other designated heritage assets. No further mitigation for Pond Farmhouse is proposed for the operational phase beyond the embedded mitigation, the magnitude of impact did not include consideration of these controls during operation and as reported within the ES.</p>
<p><b>Q1.10.8</b></p>	<p><b>Assessment of likely effects (with additional mitigation)</b></p> <p>There are numerous examples in section 9.10 of ES Chapter 9 <a href="#">[APP-052]</a> where conclusions drawn by the applicant regarding the significance of effects are not adequately justified. In particular, where table 9.7 (criteria for assessing the significance of effect) indicates that one of 2 conclusions could be drawn from the specified degree of importance and magnitude (e.g. slight or moderate), there is insufficient explanation given as to why the chosen conclusion is drawn. Whilst the ExA acknowledges the applicant's position that professional judgment can be applied, this is not fully supported by evidence and explained in section 9.10. For example, paragraph 9.10.59 regarding changes to the setting of Middle Claydon Conservation Area identifies high importance and minor magnitude but concludes slight adverse effects. Table 9.7 indicates that a conclusion of slight or moderate could be drawn in such instances with moderate effects being significant.</p> <p>Furthermore, there are examples where the conclusion of the significance of effects contradicts the criteria in table 9.7 entirely without an adequate explanation. For example, paragraph 9.10.45 regarding physical impacts to area of Iron-Age to Romano-British settlement activity in Parcel 3 (HA1/MBC45205) during construction concludes slight adverse effects, when medium importance and moderate magnitude is identified. Table 9.7 would suggest that the conclusion should be moderate effects which is significant in line with paragraph 9.6.18.</p> <p>Undertake a full review of section 9.10 and provide further justification for the conclusions drawn where they deviate from table 9.7 or where table 9.7 indicates that one of 2 conclusions on the significance of effects could be identified.</p>	<p><b>ES Volume 2, Chapter 9: Cultural Heritage [EN010158/APP/6.2.2]</b> has been updated at Deadline 2 to include additional justification for the selection of significance of effect where Table 9.7 allows for multiple options. Section 9.10 has been reviewed for consistency with the assessment criteria.</p> <p>Paragraph 9.10.45 regarding physical impacts to the area of Iron Age and Romano-British activity in Parcel 3 (HA1/MBC45205) relates to the effects following the additional mitigation secured by the <b>Draft Archaeological Management Strategy [EN010158/APP/7.10.2] [REP1-094]</b>. The archaeological excavation proposed for these remains will serve to mitigate for the physical impact, and therefore reduce the residual effect, this is in line with standard industry practice.</p>
<p><b>Q1.10.9</b></p>	<p><b>Assessment of settings</b></p> <p>Buckinghamshire Council's Local Impact Report <a href="#">[REP1-112]</a> and the Claydons Solar Action Group written representation <a href="#">[REP1-127]</a> identify concerns regarding the applicant's approach to considering the contribution of settings to the significance of</p>	<p>Each specific issue raised has been addressed within the <b>Applicant's Response to Written Representations EN010158/APP/8.12</b> and <b>Applicant's Response to Buckinghamshire Council's Local Impact Report EN010158/APP/8.11</b>.</p> <p>The Applicant's approach to assessing setting has been in line with Historic England guidance. It has considered the significance of the heritage assets, how setting contributes to this</p>

ExQ1 Ref	Question	Applicant's Response
Q1.10.10	<p><b>Botolph Claydon Conservation Area</b></p> <p>The applicant's response [PDA-006] to the Claydons Solar Action Group's relevant representation [RR-049] regarding effects on the Botolph Claydon Conservation Area states that changes to the design of the Proposed Development "have ensured that the Proposed Development is no longer visible from the Conservation Area and that the Conservation Area would continue to be experienced within a largely agricultural setting on the approaches from the west and north. The changes to the approach to the Conservation Area from the south have been assessed within the detailed setting assessment".</p> <p>However, figure 10.9 of ES Chapter 10 (Landscape and Visual) [AS-031] appears to indicate that the Proposed Development would be partially visible from Parcel 1 (to the west) as well as Parcel 3 (to the north-east) even with detailed screening. Provide further commentary on the visibility of the Proposed Development from the Botolph Claydon Conservation Area and confirm any implications for the assessment.</p>	<p>significance (noting that this contribution can be positive, negative or neutral), and has considered how the Proposed Development may affect this contribution.</p> <p>Botolph Claydon Conservation Area is shown overlain on the ZTV on <b>Figures 9.3z and 9.3aa of ES Volume 3, Figure 9.3a-v: Designated Heritage Assets within 5 km of the Order Limits overlain with ZTV [EN010158/APP/6.3.2] [AS-030]</b>. Although theoretical visibility of Parcel 1 is predicted from the south and east of Botolph Claydon (as shown on Figure 10.9b of <b>ES Volume 3, Figure 10.9b: Solar PV Modules Parcel 1 – Detailed Screening [EN010158/APP/6.3] [APP-069]</b>), at a range of approximately 2km to the nearest Solar PV modules in Parcel 1, the effect on significance of the Conservation Area is considered to be negligible. Likewise, although Parcel 3 also shows theoretic visibility from Botolph Claydon, the physical separation from the Conservation Area (c.1.2km to the Construction Compounds), and from the approach to the Conservation Area from the north means that the effect on the character and appearance of the Conservation Area will be negligible. Viewpoint 9 (<b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4.3]</b>) shows that in views east and south from Botolph Claydon the Proposed Development will be predominantly screened by vegetation and landform. Key topographic landmarks in these views (such as Grange Hill, Quanton Hill and the settlements of Oving and North Marston) would retain their prominence. The distance to the nearest Solar PV modules (approximately 220m to the east and south within Parcel 2) and the topography means that the immediate surroundings of the Conservation Area will remain agricultural in character. The Applicant recognises that the change to the agricultural character of the wider surroundings, including on footpath approaches to the Conservation Area from the south (on Footpath ECL/8/1, Bernwood Jubilee Way), will result in harm to the significance of the Conservation Area. The Applicant judges that this harm would be at the lower end of the scale of less than substantial.</p>
Q1.10.11	<p><b>Pond Farmhouse</b></p> <p>The ExA observed on its unaccompanied site inspection [EV1-001] that the setback between the proposed solar PV arrays and the listed building is reduced at the north-eastern corner of Field B4 as identified at appendix 1 of the oLEMP [REP1-086]. How was the extent of the setback determined and why does it narrow at the north-eastern corner of field B4? Could the north-eastern corner of Field B4 with the PV arrays be set further back from the farmhouse to provide additional embedded mitigation? If not, why not?</p>	<p>The setbacks from Pond Farmhouse have taken account of the principal views out from the farmhouse to the south, and less so to the west due to existing vegetation, as well as views of the farmhouse from the north. To the south, the offset is approx. 280m and extends to the first field boundary/edge of Shrub's Wood. To the west the offset is 50m from the Order Limits as existing vegetation west of Pond Farmhouse provides screening. Solar PV development has been excluded from Field B5 to the north and northwest of Pond Farmhouse to preserve views of the farmhouse from Calvert Road. A strip along the west side of B13 has also been excluded to reduce the effect on the approach to the farmhouse from Calvert Road, and existing hedgerows along Calvert Road and east of the access road provided screening of Field B13 from the road. The Applicant considers that the proposed mitigation is suitable and that further mitigation or removal of Solar PV module is not necessary.</p>

Table 3-11: Cumulative Effects

ExQ1 Ref	Question	Applicant's Response
Q1.11.1	<p><b>Environmental Statement (ES) Chapter 17 (Cumulative effects) - assessment methodology</b></p> <p>Provide more information on the 'Tier 3' projects which were scoped out of the stage 1 cumulative effects assessment [REP1-044] and reasons why.</p>	<p>Paragraph 17.4.22 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> highlights that Tier 3 projects were scoped out given they do not have sufficient environmental assessment information freely and publicly available to inform the inter-project cumulative effects assessment, nor a high-level qualitative assessment. This includes projects on the Planning Inspectorate's Programme of Projects where an EIA Scoping Report has not been submitted, projects that have been identified in the relevant Development Plan(s) (and emerging Development Plans), and projects identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.</p> <p>The exception to this is the high-level appraisal of the National Grid East Claydon Substation. As there was insufficient environmental assessment information freely and publicly available for National Grid East Claydon Substation, assumptions were applied using similar applications, National Grid's factsheet on substation construction, and engagement with National Grid in order to complete a high-level appraisal of the inter-project cumulative effects of the Proposed Development with the proposed extension to the National Grid East Claydon Substation.</p>
Q1.11.2	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology</b></p> <p>Why did all 3 of the criteria you identified for short-listing projects in the cumulative effects assessment [REP1-044] have to be met for a project to be carried forwards for further assessment? Would have meeting 2 of the criteria for example, meant more projects were considered in the short-list?</p>	<p>As set out in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>, developments identified on the long list were required to meet all three screening criteria derived by the Applicant, informed by the Planning Inspectorate's Advice on Cumulative Effects Assessment, in order to progress to the short list. This approach was adopted to ensure that sufficient and reliable information was available to enable a robust inter-project cumulative effects assessment to be undertaken.</p> <p>Each criterion that was created serves a distinct and necessary function and meeting only two of the three criteria would not provide a sufficient basis for a meaningful inter-project cumulative effects assessment. Criterion 1 assesses temporal overlap, Criterion 2 assesses whether there are any shared sensitive receptors/resources, and Criterion 3 assesses whether there is sufficient publicly available environmental information to undertake an inter-project cumulative effects assessment.</p> <p>Consequently:</p> <ul style="list-style-type: none"> <li>• Where Criteria 1 and 2 were met but Criterion 3 was not, there was insufficient environmental information available to undertake an inter-project cumulative effects assessment with confidence.</li> <li>• Where Criteria 2 and 3 were met but Criterion 1 was not, the absence of temporal overlap meant that an inter-project cumulative effect could not arise.</li> <li>• Where Criteria 1 and 3 were met but Criterion 2 was not, there was no shared sensitive receptor or resource upon which an inter-project cumulative effect could act.</li> </ul> <p>Other existing and/or approved developments that did not meet all three criteria were therefore retained on the long list, ensuring transparency, but were not taken forward for detailed inter-project cumulative effects assessment. This approach ensured that the short list focussed on those other existing and/or approved developments where a realistic and evidence-based potential for inter-</p>

ExQ1 Ref	Question	Applicant's Response
		<p>project cumulative effects could be assessed, consistent with good practice and the Planning Inspectorate's advice.</p>
<p><b>Q1.11.3</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology</b> Explain why project ID number 4 from Appendix 17.1 Long list of Other Approved or Existing Developments [REP1-072] was not taken forward for assessment.</p>	<p>This application forms part of the HS2 Hybrid Bill which is detailed as ID5 within <b>ES Volume 4, Appendix 17.1: Long List of Other Approved and or Existing Developments [EN010158/APP/6.4.2] [REP1-072]</b> and assessed within <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>. It is noted in the column 'Progress to stage 2?' in <b>ES Volume 4, Appendix 17.1: Long List of Other Approved and or Existing Developments [EN010158/APP/6.4.2] [REP1-072]</b> for project ID5 that this other existing and/or approved development was assessed under the HS2 Hybrid Bill (ID5). For completeness, this was included in the long and short list and has been assessed as under the overarching 'HS2 Hybrid Bill'.</p>
<p><b>Q1.11.4</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology</b> ES Chapter 17 [REP1-044] does not quantify significant cumulative effects in terms of whether they would be major or moderate – update the ES chapter to quantify the significance of effect for all significant cumulative effects identified.</p>	<p>As set out in paragraph 17.4.33 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>, there is currently no formal or sector-recognised methodology for categorising the magnitude of impact or the significance of inter-project cumulative effects (for example, as major, moderate or minor). Unlike single-project effects, inter-project cumulative effects do not have established significance criteria, thresholds or matrices that are consistently applied or recognised across EIA practice.</p> <p>Any attempt to quantify significant inter-project cumulative effects using such descriptors would therefore be based solely on professional judgement, without the support of an accepted or standardised assessment framework. In the absence of agreed thresholds or matrices recognised at a sector-wide level, classifying inter-project cumulative effects in this way would risk introducing subjectivity and inconsistency, rather than improving the robustness of the assessment.</p> <p>The assessment presented in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> has been undertaken in accordance with the principles set out in the Planning Inspectorate's Advice on Cumulative Effects Assessment, which does not require the categorisation of inter-project cumulative effects into levels of impact/effect (such as major or moderate). Instead, the advice focuses on identifying whether inter-project cumulative effects are likely to be significant or not, which is the key requirement of the EIA process.</p> <p>Updating <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> to further quantify the magnitude/effect of significant inter-project cumulative effects would not be supported by a recognised methodology and would not materially improve the assessment. On this basis, the Applicant considers the current approach in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> to be appropriate, proportionate and compliant with the Planning Inspectorate's Advice on Cumulative Effects Assessment.</p>
<p><b>Q1.11.5</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology</b> Provide a plan which identifies the residential properties within 250m of the order limits referred to in paragraph 17.5.8 of ES Chapter 17 [REP1-044], or direct the ExA to a plan which identifies these properties. The ExA notes that figure 10.3 [AS-031] shows residential properties initially scoped into the assessment for the Residential</p>	<p>The Applicant has provided <b>ES Volume 3, Figure 17.10: Residential properties within 250m of the Order Limits excluding Finmere Hill House, Dry Leys Farmhouse and Muxwell Farm [EN010158/APP/6.3.3]</b> at Deadline 2 that clearly identifies the residential properties within 250m of the Order Limits that are listed within Paragraph 17.5.8 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>. This figure excludes Finmerehill House, Dry Leys Farmhouse and Muxwell Farm, which are not listed in Paragraph 17.5.8 as they are assessed as a separate</p>

ExQ1 Ref	Question	Applicant's Response
	<p>Visual Amenity Assessment [APP-114], however, the names of the property addresses do not match those listed in paragraph 17.5.8.</p>	<p>environmental receptor/receptor group, as identified in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> Table 17.6 – 17.7.</p> <p>The receptors that are grouped under paragraph 17.5.8 comprise receptors assessed, not just via the RVAA, but also under <b>ES Volume 2, Chapter 6: Air Quality [EN010158/APP/6.2.2] [APP-049]</b>, <b>ES Volume 2, Chapter 9: Cultural Heritage [EN010158/APP/6.2.2]</b>, <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b> and <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b>. Therefore, the RVAA does not capture every receptor that has been taken into account from an intra-project combined effect perspective, which is why the list in Paragraph 17.5.8 does not match up with the RVAA.</p> <p>In addition, the RVAA splits out certain receptors such as the Calvert Cottages into house numbers e.g. 1-2 Calvert Cottages, 3 Calvert Cottages etc. In <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> - these are combined under 'Calvert Cottages'.</p>
<p><b>Q1.11.6</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology</b></p> <p>Paragraph 17.5.9 of ES Chapter 17 [REP1-044] refers to public rights of way (PRoW) which are considered in relation to cumulative effects. Some of the PRoWs have names, such as 'North Buckinghamshire Way', which can be identified on figure 10.5 [AS-031]. However, there are other PRoWs listed without specific names, such as "PRoW between Calvert Rd and HS2", which cannot be identified from the plans. Update paragraph 17.5.9 to include PRoW references so that these can be cross-referenced to the existing plans for identification purposes, or provide a plan which labels the PRoWs with the same descriptions as those used in ES Chapter 17.</p>	<p>The grouping of PRoW assessed within <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> is in line with how the PRoW are assessed within the <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b>. The PRoW references/names that are included within each grouping are set out within Paragraph 10.5.46, with details of relevant PRoW in Table 10.11 of the <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> as follows:</p> <ul style="list-style-type: none"> <li>• North Buckinghamshire Way/Midshires Way (ECL/5/1);</li> <li>• Bernwood Jubilee Way (ECL/7/1 and ECL/8/1);</li> <li>• PRoW between Calvert Road and HS2 (SCL/12/1, SCL/12/2, SCL/13/1 and SCL/13/2);</li> <li>• Three Points Lane and the PRoW extending to HS2 (MCL/17/1, MCL/18/1, MCL/18/2, MCL/20/1, MCL/20/2, MCL/30/1, GUN/28/1, GUN/30/1 and GUN/33/1);</li> <li>• PRoW between Three Points Lane and Splash Lane (Three Points Lane Bridleway) (MCL/15/1, MCL/16/1, and ECL/9/1);</li> <li>• PRoW between Botolph Claydon and Runt's Wood (ECL/7/1 ECL/7/2, ECL/8/1, ECL/9/2, ECL/10/1, ECL/10/2 to ECL/10/5);</li> <li>• PRoW to Finemere Hill plateau (ECL/8/2, QUA/38/1, QUA/40/3, QUA41/1, QUA/42/2 and MCL/22/1);</li> <li>• PRoW between Finemere Hill and HS2/Claydon Road (MCL/2/1, QUA/34/1, QUA/35/1, QUA/36/2, QUA/36/3, QUA/39/1, QUA/38/2, QUA/40/1, QUA/40/3, QUA/42/1, GUN/34/1 and QUA/40/4);</li> <li>• PRoW, lanes and roads between East Claydon/East Claydon Road and Parcel 3 (ECL/3/1, ECL/3A/1, ECL/3/2, ECL/4/1, ECL/4/2, ECL/5/1 and ECL/6/1);</li> <li>• PRoW, lanes and roads between East Claydon Road/Parcel 3 Granborough/Hogshaw Road (HOG/6/1, GRA1/1, GRA/1/2, GRA/2/1, GRA/2/2, GRA/3/1, GRA/3/2, GRA/4/1, GRA/10/1, GRA/11/1, WIS/1/2); and</li> </ul>

ExQ1 Ref	Question	Applicant's Response
		<ul style="list-style-type: none"> <li>PRoW between Steeple Claydon/Queen Catherine Road and Calvert Road (SCL/7/1, SCL/7/2, SCL/8/1, SCL/8/2, SCL/8/3, SCL/8/4, SCL/9/1, SCL/9/3, MCL/10/1 and MCL/10/2).</li> </ul> <p><b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> will be updated at Deadline 2 to reflect this.</p>
Q1.11.7	<p><b>ES Chapter 17 (Cumulative effects) - potential error</b></p> <p>Finemerehill House: this property is referred to as “Finmere Hill House” and “Finemerehill House” in ES Chapter 17 [REP1-044] – the ExA assumes this is an error and these are the same property. Review ES Chapter 17 for mistakes and update it accordingly.</p>	<p>The only references to Finemere Hill House within <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> are located within Table 17.6 and 17.7. These have been corrected to Finemerehill House at Deadline 2.</p>
Q1.11.8	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology and presentation of effects</b></p> <p>Provide justification or clarification on the following points regarding table 17.6 of ES Chapter 17 [REP1-044]:</p> <ol style="list-style-type: none"> <li>1. Finemerehill House – why do landscape and visual effects not apply to this receptor, when they are applied to other residential receptors?</li> <li>2. Dry Leys Farmhouse - why do air quality, landscape and visual effects not apply to this receptor, when they applied to other residential receptors?</li> <li>3. Granborough – why is air quality not applied to this receptor?</li> <li>4. The ExA is unclear which significant intra-project effects identified should be considered as being in addition to those significant effects already identified in the individual ES topic areas – update table 17.6 to make this clearer in the last column by setting out which combination of effects leads to significant effects and whether they would be in addition to effects reported already in the other chapters of ES.</li> </ol>	<ol style="list-style-type: none"> <li>1- As stated in <b>ES Volume 4, Appendix 10.1: Rosefield LVIA Methodology and Assessment Criteria [EN010158/APP/6.4] [APP-110]</b>, receptors judged to receive negligible or slight-negligible significance of effects are not considered for intra-project combined effects. In this instance, Finemerehill House has been assessed together with PRoW GUN/34/1 in viewpoint 16 shown in <b>ES Volume 3, Figure 10.6: Viewpoint locations [EN010158/APP/6.3] [APP-069]</b>. As reported in <b>ES Volume 4, Appendix 10.4: Rosefield Viewpoint Analysis [EN010158/APP/6.4] [APP-113]</b>, the scale of effects for footpath users and ground floor occupants of the house is judged to be no more than small/negligible, with overall effects assessed as at most minor/negligible adverse in <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b>. The assessment of Finemerehill House has, therefore, not been carried over to the intra-project combined assessment.</li> <li>2- Dry Leys Farmhouse is outside of the air quality study area of up to 250m from the Order Limits for construction dust, as demonstrated in <b>ES Volume 3, Figure 6.1: Demolition (During Decommissioning Phase)/Earthworks/Construction Activities Study Areas [EN010158/APP/6.3] [APP-066]</b>. Dry Leys Farmhouse is outside the RVAA study area of 200m for solar PV modules, as shown in <b>ES Volume 3, Figure 10.13: Residential Property Location Plan [EN010158/APP/6.3.2] [AS-031]</b> and has no intervisibility with the Proposed Development, as shown in <b>ES Volume 3, Figure 10.7c: ZTV of Solar PV Modules Parcel 2– Bare Earth [EN010158/APP/6.3] [APP-069]</b>.</li> <li>3- Granborough is outside of the air quality study area of up to 250m from the Order Limits for construction dust, as demonstrated in <b>ES Volume 3, Figure 6.1: Demolition (During Decommissioning Phase)/Earthworks/Construction Activities Study Areas [EN010158/APP/6.3] [APP-066]</b>.</li> <li>4- Paragraph 17.5.7 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> states that for intra-project combined effects, the interaction between likely effects on a receptor/receptor group has been established by assigning a ‘lead’ environmental factor which will have considered indirect effects upon the receptor/receptor group within the corresponding environmental factor assessment. As per the intra-project combined effects assessment undertaken in Tables 17.6 and 17.7 of <b>ES Volume 2, Chapter 17: Cumulative Effects</b></li> </ol>

ExQ1 Ref	Question	Applicant's Response
		<p><b>[EN010158/APP/6.2.3]</b>, only one significant effect is ever identified on a receptor/receptor group. Therefore, on a precautionary basis, this has been categorised as a significant intra-project combined effect. However, this is not categorised as a new significant effect, in addition to or separate from that identified in the relevant 'lead' environment factor chapter. For example, if Landscape and Visual was identified to be the 'lead' environmental factor on a receptor/receptor group and there is only a significant landscape effect on that receptor/receptor group, and no other environmental factor identifies a significant effect on that receptor/receptor group, then the <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> will have already considered the effect on the receptor/receptor group and stated the required additional mitigation measures to reduce that effect. Therefore, if the significant effect stated in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> is considered 'new' it would be a duplication, meaning that the significant effect identified on that receptor/receptor group would be 'double counted'.</p>
<p><b>Q1.11.9</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - assessment methodology and presentation of effects</b></p> <p>Provide justification or clarification on the following points regarding table 17.7 of ES Chapter 17 <a href="#">[REP1-044]</a>:</p> <ol style="list-style-type: none"> <li>1. Designated habitats – why do land and groundwater not apply to this receptor?</li> <li>2. Finemerehill House – why do landscape and visual effects not apply to this receptor, when they are applied to other residential receptors?</li> <li>3. Dry Leys Farmhouse - why does air quality not apply to this receptor, when it applied to other residential receptors?</li> <li>4. The ExA is unclear which significant intra-project effects identified should be considered as being in addition to those significant effects already identified in the individual topic areas – update table 17.7 to make this clearer in the last column by setting out which combination of effects leads to significant effects and whether they would be in addition to effects reported already in the other chapters of ES.</li> </ol>	<ol style="list-style-type: none"> <li>1- <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> will be updated to include consideration of designated habitats under Land and Groundwater in Tables 17.4-17.7 at Deadline 2. Following on from the update to <b>ES Volume 2, Chapter 11: Land and Groundwater [EN010158/APP/6.2.3] [REP1-038]</b> at Deadline 1 to include consideration of Finemere Wood SSSI as a groundwater dependent terrestrial habitat, the resulting impact of there not being a significant effect, would not change to conclusions set out in <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>.</li> <li>2- Please see the Applicant's response to point 1 in Q1.11.9 above.</li> <li>3- During the operation (including maintenance) phase, impacts on receptors due to air quality are only anticipated to be as a result of road traffic exhaust emissions. Dry Leys Farmhouse is outside of the air quality study area of up to 250m from the Order Limits and is not adjacent to the indicative internal access tracks (see <b>ES Volume 3, Figure 3.11: Indicative Location of Internal Access Tracks [EN010158/APP/6.3] [APP-063]</b>) or the external road network proposed to be used (see Figure 2 in the <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b>). It is anticipated that there would be four two-way Light Duty Vehicle trips per day during the operation (including maintenance) phase. The increased road traffic emissions resulting from the Proposed Development are expected to have a negligible impact on air quality, and nearby human receptors and designated sites during the operation (including maintenance) phase.</li> <li>4- Please see the Applicant's response to point 4 in Q1.11.9 above.</li> </ol>
<p><b>Q1.11.10</b></p>	<p><b>ES Chapter 17 (Cumulative effects) - presentation of effects</b></p> <p>Are the significant intra-project cumulative effects listed in paragraphs 17.5.10 and 17.5.11 of ES Chapter 17 <a href="#">[REP1-044]</a> additional significant effects to those already identified in the relevant ES chapters?</p>	<p>Please see the Applicant's response to point 4 in Q1.11.9 above.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.11.11	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with the proposed replacement National Grid East Claydon substation</b></p> <p>Provide justification or clarification on the following points regarding table 17.8 of ES Chapter 17 [REP1-044]:</p> <ol style="list-style-type: none"> <li>1. Bechstein's bat – ES Chapter 7 (Biodiversity) [REP1-036] identifies potentially significant effects on Bechstein's bats during operation of the Proposed Development; given the proximity of the proposed replacement substation to the order limits, explain why you have ruled out similar effects for the proposed replacement National Grid East Claydon substation?</li> <li>2. Designated heritage assets – provide greater justification regarding the conclusions on this matter, given that the assessment acknowledges that there would be increased impacts on designated heritage assets in-combination with the replacement National Grid East Claydon substation.</li> </ol>	<ol style="list-style-type: none"> <li>1- Impacts on Bechstein's bats and the replacement substation have been considered within <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>. As stated within Table 17.8, the substation lies outside the Core Sustenance Zone for Bechstein's bats and habitat loss is considered to be permanent but not significant as it will involve arable or modified grassland of limited biodiversity value for bats. Provided there is adequate mitigation/compensation for the National Grid East Claydon Substation development, there should be no inter-project cumulative effect.</li> <li>2- As set out within <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>, the Applicant recognises that the Proposed Development in combination with the proposed National Grid East Claydon Substation would result in an increased density of development east of East Claydon compared to the Proposed Development in isolation. The siting zone for the proposed National Grid East Claydon Substation is closer to East Claydon than the proposed Rosefield Substation and therefore will bring taller infrastructure elements closer to the village than the Proposed Development will. This increased change to the setting of the listed buildings within the village, and the non-designated asset that is the village as a whole, would slightly increase the level of harm to the significance of the village and listed buildings compared to the Proposed Development in isolation. It is, however, considered that the harm would remain within the lower end of less than substantial harm and the effect would be slight adverse and not significant.</li> </ol>
Q1.11.12	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with the proposed replacement National Grid East Claydon substation</b></p> <p>From paragraph 17.6.5, ES Chapter 17 [REP1-044] presents an assessment of the inter-project cumulative effects on the climate. However, the ExA notes that there appears to be no conclusion on whether there would be an inter-project cumulative effect, or not. Update the assessment to provide a conclusion, with justification.</p>	<p>It is not appropriate to assess the cumulative effects of GHG emissions. GHG emissions are inherently cumulative, as all emissions have the same impact on the same ultimate receptor, the global atmosphere. The impact is climate change, or global warming, caused by the radiative forcing effects of GHGs in the atmosphere and it is impracticable to attribute a particular specific impact to a particular emission.</p> <p>Most developments result in the release of GHGs and consequently have the potential to result in a cumulative effect. As the receptor is not geographically constrained, it is not appropriate to undertake a conventional cumulative effects assessment.</p>
Q1.11.13	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with the proposed replacement National Grid East Claydon substation</b></p> <p>From paragraph 17.6.9, ES Chapter 17 [REP1-044] presents an assessment of the inter-project cumulative effects on landscape character and visual amenity. Clarify the following points:</p> <ol style="list-style-type: none"> <li>1. Where the ES identifies that there would be cumulative effects which would be significant adverse, but this is no worse than what was identified for the Proposed Development, would this be an additional effect which should be offered weight accordingly in the planning balance?</li> <li>2. Paragraph 17.6.109 states that the in-combination effect at year 1 of operation on some PRow's in East Claydon would be major/ moderate "(tending towards major)". The ES should clearly set out what the</li> </ol>	<ol style="list-style-type: none"> <li>1- This would not be an additional effect. The text is stating that there would be no change in scale as a result of their combined effect.</li> <li>2- Each assessment in the ES, including that at Paragraph 17.6.109, takes a worst-case scenario as the basis for assessment. Paragraph 17.6.108 provides a summary of the factors used to judge the overall cumulative effect at Year 1: Large scale change over a wide geographic extent and of medium-term duration. Referring to Stages 1 and 2 as shown in <b>ES Volume 3, Figure 10.7c: ZTV of Solar PV Modules Parcel 2– Bare Earth [EN010158/APP/6.3] [APP-069]</b>, the magnitude of effect is judged to be substantial moderate. Referring to Table A10.3, combining a substantial/moderate magnitude of effect with a receptor of a high/medium sensitivity would result in a major/moderate effect. In this instance, it was judged that the scale of change to views warranted an additional judgement that this effect was tending towards major. The same process was then applied to Year 10 effects which were judged as: medium scale change over a wide geographic extent and of long term duration. Referring to Stages 1</li> </ol>

ExQ1 Ref	Question	Applicant's Response
	<p>significance of effect is on a worst-case scenario basis and not utilise vague wording of this nature. Given that the earlier paragraphs (17.6.105-106) confirm that in-combination with proposed replacement National Grid East Claydon substation, the magnitude of effect would increase, and that the Proposed Development alone would have major/ moderate effect, further justification is required as to why the in-combination effect has not been reported as a major cumulative effect. Review this matter and update the ES accordingly. Moreover, if the year 1 effect would be major adverse, would this affect the conclusions at year 10 of operation?</p> <p>3. The ES states that cumulative effects during decommissioning on landscape and visual amenity would be similar to, or no greater than those identified during construction – should the same weight therefore be offered to any effects identified during decommissioning as there have been identified during construction of the Proposed Development?</p>	<p>and 2, the magnitude of effect is judged to be substantial/moderate and the overall effect major/moderate. Hence mitigation planting would reduce the scale of change, but the overall effect would be of the same order.</p> <p>3- The same effects identified during construction are applied during decommissioning; therefore, it is understood that they would be of equal weight.</p>
Q1.11.14	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>Explain the conclusions drawn in table 17.10 and 17.15 of ES Chapter 17 [REP1-044] that there would be no heavy goods vehicle (HGV) movements during construction, when table 15.7 of ES Chapter 15 [APP-058] shows that there would be a number of HGV movements associated with the Proposed Development.</p>	<p>Table 15.7 of <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> illustrates the predicted peak of construction traffic associated with the Proposed Development. Table 17.10 and 17.15 illustrate cumulative traffic flows solely for other developments as assessed for air quality and for noise assessments. The tables do not provide combined traffic flows for both the Proposed Development and other developments.</p> <p>The data presented in Table 17.10 and 17.15 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> align with the committed development traffic flows set out in Table 4.3 of <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b>.</p>
Q1.11.15	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>Table 17.11 of ES Chapter 17 [REP1-044] does not define the inter-project effects with other development for the different phases of the Proposed Development. Update the table and supporting information to identify the likely inter-project cumulative effects during each phase of the Proposed Development to ensure consistency with the rest of the ES.</p>	<p>The inter-project cumulative effects assessment for biodiversity presented in <b>Table 17.11 of ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> considers the impacts that could potentially occur at the construction, operation (including maintenance) and decommissioning phases. <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> will be updated at Deadline 2 to confirm this.</p>
Q1.11.16	<p><b>ES Chapter 17 (Cumulative effects) - inter-project effects with other development</b></p> <p>Paragraph 17.7.17 of ES Chapter 17 [REP1-044] refers to habitat mitigation being provided for ground nesting birds during the construction phase – direct the ExA to where in the control documents this is captured specifically during the construction phase.</p>	<p>Management Objective 10, paragraph 3.3.26 of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> and paragraph 4.5.19 secure ground nesting bird habitat mitigation for during the construction phase.</p>
Q1.11.17	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p>	<p>It is considered ‘independent’ as the Proposed Development is not anticipated to have a significant impact on ground nesting birds, therefore having no significant residual effects as stated within <b>ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2.3]</b>. If other existing and/or approved</p>

ExQ1 Ref	Question	Applicant's Response
Q1.11.18	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>Table 17.12 of ES Chapter 17 [REP1-044] presents an assessment of the inter-project cumulative effects with other development on cultural heritage. Clarify the following points:</p> <ol style="list-style-type: none"> <li>1. Minor adverse effect on Finemerehill House in-combination with High Speed Rail 2 – would the cumulative effects represent substantial or less than substantial harm to this heritage asset? If this represents less than substantial harm, what level of harm on the scale of less than substantial would this be?</li> <li>2. Minor adverse effects on various heritage assets in-combination with East West Rail - would the cumulative effects represent substantial or less than substantial harm to these heritage assets? If this represents less than substantial harm, what level of harm on the scale of less than substantial would this be? Confirm specifically which heritage assets would be affected by these cumulative effects.</li> <li>3. Minor adverse effects on Botolph Conservation Area in-combination with Longbreach Solar Farm - would the cumulative effects preserve or enhance the conservation area in accordance with regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010?</li> <li>4. Minor adverse effects on the scheduled monument of the Deserted Medieval Village at Fulbrook Farm - would the cumulative effects represent substantial or less than substantial harm to this heritage asset? If this represents less than substantial harm, what level of harm on the scale of less than substantial would this be?</li> </ol>	<p>developments are anticipated to have a significant effect, that is independent from the Proposed Development and it would be for other existing and/or approved developments to mitigate and reduce their residual effects. As the Proposed Development is not anticipated to have a significant residual effect on ground nesting birds, due to the mitigation measures proposed for the Proposed Development it is considered that it would not contribute to significant inter-project cumulative effects.</p> <p>1 - The Applicant considers that harm to Finemerehill House as a result of the Proposed Development in combination with High Speed Rail 2 would be at the lower end of less than substantial.</p> <p>2 - The Applicant considers that the harm to Claydon House, Claydon Registered Park and Garden, Middle Claydon Conservation Area, Rosehill Farmhouse, and Blackmoorhill Farmhouse as a result of the Proposed Development in combination with East West Rail operating to the north of these assets would be at the lower end of less than substantial harm.</p> <p>3 - The Applicant considers that the inter-project cumulative effect of Longbreach Solar Farm and the Proposed Development on Botolph Claydon Conservation Area would be no worse than the effect of the Proposed Development in isolation, namely that it would be at the lower end of less than substantial harm. The Infrastructure Planning (Decisions) Regulations 2010 section 3(2) covers development “relating to a conservation area”, which the Applicant takes to have the same meaning as section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 in that it applies to development within a conservation area. Neither the Proposed Development nor Longbreach Solar Farm directly affect land within the Botolph Claydon Conservation Area. The character and appearance of the Conservation Area itself will therefore not be altered by the Proposed Development nor by the inter-project cumulative effect with Longbreach Solar Farm. The identified harm results from a reduction in the contribution that the setting makes to the character and appearance in views of/from the Conservation Area and its approaches which will alter the character of the setting of the Conservation Area</p> <p>4 - The Applicant considers that the inter-project cumulative effect of Longbreach Solar Farm and the Proposed Development on the Deserted Medieval Village at Fulbrook Farm would be at the lower end of less than substantial harm.</p>
Q1.11.19	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>ES Chapter 17 [REP1-044] identifies that there would not be a significant effect on below ground archaeological remains - given that archaeological remains can be classified as non-designated heritage assets, confirm the extent of any potential effect on these items, such as a negligible or minor adverse effect.</p>	<p>Please see the Applicant's response to Q1.11.5 above.</p>
Q1.11.20	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p>	<p>As per Paragraph 17.7.33 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>: “A medium sensitivity for both soil resilience and agricultural land quality and a high magnitude means</p>

ExQ1 Ref	Question	Applicant's Response
Q1.11.21	<p>The ExA is unclear regarding the significance of the inter-project cumulative effects with other developments on soils from ES Chapter 17 [REP1-044] – are there significant effects, and if so, would they be major or moderate? Set out which other projects would contribute to significant effect and for which phases of the Proposed Development this would relate to.</p> <p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>The ExA is unclear regarding the significance of the inter-project cumulative effects with other developments on traffic from ES Chapter 17 [REP1-044] – are there significant effects, and if so, would they be major or moderate? Set out which other projects would contribute to any significant effect and for which phases of the Proposed Development this would relate to.</p>	<p>there is a moderate or large adverse significant effect from cumulative developments within the 1km Zol.”</p> <p>And as per Paragraph 17.7.34 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b>: “there will be a significant effect on agricultural quality due to the loss of land however this loss will not occur on BMV, the loss will be of worse performing agricultural land and therefore keeping the best performing land within agricultural production.”</p> <p>However, it is not standard practice to assign a level of significant effect to inter-project cumulative effects. Please see the Applicant's response to Q1.11.5 above.</p> <p>Additionally, food security has been assessed with the chapter, and no significant effects have been reported.</p>
Q1.11.22	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>There are various instances where ES Chapter 17 [REP1-044] identifies cumulative inter-project effects which would not be significant, but does not clarify if these would be 'no effect, negligible, minor, or minor/ moderate'. Update the ES to quantify the cumulative inter-project effects identified.</p>	<p>Please see the Applicant's response to Q1.11.5 above.</p>
Q1.11.23	<p><b>ES Chapter 17 (Cumulative effects) – inter-project effects with other development</b></p> <p>Table 17.3 of ES Chapter 17 [REP1-044] provides a summary of the effects presented in Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment [REP1-074]. Review both documents alongside each other to ensure that any findings reported in table 17.3 reflect those identified in the main body of Appendix 17.2 [REP1-074] and are also robustly justified; give a clear explanation for the conclusions of the cumulative effects on each landscape character area and for visual receptors, for each phase of the Proposed Development. At present, there appears to be discrepancies between the conclusions in the documents and there are instances where conclusions have not been sufficiently justified. For example the following are identified:</p> <ol style="list-style-type: none"> <li>1. Major/ moderate adverse effects are identified on recreational users of PRowS between Botolph Claydon and Runt's Wood during construction in</li> </ol>	<p>1 – The description of construction effects for recreational users of PRowS between Botolph Claydon and Runt's Wood is provided in paragraphs 3.3.50-3.3.56 in <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b>. It is noted that there is a typo in paragraph 3.3.56 which should continue to refer to effects during construction and not operation. <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> will be updated at Deadline 2.</p> <p>2 – Littleton Manor has been incorrectly omitted from the assessment of effects on PRowS between East Claydon/ East Claydon Road and within Parcel 3 in <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b>. The Littleton Manor wind turbine would potentially be partially visible at distances of over 7km but would not add further to the <i>solus</i> effects of the Proposed Development. The effects are therefore correctly summarised in Table 17.3. <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> will be updated at Deadline 2.</p>

