ECOLOGY AND BIODIVERSITY REPORT

LIME DOWN SOLAR PARK, NORTON, NORTH WILTSHIRE SN16

for

SLD WILTSHIRE LTD

NB. INFORMATION ON LEGALLY PROTECTED, RARE OR VULNERABLE SPECIES MAY APPEAR IN ECOLOGICAL REPORTS. IN SUCH CASES IT IS RECOMMENDED THAT APPROPRIATE CAUTION BE USED WHEN CIRCULATING COPIES.

April 2026

S:7211

Bank House Martley Worcester WR6 6PB
United Kingdom

T +44 (0)1886 888445
E nature@bettsecology.com

www.bettsecology.com

CONTROL SHEET

General Document Information	
Client	SLD Wiltshire
Title	Ecology and Biodiversity Report
Location	Lime Down Solar Park, Norton, North Wiltshire SN16
Lead ecologist	Nicholas Valori
Date issued	12 August 2024
Contract Manager	N L Loben Technical and Operations Director

Document Version Control

Version	Date	Description
1.0	17 February 2026	Document created.
1.0	26 February 2026	Document reviewed by Dr C J Betts BSc(Hons) PhD FBNA CBiol MIBiol MCIEEM MIEnvSc.
1.1	26 February 2026	Document completed.
1.2	15 April 2026	Document updated.
1.3	29 April 2026	Document updated.

Introduction

1. My name is Nicholas Valori BSc MSc and I am a Senior Ecologist at Betts Ecology. I hold an Associate CIEEM Membership, a Bachelor of Science degree in Zoology and a Masters in Ecological Consultancy from the Russell Group University of Newcastle-upon-Tyne. My field experience includes a wide range of ecological work including habitat management and enhancement work, protected species surveys and translocation, volunteer training and a variety of other UK, EU and international projects. Further assistance in the preparation of this Proof of Evidence was provided by Company Chairman Dr Christopher Betts. Please also refer to www.bettsecology.co.uk.

2. I am instructed by Stop Lime Down (SLD) in relation to the proposed Lime Down Solar Park proposal, a proposal which spans 1,237ha, including 749ha of solar PV arrays and a 22km Cable Route Corridor (referred to within this document as the CRC). The proposal incorporates energy storage facilities, cabling across the landscape to nearby substations and, where it may be required, road widening and access for construction vehicles during panel installation and eventual decommissioning. All these will have significant ecological impacts on the local landscape and its habitats which I discuss below.

3. My review is concerned primarily with findings, conclusions and statements reported within the following supporting documents submitted as part of the Lime Down Solar Farm development's application:
    a. **[APP-055]** Chapter 3 The Scheme
    b. **[APP-061]** Chapter 9 Ecology and Biodiversity
    c. **[APP-181]** Appendix 1-2 Scoping Opinion Response Table
    d. **[APP-183]** Appendix 3-2 Cable Route Construction Method Statement
    e. **[APP-198** through **APP-209]** [Appendices 9-1 through 10-4]

f. **[APP-273]** Biodiversity Net Gain Assessment Report
g. **[APP-274]** Biodiversity Net Gain Assessment Appendix Statutory Biodiversity Metric Calculation
h. **[APP-275]** Habitats Regulations Assessment Report
i. **[APP-277]** Outline Construction Environmental Management Plan
j. **[APP-278]** Outline Operational Environmental Management Plan
k. **[APP-283]** Outline Landscape and Ecological Management Plan
l. **[APP-284]** Outline Ecological Protection and Mitigation Strategy
m. **[APP-289]** Potential Main Issues for Examination

4. Additionally, I have also considered the following documents prepared following submission of the application:
    a. SLD's Relevant Representation **[RR-4495]**
    b. Natural England's Relevant Representation **[RR-3427]**
    c. Environment Agency's Relevant Representation **[RR-1394]**
    d. IGP responses to SLD's relevant representations **[PDA-009]**
    e. IGP's responses to Natural England's Relevant Representations **[PDA-009]**

5. I note that, within their responses to SLD's relevant representations , the Applicant has indicated that Environmental Statement (ES) Volume 1, Chapter 9: Ecology and Biodiversity [**APP-061**] has been updated and a revised report will be provided at Deadline 1 (i.e. on 1st May 2026), including findings of additional surveys which have been undertaken. As a consequence, I am unable to comment fully on the adequacy of the information presented so far. SLD will seek to provide a further response to the updated ES once that information is received.