ExQ1 Ref	Question	Applicant's Response
	<p>table 17.3, but this does not appear to be assessed or explained in Appendix 17.2.</p> <ol style="list-style-type: none"> <li>Table 17.3 suggests that there would be a major/ moderate adverse effect on PRowS between East Claydon/ East Claydon Road and within Parcel 3, in combination with Littleton Manor Farm at year 1 of operation, but this does not appear to be reflected in the assessment in Appendix 17.2.</li> <li>Table 17.3 suggests for recreational users of PRow between Steeple Claydon and Calvert Road there would be moderate/ minor adverse effect in combination with Littleton Manor Farm which would be significant. The ExA queries whether the corresponding section which considers this matter in Appendix 17.2 is 'PRow and roads between Steeple Claydon/ Queen Catherine Road and Calvert Road'? If so, Appendix 17.2 suggests that Littleton Manor Farm is not taken forward in the assessment.</li> </ol> <p>(also see question Q1.11.29)</p>	<p>3 – Littleton Manor has been incorrectly omitted from the assessment of effects on PRowS between Steeple Claydon and Calvert Road in <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> and will be updated at Deadline 2. The Littleton Manor wind turbine would potentially be partially visible at distances of over 9km but would not add further to the <i>solus</i> effects of the Proposed Development. The effects are therefore correctly summarised in Table 17.3.</p>
<b>Q1.11.24</b>	<p><b>ES Chapter 17 (Cumulative effects) – mitigation hierarchy</b></p> <ol style="list-style-type: none"> <li>Explain how you have followed the mitigation hierarchy regarding cumulative effects and why additional significant cumulative effects cannot be avoided.</li> <li>What measures do you propose to mitigate any of the identified cumulative effects? If you are not proposing any, why not, and set out how this would meet with the requirements of the mitigation hierarchy.</li> </ol>	<ol style="list-style-type: none"> <li>The mitigation hierarchy has been embedded into the EIA process and design evolution of the Proposed Development to avoid and reduce significant effects, where possible. The Applicant has considered intra-project combined effects and inter-project cumulative effects throughout the design development of the Proposed Development and this has been a factor in the height and placement of infrastructure and removal of fields. For example, the location of Rosefield BESS was moved to be located in Parcel 2 to avoid cumulative noise impacts to sensitive receptors (particularly Sion Hill Farm) in combination with the East Claydon BESS, alongside other environmental factors and consideration of feedback received during the Phase Two Consultation. In addition, the boundary of the Proposed Development has been set back from properties to reduce the intra-project combined effect on these properties from a noise, air quality, residential visual amenity and glint and glare perspective. Where additional inter-project cumulative landscape and visual effects are assessed, only those as a result of the addition of Littleton Manor Farm are assessed as significant for the duration of operation; it is not possible to further mitigate these cumulative effects due to the proposed height of the wind turbine. However, it has been assessed that all other potentially significant cumulative effects can be mitigated by Year 10.</li> <li>The mitigation measures laid out in each of the individual environmental factor chapters provide mitigation to avoid and reduce cumulative effects, alongside effects associated with the Proposed Development on its own. For example, the noise barrier that is proposed around the Rosefield Substation acts as mitigation for Sion Hill Farm and reduces the inter-project cumulative noise effects associated alongside the East Claydon BESS. There is no additional mitigation above that has been specified in the Environmental Statement that is proposed to address cumulative effects.</li> </ol>
<b>Q1.11.25</b>	<p><b>Appendix 17.3: Cumulative Visualisations</b></p> <p>How did you determine which viewpoints to provide visualisations of the cumulative effects for Appendix 17.3 Cumulative Visualisations <a href="#">[APP-136]</a>? The ExA notes that</p>	<p>The viewpoints were selected in agreement with Buckinghamshire Council. The increase in inter-project cumulative effects for users of North Buckinghamshire Way and The Midshires Way was as a result of the addition of the Littleton Manor Farm wind turbine affecting views to the south of Quainton Hill, hence viewpoints 21, 22, 25, 27 and 29 are not relevant to these views. Littleton Manor Farm was</p>

ExQ1 Ref	Question	Applicant's Response
Q1.11.26	<p>significant inter-project cumulative effects were identified at North Buckinghamshire Way and The Midshires Way in relation to Viewpoints 21, 22, 25, 27 and 29 [REP1-074], however, none of these viewpoints were selected to provide a cumulative visualisation, why is that the case?</p> <p><b>Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment</b></p> <p>Update Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment [REP1-074] to refer to the viewpoints which are relevant to that particular landscape character area for the cumulative effects in section 3.2.</p>	<p>added to the <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> after the visualisations had been prepared; hence it was not incorporated into views.</p> <p>Section 3.2 of <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> will be updated at Deadline 2.</p>
Q1.11.27	<p><b>Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment</b></p> <p>Table 2 of Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment [REP1-074] does not appear to accurately present the effects identified in sections 3 and 4 of the report. For example, significant cumulative effects are identified at as a result of Longbreach Solar Farm at paragraphs 3.2.30, 3.2.66, 3.3.31, 3.3.67, 4.2.10, 4.2.60, 4.2.77, 4.2.87, 4.2.111, however they are not reported in table 2. Review the document to accurately report the effects or explain why they have not been reported in table 2 as this is not clear to the ExA. Review all of the document to ensure that the cumulative effects are accurately reported in table 2.</p> <p>The conclusions summarised in table 17.13 of ES Chapter 17 [REP1-044] do not appear to align with the conclusions drawn in table 2 of Appendix 17.2: Landscape and Visual Inter-project Cumulative Effects Assessment [REP1-074]. Review the documents to ensure that they align or explain why these differences occur. (also see question Q1.11.25)</p>	<p>Table 2 of <b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> reports only those inter-project cumulative effects that are greater than the <i>solus</i> effects reported for the Proposed Development. Additional significant inter-project cumulative effects would be experienced as a result of in combination effects for only:</p> <ul style="list-style-type: none"> <li>• East Claydon BESS, Year 1 for Granborough and PRoW, lanes and roads between East Claydon Road/Parcel 3 and Granborough/ Hogshaw Road; and</li> <li>• Littleton Manor Farm for LCA 9.2 Quainton Hill and Buckinghamshire/Midshires Way for the duration of operation.</li> </ul> <p>The inclusion of only those inter-project cumulative effects that are greater than the <i>solus</i> effects reported for the Proposed Development also explains the difference in the content of Table 17.3 of ES Chapter 17 and Table 2 of Appendix 17.2.</p> <p><b>ES Volume 4, Appendix 17.2: Landscape and Visual Inter-project Cumulative Effect Assessment [EN010158/APP/6.4.3]</b> and <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> will be updated at Deadline 2 to include the construction stage assessments for Littleton Manor Farm.</p>
Q1.11.28	<p><b>Update to the Outline Construction Environmental Management Plan</b></p> <p>In your response to the relevant representations [PDA-006], you stated that the Outline Construction Environmental Management Plan (oCEMP) [REP1-078] would be updated to commit to consultation with nearby developments prior to construction on programmes and at the discharge of requirements phase to manage interactions and reduce any associated impacts. Direct the ExA to where in the oCEMP this has been captured. If it has not been, explain why not.</p>	<p>The Applicant has included this commitment within the updated <b>Outline CEMP [EN010158/APP/7.2.3]</b> submitted at Deadline 2.</p>

Table 3-12: The draft Development Consent Order (dDCO)

ExQ1 Ref	Question	Applicant's Response
Q1.12.1	<p><b>Explanatory Memorandum (EM)</b></p> <p>The Examining Authority (ExA) considers that overall, insufficient information has been provided in the EM [AS-012] to sufficiently justify various elements of the wording used in the dDCO. The ExA has set out specific examples below which need addressing, but also requests that the applicant reviews the EM and provides more robust justification for wording used in the dDCO; full justification should be provided for each power and provision, taking into account the facts of <b>this particular Development Consent Order (DCO) application</b>. Where drafting precedents in previous made DCOs have been relied on, these should be checked to identify whether they have been subsequently refined or developed by more recent DCOs so that the DCO provisions reflect the Secretary of State's (SoS) current policy preferences. If any general provisions (other than works descriptions and other drafting bespoke to the facts of this particular application and dDCO) differ in any way from corresponding provisions in the SoS's most recent made DCOs, an explanation should be provided as to how and why they differ. Furthermore, stating that wording has been used from previously made DCOs is not sufficient on its own to justify similar or the same wording in the dDCO – an explanation should also be included as to why that wording is necessary for the specific circumstances of the Proposed Development.</p>	<p>The Applicant has updated the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> to address the matters raised in this question and this has been submitted at Deadline 2.</p>
Q1.12.2	<p><b>EM</b></p> <p>Paragraph 1.1.5 of the EM [AS-012] refers to upcoming amendments to the law which came into force on 31 December 2025 to increase the output capacity threshold for nationally significant infrastructure project generating stations which generate electricity directly from sunlight, from 50 megawatts (MW) to 100MW. However, the change does not apply to such generating stations having a capacity when constructed of not more than 100MW, if the application was accepted before but not decided before 31 December 2025. Update the EM accordingly.</p>	<p>The Applicant has updated the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> and this has been submitted at Deadline 2.</p>
Q1.12.3	<p><b>EM</b></p> <p>Paragraph 1.6.12 of the EM [AS-012] refers to various plans having control over decommissioning. However, requirements 15 and 17 of the dDCO referred to in this paragraph do not refer to decommissioning. Review both documents and update them accordingly.</p>	<p>The Applicant has updated the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> and this has been submitted at Deadline 2.</p>
Q1.12.4	<p><b>EM</b></p> <p>Paragraph 3.3.4 of the EM [AS-012] references section 172 of the Planning Act 2008. Should this refer to section 127 of the Planning Act 2008? Update the EM accordingly.</p>	<p>The Applicant has updated the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> and this has been submitted at Deadline 2.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.12.5	<p><b>EM</b></p> <p>Paragraph 4.5.2 of the EM <a href="#">[AS-012]</a> suggests that article 49 is a “Crown Rights” article, but no Crown Rights article appears in the dDCO, so this reference in the EM appears to be an error. Review the document and update it accordingly.</p>	<p>The Applicant confirms that the reference to a “Crown Rights” article in paragraph 4.5.2 is a typographical error and this has been addressed in the revised <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> submitted at Deadline 2.</p>
Q1.12.6	<p><b>EM</b></p> <p>Paragraph 5.2.3 of the EM <a href="#">[AS-012]</a> refers to the need for the Local Planning Authority, rather than the applicant needing to consult third parties to discharge some of the proposed requirements in the dDCO. Can the applicant confirm whether this approach has been accepted in any previously made DCOs and can Buckinghamshire Council confirm whether it would accept this arrangement.</p>	<p>It is common for the local planning authority to be required to consult with specific stakeholders as part of discharge of Requirements. Requirement 6 (battery safety management) of the <b>Draft DCO [EN010158/APP/3.1.4]</b> states that the planning authority “must consult with” Buckinghamshire Fire and Rescue Service on approval of the Battery Safety Management Plan. Equivalent wording appears in Requirement 7 (battery safety management) of the <b>Springwell Solar Farm Order 2026</b> and Requirement 6 (battery safety management) of the <b>Fenwick Solar Farm Order 2026</b>. Similarly, Requirements 11 (construction environmental management plan) and 18 (decommissioning and restoration) of the <b>Draft DCO [EN010158/APP/3.1.4]</b> require the local planning authority’s approval to be given “in consultation with” specified stakeholders. This form of wording has precedent across a range of made DCOs in respect of a range of Requirements. Notwithstanding this position, it would remain open to the Applicant to consult with relevant stakeholders ahead of submission to obtain their views on the detailed plan, prior to formal application for discharge under the Requirement.</p>
Q1.12.7	<p><b>EM</b></p> <p>Review paragraph 5.2.9 of the EM <a href="#">[AS-012]</a> to ensure that it correctly references the relevant parts of requirement 2 of the dDCO.</p>	<p>This has been addressed in the revised <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> submitted at Deadline 2.</p>
Q1.12.8	<p><b>Outline landscape and ecological management plan</b></p> <p>In the dDCO, the Outline Landscape and Ecological Management Plan <a href="#">[REP1-086]</a> is referred to as the “outline landscape and ecology management plan”, which differs slightly from the title of the actual document. For accuracy update the dDCO accordingly.</p>	<p>This has been addressed in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
Q1.12.9	<p><b>Article 2. Interpretation</b></p> <p>Should the definition of ‘maintain’ be amended to include reference to the development not giving rise to any materially new or materially different effects to those set out in the Environmental Statement (ES)? The ExA notes that similar wording which captures this point has been included in The Tillbridge Solar Order 2025 and The Oaklands Farm Solar Park Order 2025. If not, explain why you do not consider this to be necessary.</p>	<p>The Applicant does not consider an amendment to the definition of “maintain” to be necessary on the basis that the scope of the authorised development is controlled through Schedule 1 of the <b>Draft DCO [EN010158/APP/3.1.4]</b>, the relevant management plans and the process for discharge of Requirements. Paragraph 2 of Schedule 1 sets parameters for the authorised development and provides that any further associated development must be “<i>unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement</i>”. Similarly, paragraph 2 of Schedule 16 sets out the procedure for discharge of Requirements and provides that any application for discharge must be accompanied by a statement confirming whether it is likely that the application’s subject matter will give rise to any materially new or materially different environmental effects, and if so, what those effects are. Finally, paragraph 3(2) of Schedule 2 provides that approval for any amendment to any approved document must not be given except where it has been demonstrated to the satisfaction of the relevant planning authority that the subject matter of the</p>

ExQ1 Ref	Question	Applicant's Response
		<p>approval sought is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.</p>
<p><b>Q1.12.10</b></p>	<p><b>Article 2. Interpretation</b></p> <p>Should the definition of 'NGET' be updated to include "... or any successor as a licence holder within the meaning of Part 1 of the 1989 Act"? The ExA notes that the definition of NGET for The Tillbridge Solar Order 2025 and The Fenwick Solar Farm Order 2026 includes wording to this effect. If not, explain why you do not consider this to be necessary.</p>	<p>The Applicant does not have any objection to the insertion of this wording and this has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
<p><b>Q1.12.11</b></p>	<p><b>Article 2. Interpretation</b></p> <ol style="list-style-type: none"> <li>1. The ExA has concerns regarding the extent of works included under the definition of 'permitted preliminary works' and whether it has been adequately demonstrated that they would not have environmental impacts which would need to be controlled by requirements. The ExA also draws the applicant's attention to recently made DCOs which do not contain the same extent of 'preliminary permitted works' (or works of a similar description) to those which are proposed in the dDCO, such as the The Helios Renewable Energy Project Order 2025, The Stonestreet Green Solar Order 2025 and The Tillbridge Solar Order 2025. For example, how could the applicant ensure that access works ((i) Work No. 9) or diversions of public rights of way (j) would not have environmental impacts which would need to be controlled?</li> <li>2. Provide further justification for the extent of the works included in the definition of 'permitted preliminary works' in the EM <a href="#">[AS-012]</a> and review the definition to reduce the extent of the 'permitted preliminary works' if possible. The ExA draws the applicant's attention to section 5.7.21 of PINS <a href="#">Advice Note 15: drafting development consent orders</a>.</li> <li>3. The ExA also notes that there is no reference in the definition of 'permitted preliminary works' for advance planting or screening mitigation to be planted. Paragraph 4.3.15 of the Outline Landscape and Ecological Management Plan (oLEMP) <a href="#">[APP-145]</a>, table 10.9 of ES Chapter 10 (Landscape and Visual) <a href="#">[APP-053]</a> and table 9.8 of ES Chapter 9 (Cultural Heritage) <a href="#">[APP-052]</a> propose advance planting mitigation – explain how it is envisaged that the Proposed Development could deliver advance planting in practice and at what stage of the Proposed Development with the wording of dDCO at present?</li> </ol>	<p>1 &amp; 2. As explained in the revised <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, the works identified in the "permitted preliminary works" include pre-commencement activities such as surveys and site investigations which are considered appropriate as the nature of these works (i.e. non-intrusive, above ground works or actions) means they are not expected to give rise to environmental effects requiring mitigation. However, the Applicant does recognise that prior to some of the works identified as "permitted preliminary works", there may be a requirement to submit details to the relevant planning authority in order to protect the environment (having regard to section 5.7.21 of PINS Advice Note 15). Where this is the case, the relevant Requirement expressly prevents the relevant "permitted preliminary works" from being carried out until those details have been approved. The Applicant is therefore confident that sufficient controls are in place with respect to these works and it is appropriate that they form part of the permitted preliminary works. The Fenwick Solar Farm Order 2026 and the Longfield Solar Farm Order 2023 (and many other made DCOs, including the Tillbridge Solar Order 2025), include very similar definitions of "permitted preliminary works" to that included within the <b>Draft DCO [EN010158/APP/3.1.4]</b>. The key difference is that the <b>Draft DCO [EN010158/APP/3.1.4]</b> contains the following additional elements:</p> <ul style="list-style-type: none"> <li>• Work No. 9 (works to facilitate access to Work Nos. 1 to 8 and 10);</li> <li>• diversion of existing public rights of way; and</li> <li>• early establishment of ecological mitigation including for badgers.</li> </ul> <p>In respect of Work No. 9, as set out in section 4.2.2 of the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, this has been included in the definition as a response to the Applicant's experience from the implementation of another made solar DCO, where highway works have inadvertently triggered certain obligations that are not strictly necessary to be in place at the stage the highway works are being undertaken. Work No. 9 will also be undertaken pursuant to the powers in Part 3 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> and controlled by the Landscape and Ecological Management Plan (Requirement 7), the Construction Environmental Management Plan (Requirement 11) and the Construction Traffic Management Plan (Requirement 13), having been included in the definition of "commence" for the purposes of those Requirements. Similar wording appears in the <b>Springwell Solar Farm Order 2026</b> which was made by the Secretary of State on 8 April 2026.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>Diversions of public rights of way have been included to allow the Applicant the flexibility to undertake the permanent diversions of public rights of way early in the development if possible. Such works will similarly be undertaken pursuant to the powers in Part 3, as well as in accordance with the detailed Rights of Way and Access Strategy under Requirement 16.</p> <p>The “early establishment of ecological mitigation including for badgers” is listed as a permitted preliminary work to allow the Applicant the ability to create artificial badger setts to facilitate the relocation of badgers and any other mitigation where it is feasible and advantageous to do so at an early stage and, again, is specifically caught by Requirements 7 (landscape and ecological management plan) and 16 (rights of way and access strategy).</p> <p>Requirements 8 (fencing and other means of enclosure) and 10 (archaeology) must also be discharged before any of these elements of work are commenced.</p> <p>It is the Applicant's view that the specific Requirements set out above are sufficient to ensure that appropriate environmental controls are in place prior to the relevant permitted preliminary works commencing, and that the matters specified in other Requirements within the <b>Draft DCO [EN010158/APP/3.1.4]</b> are not required to be in place before these works can commence.</p> <p>3. In respect of early planting, the Applicant notes that paragraph 4.3.12 of <b>Outline LEMP [EN010158/APP/7.6.3]</b> describes early planting as “planting that can take place following DCO consent (if it is granted) and before construction is started as far as reasonably practicable”. The Applicant considers this would be reasonably covered by “early establishment of ecological mitigation” however to put the matter beyond doubt and, in line with (for example) with the <b>Fenwick Solar Farm Order 2026</b> and the <b>Tillbridge Solar Order 2025</b> referred to above, “advanced planting” has been included in the definition of “permitted preliminary work”. The Applicant has reflected this in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
<p><b>Q1.12.12</b></p>	<p><b>Article 6. Disapplication and modification of statutory provisions</b></p> <p><b>6(1):</b> why does the wording of this article disapply the provisions listed during decommissioning of the Proposed Development? Provide further justification.</p> <p><b>6(1)(e):</b> what is the justification for the disapplication of these powers?</p> <p><b>6(3):</b> what is the justification for the disapplication of these powers when the dDCO lists the hedgerows to be removed? Notwithstanding this, should the wording read: “Regulation 6 (permitted work) of the Hedgerows Regulations 1997 is modified so as to read for the purposes of this Order only as if there were inserted after paragraph (1)(j) the following...”, rather than refer to paragraph (e)? If not, explain why not.</p> <p><b>6(5) – (8):</b> it appears that these powers are intended to allow development not authorised by the dDCO to be carried out within the order limits pursuant to planning permission and would appear to obviate the need, in such circumstances, to apply to change the dDCO (through section 153 of the Planning Act 2008). In 6(8) it appears that the reference to “paragraph (3)” ought to amended to “paragraph (6)” regarding “enforcement action”.</p>	<p>As set out in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, these provisions have been disapplied on the basis that they address matters of which the merits and acceptability will, if the DCO is made, have already been sufficiently considered and resolved as part of that process. The dDCO seeks authorisation for decommissioning and the requirements secure (where necessary and appropriate) mitigation for decommissioning, therefore it is appropriate that the scope of the disapplications sought also cover the decommissioning phase and that the Applicant does not unnecessarily have to seek additional consents outside of the DCO process (which the Planning Act 2008 regime is set up to avoid). This approach has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b>.</p> <p>In respect of article 6(1)(e), please refer to the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> submitted at Deadline 2 in response to the similar query at Q1.12.40.</p> <p>In respect of article 6(3), as set out in in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, this provides for the modification of Regulation 6(1) of the Hedgerows Regulations 1997 (HR 1997) to provide that removal of any hedgerow to which the HR 1997 relates is permitted for purposes of carrying out of any development or exercising any functions which have been authorised by the DCO. The justification for this is equivalent to that set out above and in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, i.e. to prevent the duplicative regulation of matters which have already been</p>

ExQ1 Ref	Question	Applicant's Response
	<p>The ExA notes that the provisions in articles 6(5) to 6(8) appear similar to ones removed from other dDCOs recently by the SoS for the Department for Energy Security and Net Zero (DESNZ) because it considered it unnecessary and that it may create potential ambiguity (such as the removal of the applicant's proposed article 46 'inconsistent planning permissions' from The Byers Gill Solar Order 2025). On this basis, provide justification for why these powers are considered necessary for this specific project. The ExA directs the applicant to section 5.11.25 of PINS <a href="#">Advice Note 15: drafting development consent orders</a>. For each power sought to be disapplied, the following information should be provided:</p> <ol style="list-style-type: none"> <li>1. the purpose of the legislation/ statutory provision</li> <li>2. the persons or body having the power being disapplied</li> <li>3. an explanation as to the effect of disapplication and whether any protective provisions or requirements are required to prevent any adverse impact arising as a result of disapplying the legislative controls</li> <li>4. (by reference to section 120 of and schedule 5 to the Planning Act 2008) how each disapplied provision constitutes a matter for which provision may be made in the dDCO</li> <li>5. where the consent falls within a schedule to the Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015, evidence that the regulator has consented to removing the need for the consent in accordance with section 150 of the Planning Act 2008 should be provided</li> </ol>	<p>adequately considered as part of the grant of development consent. It also serves to bring the Proposed Development in line with any other development for which planning permission has been granted (which would benefit from the provisions of Regulation 6(1)(e) of the HR 1997). The decision to notionally insert this under Regulation 6(1)(e) is, in the Applicant's view, not of material concern, but is simply an attempt to logically group similar exemptions together. The Applicant would also note there is already an existing Regulation 6(1)(j). This disapplication has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b> and the <b>Outer Dowsing Offshore Wind Farm Order 2026</b>.</p> <p>As set out in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, Article 6(5) permits certain development authorised by a planning permission granted under the Town and Country Planning Act 1990 that is within the Order Limits to be carried out pursuant to the terms of that planning permission without breaching the DCO. This provision ensures that the undertaker does not breach section 161 of the Planning Act 2008 in carrying out certain development pursuant to a grant of planning permission. The Applicant notes that a very similar provision to paragraph (5) was recently accepted by the Secretary of State in the <b>Springwell Solar Farm Order 2026</b>. The Applicant has amended the <b>Draft DCO [EN010158/APP/3.1.4]</b> at Deadline 2 to align paragraph (5) with the made Springwell DCO. On this basis the Applicant considers the inclusion of paragraph (5) to be justified.</p> <p>In respect of Article 6 paragraphs (6) to (8), as explained in the updated <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> these provisions address the Supreme Court's decision in <i>Hillside Parks Ltd v Snowdonia National Park Authority 2022 UKSC [30]</i>. These paragraphs are considered particularly important and have been drafted specifically for the Proposed Development given there are two known, existing planning permissions that overlap the Order Limits which have been defined as "existing or approved developments," meaning:</p> <ol style="list-style-type: none"> <li>(a) East Claydon BESS (reference 23/03875/APP) approved 11 September 2025; and</li> <li>(b) East Claydon Greener Grid Park (reference 25/01297/APP) pending decision.</li> </ol> <p>Paragraphs (6) and (7) ensure that any conditions of "existing or approved development" permissions cease to have effect to the extent of any inconsistency, and that any inconsistency be disregarded for the purposes of establishing whether the existing or approved developments can proceed if they are capable of physical implementation and without the risk of enforcement action being taken (notwithstanding any incompatibility between the Proposed Development and the development authorised by the existing or approved developments). This provision adopts the terminology used by the Supreme Court in <i>Hillside</i> and reflects the approach taken in the Non-Material Change Application for Longfield Solar Farm Order 2023 which was amended to address specific overlaps.</p> <p>In respect of the final part of this question, the information set out in points 1 to 5 has been provided in table in the revised <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> submitted at Deadline 2.</p>
<p><b>Q1.12.13</b></p>	<p><b>Article 10. Power to alter layout, etc., of streets</b></p> <p><b>10(1):</b> should this part of the article read as follows: "The undertaker may for the purposes of the authorised development temporarily alter the layout of or carry out any works in the street in the case of the streets specified in column 2 of the table in</p>	<p>The wording of Article 10(1) is adapted from and very similar to wording which appears in various made DCOs, including the Helios Renewable Energy Project Order 2025 (article 10(1)), the Tillbridge Solar Order 2025 (article 10(1)) and the Fenwick Solar Farm Order 2026 (article 10(1)). The difference in the present case is that article 10(1) relates solely to permanent works (whereas the other DCOs cited provide for both temporary and permanent works on certain streets specified in the DCO). Article 10(1) of the <b>Draft DCO [EN010158/APP/3.1.4]</b> provides that the <u>streets specified in column 2</u> of the table in</p>

ExQ1 Ref	Question	Applicant's Response
	<p>Schedule 5 (alteration of streets) <b>and</b> permanently in the manner specified in relation to that street in column 3." If not, why not?</p> <p><b>10(2):</b> should this article also refer to the ability to “alter, remove, replace and relocate any street furniture, including bollards, lighting columns, road signs and chevron signs”? If not, why not?</p> <p>As currently drafted, article 10 would extend to allowing the undertaker to alter the layout of streets outside the order limits (as well as streets within the order limits). Explain why all highways works cannot be defined within the dDCO and why the extent of this power is needed, specifically in relation to the Proposed Development.</p>	<p>Schedule 5 may be <u>altered permanently in the manner specified in column 3</u> of that table. Temporary alterations to streets are dealt with under article 12. Precedent for this article is found in the <b>Springwell Solar Farm Order 2026</b> (article 10(1)).</p> <p>Article 10(2), which grants an additional general power to alter any street for the purposes of constructing, operating or maintaining the Proposed Development, subject to first obtaining the consent of street authority, is again very commonly used drafting which appears in all of the made DCOs referred to above. The provision is required on the basis that detailed design work has not yet been undertaken, and at that stage it may become apparent that additional or slightly different highway works are necessary to construct, operate or maintain the Proposed Development. The crucial additional control here is that such powers cannot be exercised without the consent of the street authority, allowing the street authority control over any additional works required. The inclusion of this provision within the <b>Draft DCO [EN010158/APP/3.1.4]</b> and numerous made DCOs before it reflects the legislative and policy intention underlying the development consent order process that DCOs should be a “one stop shop” for consenting of nationally significant infrastructure projects, both to ensure that the Secretary of State has overarching visibility of the controls applying to such projects and to prevent the need for developers to grapple with multiple separate consenting regimes for projects of this scale.</p> <p>The Applicant agrees that article 10(2) should also refer to the ability to alter, remove, replace and relocate any street furniture, including bollards, lighting columns, road signs and chevron signs and has reflected this in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
<p><b>Q1.12.14</b></p>	<p><b>Article 12. Temporary prohibition or restriction on use of streets and public rights of way</b></p> <p>Notwithstanding other precedents, justification should be provided as to why the power is appropriate and proportionate having regard to the impacts on pedestrians and others of authorising temporary working sites in these streets – for example, the EM [<a href="#">AS-012</a>] cites precedents for the wording of 12(6), but does not give information on why this power is needed specifically for the Proposed Development. Provide more information to justify the extent of this power, with specific reference to the circumstances of the Proposed Development.</p> <p><b>12(5):</b> provide more information on what is meant by ‘temporary working site’ and to what extent the impacts from these have been assessed more widely in the ES, such as (but not limited to) noise effects on sensitive receptors, ecological effects and landscape and visual effects. If these impacts have not been assessed, justify why this power should be included in the dDCO.</p> <p><b>12(8):</b> if a public right of way referred to in paragraph (3) was restricted using this power more than once, would the undertaker be required to consult the street authority before doing so after the first time it was restricted? If so, how is this captured by the current drafting? If not, why would this not be deemed necessary?</p>	<p>The Applicant considers that the first two parts of this question relate specifically to article 12(6) (and that the reference to article 12(5) is a typographical error). Article 12(6) authorises the use of any public right of way (PRoW) within the Order Limits that has been temporarily closed under the powers conferred by article 12 as a temporary working site. The effect of this provision is that a PRoW which is otherwise going to be closed as a result of article 12 may, in that intervening period when it is closed, be used as a temporary working site. The Applicant considers this to be appropriate and proportionate on the basis that it enables efficient use of a PRoW, and land, that is not otherwise able to remain in use by the public for safety reasons during construction or maintenance of the Proposed Development. Exercise of this power would not result in any additional impacts on pedestrians beyond those already experienced as a result of temporary closure of the PRoW, because it only applies to PRoWs the closure of which is already authorised under the preceding provisions of article 12. It should also be noted that any exercise of these powers would be subject to the controls set out in, for example, the detailed Construction Environmental Management Plan and the Construction Traffic Management Plan. In this context, a “temporary working site” could refer to, for example, use during temporary installation of cable routes.</p> <p>In respect of article 12(8), this should be read in the context of the article as a whole. Article 12(4) states that “<i>the undertaker <u>must not temporarily close, prohibit the use of, authorise the use of, restrict the use of, alter or divert— (a) any public right of way specified in paragraph (3) without first consulting the street authority; and (b) any other public right of way without the consent of the street authority, and the street authority may attach reasonable conditions to any such consent</u></i>” (emphasis added). Article 12(8) goes on to say that “<i>nothing in this article prevents the undertaker from temporarily closing, prohibiting the use of, authorising the use of, restricting the use of, altering or diverting a public right of way under this article more than once</i>”, but does nothing to disapply the requirements of article 12(4).</p>

ExQ1 Ref	Question	Applicant's Response
Q1.12.15	<p><b>Article 13. Permanent stopping up and diverting of public rights of way</b></p> <p><b>13(2)(b):</b> to what extent have the effects from temporary alternative routes, diverting public rights of way which would be captured by this article been assessed in the ES? How long could these temporary alternative routes be in place for? The article refers to the need for the street authority to be “reasonably satisfied” with the proposed alternative temporary routes – what is the process for the street authority to confirm its satisfaction with the proposed alternative? Why is this part of the article needed – the EM provides little explanation of why this would be required.</p>	<p>As such, any instance of a PRoW being temporarily closed etc. under article 12 would be subject to the requirements of article 12(4) and be subject to consultation with or the consent of (as appropriate) the street authority. The <b>Outline Rights of Way and Access Strategy (Outline RoWAS) [EN010158/APP/7.8.3]</b> also provides at paragraph 4.5.5 that a programme of PRoW closures / diversions is to be provided to Buckinghamshire Council prior to construction works commencing.</p> <p><b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> provides a link-level assessment to assess the changes to each individual link (as determined by the Buckinghamshire Definitive Map) where links interact with or are affected by the Proposed Development for any part of its length. This is considered in the context of embedded mitigation (via diversions, new or alternative links both permanent and temporary) that would be provided as part of the Proposed Development as diverted/replacement PRoW, and which would be subject to the commitments in terms of delivery, design and maintenance set out in the <b>Outline RoWAS [EN010158/APP/7.8.2] [REP1-090]</b>.</p> <p>The assessment presented in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> primarily considers where connectivity in terms of journey distance is changed as a result of the Proposed Development, in the context of replacement and alternative access during both the construction/decommissioning and operation (including maintenance) phases.</p> <p><b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> assess effects related to users of PRoW including, severance of communities (for example, as a result of changes in traffic flows on roads crossed by PRoW); Pedestrian delay (for example, where this relates to changes in traffic flows interacting with paths used by walkers, cyclists and horse ride); Non-motorised user amenity (for example, where users of the highway including walkers, cyclists and horse riders may experience change in journey time or amenity as a result of a change in traffic flows); and Fear and intimidation (for example, where changes in traffic flow, heavy vehicle composition, the speed at which vehicles are passing and the proximity of traffic to people discourages walkers, cyclists and horse riders from using PRoW).</p> <p><b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> and <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b> consider changes in environmental amenity experienced by users of PRoW.</p> <p>Where PRoWs are to be temporarily diverted, the duration of such a diversion in that area would be for a maximum period of 6 months. Temporarily diverted PRoW will be reinstated to their original route and to at least their original condition following track and cable trench construction activities. This is set out and secured within the <b>Outline RoWAS [EN010158/APP/7.8.2] [REP1-090]</b>.</p> <p>The reference within article 13(2)(b) to “the reasonable satisfaction of the street authority” refers to the undertaker’s obligation to maintain any temporary alternative route provided until the new PRoW is completed and opened, i.e. that alternative route must be maintained to the street authority’s reasonable satisfaction for the duration of it being available to the public. This aligns with similar phrasing in articles 10 (power to alter layout, etc., of streets) and 15 (access to works) which both require temporary works to be restored to the reasonable satisfaction of the street authority. The provision is considered necessary to ensure that the street authority retains control over the condition of PRoW in accordance with its statutory duties.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.12.16	<p><b>Article 17. Traffic regulation measures</b></p> <p><b>17(6):</b> should this article also include a requirement to display a site notice prior to the provision taking effect? If not, why not?</p>	<p>The Applicant is aware that a requirement for a site notice has been included in similar articles of other made DCOs and will include such a provision in this case. This has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
Q1.12.17	<p><b>Article 21. Removal of human remains</b></p> <p>In recently made DCOs, the SoS for the DESNZ removed similar worded articles. Provide additional justification for why the circumstances differ for the Proposed Development and why this article should be included in the dDCO.</p> <p><b>(2)(a) and (b):</b> there is no timeframe specified in which the newspaper notice and site notice should be displayed in advance of any proposed removal of human remains. Review the wording of the article and update it to include an appropriately justified timeframe.</p>	<p>The Applicant will remove this article. This has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
Q1.12.18	<p><b>Article 24. Compulsory acquisition of rights</b></p> <p>Article 24 would enable compulsory acquisition of new rights over all of the Order land, with a schedule which limits the compulsory acquisition power in defined plots to the defined rights listed in that schedule (Schedule 9).</p> <ol style="list-style-type: none"> <li>Expand on the reasons for seeking undefined rights in land not listed in schedule 9 as outlined in the Explanatory Memorandum <a href="#">[AS-012]</a> and Statement of Reasons <a href="#">[REP1-010]</a>.</li> <li>Provide evidence to show that persons with an interest in the Order land were aware that undefined new rights were being sought over all of the Order land and were consulted on that basis.</li> </ol>	<ol style="list-style-type: none"> <li>As set out in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, the purpose of article 24 is to enable the acquisition of new rights and/or creation of restrictive covenants over land which would otherwise be subject to freehold acquisition under article 22. Acquisition of new rights and/or creation of restrictive covenants constitutes a lesser interference with affected parties' interests in land as compared to outright freehold acquisition (and is therefore a less onerous power). As such, the availability of this power allows the undertaker to reduce its interference with private land rights to the minimum required for the purposes of construction, operation and maintenance of the Proposed Development. Were this power not available, the only route to securing the necessary land rights (other than temporary use, which would not be sufficient where rights are required on a permanent basis) would be freehold acquisition, when this may go beyond the rights required at the point of detailed design.</li> <li>The Applicant has engaged with affected parties in relation to the proposed use of and legal interests sought in their land from an early stage. This engagement has included: <ul style="list-style-type: none"> <li>Direct engagement with a view to seeking voluntary agreement of permanent and/or temporary rights and interests over land. In some cases voluntary agreement has already been reached.</li> <li>Statutory consultation with affected parties in accordance with section 42(1)(d) of the Planning Act 2008 (an example cover letter is provided in <b>Consultation Report Appendices E-1 and F-1 [EN010158/APP/5.2] [APP-025]</b>).</li> <li>Formal notification in the letters issued pursuant to section 56 of the Planning Act 2008 following acceptance of the DCO Application, which enclosed a copy of the section 56 notice. The section 56 notice stated that "<i>the DCO, if granted, would authorise the compulsory acquisition of land, interests in land and rights over land, and the powers to use land permanently and temporarily</i>" (emphasis added).</li> </ul> </li> </ol> <p>As explained above, the nature of this power constitutes a less onerous interference than outright freehold acquisition and as such does not put affected parties at any additional disadvantage.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.12.19	<p><b>Article 31. Temporary use of land for constructing the authorised development and Article 32. Temporary use of land for maintaining the authorised development</b></p> <p>Whilst the ExA notes the applicant's existing commentary on this issue, including during compulsory acquisition hearing 1 (CAH1) <a href="#">[REP1-107]</a>:</p> <ol style="list-style-type: none"> <li>provide further justification for wider powers which allow temporary possession of land not listed in schedule 11</li> <li>explain what steps have been taken to alert all affected persons in the Order land to the possibility of temporary possession</li> </ol> <p>In addition:</p> <ol style="list-style-type: none"> <li>Provide justification for the provisions in article 31 (5) that outline exemptions from the removal of temporary works and the restoration of land. Should this article include an explicit commitment to remove all equipment and vehicles in addition to temporary works before giving up possession of land? If not, why not?</li> </ol> <p>Furthermore:</p> <ol style="list-style-type: none"> <li>In the context of the notice period of 3 months identified in the Neighbourhood Planning Act (NPA) 2017 (not yet in force), provide further justification for the 28 days proposed to be required under articles 31(3) and 32(3).</li> <li>Under the NPA 2017, the notice of temporary possession would also have to state the period for which the acquiring authority is to take possession. Should such a requirement be included in the dDCO? If not, why not?</li> <li>The provisions of the NPA 2017 Act include the ability to serve a counter-notice objecting to the proposed temporary possession so that the landowner would have the option to choose whether temporary possession or permanent acquisition was desirable. Should articles 31 and 32 of the dDCO make such provision? If not, why not?</li> </ol>	<ol style="list-style-type: none"> <li>As explained in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> and during CAH1 <a href="#">[REP1-107]</a>, article 31 has a two-tier structure which would enable the Applicant to take temporary possession firstly, under article 31(1)(a)(i), of the land specified in Schedule 11 (Land of which temporary possession may be taken) and secondly, under article 31(1)(a)(ii), of the rest of the land within the Order Limits i.e. land which is subject to compulsory acquisition. The Applicant understands that this question relates to that second limb, article 31(1)(a)(ii). This second limb allows temporary possession to be taken for an expressly time-limited period over a wider area whilst the Proposed Development is under construction. Once the Proposed Development is constructed, and the final areas for which permanent acquisition is required are known, permanent acquisition will be sought over that targeted area. This is a proportionate approach which allows a lesser interference with private land rights, and reduces the extent to which permanent acquisition is sought to the minimum area required for operation and maintenance of the Proposed Development. Similar to other powers discussed above, this is considered necessary and appropriate on the basis that (as is an inherent feature of nationally significant infrastructure projects), detailed design work has not yet been undertaken, meaning the final location of infrastructure (and therefore the extent to which permanent acquisition is sought) is not yet known, and flexibility is therefore required in respect of the temporary construction period. When the Proposed Development is constructed and ready for operation, this will allow a proportionate approach to permanent acquisition to be taken. This has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b>, which was made by the Secretary of State on 8 April 2026.</li> <li>Please refer to the Applicant's response to item 2 within Q1.12.21 above.</li> <li>The exceptions set out in article 31(5) are included to allow for certain works undertaken on land over which temporary possession has been taken to remain in situ for the purposes of the Proposed Development, rather than requiring permanent acquisition of land for such purposes. This includes replacement and/or improvement works undertaken on the land (limbs (b), (c) and (d)), which the landowner may wish to retain, as well as works undertaken to deliver mitigation or protective works expressly required by the DCO (limbs (e), (f) and (g)), which are therefore unable to be removed. Again this has precedent in various made DCOs, including the <b>Springwell Solar Farm Order 2026</b>, made by the Secretary of State on 8 April 2026. In respect of a requirement to remove all equipment and vehicles, the Applicant is not aware of any precedent for this and does not consider it appropriate for the reasons discussed above.</li> <li>As the Examining Authority notes, the Neighbourhood Planning Act 2017 (NPA 2017) is not in force and does not therefore constitute good precedent for the purposes of nationally significant infrastructure project consenting. The 28-day notice period provided for in articles 31(3) and 32(3) is standard (being reflected in model article 29 of the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009) and justified on the basis that the Proposed Development, being of critical national priority, must be able to proceed without undue delay. Again this has precedent in the <b>Springwell Solar Farm Order 2026</b>.</li> <li>The Applicant would again note that the NPA 2017 is not in force and is not considered appropriate precedent. As explained above, the period over which temporary possession can be taken is inherently time-limited by article 31(4) (and article 32(4)). The power allows flexibility for construction works to be undertaken under temporary possession powers before permanent rights / acquisition are sought over a reduced area of land when the location of permanent infrastructure is known. It is also</li> </ol>