6. It should be noted that my review's scope includes both the assessment of specific solar panel installation ecological concerns, as well as considering potentially significant ecological impacts which may fall under separate, ancillary aspects of the

proposal (such as transportation and road access requirements). Elements of these are also discussed in further detail within other, relevant Written Representations put forward by objectors “Stop Lime Down”.

7. The evidence which I have prepared is true and has been prepared in accordance with the guidance of my professional institutions. I confirm that the opinions expressed are my own, true and professional opinions, regardless of whom I am instructed by.

Summary

8. My evidence reviews the validity and reliability of the relevant ecological data which have been published so far in relation to the proposal, framing it within the context of the different aspects of the proposed works (on- and off-site) and their scale. As I explain below, the ecological evidence submitted by the Applicant is at substantial variance with ecological best practice guidelines (including, but not limited to, current guidance from the Chartered Institute of Ecology and Environmental Management, as well as aspects of species-specific survey methods published by the relevant professional bodies).

Assessment of the Ecological Baseline

9. Chapter 9 Ecology and Biodiversity **[APP-061]** provides summary information about the baseline habitat investigations and surveys which have been undertaken. Appendix 9-1 supplements this by providing a more detailed Ecological Baseline Report (EBR) **[APP-198]**.

10. Regarding protected sites, no issue is taken with the scope of the desk-based study undertaken to identify local, national, and internationally protected sites. Some issue, however, is taken with the scope of species-specific surveys undertaken on the Solar PV Sites and the Cable Route Corridor. Concerns are also raised as to whether the Study Area identified for the assessment has also considered off-site impacts along the surrounding road network. Both of these points are discussed in further detail below.

11. The EBR and ES state:

    a. The majority of the land within the Solar PV Sites was surveyed across several field surveys between June and September 2023, and additional land was surveyed in May 2024 and August 2024. Updated walkover surveys have been undertaken in May and July 2025 [**ES, APP-061/22/§9.6.13-9.6.14**].
    b. The survey scope for the CRC was undertaken by "*taking into account the habitats that will potentially be affected by the cable works, as well as the temporary nature of the cable installation.*" [**ES, APP-061/27/§9.6.16**]
    I understand that, given the 22km length of the corridor (and access issues), not all of the site has been subject to a field survey, and the assessment has been on the basis of desk-based data only.
    c. Walkover surveys within the CRC were limited to those areas which were accessible, [**ES, APP-061/27/§9.6.16**]. As of August 2025, there were 17ha of land within the CRC which had not been assessed for ecological survey due to a lack of access permission [**EBR, APP-198/10/§2.6.7**].

12. Within the Applicant's responses to SLD's Relevant Representations, the Applicant states **[APP, SLD-066**]:

> "Since the preparation of the Chapter habitat surveys have now been completed across all previously unsurveyed areas. The survey methodology applied was consistent with that reported in the **ES Volume 3, Appendix 9-3: Ecological Baseline Report [APP-198]** for the rest of the Cable Route Corridor.
>
> The results of these surveys have been reviewed and, in the Applicant's view, do not alter the conclusions of **ES Volume 1, Chapter 9: Ecology and Biodiversity [APP-061]** regarding likely significant effects. The precautionary assumptions previously applied in the ES were conservative and appropriately accounted for any uncertainty associated with unsurveyed areas.
>
> The Applicant has updated **ES Volume 1, Chapter 9: Ecology and Biodiversity [APP-061]** and provided a revised version at Deadline 1 with the findings of these surveys, and it is considered these do not materially change the assessment of likely significant effects presented in the chapter."

13. I have not yet seen the further updates and surveys referenced although I note that it will be provided at Deadline 1 (at the same time as the submission of Written Representations from Interested Parties). In the absence of such updates, I have sought to comment on the available information as best I can and will provide further input once the information is provided.

<u>Lack of species-specific surveys for the Solar PV Sites</u>

14. Table 9-3 of Chapter 9 specifies the field surveys which have been undertaken in respect of the Solar PV Sites. At the time of presenting Chapter 9, the Applicant has presented the following species-specific surveys:
    a. Badger Survey Report ES Appendix 9-2 **[APP-199]**
    b. Bat Survey Report ES Appendix 9-3 **[APP-200]**
    c. Breeding Bird Survey Report ES Appendix 9-4 **[APP-201]**
    d. Great Crested Newt Survey Report ES Appendix 9-5 **[APP-202]**
    e. Otter and Water Vole Survey Report ES Appendix 9-6 **[APP-203]**

f. Wintering Bird Survey Report ES Appendix 9-7 **[APP-204]**

15. However, the Applicant has not provided follow-up, species-specific surveys for brown hare, hazel dormouse, reptiles, harvest mouse, hedgehog, polecat or macro-invertebrates, particularly aquatic invertebrates such as white-clawed crayfish. The omissions in species-specific surveys were in particular identified in the Secretary of State's Scoping Opinion. The Applicant's response to those omissions is provided in ES Appendix 1-2 [**APP-181**] and maintains that there can be an adequate assessment in the absence of such information.

16. The Applicant's position has been that an adequate assessment has been made based on the habitats affected, rather than through targeted species or population/community surveys. The mitigation strategy is to assume that, when in doubt, species are accepted to be present, and the necessary avoidance/translocation is to be carried out by an Ecological Clerk of Works (EcoCoW) supervising the project. It is unclear whether the Applicant proposes to provide the required updated information in the survey data provided at Deadline 1.

17. Stated mitigation for all of the species mentioned in the Applicants' reports is to focus on pre-clearance searches carried out by an ecologist shortly prior to works. Buffer strips are to be maintained along sections of hedgerow that do not require clearance. Where any animals are discovered, works within the section are to halt until these have been successfully translocated.

18. The position taken by the Applicants' ecology report hinges primarily on the predominantly agricultural and short-grazed nature of the affected habitats, with impacts on more sensitive sections near hedgerows being limited to the creation of access points and temporary cable-laying trench works. Pre-clearances are to be

carried out through visual and fingertip searches shortly prior to any vegetation stripping required.

19. I question whether the stated approach complies with the core Mitigation Hierarchy (Avoid, Mitigate, Restore, Compensate) principles that underpin UK Ecological Best Practice. It is also at odds with much of the proposal's own ecological strategy; the proposed approach significantly generalises the Avoidance phase for a site of this scale to its broad habitat categories, prioritising instead subsequent Mitigation and Restoration. The effectiveness of these latter two phases is furthermore limited by gaps in knowledge of the current on-site ecosystem's status. As a result, the proposal has a significantly greater potential to cause harm to these protected species, while also lacking the means to effectively monitor and address in the long term any unexpected impacts to these species resulting from the development.

20. While proceeding under the assumption of presence of a protected species implies putting in place the highest mitigation measures possible for the identified species (*i.e*. higher than would be usually carried out following a standard species survey), in practice it is often not feasible to effectively detect, and thus avoid and mitigate ecological impacts without a suitably informed and detailed baseline on which to make appropriate decisions, monitor and resolve negative impacts in the long term. While I expand on this further below, this is most obvious with smaller species such as aquatic and terrestrial invertebrates, for which pre-clearance searches are neither sufficiently comprehensive not effective means of detection and mitigation.

21. In the context of a development of this scale that affects and crosses such a wide section of the local landscape, in my view it is not possible to make an adequately informed and secure decision on the solar proposals purely based on broad habitat types and hypothetical ad-hoc searches as works are ongoing, without all the required species-specific survey data beforehand. This is especially the case for

fauna that are known to be present within the immediate local area, particularly hares, reptiles, dormice and invertebrates.

Lack of species-specific surveys for Cable Route Corridor

22. Save for possibly badgers, no species-specific surveys have been conducted in respect of the Cable Route Corridor. Generally, the Applicant has given the explanation that, because of the "*temporary and limited nature of impacts associated with cable route construction, with all habitat expected to be reinstated following a relatively short construction period… surveys for the CRC were not considered proportionate considering the potential impacts*." Additionally, the Applicant has stated, for example in respect of bats **[APP-200]**: that "*given the similarity of habitats and topography within the CRC relative to that found within the Solar PV Sites"* bat activity will be "*relatively comparable to that recorded within the solar PV Sites"*. As a consequence, the Applicant concludes that such species-specific surveys are not necessary or proportionate.