ExQ1 Ref	Question	Applicant's Response
		<p>noted that the duration of the construction period may be variable / unpredictable due to circumstances outside of the Applicant's control, for example due to weather conditions.</p> <p>6. As outlined above, the temporary possession power is intended to create flexibility for delivery of the Proposed Development and ensure a proportionate approach to compulsory acquisition. As temporary possession constitutes a less onerous interference than permanent acquisition, and given the status of the NPA 2017, the Applicant does not consider this to be necessary.</p>
Q1.12.20	<p><b>Article 36. Benefit of the Order</b></p> <p>Could the definition of 'grid connection works' which is referred to be more defined within article 2? The ExA draws the applicant's attention to the wording "to the extent work numbers 8, 9 and 10 are necessary in connection with work number 6" and query whether this could be better defined?</p>	<p>The approach to the definition of "grid connection works" is considered sufficiently clear and has precedent in the <b>Springwell Solar Farm Order 2026</b>. This also reflects the proposed definition to be used in the protective provisions currently being negotiated with National Grid Electricity Transmission plc (NGET) (save that in that case, the land plots specifically relevant to NGET are referenced) and the Applicant's preference would be to ensure these definitions are aligned.</p>
Q1.12.21	<p><b>Article 40. Felling or lopping of trees and removal of hedgerows</b></p> <p><b>40(4):</b> this article refers to the "...the landscape and ecology management plan approved pursuant to requirement 8 in Schedule 2 (requirements)...". The ExA assumes that this is an error and should refer to requirement 7, rather than requirement 8 which relates to the provision of details for fencing and means of enclosure?</p> <p>The dDCO as drafted does not provide a schedule of trees which are likely to be affected, why is this? Could this be included?</p>	<p>The Applicant agrees that the reference to "Requirement 8" is a typographical error and this has been corrected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p> <p>The Applicant does not consider it necessary or proportionate to provide a schedule of trees within the <b>Draft DCO [EN010158/APP/3.1.4]. ES Volume 4, Appendix 7.13: Arboricultural Impact Assessment [EN010158/APP/6.4.2]</b> includes a full tree survey together with an assessment of the likely impacts to trees arising as a result of the Proposed Development. Article 41 also provides separate protection for trees which may become subject to a tree preservation order after the date of submission of the Application (there being no such trees within the Site at the time the DCO Application was submitted, as set out in <b>ES Volume 4, Appendix 7.13: Arboricultural Impact Assessment [EN010158/APP/6.4.2].</b>)</p>
Q1.12.22	<p><b>Article 41. Trees subject to tree preservation orders</b></p> <p>PINS <a href="#">Advice Notice 15: drafting Development Consent Orders</a> section 15.8.22 states trees subject to a tree protection order (TPO) and/ or are otherwise protected (and likely to be affected) should be specifically identified and it is not appropriate for this power to be included on a precautionary basis. However, the EM <a href="#">[AS-012]</a> effectively states that this article has been added on a precautionary basis, in the event that a TPO has been made since the submission of the application for the Proposed Development. Explain how this article meets the requirements of the aforementioned guidance in this regard.</p> <p><b>41(1):</b> update the wording in this part of the article to provide a more defined date after which the powers would apply to (i.e. the day in September 2025). Explain why this power is necessary for decommissioning – the ExA notes that in other recently made DCOs, similarly worded articles did not include the decommissioning phase.</p>	<p>Article 41 has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b> and the <b>East Yorkshire Solar Farm Order 2025. ES Volume 4, Appendix 7 :13 Arboricultural Impact Assessment [EN010158/APP/6.4] [APP-099]</b> includes a full tree survey together with an assessment of the likely impacts to trees arising as a result of the Proposed Development, allowing the Examining Authority to give full consideration to the characteristics of any affected trees.</p> <p>In respect of article 41(1), as explained above, at the point of submission of the DCO Application (26 September 2025), no trees within the Site were subject to a tree preservation order, and this is the basis for the date of September 2025 stated in the article. The use of a date in this format has precedent in the <b>Springwell Solar Farm Order 2026</b>. However, for clarity the Applicant has updated this to reflect the exact date of submission of the DCO Application in the <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2. The reference to decommissioning similarly has precedent in the <b>Springwell Solar Farm Order 2026</b>.</p>
Q1.12.23	<p><b>1. Definitions</b></p>	<p>The Applicant agrees that these references to "Work No. 2" should refer to "Work No. 2A" and this has been corrected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.12.24	<p>Should the definition for 'main collector compound' read: "...connects Work Nos. 1, 3 and 4 to Work No. 2A to enable collection of electricity and transmission of electricity from and to Work No. 1, Work No. 2A and Work No. 4;"? If not, why not?</p> <p>Should the definition for 'satellite collector compound' read "...means a compound with electrical equipment required to collect electricity from the balance of solar system (BoSS) plant in Work No.1 which transmits it to Work No. 2A or Work No. 5, sitting on concrete pads or concrete columns;"? If not, why not?</p> <p><b>2. Authorised development</b></p> <p><b>Work No. 2A(a)(iii):</b> provide additional information on what the term 'ancillary structures' could cover. Provide justification for why this wording is needed in the dDCO.</p> <p><b>Work No. 2A(a)(v):</b> should this also include provision for fire safety infrastructure more generally (rather than just reference to transformers and barriers) and should this also be referred to in Work No. 3? If not, why not?</p> <p><b>Work No. 6(a):</b> should this read "...works to lay electrical cables including 400 kilovolt cables connecting Work No. 2A into the National Grid East Claydon Substation..."? If not, why not?</p>	<p>The reference to "ancillary structures" in Work No. 2A(a)(iii) has been included to cover fencing, gates, security CCTV equipment and earthing devices. The purpose of the earthing devices is to ground the equipment in case of faults, strikes etc.</p> <p>The description of Work No. 2A(a)(v) is considered sufficient to capture the fire safety infrastructure required on the basis that this will generally be inherent within the design of the substation works.</p> <p>The Applicant agrees that the reference to "Work No. 2" in the description of Work No. 6(a) should refer to "Work No. 2A" and this has been corrected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
Q1.12.25	<p><b>Further associated development</b></p> <p>Provide justification for the proposed works included under "In connection with and in addition to Work Nos. 1 to 10 further associated development within the Order limits" – the ExA note that no explanation is given in the EM <a href="#">[AS-012]</a> for these works.</p>	<p>The wording at the end of paragraph 2 of Schedule 1 authorises further associated development to the extent that such development is "unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement". This wording is well precedented and consistent with wording appearing in other consented DCOs, including the <b>Springwell Solar Farm Order 2026</b>. In addition, the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b>, at sections 5.1 and 1.6, contains extensive explanation of the mechanisms that have been built into the <b>Draft DCO [EN010158/APP/3.1.4]</b> to ensure that the built form of the Authorised Development does not exceed the basis of assessment within the Environmental Statement. The wording is required on the basis that, as noted above, detailed design work has not yet been undertaken, and at that stage it may become apparent that additional or slightly different works of associated development are necessary to construct, operate or maintain the Proposed Development. The Applicant is therefore confident that this wording is acceptable and appropriate. The Explanatory Memorandum has been updated at Deadline 2 to provide further context.</p>
Q1.12.26	<p><b>General</b></p> <p>A number of the proposed requirements require the submission of detailed management plans which must be 'substantially' in accordance with outline plans which have been submitted with the application. Provide justification for the inclusion of the word 'substantially'. Could this allow for changes to the approved documents which would lead to effects which have not been assessed in the ES? If not, how is this controlled?</p>	<p>The use of the word "substantially" in this context is well-precedented, appearing in for example the <b>Springwell Solar Farm Order 2026</b> and the <b>Fenwick Solar Farm Order 2026</b>. It is intended to reflect that, for example, the management plans are submitted in outline, prior to completion of detailed design work, and the detailed management plans may therefore need to deviate slightly from the outline plans in order to reflect this. It is the Applicant's view that a detailed management plan which would lead to environmental effects not previously assessed would not be in "substantial" accordance with the outline management plans submitted with the DCO Application. Further, paragraph 2 of Schedule 16 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> sets out the procedure for discharge of Requirements and provides that any application for discharge must be accompanied by a statement confirming whether it is likely</p>

ExQ1 Ref	Question	Applicant's Response
		<p>that the application's subject matter will give rise to any materially new or different environmental effects, and if so, what those effects are. In addition, paragraph 3(2) of Schedule 2 provides that approval for any amendment to any approved document must not be given except where it has been demonstrated to the satisfaction of the relevant planning authority that the subject matter of the approval sought is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.</p>
<p><b>Q1.12.27</b></p>	<p><b>4. Detailed design approval</b></p> <p>As drafted, requirement 4 could allow for Work No. 9 to take place prior to the approval of detailed design approval, despite requirement 4(1)(f) requiring approval of such details. Moreover, it would also allow works listed under 'further associated development' such as boundary treatments, bunds, surface water drainage systems, internal access tracks, landscaping measures and other works to take place which may need to be controlled by detailed design. Review the wording of this requirement or provide justification for your approach.</p>	<p>As explained in the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> at section 4.2.2, Work No. 9 will also be undertaken pursuant to the powers in Part 3 (Streets) of the <b>Draft DCO [EN010158/APP/3.1.4]</b>, meaning that it is not necessary for Requirement 4 to also apply to these works. It is the Applicant's view that sufficient controls are in place with respect to this works package. Part 3 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> contains various relevant controls, for example the requirement under article 11(1)(a) for highway works to be completed to the reasonable satisfaction of the highway authority, and the ability under article 16 for agreements to be entered into with the street authority in respect of highway works carried out under powers conferred by the Order. Requirement 4(1)(f) refers to vehicular and pedestrian access, parking and circulation areas "<i>relating to that part of</i>" Works Nos. 1 to 7 and 10 and as such is distinct from any works undertaken as part of Work No. 9 which, as set out in this response, is subject to separate controls. This approach has precedent in the <b>Springwell Solar Farm Order 2026</b>.</p> <p>In respect of the further associated development, these works are to be undertaken "in connection with" Works Nos. 1 to 10 and as such the Applicant considers that Requirement 4 would apply to these works to the extent that they are undertaken in connection with a Work No. which is within the scope of Requirement 4.</p>
<p><b>Q1.12.28</b></p>	<p><b>7. Landscape and ecological management plan (LEMP)</b></p> <p>As drafted, requirement 7 would allow for the following preliminary permitted works to commence prior to the submission of the detailed LEMP: (a) – (g) and (j). Explain how these preliminary works would not have effects which should be controlled through the detailed LEMP – for example, could site preparation works or temporary means of enclosure lead to a loss of biodiversity, impact on habitats or have an effect on landscape character?</p>	<p>[The Applicant confirms that these works are not expected to result in effects that require mitigation through the <b>Outline LEMP [EN010158/APP/7.6.3]</b>. This approach has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b> and the <b>Fenwick Solar Farm Order 2026</b>.</p>
<p><b>Q1.12.29</b></p>	<p><b>8. Fencing and other means of enclosure</b></p> <p><b>8(2):</b> the ExA considers the drafting of this requirement to be confusing regarding the timing of when detailed information needs to be submitted. Review the wording to ensure that this information is clearer – the ExA directs the applicant's attention to The Tillbridge Solar Order 2025 which separated out temporary construction fencing and permanent operational fencing.</p>	<p>The Applicant has updated the wording of Requirement 8 to more closely align with, for example, the <b>Tillbridge Solar Order 2025</b> and the <b>Springwell Solar Farm Order 2026</b>. This has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.</p>
<p><b>Q1.12.30</b></p>	<p><b>9. Drainage</b></p>	<p>The Applicant considers the requirement to be sufficiently clear and it covers both surface water drainage and foul water drainage. The <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b> is secured via the requirement and is submitted into Examination at <b>[REP1-096]</b> and covers both surface water</p>

ExQ1 Ref	Question	Applicant's Response
	<p>Should the requirement refer to the type of drainage information sought, ie the provision of details on “surface water” drainage? The ExA note that details of foul drainage are not referred to in this, or any other requirement. Why is this?</p>	<p>drainage and foul water drainage. The wording was considered acceptable in the recently made <b>Springwell Solar Farm Order 2026</b>.</p>
<p><b>Q1.12.31</b></p>	<p><b>11. Construction environmental management plan (CEMP)</b></p> <p><b>11(1):</b> why is the wording regarding consultation with the Environment Agency (EA) different to that of other requirements, ie why is the wording not drafted “...in consultation with the Environment Agency...”? Why are Natural England, and the local highways authority not listed as consultees on this requirement?</p> <p><b>11(4):</b> as drafted, requirement 11 would allow for the following preliminary permitted works to commence prior to the submission of the detailed CEMP: (a) – (h) and (j) – (k). Explain how these preliminary works would not have effects which should be controlled through the detailed CEMP – could these works impact on ecology for example?</p>	<p>In respect of 11(1), the Applicant is happy to make this minor amendment to change “<i>such approval to be in consultation with the Environment Agency</i>” to “<i>in consultation with the Environment Agency</i>” and this has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2, together with the addition of Natural England as a consultee. The Applicant considers that the local highway authority should be a consultee in respect of the construction traffic management plan, rather than the construction environmental management plan, and this update has been made to Requirement 13 at Deadline 2.</p> <p>Requirement 11(4) states that ““<i>commence</i>” <i>includes</i> <i>intrusive site investigations for the purpose of assessing ground conditions included in part (a) (environmental surveys, geotechnical surveys, intrusive archaeological surveys and other investigations for the purpose of assessing ground conditions), part (d) (remedial works in respect of any contamination or other adverse ground conditions) and part (i) (Work No. 9 (works to facilitate access to Work Nos. 1 to 8 and 10)) of the permitted preliminary works</i>” (emphasis added). As such the only permitted preliminary works excepted from this Requirement are limbs (b), (c), (e)-(h) and (j)-(k). These permitted preliminary works are standard works that would follow best practice and are not required to be controlled by measures set out in the detailed Construction Environmental Management Plan. This approach has precedent in the <b>Springwell Solar Farm Order 2026</b>.</p>
<p><b>Q1.12.32</b></p>	<p><b>12. Operational environmental management plan</b></p> <p><b>12(1):</b> why is the wording regarding consultation with the EA different to that of other requirements ie why is the wording not drafted “...in consultation with the Environment Agency...”? Should Natural England, and the local highways authority be listed as consultees on this requirement? If not, why not?</p>	<p>The Applicant is happy to make this minor amendment to change “<i>such approval to be in consultation with the Environment Agency</i>” to “<i>in consultation with the Environment Agency</i>” and has added Natural England as a consultee. These amendments have been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2. As noted in respect of Q1.12.34 above, the local highway authority has been added as a consultee in respect of requirement 13.</p>
<p><b>Q1.12.33</b></p>	<p><b>13. Construction traffic management plan (CTMP)</b></p> <p><b>13(4):</b> as drafted, requirement 13 would allow for the following preliminary permitted works to commence prior to the submission of the detailed CTMP: (a) – (h) and (j) – (k). Explain how these preliminary works would not have effects which should be controlled through the detailed CTMP.</p> <p>Should the requirement include the need for the relevant planning authority to consult with National Highways prior to approving relevant parts of the construction traffic management plan? If not, why not?</p>	<p>Requirement 13 has been amended in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2 to provide that the local highway authority is included as a consultee. There has been no request from National Highways to be included as a consultee in respect of this Requirement.</p> <p>In respect of 13(4), permitted preliminary works (a)-(h) and (j)-(k), and now with the included addition of (l), are standard works that would follow best practice and are not required to be controlled by the specific transport measures set out in the detailed Construction Traffic Management Plan.</p>
<p><b>Q1.12.34</b></p>	<p><b>16. Rights of way and access strategy</b></p>	<p>During operation of the Proposed Development, new permissive paths would be managed by the Applicant (as undertaker) in accordance with the detailed Rights of Way and Access Strategy. The Applicant will maintain sufficient land rights (either through voluntary agreement or through exercise of compulsory acquisition powers) to ensure control of the permissive paths and to maintain public access</p>

ExQ1 Ref	Question	Applicant's Response
	Is there anything in the drafting of this requirement which would prevent the landowner from preventing access to permissive paths during operation of the Proposed Development? If there is not, should there be?	in accordance with the detailed Rights of Way and Access Strategy, which it will be required to comply with. These paths will operate as “permissive” solely to ensure that no prescriptive permanent rights arise during the Proposed Development’s 40-year operation. There is no intention to prevent access during the operational period.
Q1.12.35	<b>17. Soil management plan</b> Should Natural England be consulted on the detailed soil management plan? If not, why not?	The Applicant is happy to include Natural England as a consultee on this Requirement and this has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.
Q1.12.36	<b>18. Decommissioning and restoration</b> <b>(1)(a):</b> should this read: “...with respect to each phase of Work No. 1 must be no later than 40 years following the date of final commissioning as notified to the relevant planning authority pursuant to requirement <b>2(6)</b> ...”? If not, why not?	The Applicant agrees there is a minor typographical error in the wording of Requirement 18(1)(a) and this has been corrected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.
Q1.12.37	<b>General</b> Provide more information in the EM <a href="#">[AS-012]</a> as to why the legislation in this schedule is incompatible with the powers contained in the order.	The Applicant has updated the <b>Explanatory Memorandum [EN010158/APP/3.2.3]</b> to address this point and this has been submitted at Deadline 2.
Q1.12.38	<b>General</b> A relatively small number of documents to be certified are included in schedule 13 of the dDCO in comparison to the The Tillbridge Solar Order 2025 for example, which certified a far greater number of documents, including ES chapters, appendices, the Habitats Regulation Assessment, Flood Risk Assessment, indicative layout, figures etc – will a similar approach be taken for the dDCO at a later stage? If not, why not?	The documents referred to in this question generally form part of the Environmental Statement which is itself a certified document for the purposes of Schedule 13, and therefore it is not necessary to list these out separately. It should be noted that the purpose of the certification process is to capture documents referred to within the DCO and this is the approach the Applicant has taken with respect to Schedule 13.
Q1.12.29	<b>Confidentiality</b> <b>7(1):</b> why is it proposed that any arbitration hearings would take place in private? The ExA note that for other recently made DCOs this would not be the case and any arbitration case would be open to and accessible by the public, unless commercial sensitivity called for a private hearing.	The Applicant is happy to update this provision to align more closely with, for example, the <b>Springwell Solar Farm Order 2026</b> and this has been reflected in the revised <b>Draft DCO [EN010158/APP/3.1.4]</b> submitted at Deadline 2.
Q1.12.40	<b>1. Interpretation</b> Should ‘discharge’ and the ‘relevant planning authority’ be defined in the interpretation? If not, why not?	The Applicant considers “discharge” to be a commonly understood term in the context of nationally significant infrastructure projects and does not therefore consider it necessary for this term to be defined. A definition of “relevant planning authority” is already provided within article 2 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> and so the Applicant does not consider it necessary for this to be defined again for the purpose of Schedule 16.
Q1.12.41	<b>2. Applications made under requirement</b>	The Applicant assumes that the reference to paragraph 2(2) here should be a reference to paragraph 2(1)(b). This provision has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b> and the

ExQ1 Ref	Question	Applicant's Response
	<p><b>2(2):</b> provide justification for the inclusion of this wording in the dDCO - if the details submitted to discharge a requirement resulted in materially different environmental effects, would this mean that details would be in conflict with the approved information?</p> <p><b>2(5):</b> have the relevant consultees captured by this wording confirmed their agreement to accept notification via email? If not, this should be obtained.</p>	<p><b>Fenwick Solar Farm Order 2026.</b> The intention is to alert the discharging authority to the potential for materially new or different environmental effects to arise, to ensure that the discharging authority has due regard to this when determining the application. Pursuant to paragraph 2(4), the deemed discharge process in paragraph 2(3) is also expressly disapplied in the case of applications identifying materially new or different environmental effects under paragraph 2(1)(b). The Applicant's expectation is that any discharge application identifying materially new or different environmental effects is unlikely to be approved by the discharging authority in the absence of further information enabling the discharging authority to be satisfied that any such environmental effects are acceptable and/or capable of being appropriately mitigated.</p> <p>In respect of paragraph 2(5), the Applicant's interpretation is that the reference to "via email" refers specifically to the provision of a copy of the application to Requirement consultees. This provision has precedent in the <b>Springwell Solar Farm Order 2026</b>. It is now very rare for planning applications of any type to be provided in hardcopy, for a range of logistical and environmental reasons, and the Applicant considers that a default requirement to provide copies in hardcopy is likely to be both unfavourable / inconvenient to consultees and inappropriate from an environmental perspective. Notwithstanding this, the provision does allow for contrary agreement to be reached between the parties in the event that any particular consultee should wish to receive documents in hardcopy.</p>
Q1.12.42	<p><b>4. Appeals</b></p> <p><b>4(3):</b> provide justification for the timeframe of 5 working days to notify the appeal parties in writing specifying the further information required. In other recently made DCOs, the wording "as soon as practicable" has been used to define this timeframe – would this be a suitable timeframe for notification? If not, why not?</p>	<p>The notification period provided in paragraph 4(3) has precedent in, for example, the <b>Springwell Solar Farm Order 2026</b> and the <b>Fenwick Solar Farm Order 2026</b>. The Applicant would suggest that a set period of five working days has the benefit of being specific versus the more subjective "as soon as practicable", and that given that five working days is itself a very short period, there is unlikely to be any practical disadvantage or difference to parties in the event of the appointed person being subject to this five working day period as compared to a requirement to notify as soon as practicable.</p>

Table 3-13: Health and Wellbeing

ExQ1 Ref	Question	Applicant's Response
Q1.13.1	<p><b>Health Effects Report</b></p> <p>Explain how the conclusions in annex A of the Health and Wellbeing Summary Statement [REP1-056] consider the worst-case scenario in terms of receptor sensitivity.</p>	<p>The sensitivity of populations and sub-populations to changes in health and wellbeing is informed by the following factors, in-line with ISEP (formerly IEMA) guidance:</p> <ul style="list-style-type: none"> <li>• Levels of prevailing socio-economic deprivation;</li> <li>• Reliance of and changes to / alternatives to shared resources (by the population and the Project);</li> <li>• Health inequalities within the population (and sub-populations);</li> <li>• The prevailing outlook of the community (i.e. levels of anxiety, uncertainty or ambivalence about the Proposed Development);</li> <li>• Limitations on the population / sub-population from undertaking daily activities;</li> </ul>

ExQ1 Ref	Question	Applicant's Response
		<ul style="list-style-type: none"> <li>• The levels of dependency on care and support for populations;</li> <li>• Prevailing health status; and</li> <li>• The ability for people to adapt to change.</li> </ul> <p>In most cases, at a population scale, given prevailing low levels of deprivation, limited health inequalities and generally good prevailing health status, the population is considered to be less sensitive – however the <b>ES Volume 4, Appendix 5.5: Health and Wellbeing Summary Statement [EN010158/APP/6.4.3]</b> at Annex A does note that populations are anxious about the Proposed Development, and in some cases have limited ability to adapt to change resulting in sensitivity at the population scale being considered at least ‘medium’ and in some cases ‘high’ (for example relating to populations affected by determinants of health such as changes to the economic use of land, and the experience of the natural environment).</p> <p>This approach is therefore considered to represent a ‘worst case’ in terms of sensitivity at a population scale.</p> <p>Notwithstanding this, the sensitivity of sub-populations to change may be higher – this is implicit in the consideration of baseline and pathways/determinants of health, and this has been made more explicit through updates to the Health Effects Report submitted at Deadline 2, based on feedback from Written Representations (see Q1.13.5).</p>
<p><b>Q1.13.2</b></p>	<p><b>Health Effects Report</b></p> <p>Explain whether the effects identified in annex A of the Health and Wellbeing Summary Statement [REP1-056] on individual receptors (such as residential properties) consider if the inhabitants could be vulnerable members of the community with higher receptor sensitivities. If they do not, why does the assessment not consider this?</p>	<p>The <b>ES Volume 4, Appendix 5.5: Health and Wellbeing Summary Statement [EN010158/APP/6.4.3]</b> and Health Effects Report (at Annex A) do not draw conclusions on the potential significance of health and wellbeing effects on individuals.</p> <p>Guidance produced by ISEP (formerly IEMA) sets out that “<i>EIA analysis at the level of individuals would likely mean that all determinants of health conclusions, positive or negative, would be significant on all projects because of the effects to some particularly sensitive individuals. This would be contrary to supporting decision-makers in identifying the material issues. Assessment of EIA significance at the level of individuals is not proportionate.</i>”</p> <p>However, it should be noted that the assessment of effects on some individual receptors – such as residential receptors – including within noise and air quality assessments has sought to inform the population and sub-population scale analysis of health effects. While it cannot be reported that specific residential receptors (for example) are inhabited by more sensitive or vulnerable sub-populations (as this would likely change over time and be disclosive to report in any case), the assessments consider the potential for such sub-populations to be affected.</p> <p>Additionally, mitigation has been designed to be flexible and responsive to address effects on individual receptors as well as general or population-scale receptors.</p>
<p><b>Q1.13.3</b></p>	<p><b>Health determinants</b></p> <p>Does the information contained in the documents entitled “LOCAL DETERMINANTS AFFECTING HEALTH OF LOCAL POPULATION FROM PROPOSED ROSEFIELD SOLAR FARM” and the “PRACTICE POPULATION HEALTH REPORT” from Claydons Solar Action Group [REP1-128] impact the findings of the Health Effects Report [REP1-056]? If so,</p>	<p>The anecdotal information contained within the documents produced by Claydons Solar Action Group <b>[REP1-128]</b> has been helpful in providing additional context for the portion of the population assessed that is registered with a GP at the 3W Health practice.</p> <p>In summary, the two documents referred to conclude that:</p>

ExQ1 Ref	Question	Applicant's Response
	<p>update the report accordingly, or if not, explain how this information is accounted for and assessed in the report.</p>	<p>a) The villages affected include an ageing demographic, with higher levels of chronic disease, mobility limitations, and reliance on local GP and community services;</p> <p>b) Such populations – and populations in rural areas more generally – are more sensitive to changes in access to local primary care, as they may rely on private transport (including provided by friends and family) to access healthcare and community services;</p> <p>c) Older sub-populations are more likely to experience barriers to access for public healthcare and social isolation, higher rates of dependency and disability, and higher prevalence of some major disease / health conditions, including respiratory disease.</p> <p>The Health Effects Report (Annex A to <b>ES Volume 4, Appendix 5.5: Health and Wellbeing Summary Statement [EN010158/APP/6.4.3]</b>) draws conclusions based on a consideration of the baseline using national statistics and public health data at a ward level. In most cases, self-reported health, health outcome metrics, metrics for risk factors and wider determinants are reported to be better than the national average. At a ward scale, the population does not have a particularly sensitive age profile, and there is no reported community in severe deprivation at the granularity available.</p> <p>However, it is noted that in some cases public data is disclosive and limited at a community level.</p> <p>The Health Effects Report has been updated accordingly and submitted at Deadline 2 to account for this helpful information and provide a more explicit conclusion in respect of the sensitivity of relevant sub-populations (older people, and people facing access or geographic factors) to change.</p>

Table 3-14: Land and Groundwater

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.14.1</b></p>	<p><b>Update to the Outline Drainage Strategy</b></p> <p>In your responses to the relevant representations [PDA-006] you stated that section 6.4.2 of the Outline Drainage Strategy [REP1-096] would be updated at deadline 1 to replace 'restricted' to 'prevented' in line with ref. 217 of the Commitments Register to respond to comments from the EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>The Applicant has updated this wording within the updated <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b> submitted at Deadline 2.</p>
<p><b>Q1.14.2</b></p>	<p><b>Update to the Outline Construction Environmental Management Plan (oCEMP)</b></p> <p>In your responses to the relevant representations [PDA-006] you stated that the oCEMP [REP1-078] would be amended at deadline 1 to note that disposal of surplus material (if necessary) could be a waste operation, to respond to comments from the</p>	<p>Table 3.6 of the <b>Outline CEMP [EN010158/APP/7.2.3]</b> was updated at Deadline 1 to include the following in response to the EA's comment Issue ID: EA21:</p> <ul style="list-style-type: none"> <li>Ordered materials shall be adequately managed to avoid spoilage or overordering and surplus materials shall be minimised: provide a suitable and sufficiently sized materials storage</li> </ul>

ExQ1 Ref	Question	Applicant's Response
	<p>EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>compound that is lockable and provides an above-ground covered area, protected from wind and rain. Encourage the reuse of cut-offs and arrange for suppliers to take back unused surplus materials and packaging.</p> <ul style="list-style-type: none"> <li>• Storage compounds will be located away from any identified water features.</li> <li>• Surplus materials are to be reused onsite where possible. All reuse and recycling to be carried out in accordance with the terms of a valid waste exemption or voluntary codes of practice/protocols.</li> <li>• Excavated material surplus shall be minimised so far as practicable; details of all inert material reuse onsite including composition and disposal location must be mapped and records retained. Refer to CL:AIRE DoW:CoP, which is outlined in <b>Appendix 1 (Outline SWMP) Section 3.5</b>, of this document.</li> </ul> <p>The EA has confirmed that it is satisfied with the updates made in relation to its comment as detailed in <b>Draft Statement of Common Ground with Environment Agency [EN010158/APP/5.15.2]</b>, under Ref. 6.5.</p>
Q1.14.3	<p><b>Update to the Outline Operational Environmental Management Plan (oOEMP)</b></p> <p>In your responses to the relevant representations [<a href="#">PDA-006</a>] you stated that the oOEMP [<a href="#">REP1-080</a>] would be amended at deadline 1 to indicate that designated concrete washout areas should be sealed to prevent loss of fluid to ground or water, to respond to comments from the EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>Although it was stated that the <b>Outline OEMP [EN010158/APP/7.3.3]</b> was to be updated, this was an error. The Applicant subsequently identified that there would not be a need for activities that would require the use of concrete during the operational phase of the Proposed Development and therefore a designated concrete washout area would not be required. The Applicant did update the <b>Outline CEMP [EN010158/APP/7.2.3]</b> and <b>Outline DEMP [EN010158/APP/7.4.3]</b> at Deadline 1 with this commitment as it would be relevant during both the construction and decommissioning phases.</p> <p>The EA has confirmed that it is satisfied with the updates made in relation to its comment in Issue ID: EA21 as detailed in <b>Draft Statement of Common Ground with Environment Agency [EN010158/APP/5.15.2]</b>, under Ref. 6.5.</p>
Q1.14.4	<p><b>Environmental permits</b></p> <p>National Policy Statement EN-1 paragraph 4.12.8 states that wherever possible, applicants should submit applications for environmental permits and other necessary consents at the same time as applying to the Secretary of State for development consent. The Schedule of Other Consents and Licences [<a href="#">REP1-014</a>] states that only a limited number of environmental permits are likely to be required, and suggests that they would be applied for after development consent was granted. Could these permits be applied for now – if not why not, and if so, why have they not yet been applied for?</p>	<p>It is recognised that several environmental permits and other consents (as listed in the Table of REP1-014) may be required for the Proposed Development. The Applicant is unable to submit applications for these permits and consents at this stage of the development due to the lack of information and detail known at this stage of the Proposed Development to inform the application process. The approach to applying for permits and consents post-DCO award and following detailed design is standard for NSIP projects.</p> <p>The BESS not been designed in detail for the purposes of the DCO Application and will be designed in line with the parameters set out in the <b>Draft DCO [EN010158/APP/3.1.4]</b> and relevant guidance and legislation applicable at the time of detailed design. Firewater containment, storage capacity and operational controls will be confirmed at the detailed design stage to ensure continued safe and resilient operation of the BESS during any period of retained storage. This further design work will determine whether water discharge activity permit(s) and/or water abstraction licence are required. The Applicant has discussed and agreed this approach with the Environment Agency, as set out in <b>Draft Statement of Common Ground with Environment Agency [EN010158/APP/5.15.2]</b>.</p>

Table 3-15: Landscape and Visual

ExQ1 Ref	Question	Applicant's Response
<b>Q1.15.1</b>	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>In the context of paragraph 5.10.25 of NPS EN-1, provide examples of existing permitted infrastructure that the applicant is aware of with a similar magnitude of impact on equally sensitive receptors that may assist the Secretary of State in judging the weight given to the visual impacts of the Proposed Development.</p>	<p>The Applicant notes the following projects of comparable scale to the Proposed Development:</p> <ul style="list-style-type: none"> <li>• Mallard Pass Solar DCO (EN010127), consented in June 2024, is a 350MW solar farm located in Lincolnshire, South Kesteven and Rutland.</li> <li>• Fenwick Solar DCO (EN010152) consented in February 2026, is an 237MW solar farm in Doncaster.</li> </ul> <p>As comparably large-scale projects they demonstrate some similar sensitivities and magnitudes of effect to the Proposed Development. However, it should be noted that each project is unique and has its own unique context and therefore no attempt has been made to directly compare the three projects.</p>
<b>Q1.15.2</b>	<p><b>NPS EN-1</b></p> <p>In the context of Buckinghamshire Council's request <a href="#">[REP1-112]</a> for the applicant to remove solar photovoltaic (PV) development from fields D28 and D29 due to landscape and visual effects, provide further comments on the applicant's approach to paragraph 5.10.26 of NPS EN-1. To what extent would reducing the scale or amending the design of the Proposed Development result in a significant operational constraint such as a reduction in electricity generation output? Would the benefit of any such change outweigh any identified loss of function? If not, why not?</p>	<p>As noted within the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b> and with Paragraph 5.10.26 of NPS EN-1 (2023) in mind, design amendments at Stage 2 design resulted in an approximate reduction of 40% of Solar PV development and, therefore, a substantial loss of function to mitigate for, among other considerations, adverse landscape and/or visual impacts. The context of the Proposed Development has influenced the Proposed Development's ability to deliver a significant CNP asset that balances the adverse landscape and visual effects against the loss of function. A comprehensive mitigation package has been embedded into the design of the Proposed Development to date with further additional mitigation commitments made to minimise any likely significant impacts.</p> <p>With regard for the removal of Fields D28 and D29, the Applicant acknowledges that the removal of these Fields would reduce the localised significant landscape effects to LCA 9.1: Finemere Hill and visual effects to users of PRoW to Finemere Hill to not significant. Effects assessed as moderate/minor (not significant) for the Quanton-Wing Hills AAL would also be further reduced.</p> <p>However, were Fields D28 and D29 to be removed, this would equate to roughly 9% loss in energy generation. In the context of paragraph 5.10.26 of NPS EN-1 (2023), the Applicant considers that this loss would be a 'significant operational constraint and reduction in function' for the Proposed Development and does not consider that the removal of these fields would result in 'a very significant benefit' or that the Councils justification for the removal of these fields should be considered 'exceptional circumstances'. Given the scale of this impact on the generation, with the above losses in mind, and the imperative to maximise best use of land, it is concluded that the benefit of keeping the energy generation in Fields D28 and D29, when considered as part of the overall Proposed Development infrastructure, is justified.</p>
<b>Q1.15.3</b>	<p><b>NPS EN-1</b></p> <p>In the context of NPS EN-1 paragraph 5.10.27, provide further details to explain the choice of colours referenced in the Design Approach Document (DAD) <a href="#">[REP1-018]</a> and Design Commitments <a href="#">[REP1-020]</a> in relation to the setting and landscape:</p>	<p>1. The Applicant does not consider that there is a need to reference any specific guidance, such as colour studies or studies of local buildings, to confirm colour choices at the detailed design stage. This is due to the relatively simple built forms of the Proposed Development and the provisions already included in the <b>Design Commitments [EN010158/APP/5.9.4]</b>. In addition, in accordance with the Requirement 4 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> the Applicant must have the detailed design approved by the relevant planning authority.</p>

ExQ1 Ref	Question	Applicant's Response
	<ol style="list-style-type: none"> <li>1. What, if any, guidance would be considered to confirm colour choices at the detailed design stage? Should any such guidance be referenced in the Design Commitments?</li> <li>2. Design commitment D15 states that one of the options for the Main Collector Compound is white and/ or metallic. Design commitment D24 also identifies metallic as an option for perimeter fencing around Rosefield substation, Satellite Collector Compounds, Battery Energy Storage Systems (BESS) and Main Collector Compound. Provide further commentary to explain how such options would be sympathetic to the landscape.</li> <li>3. Table 1 of the Design Commitments identifies colour options for different components of the Proposed Development but not for the Rosefield substation aside from the perimeter fencing. Should the Design Commitment also specify colour options and design considerations for the Rosefield substation? If not, why not?</li> </ol>	<ol style="list-style-type: none"> <li>2. The range of colour and material options identified within the <b>Design Commitments [EN010158/APP/5.9.4]</b> is designed to minimise potential impacts on local landscape character, visual amenity and nearby built heritage assets and allow for flexibility in the detailed design. All of the colours identified within the <b>Design Commitments [EN010158/APP/5.9.4]</b> allow for a grey or green colour option, with the grey option being metallic in some cases to allow flexibility in what is likely to be available from manufacturers. This responds to the predominant characteristics of the rural landscape which include open skies and vegetation blocks (hedgerows, trees and woodlands). Allowing for both grey and green colour options enable flexibility at the detailed design stage to select the most appropriate colour for individual components depending on their location. For example, where a component is located against a woodland backdrop green is likely to be the most appropriate colour choice. The final choice of colour and materials would be submitted (with justification as appropriate) as part of the detailed design for approval by the relevant planning authority in accordance with Requirement 4 of the <b>Draft DCO [EN010158/APP/3.1.4]</b>.</li> <li>3. The components of the Rosefield Substation have more limited optionality in terms of the potential for determining their colour, as these aspects are generally determined by the manufacturer/supplier. Consequently, the <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> has assessed the Rosefield Substation as an element of the Proposed Development, with the effects related more to the scale and massing than the choice of colour. Within the constraints set by the <b>Design Commitments [EN010158/APP/5.9.4]</b>, the exact colour and material choice is highly unlikely to have any discernible bearing on visual impact or the outcome of the LVIA.</li> </ol>
<p><b>Q1.15.4</b></p>	<p><b>Rosefield substation</b></p> <p>Is the Rosefield substation proposed to be air-insulated or gas-insulated? If an option is preferred, provide justification for this in relation to good design and landscape and visual effects. If the Proposed Development does not commit to air or gas insulation technology, how would the choice of technology at the detailed design stage consider good design and landscape and visual effects? How does the worst-case scenario consider this potential design choice?</p>	<p>The proposed Rosefield Substation is an air-insulated switchgear design. Gas-insulated substations are generally used where space is a central factor, such as urban and suburban areas. Air insulated substations are larger than the equivalent gas-insulated substations but have a number of advantages in terms of construction, operation and maintenance, and decommissioning. Gas-insulated substations historically use GHGs, which are largely avoided by using air-insulated equipment.</p> <p>The Rosefield Substation has been illustrated three dimensionally using its maximum design parameters in near distance views from Viewpoints 22, 23 and 25 in <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-115] [APP-116]</b>. Photomontage of longer distance views in Viewpoints 11a and 30 are presented <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-117]</b>. Hence it is considered that together, the visualisations and photomontage provide a sufficiently robust illustration of the worst-case scenario for assessment.</p>
<p><b>Q1.15.5</b></p>	<p><b>DAD</b></p> <p>Project Principle 6.2 in the DAD <a href="#">[REP1-018]</a> refers to “enhancing field boundaries and retaining key views” towards the Quainton - Wing Hills Area of Attractive Landscape (AAL). How and where has the applicant sought to enhance field boundaries in line with this principle?</p>	<p>Figure 6.13: Quainton-Wing Hills AAL of the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b> shows the Area of Attractive Landscape (AAL) in yellow. All of the hedgerows would be retained as per design principles C7 and D1 of the <b>Design Commitments [EN010158/APP/5.9.4]</b>. Appendix 2C Landscape and Ecological Mitigation and Enhancements - Parcel 2 of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> indicates an area of ‘potential to provide ecological enhancement/ screening through provision of tree belts or</p>

ExQ1 Ref	Question	Applicant's Response
Q1.15.6	<p><b>Viewpoint analysis – additional planting</b></p> <p>The scale of visual and landscape change as identified in table 10.12 of Environmental Statement (ES) Chapter 10 (Landscape and Visual) [APP-053] reduces at some viewpoints between year 1 and year 10 of operation. Paragraph 10.10.15 clarifies that it is assumed that at year 10 all new mitigation planting (including hedgerows and trees) would have been established. Can the applicant explain how the visual and landscape change brought about by the introduction of additional planting has been factored into this assessment given that it may increase the scale of change in some instances?</p>	<p>woodland blocks' along the field boundary to the south of Fields D28 and D29. In addition, paragraph 5.2.16 of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> requires a detailed survey of all hedgerows within the Order Limits and identifies lengths of hedgerow which require infilling of gaps or increasing in density to provide a reasonable degree of screening to mitigate the visual effects of the Proposed Development.</p> <p>The mitigation proposals, as set out in the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, primarily consist of proposed new grassland, hedgerow and woodland planting. The type and location of this proposed mitigation respond directly to specific guidelines in the Aylesbury Vale Landscape Character Assessment and is based on robust baseline surveys tailored to local landscape and visual receptors and consultations with relevant consultation bodies. It is therefore considered as appropriate to its location and does not result in an increase in scale of change over and above that of the Proposed Development.</p> <p>The scale of change at Year 1, as presented in Table 10.12 of <b>ES Volume 4, Appendix 10.1: Rosefield LVIA Methodology and Assessment Criteria [EN010158/APP/6.4] [APP-110]</b>, is therefore considered to be the worst-case scenario, as views of the Proposed Development would be at their most open. Any reduction in scale of change at Year 10 considers the reduction in scale of views towards the Proposed Development but is balanced with a recognition that, in some cases, an existing wider view may be reduced or even lost altogether as a result of the mitigation measures. Each such judgement is specific to its location and is based on the scale of the loss of wider views and its importance to the receptor.</p> <p>It should also be noted that these static viewpoints provide a localised assessment of change in scale but do not convey all the information required to understand the magnitude of effect, as the wider extent and duration of effect are not captured in this analysis. Hence for all landscape receptors, none of the reduced scale of effects experienced at individual viewpoints translate to an overall reduction in levels of effect between Year 1 and Year 10, as summarised in Table 10.14. Hence a localised reduction in scale of landscape change has not been judged as mitigating the overall impact of the Proposed Development on the wider Landscape Character Type (LCT) / Landscape Character Area (LCA). For visual receptors, a significant reduction in visual effects is noted for only 4-7 Catherine Cottages and the North Buckinghamshire Way/Midshires Way as a result of mitigation measures. For other visual receptors, such as the PRow between Botolph Claydon and Runts Wood, the overall reduction in effects from major to major/moderate from Year 1 to Year 10 is relatively small, and acknowledges that there will be some loss of longer distance views to Quainton Hill as a result of the mitigation planting.</p>
Q1.15.7	<p><b>Photomontages</b></p> <p>Paragraph 10.6.34 of ES Chapter 10 [APP-053] states that 11 viewpoints were selected, in agreement with the Buckinghamshire Council, for the production of photomontages to illustrate the Proposed Development and that further information on selection is provided in Appendix 10.1: Landscape and Visual Impact Assessment (LVIA) Methodology and Assessment Criteria [APP-110]. However, the rationale for the selection of the 11 viewpoints for the production of photomontages is not entirely clear. Provide further</p>	<p>It is acknowledged that this question relates specifically to the provision of photomontages, however the Applicant notes that each of the 43 viewpoints provides a two dimensional outline of the solar PV development and a three dimensional outline of the BESS, Satellite Collector Compounds and the Rosefield Substation as presented in <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-115] [APP-116]</b>. Hence, a worst-case maximum parameters scenario is provided to inform effects at each viewpoint.</p>

ExQ1 Ref	Question	Applicant's Response
	<p>justification for the viewpoints selected for photomontages. In particular, explain how the current selection adequately considers viewpoints along public rights of way (PRoW) and those in the vicinity of the Rosefield substation and BESS.</p>	<p>The selection of the eleven viewpoints for the photomontages was based on those key views that were noted of particular interest through the assessment and consultation process. The viewpoints selected generally include for multiple sensitive receptors to be included, such as for local settlements or residential properties located in conjunction with roads and PRoW, or key sensitive receptors, such as users of PRoW at Claydon House and Park or on long distance routes, such as the Bernwood Jubilee Way. As shown by photomontages in <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-115] [APP-116]</b>, the viewpoints selected illustrate the scale of the Proposed Development at distances ranging from within or on the periphery of the Order Limits (Viewpoints 1, 11a and 11b and 18), within 0.5km of the Order Limits (Viewpoint 8, 9), within 1km (Viewpoints 5, 14 and 21) and within 2km (Viewpoints 7 and 30).</p> <p>With the exception of Viewpoint 18, all of the viewpoints selected for photomontages are either on or in very close proximity to PRoW. Views of the BESS are illustrated on Viewpoints 9, 11a, 21 and 30, together with more distant views of the Rosefield Substation on Viewpoints 11a and 30. In addition, Viewpoints 22, 23 and 25 illustrate the maximum parameters of the Rosefield Substation in near distance views, hence it is considered that together, the visualisations and photomontage provide a sufficiently robust sample of views.</p>
<p><b>Q1.15.8</b></p>	<p><b>Embedded mitigation</b></p> <p>To the applicant and Buckinghamshire Council:</p> <ol style="list-style-type: none"> <li>Table 10.9 of ES Chapter 10 <a href="#">[APP-053]</a> identifies embedded mitigation, including hedgerow planting and management. ES paragraph 10.9.5 states that the Outline Landscape and Ecological Management Plan (oLEMP) <a href="#">[REP1-086]</a> ensures that all new planting would be successfully established by year 10 of operation. However, table A4.1 of the oLEMP indicates monitoring and replacement of planting to ensure establishment would not continue beyond year 5. Given the reliance on the establishment of hedgerow planting by year 10 as embedded mitigation, should the period for monitoring and management identified in the oLEMP be extended? If not, why not?</li> </ol> <p>To the applicant:</p> <ol style="list-style-type: none"> <li>In addition, the ExA notes the applicant's explanation of why 10 years has been assumed for landscape mitigation to establish, rather than 15 years or a longer period as set out in its response to the Claydons Solar Action Group's relevant representation <a href="#">[PDA-006]</a>. Provide further justification for this approach drawing comparison with specific comparable consented Nationally Significant Infrastructure Projects (NSIPs).</li> </ol>	<ol style="list-style-type: none"> <li>Five years is usually sufficient time for the initial establishment of new planting, in terms of development of the root system and acclimatisation to the environment of the Site. It is the period during which active horticultural maintenance works are required to be undertaken to ensure healthy growth and development of plant material in the period immediately following planting, rather than ongoing maintenance works. It does not refer to the period required to reach the final required assumed height. However, paragraphs 6.1.2 and 6.1.3. of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> require the detailed Landscape and Ecological Management Plan(s) to be reviewed and updated every five years, and appropriate action to be identified and taken to rectify failings if aspects of the detailed Landscape and Ecological Management Plan(s) are not being met. This would include replanting of planting failures and/or reconsideration of species if appropriate. It is therefore considered that this provides sufficient ongoing monitoring of the planting beyond the establishment period. In addition, the wording of Table A4.1 of the <b>Outline LEMP [EN010158/APP/7.6.3]</b> has been updated at Deadline 2 to make the text relating to hedgerow management beyond the five-year establishment period clearer.</li> <li>The use of a 10-year period for the establishment of mitigation planting to heights of 3-3.5m is common practice for Nationally Significant Infrastructure Projects. By way of direct comparison, similar assumptions were made for the <b>Springwell Solar Farm Order 2026</b>.</li> </ol>
<p><b>Q1.15.9</b></p>	<p><b>BESS mitigation</b></p> <p>Buckinghamshire Council's Local Impact Report <a href="#">[REP1-112]</a> identifies concerns regarding the BESS and related fencing. Would the provision of additional hedgerow and/ or tree planting in the vicinity of the BESS serve to reduce landscape and visual</p>	<p>The BESS has been located in a flatter and lower lying area of the Site with strong existing field boundary vegetation resulting in generally reduced visual impacts, particularly for people with views from more elevated locations. The BESS and any security or acoustic fencing would be located at a distance no closer than 50m from the nearest visual receptors using footpath</p>

ExQ1 Ref	Question	Applicant's Response
	<p>effects, having regard to the topography? If not, why not? If so, should this be reflected in the oLEMP <a href="#">[REP1-086]</a>?</p>	<p>ECL/7/2. The <b>Outline LEMP [EN010158/APP/7.6.3]</b> indicates the route as having potential for mitigation hedgerow planting, which in the case of Field D9 could be of benefit for the visual amenity of footpath users. However, any detailed design is most appropriately dealt with at discharge of requirements stage, as it would depend on the detailed BESS design.</p>
<p><b>Q1.15.10</b></p>	<p><b>Defining the Special Qualities of Local Landscape Designations in the Aylesbury Vale District Report</b></p> <p>To the applicant:</p> <ol style="list-style-type: none"> <li>1. Provide further commentary on how the applicant has applied the 'Defining the Special Qualities of Local Landscape Designations in the Aylesbury Vale District Report' (2016) in identifying effects and necessary landscape and visual mitigation, including in the oLEMP <a href="#">[REP1-086]</a>. Whilst the oLEMP references the report, it is not always clear how it has shaped specific and locally appropriate mitigation measures.</li> </ol>	<p>As stated in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b>, consideration of the AAL has been an important consideration in the design of the Proposed Development, with Project Principle 6.2 specifically referring to 'respecting the Special Qualities of the designation'.</p> <p>The <b>Outline LEMP [EN010158/APP/7.6.3]</b> identifies in section 2.2 the key characteristics and special qualities of the locally designated Quanton-Wing Hills Area of Attractive Landscape (AAL). Examples of how these have shaped the design of the Proposed Development and locally appropriate mitigation measures include:</p> <ul style="list-style-type: none"> <li>• Key characteristic 'Spectacular panoramic views from frequent vantage points' – as described in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b>, Solar PV development was excluded from Fields D30-D37 of Parcel 2 to reduce visibility of the Proposed Development in such views. A tree belt to strengthen the existing hedgerow along the southern boundary of Fields D28 and D29 is also shown on Appendix 2: Landscape and Ecological Mitigation and Enhancements of the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, which will enhance existing field boundaries and further reduce visibility of the Solar PV development in panoramic views from within the wider AAL.</li> <li>• Key characteristic 'Public rights of way and road network which enable views of and appreciation of the landscape' and special quality criteria 'Function' associated with a good network of public rights of way including long distance trails – as described in the <b>Outline RoWAS [EN010158/APP/7.8.3]</b>, there would be no permanent loss of PRoW or access to the countryside as a result of the Proposed Development. Within the AAL, all of the PRoW will be retained on their current alignment and the PRoW through Fields D30-D37, where the characteristics of the AAL are strongest and views of the wider AAL can be most appreciated, will retain their open views.</li> <li>• Key characteristic 'The importance of the hills in views from other areas of the district' and special quality criteria 'Landscape and scenic quality' associated with views within and from outside the area – as described in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b> in relation to Project Principle 9.3, the Solar PV development has been offset by 55m from the Bernwood Jubilee Way in Parcel 2, rather than 10m, to allow continued views over the Solar PV modules towards Quanton Hill and its landscape context. This retains views towards the hills from an area of the Site outside the AAL where the relationship to the hills is strongly experienced.</li> <li>• Key characteristic 'Remaining ancient woodland in the west of the area' and special quality criteria 'Natural character' and 'Cultural character' associated with ancient woodlands – all ancient woodland in the west of the AAL is located outside the Order Limits. As secured by the <b>Design Commitments [EN010158/APP/5.9.4]</b>, generous buffers of at least 30m will be applied to all woodlands, with potentially incorporating a</li> </ul>

ExQ1 Ref	Question	Applicant's Response
		<p>mosaic of species rich grassland and scrub planting to enhance the woodland edge and improve connectivity between individual woodlands.</p>
<p><b>Q1.15.11</b></p>	<p><b>Visual effects on Claydon House during the operation phase</b></p> <p>Should additional screening be included in the oLEMP [REP1-086] such as a block of tree planting or a belt of poplars in order to mitigate the impact of the proposed Satellite Collector Compound in field B23 (south) as requested by the National Trust [REP1-132]. If not, why not? The ExA notes the applicant's position as summarised in the Statement of Common Ground with the National Trust [REP1-028] that embedded mitigation already softens and partially screens views from Claydon House. Provide further information to demonstrate that the embedded mitigation would be effective.</p>	<p>The planting of additional avenue (poplar) trees along Three Points Lane has been agreed with National Trust. As requested by the National Trust, additional photomontages were submitted at Deadline 2, within <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-115] [APP-116]</b>, to illustrate the effects of this mitigation in views from Claydon House. The photomontage from the upper floor of Claydon House ("Chinese Room") confirms that, without further mitigation, there would be visibility of solar arrays and the Satellite Collector Compound in Parcel 1. By Year 10, the proposed tree planting along Three Points Lane will provide additional visual screening of the Proposed Development to the lower levels of Parcel 1, including the Satellite Collector Compound, whilst avoiding obstruction of the views towards Knowl Hill.</p>
<p><b>Q1.15.12</b></p>	<p><b>"LVIA Visualisations Summer"</b></p> <p>At deadline 1, the applicant provided additional summer photography visualisations [REP1-050, REP1-051, REP1-052, REP1-053, REP1-054, REP1-055].</p> <p><b>To the applicant:</b></p> <ol style="list-style-type: none"> <li>1. Should ES Chapter 10 [APP-053] be updated to provide commentary on how the visualisations have informed the LVIA and its conclusions? If not, why not?</li> </ol>	<p>The assessment in <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2] [APP-053]</b> takes into account the worst-case winter scenario at both Year 1 and Year 10. The inclusion of the summer visualisations, as requested by Buckinghamshire Council, is not required to update any of the LVIA conclusions as there would no change to the significance of effects as outlined in the ES.</p>
<p><b>Q1.15.13</b></p>	<p><b>LVIA conclusions</b></p> <p>The ExA notes concerns raised by Buckinghamshire Council [REP1-112] and the Claydons Solar Action Group [REP1-127] in relation to some of the applicant's LVIA conclusions, with an indication that the significance may have been understated or not fully justified. In addition, the applicant's conclusion on the significance of effects would appear to contradict the significance of effects criteria set out in table 10.8 and paragraph 10.6.22 of ES Chapter 10 [APP-053] in some instances. For example, table 10.14 identifies major and major/ moderate adverse effects for visual effects at Bernwood Farm and Sion Hill Farm in the operation phase, but these effects are deemed to be "not significant". Paragraph 10.6.22 indicates that a conclusion of significant should be identified in both instances.</p> <ol style="list-style-type: none"> <li>1. Undertake a full review of conclusions in the LVIA to ensure consistency with the significance of effects criteria.</li> <li>2. In addition, in order to provide a clearer justification for conclusions where professional judgement has been applied, as suggested by Buckinghamshire Council at paragraph 4.4.61 of its Local Impact Report, re-score the magnitude of effects. Alternatively, provide a more detailed justification for conclusions where the significance of effects criteria indicate that the effects could be either significant or not significant.</li> </ol>	<p>The Applicant can confirm that the description of major and major/moderate effects at Bernwood Farm and Sion Hill Farm reported as not significant in Table 10.14 of <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> is a typo and has been updated at Deadline 2. As reported in the textual analysis in the LVIA and in <b>ES Volume 4, Appendix 10.5: Residential Visual Amenity Assessment [EN010158/APP/6.4] [APP-114]</b> these effects are consistently noted as significant. No other such inconsistencies have been found within the LVIA reporting.</p> <p>The Applicant is confident that the methodology used in the assessment of magnitude of effects as set out in <b>ES Volume 4, Appendix 10.1: Rosefield LVIA Methodology and Assessment Criteria [EN010158/APP/6.4] [APP-110]</b> follows Landscape Institute standard methodology, is robust and is consistently applied across the LVIA reporting. To reiterate, moderate effects lie somewhere in the middle of the range of effects identified. Within the meaning of this term in the assessment there is a spectrum of effects ranging from those tending towards a major/moderate effect (significant) to those tending towards a moderate/minor effect (not significant). 'Moderate' effects may therefore be either significant or not significant depending on where they fall on this spectrum. Where 'moderate' effects are predicted, professional judgement is applied to determine whether the effect is significant or not, ensuring that the potential for significant effects to arise has been thoroughly considered and justification is provided for the judgement reached as appropriate. Clarification 3 (5) of <i>Landscape Institute Technical Guidance Note LITGN-2024-01: Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition</i> recognises this as an appropriate approach to identifying significant effects in LVIA.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>The Applicant has provided a reasoned justification regarding significance in each case where effects have been judged as moderate. Long-term effects judged as moderate and not significant are noted for two settlements and twelve residential receptors. With the exception of LCA 9.2: Quainton Hill, all other long-term moderate effects, as assessed for LCT/LCA, PRoW, trails and visitor attractions are judged as significant. This differentiation in assessment can largely be ascribed to the ability of design measures to more effectively mitigate views of the Proposed Development from static receptors. As described in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b> development free buffers have been increased and the BESS and Rosefield Substation located to lower lying fields resulting in reduced visibility of the Proposed Development from settlement/residential receptors. These measures, together with the management and reinforcement of existing green infrastructure, as described in the <b>Outline LEMP [EN010158/APP/7.6.3]</b>, have enabled the majority of potentially significant effects to residential receptors to be mitigated.</p>
<p><b>Q1.15.14</b></p>	<p><b>Residential Visual Amenity Assessment (RVAA) - conclusions</b></p> <p>No properties considered in the RVAA [APP-114] are deemed by the applicant to meet the residential visual amenity threshold, although significant effects in Environmental Impact Assessment (EIA) terms are identified for several properties in year 1 of operation. By year 10, significant effects are only identified to remain at Sion Hill Farm and Bernwood Farm as they would have views from elevated rooms. For the other properties, the magnitude would reduce due to the establishment of mitigation.</p> <p>Provide further justification for the conclusion that the residential visual amenity threshold is not met in instances when significant effects are identified. To what extent is the conclusion on the threshold not being met dependant on the successful establishment of mitigation planting?</p>	<p><b>ES Volume 4, Appendix 10.5: Residential Visual Amenity Assessment [EN010158/APP/6.4] [APP-114]</b> identifies greater than moderate adverse significant effects for only 6-7 Catherine Cottages at Year 1 and Sion Hill Farm and Bernwood Farm for the duration of operations. As noted in paragraph 2.5 of the Landscape Institute Technical Guidance Note 2/19, Residential Visual Amenity, <i>“the LVIA findings of significant (adverse) effects on outlook and /or on visual amenity at a residential property do not automatically imply the need for a RVAA. However, for properties in (relatively) close proximity to a development proposal, and which experience a high magnitude of visual change, a RVAA may be appropriate.”</i> Further clarification is provided in paragraph 4.18 that only those properties with the highest magnitude of effect require a judgement regarding RVAA threshold.</p> <p>In the case of 6-7 Catherine Cottages and Bernwood Farm, the worst-case Year 1 effects have both been assessed as of substantial/moderate magnitude. Hence, as this is not the highest level of magnitude, it is considered that the potential threshold for RVAA threshold has not been reached.</p> <p>In the case of Sion Hill Farm, the worst-case Year 1 effects have been assessed as of substantial magnitude, which is the highest level of magnitude. By Year 10, effects have been assessed as substantial/moderate. There is therefore potential for mitigation planting to reduce the magnitude of effect in a manner that could prevent the RVAA threshold being reached. In this instance however, although a major adverse (significant) effect is judged for Year 1, it is not considered that it would reach the required threshold to be considered overwhelming/overbearing or overly intrusive for occupants of Sion Hill Farm. A detailed description of the potential effect on the visual amenity is provided on pages 59-61 of <b>ES Volume 4, Appendix 10.5: Residential Visual Amenity Assessment [EN010158/APP/6.4] [APP-114]</b> which notes that, although there would be some prominent views of the Proposed Development along the farm access track, the principal effects from the house would be on views experienced from first floor windows and not its principal rooms. Views of the Rosefield Substation from the house would be over 200m away across a field that would remain undeveloped in the context of the existing large overhead lines and the National Grid East Claydon Substation located. The RVAA concludes that these effects</p>

ExQ1 Ref	Question	Applicant's Response
Q1.15.15	<p><b>RVAA – property visits</b></p> <p>Table A10.5.1 in the RVAA <a href="#">[APP-114]</a> identifies which properties have been visited by the applicant and where access was not obtained. In instances where access was not obtained, the applicant provides comments that the outlook was achieved from alternative locations such as a neighbouring property.</p> <p>Provide further commentary and analysis to support the applicant's position that the alternative outlooks provide an accurate basis upon which to draw conclusions.</p>	<p>would not reach the residential visual amenity threshold, hence any reduction in effect as a result of mitigation planting would only reduce effects further below the threshold.</p> <p>Six of the eighteen properties included in the final RVAA in <b>ES Volume 4, Appendix 10.5: Residential Visual Amenity Assessment</b> <a href="#">[EN010158/APP/6.4]</a> <a href="#">[APP-114]</a> were not viewed internally. Of the six properties not visited, four were immediate neighbours of those viewed:</p> <ul style="list-style-type: none"> <li>• Numbers 2, 3 and 5 Calvert Cottages were viewed internally, with 1 and 4 Calvert Cottages viewed externally.</li> <li>• Numbers 4 and 7 Catherine Cottages were viewed internally, with 5 and 6 Catherine Cottages viewed externally.</li> </ul> <p>For the remaining two properties (Numbers 1 and 2 Blackmorehill Cottages) the main aspect could be appreciated from the public road immediately in front of the house. In each case, the individual RVAA plans in <b>ES Volume 3, Figure 10.13: Residential Property Location Plan</b> <a href="#">[EN010158/APP/6.3.2]</a> <a href="#">[AS-031]</a> provide a clear indication of the relationship between those properties that were or were not visited, whilst the visualisations in <b>ES Volume 4, Appendix 10.6: LVIA Visualisations</b> <a href="#">[EN010158/APP/6.4]</a> <a href="#">[APP-115]</a> <a href="#">[APP-116]</a> provide an outlook from the principal rooms of the house as affected by the Proposed Development.</p>

Table 3-16: Noise and Vibration

ExQ1 Ref	Question	Applicant's Response
Q1.16.1	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>NPS EN-1 paragraph 5.12.6 sets out the requirements for noise assessments. This includes the need for an assessment of any likely impact on health and quality of life/ well-being where appropriate, particularly among those disadvantaged by other factors who are often disproportionately affected by noise-sensitive areas. Clarify how this policy requirement has been addressed in Environmental Statement (ES) Chapter 13 (Noise and Vibration) <a href="#">[REP1-040]</a>.</p>	<p><b>ES Volume 2, Chapter 13: Noise and Vibration</b> <a href="#">[EN010158/APP/6.2.3]</a> <a href="#">[REP1-040]</a> presents a noise assessment in accordance with the requirements of this policy, including a description of the noise generating aspects of the Proposed Development.</p> <p>Sections 13.8 and 13.10 of <b>ES Volume 2, Chapter 13: Noise and Vibration</b> <a href="#">[EN010158/APP/6.2.3]</a> <a href="#">[REP1-040]</a> assess the likely effects and residual effects of noise and vibration, respectively, on receptors arising from the construction, decommissioning, and operation (including maintenance) phases of the Proposed Development at particular times of the day and at night on the noise environment.</p> <p>There are no receptors identified within the study area which are representative of those within areas of the highest exposure to existing noise sources, such that a small change in the noise level would result in a disproportionately adverse effect. Notwithstanding this, the noise and vibration assessment has considered human receptors to be of the highest sensitivity, taking guidance from industry standard assessment methodologies and accounting for significance of impact thresholds for receptors of differing types.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.16.2	<p><b>NPS EN-1</b></p> <p>Provide further information to demonstrate that the applicant has had due regard to the relevant sections of the Noise Policy Statement for England, the National Planning Policy Framework (NPPF), and the government's associated planning guidance on noise as required by paragraph 5.12.16 of NPS EN-1.</p>	<p>Consideration for the relevant sections of Noise Policy Statement for England, the National Planning Policy Framework (NPPF), and the government's associated planning guidance on noise as required by Paragraph 5.12.16 of NPS EN-1 (2023) have been accounted for in Section 13.2 of <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>.</p>
Q1.16.3	<p><b>NPS EN-1</b></p> <p>Has the applicant considered contributing towards improvements to health and quality of life through the effective management and control of noise as outlined in NPS EN-1 paragraph 5.12.17? If so, how? If not, why not?</p>	<p><b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b> identifies the measures adopted to avoid significant adverse impacts and to mitigate and minimise other adverse impacts on health and quality of life from noise arising from the Proposed Development. Given the nature of the Proposed Development, it is not considered possible to contribute to improvements to health and quality of life through the effective management and control of noise from existing sources which impact upon receptors. This is discussed in Section 13.11 of <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>.</p>
Q1.16.4	<p><b>Study area</b></p> <p>Paragraph 13.4.1 of ES Chapter 13 <a href="#">[REP1-040]</a> and ES Figure 13.1: Study Area and Receptors <a href="#">[REP1-048]</a> identify a study area of 300 metres (m) from the order limits during the construction and decommissioning phases of the Proposed Development. Provide further justification for this having regard to the full length of the construction traffic route.</p>	<p>Notional receptors (10m from the road) are used within the assessment of construction traffic because it is the change in traffic noise level that is of interest when determining the potential for impacts, not the absolute noise levels at any given receptor within a defined study area. It is therefore not necessary to identify a study area of 300m as the change in noise level is taken to apply at any receptor along each of the roads considered. This is discussed in Paragraph 13.6.30 of <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>.</p>
Q1.16.5	<p><b>Noise-sensitive receptors</b></p> <p>Table 13.3 of ES Chapter 13 <a href="#">[REP1-040]</a> identifies noise-sensitive receptors considered in the assessment. All of the listed receptors are residential.</p> <ol style="list-style-type: none"> <li>Has the applicant considered other potentially noise-sensitive receptors in the assessment? If so, identify how they have been assessed, any conclusions on the effects and any necessary mitigation. If not, why not?</li> <li>Explain how the applicant has considered the effects of noise on livestock, other animals and related businesses.</li> </ol>	<ol style="list-style-type: none"> <li>Residential receptors are considered to be of the highest sensitivity to noise when considering the impact on humans. While other receptors (schools, places of worship etc.) may be present within the study area, those identified within Table 13.3 represent the closest/most exposed receptors to the Proposed Development. Receptors located at greater distance would experience a lower magnitude of impact to that presented within <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>.</li> <li>Within <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>, the following commitment was made within the Community Liaison section: <p><i>“Community liaison and communication throughout the construction phase would be undertaken to provide information to people residing in properties located in the vicinity of the Order Limits. This typically serves to understand concerns from local residents and enable them to be addressed where feasible, thereby reducing the likelihood of complaints. The community liaison would extend to landowners with livestock or other animals that may be present in fields adjacent to the construction works.”</i></p> <p>As part of Deadline 1, the <b>Outline CEMP [EN010158/APP/7.2.3]</b> was updated to include the following commitment in respect of this within Section 2.9. Control of Noise:</p> <p><i>“Potential disturbance to livestock would be managed through appropriate consultation with the relevant land interests so that they are aware of the construction works that will be taking place close to particular fields. In addition, the control measures with regards to noise set out</i></p> </li> </ol>

ExQ1 Ref	Question	Applicant's Response
		<p><i>in The British Horse Society document 'Advice on Construction sites and horses' would be implemented, where applicable."</i></p> <p>In addition, the following statement is included with Section 2.10 of the <b>Outline CEMP [EN010158/APP/7.2.3]</b>:</p> <p><i>"Potential disturbance to livestock would be managed through appropriate consultation with the relevant parties. Where specific concerns are raised, temporary measures would be introduced to reduce the construction induced noise levels experienced by livestock, where appropriate."</i></p> <p>As part of Deadline 2, a Noise and Vibration Technical Study has been prepared which forms <b>Appendix 1: Response to the Written Representation received from TCS Biosciences Ltd and Preston Farms to the Applicant's Response to Written Representations [EN010158/APP/8.12]</b>. This has been prepared to provide further information regarding the effects of noise and vibration on sheep and horses. The document presents a summary of available research and guidance on the impacts of noise and vibration on horses and sheep, and sets out the mitigation measures proposed to avoid or minimise adverse effects.</p>
<p><b>Q1.16.6</b></p>	<p><b>Scope of the assessment – operational vibration</b></p> <p>Table 13.4 of ES Chapter 13 [REP1-040] identifies that vibration has been scoped out of the assessment during the operation (including maintenance) phase. The Examining Authority (ExA) notes that the Scoping Opinion [APP-080] provided by the Planning Inspectorate requested that the applicant should "demonstrate that operational plant and equipment is of a type that does not generate a perceptible level of vibration or is to be used in locations unlikely to result in significant vibration impacts on both human and ecological sensitive receptors". Table 13.4 acknowledges this advice and the applicant states that it confirms "that operational elements, including fixed plant items/structures, would not emit discernible levels of vibration and are located at a sufficient distance away from sensitive receptors." Provide further information in support of this conclusion.</p>	<p>The vibration data for typical equipment installations is not presented as part of manufacturer's datasheets, which is a function of the low levels of vibration that are generated. Groundborne vibration from the proposed equipment installations will be barely perceptible within very close proximity.</p> <p>For context purposes, construction vibratory compaction plant would generate levels of vibration at many times the magnitude of the proposed operational plant. The resultant vibration levels from this activity would be imperceptible at the surrounding receptors.</p>
<p><b>Q1.16.7</b></p>	<p><b>Public Rights of Way (PRoW) users</b></p> <p>A qualitative assessment of effects on PRoW users during the construction phase is provided in section 13.8 of ES Chapter 13 [REP1-040].</p> <ol style="list-style-type: none"> <li>1. Why hasn't a quantitative assessment been undertaken or consideration given to potential effects during the operation (including maintenance) phase?</li> <li>2. In this regard, does the applicant agree with Buckinghamshire Council's conclusion in its Local Impact Report [REP1-112], that the applicant's existing noise contours and methodology would indicate significant noise effects for PRoW users during operation? If so, identify suitable mitigation as appropriate. If not, why not?</li> <li>3. Does the applicant's assessment include consideration of effects on users of existing and proposed permissive paths?</li> <li>4. Provide an update to Figures 13.3 and 13.4 [REP1-048] to identify existing and proposed permissive paths as well as PRoW.</li> </ol>	<ol style="list-style-type: none"> <li>1. There are no quantitative assessment thresholds for the determination of adverse effects on PRoWs or permissive paths. PRoWs by their nature are transitory in use, with people typically not staying in a given location for a prolonged period of time.</li> <li>2. The Applicant does not agree that significant noise effects are indicated. Proposed sources of noise would be heavily mitigated, including low-noise equipment and use of perimeter barriers. Perceptible sound from the Proposed Development would be attributable to items of noise-generating infrastructure which are localised in the context of the wider Order Limits.</li> <li>3. Permissive paths are considered to be consistent with PRoW, as set out above.</li> <li>4. An update to <b>ES Volume 3, Figure 13.3: Operational Phase Noise Contours (without additional mitigation) [EN010158/APP/6.3.3]</b> and <b>ES Volume 3, Figure 13.4: Operational Phase Noise Contours (with additional mitigation) [EN010158/APP/6.3.3]</b> has been submitted at Deadline 2.</li> </ol>

ExQ1 Ref	Question	Applicant's Response
Q1.16.8	<p><b>Embedded mitigation – offsets</b></p> <p>Provide justification for the minimum distance of 50m specified for the offsets between residential properties and identified components of the Proposed Development in table 13.12 of the ES [REP1-040]. Should offsets be specified for other potentially sensitive receptors? If not, why not?</p>	<p>The minimum distance of 50m was used as part of the preliminary design approach as a guide and is not based on ensuring particular noise levels are achieved at surrounding receptors.</p> <p>Due to the quantity of noise sources and mitigation measures applied, combined with the complexity of noise propagation pathways from multiple sources operating simultaneously, it is not appropriate to specify a fixed offset distance at which components must be sited to ensure adverse impacts would be avoided.</p>
Q1.16.9	<p><b>Embedded mitigation - use of equipment with low noise emissions</b></p> <p>When would it not be feasible to use low noise emission equipment as identified in table 13.12 ES Chapter 13 [REP1-040]? Who would make this decision? What alternative mitigation would be applied in such instances?</p>	<p>The selection of equipment will be subject to the design team/contractor responsible for the detailed design of the Proposed Development. This decision can be balanced with other factors such as equipment size, efficiency, availability and cost. If low noise emission equipment is not used, multiple alternative measures can be adopted such as layout revisions, a reduced quantity of units, screening items, acoustic packs etc. which would ensure that the noise limits secured by condition would be achieved.</p>
Q1.16.10	<p><b>British Horse Society advice on construction sites and horses</b></p> <p>The ExA notes the additional commitments included in the Outline Construction Environmental Management Plan [REP1-078] and Outline Decommissioning Environmental Management Plan [REP1-082] to implement measures in the British Horse Society document 'Advice on Construction sites and horses'. The advice acknowledges that its "guidance is general and does not aim to cover every variation in circumstances" and that advice for specific sites should be sought from the Society. Does the applicant intend to develop more detailed site-specific measures, in consultation with the British Horse Society and other relevant stakeholders? If so, should the relevant management plans make this commitment clear? If not, why not?</p>	<p>At this stage no engagement with the British Horse Society has been undertaken, however engagement with the affected land interests is underway and forms a commitment within the <b>Outline CEMP [EN010158/APP/7.2.3]</b> updated at Deadline 1. Refer to the response provided to Q1.16.5.</p> <p>Further detail has also been included in <b>Appendix 1: Response to the Written Representation received from TCS Biosciences Ltd and Preston Farms to the Applicant's Response to Written Representations [EN010158/APP/8.12]</b>.</p>
Q1.16.11	<p><b>Additional mitigation</b></p> <p>Section 13.9 ES Chapter 13 [REP1-040] makes several references to additional mitigation measures that would be applied "where practicable". Provide further details on the circumstances when it would not be practical to apply additional mitigation as identified and what alternatives would be applied instead. If additional mitigation was not applied, would this have any implications for the findings of the ES?</p>	<p>Any mitigation adopted would be with the aim of achieving the noise limits set as part of the development consent. In some cases, there may be more than one applicable mitigation measure that can be applied. Alternatively, additional mitigation may not be necessary if plant and equipment used/installed were to generate lower levels of noise than have been adopted in the assessment.</p>
Q1.16.12	<p><b>Additional mitigation – operational phase engineering refinements</b></p> <p>Paragraph 13.9.6 of ES Chapter 13 [REP1-040] states "In the case of the main transformers being a major component of the acoustic emissions from the Proposed Development, it is proposed that a minimum 5 dB(A) reduction is obtained at source through refinement of the engineering requirements in order to adopt lower noise emitting transformers. This is considered to be attainable and is secured through the Outline OEMP". What is the assumed baseline from which a 5 decibel (dB) reduction would be</p>	<p>The assumptions for the transformer source level used in the modelling and prediction of noise informing the assessment uses a reasonable worst case assumption of available design solutions (75 dB(A) at 1m, emitting from all sides of a unit of dimensions 6.72m x 2.74m x 4.65m). Table 13.8 of <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3]</b> [REP1-040] details the reasonable worst case that has been used for the purposes of the assessment. The Applicant is confident that a 5 dB(A) reduction is well within the tolerance of design solutions available on the market.</p>

ExQ1 Ref	Question	Applicant's Response
	sought? Is this mitigation dependant on currently unknown engineering developments or advancements? If so, can it be relied upon as additional mitigation?	
<b>Q1.16.13</b>	<p><b>Additional mitigation – operational phase barriers</b></p> <p>Paragraph 13.9.17 of ES Chapter 13 [REP1-040] states that a 5m high barrier would be provided around sections of the proposed Rosefield substation as secured in the Design Commitments [REP1-020]. However, the Design Commitment states that the acoustic barrier around the substation would be no greater than 5m above ground level. Should the Design Commitment require a height of 5m? Which sections of the boundary around the substation would be provided with barriers and why?</p>	<p>The height and location of acoustic barriers will depend on the final layout of the Rosefield Substation and therefore will be confirmed during detailed design. The acoustic barriers will be located where they are effective in avoiding or reducing noise impacts on receptors. The commitment to no greater than 5m is therefore correct, as this allows flexibility should a smaller barrier be suitable for achieving an appropriate level of noise attenuation.</p>
<b>Q1.16.14</b>	<p><b>Topography</b></p> <p>The applicant's response [PDA-006] to relevant representation [RR-083] regarding concern that noise emitted by the battery energy storage system would travel due to the site's sloped topography states that the applicant's modelling takes account of topography. However, ES Chapter 13 [REP1-040] does not appear to make any reference to this issue. Clarify how that applicant's modelling has taken account of topography.</p>	<p>The acoustic modelling undertaken to inform the assessment accounts for the topography of the Site and surrounding study area. This is referred to in <b>ES Volume 4, Appendix 13.3: Operational Phase Assessment Details [EN010158/APP/6.4.2] [REP1-068]</b>.</p>

Table 3-17: Population

ExQ1 Ref	Question	Applicant's Response
<b>Q1.17.1</b>	<p><b>Critical National Priority (CNP)</b></p> <p>Provide comments on the written representation submitted by Preston Farms Ltd and TCS Biosciences Ltd [REP1-133] regarding the application of CNP. Could the potential impact on these businesses fall under the exceptions to CNP as described at paragraph 4.2.15 of National Policy Statement (NPS) EN-1 as an 'unacceptable risk to, or unacceptable interference with, human health and public safety', in light of the role of the businesses in supplying the National Health Service and wider medical sector? If not, why not?</p>	<p>The residual impacts on Preston Farms Ltd and TCS Biosciences Ltd would not constitute an exception to the CNP policy. No evidence has been provided that there would be an <i>"unacceptable risk to, or unacceptable interference with, human health and public safety"</i> as written into NPS EN-1 Paragraph 4.2.15 (2023). The Applicant's assessment of the effect of the Proposed Development on the business is that it would be not significant, and various mitigation measures have been proposed, as set out further below. In developing the Proposed Development, the Applicant has taken feedback from concerned non-agricultural businesses, and has amended the Proposed Development's design over that period to help to avoid, reduce and/or minimise the potential for noise and accessibility effects perceived by these businesses. In order to limit disruption to land used by TCS Biosciences, based on this organisation's feedback the Applicant has:</p> <ul style="list-style-type: none"> <li>• Removed the option for the Rosefield Substation to be located in Field E23 (now proposed for Solar PV only), thereby reducing perceived operation phase noise effects; and</li> <li>• Confirmed in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b> that at the detailed design stage, the Solar PV module arrangement for Field E23 would be designed to incorporate movement corridors for TCS Biosciences sheep and/or horses to cross the field to access their other adjacent grazing fields.</li> </ul>

ExQ1  
Ref

Question

Applicant's Response

The above points are captured within the **Written Summary of Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 (CAH1) [EN010158/APP/8.7] [REP1-107]**. As indicated in the **Written Summary of Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 (CAH1) [EN010158/APP/8.7] [REP1-107]**, the Applicant updated the **Outline CEMP [EN010158/APP/7.2.3]**, **Outline OEMP [EN010158/APP/7.3.3]** and **Outline DEMP [EN010158/APP/7.4.3]** at Deadline 1 to include bespoke mitigation to address the sensitivity of nearby businesses, particularly Preston Farms and TCS Biosciences Ltd. This also includes a commitment that the Applicant will liaise with Preston Farms Ltd and TCS Biosciences Ltd (together, the Prestons') during the preparation of the detailed Construction Environmental Management Plan(s) and subsequently during the construction phase. The Applicant also amended design commitment G2 of the **Design Commitments [EN010158/APP/5.9.4]** to specifically require the design of corridors through the Solar PV development in Field E23 to be undertaken in consultation with the tenants and the Applicant is engaged in ongoing discussion with Preston Farms.