23. Accordingly, the Applicant's assumptions on species present in the CRC have been based on qualitative assessments of habitats undertaken to inform the Applicant's BNG, surveys carried out within the Solar Panel Fields, and desk-based assessments. Generally, assumptions have been made on the basis of broad habitat groups and species suitability, as explained above (for example, potential roost feature assessments for bats and stream condition assessments for otter and water voles). Where habitats were found to have potential or unclear suitability to support these particular species, the Applicant has proceeded with the assumption that they are present.

24. The Applicant has stated that further information will be provided in respect of species surveys for the cable route corridor. In the absence of such further information being available for me to review now, I have commented on the basis of the best available information.

25. As I have commented above for the missing species-specific surveys for the Solar PV Sites, the Applicant's approach fails to properly give effect to the mitigation hierarchy. In the absence of species-specific information, it is unclear how the Applicant will be able to effectively plan the cable route to avoid avoidable impacts to species (as they are required to do). At present, much of the fauna data that will inform its actual route is largely topographical or desk-based, with information from the solar panel fields being used as general, broad indicators of possible species presence. This is an insecure and inappropriate extrapolation.

26. It is important to highlight that the area of Cable Corridor under consideration would be 463ha of habitat, and that the route itself would be a 25m-wide working area with ~9m in width of trench and haul routes. It is not possible to make adequately informed secure decisions on the actual routing of the Cable Corridor, both from the Applicant's and the planners' perspectives, with the current lack of analysis of actual species data for these sections.

27. While precautions have been specifically included to avoid impacts from cable-laying on sensitive habitats, solid ecological data along the Cable Corridor for several protected species are lacking, even when these impacts have been flagged and appropriately mitigated within the solar panel fields. Instead, the impacts from this phase of the works are being overlooked due to the "*temporary*" nature of the trenches and in light of the benefits promised by the Applicant's proposed compensation measures. Plainly, this fails to follow the mitigation hierarchy.

28. Equally, the Applicant ought to explain what species-specific measures it will use to detect whether particular aspects of the off-site works will cause impacts on these various taxa which have not been directly surveyed. Following up on this, the Applicant should expand on what systems will be in place for the EcoCoW to determine whether changing the cable route's course is more appropriate over mitigating through translocation or similar, if significant ecological concerns are identified during cable-laying.

Assessment of Impacts and Significant Effects

Construction and Decommissioning Phases

29. The ES identifies potential adverse construction impacts to species arising from [**APP/061, §9.8.3**]:
    a. Habitat loss, for example the loss of hedgerows where existing field access points cannot be used or need to be widened, or clearance to facilitate permanent hardstanding;
    b. Killing and injury, arising out of habitat clearance and the actions of vehicles and plant during construction;
    c. Fragmentation of habitats as a consequence of habitat loss and habitat change, reducing the function of the habitats and impeding the ability of species to disperse and maintain a viable population;
    d. Disturbance to species, including through movement and vibration during construction operations and increased footfall;
    e. Pollution and habitat degradation through the release of chemical, sediment or dust pollution, interfering with the normal function of habitats and directly harming species.

30. Within ES Volume 1, Chapter 9: Ecology and Biodiversity [**APP-061**], the Applicant provides a summary of the significant residual effects which they identify as arising out of the scheme. The Applicant concludes that the majority of significant adverse effects identified in section 9.10 can be reduced to neutral non-significant effects There are just two likely significant *adverse* effects reported for the whole scheme and they are confined to the construction and decommissioning phase, as specified in the Applicant's Table 9-12 [**APP/061/170**]:

Impact	**Proposed mitigation/enhancement measures and residual effects after mitigation**
Temporary loss of hedgerows within the Cable Route Corridor	Proposed creation and enhancement of considerable extent of hedgerows *Adverse – significant* at the local level in the short term. *Neutral – not significant* in the medium to long term
Displacement of ground-nesting birds (e.g. skylark) from Solar PV Sites	Provision of compensatory nesting habitat (permanent grassland, set aside); enhancement of foraging opportunities; targeted management under the Outline LEMP. *Adverse – significant* at local level (skylark) *Adverse – significant* at site level (yellow wagtail, corn bunting, grey partridge, quail)

Road widening and boundary features

31. In my professional view, the full extent of harm to the hedgerow network and wider boundary features (both at the Solar PV Sites and the CRC) has been overlooked by the Applicant. I note that there will inevitably be adverse hedgerow impacts when access is required into fields and with the creation of new access points during construction, which have been the main focus of the proposal's ecological assessments and mitigation. However, it is likely that any changes required to the road network would have an impact on boundary features within the local landscape as well.