The Applicant recognises the importance of the operation undertaken by TCS Biosciences and, therefore, has: consulted with businesses (including TCS Biosciences Ltd) during the pre-application period, has amended the Proposed Development's design over that period to help to avoid, reduced and/or minimised the potential for noise and accessibility effects perceived by these businesses, which is reported in the ES. This has resulted in the assessment within the ES concluding non significant residual impacts on Preston Farms Ltd and TCS Biosciences Ltd. Therefore, the Applicant does not consider that the Proposed Development gives rise to/or places any 'unacceptable risk to, or unacceptable interference with, human health and public safety'. This is concluded within the **Planning Statement [EN010158/APP/5.7.3] [REP1-016]** and, accordingly, the Applicant considers that the CNP presumption applies to the Proposed Development.

The Applicant considers that were the non-significant residual effects to manifest, there is no evidence to suggest that they would jeopardise the future of the business, and also no evidence that it would have a measurable impact on the functioning of the NHS. In order to address uncertainty, the Applicant has developed a suite of precautionary, flexible and responsive management plans that are secured and allow for: the design of bespoke measures; the monitoring of potential effects, and the management and correction of such effects if they arise.

A full address of the Written Representation submitted by **Preston Farms Ltd and TCS Biosciences Ltd [REP1-133]** is available in **Appendix 1 - Response to the Written Representation received from TCS Biosciences Ltd and Preston Farms** of the **Applicant's Response to Written Representations [EN010158/APP/8.12]** to provide a clear, single document setting out the detail of the Applicant's position regarding the effects on and mitigation for these commercial operations. This includes an appended technical note (Annex 1 - **Noise and Vibration Technical Note**) which has also been submitted at Deadline 2 to provide further information regarding the effects of noise and vibration on livestock (cattle and sheep) and horses, and set out how guidance (including from the British Horse Society) has been used to further develop the approach to monitoring, mitigation and engagement secured within construction and operational management plans.

Engagement with Preston Farms and TCS Biosciences is ongoing to seek agreement to the approach to managing the effects of the Proposed Development, where practicable.

ExQ1 Ref	Question	Applicant's Response
Q1.17.2	<p><b>Baseline environment – agricultural economy</b></p> <p>Section 14.5 of Environmental Statement (ES) Chapter 14 (Population) [APP-057] provides some details of the number of people in employment on the Claydon Estate within the order limits.</p> <ol style="list-style-type: none"> <li>1. Provide full details of the total number of people employed (full time equivalents), including seasonal workers, for each tenancy and the Claydon Estate itself.</li> <li>2. What impact would the Proposed Development have on the number of jobs?</li> <li>3. Would any of the proposed “land swaps” for tenants of the Claydon Estate impact employment numbers?</li> </ol>	<p>The full number of people employed by the tenancies within the Order Limits is not known by the Applicant, though was sought – as such an indicative assessment of the employment capacity of the land (based on the ratio of agricultural land to agricultural employment across Buckinghamshire) has been provided as a hypothetical approach to assessment of effects on the agricultural economy.</p> <p>Although the Applicant does not have full information on the total number of people employed, engagement with the agricultural operators has confirmed that the actual employment supported by the agricultural land affected by construction activity is far lower than the indicative capacity, and therefore the above assessment sets a hypothetical, ‘worst-case’ assessment of employment capacity rather than actual net employment reduction which would be influenced by commercial agreements between the Applicant and agricultural operations affected.</p> <p>As set out in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> the Claydon Estate currently has ownership of a wider area of land outside of the Order Limits, and has confirmed that it will continue to farm the remainder of the land with contractors (where currently farmed, and not included within potential land swaps with tenants). The Claydon Estate does not plan to reduce the number of employees supported by its wider operation as a result of the Proposed Development.</p> <p>The Claydon Estate has engaged with agricultural operators where they are tenant farms, and has in most cases agreed land swaps that will reduce the indicative net effect on employment by supporting the ongoing viability of agricultural operations on alternative land. As such, in most cases, due to agreements for land swaps, the viability of the tenanted operations would not be affected and employment levels would be maintained on alternative land.</p> <p>In some cases, where land is temporarily required on a short-term basis for construction activity but can then be returned to agricultural use, this land (except for access routes within it) would continue to be farmed after construction, with interim compensation arrangements agreed during the construction phase when that land is inaccessible where this applies.</p> <p>The Proposed Development would also generate employment – albeit in different sectors, as set out in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> – 600 FTE jobs would be supported during the construction phase, and 24 Full Time Equivalent (FTE) jobs would be supported during the operational phase.</p>
Q1.17.3	<p><b>Embedded mitigation – offsets</b></p> <p>Offsets for public rights of way (PRoW) for fencing from solar photovoltaic (PV) development are specified in table 14.24 of ES Chapter 14 [APP-057] and secured in the Design Commitments [REP1-020]. Whilst some commentary on the rationale for the offsets is contained in the Design Approach Document [REP1-018], provide further justification for the offset distances specified. What analysis was undertaken to determine if the specified offsets would provide the necessary mitigation?</p>	<p>The offsets from PRoW secured in the <b>Design Commitments [EN010158/APP/5.9.4]</b> are as follows:</p> <ul style="list-style-type: none"> <li>• Perimeter fencing surrounding the Solar PV development will be offset at least 55m from the Bernwood Jubilee Way within Fields D4, D11, D14 and D15 to allow views to be retained over the Solar PV development.</li> <li>• Perimeter fencing surrounding the Solar PV development will be offset at least 30m from the Mid Shires Way and North Bucks Way within Fields E21/E22 and E23.</li> <li>• Perimeter fencing surrounding the Solar PV development will be offset at least 10m from either side of existing PRoW.</li> </ul> <p>The text and figures within Section 6 of the <b>Design Approach Document [EN010158/APP/5.8.3]</b> relating to ‘Project Principle 2.3: Consider sequential views and the experience of people using the local network of</p>

ExQ1 Ref	Question	Applicant's Response
		<p>Public Rights of Way and recreational routes, Calvert Road, Claydon Road and other local roads' and Project Principles 9.1 to 9.4 under 'Strategic Principle 9 - Provide new ways to enjoy the countryside' provide a level of rationale for these offset distances.</p> <p>The offset along the Bernwood Jubilee Way was tested to ensure it was sufficient to allow views over the top of the panels using initial cross-sections through the Proposed Development, three dimensional models such as that illustrated at Figure 6.4 of the <b>Design Approach Document [EN010158/APP/5.8.3]</b>, and the visualisations provided at <b>ES Volume 4, Appendix 10.6: LVIA Visualisations [EN010158/APP/6.4] [APP-115] [APP-116]</b>.</p> <p>The offsets for other PRoW were informed by a number of factors. This has included consideration of the width of minimum offsets utilised at other DCO solar farms, consideration of guidance such as The British Horse Society's 2025 'Advice on solar farms near routes used by equestrians' with its recommended minimum clear width of 4m from Solar PV development/a 5m minimum corridor, testing of the character and feel of the corridors created by the offsets using illustrative cross sections such as Figures 6.5 and 6.17-6.19 of the <b>Design Approach Document [EN010158/APP/5.8.3]</b>, and assessment of the effects for users of the PRoW within <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b>. The Applicant is therefore confident that these offsets provide the necessary mitigation</p>
Q1.17.4	<p><b>Embedded mitigation - corridor for grazing animals in field E23</b></p> <p>To the applicant:</p> <ol style="list-style-type: none"> <li>1. How wide would the corridor be and what boundary treatments are proposed? If such details are currently unknown, when would they be determined and how would proposals be developed and agreed?</li> <li>2. What evidence can the applicant provide to demonstrate that the related issues identified in the written representation from Preston Farms Limited and TCS Biosciences Limited <a href="#">[REP1-133]</a>, including stress to animals, would be avoided or mitigated with the proposed corridor?</li> </ol>	<ol style="list-style-type: none"> <li>1. At Deadline 1, the Applicant submitted a revised version of the <b>Design Commitments [EN010158/APP/5.9.4]</b>, which secured at design commitment G2 that the corridor through Field E23 would be designed in consultation with the tenants. It is anticipated that the corridor would be at least 20m wide, which is secured by a further amendment to the <b>Design Commitments [EN010158/APP/5.9.4]</b> submitted at Deadline 2, with the location and boundary treatments to be determined in consultation with TCS Biosciences/Preston Farms depending on their preferred route. The corridor would not run between rows of Solar PV modules, and would be outside the perimeter fencing surrounding the Solar PV development. Hedgerows and/or a taller fence for visual screening could be installed along the perimeter fenceline in consultation with TCS Biosciences/ Preston Farms.</li> <li>2. The Applicant provides further detail in <b>Appendix 1: Response to the Written Representation received from TCS Biosciences Ltd and Preston Farms of the Applicant's Response to Written Representations [EN010158/APP/8.12]</b> at Deadline 2. In summary, the Applicant accepts that E23 will no longer form 'open grazing'. The British Horse Society's 2025 'Advice on solar farms near routes used by equestrians', whilst not tailored to the specifics of Preston Farms Limited and TCS Biosciences Limited, identifies that care should be taken in solar farm design not to create narrow corridors through solar farms, as tall fencing along the corridors could be intimidating and narrow corridors could create confinement with no 'escape space'. The British Horse Society recommends a minimum useable width of 4m between fences for bridleways and byways passing through solar farms, to allow horses to be able to comfortably pass each other, which they indicate means that fence lines should be a minimum of 5m apart. Consequently, a 20m corridor is four times the width of the minimum recommended by the British Horse Society. Whilst the guidance relates to linear routes along which horses could expect to pass each other, rather than corridors specifically for the movements of horses, the Applicant considers that 20m provides a substantial corridor for the passage of horses when considered against the British Horse Society guidance.</li> </ol>

ExQ1 Ref	Question	Applicant's Response
		<p>The same British Horse Society guidance identifies that glint and glare from Solar PV development has been a concern for horse riders. The guidance states that the British Horse Society has “no evidence of horses reacting to it or of it being detrimental to the health and wellbeing of horses” having considered sites with both solar panels and horses. The guidance goes on to state “Horses may react to a new solar structure as they might to anything different in their environment, but will quickly accept it (when introduced appropriately). Such reaction is simply to a change in their surroundings, it is not likely to be a response to reflection because their handlers report no reflection from panels. Although horses’ vision is different from humans, their response does not suggest that they see panels differently.”</p>
<p><b>Q1.17.5</b></p>	<p><b>Additional mitigation</b> Paragraph 14.9.1 of ES Chapter 14 [APP-057] refers to an “Outline Public Rights of Way and Permissive Paths Management Plan”. Should this refer to the Outline Rights of Way and Access Strategy?</p>	<p>Yes this reference should be to the <b>Outline RoWAS [EN010158/APP/7.8.2] [REP1-090]</b> and has been updated accordingly in a version submitted to Deadline 2.</p>
<p><b>Q1.17.6</b></p>	<p><b>Beneficial residual effects</b> ES Chapter 14 [APP-057] identifies that with embedded and additional mitigation measures in place, slight-beneficial socio-economic effects would be experienced during the construction and decommissioning phases on tourism and the tourist economy (tourist accommodation) due to the effect of non-local construction workforce on the tourism accommodation market.  Provide further justification for this conclusion having regard to the potential for a reduction in visitor numbers and use of accommodation due to actual or perceived negative impacts and disruption due to construction or decommissioning activities.  Permanent, slight beneficial effects are also identified for the operational phase for community access/walkers, cyclists and horse riders.  Provide further justification for this conclusion having regard to the potential for usage of PRow and permissive paths to be impacted by noise, landscape and visual and other effects that may reduce the attractiveness of such routes. Should the provision of permissive paths contribute towards a conclusion of permanent beneficial effects when the permissive paths might be removed upon decommissioning?</p>	<p>It should be noted that during the construction and decommissioning stages, effects on tourist accommodation and the tourist economy and its components are considered separately – the former assessed as slight <i>beneficial</i>, the latter as slight <i>adverse</i>.  The Applicant does not consider that there would be evidence to support the conclusion of a reduction in the number of visitors to the area due to actual or perceived effects, as environmental changes associated with these phases are highly localised and unlikely to be significant on the tourist economy (albeit some receptors – a small number of PRow and one tourist receptor) would experience significant landscape and visual effects.  The tourist economy is substantial and diverse, and as such is unlikely to experience noticeable change as a result of the construction or decommissioning of the Proposed Development.  At the same time, there would be an increase in the use of tourist accommodation by construction workers – this is likely to be minimal and dispersed across a wide area, but would nonetheless represent an identified and quantifiable increase in accommodation use, within spare capacity, that would have a slight beneficial effect, as reported in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>.  <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> assesses the potential for effects on community access, separately to effects experienced relating to noise, traffic and access, landscape and visual and other environmental impacts – this is made clear at paragraphs 14.6.52 to 14.6.59. As such, the slight beneficial effects during the operational phase relate to The assessment of connectivity in terms of journey distance, in the context of replacement and alternative access and where the Proposed Development affects existing (or provides new) strategically important links identified by policy, designation, stakeholder feedback or where there are substantively new routes that provide an improvement to the network in-line with wider plans and policies identified in this chapter.  That assessment sets out that during the operational phase:</p> <ul style="list-style-type: none"> <li>• The diversion of PRow ECL/7/2, SCL/13/1, SCL/12/2, SCL/13/2 and ECL/4/2) is likely to result in a slight adverse effect on these links.</li> </ul>

ExQ1 Ref	Question	Applicant's Response
		<ul style="list-style-type: none"> <li>• However, in the case of diverted routes combining SCL/12/2 and SCL/13/2, there is a decrease in journey length which would result in a neutral or slight positive effect for that link.</li> <li>• The creation of new permissive paths would also increase community accessibility and recreational opportunities in an area that is currently inaccessible. The routes would improve community connectivity between the existing public highway and community areas such as East Claydon, Middle Claydon and Botolph Claydon in the east and Calvert in the west.</li> <li>• Overall, therefore on balance there is likely to be a permanent, slight beneficial residual effect on community access (PRoW and Permissive Paths) and their users (WCH), which is considered to be not significant.</li> </ul> <p><b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> has been amended at Deadline 2 to confirm that while these effects would be long-term, they would not be permanent.</p> <p>Elsewhere in the ES, it is concluded that during the operational phase users of PRoW will experience:</p> <ul style="list-style-type: none"> <li>• Negligible to minor adverse (not significant) effects relating to noise (<b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>) and air quality <b>ES Volume 2, Chapter 6: Air Quality [EN010158/APP/6.2.2] [APP-049]</b>;</li> <li>• Negligible effects in terms of severance, non-motorised user amenity and fear and intimidation) (operational (including maintenance) phase were scoped out of the assessment (<b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b>) as a result of being unlikely to give rise to greater than negligible effects);</li> <li>• Significant effects (moderate or moderate/major adverse) for only five PRoW (including Bernwood Jubilee Way, PRoW between Calvert Road and HS2, PRoW between Botolph Claydon and Runt's Wood, PRoW to Finemere Hill and PRoW, lanes and roads between East Claydon/East Claydon Road and to within Parcel 3) (<b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b>). For context, there are 96 PRoW within 500m of the Proposed Development, of which 30 intersect with the Order Limits.</li> </ul>
Q1.17.7	<p><b>Residual effects on the agricultural economy</b></p> <p>Paragraphs 14.10.6 and 14.10.38 of ES Chapter 14 <a href="#">[APP-057]</a> refer to the "...indicative likely change in employment and agricultural land" during the construction and operation phase respectively. Clarify what likely change in employment and agricultural land has been assessed.</p>	<p>In the absence of detailed information about the number of FTE jobs supported by individual tenancies and landholdings within the Site, effects on the agricultural economy have been determined by the extent to which the Proposed Development changes the <i>indicative</i> capacity for agricultural employment, and production and land availability in the agricultural economy at county, regional and national scales.</p> <p>The assessment in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> considers the potential for the effect of temporary land and employment reduction at the Site in agricultural uses relative to the scale of the regional agricultural economy.</p> <p>This provides a 'worst case' assessment in the hypothetical scenario that all of the agricultural land within the Site loses employment capacity within the overall agricultural economy, based on an average FTE job per hectare ratio for Buckinghamshire.</p> <p>The ratio was informed by 2024 data on the structure of the agricultural industry in England published by Defra (see Table 14.14 in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>), which provides</p>

ExQ1 Ref	Question	Applicant's Response
		<p>an overview of the UK's agricultural economy by region including data relating to land use, yields and employment.</p> <p>Indicatively, based on County-wide average employment per ha this would result in:</p> <ol style="list-style-type: none"> <li>the temporary, long-term reduction of the indicative capacity for up to around 10 FTE jobs, during the operational phase; and</li> <li>An additional short-term reduction of the indicative capacity for up to around 5 FTE jobs during the construction phase.</li> </ol> <p>As set out in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> the Claydon Estate currently has ownership of a wider area of land outside of the Order Limits, and has confirmed that it will continue to farm the remainder of the land with contractors (where currently farmed, and not included within potential land swaps with tenants). The Claydon Estate does not plan to reduce the number of employees supported by its wider operation as a result of the Proposed Development.</p> <p>The Claydon Estate has engaged with agricultural operators where they are tenant farms, and has in most cases agreed land swaps that will reduce the indicative net effect on employment by supporting the ongoing viability of agricultural operations on alternative land.</p>
<p><b>Q1.17.8</b></p>	<p><b>Residual effects on agricultural businesses and landholdings</b></p> <p>The applicant's assessment of residual effects in section 14.10 of the ES <a href="#">[APP-057]</a> identifies mitigation that has informed the assessment conclusions, including replacement land "...of at least the same level of provision, and in terms of severance of wider landholdings (where all replacement land is equally accessible from remaining landholdings and agricultural facilities; and for example, through the commitment to allowing for an grazing animal corridor through Field E23 to prevent severance)".</p> <p>Paragraph 14.10.2 concludes that during the operation phase "...the value (sensitivity) of the agricultural land holdings as a receptor is very high and the magnitude of change expected at this operation is minor. Therefore, there is likely to be a temporary or permanent slight adverse residual effect on agricultural businesses and landholdings, which is considered to be not significant."</p> <ol style="list-style-type: none"> <li>Provide comments on the implications of conclusions on residual effects on agricultural businesses and landholdings in the event that replacement land is not agreed by tenants to be of the same level of provision or if the grazing corridor is not effective.</li> <li>Provide further justification for the conclusion of slight (not significant) effects in the context of table 14.23 (significance criteria) which indicates that a combination of very high sensitivity and minor magnitude of change can lead to either a slight or moderate effect. Paragraph 14.6.69 states that a moderate effect would be deemed as significant.</li> </ol>	<p>A full address of the Written Representation submitted by <b>Preston Farms Ltd and TCS Biosciences Ltd [REP1-133]</b> is available in <b>Appendix 1: Response to the Written Representation received from TCS Biosciences Ltd and Preston Farms</b> of the <b>Applicant's Response to Written Representations [EN010158/APP/8.12]</b>.</p> <p>Residual effects would be considered significant if the mitigation provided does not reasonably reduce the magnitude of change to 'minor' – this would align with the definitions set out in Table 14.22 in <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> (i.e. loss or partial loss of key characteristics; changes that compromise the viability of the business; introduction of severe severance with limited accessibility provided).</p> <p>However, the Applicant considers that the replacement land is of equal or better quality, accessibility and environmental amenity such that it would not compromise the viability of the operations, and that the animal corridor will be of appropriate and adequate design. The Applicant notes that all parties offered Heads of Terms for replacement land (including Preston Farms) have agreed these terms.</p> <p>It is noted that in some cases, affected fields are used for agricultural and non-agricultural operations. Throughout the development of the Proposed Development the Applicant has taken feedback from concerned non-agricultural business, including TCS Biosciences, to help avoid, reduce and/or minimise the potential for noise and accessibility effects perceived by these businesses. As set out in the <b>Written Summary of Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 (CAH1) [EN010158/APP/8.7] [REP1-107]</b>, some of the amendments to the design to reduce noise and other impacts, based on this feedback, include the removal of the Rosefield Substation and BESS from Field E23 (now only Solar PV development) to reduce noise, and incorporating suitable livestock movement corridors through the Solar PV fields for TCS Biosciences livestock to access surrounding adjacent grazing fields.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>The Applicant has detailed a range of measures to ensure animals are not adversely affected by the Proposed Development. At Deadline 1, the Applicant amended design commitment G2 of the <b>Design Commitments [EN010158/APP/5.9.4]</b> to specifically require the design of corridors through the Solar PV development in Field E23 to be undertaken in consultation with the tenants and the Applicant is engaged in ongoing discussion with Preston Farms, which includes reference to this point.</p> <p>In-line with methodology set out within <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>, professional judgement and expertise have been used to assess impacts where quantitative or appropriate guidance is not available.</p> <p>As set out in <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b>, where more than one effect classification exists for any given scenario (i.e. slight or moderate), professional judgement is used to assign a single effect classification.</p> <p>For effects on the viability of agricultural and non-agricultural businesses, the significance of the effect is informed by professional judgement of the factors that influence magnitude and sensitivity outlined in tables 14.21 and 14.22 of <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>. These factors are – as determined by guidance – not quantitative in nature and therefore rely on professional judgement to confirm significance.</p> <p>A 'slight' residual effect has been determined rather than 'moderate' based on the consideration of embedded and additional mitigation that reduce the magnitude of change to 'minor' – such mitigation represents best practice and in some cases:</p> <ol style="list-style-type: none"> <li>Goes beyond the expected standards – for example where Heads of Terms for replacement land provided in land swaps far exceed the provisions of compensation under the Agricultural Holdings Act 1986; and</li> <li>Has been developed in response to issues raised by affected businesses and reflects bespoke and highly responsive mitigation – such as indicated in the <b>Written Summary of Applicant's Oral Submissions at Compulsory Acquisition Hearing 1 (CAH1) [EN010158/APP/8.7] [REP1-107]</b>, a number of the outline management plans were updated at Deadline 1 to include construction management measures specifically in response to concerns raised by individual business.</li> </ol>
<p><b>Q1.17.9</b></p>	<p><b>Magnitude of change for agricultural businesses and landholdings</b></p> <p>Provide further justification for the "minor" magnitude of change identified in the assessment of effects <a href="#">[APP-057]</a> on agricultural businesses and landholdings in the context of the description of magnitude outlined in table 14.22 and related matters raised by interested parties.</p>	<p>In-line with the criteria set out in Table 14.22 of <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>, the provision of additional mitigation, embedded design, environmental management and land swaps (where land is considered equally productive, of similar size and quality, and accessible to each Tenant/Occupier, such that effects on viability of those agricultural businesses would not be adversely affected) means that at most, a minor magnitude of change would occur.</p> <p>A minor adverse magnitude of change has been informed by:</p> <ul style="list-style-type: none"> <li>A discernible change in attributes, quality or vulnerability, and minor loss of, or alteration to, one (maybe more) key characteristics, features or elements, e.g. amendment to access or acquisition of land resulting in changes to operating conditions that do not compromise overall viability of property, businesses, community assets or agricultural holdings; and</li> </ul>

ExQ1 Ref	Question	Applicant's Response
Q1.17.10	<p><b>Residual effects on other (non-agricultural) businesses and development land</b></p> <p>Provide further justification for the conclusion of slight adverse residual effects during the construction and operational phase where the combination of high/very high sensitivity and minor magnitude can lead to a conclusion of slight or moderate (significant) effects as per table 14.23 of ES Chapter 14 <a href="#">[APP-057]</a>. This is in the context of effects related to landscape and visual amenity which are acknowledged by the applicant as moderate adverse (significant) at Hogshaw Farm and Wildlife Park.</p>	<ul style="list-style-type: none"> <li>• Introduction (adverse) of severance with adequate accessibility provision.</li> </ul> <p>As a result of embedded and additional mitigation, the Applicant's view is that the change:</p> <ul style="list-style-type: none"> <li>• May result in a discernible change in the operations, as a result of change in location of operations and environmental amenity, but that these changes are not considered to amount to 'partial loss of/damage to key characteristics, features or elements, e.g. partial removal or substantial amendment to access or acquisition of land compromising viability' that would be required to meet the criteria for a moderate magnitude of change, as a result of:             <ul style="list-style-type: none"> <li>○ Heads of Terms for replacement land of equal or better quality and accessibility provided in land swaps that far exceed the provisions of compensation under the Agricultural Holdings Act 1986; and</li> <li>○ Mitigation secured in the (updated for Deadline 1) <b>Outline CEMP [EN010158/APP/7.2.3]</b>, <b>Outline OEMP [EN010158/APP/7.3.3]</b> and <b>Outline DEMP [EN010158/APP/7.4.3]</b> which include bespoke mitigation to address the sensitivity of nearby businesses, particularly Preston Farms and TCS Biosciences; but</li> </ul> </li> <li>• Does not result in the introduction of severance without adequate accessibility provision – having regard to embedded measures such as the animal grazing corridor in Field E23, and measures secured by the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</li> </ul> <p>An assessment of the potential for change to business viability (including driven by access and environmental amenity) has been undertaken where there may be the potential to affect the viability of businesses as a result of significant changes.</p> <p>A 'slight' residual effect has been determined rather than 'moderate' based on the consideration of embedded and additional mitigation that reduce the magnitude of change to 'minor'.</p> <p>In the specific case of Hogshaw Farm and Wildlife Park, in explanation of the criteria for 'magnitude of change' applied in this instance in accordance with guidance, the Applicant's view is that changes do not result in a moderate scale of change, reflecting the fact that:</p> <ul style="list-style-type: none"> <li>• Effects are limited geographically and are largely not significant (traffic, noise, air quality), with the exception of a single moderate residual adverse effects relating to landscape and visual amenity at Hogshaw Farm and Wildlife Park;</li> <li>• There would be no change in land or access/severance that would affect the viability of the current operation in-line with criteria in Table 14.22.</li> </ul> <p>A minor magnitude of change reflects the fact that there would be a discernible change in attributes, quality or vulnerability in-line with criteria in Table 14.22.</p> <p>The sensitivity of the receptor is considered to be high as a result of the business being sensitive to changes to environment or access such that significant effects may affect operating practices, with limited capacity to absorb or respond to change, in-line with criteria in Table 14.21.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>As set out in <b>ES Volume 1, Chapter 5: Approach to the EIA [EN010158/APP/6.1] [APP-048]</b>, where more than one effect classification exists for any given scenario (i.e. slight or moderate), professional judgement is used to assign a single effect classification.</p> <p>For effects on the viability of non-agricultural businesses, the significance of the effect is informed by professional judgement of the factors that influence magnitude and sensitivity outlined in tables 14.21 and 14.22 of <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b>. These factors are – as determined by guidance – not quantitative in nature and therefore rely on professional judgement to confirm significance.</p> <p>In the Applicant's view, despite the high sensitivity of the receptor, it is not considered that a single moderate environmental effect is likely to endanger the viability of the business and the services and facilities it offers.</p> <p>Mitigation has been applied to reduce the significance of landscape and visual effects as far as reasonably practicable, and it is not considered that this would affect the viability of the businesses concerned given their diverse attraction and business model.</p> <p>During the pre-application period, consultation feedback has been considered, resulting in design changes and embedded mitigation being proposed to seek to limit adverse effects. A substantial woodland tree buffer is proposed to the eastern boundary of Fields D8, D9, D19 and D26.</p>
Q1.17.11	<p><b>Residual effects on tourism and the tourist economy</b></p> <p>In relation to the operational phase, paragraph 14.10.51 concludes that "Therefore, there is likely to be a temporary slight adverse residual effect on tourism, which is considered to be not significant.". Should this conclusion consider that the "temporary" effect would be for 40 years which is long-term?</p>	<p>This paragraph has been amended to account for the duration of temporary effects, which will be long-term, in an updated version of <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> submitted at Deadline 2.</p>
Q1.17.12	<p><b>Outline Employment, Skills and Supply Chain Plan</b></p> <p>Buckinghamshire Council has made a request [REP1-112] for further consideration to be given to access to the site for construction workers from deprived areas of the county. The applicant's own assumption in its Transport Assessment [APP-131] is that 75% of construction staff would travel to and from the site by minibus. In this context, should the Outline Employment, Skills and Supply Chain Plan [REP1-100] provide a firmer commitment to providing such services for construction workers in deprived areas?</p>	<p>The <b>Outline Employment, Skills and Supply Chain Plan (Outline ESSCP) [EN010158/APP/7.14.3]</b>, paragraph 3.1.5 sets out the Applicant's commitment to contribute an Education and Skills Fund in the sum of £50,000, to be made available, annually, from the date of commencement until the date of decommissioning, to support the priorities set out in the detailed Employment, Skills and Supply Chain Plan. Arrangements for allocating the Fund would be agreed by the Applicant and Buckinghamshire Council. There is potential for this Fund – or a part of it – to be used in the same way as the Jobcentre Plus Flexible Support Fund, to support job seekers who are not engaged with Jobcentre Plus, but are located in the most deprived communities and lack access to transport or face other barriers to accessing and sustaining work. Additionally, as mentioned in the <b>Outline CTMP [EN010158/APP/7.5.3]</b>, Section 4.10, a Staff Travel Plan will be provided which will include:</p> <ul style="list-style-type: none"> <li>• Provision of public transport information to access where staff will be resident so there is no need for non-local staff to bring cars to the wider area;</li> <li>• Staff bus service for transport of Site staff from Bicester and Aylesbury, with pick ups from the mainline rail stations, accommodation/hotel areas and park and ride sites.</li> </ul>

ExQ1 Ref	Question	Applicant's Response
		<ul style="list-style-type: none"> <li>• Promotion of a car sharing scheme; and</li> <li>• Car parking management.</li> </ul> <p>The detailed Employment, Skills and Supply Chain Plan would describe how the Applicant would work in concert with other public, private and voluntary and community sector organisations, to harness collective knowledge, skills, expertise and financial resources to support those furthest from the labour market into work. Paragraph 3.3.2 of the Outline ESSCP suggests that the Opportunity Bucks Wards, where communities experience the greatest challenges to gaining and sustaining work, could be included within the priority target areas for recruitment drives and skills delivery.</p>
Q1.17.13	<p><b>Outline Employment, Skills and Supply Chain Plan</b></p> <p>The applicant's response [PDA-006] to Buckinghamshire Business First's relevant representation [RR-025] appears to make commitments that are not reflected in the Outline Employment, Skills and Supply Chain Plan [REP1-100], including the applicant's participation in the Construction Sector Employer Group. Does the plan need to be updated?</p>	<p>The <b>Outline ESSCP [EN010158/APP/7.14.3]</b> will be updated and submitted at Deadline 2 to include the Applicant's commitment to participate in the Construction Sector Employer Group and collaborate with Buckinghamshire Business First to quantify the contribution of benefits arising from the Proposed Development to social value outcomes.</p>

Table 3-18: Soils

ExQ1 Ref	Question	Applicant's Response
Q1.18.1	<p><b>Best and Most Versatile (BMV) agricultural land</b></p> <p>What are the economic and other benefits of BMV agricultural land in the order limits and how have they been considered by the applicant?</p>	<p>The Applicant points to <b>Appendix 4</b> of the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b> which sets out how the Proposed Development is compliant with Paragraph 5.11.34 of NPS EN-1 (2023).</p> <p>Furthermore, there is no standardised guidance for how to assess the economic impact of BMV soils. The IEMA (now ISEP) (2021) A New Perspective on Land and Soil in Environmental Impact Assessment Guidance does not specify the economic value of soil as it is highly dependent on individual land management and crop variation. The economic value of agricultural landholdings and agricultural economy have been assessed within the <b>ES Volume 2, Chapter 14: Population [EN010158/APP/6.2.2]</b> and no significant effects have been reported.</p>
Q1.18.2	<p><b>BMV land – regional context</b></p> <p>Table 12.2 of Environmental Statement (ES) Chapter 12 (Soil) [APP-055] records that the Planning Inspectorate's scoping opinion requested that the loss of BMV land should be considered "within a regional context". The Examining Authority (ExA) notes that ES Chapter 17 (Cumulative Effects) [REP1-044] identifies a 1 kilometre zone of influence from the order limits whilst the study area for soils assessed in ES Chapter 12 is confined to the order limits only. Paragraph 12.10.9 states that "The temporary availability of this land is also not</p>	<p>The Applicant has considered the regional context of BMV land in Appendix 1 – Site Selection Report of the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b> which considers a 10km search area. According to the provisional Agricultural Land Classification (ALC) mapping, the area within 10km of the Order Limits is predominantly made up of a mixture of Grade 3 and 4 with only small pockets of Grade 2. Furthermore, against the small proportion of BMV (1.51% / 10.2 ha) within the Order Limits and the approximately 57,332 ha of BMV within Buckinghamshire, it is considered that the effects on BMV land is not significant in a regional context. It is noted that the provisional ALC mapping does not differentiate between sub-grades 3a and 3b, however, it is considered the land within the Order Limits and wider search area includes relatively low levels of BMV land. It is also worth noting that the Applicant took into account</p>

ExQ1 Ref	Question	Applicant's Response
	<p>considered to be significant in the regional context". However, no regional context is provided. How has the applicant considered effects on BMV land in a regional context?</p>	<p>agricultural land quality when identifying an appropriate Site and during the design evolution of the Proposed Development.</p> <p>It is anticipated that other projects, including those included within the short-list specified in Table 17.3 of <b>ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2.3]</b> would be required to follow similar principles to reduce the level of BMV land impacted by the scheme and commit to a soil management plan or similar to ensure soils are not adversely affected. The decommissioning phase will not adversely affect soils due to the commitments detailed within the <b>Outline Soil Management Plan (Outline SMP) [EN010158/APP/7.7.3]</b> whereby the reduction in soil quality can be reversed, preventing medium or long-term effects to the availability of BMV for the Proposed Development and for other similar projects in the region.</p>
<p><b>Q1.18.3</b></p>	<p><b>Food production</b></p> <p>ES Chapter 12 [APP-055] and the Planning Statement [REP1-016] state that due to amendments in the National Planning Policy Framework, "there is no longer a need to consider the availability of agricultural land for food production in planning terms". Provide further commentary on this position in the context of National Policy Statement (NPS) EN-3 paragraph 2.10.11 and the 'Powering Up Britain: Energy Security Plan' which "encourages deployment of solar technology that delivers environmental benefits, with consideration for ongoing food production...".</p>	<p>The Applicant recognises the importance of agricultural use on national food security and confirms low-quality land has been prioritised for the Proposed Development, with only 1.51% of the Site considered to be BMV land.</p> <p>The Applicant notes that the National Planning Policy Framework should be considered both an important and relevant consideration to the Secretary of State in decision making. Normal agricultural use (e.g. arable and/or grazing as current) would continue (except for the cable installation and access track construction) in Work Nos 2B, 6, 7 and 10B (<b>Works Plans [EN010158/APP/2.3.2] [AS-006]</b>) (all areas outside of main developable Parcels).</p> <p>The area under the Solar PV Modules will either be managed by grazing or a cutting regime as set out and secured in the <b>Outline LEMP [EN010158/APP/7.6.3]</b>. The managed grassland will improve soil nutrient retention, carbon storage and water retention due to the improved microbial community and nutrient input from the grassland. A grazed grassland will have improved nutrient retention over a cutting regime however a grassland within a cutting regime will still have the same residual effect during operation.</p>
<p><b>Q1.18.4</b></p>	<p><b>Agricultural grazing</b></p> <p>ES Chapter 12 [APP-055] and the Planning Statement [REP1-016] refer to the potential for continued agricultural use during the operational lifetime of the Proposed Development beneath and around the solar photovoltaic modules "with potential for agricultural grazing". Provide further commentary on who would manage any such grazing during the operational phase and how. Would the layout and design of the Proposed Development enable productive agricultural grazing? (also see questions Q1.4.2 and Q1.7.17)</p>	<p>Rosefield Solar Farm would be responsible for managing the grazing in partnership with suppliers, ideally local suppliers. The stocking levels/grazing regime would be managed for biodiversity/ecological benefit and as such the grazing would be subject to restrictions and would not be as intense as on a typical cattle or sheep farm. Grazing has been considered throughout the layout and design of the Proposed Development to ensure this would enable grazing practices to be feasible during the operational (including maintenance) phase of the Proposed Development. See response below to Q1.1.8.5 regarding effects of grazing.</p>
<p><b>Q1.18.5</b></p>	<p><b>Soil ecosystems</b></p> <p>The assessment of soil ecosystems during the operation phase in ES Chapter 12 [APP-055] identifies a slight beneficial effect. Paragraph 12.10.14 indicates that this is partially predicated on grazing of the land. Provide comments on any implications of this conclusion in light of response to the above question regarding agricultural grazing and the extent to which it is secured.</p>	<p>In the absence of grazing, the same conclusions would be drawn for the residual effects on soil ecosystems during operation due to the absence of heavy farming activities such as cultivation and fertiliser/pesticide application. The area under the Solar PV Modules will either be managed by grazing or a cutting regime as set out and secured in the <b>Outline LEMP [EN010158/APP/7.6.2] [REP1-086]</b>. The managed grassland will improve soil nutrient retention, carbon storage and water retention due to the improved microbial community and nutrient input from the grassland. A grazed grassland will have</p>

ExQ1 Ref	Question	Applicant's Response
Q1.18.6	<p><b>Future baseline</b></p> <p>Paragraph 12.5.14 of ES Chapter 12 [APP-055] states that “While there may be potential changes in relation to climate change, including greater rainfall intensity and frequency of droughts, that could affect soil conditions, land grade, and farming practices, it is likely that these would only become apparent over longer time frames”. Provide further justification for this statement, including cross referencing with the applicant’s consideration of climate change in ES Chapter 16 (Water) [REP1-042].</p>	<p>improved nutrient retention over a cutting regime however a grassland within a cutting regime will still have the same residual effect during operation.</p> <p>Paragraph 16.5.40 of the <b>ES Volume 2, Chapter 16: Water [EN010158/APP/6.2.3] [REP1-042]</b> states that climate change is likely to result in wetter winters and longer drier summers.</p> <p><b>ES Volume 4, Appendix 8.2: Climate Change Resilience Assessment [EN010158/APP/6.4] [APP-105]</b> Table 10, notes increased winter precipitation, increase in magnitude and frequency of extreme rainfall events, and increased risk of drought as a likely climate change effect during the operational phase of the Proposed Development.</p> <p>While such changes may affect elements relating to soil resources such as moisture conditions, paragraph 12.5.14 of <b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> refers to the fact that more fundamental changes to soil characteristics would occur on a timescale outside the Proposed Development’s operational life.</p>
Q1.18.7	<p><b>Worst case scenario</b></p> <p>Table 12.4 of ES Chapter 12 [APP-055] does not specify the maximum area of the Battery Energy Storage System (BESS) and Satellite Collector Compounds assessed as being a reasonable worst-case scenario. Confirm the maximum area assessed.</p>	<p><b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> Table 12.4 has been updated at Deadline 2 to include the maximum areas that have been assessed. The maximum area of the Battery Energy Storage System (BESS) is 7.8ha and Satellite Collector Compounds is 18.2ha; all areas are Grade 3b.</p>
Q1.18.8	<p><b>Outline Soil Management Plan (oSMP) – Department for Environment, Food &amp; Rural Affairs (Defra) guidance</b></p> <p>Paragraphs 3.2.9 and 3.7.7 and of the oSMP [REP1-088] state that soil storage and handling will “normally be as specified” in the Defra guidance. When would soil handling and storage not be as specified in the Defra guidance and why? When the guidance is not applied, what alternative measures would be used? What is the process for determining and signing off deviations from the guidance?</p>	<p>All soil handling and storage for the Proposed Development will be managed under the Defra guidance therefore the wording in paragraphs 3.2.9 and 3.7.7 has been updated in <b>Outline SMP [EN010158/APP/7.7.3]</b> at Deadline 2 for clarification.</p>
Q1.18.9	<p><b>Green and blue infrastructure</b></p> <p>Paragraph 12.13 of ES Chapter 12 [APP-055] states that “The permanent land take for Green Infrastructure affects an assumed total area of 8.7 hectares (ha), none of which is classified as BMV land” and that a total of just over 10ha would be occupied by green and blue infrastructure, none of which would be classified as BMV. However, figure 12.1 of ES Chapter 12 [AS-022] appears to show grade 2 and 3a agricultural land in areas “proposed mitigation and/or enhancement” in the vicinity of Knoll Hill. Confirm whether any BMV land would be used for green and blue infrastructure and whether this would be permanently lost for agricultural use.</p>	<p>There would be an area of BMV land located within Field B9 (adjacent to Knowl Hill) in Parcel 1 that is proposed as green and blue infrastructure. The statement set out in Paragraph 12.13 is correct as none of the area of Green or Blue Infrastructure within the area of BMV land is considered to be permanent for the purposes of the assessment. This land could be returned to agricultural production once this has been returned to the landowner at the end of the decommissioning phase.</p> <p>This land will be reinstated and returned to the same agricultural land classification grade as prior to the installation of the Proposed Development and returned back to the landowner at the end of the decommissioning phase, as set out and secured in the <b>Outline SMP [EN010158/APP/7.7.3]</b>.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.18.10	<p><b>Residual effects on agricultural land quality during the operation phase</b></p> <p>Paragraph 12.10.13 of ES Chapter 12 [APP-055] states that "...the significance of the residual effect on agricultural land quality during operation (including maintenance) will be slight adverse/neutral or slight adverse and not significant." Provide further clarification of when the residual effect would be slight adverse/ neutral or slight adverse.</p>	<p>The residual effect will be slight adverse for BMV land (Grades 2 and 3a) and slight/neutral adverse for Grade 3b in accordance with the IEMA (now ISEP) (2021) A New Perspective on Land and Soil in Environmental Impact Assessment Guidance. <b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> has been updated at Deadline 2 for clarification.</p>
Q1.18.11	<p><b>oSMP – Environmental Improvement Plan</b></p> <p>In the context of NPS EN-3 paragraph 2.10.34, provide further commentary on how the measures in oSMP [REP1-088] are in line with the ambition set out in the government's Environmental Improvement Plan to bring at least 40% of England's agricultural soils into sustainable management by 2028 and increase this up to 60% by 2030.</p>	<p><b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> concludes that only 1.51% of the land is classified as BMV. Therefore, the land with the highest potential for agricultural production will be remaining within the agricultural system. As there is such a low percentage of BMV land used the sustainable management targets are able to be prioritised for the areas of land that are the most productive and have the highest potential of success.</p> <p>In addition, the <b>Outline LEMP [EN010158/APP/7.6.3]</b> will secure landscape and biodiversity enhancements across the Site, which will provide benefits to soil quality through increasing biological activity over the operational lifetime of the Proposed Development.</p>
Q1.18.12	<p><b>oSMP – soil restoration</b></p> <p>Section 12 of the oSMP [REP1-088] states that "Following decommissioning, the land will be reinstated and returned to the same ALC Grade as prior to the installation of the Proposed Development."</p> <ol style="list-style-type: none"> <li>1. Would the entirety of the order limits be reinstated to the same agricultural land classification (ALC) grade as prior to the installation of the Proposed Development? If not, clarify where and why not.</li> <li>2. Would pre-construction ALC surveys be carried out on land that has not been surveyed to provide an accurate baseline for soil restoration to the original ALC grade? If not, why not?</li> </ol>	<ol style="list-style-type: none"> <li>1. The entirety of the Order Limits will be reinstated to the same ALC grade as prior to installation of the Proposed Development as set out and secured in <b>Outline SMP [EN010158/APP/7.7.3]</b>.</li> <li>2. The Applicant has been unable to complete ALC surveys within the unsurveyed area due to access restrictions. If consent for the Proposed Development is granted, this area will be surveyed prior to construction to establish a baseline condition. This has been committed to within <b>Outline SMP [EN010158/APP/7.7.3]</b> issued at Deadline 2.</li> </ol>
Q1.18.13	<p><b>oSMP – potential use of concrete blocks or gabions</b></p> <p>Paragraph 4.2.5 of the oSMP [REP1-088] states that "The option to install pre-cast concrete blocks or gabions (filled with local stone) known as "shoes" may also be considered, avoiding the need for driven and screw anchored installation, therefore minimising ground disturbance." Who would consider the use of such methods and in what circumstances would they be applied?</p>	<p>The Solar PV modules would typically be mounted on a piled steel structure. However, the <b>Design Commitments [EN010158/APP/5.9.4]</b> also include an option for some mounting structures to be supported by ballasted or shallow concrete foundations, for example, to avoid piling depths and mitigate effects (if required) due to ground conditions, to reduce the impact on areas of archaeological sensitivity or to adapt the design of substructure works around existing underground utilities (if required).</p> <p>These methods will be considered and determined during the detailed design, which would be undertaken post consent.</p>
Q1.18.14	<p><b>oSMP – grass sward</b></p> <p>Elaborate on commentary in paragraph 4.3.1 of the oSMP [REP1-088] regarding the decision about where grass seeding will occur prior to construction. Who would make this decision? What would happen in instances</p>	<p>This will be determined during detailed design. A grass sward will be seeded across as much of the Site as possible prior to any construction works. The establishment of the grass sward is to prevent vehicle rutting and soil erosion. Low pressure vehicles will only be driven on a straight line on the grass and any vehicle turning will occur on track matting. These measures are additional precautions to prevent vehicle rutting and soil erosion therefore the grass sward is not the sole reliance of mitigation.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.18.15	<p>when grass swards have not established 6 months prior to construction? What alternative methods would be applied in such circumstances?</p> <p><b>oSMP – drainage</b></p> <p>The ExA notes the applicant's amendments to the oSMP [REP1-088] regarding remedial works to agricultural drainage. What assessment has the applicant undertaken to determine the suitability of the existing drainage system to support the operational phase? For the decommissioning phase, paragraph 5.4.8 states that if required due to damage, new drains should be installed into the subsoil, prior to topsoil reinstatement. How quickly would drains be repaired or replaced due to any damage during the construction phase?</p>	<p>Existing land drainage systems have not been considered within the <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b>. Therefore, the drainage assessment is currently conservative and the required new SuDs will be installed during construction phase to enable the drainage throughout operational stage to meet IDB requirements.</p> <p>Existing land drainage systems which are damaged throughout construction would either be reinstated or diverted during the decommissioning stage to ensure that the fields are returned to the landowner in the condition that they were received and can be returned to their original land use. If required due to damage to a section of an existing drainage system, new drains would be installed into the subsoil, prior to topsoil reinstatement in the decommissioning phase. This is set out and secured in the <b>Outline CEMP [EN010158/APP/7.2.3]</b>.</p>
Q1.18.16	<p><b>oSMP – monitoring and compliance</b></p> <p>Who would be responsible for the monitoring and compliance of measures in the oSMP [REP1-088]? Would monitoring and compliance information be shared with any relevant stakeholders?</p>	<p>The Applicant will be responsible for the implementation, monitoring and compliance of measures set out in the <b>Outline SMP [EN010158/APP/7.7.3]</b> as reflected in the detailed Soil Management Plan. The latter is secured by Requirement 17 of the <b>Draft DCO [EN010158/APP/3.1.4]</b> which will become a legally abiding commitment if consent is granted for the Proposed Development. It is anticipated that this would be undertaken either by the Applicant directly, or an appropriate qualified party appointed on behalf of the Applicant. Monitoring and compliance information would be recorded and provided to the relevant planning authority in accordance with the <b>Draft DCO [EN010158/APP/3.1.4]</b>.</p>
Q1.18.17	<p><b>ALC Report – extent of unsurveyed areas</b></p> <p>Table 4.2 of the ALC Report [APP-126] indicates that that 42.45ha was not surveyed. However, paragraph 12.6.3 of ES Chapter 12 [APP-055] states that 53ha was not surveyed, with paragraph 12.13.1 indicating that that 54.45ha was not surveyed. How much land (in ha) within the order limits has not been surveyed?</p>	<p>In total, 54.45ha of land has not been surveyed due to access restrictions. 42.45ha of this area has been classified as Grade 3b land, in accordance with guidance from Natural England, and the remaining 12ha is the area of the National Grid East Claydon Substation, which is classified as Non-agricultural land. <b>ES Volume 2, Chapter 12: Soil [EN010158/APP/6.2.2]</b> and <b>ES Volume 3, Figure 12.1: Agricultural Land Classification [EN010158/APP/6.3.2] [AS-022]</b> have been updated at Deadline 2 for consistency.</p>
Q1.18.18	<p><b>ALC Report – assumed grade 3b land</b></p> <p>Paragraph 3.1.5 of the ALC Report [APP-126] states that "As the soil type is homogeneous throughout the Site it is therefore reasonable to assume the unsurveyed area will also be Grade 3b." Annex 3 of the ALC Report indicates that land in the vicinity of Knoll Hill Farm was not surveyed. This area is also in close proximity to the only BMV land identified in the ALC survey. As highlighted in the Claydons Solar Action Group's written representation [REP1-127], grade 3a agricultural land was also identified close to Parcel 1 of the order limits in surveys undertaken for High Speed Rail 2. Provide further justification for the assumption that land not subject to survey can be considered to be grade 3b land as a reasonable worst-case scenario.</p>	<p>The Grade 2 and 3a land identified at the Site results from lighter topsoil texture resulting in a higher wetness class compared to the soil across majority of the Site. The soil maps indicate that a heavy textured topsoil is expected within the unsurveyed area. The soil maps have been reflective of the soils observed on-site so they can be trusted with relatively high confidence. The assumption of Grade 3b has been discussed and agreed with Natural England soil specialists as presented in <b>Draft Statement of Common Ground with Natural England [EN010158/APP/5.14] [REP1-025]</b>.</p>

Table 3-19: Transport and Access

ExQ1 Ref	Question	Applicant's Response
Q1.19.1	<p><b>National Policy Statement (NPS) EN-1</b></p> <p>In relation to the applicant's assessment of traffic and transport matters, NPS EN-1 paragraph 5.14.8 states that "The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports)."</p> <p>How has the applicant met this policy requirement?</p>	<p>Table 15.2 of <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> sets out that transport and access issues resulting from construction activities were scoped into the assessment as it was deemed that they may lead to significant effects and require mitigation. However, Table 15.3 sets out that transport and access issues resulting from the operation (including maintenance) and decommissioning phases of the Proposed Development were scoped out of the assessment due to the lower volumes of traffic generated. Paragraphs 15.10.2 and 15.10.3 of <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> set out that the effects on road users and residents arising from construction activities are temporary and can be satisfactorily addressed by the mitigation measures included within the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p> <p>The construction traffic routes noted in <b>ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> do not interact with the railways (by means of new crossings or use of level crossings) and the study area does not contain the access junctions for any commercial airports. As such, no impacts on either railways or airports are resultant from traffic accessing and egressing the Proposed Development.</p>
Q1.19.2	<p><b>NPS EN-1</b></p> <p>How has the applicant had regard to the need to provide appropriate facilities for heavy goods vehicle (HGV) drivers as appropriate as stated in NPS EN-1 paragraph 5.14.13?</p>	<p>Section 4.5 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b> sets out the HGV vehicle requirements for the Proposed Development. To ensure the highest standards of safety for all road users and contractors, all HGVs arriving at Site shall be required to comply with the prescribed standards as noted in the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p>
Q1.19.3	<p><b>NPS EN-1</b></p> <p>Paragraph 2.10.125 of NPS EN-1 states that "Applicants should ensure all sections of roads and bridges on the proposed delivery route can accommodate the weight and volume of the loads and width of vehicles. Although unlikely, where modifications to roads and/or bridges are required, these should be identified, and potential effects addressed in the ES."</p> <p>The ExA notes the applicant's consideration of weight on the Abnormal Indivisible Load (AIL) route in the AIL Route Survey <a href="#">[APP-131]</a>, but it is not clear whether weight has been considered on the construction traffic route or in Environmental Statement (ES) Chapter 15 (Transport and Access) <a href="#">[APP-058]</a>. Provide further clarification and update documents if appropriate.</p> <p>The ExA is also mindful of Buckinghamshire Council's request <a href="#">[REP1-112]</a> for a complete swept path analysis from the A41 to the access points for the Proposed Development. The applicant is invited to consider this request in the context of this policy requirement.</p>	<p>The final bullet point of Paragraph 15.6.15 of <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> sets out that Abnormal Indivisible Loads associated with the construction of the Proposed Development have been included within a separate route survey assessment, which identifies if any physical mitigation measures are required to accommodate the predicted loads (within the existing limits of road adoption and covered within the <b>Draft DCO [EN010158/APP/3.1.4]</b>).</p> <p>A weight review has been included in Section 6 of <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> for Abnormal Indivisible Loads (AIL) and sets out that all of the relevant road and structure operators have been contacted to ascertain if there are any relevant constraints that should be noted. Comments received are included within Table 9-1 and Appendix D of <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b>. In addition to the AIL route, there are no posted weight limits on the route leading to the main construction site access points.</p> <p>ALL deliveries are to be made from the north of the Site as noted in <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> in Figure 2. No AIL traffic is proposed to access from the south from the A41 corridor.</p> <p>Swept path drawings for the constrained sections of the route from the A41 to the Proposed Development access junctions have been undertaken and are presented in Annex 1 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p>
Q1.19.4	<p><b>Operational (including maintenance) phase of the Proposed Development</b></p>	<p>The Applicant does not believe that matters relating to operational traffic movements should be subject to further approvals. Operational traffic levels are noted in Section 5.6 of <b>ES Volume 6.4, Appendix 15.1:</b></p>

ExQ1 Ref	Question	Applicant's Response
	<p>ES Chapter 15 [APP-58] scopes out the operational (including maintenance) phase from the assessment due to the low-level of traffic expected to be generated. Section 2.11 of the Outline Operational Environmental Management Plan (oOEMP) [REP1-080] commits the applicant to submit a planned maintenance schedule every 12 months from the date of final commissioning to the relevant local planning authority. Paragraph 2.11.7 lists details that must be included in the statement including "Confirmation that the environmental effects that are likely to arise as a result of such maintenance and the environmental controls to be implemented are not materially worse than those reported in the ES."</p> <p>Should the applicant's conclusions on this matter be subject to approval by the relevant local planning authority? If not, why not?</p>	<p><b>Transport Assessment [EN010158/APP/6.4] [APP-131]</b>. These traffic levels are significantly below the thresholds for a transport assessment or EIA assessment and as such, no further assessment is considered necessary.</p>
Q1.19.5	<p><b>Study area</b></p> <p>Confirm why the AIL route is not within the study area considered in ES Chapter 15 [APP-058].</p>	<p>The level of AIL only traffic on the AIL route as noted in of <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> is such that the level of traffic impact would not register on a daily basis.</p> <p>Mitigation measures are however provided for AIL traffic on this route as stated in Section 5 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p>
Q1.19.6	<p><b>Transport Assessment (TA) – minibus usage</b></p> <p>In the context of ExQ 1.17.12 above regarding the extent to which 75% of construction staff would use a minibus is secured, confirm if there are any related implications for the assumptions made in the TA [APP-131] and its conclusions. This should include confirmation or otherwise that 10% of construction staff would arrive by car and 15% by light goods vehicle (LGV). Provide amendments to the TA and Outline Construction Traffic Management Plan (oCTMP) [REP1-084] if necessary.</p>	<p>No further amendments are required to <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> or the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p> <p>The movement of staff to and from the Site will be secured at the mode shares noted in Section 5.2 of <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> as a requirement of the detailed Construction Traffic Management Plan and therefore constitute a binding commitment under the DCO. In addition, the requirement for construction staff to use the proposed travel plan mode share targets will be a commercial requirement under the construction contract between contractors and the Applicant.</p>
Q1.19.7	<p><b>TA – traffic count locations</b></p> <p>Were traffic count locations as referenced in section 4.7 of the TA [APP-131] agreed with Oxfordshire County Council as well as Buckinghamshire Council? If not, why not?</p>	<p>Both Councils were invited to agree the scope and baseline elements of the assessment. Oxfordshire were invited to comment and made a brief statement as noted in Table 15.1 of <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b>. Significant engagement with Buckinghamshire Council on the locations of traffic surveys was undertaken given the discussions held on the potential access route to the Proposed Development.</p>
Q1.19.8	<p><b>TA – junction modelling</b></p> <p><b>To the applicant:</b></p> <p>Buckinghamshire Council's Local Impact Report [REP1-112] indicates that that applicant will provide junction modelling but that this information has not been forthcoming. When will the applicant provide this information?</p>	<p>Junction modelling at the A41 / Station Road junction will be provided at Deadline 3.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.19.9	<p><b>Residual effects during construction</b></p> <p>Table 15.16 of ES Chapter 15 [APP-058] summarises the applicant's assessment of residual effects. Recognising that the applicant may have applied "professional judgement", further justification is required from the applicant for conclusions of minor residual effects (not significant) where the sensitivity of receptor is high and magnitude of impact is minor. Table 15.11 of the ES (significance of effects matrix) suggests that "moderate" should be the conclusion in such instances which would be "significant" as per para 15.6.19.</p> <p>The above applies to the following receptors: users of Snake Lane/Fidlers Field, users of Granborough Road and public rights of way (PRoW), bridleway and path users within the development areas.</p>	<p>The process used in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> does allow for professional judgement to be used in assigning a score from the matrix noted in Table 15.11 (paragraph 15.6.20).</p> <p>The results of the assessment, with the inclusion of additional mitigation, is provided in Table 15.15. This specifically outlines the significance following the use of mitigation that addresses matters such as road safety, non-motorise amenity, etc on receptors.</p>
Q1.19.10	<p><b>TA - trip generation average</b></p> <p>Provide further justification for the approach of the TA in averaging trip generation out over a 12-hour day in the context of paragraph 3.15.18 of the Proposed Development Description [REP1-034] which states that employees would travel "...to and from Site an hour on either side of these times (i.e. between 6am - 7am and 7pm - 8pm)". Construction deliveries are also restricted to a 10-hour day Monday to Friday (08:00 to 18:00) as identified in the oCTMP [REP1-084]. Confirm where restrictions on these delivery times are secured in the Outline Construction Environmental Management Plan [REP1-078] as stated in the oCTMP at paragraph 3.2.1.</p>	<p>The approach undertaken in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> and <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> provides an assessment over a day, when compared to the daily baseline. This approach is standard for construction effect assessment for energy related projects.</p> <p>Within the average day, there will be peaks and troughs in vehicle movements, however the assessment represents a daily total compared against a daily baseline total.</p> <p>The times reported in the <b>Outline CTMP [EN010158/APP/7.5.3]</b> report journey travel times to Site, whereas times reported in the <b>Outline CEMP [EN010158/APP/7.2.3]</b> report working hours within the Site.</p>
Q1.19.11	<p><b>oCTMP – Traffic Management Group</b></p> <p>Should the membership of the proposed Traffic Management Group as identified in section 4 of the oCTMP [REP1-084] also include representatives from neighbouring local authorities along the entirety of the construction traffic route and AIL routes, including Oxfordshire County Council and Milton Keynes City Council? If not, why not?</p>	<p>The Applicant considers that the Traffic Management Group should be a focussed group, addressing those stakeholders that are most affected by construction traffic. Traffic levels predicted in both Oxfordshire County Council and Milton Keynes City Council are not considered significant. Both authorities will however be advised when works commence as a matter of courtesy.</p> <p>Milton Keynes City Council will be consulted on the Abnormal Indivisible Load (AIL) movements as part of the formal AIL application order process as required by law.</p>
Q1.19.12	<p><b>oCTMP – co-ordination with local business and visitor attractions</b></p> <p>A new section 4.4 (information to other parties) is provided in the oCTMP at deadline 1 [REP1-084] which outlines the applicant's approach to sharing information with other parties regarding construction traffic, including the National Trust, Buckinghamshire Railway Centre and Hogshaw Farm and Wildlife Park.</p> <p>The updated oCTMP [REP1-084] also includes additional commitments to work with agricultural business interests to facilitate the safe crossing of livestock and to avoid road reconstruction works to Snake Lane/ Fiddlers Field during the school summer holiday period, if possible. In addition, no construction traffic will</p>	<p>1) The Applicant considers that the Traffic Management Group should be condensed to make the group focussed and to ensure actions occur quickly. A smaller group is more conducive to this type of operation, thus the suggested members noted in Section 4 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p> <p>Business and tourism interests are already catered for through the inclusion of elected members and parish councillors, who as effective spokesmen and spokeswomen for their communities, can advise of any matters relevant for all groups.</p> <p>2) Section 4.4 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b> was specifically included at the request of Buckinghamshire Council's highway officers following a meeting held between the Council and Preston Farms / TCS Biosciences. The commitment made with respect to Section 4.4 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b> is expressly described as applying to the parties "including, <u>but not limited to</u>"</p>

ExQ1 Ref	Question	Applicant's Response
	<p>be permitted to travel east on Granborough Road to minimise interactions with local agricultural traffic and livestock crossings on the public road.</p> <p><b>To the applicant:</b></p> <ol style="list-style-type: none"> <li>Should business and tourism stakeholders be represented on the Traffic Management Group? If not, why not?</li> <li>Should Preston Farms Limited and any other relevant local agricultural interests also be referenced in section 4.4 of the oCTMP and/ or the Traffic Management Group? If not, why not?</li> </ol>	<p>(emphasis added) those specified, as it would apply to all farming / livestock interests within the limits of the DCO.</p> <p>It is not proposed to add Preston Farms / TCS Biosciences to the Traffic Management Group as this would be unfair to other businesses in the area. Instead they are welcome to raise issues directly with the Applicant or via the elected members or parish council members of the Traffic Management Group.</p>
Q1.19.13	<p><b>oCTMP – onsite access management</b></p> <p>Paragraph 7.1.2 of the TA [APP-131] states that the “CTMP will also include an Onsite Access Management Plan (OAMP) to safely manage the interactions between PRow, bridleway and path users and construction traffic/activities.”</p> <p>The outline CTMP [REP1-084] does not make reference to an OAMP, although related details are provided in section 6. Does the applicant intend to produce an OAMP? If so, would this form part of the outline or detailed CTMP?</p>	<p>The reference made in <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> refers to Section 6 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>, entitled “On-site Access Management Proposals”. The reference in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> can be revised to “Proposals”, rather than “Plan” if this would help clarify matters.</p>
Q1.19.14	<p><b>Outline CTMP – wear and tear agreement</b></p> <p><b>To the applicant and Buckinghamshire Council:</b></p> <p>What form of legal agreement would the wear and tear agreement as referenced in section 4.7 of the oCTMP [REP1-084] take? Has any progress been made on this to date?</p> <p><b>To the applicant:</b></p> <p>Is a corresponding agreement being sought with other local authorities on the construction traffic route? If not, why not?</p>	<p>An agreement under the Highways Act (1980), Section 59 (Recovery of expenses due to extraordinary traffic) can be agreed between both parties. This would be pursued post-consent as has become standard practice for DCO projects.</p> <p>The proposed agreement is with Buckinghamshire Council as detailed in Section 4.7 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>. This is due to Buckinghamshire Council being the highway authority with the highest predicted traffic level. The traffic impacts in Oxfordshire County Council and National Highways networks are not considered significant and as such, will not result in appreciable damage occurring.</p> <p>Through the Abnormal Indivisible Load order applications, a separate road damage agreement is made between the road authorities at the haulier.</p>
Q1.19.15	<p><b>oCTMP – on-site parking</b></p> <p>How many on-site car parking spaces would be provided at the primary and secondary construction compounds for staff during the construction phase? If available, how has this data informed the TA [APP-131] and ES Chapter 15 [APP-058]?</p> <p>How would the commitment made at paragraph 4.9.2 of the oCTMP [REP1-084] that no parking will be permitted on the public road verges be managed and enforced?</p>	<p>The traffic generation set out in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> and in <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> set the required number of parking spaces required at site. The total number of parking spaces will be determined once the confirmed number of staff has been made (but will not exceed the assessed 600 employees stated in the assessment). The Staff Travel Plan elements of the <b>Outline CTMP [EN010158/APP/7.5.3]</b> will reduce the need for extensive parking provision.</p> <p>Parking outside the construction site on public verges will not be tolerated and will be enforced via inspections carried out by the Principal Contractor on a daily basis. Monitoring by the site banksmen will also be undertaken, noting anyone walking into Site or parking on the verge. Other road users can report antisocial parking issues as detailed in Section 7.2 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>.</p>
Q1.19.16	<p><b>oCTMP - controls</b></p>	<p>The Staff Travel Plan required under the <b>Outline CTMP [EN010158/APP/7.5.3]</b> includes requirements to monitor staff travel to ensure that the mode shares are adhered to. In addition, all traffic to the construction</p>

ExQ1 Ref	Question	Applicant's Response
	<p>What measures are secured to ensure that vehicles movements identified in the TA <a href="#">[APP-131]</a> would not be exceeded?</p>	<p>site will be required to be prebooked, as noted in Section 4.10.5 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b>, ensuring that the Applicant can monitor and stop deliveries to ensure that the movement predictions are adhered to.</p> <p>It is noted that the traffic figures set out in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b> are the peak flows associated with construction activities. Following this peak, traffic numbers fall significantly as identified in Annex 1 of <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b>.</p>
Q1.19.17	<p><b>Outline CTMP – AIL traffic management measures</b></p> <p>Paragraph 2.2.3 of the oCTMP <a href="#">[REP1-084]</a> appears to indicate that the AIL Route Survey <a href="#">[APP-131]</a> was prepared following the production of the oCTMP. Should section 5 of the outline CTMP (AIL Traffic Management Measures) be updated to include relevant details of the AIL Route Survey? If not, why not?</p>	<p>The AIL Route Survey provided in <b>ES Volume 6.4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4] [APP-131]</b> is based upon a worst case load arrangement and demonstrates that access to the Proposed Development is achievable. The measures outlined in Section 5 of the <b>Outline CTMP [EN010158/APP/7.5.3]</b> are complimentary to the access feasibility assessment undertaken in <b>ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2.2] [APP-058]</b>.</p> <p>Full details of the AIL traffic management measures will be undertaken once the selected AIL configuration has been confirmed, post determination. These will be outlined in the detailed Construction Traffic Management Plan, required under the DCO.</p>
Q1.19.18	<p><b>High Speed Rail 2 (HS2)</b></p> <p>What is the role and function of the Traffic Liaison Group referenced in the draft Statement of Common Ground with HS2 Limited <a href="#">[REP1-030]</a>?</p> <p>Provide a clear plan that identifies the construction traffic route for HS2 in relation to the construction traffic route for the Proposed Development.</p>	<p>The Traffic Liaison Group referred to is a forum to allow discussion between promoters of significant developments to discuss common traffic issues and to agree common traffic management measures.</p> <p>The Applicant has provided an indicative plan at <b>Appendix 3</b> for information as Figure 1.19.19. Construction traffic associated with HS2 will use the A41 corridor within the extents of the study area of the Proposed Development. HS2 traffic can use the southern section of Station Road from the A41, but does not reach the Snake Lane / Fidlers Field access junction with Station Road.</p> <p>The Applicant believes that no HS2 traffic progresses further north from the HS2 construction access on Station Road.</p>
Q1.19.19	<p><b>Outline Rights of Way Access Strategy (oRoWAS) – permanent diversions</b></p> <p>What constraints would prohibit the applicant from defining the minimum width of 2 metres for newly created footpaths in the oRoWAS <a href="#">[REP1-090]</a> as requested by Buckinghamshire Council?</p>	<p>The <b>Outline RoWAS [EN010158/APP/7.8.3]</b> has been updated at Deadline 2 to include reference to a 2m minimum width for newly created footpaths, subject to a survey at the detailed design stage to ensure that additional hedgerow removals are not required where the diverted PRow pass through any hedgerows and to identify where any furniture such as gates may restrict the width.</p>
Q1.19.20	<p><b>oRoWAS – operational phase effects</b></p> <p>Why does section 5 of the oRoWAS <a href="#">[REP1-090]</a> cross refer to ES Chapter 6 (Air Quality) <a href="#">[APP-049]</a>, but not to other chapters that may be of relevance, including Chapters 10 (Landscape and Visual) <a href="#">[APP-053]</a> and 13 (Noise and Vibration) <a href="#">[REP1-040]</a>?</p>	<p>The <b>Outline RoWAS [EN010158/APP/7.8.3]</b> has been updated at Deadline 2 to include references to both <b>ES Volume 2, Chapter 10: Landscape and Visual [EN010158/APP/6.2.2]</b> and <b>ES Volume 2, Chapter 13: Noise and Vibration [EN010158/APP/6.2.3] [REP1-040]</b>.</p>
Q1.19.21	<p><b>oRoWAS and Design Commitments – offsets for permissive paths</b></p> <p>Whilst offset distances from solar photovoltaic development are specified for PRowS, neither the oRoWAS <a href="#">[REP1-090]</a> nor the Design Commitments <a href="#">[REP1-</a></p>	<p>There is a single existing permissive path within the Site, located along the southern edge of Runts Wood in Parcel 2. As shown by Appendix 5: Green and Blue Infrastructure Parameters - Buffer Widths of the</p>

ExQ1 Ref	Question	Applicant's Response
	<p><a href="#">020</a>] provide corresponding details for offsets for existing or proposed permissive paths. Please provide clarification and update documents as appropriate.</p>	<p><b>Outline LEMP [EN010158/APP/7.6.3]</b>, this route falls within the 30m woodland offset from Runts Wood and is not considered to require a separate offset.</p> <p>The proposed permissive paths have all been located to follow the margins of fields. Consequently, where they are located in proximity to Solar PV development the offset will correspond to the 10m minimum offsets from hedgerows secured by the <b>Design Commitments [EN010158/APP/5.9.4]</b> and a separate offset for the proposed permissive paths was not considered necessary. The proposed permissive bridleway follows the existing alignment of a PRoW through Field D28 and consequently does not require a separate offset either.</p>

Table 3-20: Water Environment

ExQ1 Ref	Question	Applicant's Response
<p><b>Q1.20.1</b></p>	<p><b>Update to the Outline Battery Safety Management Plan (oBSMP)</b></p> <p>In your responses to the relevant representations <a href="#">[PDA-006]</a> you stated that the oBSMP <a href="#">[REP1-092]</a> would be amended at deadline 1 to provide further detail on the maintenance schedule in place for the automatic or manual penstocks, to respond to comments from the EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>Paragraphs 6.6.8 and 6.6.9 of the <b>Outline BSMP [EN010158/APP/7.9.3]</b> were added at Deadline 1 with the following in response to Issue ID: EA11:</p> <p>“The automatic and manual isolation systems would be subject to regular operational maintenance to ensure the reliability of the firewater isolation system in a flood event. The detail of this maintenance will be included in the detailed Battery Safety Management Plan(s) once the detailed design of the Proposed Development has been completed.</p> <p>This approach ensures that environmental protection is maintained under both normal and emergency conditions. The water tanks would be maintained and cleaned at regular intervals with any silt collected during post fire event, also tested and transported offsite if required. Following a fire event, the aggregate subbase below the BESS units would be evaluated for contamination and reinstated to maintain the integrity of the site's drainage infrastructure. Details of the testing and replacement procedures would be included in the detailed Battery Safety Management Plan(s). UK accredited labs would be used for water testing.”</p> <p>The EA has confirmed that it is satisfied with the updates made in relation to its comment as detailed in <b>Draft Statement of Common Ground with Environment Agency [EN010158/APP/5.15.2]</b>, under Ref. 1.9 and 6.1.</p>
<p><b>Q1.20.2</b></p>	<p><b>Update to the Outline Decommissioning Environmental Management Plan (oDEMP)</b></p> <p>In your responses to the relevant representations <a href="#">[PDA-006]</a> you stated that the oDEMP <a href="#">[REP1-082]</a> would be amended at deadline 1 to include the requirement for a 12-month post-construction monitoring regime, to respond to comments from the EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>Table 3.9 of the <b>Outline DEMP [EN010158/APP/7.4.3]</b> has been updated at Deadline 2 under the 'Monitoring' Column to state:</p> <p>“A water monitoring regime will be undertaken during the decommissioning phase. Further details of the monitoring would be set out at detailed design stage and in agreement with the Environment Agency and Buckinghamshire Council.”</p> <p>The reference to 12-month post-construction water monitoring was related to the updates that were made to the <b>Outline CEMP [EN010158/APP/7.2.3]</b> and are not relevant for the decommissioning phase.</p>