32. Many of the existing country roads within the Lime Down area directly abut both the hedgerows and boundary ditches surrounding many of the Solar PV fields. While proposed ecological impact avoidance during solar PV panel installation aims to ensure that these features are protected "wherever possible" through the use of wide

buffer strips, any widening of the country lanes around the fields required for safe access will likely directly impact these water courses and hedgerow sections, as well as potentially those of fields not falling directly within the development's scope.

33. Access restrictions and road widening present a potentially significant source of adverse off-site ecological impacts which risks being overlooked, particularly given the degree of transportation pressures required for a development of this scale within the otherwise low-density network of small country lanes within the local area. I understand that SLD's highways consultant has also raised concerns about the identification and assessment of such effects from highways works and movements.

34. Clarification should be sought from the Applicant as to which exact sections of the surrounding road network that will require further widening and the anticipated effect on the associated boundary features. Additionally, assurance is needed that further ecological surveys will be carried out before any road widening is undertaken.

Hedgerows losses within the CRC

35. I would challenge the assessment of the loss of hedgerow expected as a result of trenching within the CRC as being "short-term". A realistic view of such operations would be an impact of at least medium term, of 3-5 years for a standard hedgerow, and proportionally much longer for a hedge with trees or one which has ancient attributes. The latter of which in particular are effectively irreplaceable within the development's scale. I would expect with this scale of losses to be closer to at least district-level impact, rather than local.

36. Equally, further information should be provided as to how the Applicant's approach to access complies with the mitigation hierarchy, having regard to the rich ecological features of much of the hedgerow present.

Skylark

37. I note that the Applicants have identified as a significant residual impact within the table **[APP/061/170]** the loss of available nesting and foraging habitat for several bird species (most notably skylark and yellow wagtail) specialising in open grassland and field habitats which would be lost as a result of the development.

38. To address these, the site's avoidance and mitigation strategy has accordingly amended the site's landscape to ensure that a total 117ha of fields are retained as either hay-cut grassland or arable field. These are to be enhanced to ideally support greater numbers of skylark territories [**APP-061; APP-7.18**], with the intent for these to remediate for those displaced and lost across the rest of the Solar PV fields.

39. This particular mitigation approach has been a good example of how baseline species surveys identified the degree of impacts expected from the proposal (i.e. loss of nesting territories) and sought to address these losses proportionally within the scope of the development (i.e. retention and enhancement of a suitable number of fields within the proposal's boundaries). I therefore question why this approach was not adopted for many of the previously-mentioned taxa which were specifically screened out. As an example, brown hare and a number of invertebrate species notably share similar preferences for open field habitats as the rural bird species assessed, yet were not subject to any specific baseline surveys or factored in when determining the exact locations and areas to be retained, and whether these would be sufficient.

40. More specifically to skylark, I welcome the aim to enhance the retained fields to allow for these to support a greater number of skylark (ideally accommodating those which would have previously been nesting within the solar PV fields). It should still be nevertheless stressed that these retained sections are still only a limited fraction of the total area which will be developed. Ultimately, even in a best case

scenario, available nesting habitat for these species is to be further fragmented across this smaller number of retained fields, adding a further degree of sensitivity within these retained habitats to even short-term, unexpected impacts in the future. Appropriate follow-up monitoring will be key to ensure that these retained sections are being enhanced and supporting larger numbers of skylark, and quickly recognize any unexpected sources of impact.

41. I understand SLD reserves its right to comment when further information comes forward.

Cable Route Corridor (CRC)

42. I note that ES Chapter 3 **[APP-055]** and Appendix 3-2 **[APP-183]** detail the preliminary cabling specifications and required access drive extensions. Cable-laying, both on-site and when interconnecting switches, substations and the main grid, will be carried out primarily by creating open trenches. These would be:
    a. 1.6m wide and up to 1.2m deep on-site
    b. A 25m wide 'work corridor' for interconnecting and grid connection cables. This width is to include the trench itself, spoil heaps and a 7m wide haul road. The cable trenches themselves would be up to 7m wide for interconnecting cables, and 1.7m wide for new grid cables, generally maintaining 1.2m to 2m depth.

43. Exact routes for Grid and Interconnecting cables have been deferred to the later design stage. For assessment purposes, the entirety of a 50m-wide Cable Route Corridor through the landscape has been considered by the applicant (with potential to increase to 665m in width around utility, road and rail-crossing locations).

44. As cable-laying will be carried out through open trenches rather than through underground coring or similar, more indirect but expensive approaches, cable-laying

will result in at least temporary loss of habitat and features directly above its trench lines. While this may be less of a concern ecologically when crossing arable fields where ploughing and soil disturbance are major features of this land use, it carries a potential for significantly adverse impacts to woodland, hedgerow and other high-quality off-site habitats within the landscape (such as field boundary strips, grasslands, meadows, nearby water bodies and streams). Extensive trenches such as these are also among the works most likely to conflict with wildlife features such as badger setts, mammal and bird nests, food resources, dormouse hedgerow corridors, *etc.* within the local landscape, due to the required overall length of the cable corridor. Cutting through sections of high value hedgerow and other wildlife corridors is justifiably regarded as bad practice generally. It will require careful ecological impact assessment in each case, in addition to the Avoidance Areas already identified by the proposal where non-intrusive installation methods will be used to avoid impacts to watercourses, hedgerows and mature vegetation.

45. The 50m corridor width affords some leeway to avoid particularly high-value features at the design stage, and measures are scheduled to be included to avoid damages within sensitive areas such as designated sites. However, I am bound to point out that, even in a best case scenario of like-for-like restoration, this phase of the works will unavoidably result in significant short-term habitat losses. Even when "temporary", large-scale trenching such as that proposed carries an inherently high risk of adversely affecting protected and vulnerable fauna, irreplaceable habitats and features above and below ground, which have been overlooked due to the great length and area of the work area.

46. Given that the proposed length of cable-laying required by this proposal is particularly long, estimated at 22km, relative to large-scale solar farm proposals approved within the country in the past, the Applicant ought to provide further detail on exactly what methods would be used to determine, at the final design and construction stages,

whether a particular pathway is preferable over another, particularly in regard to identifying ecologically sensitive habitats and features which may not be currently listed as specifically designated sites or within Public Records.

Other Species

47. As noted above, the Applicant's table of residual effects does not include any assessment of the residual adverse effects during the construction and decommissioning phases for any other species. No clear explanation for this is provided, but the implication is that, as a consequence of the mitigation measures in place, there will be no effect on species or habitats post construction. Clarification is sought from the Applicant as to the likely significant ecological effects following the construction phase, as distinct from the decommissioning phase.

48. Plainly, it is unlikely that the mitigation measures proposed will be effective to entirely remove any significant negative effects at the construction phase. Generally, the Applicant relies on the appointment of an Ecological Clerk of Works (EcoCoW) supervising the project. The stated mitigation for all the species mentioned in the Applicant's reports is to focus on pre-clearance searches carried out by an ecologist shortly prior to works. Where any animals are discovered, works within the section are to halt until these have been successfully translocated.

49. I would note that relocation of species is often a highly complex operation without certainty of outcome, particularly when operating without prior data on the site and species concerned. Receptor site identification and suitability, as well as the study of the individual species and populations concerned, are paramount.

50. Pre-clearance searches alone are not an effective means of detecting and mitigating potential adverse impacts on fauna. As an example, important invertebrates which could be directly or indirectly affected. Generally, *ad-hoc* translocation is not a

realistically feasible or effective mitigation approach for invertebrates, and the significant survey effort required to even assess invertebrate activity or presence of sensitive species and factors, especially when impacts may not be limited to direct habitat loss alone, make it unsuited as a realistic avoidance/mitigation approach shortly prior to, or during, ongoing works. A full entomological survey to determine the status and importance of the specific macroinvertebrate populations on site would be required in the first place. Its findings would then form the basis for future mitigation/enhancement strategies as well as a baseline for long-term monitoring efforts, to confirm that no negative impacts on these taxa are taking place or cannot be mitigated.

51. As a result, the site has a significantly greater potential to cause harm to notable and/or protected species (not exclusively invertebrates, either), while also lacking the means to effectively monitor and address in the long term any unexpected impacts to these species resulting from the development.

52. Equally, the mechanisms and procedures proposed by the Applicant to monitor and confirm the construction and operation phases are insufficiently detailed as a result of the lack of species-specific surveys outlined above. As such, the Secretary of State does not have sufficient information to confirm that the construction phase will not have significant adverse impacts on the unsurveyed species, thus making a planning decision insecure.