ExQ1 Ref	Question	Applicant's Response
Q1.20.3	<p><b>Update to the Outline Operational Environmental Management Plan (oOEMP)</b></p> <p>In your responses to the relevant representations [PDA-006] you stated that the oOEMP [REP1-080] would be amended at deadline 1 to clarify that the mitigation measures proposed will also protect surface water quality, to respond to comments from the EA. However, this does not appear to have been actioned. Update the document accordingly or explain why you no longer intend to make this amendment.</p>	<p>Table 3.5 of the <b>Outline OEMP [EN010158/APP/7.3.3]</b> was updated at Deadline 1 under the 'Potential impact' column to state 'Contamination of soil/groundwater/<b>surface water</b> related to potential spills from operational plant through operation or refuelling activities, and spillages and leaks of fuels, oils and chemicals' to reflect that the mitigation measures would also protect surface water quality.</p> <p>Table 3.5 of the <b>Outline OEMP [EN010158/APP/7.3.3]</b> under the 'Mitigation / Enhancement Measure' column also includes measures to mitigate surface water pollution.</p> <p>In addition, Table 3.8 of the <b>Outline OEMP [EN010158/APP/7.3.3]</b> has been updated at Deadline 2 to further clarify this point to state: "The measures outlined in <b>Table 3.5</b> in relation to groundwater will also be adhered to in order to protect surface water quality."</p>
Q1.20.4	<p><b>Provision of pre-planning enquiry water supply assessment</b></p> <p>In your response [AS-035] to the Examining Authority's (ExA) section 89 letter dated 9<sup>th</sup> January 2026 [PD-006], you stated that a pre-planning enquiry water supply assessment had been undertaken with Anglian Water Serviced Limited and this would be submitted to the examination at deadline 1. Direct the ExA to where this is located in the application documents or explain why this has not been provided.</p>	<p>A draft statement of common ground has been produced between the Applicant and Anglian Water Services Ltd (AWS)- <b>Draft Statement of Common Ground with Anglian Water [EN010158/APP/5.18] [REP1-029]</b>. This confirms that a pre-application enquiry has been approved/accepted for this stage of the Proposed Development. The formal application for supply will be made to AWS prior to construction as the current advice received through the pre-application enquiry is only valid for 12 months. The pre-application enquiry hasn't been shared but the discussion around it within the <b>Draft Statement of Common Ground with Anglian Water [EN010158/APP/5.18] [REP1-029]</b> has been updated as to the agreed status to reflect the position between the parties.</p>
Q1.20.5	<p><b>NPS EN-1</b></p> <ol style="list-style-type: none"> <li>NPS EN-1 paragraph 5.8.41 states that energy projects should not normally be consented within Flood Zone 3b. However, parts of the Proposed Development would be located in Flood Zone 3b. Is there a material reason why the Proposed Development located in Flood Zone 3b <b>must</b> be located in these areas?</li> <li>The ExA notes that the Sequential Test [REP1-016] states that whilst the edges of the fields in Flood Zones 2 and 3 could be excluded from the Proposed Development, this would reduce the megawatt capacity and would fail to make the best use of land to deliver renewable energy. If development was excluded from Flood Zones 2 and 3, set out how much the megawatt capacity would be reduced by, for each Flood Zone.</li> </ol>	<p>Taking each point in turn,</p> <ol style="list-style-type: none"> <li>The <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b> and <b>Appendix 5</b> (Sequential and Exception Tests) both recognise the wording of NPS EN-1 (2023) Paragraph 5.8.41 which confirms that energy projects should not normally be considered within Flood Zone 3b areas but, where essential energy infrastructure has to be located in such areas for operational reasons, consent can be granted if the development does not result in a net loss of flood plain storage or impede water flows.</li> </ol> <p>With the above in mind, <b>Appendix 5</b> (Sequential and Exception Tests) to the <b>Planning Statement [EN010158/APP/5.7.3] [REP1-016]</b> notes that the Applicant has sought to maximise the export potential (and, by virtue, the extent of installed Solar PV modules within the Order Limits) of the Proposed Development against its grid connection offer whilst being designed in such a way that takes account of all site-level environmental and spatial considerations. Furthermore, and in needing to retain installed capacity such as to not result in a significant operational constraint or reduction in function, the Applicant has demonstrated that the placement of Solar PV modules in Flood Zone areas is exceptionally and operationally necessary in order to maximise the grid connection offer, especially on the basis that Solar PV modules can be made operationally safe in Flood Zone areas.</p> <p>This planning policy was most recently and applicably reviewed by the SoS when making the decision to approve the <b>Springwell Solar Farm Order 2026</b>. The SoS' Decision Letter notes at Paragraph 4.80 that <i>"the Secretary of State recognises the need for the solar panels to be located in proximity to the National Grid connection. The Applicant demonstrated that it had considered a range of search criteria in identifying suitable sites and concluded that siting some panels in Flood Zone 3b was operationally necessary, having discounted alternative land at lower flood risk as such sites were less suitable for delivering the wider sustainable development objectives of the project, including maximising renewable</i></p>

ExQ1 Ref	Question	Applicant's Response
		<p><i>energy generation. Accordingly, the Secretary of State is satisfied that the panels cannot be located elsewhere, and that this operational necessity is directly linked to the delivery of the development, ensuring the intended renewable energy capacity is achieved".</i> The Applicant is confident in both its site selection process and site-level design for the Proposed Development for Solar PV modules located in Flood Zone 3b to be considered an operational necessity for the reasons stated in the above paragraph.</p> <p>2. Should Solar PV modules be:</p> <ul style="list-style-type: none"> <li>- excluded from Flood Zone 3, the removal would result in a 3.3MW loss of generating capacity;</li> <li>- excluded from Flood Zones 2 and 3, the removal would result in a 5.1MW loss of generating capacity; and</li> <li>- excluded from Flood Zone 2, the removal would result in a 5.1MW loss of generating capacity</li> </ul>
Q1.20.6	<p><b>NPS EN-1</b></p> <p>NPS EN-1 paragraph 5.18.15 states that flood risk assessments (FRA) should identify and secure opportunities to reduce the causes and impacts of flooding overall during the period of construction. Demonstrate how you have complied with this requirement, noting that the FRA [PDA-004] does not identify which construction compounds would be located in Flood Zones 2 and 3.</p>	<p>As noted and secured within the <b>Design Commitments [EN010158/APP/5.9.4]</b>, Design Commitment E1 states that the Construction Compounds will be located outside of Flood Zone 2 and 3 areas. Therefore, further consideration is not required and the location of the Construction Compounds are compliant with policy and this reflects the application of a sequential approach to the siting of temporary construction infrastructure, avoiding areas at higher risk of flooding.</p> <p>The <b>ES Volume 4, Appendix 16.1: Flood Risk Assessment [EN010158/APP/6.4.3]</b> also considers construction-phase flood risk more broadly and identifies standard mitigation measures, including the management of surface water runoff, protection of existing drainage pathways, and pollution prevention controls to reduce the risk of exacerbating flooding during the construction phase.</p> <p>Through the combination of embedded design measures and construction-phase mitigation, the Proposed Development has considered flood risk in accordance with NPS EN-1 (2023) paragraph 5.18.15.</p>
Q1.20.7	<p><b>NPS EN-3</b></p> <p>The Outline Drainage Strategy [REP1-096] paragraph 5.5.1 refers to the provision of approximately 3.67 hectares of impermeable areas which constitute access tracks. However, paragraph 2.10.85 of NPS EN-3 states that "Where access tracks need to be provided, permeable tracks should be used..." Why have you not committed to the use of permeable tracks in accordance with NPS EN-3?</p>	<p>As noted and secured within the <b>Design Commitments [EN010158/APP/5.9.4]</b>, Design Commitment E2 states that internal access tracks will typically be surfaced with permeable material such as gravel and will include drainage such as a swale or ditch on the downhill side of the track. Design Commitment E3 also confirms that the Abnormal Indivisible Load access track will be surfaced with permeable material (assumed to be compacted gravel) or temporary plating. Design Commitments E2 and E3 demonstrate compliance with NPS EN-3 (2023) Paragraph 2.10.85. However, and for the purposes of assessment within the <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b>, it is assumed that access tracks will be constructed from a Hydraulically Bound Mixture, classifying them as impermeable surfaces. This conservative, worst-case scenario has been used to demonstrate and ensure that the drainage design has capacity to handle all surface runoff from the Site, including the access track areas. In practice these areas will not be fully impermeable, therefore the assessment is conservative.</p>
Q1.20.8	<p><b>NPS EN-3</b></p> <p>The Outline Drainage Strategy [REP1-096] paragraph 5.9.3 states that limited culverting may be required to cut off ditches. However, paragraph 2.10.87 of NPS EN-3 states that culverting existing watercourses/ drainage ditches should be avoided. Why can culverting not be avoided?</p>	<p>Paragraph 5.9.3 of the <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b> refers specifically to the proposed drainage features and not existing watercourses/drainage ditches. The limited culverting proposed beneath the new access tracks, as stated, may be required to interconnect the new swales and cut off ditches within the drained sub-catchments and to facilitate their outfalls into designated discharge points.</p>

ExQ1 Ref	Question	Applicant's Response
		<p>A response to Q1.20.12 below provides more information regarding culverting of existing watercourses/ drainage ditches.</p> <p>Where necessary, the existing culverts may need to be replaced/maintained if access tracks are situated across them.</p>
<p><b>Q1.20.9</b></p>	<p><b>NPS EN-3</b></p> <p>NPS EN-3 paragraph 2.10.88 states that where culverting for access is unavoidable, applicants should demonstrate that no reasonable alternatives exist and where necessary, it will only be in place temporarily for the construction period. Confirm if there would be culverting for access, and if so, demonstrate that no reasonable alternatives exist and where necessary it would only be in place temporarily for the construction period.</p>	<p>The Applicant can confirm that there will be no new culverting required for existing watercourses or drainage ditches across the Site.</p> <p>Where necessary, the existing culverts may need to be replaced/maintained if access tracks are situated across them.</p> <p>Following ongoing engagement with the Environment Agency, the Applicant has agreed to install a clear span bridge over the Claydon Brook to facilitate abnormal indivisible load (AIL) access to Parcel 3. This is set out in the <b>Draft Statement of Common Ground with Environment Agency [EN010158/APP/5.15] [REP1-026]</b> and secured within the <b>Design Commitments [EN010158/APP/5.9.4]</b>.</p>
<p><b>Q1.20.10</b></p>	<p><b>Sequential test</b></p> <p>Provide an explanation of how you applied the sequential test to all elements of the Proposed Development. The ExA notes that information has been provided on how the sequential test was applied to the location of the proposed photovoltaic panels [REP1-016]. However, more detailed information should be provided on the sequential approach to the location of all elements of the Proposed Development, considering each phase of the Proposed Development.</p>	<p>As noted in the <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b>, the Applicant undertook a systematic process when determining a suitable site for the Proposed Development, which was framed at a macro level by principles of good design. One key reason, among others reported through Paragraph 5.2.2 of <b>Design Approach Document [EN010158/APP/5.8.2] [REP1-018]</b>, as to why the Site was selected is because it had sufficient land outside Flood Zone 2 and 3 areas to accommodate the Rosefield Substation, BESS, ITS, Independent Outdoor Equipment (transformer, switchgear and central inverters), Collector Compounds and Construction Compounds. This provided sufficient flexibility in the evolution of the Proposed Development's design to enable the sequential test to be applied at site level to all those other elements of the Proposed Development, besides the Solar PV modules (for which there is an established operational need), and this has been secured via Design Commitment E1 which states that the Rosefield Substation, BESS, ITS, Independent Outdoor Equipment (transformer, switchgear and central inverters), Collector Compounds and Construction Compounds will be located outside Flood Zone 2 and 3 areas (<b>Design Commitments [EN010158/APP/5.9.4]</b>). This reflects compliance with the sequential test's requirements as the elements of the Proposed Development, besides the Solar PV modules, have been sequentially steered towards areas with the lowest risk of flooding.</p>
<p><b>Q1.20.11</b></p>	<p><b>Environmental Statement (ES) Chapter 16 (Water)</b></p> <p>Table 16.9 in ES Chapter 16 [REP1-042] shows the criteria matrix for determining significance of effect. Explain why the matrix is set out such that there would be 4 instances which would constitute a significant effect, which is different to matrices used in other ES chapters. For example, why would a minor magnitude of impact on a high sensitivity receptor, or a major magnitude of impact on a low sensitivity not have a moderate effect, which would be significant?</p>	<p>The significance matrix presented <b>ES Volume 2, Chapter 16: Water [EN010158/APP/6.2.3] [REP01-042]</b> has been developed in accordance with relevant good practice guidance and previous project experience. The matrix reflects the specific characteristics of hydrology and flood risk assessment, where effects are typically managed through regulatory controls rather than determined solely by a direct combination of receptor sensitivity and impact magnitude. For example, a minor magnitude impact on a high-sensitivity receptor would not usually result in a significant effect. This is because such receptors, including those within Flood Zone 3, are generally subject to embedded mitigation measures, meaning that the resulting significance of effect is typically minor. A minor change would fall within natural variability and would not materially alter flood risk or water quality. This results in four combinations giving rise to significant effects, reflecting a more risk-based and outcome-focused assessment, which is consistent with the principles of NPS EN-1 (2023).</p>

ExQ1 Ref	Question	Applicant's Response
Q1.20.12	<p><b>ES Chapter 16 (Water)</b></p> <p>ES Chapter 16 <a href="#">[REP1-042]</a> states that there would be opportunities for enhancement to the water environment, through biodiversity enhancements within Parcel 1a where Finemere Wood Site of Special Scientific Interest and the Muxwell Brook are located and that vegetation cover below the solar panels would slow the rate of surface water runoff during high intensity rainfall events, promoting the interception of surface water runoff, thus overall reducing flood risk in the order limits and downstream of the Proposed Development. The ExA however notes that no beneficial effects are identified as a result of the Proposed Development in table 16.11 of ES Chapter 16 for example. Can you quantify the extent of any enhancements stated in the ES? If so, should these be considered as temporary benefits?</p>	<p>This approach is consistent with that applied in other DCOs, including the <b>Springwell Solar Farm Order 2026</b>, demonstrating that such a matrix is an accepted and appropriate approach for water environment assessments.</p> <p><b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b> identifies potential enhancements including reduced runoff and improved water quality gains within Parcel 1a. The cessation of intensive agriculture would reduce fertiliser and pesticide inputs, lowering diffuse pollution risk and improving water quality. The <b>Outline LEMP [EN010158/APP/7.6.3]</b> secures biodiversity mitigation and planting, and the <b>Outline Drainage Strategy [EN010158/APP/7.11.3]</b>, offers attenuation of runoff to ensure there is no increase in flows leaving the Site.</p> <p>These benefits are difficult to quantify as the site already behaves much like natural greenfield land, so any improvements in runoff are likely to be small and difficult to clearly measure and therefore are not reported as significant beneficial effects in Table 16.11 as they do not represent a known change in baseline conditions.</p> <p>Benefits would persist over the operational lifetime and are not temporary.</p>



# Appendix 1

## Guidance on Associated Development Applications



# BESS as associated development

Paragraph 5 of the **Guidance on associated development applications for major infrastructure projects** ([here](#)) describes four tests for associated development. The tests are:

- **Direct Relationship:** The definition of associated development requires a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts.
- **Subordinate:** Associated development should not be an aim in itself but should be subordinate to the principal development.
- **Not only additional revenue:** Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development. This does not mean that the applicant cannot cross-subsidise, but if part of a proposal is only necessary as a means of cross-subsidising the principal development then that part should not be treated as associated development.
- **Proportionate in nature and scale:** Associated development should be proportionate to the nature and scale of the principal development.

In the context of the Proposed Development, the following points are noted:

- **Direct Relationship:** There is a direct relationship between the proposed BESS and the solar array. When energy is generated by the solar array but is not immediately needed, the BESS will store that energy and will export it to the grid when needs are greater. This supports the operation of the Proposed Development by increasing its effectiveness, reducing the potential for wasted energy, and maximising a key benefit of the Proposed Development, being the level of carbon free energy sent to the grid.

The BESS will also be capable of delivering support to the grid which will increasingly be needed to operate a low-carbon electricity system. This also supports the operation of the Proposed Development by increasing the security, reliability and flexibility of the system to which it connects and therefore is also demonstrative of a direct relationship between the BESS and the solar array.

- **Subordinate:** The BESS is subordinate to the solar array in that the principal benefit of the Proposed Development, being the generation of carbon free energy, derives from the solar array. The Proposed Development aims to meet the need for new energy generation on the grid by developing the solar array with a co-located BESS. A standalone BESS development would provide benefits to the energy system but on its own would not generate low-carbon electricity. However, the BESS will store predominantly low-carbon energy and therefore, the BESS is clearly functionally subordinate to the solar array.

Further, the BESS would operate in a subordinate fashion to the solar array, in that the output from the solar array would influence how the BESS could operate at any moment in time but the reverse would not be true. However, in practice, how the BESS would operate at any time would also depend on a large number of other

factors including national demand, the weather, and the evolving composition of the future GB generation fleet.

To illustrate this point, if at a time when the grid needed energy, the sun was shining and the BESS had available charge, the solar array would generate and discharge to the grid. The BESS, however, would not discharge unless spare export capacity to the grid was available, or at a later time became available, for the BESS to export (i.e. when the generation from the solar array reduced to below the connection capacity level).

- **Not only additional revenue:** Investing in unsubsidised solar is economically rational on a stand-alone basis and requires no cross-subsidisation financially to justify the cost of the principal development. For example, EN-3 states: “*Solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation*” (Para 2.10.5). As such, the BESS is not *only* necessary as a source of additional revenue for the applicant, to cross-subsidise the cost of the principal development, because no cross-subsidisation is necessary for the solar array. The BESS supports the operation of the Proposed Development by increasing its effectiveness, reducing the potential for wasted energy, and maximising a key benefit of the Proposed Development, being the level of carbon free energy sent to the grid.
- **Proportionate in nature and scale:** The BESS is proportionate to the Proposed Development in nature and scale. This is because:
  - The power capacity of the BESS matches the grid export capacity available to it;
  - Based on the indicative layout of the solar array and the BESS design parameters, the energy generated by the solar array over the course of a day can regularly exceed the energy storage capacity of the BESS; and
  - The footprint of the BESS is much smaller than the footprint of the solar array

# Appendix 2

## Review of Research Papers on the Impacts of Solar Development to Bats



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# 1. Review of Research Papers on the Impacts of Solar Development to Bats

## 1.1. Introduction

1.1.1. The evidence base relating to the biodiversity impacts of solar farms is relatively limited; in particular, there has been little research undertaken on the impact of solar farms on bats. Similarly, the evidence base underpinning current practice and mitigation recommendations does not appear to be well developed. The effects of solar panels on bat behaviour are not currently known and results from the few monitoring studies conducted to date have been mixed.

1.1.2. This technical note is intended to provide a summary and critical review of four research papers that have recently been published on the topic of bats and solar farms. The learning from this review is intended to assess the current level of understanding in relation to the impact of, specifically solar panels, on bats and how this information can be used to support decision-making for the Proposed Development. This technical note specifically considers the following four research papers:

- Tinsley E., Froidevaux J.S.P., Zsebok S., Szabadi K. L., and Jones G. 2023. Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity. *Journal of Applied Ecology*. 00: 1-11– hereafter referred to as ‘Paper A’,
- Szabadi K. L., Kurali, A., Rahman, N.A.A., Froidevaux, J.S.P., Tinsley, E., Jones, G., Gorfal, T., Estock, P and Zsebok, S. 2023. The use of solar farms by bats in mosaic landscapes: Implications for conservation. *Global Ecology and Conservation*. 44 – hereafter referred to as ‘Paper B’,
- Barré. K., Baudouin, A., Froidevaux, J.S.P., Chartendrault, V, and Kerbiriou, C. 2023. Insectivorous bats alter their flight and feeding behaviour at ground-mounted solar farms. *Journal of Applied Ecology* – hereafter referred to as ‘Paper C’; and,
- Szoldatits, K.E., Walston, L.J., Hartmann, H.M., Fox, L., Stanger, M.E., Steele, S.E., Hogstrom, I., and Macknick, J. 2025. Bat activity at ecovoltaic solar energy developments in the Midwestern United States. *Global Ecology and Conservation* - hereafter referred to as ‘Paper D’.

1.1.3. The technical review is split into three sections:

- A summary of the aims and key findings of each paper;
- a critical review of the approach taken and conclusions drawn from each paper including potential limitations and questions that give rise to uncertainty; and
- a summary of the information that can be taken from these papers, how it may fit within the wider body of research into this topic and how this information could be used to guide decision-making on the Proposed Development.

## 1.2. Summary of Papers

### Paper A

- 1.2.1. Paper A compared species-specific bat activity and bat species richness between locations with solar panels and paired locations in which no solar panels were present, looking at both open field and field boundary habitats within South-West England. This study identified 10 species, or species groups, all recorded occurring at each of the sites (i.e. solar vs. control) and habitat features (i.e. boundary vs. open field). The key findings of this paper include:
- Higher levels of bat activity were recorded at control sites than at solar panel sites and along field boundaries rather than open fields.
  - They found statistical evidence for six species / species groups being negatively impacted by solar panels: serotine, *Myotis* spp. *Nyctalus* spp., common pipistrelle, soprano pipistrelle and *Plecotus* sp(p).
- 1.2.2. The nature of the impact was dependent on the habitat type and related to the typical foraging habitat used by a species:
- common pipistrelle and *Nyctalus* spp. showed a significant negative impact from solar panels regardless of the habitat type,
  - *Myotis* spp. and serotine showed a significant negative impact from solar panels along boundary features. It was concluded that the solar panels might be causing changes in flight lines and therefore increased habitat fragmentation,
  - soprano pipistrelle and *Plecotus* sp(p). showed significantly less activity within open habitat where solar panels were present, suggesting that the presence of solar panels might result in habitat loss; and,
  - no difference in bat species richness was recorded between solar panel sites compared to their paired control sites.
- 1.2.3. The paper recommends that the impacts of solar panels on bat activity are best assessed on a species-specific basis rather than pooling in relation to generally held bat-risk categories.
- 1.2.4. The paper suggests that solar farm mitigation should consider:
- a reduction in the density of panels within the site footprint,
  - ensuring boundary habitats are maintained and improved in relation to both area and diversity,
  - ensuring appropriate planting is used to improve foraging resources for those species identified as being at risk, both within the solar site and across the surrounding area; and,
  - the potential for the relocation of the site to a less sensitive location where otherwise proposed in proximity to a roost or along a known important commuting route used by species identified in the paper as being impacted by solar panels.

1.2.5. The paper recommends further research to consider, with mitigation options in mind:

- bat behaviour in and around solar panels; and,
- potential causes of avoidance of solar panels.

### **Paper B**

1.2.6. Paper B aimed to characterise the use of solar sites by bats and compare the species composition, abundance and foraging activity between solar sites and other nearby habitats within Hungary. This study identified six species (barbastelle, Savi's pipistrelle (*Hypsugo savii*), common pipistrelle, soprano pipistrelle, noctule and Leisler's bat) and three species groups (*Myotis* spp., Kuhl's (*Pipistrellus kuhlii*) / Nathusius' pipistrelle, and a group for species with calls in the frequency range of 23-31kHz (QCF group)), with all bar barbastelle recorded in all habitat types. The key findings of this paper include:

- that there were significant differences in the number of echolocation recordings between solar sites and other habitats, specifically:
  - there was significantly lower activity in forests for Savi's pipistrelle, Kuhl/Nathusius' pipistrelle and noctule, but significantly higher activity for *Myotis* sp(p).
  - there was significantly higher *Myotis* sp(p). activity and a 'trend for higher activity' of soprano pipistrelle on grasslands compared to solar sites.
  - there was greater activity from settlements for Savi's pipistrelle, Kuhl/Nathusius' pipistrelle and common pipistrelle compared to solar sites.
  - there was significantly higher activity in waterside habitats for Kuhl's/Nathusius' pipistrelle, common pipistrelle and the QCF group compared to solar sites. No barbastelle activity was recorded within solar sites.
  - no significant difference in bat activity was recorded between arable fields and solar sites. Arable sites are typically considered poor for bats and therefore this may suggest that solar farms could also be considered as poor habitat for bats.

1.2.7. The paper concluded that the considerable amount of bat activity recorded for several bat species at solar sites suggests that the absence of natural linear features in these sites is not an issue for many bats in their vicinity, supported by the presence of both species that typically fly at altitude (e.g. *Nyctalus* spp.) and those that usually commute at lower heights along the edges of more cluttered habitats (e.g. *Pipistrellus* spp.).

1.2.8. Feeding buzzes were recorded at solar farms indicating that they not only commute over this habitat but also forage there. In addition, species that often thrive in urban landscapes were found in great abundance at solar sites suggesting that selection pressures between the two habitat types may be similar.

1.2.9. The paper recommends a similar mitigation hierarchy to that developed for wind farms and recommends further research to consider:

- which insect groups are associated with the solar site vegetation and/or which are attracted to solar panels,
- detailed recording of the behaviour of bats at solar farms,

- differences between geographical regions to tailor management to local insect and bat communities; and,
- the effects of size and heterogeneity of solar sites, the location of installations, landscape context and cumulative impacts of solar sites across the landscape.

### **Paper C**

- 1.2.10. This paper looked to assess the impact of ground-mounted solar farms on the flight and feeding behaviour of insectivorous bat species through a three-stage assessment:
- whether the probability of a 'feeding buzz' having been recorded can be robustly determined by an automated classifier (feeding buzzes being echolocation calls indicative of bat foraging behaviour).
  - whether other flight behaviour metrics (flight speed and sinuosity) were effective proxies for bat feeding behaviour.
  - whether there were variations in feeding buzz probability / flight behaviour metrics between solar farm sites and control sites.
- 1.2.11. The study recorded echolocation calls, including feeding buzzes, and reconstructed bat flight paths through the use of three-dimensional echolocation call recording. Sixteen paired locations in the Rhône Valley in France were assessed, with each pair comprising of one solar farm site and one control site. Based on the scale of data collected, the analysis of the studies' results was limited to six species and one species group which were assigned to one of three guilds based on their echolocation call structure and foraging strategy. The key findings of this paper include:
- 87% of recorded activity related to the mid-range echolocator (MRE) guild (Nathusius' pipistrelle, soprano pipistrelle, Kuhl's pipistrelle and common pipistrelle), with only low levels of activity from the short-range echolocator (SRE) guild (7% - comprising *Myotis* sp. and grey long-eared bat (*Plecotus austriacus*)) or long-range echolocator (LRE) guild (5% - comprising Leisler's bat and noctule).
  - the automated classifier was found to reliably estimate the probability of feeding buzz presence when compared to manual checks.
  - flight speed and sinuosity flight behaviour metrics were found to be relevant predictors of feeding behaviour, with feeding buzz probability correlated with decreasing flight speed and increased sinuosity.
  - the results of the study supported the hypothesis that insectivorous bats exhibit behavioural responses to solar farms, with most bat species considered demonstrating faster and straighter flights with a lower feeding buzz probability within the solar farm sites compared to the control sites.
  - the only bat species showing evidence counter to the study's hypothesis was Nathusius' pipistrelle, which demonstrated a lower mean flight speed at solar farm site, despite a lower average feeding buzz probability. No clear explanation for this was identified by the study.
- 1.2.12. It was concluded that solar farms resulted in a reduction in habitat quality for bats, with reduced evidence of feeding behaviour potentially due to a reduction in prey

biomass as a result of trophic cascade – i.e. a reduction in floral abundance under solar panels in turn reducing insect prey availability.

- 1.2.1. The study advises that the type of functionality loss observed in this study should be addressed as a form of habitat loss within the mitigation hierarchy but notes that, since the exact triggering mechanisms are unknown, the understanding of effective mitigation measures is, at present, limited. In light of this they recommend:
- avoiding sites which have the greatest feeding potential for bats when selecting solar farm locations; and,
  - offset any residual impacts through measures to increase the foraging value of habitats within and adjacent to solar farms, e.g. sowing native flowering plant species, providing connectivity and/or using livestock grazing to manage vegetation which will support dung-feeding insects.

### **Paper D**

- 1.2.2. This paper looked to assess the impact of ecovoltaic sites, sites which co-prioritise electricity generation and ecosystem function (hereafter 'solar sites'), on bat activity by comparing weekly measures of both overall and species-specific bat activity between 12 paired solar facilities and agricultural field reference sites in the midwestern United States.
- 1.2.3. The paper found that:
- overall bat activity (considering five bat species) was higher on solar sites than the paired reference sites during the first half of the monitoring period (mid-May to mid-June), where average weekly overall bat activity was approximately 50% higher at the solar sites,
  - overall bat activity and species-specific activity was never statistically greater at the reference sites than at solar sites,
  - species-specific assessments considered three species and found:
    - Only hoary bat (*Lasiurus cinereus*) recorded higher activity at the solar sites relative to paired reference sites throughout the majority of the monitoring period,
    - big brown bat (*Eptesicus fuscus*) recorded greater activity levels at the solar sites compared to paired reference sites during the first six weeks of surveying with no distinguishable difference in activity levels over the remainder of the monitoring period; and,
    - no notable variations in activity levels were identified for the silver-haired bat (*Lasionycteris noctivagans*).
- 1.2.4. It was concluded that bat species in the midwestern US do not avoid solar sites and that solar sites could provide early season foraging habitat during a time of year when insect levels are lower in agricultural habitats, when only low levels of insect pest abundance were noted in these locations.
- 1.2.5. The study advises that the siting of PV solar sites on ecologically compromised land may theoretically alleviate some of the negative ecological impacts that would occur if such development were placed in more natural habitats and that incorporating on-site habitat management could increase available habitat for wildlife. The study notes that further research is required to determine:

- the behaviour of bats surrounding solar sites and the underlying drivers of species-specific responses,
- the habitat quality of site by considering insect abundance and foraging activity,
- seasonal behaviour differences between bat age groups; and,
- bat responses to different vegetation management practices including on ecovoltaic and non-ecovoltaic solar sites.

### 1.3. Critical Review

#### Survey Locations

##### Overall

- 1.3.1. The survey locations used within Paper A were all located in south-west England and as such are likely to reflect a broadly comparable set of conditions as present at the Proposed Development. The location of Paper A's survey locations within England also means that all bat species identified by Paper A are of relevance to the consideration of bats at the Proposed Development, albeit with the potential for site-specific variations in the bat assemblage.
- 1.3.2. The survey locations used in Paper B were located across a number of widely spaced locations within Hungary. Climatic conditions between the UK and Hungary are not vastly different and are therefore considered to be unlikely to significantly impact the relevance of this paper to a UK audience. However, there are several species recorded within Paper B which are not typically recorded in the UK, namely: Savi's pipistrelle, Kuhl's pipistrelle and parti-coloured bat (*Vespertilio murinus*). In addition to the results for these species being of limited value in assessing the impact to UK bat assemblages, consideration should be given for the potential for the presence of these species to impact the behaviour of species that are found in the UK, such that the behaviour patterns recorded from a species in Hungary could vary from those of the same species in the UK.
- 1.3.3. This is a point reflected in the conclusions of Paper B which states: *"It is also important to reveal the differences in the use of solar farms by bats across different geographic regions to tailor the policy of management of PV solar farms to the local insect and vertebrate communities."*
- 1.3.4. The survey locations used in Paper C were all located within France's Rhône Valley. The Rhône Valley experiences a typically more Mediterranean climate compared to the UK; however, it is not considered that this variation is of sufficient scale to render the conclusions drawn irrelevant to a UK audience. However, there are several species recorded within the paper which are not typically recorded in the UK, namely: Kuhl's pipistrelle (including in the study assessment) as well as Savi's pipistrelle and common bent-wing bat (*Miniopterus schreibersii*) which are mentioned but not included in the assessment due to low occurrence levels. Given the consistency of results across the majority of species assessed in the paper, the limited applicability of results for Kuhl's pipistrelle within the UK is of only minor impact. However, of greater note is the need to give consideration to the potential for a different assemblage of species to impact the behaviours observed, i.e. there is the potential for the behaviour patterns of a given species in the Rhône Valley to vary from those of the same species in the UK.

- 1.3.5. All of the survey locations were located along watercourses providing consistency in any impacts resulting from this proximity; however, the single aerial photo provided to illustrate exemplar survey locations shows two sets of paired locations of which the control location for Pair 1 is a thin strip of land between two solar farms. The impact of such a location on bat behaviour and the results obtained compared to, for example the control location for Pair 2, also shown in the aerial photo, and adjacent to a solar farm on only one side, are not explored within the paper but can reasonably be assumed to have a degree of influence on the observed activity. Further, it is unclear whether a similar situation occurs for any of the other 14 paired locations for which aerial photos are not provided.
- 1.3.6. There is additionally a minor lack of clarity in relation to the total number of sites considered with a “*total of 16 pairs (16 controls and 16 solar sites)*” stated within Section 2.2 and supported by the map provided in Figure 1b, while elsewhere, when discussing the nature of the solar panels it is stated that “*Seven of the nine solar farms....*” (Section 2.1). Presuming that the reference to 16 pairs is correct, this does raise the question of the nature of the solar panels at the seven outstanding solar farms not included in the Section 2.1 statement.
- 1.3.7. The survey locations used in Paper D were located across five States across the midwestern US<sup>1</sup>. The Midwestern US typically experiences hotter and more humid summer and colder winter conditions compared to the UK meaning that seasonal patterns in bat behaviour may vary between the two locations. The paper recorded five species<sup>2</sup>, of which three<sup>3</sup> were assessed at a species-specific level. None of these species occur in the UK, although all five are insectivorous, consistent with UK bat species. Given the lack of any crossover between the species recorded and assessed by Paper D and the species known to occur in the UK, significant caution is required in the application of any specific Paper D findings to a UK location. However, the overarching conclusions may still have some relevant to a UK audience given the questions asked, methodology employed and broad habitat/land use types considered.
- 1.3.8. In the case of all four papers, the survey methodology used explored the differences between existing solar farms and control sites. None of the papers explored differences within the same site pre and post the development of a solar farm. While this is understandable, as it would likely only offer a limited number of suitable survey locations and require a long-term study period (given the time required to develop a solar farm), this is an important point to note, since highly localised variations in bat activity/species assemblage can often be observed. As such, the potential for variations in bat activity between solar panel sites and control sites due to localised variations, rather than necessarily the presence of the solar panels, cannot be ruled out.

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<sup>1</sup> Illinois (two paired sites), Indiana (three paired sites), Michigan (one paired site), Minnesota (five paired sites) and Wisconsin (one paired site).

<sup>2</sup> big brown bat, Eastern red bat (*Lasiurus borealis*), hoary bat, little brown bat (*Myotis lucifugus*) and silver-haired bat.

<sup>3</sup> big brown bat, hoary bat and silver-haired bat.

### Habitats

- 1.3.9. All papers compare levels of bat activity within solar farms to levels of bat activity in areas in which no solar panels were present.
- 1.3.10. In Paper A this was achieved through consideration of “open” and “boundary” habitats, and the paper outlines a number of measures that were employed to maximise consistency between the solar and control locations including:
- locating paired solar and control sites within the same land management boundary,
  - matching as closely as possible plot size, habitat type and land use; and,
  - the exact matching of boundary feature type (i.e. hedgerow, treeline, woodland or vegetated ditch).
- 1.3.11. However, detail on how this was achieved, how the land management boundary was determined and how close a match was considered acceptable are not provided. The exact matching of boundary feature type is a positive measure taken by this research, but the paper does not expand on whether this matching included a number of further factors, beyond broad boundary type, which could influence bat activity such as:
- the quality of a boundary feature (e.g. the height, width of a hedgerow, the extent of any gaps in a hedgerow or distance between trees in a treeline or the presence/absence of trees within a hedgerow),
  - the habitats at either end of the boundary feature; or
  - the extent of connectivity of the boundary feature to the wider landscape.
- 1.3.12. Further, within the pool of solar panel open sites, it is stated that these comprised grazed or mown grassland or cut arable crops; however, no detail is provided on potential variations in the species richness of the grassland solar sites or the number of solar sites that fall into each of these categories.
- 1.3.13. Paper B is notable for comparing a much broader range of habitats to solar farm sites including forests, arable, grasslands, settlements and watersides. While it states that each of their 15 sample areas extended on average across a 5km area, it does not state whether, or not, locations representative of each of these comparison habitats were present within each sample area. Furthermore, the paper suggests potentially significant variations in different examples of each comparison habitat type, with, for example, forests habitats included in the study ranging from coniferous to oak to black locust plantations, each of which are likely to have variations in bat assemblage as well as the nature and scale of their use by bats.
- 1.3.14. Similarly, Paper B outlines variations within the solar sites selected for study with significant variations in the size of surveyed solar sites (1.2 – 45ha); although the statistical analysis completed on the collected data did build in both area and habitat as random effects to ensure a degree of control for the spatial dependency of sampling points. Paper B has undertaken its comparison at the habitat level, rather than, as detailed in Paper A, pairing specific sites for comparison. However, it is unclear whether any measures, other than within the statistical analysis, were taken to ensure that the size range of comparison habitats reflected the size range seen across different solar sites.

- 1.3.15. Paper B does not provide any information on the underlying solar farm habitats and further does not make any reference to linear features within their study, an important habitat/feature for bats, within either the solar or comparison sites, either as a specifically considered habitat type or where such features may be present relative to the survey locations. Differences in the presence/extent of linear features within both solar and control sites could have a significant impact on bat activity and how a site is used by bats; therefore, the absence of information in this area appears to be a notable omission.
- 1.3.16. Within the conclusions of Paper B, it is noted that the similarities identified between solar sites and arable sites may have been influenced by many of the solar sites being surrounded by arable land; however, no information is provided on the number of solar sites to which this applies or what the adjacent habitats were for solar farms to which this did not apply and/or the control habitat locations. As a result, it is difficult to assess the extent to which this similarity has been influenced by the wider landscape or the presence of solar panels.
- 1.3.17. Neither paper makes reference to the direction in which the solar panels faced relative to other habitats/bat suitable features (i.e. boundary features) that were also being considered. Given that the smooth surface of solar panels may be interpreted as water or an open flightpath by bat echolocation calls, the direction of solar panels relative to habitat features, in particular, linear features used for commuting, could have a significant impact on the nature and scale of use by bats and would have been interesting to see this explored as part of these papers.
- 1.3.18. Paper C achieved this through the selection of solar farm locations where appropriate control sites could be standardised in relation to a number of measures including: the separation of solar farm and control sites by 100-500m; vegetation height and cover based on visual observations; distance to the nearest woodland edge and water body; and, the proportion of woodland within a 1km radius, with statistical analysis indicating that landscape composition did not significantly differ between solar and control sites.
- 1.3.19. The consideration of these variables and statistical assessment to ensure consistency are positive measures taken by the paper; however, other landscape features which may have a notable influence on bat behaviour do not appear to have been accounted for, most notably the extent and nature of any connectivity either within a site or between a site and the wider landscape.
- 1.3.20. The solar farm locations are stated to be on grazed or mown grassland with native plant species between 0.2 and 1.1m high and covering between 20 to 90% of the ground surface; however, there is no mention of the type of vegetation cover within the control sites, with only the vegetation height and extent of cover standardised between paired locations. It is also notable that the ranges for vegetation height and extent of cover are considerable and while these may have been standardised between paired locations, it may introduce a notable degree of variation across the 16 paired locations considered overall.
- 1.3.21. The surface area of solar panels is stated as ranging from 2.5 ha to 25 ha and it is presumed that this can reasonably be used as a proxy for overall site size. However, this is a considerable range of site sizes which may influence the nature of bat activity - i.e. if solar farms are impacting bat foraging behaviour, as concluded by this paper, it can reasonably be considered that this impact would be greater for larger solar farm locations; however, this is not explored by the paper. In addition,

there is no indication within the list of variables standardised between the solar and controls sites, whether site size was also taken into account.