53. Likewise, clarification is sought as to the anticipated impacts to any habitat created during the decommissioning phase.

<u>Likely Significant Effects – Operation and Maintenance</u>

54. The Applicant's Table 9-13 [**APP-61/170-171]** assumes that there will be no adverse residual effects following mitigation during the operation and maintenance phase.

Effect of Panels

55. As mentioned with regard to skylarks, in my view it is likely that the panels will have a negative effect on the local population of species such as hares, which generally inhabit open swathes of grassland. There is no extensive published information or studies into this as regards solar panel installations, and baseline data on hares and other open habitat taxa within the solar panel fields will be necessary to assess and monitor them and determine their context in relation to the biodiversity and ecology of the site.

Effect of Fencing

56. Information submitted by the Applicant within **Chapter 3 [APP-055]** and the Outline Landscape and Ecological Management Plan **[APP-283]** specifies that perimeter fencing of the proposed solar PV sites will be 2.5m deer wire mesh and security fencing, with wooden posts. These are to be directly driven into the ground using a standard post-driver, generally avoiding foundations and 'concreting in' only when required.

57. Similar perimeter fencing is to be used around substations and on-site battery facilities, with 3m tall palisade fencing around these.

58. The Applicant has addressed preliminary concerns by SLD regarding this boundary fencing potentially causing commute route disruption and exclusion of fauna from the solar panel fields due to this new fencing, confirming that the scheme incorporates fencing that is permeable to wildlife, with the exception of deer, without the need for wildlife gates **[PDA-009/ § SLD-070].** This is in line with the development's previous assessment concerning fragmentation reported within the Ecology report **[APP-061/ §9.8.4]**, which states that typical perimeter fencing is not considered to impede the movement of most mammals, which may continue to move through, beneath or potentially over fencing.

59. However, no details are given as to exact width of the wire mesh to be used at this stage, which is key to confirming whether this truly does not risk obstructing medium-sized terrestrial fauna, as is stated. While burrowing fauna, such as badger, rabbit and fox, may indeed be able to move below fencing if required, this would still constitute an effective obstruction if sufficient mesh width or wildlife gates are not afforded, particularly for non-burrowing, larger fauna.

60. This is most relevant in regard to brown hare, which are present across the site and its surrounding landscape. While mitigation for them includes pre-clearance searches and the imposition of a 10 mph speed limit along work tracks, without exact confirmation of mesh width it is not possible at present to confirm the potential disruptions to commuting routes and habitat use that enclosing the various large fields and potential exclusions of the species would have at this scale.

61. While this is most noticeable in the case of hare, it can also be a significant impact for other medium-sized fauna such as hedgehog or otter. Inappropriate fencing can have severely adverse consequences when directly abutting roads, leading to an increase in injury and death of animals as well as traffic accidents generally. While perhaps less relevant to smaller scale proposals, in the case of the Lime Down Solar Park the sheer size of the project and its layout create several corridors where the only sections between two opposite, enclosed fields will be an access road in-between for long stretches. These unintentional “corridors” would be particularly prevalent across Lime Down Sections A, C and E.

62. Further confirmation is sought on what measures the Applicant intends to put in place to address these likely disruptions to commute routes, increased habitat fragmentation and increase in road injuries, mortalities for larger terrestrial fauna and accidents affecting human drivers over the long term. I also generally question the

stated lack of need for more easily accessible wildlife gates for a development of this scale, particularly at potential bottlenecks along roadsides.

BNG

63. Current enhancement targets will be limited primarily to the creation of new modified and neutral grassland swards. Much of the proposal's on-site gains will result from the change in use of the fields from cropland to neutral or modified grassland. Enhancement efforts are to be concentrated primarily within the boundary buffer zones around individual panel areas and fields set aside for ecological enhancement. Water courses and hedgerow enhancement will instead aim to be secured through the loss of seasonal agricultural fieldwork, allowing for wider buffers to be maintained along the top embankments of nearby ditches and streams.

64. While some improvement to neutral grassland may be possible, current BNG targets assume that grassland vegetation will be either retained or sown directly below the solar panels. These sections will not be the focus of any long-term enhancement strategies, as opposed to field buffers and designated offset areas. Having regard to the shading of grassland by panels and difficulty in realistically accessing and maintaining these sections, the feasibility of conserving ecological value or species richness within these sections is limited. Additionally, the panel geometry within the fields poses a risk of increased water run-off. These changes in water flow are unlikely to be absorbed by surrounding vegetation alone, with additional water flow control measures, such as gravelled French drains or similar, likely to be required as a result. It will also impact soil ecology which has not been considered or its consequences examined.