- 1.3.22. The paper provides a range of information on the solar panels, including height, width, distance apart, angle and, in the case of two solar farm locations, the axis on which they were aligned. However, there is an absence of axis information for the remaining locations and, even where this was provided, it is not discussed in relation to other habitats/bat suitable features (i.e. boundary features). Given that the smooth surface of solar panels may be interpreted as water or an open flightpath by bat echolocation calls, the direction of solar panels, relative to habitat features, in particular linear features, could have a significant impact on the nature and scale of use by bats, and therefore influence broader levels of behaviour within a site.
- 1.3.23. All of the solar sites selected for assessment in Paper D were former agricultural fields used to grow corn or soybean, which were located within a predominantly agricultural landscape, suggesting a good level of consistency between these sites. However, significant variations in the size of the site were recorded with solar sites ranging from 7.5 ha to 550 ha (with eight sites under 35 ha and four sites over 180 ha). While the typical area used by an individual bat of the species recorded by Paper D (i.e. equivalent areas to UK bat Core Sustenance Zones (CSZ)) is not known, a solar site of 550 ha could account for a large proportion, if not potentially all of, the typical range used by an individual bat, and therefore it is reasonable to assume that the use of a site of this size may vary from that of a site which is only 7.5 ha in size and equates to only a small proportion of an individual bat's range, particularly within a largely agricultural landscape where other foraging options may be limited.
- 1.3.24. A further factor that may influence bat activity and was noted as being dependent on solar site size related to the habitats created within these developments. All solar sites subject to assessment had been seeded with a site-appropriate grassland seed mix intended to provide suitable habitat for insect pollinators and other wildlife. These habitats had been delivered between two and six years prior to monitoring, thereby allowing some time, albeit variable, for habitat creation to have established. However, depending on site size, variations in the extent of habitat provision were noted, with smaller sites (those producing <100 megawatts) being entirely seeded with mix(s) intended to deliver for biodiversity while in larger sites (those producing  $\geq$ 100 megawatts) only specific portions of the site were seeded with such mix(s), with the remaining areas planted and managed as turf or for livestock foraging. This variation meant that while 66% of assessed solar sites were seeded entirely for biodiversity, less than 10% of the total site was seeded specifically with biodiversity in mind for the remaining 33% of assessed solar sites, with less than 5% of one site subject to such seeding.
- 1.3.25. While detectors were stated as being placed as close to areas of biodiversity related habitat creation it is unclear to what extent dedicated biodiversity areas within the larger solar sites were connected to the wider landscape and whether or not these biodiversity areas within larger solar sites included PV panels or not. The results provided similarly do not distinguish between these forms of intervention or between the individual pairs of assessed sites, meaning that it is not clear whether the variations observed were consistent across all sizes/forms of habitat intervention or not.

- 1.3.26. The paired reference sites selected for comparison in Paper D were all active row crop fields comprising corn or soybean, reflecting the solar site habitats prior to development. However, these were notably smaller in size on average, at 30 ha, and, while paired reference sites were located at least 100m from non-agricultural habitats, the potential influence of other habitats in bringing bats into the general area cannot necessarily be ruled out.
- 1.3.27. Paper D also considers sites across the widest landscape scale of any of the four papers considered in this document, with paired sites spanning across five US States. As the results of the paper are not broken down on a site-by-site basis, it is not possible to determine what, if any, variations occurred between individual States and the impact of any associated local variables.

### **Detectors**

- 1.3.28. While Paper A does not specifically state the number of detectors used per sampling location, the wording suggested that a single detector was used per sampling location providing consistency in the scale of data collected per sampling location. However, Paper B states that between 1 and 6 sampling points were used per survey location depended on the size of the site, introducing considerable variation in the scale of data collected per survey location. The analysis methods outlined stated that data was collated, on the basis of the number of sequences recorded over a night, per sampling point at both the species/species group and overall levels. Therefore, while it does not appear that multiple sampling points were combined into a total habitat type, activity level variations in the number of sampling points per sampling location will introduce variation in the extent of data held for different habitat types which will influence the relative robustness of the conclusions drawn. For example, 54 sample points were collected for solar farms compared to just 10 for waterside habitats.
- 1.3.29. With regards to the use of static detectors and their location, Paper A provides details on specific static detector deployment locations and position; however, no such details are provided by Paper B. Specifically Paper B does not detail:
- where within each survey location static detectors were positioned e.g. along hedgerows or in open fields,
  - whether or not this varied between sample points if more than one sample point was present within a habitat; or,
  - whether there was consistency of deployment position between habitats that were going to be compared to each other.
- 1.3.30. Paper C used a specialised acoustic recording set up to enable the triangulation of bat flight paths and provides a range of details in relation to the set-up and positioning of this equipment. This includes details of the positioning of the acoustic set-up (i.e. between two rows of solar panels, more than 25m from the edge of the solar farm and with the x axis of the acoustic set up parallel to the solar panel rows) and the consistency of this placement within the control sites. In addition, the paper recognises that the presence of solar panels may result in 'acoustic blind spots' due to panels blocking sound waves and sets out the measures that were taken to account for this within each pair of sites; namely, the exclusion of data from the control site that related to a position which, on the solar site, would not have been recordable.

- 1.3.31. These measures are considered to illustrate a good understanding of the complexities relating to acoustic recording within solar farm sites and appropriate measures to ensure consistency within each pair of locations. However, it appears from the information provided that a single acoustic set-up was used in each location, providing limited coverage of a given site and potentially not reflecting within-site variations. Furthermore, although a measure of being at least 25m from the edge of a site is given, this does not provide clarity on whether the distance from the edge of a site was consistent across all locations, nor whether a central point within a site was selected or not. Given that the acoustic set-up is stated as having an approximate range of 30m, the placement of a detector just over the more-than-25m-from-the-edge parameter may have picked up activity outside of the site. In addition, an acoustic set-up within the middle of a site, with or without solar panels, can reasonably be expected to pick up a distinctly different activity relative to one in closer proximity to edge habitat or boundary features.
- 1.3.32. Paper D specifies that a single detector was deployed at each solar site but does not specifically state the same in relation to the paired reference sites, although this is implied by the language used which would provide consistency in the scale of data collected per sampling location.
- 1.3.33. Solar site detectors in Paper D are stated to have been placed at least 100m from the solar site boundary on all but one occasion (when detector was placed 50m from the solar site boundary). Given that the acoustic set-up is stated as having an approximate range of 30m the placement of detectors at both the 50 and 100 m distances should have ensured that bat activity outside of the solar site was not captured by these detectors. Paper D also states that detectors within solar sites were placed as close as possible to an area of habitat that had been provided for biodiversity. However, it does not specify whether detectors were placed near, within or on the edge of these areas, nor whether this positioning varied between solar sites. Furthermore, it is unclear the extent to which these habitats provided for biodiversity also included solar panels. For the smaller sites in which 100% of habitat provision was designed with biodiversity in mind, there is considered to be a greater likelihood that panels will also have been present, particularly given the focus of the paper; however, this is not specified. Nor is it specified what the angle or alignment of any panels may have been if present, although it is stated that ten of the solar sites comprised single-axis tracking panels while the remaining two used fixed-tilt panels. Within larger sites, it is stated that specific portions of the solar site were seeded with 'habitat-focused seed mix', with this area equating to 5-10% of each site. While it is not specifically stated, the language suggests that these areas may have been set aside for biodiversity and therefore would not be expected to contain solar panels. As such, while data collected from these areas would reflect bat activity from habitat located within a wider landscape that contains solar panels, it does not necessarily mean that bats would have had to come into close proximity to solar panels to access these areas, particularly as it is not known whether these areas of the site were located on the edge of or within the wider solar development.
- 1.3.34. Variations in positioning of detectors, the presence or absence of solar panels, and location of areas of habitat provided for biodiversity relative to the wider solar site, if these occurred, are likely to have influenced the nature and extent of bat activity recorded, particularly given the already discussed variations in the extent of habitat provided for biodiversity between different solar sites.

- 1.3.35. The positioning of reference site detectors in Paper D provides a range of detail regarding the distance that detectors were placed from non-agricultural habitat types, solar site boundaries and other survey locations such that these detectors are unlikely to have picked up bat activity resulting from different habitat or land use types, or activity that would have been duplicated by another detectors. However, Paper D states that while they were 'adjacent' to agricultural fields containing row crops, they were not placed within these fields, due to impacts this would have had on farming operations, but instead placed on a variety of linear features including fencelines and hedgerows. Bats are widely known to use linear features to move through landscapes and, as such, the positioning of detectors on these features may have resulted in higher levels of activity being recorded than may have been recorded if the detectors had been placed within the centre of agricultural fields. This is of note given that the exact positioning of solar site detectors is not specified and therefore it is not known whether the positioning of detectors on linear features was replicated within solar sites. If this was not consistent, this may have introduced significant inconsistency into the paired detector comparisons.

### **Species**

- 1.3.36. Across Paper A and Paper B, all of the species recorded at the Order Limits during walked transect surveys (noctule, soprano pipistrelle, serotine, common pipistrelle, brown long-eared bat, *Myotis* sp., Leisler's bat and barbastelle) were represented either at the species or a species group level, albeit to varying levels, with some at insufficient abundance to permit inclusion in statistical analyses. As such, together there are no gaps in the species for which information is provided by these two papers. That said, within species groups, there are likely to be variations in how bats react to the presence of solar panels; this is of note due to the likely presence of Bechstein's bat (a *Myotis* sp.) in proximity to the Order Limits.

Paper C accounts for the majority of species recorded at the Order Limits during walked transect surveys, namely: noctule, soprano pipistrelle, common pipistrelle, *Myotis* spp. and Leisler's bat. *Eptesicus* sp. (serotine in the UK) and barbastelle are discussed in the definition of the species guilds used by the paper but not assessed further, presumably due to levels of activity being too low to support analysis. Brown long-eared bat was not listed in the paper, although grey long-eared bat (*Plecotus austriacus*) was. As such, the paper is considered to represent the majority of the most commonly encountered species at the Order Limits and, while some species were not assessed, it is not considered that this takes away from the relevance of the study overall.

- 1.3.37. Paper D considers a North American bat species assemblage that does not have any crossover with that recorded at. As such while, given the limited research available in relation to bats and solar developments, the findings of this paper are of interest, some caution is required in considering the extent to which the findings can be translated to a UK bat assemblage and / or UK solar site.

## **Survey Methods**

### **Survey period**

- 1.3.38. Both Paper A and Paper B undertook their data collection during the mid to late optimal bat survey window<sup>4</sup> namely July to October (Paper A) and July to mid-September (Paper B), therefore covering the late breeding, mating and autumnal transitory stages of a bat's annual lifecycle. As a result, neither paper covers the spring transitory or early breeding season stages of a bat's lifecycle during which notable differences in the extent and/or nature of recorded bat activity may occur. Paper C undertook surveys over nine nights in late September, at the latter end of the optimal bat survey window, with each location in a given pair monitored simultaneously. As such the results can only be said to be reflective of mating and autumn transitory behaviour, which may vary notably from the extent or nature of activity during the breeding season. Paper D; however, recorded over a 16-week period between mid-May and early September at each location, albeit for only two hours per night (between 10pm and midnight). Therefore, this paper provides a much greater scale of data on which to draw conclusions, including seasonal changes due to the survey period covering almost the entire bat active season. The timing of recordings on any given night, at a set time rather than a specific time period relative to sunset, means that the nature of activity recorded throughout the survey period is likely to have changed as the recording period changes from being several hours into the night at the start and end of the season to being relatively close to sunset during the middle part of the season. However, while this will have introduced variations across the survey period, this will have been consistent between paired detectors and different survey locations.
- 1.3.39. Paper B completed all surveys during a single survey window, while Paper A undertook surveys across two survey windows, one in 2019 and the other in 2020. While not explicitly stated, it is inferred from subsequent text that this does not represent multiple surveys of each location but simply the time required to cover all survey locations. Paper C surveys were undertaken on a single night at each location for a period of 3 hours after sunset. While this survey period broadly covers the average emergence times usually stated for the recorded bat species, a single, incomplete, night of data collection per location limits the extent to which robust conclusions can be drawn given the night-on-night variation that can often be seen with bat activity. This is of particular note given the focus of the paper on feeding buzzes which the paper itself notes are rare, stating that they comprise less than 2% of all acoustic recordings. Indeed, this limiting factor of the study is noted in the paper itself, with a recommendation that further studies should look to confirm the observed patterns of activity at different times of year and within different climatic locations. Paper D surveys were undertaken across two years with each location being surveyed in just one of the two years, with pairs of detectors always recording simultaneously.
- 1.3.40. There is a notable difference in the scale of data collected per survey location by each paper, e.g. Paper A completing seven nights of monitoring at each location during which recordings were made throughout the night, Paper B completed only a single night of monitoring at each location during which recordings were only

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<sup>4</sup> Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

made for the first four hours and Paper D recording over a 16-week period but only for two hours per night the timing of which relative to sunset will have varied over the course of the survey window.

- 1.3.41. While the monitoring period used by Paper B is sufficient to cover the average emergence times usually stated for the recorded bat species, the single, incomplete, night of data collection limits the extent to which robust conclusions can be drawn given the night-on-night variation that can often be seen within bat activity. In comparison, the approach taken by Paper A exceeds the five-night minimum time period stated in bat survey guidance for static detector deployments (Collins, 2023) and therefore, while still of a limited scale of data collection, offers, to a degree, a reduced risk of drawing inaccurate conclusions. Paper D treads a middle path, collecting long-term data albeit with limited coverage in any given night.
- 1.3.42. All papers undertook simultaneous monitoring of locations that had been paired/grouped together. However, Papers A, B and D had survey periods that extended over a number of months across which variations in activity could reasonably be expected to occur. Paper B included the survey month as a fixed factor and temperature as a continuous fixed effect within their statistical analysis, while Paper A makes no mention of similar measures to control for variations in the survey timing. Paper D accounted for these seasonal variations through the modelling of weekly overall and species-specific activity levels.

#### Survey equipment

- 1.3.43. Paper A used SM3 detectors and Paper B AudioMoth devices to collect their data. Paper B recognised that the microphone of the AudioMoth is unlikely to be as sensitive as those used in more expensive devices, such as the SM3. The impacts of the reduced levels of sensitivity typically seen in less expensive acoustic detector microphones are most frequently seen in those species which typically echolocate quietly and/or which are very directional in their calls and may thereby influence the conclusions drawn from data analysis. This is likely to be a more notable consideration in relation to the results of Paper B.
- 1.3.44. While Paper A used a higher specification static detector, there is a lack of clarity about the form in which recordings were made by this device. SM3 detectors have the capability of recording in either zero-crossing or full spectrum format<sup>5</sup>. During the analysis of the data, further discussion of which is provided below, the use of both zero-crossing and full-spectrum analysis methods are mentioned suggesting that data may have been recorded in full-spectrum format however, this is not explicitly stated. As zero-crossing recordings contain reduced levels of detail, there is a greater chance of species being missed and/or inaccurately identified, and therefore clarity on this point would provide greater confidence in the results stated and the reliability of conclusions drawn.
- 1.3.45. Paper D specifies the use of Song Meter Mini Bat detectors, a comparatively new detector type with higher specification microphones and internal programming relative to either of the detectors detailed in Paper A or B. As such it is not

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<sup>5</sup> Full spectrum recordings can be 'downgraded' (reduced) to a zero-crossing format, but data recorded in the zero-crossing format cannot be 'upgraded' to full spectrum.

considered that the detector used poses a constraint or limitation on the conclusions subsequently drawn by Paper D.

#### Weather conditions

- 1.3.46. Papers A, B and C state that data was collected during periods of suitable weather conditions only. However, none of these papers state the weather conditions immediately prior to the start of data collection, which can have a notable impact on levels of bat activity, and in particular for Paper C given the focus of that paper, the need for a bat to feed. For example, if weather prior to survey has been sub-optimal for bats, then there may be a greater drive to emerge early, with bats spending longer foraging, while if there has been a run of optimal weather conditions immediately prior to a survey, bats may have a reduced need to forage and therefore potentially emerge later and return to their roosts earlier, suggesting lower levels of activity in an area. These factors are likely to have a greater influence on studies such as these papers which have a shorter survey window.
- 1.3.47. The absence of this information is less likely to have impacted on the results of Paper A given the longer survey window, which makes the weather conditions immediately prior to the start of data collection less impactful to the data collected overall. However, differences in weather prior to the start of data collection have the potential to significantly influence the results, and therefore conclusions, of Paper B given that only a single, partial, night of data was collected for each survey location.
- 1.3.48. Paper C states that data was collected during periods of suitable weather conditions for both insects and bats with these listed as 11.4 – 20°C mean nighttime temperature, wind speed 0 – 5.5.m/s and no rain. While it is agreed that these reflect suitable survey conditions, they do illustrate a wide range of conditions to have occurred in a relatively short time period (nine nights) and, as such, there is the potential for considerable night-on-night variation, potentially impacting levels, and the nature of, bat activity. The simultaneous monitoring of paired sites means that, within a given pair, identified variations between a solar and control site should not have been unduly influenced. However, where the data is used to examine overarching variations, differences in weather conditions could have influenced the conclusions drawn.
- 1.3.49. Paper D makes no reference to specific weather conditions, with the only reference to temperature or wind being a statement that these variables were not included in the statistical analysis of the data as it was expected that these would have been similar within each set of paired detectors. Given the time period over which surveys were undertaken it can reasonably be expected that conditions will have varied and have included periods of optimal and sub-optimal conditions for bats. While this introduces variability into the data, the occurrence of such variations would have been reflected across the entire dataset collected.

#### Data analysis

- 1.3.50. Both Paper A and Paper B used a combination of automated identification and manual verification to complete the analysis of the data collected and looked to combine recordings into species groups where there was insufficient information to confidently apply a species-level identification. This is in line with standard analysis methods. However, while Paper A states that a manual review of a small proportion of files automatically identified as noise, this measure is not stated within Paper B and as such there is a risk of bat echolocation calls having been missed

within these ‘noise’ files. However, given the overall scale of data collected by both papers, this impact would likely be minimal for most species barring those for which only very low numbers of recordings were identified.

- 1.3.51. Paper C used automated analysis to assign an identification to the closest taxonomic level as well as to determine the probability of a feeding buzz being present. While the paper considers as one of its primary points the accuracy with which the feeding buzz probability is determined, with comparisons to manual checks, no such manual verification is stated as having been undertaken with regards to the initial species/species group identification.
- 1.3.52. Presuming species identification checks were not manually undertaken, there is a risk that some species could have been inaccurately assigned and/or that bat echolocation calls could have been missed, given that the paper excluded certain species/species groups.
- 1.3.53. Paper D again used a hybrid automated and manual approach to the analysis of bat data. This paper used two automated id programmes, the first was applied to all collected data in a standard manner, while the second was applied only to those recordings the first automated id programme identified as noise/without bat identifications. Manual verification was limited to only those recordings which were identified as containing a bat by the second programme but not the first. As such, a large proportion of the bat identifications do not appear to have been subject to manual verification. Therefore, while the approach taken reduces the likelihood that bat echolocation calls may have been missed entirely, providing greater confidence in the overall bat activity results reported, it does not preclude that individual recordings could have been mis-identified at the species level, potentially impacting on the species-level activity results reported.

### **Results**

- 1.3.54. The results presented in Paper A focus on solar site and control site comparisons, thereby offering a clear set of results. However, as a result, some of the finer scale detail that could have been obtained from this data, and that would be of value for applying to real-world situations (for example whether there were differences between the different boundary types considered), is not explored. Paper D takes a similar approach assessing differences between pairs of detectors over the survey period. However, the approach taken does allow for some more nuanced assessments to be undertaken compared to Paper A, specifically whether seasonal differences may be present in any variations between paired detectors.
- 1.3.55. Paper B on the other hand identified a range of variations between different habitat types. However, because of the variety of habitats included within the control site options, it is difficult for the paper to offer certainty that the variations observed are as a result of the presence of the solar panels, rather than just inherent differences in the species composition, nature of use and/or acoustic recording limitations that might naturally be expected to occur between different habitat types. For example, forest habitats would be expected to record a greater number of clutter-specialist bat species compared to more open habitats such as arable or solar; furthermore, increased clutter will influence the movement of soundwaves, introducing barriers and potentially limiting the apparent abundance of bat call activity, particularly considering the use of less sensitive microphones by Paper B.
- 1.3.56. Paper C states a clear final conclusion that “insectivorous bats of several species in two functional guilds show strong behavioural responses to ground-mounted

utility-scale solar farms” and that since the changes observed are “explicit indicators of a decrease in bat feeding behaviour, it is clear that the implementation of solar farms results in a reduction of habitat quality for bats”. However, the paper looks to cover a lot of ground in a single study given the approach taken to get to this conclusion, namely the investigation of both feeding buzz predictability and the use of flight metrics as proxies for feeding behaviour, prior to drawing conclusions about differences in foraging activity at solar and control sites, resulting in a somewhat ‘daisy-chained’ conclusion.

- 1.3.57. This is important as, although the paper does assess and evidence each step in this process, the measures used to draw their conclusions are relatively new areas of research. While papers exploring these factors for certain species are referenced, there is not a body of evidence against which to reference their findings at each stage.

## 1.4. Conclusions

- 1.4.1. Both Paper A and Paper B represent an initial foray into an area of research that has, to date, been poorly explored. Indeed, Paper C states that they are only aware of three studies exploring the effects of solar farms on habitat use by vertebrates, one in relation to reduced bird species richness and density<sup>6</sup>, while the other two are Paper A and Paper B. As such, these papers offer a useful addition to the knowledge currently held with regards to solar panels and bats. Similarly, Paper D states that it is ‘*the first (study) to evaluate bat community-level responses to solar energy development in the U.S.*’ reflecting that poor exploration of this area of research is not limited to UK- or European-focused literature.
- 1.4.2. Given the early stage of this research topic, it is perhaps to be expected that the papers primarily focus on obtaining evidence that a difference in bat activity between sites with solar panels and sites without solar panels does exist. While certainly useful, they do not provide information to support any assessment of the scale or nature of impacts where a solar farm is to be developed, nor provide much support to the development of suitable mitigation measures.
- 1.4.3. Paper A is considered to provide a more robust methodology, given the narrower focus of the study, slightly greater (albeit still limited) scale of data collection and greater detail provided in relation to the data collection and analysis methods. As a result, it is considered that there is a greater likelihood that the variations observed may be due to the presence of the solar panels, thereby providing increased confidence in the conclusions subsequently drawn. The broader focus of Paper B, on the other hand, brings into question whether the conclusions drawn represent differences that result directly from the presence of solar panels or can partially or fully be attributed to other differences in the habitat types being compared.
- 1.4.4. Both Paper A and Paper B conclude that the presence of solar farms is likely to result in a less suitable area of habitat for bats, and, while a number of limitations to both papers have been identified, it is not considered that this overall conclusion

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<sup>6</sup> Visser, E., Perold, V., Ralston-Paton, S., Cardenal, A. C., & Ryan, P. G. (2019). Assessing the impacts of a utility-scale photovoltaic solar energy facility on birds in the Northern Cape, South Africa. *Renewable Energy*, 133, 1285–1294. <https://doi.org/10.1016/j.renene.2018.08.106>

is likely to be wholly inaccurate. In particular, Paper B's conclusion that, in relation to bat suitability, solar farms may be most likened to poor quality arable habitats, offers a useful assumption to make when considering the likely scale of impact that might result from a solar farm, without mitigation, for bats.

- 1.4.5. Where Paper A and Paper B looked broadly at differences in bat activity levels, Paper C explored a more specific aspect of differences through consideration of foraging activity, a key way in which the development of solar farms could influence bat activity. However, as with Paper A and Paper B, and as may be expected given the early stage of this area of research, Paper C focuses primarily on evidencing that differences between solar and non-solar sites do occur, rather than exploring the specific reasons for the differences. As such, although suggestions are made for why differences may occur, the evidence base to recommend or support specific mitigation measures is not provided.
- 1.4.6. Paper D similarly looks to address the initial question of whether or not a variation between solar and non-solar sites exists and, while questions can be put to the paper (as detailed above), the longer-term duration of data collection may be considered to offer greater weight to the conclusions drawn. These sit counter to those of Papers A, B and C by suggesting increased use of solar sites for at least part of the active season relative to agricultural (crop) landscapes, at least where solar sites are designed to include biodiversity-focused habitats, the presence or absence of which within the solar sites considered by Papers, A, B and C is not specified. However, caution is required in applying these conclusions to UK solar developments given the entirely different bat assemblage recorded. A next step in UK based research may therefore be to look to repeat a survey of this nature with specific consideration to UK solar sites where measures have been taken to incorporate provision of biodiversity focused habitats.
- 1.4.7. All four papers in their introductions touch on the fact that concerns regarding bats and solar farms go beyond just the loss of habitat and/or the change in land use, with factors such as the large expanse of smooth surfaces potentially being interpreted as water and/or as open flyways, as well as ways in which aspects of solar panels (such as surface type or light pollution) may impact invertebrate prey stated. As discussed in the papers, research has been carried out on aspects of these topics; however, the specific impacts of solar panels themselves on bats are still unknown. A clearer understanding of these impacts and the specific aspects of solar farms/panels that have adverse impacts on bats would offer the most useful information to allow for solar farm specific impacts to be considered and assessed as well as supporting the development of specific mitigation measures.
- 1.4.8. Clearly, there are opportunities to design and manage modified habitats that sit beneath, between and in the immediate vicinity of solar panels and associated infrastructure, in the interests of enhancing biodiversity. Hence carefully designed schemes could deliver net gains in biodiversity, particularly where they are sited in less biodiverse locations. However, to realise such gains, it will also be important to understand any negative impacts on biodiversity that arise from solar farms. Protected areas, priority and sensitive habitats should clearly be avoided, and further research on threshold distances from solar farms for any detrimental effects

on biodiversity would allow conservation buffer zones to be identified (Smith & Dwyer, 2016)<sup>7</sup>.

- 1.4.9. In terms of the weight to be attached to these research papers, they could be capable of being an important and relevant consideration in the decision-making process; however, based on the analysis above, and particularly the fact that none of the papers considered the same site before and after solar panels were present, as well as the limited extent of data collection, it would be difficult for the decision-maker to place any more than limited weight on them at this stage. This conclusion reflects recommendations within the Bat Mitigation Guidelines (2025)<sup>8</sup> which states *“This early research should be taken into account when assessing the impacts of solar farms, but the constraints of the research recognised in drawing any conclusions.”*

## 1.5. Additional Papers of Relevance

- 1.5.1. In addition to the four papers critically reviewed above which specifically consider the potential impacts of solar farms on bats, consideration has been given to two additional papers which have indirect relevance to bat activity within solar developments and are therefore considered to be of interest and relevance to the Proposed Development.

### **Field Boundary Use**

**Foxley, T., Lintott, P and Stone, E. 2023. What drives bat activity at field boundaries? Journal of Environmental Management. Vol 329.**

- 1.5.2. This paper builds on an existing understanding regarding the importance of field boundaries for bats within agricultural landscapes by investigating the specific drivers of bat activity associated with such features.
- 1.5.3. The paper undertook surveys over a 12-week period in North Somerset between early July and the start of October, thereby covering a large proportion of the bat active season, albeit not reflecting activity during the spring transitory or early breeding season stages. Song Meter Mini Bat detectors, a modern detector with suitably sensitive microphones and internal programming capabilities, were placed, where possible in pairs, on either side of field boundaries and set to record throughout the night for a period of at least six nights. This recording programme meets recommend static detector deployment guidance; however, not all recording locations were monitored simultaneously, and each was surveyed on only one occasion, which may impact the robustness of the dataset collected.
- 1.5.4. Data was also collected on the field boundary characteristics; the habitats present in adjacent fields, and the landscape features within 250m of each recording location.
- 1.5.5. Collected acoustic data was analysed using an automated id programme, followed by manual verification in line with guideline recommendations, with manual verification used to establish an error rate model against which identifications were

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<sup>7</sup> Smith, J. & Dwyer, J. (2016). Avian interactions with renewable energy infrastructure: An update. Condor 118(2): 411-423.

<sup>8</sup> Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

weighted relevant to the confidence with which the automated id made its classification.

- 1.5.6. The paper also notes the inherent issues associated with the identification of certain bat species (i.e. those of the *Myotis* genus) and combines these recordings to prevent misleading identifications, as well as removing from further consideration species where the number of identifications was too low to support robust statistical analysis and / or where species are known to be under-recorded by acoustic surveying (i.e. *Plecotus* spp.). While this reduces the number of individual species considered in the study it reflects suitable measures to ensure that where conclusions are drawn, they are based on appropriate datasets.
- 1.5.7. A measure of bat activity over the entire recording period for a given location was calculated in which every minute in which a bat species was identified as one occurrence. This provides a clear and consistent definition of bat activity but may have resulted in underestimations of activity levels should multiple registrations by an individual or multiple bats of the same species be recorded within the same minute, while another minute with just a single registration would be given the same weighting under this process.
- 1.5.8. The relative importance of different aspects of landscape structure, specifically field boundaries, adjacent fields and local landscape, were assessed through the creation of three models using generalised additive models.
- 1.5.9. The study found that:
- In relation to field boundary characteristics:
    - lesser horseshoe bat, greater horseshoe bat, common pipistrelle and ‘big bat’ species (*Nyctalus* and *Eptesicus*) identified higher activity along vegetated field boundaries compared to non-vegetated field boundaries,
    - greater horseshoe bat and soprano pipistrelle activity was higher on field boundaries with trees (increasing by 2 and 3% respectively per tree per 100m),
    - common pipistrelle and soprano pipistrelle activity was higher at field boundaries with tall vegetation (increasing by 9 and 15% respectively per extra metre of height); and
    - *Myotis* activity was higher at wide boundaries (4% increase for each extra metre of width).
  - In relation to adjacent field characteristics:
    - greater horseshoe activity was 149% higher on field boundaries bounded by improved grassland and 46% lower at field boundaries bounded by arable land,
    - common pipistrelle activity was 42% lower on field boundaries bounded by improved grassland and 48% lower when bounded by arable land,
    - *Myotis* activity was 39% lower in locations that were managed under environmental stewardship schemes, although the paper notes that these survey locations may simply have been less suitable for *Myotis* sp(p). due to unmeasured factors; and

- common pipistrelle, soprano pipistrelle and big bat activity was higher in locations with livestock than at those without livestock (26%, 34% and 26% respectively).
- In relation to local landscape characteristics:
  - lesser horseshoe bat and big bat activity increased by 2% for every 1% increase in woodland cover within a 250m buffer,
  - big bat activity increased by 1.4% for every 1% increase in urban/suburban cover within a 250m buffer; and
  - soprano pipistrelle and *Myotis* sp. activity decreased with higher levels of artificial light at night (8 and 5% decrease respectively for every 1 increase in radiance (note the paper does not specify whether the “every 1 increase” relates to a percentage increase or a unit (lux) increase).
- 1.5.10. Field boundary characteristics were identified as being better than adjacent field or local landscape characteristics for describing bat activity patterns for common pipistrelle, soprano pipistrelle greater horseshoe bat and lesser horseshoe bat, and overall the paper concluded that its findings supported the existing body of evidence that planting field boundary trees and allowing existing hedgerows to outgrow would benefit a range of bat species.
- 1.5.11. Separately, big bat activity was identified to be better determined by consideration of local landscape characteristics than those associated with field boundaries or adjacent fields, reflecting the difference in flight behaviour and lower reliance on linear features for these species. Despite this, the paper considers that these species may still benefit from the increased landscape heterogeneity resulting from vegetated field boundaries.
- 1.5.12. The paper indicates that; its findings add to the growing understanding of the value of field boundaries for bats; identifies that assessment of the frequency of feeding buzzes would be beneficial, providing additional insight into how bats use field boundaries; and states that field boundaries can be a valuable tool in developing biodiversity-friendly agricultural practices.

#### **Insect Responses to Habitats within Solar Developments**

**Walston, L.J., Hartmann, H.M., Fox, L., Macknick, J., McCall, J., Janski, J. and Jenkins, L. 2024. If you build it, will they come? Insect community responses to habitat establishment at solar energy facilities in Minnesota, USA. Environmental Research Letters. Vol 19.**

- 1.5.13. This paper aims to understand how insect communities respond to newly established habitat within solar developments located within agricultural landscapes by investigating temporal changes in flowering plant abundance and diversity, temporal changes in insect abundance and diversity, and the pollination services of solar-pollinator habitat through comparison of pollinator visitation to agricultural fields near solar developments versus agricultural fields located elsewhere.
- 1.5.14. The study was undertaken over a five-year period between 2018 and 2022 at two solar developments located in Minnesota following the construction of these sites in 2017 from a baseline of row crop production. Both sites comprised 2m high panels on a single axis tracking system and were restored using native plantings of grasses and forbs which were initially managed through seasonally mowing and

spot herbicide application before sheep grazing was introduced in 2021. As such, both sites represented a largely consistent baseline and post-development scenario from which conclusions could be drawn. Specifically, data considered within this study was collected from experimental test plots located within each site which were planted with additional species not included elsewhere across either site and were not subject to sheep-grazing.

- 1.5.15. Data on the insect and plant communities were collected through observational surveys completed along 30m transects located within the experimental plots. While the nature of each transect was consistent (2m wide and located between two rows of panels) there was variability in the number of transects undertaken at each site ranging from six to eight. While this means that more data may have been collected at one site compared to the other, the purpose of the study was not to compare the two locations and, as such, is not viewed as a constraint. Of these transects two were designed to ensure they were in full sunlight, and the impacts of shade were managed by ensuring that the time of day in which transects were undertaken was consistent.
- 1.5.16. Four bi-weekly survey visits were undertaken between early July and late August each year, when flowers were in full bloom. The only exception to this was the initial baseline year of data collection when only one survey trip was undertaken in late August. This reduced level of data collection for the baseline, at the end of the identified survey window, could have artificially reduced the initial baseline value assigned to each transect and therefore risks artificially inflating subsequent increases, although steps to address unequal transect observation within and across years were taken including the averaging of insect observations rather than the use of a sum to determine insect abundance.
- 1.5.17. The study also undertook transects in soybean fields adjacent to / near solar sites to consider pollinator visitation to soybean fields at different distances from solar sites. The paper recognises that, due to the comparatively short bloom period of soybeans, overall levels of pollinator observations would be lower in these areas than within the solar site experimental test plots and therefore does not attempt to undertake any comparisons between the two types of location.
- 1.5.18. The paper specifies that all transects were undertaken during optimal environmental conditions for pollinator activity, ensuring that adverse weather conditions will not have impacted the results obtained.
- 1.5.19. The study found that:
  - Within the experimental test plots:
    - the most numerous insect groups were beetles followed by Syrphid flies and moths,
    - temporal shifts were observed with Syrphid flies dominant in years 0 to 2, while soldier beetles were dominant in years 3 and 4,
    - floral abundance and flower plant species-richness increased over time following seeding in year 0, with year explaining between 61.4 and 84.8% of the variation at each of the two sites,
    - insect group diversity, total insect abundance and native bee abundance increased over time, with year explaining 44, 63.6 and 66.7% of this variation respectively,

- over the five-year study period, insect group diversity increased nearly linearly by approximately 150%,
  - total insect abundance and native bee abundance demonstrated exponential patterns of increase with total insect abundance having tripled by the end of the study period; and,
  - a notable turning point was identified after Year 2, with abundance measures showing noticeable increases after this point, including 80% of native bee observations.
- Within off-site transects:
    - bee visitations to soybean flowers adjacent to solar-pollinator habitat were comparable to bee visitations adjacent to Conservation Reserve Program (CRP) grasslands,
    - bee visitations to soybean flowers adjacent to solar-pollinator habitat were approximately 2 and 2.5 times greater than bee visitation at roadside and soybean field interior transects respectively; and,
    - no differences were noted in visitation between solar adjacent soybean transects, CRP-adjacent or roadside soybean transects when considering all pollinators and beneficial insects; however, these locations did all record greater visitation than the soybean interior transects.
- 1.5.20. As noted in the paper, the study did not include transects that were located in full shade regions such as those located under the solar panels, and it would be reasonable to assume that the results found from such locations would vary from those detailed above.
- 1.5.21. The paper considers that it provides the first empirical evidence on interannual temporal changes in insect communities following the planting of pollinator habitat at solar sites. While the paper notes that the results are based on experimental test plots within wider solar sites, with areas outside the test plots subject to different planting and management practices, it did find that the dominant flowering native species within the test plots were consistent with those observed in the groundcover establishment across the larger solar sites.
- 1.5.22. The paper suggests that the responses observed support two important potential implications of solar-pollinator habitat: first, that it can provide an important role in conserving biodiversity in agricultural landscapes; and secondly, that ‘spillover’ in insect abundance and diversity from solar sites may help to mitigate land use conflicts that arise where agricultural land is taken out of production for solar development. In recognition of the limited research in this area to date, the paper recommends that further research should consider site-level variation in vegetation management to better understand biodiversity responses across entire solar sites as well as considering geographic variations and the availability and effectiveness of different seed mixes, mowing frequencies and grazing regimes.
- 1.5.23. While this paper focuses on insect, floral and agricultural assemblages that are distinct from those encountered in the UK, and therefore caution should be applied in relation to any specific scales of change, the broad findings are likely to be applicable to UK based solar sites. With consideration to the Proposed Development, they indicate that floral abundance and diversity can be generated in association with solar developments, and that the provision of such habitat within



a solar landscape can support diverse and abundance insect assemblages, which in turn would provide a foraging resource for bats.

# Appendix 3

## Map of HS2 and Applicant's Access Route





Key	
Applicant's Construction Access Route	
Indicative HS2 Construction Access Route	

**Appendix 3 - Map of HS2 and Applicant's Access Routes**



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