65. Factors concerning such important environmental elements as the site's hydrology and soils must be fully addressed in order to adequately identify and understand all adverse impacts within said context. I note that any measures requiring additional

artificial drainage features, particularly if these require new unvegetated surfaces as opposed to SuDS or similar attenuation, will result in BNG measurements having to be recalculated and adjusted accordingly as well.

Bath & Bradford-on-Avon Bats SAC

66. Natural England have raised concerns relating to the relevance of the Bath & Bradford-on-Avon Bats SAC to the proposal, particularly areas within Lime Down C **[RR-3427]**.

67. At present, the proposal does not consider this SAC to be functionally linked to the site due to its relative distance. Although a closer, historic lesser horseshoe bat Core Roost was located within the village of Grittleton, this has since been declassified. Natural England has however flagged that, while the Grittleton roost may no longer meet the relevant Core Roost criteria, there is potential for this to still be functionally linked to the major Bath & Bradford-on-Avon Bats SAC population. Natural England has supported this reasoning by pointing out an early horseshoe bat pass during the survey season, suggesting an active roost nearby. Based on the proximity of the potential, nearby roosts, the organization has concluded that current evidence is insufficient to confidently state that the site is not functionally linked to this SAC population and its outlier roosts.

68. The Applicant has responded to these comments by Natural England, stating that the presence of nearby horseshoe bat roosts does not necessarily imply a functional link to the SAC **[PDA-009/ § 3.3]**. Lesser horseshoe bats can use small, local roosts (such as night, non-breeding day, maternity, and satellite roosts) as part of a smaller, distinct local population, which the Applicant states that in this case could fall outside SAC boundaries.

69. The Applicant continued by stating that it is not possible to determine to what extent individual bats move between the SAC and the Core Area/Impact Zone without advanced survey data and techniques. The development's Habitat Regulations Assessment Report **[APP-275]** had up to that point referred to published datasets and planning guidance for Wiltshire, on the assumption that these have been determined based on best available population-based evidence. The Applicant's view is that putting further emphasis and additional survey efforts to confirm the validity of this published data in the context of Lime Down C and the SAC in question to be inconsistent and inappropriate with the rest of the development.

70. I understand that ecological surveys are ultimately limited by resources, timings and access, particularly for mobile species such as bats, and even following Best Practice to the letter conclusions will often have a degree of uncertainty, or have to defer to historic information by third parties and public records. However, the inability to confirm/disprove linkage does not necessarily solve the underlying uncertainty in this case.

71. The position of the proposal has been that impacts to the SAC can be safely screened out from the HRA due to the distance between the two, supported by published datasets. However, actual site surveys have confirmed proximity of a local roost. While this may be part of a separate, local population, the historic presence of a closer (albeit now-declassified) Core Roost potentially linked to the SAC adds clear ambiguity to the situation. I therefore agree with Natural England's conclusion that this aspect of the site's ecology be screened in and subject to further assessment in relation to expected lighting and fragmentation impacts.

Conclusion

72. At this stage, the work done by the Applicant falls short of what is required for baseline ecological assessment concerning many species, relative to what would be normally expected even within the context of much smaller developments.

73. Prior to analysing more in-depth and specific aspects concerning potential long-term consequences of both the PV fields and, equally if not more significantly, the Cable Route Corridor, a much more comprehensive baseline supported by up-to-date surveys is required before proceeding further.

74. I would also like to highlight further the scale of impacts arising from trenching and cable-laying across the CRC, temporary or otherwise, to fauna and sensitive features such as hedgerows. I am concerned of the degree of *ad-hoc* mitigation responsibility which will be required in this case while these works are ongoing, and whether any unexpected impacts can be realistically detected and addressed on the spot over such a large section of works without more specific supporting data collected prior.

75. Lastly, I would welcome further assessments and considerations of ecological impacts stemming from any required upgrades and widening to the existing, rural road network for construction traffic; depending on the extent these have the potential to be a significant source of habitat and boundary feature loss.

76. In conclusion, I question whether these deficiencies in the evidence submitted so far is sufficient to support a safe planning decision in its current form.